

OIL ANALYSIS REPORT

Sample Rating Trend







Machine Id TOTE 1 Component Hydraulic System Fluid AW HYDRAULIC OIL ISO 46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

Fluid Condition

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

SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WCI2269617		
Sample Date		Client Info		06 Aug 2015		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>20	0		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>20	<1		
Lead	ppm	ASTM D5185m	>20	0		
Copper	ppm	ASTM D5185m	>20	<1		
Tin	ppm	ASTM D5185m	>20	0		
Antimony	ppm	ASTM D5185m		0		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 5	current	history1	history2
	ppm ppm					
Boron		ASTM D5185m	5	<1		
Boron Barium	ppm	ASTM D5185m ASTM D5185m	5 5	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5 5	<1 0 <1		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5	<1 0 <1 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25	<1 0 <1 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	<1 0 <1 0 0 35	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300	<1 0 <1 0 0 35 263	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370	<1 0 <1 0 0 35 263 338	 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500	<1 0 <1 0 0 35 263 338 3212		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500	<1 0 <1 0 0 35 263 338 3212 current	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm S	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	5 5 25 200 300 370 2500	<1 0 <1 0 0 35 263 338 3212 current 3	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 2500 2500 2500	<1 0 <1 0 0 35 263 338 3212 current 3 0	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m	5 5 5 200 300 370 2500 2500 2500 2500 2500	<1 0 <1 0 0 35 263 338 3212 current 3 0 <1	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 2500 2500 2500 2500 215 20 20 20	<1 0 <1 0 0 35 263 338 3212 current 3 0 <1 current	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIS Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m	5 5 5 25 200 300 370 2500 2500 2500 >15 >20 <u>limit/base</u> >200	<1 0 <1 0 0 35 263 338 3212 <i>current</i> 3 0 <1 <i>current</i>	 history1 history1 	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIS Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m	5 5 5 200 300 370 2500 2500 2500 >15 >20 imit/base >20 imit/base >5000 >1300 >160	<1 0 <1 0 0 35 263 338 3212 <i>current</i> 3 0 <1 <i>current</i> 792 131	 history1 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D5185m	5 5 5 200 300 370 2500 2500 2500 >15 >20 imit/base >20 imit/base >5000 >1300 >160	<1 0 <1 0 0 35 263 338 3212 <i>current</i> 3 0 <1 <i>current</i> 792 131 6	 history1 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Ptucles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm s	ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 25 200 300 370 2500 2500 2500 >15 -20 20 20 20 20 20 20 20 20 20 20 20 20 2	<1 0 <1 0 <1 0 35 263 338 3212 current 3 0 <1 current 792 131 6 1	 history1 history1 history1	 history2 history2 history2

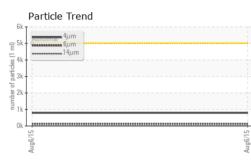
ISO 4406 (c) >19/17/14

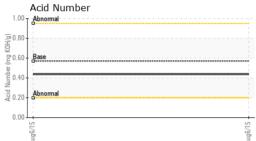
Oil Cleanliness

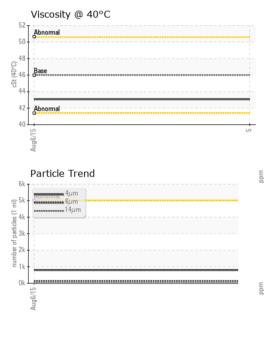
17/14/10



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	FLUID DEGRADATION		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.437		
	VISUAL		method	limit/base	current	history1	history
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
	Silt	scalar	*Visual	NONE	NONE		
Aun6/15	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.05	NEG		
	Free Water	scalar	*Visual		NEG		
	FLUID PROPER	TIES	method	limit/base	current	history1	history
	Visc @ 40°C	cSt	ASTM D445	46	43.07		
- Straette	SAMPLE IMAGE	S	method	limit/base	current	history1	history
4	Color				no image	no image	no image
	Bottom				no image	no image	no imag
۔ ب	GRAPHS Ferrous Alloys			491,520	Particle Count	t	
	Non-ferrous Meta	ls		122,880 30,720 51,990 1,920 1,	Abnormal	•	
	und 5-			annu 30 Bridgerig Angelige	е _µ 6 _µ	14µ 21µ	<u>збµ 71</u>
	Viscosity @ 40°C			Aug6/15 Aug6/15 Aug (Mumber (mg K0H(g)	Acid Number Abnormal Base Abnormal		
Laboratory Sample No. Lab Number Unique Numbe	: WearCheck USA - : WCl2269617 : <mark>03798655</mark>	501 Madia Recieved Diagnose Diagnost	d : 07 / ed : 10 /		B HAV		S PORTLA 0 SE HWY ACKAMAS, US 97

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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