



**FILTER
TECHNOLOGY**

cleaner fluids mean better business

CASE STUDY



Hydraulics

Case No : 8 - 6 - 22

Hydraulic Oil Filtration, Hitachi EX750 : AUI Inc., Albuquerque, New Mexico

Concerned with their equipments hydraulic oil cleanliness due to high particle counts, AUI decide to fit their Hitachi EX 750 with a KS-100-A-FM 3 in February 2004 with the aim to reduce these high ISO levels. Capacity of the system is 662litre / 175 gallons

Samples taken at 1380 hours indicated the ISO of the oil at 22/20/16 which along with cooper at 80ppm were flag on the report below, it was decided to re sample the oil in the next 100hours.



The system was re sampled at 1443 hours 63 hours after installing the KS-100-A-FM3. The report below indicates the oil now at 18/15/13 at reduction of 94% in particulate contamination, copper reduced 5 ppm which indicates these particles are sub micron level.

Vice President Steve Drennan was pleased with the results and has placed orders to fit two Hitachi's EX330 and a EX450 based on these results

Fluid Trend Analysis 01/23/2004		CASHMAN CAT		600 Glendale Ave. • Sparks, NV 89431 • 775-332-2477										Reportable											
Customer Unit ID		Make		Model		Serial		Compartment								1 of 1									
3520		HITACHI		EX750		005339		Hydraulic System																	
Oil Sample Information				Miscellaneous				Infrared Analysis % Allowable				Prior Interpretation Codes													
Control #	Date Taken	Fluid Status	Fluid Add	SMR	Fluid Run Time	A/F	Fuel	H2O	Viscosity 100C	TBN	TAN	Soot	Oxi	Nit	Sul										
E-																									
D-																									
C-																									
B-	15620040116	01/05/2004	Sampled	0.0	5304	1380	N	N	N	7.3	0.00	0.25	0	88	16	34	305	917	413	300	476				
A-	22620040122	01/19/2004	Sampled	0.0	5367	1443	N	N	N	7.4	0.00	0.29	0	9	16	16	Fluid Type / Grade: CHEVRON 30W								
Filter Changed ^																									
Wear Metals (Parts per Million)																									
Copper	Iron	Chrome	Lead	Alum	Silicon	Molybdm	Sodium	Magnesm	Tin	Zinc	Nickel	Potasum	Calcium	Phospor											
E-																									
D-																									
C-																									
B-	80	2	0	0	1	2	3	5	21	0	1027	0	13	2369	645										
A-	75	4	1	2	2	4	4	6	20	0	1033	0	13	2551	684										
Overall Status	Particle Counts (per Milliliter)										Current Sample Interpretation		Current Sample is Line "A"												
	4u	6u	14u	20u	25u	50u	75u	100u	ISO																
E-																									
D-																									
C-																									
B-	Reportable	25642	5272	405	103	55	5	0	0	0	22/20/16														
A-	Reportable	2185	295	43	3	6	0	0	0	0	18/15/13														