

OilPure Technologies, Inc.

P.O. Box 483976 • Kansas City • Missouri • 64148 • USA

Tel: 913-906-0400 • Fax: 913-906-9815

E-mail: oilpure@earthlink.net

January 13, 2001

Bruce Riley
 ULTRA CLEAN TECHNOLOGIES CORP.
 746 Shiloh Pike
 Bridgeton, NJ 08302

Dear Bruce:

We evaluated a hydraulic hose provided by your firm. The hydraulic hose is 1" dia. x 24" wire hydraulic hose with the use of Ultra Clean Technologies Ultra Clean Projectiles. According to the particle count testing from OilPure laboratory, we found that the Ultra Clean hose cleaning device and their Ultra Clean Projectiles are capable of providing ISO code 13/10 oil cleanliness.

Test Procedure

1. The hose was rinsed with new hydraulic oil several times, 150 cc oil quantity in each rinse.
2. The hose is washed with the same oil quantity of new oil each time
3. New hydraulic oil is AW46 viscosity grade and filtered to ISO code 13/10 cleanliness before testing.
4. Laser light particle count is used as particle count analysis. Particle counter is made by HIAC/ROYCO and uses the ISO:4406 standard for particle count method. Special quality control for particle count testing is made to make sure that the particle count shows accurate reading.
5. All oil samples were tested twice to make sure that particle count reading confirms accuracy.


Test Result Findings

Particle Count (in one cc)	New Oil	Ultra Clean Projectiles / Marker Saw			
		<u>1st Rinse</u>		<u>2nd Rinse</u>	
ISO Code:	13/10	13/11	13/10	13/10	13/10
>5 microns	49	53	49	63	49
>10 microns	15	26	15	12	11
>15 microns	8	16	8	7	6
>25 microns	3	8	3	3	1
>50 microns	1	2	1	1	0
>75 microns	0	0	0	0	0

The ISO code 13/10 oil cleanliness can be expected after hose is cleaned by Ultra Clean Projectiles by ULTRA CLEAN TECHNOLOGIES. We hope that this test data will provide sufficient information for ULTRA CLEAN TECHNOLOGIES' customer regarding oil cleanliness after ULTRA CLEAN hose cleaning.

Yours sincerely,

Vichai Srimongkolkul
 Technical Director

Hose Cleanliness Evaluation Report		 <i>The Machine Reliability Company</i>
Company: Ultra Clean Technologies Corp. Address: 746 Shiloh Pike City: Bridgeton State: NJ Zip: 08302 Telephone: 1-800-791-9111 Fax: 856-453-4975 Contact: Bruce Riley Title: President E-mail: briley@ultracleantech.com	Test Date: September 5, 2006 New Oil for Evaluation: AW46 Hydraulic Oil Hose Type: -16 1" x 28" oal, 4 spiral hyd hose assembly w 1" Male NPT EE Note:	

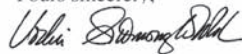
Dear Bruce

Test Procedure

1. The hose was rinsed with new hydraulic oil several times with non-contact flow technique.
2. The hose is washed with the same oil quantity of new oil each time
3. New hydraulic oil is AW46 viscosity grade and filtered to a low ISO code cleanliness before testing.
4. Laser light particle count is used as particle count analysis. Particle counter is made by HIAC/ROYCO and uses the ISO:4406-99 standard for particle count method. Special quality control for particle count testing is made to make sure that the particle count shows accurate reading.
5. All oil samples were tested twice to make sure that particle count reading confirms accuracy.

We hope that this test data will provide sufficient information regarding hose cleanliness evaluation.

Yours sincerely,



Vichai Srimongkolkul
 Technical Director

Item No.	Hose I. D.	Hose Descriptions	Solid Contamination Particle Count in 1 cc						ISO Code
			4µ	6µ	14µ	20µ	30µ	40µ	
1	NEW	New AW 46 Hydraulic Oil as base line comparison	214	64	23	9	1	0	15 / 13 / 12
	A1	Chop saw with abrasive wheel - no cleaning	99,999	99,999	92,618	67,576	29K	15K	24 / 24 / 24
	A2	Chop saw with abrasive wheel - 10 second air blow	96,508	52,827	4,546	1,013	53	13	24 / 23 / 19
3	A3	Chop saw with abrasive wheel - Ultra Clean	1,824	511	54	20	2	0	18 / 16 / 13
4	A4	Chop saw with metal scalloped blade - no cleaning	99,999	99,999	54,879	29,617	6.4K	2.5K	24 / 24 / 23
	A5	Chop saw with metal scalloped blade - 10 second air blow	99,999	84,470	18,639	5,725	752	247	24 / 24 / 21
	A6	Chop saw with metal scalloped blade - Ultra Clean	2,354	638	73	22	5	1	18 / 16 / 13