

SOUTHWEST RESEARCH INSTITUTE™

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DRAW DOWN TEST (PER CUMMINS ENGINEERING SPECIFICATION 10634) MODIFIED

DATE: APRIL 23, 2002

WORK ORDER NUMBER: 315866

STAND I.D.: NO. 2

SPONSOR: FILTRATION SOLUTIONS

TEST FLUID: MIL-H-5606, BATCH NO.: 01-12

FILTER I.D.: FS 2500

CONTAMINANT: SAE 5-80 DUST, BATCH NO.: 4390C

PARTICLE DISTRIBUTION ANALYSIS (PARTICLES PER MILLILITER)

PARTICLE SIZE	UPSTREAM COUNTS	DOWNSTREAM COUNTS	FILTRATION RATIO	EFFICIENCY %
SAMPLE TAKEN AT 3 MIN.				
>3 MICRON	19444.74	80.72	24089.12	99.58
>5 MICRON	18591.78	26.10	71232.87	99.86
>10 MICRON	15217.50	4.30	353895.35	99.97
>15 MICRON	11351.10	1.46	777472.60	99.99
>20 MICRON	7473.12	0.52	1437138.46	99.99
>30 MICRON	3076.86	0.14	2197757.14	100.00
>40 MICRON	1445.46	0.08	1806825.00	99.99
>50 MICRON	324.14	0.00	>100000.00	100.00
SAMPLE TAKEN AT 6 MIN.				
>3 MICRON	19301.42	59.76	32298.23	99.69
>5 MICRON	18402.22	19.74	93223.00	99.89
>10 MICRON	14791.84	3.98	371654.27	99.97
>15 MICRON	10749.28	1.62	663535.80	99.98
>20 MICRON	6874.60	0.64	1074156.25	99.99
>30 MICRON	2696.52	0.36	749033.33	99.99
>40 MICRON	1229.98	0.26	473069.23	99.98
>50 MICRON	269.94	0.10	269940.00	99.96
SAMPLE TAKEN AT 12 MIN.				
>3 MICRON	18803.94	101.56	18515.10	99.46
>5 MICRON	17862.76	35.76	49951.79	99.80
>10 MICRON	14144.24	5.56	254392.81	99.96
>15 MICRON	10045.12	1.60	627820.00	99.98
>20 MICRON	6213.62	0.60	1035603.33	99.99
>30 MICRON	2285.02	0.28	816078.57	99.99
>40 MICRON	973.46	0.24	405608.33	99.98
>50 MICRON	183.10	0.16	114437.50	99.91

TECHNICIAN: DAVID DON

DATE COMPLETED: APRIL 25, 2002

APPROVED: Karen Kohl for GAE



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PARTICLE DISTRIBUTION ANALYSIS (PARTICLES PER MILLILITER)

PARTICLE SIZE	UPSTREAM COUNTS	DOWNSTREAM COUNTS	FILTRATION RATIO	EFFICIENCY %
SAMPLE TAKEN AT 20 MIN.				
>3 MICRON	18625.10	69.66	26737.15	99.63
>5 MICRON	17585.24	23.36	75279.28	99.87
>10 MICRON	13577.00	4.50	301711.11	99.97
>15 MICRON	9314.94	1.62	574996.30	99.98
>20 MICRON	5597.18	0.78	717587.18	99.99
>30 MICRON	2033.04	0.34	597952.94	99.98
>40 MICRON	884.30	0.12	736916.67	99.99
>50 MICRON	190.24	0.10	190240.00	99.95

DOWNSTREAM ACCEPTABLE LIMITS: >3 MICRON @ 3 MIN.: <14,000 PARTICLES/ML.
@ 20 MIN.: <1,500 PARTICLES/ML.

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