

START

0019132



HANFORD ENVIRONMENTAL HEALTH FOUNDATION

August 1, 1985

9855

UNC Nuclear Industries
1114N Building
100N Area

Attn: E. M. Greager

PARTICULATE, METAL & ANION ANALYSIS - 183H BASIN

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2
1
2
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0
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4

Results of the particulate, copper and anion analysis of 30 membrane filter samples and blanks received July 22-26, 1985, are shown in the attached table. These samples were reportedly collected during sludge removal from the 183H Basin. Reported concentrations are based on air volumes provided. As agreed on in our discussion of July 24, 1985, only the two highest samples from each group were analyzed for copper and anions respectively. Also included are the results of the analysis of six environmental samples collected July 26, 1985, by S. R. Somers of Environmental Health Sciences. All samples were analyzed for copper or anions. Sampling locations are included in the report.

If you have any questions concerning this report, please contact Environmental Health Sciences.

M. K. Hamilton, CIH
Environmental Health Sciences

spm

Attachment



ANALYTICAL RESULTS - 183H BASIN
MEMBRANE FILTERS RECEIVED JULY 22-26, 1985

Date	Time	Sample Location & Description	m ³ Air Vol.	mg/m ³ Part	mg/m ³ F	mg/m ³ NO ₃	mg/m ³ SO ₄	mg/m ³ Cu
**	0110-0400	N9476	4.81	0.21	*	*	*	0.0007
(Metals)	0115-0402	N9686	4.73	0.17	*	*	*	*
	0110-0400	N9336	4.81	0.12	*	*	*	*
	0115-0402	N138	4.73	0.144	*	*	*	*
	Blank	N250	-	-	*	*	*	-
**	0402-0700	N647	5.04	0.08	< 0.001	0.0018	< 0.003	*
(Anions)	0402-0700	N9989	5.04	< 0.01	*	*	*	*
	0400-0700	N647	5.09	0.04	*	*	*	*
	0400-0700	H634	5.09	0.07	*	*	*	*
	Blank	E490	-	-	*	*	*	*
**	0105-0400	H748	4.95	0.06	*	*	*	*
(Metals)	0105-0400	E279	4.95	< 0.01	*	*	*	*
	0105-0400	N442	4.95	0.03	*	*	*	*
	0105-0400	N9598	4.95	0.01	*	*	*	*
	Blank	N9893	-	-	*	*	*	*
**	0400-0700	H668	5.09	0.06	*	*	*	*
(Anions)	0400-0700	H480	5.09	0.09	0.0016	< 0.001	0.0046	*
	0400-0700	N715	5.09	0.06	*	*	*	*
	0400-0700	H776	5.09	0.08	*	*	*	*
	Blank	N610	-	-	-	-	-	*
7-24-85	0100-0400	E726	5.10	0.07	*	*	*	*
(Metals)	0100-0405	N9526	5.24	0.08	*	*	*	*

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ANALYTICAL RESULTS - 183H BASIN
MEMBRANE FILTERS RECEIVED JULY 22-26, 1985
(Continued)

Date	Time	Sample Location & Description	m ³ Air Vol.	mg/m ³ Part	mg/m ³ F	mg/m ³ NO ₃	mg/m ³ SO ₄	mg/m ³ Cu
7-24-85 (Metals)	0100-0405	N9180	5.24	0.06	*	*	*	*
	0100-0405	N741	5.24	0.07	*	*	*	*
	Blank	N9386	-	-	*	*	*	*
7-24-85 (Anions)	0405-0700	E699	4.96	<0.02	*	*	*	*
	0405-0700	N9590	4.96	0.03	*	*	*	*
	0405-0700	N733	4.96	<0.02	*	*	*	*
	0405-0700	H575	4.96	<0.02	*	*	*	*
	Blank	N527	-	-	*	*	*	*
7-25-85 (Metals)	0115-0415	N9570	5.10	0.12	*	*	*	*
	0115-0415	N35	5.10	0.17	*	*	*	0.0038
	0115-0700	N606	9.77	0.06	*	*	*	*
	Blank	6025	-	-	*	*	*	*
7-25-85 (Anions)	0115-0700	H1106	9.77	0.03	*	*	*	*
	0415-700	N10011	4.67	<0.02	*	*	*	*
	0415-700	H475	4.67	<0.02	*	*	*	*
	Blank	H1152	-	-	*	*	*	*
8-hour Time-Weighted-Average			-	10.0	2.5	NE	NE	1.0
ENVIRONMENTAL (See Attached Map for Sample Locations)								
7-26-85	0025-0716	N104-PI Valve	0.89	0.22	*	*	*	<0.0006
	0025-0716	H450-Well 4-5	0.82	<0.1	*	*	*	<0.0006

9 2 1 2 5 0 1 1 5 5 7

ANALYTICAL RESULTS - 183H BASIN
 MEMBRANE FILTERS RECEIVED JULY 22-26, 1985
 (Continued)

<u>Date</u>	<u>Time</u>	<u>Sample Location & Description</u>	<u>m³ Air Vol.</u>	<u>mg/m³ Part</u>	<u>mg/m³ F</u>	<u>mg/m³ NO₃</u>	<u>mg/m³ SO₄</u>	<u>mg/m³ Cu</u>
<u>ENVIRONMENTAL</u>								
7-26-85	0032-0710	H706-Well 4-4	0.83	< 0.1	*	*	*	< 0.0006
	0032-0710	H828-PI Valve	0.86	< 0.1	< 0.003	< 0.007	< 0.02	*
	0038-0713	N336-Well 4-5	0.81	< 0.1	< 0.004	< 0.008	< 0.02	*
	0038-0713	411-Well 4-4	0.83	< 0.1	< 0.003	< 0.007	< 0.02	*
	Blank	4	-	-	-	-	-	*

*Not Analyzed

**Not Given

NE=None Established

REACTOR AREA

100-H

9 2 1 2 5 0 1 1 5 , 8 .

SCALE IN FEET
0 100 200 400



SOLAR EVAPORATION PONDS
(12)

Columbia River

Well 4-4

Well 4-5

71 valve
U 761 304

Ambient Air Sampling
July 25, 1985, 12:00 am-7:00 am

Environmental Conditions
Wind: Gentle, N-NW
Precip: None

