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INV.

9-47

FILE W/O. G.

DATE July 24, 1947 COPY 1 OF 1 SERIES 4A
SUBJECT River Water Sampling

Yakima River Water - Work Sheets - Computations.
Tables

To File

FROM B. F. Butler

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LFR 9-7

Classification **RESTRICTED** Page 66
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 R/S **Schick** Date **4/2/58**

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JUL 27 1951

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ENGINEERING DEPARTMENT

COPIES OF 1, SERIES MA

SHEET No. 12

This Document, consisting of 56 Pages, No. 1

TITLE OF PROJ.

Yakima River Water Station VIII

SUBJECT

Index

COMPUTER A. Nielson

COPY 1 OF 1, SERIES MA

WORKS

Copies, Series A

DATE Feb. 11, 1957

I.

Temperature

1.	Temp x Alkal MO	Page 5
2.	Temp x Alkal PH	6
	Temp x pH	6
3.	Temp x Chlorine	7
	Temp x Hardness	7
4.	Temp x Albumin N	8
5.	Temp x NH ₃ N	9
	Temp x NO ₃ N	9
6.	Temp x Oxygen Dissolved	10
7.	Temp x Oxygen BOD	11
	Temp x Total Solids	11
8.	Temp x Turbidity	12

W10.8
W10.40
A6.01
A6.407

II.

pH-

1.	pH x Alkal MO	13
	pH x Alkal PH	13
2.	pH x Chlorine	14
	pH x Hardness	14
3.	pH x Albumin N	15
	pH x NH ₃ N	15
4.	pH x NO ₃ N	16
5.	pH x Oxygen Dissolved	17
	pH x Oxygen BOD	17
6.	pH x Total Solids	18
	pH x Turbidity	18

III. Potentiometry: Methyl Orange

1.	Alkal MO x Alkal PH	19
	Alkal MO x Chlorine	19
2.	Alkal MO x Hardness	20
	Alkal MO x Albumin N	20
3.	Alkal MO x NH ₃ N	21
	Alkal MO x NO ₃ N	21

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ENGINEERING DEPARTMENT

COMPUTATION SHEET

H2W-7113

SHEET NO. 2

TITLE OF PROJ.

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DATE

18

Alkalinity Methyl Orange (continued)

4.	Alkal MO x Oxygen Dissolved	Page 22
	Alkal MO x Oxygen BOD	22
5.	Alkal MO x Total Solids	23
	Alkal MO x Turbidity	23

IV.

Alkalinity Phenolphthalein

1.	Alkal Ph. x Chlorine	24
	Alkal Ph. x Hardness	24
2.	Alkal Ph. x Albumin N.	25
	Alkal Ph. x NH ₃ N	25
3.	Alkal Ph. x NO ₃ N	26
4.	Alkal Ph. x Oxygen Dissolved	27
	Alkal Ph. x Oxygen BOD	27
5.	Alkal Ph. x Total Solids	28
	Alkal Ph. x Turbidity	28

V Chlorine

1.	Chlorine x Hardness	29
	Chlorine x Albumin N.	29
2.	Chlorine x NH ₃ N	30
	Chlorine x NO ₃ N	30
3.	Chlorine x Oxygen Dissolved	31
	Chlorine x Oxygen BOD	31
4.	Chlorine x Total Solids	32
	Chlorine x Turbidity	32

VI

Hardness

1.	Hardness x Albumin N.	33
	Hardness x NH ₃ N	33
2.	Hardness x NO ₃ N	34
3.	Hardness x Oxygen Dissolved	35
	Hardness x Oxygen BOD	35
4.	Hardness x Total Solids	36
	Hardness x Turbidity	36

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H2W-7173

ENGINEERING DEPARTMENT

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COMPUTATION SHEET

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TITLE OF PROJ.

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DATE

19

VII.

Albuminoid Nitrogen

1.	Albuminoid N	x	NH ₃ N	Page 37
	Albumin N	x	Oxygen Dissolved	37
2.	Albumin N	x	NO ₃ N	38
3.	Albumin N	x	Oxygen BOD	39
	Albumin N	x	Turbidity	39
4.	Albumin N	x	Total Solids	40

VIII.

NH₃N

1.	NH ₃ N	x	NO ₃ N	41
2.	NH ₃ N	x	Oxygen Dissolved	42
	NH ₃ N	x	Oxygen BOD	42
3.	NH ₃ N	x	Total Solids	43
	NH ₃ N	x	Turbidity	43

IX.

NO₃N

1.	NO ₃ N	x	Oxygen Dissolved	44
	NO ₃ N	x	Oxygen BOD	44
2.	NO ₃ N	x	Total Solids	45
	NO ₃ N	x	Turbidity	45

X.

Oxygen Dissolved

1.	Oxygen Dissolved	x	Oxygen BOD	46
	Oxygen Dissolved	x	Total Solids	46
2.	Oxygen Dissolved	x	Turbidity	47

XI.

Oxygen Biological Demand

1.	Oxygen BOD	x	Total Solids	48
	Oxygen BOD	x	Turbidity	48

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COMPUTATION SHEET

14

4/2/57

SHEET NO. 4

TITLE OF PROJ.

Index

PROJ. No.

SUBJECT

WORKS

COMPUTER

DATE

10

XII.

Total Solids

1. Total Solids x Turbidity

Page 19

XIII.

Month of Year

1	Month of Year	x	Alkalinity MO*	50
	Month of Year	x	Alkalinity Ph*	50
2	Month of Year	x	pH.	51
3	Month of Year	x	Chlorine	52
	Month of Year	x	Hardness	52
4	Month of Year	x	Total Solids *	53
	Month of Year	x	Turbidity *	53
5	Month of Year	x	Temperature *	54
	Month of Year	x	Albuminoid N	54
6	Month of Year	x	NH3 N	55
	Month of Year	x	NO3 N	55
7	Month of Year	x	Oxygen Dissolved *	56
	Month of Year	x	Oxygen BOD	56

* Correlations

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5 COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ. Temp X Altal M.D.

PROJ. NO.

SUBJECT

WORKS

Station VIII

COMPUTER G. J. Johnson

DATE 1/29

10 175

	0-19	20-39	40-59	60-79	80-99	100-119	120-139	140-159	160-179	180-199	200-219	220-239	240-259		
46-55														2	2
56-65														7	7
66-75														7	7
76-85														10	9
86-95														9	9
96-105														12	11
106-115														6	6
116-125														12	12
126-135														7	7
136-145														5	5
146-155														10	11
156-165														12	12
166-175														8	8
	5	8	11	10	9	6	8	10	8	9	17			110	
	5	7	11	8	9	6	8	10	8	9	15	6	3	106	

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FORM PH-41

ENGINEERING DEPARTMENT

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COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ.

Temp x Alkal Ph

PROJ NO.

SUBJECT

WORKS

5/9/69 *Water* *TEMP*

DATE

19

Alkal	Ph	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9
0-1.9														17 16
2-3.9														29 29
4-5.9														20 19
6-7.9														14 13
8-9.9														11 13
10-11.9														9 9
12-13.9														7 6
14-15.9														
		5	8	11	9	9	4	8	10	8	8	16	6	2 17 10.6

Temp x ph

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9
7.50-7.55													1
7.56-7.60													2
7.61-7.65													6
7.66-7.70													8
7.71-7.75													16
7.76-7.80													16
7.81-7.85													20
7.86-7.90													18
7.91-7.95													13
7.96-8.00													4
8.01-8.05													
8.06-8.10													
8.11-8.15													
8.16-8.20													
8.21-8.25													
8.26-8.30													
8.31-8.35													
8.36-8.40													
8.41-8.45													
8.46-8.50													
8.51-8.55													
8.56-8.60													
8.61-8.65													
8.66-8.70													
8.71-8.75													
8.76-8.80													
8.81-8.85													
8.86-8.90													
8.91-8.95													
8.96-9.00													
9.01-9.05													
9.06-9.10													
9.11-9.15													
9.16-9.20													
9.21-9.25													
9.26-9.30													
9.31-9.35													
9.36-9.40													
9.41-9.45													
9.46-9.50													
9.51-9.55													
9.56-9.60													
9.61-9.65													
9.66-9.70													
9.71-9.75													
9.76-9.80													
9.81-9.85													
9.86-9.90													
9.91-9.95													
9.96-10.00													

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FORM 2-61

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 3

TITLE OF PROJ.

PROJ. NO.

SUBJECT

Temp. & Chlorine

WORKS

COMPUTER

DATE

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
1-1.5														
1.6-1.0														
1.1-1.5			II	I	IIII	II	I	IIII	IIII	II	IIII			1
1.6-2.0		IIII	IIII	IIII	I	I	IIII	II	I					28
2.1-2.5	IIII		I	I	II									20
2.6-3.0		IIII	IIII											9
3.1-3.5			II	I	I					II	IIII	IIII		14
3.6-4.0											II			14
4.1-4.5										II	II	I	II	14
4.6-5.0														
5.1-5.5														
	5	7	12	8	9	6	9	9	8	8	16	6	3	106

Temp. & Chlorine

	2-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
36-45						I	IIII	IIII	IIII					1
46-55					I		I		II		I			15
56-65			I		IIII	I								5
66-75			IIII	I	IIII	I				II	I			6
76-85	II	IIII		IIII							II			11
86-95		IIII	IIII	I							IIII	IIII	II	11
96-105	IIII		II	I							I			18
106-115			I	II	I	I								7
116-125										II				6
126-135											II			3
136-145										I	IIII	IIII	I	10
146-155							II	I		II	II			8
156-165						I			II					3
166-175														
	5	7	12	8	9	6	9	9	8	8	16	6	3	106

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ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 4

TITLE OF PROJ.

Washington Bridge at Lake

PROJ. NO.

SUBJECT

Aluminum R. V. Transfer Station Vitr

WORKS

COMPUTER

DATE

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
.01-.029	11		11	11	11	11	11	1	1	1	11	1		7
.03-.049		111	11		11	1	11	11	111	11	11	1		25
.05-.069			111	11	11	1	1	111	11	11	11	1		26
.07-.089		11		1	1	1	1	1			11	1		27
.09-.109								11				1		8
.11-.129			1	1						1	11	1		9
.13-.149											1			7
.15-.169											1			1
.17-.189														
.19-.209											1			1
.21-.229														
.23-.249														
.25-.269														
.27-.289														
.29-.309														
.31-.329														
.33-.349														
	5	8	11	8	9	6	8	10	8	8	16	6	3	106

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ENGINEERING DEPARTMENT

COUPON 9

COMPUTATION SHEET

SHEET NO. 5

TITLE OF PROJ. Marina Fire 51

PROJ NO. _____

SUBJECT TEMPX. NH₃ N

WORKS _____

	COMPUTER												DATE	
	0-19	2-39	4-59	6-79	8-99	10-119	12-139	14-159	16-179	18-199	20-219	22-239	24-259	
01-029	III	II	III	II	II	II	II	II	II	II	II	II	II	
03-049	III	II	III	II	II	II	II	II	II	II	II	II	II	
05-069	II	II	II	II	II	II	II	II	II	II	II	II	II	
07-089	II	II	II	II	II	II	II	II	II	II	II	II	II	
09-109	II	II	II	II	II	II	II	II	II	II	II	II	II	
11-129	II	II	II	II	II	II	II	II	II	II	II	II	II	
13-149	II	II	II	II	II	II	II	II	II	II	II	II	II	
15-169	II	II	II	II	II	II	II	II	II	II	II	II	II	
17-189	II	II	II	II	II	II	II	II	II	II	II	II	II	
19-209	3	8	11	8	9	6	8	10	8	8	14	6	3	166

NO. 14

	0-19	2-39	4-59	6-79	8-99	10-119	12-139	14-159	16-179	18-199	20-219	22-239	24-259	
01-029	II													16
03-049														1
05-069														2
07-089														7
09-109														9
11-129														16
13-149														16
15-169														10
17-189														8
19-209														2
21-229														11
23-249														9
25-269														5
27-289														3
29-309														1
31-329														6

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FORM NO. 11

ENGINEERING DEPARTMENT

10

COMPUTATION SHEET

42 W 11
SHEET NO. 4

TITLE OF PROJ.

TEMP X O.D

PROJ. NO.

SUBJECT

Station VIII

COMPUTER

DATE

WORKER

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	Σ
4.5-5.5		+	+								(14/10)	1	2	3
5.6-6.5											7	3	1	11
6.6-7.5											5	2		7
7.6-8.5														21
8.6-9.5														18
9.6-10.5														14
10.6-11.5														14
11.6-12.5														12
12.6-13.5														6
13.6-14.5														
14.6-15.5														
Σ	5	8	11	8	9	6	8	10	8	3	16	6	3	106

N = 110

N = 110

Σx

Σy

Σxy

Σx²

Σy²

Σ(x - $\bar{x}$)²

Σ(y - $\bar{y}$)²

Σ(x - $\bar{x}$)(y - $\bar{y}$)

$$r = \frac{\Sigma xy - \Sigma x(\bar{y})}{\sqrt{\Sigma(x - \bar{x})^2 \cdot \Sigma(y - \bar{y})^2}} =$$

$$r = -0.895029$$

$$r^2 = 0.801$$

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COMPUTATION SHEET

#26-71

SHEET NO. 7

TITLE OF PROJ.

PROJ. NO.

SUBJECT

Temper O-BOD

Station VIII

WORKS

COMPUTER

DATE

10

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
0-2		II	IIII	IIII	IIII				III	II	IIII	I		25
3-5		III	II		III	II	II	II		III	II		III	26
6-8		II	II				III	III	II		I	I		19
9-1.1	III	I	II			II	I				I	II		12
12-1.9														7
15-1.7														3
18-2.0														1
21-2.3														1
24-2.6														1
27-2.9														
30-3.2														
5.1														1
	5	8	11	7	5	7	8	7	2	0	16	6	3	106

Total S. l. v. s. y. Temperature

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
10-100														
101-120														4
121-140														4
141-160		II	IIII				IIII	IIII	II					17
161-180	III	II	II		III	II	II	II						21
181-200		III	I		III						II			13
201-220				IIII							I	II		10
221-240							II			II			II	11
241-260										II	IIII	I		11
261-280											II		I	10
281-300														3
301-320														1
321-340														
341-360														
361-380														
381-400														
401-420														
421-440														
441-460														
461-480														
481-500														
	5	8	11	8	7	6	8	10	8	7	17	6	3	106

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#12W-717

FORM 54-51

ENGINEERING DEPARTMENT

REPORT

COMPUTATION SHEET

SHEET NO. 8

TITLE OF PROJ.

Temp & Turbidity

PRJ. NO.

SUBJECT

Station VTT

WORKS

	COMPUTER												DATE	18
	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9	16-17.9	18-19.9	20-21.9	22-23.9	24-25.9	
0-10														16
11-20														39
21-30														14
31-40														11
41-50														8
51-60														8
61-70														5
71-80														2
81-90														
91-100														2
101-110														
111-120														1
	5	8	11	8	9	5	7	10	8	8	14	6	3	104

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DUPONT

13

COMPUTATION SHEET

SHEET NO. 1

HEW-111

TITLE OF PROJ.

Nakima River Water

PROJ NO

SUBJECT

pH X ALKAL MO Station VIII

WORKS

	COMPUTER										DATA			
	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	8.26-8.25	8.26-8.25	8.26-8.25	8.26-8.25
46-55														
56-65														
66-75														
76-85														
86-95														
96-105														
106-115														
116-125														
126-135														
136-145														
146-155														
156-165														
166-175														

	COMPUTER										DATA			
	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	7.96-7.95	8.26-8.25	8.26-8.25	8.26-8.25	8.26-8.25
2-1.9														
3-2.9														
4-3.9														
5-4.9														
6-5.9														
7-6.9														
8-7.9														
9-8.9														
10-9.9														
11-10.9														
12-11.9														
13-12.9														
14-13.9														

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DUPONT

COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ

PROJ NO

SUBJECT

WORKS

	7.46-7.55	7.56-7.65	7.66-7.75	7.76-7.85	7.86-7.95	7.96-8.05	8.06-8.15	8.16-8.25	8.26-8.35	8.36-8.45	8.46-8.55	8.56-8.65	8.66-8.75	8.76-8.85
1-1.5														
1.6-1.0														
1.1-1.5														
1.6-2.0														
2.1-2.5														
2.6-3.0														
3.1-3.5														
3.6-4.0														
4.1-4.5														
4.6-5.0														
5.1-5.5														

pH X Hardness

	7.46-7.55	7.56-7.65	7.66-7.75	7.76-7.85	7.86-7.95	7.96-8.05	8.06-8.15	8.16-8.25	8.26-8.35	8.36-8.45	8.46-8.55	8.56-8.65	8.66-8.75	8.76-8.85
36-75														
76-55														
56-65														
66-75														
76-85														
86-95														
96-105														
106-115														
116-125														
126-135														
136-145														
146-155														
156-165														
166-175														
176-185														
186-195														
196-205														
206-215														
216-225														
226-235														
236-245														
246-255														
256-265														
266-275														
276-285														
286-295														
296-305														
306-315														
316-325														
326-335														
336-345														
346-355														
356-365														
366-375														
376-385														
386-395														
396-405														
 														

DECLASSIFIED

DECLASSIFIED

15

#2W-717

ENGINEERING DEPARTMENT **SECRET** COMPUTATION SHEET

SHEET NO. 3

TITLE OF PROJ. Albany Station PROJ NO. _____
 SUBJECT PH 4 Albany N Station WORKS _____

	COMPUTER										DATE			
	746-755	756-765	766-775	776-785	786-795	796-805	806-815	816-825	826-835	836-845	846-855	856-865	866-875	876-885
01-029														
03-049														
05-069														
07-089														
09-109														
11-129														
13-149														
15-169														
17-189														
19-209														
21-229														

- PH 4 N H3

	746-755	756-765	766-775	776-785	786-795	796-805	806-815	816-825	826-835	836-845	846-855	856-865	866-875	876-885
01-029														
03-049														
05-069														
07-089														
09-109														
11-129														
13-149														
15-169														
17-189														
19-209														

DECLASSIFIED

DECLASSIFIED

15

H 2 W. 7173/6

ENGINEERING DEPARTMENT

COMPUT

COMPUTATION SHEET

SHEET NO. 4

TITLE OF PROJ.

Water Station

PROJ NO.

SUBJECT

-PH- X NO3

Station VII

WORKS

	746-755	756-765	766-775	776-785	786-795	796-805	806-815	816-825	826-835	836-845	846-855	856-865	866-875	876-885	
01-029															
03-049															
05-069															
07-089															
09-109															
11-129															
13-149															
15-169															
17-189															
19-209															

-PH- X NO3

	746-755	756-765	766-775	776-785	786-795	796-805	806-815	816-825	826-835	836-845	846-855	856-865	866-875	876-885	
01-029															
03-049															
05-069															
07-089															
09-109															
11-129															
13-149															
15-169															
17-189															
19-209															
21-229															
23-249															
25-269															
27-289															
29-309															
31-329															
33-349															
35-369															
37-389															
39-409															
41-429															
43-449															
45-469															
47-489															
49-509															

DECLASSIFIED

DECLASSIFIED

17

H 2 W. 717

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ. Wabamun River Water

PROJ NO

SUBJECT pH x Oxygen Dissolved

WORKS

COMPUTER

Station VIII

DATE

	740-7.5	750-7.65	760-7.75	770-7.85	780-7.95	790-8.05	800-8.15	810-8.25	820-8.35	830-8.45	840-8.55	850-8.65	860-8.75	870-8.85
4.6-5.5														
5.6-6.5														
6.6-7.5														
7.6-8.5														
8.6-9.5														
9.6-10.5														
10.6-11.5														
11.6-12.5														
12.6-13.5														
13.6-14.5														
14.6-15.5														

pH x Oxygen BOD

	740-7.55	750-7.65	760-7.75	770-7.85	780-7.95	790-8.05	800-8.15	810-8.25	820-8.35	830-8.45	840-8.55	850-8.65	860-8.75	870-8.85
0-1.2														
1.3-2.5														
2.6-3.8														
3.9-5.1														
5.2-6.4														
6.5-7.7														
7.8-9.0														
9.1-10.3														
10.4-11.6														
11.7-12.9														
13.0-14.2														
14.3-15.5														
15.6-16.8														
16.9-18.1														
18.2-19.4														
19.5-20.7														
20.8-22.0														
22.1-23.3														
23.4-24.6														
24.7-25.9														
26.0-27.2														
27.3-28.5														
28.6-29.8														
29.9-31.1														
31.2-32.4														
 														

DECLASSIFIED

DECLASSIFIED

ENGINEERING DEPARTMENT

DUPONT

COMPUTATION SHEET

SHEET NO. 2

H 2 W 717

FILE OF PROJ.

W. J. ... Station

PROJ. NO.

SUBJECT

PH x Total Solids

Station VII

WORKS

	COMPUTER										DATE			
	7.40-7.55	7.56-7.65	7.66-7.75	7.76-7.85	7.86-7.95	7.96-8.05	8.06-8.15	8.16-8.25	8.26-8.35	8.36-8.45	8.46-8.55	8.56-8.65	8.66-8.75	8.76-8.85
-1.00														
1-120														
1-140														
1-160														
1-180														
21-200														
21-220														
21-240														
21-260														
21-280														
21-300														
21-320														
21-340														
21-360														
21-380														
21-400														
21-420														
21-440														
21-460														
21-480														
21-500														
21-520														
21-540														
21-560														
21-580														
21-600														
21-620														
21-640														
21-660														
21-680														
21-700														
21-720														
21-740														
21-760														
21-780														
21-800														
21-820														
21-840														
21-860														
21-880														
21-900														
21-920														
21-940														
21-960														
21-980														
21-1000														

PH x Turbidity

	7.40-7.55	7.56-7.65	7.66-7.75	7.76-7.85	7.86-7.95	7.96-8.05	8.06-8.15	8.16-8.25	8.26-8.35	8.36-8.45	8.46-8.55	8.56-8.65	8.66-8.75	8.76-8.85
0-10														
11-20														
21-30														
31-40														
41-50														
51-60														
61-70														
71-80														
81-90														
91-100														
101-110														
111-120														
121-130														
131-140														
141-150														
151-160														
161-170														
171-180														
181-190														
 														

DECLASSIFIED

DECLASSIFIED

FORM NO. 11

ENGINEERING DEPARTMENT

19
COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ. *Aluminum Chloride Station*

PROJ. NO.

SUBJECT *Aluminum Chloride Station*

WORKS

	COMPUTER <i>Station</i>													DATE
	46-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	176-185
0-1.9	///	///	///	///	///	///	///	///	///	///	///	///	///	///
2-3.9						///	///	///	///	///	///	///	///	///
4-5.9							///	///	///	///	///	///	///	///
6-7.9								///	///	///	///	///	///	///
8-9.9									///	///	///	///	///	///
10-11.9										///	///	///	///	///
12-13.9											///	///	///	///
14-15.9												///	///	///

Aluminum Chloride Station

	46-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	176-185
1-1.5														
6-1.0														
11-1.5	///	///	///	///	///	///	///	///	///	///	///	///	///	///
16-2.0	///	///	///	///	///	///	///	///	///	///	///	///	///	///
21-2.5														
26-3.0														
31-3.5														
36-4.0														
41-4.5														
46-5.0														
51-5.5														

DECLASSIFIED

DECLASSIFIED

ENGINEERING DEPARTMENT

20
COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ.

Y-2000-1000-1000

PROJ. NO.

SUBJECT

Al-100 x Hardness

WORKS.

COMPUTER

Station 17111

DATE

	46-85	56-85	66-85	76-85	86-85	96-85	106-85	116-85	126-85	136-85	146-85	156-85	166-85	176-85	186-85
36-85															
46-85															
56-85															
66-85															
76-85															
86-85															
96-85															
106-85															
116-85															
126-85															
136-85															
146-85															
156-85															
166-85															
176-85															
186-85															

AL-100 x Al-bunt IV

	46-85	56-85	66-85	76-85	86-85	96-85	106-85	116-85	126-85	136-85	146-85	156-85	166-85	176-85	186-85
46-85															
56-85															
66-85															
76-85															
86-85															
96-85															
106-85															
116-85															
126-85															
136-85															
146-85															
156-85															
166-85															
176-85															
186-85															

DECLASSIFIED

100M 44.41

NEW-717A

DU PONT

SHEET NO.

Japan's River Water

PROJ NC

$$Al_2O_3 \cdot MO \times NH_3 \cdot N$$

WORKS

COMPUTER

Sept 16 17 VII

DATE:

Alkal Mo. x. NQ.N

DECLASSIFIED

DECLASSIFIED

23

H2W 7.1732

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO 5

TITLE OF PROJ.

Madison River Water

PROJ NO

SUBJECT

At Total MD & Total Solids

WORKS

COMPUTER

Station 1101

DATE

	46-95	56-105	66-115	76-125	86-135	96-145	106-155	116-165	126-175	136-185	146-195	156-205	166-215	176-225
81-100														
101-120														
121-140														
141-160														
161-180														
181-200														
201-220														
221-240														
241-260														
261-280														
281-300														
301-320														
321-340														
341-360														
486		0.173												

At Total MD & Turbidity

	46-95	56-105	66-115	76-125	86-135	96-145	106-155	116-165	126-175	136-185	146-195	156-205	166-215	176-225
0-10														
11-20														
21-30														
31-40														
41-50														
51-60														
61-70														
71-80														
81-90														
91-100														
111-120														

DECLASSIFIED

DECLASSIFIED

Form No. 24

ENGINEERING DEPARTMENT

24

COMPUTATION SHEET

4240-11

SHEET NO. 1

TITLE OF PROJ. Yakusma River Water

PROJ. NO.

SUBJECT Airial Ph X Chlorine

WORKS

COMPUTER

Station VIII

DATE

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
1-1.5								
1.6-1.0								
1.1-1.5								
1.6-2.0								
2.1-2.5								
2.6-3.0								
3.1-3.5								
3.6-4.0								
4.1-4.5								
4.6-5.0								
5.1-5.5								

Airial Ph X LT 0.5/17.5.5

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
36-45								
46-55								
56-65								
66-75								
76-85								
86-95								
96-105								
106-115								
116-125								
126-135								
136-145								
146-155								
156-165								
166-175								
176-185								
186-195								
196-205								

DECLASSIFIED

DECLASSIFIED

FORM PH-117

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ.

Alkal Ph x Albumin N

PROJ. NO.

SUBJECT

Alkal Ph x Albumin N

WORKS

COMPUTER

Station VIII

DATE

19

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
.01-.029								
.03-.049								
.05-.069								
.07-.089								
.09-.109								
.11-.129								
.13-.149								
.15-.169								
.17-.189								
.19-.209								

Alkal Ph x NH₃ 14

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
.01-.029								
.03-.049								
.05-.069								
.07-.089								
.09-.109								
.11-.129								
.13-.149								
.15-.169								
.17-.189								
.19-.209								

DECLASSIFIED

DECLASSIFIED

FORM 10-1

ENGINEERING DEPARTMENT

REPORT

COMPUTATION SHEET

SHEET NO. 3

H2W.7173

TITLE OF PROJ.

Waterman River Water

PROJ. NO.

SUBJECT

Atkins Pk. x NO. 11

WORKS

COMPUTER

Station VII

DATE

19

01-029

03-049

05-069

07-089

09-109

11-129

13-149

15-169

17-189

19-209

21-229

23-249

25-269

27-289

29-309

31-329

33-349

35-369

37-389

39-409

41-429

DECLASSIFIED

27

H2W-11(13)

Form No. 1

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ.

Wabash River Water

PROJ. NO.

SUBJECT

Alkal Ph x O.D.

WORKS

COMPUTER

Station VII

DATE

19

	0-4.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
4.6-5.5				II	III	III	II	
5.6-6.5				II	III	III	II	
6.6-7.5	III	III	III	II		III	II	
7.6-8.5	III	III	III	II	I	III	III	
8.6-9.5	III	III	III	I	I			
9.6-10.5	II	III	III	III		I		
10.6-11.5	I	III	III	II				
11.6-12.5		II	III					
12.6-13.5								
13.6-14.5								
14.6-15.5								

Station VII, Y. 5-15.0

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
0-1.2	II	III	III	III	I	III	I	
1.3-1.5	III	III	III	I	III	II	III	
1.6-1.8	III	III	III	III	II	III		
1.9-1.1	II	III	II	III			I	
1.2-1.9		II	II	I		II		
1.5-1.7		II					I	
1.8-2.0								
2.1-2.3								
2.4-2.6	I							
2.7-2.9	I							
3.0-3.2								

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28

HZW-71728

ENGINEERING DEPARTMENT **DUPONT** COMPUTATION SHEET

SHEET NO. 5

TITLE OF PROJ. Water Resources Master PROJ. NO. _____
 SUBJECT Alkal. Ph. x Total Solids WORKS _____

COMPUTER Station VIII DATE _____

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
81-100		III	I					
101-120		II	I					
121-140	III	IIII	IIII					
141-160	IIII	IIII	II	I				
161-180		IIII	II	IIII	I			
181-200	IIII	I	II	II				
201-220			I	II	IIII	I		
221-240				IIII	II	II		
241-260		I			IIII	II		
261-280								
281-300								
301-320								
321-340								
341-360								
361-380								
381-400								
401-420								
421-440								
441-460								
461-480								
481-500								
501-520								
521-540								
541-560								
561-580								
581-600								
601-620								
621-640								
641-660								
661-680								
681-700								
701-720								
721-740								
741-760								
761-780								
781-800								
801-820								
821-840								
841-860								
861-880								
881-900								
901-920								
921-940								
941-960								
961-980								
981-1000								

786

Alkal. Ph. x Turbidity

	0-1.9	2-3.9	4-5.9	6-7.9	8-9.9	10-11.9	12-13.9	14-15.9
0-10		II	IIII	IIII				
11-20		IIII	IIII	IIII	IIII	IIII	IIII	
21-30		II	II		II	II	I	
31-40	II	IIII				II		
41-50	IIII	IIII						
51-60	IIII	IIII						
61-70	II	I						
71-80								
81-90								
91-100								
101-110								
111-120								
121-130								
131-140								
141-150								
151-160								
161-170								
171-180								
181-190								
191-200								
201-210								
211-220								
221-230								
231-240								
241-250								
251-260								
261-270								
271-280								
281-290								
291-300								
301-310								
311-320								
321-330								
331-340								
341-350								
351-360								
361-370								
371-380								
381-390								
391-400								
401-410								
411-420								
421-430								
431-440								
441-450								
451-460								
461-470								
471-480								
481-490								
491-500								
501-510								
511-520								
521-530								
531-540								
541-550								
551-560								
561-570								
571-580								
581-590								
591-600								
601-610								
611-620								
621-630								
631-640								
641-650								
651-660								
661-670								
671-680								
681-690								
691-700								
701-710								
711-720								
721-730								
731-740								
741-750								
751-760								
761-770								
771-780								
781-790								
791-800								
801-810								
811-820								
821-830								
831-840								
841-850								
851-860								
861-870								
871-880								
881-890								
891-900								
901-910								
911-920								
921-930								
931-940								
941-950								
951-960								
961-970								
971-980								
981-990								
991-1000								

DECLASSIFIED

DECLASSIFIED

[illegible]

Cellulose. X. N/5 M.

[illegible]

SUBJECT CONFIDENTIAL X 1113 11 WORKS

_____ TITLE OF PROJ. _____ PROJ. NO.

ENGINEERING DEPARTMENT COMPUTATION SHEET

30

COMPUTATION SHEET

SHEET NO.

44-71730

SHEET NO. 35

17. John - 1910

PROJ NO

Chlorine D.D.

WORKS

COMPUTER Station VIII

DATE

[illegible]

Chlorine y O. B.O.

[illegible]

14

DECLASSIFIED

DECLASSIFIED

32

H2W-71732

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 9

TITLE OF PROJ.

Waterman River Water

PROJ. NO.

SUBJECT

Chlorine x Total Solids

WORKS

COMPUTER

Station VIII

DATE

	1-1.5	6-1.0	11-1.5	16-2.0	21-2.5	26-3.0	31-3.5	36-4.0	41-4.5	46-5.0	51-5.5
81-100			I	II							
101-120				II			II	I			
121-140				III	III	I			III		
141-160				III	III	II	III				
161-180				III	II	II	II	II			
181-200				I	II	II	II	II			
201-220					II	I	I	II	I	II	
221-240				I			II	III	III	II	
241-260				II	III	I	II	II	II	I	
261-280				I		I	II	II	I	II	
281-300				II				I			
301-320						I					
321-340											
341-360											
486							I				

Chlorine x Turbidity

	1-1.5	6-1.0	11-1.5	16-2.0	21-2.5	26-3.0	31-3.5	36-4.0	41-4.5	46-5.0	51-5.5
0-1.0				II	II	III	III	II	II	II	
11-20				II	II	III	III	II	II	II	
21-30				II	II	III	III	I	II	II	
31-40				II	I		I	II	I		
41-50			I	III	I	II		I			
51-60				III	III	II					
61-70				III	III						
71-80				II	I						
81-90							I				
91-100											
101-110											
111-120											
121-130											
131-140											
141-150											
151-160											
161-170											
171-180											
181-190											
191-200											

DECLASSIFIED

DECLASSIFIED

33

H 2 W 71

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ.

Thermocouple X-ray

PROJ. NO.

SUBJECT

Thermocouple X-ray

WORKS

COMPUTER

S. J. ...

DATE

	36-45	46-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	176-185
01-029															
03-049															
05-069															
07-089															
09-109															
11-129															
13-149															
15-169															
17-189															
19-209															

Thermocouple X-ray

	36-45	46-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	176-185
01-029															
03-049															
05-069															
07-089															
09-109															
11-129															
13-149															
15-169															
17-189															
19-209															

Thermocouple X-ray

DECLASSIFIED

DECLASSIFIED

34

#EW-7172

ENGINEERING DEPARTMENT

OUTPORT

COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ.

Station VIII

PROJ. NO.

SUBJECT

Station VIII

WORKS

COMPUTER

Station VIII

DATE

	36-AS	40-AS	50-AS	60-AS	70-AS	80-AS	90-AS	100-AS	110-AS	120-AS	130-AS	140-AS	150-AS	160-AS	170-AS	180-AS
01-029																
03-079																
05-069																
07-069																
09-109																
11-129																
13-149																
15-169																
17-189																
19-209																
21-229																
23-249																
25-269																
27-289																
29-309																
31-329																
33-349																
35-369																
37-389																
39-409																

DECLASSIFIED

DECLASSIFIED

35

H2W-7175

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 3

TITLE OF PROJ

14a Atomic Power Station

PROJ NO

SUBJECT

Handbook x Q-D

WORKS

COMPUTER

ST-11-17

DATE

	16-45	16-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	221
9.6-55															
5.6-65															
6.6-95															
2.6-85															
8.6-95															
9.6-105															
10.6-115															
11.6-125															
12.6-135															
13.6-145															
14.6-155															

Handbook x Q-D

	56-48	16-55	56-65	66-75	76-85	86-95	96-105	106-115	116-125	126-135	136-145	146-155	156-165	166-175	221
0-2															
3-5															
6-8															
9-11															
12-14															
15-17															
18-20															
21-23															
24-26															
27-29															
30-32															

DECLASSIFIED

ENGINEERING DEPARTMENT (DUPONT) COMPUTATION SHEET

COMPUTATION SHEET

98

7-10-47

5-21-1 M3 #

TIME OF PROJ.

PROJ. NO

SECRET

WORKS

COMPUTER Station

DAVE

21-10	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11-20	11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DECLASSIFIED

37

H2W7178

ENGINEERING DEPARTMENT **DUPONT** COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ.

Yokum. Review Station

PROJ. NO.

SUBJECT

Aluminum N & NH₃N

WORKS

COMPUTER

Station VII

DATE

10

N X NH₃N

Aluminum

Aluminum X NH₃N Discontinued

DECLASSIFIED

DECLASSIFIED

JOHN P. 11

ENGINEERING DEPARTMENT

(DU PONT)

38

COMPUTATION SHEET

#8 W. 71

SHEET NO. 2

TITLE OF PROJ.

Yakima River Station

PROJ. NO.

SUBJECT

Aluminum 76 x NO₂ N

WORKS

COMPUTER

5/21/67

DATE

19

Aluminum x NO₂ N

DECLASSIFIED

DECLASSIFIED

FORM PH-1

40

H 2 W-71

ENGINEERING DEPARTMENT **DUPONT** COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ.

Valuina Film Station

PROJ. NO.

SUBJECT

Albumin x Total Solids

WORKS

COMPUTER

Station VIII

DATE

DECLASSIFIED

1.000 PM-4

DU PONT

41

SHEET NO

TITLE OF PROJ

PROJ. No.

SUBJECT.

WORKS

COMPUTER

DATE _____

15

01-0295

03-099

05-069

Q7-689

09-109

N = 129

13-19

١٦٩-١٧٥

17-184

19-209

91-826

21-29

25-121

22.780

20 2A

31 324

22.924

74-111

77 180

11-12-13

91

DECLASSIFIED

DECLASSIFIED

42

H2471m

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ.

Yukawa River Marker

PROJ NO.

SUBJECT

NH₃ N x Oxygen Dissolved

WORKS

COMPUTER

Stahel VII

DATE

19

	01-029	03-049	05-069	07-089	09-109	11-129	13-149	15-169	17-189	19-209	
4.6-5.5											
5.6-6.5											
6.6-7.5											
7.6-8.5											
8.6-9.5											
9.6-10.5											
10.6-11.5											
11.6-12.5											
12.6-13.5											
13.6-14.5											
14.6-15.5											

NH₃ N x Oxygen B.L.D.

	01-029	03-049	05-069	07-089	09-109	11-129	13-149	15-169	17-189	19-209	
1.2											
1.3-1.5											
1.6-1.8											
1.9-1.1											
1.2-1.4											
1.5-1.7											
1.8-2.0											
2.1-2.3											
2.4-2.6											
2.7-2.9											
3.0-3.2											

DECLASSIFIED

DECLASSIFIED

ENGINEERING DEPARTMENT

Coupons

43 COMPUTATION SHEET

SHEET NO. 3

TITLE OF PROJ.

Reinforced concrete structure

PROJ. NO.

SUBJECT

NH₂N x Total Solids

WORKS

COMPUTER *Station 17*

DATE

19

	01-029	03-049	05-069	07-089	09-109	11-129	13-149	15-169	17-189	19-209
81-100										
101-120										
121-140										
141-160										
161-180										
181-200										
201-220										
221-240										
241-260										
261-280										
281-300										
301-320										
321-340										
341-360										
486										

NH₂N x Total Solids

	01-019	03-039	05-059	07-079	09-099	11-119	13-139	15-159	17-179	19-199
0-10										
11-20										
21-30										
31-40										
41-50										
51-60										
61-70										
71-80										
81-90										
91-100										
101-110										
111-120										
121-130										
131-140										
141-150										
151-160										
161-170										
171-180										
181-190										
191-200										

DECLASSIFIED

[REDACTED]

42 W-1

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO

TITLE OF PROJ.

Wahman River Station

Proj No

SUBJECT.

NO_3N x Oxygen Dissolved

WORK

COMPUTER

Station ⑤

DATE _____

027

 Mg_3N_2

NO. 11 Y 0-13217

DECLASSIFIED

422.

ENGINEERING DEPARTMENT

DU PONT

COMPUTATION SHEET

SHEET NO

TITLE OF PROJ.

NO₂-N - Total Solids

PROJ No

SUBJECT

COMPUTER STALLING

1945

NO_3^- v Total Solids

No. 1 x Turbidity

DECLASSIFIED

HOW-:

DU PONT

COMPUTATION SHEET

SHEET NO.

TITLE OF PROJ.

PROJ. NO.

SUBJECT

WORKS

COMPUTER

Sta/1017 VIII

DATE _____

[illegible]

C. D. - 2. Total. 5:11:18.

[illegible]

DECLASSIFIED

DECLASSIFIED

ENGINEERING DEPARTMENT
COMPUTATION SHEET
SHEET NO. 2
TITLE OF PROJ. *Oxygen Dissolved in Turbidity*
SUBJECT *Oxygen Dissolved in Turbidity*
DATE *10-15-55*

DECLASSIFIED

DECLASSIFIED

48

NEW 7

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET NO. 13

TITLE OF PROJ.

Hydrogen Turbine

PROJ. NO.

SUBJECT

Operating - 2000 & 3000 Series

WORKS

COMPUTER

5000 11 VII

DATE

19

	0-2	3	6	9	12	15	18	21	24	27	30	33	36
81-100													
101-120													
121-140													
141-160													
161-180													
181-200													
201-220													
221-240													
241-260													
261-280													
281-300													
301-320													
321-340													
341-360													
361-380													
381-400													
401-420													
421-440													
441-460													
461-480													
481-500													
501-520													
521-540													
541-560													
561-580													
581-600													
601-620													
621-640													
641-660													
661-680													
681-700													
701-720													
721-740													
741-760													
761-780													
781-800													
801-820													
821-840													
841-860													
861-880													
881-900													
901-920													
921-940													
941-960													
961-980													
981-1000													

Oxygen BOLD Turbidity

	0-2	3	6	9	12	15	18	21	24	27	30	33	36
0-10													
11-20													
21-30													
31-40													
41-50													
51-60													
61-70													
71-80													
81-90													
91-100													
101-110													
111-120													
121-130													
131-140													
141-150													
151-160													
161-170													
171-180													
 													

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1000 PM-101

ENGINEERING DEPARTMENT

COMPUTATION SHEET

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H2W-11

SHEET NO. 1

TITLE OF PROJ.

Neutronium Phase Station

PROJ. NO.

SUBJECT

Total Solids x Turbidity

WORKS

COMPUTER *5:27:37 PM*

DATE

	81-110	101-120	121-140	141-160	161-180	181-200	201-220	221-240	241-260	261-280	281-300	301-320	321-340	341-360	AP
2-10			III	III	III	III	III	III	III	III					
11-20															
21-30															
31-40															
41-50															
51-60															
61-70															
71-80															
81-90															
91-100															
121-170	123 123														

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FORM NO. 10

ENGINEERING DEPARTMENT

SECRET

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COMPUTATION SHEET

SHEET NO. 1

TITLE OF PROJ. _____

PROJ. NO. _____

SUBJECT _____

WORKS _____

COMPUTER _____

DATE _____

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
46-55					III	VI							2
56-65					III	II							2
66-75					III	II							7
76-85			II	III		II							1.0
86-95			III	III									9
96-105	III	III	II			II							1.2
106-115		III								III	III		6
116-125										III			1.2
126-135										III			7
136-145						III	II						5
146-155						III	III	II					1.3
156-165						III	III	III					1.2
166-175								III					8
	8	8	9	9	9	8	16	10	2	7	1.1		

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	1	2	3	4	5	6	7	8	9	10	11	12	
6-1.9		III	III	III	III	III						III	1.7
2-3.9	III	III	III	III	III	III					III	III	1.7
4-5.9							III	II	II	II	III		1.7
6-7.9							III	III	II	II			1.2
8-9.9							III	III	II	III			1.2
10-11.9							III	III	II	III			1.1
12-13.9							III	III	II	III			8
14-15.9													
	8	8	9	9	7	8	11	12	8	9	8	7	1.1

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H2W71

ENGINEERING DEPARTMENT COMPUTATION SHEET

SHEET NO. 2

TITLE OF PROJ. _____ PROJ. NO. _____
 SUBJECT -12 H- X Monthly WORKS _____

COMPUTER _____ DATE _____

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	1	2	3	4	5	6	7	8	9	10	11	12	
7.96-7.55													1
7.56-7.65													0
7.66-7.75													3
7.76-7.85													5
7.86-7.95													9
7.96-8.05													16
8.06-8.15													17
8.16-8.25													19
8.26-8.35													20
8.36-8.45													19
8.46-8.55													5
8.56-8.65													1
8.66-8.75													1
8.76-8.85													11
	8	8	9	9	7	9	11	17	2	9	8	7	111

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NEW 71

ENGINEERING DEPARTMENT

COMPUTATION SHEET

SHEET No. 3

TITLE OF PROJ _____

PROJ No _____

SUBJECT _____

WORKS _____

COMPUTER

DATE

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	
	1	2	3	4	5	6	7	8	9	10	11	12	
1-1.5													
1.6-1.0													
1.4-1.5	"		"	"	"	"	"	"	"	"	"	"	1
1.6-2.0	"	"	"	"	"	"	"	"	"	"	"	"	2
2.1-2.5	"	"	"	"	"	"	"	"	"	"	"	"	7
2.6-3.0	"	"	"	"	"	"	"	"	"	"	"	"	
3.1-3.5	"	"	"	"	"	"	"	"	"	"	"	"	
3.6-4.0	"	"	"	"	"	"	"	"	"	"	"	"	
4.1-4.5	"	"	"	"	"	"	"	"	"	"	"	"	2
4.6-5.0	"	"	"	"	"	"	"	"	"	"	"	"	7
5.1-5.5	"	"	"	"	"	"	"	"	"	"	"	"	
1	8	8	7	7	7	8	1	11	8	9	2	7	106

Hardness x Month of Year

	1	2	3	4	5	6	7	8	9	10	11	12	
36-45				"	"	"							1
46-55			"	"	"	"							15
56-65	"	"	"	"	"	"							5
66-75	"	"	"	"	"	"	"						7
76-85	"	"	"	"	"	"	"						10
86-95	"	"	"	"	"	"	"	"			"	"	11
96-105	"	"	"	"	"	"	"	"	"		"	"	19
106-115										1	"	"	7
116-125										1	"	"	6
126-135									"	1			3
136-145								"	1				8
146-155							"		"	"			11
156-165									1				1
166-175													7
176-185													
186-195													
196-205													
206-215													
216-225													
226-235													
236-245													
246-255													
256-265													
266-275													
276-285													
286-295													
296-305													
306-315													
316-325													
326-335													
336-345													
346-355													
356-365													
366-375													
376-385													
 													

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42 W. 71

SHEET No. _____

TITLE OF PROJ

Proj No

SUBJECT

Total Seals & Mo. of Year

NEW YORK

COMPUTER

Station VIII DATE

1

Turbidity 1 Month of Year

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FORM NO. 1

ENGINEERING DEPARTMENT

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COMPUTATION SHEET

H E W. 711

SHEET NO. 1

TITLE OF PROJ. Analysis of Station & Base Station PROJ. NO. _____

SUBJECT NH3 N. Y. Mo of Year Station VII WORKS _____

	1	2	3	4	5	6	7	8	9	10	11	12
01-029	III	I	III	III	III	III	II	I	III	III	III	III
03-049	III	III	III	II	III	III	I	III			I	II
05-069		I		II	II	I	III	III			III	I
07-089		II					II	III	II	II	I	
09-109	I	I	I				II	I	I			
11-129												
13-149												
15-169												
17-189												
19-209												

N O 3 N. Y. Mo of Year

	1	2	3	4	5	6	7	8	9	10	11	12
01-029												
03-049		I			I							
05-069				III	I		I	I	I			
07-089				I		II	II	I	III			
09-109				I	I		I	III	I	II	I	II
11-129	I	I				III	I		II	I		I
13-149		I		I	III			II		II	I	
15-169			I	I	I			II		II	I	
17-189	I	II					I	I		I	I	
19-209	I		I	II		II		II		II	I	
21-229			I			I						
23-249	III		III			I						
25-269	II						II		I		I	
27-289		II								I		
29-309												I
31-329							II	I		II		
33-349												
35-369												
37-389												
39-409												
41-429												

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N2W-71

ENGINEERING DEPARTMENT

COMPUTATION SHEET

PROJ. NO.

SUBJECT

Oxygen Dissolved x Mo. of Year

Stalio III Works

DATE

COMPUTER

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