

Interoffice Communication

JCC
FSR
DCS
RHG
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RHG

To R. D. Gamblin
From Douglas Michels
Date May 22, 1974
Subject Cost Breakdown For Multipoint Analyzers

I talked to Mr. Bob Anthony who works for Mr. Bob Walston concerning a cost breakdown on the analyzers. They have on order two 10-Point Analyzers for the VCM Plant. Their estimated cost breakdown is as follows:

	<u>Per Analyzer</u>	<u>Total Cost</u>
1. Honeywell Model 1000. Process Chromatograph	6700	13400
2. 10-Stream Sample System, Less Pump	3500	7000
3. 300 ft. of Interconnecting Cable	450	900
4. Alarm System Including Lights and Horn In Control Room	1350	2700
5. Transite House For Mounting Analyzer Unit, etc.	800	1600
6. Misc. Tubing and Fittings	300	600
TOTAL	14,200	28,400

Mr. Anthony said he talked to C. Heddins and Heddins already has pump called for in Item 2. He also estimated approximately 15 man-days would be required for installation and startup.

Douglas Michels

Douglas Michels

brc
cc. RHG ✓

Grid Points

4-26,27

4-27,28

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
Tr	.7	Tr		Tr	.7	Tr	Tr	Nil	Tr	Tr	Tr	Tr	Tr	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
Tr	Tr	Nil	Tr	Tr	1	1	Tr	Tr	Tr	4	.85	.57	Nil		Nil	Nil	.76							Tr	Tr	Tr	
Nil	Tr		Tr	Nil	4.8	8	Tr	Tr	Nil	Nil	2	.25	.31	Nil	Nil	.40	.80	Tr	.23	.23	Tr	Tr	.64		Nil	Nil	
Nil	Tr	1.24	1.24	Nil	.38	1.13	.68	Nil	Nil	4.1	Nil	12.5	Nil	Tr	Nil		3.6	.6	Tr	Nil	Nil	Nil	Nil	Nil	Nil	Nil	
.14	Tr	Nil				Tr	1.62	Nil	Nil	Nil	Nil					Tr	.86	Nil	Nil	Nil	Nil	Nil	Nil	Nil	.49	Nil	
		Tr	Tr	15	6.2	16.9	33	70	43	17															24	29	
2	4	7	5									Tr	Tr	Tr			3.1	Tr	Nil	Nil	Nil	Nil	Nil			Nil	
Tr	Nil	Nil					Tr	1	Tr	1	1	1	1	1	1	.33	.20	2.6	.67	.33	.33	.70	Tr	2.8	Nil	Nil	
.11	.23								.89	.78	.78					.80	.74	1.9	Nil	Nil	Nil	.51	.17	.23	Nil		
		Tr	Tr	Tr				7.5	71	61	69	35	30	17	16	36									16	16	
	14	9	9	4.3	14.1	9.8	5.1	4.5	4.9	4.9	4.7	22.3	7	14	14	21	15	14	19	16	15				6	6	
				2.8	2.6	3.5	1.3	2.4	5.4	4.7	4.0	8.4	5.5	5.5	7.1	4.9	6.4					11	15	12	2.8	2.7	
129	93	66	50	54	38				110	108	98				26	66	56	31	42	44	65	40	31	35	67	52	36
13	9.7	3.7	9.9	6.8	5.5	14	5.4	3																		7.6	5.2
6.5	6.9	4.9	3.3	2.2	2.7	1.3	3.0	3.0	1	5	2	2.5	5	6	8	6	14.235	11	7	2	6.1	4.8	1.8	16	5	5.4	
Tr	Tr	Tr	Nil	Nil	Nil	Nil	Nil	Nil				.6	Tr	.56	Tr	Tr	Nil	Nil	Tr	Nil	Tr	Tr	Nil	Tr	Nil	Nil	
Tr	Tr	Tr		Tr		2	Nil	Nil	Nil	Nil	Nil	4.6	.42	.28	1.6	.62	.74								Tr	Tr	
Tr	Tr	1.9		Tr	.97	Nil			Nil	Nil	Tr		Tr	6.6	1.0	.89	1.8	Tr	.67	.60	.47	2.4	4.8	.6	Nil	Tr	

High
Low
Avg

129	93	66	50	54	62	16.9	33	75	110	108	98	25.0	30	26	66	56	14.235	42	44	65	40	24.4	35	67	52	36
Tr	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
10.8	8.7	6.24	7.13	6.08	15.19	17.48	3.8	11.36	15.75	14.0	13.07	9.18	3.78	6.78	8.42	9.34	9.59	5.8	6.5	7.0	5.5	23.2	4.73	8.5	7.05	6.19
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

VVC 000011426

88

248
72

72

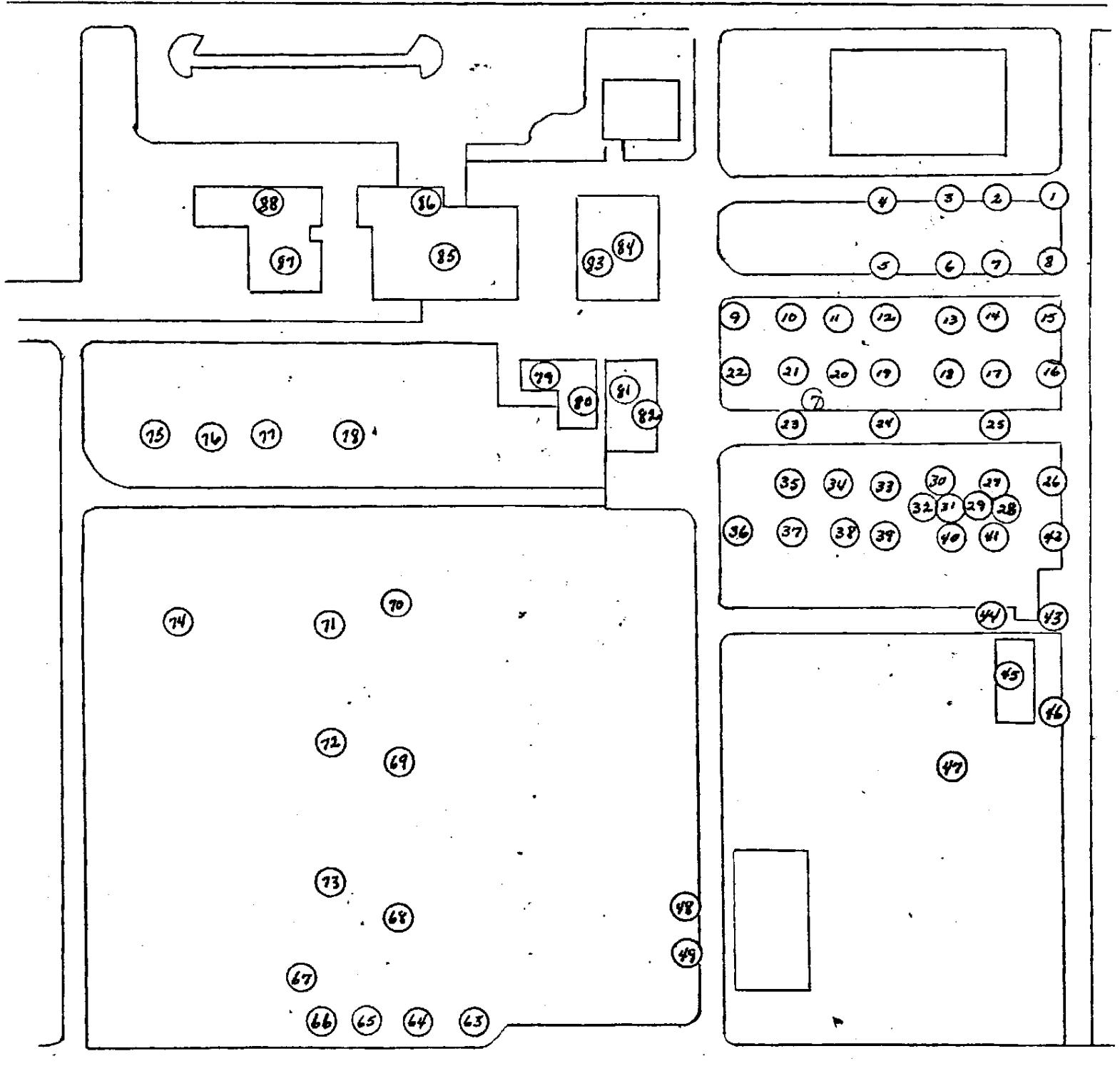
72

26

25
21
7

VVC 000011429

VCM SURVEY RESULTS



59 61
57 65 53 50

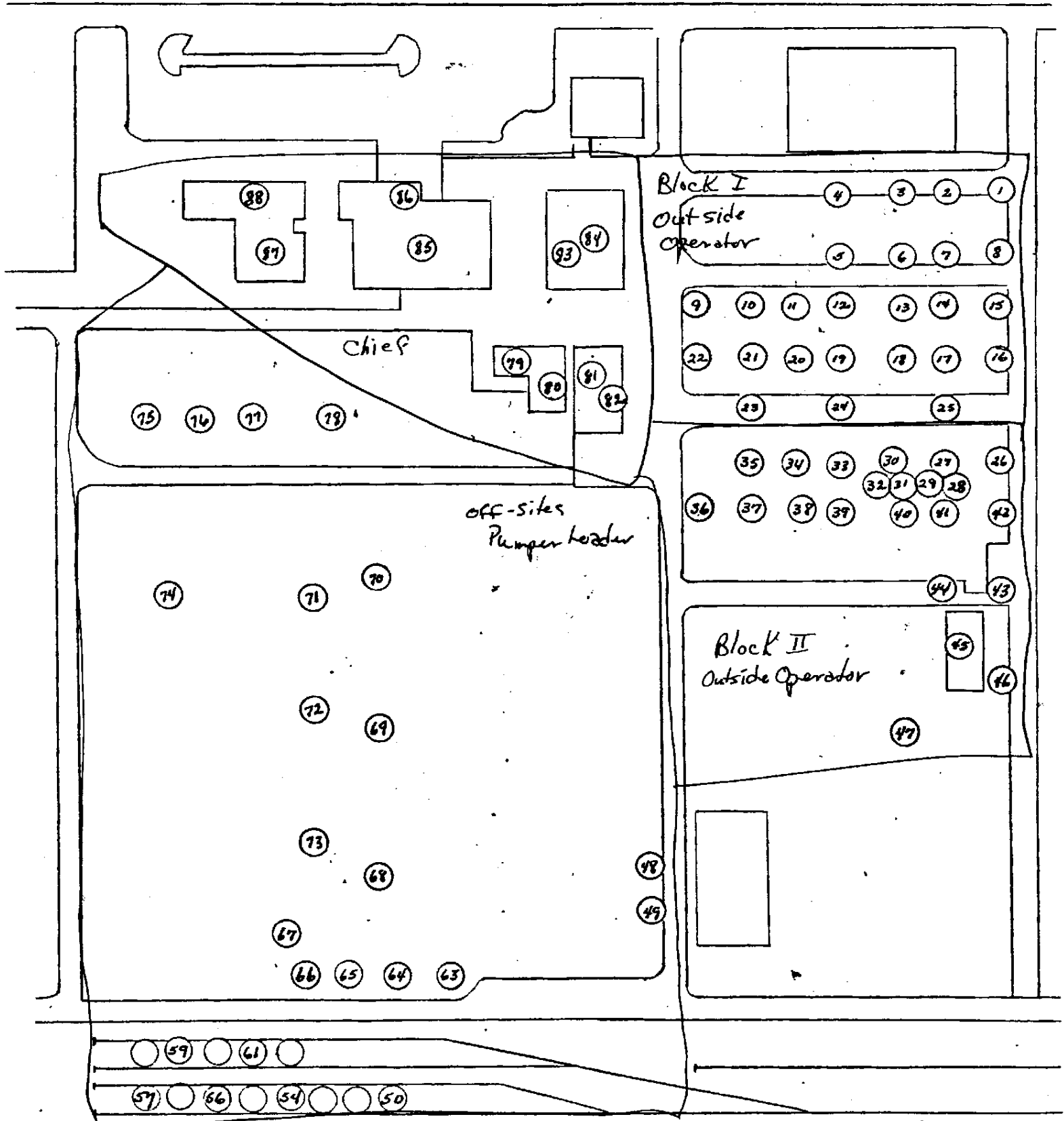
DATE _____
TIMES

WEATHER DATA

COMMENTS

VVC 000011430

VCM SURVEY RESULTS



DATE _____
TIMES _____

WEATHER DATA

COMMENTS

VVC 000011431

Attached is a proposed list of VCM monitoring points. For each of the two 10 point fixed point monitors. Also attached is a second list of known and potential problem areas.

Two plot plant diagrams are attached the first shows the location of the proposed monitoring net work. The second plot plan can be used as a working sheet to incorporate changes as they are suggested.

Fixed Point Monitor No. 1

<u>Point</u>	<u>Location</u>
1	VCM Reflux Pumps
2	Top VCM Dryers
3	T-252 Pit North
4	T-252 Pit South
5	T-2 Pit
6	L.E. Reboilers and Reflux Pumps
7	Control Room
8	Quench Column Reflux Pumps
9	S-309 South Side
10	VCM Column Feed Pumps

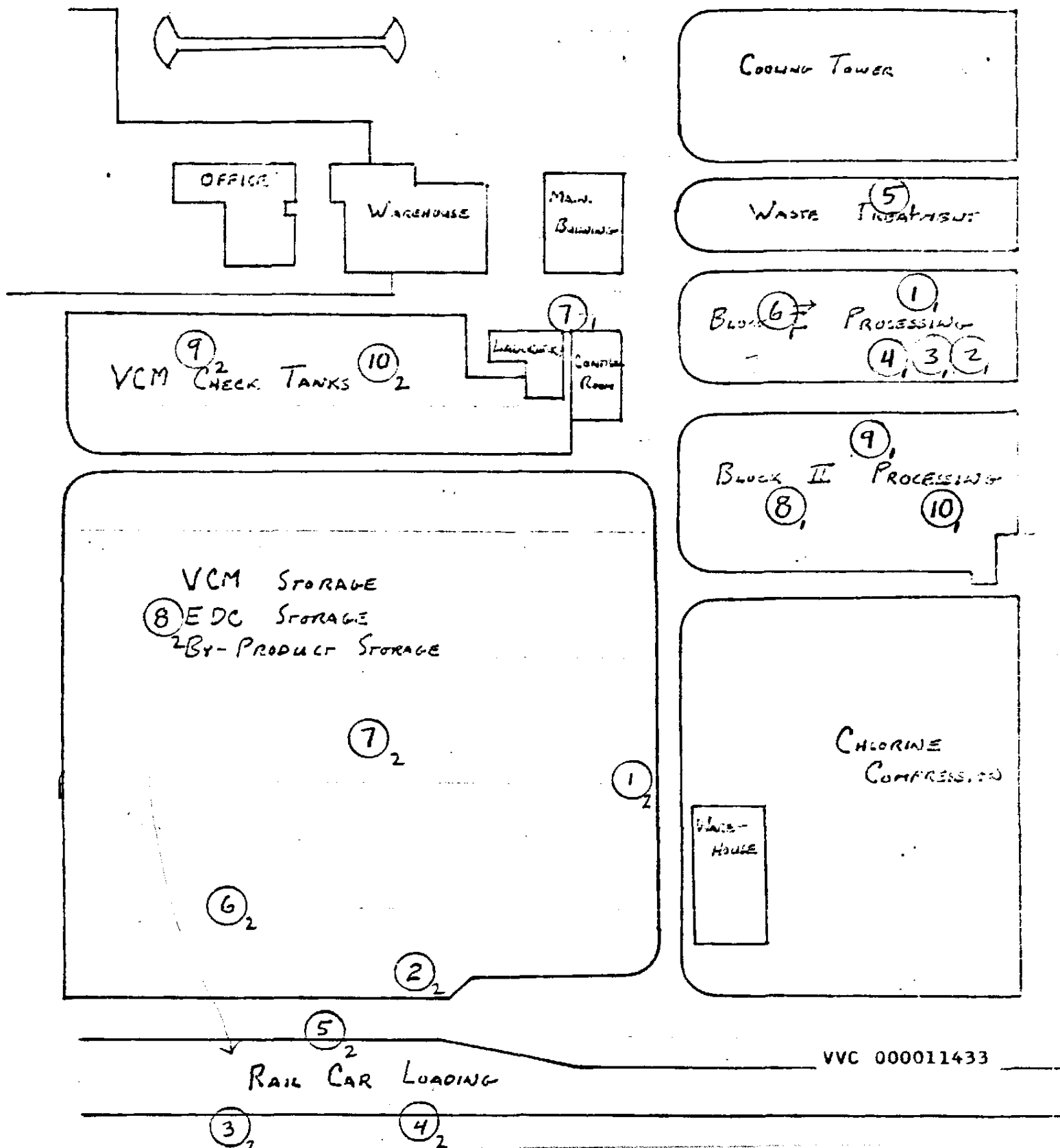
Fixed Point Monitor No. 2

<u>Point</u>	<u>Location</u>
1	L.E. Dryer
2	VCM Loading Pumps
3	#1 Rack East
4	#1 Rack West
5	#2 Rack
6	Rail Car Vent Recovery Unit
7	Below T-411B
8	Below T-411D
9	Below T-401B
10	P-401 Pumps

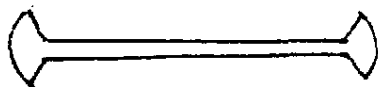
Other Known and Potential Problem Areas

1	C-500	14	Office Building
2	H.E. Reboilers and Reflux Pumps	15	Property Line Monitoring
3	T-104	16	Non-Hazardous Area Monitoring
4	T-110	17	Chlorine Compressor Building
5	Cooling Tower	18	Secondary Treating Area
6	Furnaces		
7	EDC Vaporizers		
8	Laboratory		
9	Tars Loading Point		
10	Loading Rack		
11	Storage Spheres		
12	Maintenance Building		
13	Warehouse Building		

VVC 000011432



VVC 000011433



OFFICE

WAREHOUSE

MAN.
BUILDING

VCM CHECK TANKS

LABORATORY

CONTROL
ROOM

VCM STORAGE
EDC STORAGE
BY-PRODUCT STORAGE

COOLING TOWER

WASTE TREATMENT

BLOCK I PROCESSING

BLOCK II PROCESSING

CHLORINE
COMPRESSION

WATER-
HOUSE

RAIL CAR LOADING

VVC 000011434