MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS
11:13	7.3		0 2 4
	7.3		-1 1 4½
	7.5		-2 0 5

2 1 0 -1 -2 -3 -4

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE A SPD 2	NORTHWEST		8 31 72	DIPOLE DIPOLE	0237		WHITMAN	178

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/2 1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-2 -3	-1 0	1	100.	1.35	7.0	111	M	1 1	5	5	5						3	
		-2 -3	0 1	2	10.	2.95	7.0	92	M	1 1	4	4	5	3	4	5			4	
		-1 -2	0 1	1	30.	1.40	7.0	33	M	1 1	5	5	5						5	
		-1 -2	1 2	2	10.	3.10	6.0	119	M	1 1	4	6	6	5	6	5	5	5	5	
		-2 -3	1 2	3	10.	1.10	6.0	105	M	1 1	3	2	6	1	7	4	5	-2	4	
		4	0		3 6.	.4	3	7		4										
		~~-2 -3~~	~~1 2~~	~~3~~	~~10. 1.10~~	~~6.0~~		~~105~~	~~M~~	~~1 1~~	~~3~~	~~2~~	~~6~~	~~1~~	~~7~~	~~4~~	~~5~~	~~-2~~		
		0 -2	-1 -3	½	100.	1.86	6.2	108	M	1 1	5	5	5	5					5	
		-3 -4	-2 -1	1	100.	1.70	7.0	140	M	1 1	7	7	7						7	
			-1 0	2	30.	1.40	7.1	134	M	1 1	4	5	4	6	4	7	3	3	5	
			0 1	3	10.	1.60	7.3	126	M	3 1	2	4	0	3	1	3	2	3	2	
			1 2	4	3.	2.30	5.8	113	M	3 1	4	-1	6	7	2	3	4	3	0	
		5	4		1 1	-2	7	-2		1										
		-2 -4	-1 1	½	100.	2.32	7.4	113	M	1 1	6	5	5	5					5	
									L	1 1	3	3	1	3	3				3	L
		-2 -4	0 2	1	30.	2.20	7.0	108	M	1 1	7	8	5	7	6	5	11	6	7	
									L	1 1	7	6	0	5	6	1	5	7	5	L
		-5 -4	-3 -2	1	100.	1.95	7.5	150	M	1 1	6	5	5	5					5	
			~~-3 -2~~	~~1~~					L	1 1	4	4	4						4	L
			-2 -1	2	30.	1.50	7.3	142	M	1 1	5	5	6	3	6	5	5		5	
									L	1 1	5	3	4	4	5	4			4	L
			-1 0	3	10.	2.12	7.3	162	M	1 1	5	7	5	6	2	2	2	6	2	
		4	3		7 0	.3	5	5		3										
									L	1 1	10	3	4	3	6	7	2	11	6	L
		11	1		3 15	.5	4													
			0 1	4	3.	3.15	7.2	151	M	3 1	6	-1	-2	4	0	2	4	4	2	
		3	1		7 3	.4	1													
									L	3 1	5	6	-1	0	4	3	6	1	4	L
		0	3		0 5	-2	5	1		0	3	4								

2 1 0 -1 -2 -3 -4 -5 IL 6

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 4 SPD 2	NORTHWEST		8 31 72		0237		WHITMAN	178

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-5 -4	1 2	5	3.	1.74	6.2	169	M	3	1	7	7	6	1	7	-4	7	5	12	
		2	4	5	5	.6	5	-4			6										
		-5 -3	-2 0	½	100.	2.80	7.2	140	M	1	1	4	3	3	3	3				3	
			-1 1	1½	30.	2.90	7.1	141	M	1	1	6	4	6	4	7	6	5	5	11	
			0 2	1½	30.	1.25	6.6	143	M	1	1	10	7	9	6	9	5	11	6	8	
		-5 -6	-4 -3	1	100.	3.02	7.0	243	M	1	1	5	5	5						10	
			-3 -2	2	30.	2.08	7.5	131	M	1	1	6	7	6	7	6				7	
			-2 -1	3	10.	2.35	7.4	183	M	3	1	3	3	2	3	3				5	
			-1 0	4	10.	1.30	7.3	205	M	3	1	3	3	3	3					6	
			0 1	5	3.	2.10	7.0	121	M	3	1	4	4	5	6	4	6	4	3	13	
			1 2	6	3.	1.32	6.4	197	M	3	1	5	5	2	1	4	7	4	3	15	
		7	3	6	5	.3	2	8			2										
		-6 -4	-3 -1	½	100.	3.15	7.1	160	M	1	1	5	5	5						10	
			-2 0	1	100.	1.05	7.3	165	M	1	1	6	5	5	5					11	
			-1 1	1½	30.	1.62	7.0	173	M	1	1	7	5	8	7	7	6	7		14	
			0 2	2	10.	2.35	6.6	164	M	3	1	4	3	4	4	4	4			12	
		-7 -6	-4 -3	2	30.	2.55	7.0	251	M	1	1	6	6	5	5	6				6	
			-3 -2	3	10.	2.80	7.5	275	M	1	1	8	7	7	5	7	8	8		7	
			-2 -1	4	10.	1.35	7.4	210	M	3	1	3	3	3	2	3	6	1	3	9	
			-1 0	5	3.	2.75	7.3	224	M	3	1	4	3	7	3	7	4	7	3	17	
		4	5	4	4																
			0 1	6	3.	1.45	7.0	209	M	3	1	11	1	9	2	2	6	5	5	15	
		4	5	4	4	.3	7	6			6										
		-7 -5	-4 -2	½	300.	1.50	7.4	231	M	1	1	6	6	6						6	
			-3 -1	1	100.	1.32	7.4	365	M	1	1	6	7	8	7	6	5			7	
			-2 0	1½	30.	2.00	7.4	222	M	3	1	5	9	5	11	2	8	7	3	16	YO
		3	4	4	3	.3	3	3													
			-1 1	2	10.	3.10	7.1	281	M	3	1	3	3	3	3	4	3			9	
			0 2	2½	10.	1.80	6.7	261	M	3	1	7	35	19	49	23	6	31	2	15	
		23	17	17	22	.7	34	9			5	2	3	5	8	5	4	5	7		

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 3

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 4 SPD 2	NORTHWEST		8 31 72		0237		WHITMAN	178

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/½	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-8 -7	-4 -3	3	10.	2.38	7.0	196	M	3	1	3	3	2	3	3	2	4	3	7	
			-3 -2	4	3.	3.30	7.0	163	M	3	1	2	1	6	9	5	4	-3	3	13	
		6	3	8	2	.0	2	9			8	5									
			-2 -1	5	3.	1.80	7.0	153	M	3	1	4	6	5	9	7	4	10	3	16	
		13	5	1	2	.3	5	11			1	3	5	3	3	5	4	5	5		
			+1 0	6	3.	1.28	7.2	172	M	3	1	1	0	2	6	5	7	3	5	8	
		-2	-6	5	6	.3	7	5			0	5								12	
		-8 -6	-4 -2	1	100.	1.42	7.2	227	M	1	1	7	7	5	2	2	7	11	7	14	
			-3 -1	1½	30.	1.85	7.0	222	M	1	1	15	15	5	9	23	4	5	5	17	
		3	5	7	5	.11	5	9			1										
			-2 0	2	10.	2.88	7.0	187	M	3	1	6	4	3	5	11	7	1	5	14	
		5	5	6	4	.1	5	4			5	2	5								
			+1 1	2½	10.	1.85	7.0	178	M	3	1	3	3	4	3	2	0	5	-1	8	
		4	1	4																	
			0 2	3	3.	3.00	5.9	175	M	3	1	2	5	8	3	0	3	9	5	14	
		3	9	0	7	.5	9	5			4										
		-9 -8	-4 -3	4	3.	3.48	7.0	172	M	3	1	3	2	4	2	7	-3	2	19	13	
		15	0	8	12	.9	6	5			7	3	3	7							
			-3 -2	5	3.	1.80	7.0	153	M	3	7	7	6	4	11	3	1	3	-2	11	
		1	0	3	4	.3	5	8			4										
			+2 0	6	3.	1.05	7.0	145	M	3	1	11	2	11	7	15	7	1	6	23	
		-9 -7	-4 -2	1½	30.	1.70	7.1	181	M	3	1	3	4	4	3	3	3			20	
			-3 -1	2	10.	2.45	7.1	159	M	3	1	0	2	1	3	5	1	3	6	9	
		2	6	2	4	.2	3	4			2										
			-2 -1	2½	10.	1.45	7.1	153	M	3	1	3	4	2	3	4	3			17	
			-1 1	3	3	2.96	7.0	170	M	3	1	9	10	3	9	4	3	9	4	14	
		2	8	3	8	.5	10	2			9	4	5	4	-1	5	3	2	13		
			0 2	3½	3.	1.80	6.5	128	M	3	1	6	4	7	7	-2	10	3	4	16	
		1	1	1	15	.5	0	111			7	12	2	6	7	7	3	2			

mining geophysical surveys

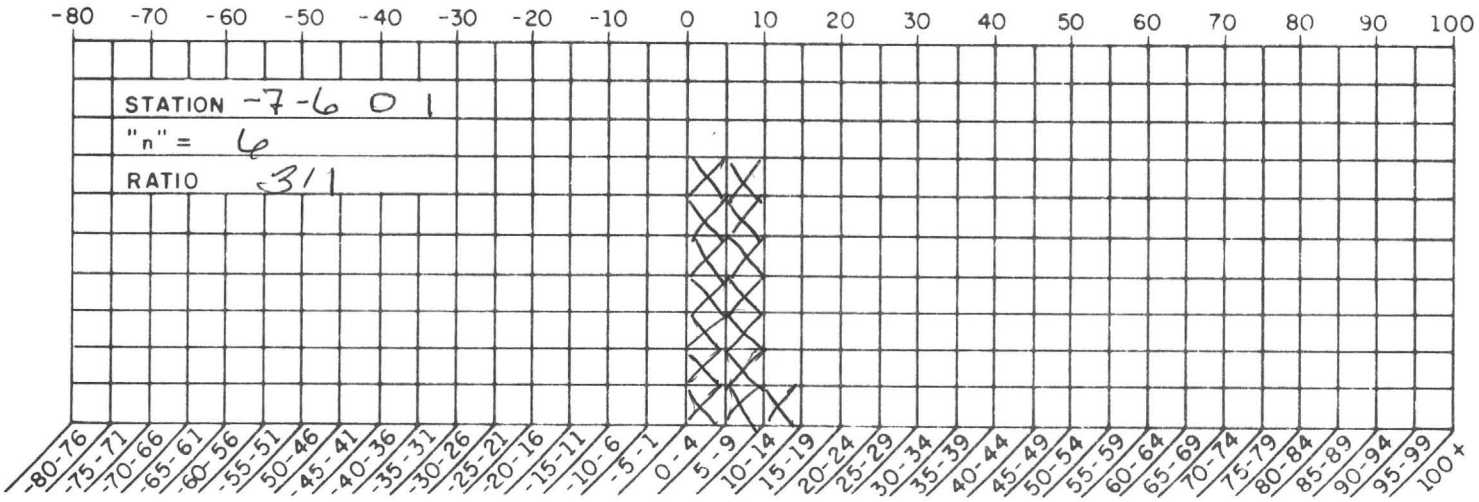
TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

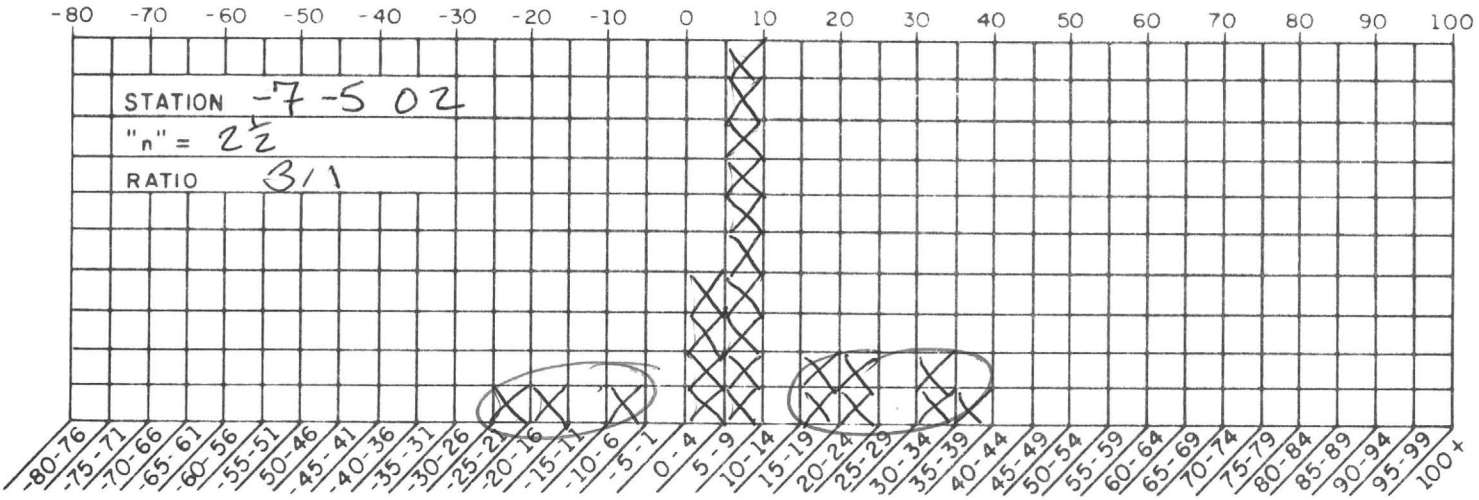
PAGE 4

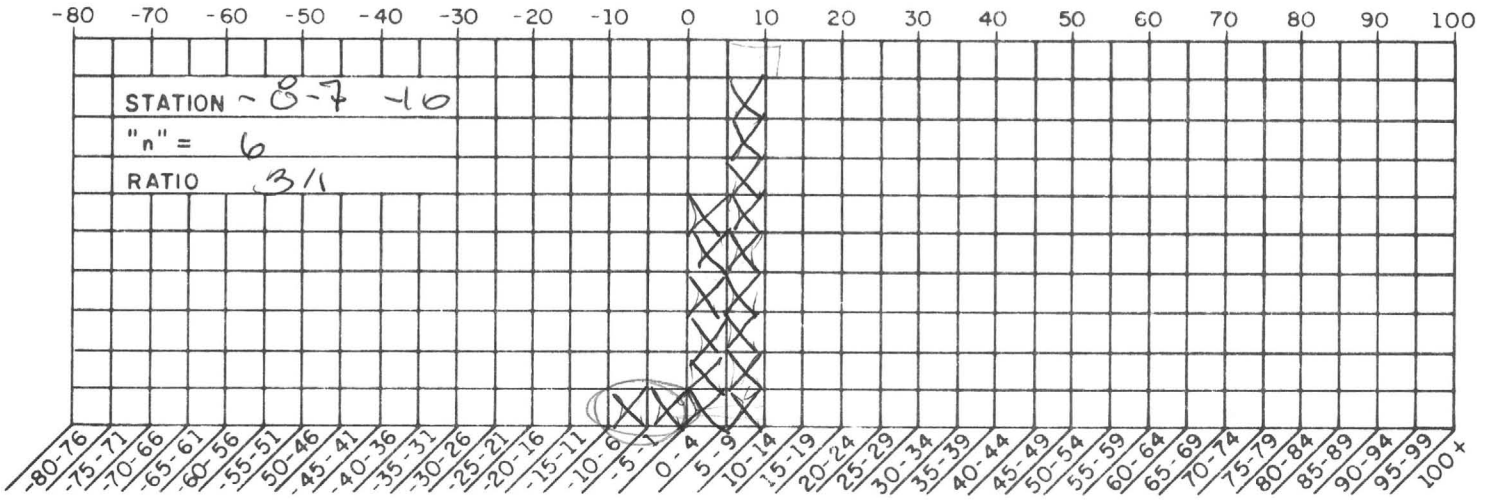
I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 4 SPD 2	NORTHWEST		8 31 72		0237		WHITMAN	178

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω / 1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-10 -8	-4 -2	2	10.	2.52	7.0	166	M3	1	9	5	5	4	5	5	4		16	
		-3 -1	2½		10.	1.35	7.0	145	M3	1	-2	6	9	3	0	4	6	4	15	
		7	7	2	4	.9	4	7		6	7	5	8							
		-2	0 3		3.	2.95	7.2	147	M3	1	7	5	19	13	7	10	4	5	19	
		6	3	12	9	-13	6	7		3										
		-1	1 3½		3.	2.15	7.1	143	M3	1	1	11	0	7	-1	2	14	17	17	
		5	-6	11	5	.14	4	8		7	9	-20	14	1	7	6	13	7		
		0	2 4		3.	1.45	6.9	145	M3	1	9	11	8	16	35	43	5	7	36	
		-5	24	0	17	-1	-2	32		24	4	13	6	14	12	15	57	-15		
		5	-6	11	14	.31	9	3		11	15	21	0	27	14	2	36	4		
		20	7	18	11	.15	8	28		4	10									
		-11 -9	-4 -2	2½	10.	1.65	7.0	173	M3	1	7	7	5	5	6	5	3	7	17	
		-3 -1	3		3.	3.15	7.1	153	M3	1	5	3	1	4	5	7	1	5	27	
		10	6	8	10	.6	7	11		11	0	19	6	13	6					
		-2	0 3½		3.	2.16	7.0	152	M3	1	3	14	10	7	9	5	2	2	19	
		14	11	0	-4	3	20	4		3	7	0	0	19						
		-1	1 4		3.	1.75	7.1	129			8	7	-3	22	13	7	14	19	26	
		43	35	19	7	-8	14	38		3	8	11	7	0	6					
		0	2 4½		1.	2.95	6.7	132	M3	1	6	13	13	-18	6					
		-12 -10	-4 -2	3	3.	3.25	7.1	158	M3	1	5	5	5	3	12	-2	-7	6	12	
		6	3	5	4	.7	4	5												
		-3	-1 3½		3.	1.90	7.1	133	M3	1	11	15	9	5	15	21	8	10	24	
		10	5	9	8	.10	-10	14		9	14	-3	2	5	7	14				
		-2	0 4		3.	1.32	7.1	128	M3	1	5	0	-4	-14	6	17	13	7	17	
		12	-7	24	8	.7	9	10		-1	7								22	
				4½	1.	3.00	7.0	123	M3	1	P.D. SIGNAL VERY STRONG CAN'T READ									

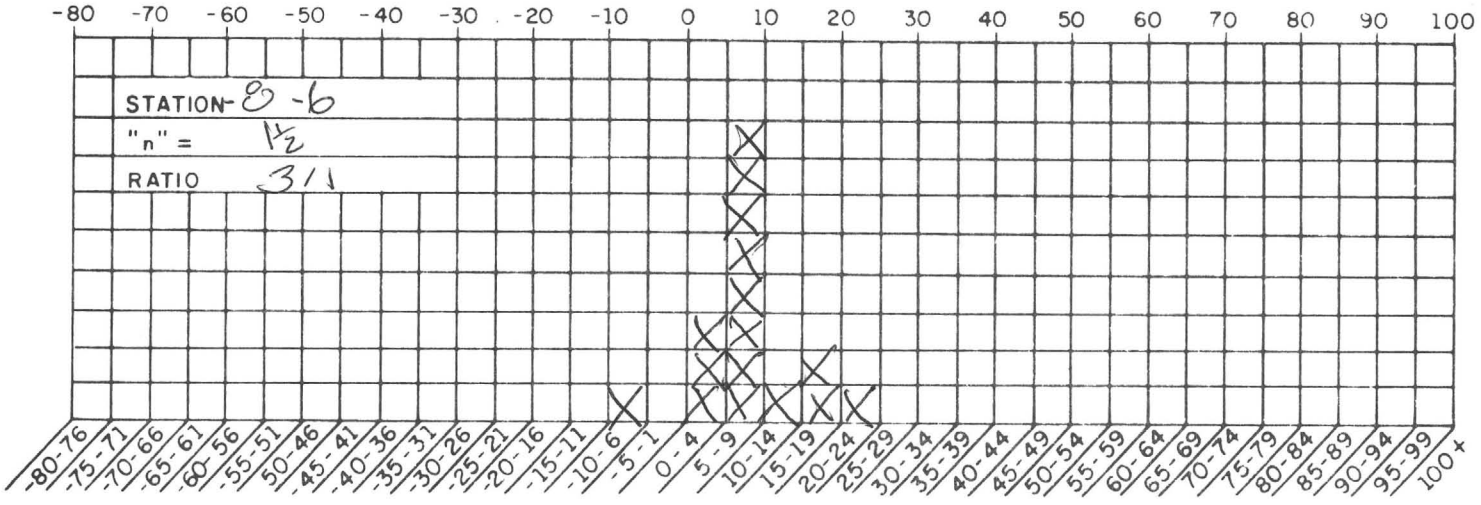
JOB 0237 DATE 8 72 LINE 4 PAGE 1

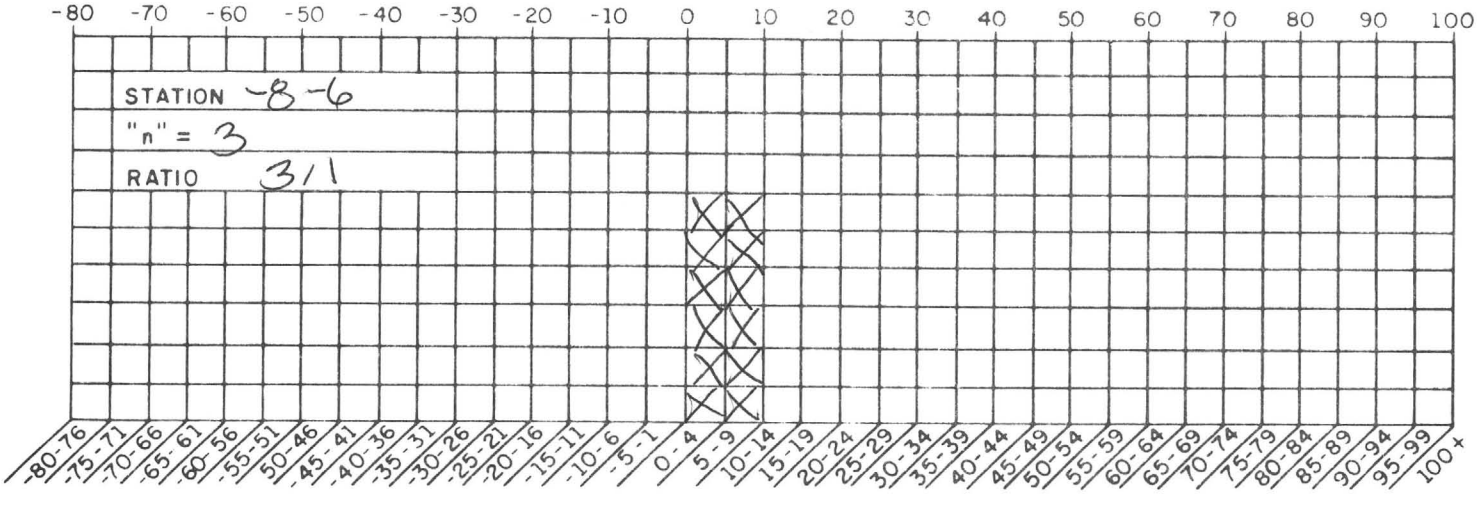


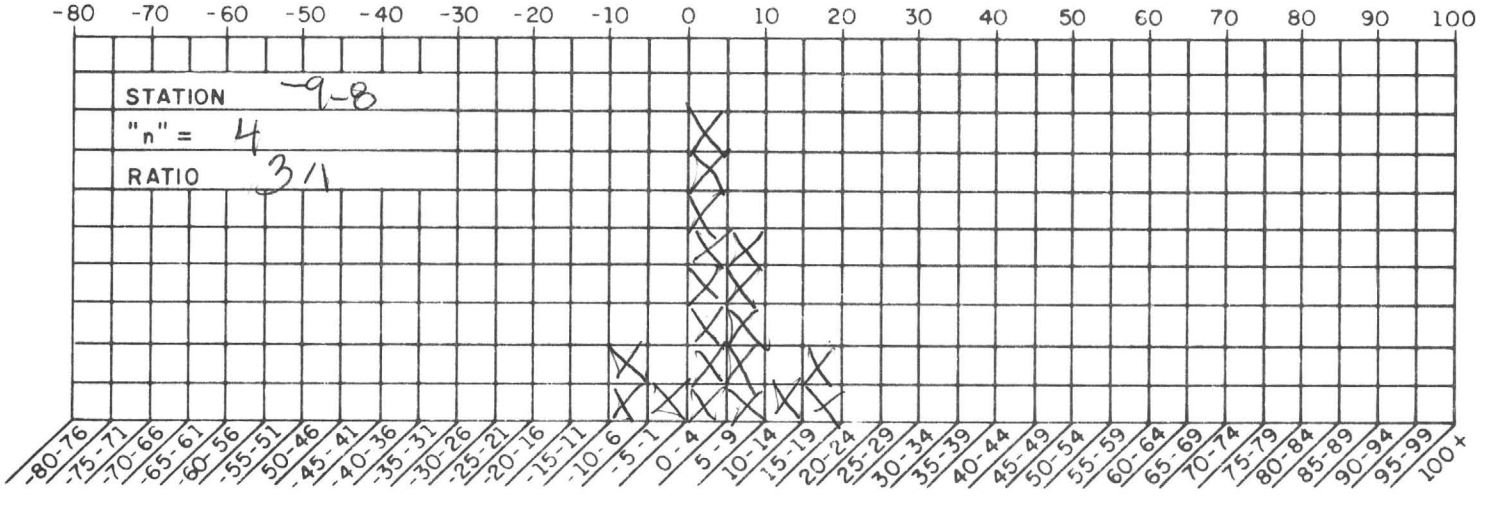




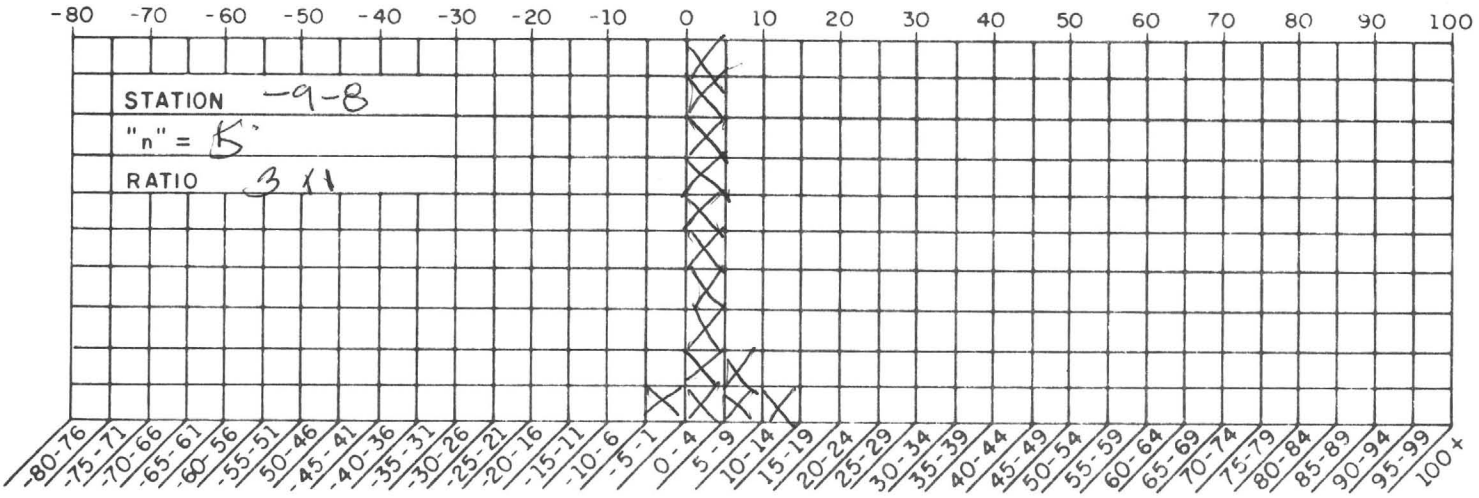
JOB _____ DATE _____ LINE 4 PAGE 2

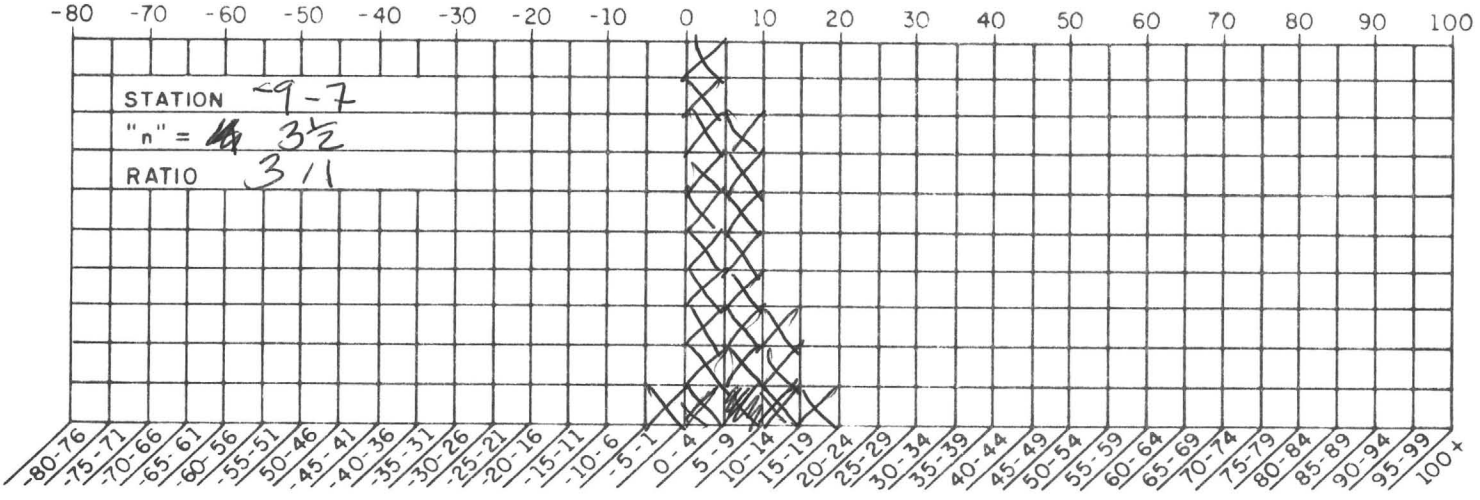


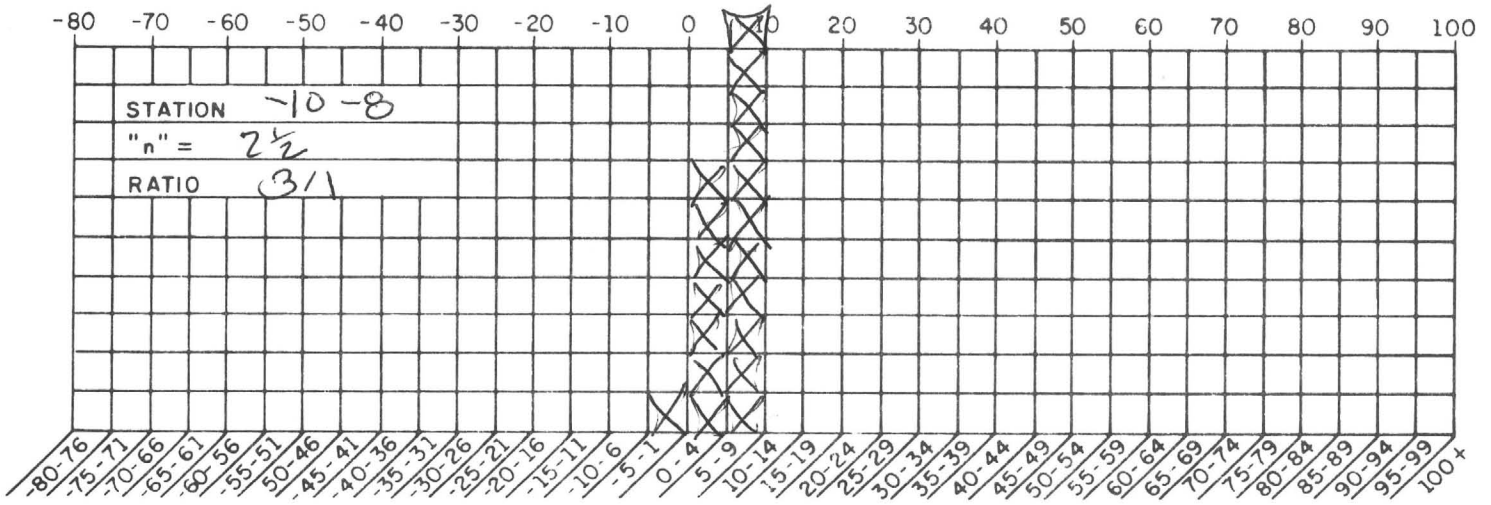




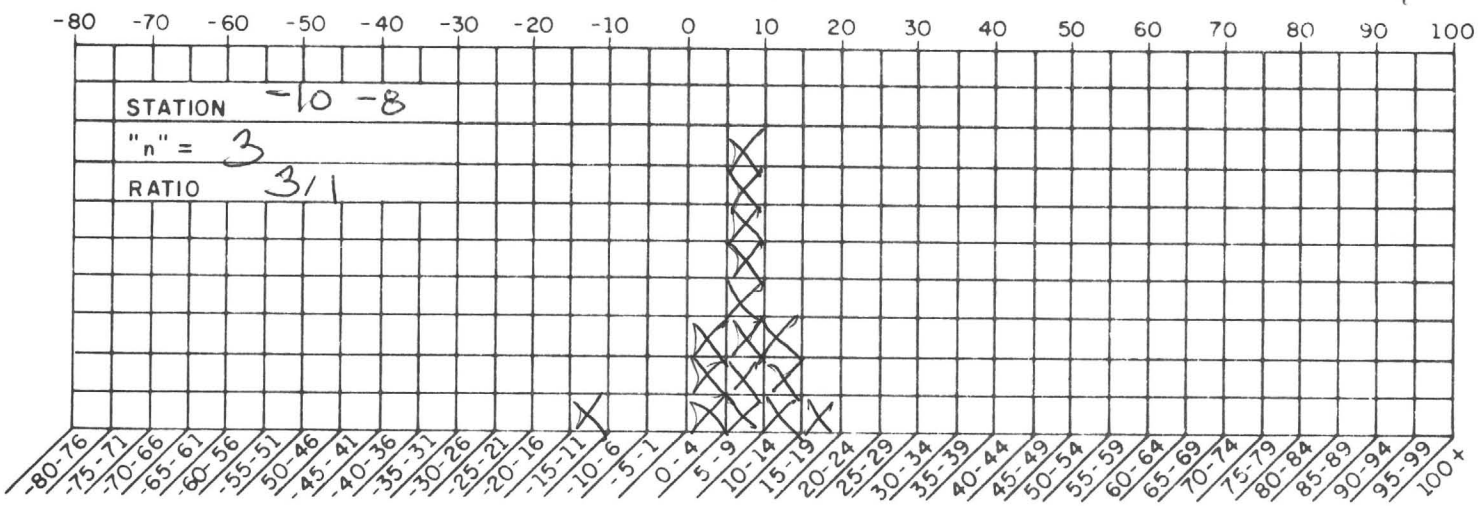
JOB _____ DATE _____ LINE _____ PAGE 3

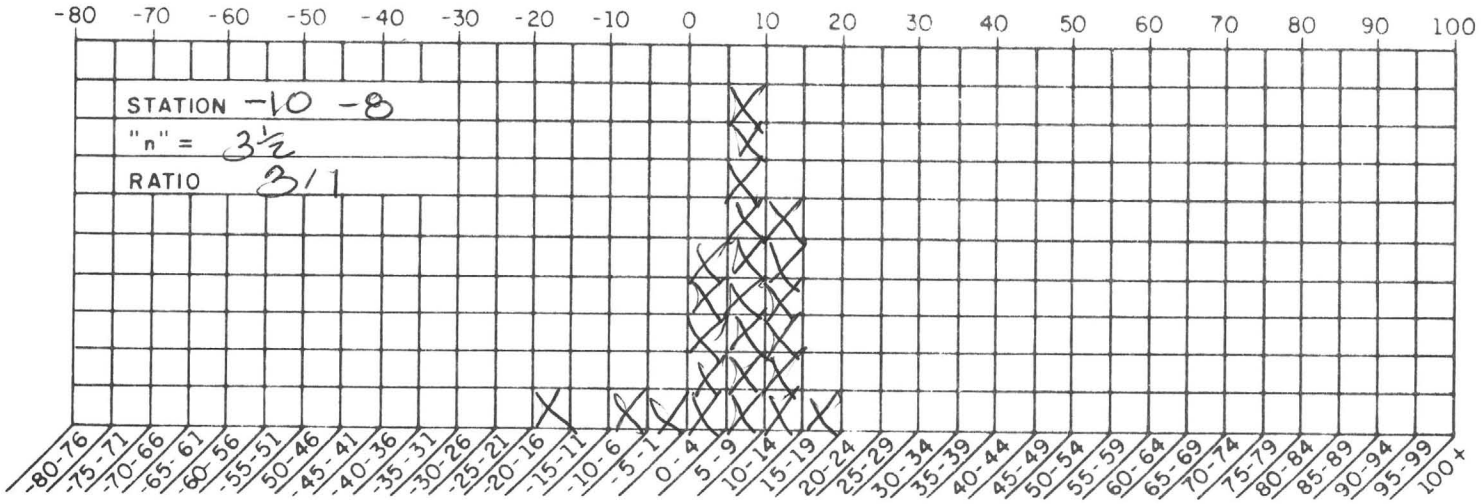


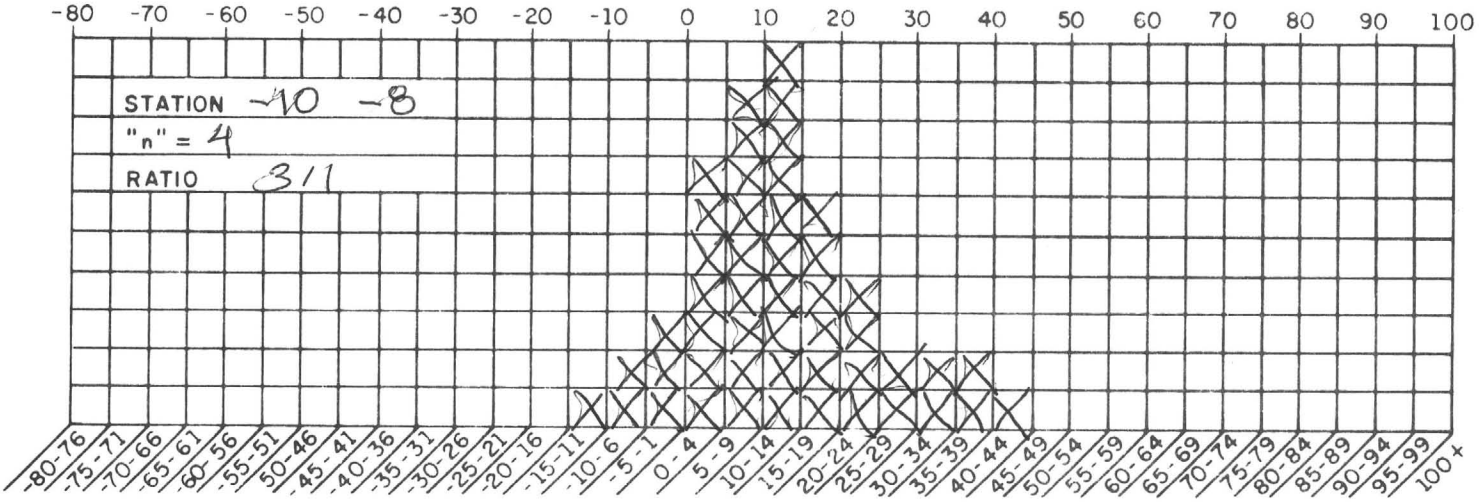




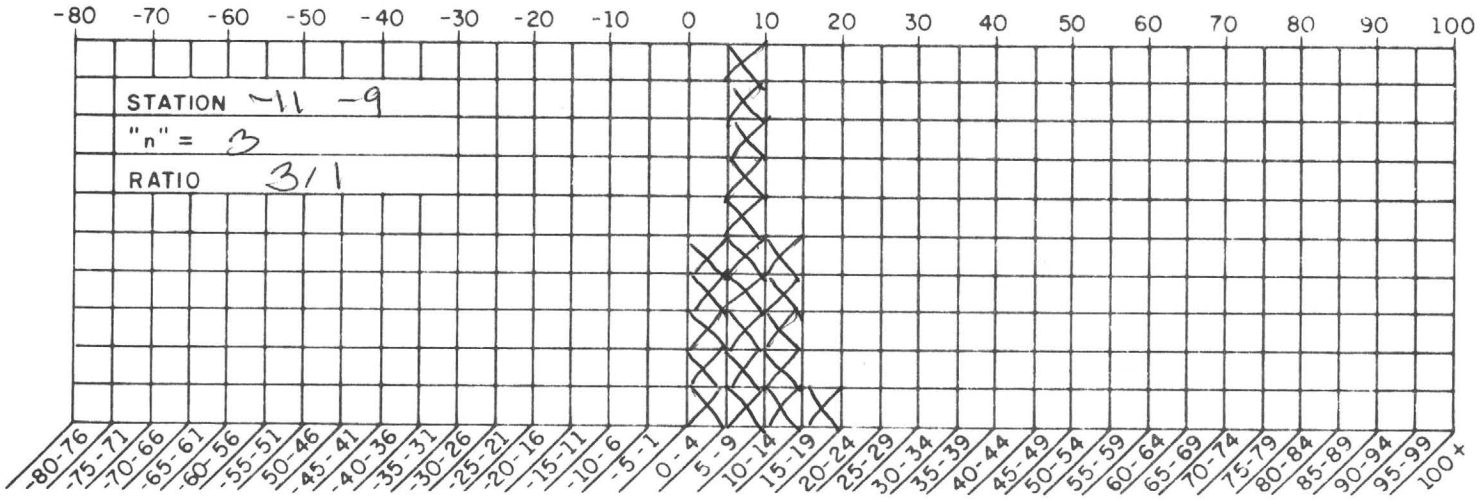
JOB _____ DATE _____ LINE 4 _____ PAGE 4

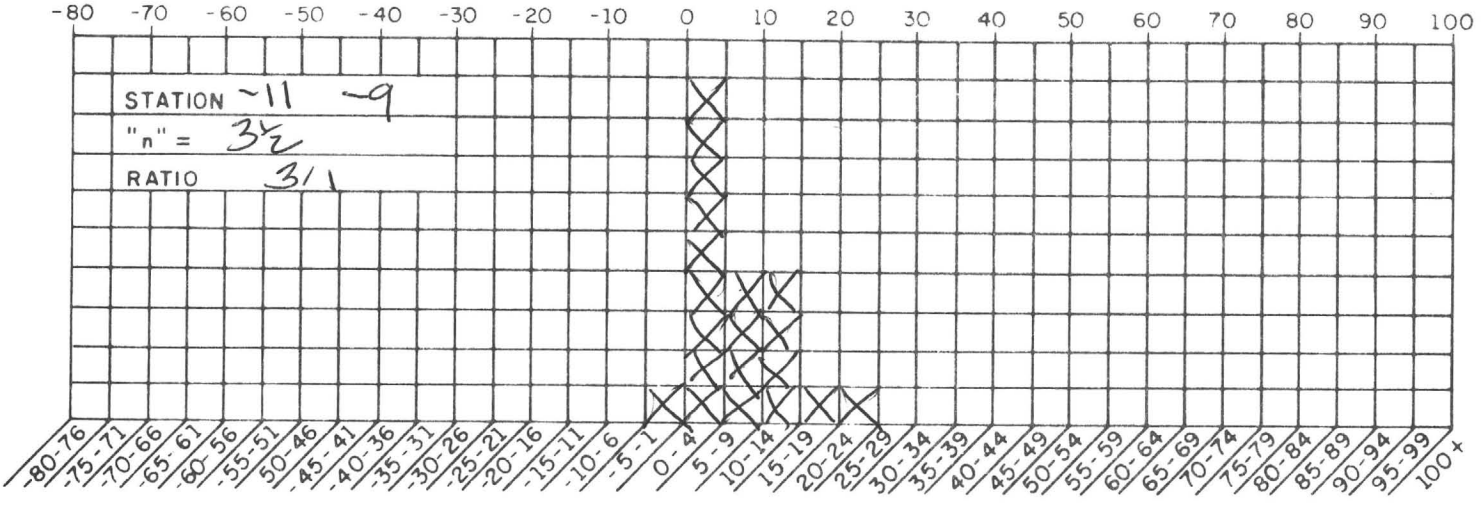


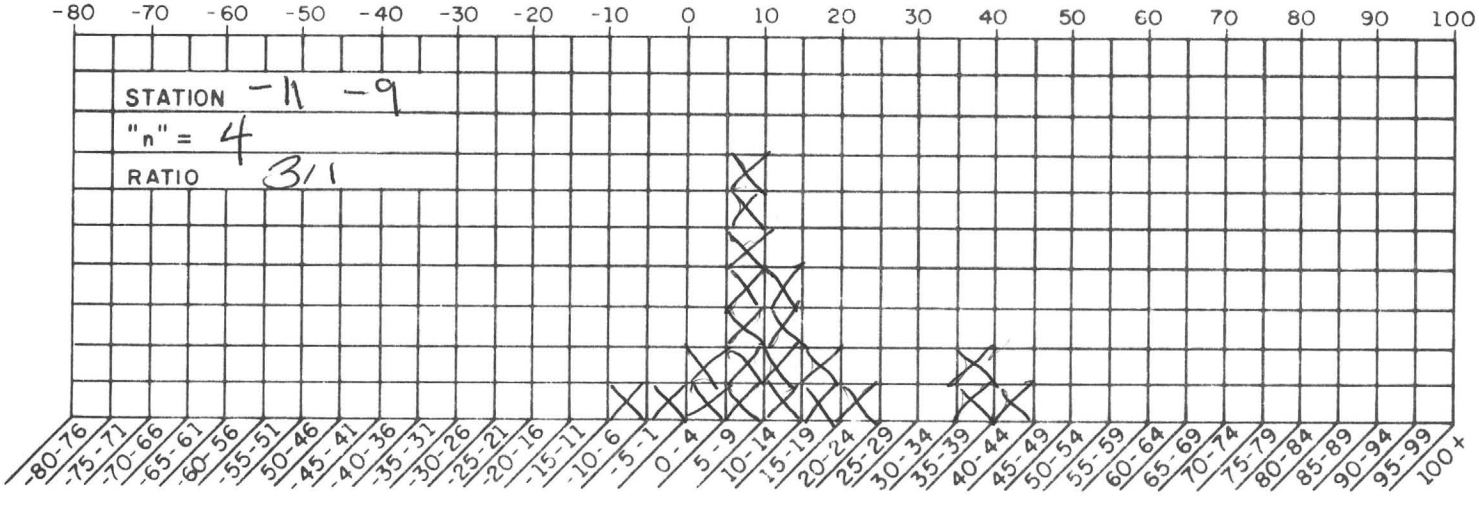




JOB 0237 DATE _____ LINE 4 SPD 2 NW PAGE 5

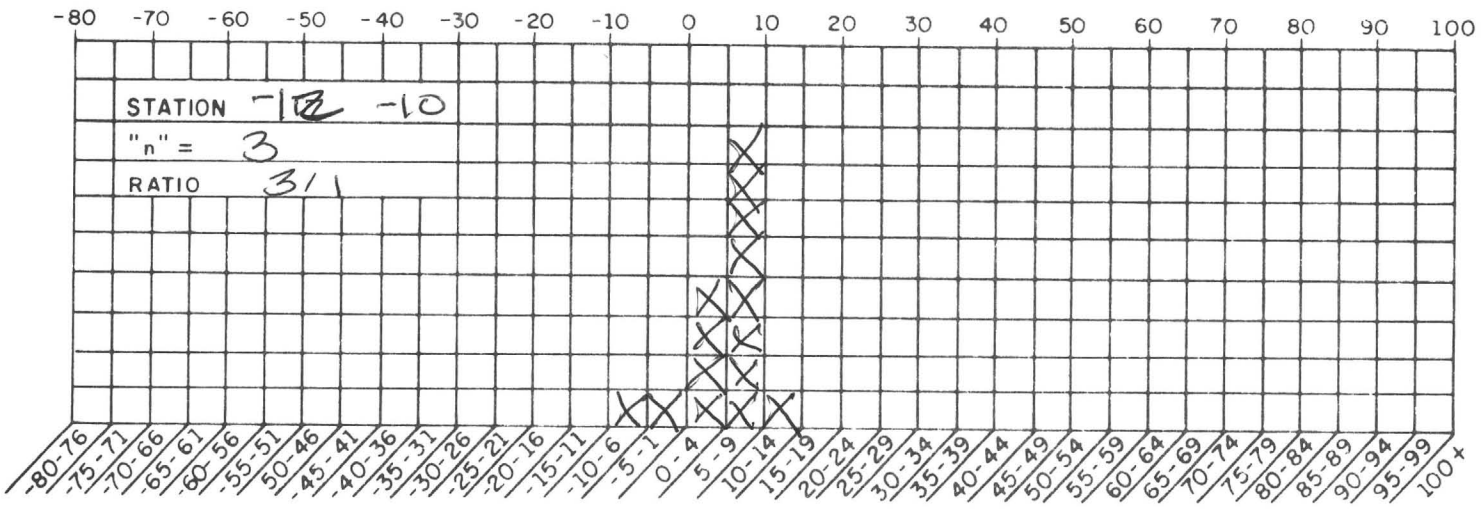


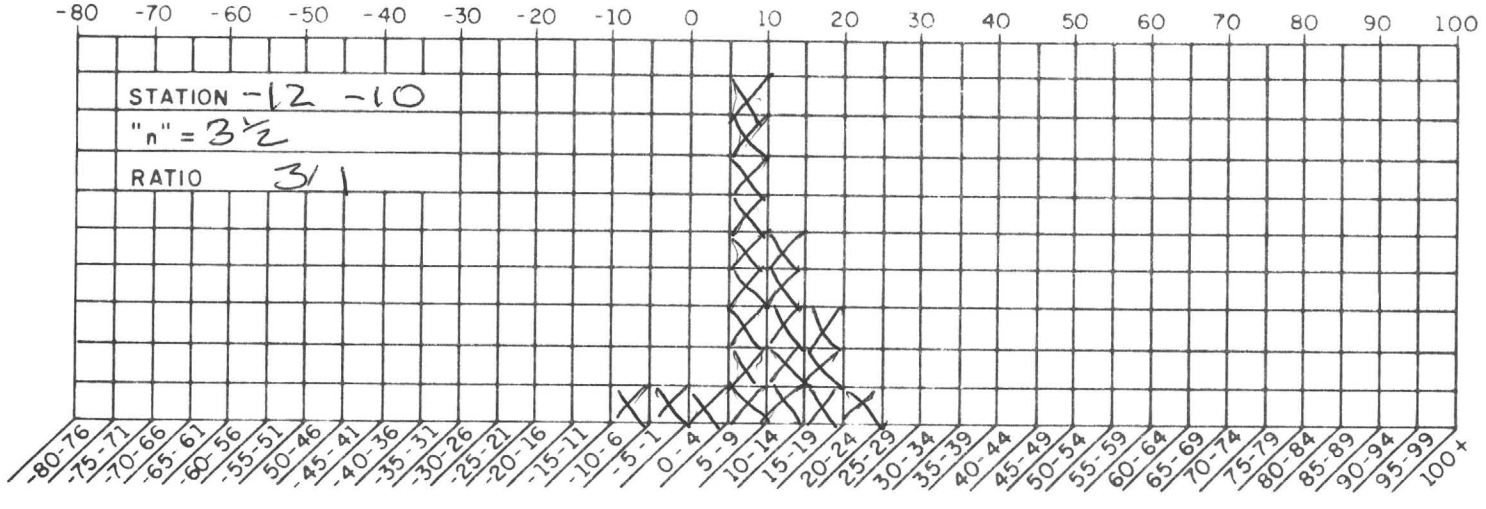


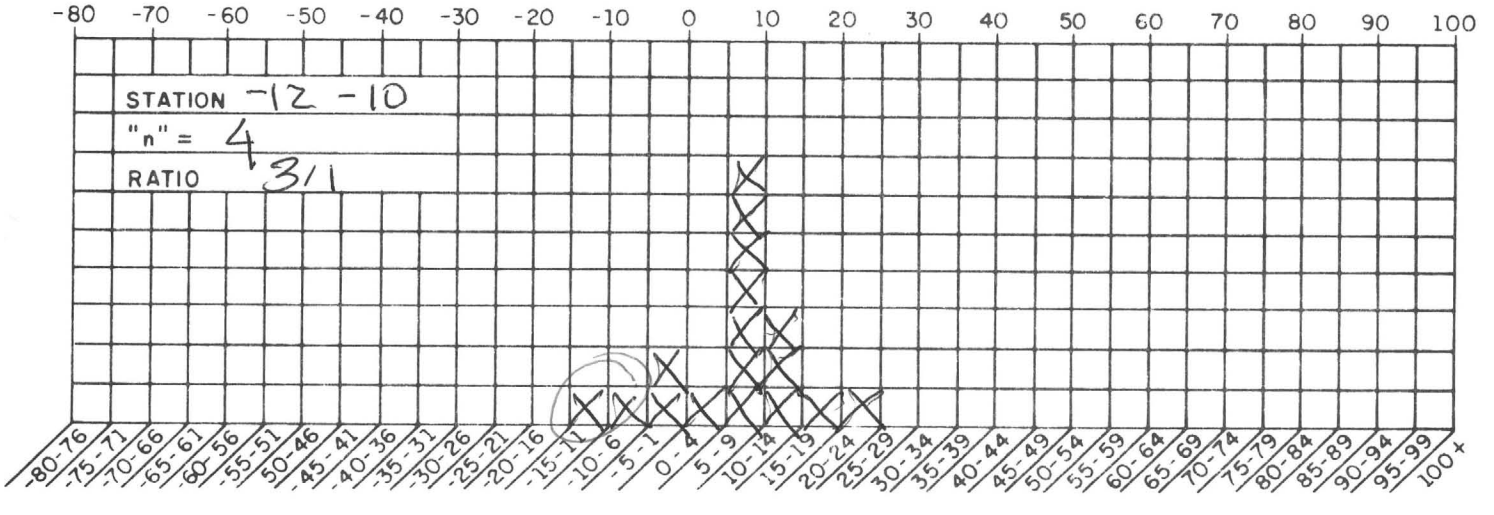


MINING GEOPHYSICAL SURVEYS FIELD DATA HISTOGRAMS

JOB _____ DATE _____ LINE 4 PAGE 6







MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L4 #2 NW

Project:	Client:	Date:
0237	ESSEX	8/31/72

TIME a=2000	I	VA	COMMENTS
-4-2	7.0		
-3-1	7.1		
-2-0	2.0		
-1-1	7.1		
0-2	6.7		
-4-2	7.1		
-3-1	7.1		
-2-0	7.1		
-1-1	7.0		
0-2	6.6		

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-4 #2 NW

Project:	Client:	Date:
0237	ESSEX INT	8/31/72

TIME a=100	I	# a=200	I COMMENTS
-1-0	7.0	0-2	6.2
0-1	7.0		
1-2	6.0		
-2-1	7.0	-1-1	7.4
-1-0	7.1	0-2	7.0
0-1	7.3		
1-2	5.8		
-3-2	7.5	-2-0	7.2
-2-1	7.3	-1-1	7.1
-1-0	7.3	0-2	6.6
0-1	7.2		
1-2	6.2		
-4-3	7.0	-3-1	7.1
-3-2	7.5	-2-0	7.3
-2-1	7.4	-1-1	7.0
-1-0	7.3	0-2	6.6
0-1	7.0		
1-2	6.4		

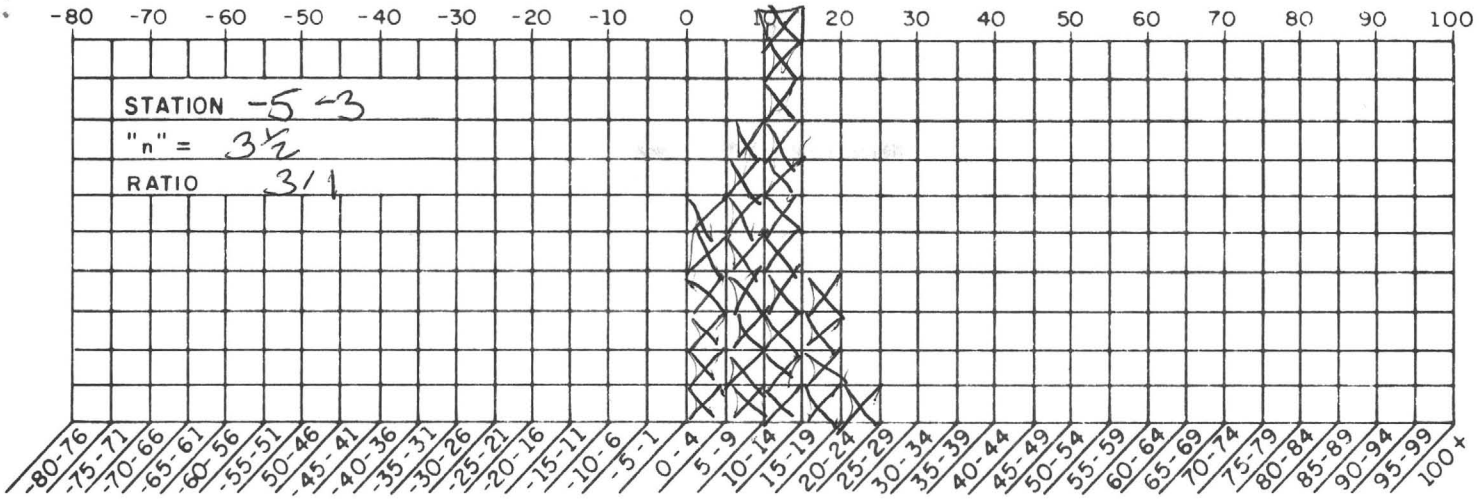
MINING GEOPHYSICAL SURVEYS

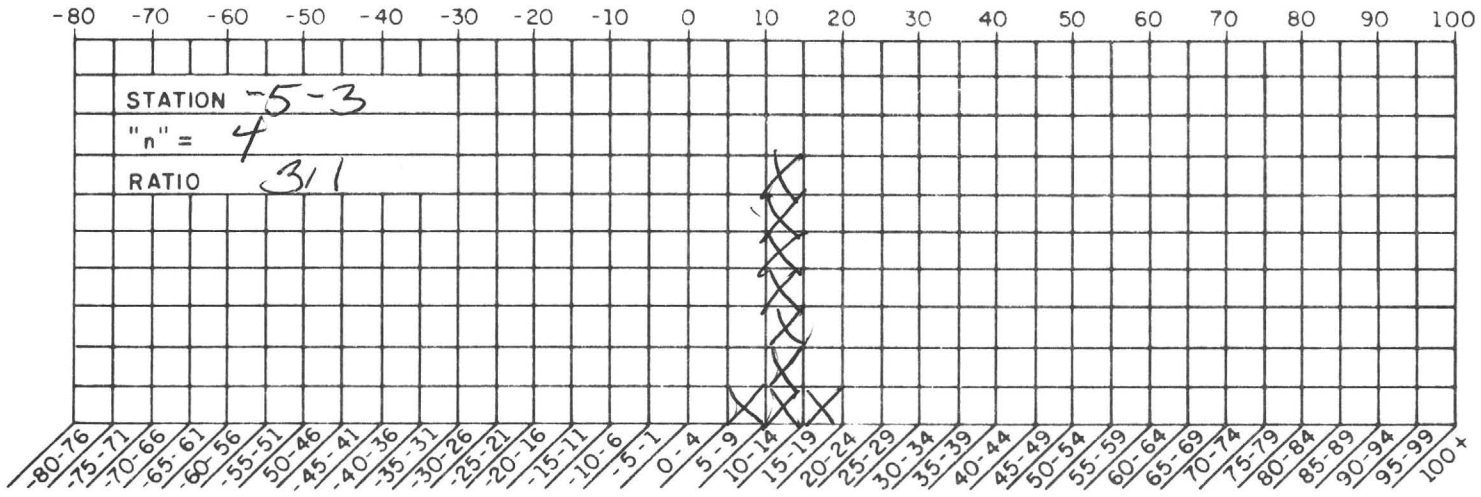
INDUCED POLARIZATION SURVEY

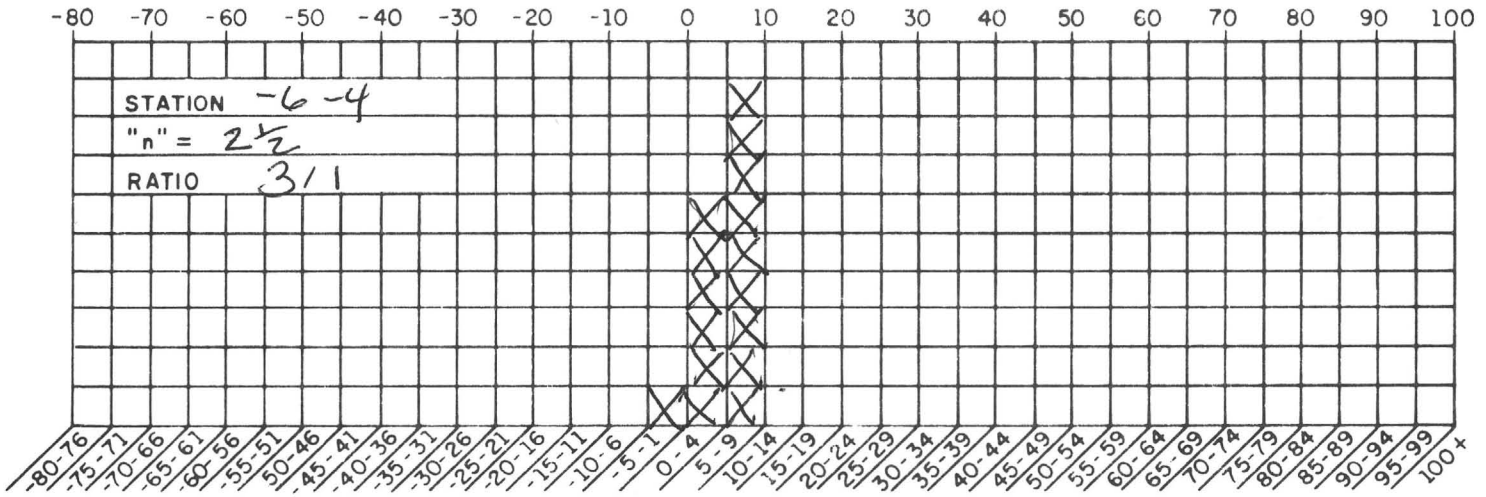
Project:	Client:	Date:

TIME a=1000	I	a=2000	COMMENTS
-4-3	7.0	-4-2	7.0
-3-2	7.5	-3-1	7.4
-2-1	7.4	-2-0	7.4
-1-0	7.4	-1-1	7.1
0-1	7.0	0-2	6.7
-4-3	7.0	-4-2	7.2
		-3-1	7.0
-3-2	7.0	-2-0	7.0
		-1-1	7.0
-2-1	7.0	0-2	5.9
-1-0	7.2		
-4-3	7.0	-4-2	7.1
-3-2	7.0	-3-1	7.1
-2-1	7.0	-2-0	7.1
		-1-1	7.0
		0-2	6.5
		-4-2	7.0
		-3-1	7.0
		-2-0	7.2
		-1-1	7.1
		0-2	6.9

JOB 0237 DATE _____ LINE 5 SPD 1 NW PAGE 1







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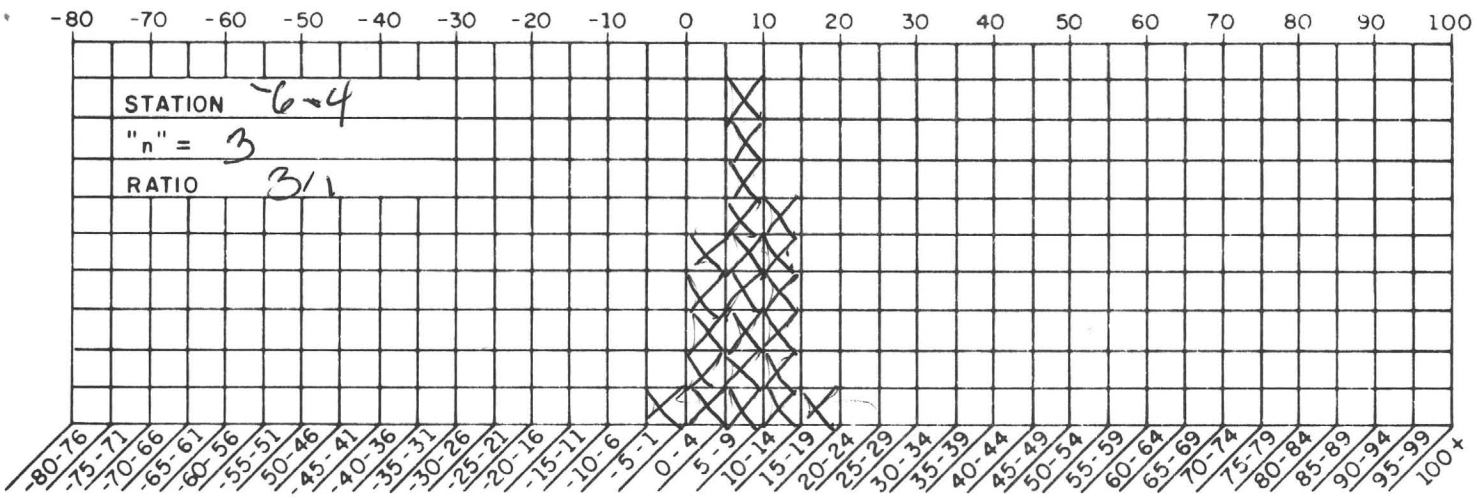
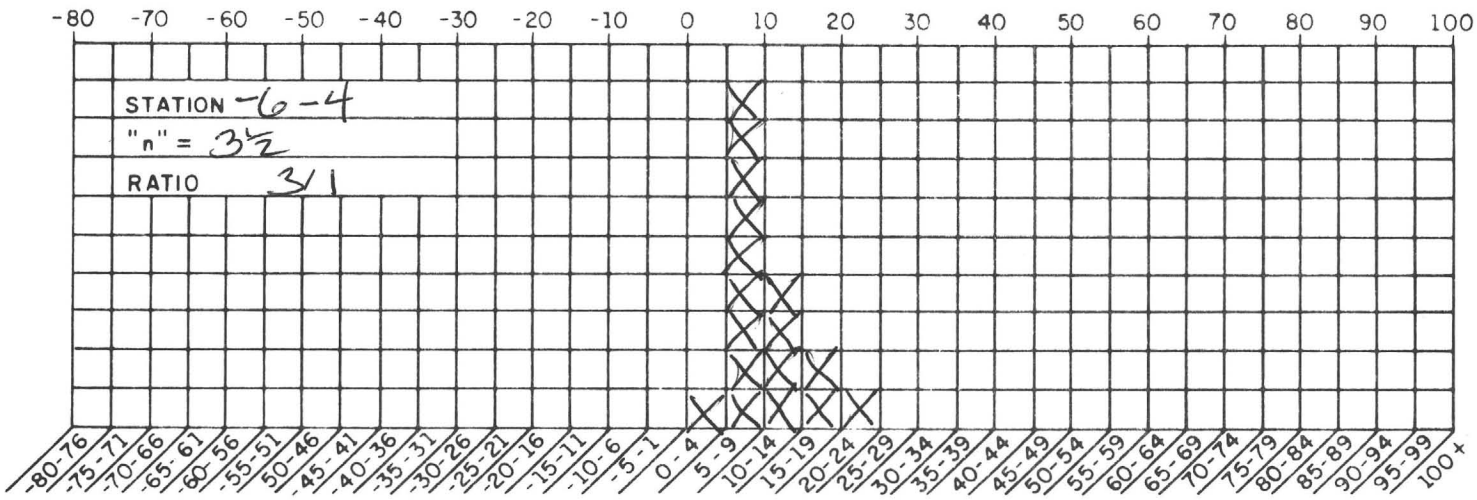
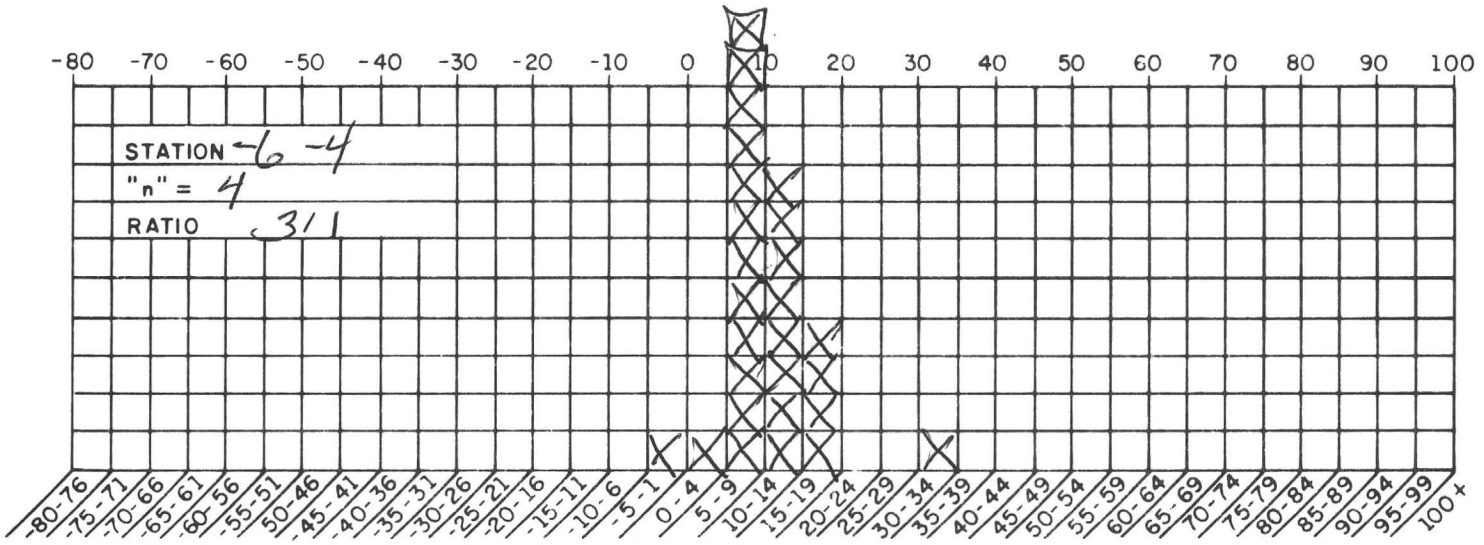
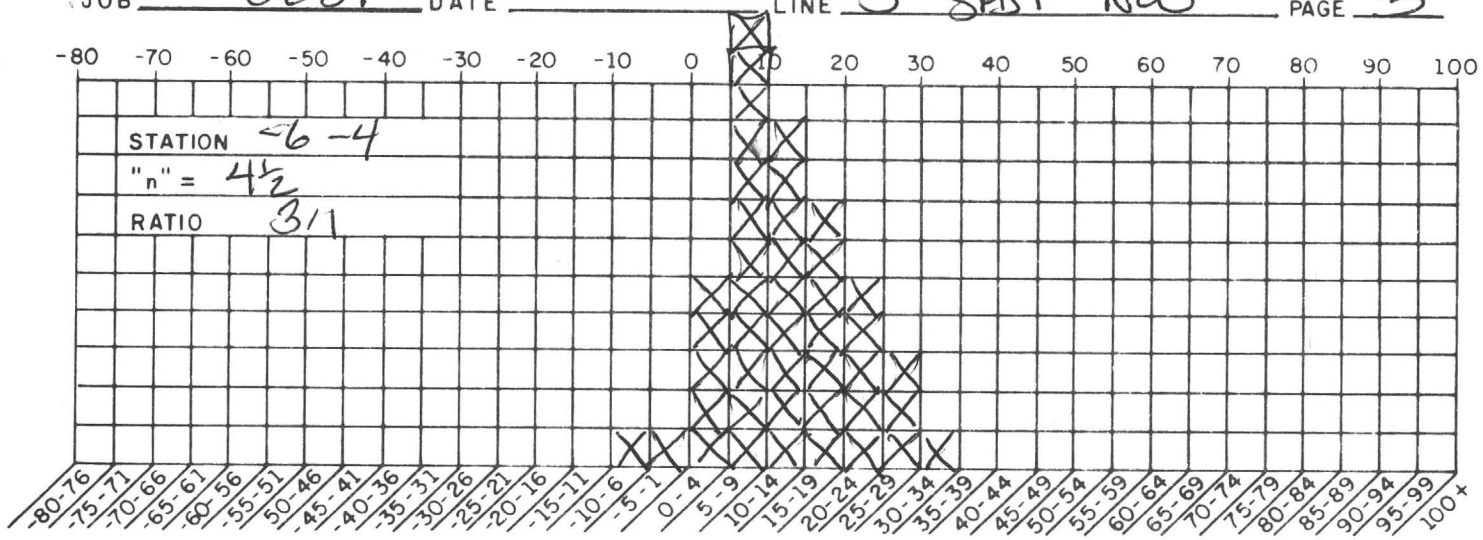
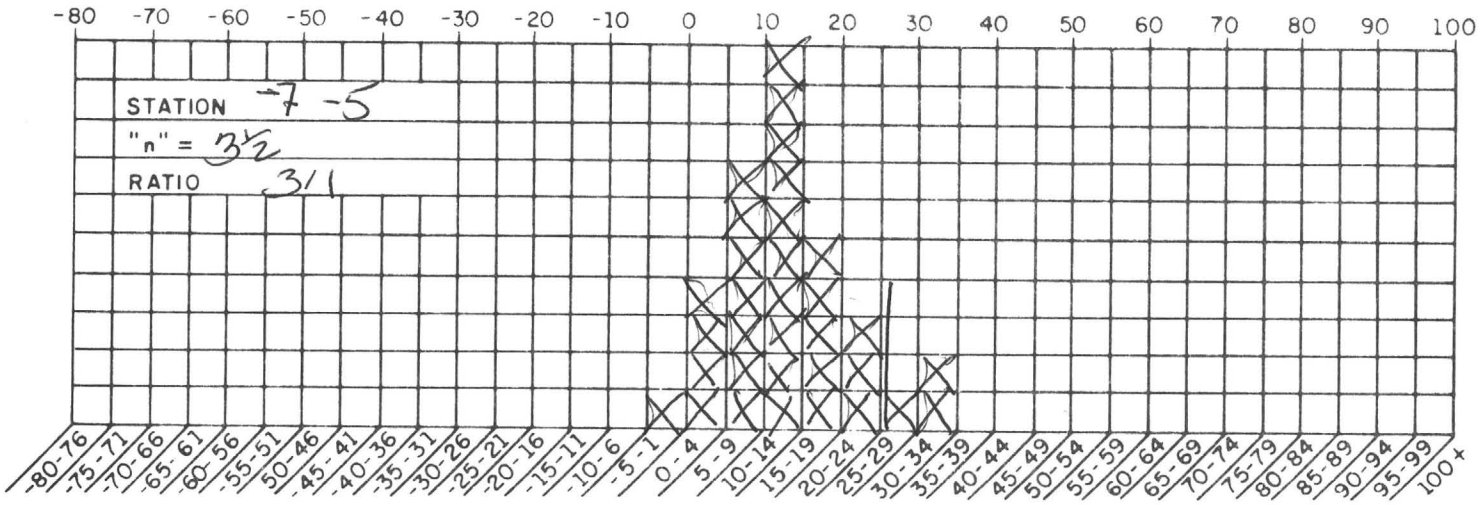


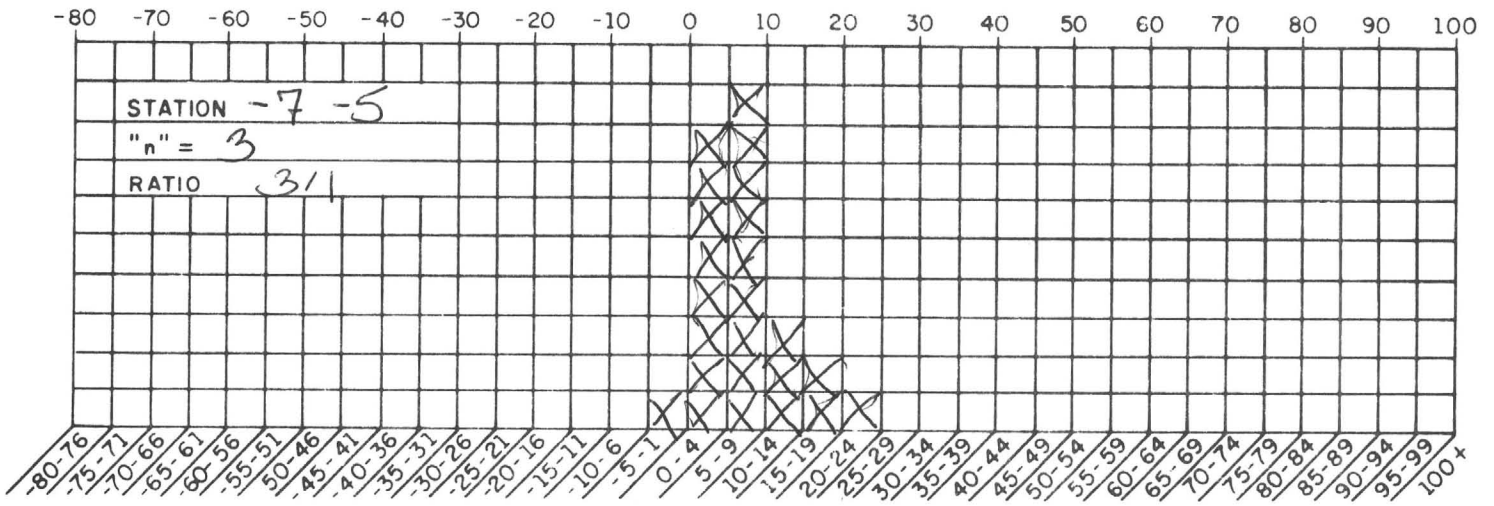




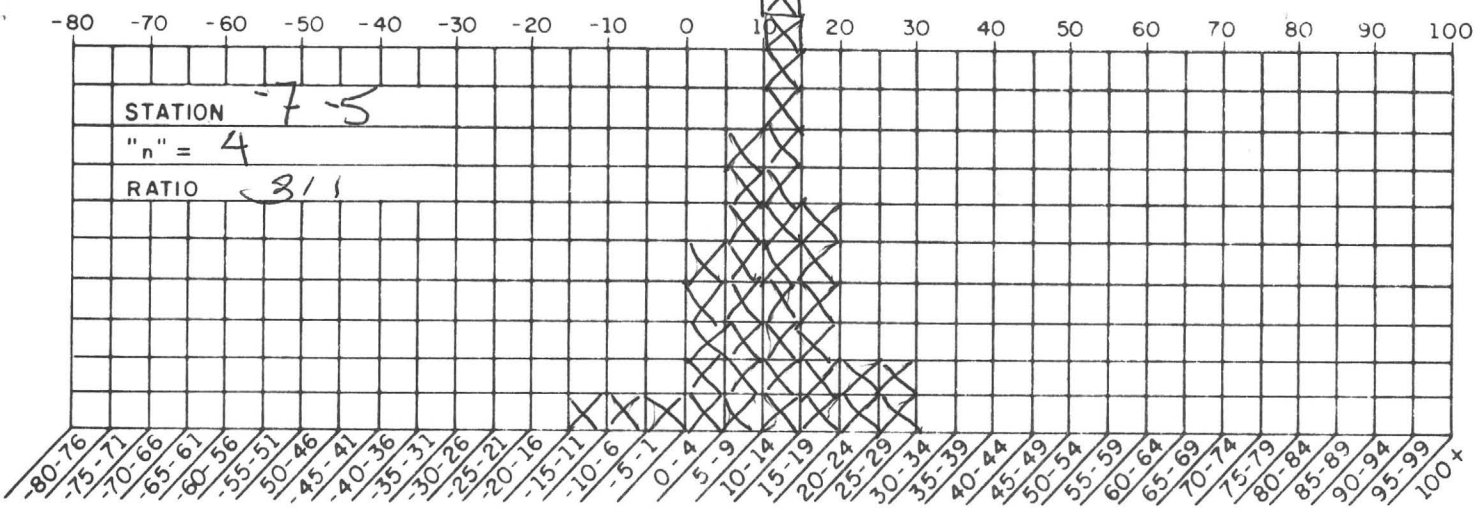
JOB 0237 DATE _____ LINE 5 SAD1 N20 PAGE 3

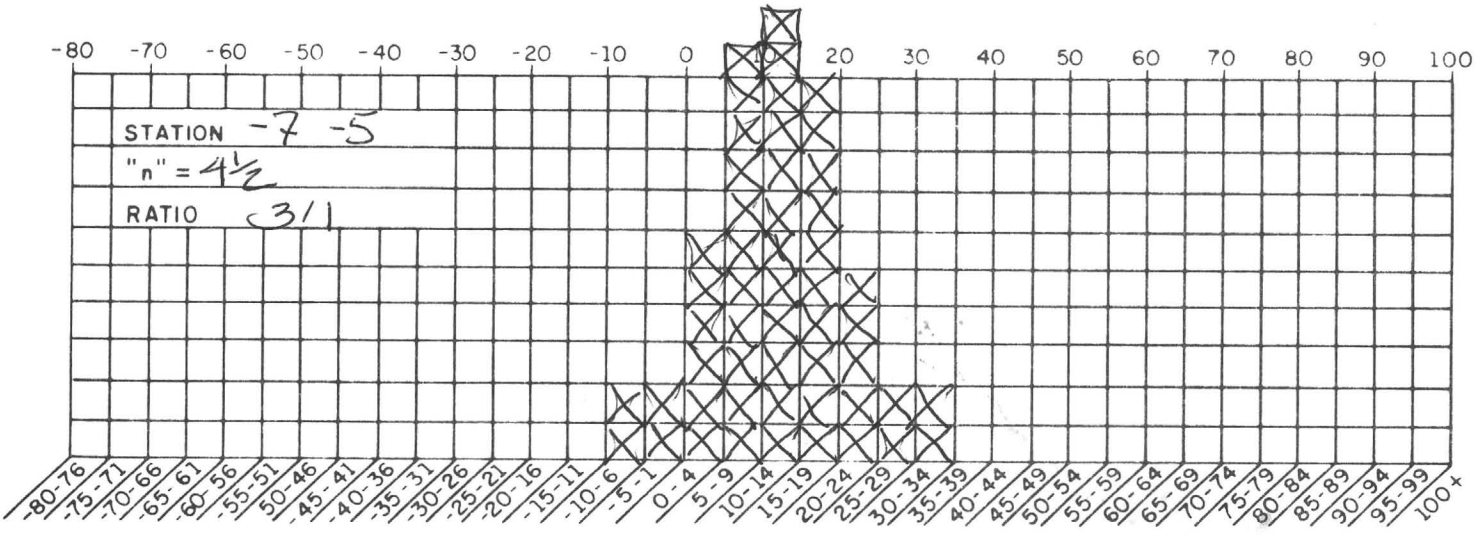


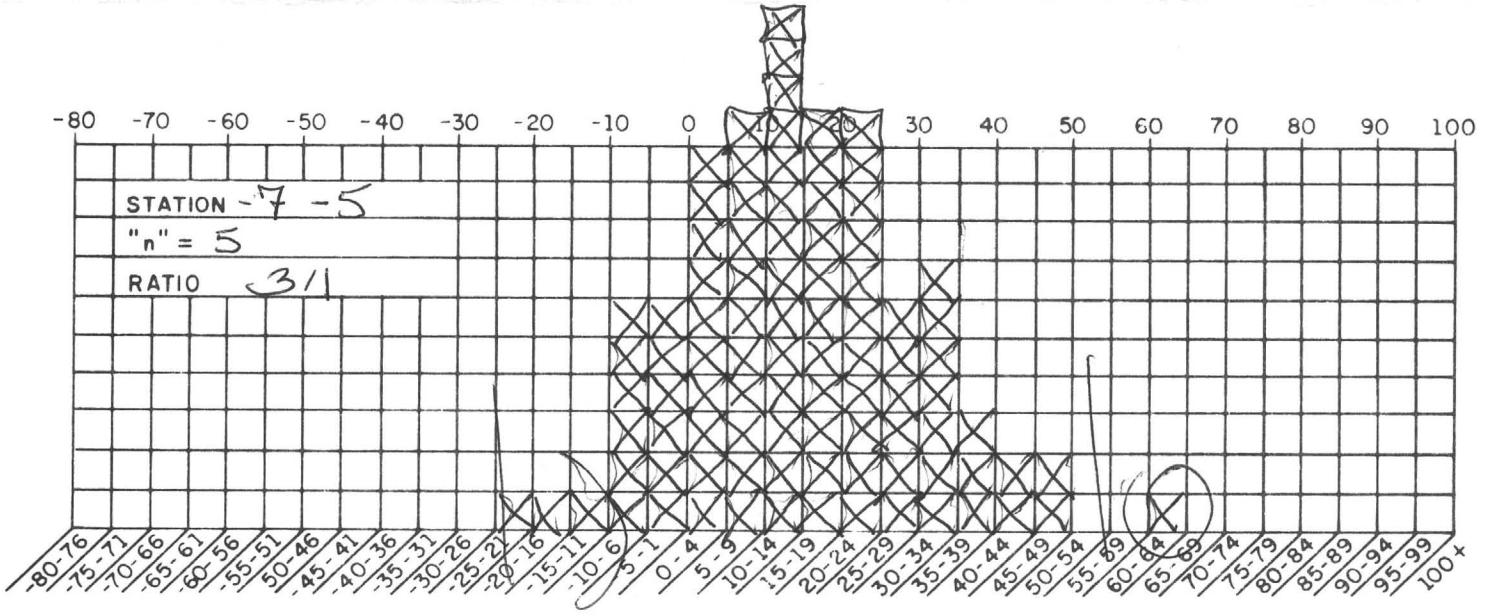




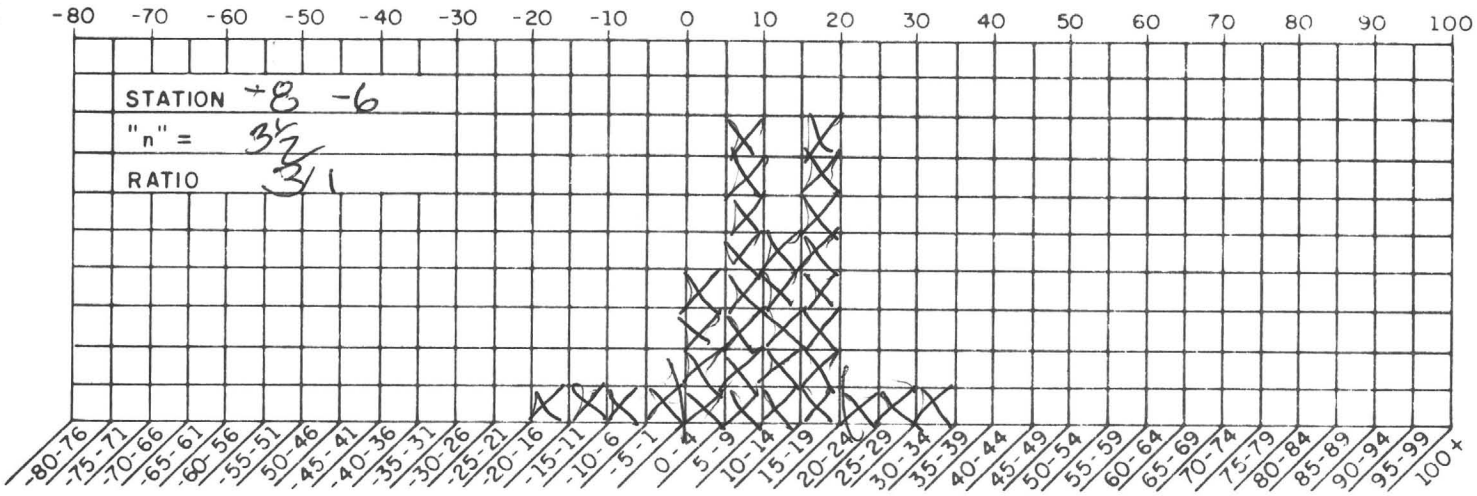
JOB 0237 DATE 9 772 LINE 5 SPD 1 NW PAGE 4

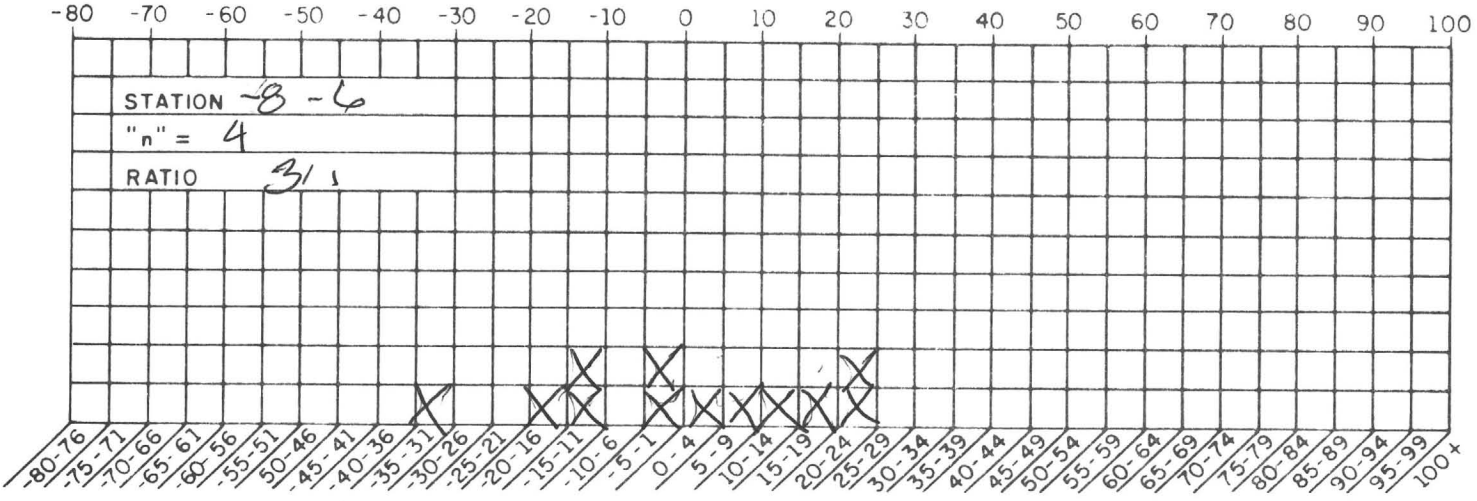


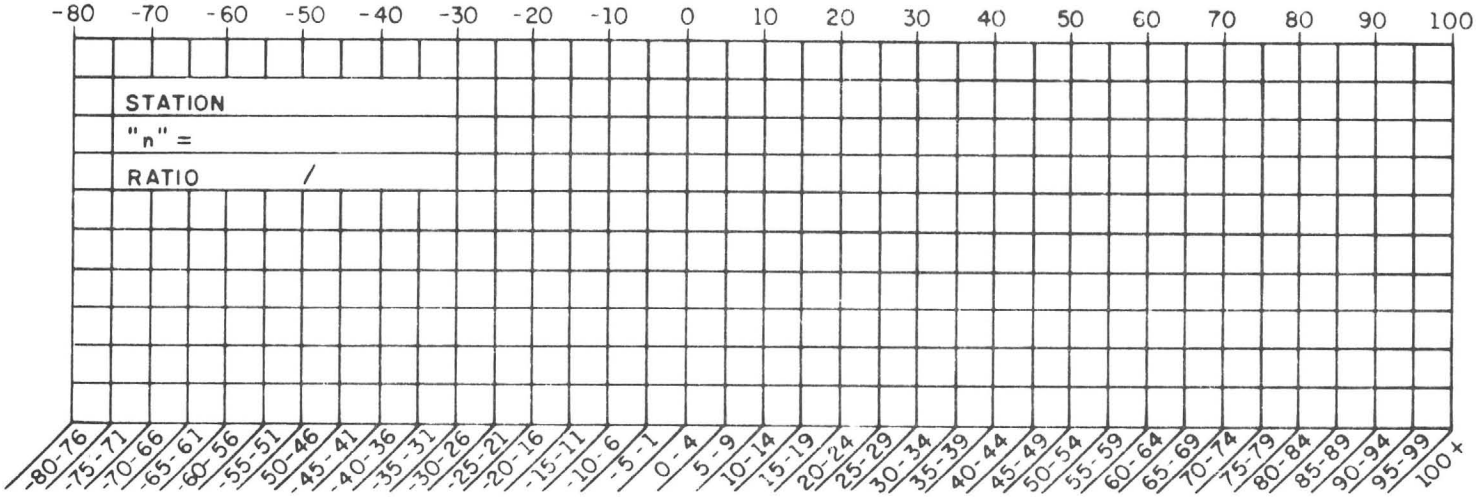




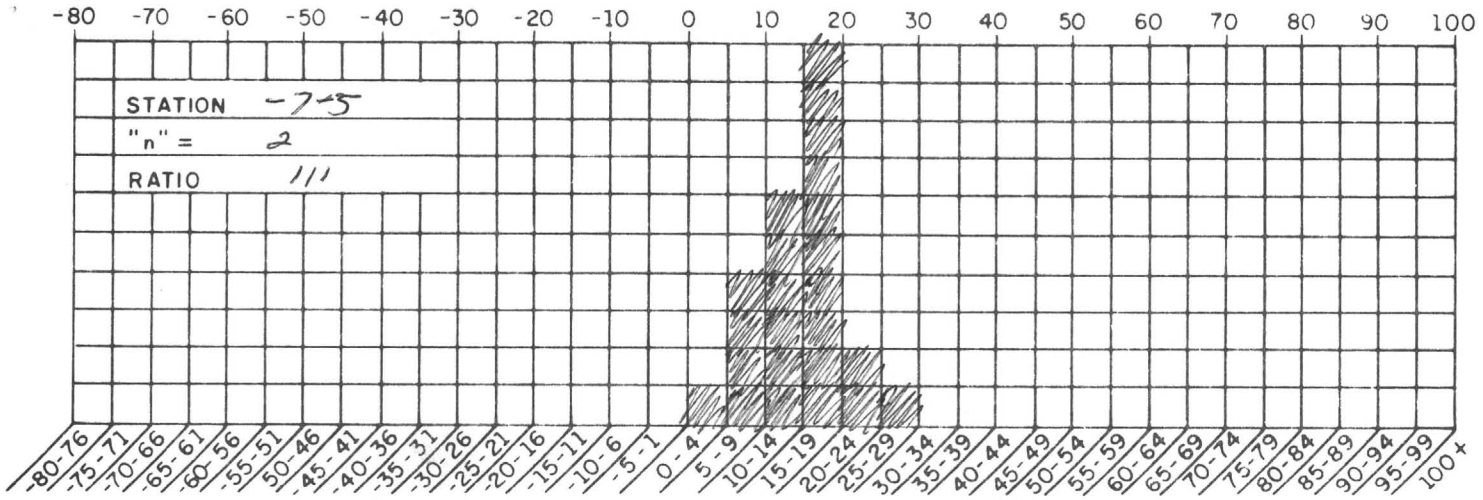
JOB _____ DATE _____ LINE _____ PAGE 5

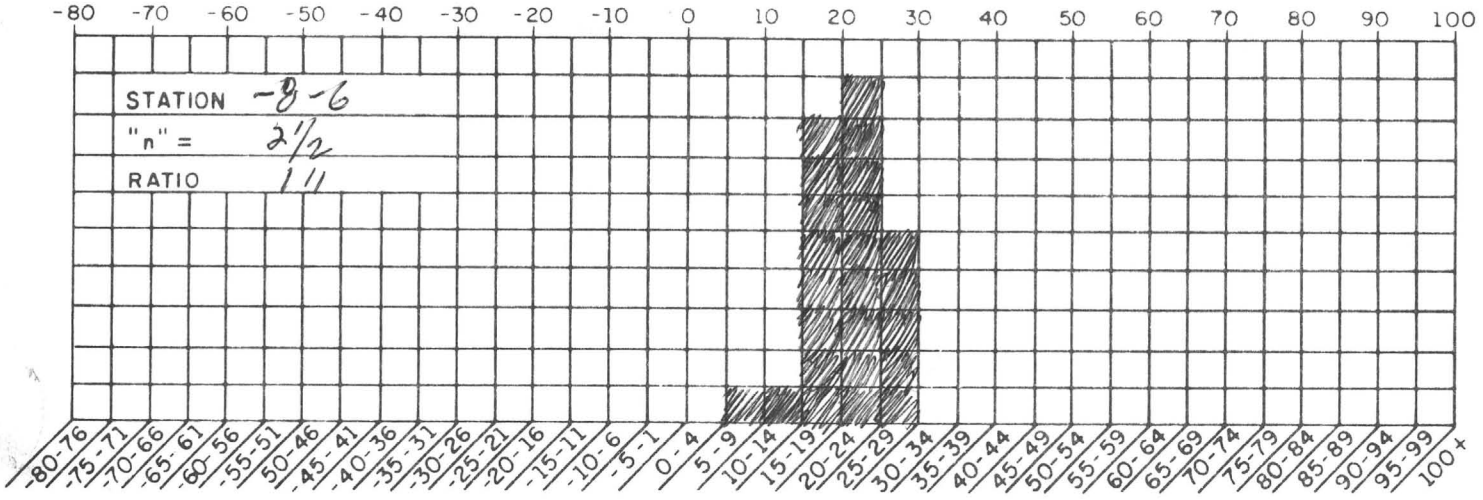


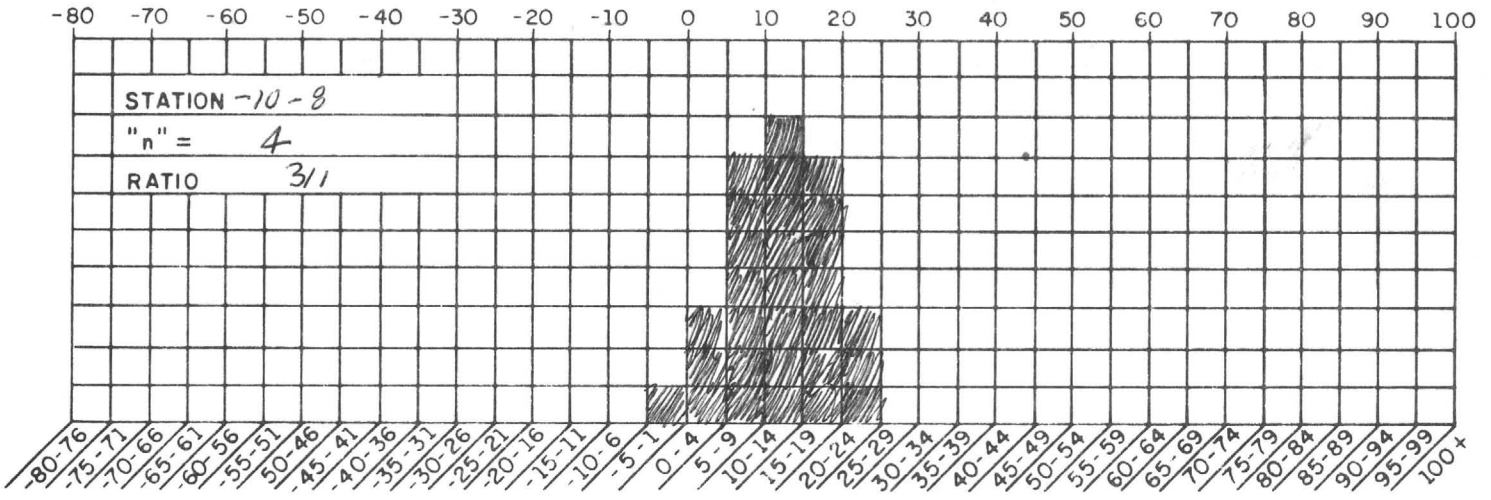




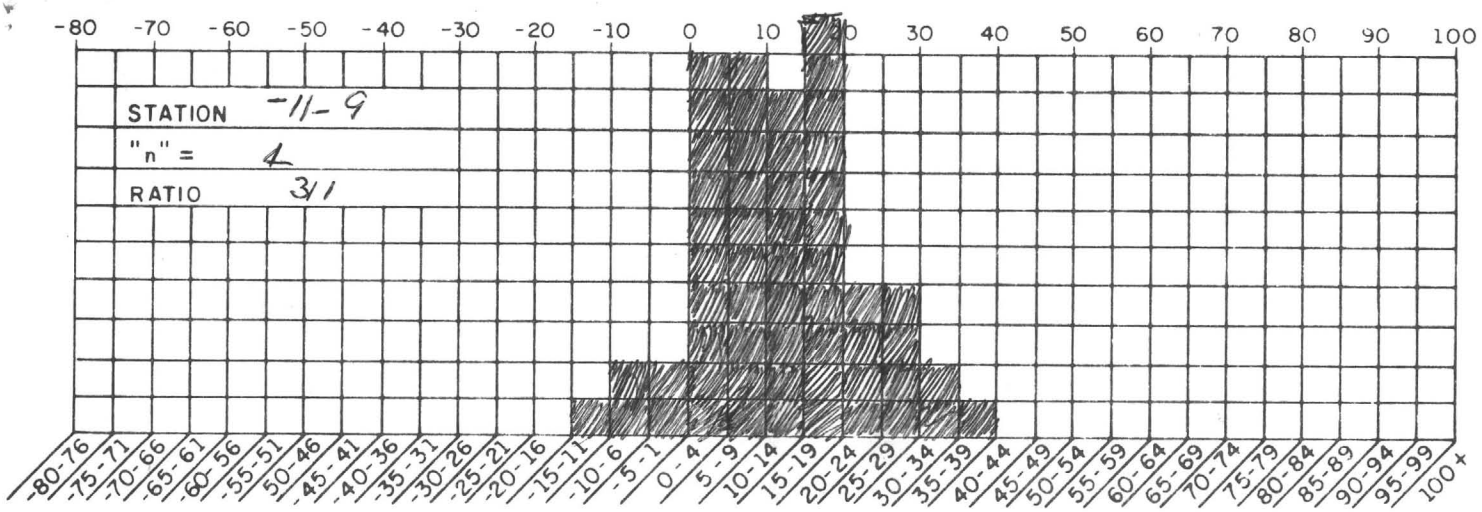
JOB 0237 DATE 9/5/72 LINE S #1 NW PAGE 1

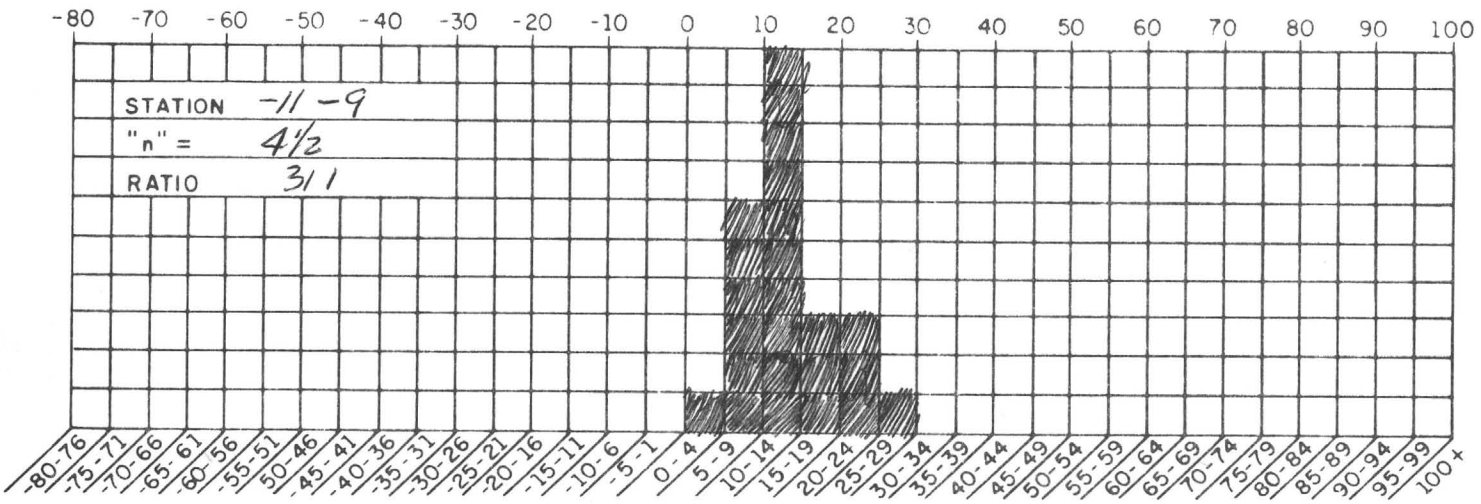


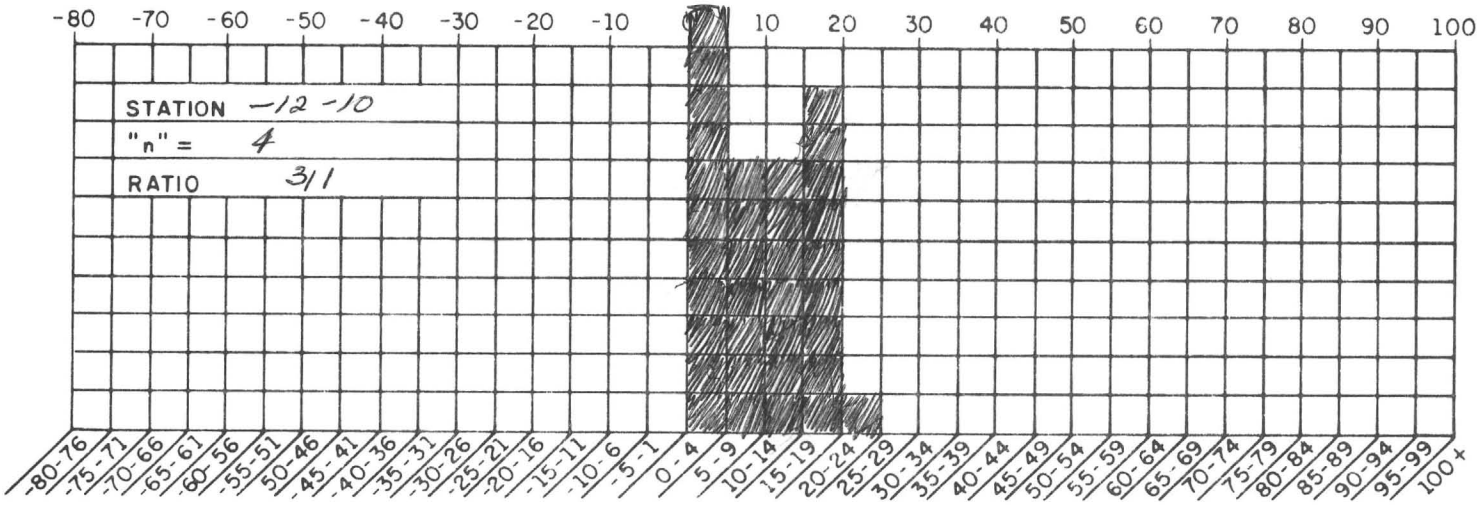




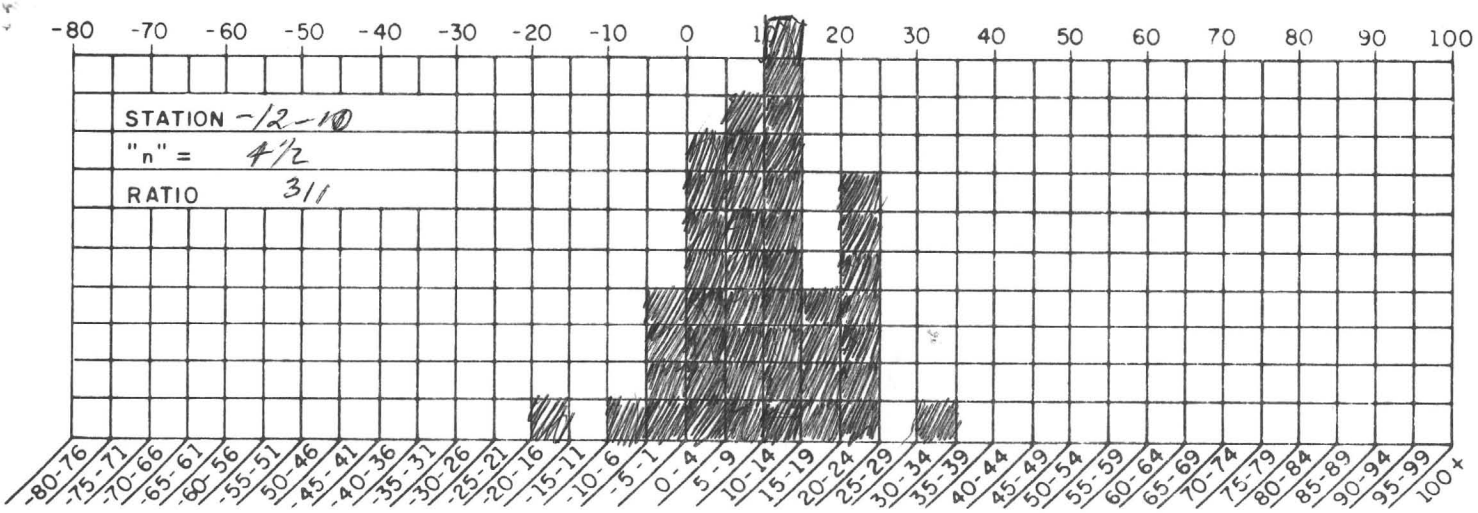
JOB 0237 DATE 9/5/72 LINE 5#1 NW PAGE 2

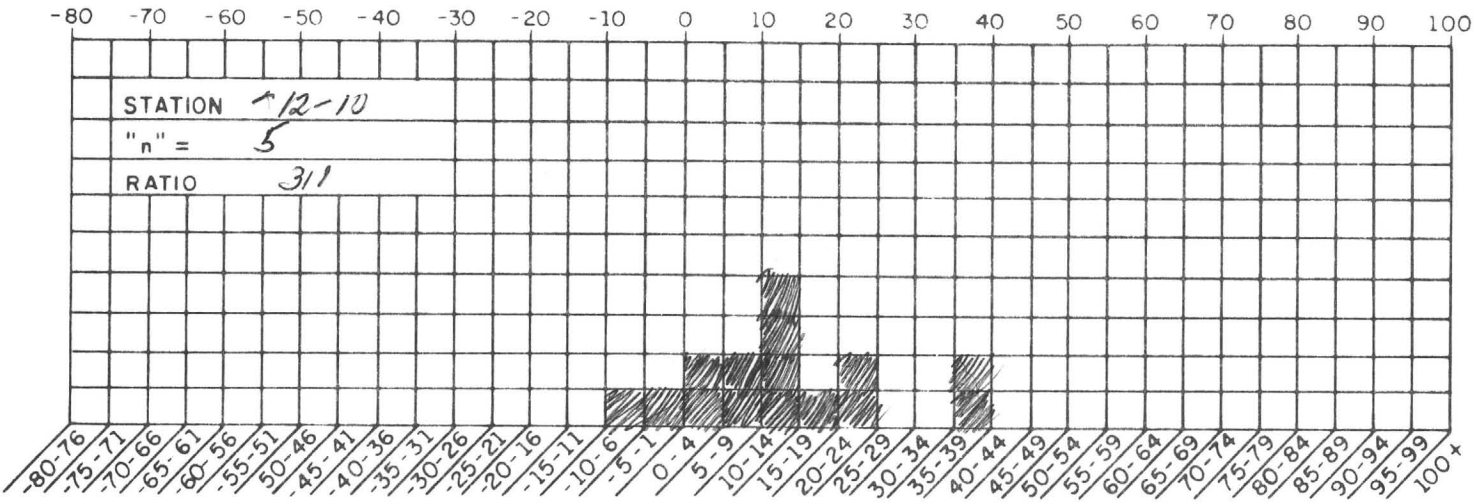


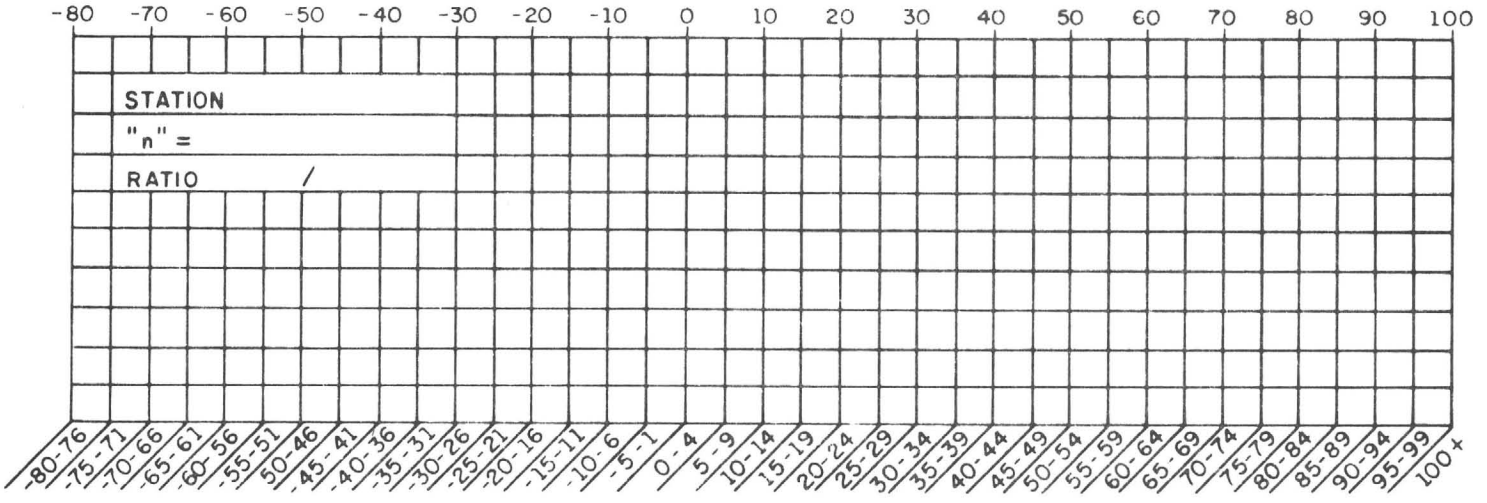




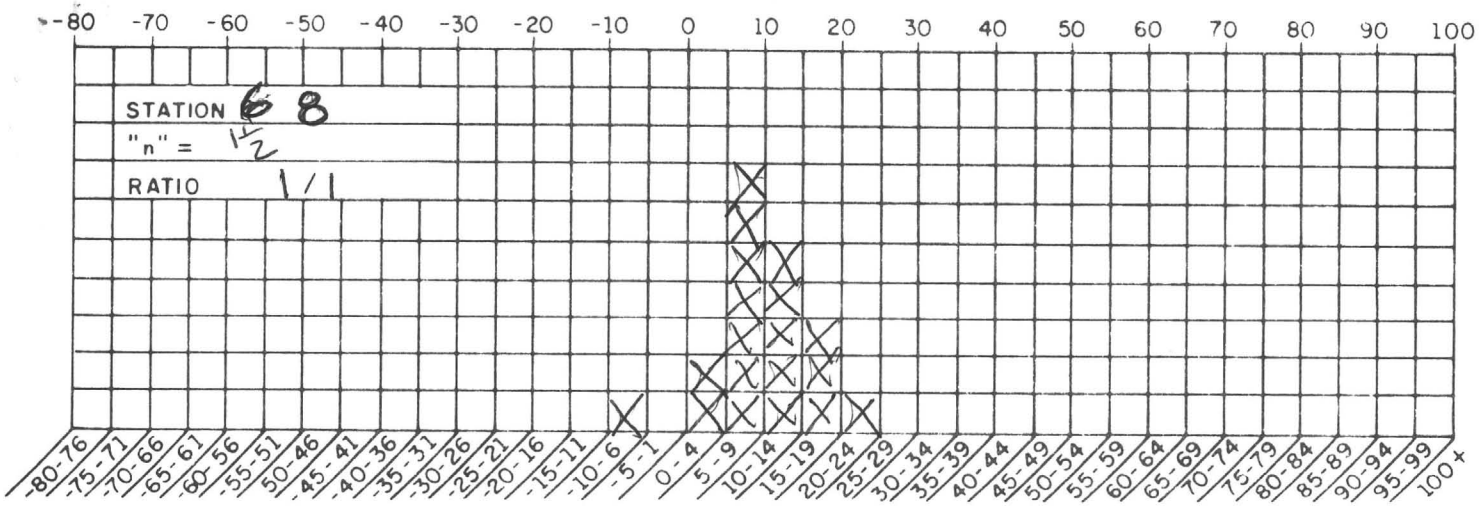
JOB 0237 DATE 9/5/72 LINE 5 #1 NW PAGE 3

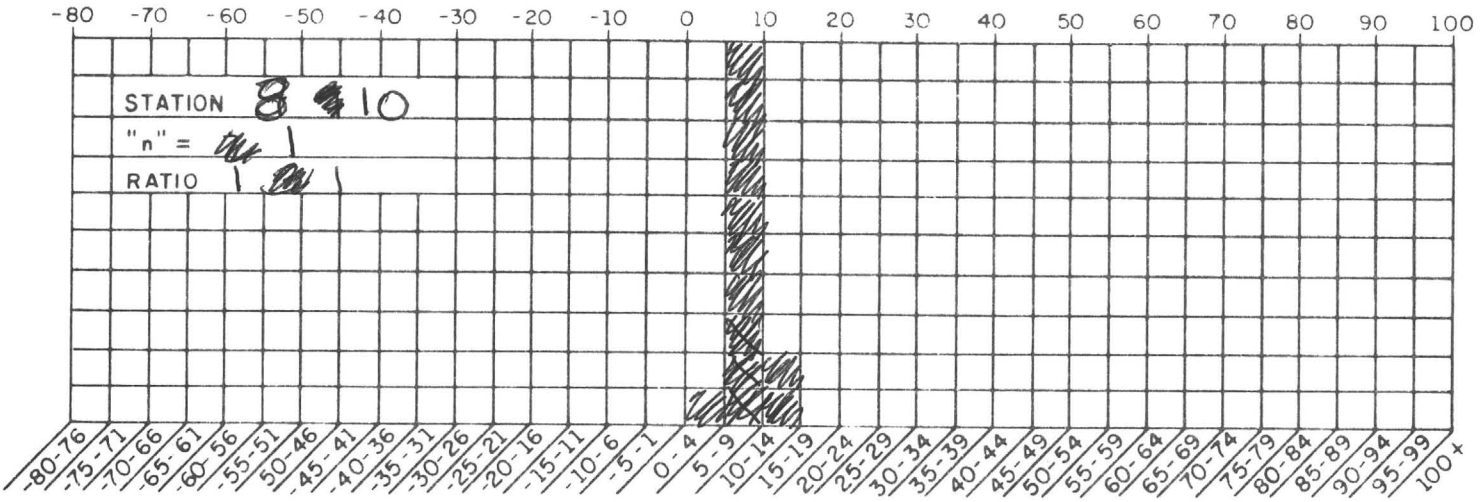


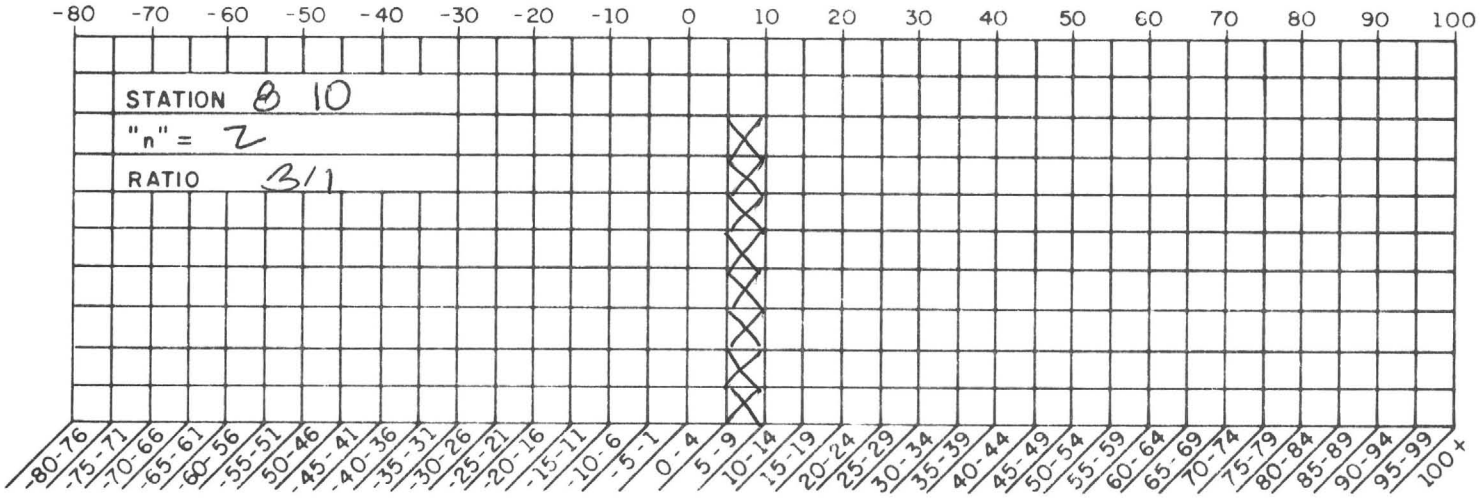




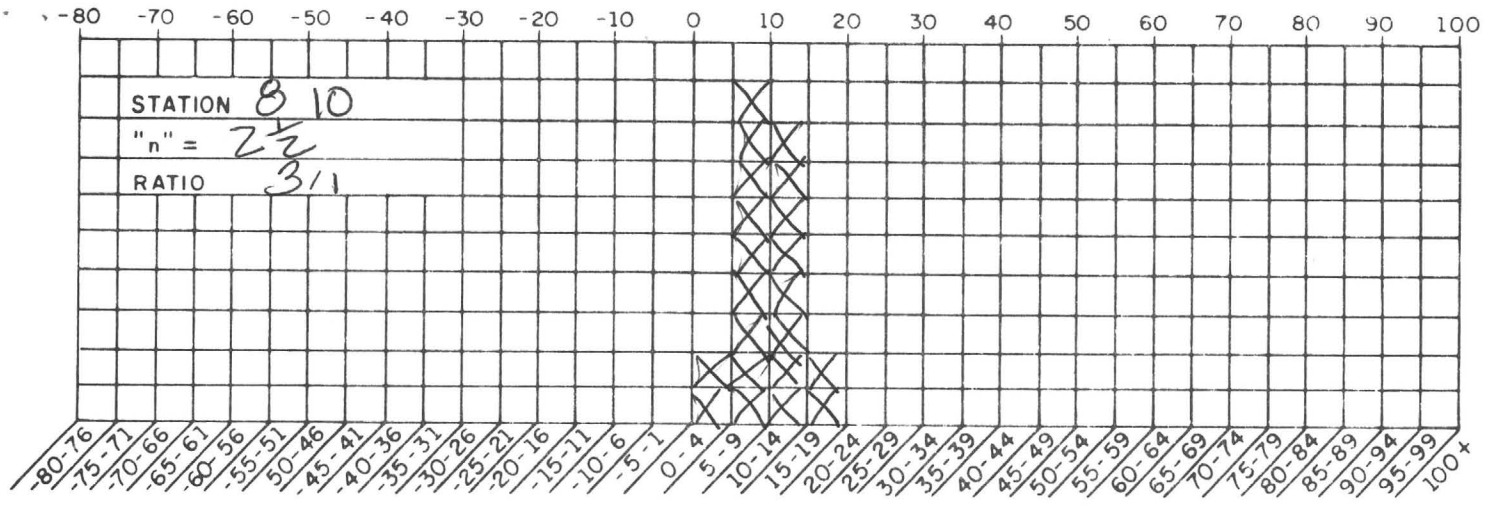
JOB 0237 DATE 9 7 72 LINE 5 SPA 1 SE PAGE 1

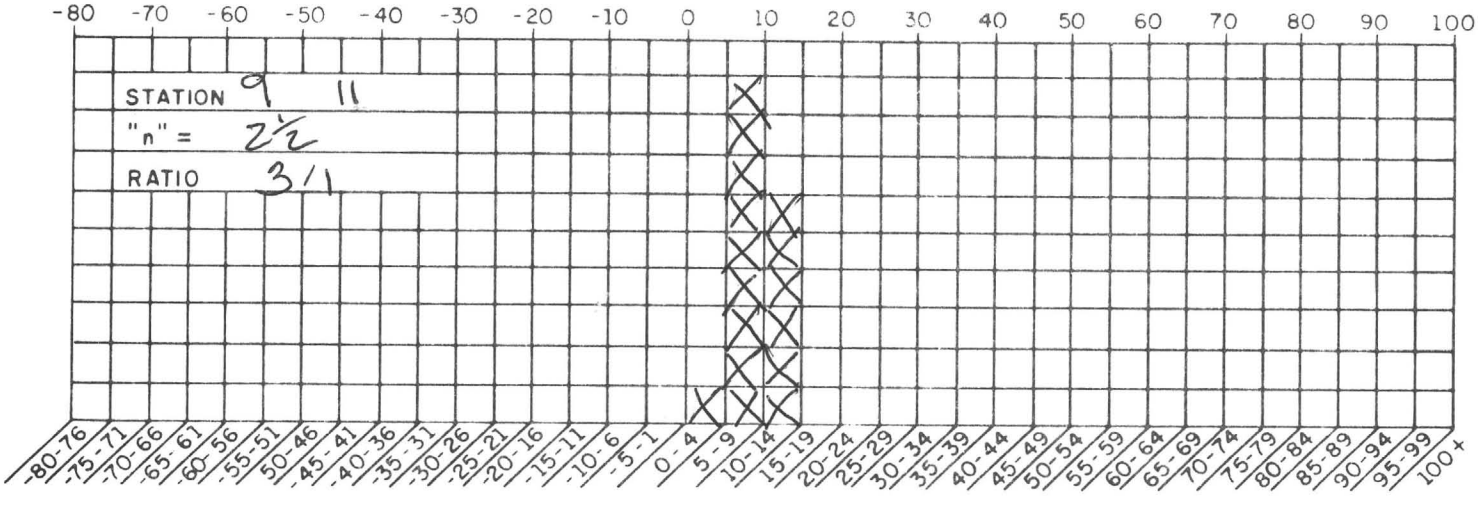


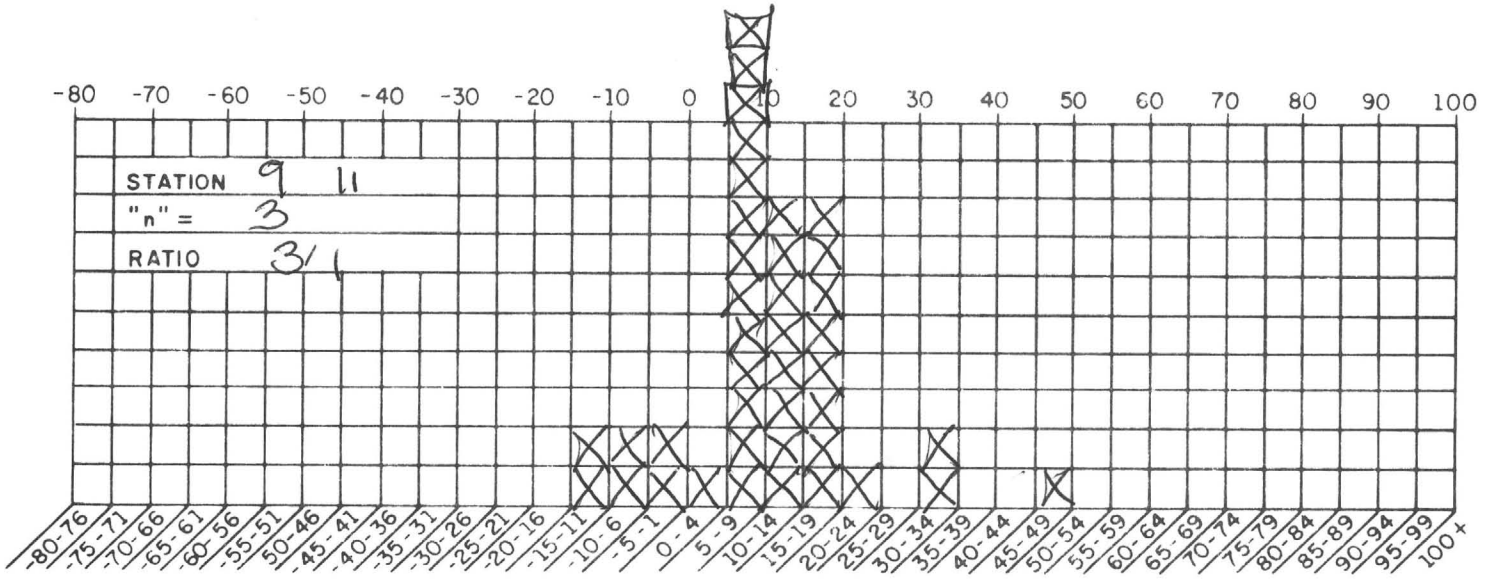




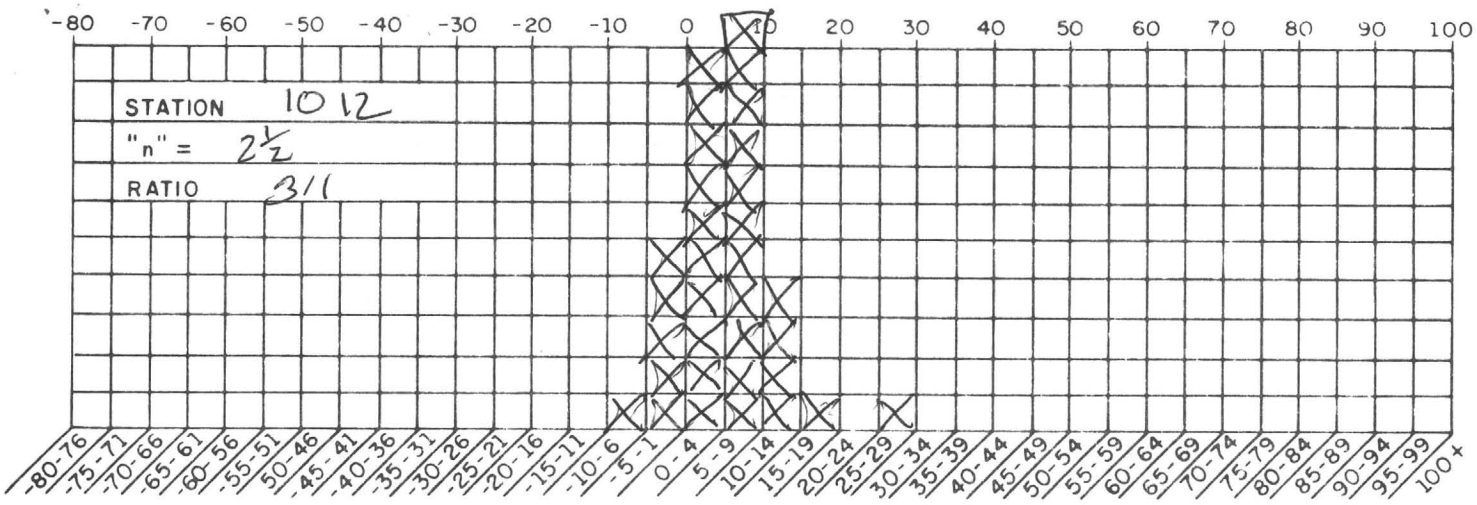
JOB _____ DATE 9 7 72 LINE 5 SPD 1 SE PAGE 2

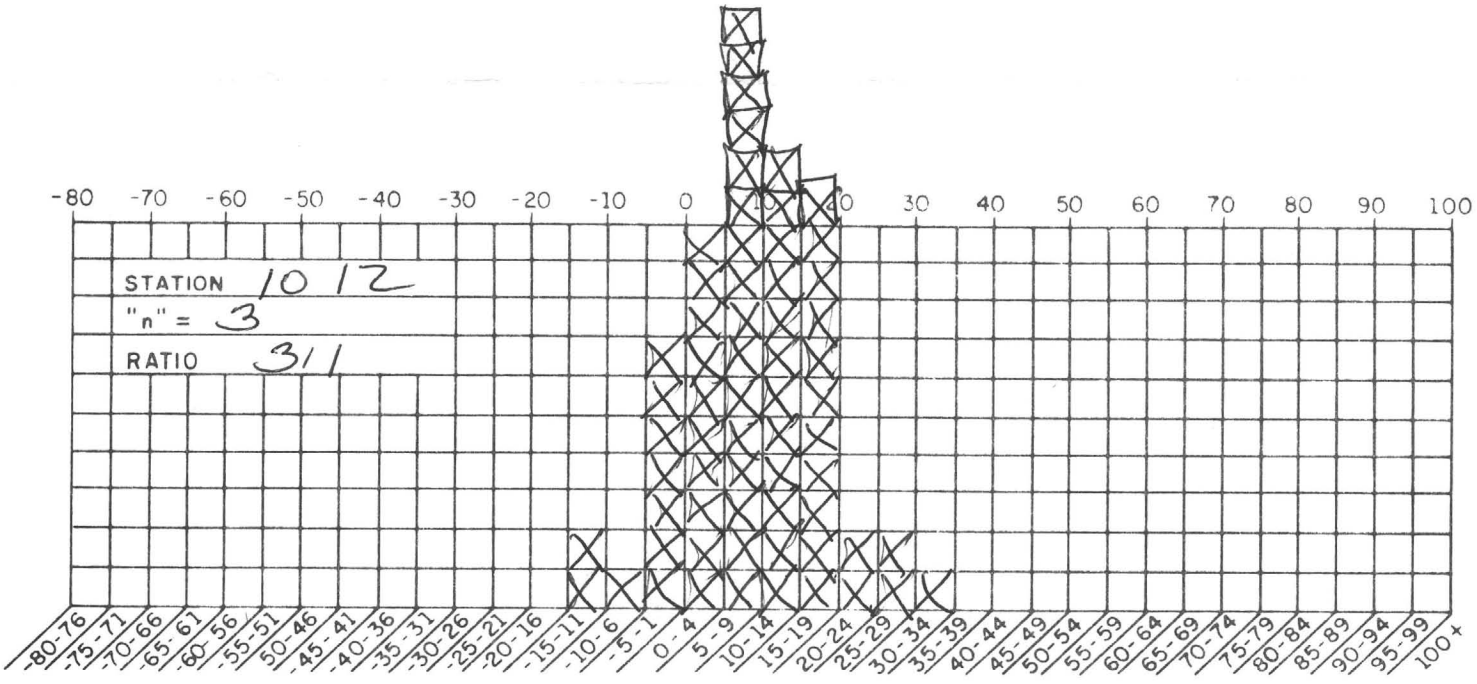


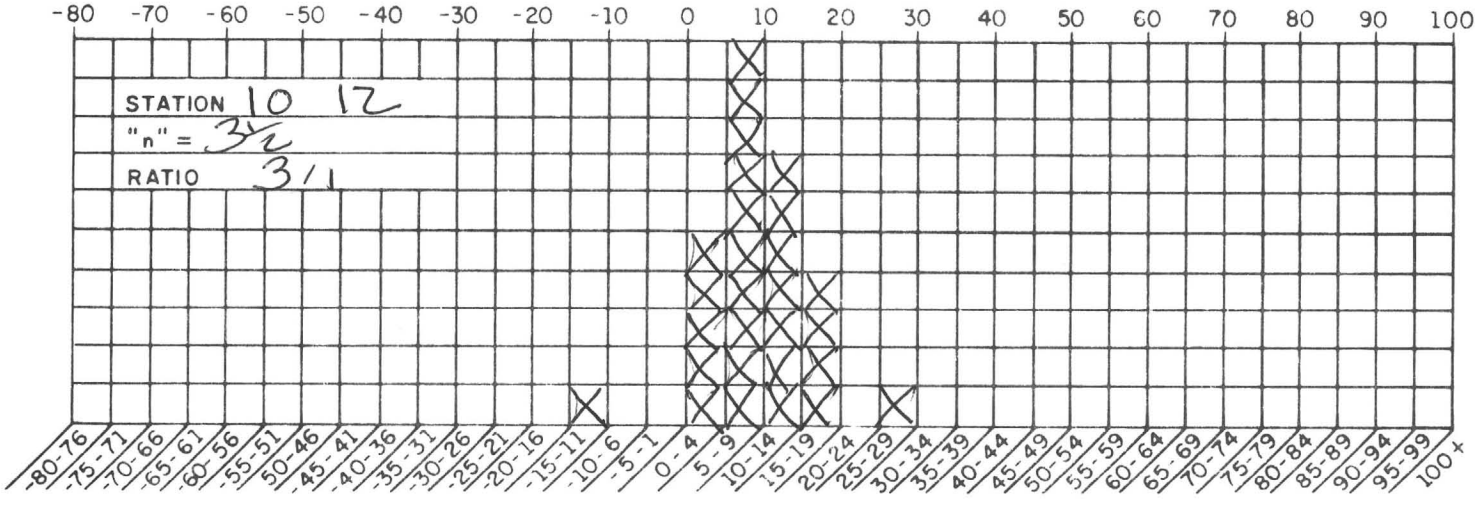




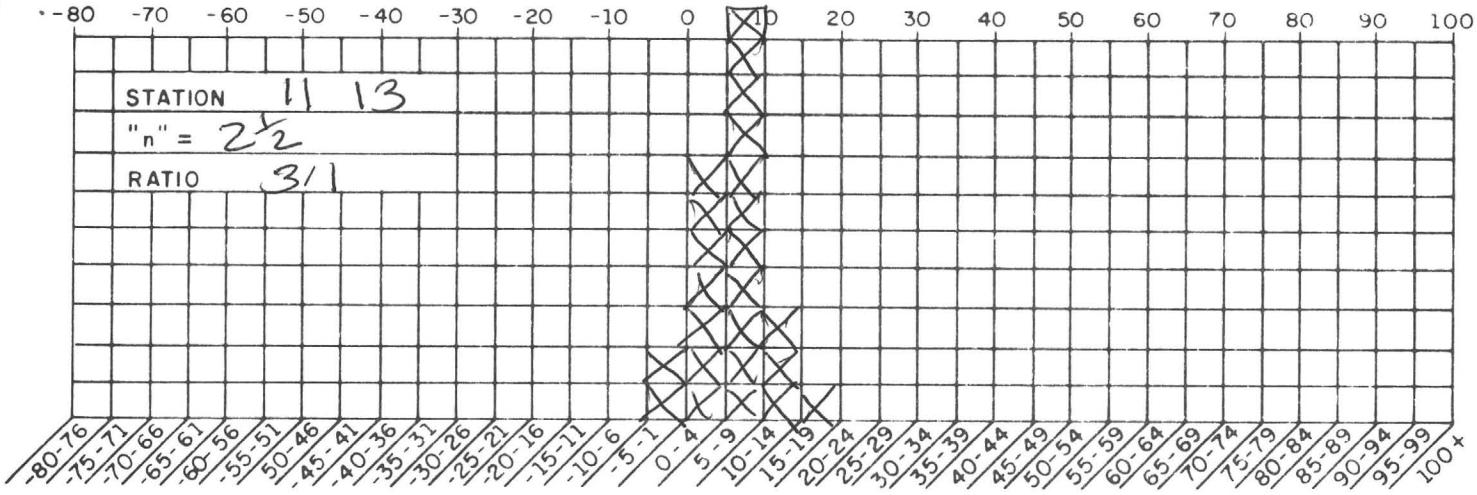
JOB _____ DATE _____ LINE 5 SRD 1 SE PAGE 3

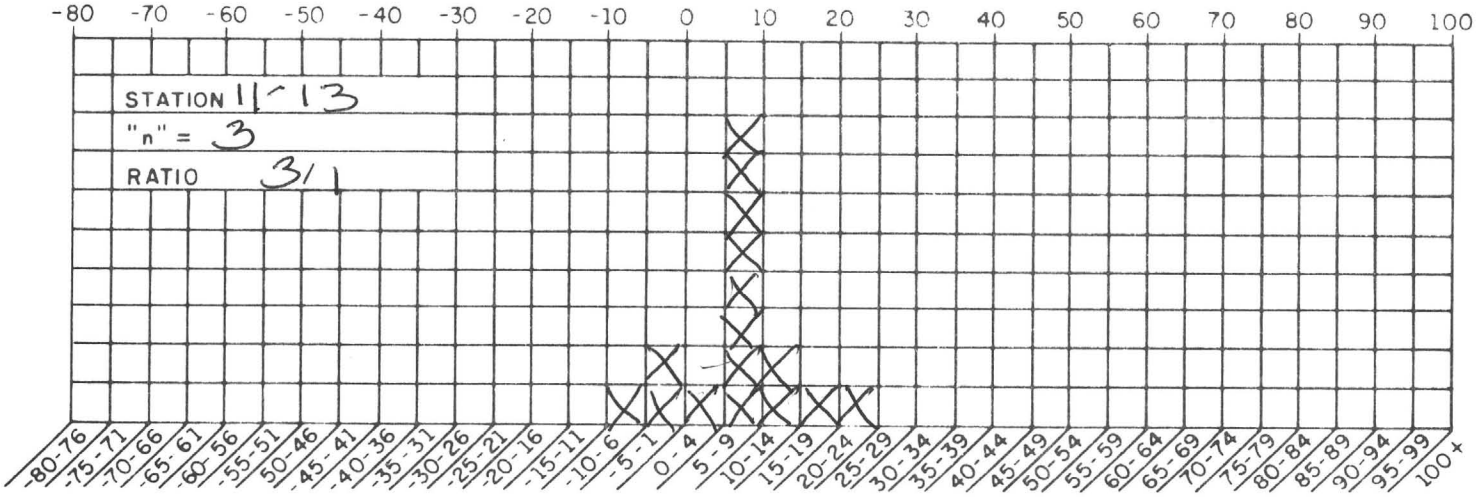


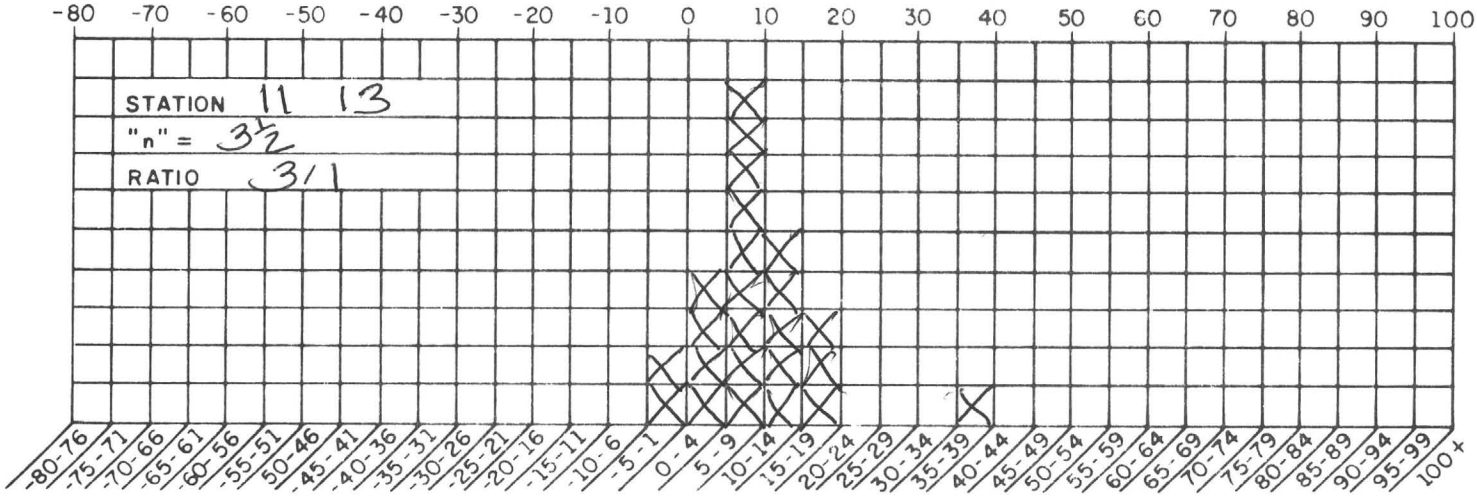




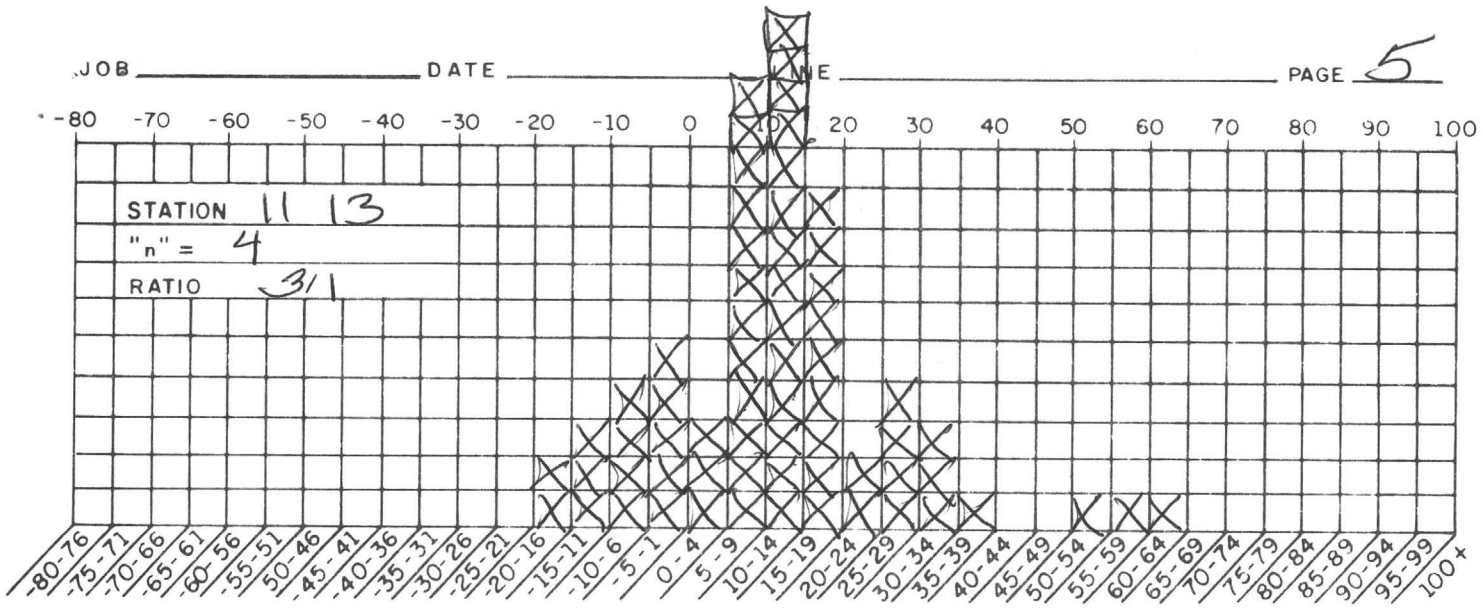
JOB _____ DATE _____ LINE 5 SW 1 SE PAGE 4

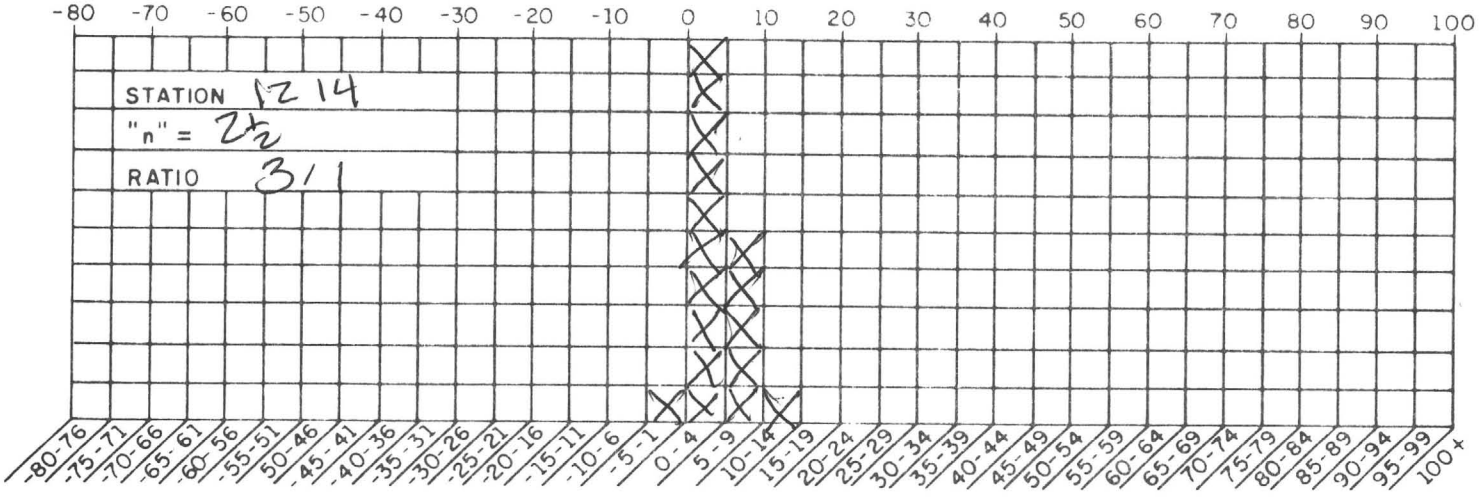


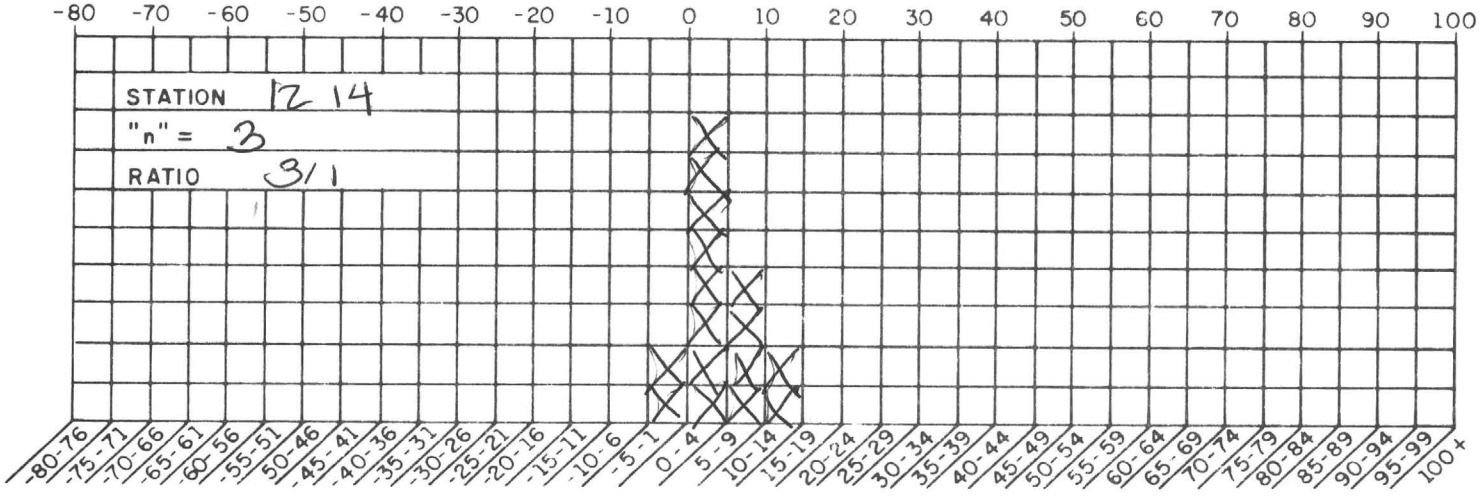




JOB _____ DATE _____ LINE _____ PAGE 5







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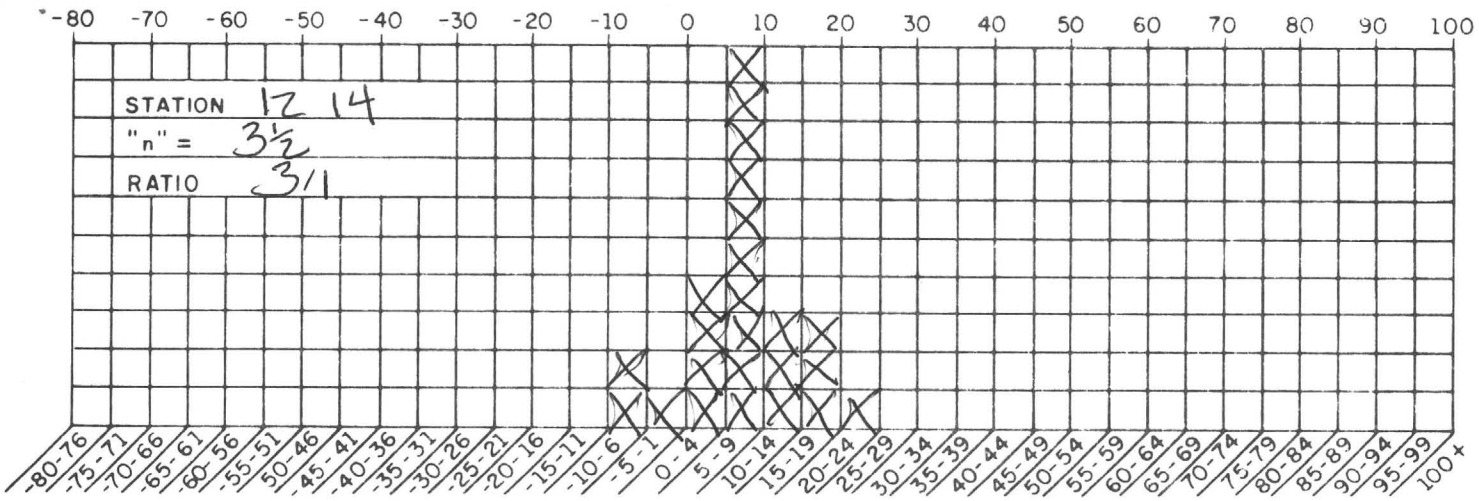
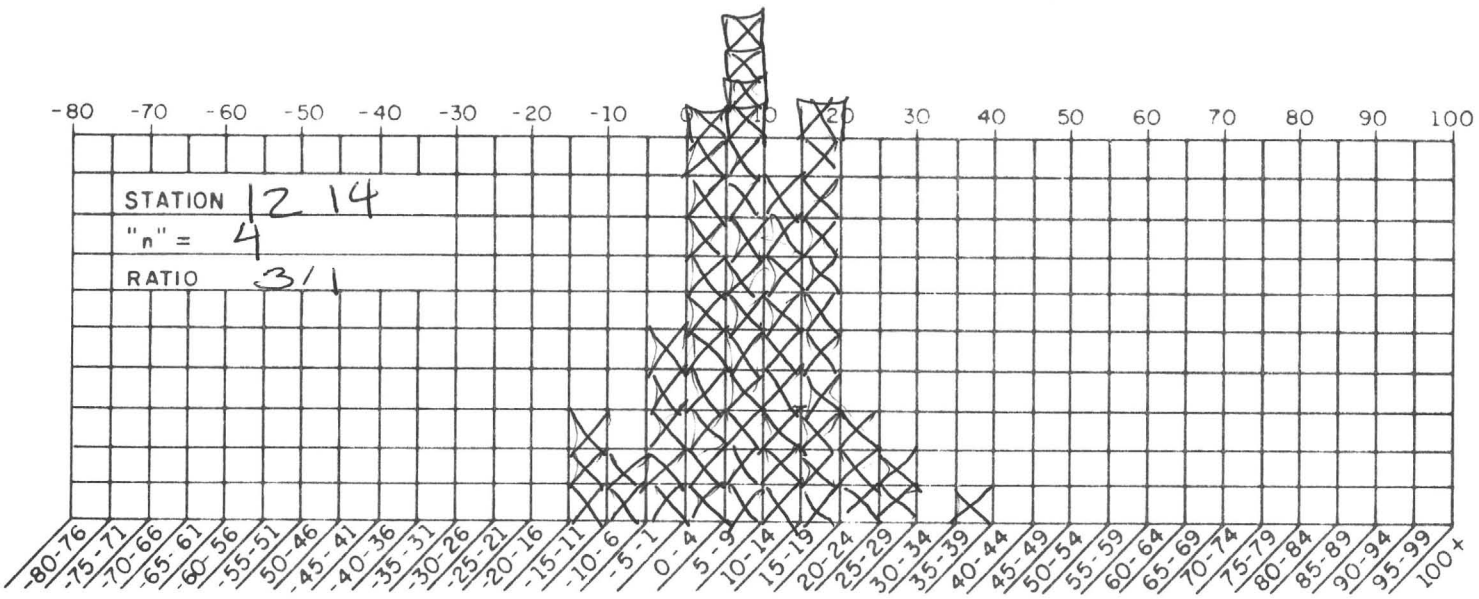
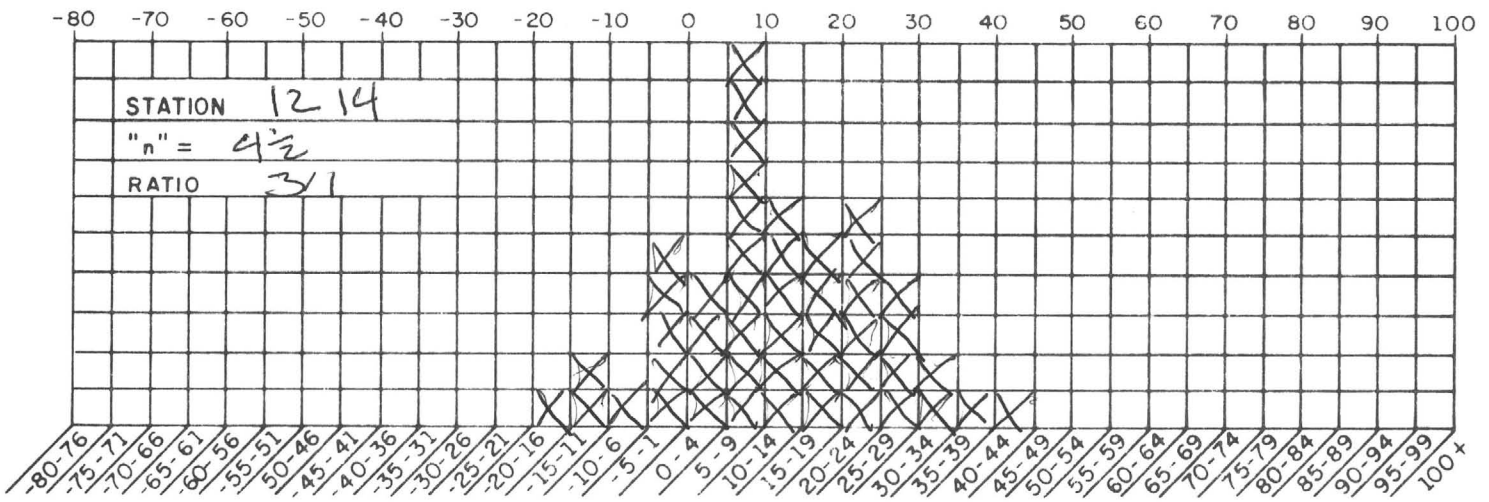
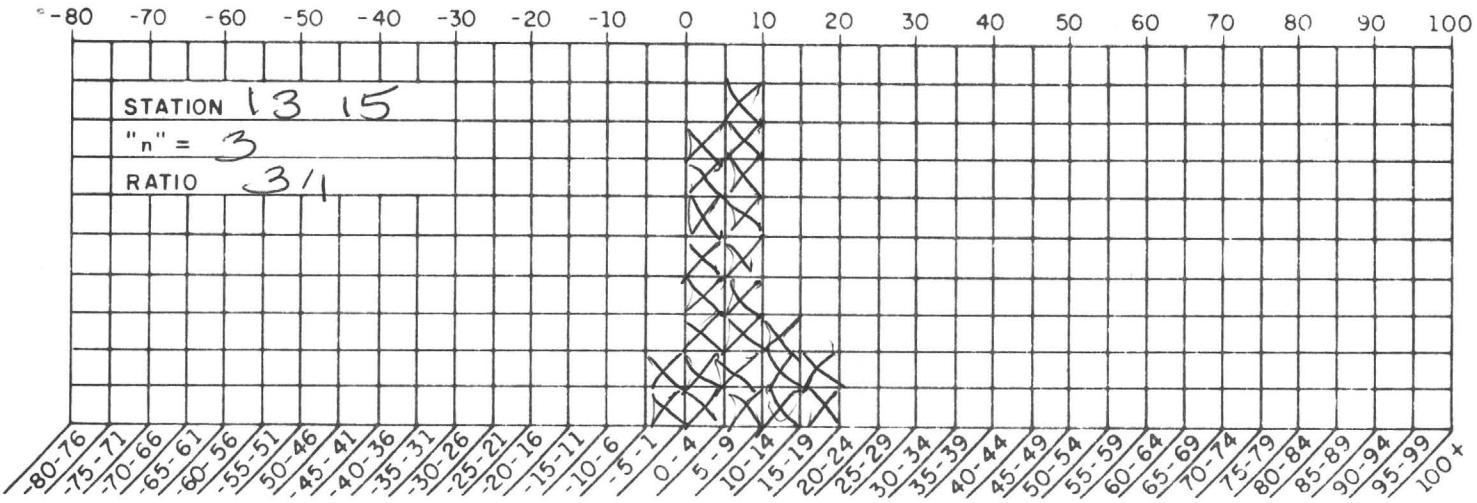
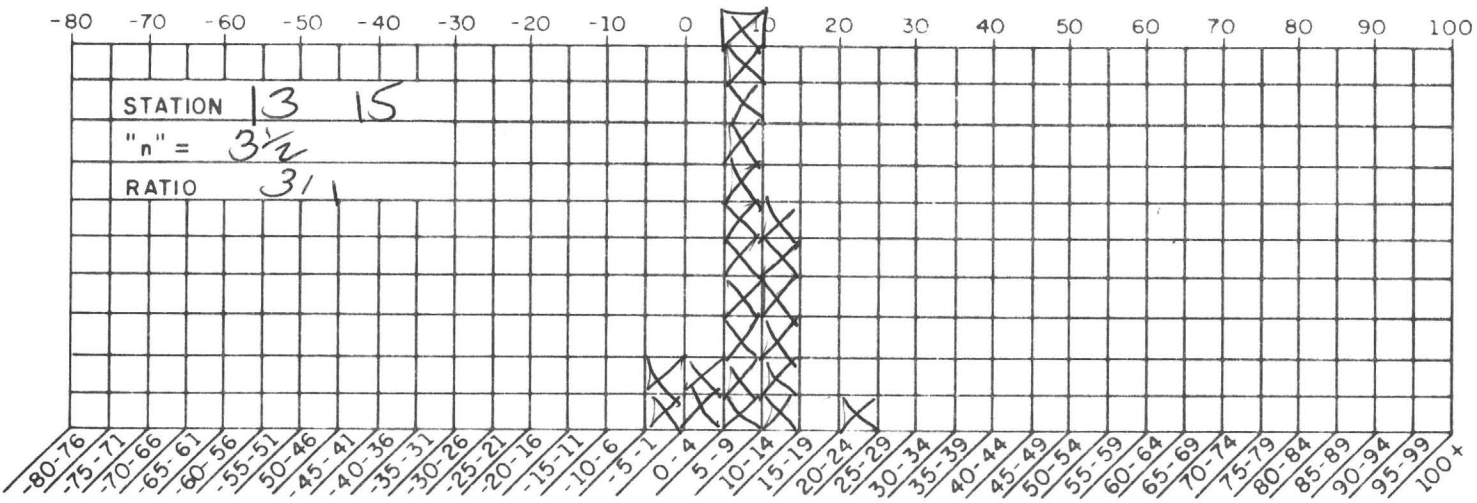


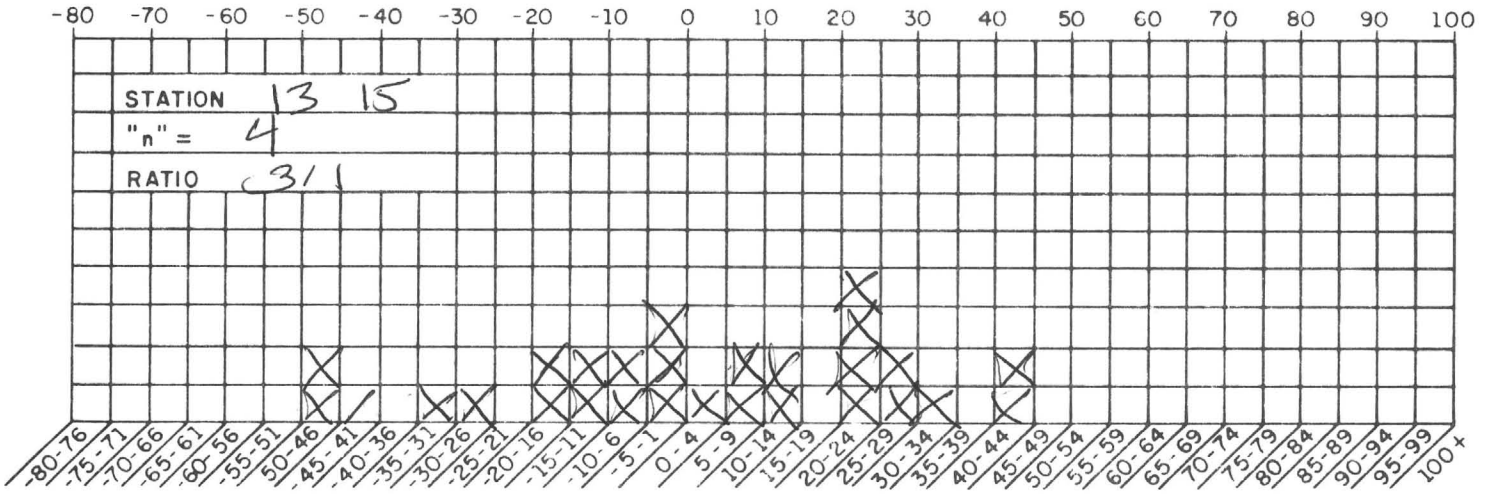




JOB _____ DATE _____ LINE 5 SE01 SE PAGE 7







mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

	I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
		5 # L NW	N43°E	2000.	9/5/74	DIPOLE-DIPOLE	0237		SADOWSKI	88

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/5	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-4-2	-1 1	½	100.	3.30	7.4	160	m	1	1	10	6	5	6	6	6			6	
			0 2	1	30.	3.00	6.5	159		1	1	4	6	6	5	5				5	
		-5-3	-2 0	½	300.	1.95	7.3	200	m	1	1	6	8	8	8	8				8	
			-1 1	1	100.	1.20	7.3	189		1	1	8	8	6	8	8				8	
			0 2	1½	30.	1.35	6.5	157		1	1	8	10	10	8	12	9	11	10	10	
		-6-4	-3-1	½	300.	1.26	7.3	187	m	1	1	9	9	9						9	
			-2 0	1	100.	1.24	7.3	195		1	1	10	11	11	10					10	
			-1 1	1½	30.	1.30	7.3	135		1	1	12	14	14	13	12				13	
			0 2	2	10	1.64	6.5	116		1	1	12	17	16	15	21	16	16	20	16	
		20	8	18	15	.16	12	20		14		16	22	13	14	16	13				
*		-7-5	-4-2	½	100.	3.00	7.3	148	m	1	1	5	4	4	4					4	
			-3-1	1	30.	2.30	7.3	108		1	1	9	6	8	7	8	8			8	
			-2 0	1½	30.	1.15	7.3	109		1	1	12	8	13	11	12	11	11		11	
			-1 1	2	10.	1.30	7.3	82		1	1	4	18	21	17	11	12	6	28	14	
		9	11	20	7	.16	14	16		14		18	9	19	15	13	16	14	14		
			0 2	2½	3.	1.90	6.5	66	3	1		6	4	10	7	7	8	7	4	21	
		11	7																		
		-8-6	-4-2	1	30.	3.25	7.2	156	m	1	1	7	8	8	7					8	
			-3-1	1½	30.	1.23	7.3	128		1	1	11	14	13	16	12	14	14		13	
			-2 0	2	10.	2.26	7.3	143		1	1	15	16	18	19	18	14	19	16	17	
		18	17																		
			-1 1	2½	10.	1.05	7.3	118		1	1	26	17	28	8	17	16	16	22	20	
		20	20	24	19	.16	28	16		15		20	23	28	20	23	12	29	22		
			0 2	3	3.	1.55	6.5	82	3	1		4	16	2	12	8	6	10	11	24	
		7	9	8	9	.17	12	12		12		3	9	8	14	5	16	4	11		
		-9-7	-4-2	1½	30.	2.24	7.3	229	m	1	1	6	8	10	7	12	9	10	8	9	
			-3-1	2	10.	2.75	7.3	173		1	1	17	18	17	16	20	13	17	13	17	
		17	14	14	20	.18	18	13													

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	5#2 NW			9/5/72		0237			88

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫e	mv/v	1/s	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-9 -7	-2 0	2½	10.	1.72	7.3	177	m	3	1	6	5	7	*5	5	6	6	8	18	
			-1 1	3	3.	2.50	7.3	118		3	1	8	10	6	11	9	10	8	7	23	
		8	17	2	10	.3	7	60													
			0 2	3½	3.	1.35	6.5	102		3	1	13	4	13	10	16	8	4	14	30	
		9	7	14	8	.18	5	6		10		10	18	8	9	7	8	12	9		
		-10 -8	-4 -2	2	10.	2.65	7.3	167	m	3	1	3	3	4	3					10	
			-3 -1	2½	10.	1.25	7.3	128		3	1	7	9	4	7	7	5	7	4	19	
		8	6																		
			-2 0	3	3.	1.62	7.3	77		3	1	8	6	6	7	8	7			21	
			-1 1	3½	3.	1.30	7.3	88		3	1	7	10	8	12	9	10	8	8	29	
		9	16	12	12	.7	10	13			5	12	6	7	7	15	15	7	10		
			0 2	4	1.	2.32	6.5	82		3	1	8	7	-1	8	9	20	22	5	35	
		10	6	15	0	.17	4	19			9	19	14	4	10	24	16	12	12		
		13	17	13	10	.17															
		-11 -9	-4 -2	2½	10.	1.10	7.3	113	m	3	1	3	4	4	4	5				17	
			-3 -1	3	3.	2.10	7.3	99		3	1	6	8	5	7	2	8	6	8	19	
		7	6																		
			-2 0	3½	3.	1.40	7.3	94		3	1	10	3	5	15	11	8	11	8	18	
		5	12	7	12	.4	11	7			7	12	9	2	9	12	4	13	7		
			-1 1	4	1.	2.35	7.3	74		3	1	15	0	16	14	2	7	15	12	34	
		20	7	10	15	.15	4	28			0	8	11	18	-12	25	11	1	36		
		6	18	7	16	.14	-9	26			3	33	0	20	-6	33	23	18	10		
		7	26	14	0	.6	18	1			11	9	2	16	8	8	-3	20	-4		
			0 2	4½	1.	1.37	6.5	65		3	1	13	8	10	26	10	11	11	10	38	
		9	18	8	13	.9	10	28			22	0	13	18	16	9	20	12	17		
		-12 +10	-4 -2	3	3.	2.30	7.3	108	m	3	1	4	8	3	13	+3	11	3	8	19	
		5	2	12	8	.12	4	10			3	5	7	6	*4	8	6	10	2		
			-3 1	3½	3.	1.35	7.3	91		3	1	15	12	11	3	10	14	14	4	26	
		6	6	8	5	.5	12	4			12	4	13	5	10	10	6	12	6		

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

	I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
		5 #2 NW			9/5/72		0237			88

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		12-10	-2 0	4	10	1 .15	7.3	36	m	3	1	2	4	10	8	18	5	16	2	28	
		17	11	17	2	.22	0	12			7	4	18	0	18	1	9	12	6		
		14	5	12	2	.14	1	15			4	16	8	14							
		-1	14½		10	1.90	7.3	61		3	1	4	4	10	10	0	32	-2	17	28	
		20	24	-8	18	.4	22	-4			12	12	10	8	11	2	7	-2	16		
		18	22	22	10	.18	11	6			23	5	20	10	7	11	-1	3	12		
		9	2	6	9	.1	8														
			0 2	5	10	1 .20	6.5	74		3	1	3	-8	0	14	18	39	23	24		
		7	10	36	-2	.6	11	14	electrode dried up + current dropped												

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 4

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 5 SPD 1	NORTHWEST		9 72		0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	½	⅓	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-5 -3	1 3	2	10.	2.55	7.1	165	M			7	11	11	11	7	7	8	10	9	
		10	8	13	7					1	11										
		-5 -3	2 4	2½	10.	1.20	7.2	125	M			5	7	9	-5	6	7	5	-3	15	
		5	11	4	3	.9	6	7			7	5	5	2	10	5	5	3	1		
		-5 -3	3 5	3	3.	2.36	7.2	113	M	3	11	5	7	5	7	7	5	9	6	21	
		5	11	6	9	.9															
		-5 -3	4 6	3½	3.	1.86	7.2	127	M	3	1	1	3	3	13	1	15	12	13	28	
		5	12	15	10	.7	18	7			10	7	9	3	13	21	13	6	8		
		0	6	13	11	.9	18	11													
		-5 -3	5 7	4	3.	1.90	7.2	182	M	3	1	12	15	14	10	11	10	14	11	35	
		9																			
		-6 -4	1 3	2½	10.	1.15	7.2	120	M	3	1	7	3	-1	6	5	4	1	7	13	
		0	1	6	9	.6	2	5			7										
			2 4	3	3.	1.65	7.2	79	M	3	1	7	3	5	13	8	3	5	11	22	
		11	4	-5	8	.8	19	10			6	13	1	8	11	3	7				
			3 5	3½	3.	1.20	7.2	82	M	3	1	9	21	11	2	13	7	8	15	30	
		5	9	8	9	.19	7	11			6	11									
			4 6	4	1.0	3.15	7.2	101	M	3	1	14	15	-3	7	6	14	19	5	32	
		16	13	11	7	.7	6	11			6	14	8	2	19	13	34	8	11		
		5	9	8																	
			5 7	4½	1.0	3.35	7.2	144	M	3	1	13	17	15	13	20	17	20	6	37	
		16	9	9	5	.26	0	19			-9	6	-3	31	7	13	14	3	3		
		25	3	20	7	.17	28	11			15	14	9	9	7	13	21	7	9		
		26	13	4	12																
		-7 -5	1 3	3	3.	1.35	7.2	65	M	3	1	11	6	3	7	6	-3	2	5	21	
		11	4	5	23	.0	8	6			11	14	9	4	19	0	7	3	15		
			2 4	3½	1.0	2.46	7.2	56	M	3	1	13	20	3	12	3	15	(30)	5		
		9	19	16	(25)	.14	13	3			-9	22	5	20	13	15	5	(31)	13	36	
		10	8	11	5	.19	0	12			-3	13									

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 25

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 1	NORTHWEST		9 7 72	DIPOLE DIPOLE	0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω 1/s	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-7 -5	3 5	4	1.0	1 .85	7.2	59	M3	1	19	7	9	14	8	13	11	9	31	
		11	15	16	0	.16	24	4		12	12	7	-1	25	-13	4	10	12		
		-6	12	18	2	.13	7	25		16	6	22	14	13	7	7	13	11		
			4 6	4½	1.1	.70	7.2	73	M3	1	24	2	6	14	21	13	5	17	36	
		7	15	6	14	.17	11	9		13	8	3	28	3	19	5	9	22		
		11	-3	31	-9	.20	19	11		15	10	16	19	2	17	-4	27	3		
		13	21	5	12	.10	5	6		33	-6	16	13	3						
			5 7 5		1.1	.90	7.2	106	M3	1	27	3	15	11	7	21	3	30	39	
		3	24	11	4	.23	16	-5		33	-6	32	1	20	22	8	17	8		
		22	7	13	10	.9	11	15		7	27	7	40	-13	18	1	24	-7		
		3	31	-9	36	-19	39	-2		21	12	25	-3	46	6	11	16	33		
		-3	15	27	9	.46	-23	40		13	21	14	22	13	22	17	9	7		
		34	-6	9	-7	.25	1	18		11	-5	14	3	18	25	16	33	1		
		35	14	-5	10	.61														
		-8 -6	1 3	3½	1.0	3.45	7.2	79	M3	1	10	8	3	8	9	15	19	23	28	
		-5	27	14	16	34	15	2		15	12	5	16	0	17	8	15	5		
		10	-17	8	-6	5	6	3		11	10									
			2 4 4		1.2	2.26	7.2	72	M3	1	11	-19	19	-31	2	-15	-3	-4		
		91	22	-11	20	.26														

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

	I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
		LINE 5 SPD 1	SOUTHEAST	2000.	9 7 72	DIPOLE DIPOLE	0237		WHITMAN	88

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	So	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		5 7	2 4	½	100.			10											
						2.11			M	1	1	2	3	3	3	3	3	3	
		5 7	1 3	1	30.	1.95		93	M	1	1	9	8	8	8			8	
		6 8	3 5	½	100.	3.22		161	M	1	1	0	0	-1	4	7	5	7	7	5	
		6	7	6	6.	7	6												
		6 8	2 4	1	30.	2.35		113	M	1	1	7	8	7	11	7	5	5	9	7	
		6 8	1 3	1½	30.	1.15		121	M	1	1	8	3	7	9	15	8	11	14	10	
		15	13	22	14	.18	9	4			-7	11	6	8							
		7 9	4 6	½	100.	2.25		113	M	1	1	6	7	7	7	7				7	
			3 5	1	30.	2.05		98	M	1	1	7	7	8	7	10	8	8	7	8	
			2 4	1½	10.	2.42		85	M	3	1	5	1	3	5	3	5	3	5	10	
		2	5	6	5	.2	6	-2			6	-1	5	1	5	3	4	4	1		
			1 3	2	10.	1.52		92	M	3	1	5	6	6	5	7	7	1	9	19	
		7	12	5	9	.7	7	2			6	9									
		8 10	5 7	½	100.	3.25		163	M	1	1	5	6	6	7	5	5	6		6	
			4 6	1	30.	2.06		99	M	1	1	11	3	14	5	8	7	8	9	8	
		7	6	7	6	.7															
			3 5	1½	10.	2.60		91	M	3	1	2	3	1	3	-1	3	3	3	9	
			2 4	2	10.	1.30		83	M	3	1	7	5	6	5	5	5	6	7	17	
			1 3	2½	3.	3.02		94	M	3	1	12	9	1	11	9	11	9	11	28	
		7	13	5	10	.2	11	10			9	16	7	9	15	9					
		9 11	5 7	1	30.	2.82		133	M	1	1	6	7	7	7					7	
			4 6	1½	10.	2.60		91	M	3	1	0	4	2	3	5	4	3	3	9	
			3 5	2	10.	1.25		80	M	3	1	4	5	7	3	1	3	5	2	12	
		3	7	-1	7	.2	4	4			7	4	3								
			2 4	2½	3.	2.25		73	M	3	1	14	6	9	12	5	11	10	7	26	
		7	13	7	13	.4	6	8			7										
			1 3	3	3.	1.75		34	M	3	1	14	17	-7	13	17	15	15	7		
		7	8	3	9	.18	8	9			-11	33	-3	17	8	13	10	10	5		

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 5 SRD 1	50 UTHEAST	2000	9 7 72		0237		WHITTMAN	88

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω 1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		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 28 29	30 31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80
		9 11	1 3	cond				M3		1	-3	17	-9	47	-11	11	14	9	33	
		7	19	13	8	.34	9	21		8										
		10 12	5 7	1½	30.	1.37		144	M3	1	3	3	2	3	3	5	2	3	9	
			4 6	2	10.	1.72		110	M3	1	1	8	4	7	3	6	9	2	13	
			5	1 5	-3	.5	9	5		8	1	9	-6	12	-1	5	6	3		
			3 5	2½	3.	3.05		95	M3	1	3	1	8	0	11	14	5	4	16	
		14	1	-1	6	.4	8	-1		26	-4	7	9	2	-6	4	15	-2		
		6	6	3	9	.14	9	-4		8	1									
			2 4	3	3.	2.00		96	M3	1	26	-8	6	-14	23	19	23	1	27	
		16	19	3	19	-.15	33	7		12	3	5	19	17	2	3	3	17		
		7	12	0	11	.14	15	14		15	-2	25	6	2	3	15	9	9		
		-3	10	5	13	-.4	9	4		10	8	6	11	3	9	10	-1	14		
		-5	5	-3	8	.5	4	-3		7	8	11								
			1 3	3½	3.	1.85		120	M3	1	9	14	2	0	2	14	7	9	26	
		15	16	7	1	.17	9	-11		14	10	11	17	2	11	6	5	5		
		9	10	25	7															
		11 13	5 7	2	10.	3.40		217	M3	1	3	3	3	5	3	3	4	5	11	
			4 6	2½	10.	1.52		158	M3	1	3	5	7	3	16	6	2	7	17	
		3	8	11	-3	.10	-3	8		0	12	7	9	4	4	5	6	7		
			3 5	3	3.	2.85		137	M3	1	5	-7	-4	5	5	5	16	-3	17	
		21	1	13	5	.15	7	5		7										
			2 4	3½	3.	2.10		144	M3	1	17	1	14	3	6	1	-2	16	27	
		12	12	5	9	.14	1	32		7	9	8	16	-3	5	7	7	14		
			1 3	4	3.	1.82		174	M3	1	13	10	-7	11	13	29	-10	19	27	
		18	10	5	60	-.20	-7	15		26	9	17	8	9	16	4	21	14		
		9	-20	34	6	.16	-13	25		-9	(53)	-11	31	5	21	-5	34	-1		
		-5	-13	11	9	.9	10	19		3	12	6	13	-2	17	14	25	37		
		0	(58)	-4	16	.7	11	9		10	13	9	14							

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 3

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 5 SPD 1	SOUTHEAST	2000.			0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/n	1/s	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		12 14	5 7	2½	10.	1.90		198	M	3	1	6	5	2	2	10	3	4	5	12	
		5	3	4	2	.4	2	6			-1	4									
			4 6	3	3.2	.80		134	M	3	1	9	13	5	4	4	3	2	-5	12	
		12	0	7	-3	.3	0	2			9										
			3 5	3½	3.	1.75		120	M	3	1	17	-8	15	7	11	1	7	7	20	
		-9	23	17	9	.4	1	-5			11	9	1	5	11	7	5	6	6		
			2 4	4	3.	1.25		120	M	3	1	7	-7	7	7	17	7	17	0	24	
		1	19	-3	-4	.14	2	-15			3	25	2	22	5	17	10	27	-6		
		21	9	13	17	.18	-12	-13			19	9	15	-3	11	-2	5	10	4		
		8	6	7	3	.11	18	13			15	16	5	11	35	9	13	3	20		
		5	7	4	8	-.3	7														
			1 3	4½	3.	1.20		155	M	3	1	7	15	7	18	24	27	2	35	34	
		7	14	23	21	.19	0	22			-2	25	9	-4	0	-1	7	23	1		
		16	5	13	-11	-.16	12	-3			24	9	30	5	8	-6	33	12	11		
		7	40	-15	26	-.5	26	13			16										
		13 15	5 7	3	10.	1.15		184	M	3	1	4	2	6	4	5	3	6	8	18	
		7	8	-5	13	.2	8	3			7	-4	15	14	11	2	15	6	2		
			4 6	3½	3.	1.72		118	M	3	1	8	7	5	7	11	6	-3	7	23	
		6	9	11	13	.8	12	-2			13	9	13	21	3	7	6				
			3 5	4	3.	1.35				N3	1	22	14	10	-10	8	3	-35	43		
		-9	-12	27	-5	-5	22	-20			23	-20	-46	21	28	43	33	-30	-46		
		8	-2	+12	?.	?.	TOO NOISY														
			2 44½		1.2	.55		110	M	3	1	8	8	19	-16	40	12	27	3		
		33	11	43	9	.24	-10	37			7	-4	22	-3	31	23	11	7	-2		
		57	14	-7	??	TOO NOISY															
*			1 3 5		1.	2.56		140	M	3	1	18	4	54	39	15					

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-5 #1 NW

Project:	Client:	Date:
0237	ESSEX	9/7/72

TIME	I	VA	COMMENTS
1-3	7.1		
2-4	7.2		
3-5	7.2		
4-6	7.2		
5-7	7.2		
1-3	7.2		
2-4	7.2		
3-5	7.2		
4-6	7.2		
5-7	7.2		
1-3	7.2		
2-4	7.2		
3-5	7.2		
4-6	7.2		
5-7	7.2		
1-3	7.2		
2-4	7.2		
3-5	—	Rx having great difficulty	
4-6	—	in reading because of a	
5-7	—	secondary signal coming from another crew (Phelps Dodge)	

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-5 #1 SE

Project:	Client:	Date:
0237	ESSEX	9/7/72

TIME	I	VA	COMMENTS
2-4	7.2		
1-3	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
5-7	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
5-7	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		

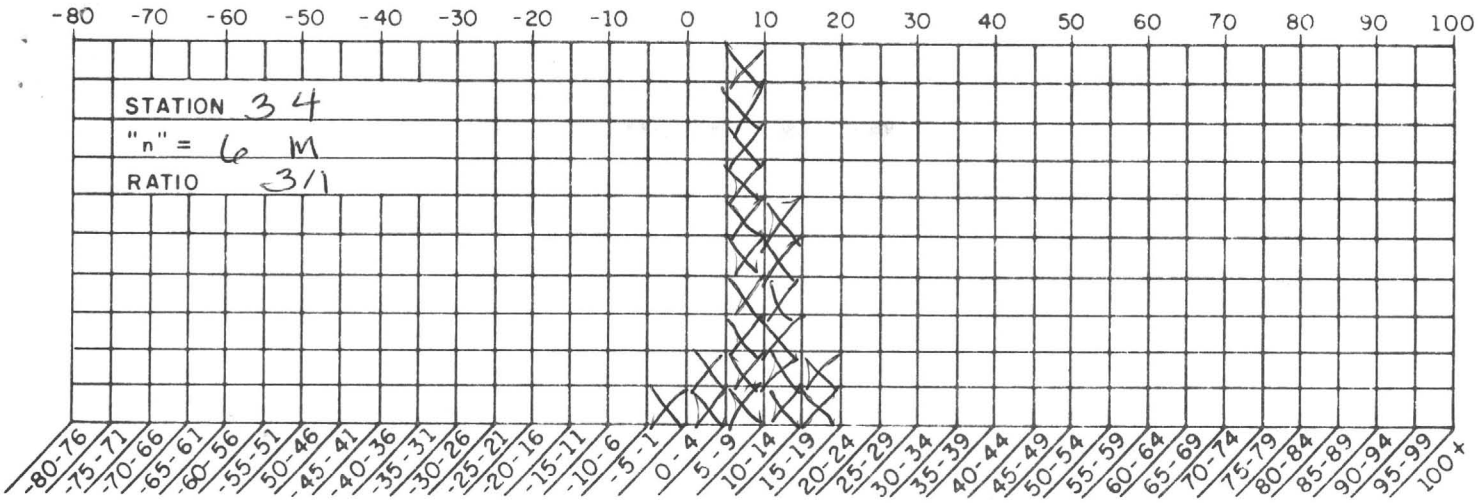
MINING GEOPHYSICAL SURVEYS

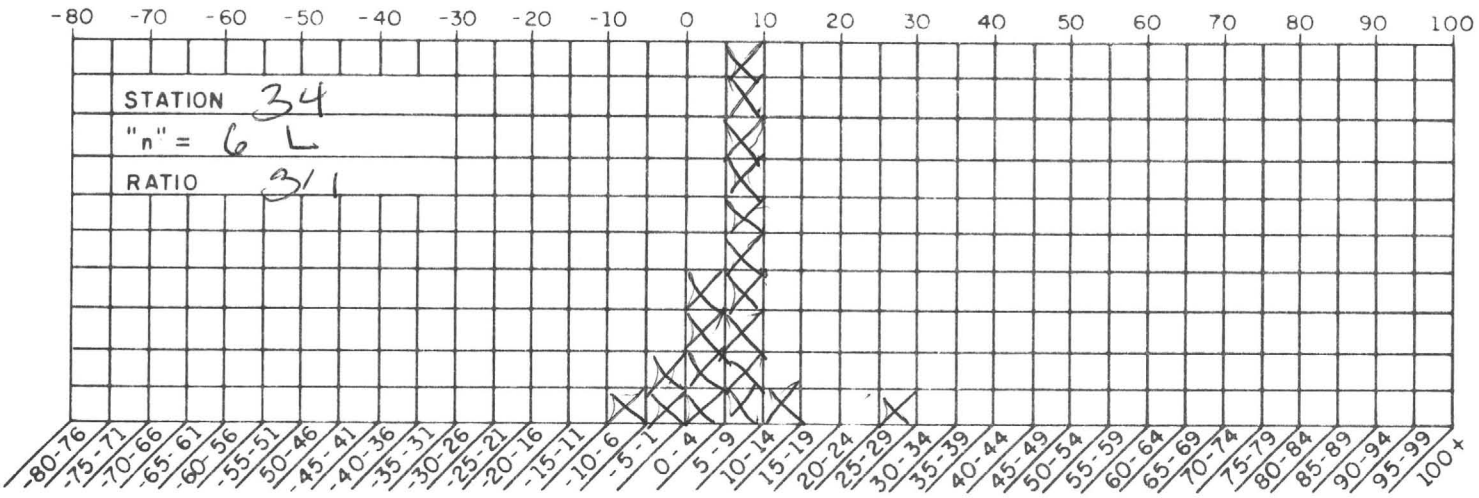
INDUCED POLARIZATION SURVEY

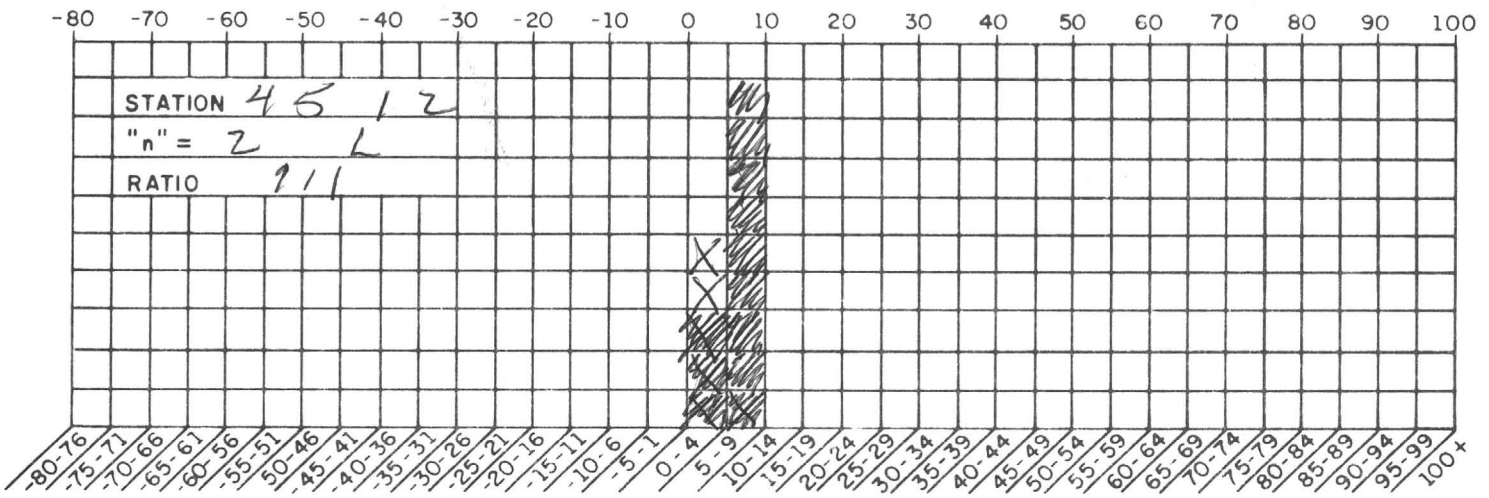
Project:	Client:	Date:

TIME	I	VA	COMMENTS
5-7	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
5-7	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
5-7	7.2		
4-6	7.2		
3-5	7.2		
2-4	7.2		
1-3	7.2		
5-7	7.2		
4-6	7.2		
3-5	7.2 (3-4)		
2-4	7.2		
1-3	7.2		

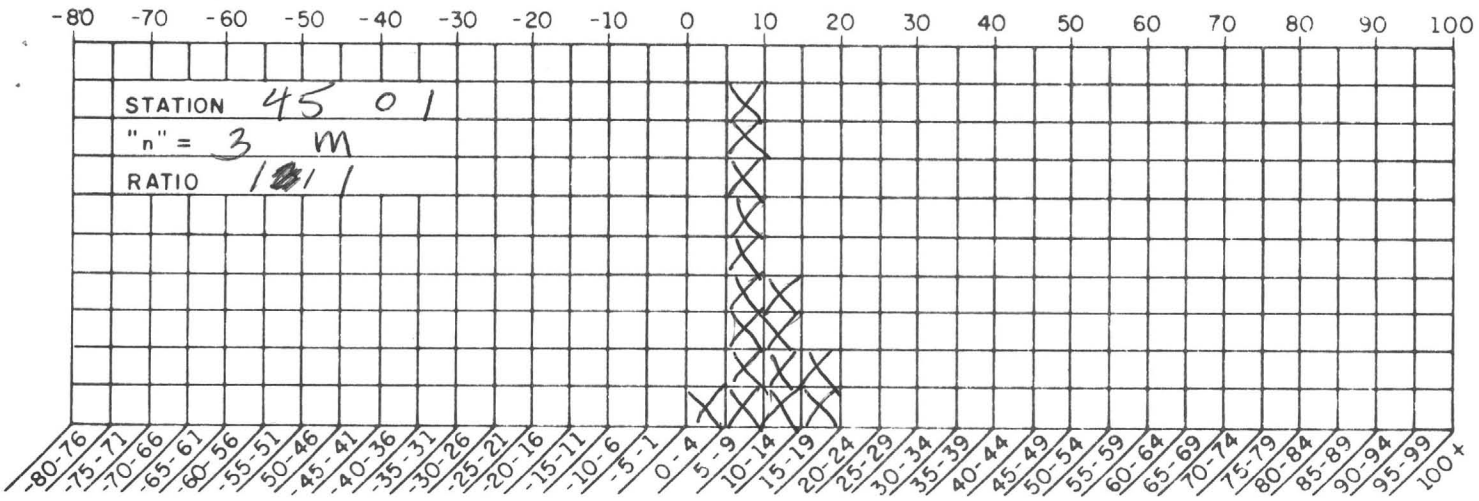
JOB 0237 DATE 9 2 72 LINE 5 SPD 2 SE PAGE 1

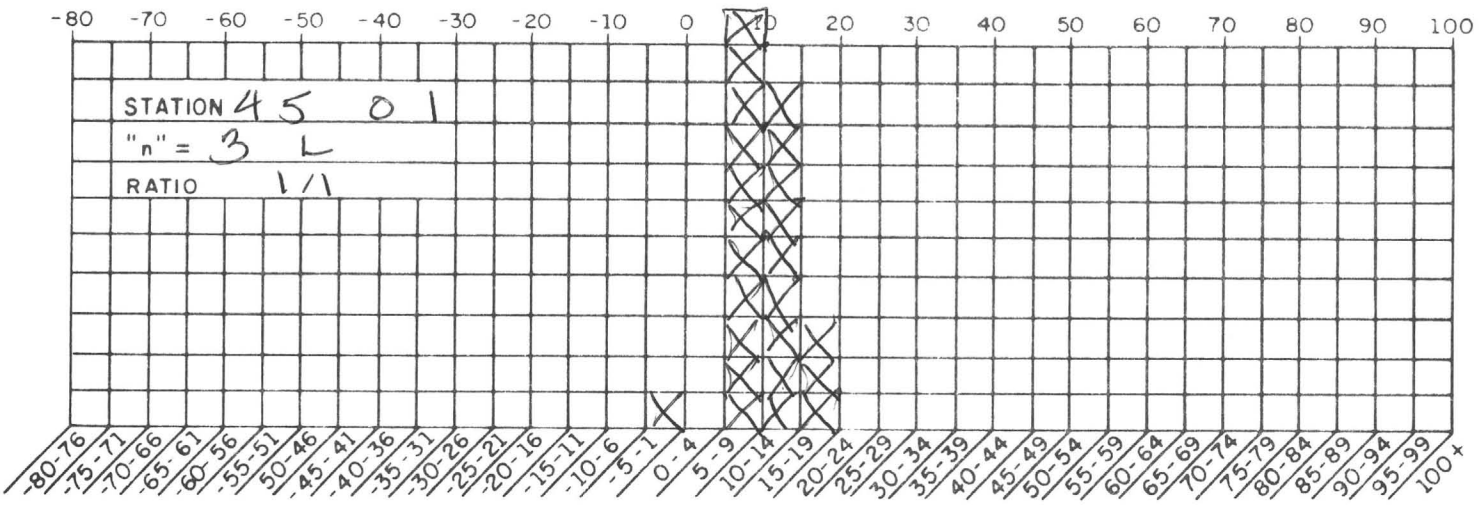


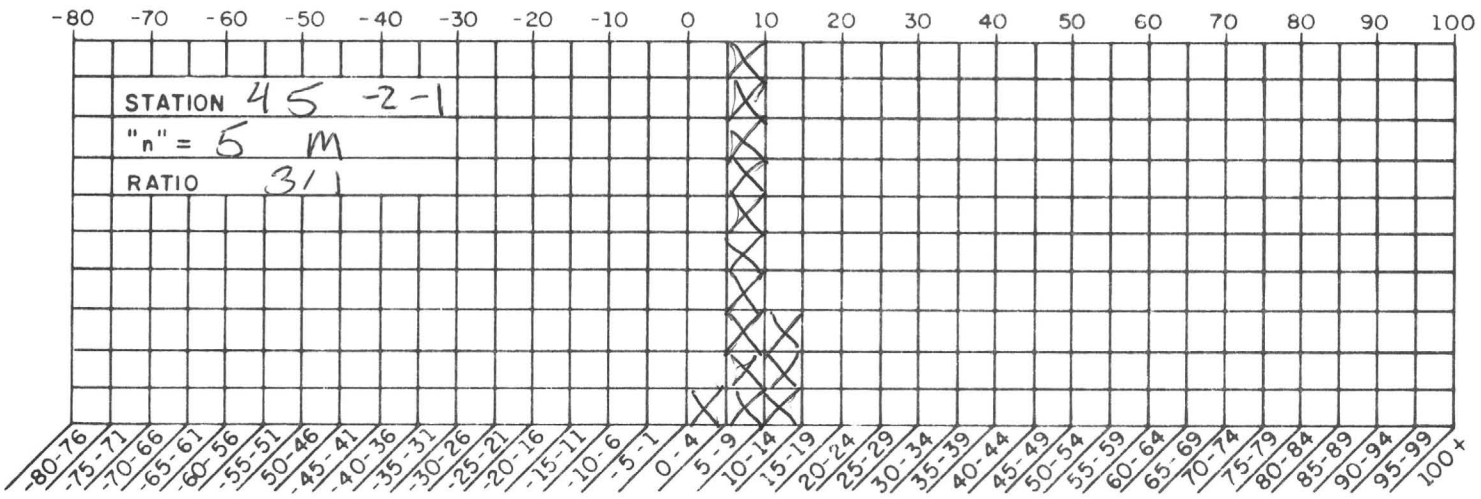




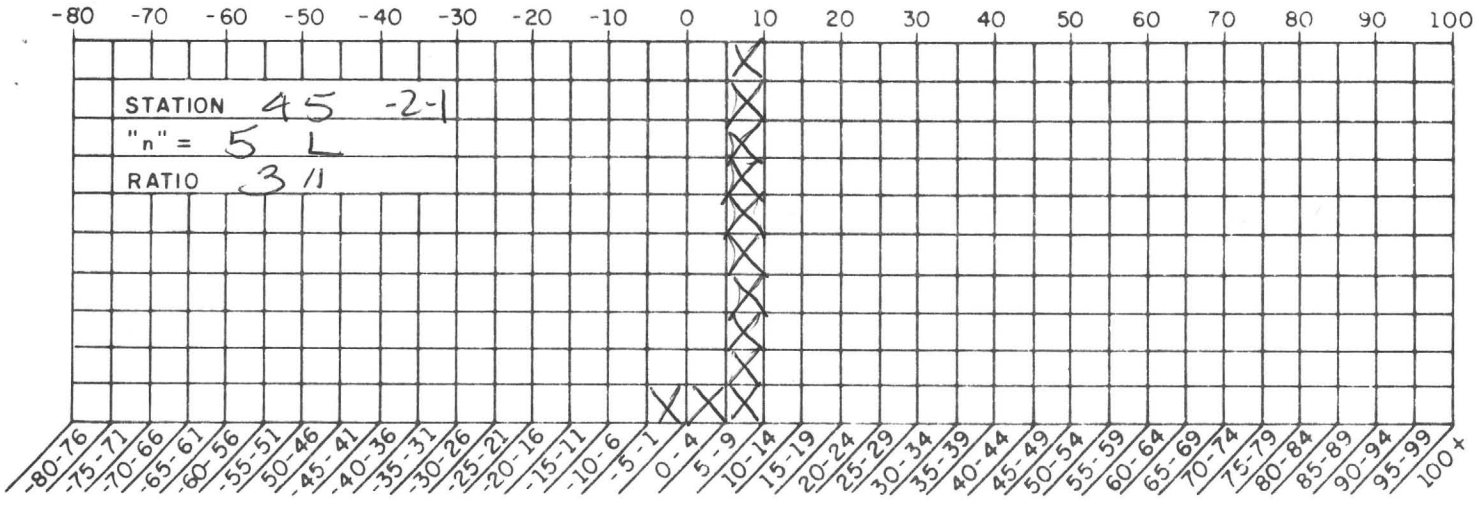
JOB 0237 DATE 9 2 72 LINE 5 SPN 2 SE PAGE 2.

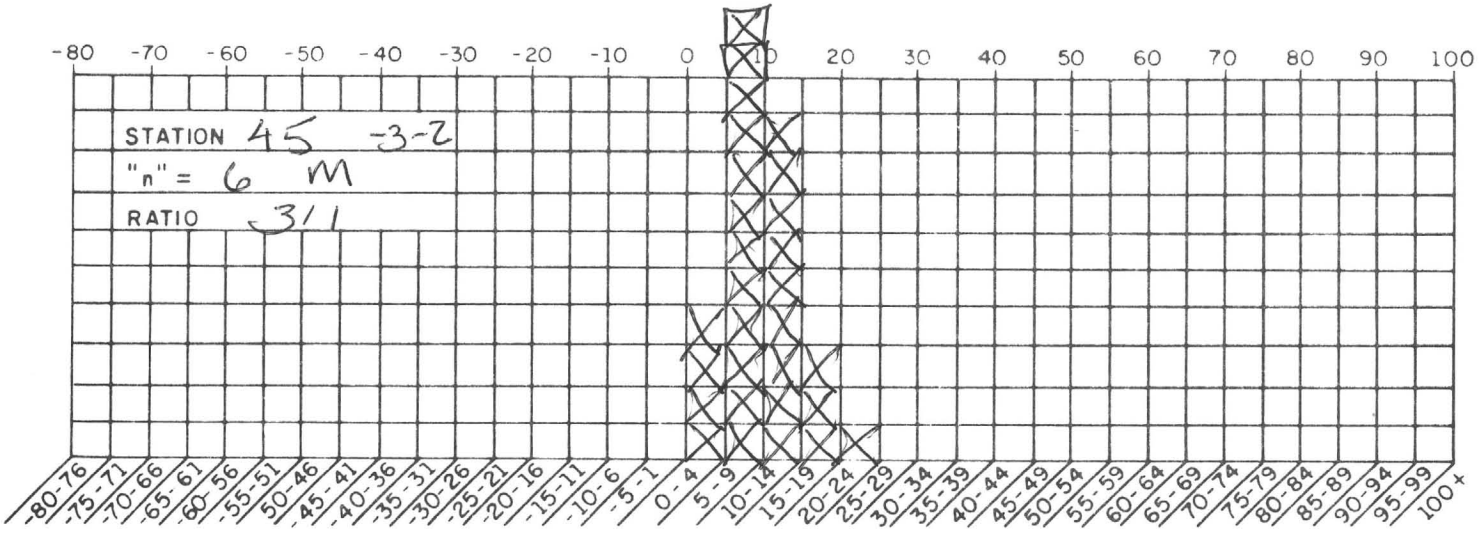


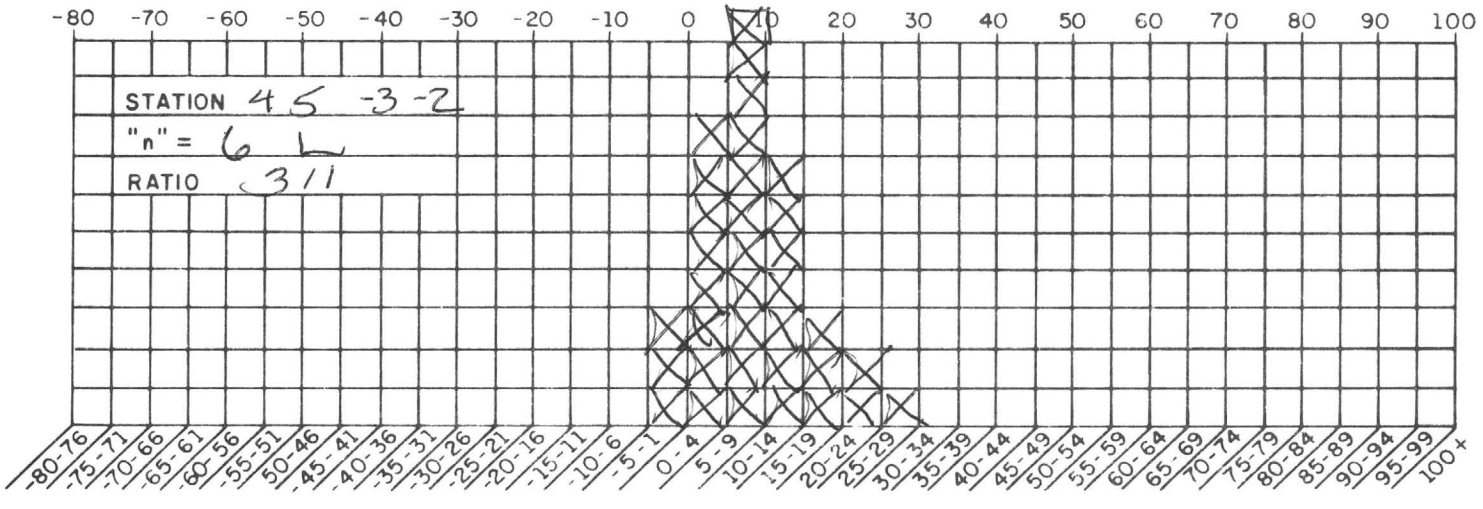




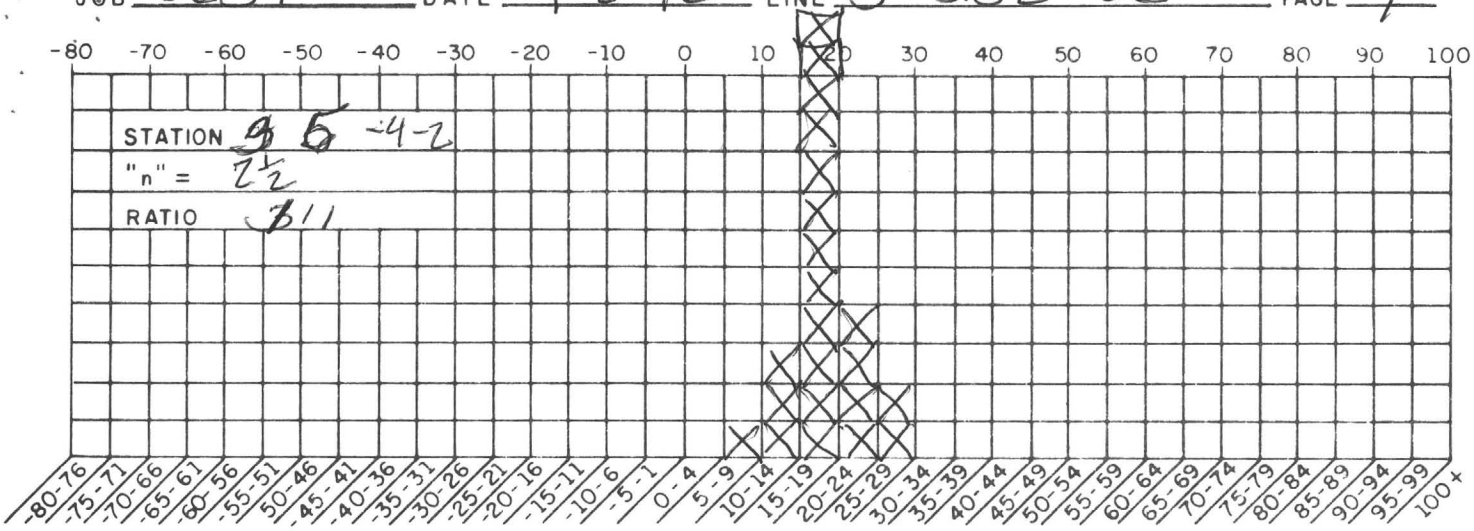
JOB 0237 DATE 9 2 72 LINE 5 SPD2 SE PAGE 3

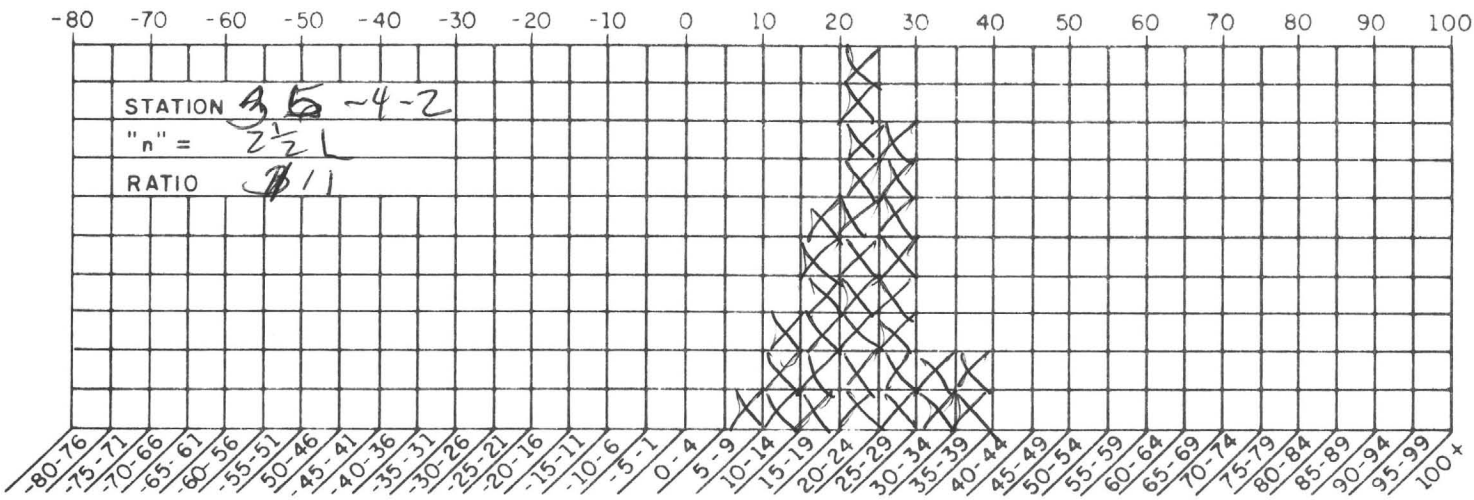


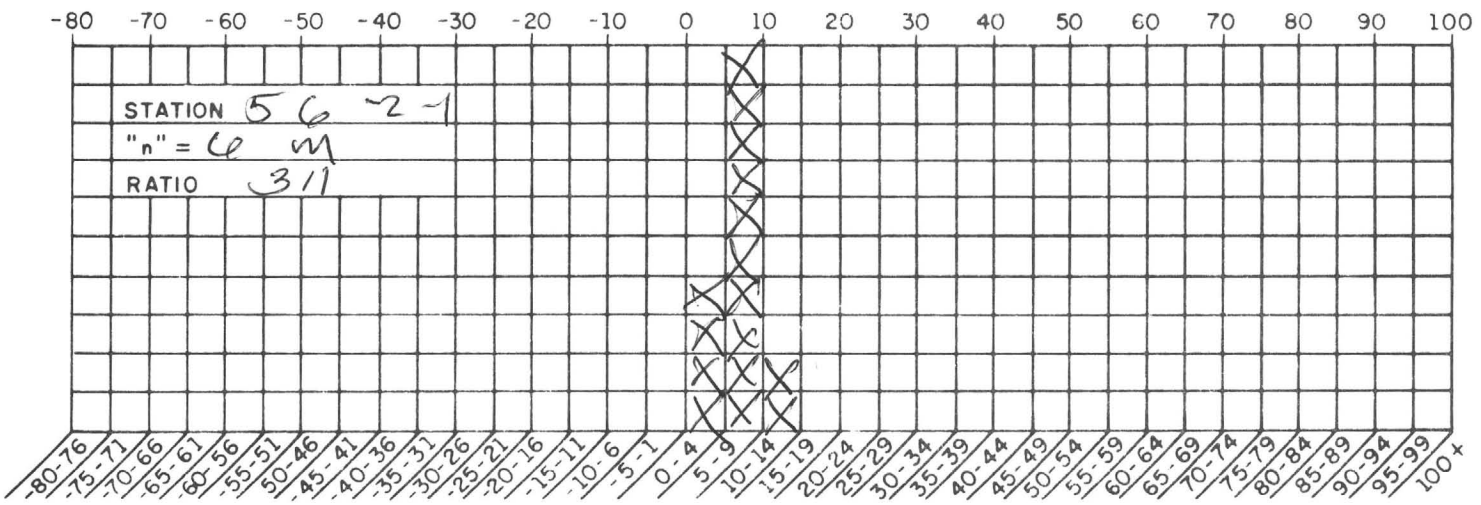




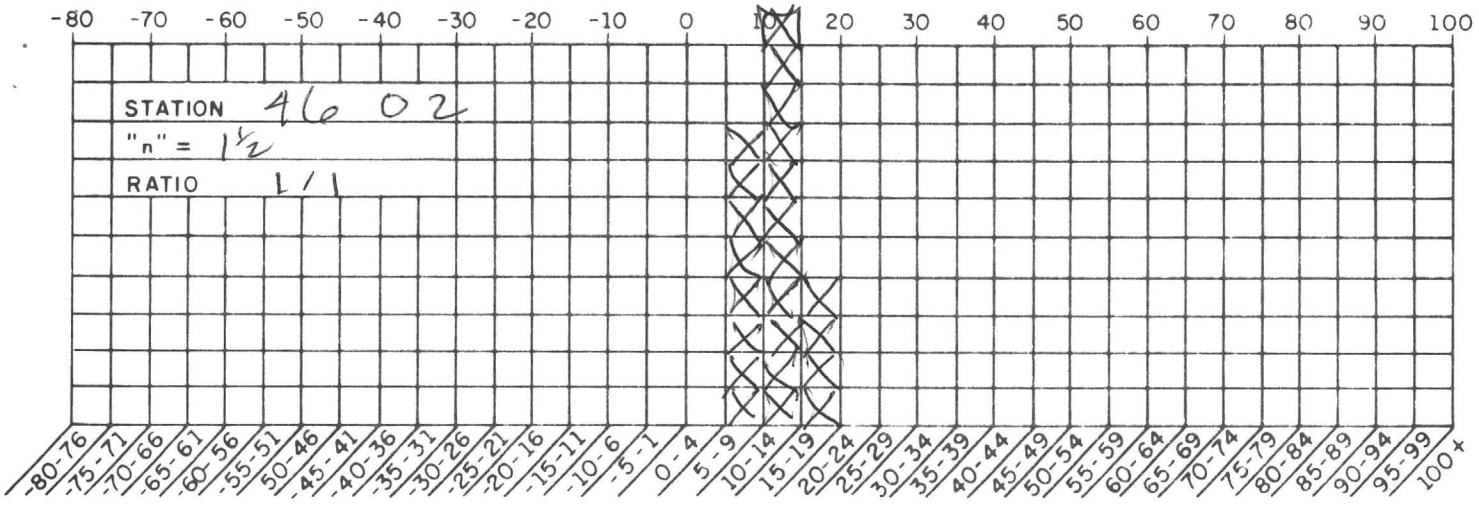
JOB 0237 DATE 9 2 72 LINE 5 SP02 SE PAGE 4

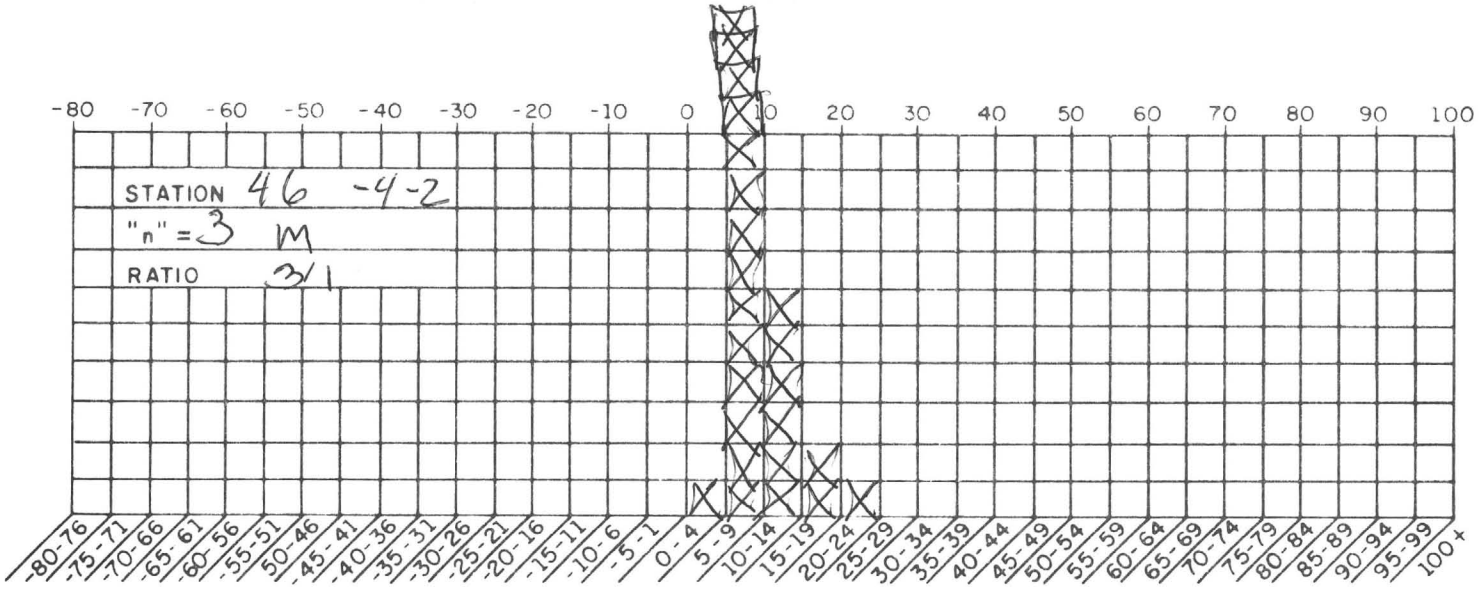


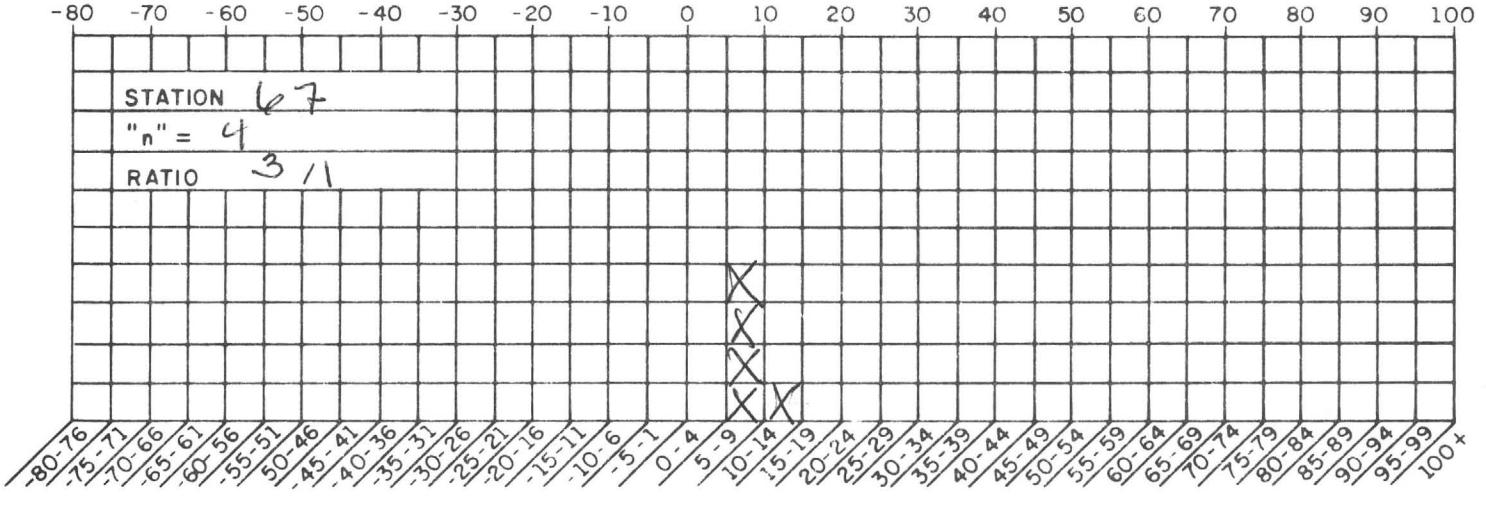




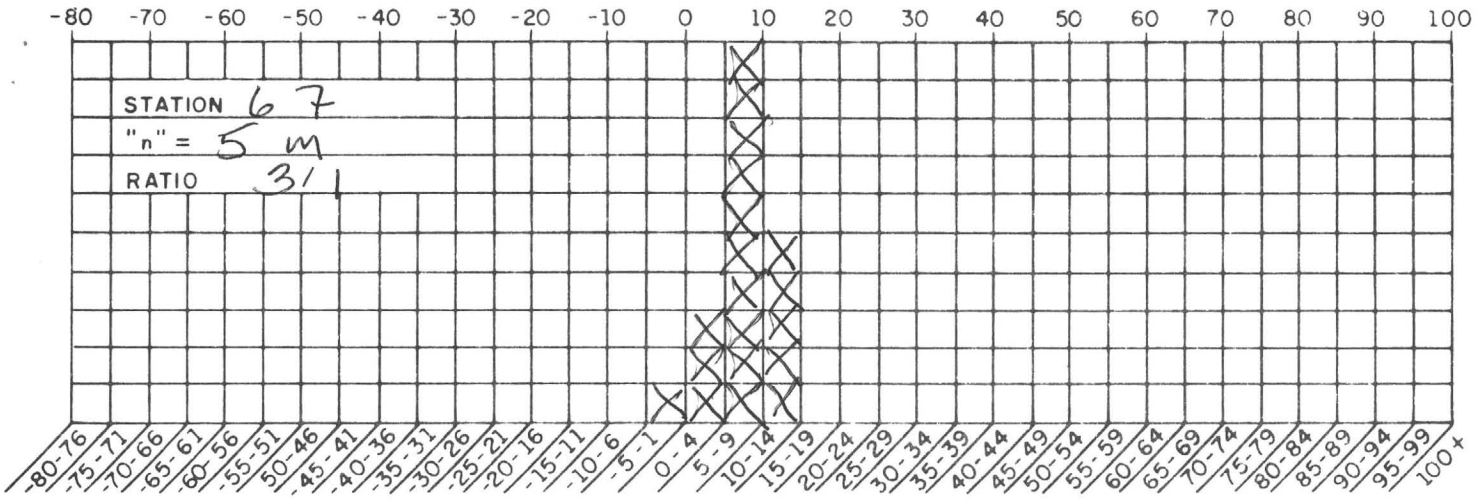
JOB 0237 DATE 9 2 72 LINE 5 SPD 2 SE PAGE 5

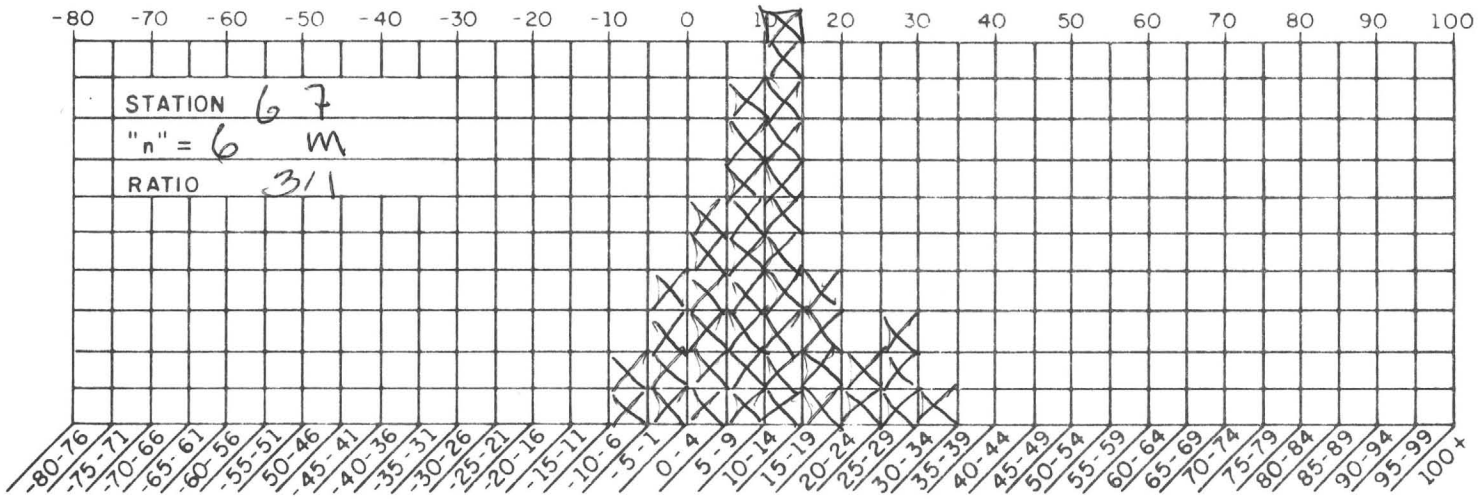


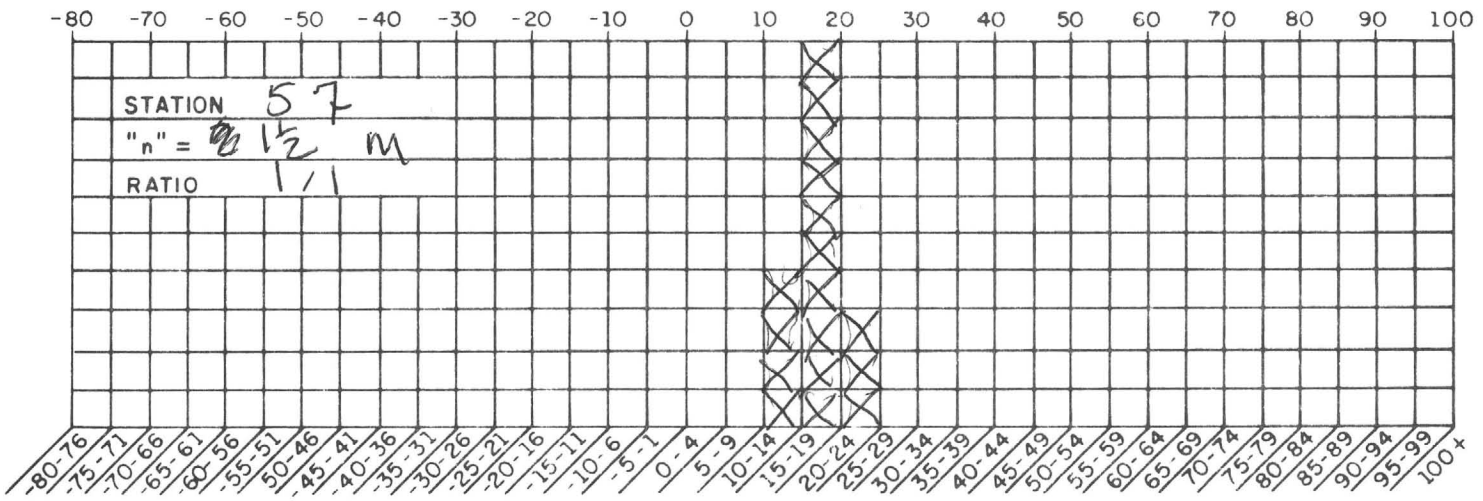




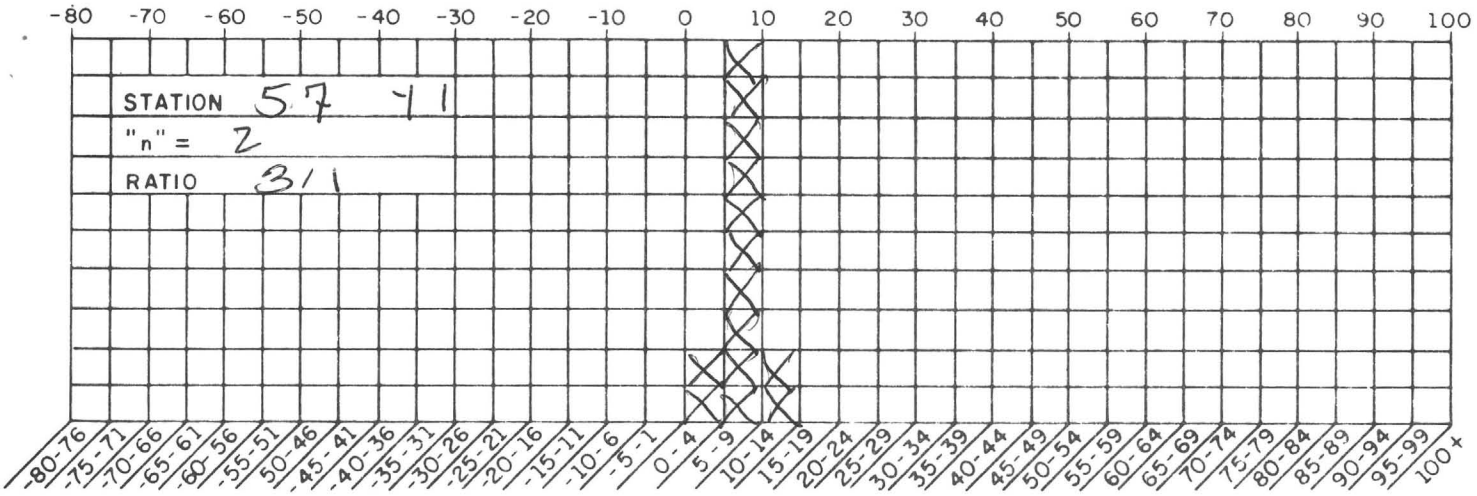
JOB 0237 DATE 4 2 72 LINE 5 SPD 2 SE PAGE 6

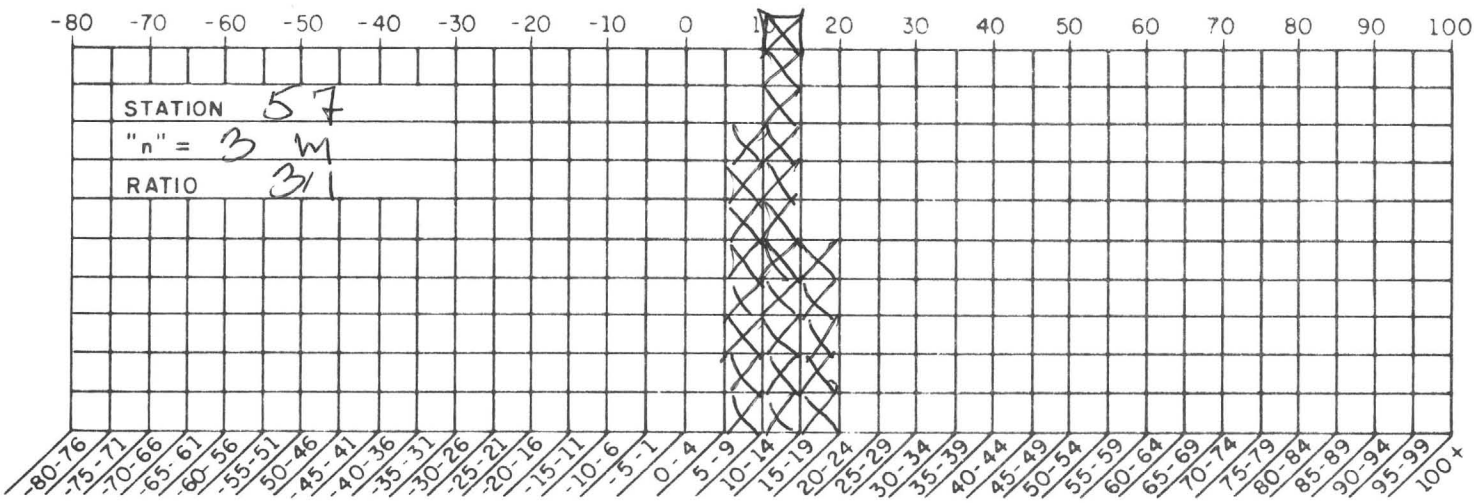


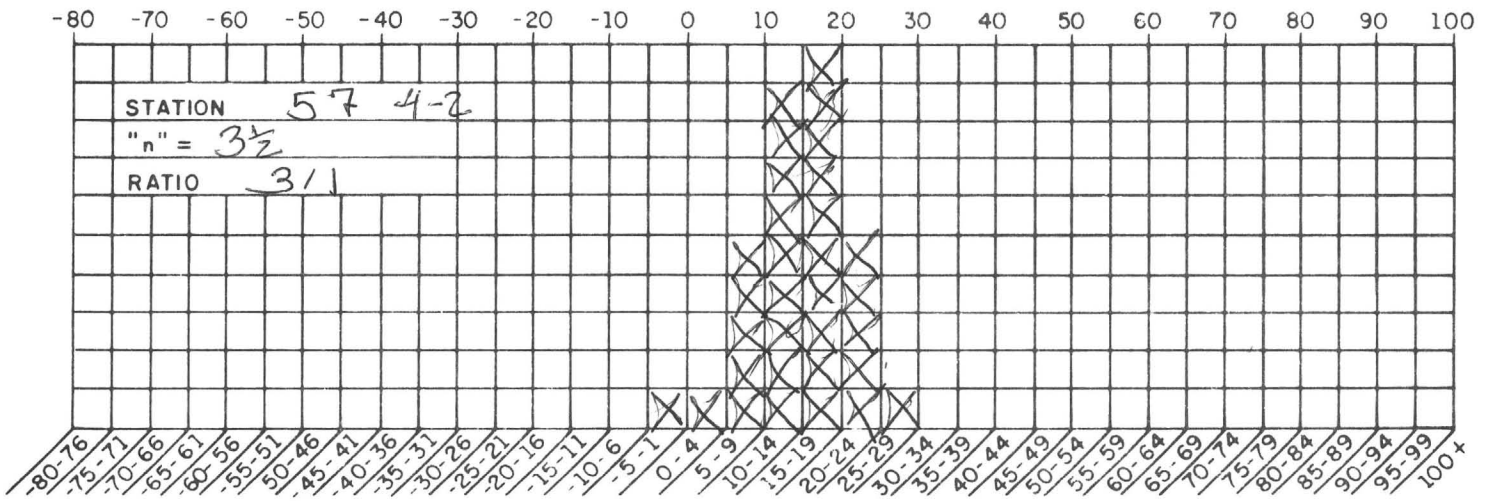




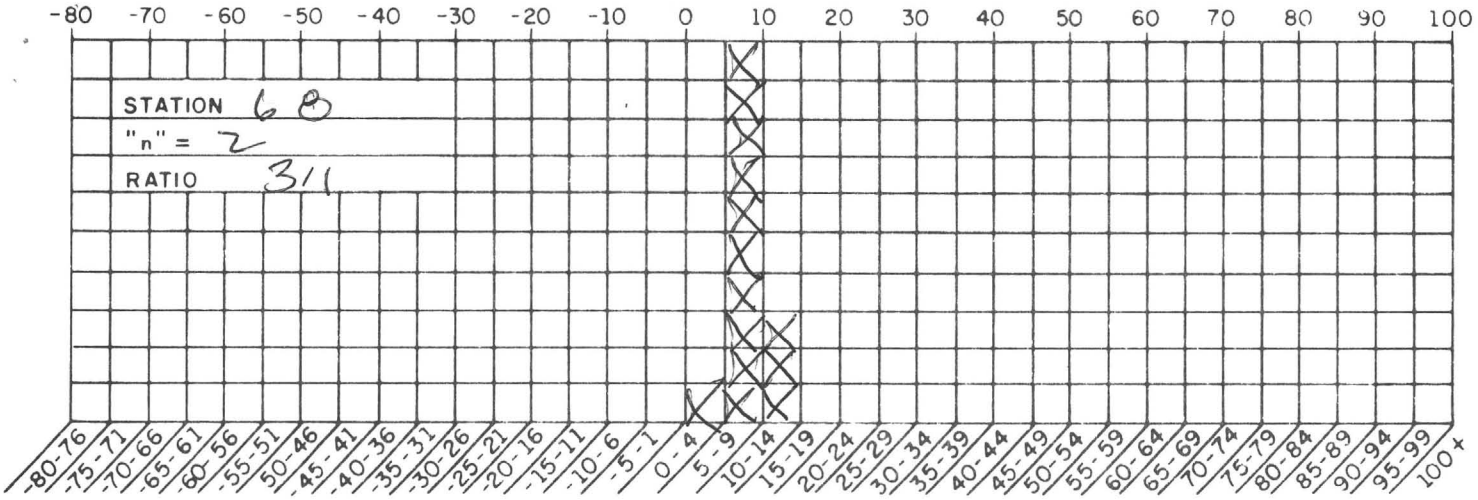
JOB _____ DATE _____ LINE _____ PAGE 7

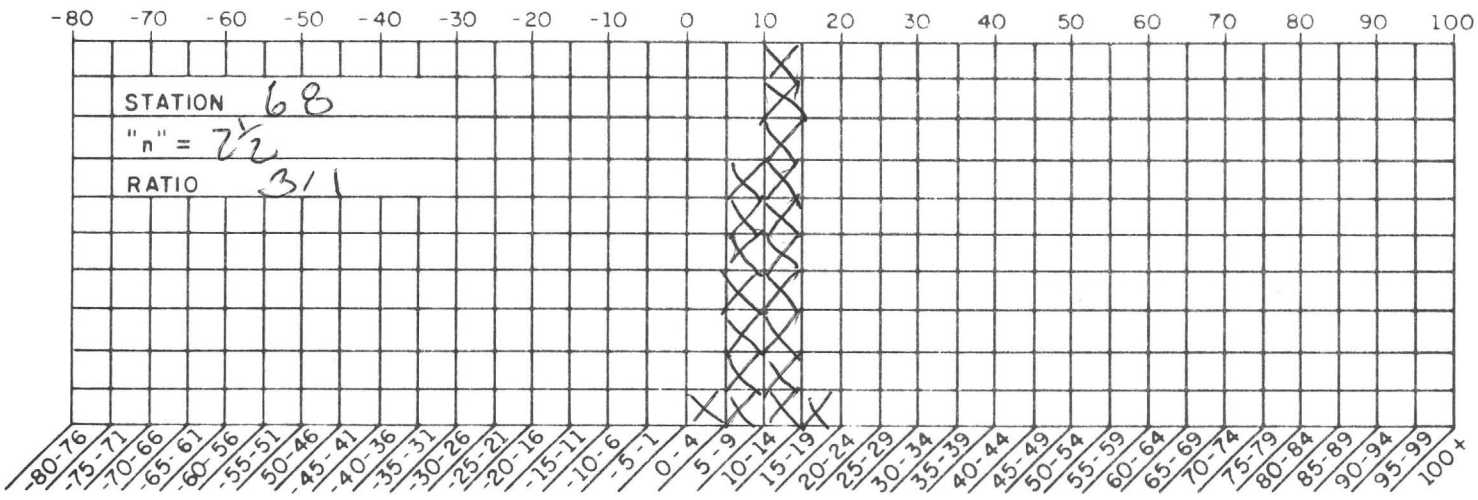


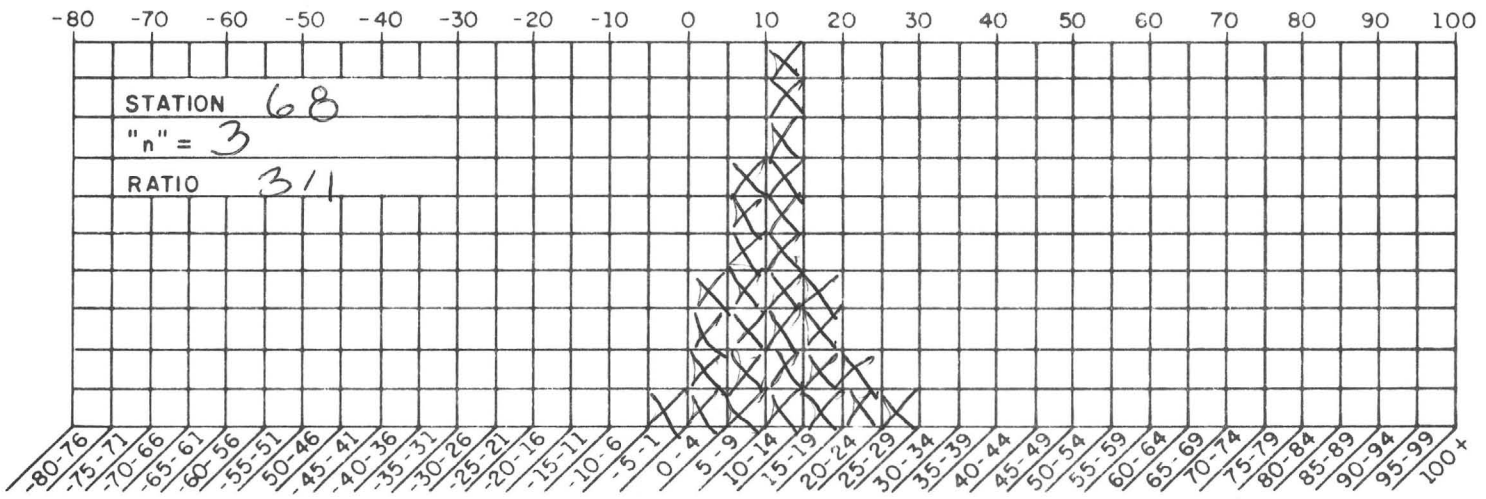




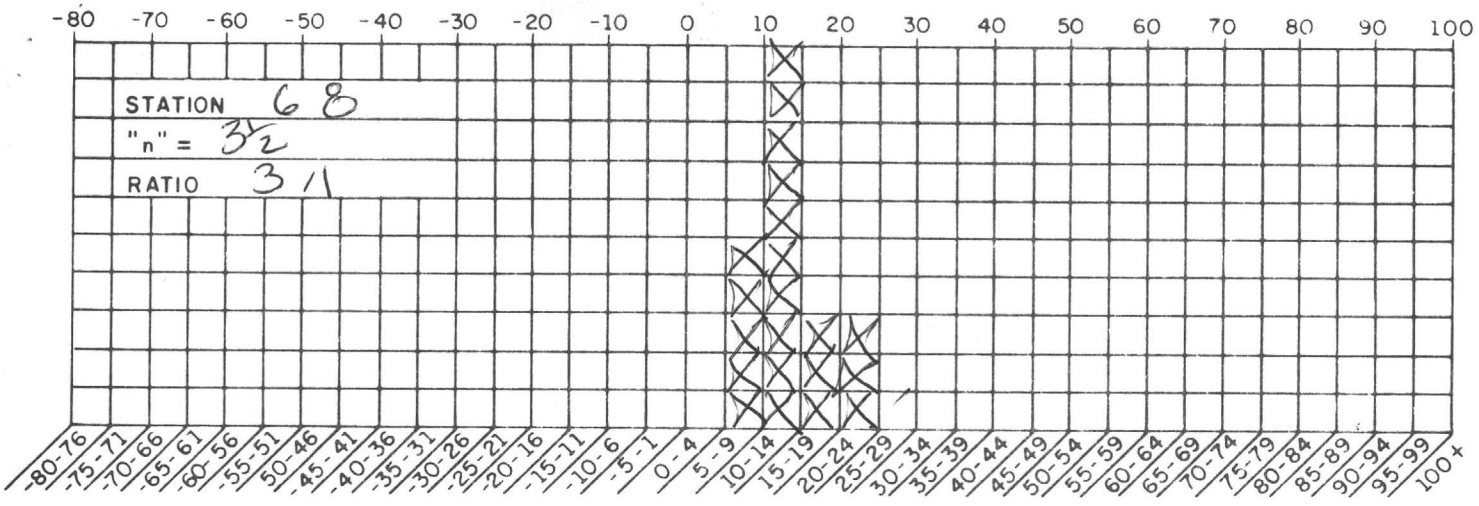
JOB 0237 DATE 9 2 72 LINE 5 SPD 1 SE PAGE 8

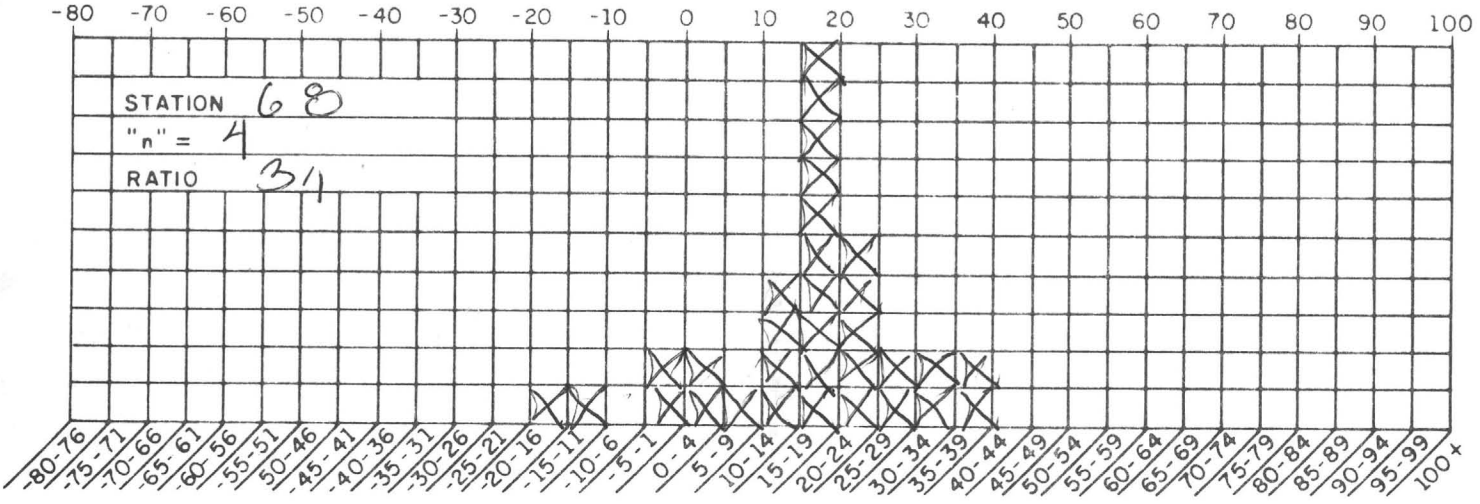


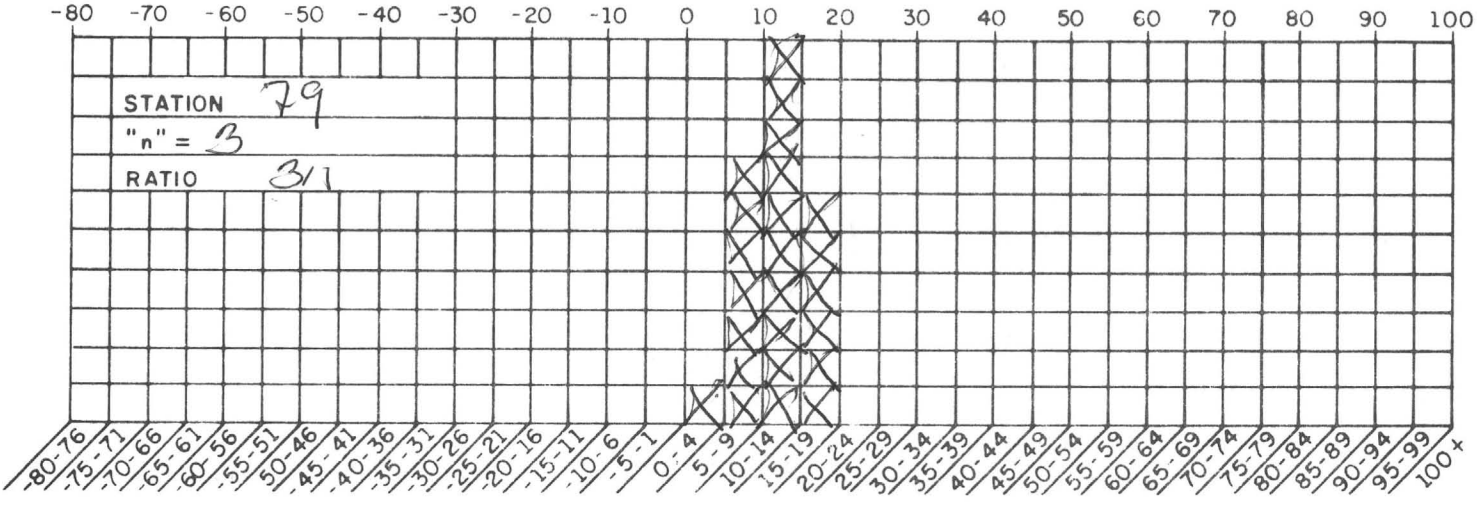




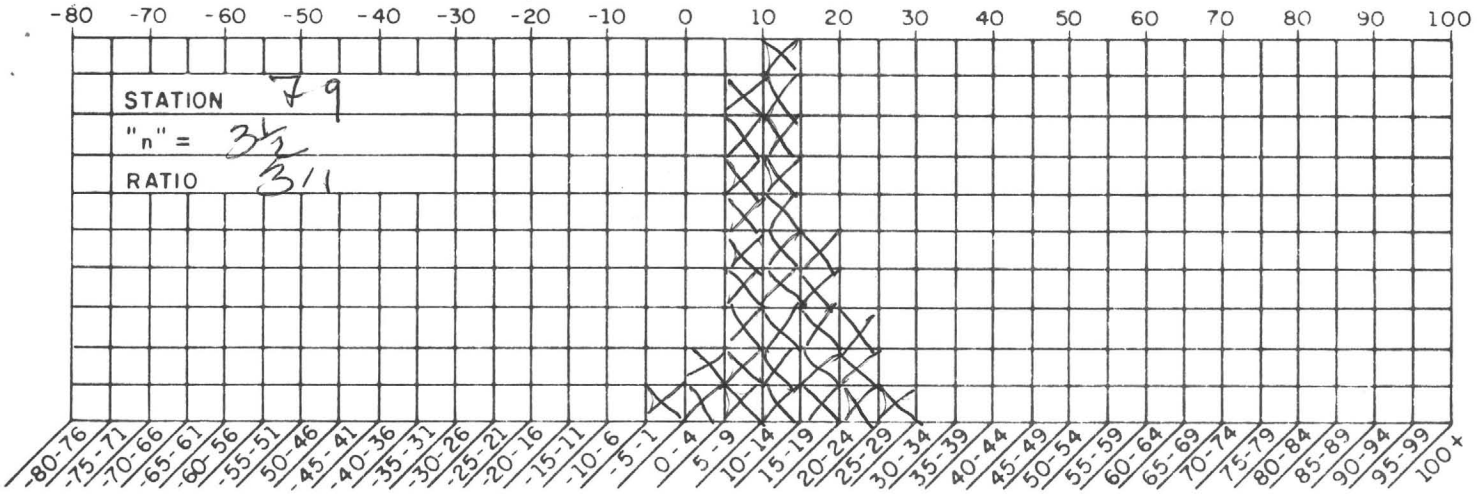
JOB 0237 DATE 9 2 72 LINE 5 SP 2 SE PAGE 9

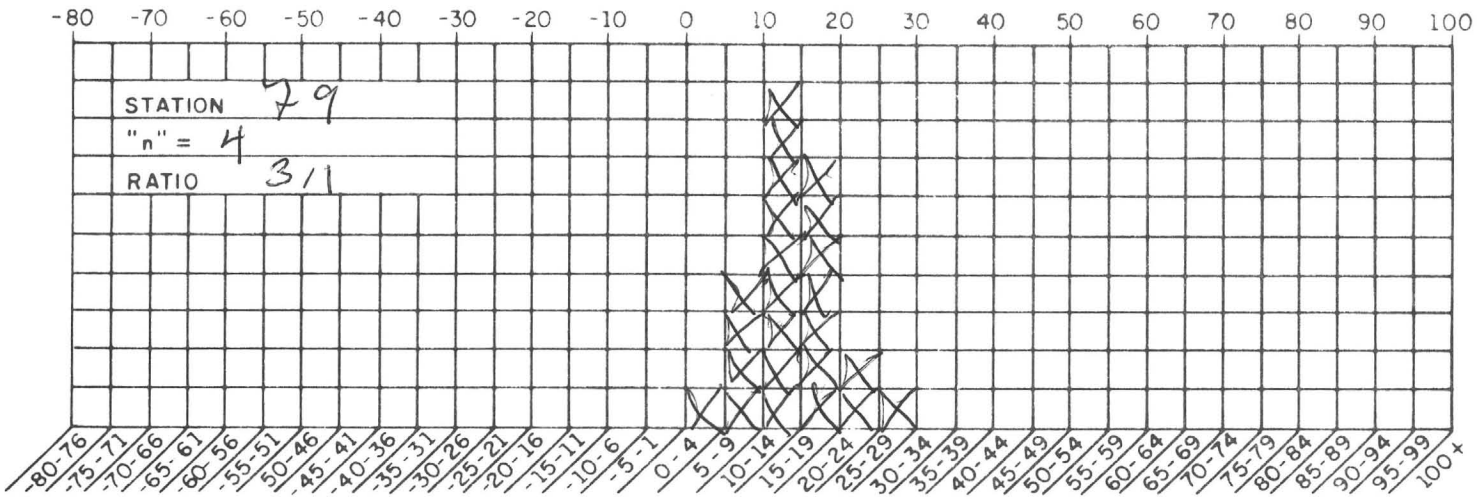


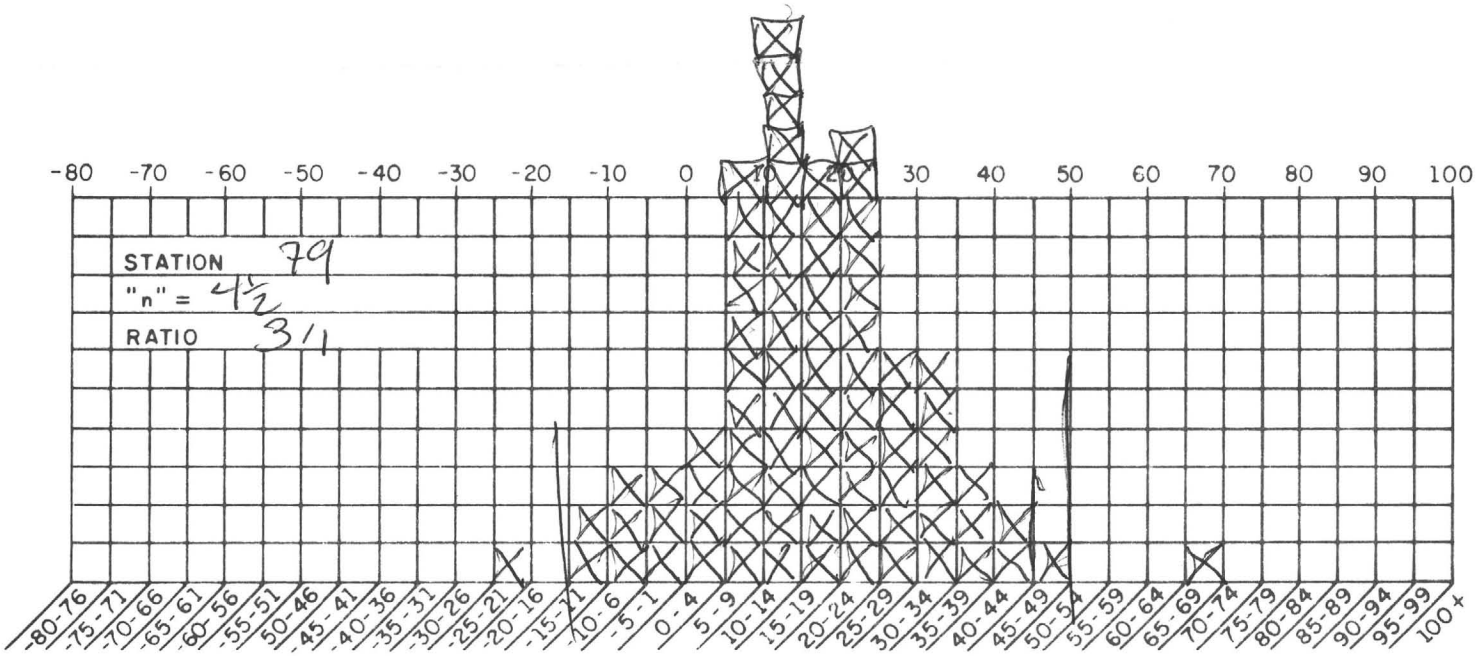




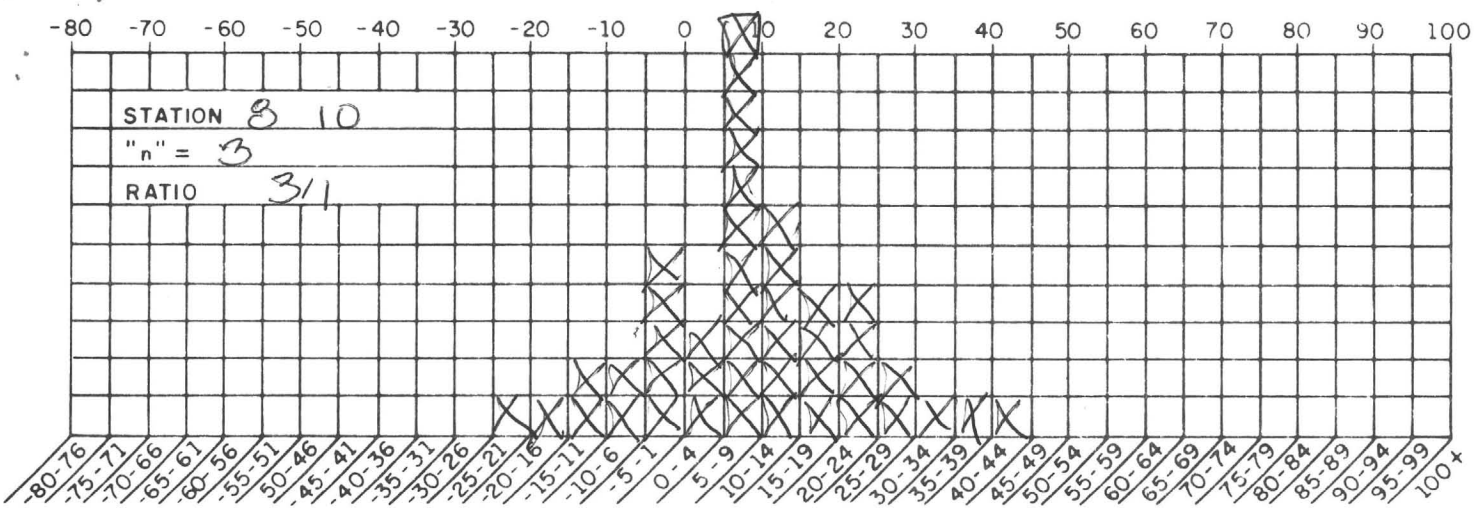
JOB _____ DATE _____ LINE _____ PAGE 10

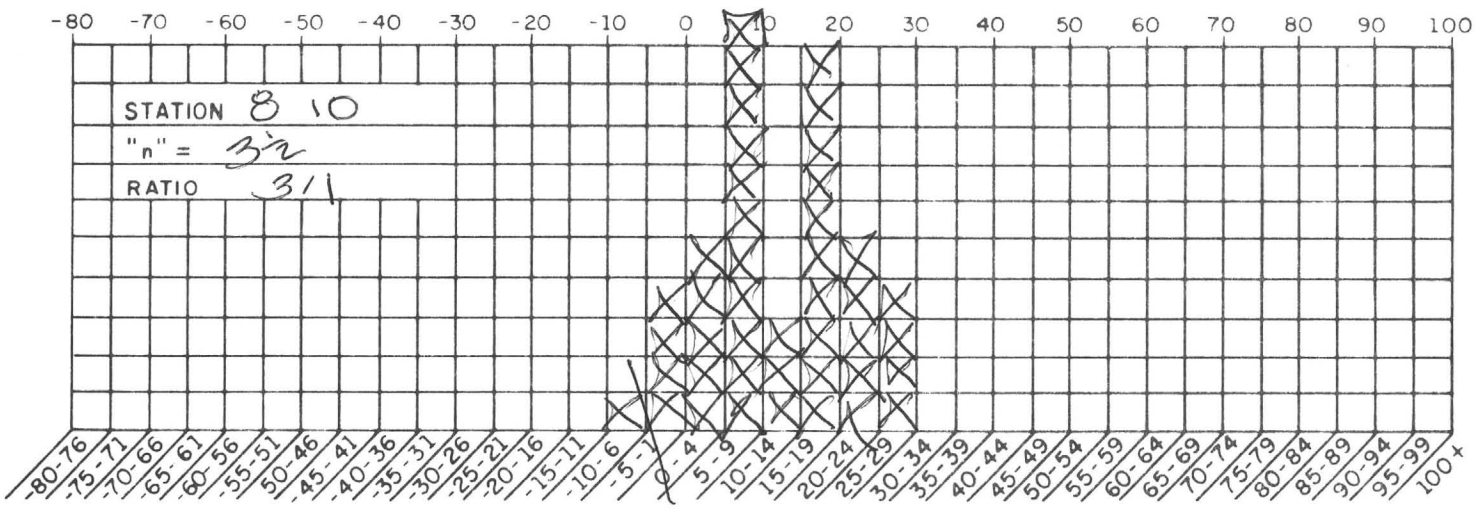


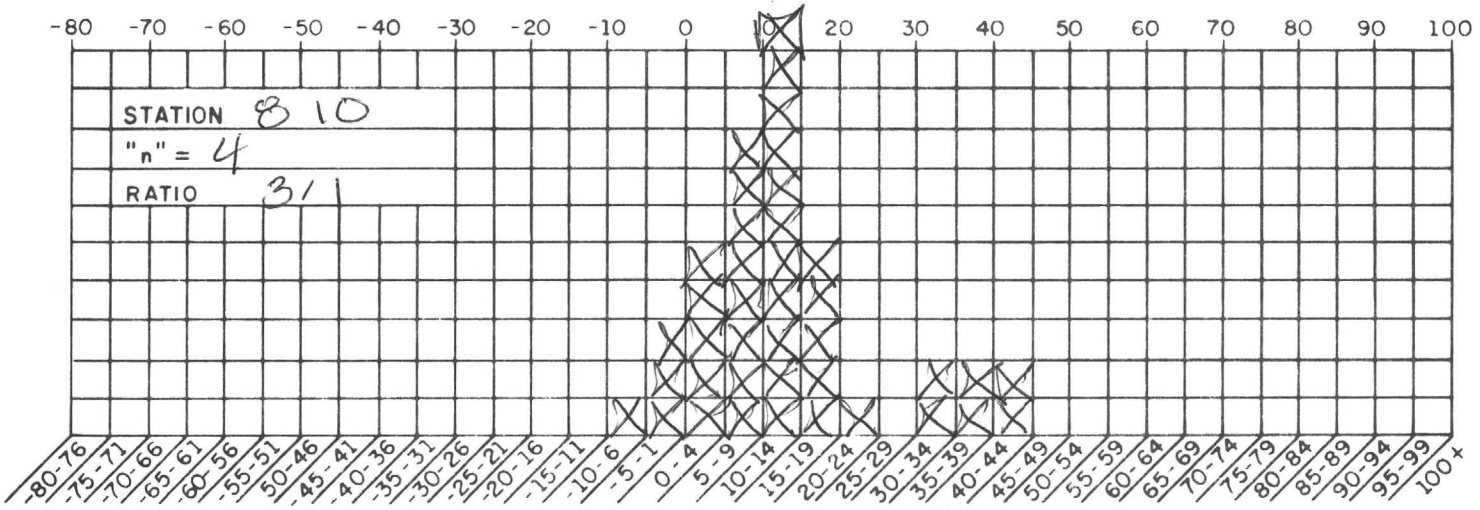




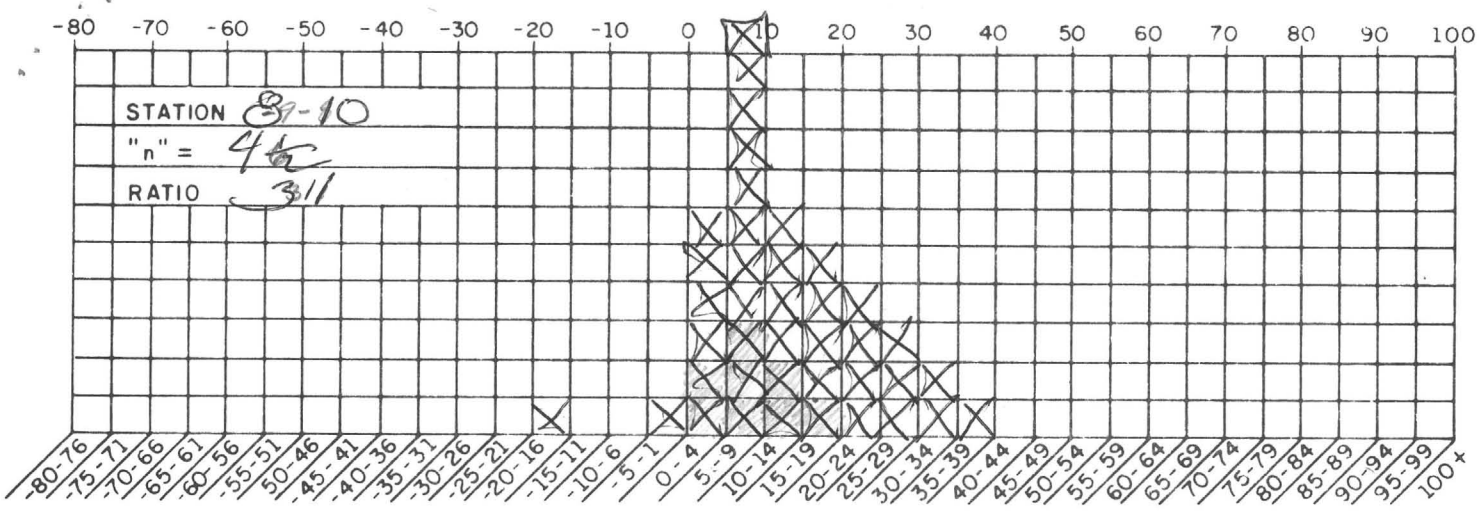
JOB _____ DATE _____ LINE 5 SPREAD PAGE 11

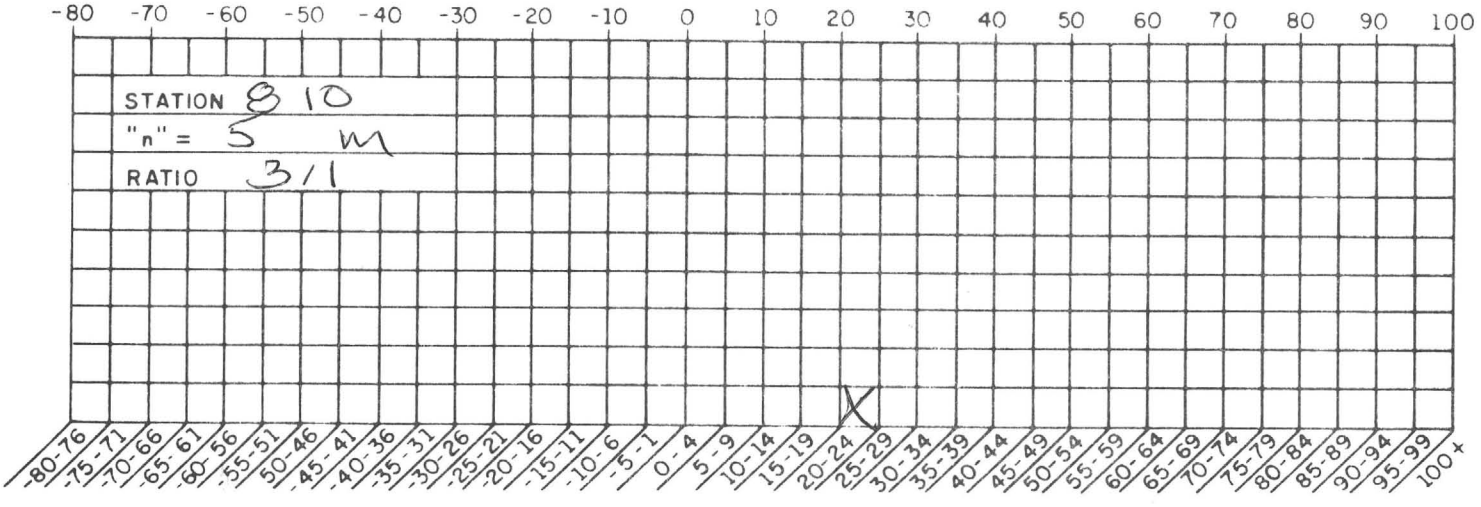


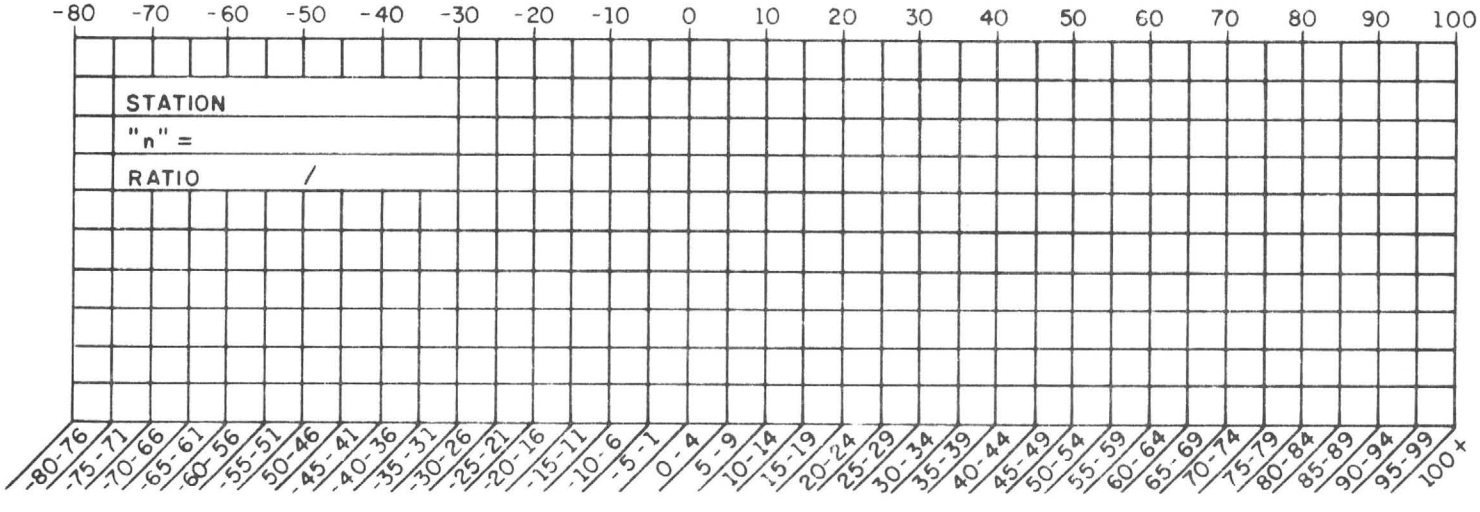




JOB _____ DATE _____ LINE 5 SPD2 SE PAGE 12







MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

LINE 5 SPD 2 NCO RAW

Project:	Client:	Date:
0237	ESSEX	9 5 72

TIME	I	VA	COMMENTS
	7.4		-1 1
	6.5		0 2
09:49	7.3		-2 0
	7.3		-1 1
	6.5		0 2
	7.3		-3 -1
	7.3		-2 0
	7.3		-1 1
	6.5		0 2
	7.3		-4 -2 ½
	7.3		-3 -1 1
	7.3		-2 0 1½
	7.3		-1 1 2
	6.5		0 2 2½
	7.2		-4 -2 1
	7.3		-3 -1 1½
	7.3		-2 0 2
	7.3		-1 1 2½
	6.5		0 2 3

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS
	7.3		-4 -2 1½
	7.3		-3 -1 2
	7.3		-2 0 2½
	7.3		-1 1 3
	6.5		0 2 3½
	7.3		-4 -2 2
	7.3		-3 -1 2½
	7.3		-2 0 3
	7.3		-1 1 3½
			0 2 4
	7.3		-4 -2 2½
	7.3		-3 -1
	7.3		-2 0
	7.3		-1 1
	6.5		0 2 4½
	7.3		-4 -2 3
	7.3		-3 -1 3½
	7.3		-2 0 4
	7.3		-1 1 4½
	6.5		0 2 5

7 6 5 C4 C3 C2 C1 0 -1 -2 -3 -4 SW

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 1	NORTHWEST	1000.	8 16 72	DIPOLE DIPOLE	0237		WHITMAN	484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/2 1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		1 2	3 4	1	100.	2.80	7.0	280	M 1	1	7	7	7						
		1 2	4 5	2	10.	2.76	7.0	91	M 1	1	10	9	8	8	9	8			
		2 3	4 5	1	100.	2.92	7.0	210	M 1	1	6	6	6						
		2 3	5 6	2	10.	3.50	6.0	134	M 1	1	7	9	7	5	9	7	5	8	
		1 2	5 6	3	3.	3.02	6.0	83	M 3	1	7	3	5	3	5	0	1	3	
		1 2	6 7	4	3.	1.45	7.0	71	M 3	1	4	7	5	6	10	8	2	7	
		3	7	4	6	.11	7	7		3									
		2 3	6 7	3	10.	1.25	7.0	102	M 3	1	3	3	2	3	2	3	2	4	
*a=2000'		1 3	4 6	½	300.	1.25	7.0	193	M 1	1	6	6	6	6					
a=2000'		1 3	5 7	1	30.	2.32	7.0	114	M 1	1	9	9	9	9					
		0 1	2 3	1	100.	1.92	7.0	156	M 1	1	4	4	4						
		0 1	3 4	2	~~300.~~	~~1.92~~	2.75 7.0	90	M 1	1	8	5	5	7	7	7	7		
		0 1	4 5	3	3.	2.38	7.0	56	M 3	1	4	4	4	6	4	4			
		0 1	5 6	4	3.	1.50	6.0	82	M 3	1	7	13	5	5	6	11	11	7	
		7	5	8	10	.9	7	10		11	10	19	3	8	4	12	21	9	
		0 1	6 7	5	1.	2.80	7.0	80	M 3	1	5	8	-6	5	0	47	4	3	
		11	2	-8	11	.11	17	14		11	11	10	5	6	27	10	4	10	
		8	11	11	11	.9	1	15		4	10	12	7	7	-1	13	5	8	
*		0 2	3 5	½	10.	3.42			M 1	1	7	9	10	9	8	7	7	10	
		0 2	4 6	1	10.	1.25			M 1	1	21	16	23	17	22	20	17	24	
		20	19	16	17	18	24	12		17									
		0 2	5 7	1½	3.	2.75			M 3	1	9	7	8	10	7	7	8	5	
		5	5	7	6	8	7	9		8									
*		0 2	3 5	½	100.	3.35	7.0	122	M 1	1	6	6	6						
		0 2	4 6	1	30.	1.78	7.0	88	M 1	1	11	9	9	11	10	11	11	12	
		0 2	5 7	1½	10.	2.25	6.5	62	M 3	1	5	4	3	5	7	5	6	5	
		-1 0	1 2	1	100.	2.60	7.0	214	M 1	1	4	4	5	4	9	5	5	5	
		-1 0	2 3	2	30.	1.45	7.0	122	M 1	1	7	8	6	7	9	8	9	7	
		-1 0	3 4	3	10.	1.40	7.0	112	M 3	1	6	4	4	4	2	4	6	2	
		-1 0	4 5	4	3.	2.15	[illegible]	166	M 3	1	13	6	7	7	-2	10	14	4	
		10	13	7	7	.9	7.0	8		11	-5	9	11	9	11	6	9	11	

mining
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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 1	NORTHWEST	1000.	8 16 72		0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-1 0	5 6	5	3.	1 .52	6.6	167	M	3	1	7	12	13	17	10	9	14	12	36	
		11	11	13	12	.15	12														
		-1 0	6 7	6	1.	2.85	6.6	141	M	3	1	32	11	14	23	22	-3	7	7	46	
		15	30	20	19	.21	27	23			14	9	15	16	5	5	20	18	3		
		24	25	13	16	.23	20	17			9	17	0	13	24	10	6	9	13		
		0	3	17	31	.26	22	1			16	11	10	20	23	14	10	26	23		
		-1 1	2 4	½	100.	2.90	7.0	144	M	1	1	5	6	6	6					6	
		-1 1	3 5	1	30.	1.76	6.5	73	M	1	1	15	13	12	14	13	13	14	11	13	
		-1 1	4 6	1½	10.	2.56	7.0	92	M	3	1	8	9	11	8	8	9	10	7	27	
		-1 1	5 7	2	10.	1.45	6.0	117	M	3	1	12	9	17	15	6	12	10	12	34	
		11	10	16	9	.12	11	7			14										
		-2 -1	1 2	2	10.	2.12	7.0	90	M	1	1	9	9	3	7	5	6	13	4	7	
		16	0	9	6	4	2	9			12										
		-2 -1	2 3	3	3.3	.38	7.0	83	M	3	1	4	5	-3	5	10	0	3	-5	12	
		7	2	5	23	.19	-6	9			3	5	6	3	8	2	-5	5	8		
		-2 +1	3 4	4	3.	2.16	7.0	102	M	3	1	17	13	10	6	37	4	6	9	27	
		-2	6	23	9	.13	9	11			9	9	6	4	6						
		-2 -1	4 5	5	1.	3.35	6.5	102	M	3	1	9	13	11	8	10	-3	15	16	29	
		8	15	13	9	.20	-1	11			0	7	15	3	9	9	8	16	12		
		12	10	4	9	.14	13	9													
		-2 -1	5 6	6	1.	3.15	6.0	164	M	3	1	23	3	18	20	19	9	19	7	35	
		27	12	17	9	.7	21	11			17	11	8	22	5	7	16	8	6		
		17	9	9	18	.9	9	5			19	7	9	12	14	8	3	18	12		
		-2 0	1 3	½	100.	3.15	7.0	122	M	1	1	5	6	5	5	5				5	
		-2 0	2 4	1	30.	2.48	7.0	120	M	3	1	4	4	3	3	4	4	3		11	
		-2 0	3 5	1½	10.	2.75	6.5	107	M	3	1	7	7	9	6	6	7	3	7	26	
		-2 0	4 6	2	10.	1.92	7.0	122	M	3	1	9	13	9	12	15	11	11	11	33	
		12	11	8	8	.13	10	10			11										
		-2 0	5 7	2½	10.	1.20	6.0	159	M	3	1	10	5	11	13	14	10	12	15	35	
		13	14	12	11	.10															

1 X 11 0 1 C7 -2 C6 -3 C5 DH 11 -4 C4 11 5 C3 -6

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 1	NORTHWEST	1&2x10³	8 17 72	DIPOLE DIPOLE	0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-2 -3	1 2	3	3.	2.02	6.8	51	M	3	1	2	4	5	2	2	2	4	2	9	
		-2 -3	2 3	4	3.	1.42	7.0	70	M	3	1	9	7	7	8	11	4	11	7	23	
		6	7	9	5	.7	7	8			7										
		-2 -3	3 4	5	1.	3.22	7.0	92	M	3	1	9	13	7	15	14	15	10	2	32	
		19	8	12	4	.16	13	7			13	9	12	8	12	9	12	10	9		
		-2 -3	4 5	6	1.	1.75	6.0	94	M	3	1	29	20	25	17	11	21	16	15	48	
		3	14	12	12	.15	19	13			8	24	3	9	13	21	9	22	17		
		20	19	9	22	.12	23	19			11	27	17	7	9	19	15	26	13		
*	2000'	[illegible]																			
*	2000'	-3 -1	2 4	1½	10	2.[illegible]8	6.5	88	M	3	1	6	5	6	6	6				18	
		-3 -1	3 5	2	10	1.25	6.0	96	M	3	1	7	11	10	13	8	13	13	9	32	
		-3 -1	4 6	2½	3.	3.42	6.5	118	M	3	1	15	14	13	14	15	14	16	13	43	
		-3 -1	5 7	3	3.	2.62	6.0	151	M	3	1	14	17	14	15	17	15	15	14	45	
		-3 -1	1 3	1		.	7.0														
		-3 -4	1 2	4	3.	1.08	7.0	53	M	3	1	14	6	4	6	11	7	6	7	20	
		9	-2	3	11	.3	5	9			8										
		-3 -4	2 3	5	1.	2.86	7.0	82	3		1	10	11	7	7	15	10	15	13	35	
		5	16	18	6	.17	3	19			21	6	9	13	13	10	13	10	13		
		-3 -4	3 4	6	1.	2.44	7.0	112	3		1	13	8	14	7	14	8	14	22	38	
		18	17	12	7	.13	13	14			19	11	0	26	6	17	10	13	5		
*	2000'	-4 -2	1 3	1½	10.	1.60	7.0	58	3		1	7	8	7	9	7	8	5	7	22	
		-4 -2	2 4	2	10.	1.05	6.0	81	3		1	11	10	12	9	11	10	11	12	32	
		-4 -2	3 5	2½	3.	2.65	6.0	99	3		1	13	14	13	16	13	15	13	12	41	
		-4 -2	4 6	3	3.	2.62	7.0	127	3		1	15	21	9	15	16	16	17	13	48	
		23	17	16	12	.17	18														
		-4 -2	5 7	3½	3.	1.85	6.0	152	3		1	13	23	15	8	11	11	29	17	48	
*		15	16	17	19	.16	26	5			24	14	17	8	15	17	15				

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 4

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 1	NORTHWEST		8 17 72	DIPOLE DIPOLE	0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	mv/Ω	1/s	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-5 -4	1 2	5	3.	1	.22	7.0	105	3	1	10	6	6	10	4	7	14	2	27	
		6	7	21	11		.11	13	15		17	15	8	7	5	14	7	12	6		
		-5 4	2 3	6	3.	1	.15	7.0	159	3	1	8	17	17	11	14	5	19	11	37	
		21	7	23	8		.11	25	7		12	0	17	11	23	4	14	14	10		
		-5 -3	1 3	2	10.	1	.32	7.0	87	3	1	13	10	12	5	16	10	10	11	32	
		10	15	9	6		.14	9	10		13										
		-5 -3	2 4	2½	3.	3	.28	6.0	123	3	1	17	13	6	21	5	20	11	15	41	
		11	23	10	15		.11	17	9		19	13	12	16	15	13	15	15	14		
		14	7		[illegible]				[illegible]												
		-5 -3	3 5	3	3.	2	.70	6.0	155	3	1	20	13	17	20	12	8	22	11	44	
		13	11	26	21		.14	12	19		16	7	10	10							
		-5 -3	4 6	3½	3.	2	.70	6.5	202	3	1	9	16	14	14	17	20	15	14	43	
		20	28	2	20		.0	24	8		27	5	16	7	16	17	17	13	14		
		6	24	17	10		.10	17	12		8	18	16	17	13						
		-5 -3	5 7	4	3.	2	.17	6.0	250	3	1	6	23	15	20	5	6	18	31	53	
		5	36	9	19		.21	29	8		20	16	29	10	7	30	9	8	27		
		11	29	14	26		.26	11	23		31	12	22	0	38	9	25	13	25		
		26	1	21	11		.30	14	15		26	28	12	24	16	10	38	10	29		
		21	13	14	19		.17	16	13		15	24	18	8	21	12	24	-7	16		
		17	26	23	20		.19	24	18		25	23	6	21	19	3	16	13	22		
		9	20	7	24		.14	34	-5		30										
		-4 -6	1 3	2½	3.	3	.62	7.0	116	3	1	10	18	8	9	7	15	12	11	34	
		15	5	21	9		.12	4	22		-5	17	13	9	15	14	15	5	10		
		17	16	6	15		.6	21	13		11	10	11	2	12						
		-4 -6	2 4	3	3.	3	.02	6.0	179	3	1	33	2	18	21	4	21	6	15	44	
		15	12	15	19		.13	17	14		14	9	16	16	12	15	15	11	22		
		-4 -6	3 5	3½	3.	2	.42	6.0	178	3	1	21	10	15	15	23	13	23	13	57	
		22	17	19	27		.7	30	21		11	19	20	21	15	21	27	20	15		
		20	25	21																	

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NECOR BOREHOLE #3

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 5

LINE 6 SPD 1 NORTHWEST 8 17 72

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/n	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
	I	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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80
		-4 -6	4 6	4		3. 2.	45 6.5	220.	3		1	28	1	11	17	12	24	27	10	57	
		18	23	5		17	20 18	15			14	20	11	29	16	19	20	27	13		
		30	27	4		16	13 16	21			7	11	25	15	15	19	20	5	43		
		-4 -6	5 7	4½		3. 2.	08 6.0	322.	3		1	-5	14	35	14	21	21	7	14	53	
		32	11	25		1	30 9	19			26	25	23	26	19	6	27	21	18		
		9	15	23		2	20 18	11			14	14	15	27	24	19	6	31	23		
		30	42	19		16	15														
* 2000'		-5 -7	1 3	3		3. 1.	96 6.8	77	3	1	1	6	23	13	20	14	16	13	25	75	
		5	34	10		14	13 21	12			17	15	19	8	17	0	12	15	18		
		-5 -7	2 4	3½		3. 1.	90 6.5	149	3	1	1	7	17	12	17	10	20	15	7	44	
		16	11	17		16	22 12	24			31	12	19	9	4	16	15	12	29		
		14	15																		
		-5 -7	3 5	4		3. 1.	45 6.0	144	3	1	1	15	18	24	1	23	3	-2	8	38	
		36	10	12		10	5 10	11			20	16	25	7	23	19	12	10	15		
		12	9	18		13	9														
		-5 -7	4 6	4½		3. 1.	60 6.5	229	3	1	1	19	3	11	21	7	33	19	11	57	
		33	25	9		14	20 5	15			12	2	18	31	10	25	11	21	29		
		14	-4	3		36	27 9	18			27	4	30	25	24	12	-3	22	9		
		43	5	0		43	16 -3	45			37	-14	38	17	17	22	8	11	14		
		~~-5 -7~~	~~4 6~~	~~4½~~		~~3. 1.~~	~~60 6.5~~	~~229~~	~~3~~	~~1~~	~~1~~	~~19~~	~~3~~	~~11~~	~~21~~	~~7~~	~~33~~	~~19~~	~~11~~	~~57~~	
		-5 -7	5 7	5		3. 1.	25 6.0	251	3	1	1	24	23	46	11	23	3	31	18	60	
		5	26	20		20	23 20	0			31	20	5	26	44	15	29	41	9		
		15	17	-2		3	23 7	23			28	4	38	29	43	13	23	24	18		
		-6 -8	1 3	3½		1. 3.	25 7.0	76	3	1	1	2	12	25	16	8	4	26	18	48	
		33	14	3		16	16 20	14			20	8	23	16	24	21	17	13	9		
		18	17	18		16															
		-6 -8	2 4	4		1. 3.	25 6.5	115	3	1	1	14	14	16	16	13	21	19	23	47	
		16	24	24		13	9 17	9			3	15	14	16	17	11	17	32	22		

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 6

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPS 1	NORTHWEST		8 17 72					

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/2	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-6 -8	3 5	4½		1.	2.82	6.0	146	3	1	16	15	45	23	23	3	21	17	43
		6	35	0		8	23	-1	-7		19	3	27	14	26	20	-6	41	5	
		24	0	-2		33	.10	28	20		4	35	20	-1	17	19	2	15	8	
		10	-13	32		84	-1	-17	15		14	13	38	14	-10	16	8	18	24	
		15	[illegible]			[illegible]			[illegible]											
		-6 -8	4 6	5		1.	3.06	6.5	189	3	1	-2	14	20	23	12	27	13	17	46
		17	3	36		8	.34	5	0		16	30	40	4	16	5	5	50	39	
		7	29	14		27	.25	13	30		14	24	32	25	-1	55	10	-4	0	
		28	21	14		15	.9	2	24		25	19	29	-7	16	23	25	14	6	
		26	22	17		15	.19	0	38		7	5	19	3	-7	33	21	6	9	
		21	10	11		7	.22	4	6											
		-6 -8	5 7	5½		1.	2.78	6.0	241	3	1	—								

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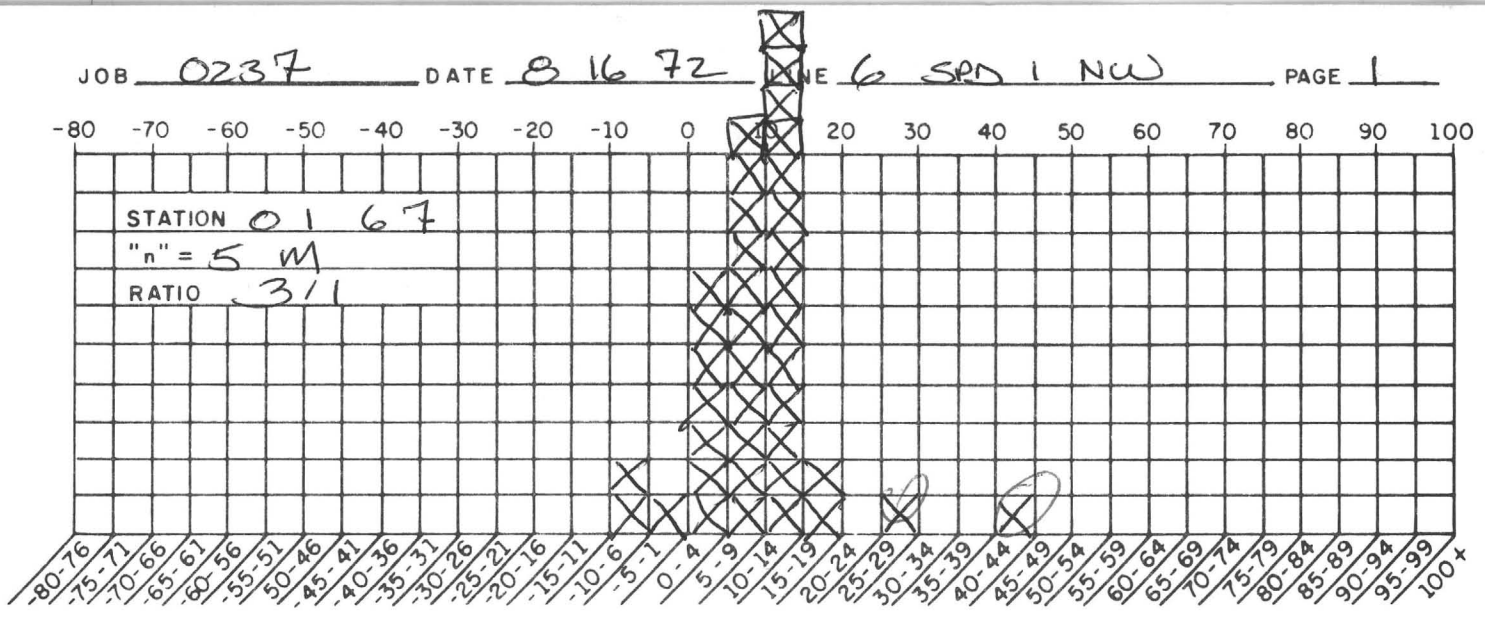
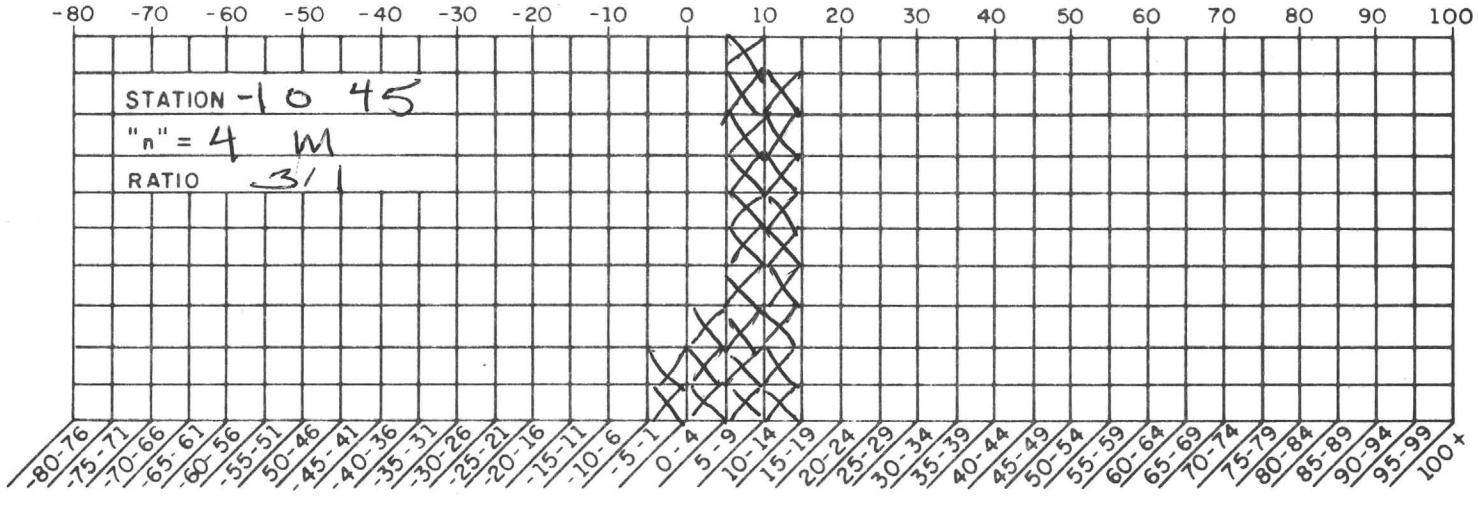
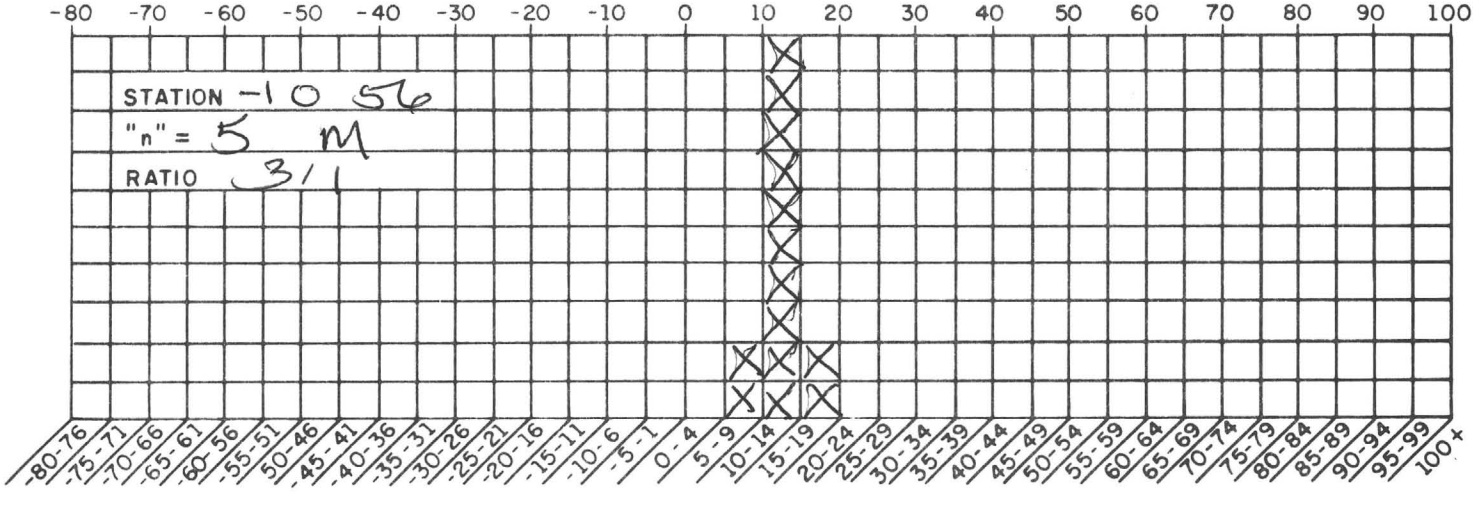
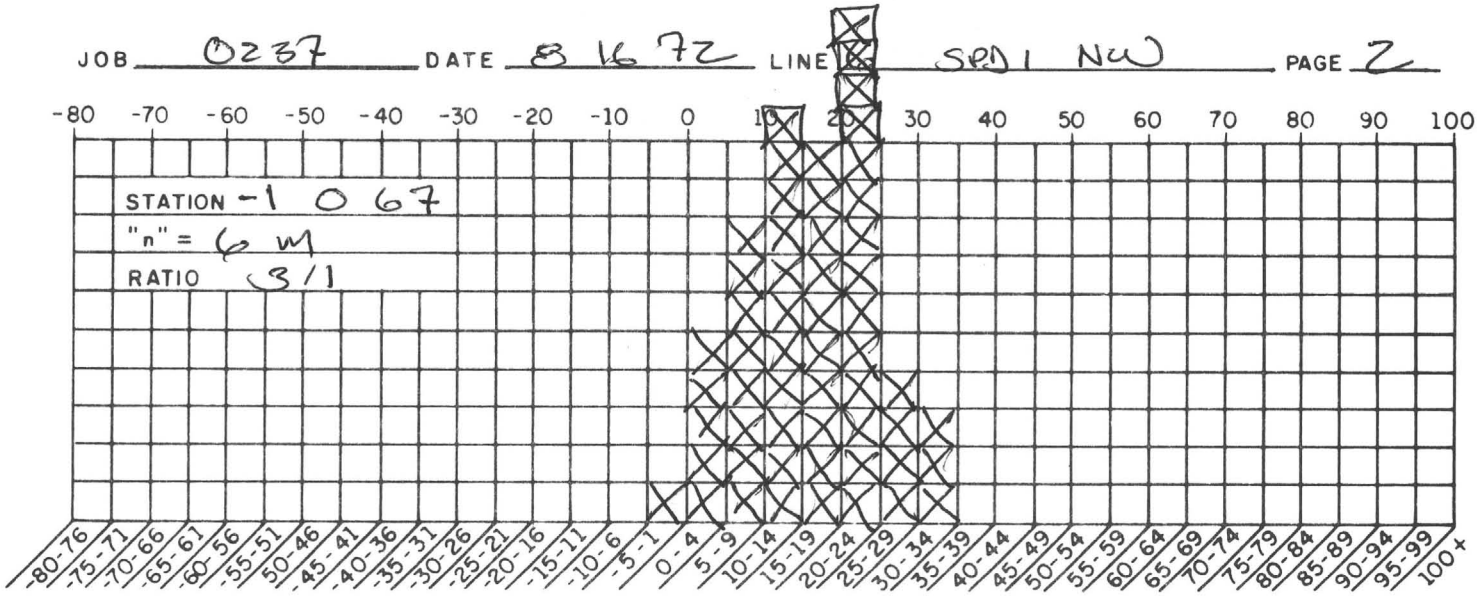
JOB 0237 DATE 8 16 72 LINE 6 SPD 1 NW PAGE 1

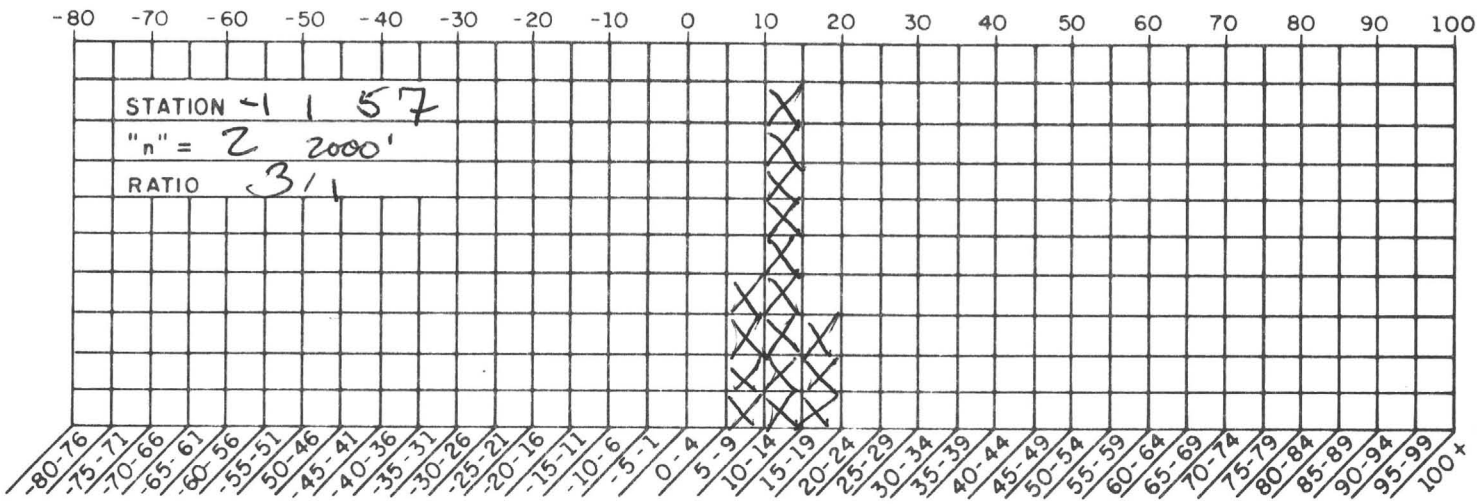


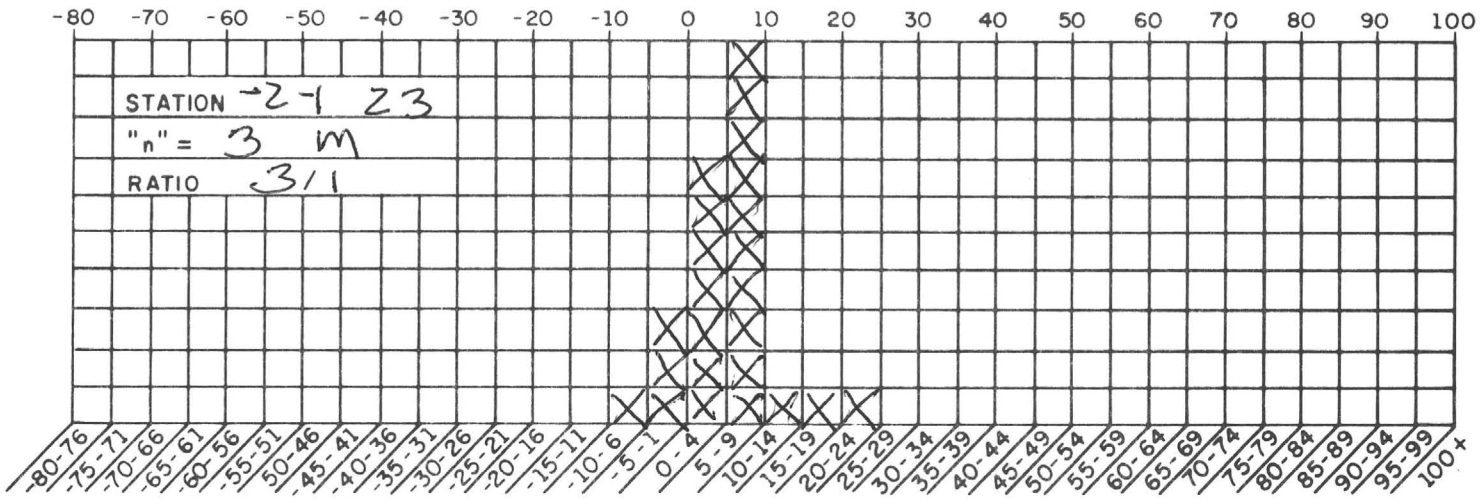




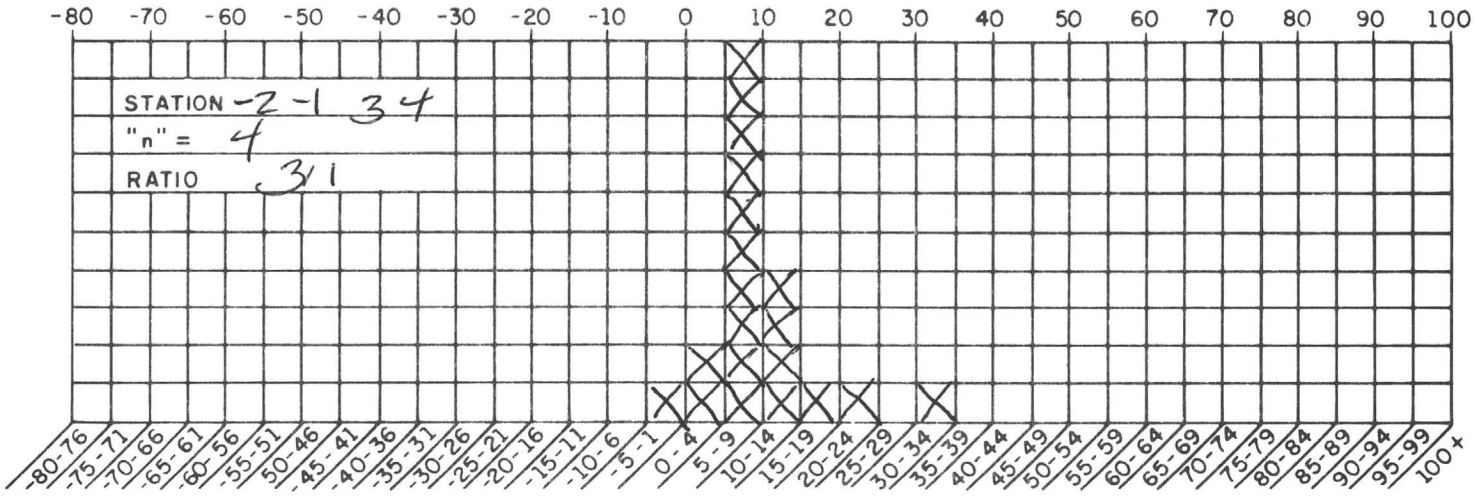
JOB 0237 DATE 8 16 72 LINE SPD 1 NW PAGE 2

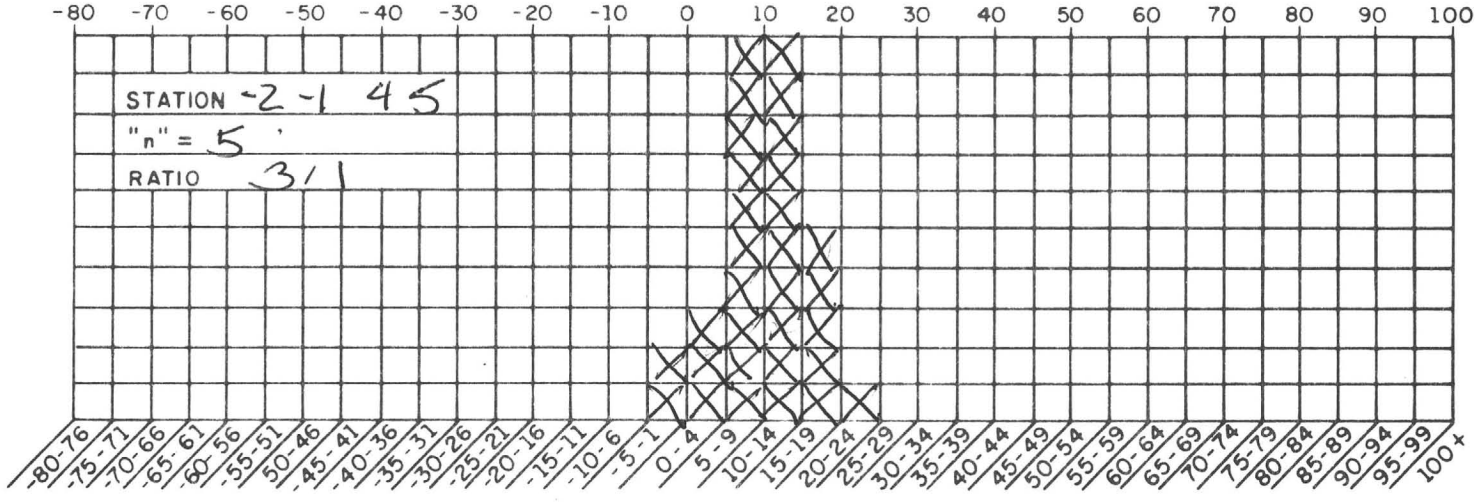


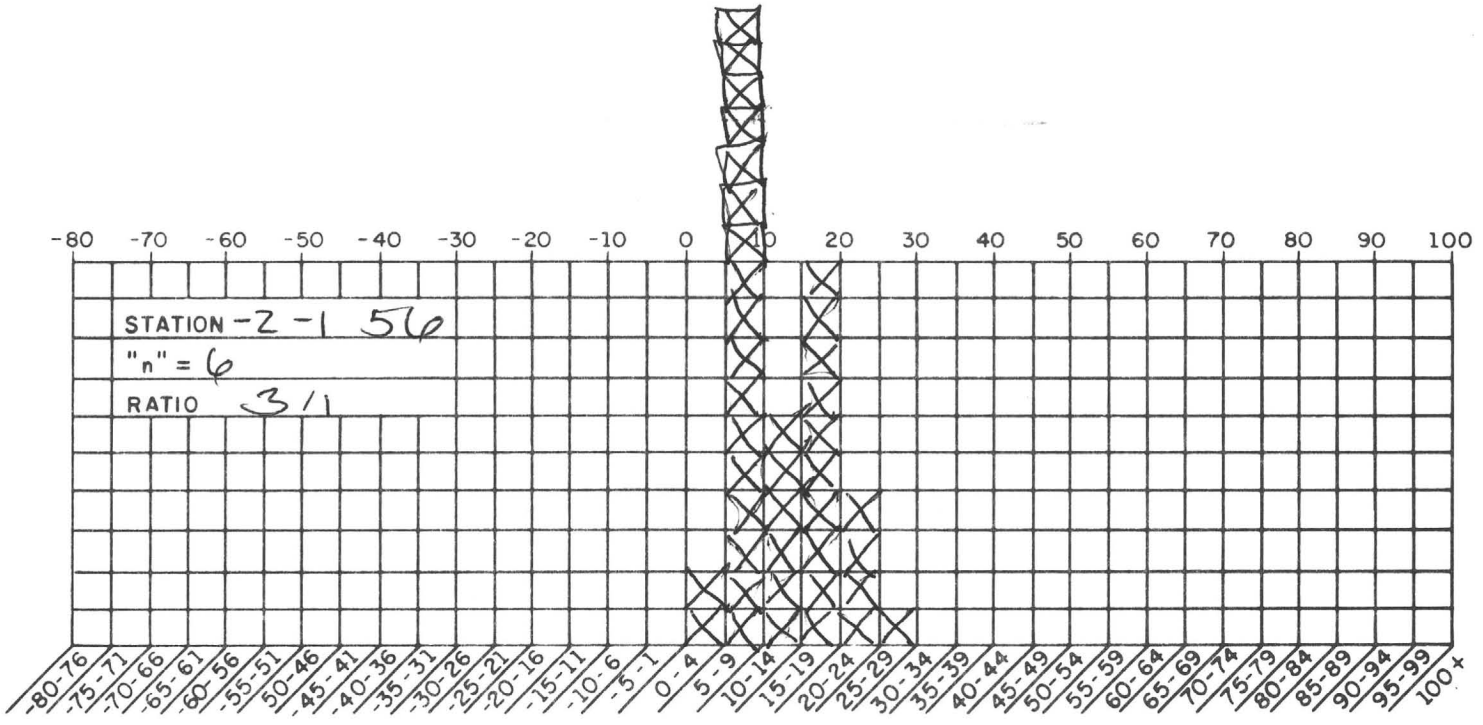




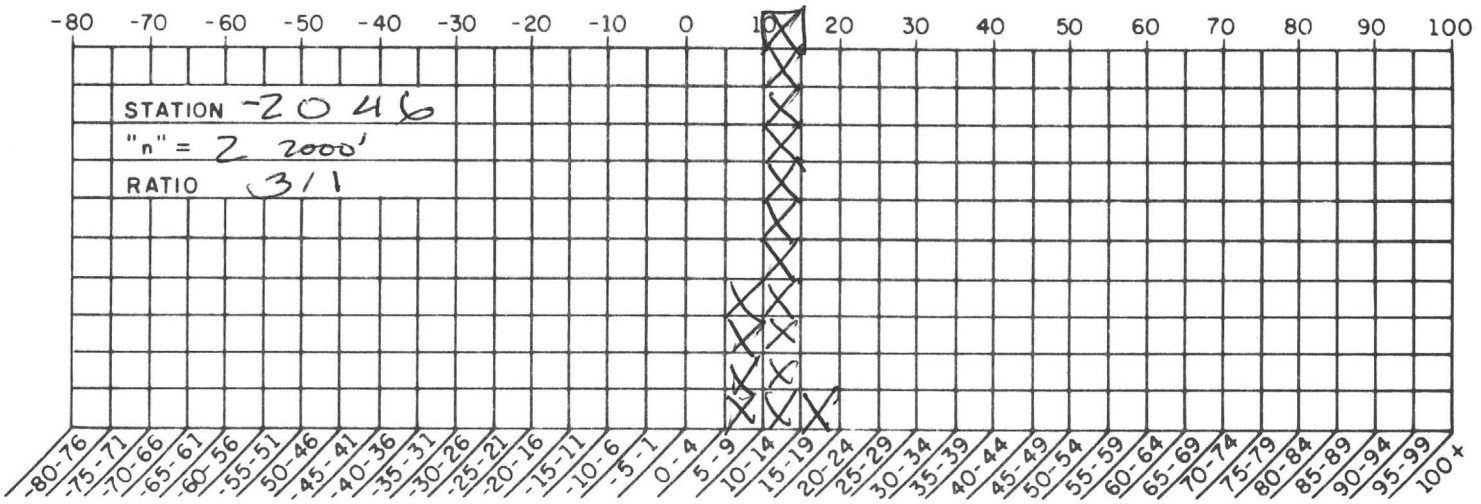
JOB 0837 DATE 8 16 72 LINE 6 SAD 1 NW PAGE 3

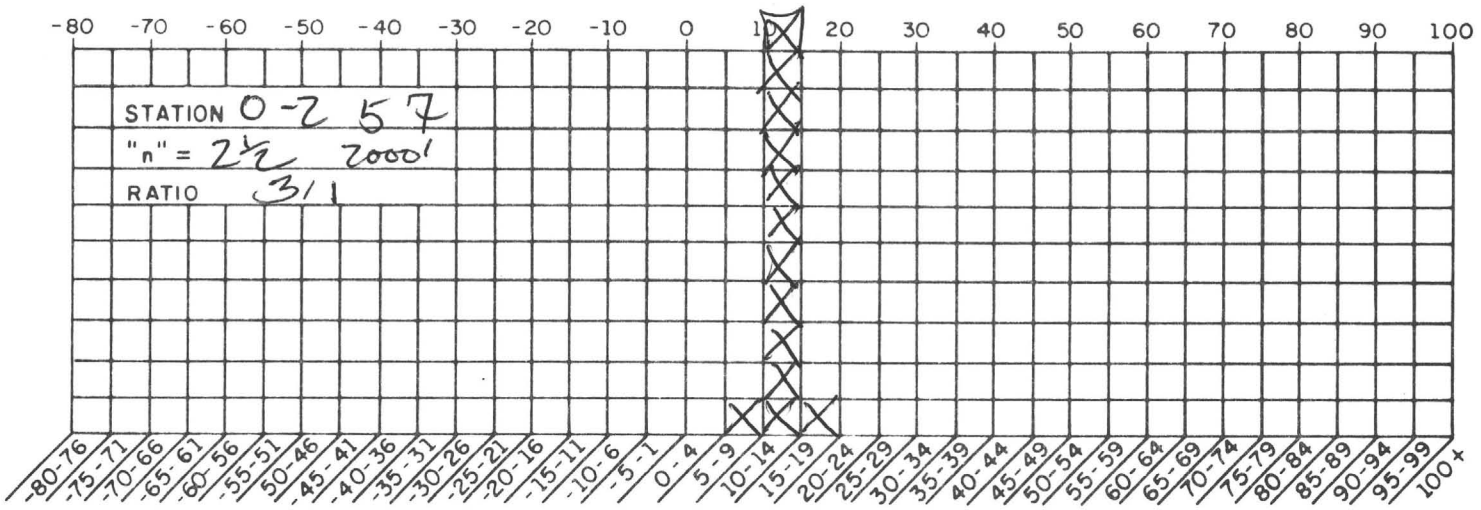


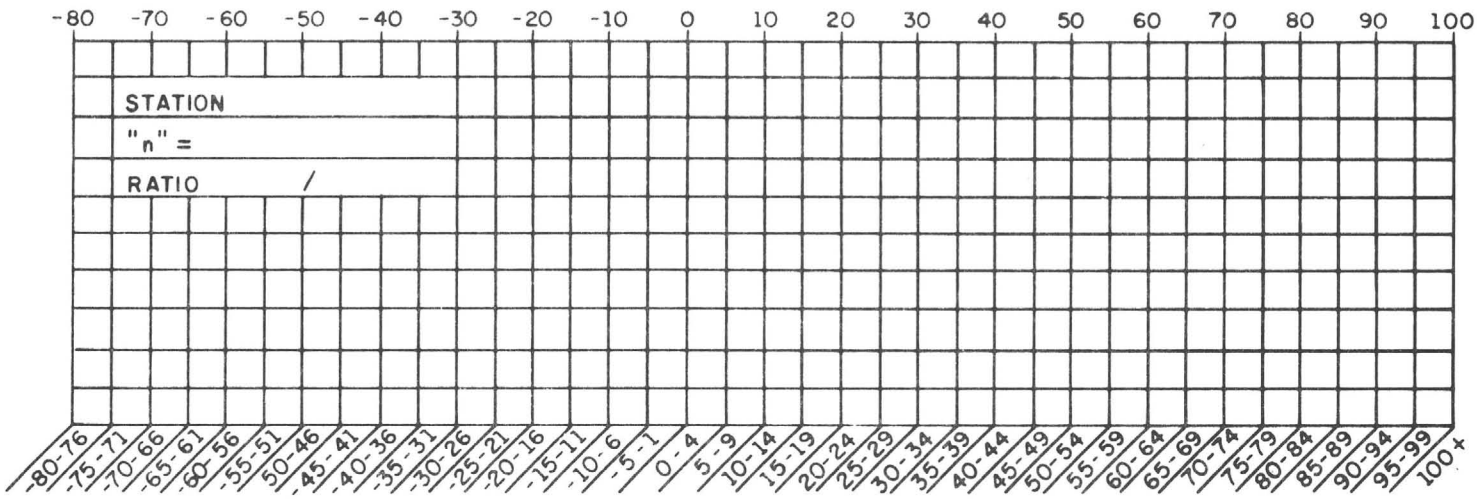




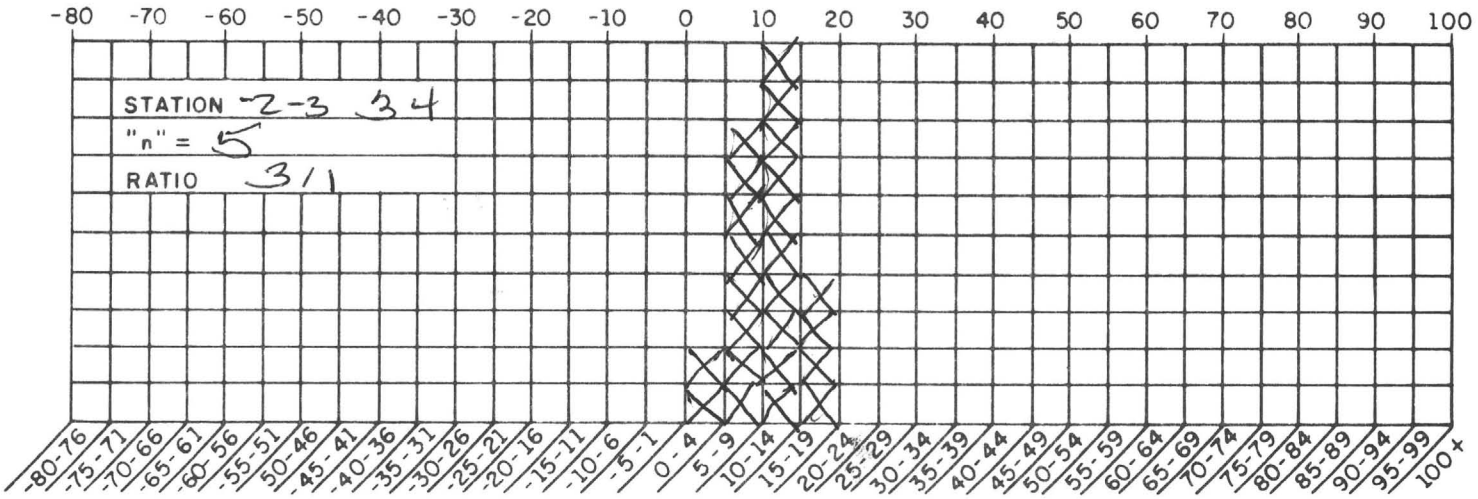
JOB _____ DATE 8 16 72 LINE 6 (SOUTH) PAGE 4

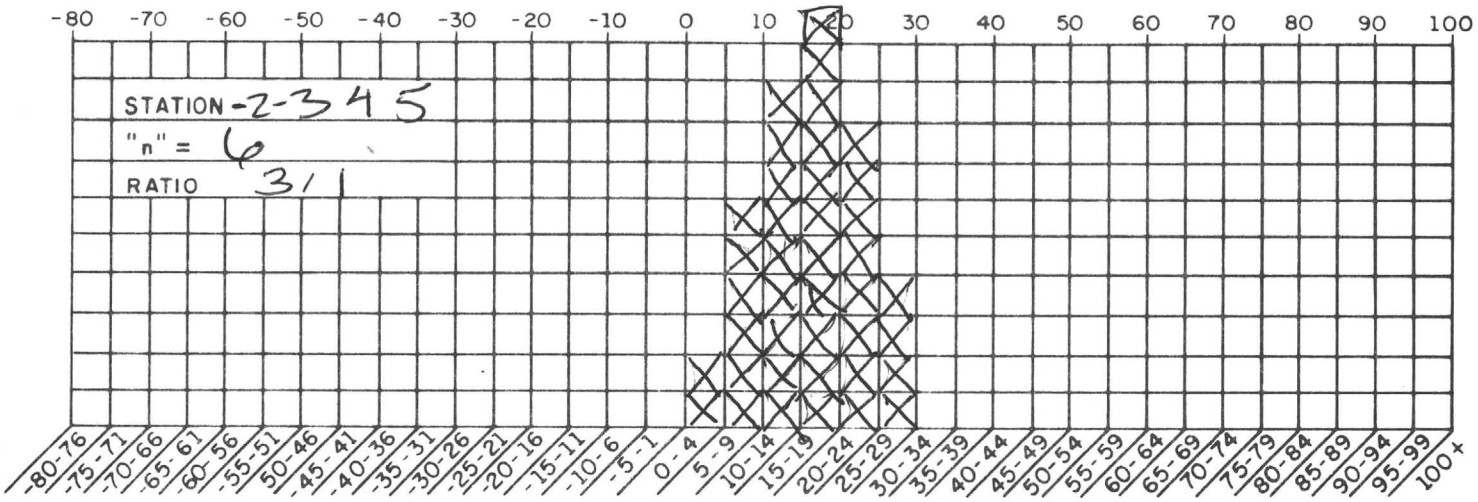


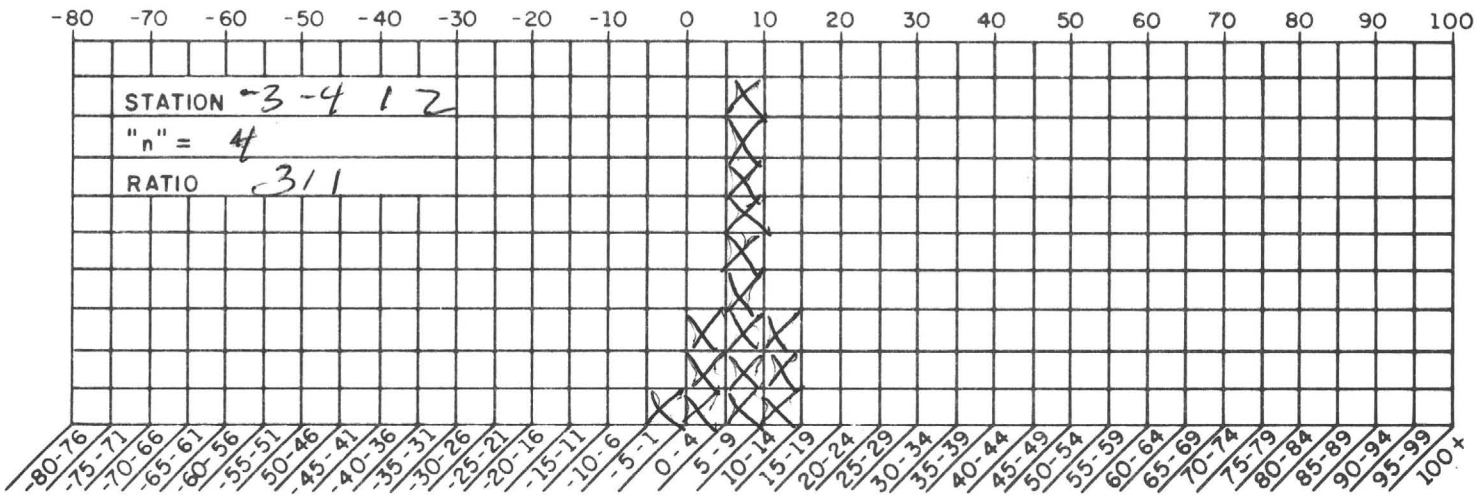




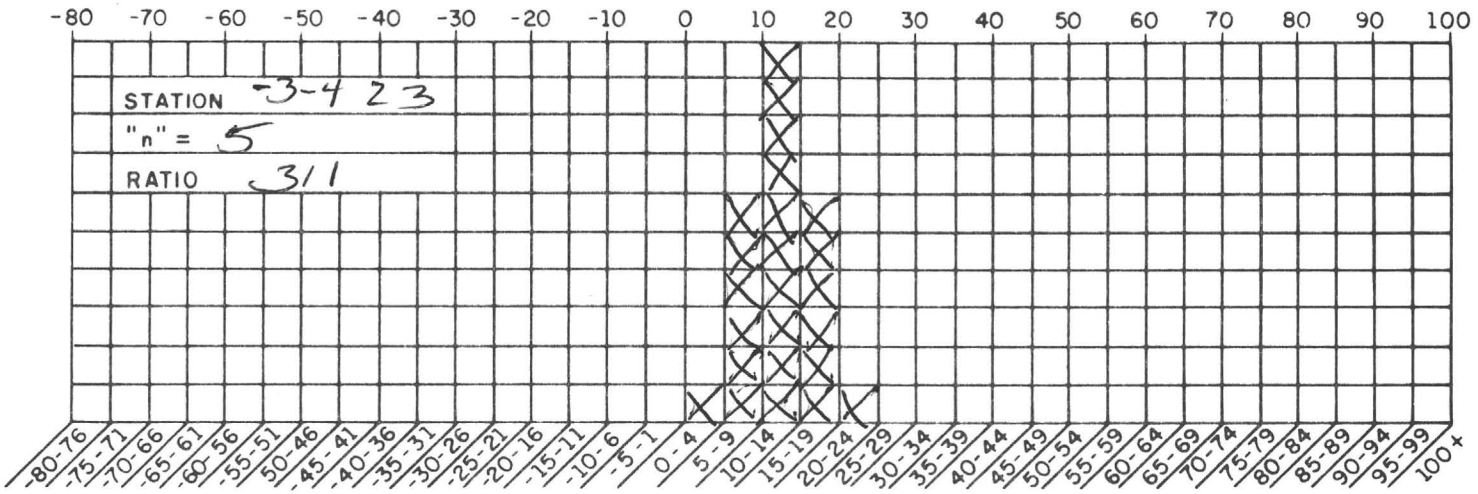
JOB _____ DATE 8 17 72 LINE 6 SPD 1 NW PAGE 6

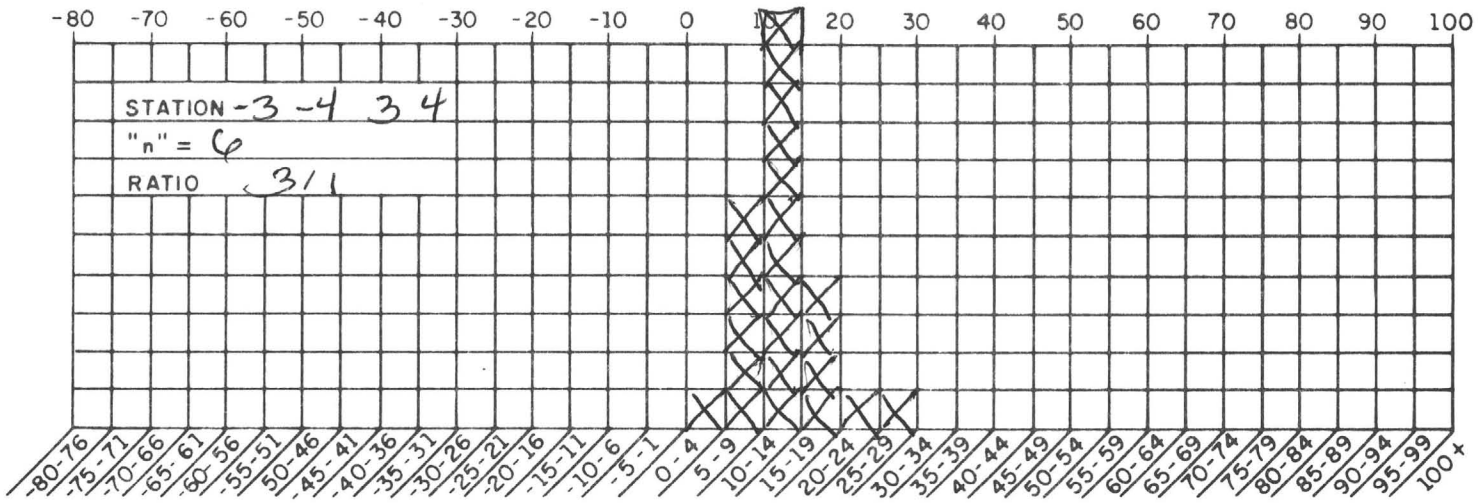


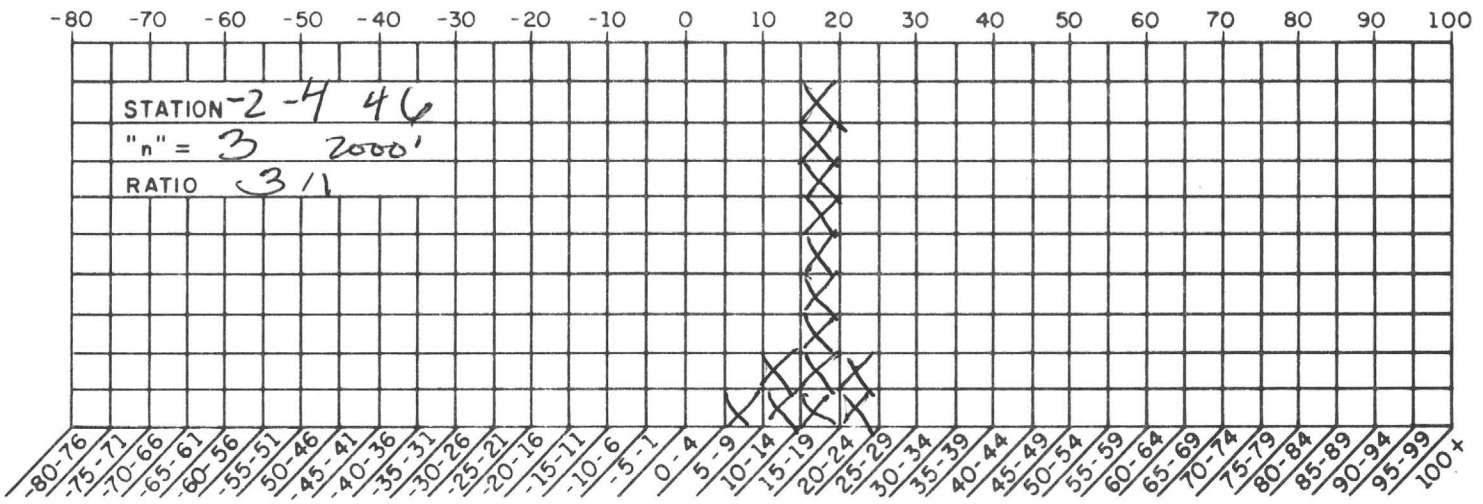




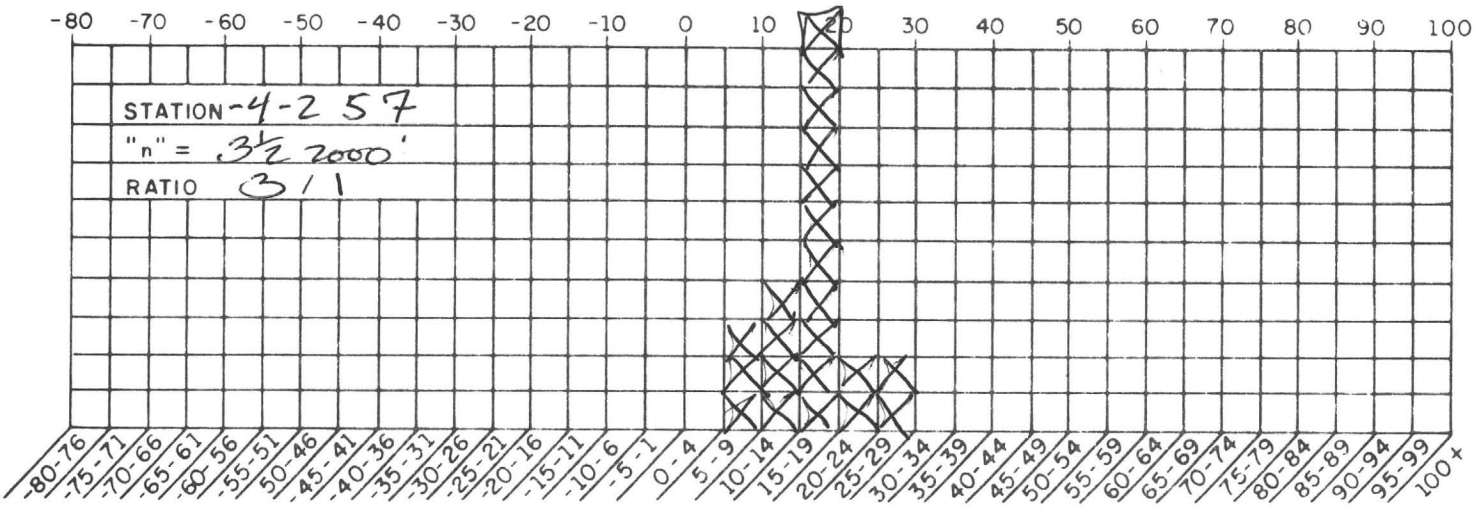
JOB 6237 DATE 8 17 72 LINE 6 SP01 NW PAGE 7

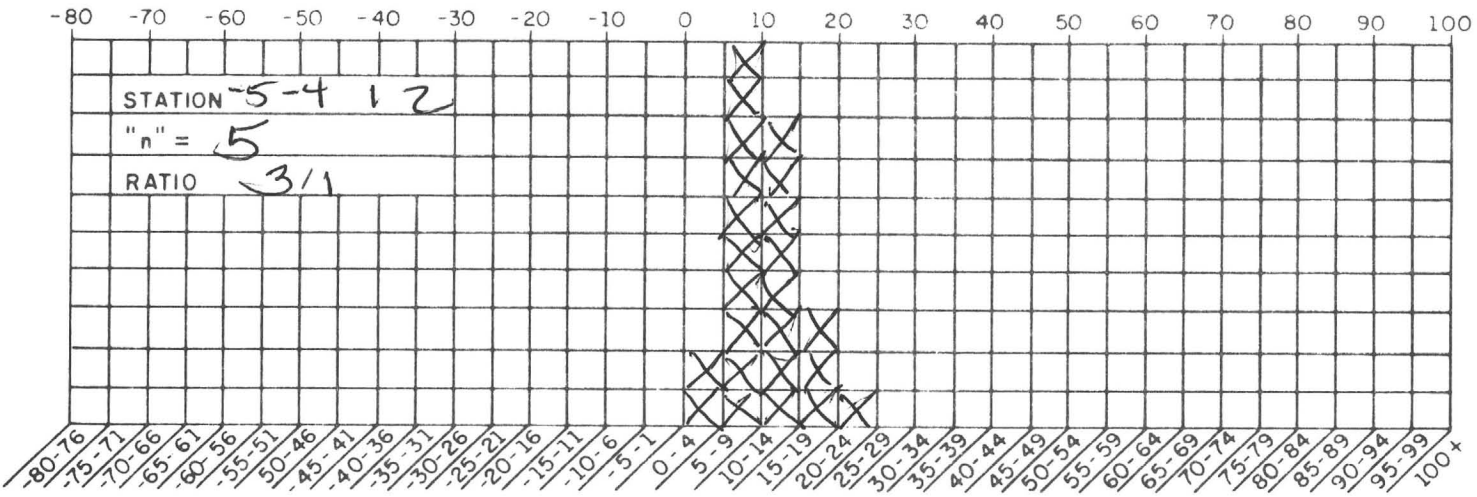


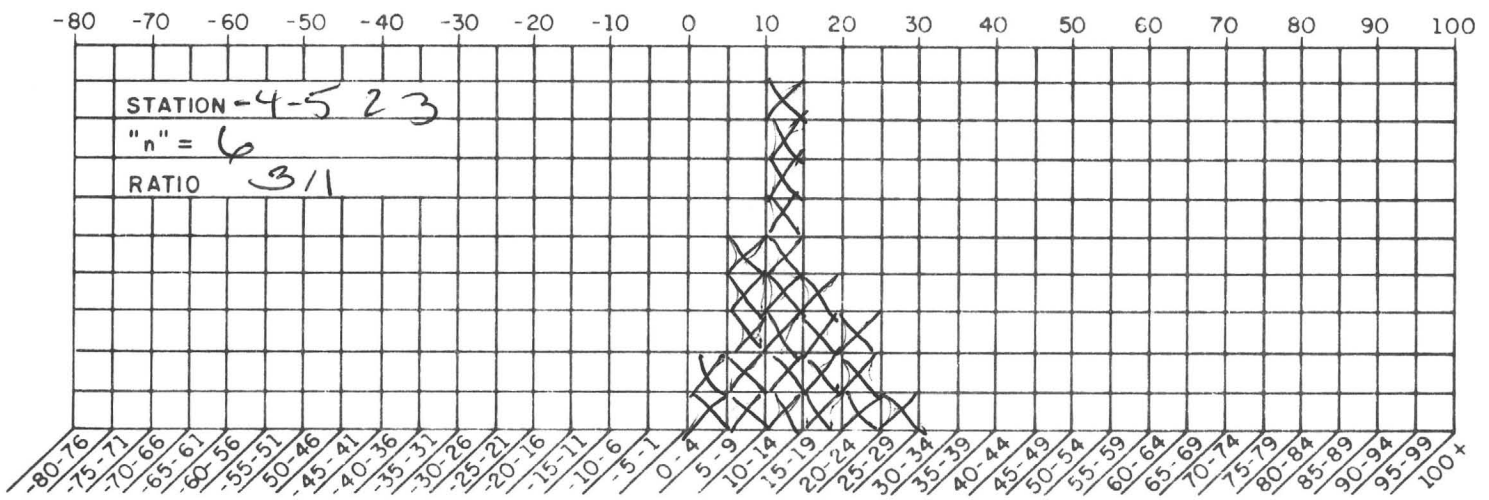




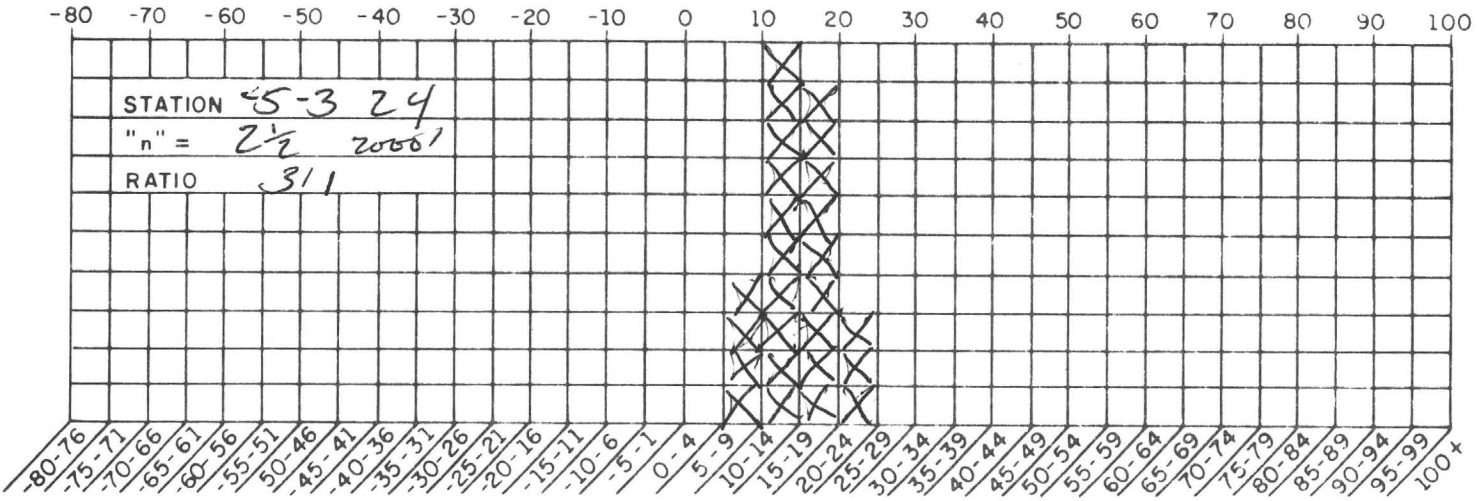
JOB 0237 DATE 8 17 72 LINE 6 SPD I NW PAGE 8

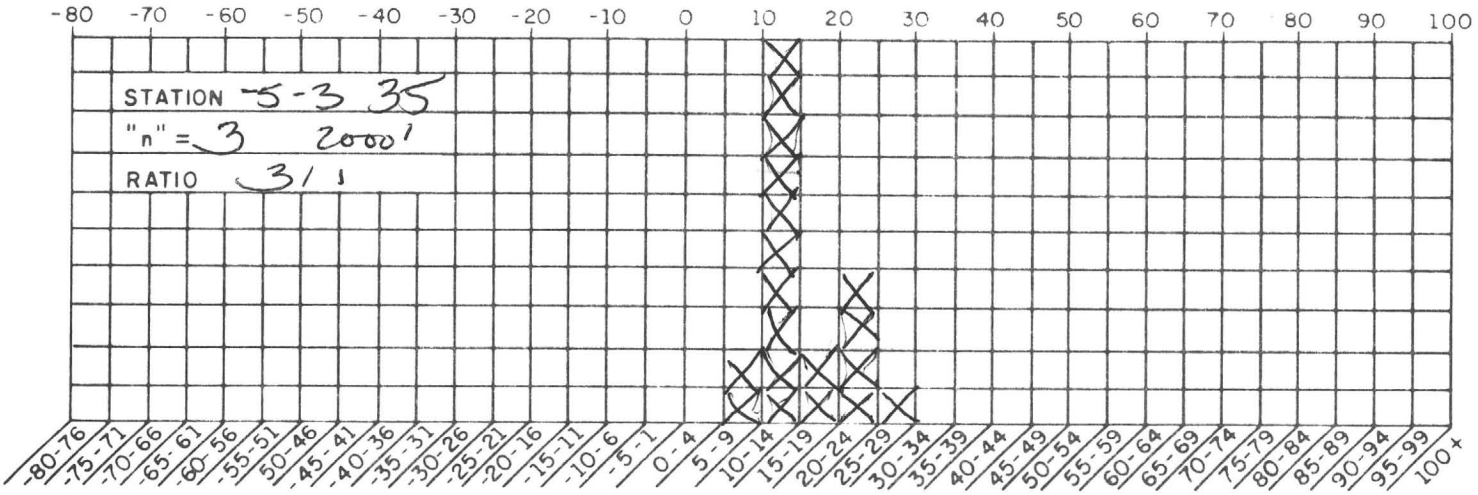


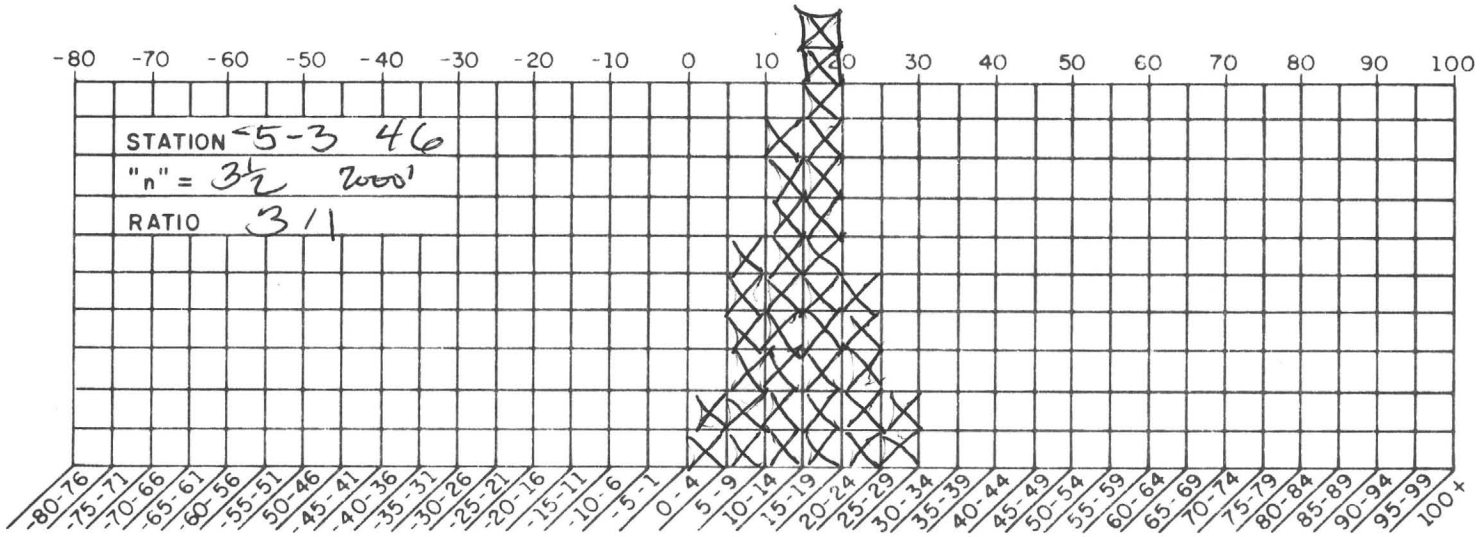




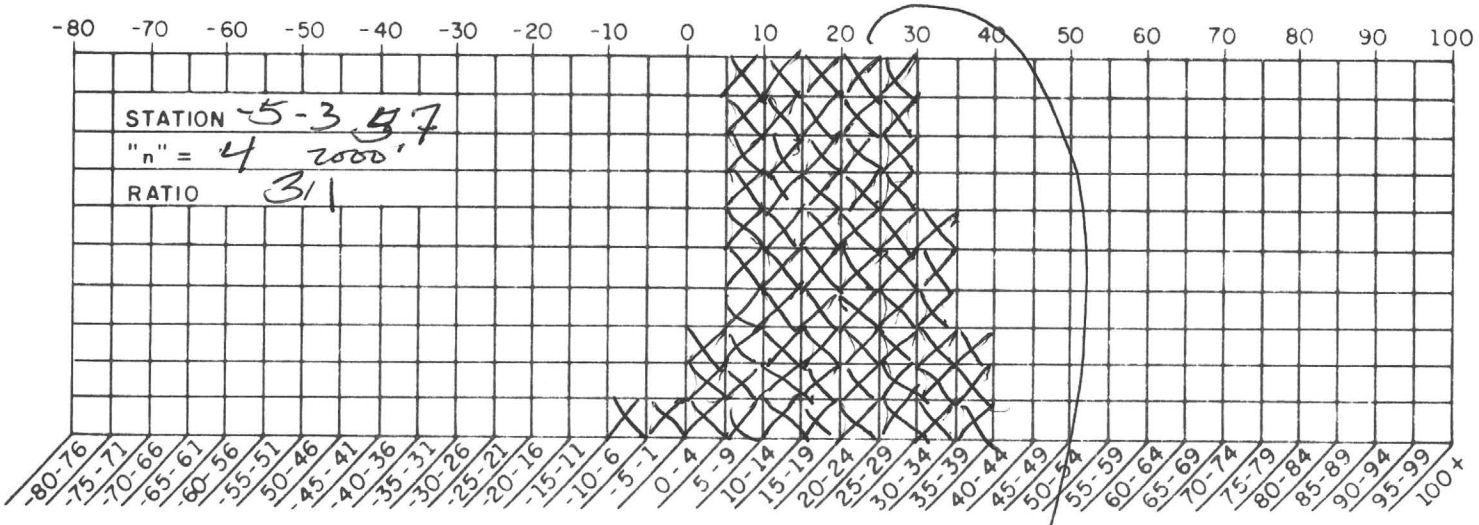
JOB 0237 DATE 8 17 72 LINE 6 SD I NW PAGE 9

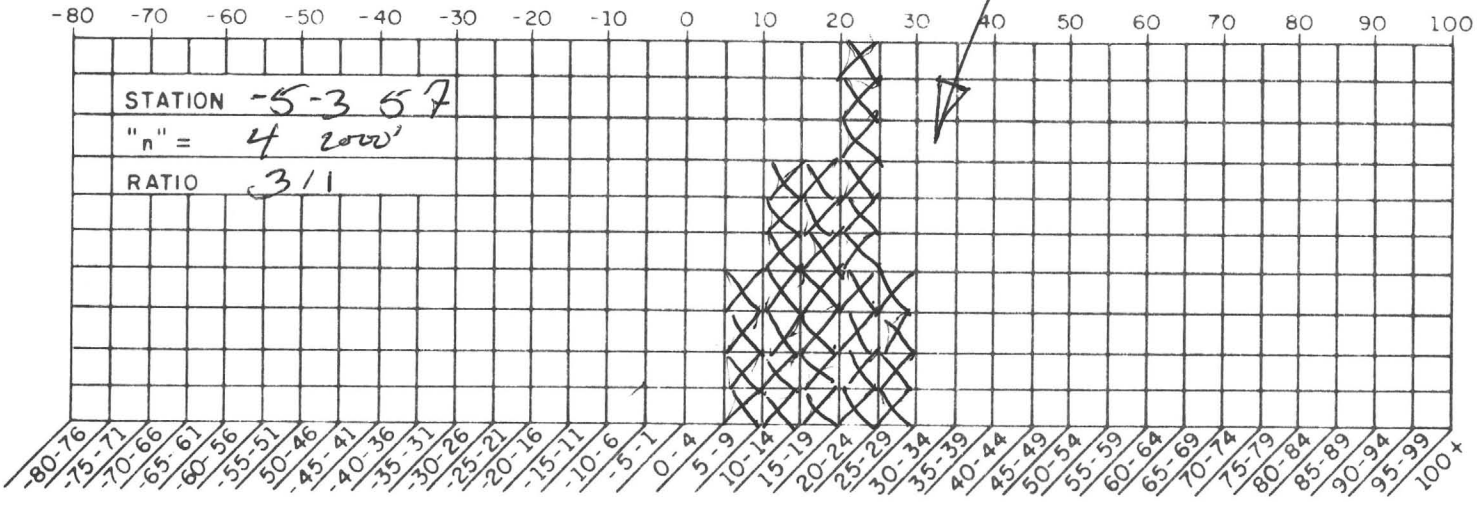


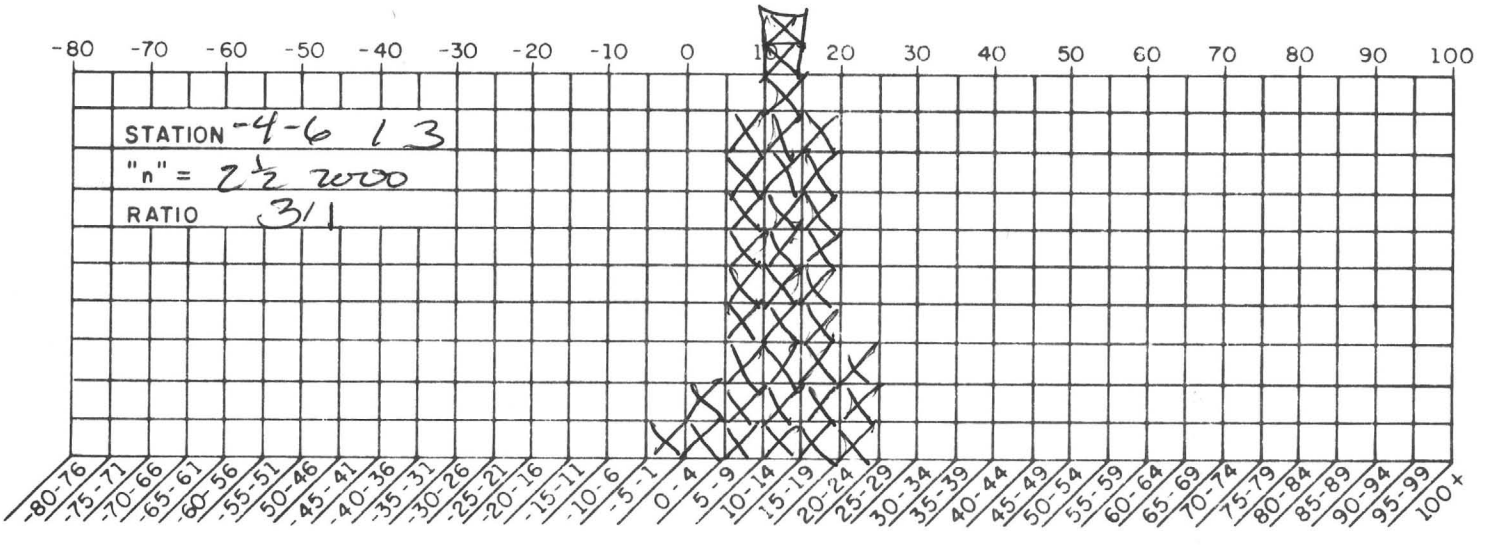




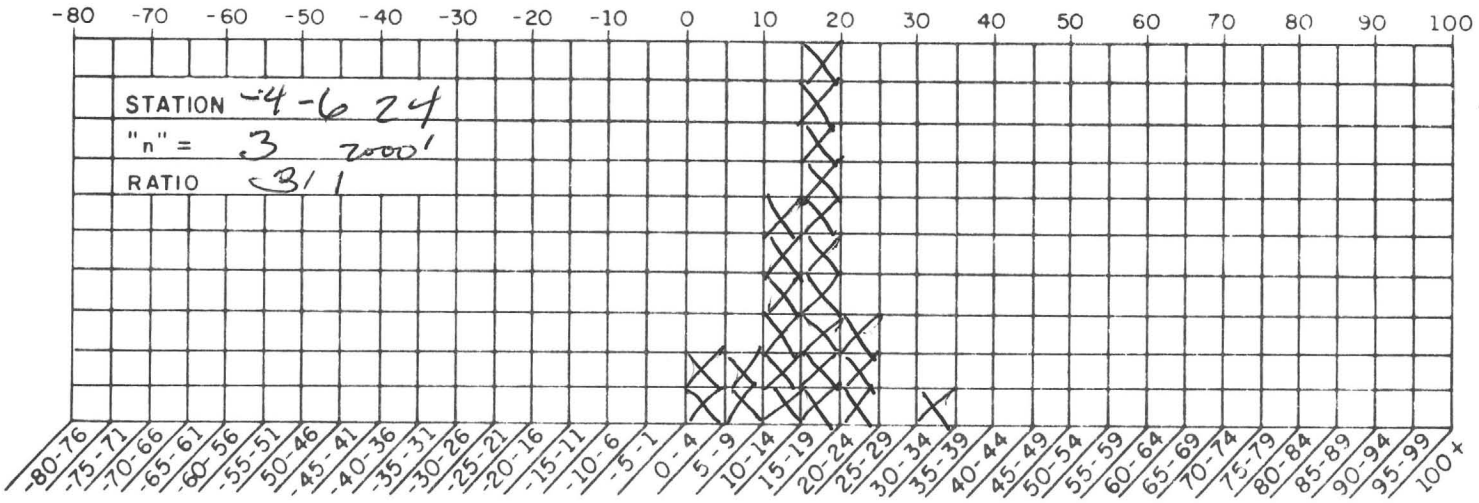
JOB 0237 DATE 8 17 72 LINE 6 SPD1 NW PAGE 10

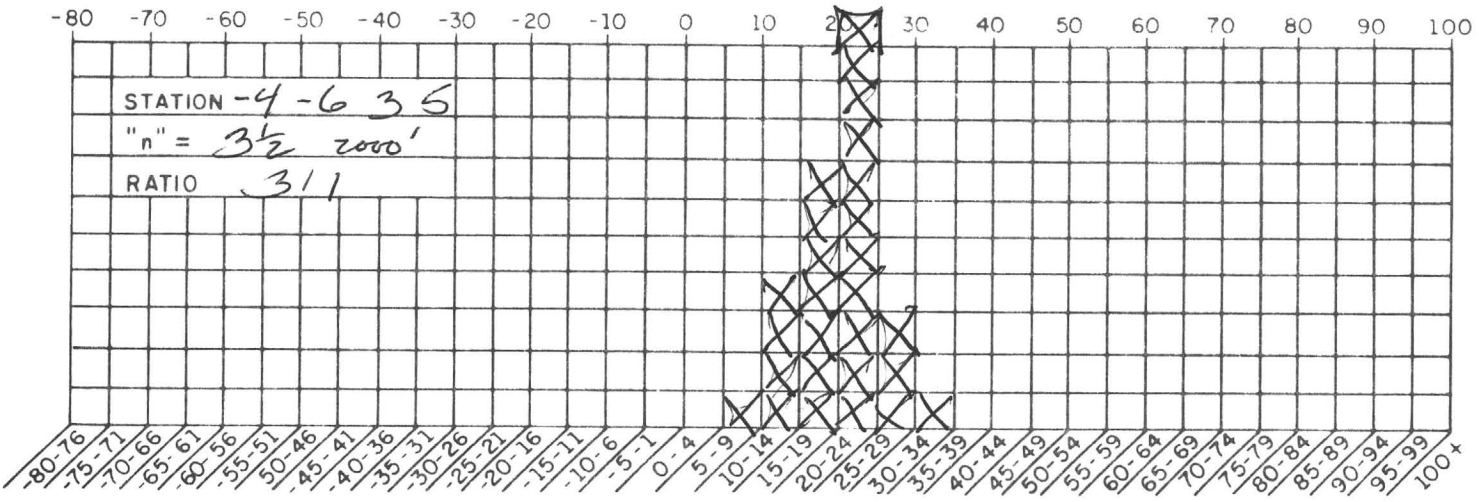


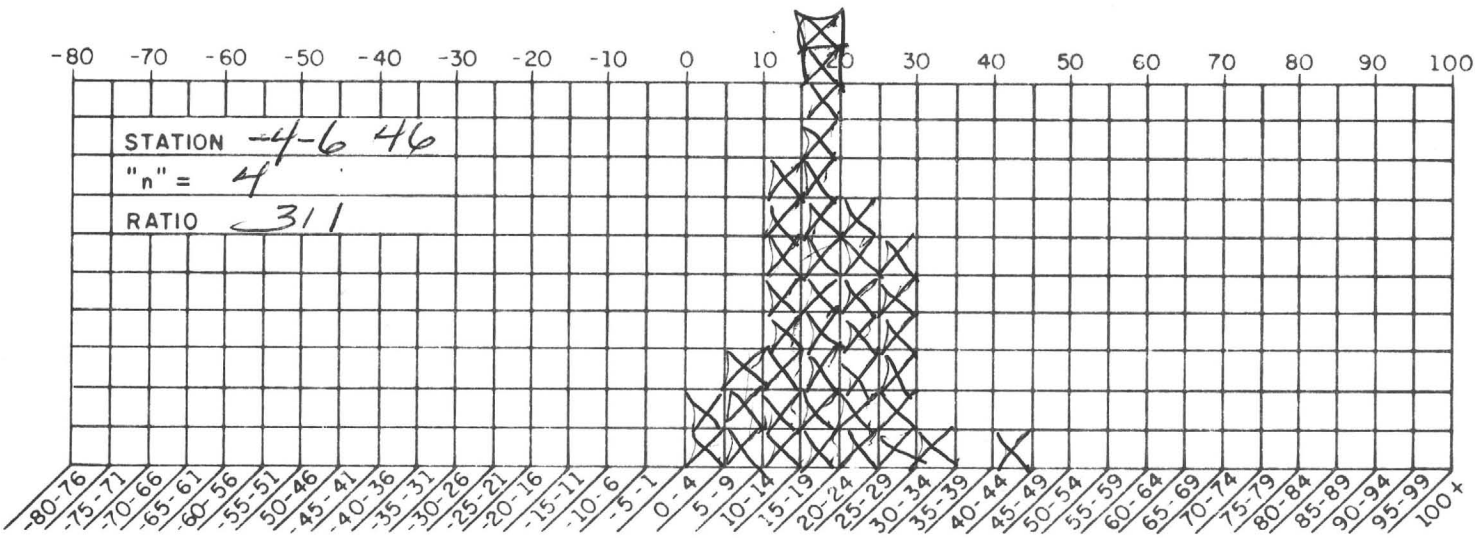




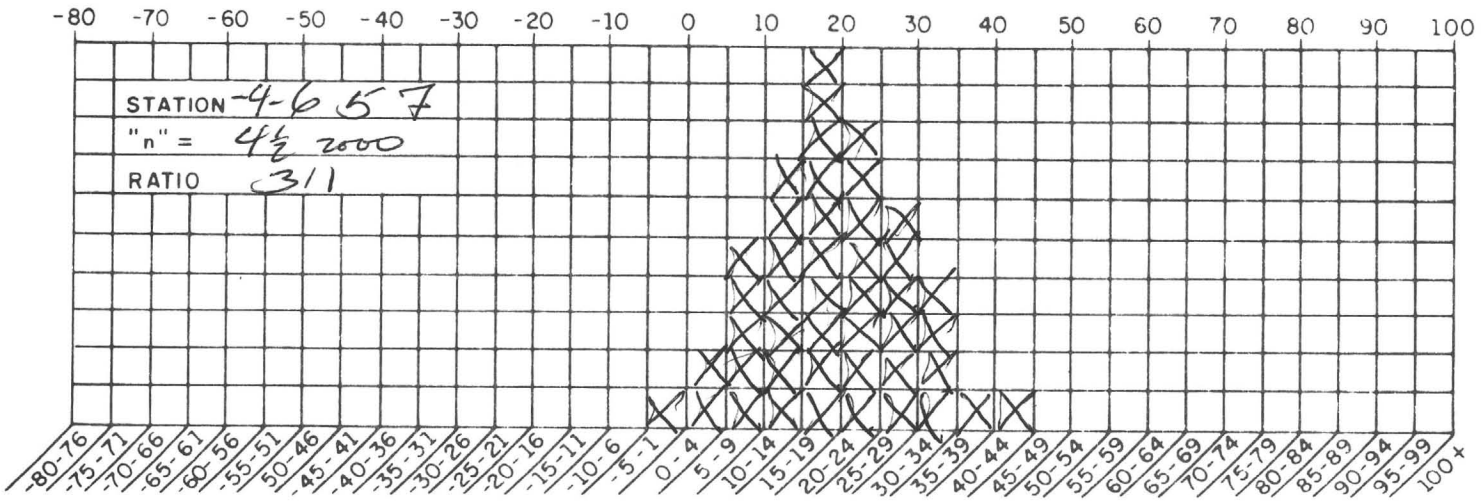
JOB 0237 DATE 8 17 72 LINE 6 SPD1 NW PAGE 11

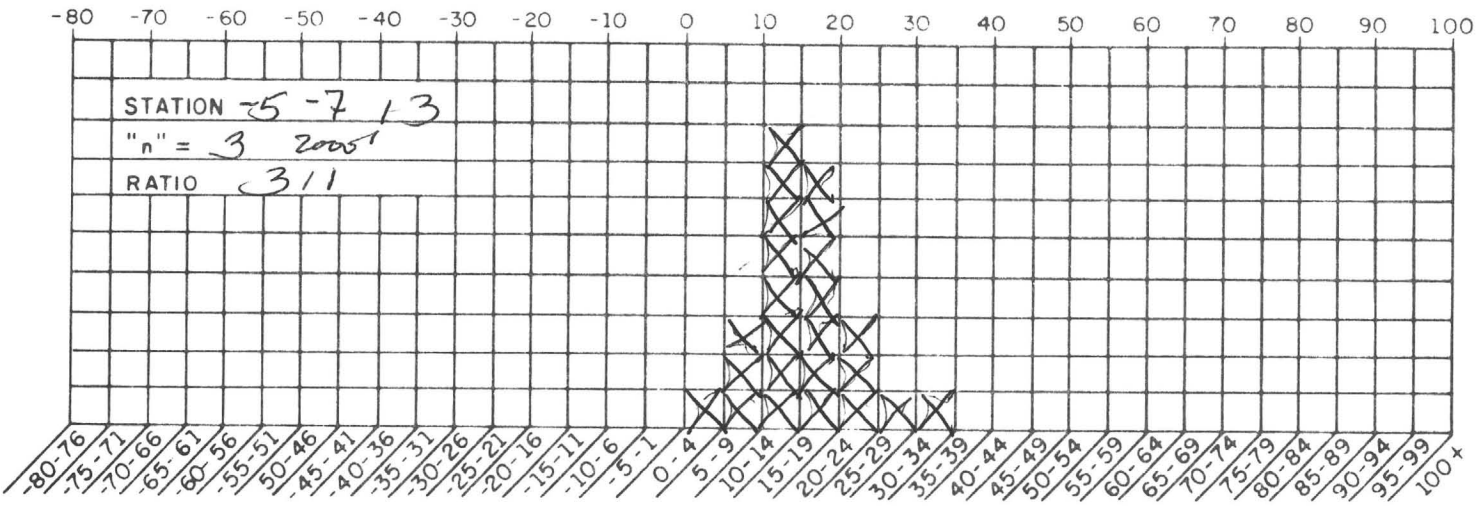


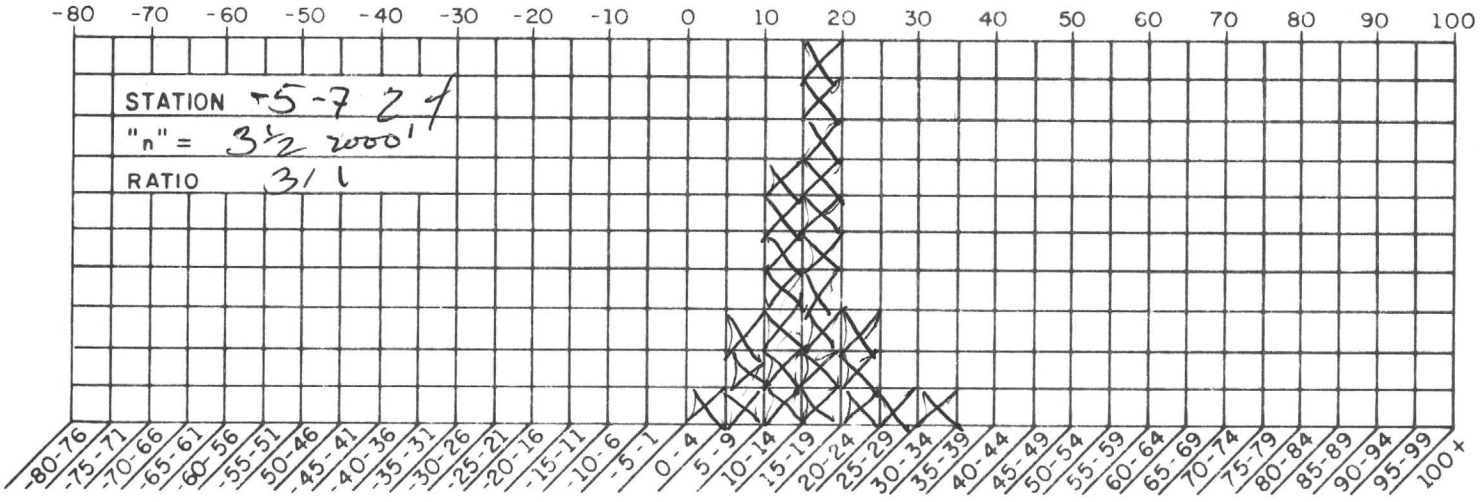




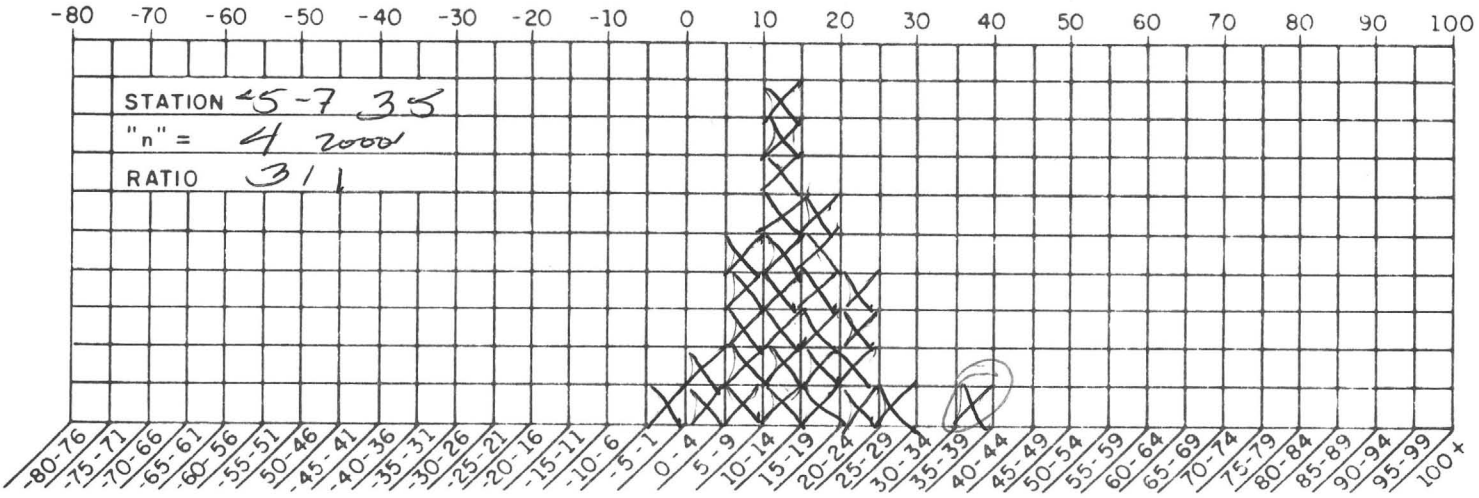
JOB 0237 DATE 8 17 72 LINE 6 SPD 1 NW PAGE 12

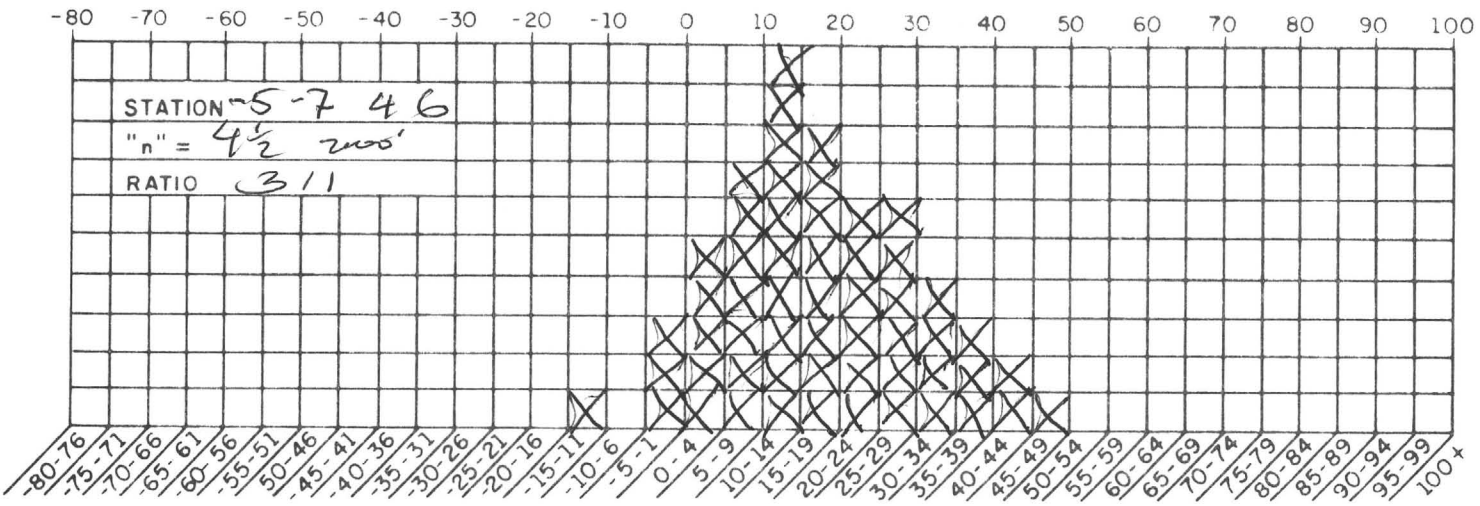


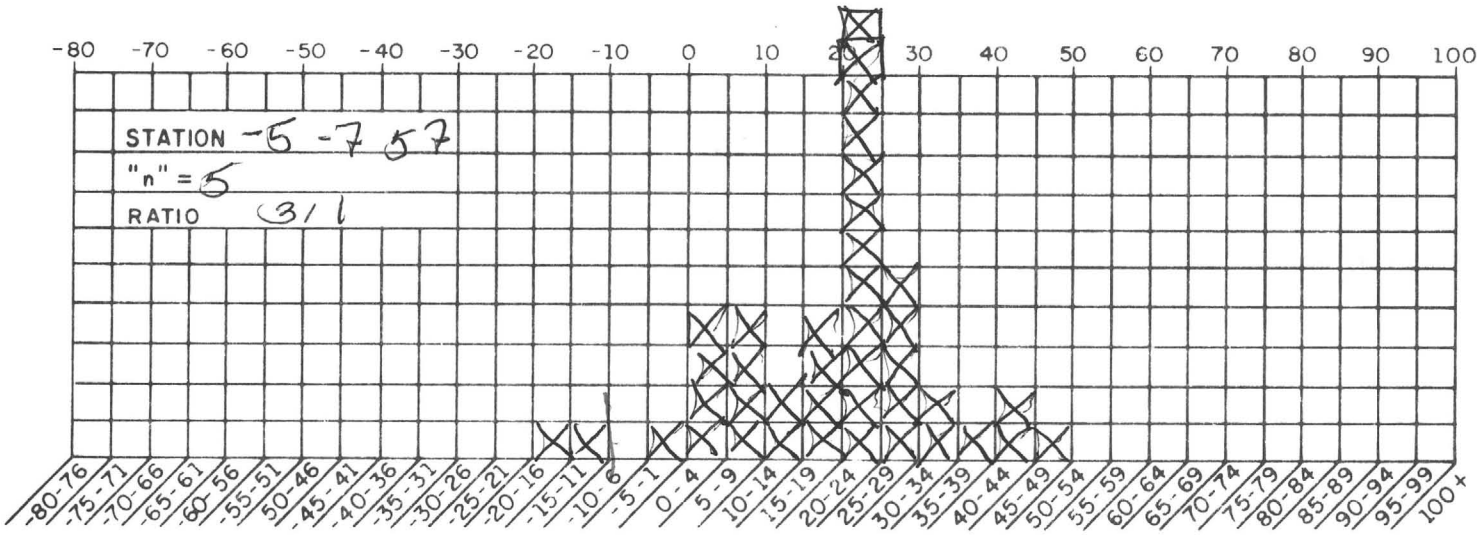




JOB 0237 DATE 8 17 72 LINE 6 SP01 NW PAGE 13

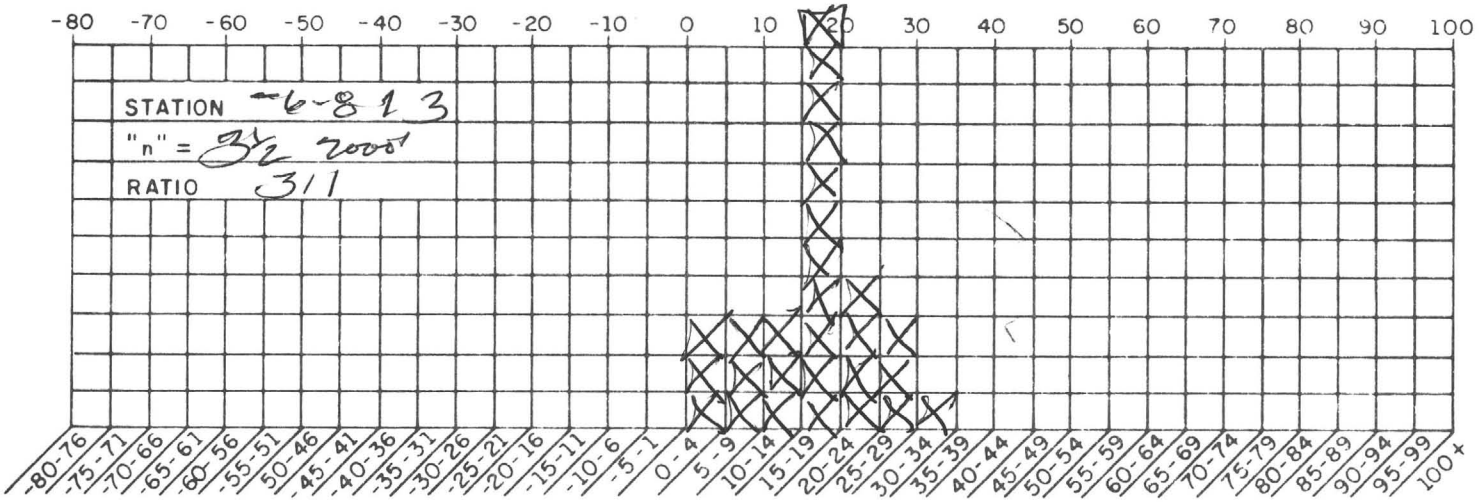


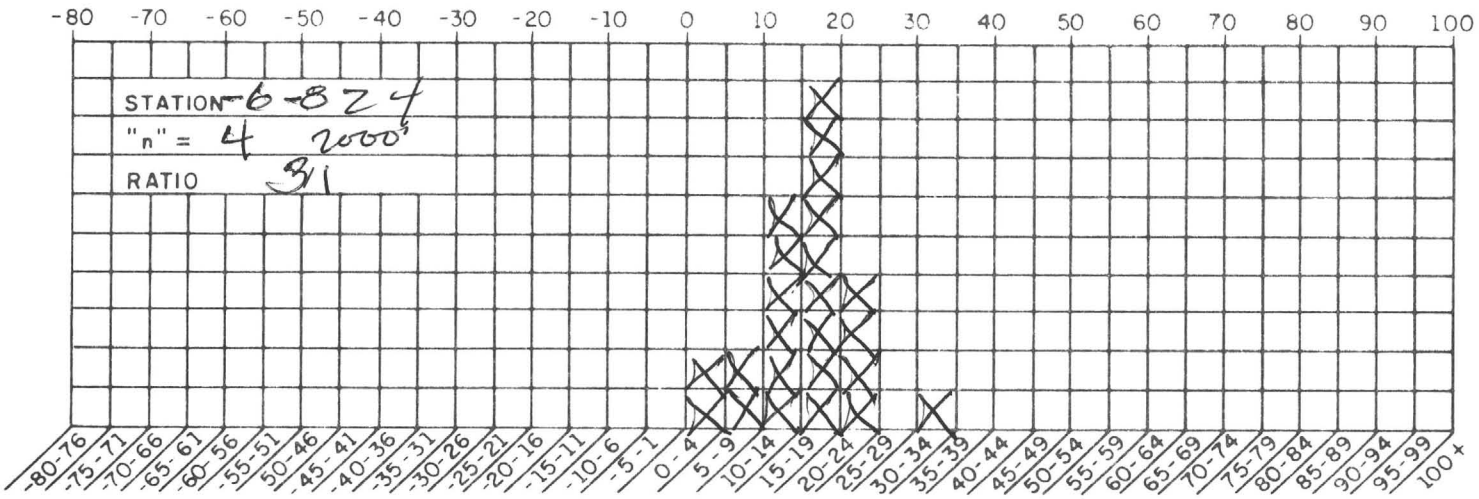


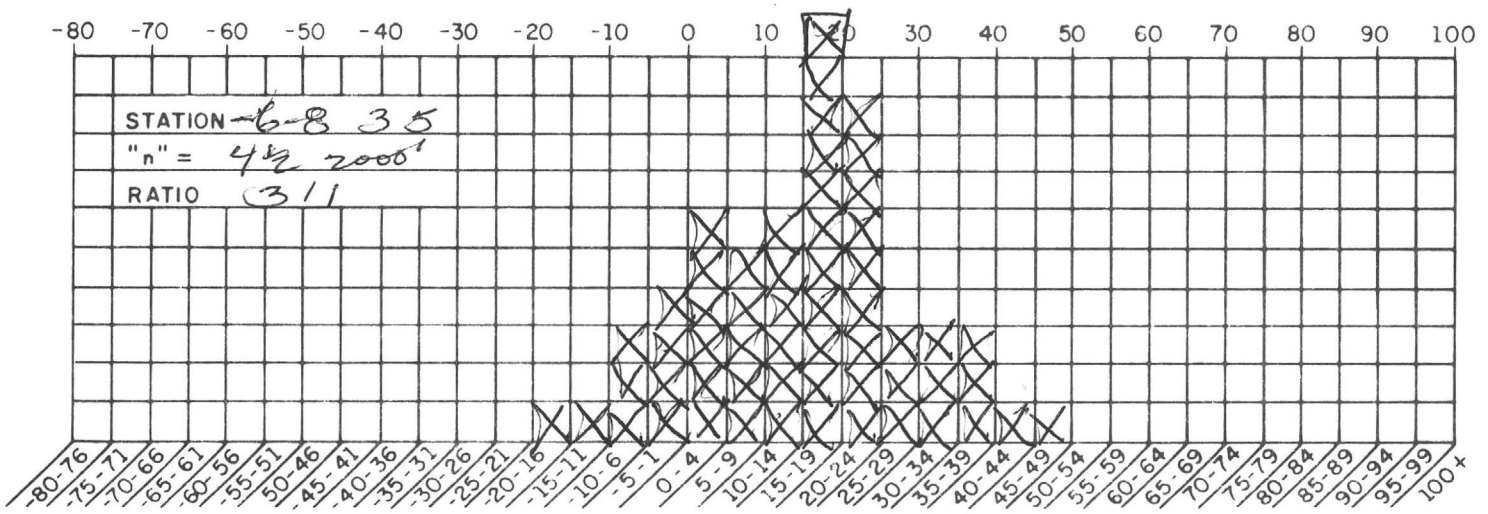


MINING GEOPHYSICAL SURVEYS FIELD DATA HISTOGRAMS

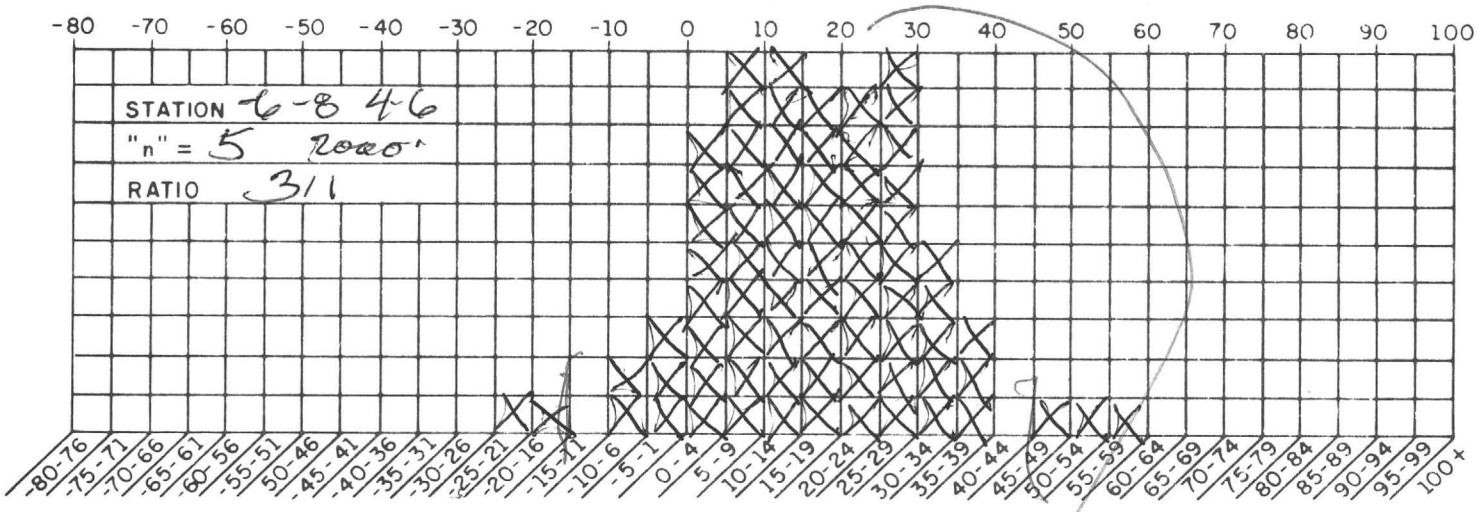
JOB _____ DATE 8 17 72 LINE 6 SPD, NW PAGE 14

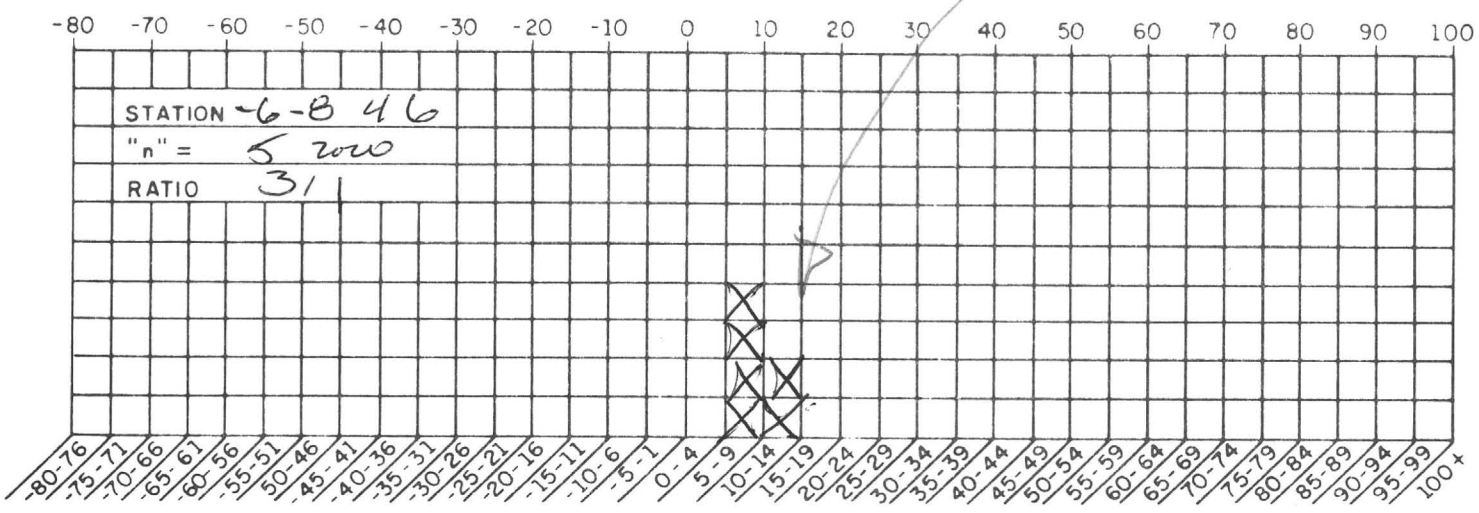


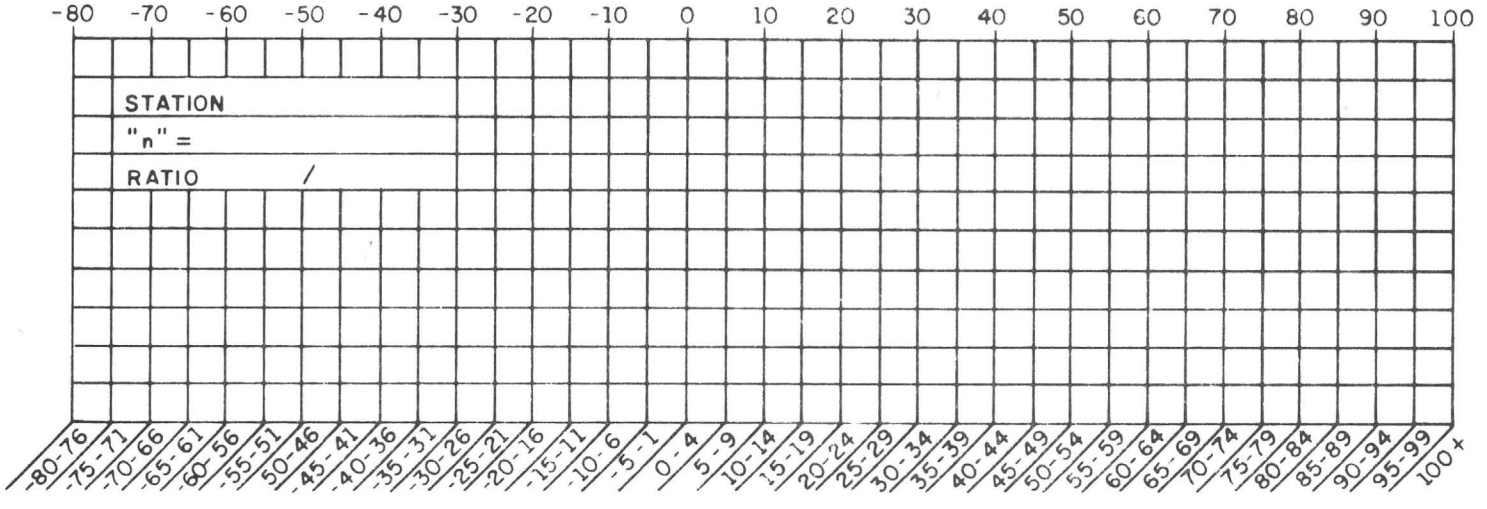




JOB 0237 DATE 8 17 72 LINE 6 SPD 1 NRO PAGE 15







MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-6 NW a=1000 & 2000

Project:	Client:	Date:
0237	ESSEX	8/16/72.

a=1000 TIME	I	a=2000	I COMMENTS
3-4	7.0	4-6	7.0
4-5	7.0	5-7	7.0
5-6	6.0		
6-7	7.0		
2-3	7.0	3-5	7.0
3-4	7.0	4-6	7.0
4-5	7.0	5-7	6.5
5-6	6.0		
6-7	7.0		
1-2	7.0	2-4	7.0
2-3	7.0	3-5	6.5
3-4	7.0	4-6	7.0
4-5	7.0	5-7	6.0
5-6	5.5		
6-7	6.5		
1-2	7.0	1-3	7.0
2-3	7.0	2-4	7.0
3-4	7.0	3-5	6.5
4-5	6.5	4-6	7.0
5-6	6.0	5-7	6.0

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

~~a=1000~~ TIME	I	~~a=2000~~	~~I~~ COMMENTS
~~1-2~~	6.8	1-3	7.0
2-3	7.0	2-4	6.5
~~3-4~~	7.0	3-5	6.0
4-5	6.0	4-6	6.5
		5-7	6.0
8/17/72			
1-2	7.0	1-3	7.0
2-3	7.0	2-4	6.0
3-4	7.0	3-5	6.0
		4-6	7.0
		5-7	6.0
1-2	7.0	1-3	7.0
2-3	7.0	2-4	6.0
		3-5	6.0
		4-6	6.5
		5-7	6.0 n=4
~~1-2~~		1-3	7.0
		2-4	6.0
		3-5	6.0
		4-6	6.5
		5-7	6.0 n=4½

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-6 NW

Project:	Client:	Date:
0237	ESSEX	8/17/72

TIME a=2000	I	VA	COMMENTS
1-3	6.8		
2-4	6.5		
3-5	6.0		
4-6	6.5		
5-7	6.0		n=5
1-3	7.0		
2-4	6.5		
3-~~5~~	6.0		
4-6	6.5		
~~5~~-7	6.0		n= 5½

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 5E	N43°E	2000. 1000.	8/18/72	DIPOLE-DIPOLE	0237		SADOWSKI	484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫σ	my/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		6-7	4-5	1	100.	1.65	7.0	136	1	1		5	4	4	4					4	
		6-7	3 4	2	30.	1.52	7.5	140	1	1		4	4	5	6	4				5	
		5 6	3 4	1	100.	2.10	7.5	161	1	1		3	3	4	3	3				3	
		5 6	2 3	2	30.	1.25	7.6	123	1	1		6	6	4	5	6	4			5	
		6 7	2 3	3	10.	1.30	7.6	107	1	1		13	4	6	8	6	13	11	7	9	
		6	5	8	15	.3	8	14		6		10	6	10							
		6 7	1 2	4	3.	1.70	7.5	98	1	1		24	20	13	27	2	22	15	19	19	
		17	10	20	14	.15	12	11		15		22	8	29	16	26	2	26	18		
		21	15	18	28	.															
		5 6	1 2	3	10.	1.05	7.5	81	1	1		12	16	9	17	5	13	6	8	11	
		6	16	3	16	.6	9	11		9		14	8	15	6	10	10	15	15		
						.															
		5 7	2 4	½	100.	3.05	7.5	142	1	1		4	3	4	4					4	
			1 3	1	30.	2.35	7.5	108	1	1		6	6	6	8	6				6	
						.															
		7 8	5 6	1	100.	2.65	5.5	177	1	1		3	3	4	3					3	
			4 5	2	30.	1.25	7.0	122	1	1		5	2	6	4	3	4	4		4	
			3 4	3	10.	1.80	7.5	130	1	1		6	5	8	3	11	3	8	8	6	
		2	9	6	8	.															
			2 3	4	3.	2.60	7.0	128	1	1		12	3	6	18	6	22	4	16	10	
		8	16	5	7	.15	15	5		13		16	6	4	13	6	7	9	8		
		6	10	12	16	.2	14	9		19											
			1 2	5	3.	1.05	7.5	24	1	1		18	14	47	2	36	24	22	18	25	
		23	26	26	13	.43	58	10		14		30	58	8	18	42	39	40	6		
		-12	38	57	8	.14	14	32		22		30	21	8	11	27	16	40	42		
		32	50	-17	18	.22	-18	36		-8		24	0	8	24	32	27	39	32		
		30	40	-4	10	-.14	-4	26		29		28	25	32	16						
						.															
		6 8	3 5	½	30.	1.65			1	1		6	6	6							
			2 4	1	10.	2.65			1	1		16	8	6	6	10	9	12	12		
		-15	10	8	8	.11	7	8													
		-	1 3	1½	10.	1.10			1	1		14	20	15	11	19	16	14	14		
		-20	16	14	28	.18	20	23		22		19	15	12	16	14	16				

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 SE	N43°E	1000. 2000.	8/18/72					484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		6-8	3 5	½	100.	2.55	6.5	141	1	1		4	5	4	5	5				5	
			2 4	1	30.	2.95	7.5	136	1	1		6	8	6	7	6	4	7		6	
			1 3	1½	10.	3.00	7.5	101	1	1		14	11	12	12	11	12			12	
		8-9	6 7	1	100.	2.12	7.0	174	1	1		6	6	6						6	
			5 6	2	30.	1.45	5.5	182	1	1		4	7	7	6	6				6	
			4 5	3	10.	1.40	7.0	115	1	1		4	4	5	8	12	5	3	6	6	
		4	7																		
			3 4	4	3.	3.05	7.5	140	1	1		6	14	9	12	16	4	0	5	9	
		25	16	15	10	.6	0	15		9		3	-1	8	2	12	12	18	13		
		8	2	16	9	.9	6														
			2 3	5	3.	1.50	7.5	121	3	1		3	2	2	4	5	6	6	7	15	
		4	7	8	7	.7	6														
			1 2	6	1.	2.02	7.5	87	3	1		8	20	-4	11	20	4	1	4	17	
		12	4	8	10	.1	13	6		-4		-3	9	0	9	6	2	0	14		
		8	16	-2	8	.10	-4	3		4		4	-1	-4	10	16	8	0	5		
		7-9	4 6	½	300.	1.52	7.5	219	1	1		8	8	8						8	
			3 5	1	30.	2.40	6.5	127	1	1		8	9	7	8	8	8			8	
			2 4	1½	30.	1.20	7.0	130	1	1		12	12	10	[illegible]	16	15	8	17	11	
		9	6	13	14	.11	16	8		14		14	10	11	12						
			1 3	2	10.	1.72	7.5	105	1	1		28	28	22	40	24	14	23	23	23	
		26	0	29	19	.16	16	24		26		20	16	32	19	32	22	26	20		
		9-10	6 7	2	30.	2.90	7.0	286	1	1		11	8	10	7	9	10			9	
			5 6	3	10.	3.05	5.5	319	1	1		10	6	6	8	8	10			8	
			4 5	4	10.	1.15	6.5	203	1	1		7	6	5	14	16	18	4	19	10	
		0	7	14	6	-1	16	4		19		6	14	12	6	19	21	17	12		
		9	10	19	0	.12	12	9													
			3 4	5	3.	3.05	7.5	295	3	1		4	8	0	7	2	0	5	3	12	
		-2	6	3	3	.6	0	7		0		4	5	2	5	6	0	12			
			2 3	6	3.	1.75	7.5	265	3	1		10	14	-1	10	0	6	10	10	[illegible]	19
		7	1	4	4	.7	0	7		4		4	8	6	12	14	10	7	2		

.575
.18
1.26
2.3
3.25
5.75
8.2
11.5
15.5
20.1
26.

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 3

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 SE	N43°E	100 00 / 200 00	8/18/72		0237			4 84

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		8-10	5 7	½	300.	1.15	6.5	191		1	1	6	8	7	7	7				7	
			4 6	1	100.	1.20	7.0	197		1	1	8	8	8	8					8	
			3 5	1½	30.	1.30	6.5	151		1	1	4	12	6	7	10	8	6	9	10	
		12	8	6	15	.8	14	9		12	12	4	14	10	9	14					
			2 4	2	10.	2.70	7.5	166		1	1	12	8	18	12	22	8	10	27		

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 SE	N43°E	2000	8/19/72	DIPOLE-DIPOLE	0237		SADOWSKI	494

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	mv/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		8 6 10	2 4	2	10.	2.70	7.5	166	1	1		11	20	20	13	14	21	22	14	14
		6	18	22	9	.14	6	11		16		13	6	17	14	19	6	12	15	
		17	9	12	12	.														
			1 3	2½	10.	1.35	7.5	135	3	1		11	5	7	7	4	8	4	4	20
		6	6	4	10	. 8	8	4		8		7	5	8	6					
						.														
		10-11 6 7	3		10.	2.35	7.0	173	1	1		13	12	11	12	12				12
		5 6	4		10.	1 .18	5.5	24	1	1		17	11	22	15	20	21	15	10	14
		11	16	14	10	.14	8	19		18		8	19	13	6	18	10	11	15	
		4 5	5		3.	1.90	6.5	132	3	1		8	3	8	7	0	4	9	9	19
		4	6	12	4	. 8	4	6		6		9	3	1	7	14	11	-1	9	
		3 4	6		3.	1.80	7.5	232	3	1		11	4	5	2	8	8	8	1	20
		7	3	14	6	.12	4	10		3		14	6	10	4	-1	8	6	10	
		8	4	8		.														
						.														
		9-11 5-7	1		100.	1 .40	6.0	242	1	1		11	12	12	12					12
		4 6	1½		30.	1 .50	7.0	162	1	1		12	12	13	12					12
		3 5	2		10.	2.75	6.0	211	1	1		16	21	17	18	16	7	10	19	15
		12	3	20	13	.24	13	19		13		11								
		2 4	2½		10.	2.10	7.0	225	3	1		8	5	6	8	9	9	9	2	21
		6	8	6	8	.														
		1 3	3		10.	1.20	7.5	134	3	1		13	12	7	12	10	10	18	6	31
		16	6	6	6	. 4	7	11		14		14	12	12	10					
						.		123												
		11-12 6 7	4		10.	1.05	7.0	[illegible]	3	1		4	4	4	6	5	6			17
		5 6	5		3.	2.25	5.5	[illegible] 24	3	1		0	2	4	5	2	5	4	0	10
		5	5	4	0	. 6	5	3	150	5										
		4 5	6		3.	1.06	6.5	[illegible]	3	1		5	6	-6	-2	2	-3	15	0	7
		7	0	-7	4	. 3	7	-6		4		-4	-2	14	-4	0	2	2	6	
		0	6	1	6	-3	10	10		-2										
						.														
		10-12 5 7	1½		100.	1.80			1	1		(8)?	14	8	10	10	10	14	12	
		12	10	14		.														

station on hill

No good, keeps not station

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TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6	SE		8/19/72		0237			484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/n	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		10 12	4 6	2	10.	1.15				1	1	9	7	9	10	16	14	10	12		
		14	12	12	7	.8	14		11		10	17	9	1	16	7	9	12	4		
			3 5	2½	3.	1.85				3	1	6	1	7	3	6	4	10	2		
		0	4	6	6	.4	6		5		10	4	11	3	9						
			2 4	3	3.	1.70				3	1	5	8	9	9	10	8	11	9		
		8	9																		
		ok	1 3	3½	3.	2.65	7.5		174	3	1	14	14	13	14	4	10	8	18	32	
	↓	7	10	14	13	.10	18		13		7	12	13	10	15	14					
			2 4	3	10.	1.34	7.5		205	3	1	11	9	9	9	8	10	10		28	
			3 5	2½	10.	1.44	6.0		180	1	1	19	14	11	20	18	19	19	19	16	
		21	15																		
			4 6	2	30.	1.10	7.0		217	1	1	12	14	16	11	18	13	17	13	17	
		11	13	15	12	.18															
			5 7	1½	30.	1.76	6.5		225	1	1	15	10	11	12	12	13	14	12	13	
		16	10	14	13																
		12-13	5 7	2	10.	2.15	6.5		152	1	1	25	12	18	15	15	16	10	8	14	
		13	16	12	18	.14	8		13		14	14	6	16	10	16					
			4 6	2½	10.	1.45	7.0		155	1	1	9	15	18	14	13	6	26	8	13	
		22	14	12	10	.19	6		26		-6	20	10	16	8	4	20	10	18		
		16	20	3																	
			3 5	3	3.	2.65	6.5		141	3	1	24	-2	16	13	4	10	18	6	23	
		8	0	2	6	.6	12		6		-6	28	-8	10	16	0	16	-3	8		
		11	9	3	4	.6															
			2 4	3½	3.	2.28	7.5		150	3	1	14	24	14	-26	52	-11	14	6	34	
		14	28	3	0	.28	19		18		16	26	2	17	-6	8	10	30	-4		
		6	15	19	0	.9	7		4		22	-4	12	6	24	12	3				
			1-3 4		3.	.30	7.5		120	3	1	24	16	-3	24	0	24	-6	3	35	
		-4	30	-2	27	.10	10		10		18	6	6	2	7	-2	19	1	14		
		30	9	30	5	.22	2		13		9	22	18	11	7	9	20	8	16		
		13	14	-4	29	.22	-4		24		16	14	0	16	16	15	40	-8	12		

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 SE			8/19/72		0237			484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	mv/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		12+14	5 7	2½		3.	3.00	6.5	107	3	1	12	4	16	2	8	6	0	6	23	
		5	4	4		10	.10	3	14		0	13	4	7	2	8	8	6	6		
			4 6	3		3.	2.48	7.0	122	3	1	5	10	4	5	12	8	17	3	11	
		4	6	8		4	.7	9	5												
			3 5	3½		3.	1.40	6.5	100	3	1	14	6	6	3	6	4	12	14	24	
		17	8	9		10	.2	4	6		11	10	10	10	5	8	7	16	8		
			2 4	4		3.	1.26	7.5	116	3	1	14	14	11	12	4	14	8	10	35	
		8	15	18		10	.15	17	7		12	21	4	6	19	9					
			1 3	4½		1.	2.35	7.5	97	3	1	8	7	18	14	20	8	28	11	37	
		22	16	6		19	20	9	16		0	37	0	6	20	8	25	12	15		
		+6	22	10		-3	+2	21	12		22	20	11	12	17	10	6	10	2		
			6	12	20	30	.														
							.														
		13-15	5 7	3		3.	2.38	6.5	120	3	1	6	8	0	6	9	17	-6	4	13	
		9	8	3		6	.3	9	9		7										
			4 6	3½		3.	2.15	7.5	111	3	1	10	9	14	8	11	12	8	8	20	
		12	12	7		7	.8	19	9		6	6	8	6	18	7	3	-6	10		
			3 5	4		3.	1.21	6.5	103	3	1	14	20	17	19	9	-2	2	9	22	
		18	11	1		6	.8	18	7		8	9	7	8	2	0	15	28	4		
		0	5	-5		8	.12	0	8		14	4	16	8							
			2 4	4½		1.	3.20	7.5	132	3	1	4	6	20	4	2	17	17	16	34	
		14	8	16		0	.8	11	6		3	11	5	13	3	8	22	14	3		
		14	4	14		12	.20	8	35		-4	24	22	-3	25	0	20	2	30		
		-10	12	18		-14	.26	-10	25		22	26	10	17	17	18					
			1 3	5		1.	2.15	7.5	111	3	1	45	10	24	26	8	35	0	37		
		12	40	17		2	.37	20	10		38	46	4	8	36	-13	44	8	20	54	
		20	44	-1		16	.12	29	-30		32	10	-8	15	-29	0	5	-58	14		
		64	15	10		6	.18	6	32		62	0	20	32	24	0	31	52	10		
		15	5	46		-6	.-9	56	-25		46	-4	34	12	-9	55	-1	28	8		
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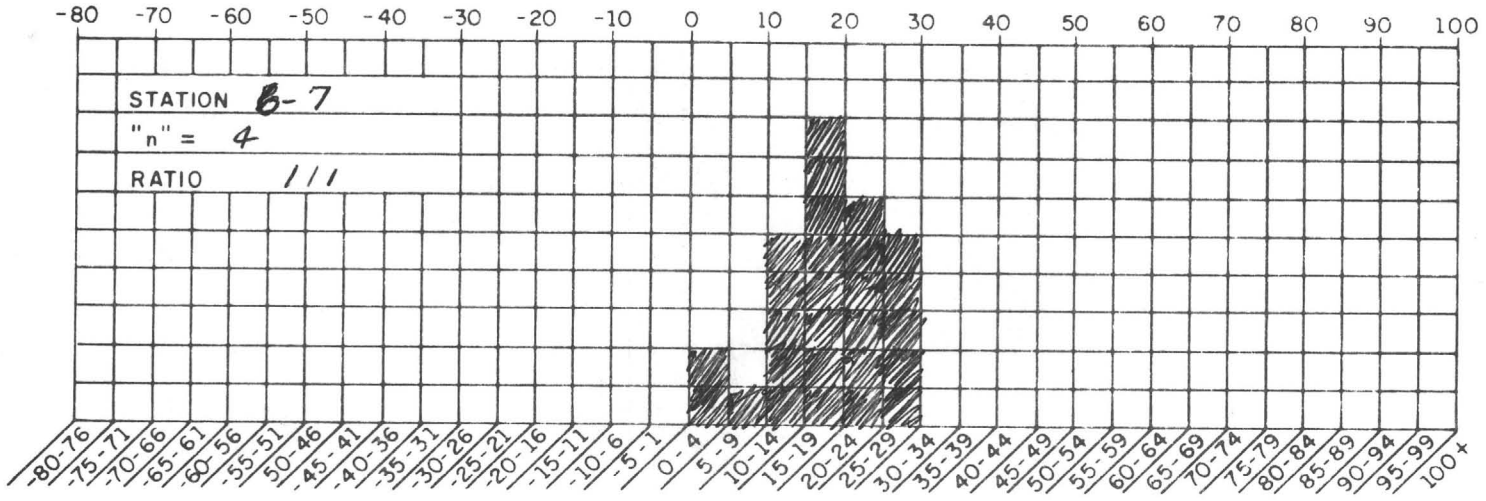
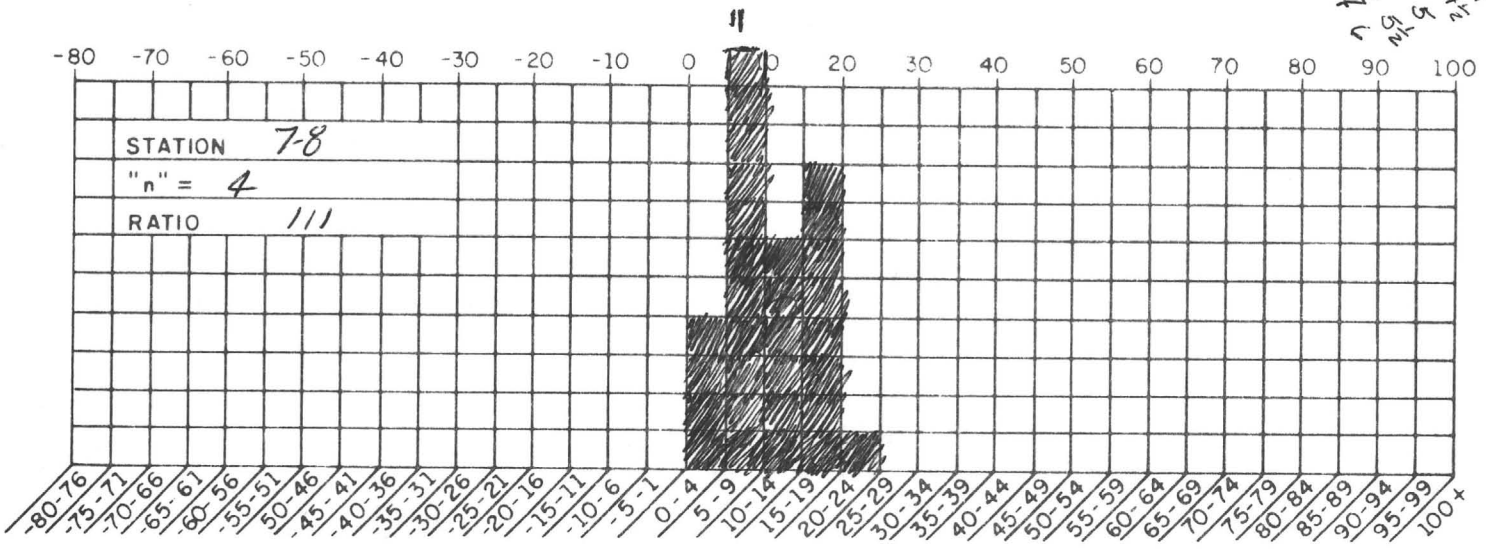
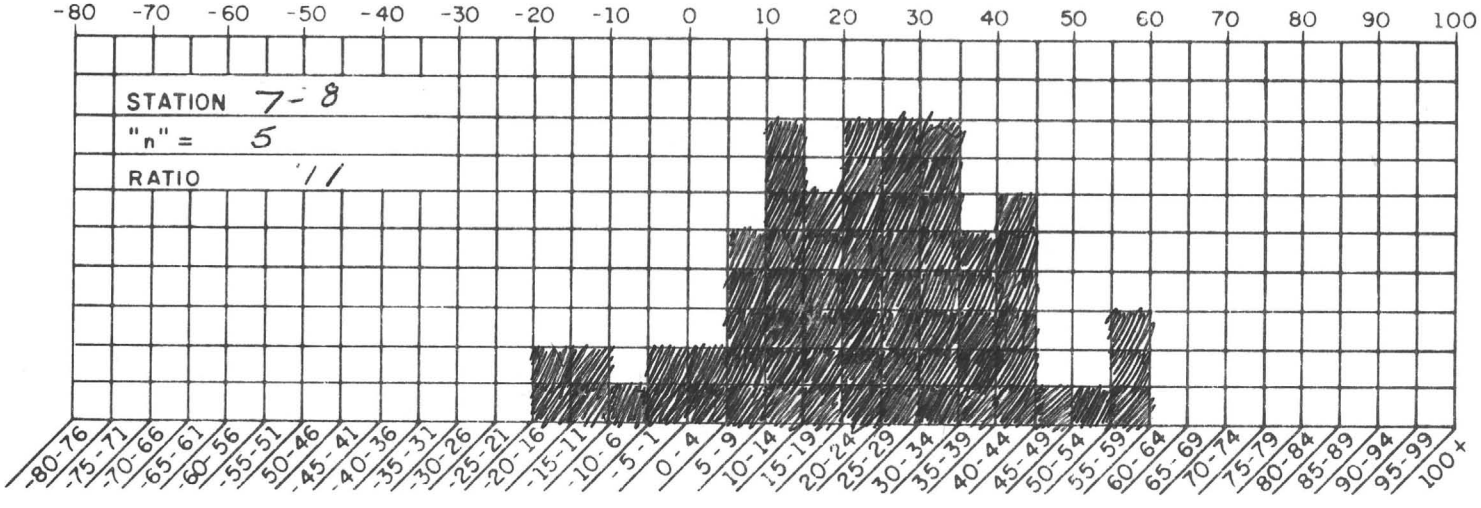
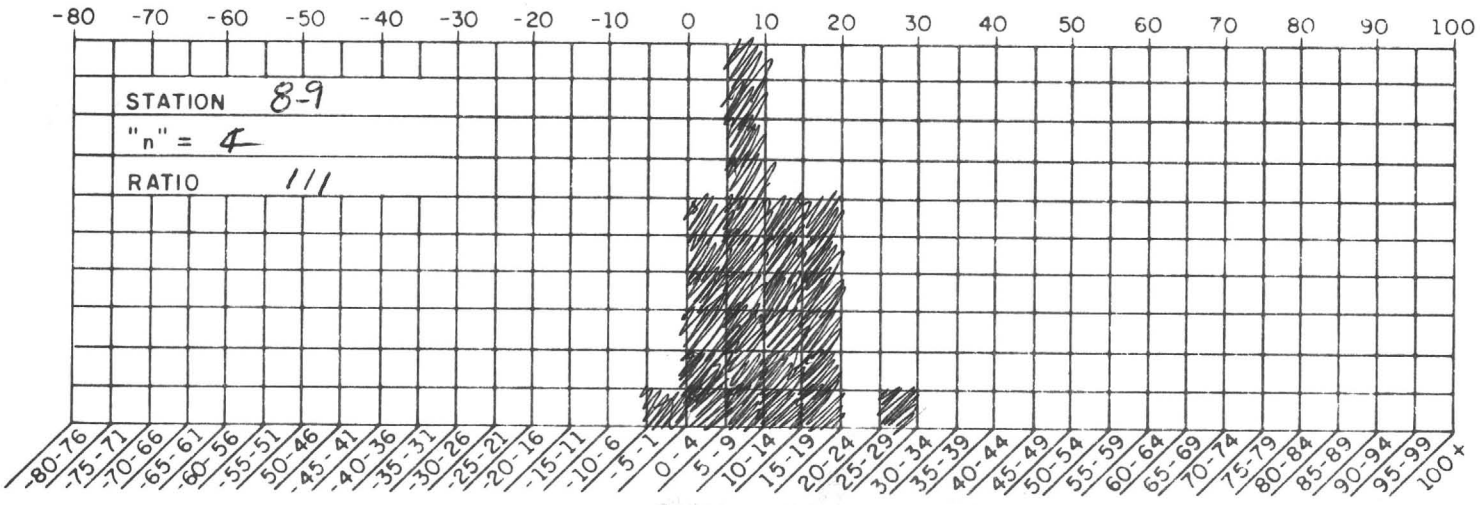
JOB 0237 DATE 8/18/72 LINE 6 SE PAGE 1

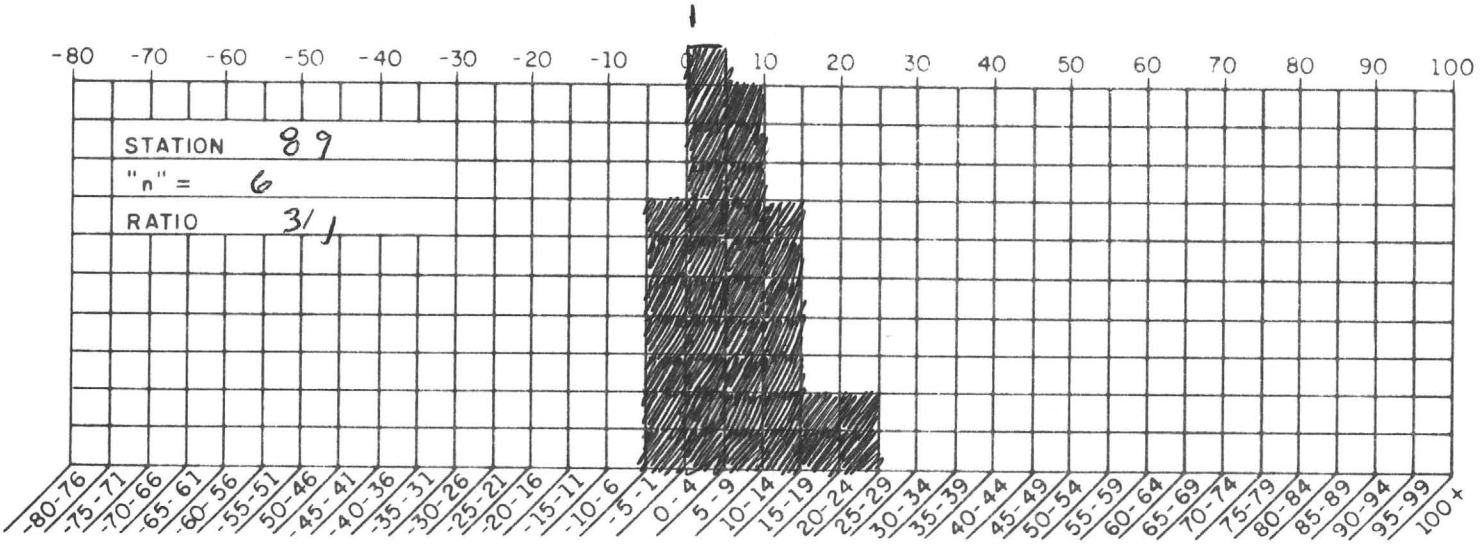


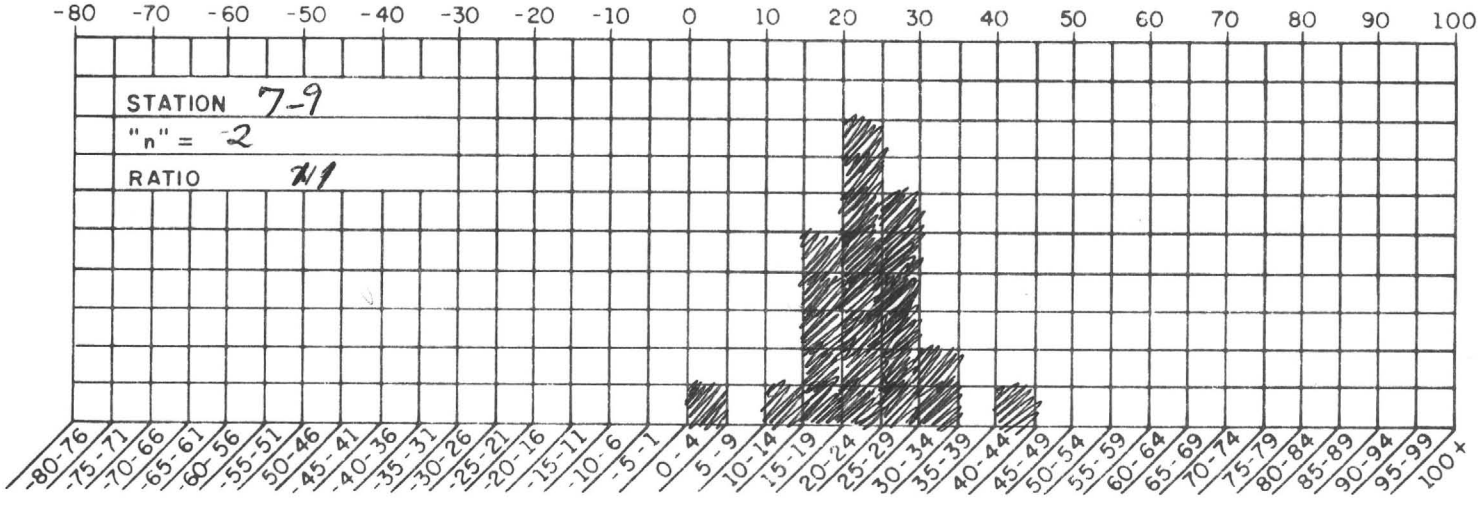




JOB 0237 DATE 8/18/72 LINE 6 SE PAGE 2

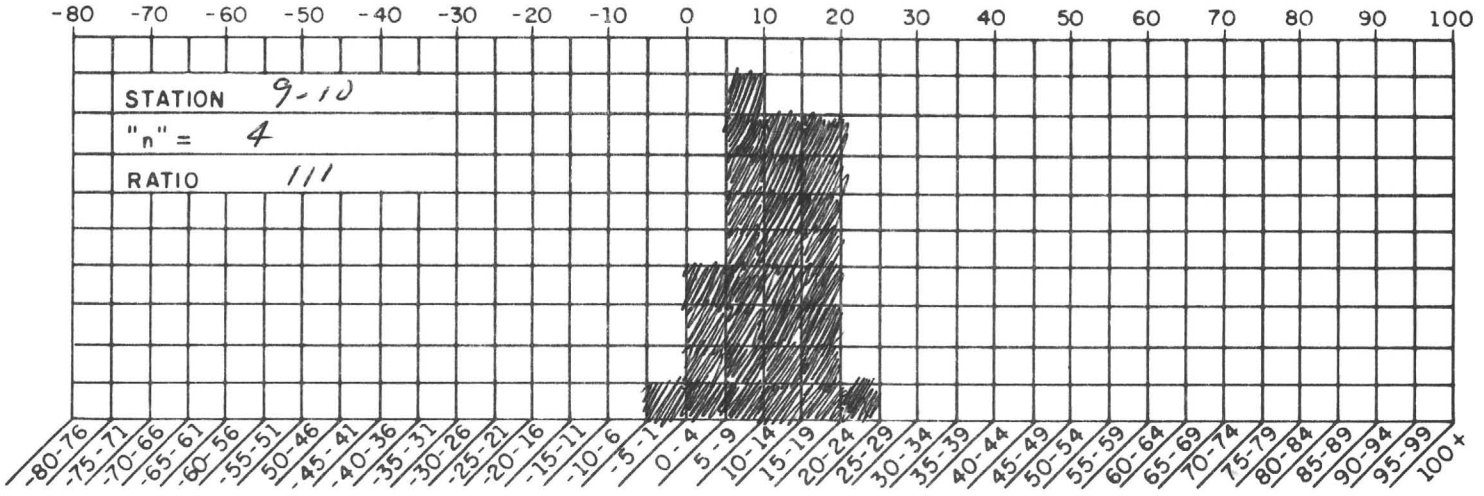


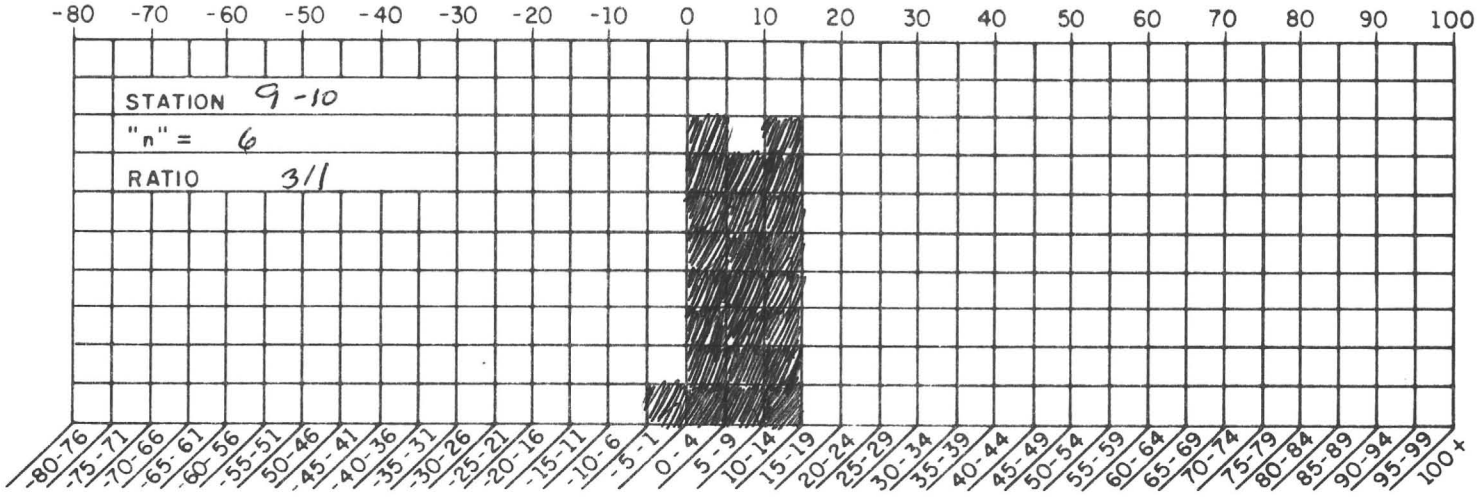


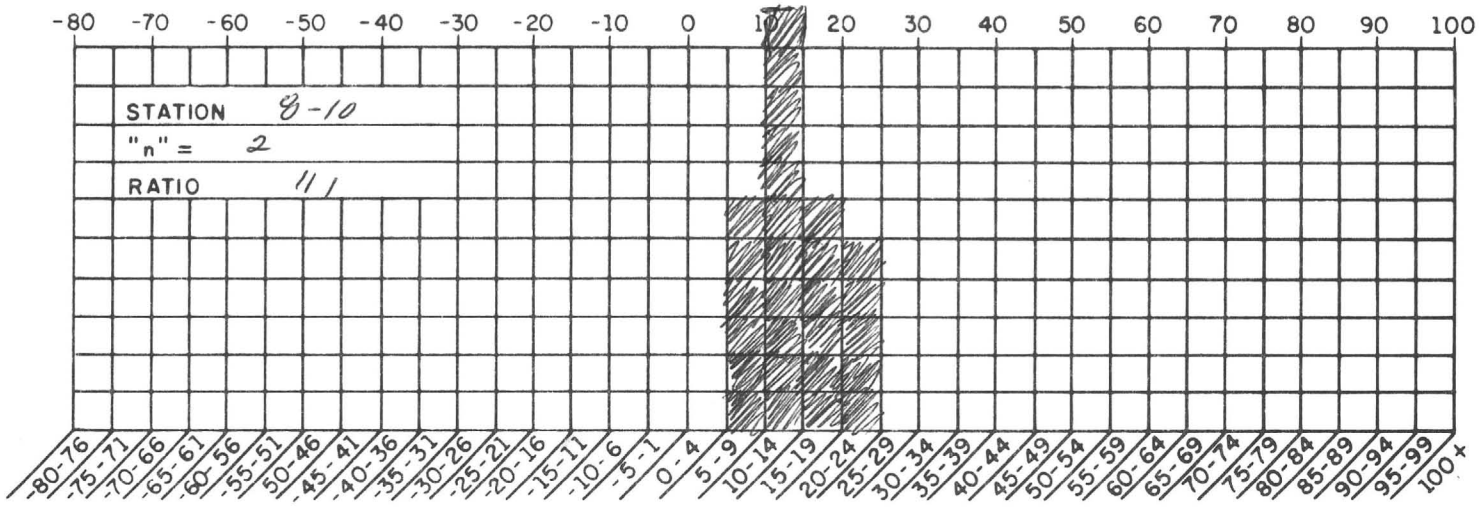


MINING GEOPHYSICAL SURVEYS FIELD DATA HISTOGRAMS

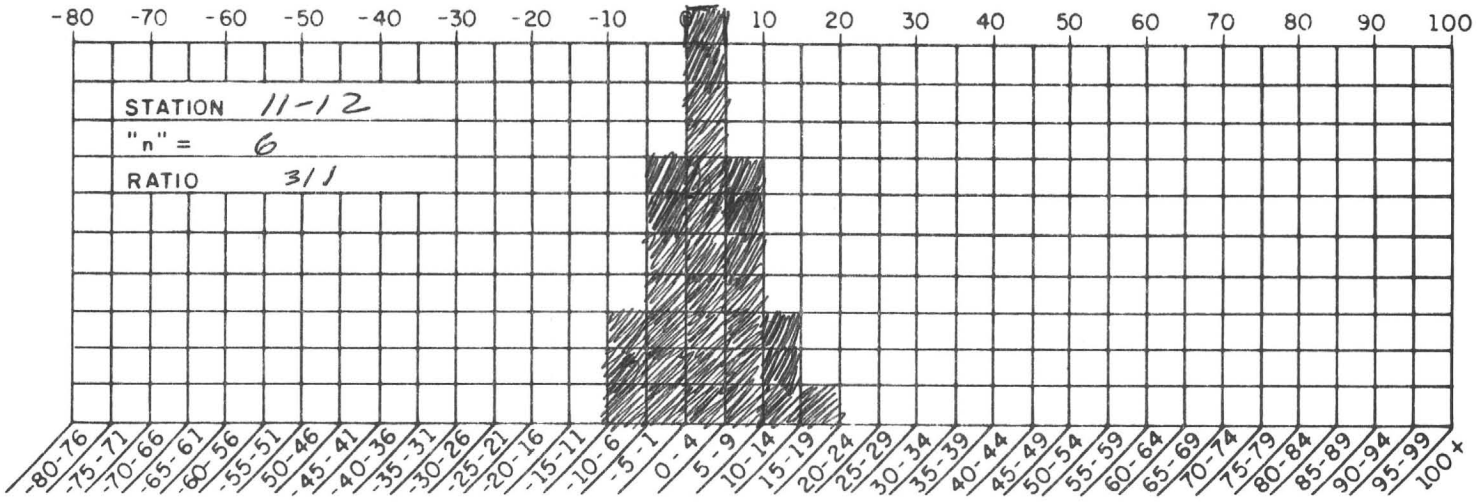
JOB 0237 DATE 8/16/72 LINE 6 SE PAGE 3

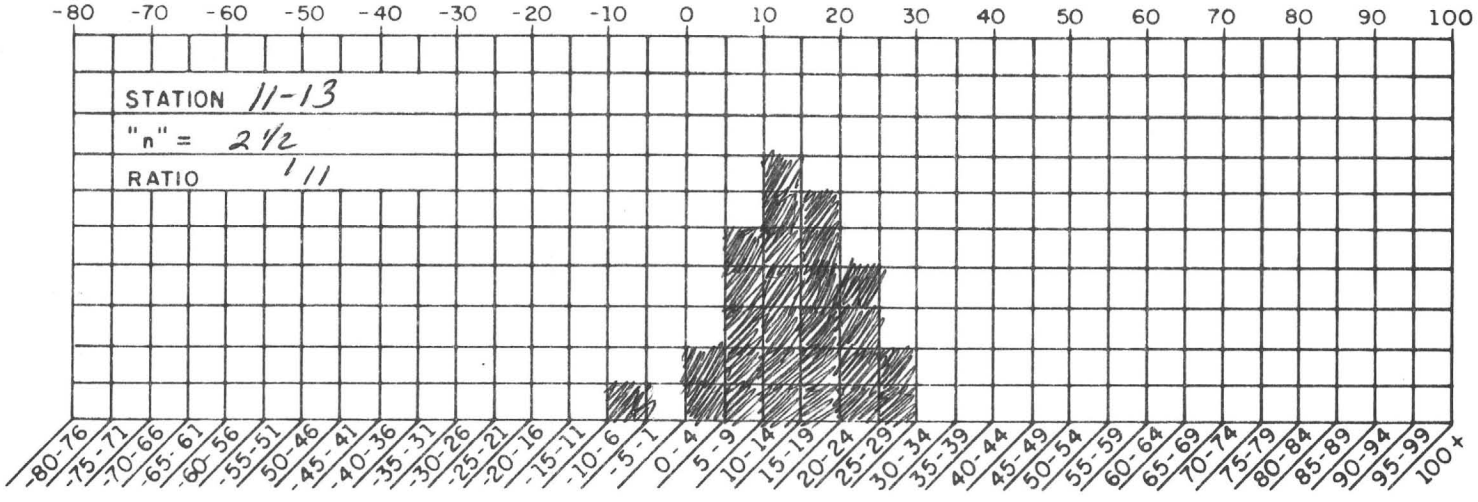


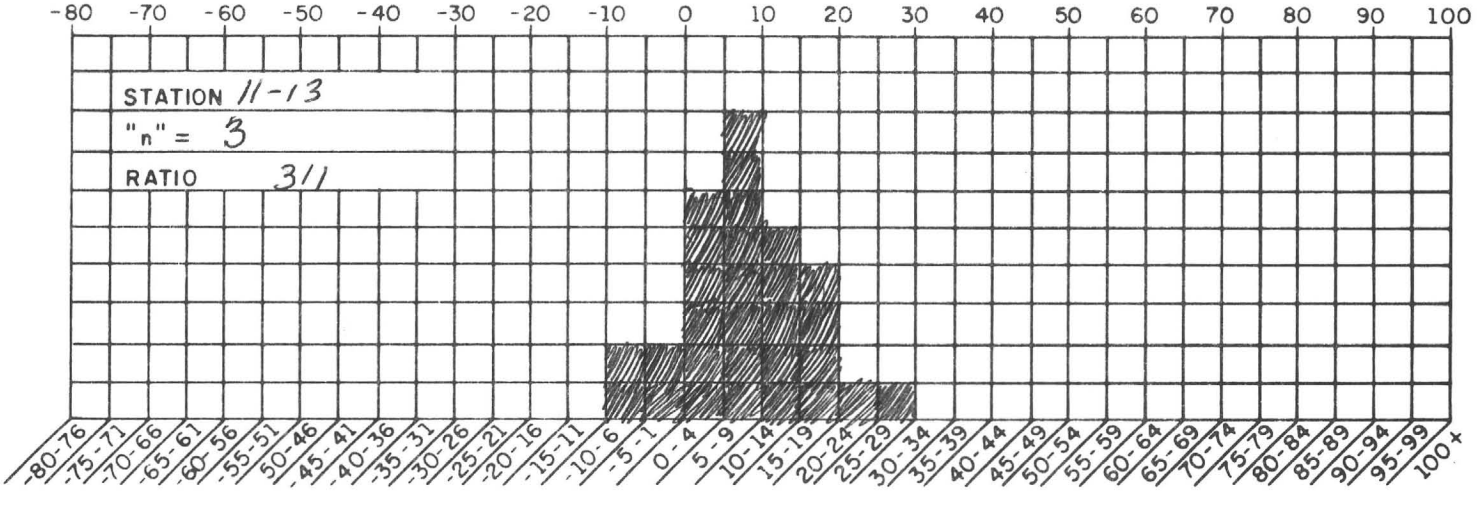




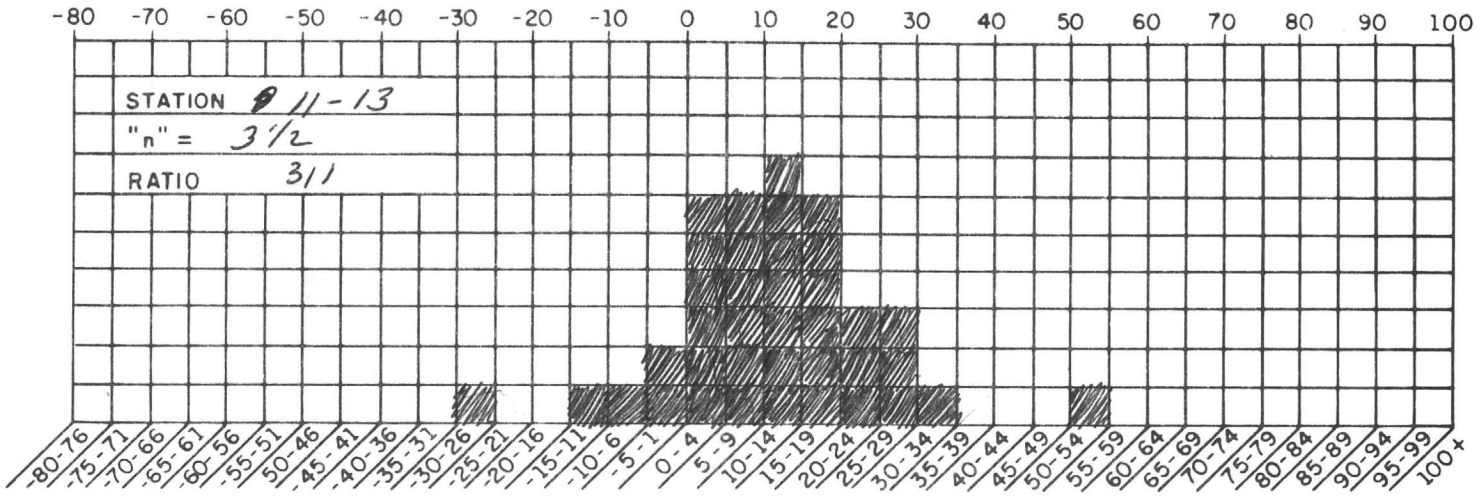
JOB 0237 DATE 8/19/72 LINE 6 SE PAGE 4

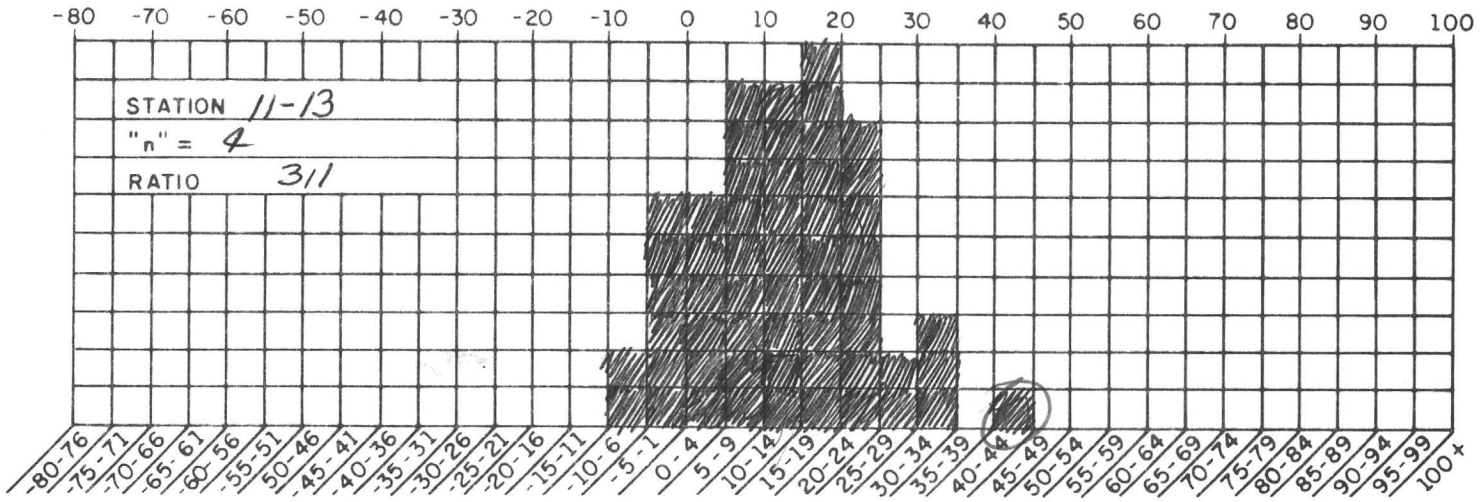


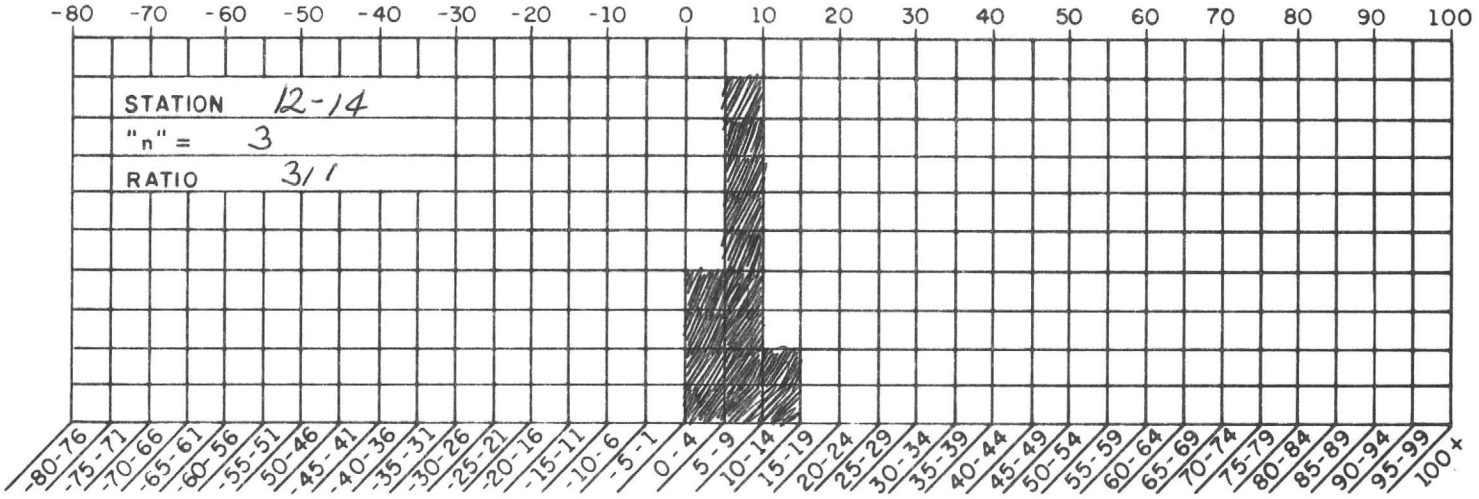




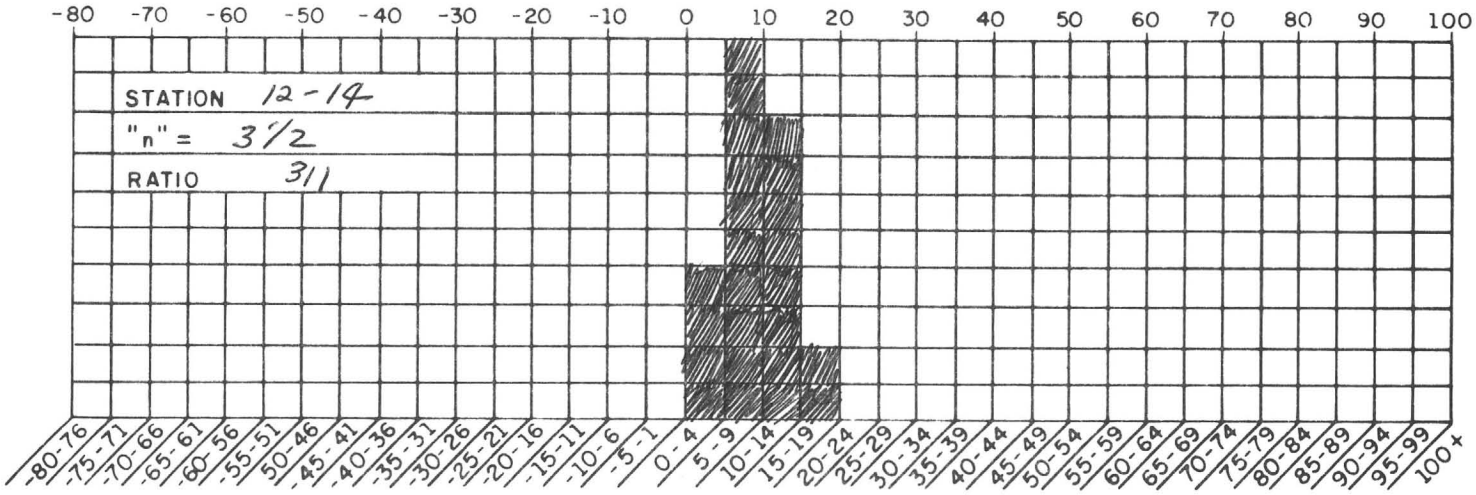
JOB 0237 DATE 8/19/72 LINE 6 SE PAGE 5

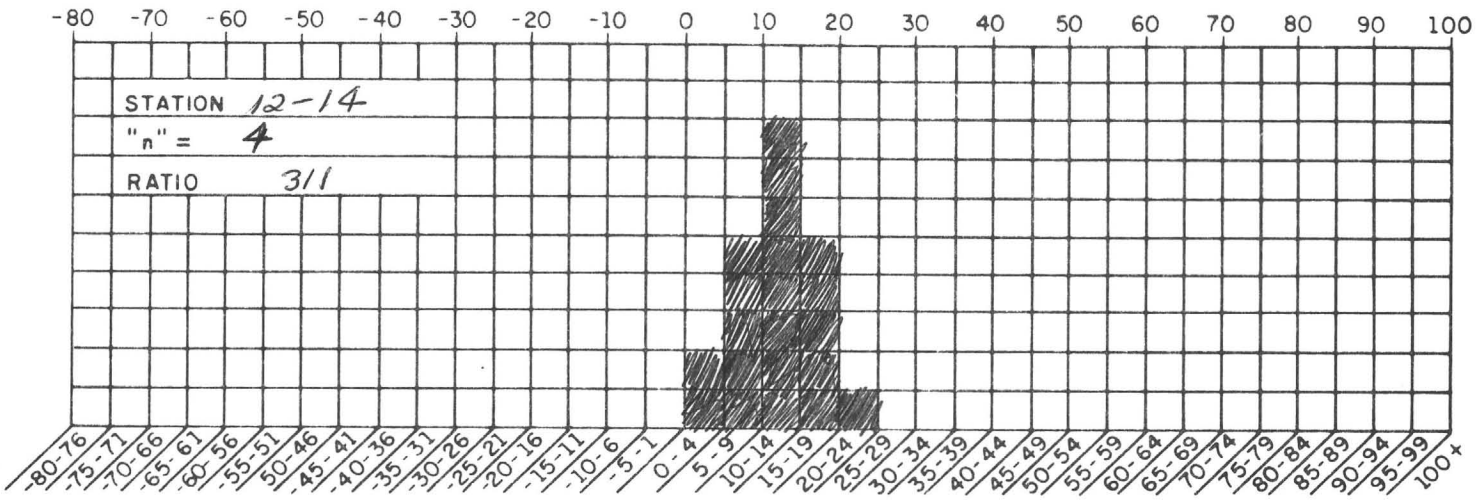


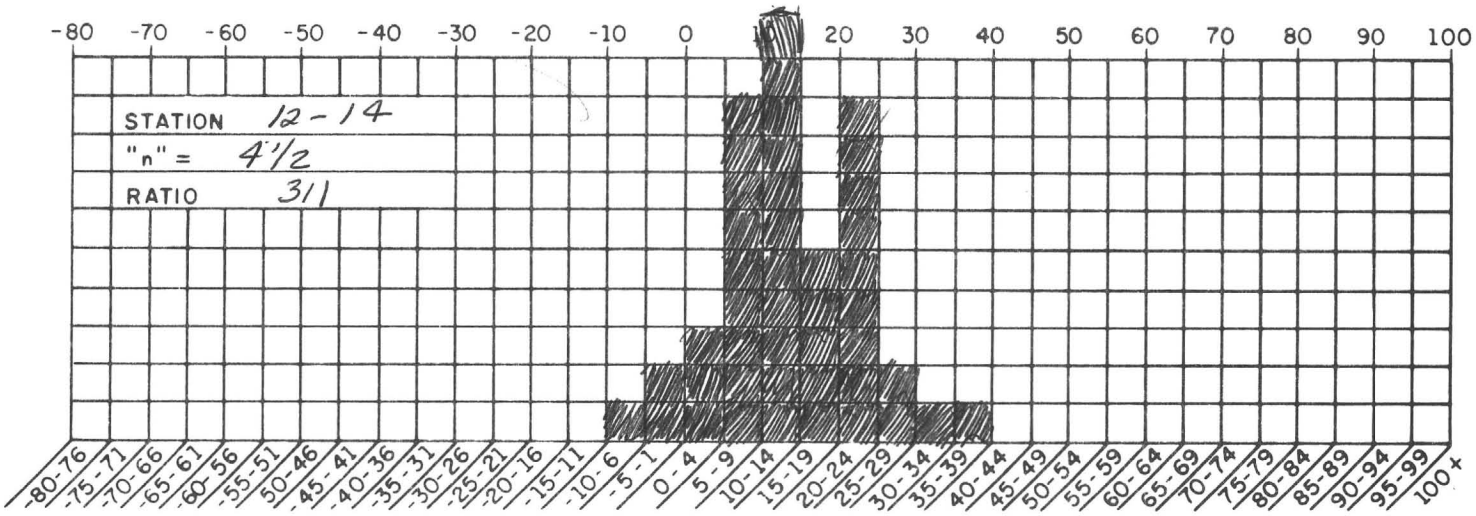




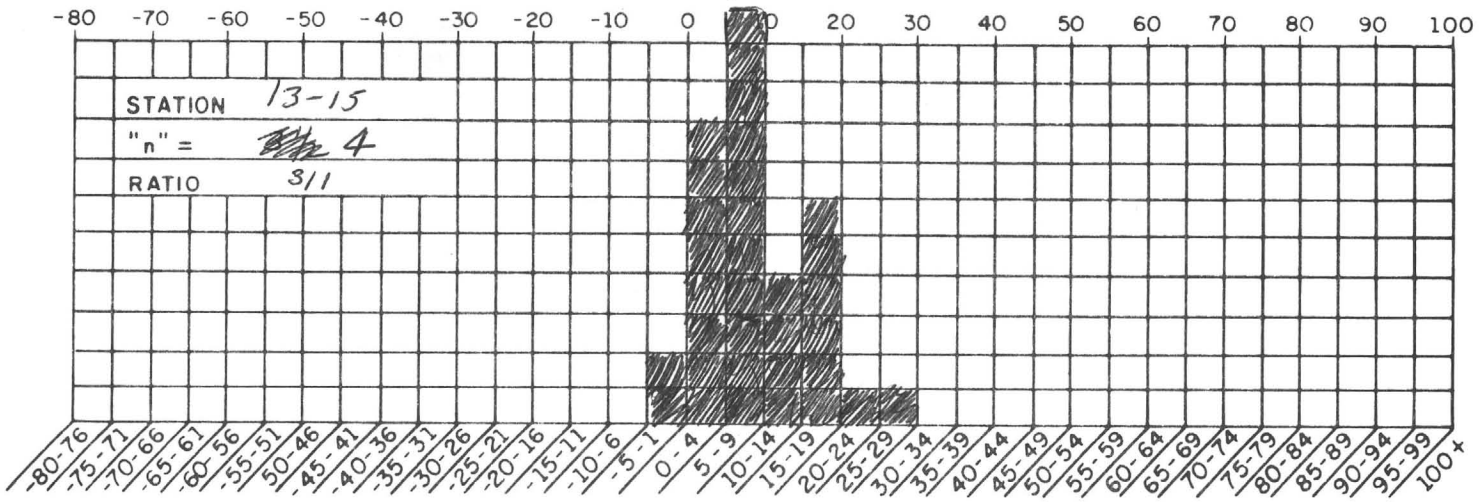
JOB 0237 DATE 8/19/72 LINE 6 SE PAGE 6

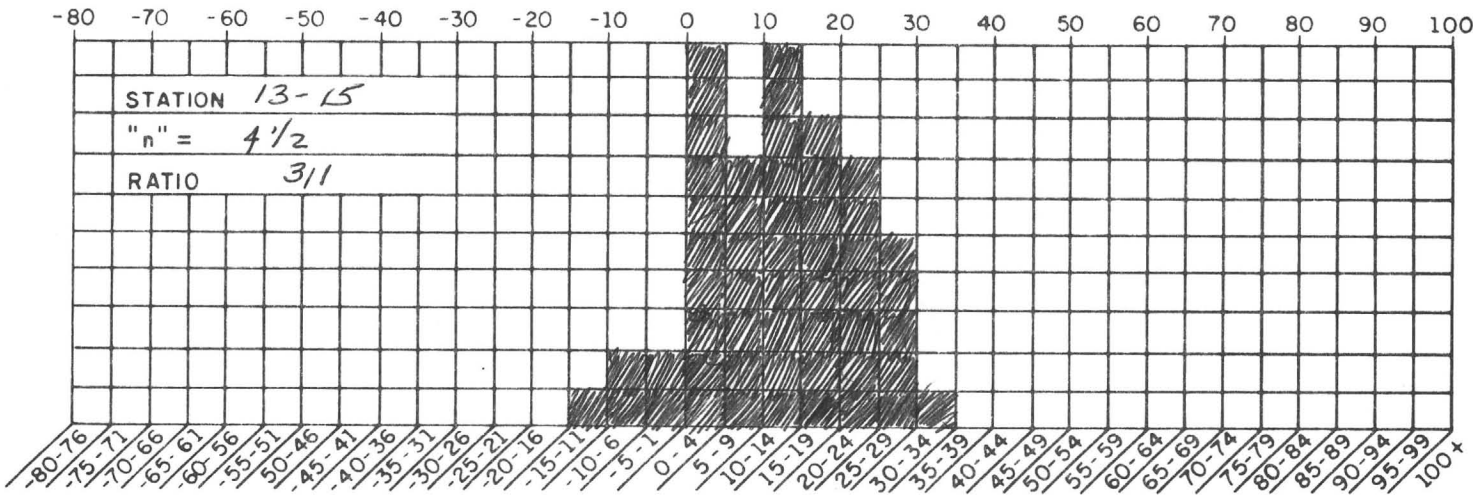


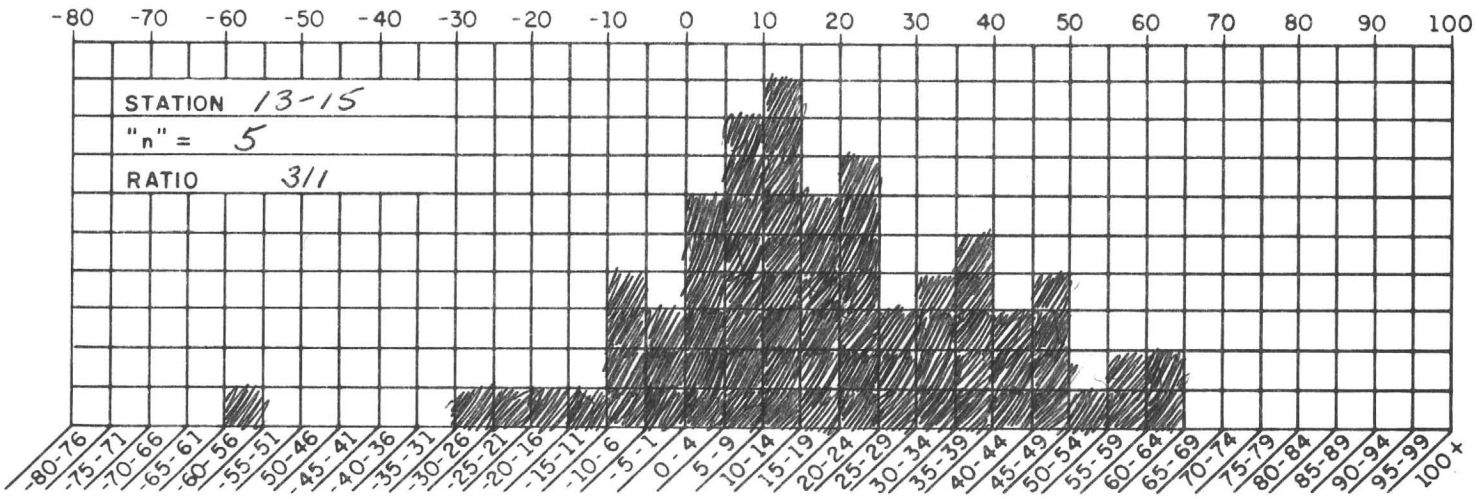




JOB 0237 DATE 8/19/72 LINE 6 SE PAGE 7







MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

LINE 6 SR01 SOUTHEAST RDW

Project:	Client:	Date:
02.37	ESSEX	8 18 72

TIME	I	VA	COMMENTS
	7.0		4-5
	7.5		3-4
	7.0		2-3
	7.5		1-2
	7.5		2-4 ½ a=2000'
	7.5		1-3 1 a=2000'
	5.5		5-6 1
	7.0		4-5 2
	7.5		3-4 3
	7.0		2-3 4
	7.5		1-2 5
	6.5		3-5 ½ ✓
	7.5		2-4 1 ✓
	7.5		1-3 1½ ✓
	7.0		6-7 1
	5.5		5-6 2
	7.0		4-5 3
	7.5		3-4 4
	7.5		2-3 5
	7.5		1-2 6

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS
			[illegible]
10:57	7.5		4-6 ½ Q=2000
	6.5		3-5 1
	7.0		2-4 1½ ✓
11:12	7.5		1-3 2
	7.0		6-7 2
	5.5		5-6 3
	6.5		4-5 4
11:42	7.5		3-4 5
	7.5		2-3 6
	6.5		5-7 ½
	7.0		4-6 1
	6.5		3-5 1½
	7.5		2-4 2 ✓
	7.5		1-3 2½
	7.0		6-7 3
	5.5		5-6 4
	6.5		4-5 5
	7.5		3-4 6

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

LINE 6 SPD 1 SOUTHEAST ROW

Project:	Client:	Date:
0237	ESSEX	8 19 72

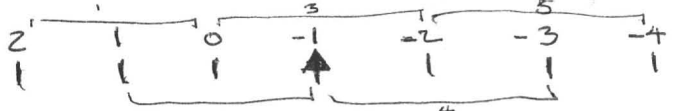
TIME	I	VA	COMMENTS
9:51	6.0		5-7 1
	7.0		4-6 1½
	6.0		3-5 2
	7.0		2-4 2½
	7.5		1-3 3
	7.0		6-7 4
	5.5		5-6 5
	6.5		4-5 6
	6.5		5-7 1½
	7.0		4-6 2
	6.0		3-5 2½ ✓
	7.5		2-4 3 ✓
	7.5		1-3 3½
	6.5		5-7 2
	7.0		4-6 2½
	6.5		3-5 3
	7.5		2-4 3½
10:37 10:47	7.5		1-3 4

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS
10:59	6.5		5-7 2½
11:03	7.0		4-6 3
11:06	6.5		3-5 3½
	7.5		2-4 4
11:15	7.5		1-3 4½
	6.5		5-7 3
	7.5		4-6 3½
	6.5		3-5 4
	7.5		2-4 4½
	7.5		1-3 5
			5-7 3½
			4-6 4
			3-5 4½
			2-4 5
			1-3 5½



mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

	I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
		LINE 6 SPD 2	SOUTHEAST	2000.	8 20 72	DIPOLE DIPOLE	0237		WHITMAN	484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/s	1/s	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
10:40		6 8	0 2	2		3. 2.	90 6.0	67	3	1		7	14	9	13	14	7	8	12	32	
		15	8	14	5	.11	6	10		16											
		6 8	1 -1	2½	3.	2.	90 7.0	93	3	1		11	13	6	12	13	11	13	15	35	
		6 8	0 -2	3	3.	2.	20 6.0	127	3	1		13	17	18	14	19	9	10	11	42	
		10	17	15	16	.14	15	12		19		11									
		6 8	-1 -3	3½	3.	1.	52 6.0	125	3	1		15	17	11	23	19	22	19	19	53	
		6	27	23	11	.16	15	21		15		23	18	17							
		6 8	-2 -4	4	3.	1.	28 6.5	130	3	1		10	12	9	26	17	19	30	23	57	
		11	7	20	19	.19	21	17		18		14	16	18	20	12	20	37	18		
		7 9	0 2	2½	3.	2.	30 6.0	86	3	1		21	5	6	13	18	3	7	21	28	
		15	1	7	15	.18	27	-3		16		-11	17	23	7	16	-3	11	12		63
		-4	22	2	3	.9	7	13		7		0	11	1	20	0	21	18	4		
		7	-7	6	7	.9	7	5		25		-4	19	11	13	10	10	10	13		
		-11	17	-6	20	-9	14	17		12											
		7 9	1 -1	3	3.	2.	32 7.0	114	3	1		12	12	6	28	10	20	13	15	38	20
		9	10	19	10	.13	9	11		9		13	16	8	11						
		7 9	0 -2	3½	3.	1.	85 6.0	152	3	1		21	-1	23	8	31	19	-9	27	37	
		6	19	-5	5	.7	7	6		28		10	17	21	1	14	27	7	7		32
		12	9	12	11	.7	13	16		14											
		7 9	-1 -3	4	3.	1.	30 6.5	138	3	1		29	-9	16	9	3	17	8	9	40	
		7	18	19	24	.5	24	7		42		10	7	33	6	10	12	13	12		48
		18	6	21	4	.15	23	15		11		10	13	13	19	10	10	19	7		
		14	15	23	14	.6	10	11		12											
		7 9	-2 -4	4½	3.	1.	05 7.0	170	3	1		22	25	13	5	11	12	16	25	44	
		1	14	15	12	.24	13	11		17		4	19	31	22	19	15	14	12		33
		21	15	15	14	.12	7	1		21		10									
		8 10	0 2	3	3.	2.	00 6.0	115	3	1		11	11	3	7	17	10	19	8	29	
		24	8	-17	37	.13	3	DA		0		28	-1	7	7	8	23	-3	8		
		8 10	1 -1	3½	3.	2.	12 7.0	174	3	1		28	23	16	-5	12	0	59	68	46	
		4	25	16	6	.15	15	139		8		21	27	31	5	16	20	6	48		
		37	8	-38	11	-4	17	76		14		15	16	21	-2	31	21	13	4		

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

	I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	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 28 29 30 31 32	33 34 35 36 37 38 39 40 41 42 43 44	45 46 47 48 49 50 51 52 53 54 55 56 57	58 59 60 61 62 63	64 65 66 67	68 69 70 71 72 73 74 75 76 77	78 79 80
					8 20 72					

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS	
	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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71	78 79 80
cont		0	34	2	16	28	-3	9			18	10	25	12	13	22	13	16	15			56
	8	10	0 -2	4	3.0	1.70	6.0	196	3	1		8	19	10	7	30	19	4	15	50		
		35	2	30	20	.12	21	17			8	29	6	18	26	9	26	16	14			32
		18	19	10	15	.17	21	15			22											
	8	10	-1 -3	4½	3.	1.28	6.5	183	3	1		44	4	22	10	14	19	25	24	47		
		18	7	26	7	.23	11	32			17	19	10	17	10	12	21	16	29			35
		2	16	15	9	.14	17	7			21	5	37	30	15	15						
	8	10	-2 -4	5	3.	1.10	7.0	190	3	1		24	31	9	12	28	7	31	23	58		
		34	-7	35	4	.22	2	53			0	28	21	10	16	26	46	-4	16			
		22	24	9	0	.29	1	2			16	34	49	37	18	27	13	11	31			104
		26	14	18	9	.10	25	4			17	3	9	16	16	13	12	15	44			
		-6	3	29	-5	.46	21	28			39	14	28	25	17	23	27	8	24			
		23	10	28	52	-.2	34	4			15	14	5	28	-13	24	26	27	9			
		27	14	24	39	.15	13	26			25	25	-3	22	23	40	21	21	13			
	8	44																				
	9	11	0 2	3½	3.	1.85	6.0	152	3	1		13	13	21	21	17	-17	24	21	36		34
		-4	17	-3	15	.17	13	11			27	15	-5	39	-29	19	-13	21	23			
		8	18	2	28	.17	9	15			18	17	4									
	9	11	1 -1	4	3.2	.10	7.0	207	3	1		-23	5	7	-4	17	21	6	6	43		
		25	19	21	23	.13	35	12			17	11	11	30	12	57	-3	12	13			40
		24	37	6	-13	.12	14	17			15	12	4	14	26	17	17	7	21			
	9	11	0 -2	4½	3.	1.65	6.0	256	3	1		11	31	6	22	20	25	24	11	51		
		29	16	19	6	.35	23	19			19	14	-15	41	8	31	-23	78	-20			40
		19	-2	16	15	.1	20	14			16	13	17	25	9	-16	54	48	4			
	9	11	-1 -3	5	3.	1.29	6.5	231	3	1		45	1	16	32	34	21	9	1	51		
		29	7	25	8	.11	3	27			36	10	15	11	23	38	14	2	47			
		-10	69	-8	-1	.42	8	111			33	3	50	11	25	-20	73	60	6			81
		35	-3	21	21	.0	-1	35			25	15	22	17	19	15	30	22	5			
		37	-5	23	33	.5	45	113			44	14	16	21	24	19	13	5	15			
		16	22	14	29	.33	19	13			16	25	13	29	11	17	1	15	16			

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 3

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	LINE 6 SPD 2	SOUTHEAST				0237			

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		1012	0 2	4	3.	1.18	6.0	136	3	1	24	0	21	3	-3	19	5	19	32		
		2	19	7	17	-10	11	17		15	26	28	10	5	11	31	5	13			72
		10	11	-2	35	.5	-6	6		22	33	3	7	18	21	14	26	-3			
		19	-2	10	4	.24	9	4		-9	-3	31	3	3	5	14	19	6			
		23	11	15	3	-1	11	14		30	-3	13	-15	17	16	-11	-2	12			
		1012	1 -1	4½	3.	1.35	7.0	179	3	1	23	25	30	9	22	-9	15	28	44		
		0	47	17	14	.5	13	17		11	23	33	-11	26	25	7	-8	-3			
		33	48	14	21	.16	24	35		29	9	17	6	24	6	13	29	26			98
		29	9	5	7	.13	19	0		0	29	5	5	15	17	5	-1	29			
		17	23	2	-5	.3	24	22		25	37	1	30	4	17	48	31	23			
		-1	3	10	23	.35	33	19		30	27	7	17	8	32	12	4	17			
		7	10	23	9	-3	16	33		-17	24	-10	36	-17	1	11	-11	12			108
		8	12	7	5																
		1012	0 -2	5	3.	1.10	6.0	221	3	1	32										

-4 -3 -2 -1 0 1 2
1 2 3 4 5 6 7

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 1

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW	N43°W	1000. 2000.	8/22/72	DIPOLE-DIPOLE	0237		SADOWSKI	484

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	ρa	m/ρ	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-2-1	0 1	1	100.	1.10	6.0	105	1	1		6	6	6	6					6	
		-3-1	0 2	½	100.	1.40	5.8	87	1	1		7	8	6	6	8				7	
		-4-3	-2-1	1	100.	1.38	6.0	132	1	1		15	12	0	3	10	-11	8	14	3	
		8	-6	-11	8	.2	-4	-2		0		2	4	2	10	8	-2	0	7		39
		4	-1	11	-9	.10	12	6		-6		-14	7	4	1	10	18	-6	-24		
				1	100.	1.45	6.0	139	1	1		4	12	-14	6	6	-4	-5	11	2	
			-1 0	2	10.	2.10	6.0	81	1	1		11	18	18	7	3	8	16	19	10	
		13	3	5	13	.17	12	2		-2		7	16	16	6	9	0	12	7		40
		14	21	15	6	.-2	4	16		18		11	-2	2	16	17	15	2	-4		
		-3-2	-1 0	1	30.	3.00	6.0	86	1	1		4	5	6	6	6	5			5	6
			0 1	2	10.	1.65	7.0	54	1	1		7	7	8	12	7	8	7		8	7
		-4-3	0 1	3	3.	2.18	7.0	54	1	1		19	14	14	8	26	22	16	4	17	
		26	17	10	19	.14	22	14		17		22	16	19	20	18	24	9	13		24
		-4-3	1 2	4	3.	1.15	7.5	53	3	1		14	2	4	10	9	14	11	-4	27	
		16	11	19	14	.13	7	7		24		2	6	2	4	24	16	3	-7		42
		4	-4	-3	13	.26	14	18		7		14	11	5	9	10	27	37	9		
		-10	-6	20																	
		-3-2	1 2	3	3.	2.15	7.5	49	1	1		-18	9	-4	18	11	-6	-16	27	8	
		4	8	18	17	.18	16	8		10		25	6	13	18	7	10	14	7		
		12	10	10	6	.15															
		-4-2	-1 1	½	100.	1.65	7.5	79	1	1		5	6	7	6	6	5			6	
			0 2	1	10.	1.55	5.5	32	1	1		11	12	8	10	8	10	9	8	10	8
		-5-4	-3-2	1	100.	2.75	5.5	288	1	1		12	6	10	7	8	7	12	7	8	10
		8	6																		
			-2-1	2	30.	1.55	6.0	178	1	1		0	4	-20	26	-12	32	2	32	5	
		-14	8	-2	2	.0	1	12		-3		-18	-6	18	12	-10	-11	28	5		

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 2

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 ~~12~~ NW			8/2/72		0237			4

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
cont.		-5-4	2-1	2						1	1	7	6	8	6	7	7	8	7		
		8	6		6	6	.6														
		-1	0	3	10	1.40	6.0	134		1	1	-20	14	44	44	2	-17	-8	-8	16	
		62	16	0	19 OK	8	21 OK	16		18		14	20	19	18	19	16	17	15		
		16	14		16	21	.17														
		0	1	4	3	2.06	7.0	102	3	1		3	10	11	4	3	12	8	9	21	
		6	6		6	9	.2	4		9		7	11	8	5	6	12	12	5	7	
		1	2	5	3	1.26	7.5	101	3	1		12	16	10	11	10	14	5	16	27	
		0	4		12	23	.18	10		14		2	8	4	16	12	2	10	5	19	
		3	42		3	0	37	-10		-40		-12	14	-12	30	7	2	16	17	16	
		10																			
		-5-3	-2 0	½	100	2.10	5.5	134		1	1	10	7	4	6	8	11	6	4	57	
		4	9		11	9															
		-1	1	1	30	1.92	7.5	88		1	1	1	2	14	14	16	15	12	15	13	
		16	14	14	14	.15	14	14													
		0	2 ½		30	2.60	7.5	74	3	1		3	11	12	14	4	10	7	15	27	
		8	1	12	12	.12	7	0		10		20	4	12	12	-2	10	8	16	27	
		10																			
		-6-5-4-3	1		100	2.58	6.0	234		1	1	7	6	7	7					7	
		-3-2	2		30	1.40	5.5	130		1	1	8	8	6	6	6				6	
		-2-1	3		10	1.45	6.0	134		1	1	0	13	10	12	16	6	12	8	9	
		10	16	10	9	.8	8	5		14		7	7	7	9						
		-1	0 4		3	2.20	6.0	123	3	1		8	2	4	3	0	8	3	6	11	
		4	2	4	12	.6	-4	-4		6		12	5	2	4	0	4	2	6		
		0	1 5		1	2.80	7.0	88	3	1		5	8	1	15	7	-6	-12	12	25	
		26	24	-8	0	-4	6	18		21		0	24	15	2	4	13	-3	11		
		21	-5	-12	28	.22	22	6		-10		14	3	2	-7	16	17	12	5		
		13	6	20	5	.13	4	10		12		22	16	9							
		1	2 6		1	2.15	7.0	40	3	1		9	19	9	26	25	4	12	2	19	
		6	23	17	18	.27	-3	14		26		16	11	13	17	14	11	3	11		
		2	18	14	18	.28	18	25		12		10	15	19	26	8	2	25	9		

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 3

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW			8/22/72		0237			1 of 1

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/n	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80
		-6 -4	-3 -1	½	30.	2.15				1	1	8	8	6	6	7					
			-2 0	1	10.	1.95				1	1	9	8	20	22	14	16	16	14		
		11	20	18	10	.11	9	8		17	18	10	16	7	11	10	17	12			
			-1 1	1½	3.	3.48				3	1	17	7	9	8	12	7	6	6		
		12	5	12	14	.5	6	12				9	15	16	8	8	7				
			6 2	2	3.	1.20				3	1	18	3	0	19	32	3	17	14		
		18	10	8	2	.13	14	14			7	18	32	10	8	-1	10	13	16		
		11	0	6	14	.24	20	12		12											
		-7 -6 -4 -3	2								1										
		-6 -4	-3 -1	½	300.	1.35	6.0	248		1	1	6	6	6						6	
			-2 0	1½	30.	2.56	5.5	121		1	1	4	6	8	12	11	12	10	10	9	10
		14	7																		
			-1 1	1¼	30.	1.20	7.5	124		1	1	10	22	21	24	22	22	20	16	20	8
			0 2	2	10.	1.15	5.5	96		3	1	4	9	12	14	10	4	8	19	37	
		14	13	22	7	.11	13	6			6	0	6	7	7	6	18	8	8		30
		8	12	12	12	.20	15														
		-7 -6 -4 -3	2		10.	3.12	6.0	120		1	1	5	3	6	7	2	8	10	5	5	10
		3	4																		
			-3 -2	3	3.	2.78	5.0	96		1	1	18	13	3	6	14	19	6	6	6	
		14	0	3	12	.0	13	17			4	-4	0	14	1	9	12	12	-2		33
		10	-2	2	11	-.2	3	-4			4	2									
			-2 -1 4		3.	1.15	5.5	70		3	1	3	5	12	8	8	-4	7	4	18	
		8	14	5	4	.6	5	-2			2	3	-3	11	6	8	10	11	10		30
		14	2	10	8	.4	2														
			-1 1	5	1.	2.90	5.5	69		3	1	16	11	19	14	9	10	2	19	13	
		6	18	20	25	.12	23	28			18	16	10	16	18	4	17	12	26		34
		-5	5	12	25	.7	28	23			0	14	8								
			0 1 6		1.	1.15	7.0	53		3	1	25	10	21	20	34	8	36	29	52	
		30	35	32	23	.20	15	30			40	19	28	24	9	32	26	22	24		46
		10	27	32	3	.8	-5	42			33	2	27	6	-2	22	6	20	20		
		52	56	14	20	39	-4	32			12	12	22	14	7	1	25				

smaller grid size

mining
geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 4

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW			8/22/72		023	7		4

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-8-5	-4-2	½	300.	1.15	6.0	207		1	1	10	9	9	8	8				16	
			-3-1	1	30.	2.58	6.0	148		1	1	8	8	5	7	8	8	9		8	
			-2 m 0	1½	10.	2.36	6.0	199		1	1	20	22	12	14	18	20	16	24	17	
		23	12	18	6	.14	17	13		25											16
			-2 0	2	10.	1.90	4.0	122		3	1	4	6	7	2	1	9	9	4	18	
		6	9	10	4	.4	6	6		10		7									17
			-1 1	2	3.	2.75	4.0	95		3	1	4	22	12	-2	7	8	8	4	28	
		3	15	16	14	.21	4	8		12		17	11	17	4	9	18	2	14		28
		14	4	7	7																
			0 2	3	3.1	.35	4.0	76		3	1	16	-2	9	8	11	26	34	-4	36	
		20	27	-4	-8	.24	20	8		10		6	28	6	0	8	14	1	20		40
		-6	10	10	29	.-2	4	17		12		19	18	8	4	13	8	35	17		
8/23/72		-8-7	-4-3	3	3.	3.02	7.5	69		1	1	19	9	16	4	9	15	12	24	12	
		12	8	14	19	.15	16	10		10		7	3	15	2	14	6	21	11		27
		14	6	6																	
			-3-2	4	3.1	1.05	6.8	53		3	1	2	14	4	6	10	12	7	-2	28	
		6	-14	8	13	.2	10	6		11		13	8	17	7	1	-10	6	-13		32
		4	14	2	0	.14	12	-4		17		5	14	8							
			-2-1	5	1.	2.15	7.2	60		3	1	16	6	13	13	28	25	24	-30	35	
		39	20	27	6	.-2	12	8		10		32	14	8	7	21	20	-8	18		36
		0	-3	-2	2	.4	6	13		11		16	12	10	11	-16					
			-1 0	6	1.	1.55	6.7	42		3	1	26	50	26	-2	1	20	9	9	50	
		1	39	1	-1	.3	16	23		18		6	32	4	26	22	19	14	26		
		6	17	38	-5	.38	6	0		14		44	22	9	24	31	26	15	29		66
		26	14	26	12	.2	4	16		22		8	33	13	28	9	6	22	28		
		14	19	11	43	.12	14	16		22		10	38	11	47	34	18				
		-8-6	-4-2	1	30.	2.05	7.3	91	m	1	1	6	7	6	9	9	7			7	
									Ω	1	1	+2	+14	+8	0	+4	+5	0	0	2	
		73	0	-1	+8	.+2	0	+5		+8		+2	-2	+2	+1	0	+8	+4	+3		24

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 5

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW		100 200	8/23/72		0237			4847

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
	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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80
		-8 -6	-3 -1	1½	10	2.	14	7.2	7	m	1	1	12	22	6	15	15	10	16	13	14
		16	17		13	15	.20	5	18			7	18	22	86	11	16	9	18	16	9
									01		1	0	+12	+2	+9	+30	+3	+16	+1	9	
		+2	-2	-22	+3	+3		0	+12		-5	+50	+15	+27	+2	+3	+12	+11	+9	9	
		-22	+10	+34	+1	+10		+8	+12		+17	+4	+16	-1	0	+23	+22	+6	+2	12	
			-2 0	2	3.	3.0	2	6.4	25	m	3	1	14	6	10	12	7	12	13	12	25
		13	14	17	10	.6		15	14												
									03		1	+5	0	-1	+11	+4	+17	+10	+2	18	
		+4	+3	+2	+1	+9		+15	+4		22	+1	0	-4	0	-2	+6	+7	+13		
		+14	+6	+6	-16	-123		9	8		11	8	4								
			-1 1	2½	3.	2.3	4	6.4	22	m	3	1	15	21	17	22	23	20	14	16	44
		14	12		10	10	.14	8	20			9	21	21	16	17	13	18	11	6	
									03		1	12	6	8	17	13	13	16	20	44	
		30	17		24	15	.34	15	14			6	6	15	14	18	17	15	20	30	
		3	13		15	22	.0	5													
			0 2	3		1.	1.8	0	6.2	32	m	3	1	26	8	-37	-2	17	-4	14	8	44
		52	34		44	-12	.14		26	42			20	12	17	20	5	-22	-15	2	30	
		14	34		17	54	-10		36	-14			19	24	18	-2	46	23	21	-4	-2	
		43	34		32	3	.22		21	14			1	-3	34	10	6	-34	-12	47	4	
		23	2		45	30	.9		4	4			12	36	30	36	-28	-8	30	1	38	
		-10	12		-2	35	.40		10	24			14	9								
										03		1	17	27	-32	30	-23	50			
										Vp became too variant for last reading to be taken											
		-9 -8	-4 -3	4		3.	1.6	2	7.5	76		3	1	3	8	6	6	0	2	16	6	20
		11	14		7	3	.8		8	8			6	3	8							
			-3 -2	5		1.	2.2	4	6.7	27		3	1	24	8	4	10	7	2	13	16	22
		26	-2		6	19	.4		1	11			-2	6	0	13	21	8	36	6	4	
		-4	34		34	13	.11		0	-4			30	-20	8	2	6	12	-24	8	9	
			-2 -1	6		1.	1.2	0	7.2	20		3	1	10	13	10	-14	13	18	-4	20	42
		24	16		10	12	.6		26	14			18	10	29	23	18	30	-1	16	16	
		8	19		0	29	.24		14	18			-8	35	4	13	-5	2	-28	6	9	

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW			8/23/72		0237			4 & 7

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80
*		-9	-7	-4	-2 1½	10	2.05	7.5	21		3	1	6	6	4	1	3	9	5	8	16	13
		8	4	6	6	.5																
			-3	-1	2	3	3.15	7.2	60		3	1	7	12	12	10	9	5	12	9	30	15
		11	13	10	8	.10	10		10													
			-2	0	2½	3	1.45	4.9	67		3	1	22	20	16	19	14	30	23	0	65	24
		10	17	17	31	.22	24		24		24		24	19	12	15	20	16	26	27		
			-1	1	3	3	1.62	6.4	97		3	1	25	12	24	19	16	11	15	33	61	30
		32	26	30	19	.14	18		20		25		17	24	19	14	12	24	16	29		
		28	16	8	19	.20	16															
			0	2	3½	1	1.45	6.3	28		3	1	-27	92	38	-24	-12	26	42	11		
		70	-4	29	40	.38	42		-15		50		22	34	44	33	-2	4	31	6		
		35	11	-4	34	.28	4		28		26		81	5	40	28	50	44	-36	-60		
		-42	32	34	46	.20	46		11		31		35	50	17	24	-2	40	16	-8		
		35	37	32	32	.35	27		19		52		0	-10	-16	20	-42	26	19	2		
		20	-64	-12	28	.3	72		14		22		4	25	5	2	44	34	-44	46		
		12	18	51	-4	.19	23		-12		40		8	21	14	24	-60	-10	14	-9		
*		-10	-8	-4	-2 2	3	3.45	6.4	71	m	3	1	6	6	7	6	8	10	4	3	18	12
		6	[redacted]	5	6	.5																
											3	1	10	5	7	10	6	8	9	7	22	19
		8	8	7	6	.12	11		5		18		6	9	7							
			-3	-1	2½	3	2.05	6.3	73	m	3	1	25	15	20	17	20	15	14	14	48	17
		14	14	14	18	.14	13		14		12		18									
											3	1	15	19	6	14	7	8	7	14	38	17
		14	14	14	13	.14	13		16		15		11									
			-2	0	3	3	1.15	4.3	92	m	3	1	20	28	15	15	21	16	19	20	58	24
		18	22	18	18	.18	30		9		4		16	22	22	30	14	6	25	40		
											3	1	22	6	25	0	10	10	8	-11	31	
		-22	-7	0	4	.16	-7		2		-16		-26	-12	-10	-7	13	-12	-6	4		603
		15	22	39	24	.9	18		54		12		17	-8	21	-16	45	-26	7	52		
		18	57	-2	13	.11	22		13		13		24	25	15	30	0	16	-2	22		
		14	19	22	19	.26	18		26													

	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 28 29	30	31	32 33	34 35 36 37	38 39 40 41	42 43 44 45	46 47 48 49	50 51 52 53	54 55 56 57	58 59 60 61	62 63 64 65	66 67 68	69 70 71 72 73 74 75 76 77 78 79 80

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

PAGE 7

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW			8/24/72		0237			4 8 7

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	m/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		-10-8	-1 1	3½		3.	1.25	6.7	9	m	3	1	15	15	15	14	12	16	20	24	53
		15	25		14	19	.22	10	20			12	14	18	14	9	28	19	28	24	
										ρ	3	1	30	26	19	13	30	32	26	25	55
		15	25		17	16	.17	11	28			34	18	25	13	28	22	20	19	10	
		33	24		19	15	.33	22	24			24	7								
			0 2	4		1.	1.75	4.4	9	m	3	1	34	36	54	-8	-2	62	72	30	62
		51	48		40	-18	4.38	100+	78			6	6	26	27	29	60	83	64	-50	
		12	53		45	12	-.30	-32	38			68	24	7	-24	8	60	52	-17	-12	
~		18	-12		-18	18	100+	0	18			5	38	12	-18	32	15	17	-15	-4	
		34	3		15	0	.38	26	21			12	-2	-10	12	16	0	14	27	10	
		48	8		24	21	.16	32	30			20	17	75	6	32	27	30	37	-4	
										ρ	3	1	46	10	-3	0	20	19	-6	6	49
		20	-8		8	32	.30	24	34			16	6	21	12	-12	0	-14	9	0	
		22	-9		20	-4	.20	10	37			32	56	43	27	34	54	10	16	23	
		6	10		18	8	.16	17	15			10	1	14	5	22	-20	7	15	40	
		-11-9	-4-2	2½		3.	2.00	5.8	78		3	1	9	10	12	20	12	14	16	20	76
		15	18		15	18	.18	14	20			14	15								
			-3-1	3		3.	1.90	5.4	121		3	1	8	15	15	5	8	8	10	8	36
		5	18		12	26	.11	2	19			12	14	23	15	22	10	9	7	10	
			-2 0	3½		3.	1.40	3.4	66		3	1	0	-2	6	24	25	6	4	22	32
		4	18		15	6			282												
			-2 0	3½		1.	2.05	2.0	142		3	1	33	32	17	19	5	16	8	16	54
		16	10		17	22	.16	27	70			10	28	31	34	2	9	8	3	10	
		24	29		33	3															
			-1 1	4		3.	1.15	6.9	115		3	1	14	20	14	18	20	26	30	18	58
		22	22		18	20	.23	16	12			16	16	22	18	22	20	19	11	24	
			0 2	4½		1.	1.55	4.5	102		3	1	20	22	30	6	0	2	0	46	42
		56	1		34	85	.26	4	116			16	38	38	34	14	24	30	44	24	
		-7	22		60	0	.10	-2	16			32	46	12	2	10	10	40	-11	14	
		19	23		38	3	.22	20	62			32	36	36	38	8	6	28	9	11	
		-7	-6		16	26	.16	8	33			17	36	14	32	-2	6				

mining geophysical surveys

TIME DOMAIN INDUCED POLARIZATION AND RESISTIVITY SURVEY

I	LINE	DIRECTION	"a" space	DATE	ELECTRODE ARRAY	PROJECT	UNIT	OPERATOR	Rx
	6 #2 NW			8/24/72		0237			404

TIME	T	Rx	Tx	n	RANGE	MULT	CURRENT	∫a	mv/Ω	1/3	Hz	RDG	RDG	RDG	RDG	RDG	RDG	RDG	RDG	"m"	PLOTTER ABSCISSAS
		+12 -10	-4 -2	3		1.	1.94	2.5	89		3 1	not enough signal from current electrode to read Rx									
		~~+13~~	-3 -1	3½		3.	1.10	5.5	98		3 1	6	8	15	17	10	16	16	14	85	
		13	-3		9	24	.16	28	3		12	14	9	20	8	14	11	6	6		30
		17	26		9	1	.19	8													
			-2 0	4				0.8			3 1	not enough signal									
			-1 1	4½		3.	.05	6.9	142		3 1	28	10	10	4	23	19	24	20	57	
		30	16		16	24	.11	31	14		24	24	18	10	36	27	18	27	15		34
current change 1 x 2.20		26	5		10	38	.4	20	16		11	28	6								
			0 2	5		1.	1.30	4.7	111		3 1	27	-22	83	60	34	-17	37	10	72	
		34	6		15	8	-14	8	6		~~99~~	38	40	22	41	47	58	11	23		78
		37	12		62	13	.12	30	58		50	29	15	58	56	42	8	-6	34		
		24	24		60	8	.7	10	-10		21	40	25	-8	24	4	35	24	26		
		45	18		12	-14	.37	25	7		4	33	39	23	20	31	43	75	16		
		10	2		29	48	.31	2	42		14	19	27								

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

LINE 6 SPD 2 NW

ROAD

Project:	Client:	Date:
0237	ESSEX	8 22 72

TIME	I	VA	COMMENTS
	6.0		0 - 1
	5.8		0 - 2
08:52	6.0		-1 -2
	6.0		-1 0
	7.0		0 1
	7.5		1 2
	7.5		1 -1
09:40	5.5		0 2
10:00	5.5		-3 -2 1
	6.0		-2 -1 2
	6.0		-1 0 3
	7.0		0 1 4
	7.5		1 2 5
	5.5		-2 0 ½
	7.5		-1 1 1½
	7.5		0 2 1½
10:59	6.0		-4 -3 1
	5.5		-2 -3 2
	6.0		-1 -2 3

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

Project:	Client:	Date:

TIME	I	VA	COMMENTS
	6.0		-1 0 4
7.0	[illegible]		0 1 5
7.0			1 2 6
	6.0		-1 -3 ½
	5.5		0 -2 1
	7.5		1 -1 1½
	5.5		0 2 2
13:24	6.0		-3 -4 R
	5.0		-3 -2 2
	5.5		-2 -1 3
	[illegible] 5.5		4 +1 5
	7.0		0 1 6
	6.0		-2 -4 ½
	6.0		-3 -1 1
	[illegible] 4.0		-2 0 1½
	4.0		-1 1 2
	4.0		0 2 2½

MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

LINE 6 SRD 2 NW RDW

Project:	Client:	Date:
0237	ESSEX	8/23/72

TIME	I	VA	COMMENTS
	7.5		-3 -4 3
	6.8		-2 -3 4
	7.2		-1 -2 5
	6.7		0 -1 6
	7.3		-4 -2
	7.2		-3 -1
	6.4		-2 0
	6.4		-1 1
	6.2		0 2
	7.5		-3 -4 4
	6.7		-2 -3 5
	7.2		-1 -2 6
	7.5	7.0 17:20	-4 -2
		6.6 17:40	
	7.2		-3 -1 1½
	4.9		-2 0 2
	6.4		-1 1 2½
	6.3		0 2 3

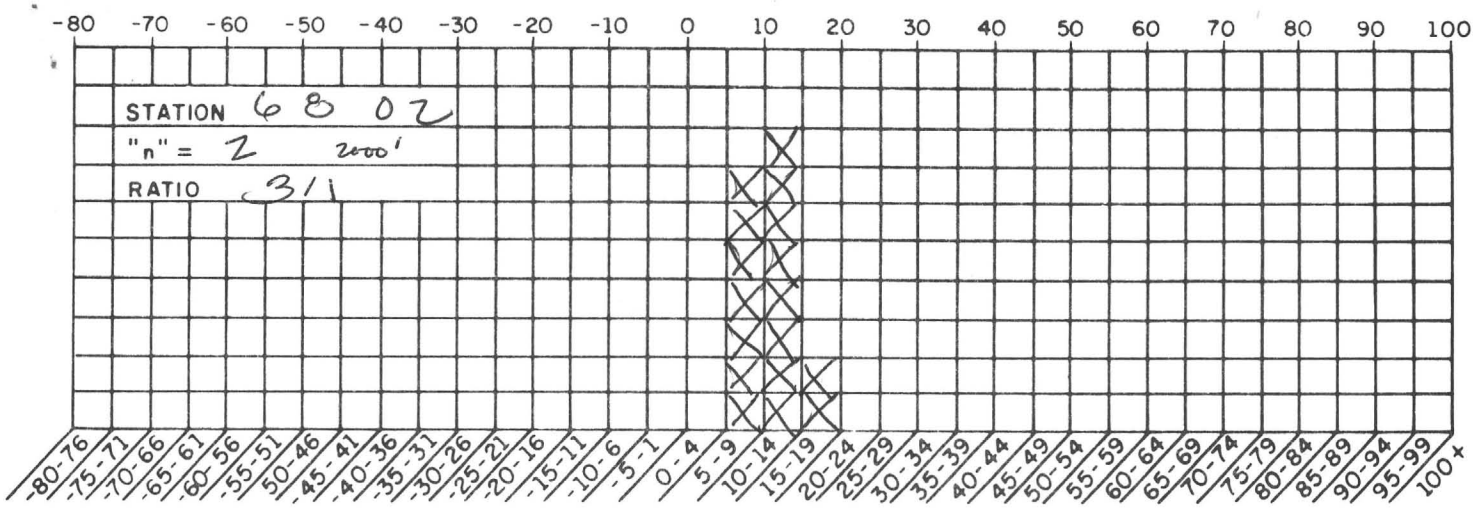
MINING GEOPHYSICAL SURVEYS

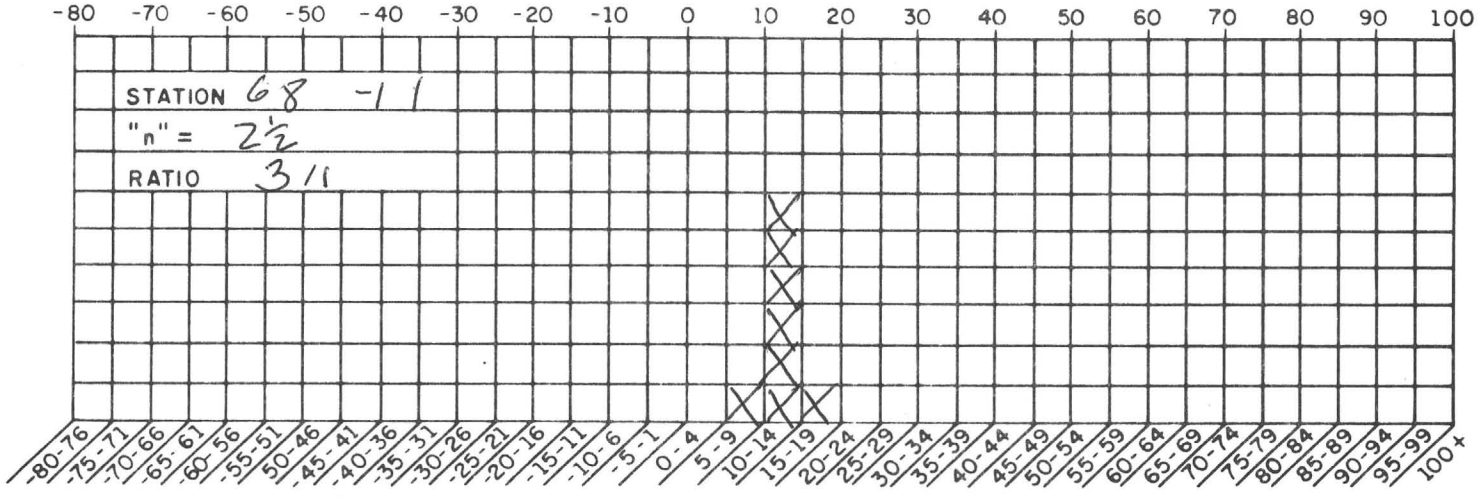
INDUCED POLARIZATION SURVEY

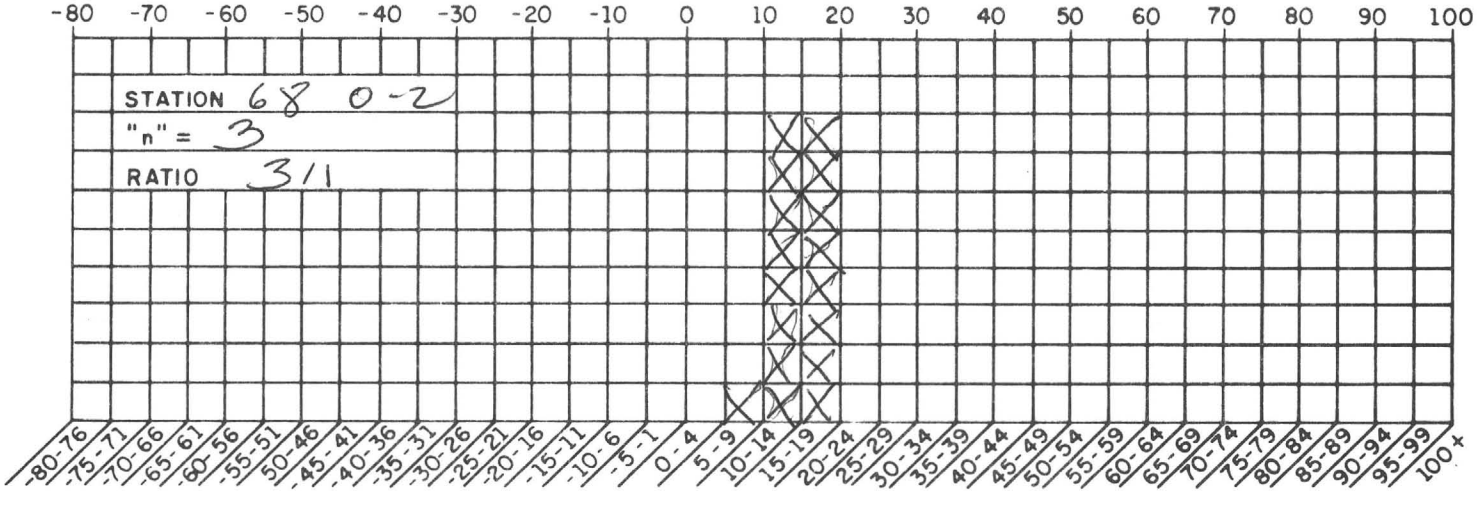
Project:	Client:	Date: 8/24/72

TIME	I	VA	COMMENTS
	6.4		-4 -2 2
	6.3		-3 -1 2½
	4.3		-2 0 3
	6.7		-1 1 3½
	4.4		0 2 4
	5.8/5.4/5.0		-4 -2 2½
	5.4		-1 -3 3
	3.4/2.0/1.1		-2 0 3½
	6.9		-1 1 4
	4.5		0 2 4½
	2.5/1.1/.7		-4 -2 3
	5.5		-3 -1
	0.8		-2 0
	6.9		-1 1
	4.7		0 2

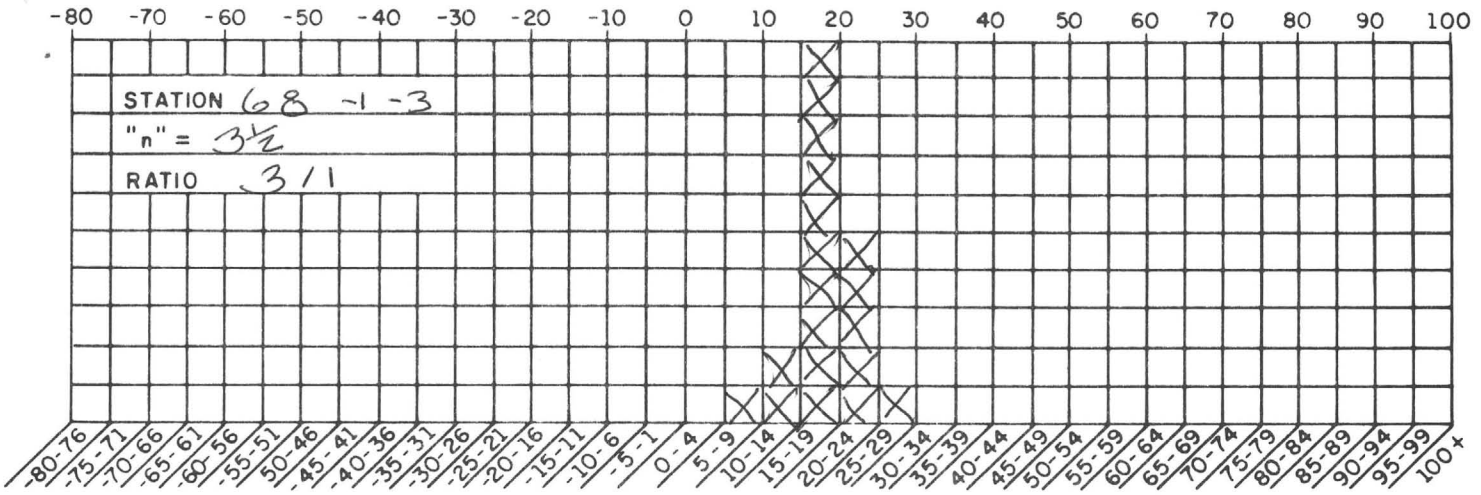
JOB 0237 DATE 8 20 72 LINE 6 SPD 2 SOUTHEAST PAGE 1

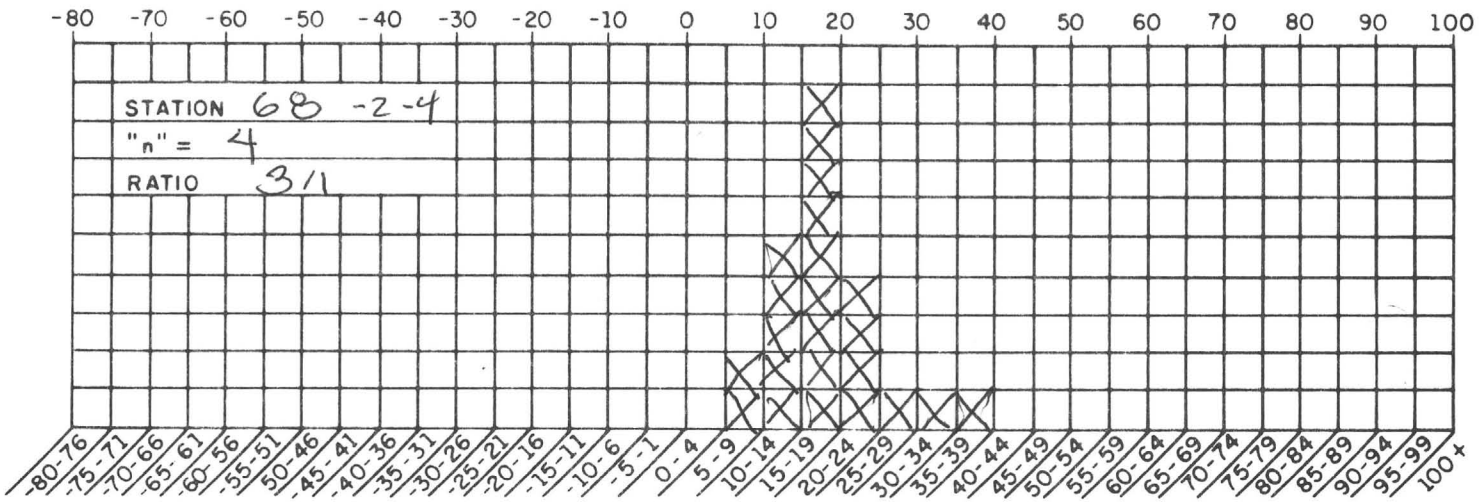


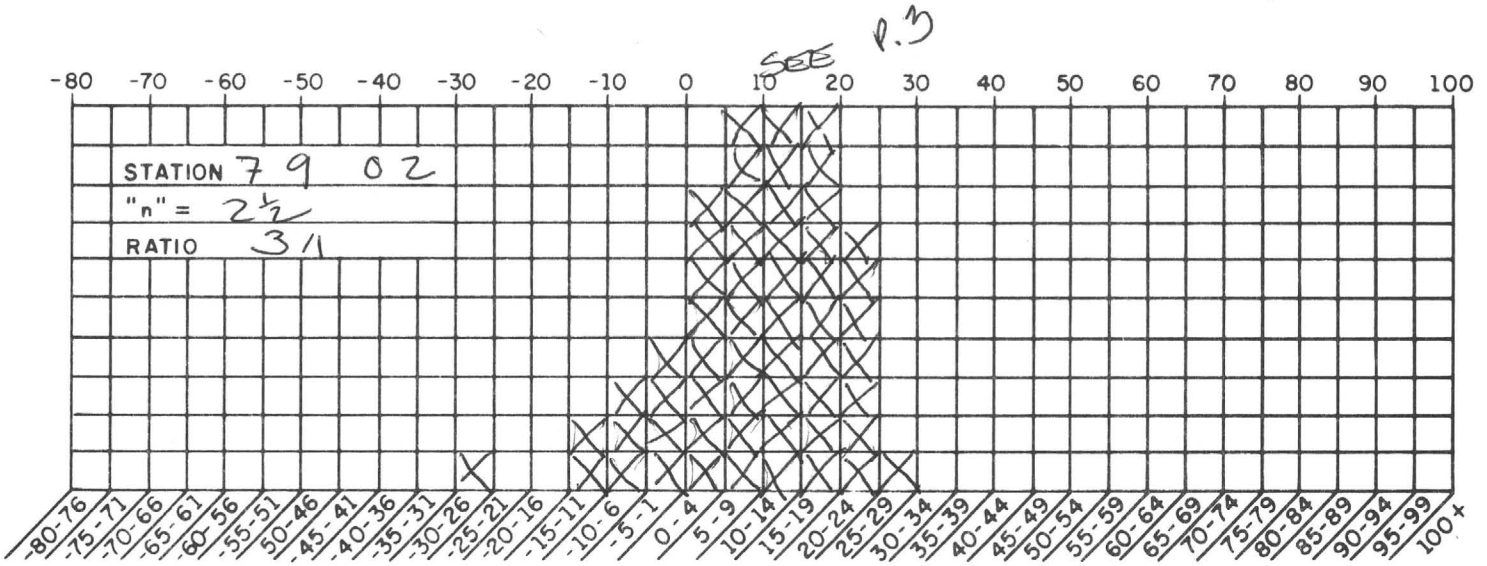




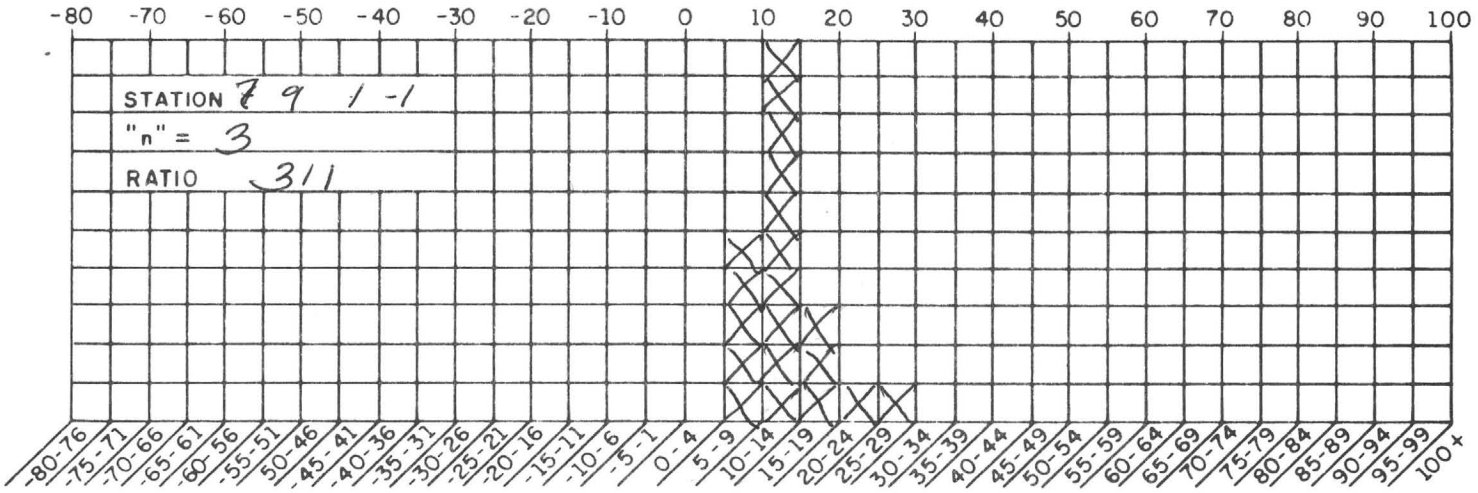
JOB 0237 DATE 8 20 72 LINE 6 SPD2 SOUTHEAST PAGE 2

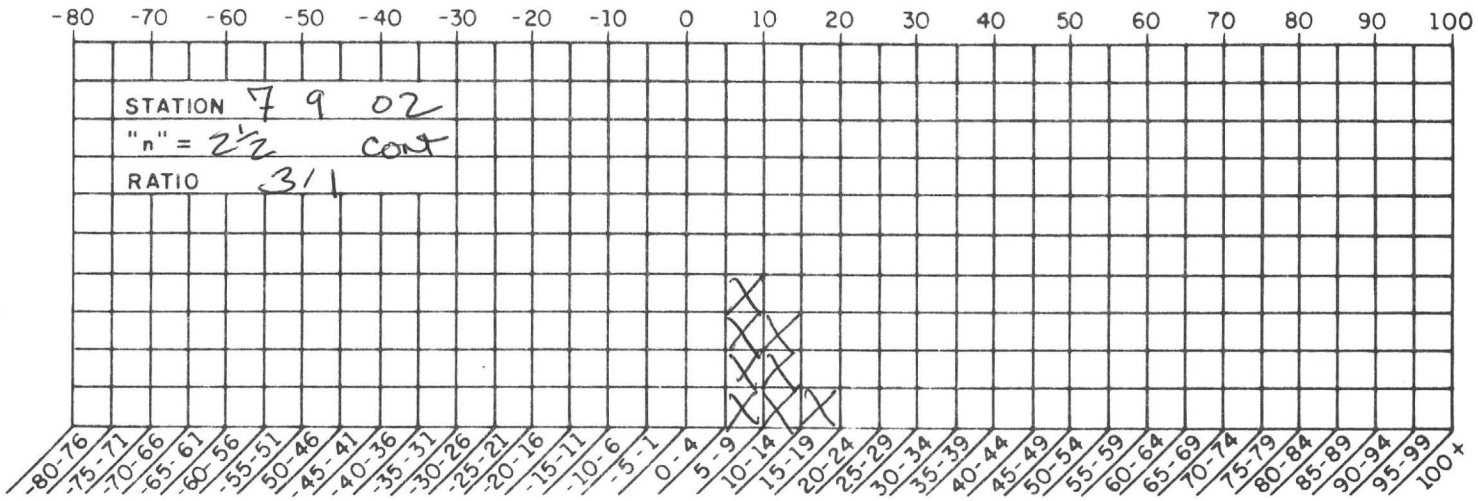


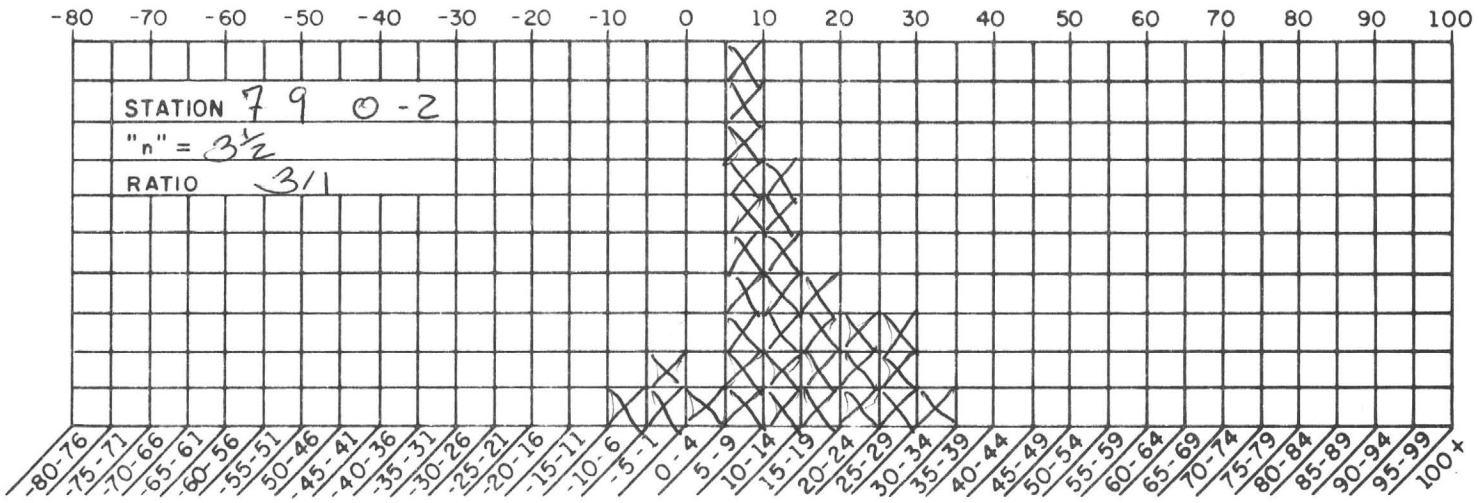




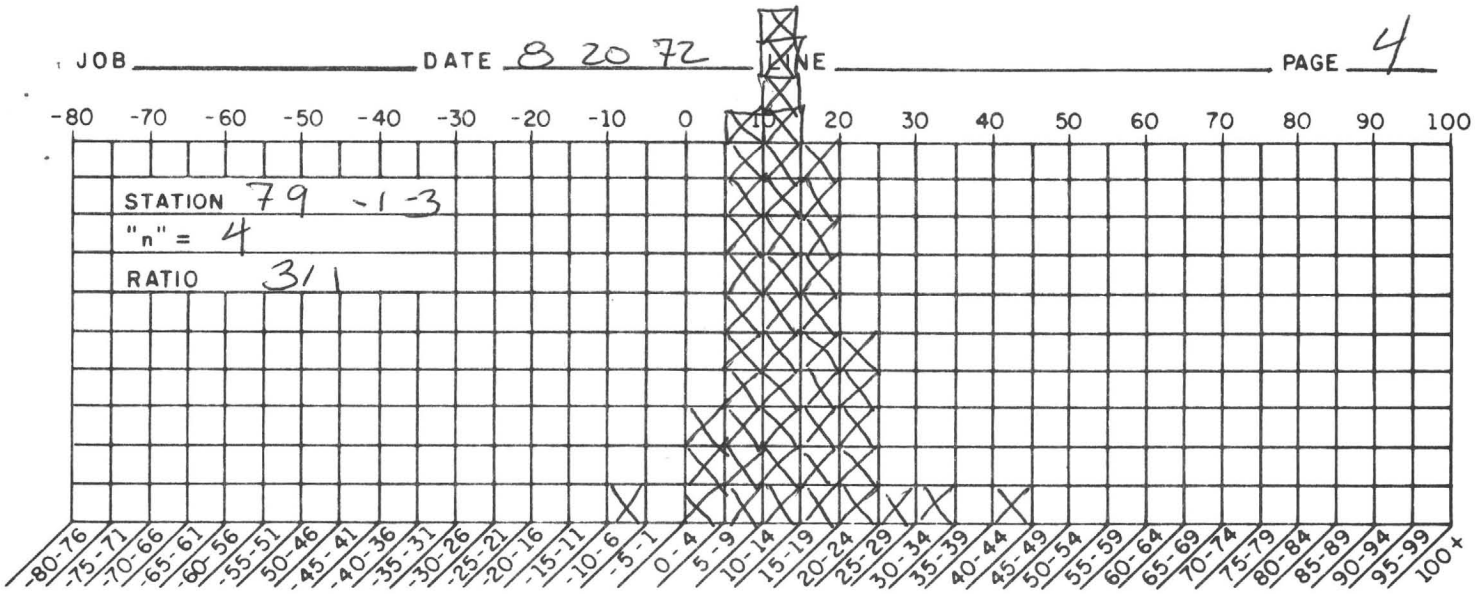
JOB _____ DATE 8 20 72 LINE 6 SP12 SE PAGE 3

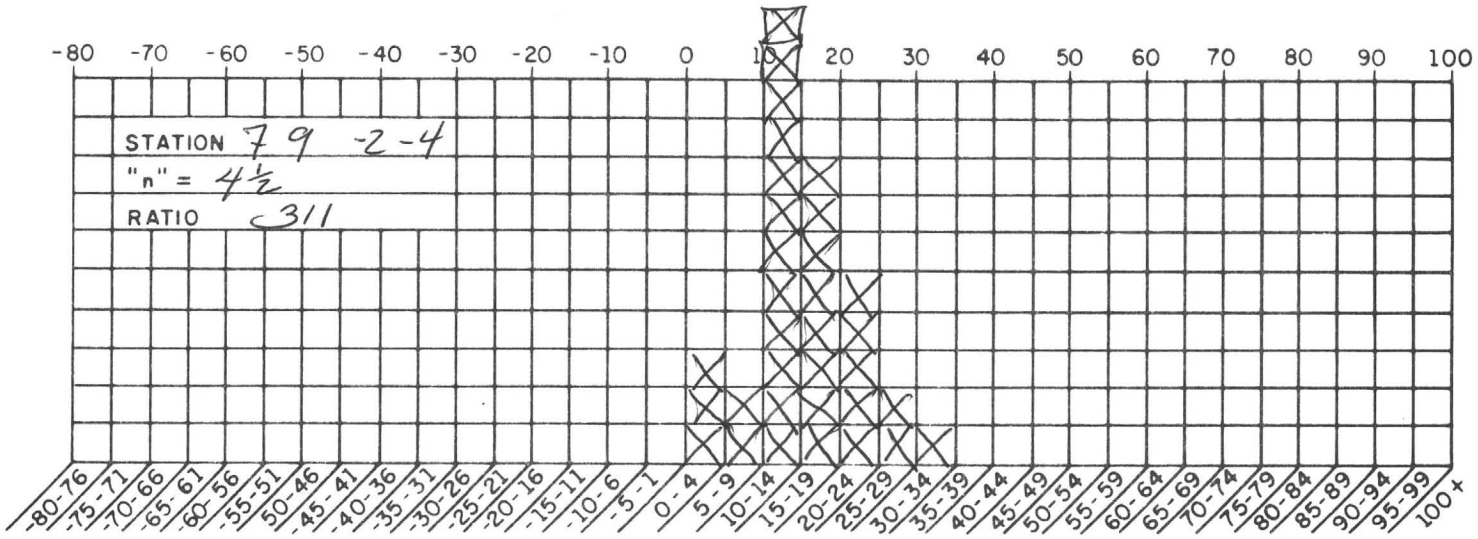


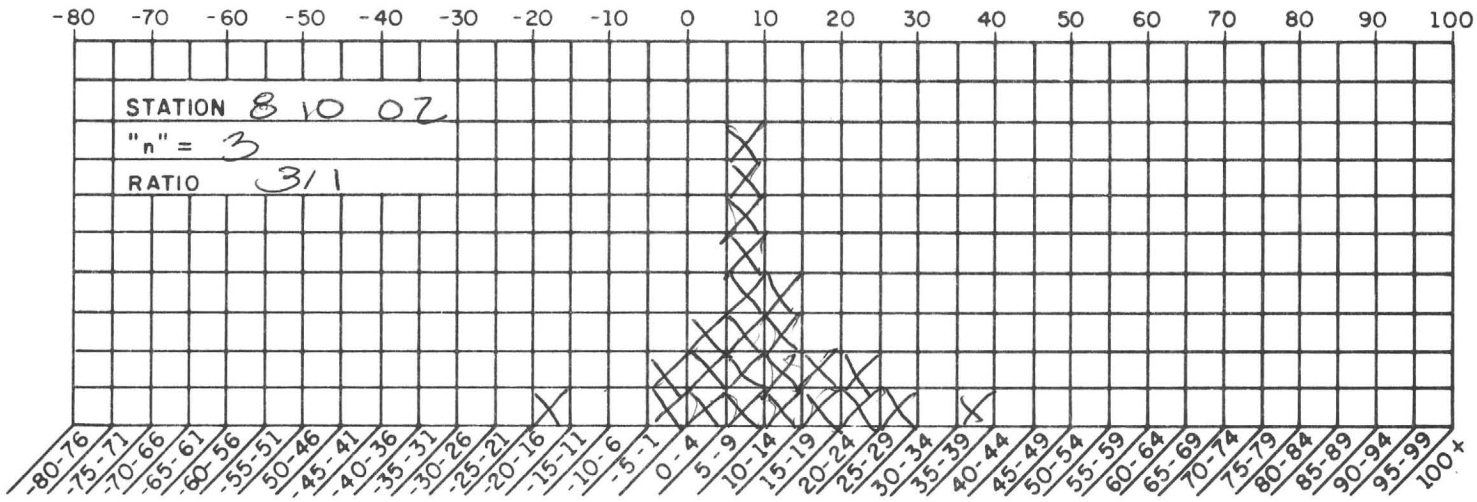




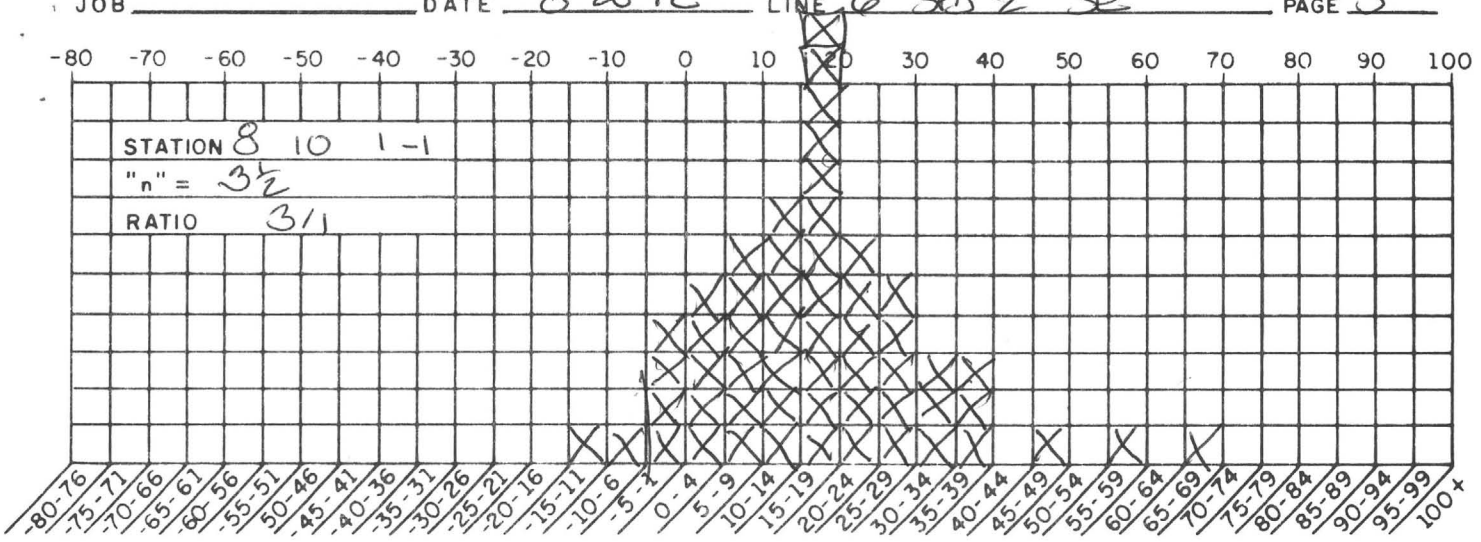
JOB _____ DATE 8 20 72 LINE _____ PAGE 4

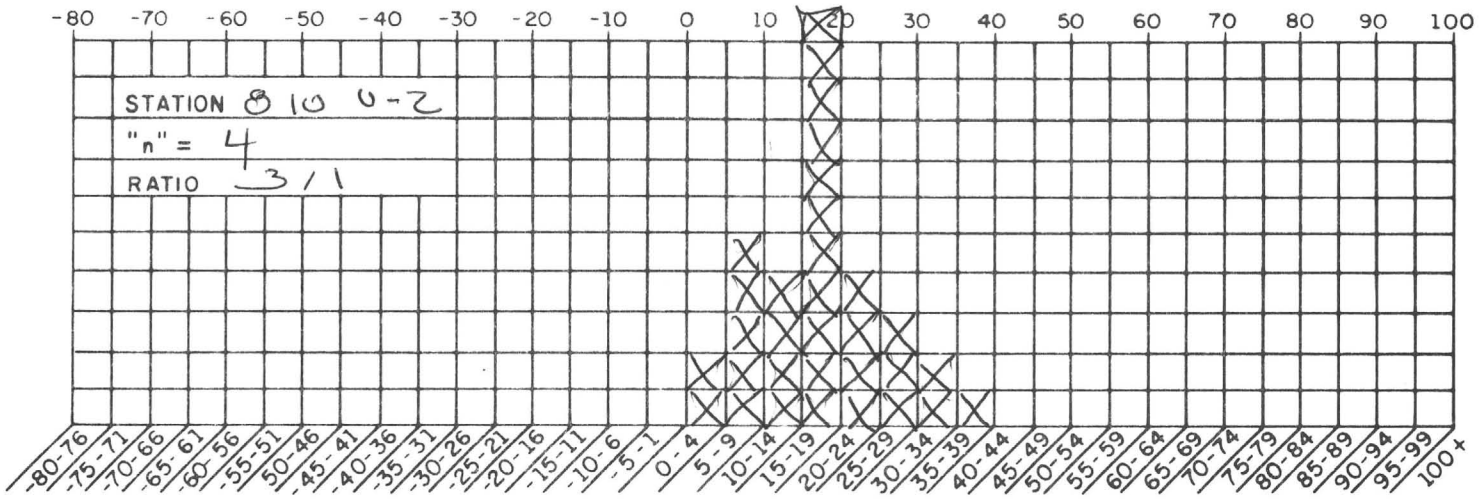


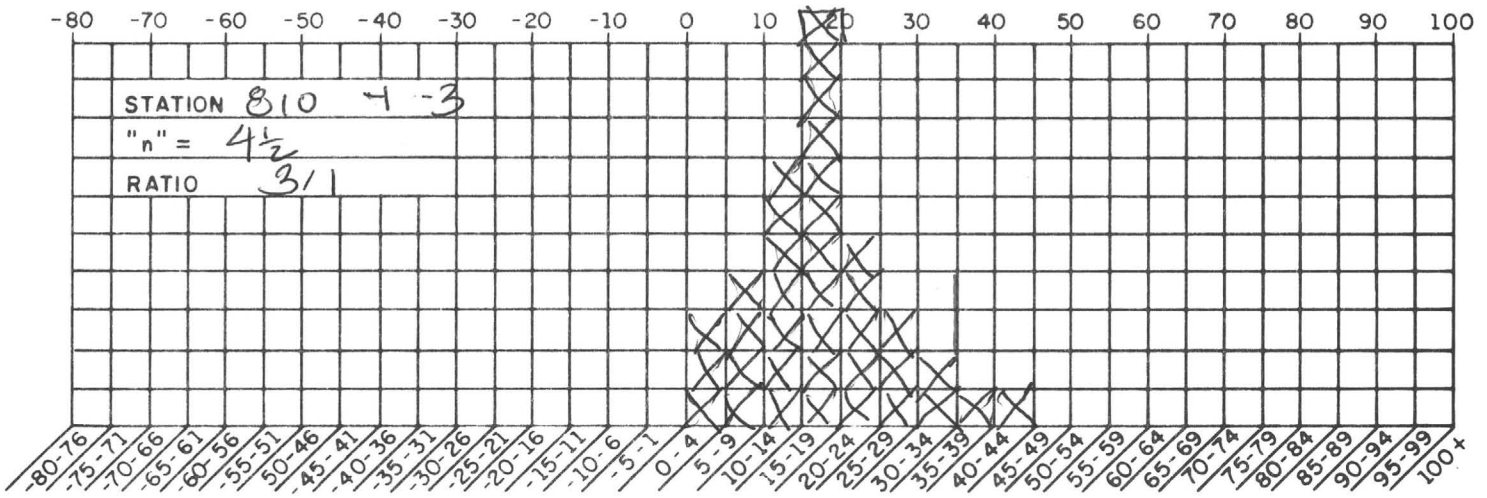




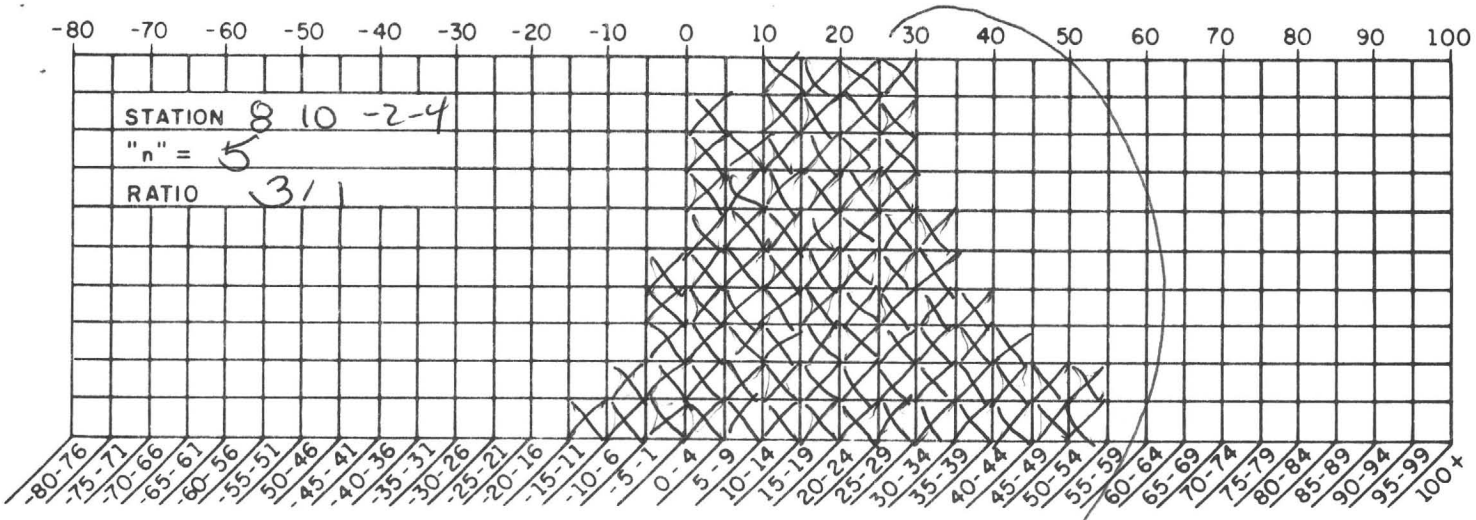
JOB _____ DATE 8 20 72 LINE 6 SD 2 SE PAGE 5

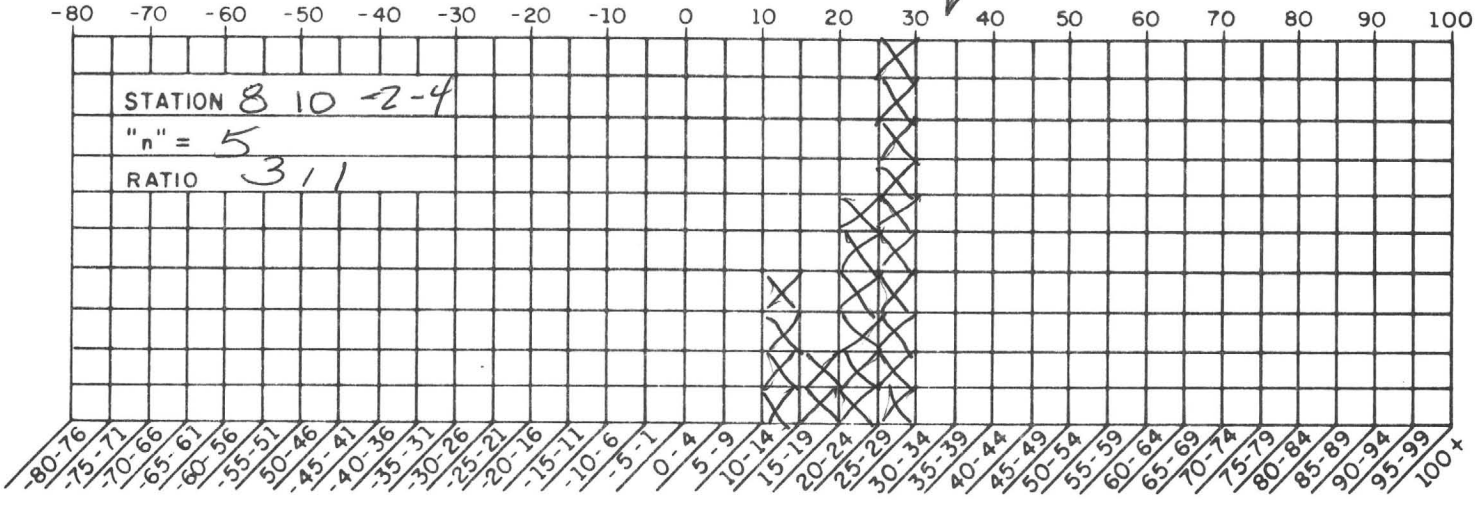


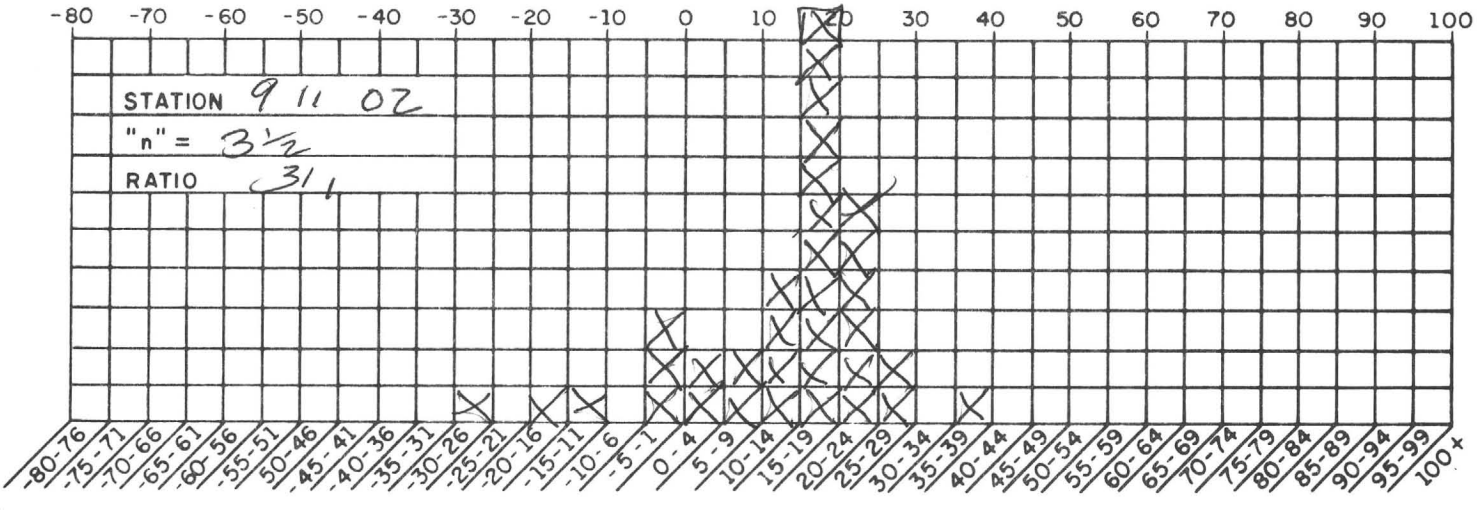




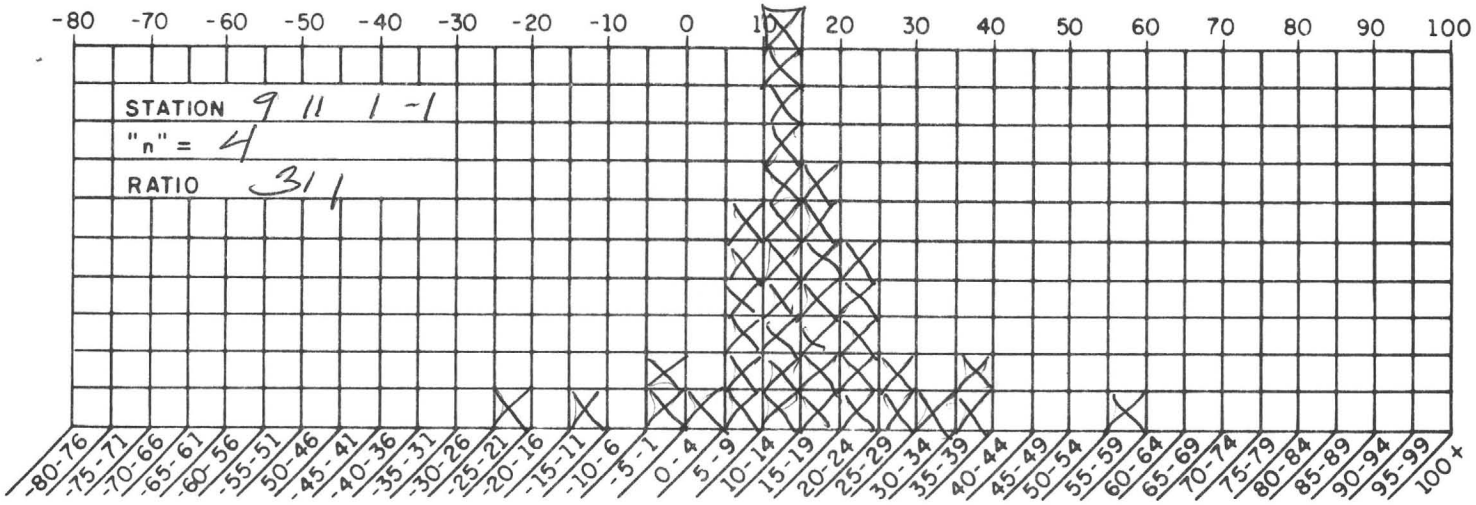
JOB _____ DATE _____ LINE 6 SPDZ SE _____ PAGE 6

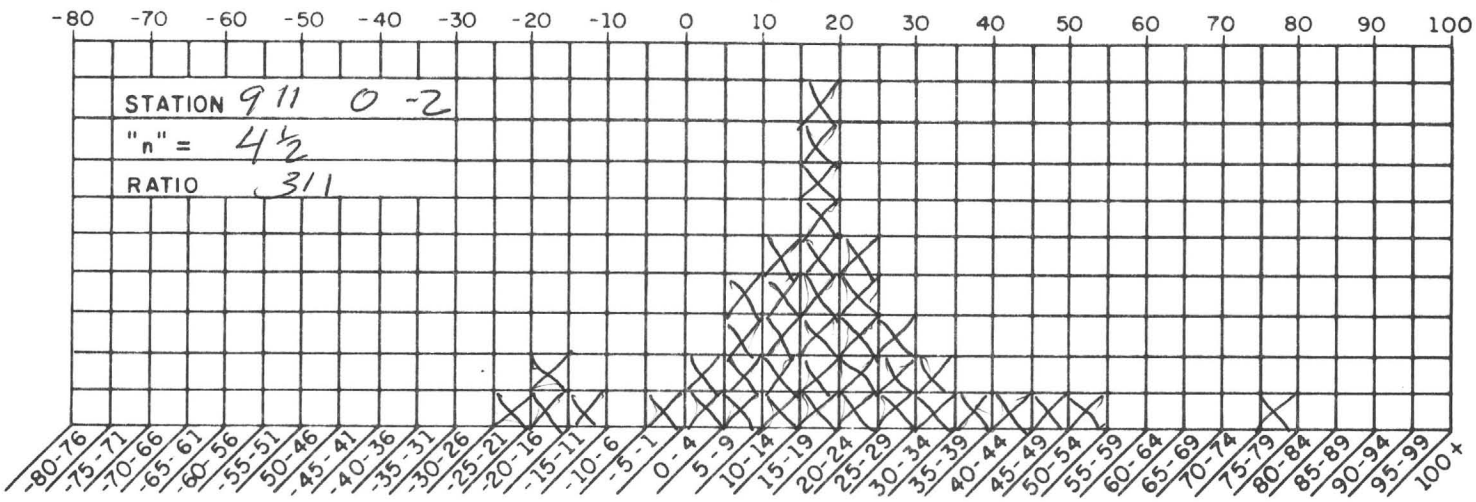


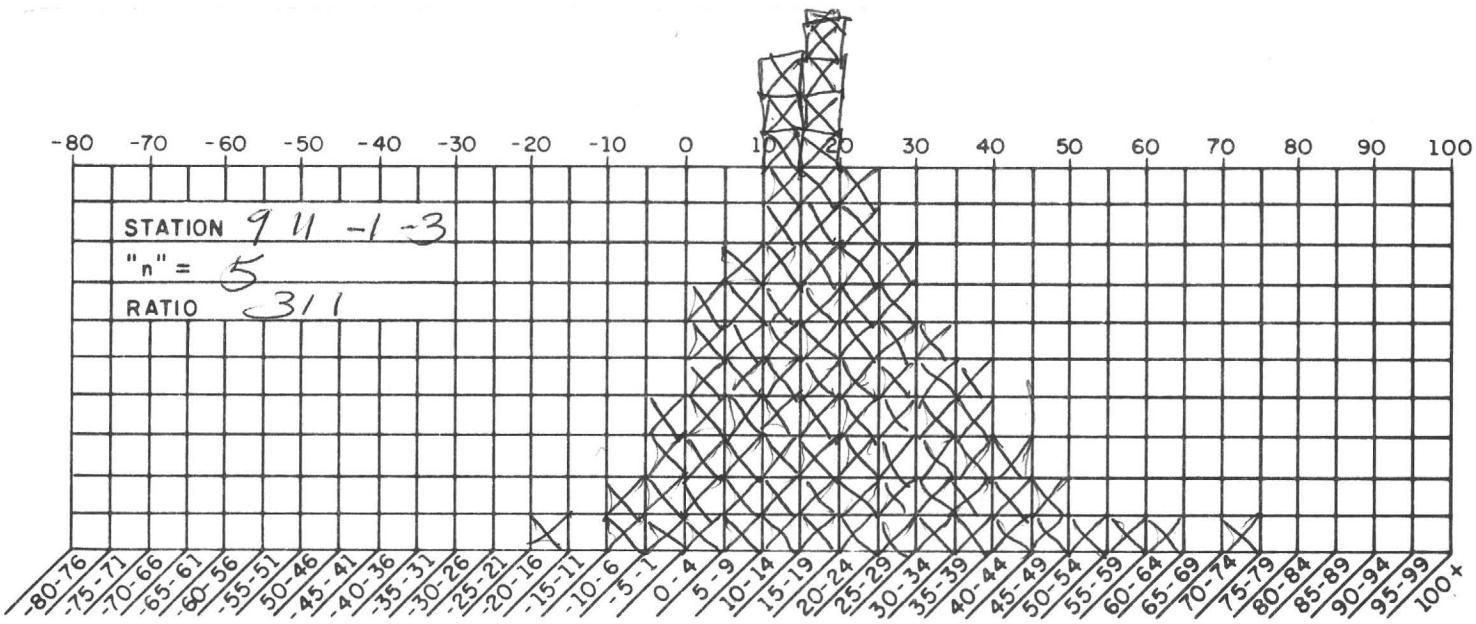




JOB _____ DATE 8 20 72 LINE _____ PAGE 7







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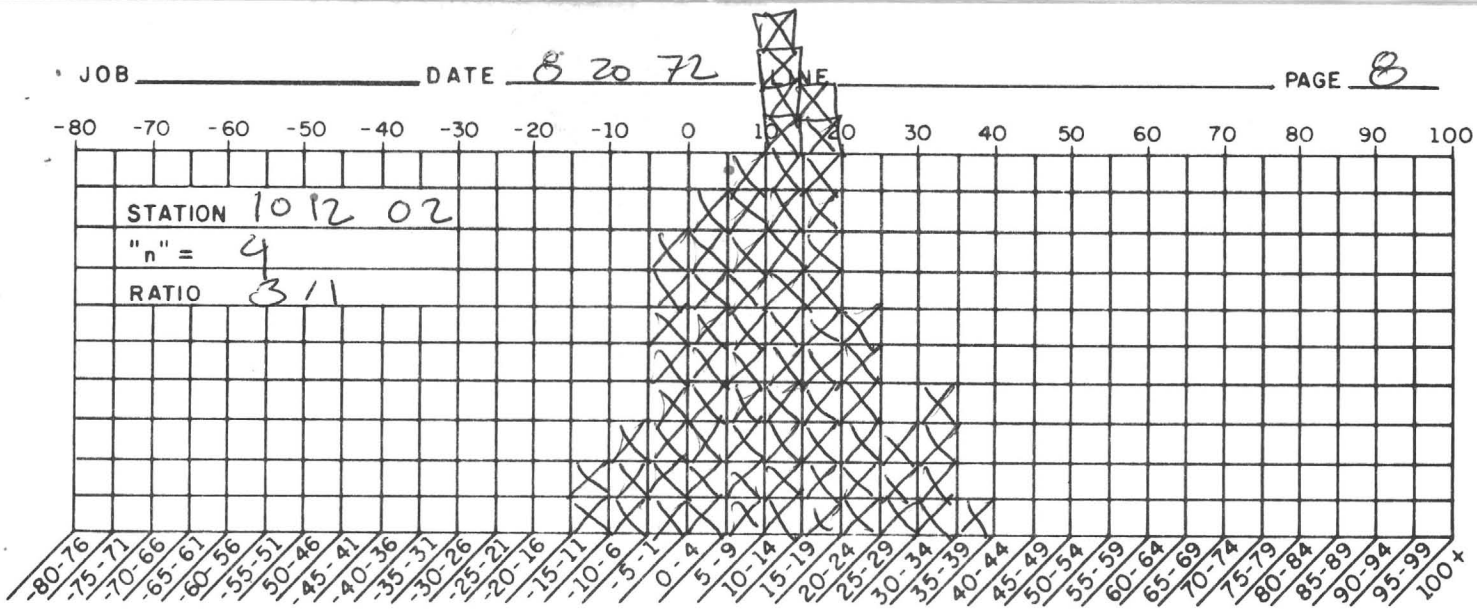
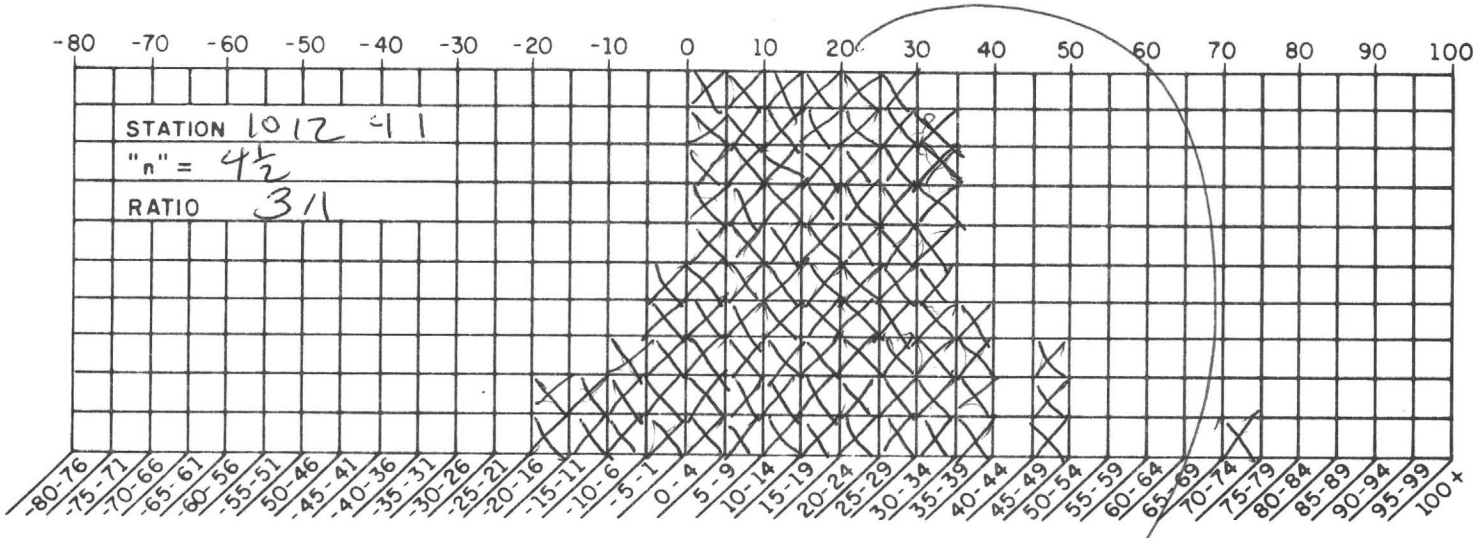
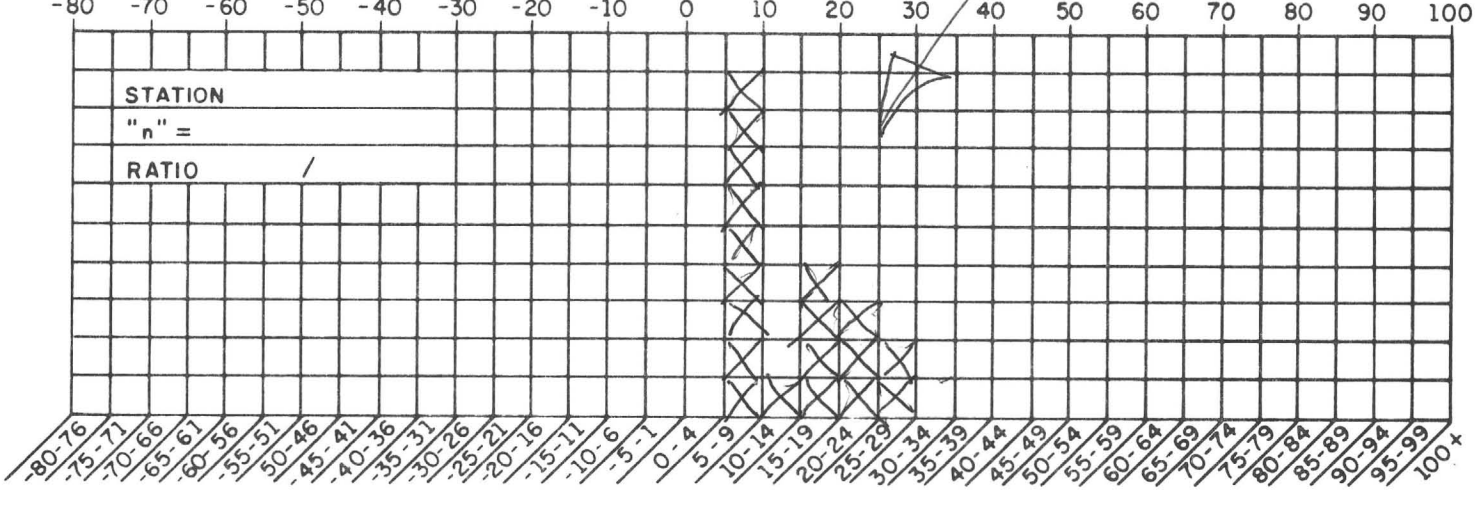






MINING GEOPHYSICAL SURVEYS

INDUCED POLARIZATION SURVEY

L-6 #2 SE

Project:	Client:	Date:
0237	ESSEX INT.	8/20/72

TIME	I	VA	COMMENTS
0-2	6.0		68
-1-(1)	7.0		
-2-0	6.0		
-3-1	6.0		
-4-2	6.5		
0-2	6.0		79
-1-(1)	7.0		
-2-0	6.0		
-3-1	6.5		
-4-2	7.0		
0-2	6.0		810
-1-(1)	7.0		
-2-0	6.0		
-3-1	6.5		
-4-2	7.0		
0-2	6.0		9 11
-1-(1)	7.0		
-2-0	6.0		
-3-1	6.5		

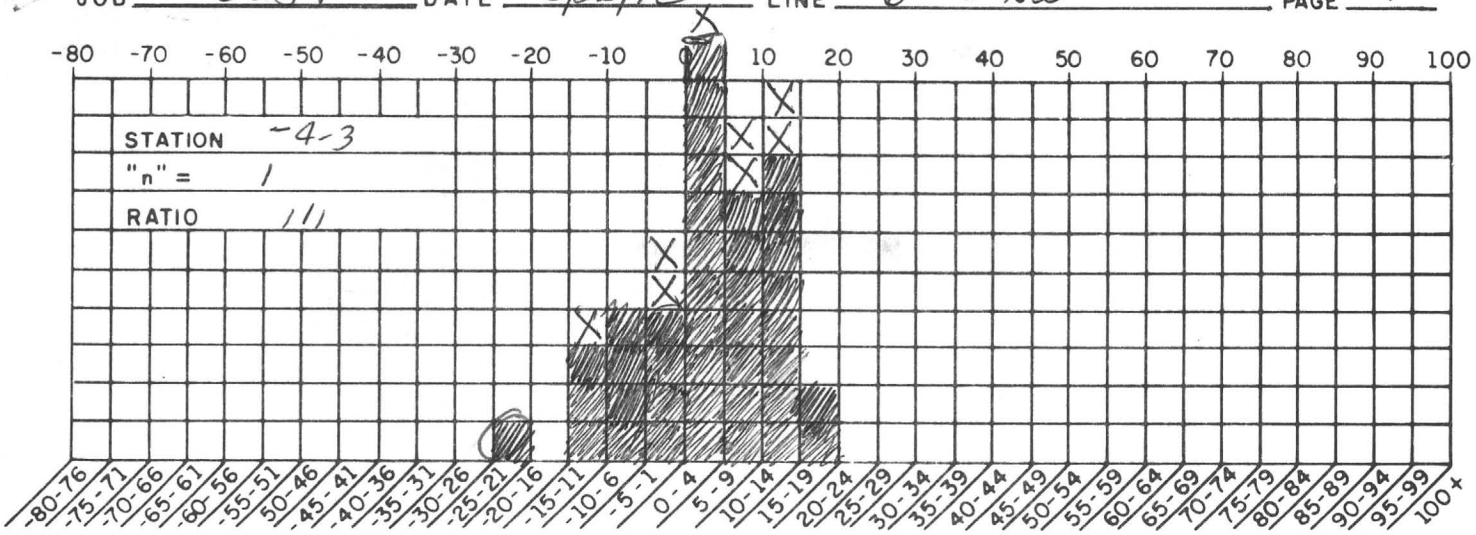
MINING GEOPHYSICAL SURVEYS

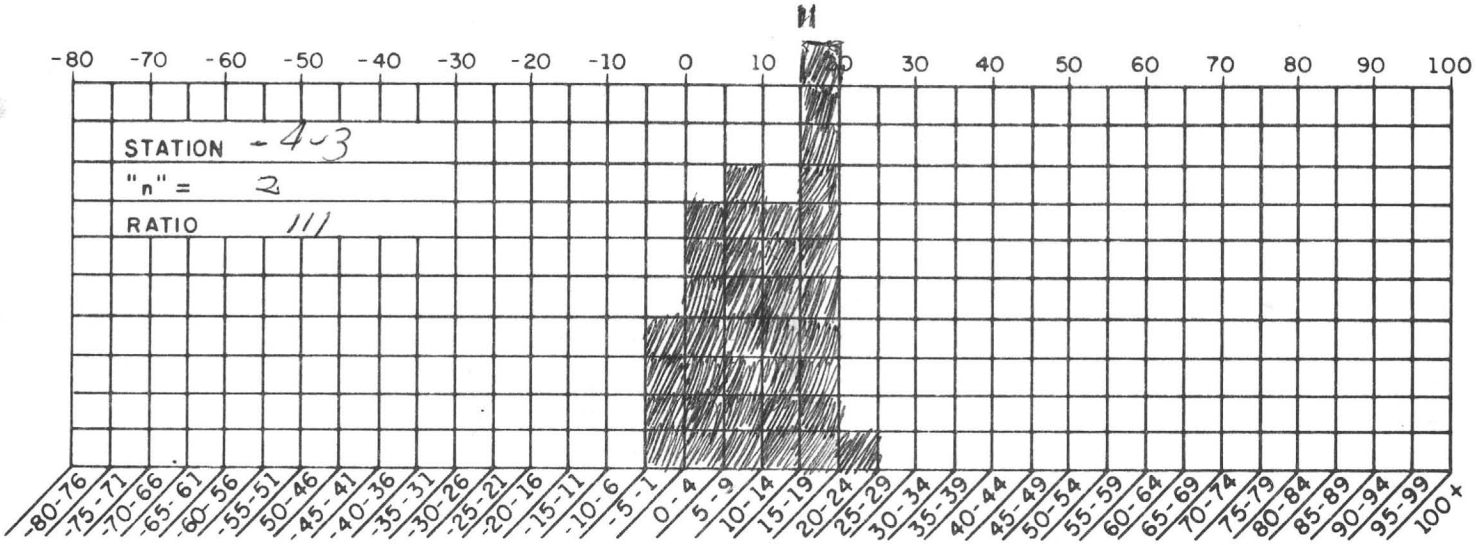
INDUCED POLARIZATION SURVEY

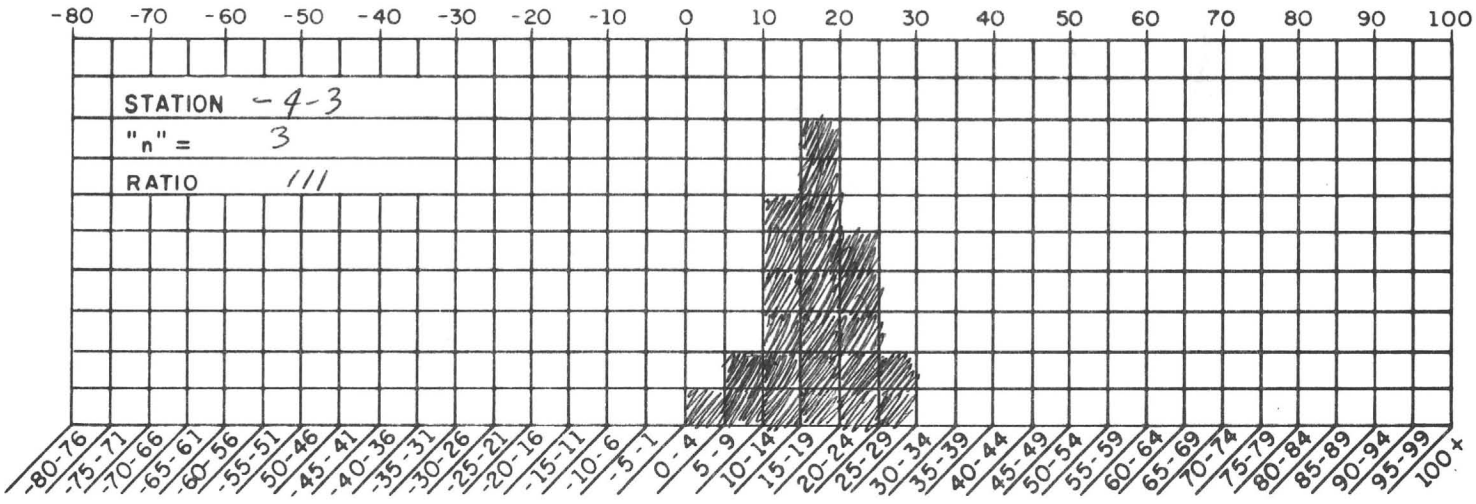
Project:	Client:	Date:

TIME	I	VA	COMMENTS
0-2	6.0		
-1-(1)	7.0		
-2-0	6.0		
0-2			
-1-(-1)			

JOB 0237 DATE 8/22/72 LINE 6 #2 NW PAGE 1







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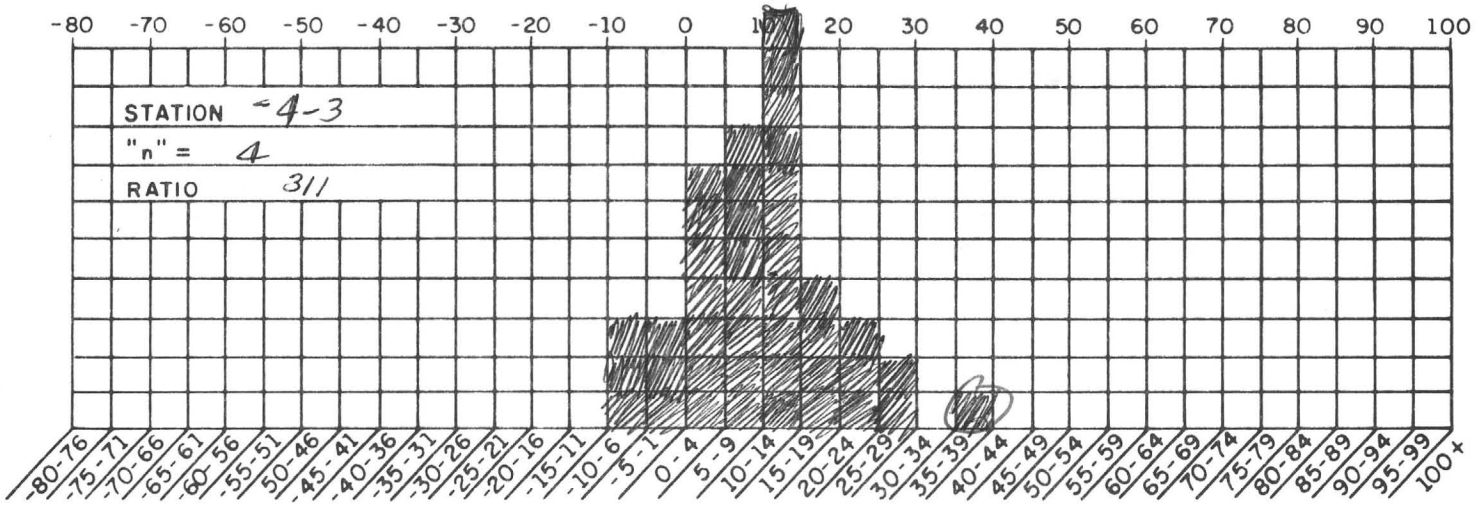
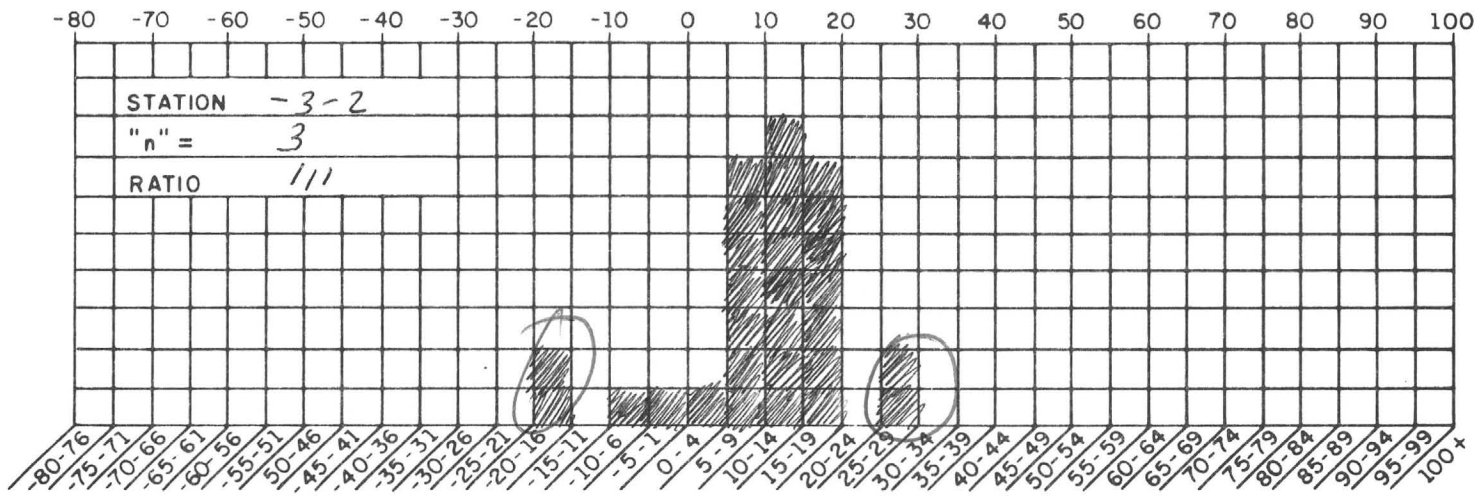
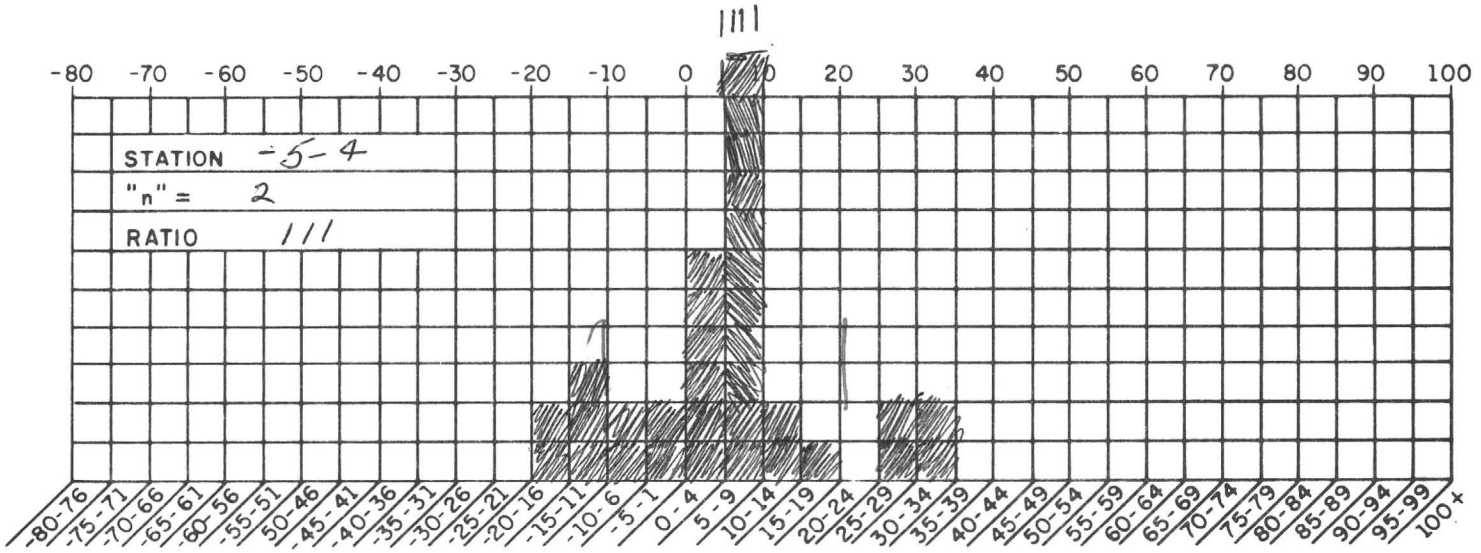
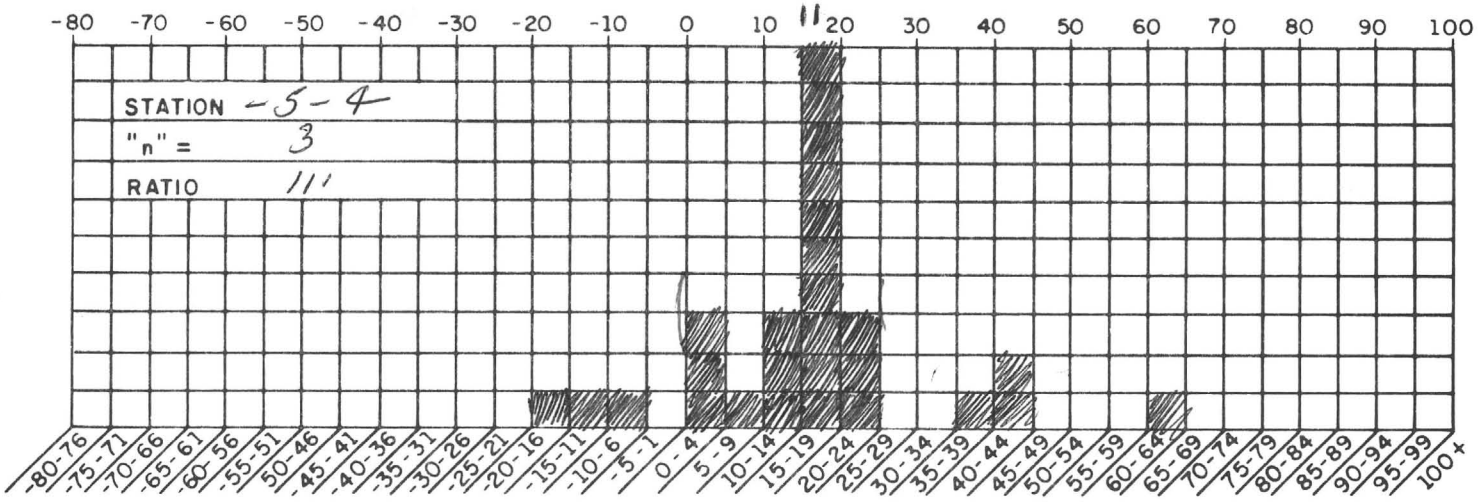
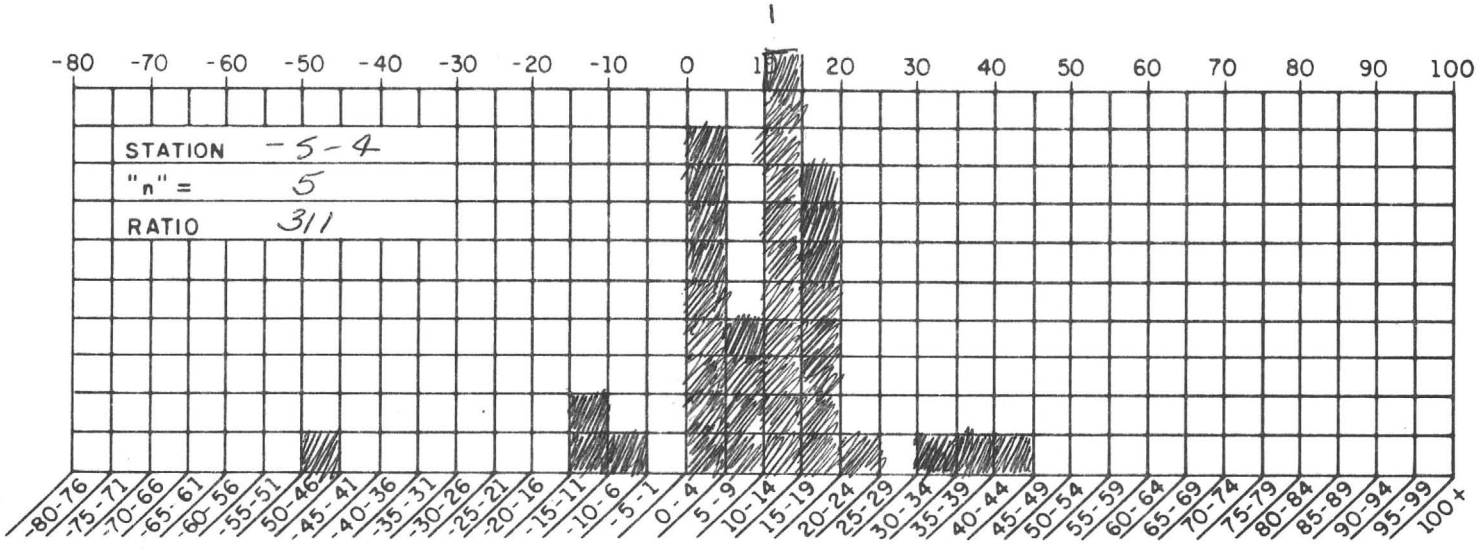


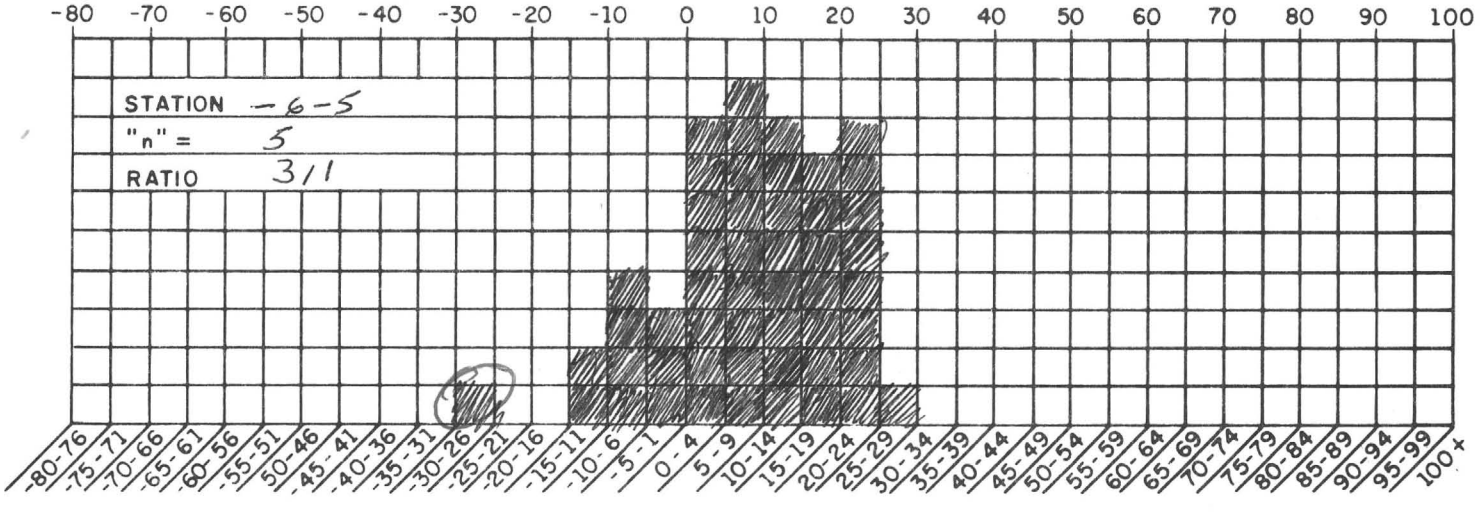




JOB 0237 DATE 8/22/72 LINE 6 #2 NW PAGE 3







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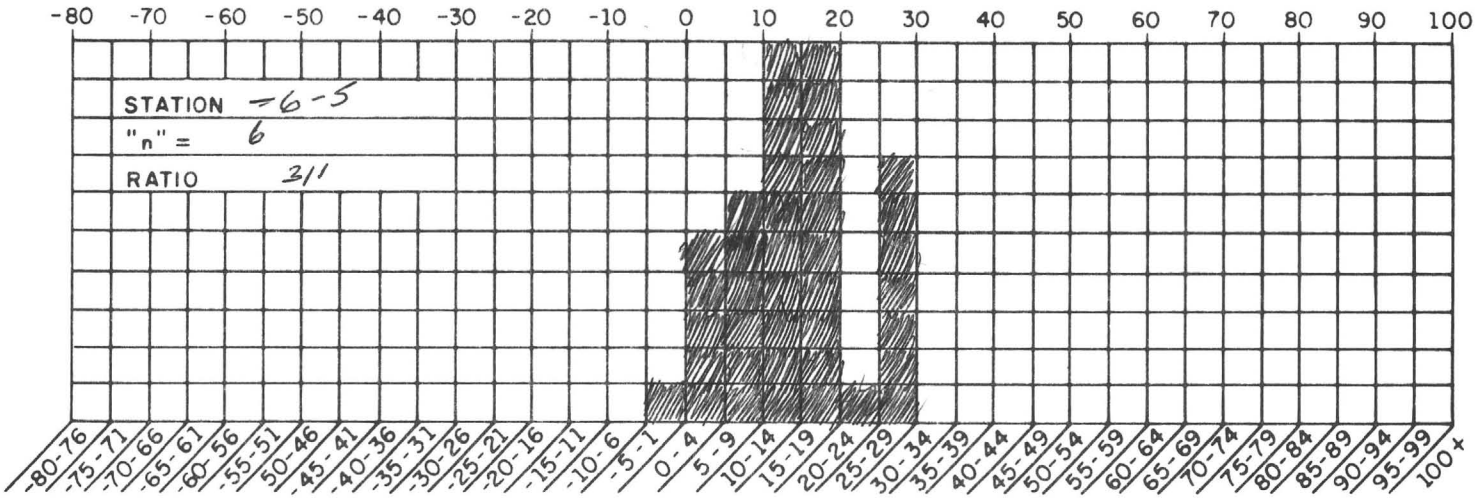

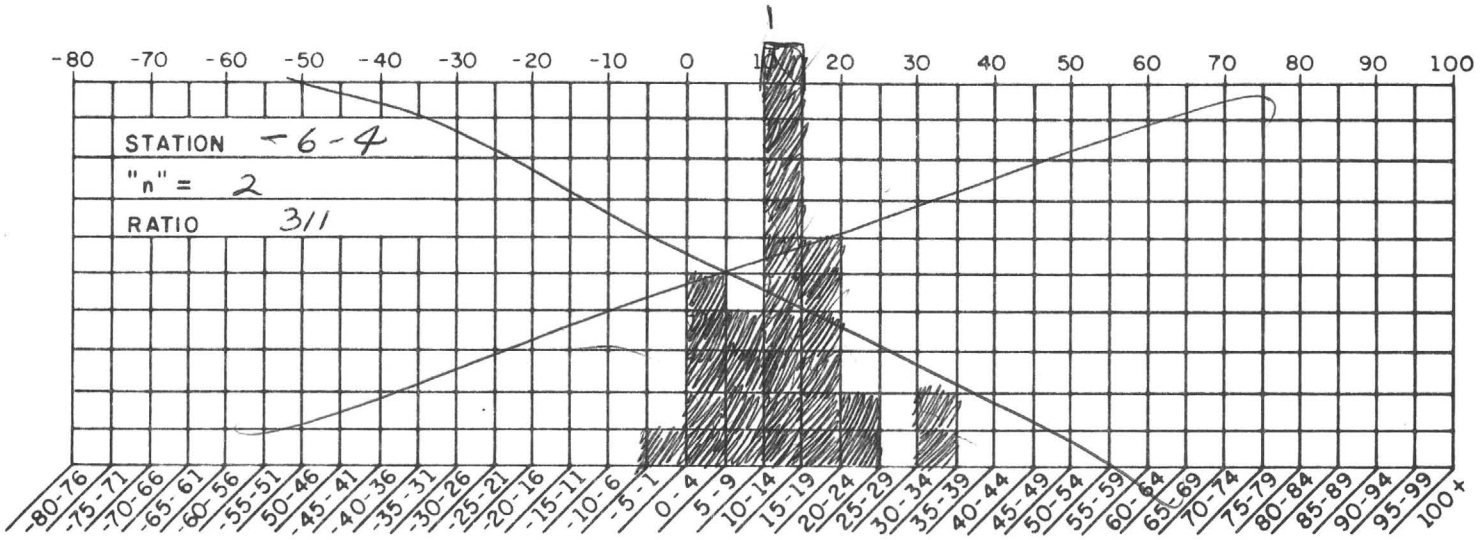

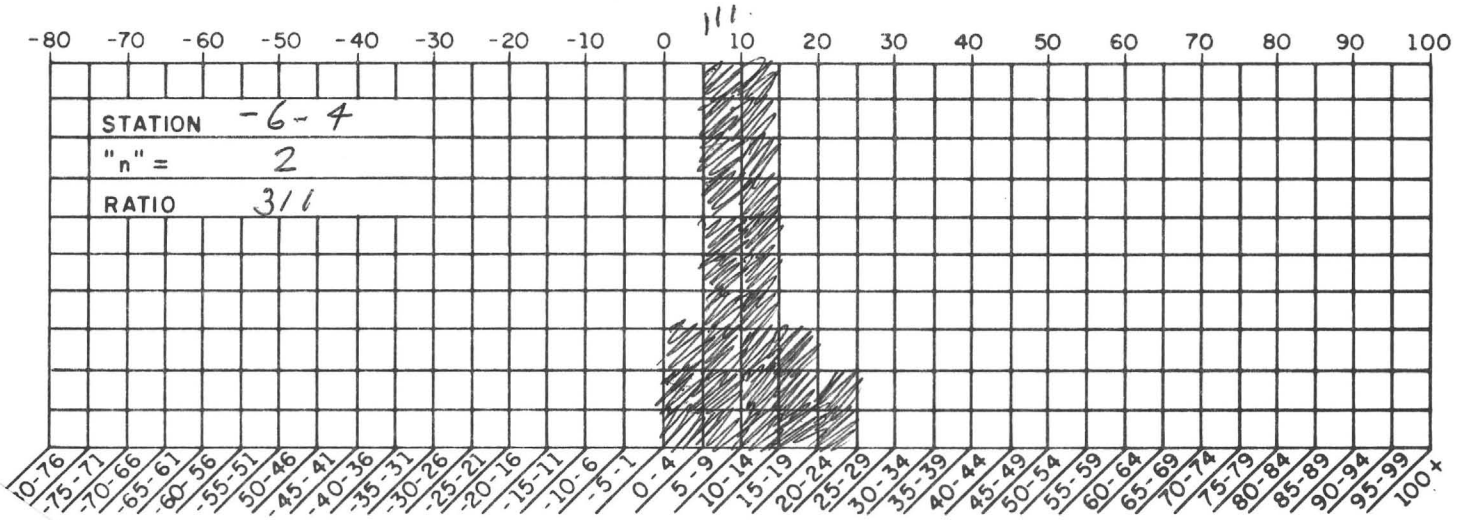

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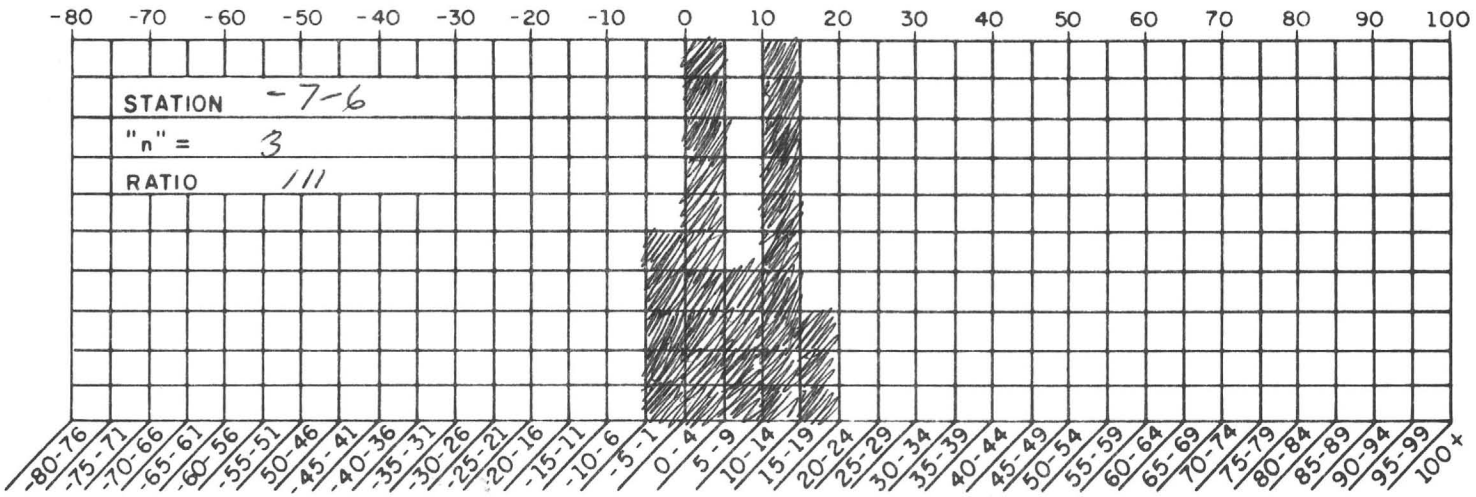

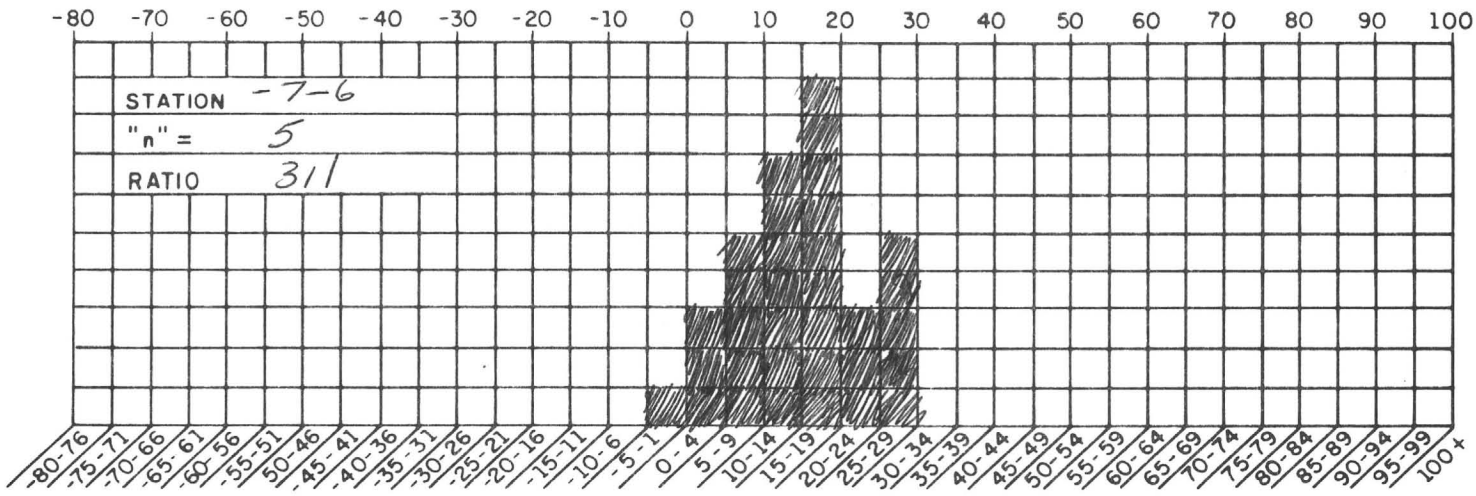

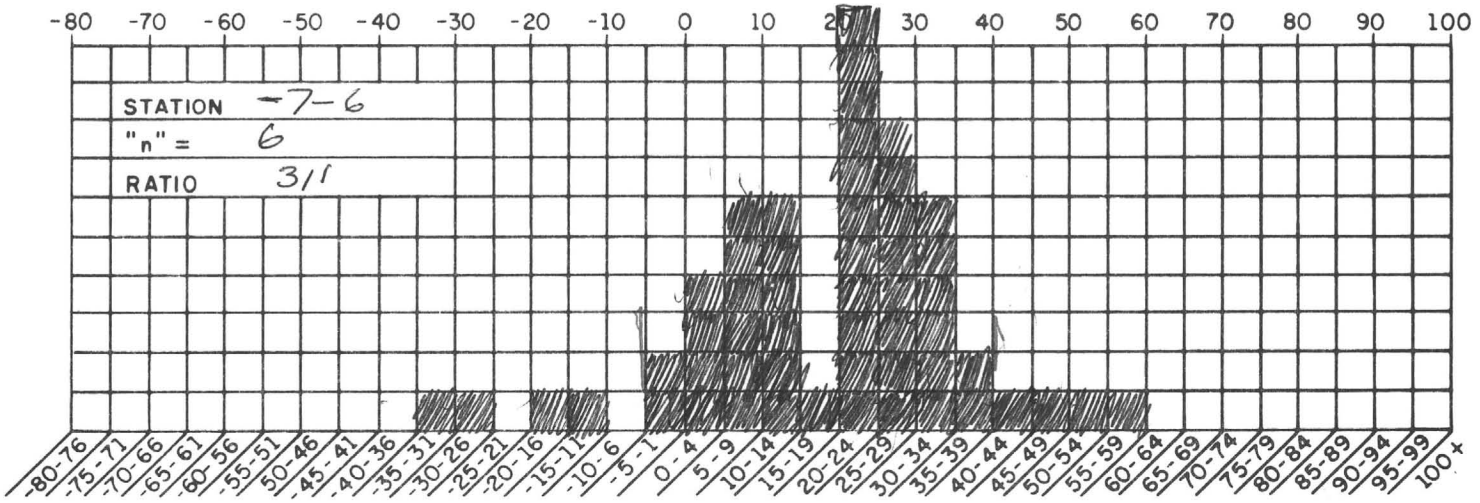

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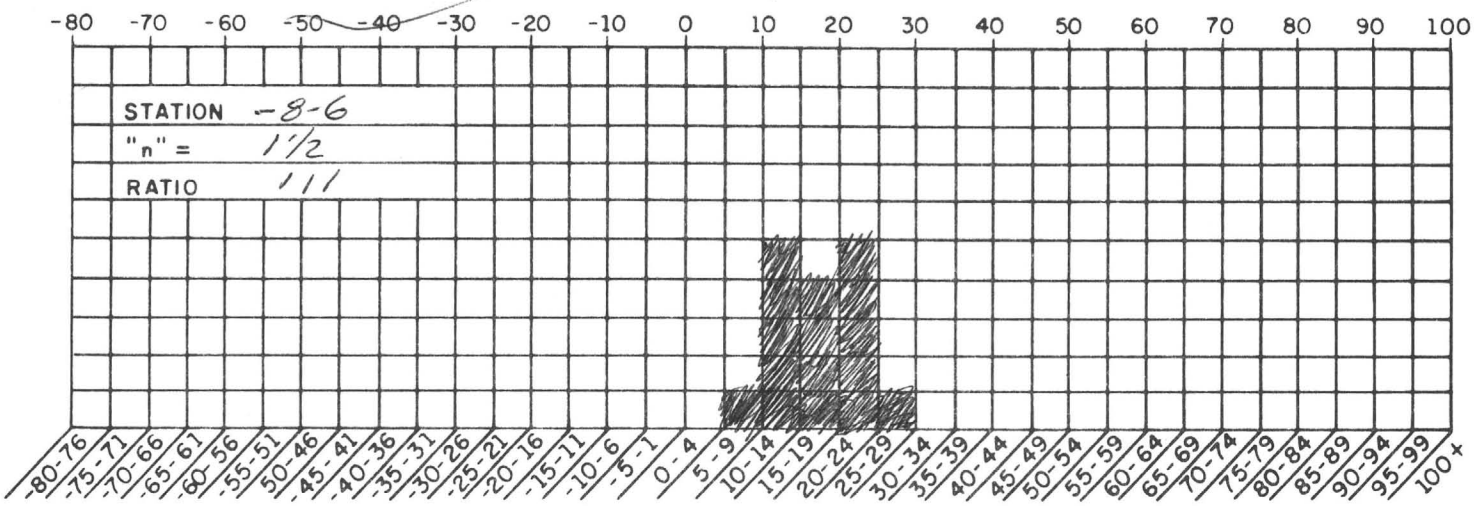

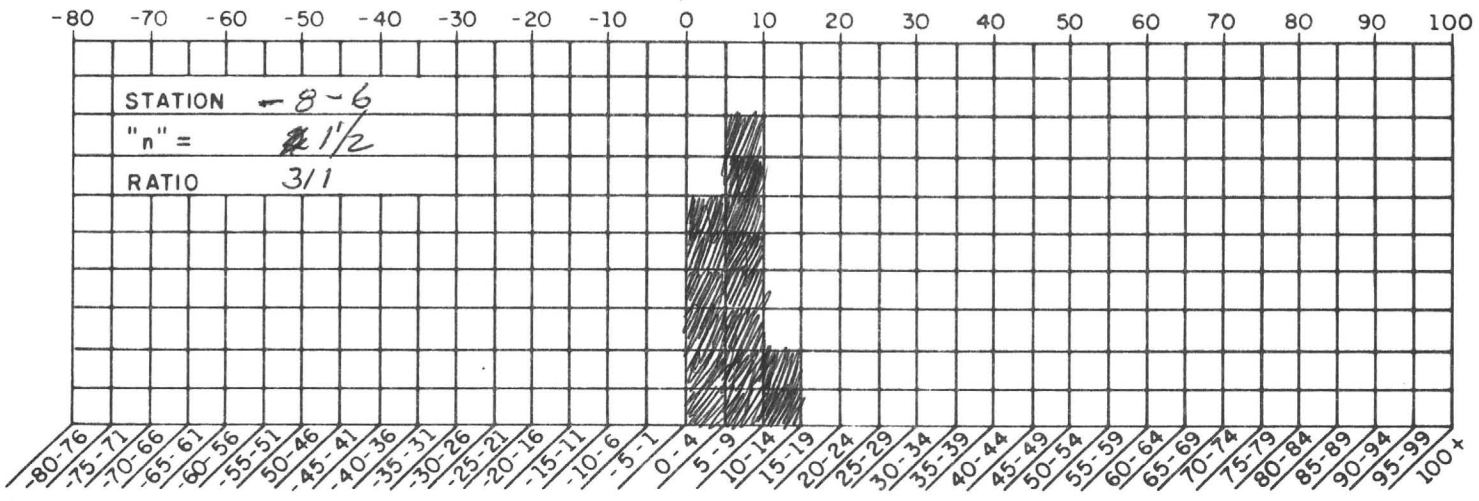

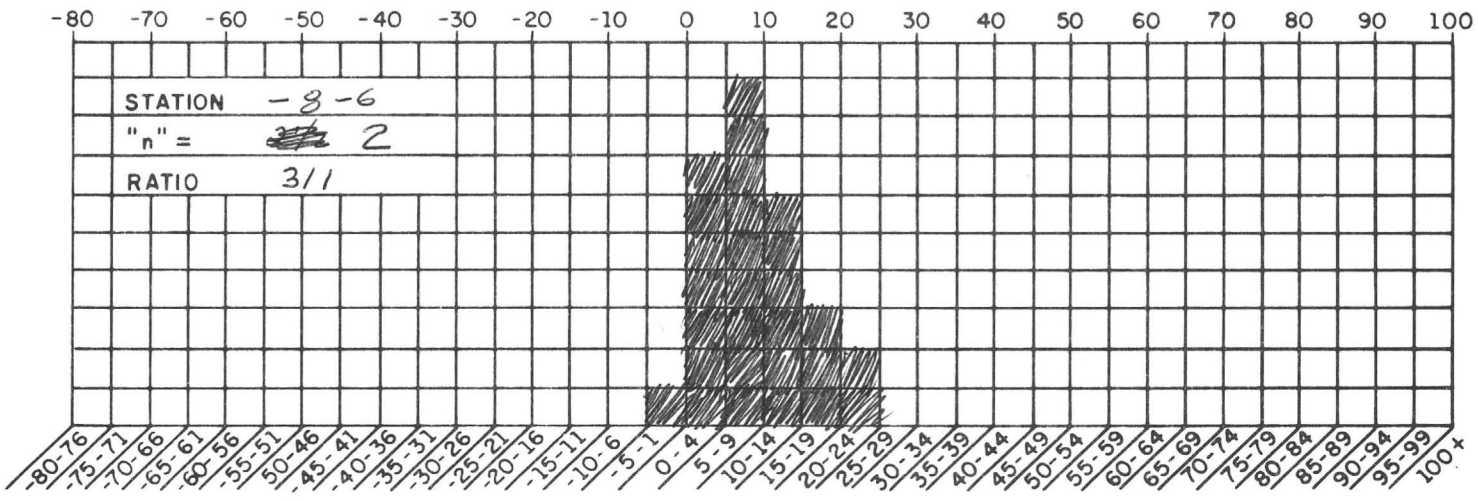

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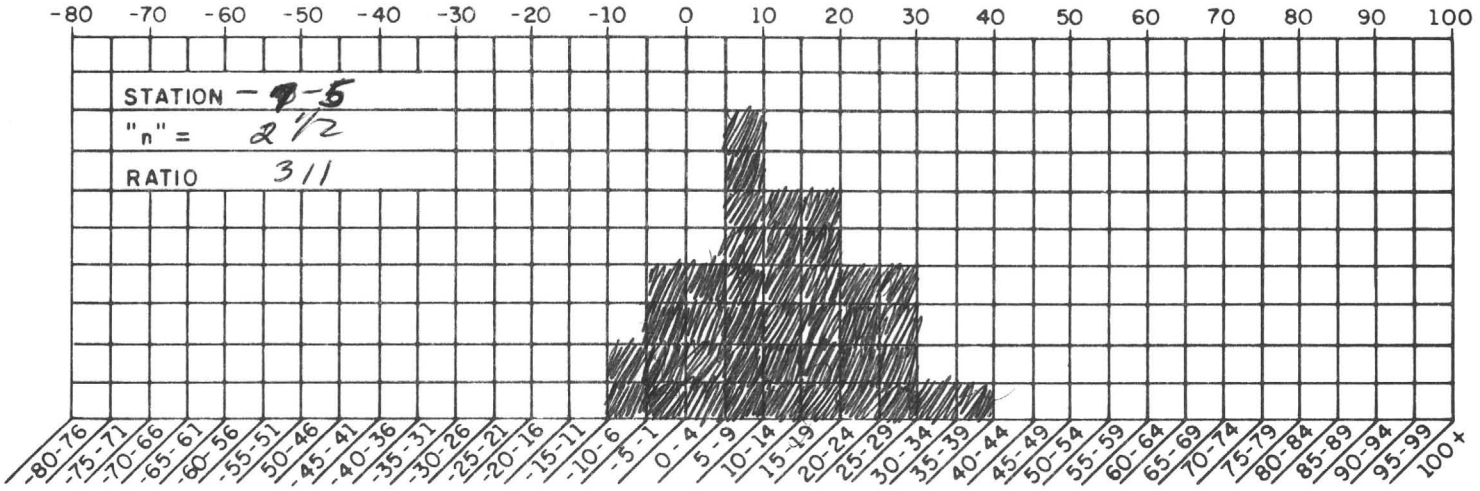

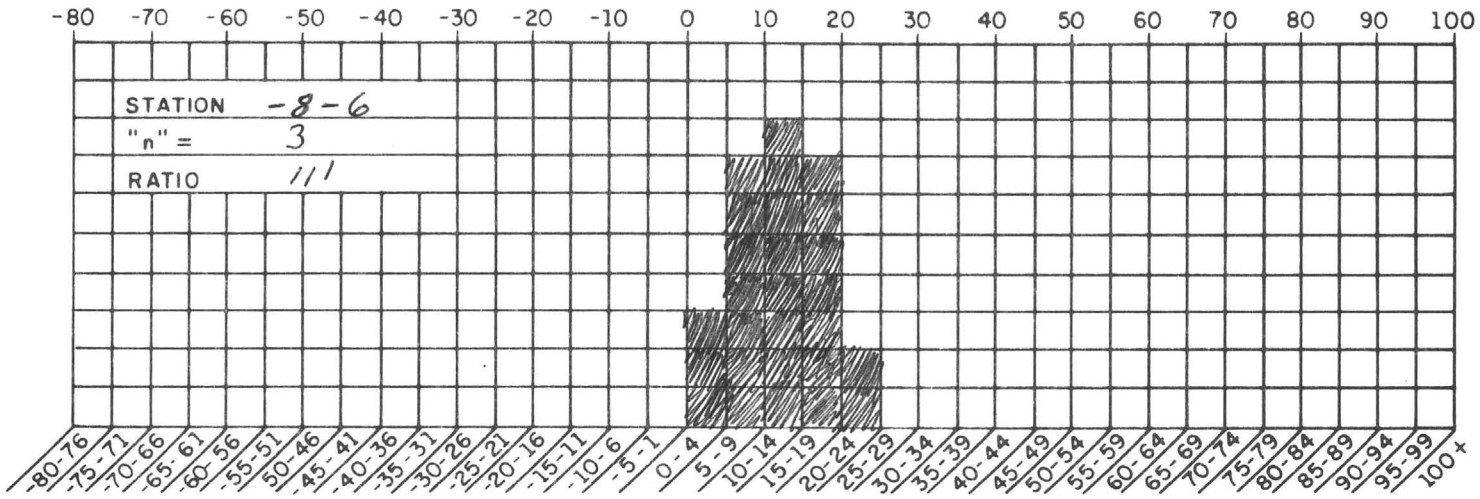

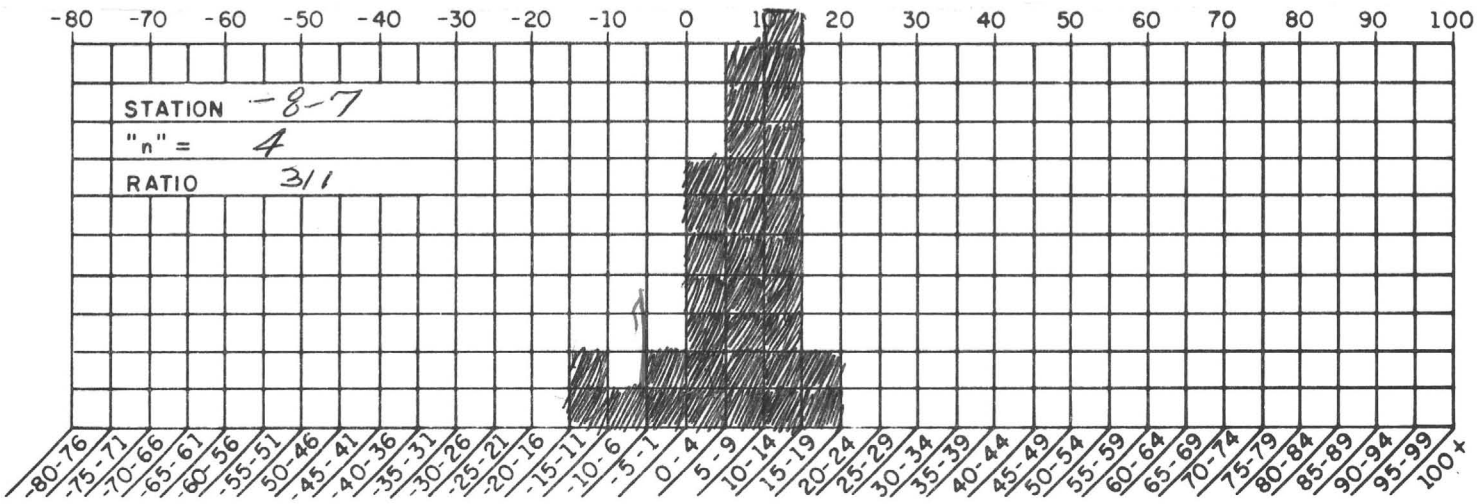

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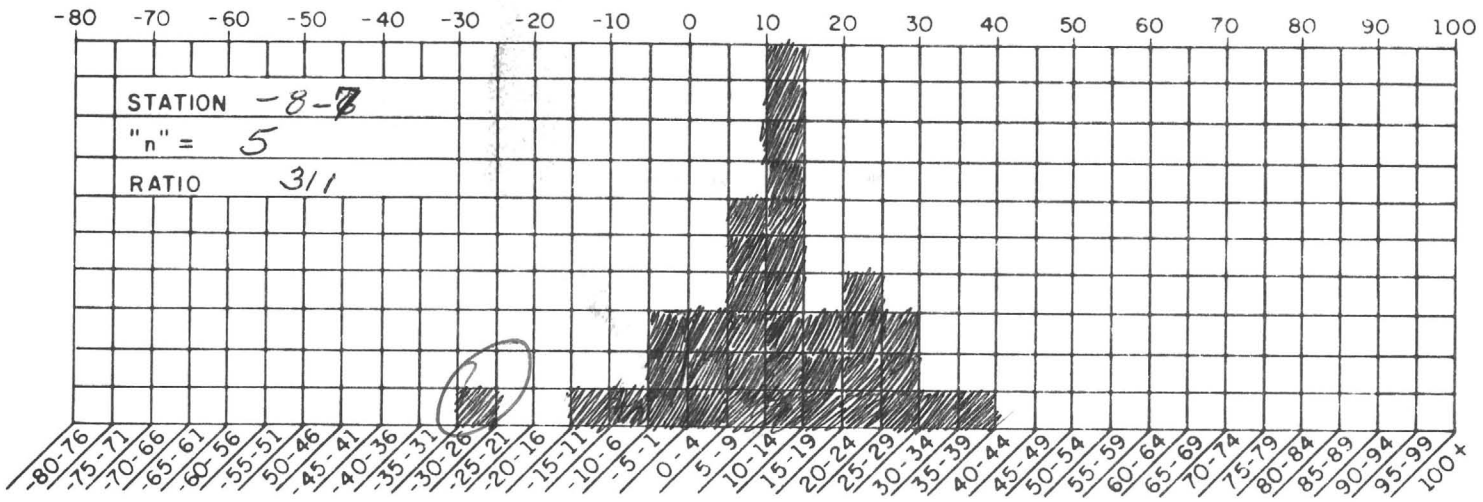

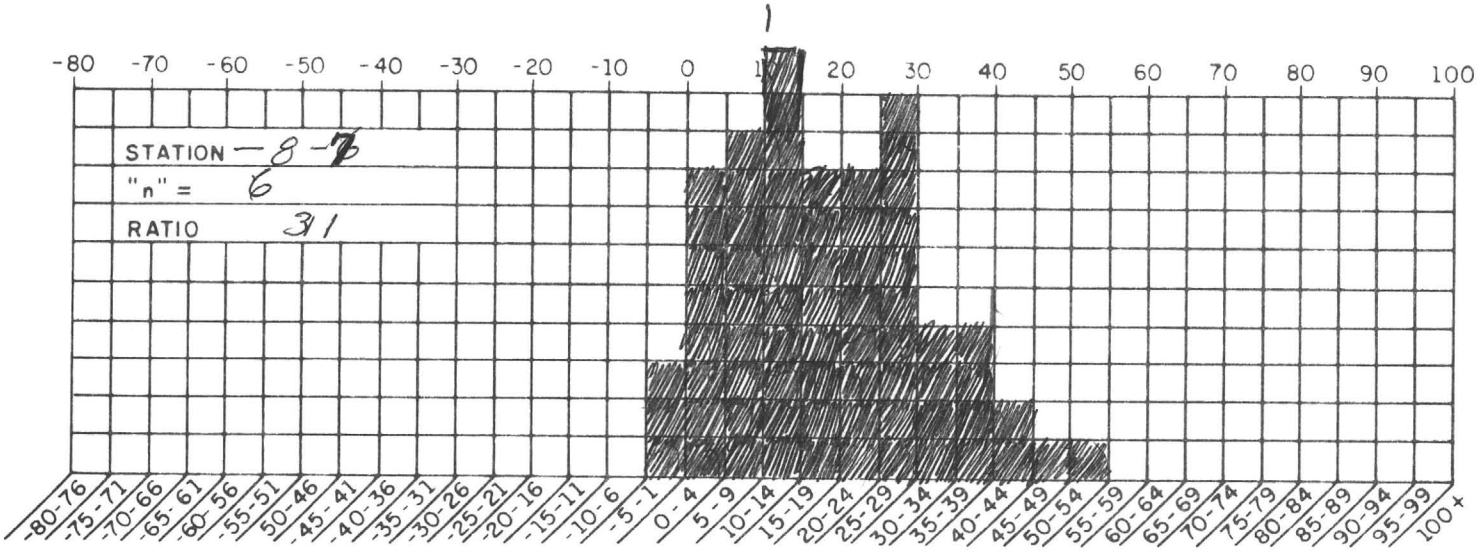

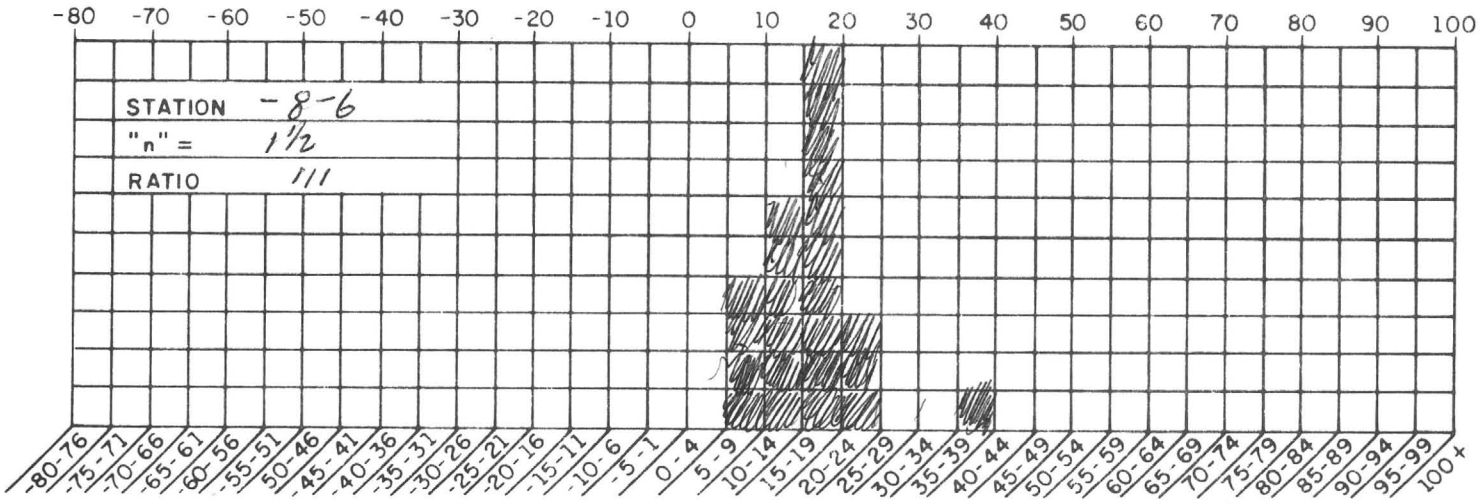

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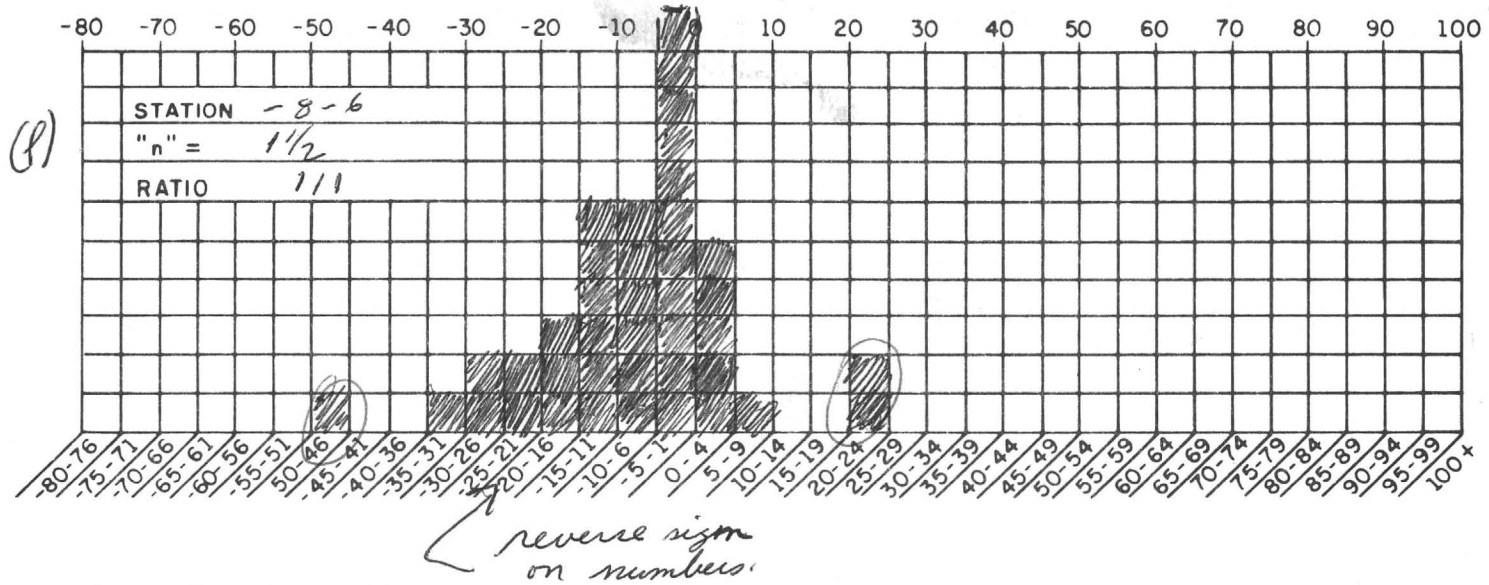

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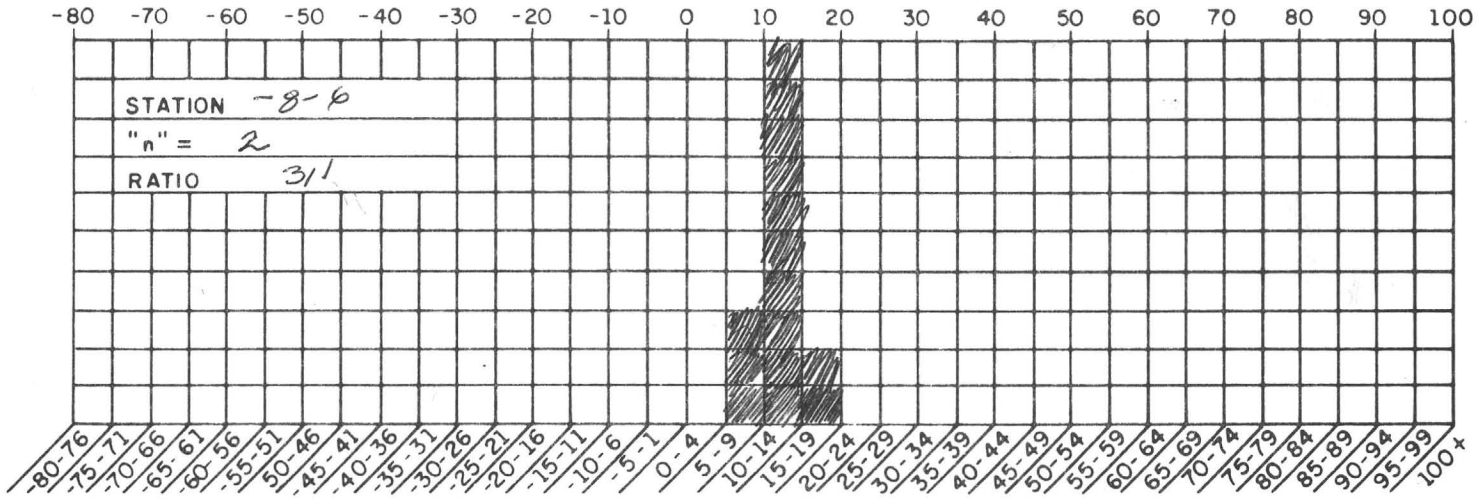

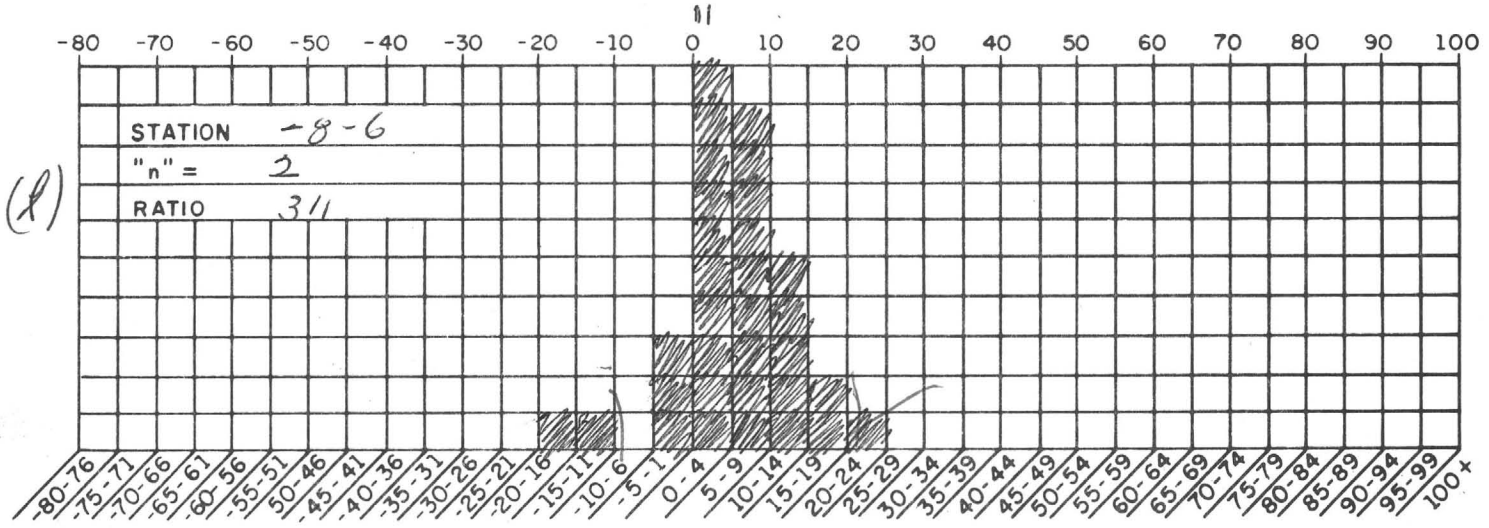

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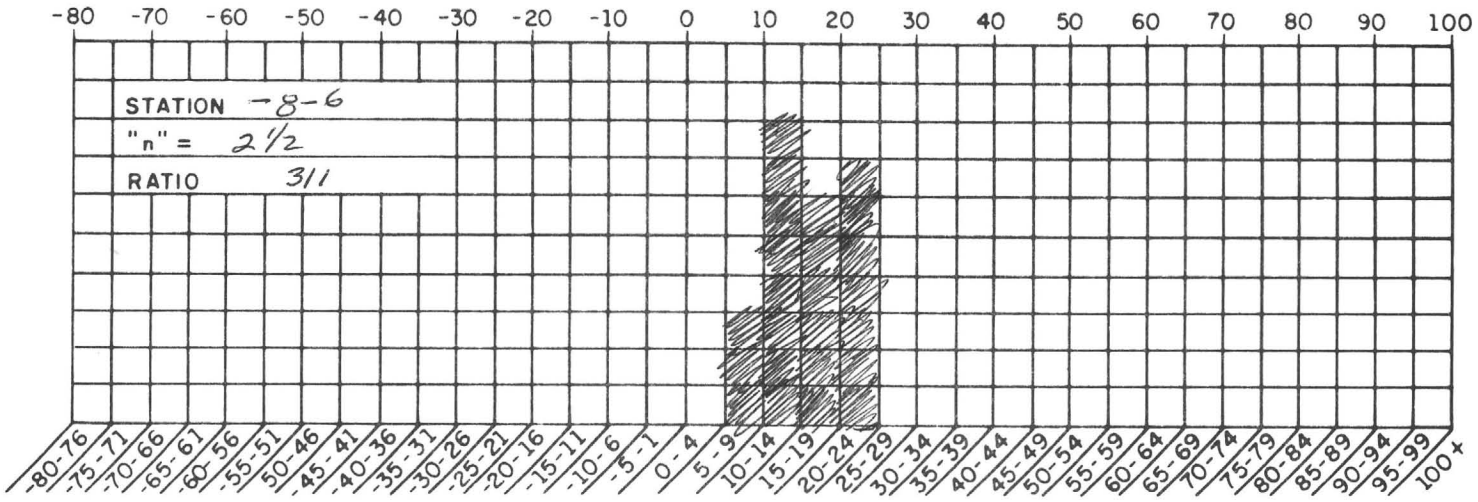

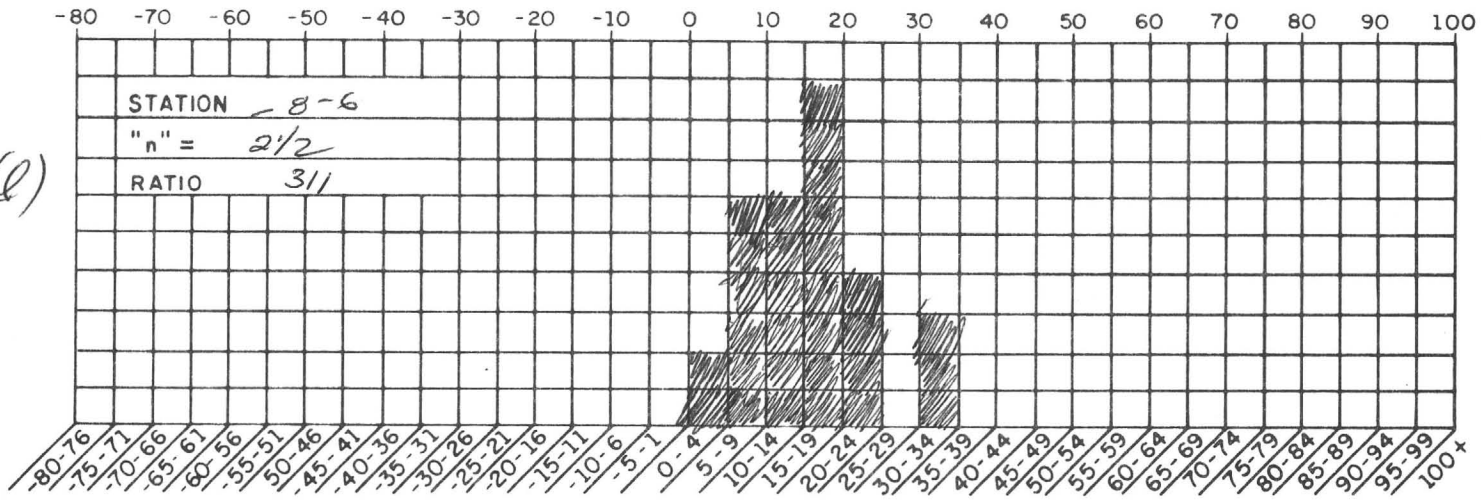

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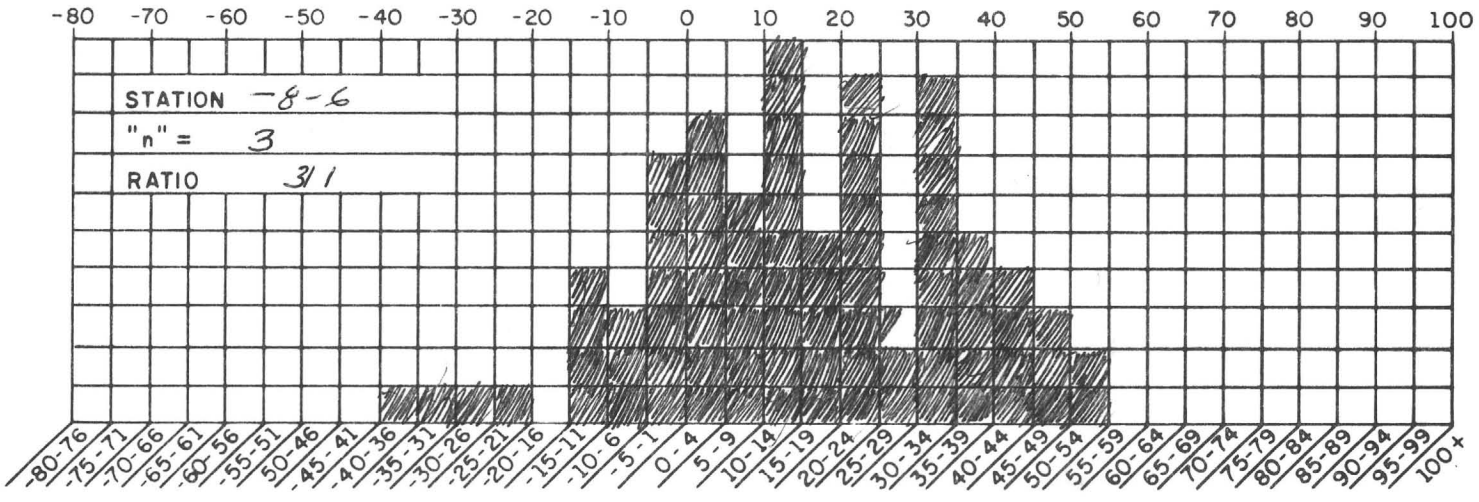

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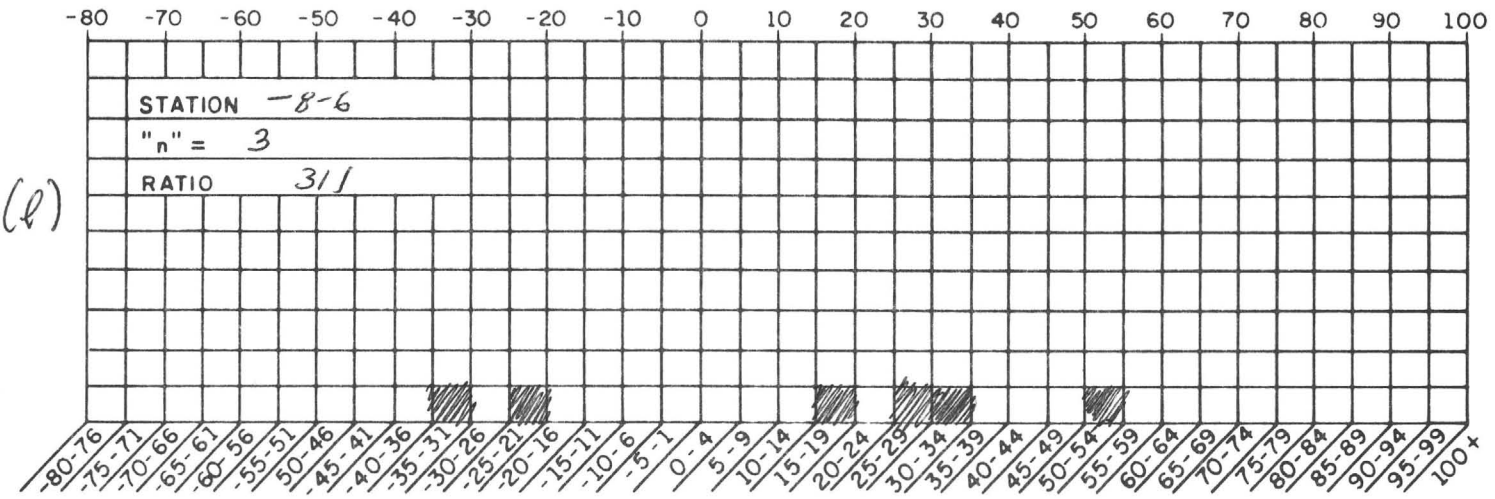

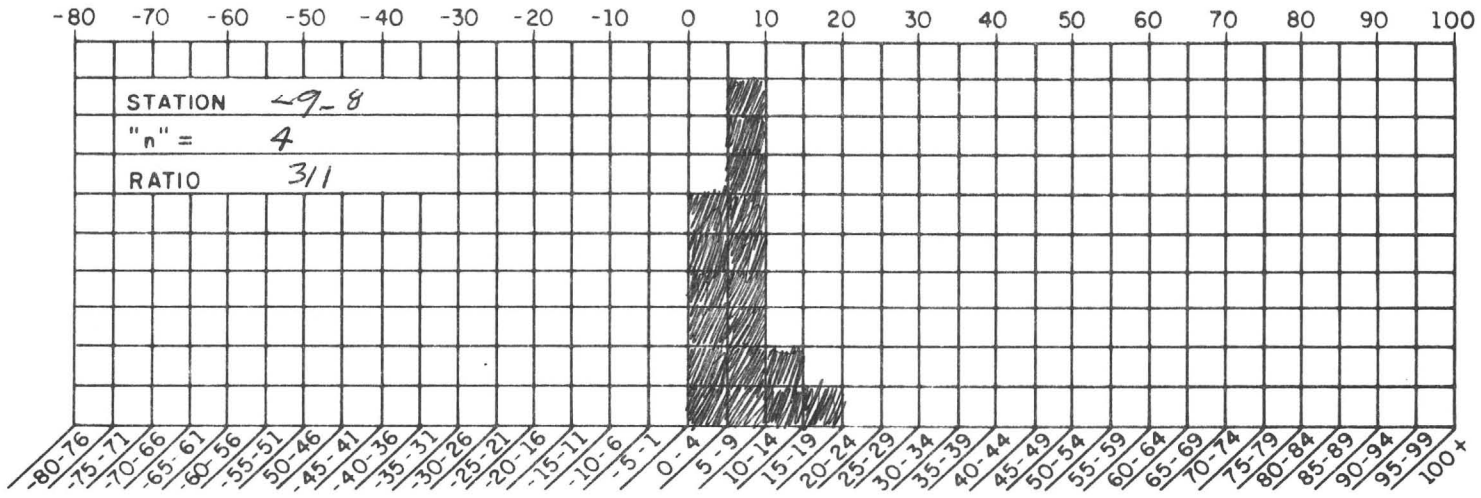

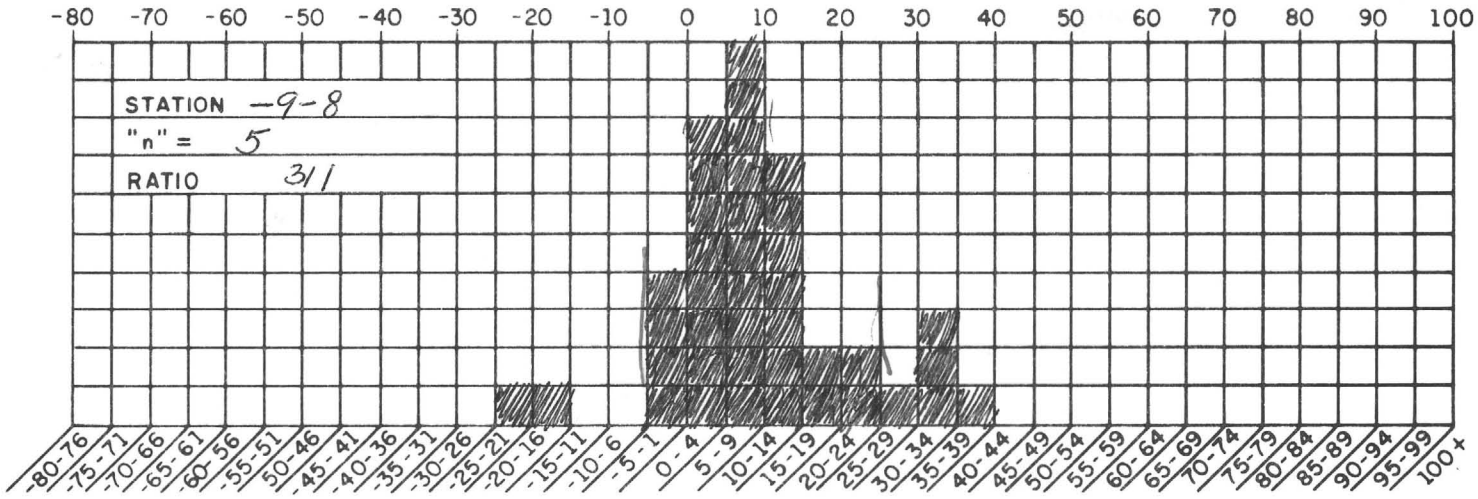

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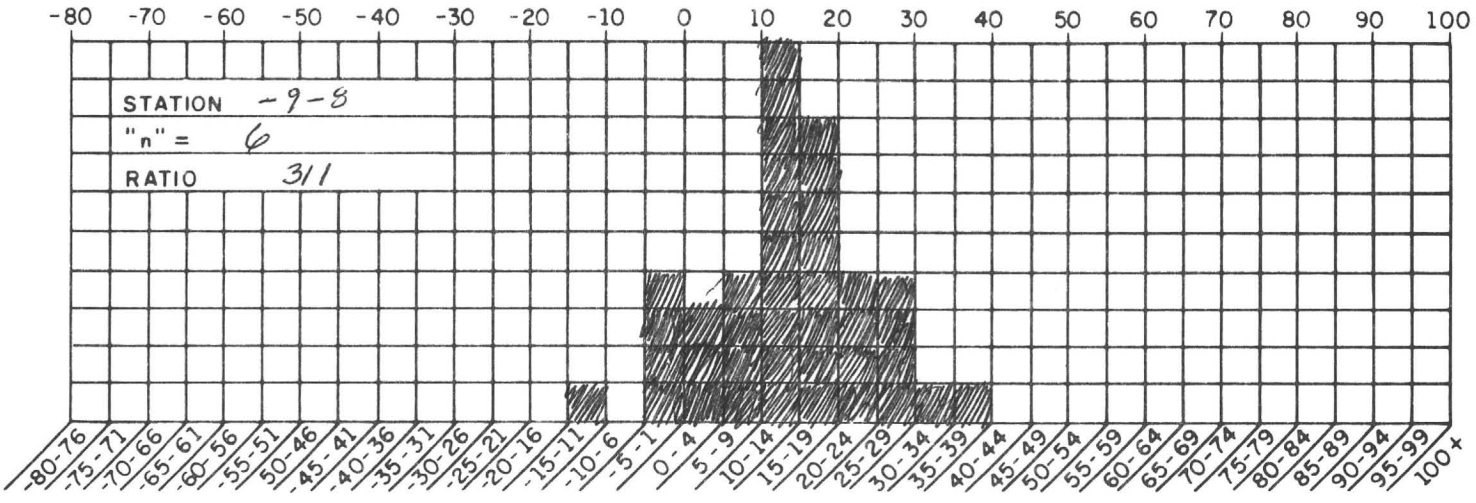

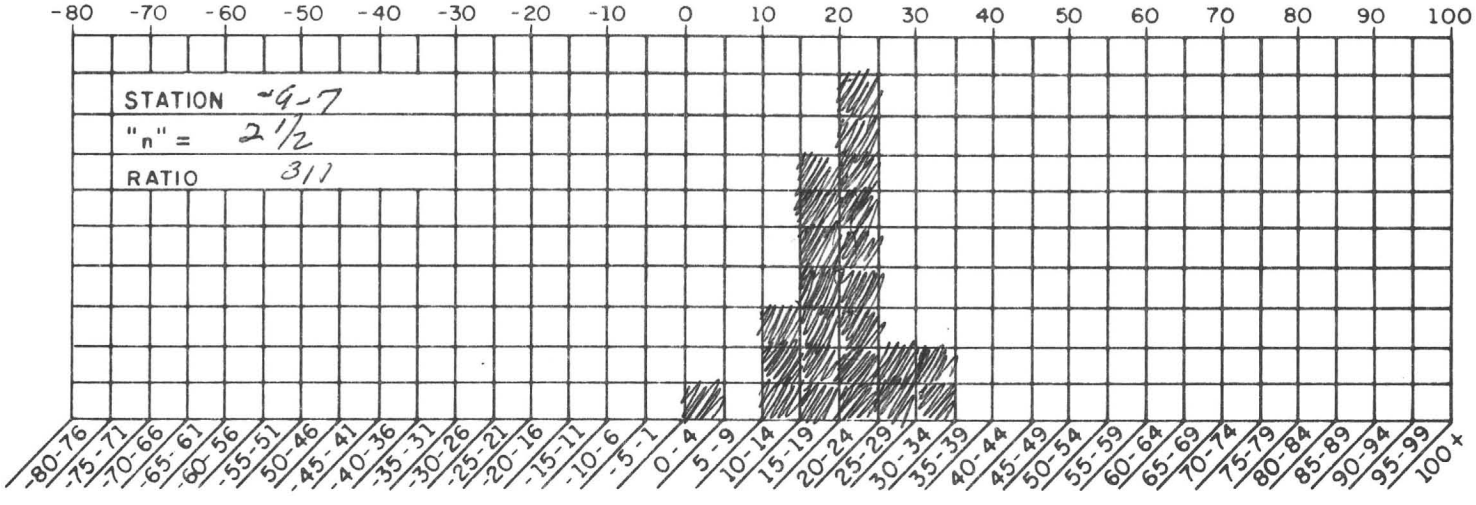

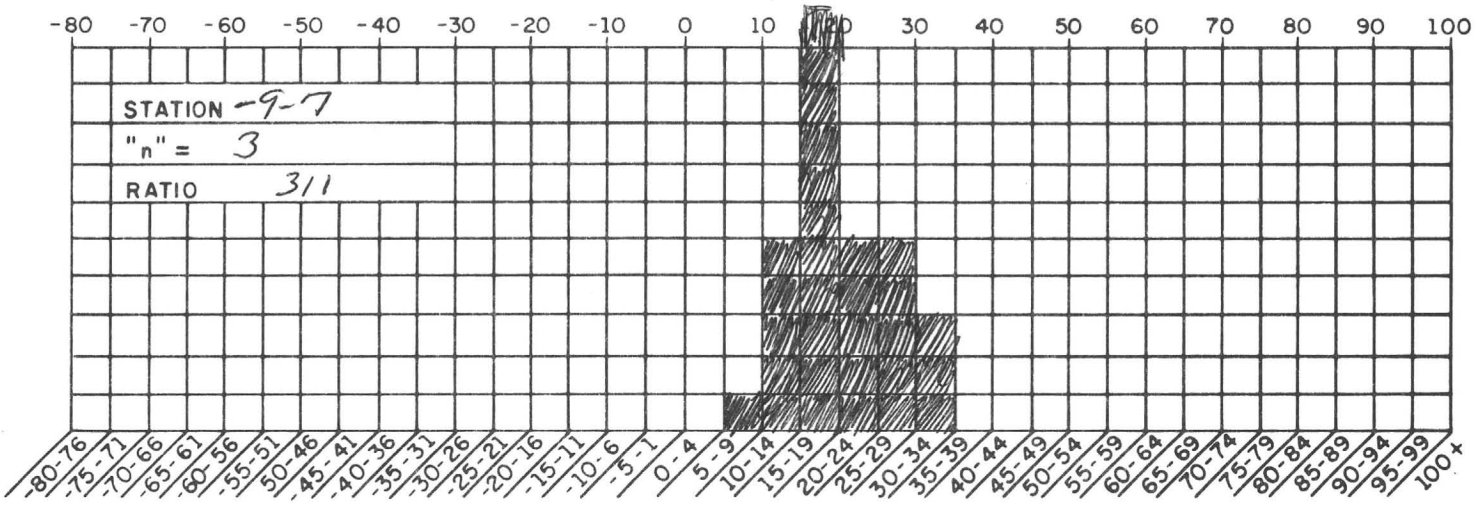

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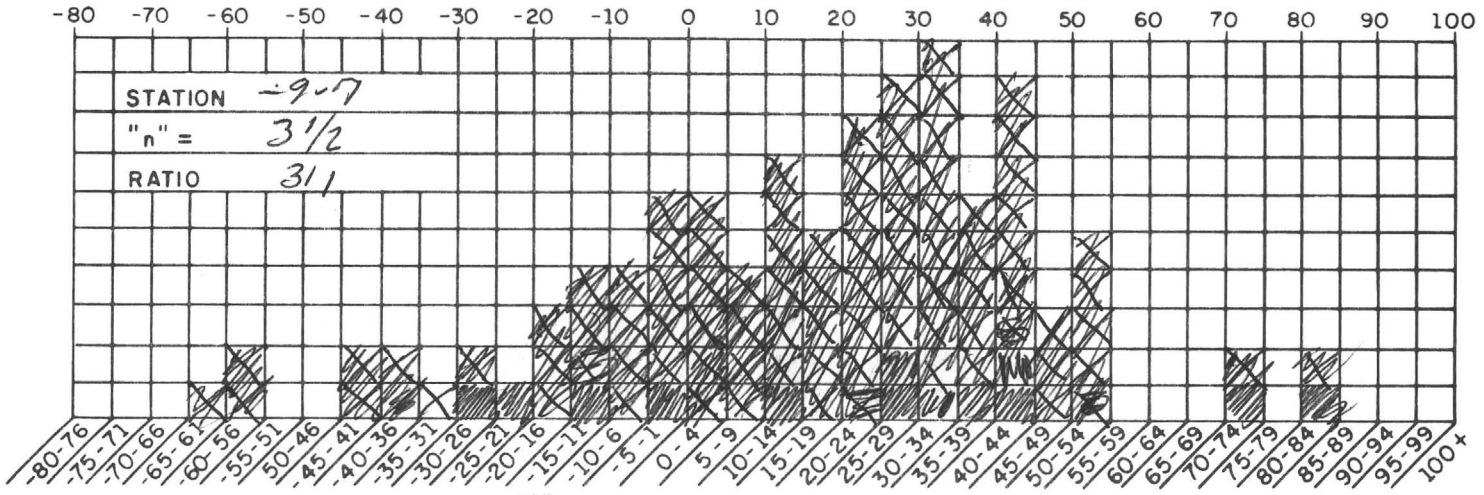

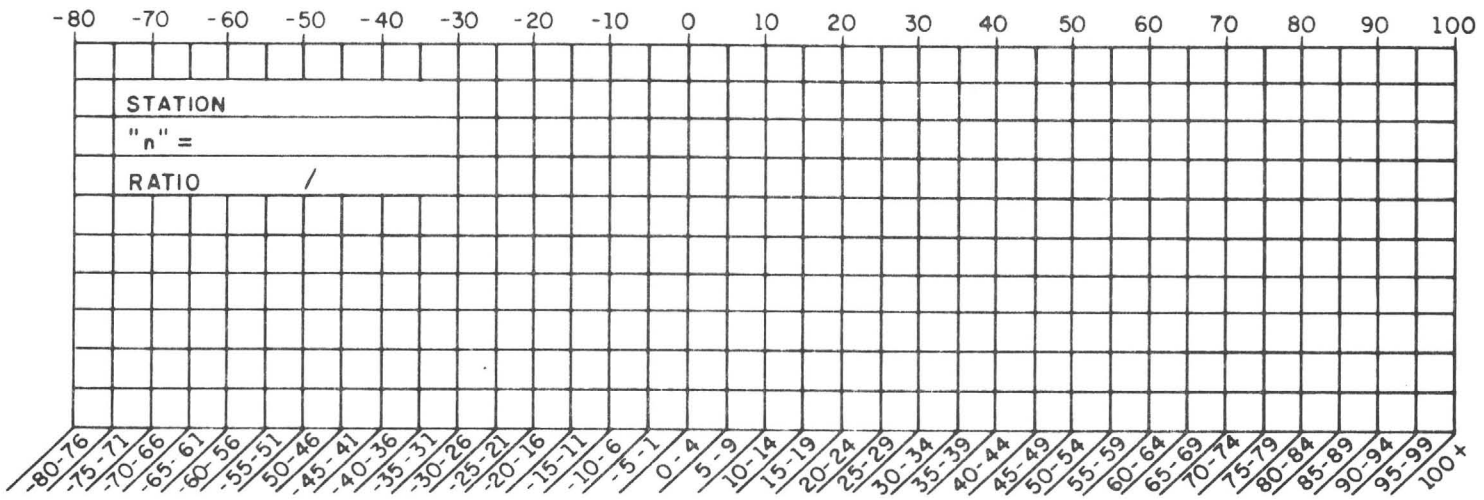

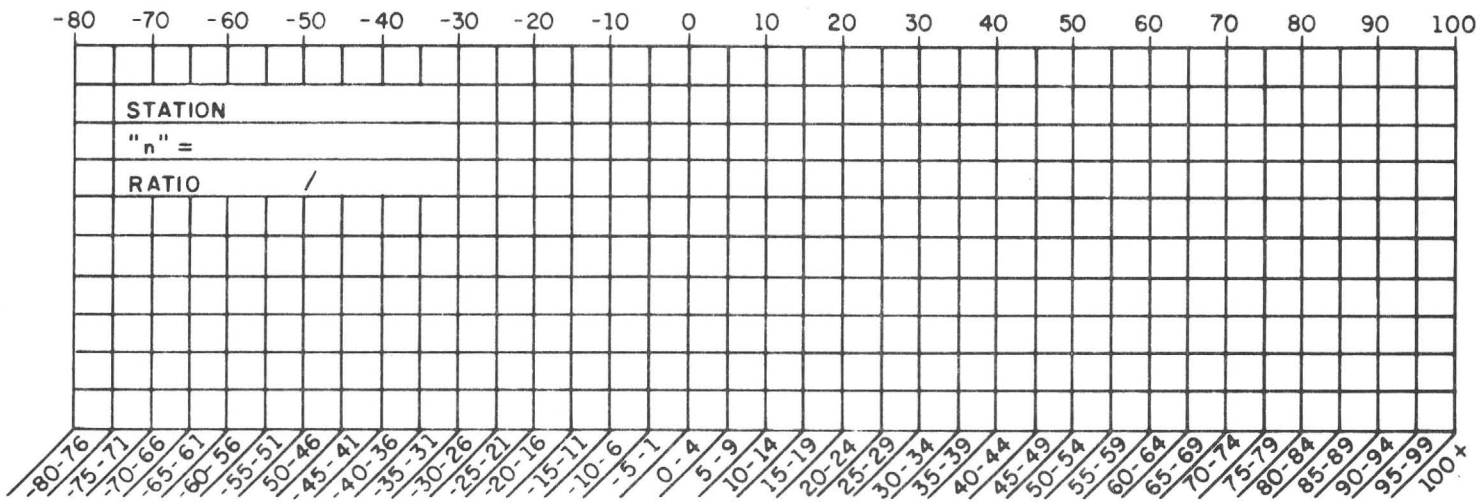

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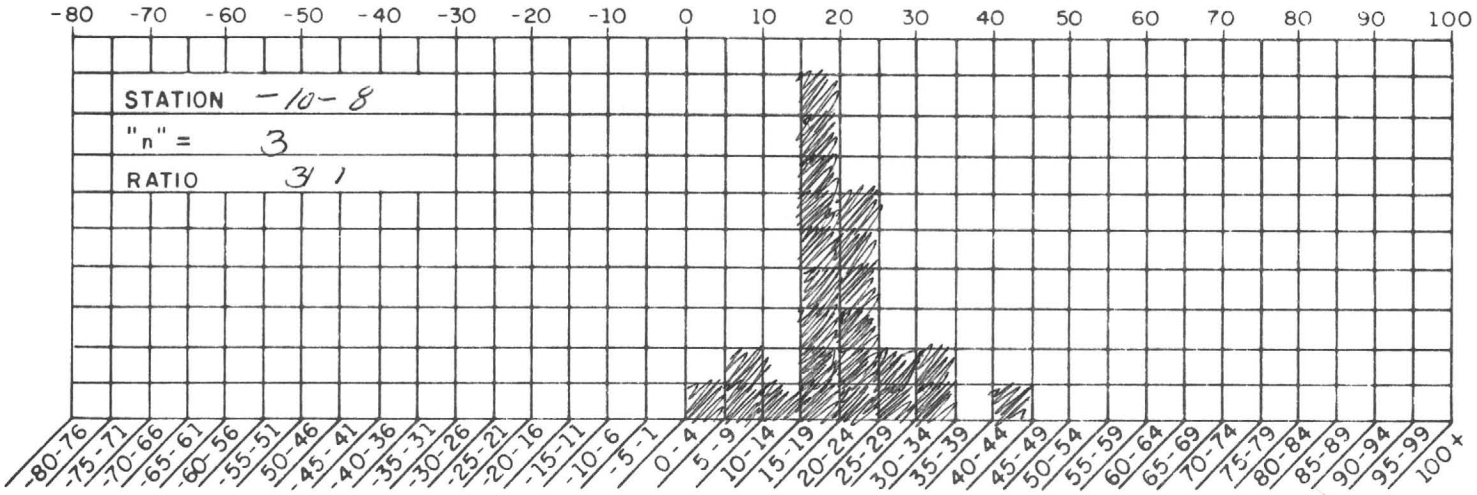

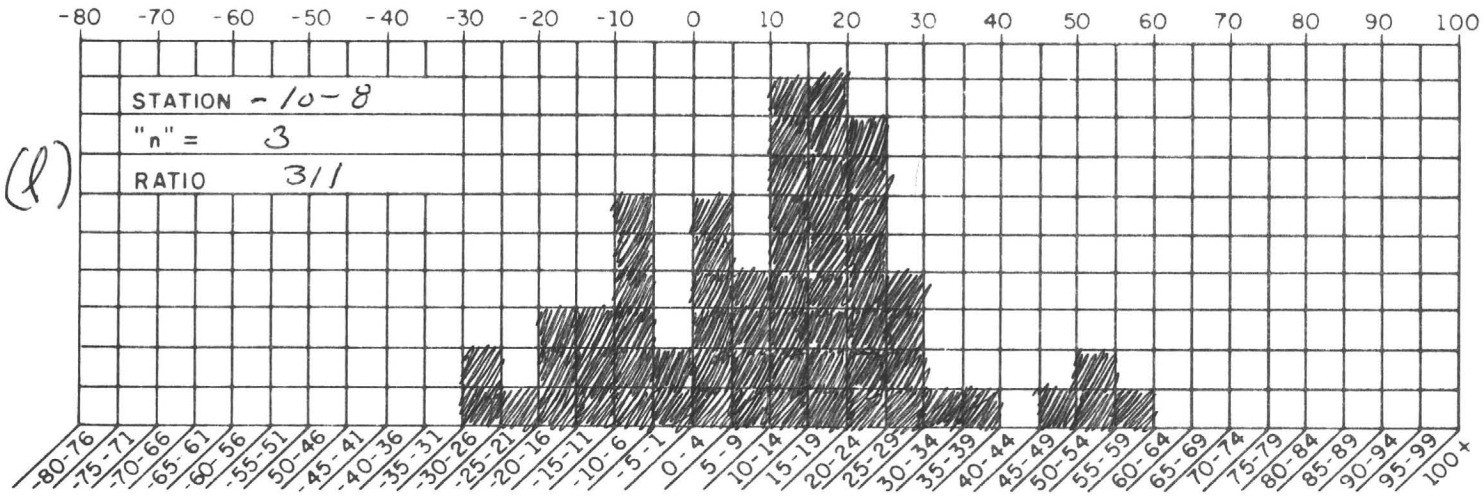

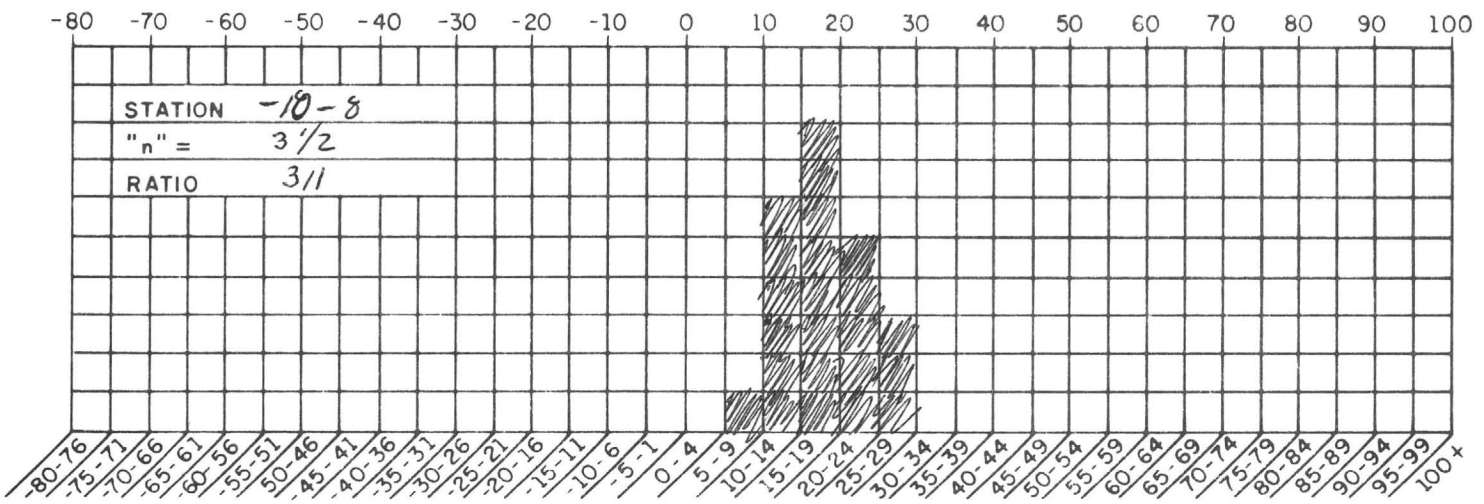

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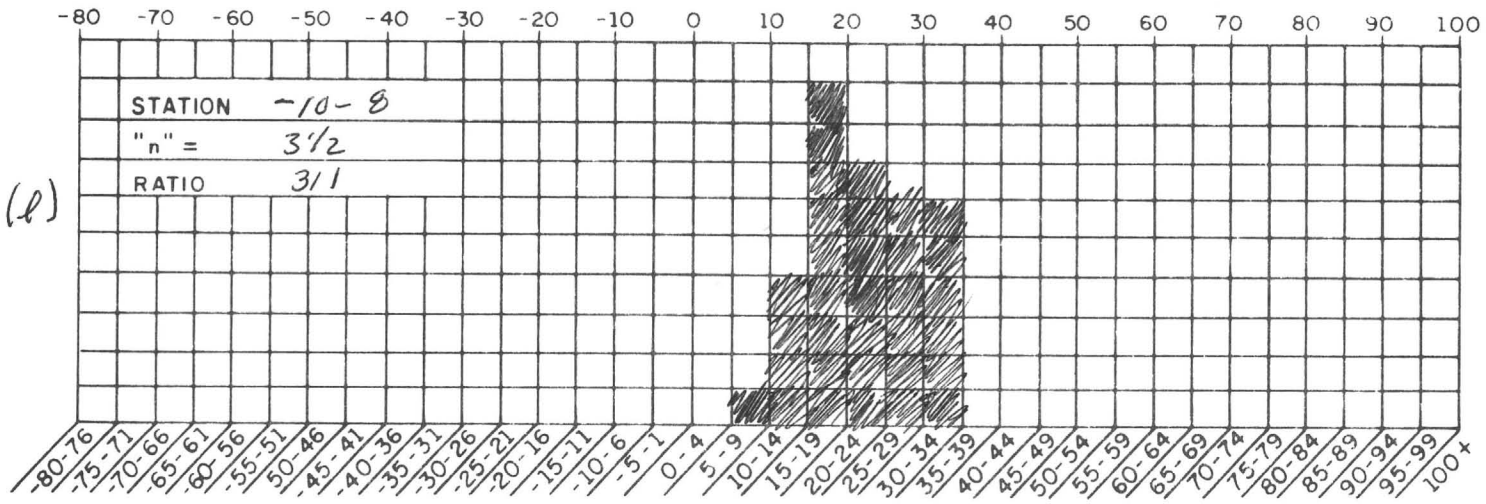

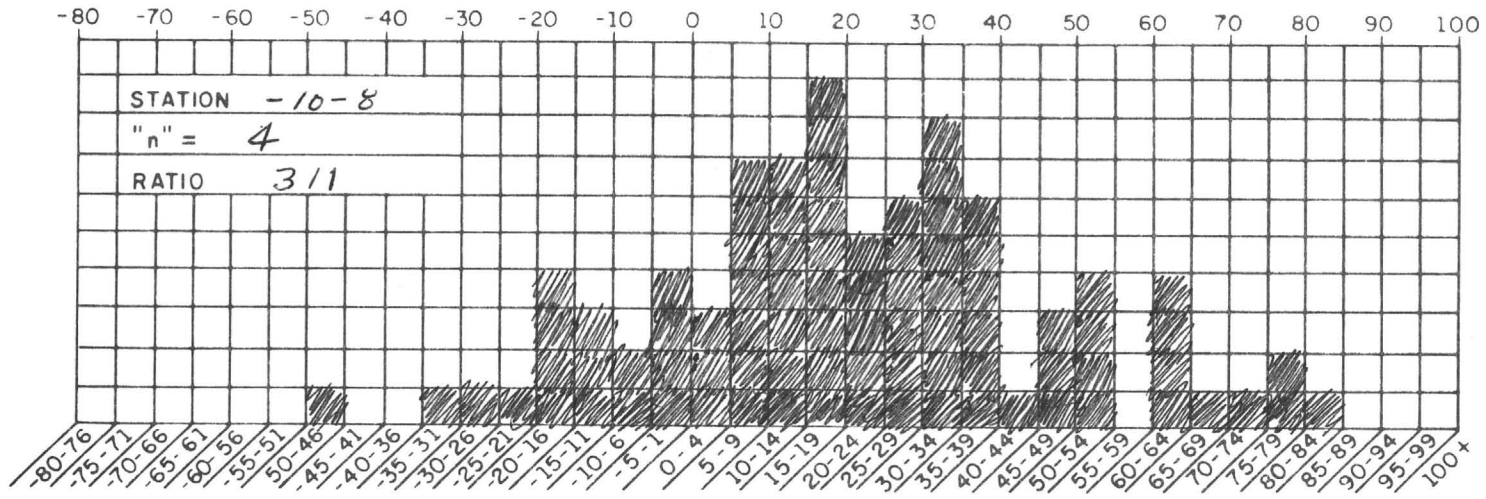

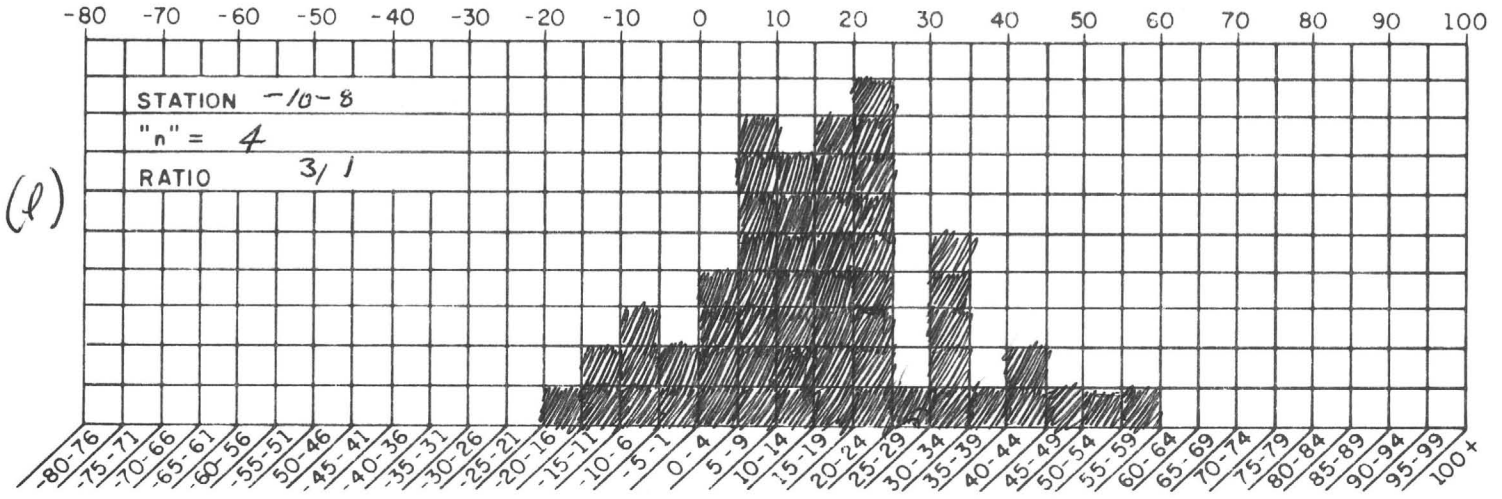

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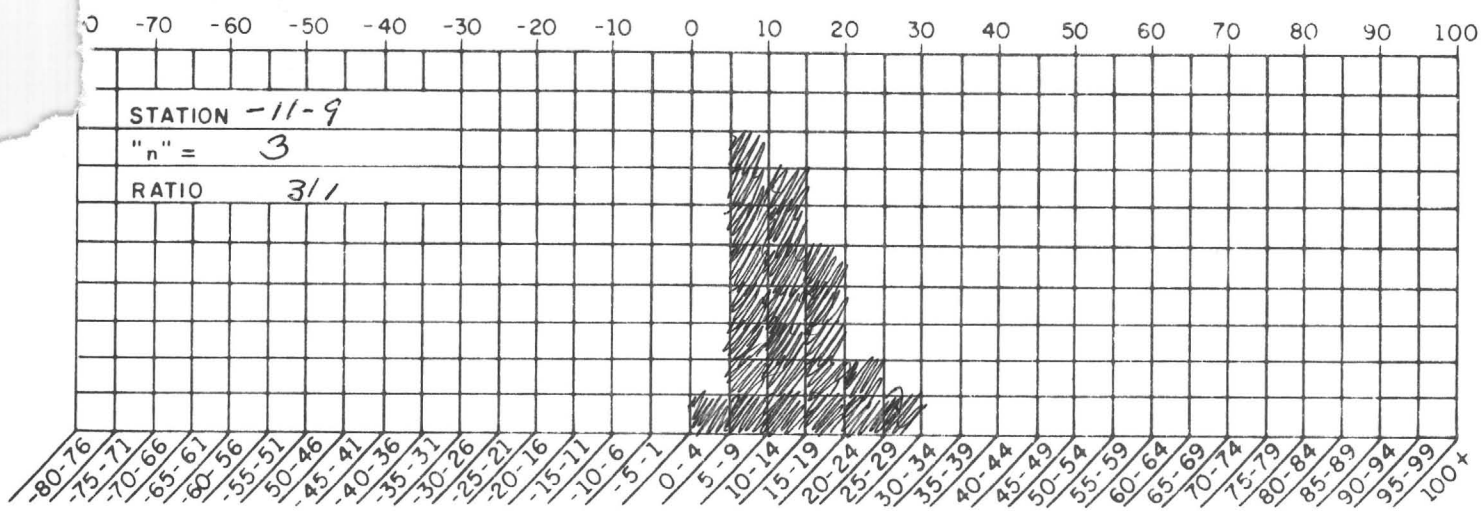

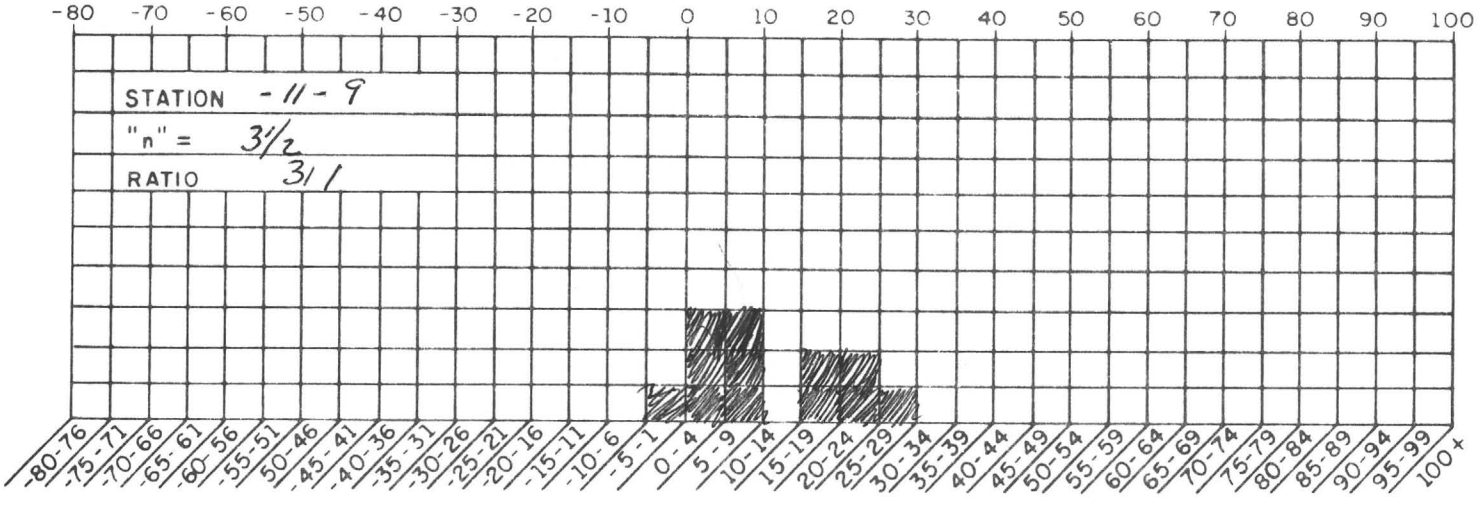

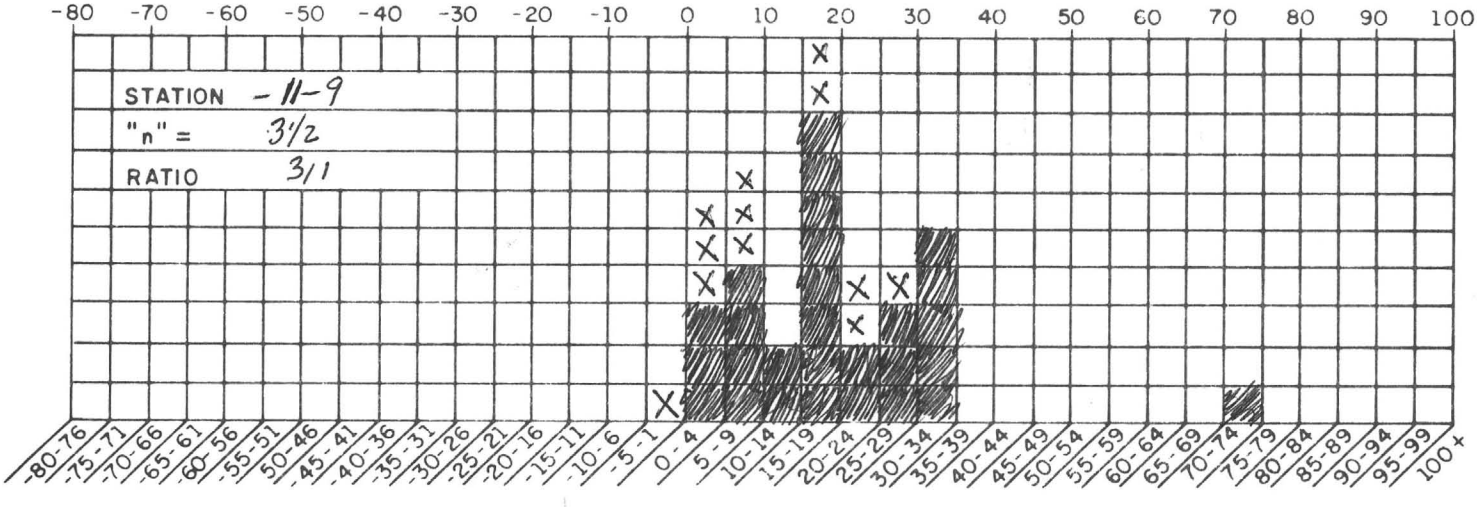

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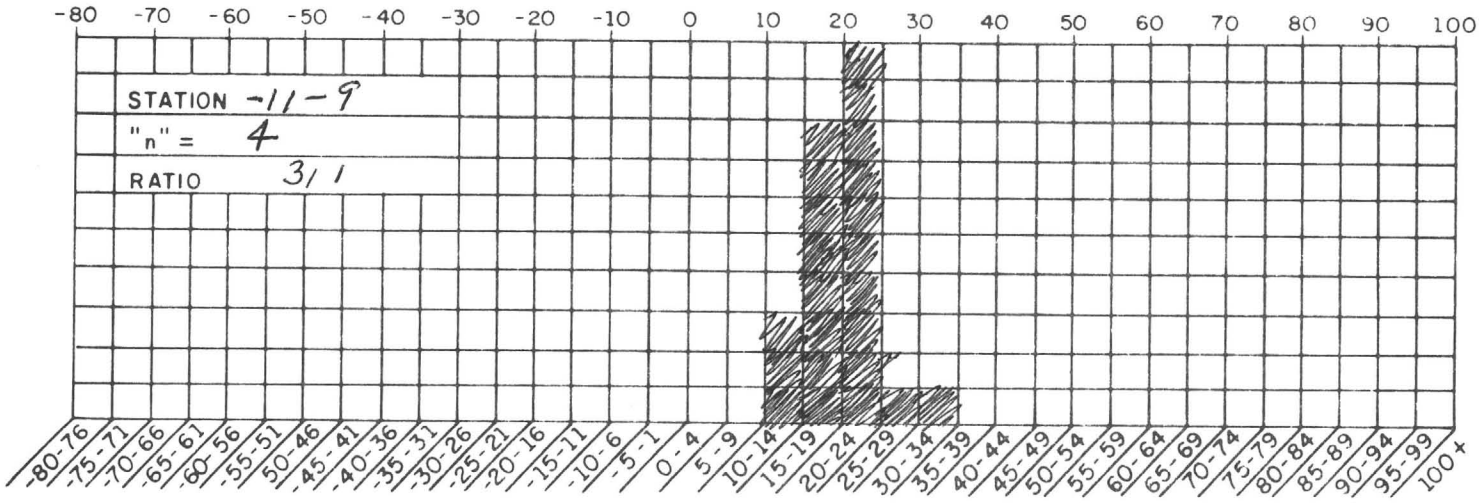

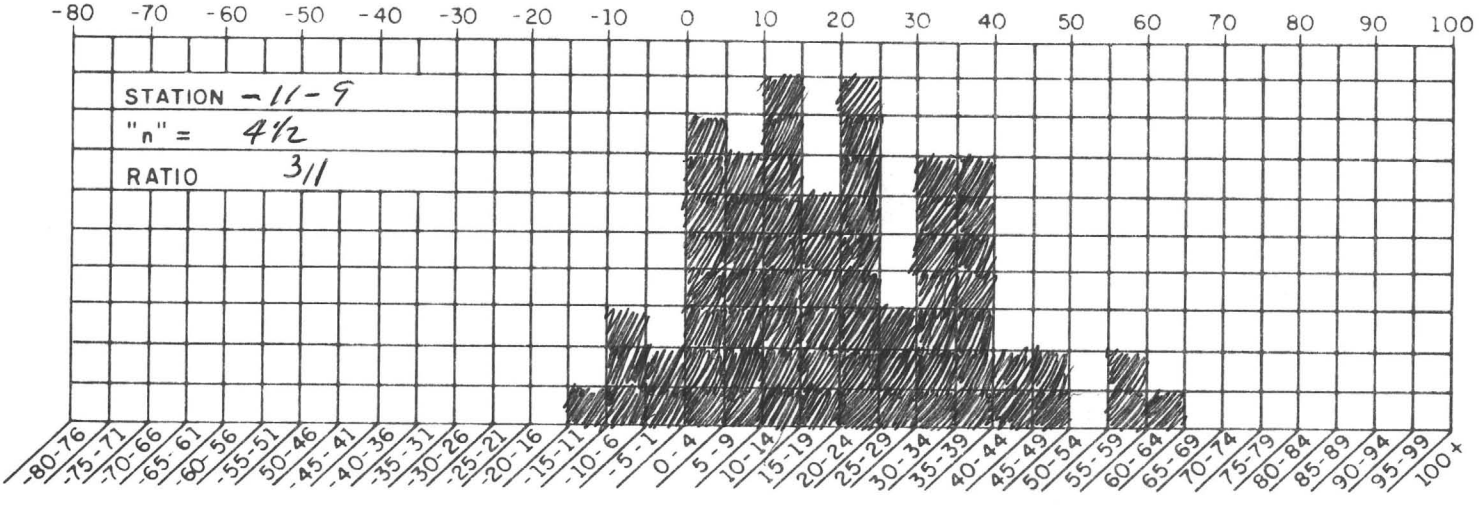

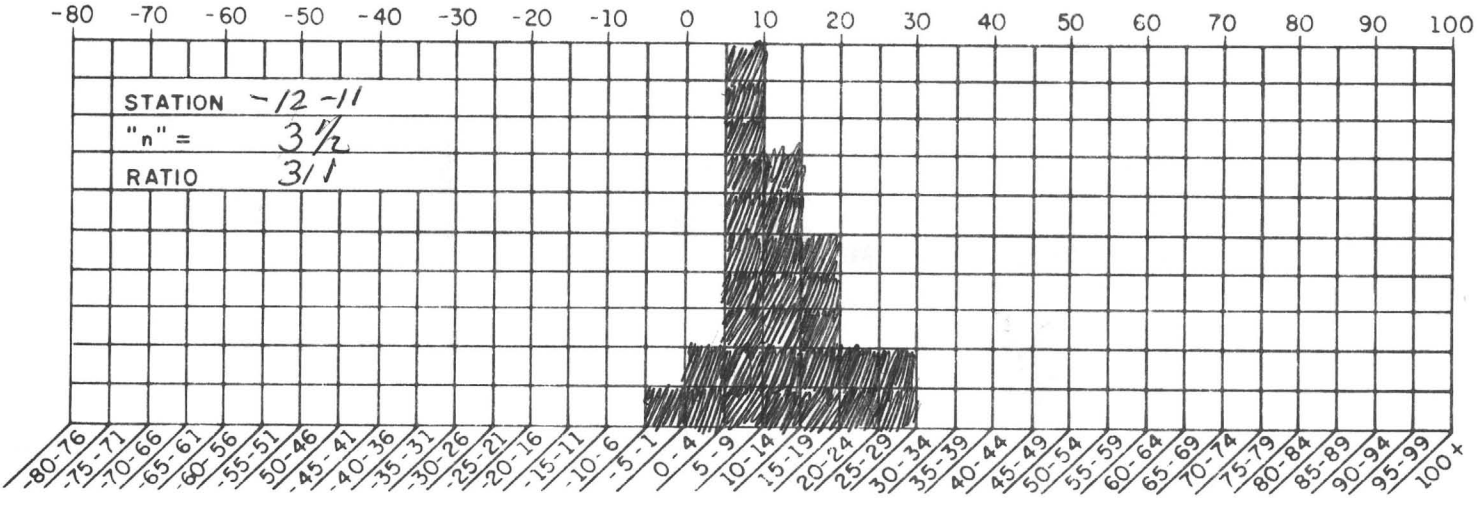
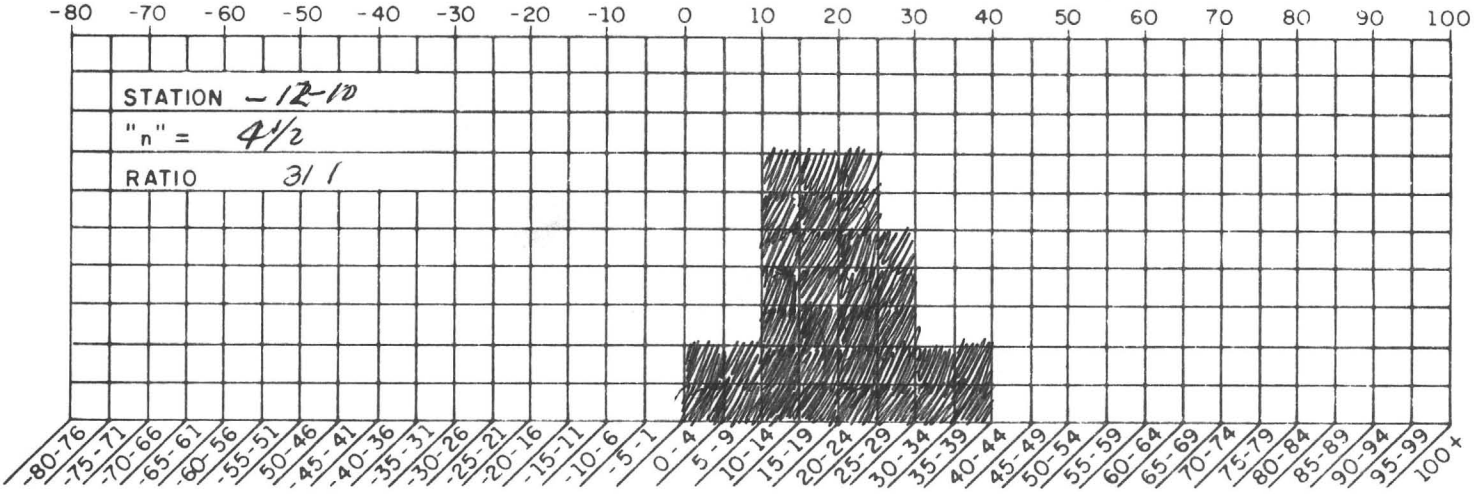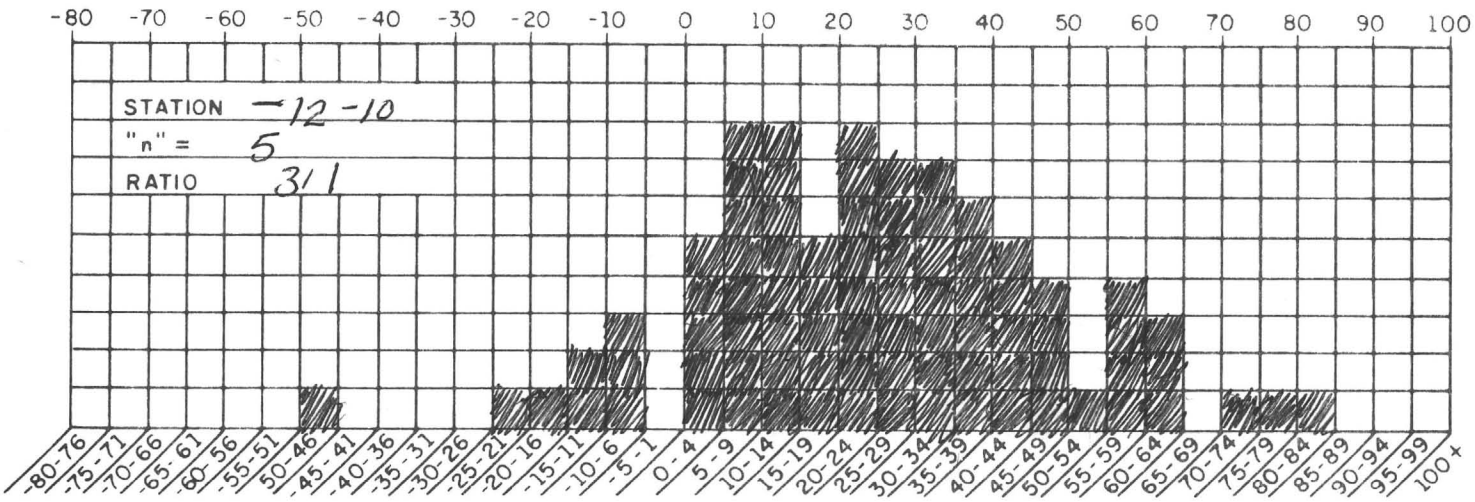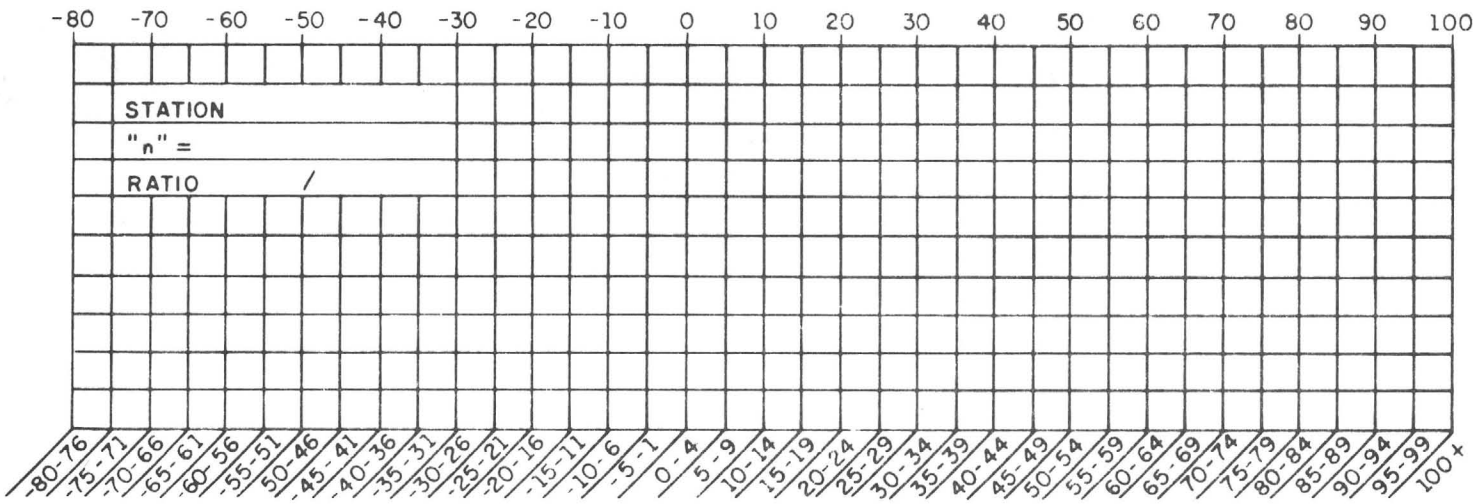
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