

STADIA SURVEY NOTES

AREA 11.P.R. #4 STATE or PROVINCE ALBERTA PAGE No. 186
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day MAR Mo. 1977 Yr. BOOK No. _____
 SURVEYOR C. DE-SARLAIS RODMAN C. P. O'NEILL WEATHER: Cool Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3		2640				T	26			-54		1302'		32	
4				270°12'25"					5°0'	-49					
5		1760							96			1292.4		31	
6	W	880							74			1294.7		30	
7		0							50			1297.1		29	
8	E	880				T	64					1300.1		28	
9		1760				T	38					1307.0		27	
10		2640		89°40'48"					50	+94		1311.5	○	26	Very bad heat waves
11				270°25'11"					100	+94			∇		
12															
13		2640				B	134			+267		1338.5			
14				269°27'26"					100	+270					
15		1760				B	143					1315.4		25	
16	W	880							135			1326.0		24	
17		0							50			1333.5		23	
18	E	880		89°30'					29			1343.3		22	
19		1760		89°00'					27			1366.5		21	
20															

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STADIA SURVEY NOTES

AREA N.O.R.#4 STATE or PROVINCE ALASKA PAGE No. 187
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day MAR Mo. 1977 Yr. BOOK No. _____
 SURVEYOR R. DOSTARLOIS RODMAN C. Rain's WEATHER: Cold Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2		1870		89° 00' 23"					50	+27.3		1365.4		20-4	
3		✓		27° 02' 39"					10°	+27.0					
4															
5		2530				B	14'			+26.9		1392.8			
6		✓		269° 36' 17"					10°	+22.2					
7		1760		90° 30'					107			1366.7		20	
8	W	880				B	122					1374.7		19	
9		D							50			1387.8		18	
10	E	880				T	12					1396.0		17	
11		1760				T	28					1398.7		16	
12		2640				T	46					1400.9		15	
13		✓		270° 20'					75	+8.5					
14										+8'					
15		2640							122	+12.3		1413.7			
16		✓		269° 55' 59"					10°	+12.8					
17		1760							86			1405.0		14	
18	W	880							58			1407.9		13	
19		D							50			1408.7		12	
20															

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STADIA SURVEY NOTES

AREA N.P.P. #4 STATE or PROVINCE ALASKA PAGE No. 188
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day MAR Mo. 1972 Yr. BOOK No. _____
 SURVEYOR P. DESTADLAIS RODMAN G. Cairns WEATHER: cld clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2	E	880	/						55				1408.2	11	
3		1430	/						143	-143			1399.2	10	10-21
4		✓		269°49'05"					100	-145				✓	
5															
6		2970		88°28'04"					50	-742		13254		Δ	
7		✓		271°26'47"					100	-738				✓	
8		2640		88°30'					55				1388.9	10	
9		1760		89°20'					29				1342.9	9	
10	W	880		90°00'					189				1298.7	8	
11		0							50				1320.4	7	
12	E	880		89°00'					60				1334.8	6	
13		990		29°02'44"					00	+84			1333.7	5	5-4
14		✓		271°03'14"					100	+83				✓	
15															
16		2530		88°26'19"					60	-628		12713		Δ	
17		✓		271°38'05"					100	-624				✓	
18		1760		88°20'					52				1317.2	5	
19	W	880		88°58'					20				1287.2	4	
20		0							50				1266.3	3	

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STADIA SURVEY NOTES

AREA N.P.B.#4 STATE or PROVINCE ALASKA PAGE No. 189
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day MAR Mo. 1977 Yr. BOOK No. _____
 SURVEYOR E. DESTARLAIS RODMAN C. Pains WEATHER: Cold clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2	E	880		89°20'					21			1279.4		2	
3		1260		88°40'03"					50	+359		1306.9	⊙	1	
4		✓		231°23'28"					100	+355			✓		
5															
6		5170		89°44'24"					50	-103		1296.5	Δ		
7		3960		90°16'					40			1280.7		6	T.S
8		2640		91°16'					132			1229.4		12	T.S
9		1320		91°30'					149			1247.0		18	T.S
10		0							50			1291.5		24	T.S
11		1320		91°54'20"					80			1277.6		30	
12		2640		91°57'18"					80			1203.4		36	
13		3960		92°05'51"					30			1148.3		42	
14		5280		91°13'08"					30	-115.9		1180.4	⊙	48	
15															
16															
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA N.R.R. #4 STATE or PROVINCE ALASKA PAGE No. 190
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day Mar Mo. 1977 Yr. BOOK No. _____
 SURVEYOR R. DOSYARLAIS RODMAN G. Gains WEATHER: Cool / Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1			TAKEOFF FROM TBM							3816 Elev.		1307°			
2															
3															
4		2640		89°28'54"					50	-187		1209.1		Δ	
5		✓		87°35'27"					10°	-179				✓	
6		1760							06			1288.4		33	
7		E 880							35			1285.6		34	
8		0							50			1284.1		35	
9		W 880							65			1282.6		36	
10		1760							61			1282.9		37	
11		2640							95	-94		1278.4		38	1278.8
12		✓		270°02'24"					10°	-105				✓	
13															
14		2640							54	+55		1284.9		Δ	
15		✓		270°04'05"					10°	+63				✓	
16		1760							61			1278.7		39	
17		E 880							70			1277.9		40	
18		0							56			1279.9		41	
19		W 880							42			1280.7		42	
20		1760		89°30'					41			1296.1		43	

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STADIA SURVEY NOTES

AREA N.P.R #4 STATE or PROVINCE ALASKA PAGE No. 191
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day MAR Mo. 1977 Yr. BOOK No. _____
 SURVEYOR C. DESTARCAIS RODMAN C. Pains WEATHER: Mild Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2		2640		89° 19' 02"				50				1311.2	4A		
3		3190		89° 22' 31"				60	+28.6			1312.4	⊙	1312.7	
4		✓		270° 34' 30"				10	+27.5				∇		
5															
6		2970		88° 48' 49'				50	-56.3		1256.8		∇		
7		✓		271° 15' 10'				10	-55.6				∇		
8		2640		88° 50'				25				1307.9	45		
9		1760		89° 10'				30				1279.4	46		
10	E	880				T	77					1253.5	47		
11		2						50				1251.8	48		
12	W	880		90° 40'				14.8				1231.8	49		
13		990		91° 00'				130	-30.3			1226.3	⊙	49-1 1226.7	
14		✓		268° 48' 06"				100	-30.5				∇		
15															
16		2530		89° 00' 46'				50	-38.5		1100.4		∇		
17		✓		271° 04' 28"				100	-37.9				∇		
18		1760		85° 01' 29" HR 5°				150				1198.3	50		
19	E	880		89° 00'				16.2				1193.6	51		
20		0						50				1183.4	52		

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AREA N.P.P. #4 STATE or PROVINCE ALASKA PAGE No. 192
 LINE No.(s) 86 PARTY No. 1195 DATE 31 Day Mar Mo. 1977 Yr. BOOK No. _____
 SURVEYOR R. D. STALLONE RODMAN G. Rains WEATHER: Cool Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2	W 880			91°40'					127				1150.1		53	
3	1760			91°50'					131				1119.0		54	
4	2640			91°17'41"					140	-73.8			1114.1	0	55	1114.7
5	✓			268°35'38"					100	-74.3				✓		
6																
7	2640						T	75		-54		1108.9		Δ		
8	✓			270°12'55"					50	-52				✓		
9	1760						T	50					1112.7		56	
10	E 880								03				1108.6		57	
11	0								50				1103.9		58	
12	W 880								112				1097.7		59	
13	1760								121				1096.8		60	
14	2640						B	27		-17.0			1091.4	0	61	1092.3
15	✓			268°50'15"					100	-17.3				✓		
16																
17	1760						T	53		-37		1088.4		Δ		
18	✓			270°20'					72	-32				✓		
19	E 880						T	65					1086.3		62	
20	0								50				1083.4		63	

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STADIA SURVEY NOTES

AREA N.P.R. #4 STATE or PROVINCE ALASKA PAGE No. 193
 LINE No.(s) 86 PARTY No. 1185 DATE 1 Day April Mo. 1977 Yr. BOOK No. _____
 SURVEYOR C. DESJARLAIS RODMAN G. Rains WEATHER: Cool Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2	W	880	/						82			1080.2		64	
3		1760	/	87° 18' 52"					8°	+748		1162.9	⊙	65	1163.7
4		V		78° 45' 00"					10°	+745			✓		
5															
6	E	880	/			B	149			+19.3		1182.4 ✓			
7				269° 40'					145	+19.5			✓		
8		0	/						5°			1178.4		66	
9	W	880	/						65			1175.9		67	
10		1760	/						124			1170.0		68	
11		2640	/	90° 08' 59"					14°	-21.0		1160.8	⊙	69	1161.7
12		V		269° 46' 57"					12°	-21.4			✓		
13															
14		2750	/			B	104			+243		1185.4 ✓			
15		V		269° 40'					91	+248			✓		
16		1870	/			B	125					1187.0		70	1163.7
17		890	/			B	149					1161.2		71	1165.7
18	E	110	/						76			1178.0		72	
19		0	/						5°			1180.6		72 1	
20	W	770	/						77			1177.9		73	

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STADIA SURVEY NOTES

AREA N.P.R. #4 STATE or PROVINCE ALASKA PAGE No. 194
 LINE No.(s) 86 PARTY No. 1195 DATE 1 Day April Mo. 1977 Yr. BOOK No. _____
 SURVEYOR P. DESTARINIS RODMAN G. Pains WEATHER: Cool Clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	SEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD		
1															
2		1650				B	97					1167.5		74	
3		2530				B	63					1166°	⊙	75	1167.1
4		✓		269°50'				127		-19.1 -19.6			✓		
5															
6		2640		89°42'54"				145		-1.5		1168°1'	Δ		
7		✓		270°16'23"				150		-2.0			✓		
8		1760				T	77					1169.0		76	
9	E	880				T	35					1168.8		77	
10		0						50				1163.0		78	
11	W	880	/					33				1164.7		79	
12		1760				T	58					1170.9		80	
13		2310				T	46			+6.8		1174.7	⊙	80-3	1175.6
14		✓		270°16'23"				50		+6.4			✓		
15															
16		2090	/					25		+2.4		1177.3	Δ		
17		✓		270°07'36"				50		+2.9			✓		
18		1760	/					98				1167.4		81	
19	E	880	/					114				1165.9		82	
20		0	/					50				1172.3		83	

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AREA N.P.B.#4 STATE or PROVINCE ALASKA PAGE No. 195
 LINE No.(s) 86 PARTY No. 1195 DATE 1 Day April Mo. 1977 Yr. BOOK No. _____
 SURVEYOR P. DESTARLIS RODMAN G. Pains WEATHER: cool clear P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2	W 880	/							150				1162.3	84	
3	1430			90°35'53"					140	-290			11480	84-3	11493
4	✓			269°13'09"					100	-293				✓	
5															
6	2080			86°51'45"					50	108.6	108.2		1039.8	85	
7	✓			273°15'12"					100	16.6				✓	
8	1760			89°00'					14	29.2			1069.0	85	
9	E 880	/							83	8.3			1031.5	86	
10	0								50				1034.8	87	
11	W 880						T	33		1.1			1040.9	88	
12	1760						T	21		0.4			1039.4	89	
13	2620						T	123		0.8	0.3		1040.1	90	1041.6
14	✓			270°06'36"					50					✓	
15															
16	2970			90°45'					147	53.8			1094.2	91	
17	✓			265°08'44"					100	54.1				✓	
18	2090			91°00'					145	51.1			1043.2	91	
19	1210			91°36'					124	44.1			1050.2	92	
20	E 330						B	143		16.0			1078.3	93	

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STADIA SURVEY NOTES

AREA N.P.D. #4 STATE or PROVINCE ALASKA PAGE No. 196
 LINE No.(s) 86 PARTY No. 1195 DATE 2 Day April Mo. 1977 Yr. BOOK No. _____
 SURVEYOR R. D. SUTLER RODMAN G. Paine WEATHER: Cloudy Cool P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2		0							50				1089.2	93-2	
3	W	550		89°10'					17	6.3			1100.5	94	
4		880		89°11'53"					20		5.3		1099.4	94-2	1101.0
5		✓		270°58'49"					100		5.2			0	
6															
7		2310							64		6.5	1106.1		Δ	
8		✓		270°04'45"					100		6.7			Δ	
9		1760							126	12.7			1093.5	96	
10	E	880		91°40'					136	39.2			1066.9	96	
11		0							50				1101.1	97	
12	W	880		88°30'					29	20.1			1126.2	98	
13		1760		88°30'					10	45.0			1151.1	99	
14		2640		88°27'10"					50		66.1		1171.9	100	1173.6
15		✓		271°38'30"					100		65.8			✓	
16															
17		2640		91°20'					145		76.1	12AB-3		Δ	
18		✓		268°53'10"					100		76.4			✓	
19		1760		91°10'					109	46.3			1202.1	101	
20	E	880		91°00'					112	26.6			1221.8	102	

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STADIA SURVEY NOTES

AREA N.P.R. #4 STATE or PROVINCE ALASKA PAGE No. 197
 LINE No.(s) 86 PARTY No. 1195 DATE 2 Day April Mo. 1977 Yr. BOOK No. _____
 SURVEYOR P. DASTARLOIS RODMAN C. Pains WEATHER: Cloudy Fog Cold P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2		0							5°				1243.3	103	
3	W	980		89°00'					29	12.9			1261.3	104	
4		1760		89°00'					17	28.7			1277.3	105	
5		2640		88°56'30"					5°		43.6		1291.7	106	1293.6
6		0		271°08'26"					10°		43.4				
7															
8		1990		90°30'					12°		29.6	1321.6			
9		0		269°25'20"					10°		29.9				
10		1110				B	123			17.9			1303.7	107	
11		230							85°	8.5			1313.0	108	
12		0							5°				1316.6		Int 45186
13		677.19		91°07'07"					5'		126.5		1194.4	109	TBM 4514
14		0		268°52'02"					5'		127.2				
15													1196.5		TBM ASIA LISTED.
16													2.1		TIE.
17															
18															
19															
20															

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AREA NPRA STATE or PROVINCE ALASKA PAGE No. 198
 LINE No.(s) 86 PARTY No. 1195 DATE 3 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1			TAKE OFF INT. LINES 86				45								RE: PAGE 197	
2			(WORKED BACK FROM TBM. 4514)										1318.7			
3																
4	E 2410	✓				B	5.0			17.2		1335.7	Δ			
5	✓			90 05' 23"	(269 54.27)			13.0	13.0				CHK.			
6	1760	✓						10.1	10.2			1325.6		109		
7	880	✓						6.3	6.3			1329.4		110		
8	0							5.0				1330.7	κ	111		
9	880			89° 00' 00"				8.2	7.1			1342.9		112		
10	1760			89° 00' 00"				6.1	24.5			1360.3		113		
11	W 2640			88 50 00				6.2	47.4			1382.7	○	114 1182.4		
12	✓			27 04 50				3.0	47.0				CHK.			
13	E 880	✓						14.9	14.9		1397.8		Δ			
14	✓			269 41 56				12.0	15.0				CHK.			
15	0							5.0				1392.8	κ	115		
16	880	✓						14.5	14.5			1383.2		116		
17	1760			90 40 00				10.5	31.0			1366.7		117		
18	W 2640			90 49 35				12.0	50.2			1347.3	○	118 1346.8		
19	✓			269 12 24				14.0	50.5				CK.			
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 199
 LINE No.(s) 86 PARTY No. 1195 DATE 3 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2	E	1760		88 56 40				5.0	27.4			1320.0		Δ		
3		/		27 12 44				10.0	27.3					CHK.		
4		880		89 00 00				4.6	10.7			1330.8			119	
5		0						5.0				1315.0			120	
6		880		91 00 00				8.5	23.9			1296.2			121	
7	W	1760		91 00 00				14.3	45.1			1274.7		○	122	1274.0
8		✓		268 50 42				10.0	45.3					CHK.		
9	E	1760		87 34 03				14.0	60.4			1214.4		Δ		
10		✓		272 25 10				14.0	60.4					CHK.		
11		880		87 30 00				3.3	35.0			1249.4			123	
12		0						5.0				1209.4		⊥	124	
13		880		91 00 00				8.8	24.2			1190.2			125	
14		1430		91 10 00				13.4	42.6			1171.8			125	GP 3
15		1760		90 50 00				10.4	36.1			1178.3			126	
16		2640	✓				B	4.2				1196.8			127	
17	W	2970	Y				B	4.4				1194.5		○		127 GP 2
18		✓		269 51 49				13.0	19.8					CHK.		1193.5
19																
20																

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2nd _____

STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 200
 LINE No.(s) 86 PARTY No. 1195 DATE 3 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. O.F.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2310		89 03 13				6.0	32.0		1162.8		Δ			
4		✓		87 01 48				10.0	31.7				CHK			
5		1760		89 00 00				4.3	26.3			1189.2		128		
6		880	✓			T	1.0		3.4			1166.2		129		
7		0						5.0				1157.8		130		
8		880		89 30 00				4.7	3.0			1165.8		131		
9	W	1760		89 30 00				8.7	6.6			1169.1	○	132	11678	
10		✓		87 31 31				10.0	6.3				CHK.			
11	E	1760	✓			B	13.6		22.5		1191.9		Δ			
12		✓		88 40 40				13.0	22.7				CHK.			
13		880	✓					12.9	12.9			1178.9		133		
14		0						5.0				1186.9	κ	134		
15	W	770		91 10 00				14.0	29.7			1162.0	○		134 GP 4	
16		1		88 44 21				13.0	29.8				CHK.		1160.6	
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 201
 LINE No.(s) 86 PARTY No. 1195 DATE 3 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMANG FRANS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD-READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	2750		873045				110	118.1		1044.4		Δ			
4		✓		2723308				5.0	117.6				CHK			
5		2640		873235				1.0	111.9			1156.3		135		
6		1760		881235				2.0	52.9			1097.3		136		
7		880	✓					2.0	2.0			1042.4		137		
8		0						5.0				1039.4	κ	138	RIVER BOTTOM.	
9		880	✓				T	4.3		0.1		1044.5		139		
10		1760	✓				T	1.6		7.1		1051.5		140		
11	W	2640		893921				5.0	10.7			1054.6	○	141	1052.8	
12		✓		8702035				6.0	10.2				CHK			
13	E	2640		914917				13.0	97.0		1152.2		Δ			
14		✓		2680751				12.0	97.6				CHK			
15		1760		924000				11.0	92.9			1059.3		142		
16		880		932000				11.2	62.3			1089.9		143		
17		0						5.0				1147.2	κ	144		
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR⁴ STATE or PROVINCE ALASKA. PAGE No. 202
 LINE No.(s) 86 PARTY No. 1195 DATE 3 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3		880		87 50 00				1.0			1184.4	145		
4		1760		87 50 00				5.4			1213.2	146		
5	W	2640		87 40 00				8.4	98.8'		1250.4	147	1248.3	
6	✓			87 15 15				6.0	98.2		CHK.			
7	E	770		91 30 00				13.6	33.8	1284.4	Δ			
8	✓			268 25 39				13.0	33.9		CHK.			
9	0							5.0			1279.4	K	147 GP 4	
10		110						5.5			1278.9		T.P.	
11	W	990		91 00 00				13.4	30.7		1253.6	149	1251.4	
12	✓			269 01 42				14.0	30.8		CHK.			
13	E	2640		88 21 56"				5.0	70.1	1184.0	Δ			
14	✓			271 32 08"				6.0	69.6		CHK.			
15		1760		88 20 00"				5.6			1229.5	150		
16		880		88 50 00"				1.2			1200.6	151		
17	0							5.0			1178.9	K	152	
18		880	✓					2.2			1181.8	153		
19		1760		89 30 00"				3.8			1195.4	154		
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 203
 LINE No.(s) 86 PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	W	2640		89° 10' 00"				9.0	29.2	1212.9	○	155	1210.4	
4	✓			270 44 03'				5.0	29.0		CHK.			
5	E	1870		91 30 00"				10.8	59.8	1212.9	△			
6	✓			268 33 25				13.0	60.0		CHK.			
7		990		91° 00' 00"				13.1		1242.5		156		
8		110	✓					5.9		1267.0		157		
9		0						5.0		1267.9	κ		157 G.P.1	
10		770	✓					11.6		1261.3		158		
11		1650	✓			B	10.6	8.3		1254.0		159		
12	W	2530	✓			B	4.5		17.3	1255.4	○	160	1252.6	
13	✓			269 53 38'				13.0	17.6		CHK.			
14	E	990	✓					6.8	6.8	1262.3	△			
15	✓			269 53 10				5.0	6.9		CHK.			
16		110	✓					3.3		1259.0		161		
17		0						5.0		1257.3	κ		161 G.P.1	
18		770		90° 50' 00"				14.0	25.2	1237.1		162		
19		1656	✓	91 30 00"				8.4	51.6	1210.7		163		
20														

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STADIA SURVEY NOTES

AREA NPR*4 STATE or PROVINCE ALASKA PAGE No. 204
 LINE No.(s) 86 PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	✓	2530		91 30 00				14.3		80.6		1181.2	○	164	1178.2	
4	✓			268 27 05				13.0		81.1			CHK			
5	E	2640		88 50 00				8.5		45.1	1136.6		Δ			
6	✓			271 00 23"				2.0		44.7			CHK			
7		1760		89 30 00				0.6		14.7		1151.3		165		
8		880	✓					12.8				1123.8		166		
9		550		92 20 00				3.5				1110.7			166 GP 2 DEPT.	
10		0						5.0				1131.6	κ	167		
11		880		88 10 00				3.1				1161.6		168		
12		1760		88 00 00				4.8				1193.1		169		
13	W	2640		88 00 00				2.7				1225.8	κ	170		
14	W	2970		87 57 09"				2.0		103.9		1239.8	○		170 GP 2	
15	✓			272 01 31				2.0		103.3			CHK		1236.4	
16	E	550		91 00 00				12.9		22.5	1262.4		Δ			
17	✓			268 59 32				13.0		22.6			CHK			
18		0						5.0				1257.4	κ	171		
19	W	880	✓				B	13.9		18.3		1244.0	○	172	1240.5	
20	✓			269 42 02				14.0		18.5			CHK			

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 205
 LINE No.(s) 86. PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	2310		89 09 05				5.0		29.1	1215.3		Δ		
4		✓		270.51 06				6.0		28.7			CHK		
5		1430	✓					3.0			1212.3			173	
6		550	✓					4.0			1211.3			174	
7		0						5.0			1210.3		κ		174- GP3
8		330	✓					12.4			1202.9			175	
9		1210		91 30 00				11.1			1172.5			176	
10	W	2090		91 30 00				11.1		65.9	1149.1		○	177	1145.4
11		✓		248 31 56				13.0		66.2			CHK.		
12	E	1760		88 20 00				3.4		47.7	1101.7		Δ		
13		✓		271 41 51				5.0		47.4			CHK.		
14		880		98 50 00				3.9			1115.7			178	
15		0						5.0			1096.7		κ	179	
16		550		91 50 00				14.4			1069.7			179- GP3	
17		880		90 30 00				11.1			1082.9			180	
18		1760		89 20 00				1.2			1120.9			181	
19	W	2640		88 30 00				5.6		63.3	1164.5		○	182	1160.5
20		✓		271 25 22				3.0		62.9			CHK.		

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 206
 LINE No.(s) 86 PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAVIS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2090		92 10					10.6	89.7	1254.6		Δ			
4		✓		87 52 41					13.0	90.0			CHK.			
5		1210		92 00 00					13.7			1198.7		183		
6		330	✓			B	14.4	1.7	16.1			1238.5		184		
7		0							5.0			1249.6	κ			GP2
8		550	✓			T	9.4	2.8	6.6			1248.0		185		
9	W	660	✓			T	14.0			10.7		1243.7	○			185 - GP1
10		✓		270 10 36					13.0	10.8			CHK.			1239.5
11	E	2530		87 12 55					5.0	117.6	1126.6		Δ			
12		✓		272 47 07					6.0	117.1			CHK.			
13		1760		87 20 00					2.6			1205.7		186		
14		880		87 30 00					2.4			1162.5		187		
15		0							5.0			1121.6	κ	188		
16		880		91 30 00					10.4			1093.1		189		
17	W	1210		91 20 00					11.8	40.0		1086.4	○			GP2
18		✓		268 42 17					13.0	40.2			CHK.			1082.0
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 207
 LINE No.(s) 86 PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAWS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	2310	✓			T	13.6			2.2	1088.9		△			
4		1		87° 00' 32"				3.0		2.5			CHK			
5		1760		90 50 00				10.3				1052.9		190		
6		1210		91 40				14.4				1039.2			GP 3 CREEK.	
7		880		91 40				14.4				1048.8		191		
8		0						5.0				1083.9	✕	192		
9		880		87 50				3.7				1118.4		193		
10																
11		920		87 50				2.2		32.5		1121.4		SP 631	LINE 46	
12		CHK.		87 19 53				5.0					CHK.			
13																
14																
15																
16		1760		87 30				2.8				1162.7		194		
17	W	2640		87 20				3.0				1208.4	11	195		
18	W	2970		87 20				6.1		131.7		1226.2	0		GP 2	
19		✓		87 37 45				5.0		131.3			CHK.		1221.5	
20																

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STADIA SURVEY NOTES

AREA NPR #A STATE or PROVINCE ALASKA PAGE No. 208
 LINE No.(s) 86 PARTY No. 1195 DATE 4 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMANG. TAINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	1100		9100				14.4	33.6	1254.0		△			
4		✓		268 51 30				12.0	33.8						
5		550 ✓				B	12.9 2.8	15.7			1238.3		196.		
6		0						5.0			1249.0	κ			
7	S	149 ✓						7.6	7.6		1246.4	○	TBM 4617		
8		✓		27010				8.0	7.6			CK.	1241.6		
9											1241.6		TBM 4617 LISTED.		
10											4.8	TIE			
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 209
 LINE No.(s) 86 PARTY No. 1195 DATE 5 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2												1246.4			RE: Page 208 LN. 7
3															(USING ELEVATION CARRIED FROM TBM 451A - GIVEN ELE FOR 4617 APPEARS ± 5.0%).
4															
5	S 148	✓						8.0	8.0		1254.4		Δ		
6		✓		270 10				8.4	8.0				CHK		
7		0						5.0				1249.4	κ		196 GP 3
8		330	✓				T 3.7 1.7	2.0				1252.3		197	
9		1210		89 10				2.3				1269.7		198	
10	W 2090			89 00 00				10.1	26.3			1280.3	0	199	12755 12757
11		✓		271 00 00				10.8	25.9				CHK		
12	E 2310			90 00				12.3	12.4		1292.7		Δ		
13		✓		270 00				12.3	12.4				CHK		
14		1430	✓					10.9				1281.8		200	
15		550	✓					2.8				1289.9		201	
16		0						5.0				1287.7	κ		GP 3
17		330	✓					11.8				1280.9		202	
18		1210		90 50				12.4				1262.7		203	
19		2090		90 50				13.5				1248.7		204	
20															

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STADIA SURVEY NOTES

AREA NPR²A STATE or PROVINCE ALASKA PAGE No. 210
 LINE No.(s) 86 PARTY No. 1195 DATE 5 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMANG FRANK WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	W	2970		91 01 18				13.0	66.1		1226.5	○ 205	1221.7 1222.5	
4	✓			268.58 32				13.0	66.2			CHK.		
5	E	2640		90 20				14.0	29.5	1256.1		△		
6	✓			269 40				14.1	29.6			CHK.		
7		1760		91 20				10.6			1204.5	206		
8		880		91 30				12.7			1220.3	207		
9		0						5.0			1251.1	κ 208		
10		880		87 40				3.8			1288.1	209		
11	W	1760		87 40				10.8	60.7		1316.8	○ 210	1312.1 1313.4	
12	✓			272 20				10.8	60.7			CHK.		
13	E	550	✓			T	7.2		4.5	1321.3		△		
14	✓			270 09 13				6.0	4.5			CHK.		
15		0						5.0			1316.3	κ	GP3	
16		330		90 30				13.7			1304.7	211		
17		1210		91 50				11.7			1270.9	212		
18		2090		91 20				11.1			1261.5	213		
19	W	2970		91 20				11.5	80.8		1240.5	○ 214	1235.7 1237.4	
20	✓			268 40				11.6	80.8			CHK.		

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STADIA SURVEY NOTES

AREA NPR # STATE or PROVINCE ALASKA PAGE No. 211
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	2640	✓					13.0		13.1	1258.7		Δ			
4		✓		270 00				13.2		13.2			CHK			
5		1760		90 40				10.5			1222.7			215		
6		880		93 00				10.0			1197.7			216	CREEK	
7		0						5.0			1248.7		κ	217		
8		880		87 00				3.5			1296.2			218		
9		1760		87 00				4.2			1341.4			219		
10		2640		87 00				3.5			1388.1			220		
11	W	2970		273 00				8.7		146.3	1400.0		○		GP2 1397.8	
12		✓		87 00				8.8		146.2			CHK		1396.5	
13	E	660		90.50				14.0		23.6	1423.6		Δ			
14		1		269 10				14.0		23.6			CHK			
15		110	✓					7.6			1416.0			221		
16		0						5.0			1418.6		κ		GP1	
17		770	✓					13.6			1410.0			222		
18	W	1650		90 40				14.0		33.3	1390.4		○	223	1385.9 1388.5	
19		✓		269 20				13.9		33.2			CHK			
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 212
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FRANS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	E	2640		87 54 04				13.0	83.5	1307.0		△		
4		✓		87 22 05 50				13.0	83.4			CHK		
5		1760		87 50				8.4		1365.0		224		
6		880		88 00				2.8		1334.9		225		
7		0						5.0		1302.0		✕ 226		
8		880		92 10				14.6		1259.1		227		
9		990		92 30				13.7		1250.1			GP 1	
10		1210		92 51 04				13.0		1233.8			GP 2	
11		1430		92 30				13.0		1231.6			GP 3	
12		1650		91 40				10.6		1248.4			GP 4	
13		1760		91 10				14.4		1256.7		228		
14		1870		91 00				10.5		1263.8			GP 1	
15		2090		90 30				9.5		1279.1			GP 2	
16		2310	✓					11.4		1295.5			GP 3	
17		2530	✓			T	10.4			1309.1			GP 4	
18	W	2640	✓			T	3.8		9.3	1316.3	⊙	229	1311.7 1314.8	
19		✓		87 0 16 00				3.0	9.3			CHK		
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 213
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAVIS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2640		93 50				9.8	186.0	1502.3		△			
4	✓			266 10				9.7	186.0			CHK			
5		1760		93 50				13.9			1371.0		230		
6		880		93 50				11.6			1432.0		231		
7		0						5.0			1497.3	τ	232		
8		880		87 20				2.8			1540.4		233		
9	W	1210		87 20				8.5	47.7		1550.1	○		GP 2 1549.5	
10	✓			272 40				8.3	47.8			CHK		1545.9	
11	E	550		87.50				9.9	10.9	1539.2		△			
12	✓			272 10				9.8	10.9			CHK			
13		473		272 10				5.1			1516.2			TD	
14		0						5.0			1534.2	τ	234		
15		880		93 40				13.6			1469.4		235		
16		1760		94 00				12.0			1404.7		236		
17	W	2310		94 20				8.4	182.6		1356.6	○		GP 3	
18	✓			265 46 37				13.0	182.7			CHK		1351.9 1355.8	
19															
20															

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STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 214
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	1760		88 20				6.3		44.8	1311.7		Δ			
4		✓		87 40				6.2		44.9			CHK.			
5		1430		89 00				4.6			1332.0			237		
6		550		93 20				14.3			1265.5			238	CREEK	
7		0						5.0			1306.7		κ		GP 3	
8		330 ✓						3.2			1308.5			239		
9	W	660		90 10	42			14.0		16.1	1295.7		0		GPE	
10		✓		269 49	34			14.0		16.0			CHK.		1290.9 1295.2	
11	E	2310		90 50				14.2		47.9	1343.6		Δ			
12		✓		269 10				14.3		48.0			CHK.			
13		1760		91 40				12.0			1280.4			240		
14		1210		93 10				10.5			1266.4				GP 3 CREEK	
15		880		93 00				12.2			1285.4			241		
16		0						5.0			1338.0		κ	242		
17		880		85 40				6.2			1403.7			243		
18		1760		85 40				5.9			1470.3			244		
19	W	2640		85 37	46			5.0		195.5	1539.1		0	245	1535.0	
20		✓		274 22	20			5.0		195.5			CHK.		1539.7	

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 215
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAVIS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	1230		93 30					14.9	102.1	1641.2			246	Δ
4		✓		866 30					14.9	102.1					CHK.
5		550		93 00					11.1		1601.3			246	
6		0							5.0		1636.2				κ
7		330		87 20					1.4		1655.1			247	
8	W	880		87 20					12.9	28.0	1669.2				○
9		✓		272 40 30					13.0	28.0					CHK.
10	E	880		87 30					13.1	25.2	1643.9				Δ
11		✓		272 29 54					13.0	25.3					CHK.
12		550		87 30					2.3		1665.6			248	
13		0							5.0		1638.9				κ
14		330		91 30					14.3		1621.0			249	
15		1210		93 00					10.5		1570.1			250	
16	W	2090		93 20					10.9	132.3	1511.7			251	○
17		✓		866 40 32					11.0	132.2					CHK.
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 216
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	2640		86 40				7.5		145.6	1366.0		Δ			
4		✓		273 19 47				7.0	-	145.8			CHK.			
5		1760		86 40				5.0			1463.1			252		
6		880		86 40				5.6			1411.4			253		
7		0						5.0			1361.0		κ	254		
8		880		92 40				13.1			1311.9			255		
9		1760		93 00				13.3			1260.6			256		
10	W	2640		93 00				8.4		146.5	1219.6		○	257	1215.0 1220.9	
11		✓		267 00				8.1		146.4			CHK.			
12	E	2640					T	13.1	B ²	0.0	0.0	1219.5		Δ		
13		✓		270 04 25				3.0		0.1			CHK.			
14		1760		91 30				13.6			1159.8			258		
15		1650		92 10				10.8			1146.3				GPI CREEK.	
16		880		92 50				10.5			1165.5			259		
17		0						5.0			1214.5		κ	260		
18		880		88 30				3.2			1239.3			261		
19																
20																

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 217
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3		1760		87 40				5.2				1285.8		262		
4	W	2310		87 40				10.4		83.5		1303.2	0		GP 3	
5	✓			273 14 07				6.0		83.7			C.K.		1298.6 1305.0	
6	E	2970		91 25 09				13.0		86.7	1389.7		Δ			
7	✓			88 35 13				13.0		86.6			C.K.			
8		2640		91 30				13.0				1307.5		263		
9		1760		91 50				10.0				1323.4		264		
10		990		93 50				12.8				1310.9			GP 4	
11		880		93 50				14.1				1316.9		265		
12		0						5.0				1384.7	x	266		
13		880		86 50				3.1				1435.2		267		
14		1760		86 50				7.8				1478.9		268		
15	W	2640		86 51 09				5.0		139.6		1529.7	0	269	1525.4 1532.4	
16	✓			273 09 53				5.0		140.0			C.K.			
17	E	770		91 53 34				14.0		39.9	1569.1		Δ			
18	✓			268 07 04				14.0		39.9			C.K.			
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 218
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J SPRAGUE RODMAN G. FRANS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3		0							5.0			1564.1	⊗		GPA TP
4		110	✓						7.6			1561.5	⊗	270	
5	W	880		92 30					13.9	52.3		1516.9	⊙		GPA
6		✓		261 30					137	52.2			CK		1512.6 1519.8
7	E	440		86 00					5.0	25.6	1491.2		Δ		
8		✓		274 00					4.9	25.7			CK		
9		330		86 10					3.2			1510.1		271	
10		0							5.0			1486.2	⊗		GPA
11		550		93 40					12.8			1443.3		272	
12		1430		93 40					10.1			1389.8		273	
13	W	1740		93 40					10.1	121.2		1376.8	⊙		TBM 4911
14		✓		266 20					9.7	121.0			CK		1365.6
15												1373.1			TBM 4911 LISTED.
16												1373.1			TIE. 7.5 1373.1
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 219
 LINE No.(s) 86 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3														
4														
5	E	589		85 20				8.0	39.8	1333.4			Δ	
6	✓			874 21 54				5.0	39.7				CNK	
7	0							5.0			1328.4		274	
8		880		94 30				12.6			1251.9		275	
9	W	1760		94 20				13.5	146.2		1187.2		276 1186.6 1186.7	
10	✓			265 40				13.6	146.2				CNK	
11	E	1760		89 00				10.0	20.6	1166.6			Δ	
12	✓			271 00				10.7	20.6				CNK	
13		880		92 00				12.9			1123.0		277	
14	0							5.0			1161.6		278	
15		880		86 10				4.4			1220.8		279	
16	W	1210		86 18 38				10.0	27.6		1234.1		279 G.P.R.	
17	✓			273 40 54				10.0	67.5				CNK 1233.7 1234.0	
18	✓													
19														
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 220
 LINE No.(s) 26 PARTY No. 1195 DATE 6 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
1																
2																
3	E	1100		89 30				14.3		4.7		1238.8		Δ		
4		✓		270 30				14.3		4.7				CHK.		
5		550	✓					3.2				1235.6			280	
6		0						5.0				1233.8		κ		GP3
7		330	✓					8.4				1230.4			281	
8		1210	✓				T	5.0 6.0				1239.8			282	
9	W	2090		88 38 27				5.0		44.5		1283.2		0	283	1282.8 1283.3
10		✓		87 21 22				5.0		44.4				CHK.		
11	E	1210		92 20				13.4		62.7		1345.9		Δ		
12		✓		267 40				13.5		62.7				CHK.		
13		330	✓				B	14.4				1329.9			284	
14		0						5.0				1340.9		κ		GP2
15		550	✓				T	1.6				1347.1			285	
16		1430		88 20				6.0				1381.5			286	
17	W	2200		87 50				2.6		80.4		1426.3		0	—	GP4
18		✓		272 10				2.7		80.4				CHK.		1426.0 1426.7
19																
20																

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STADIA SURVEY NOTES

AREA NPR-4 STATE or PROVINCE ALASKA PAGE No. 221
 LINE No.(s) 86 PARTY No. 1195 DATE 8 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR S. SPRAGUE RODMAN G. TRANE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2750		92 05	13			13.0	113.2	1539.7		△			
4		✓		867 54	19			13.0	113.4			CHK			
5		2640		92 02	38			13.0	167.2		1432.5		287		
6		1760		91 50				11.7			1471.7		288		
7		880		92 00				13.3			1495.7		289		
8		0						5.0			1534.7		290		
9	W	880		87 40				10.0	25.8		1565.5		291	T.P.	
10		✓		872 20				10.0	25.8				CHK	1565.3 1566.2	
11	E	540		86 40				9.2	22.1	1543.3		△			
12		✓		873 25	29			10.0	22.2				CHK		
13		0						5.0			1538.3		292	GP. 3	
14		340		92 30				13.0			1515.5		292		
15		1220		93 44	28			13.0			1450.9		293		
16	W	1550		94 07	34			13.0	124.3		1419.1		293	GP2	
17		✓		865 52	30			13.0	124.3				CHK	1418.5 1419.6	
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 222
 LINE No.(s) 86 PARTY No. 1195 DATE 8 Day 1 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G RAIN WEATHER: FOG - LIGHT SNOW. P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2640		88 00 49				3.0	88.3	1330.7		Δ			
4		✓		87 59 15				3.0	88.3			CHK			
5		2090		88 50				2.0			1371.2		294		
6		1210		90 30				14.0			1306.1		295		
7		880		92 28 57				14.5			1278.1			GP2	
8		330		91 20				13.0			1310.1		296		
9		0						5.0			1325.7	κ		GP2	
10	W	550		91 00				13.0	22.6		1308.1	○	297	1307.5 1308.8	
11		✓		869 10				14.6	22.6			CHK.			
12	E	2970		91 11 58				13.0	75.3	1383.3		Δ			
13		✓		868 48 19				13.0	75.2			CHK.			
14		2090		92 50				10.8			1269.3		298		
15		1210		92 30				14.5			1316.1		299		
16		330		90 50				13.7			1364.8		300		
17		0						5.0			1378.3	κ		GP2	
18		550		88 00				3.9			1398.6		301		
19	W	880		88 20				5.8	19.8		1403.2	○		GP2 1404.1	
20		✓		871 40				5.7	19.8			CHK.		1402.6	

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 223
 LINE No.(s) 86 PARTY No. 1195 DATE 8 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAVIS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	1430		90 50				11.4	32.2	1435.9		Δ			
4		✓		269 10				11.4	32.2			CHK			
5		880		91 50				11.0			1396.2		302		
6		0						5.0			1430.4	κ	303		
7		880		88 30				0.5			1457.9		304		
8	W	1760		88 30				8.6	37.4		1472.9	○	305	1472.3 1474.0	
9		✓		271 30				8.4	37.5			CHK			
10	E	2310		90 40				12.3	39.3	1512.2		Δ			
11		✓		269 20				12.3	39.3			CHK			
12		1430		90 30				11.0			1488.7		306		
13		530	✓					11.0			1501.2		307		
14		0						5.0			1507.2	κ		GP 3	
15		330	✓					13.0			1499.2		308		
16	W	660		91 40				12.9	32.1		1480.1	○		GP 2 1481.4	
17		✓		268 30				14.8	32.1			CK.		1479.5	
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 224
 LINE No.(s) 86 PARTY No. 1195 DATE 8 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FRINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2320		86 28 07				5.0	137.5	1342.2		Δ			
4				87 32 59				5.0	137.9			CHK			
5		1760		86 30				2.2			1447.2		309		
6		880		87 10				2.2			1383.4		310		
7		0						5.0			1337.2	κ	311		
8		880		92 00				15.0			1296.5		312		
9	W	1760		92 30				13.3	90.1		1252.1	○	313	1251.2 1253.3	
10				86 30				13.3	90.1			CHK			
11	E	2640		88 36				3.0	61.3	1190.8		Δ			
12				87 23 58				2.0	61.3			CHK			
13		1760	✓					6.8			1184.0		314	RIVER BOTTOM	
14		880	✓					4.9			1185.9		315	" "	
15		0						5.0			1183.8	κ	316	" "	
16		880	✓					13.2			1177.6		317	" "	
17		1760	✓					11.7			1179.1		318	" "	
18	W	2640		87 54 45				5.7	90.3		1280.9	○	319		
19				87 04 49				5.7	90.1			CHK		1280.0 1282.4	
20															

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STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 225
 LINE No.(s) 86 PARTY No. 1195 DATE 9 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J SPRAGUE RODMAN G. FRANKS WEATHER: COLD - FOG P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	E	1210		92 10				11.6	57.3	1329.1		△		
4	V			267 50				11.3	57.2			CHK		
5		330		90 50				12.1			1321.2	320		
6		0						5.0			1333.1	K	GP 2	
7		550		89 10				1.0			1345.1	321		
8		1430		89 00				9.5			1353.5	322		
9	W	1980		89 06 15				12.0	18.9		1357.4	O	GP 3	
10	V			271 00				14.8	19.3			CHK	1356.5 1359.1	
11	E	1540		89 30				8.6	4.8	1352.3		△		
12	V			270 30				8.1	5.0			CHK		
13		1210		89 30				6.8			1356.1	323		
14		330	✓				T 2.4				1351.6	324		
15		0						5.0			1347.3	K	GP 2	
16	W	550		90 40				12.8	19.2		1333.2	O	325	
17	V			269 20				12.6	19.1			CHK	1332.4 1335.2	
18														
19														
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 226
 LINE No.(s) 86 PARTY No. 1195 DATE 9 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	1650		87 30				4.8	67.0	1265.8		Δ			
4	✓			87 30				4.1	67.4			CHK			
5		770	✓				7 1.1					1268.6	326		
6		0						5.0				1260.8	κ	GPA	
7		110	✓					11.2				1254.6	327		
8		990		91 20				14.3				1228.5	328		
9		1870		91 30				12.8				1204.1	329		
10	W	2750		91 20				7.5	71.6			1194.7	330	1193.8 1176.8	
11	✓			88 40				6.5	71.1				CHK		
12	E	330	✓					6.2	6.2	1200.8		Δ			
13	✓			87 00				6.1	6.2				CHK		
14		0						5.0				1195.8	κ	GP 2	
15		550	✓					2.1				1198.7	331		
16		1430		88 30				6.4				1231.9	332		
17		2310		88 10				3.1				1271.5	333		
18	W	2570		88 00				5.4	84.1			1285.4	○	TBM 1701	
19	✓			87 00				4.4	84.6				✓	1284.6 1287.8	
20												1282.8	TBM 1701	LISTED.	

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 227
 LINE No.(s) 86 PARTY No. 1195 DATE 9 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAIN'S WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1				<u>TAKE OFF</u>	<u>TBM</u>			<u>1701</u>				<u>1287.8</u>			
2															
3	<u>E</u>	<u>1172</u>		<u>91 30</u>				<u>14.6</u>		<u>45.3</u>	<u>1333.1</u>		<u>Δ</u>		
4		<u>✓</u>		<u>268 30</u>				<u>14.6</u>		<u>45.3</u>			<u>CHK</u>		
5		<u>550</u>		<u>91 00</u>				<u>14.9</u>				<u>1308.6</u>		<u>334</u>	
6		<u>0</u>						<u>5.0</u>				<u>1328.1</u>	<u>κ</u>		<u>GP 3</u>
7		<u>330</u>	<u>✓</u>					<u>5.1</u>				<u>1328.0</u>		<u>335</u>	
8		<u>1210</u>		<u>88 50</u>				<u>4.9</u>				<u>1352.8</u>		<u>336</u>	
9		<u>2090</u>		<u>88 40</u>				<u>5.2</u>				<u>1376.4</u>		<u>337</u>	
10	<u>W</u>	<u>2970</u>		<u>88 20</u>				<u>9.8</u>		<u>76.4</u>		<u>1410.0</u>	<u>○</u>	<u>338</u>	<u>1409.6</u>
11		<u>✓</u>		<u>271 40</u>				<u>8.8</u>		<u>76.9</u>			<u>CHK</u>		
12	<u>E</u>	<u>770</u>		<u>91 30</u>				<u>12.8</u>		<u>33.0</u>	<u>1442.8</u>		<u>Δ</u>		
13		<u>✓</u>		<u>268.30</u>				<u>12.6</u>		<u>32.9</u>			<u>CHK</u>		
14		<u>0</u>						<u>5.0</u>				<u>1437.8</u>	<u>κ</u>		<u>GP 4</u>
15		<u>110</u>	<u>✓</u>					<u>8.0</u>				<u>1434.8</u>		<u>339</u>	
16		<u>990</u>		<u>88 40</u>				<u>6.1</u>				<u>1459.7</u>		<u>340</u>	
17	<u>W</u>	<u>1760</u>		<u>88 47 16</u>				<u>12.0</u>		<u>25.2</u>		<u>1468.1</u>	<u>○</u>		<u>GP 4</u>
18		<u>✓</u>		<u>271 13 14</u>				<u>12.0</u>		<u>25.3</u>			<u>CHK</u>		<u>1467.5</u>
19												<u>30.7</u>			
20															

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STADIA SURVEY NOTES

AREA N P R A STATE or PROVINCE ALASKA PAGE No. 228
 LINE No.(s) 86 PARTY No. 1195 DATE 9 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMANG FRANS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	1980		90 30					14.6	32.0	1499.9			Δ	
4		✓		269 30					14.3	31.8				CHK	
5		1870		90 40					9.8		1468.3		341		
6		990		90 40					7.5		1480.9		342		
7		110	✓						5.6		1494.3		343		
8		0							5.0		1494.9		344	κ	GP1
9		770	✓						2.7		1497.2		344		
10		1540	✓						3.6		1496.3				GPA
11		1650	✓				T	3.5	8.3		1501.7		345		
12	W	2530		88 10					2.0	78.8	1578.7		346	0	1577.7
13		✓		271 50					1.9	78.8				CHK	
14	E	1400		93 20					14.5	95.8	1674.6			Δ	
15		✓		266 40					14.6	95.9				CHK	
16		550		92 40					11.5		1637.5		347		
17		0							5.0		1669.6		348	κ	GP3
18		330		87 00					3.7		1688.1				
19															
20															

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STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 229
 LINE No.(s) 86 PARTY No. 1185 DATE 9 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAIN WEATHER: COLD FOG. P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	W	1210		87 10					6.7		53.0		1727.6	○	349	1726.4
4		✓		212 50					6.7		53.0			CHK		
5	E	2970		70 32					13.0		40.8	1768.9		△		
6		✓		269 26 58					13.0		41.3			CHK		
7		2090	✓			B	11.6						1746.7		350	
8		1210	✓			B	12.7						1750.1		351	
9		330	✓						6.4				1762.5		352	
10		0							5.0				1763.9	κ		GP 3
11		550		90 30					14.0				1750.1		353	
12	W	1100		71 42 59					13.0		46.0		1722.9	○		GP 3 1721.3
13		✓		268 17 10					13.0		45.9			CHK		
14	E	2970	✓			T	6.8				7.9	1715.7		△		
15		✓		270 12 47					3.0		7.9			CHK		
16		2640	✓						5.6				1709.5		354	
17		1760		91 10					10.6				1668.6		355	
18		880		72 30					13.2				1663.5		356	
19		0							5.0				1710.1		357	
20																

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 230
 LINE No.(s) 86 PARTY No. 1195 DATE 10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: FOG (PEA SOUP) P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	W	770		88 25 07					13.0	8.2		1723.3	○		GP 4 1721.4
4		✓		271 35 05					13.0	8.3			CHK		
5	E	1540		88 29 55					14.0	26.3	1697.3		△		
6		✓		271 28 53					14.0	26.0			CHK		
7		1430		88 30					11.6			1723.1		358	TARGET
8		550		88 20					2.3			1711.0		359	
9		0							5.0			1692.3	κ		GP 3
10		330		91 40					13.1			1674.6		360	
11	W	1210		93 10					13.5	80.3		1617.0	○	361	1614.8
12		1		266 50					13.5	80.3			CHK		
13	E	2530	✓						3.3	3.4	1620.4		△		
14		✓		270 02 28					5.0	3.4			CHK		
15		1650		91 50					12.4			1555.2		362	
16		770		91 30					13.4			1586.9		363	
17		0							5.0			1615.4	κ		GPA
18		110	✓						5.9			1614.5		364	
19															
20															

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STADIA SURVEY NOTES

AREA NPR# 4 STATE or PROVINCE ALASKA PAGE No. 231
 LINE No.(s) 86 PARTY No. 1195 DATE 10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		9 90	✓			B	11.2	4.9				1604.2		365		
4		18 70		90 30					12.5			1591.5		366		
5	W	21 50		90 30					11.4	35.6		1584.9	○	367	367	1582.3
6		✓		269 30					11.3	35.5			CHK.			
7	E	29 70	✓			T	14.8			0.1	1585.1		△			
8		✓		270 05 50					5.0	0.1			CHK.			
9		20 90	✓						12.4			1572.7		367	368	
10		12 10		90 30					11.8			1562.7		368	369	
11		33 0		90 40					14.8			1566.4		369	370	
12		0							5.0			1580.1	κ		GP 2	
13		5 50	✓			T	0.7					1587.1		370	371	
14		14 30		88 50					12.9			1601.2		371	372	
15	W	23 10		88 50					8.4	38.5		1623.6	○	373	1620.5	
16		✓		271 10					8.4	38.5			CHK.			
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 232
 LINE No.(s) 86 PARTY No. 1195 DATE 10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. T. RAINS WEATHER: FOG. (PEA SOUP) P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD-READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Δ B.S. OF.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2640		91 29 04				12.0	80.5	1704.3		Δ			
4		✓		268 30 16				12.0	80.8			CK			
5		1760		91 20				12.0			1651.3		374		
6		880		91 10				11.1			1675.3		375		
7		0						5.0			1699.3		376		
8		880		88 30				10.8			1716.5		377		
9	NW	575		88 30				3.7	11.3		1715.6	○	TBM 1703		
10		✓		871 31 28				4.0	11.3			CHK		1712.2	
11															
12										TBM 1705	1712.2				
13											+ 3.4	TIE			
14															
15															
16															
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #1 STATE or PROVINCE ALASKA PAGE No. 233
 LINE No.(s) 86 PARTY No. 1195 DATE -10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: FOG (DEA SOUP) P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1											1712.2			
2														
3														
4	NE	381	✓					6.6	6.6	1718.9		Δ		
5			✓	269	44	23		5.0	6.7			CNK		
6		0						5.0			1715.9		377	T.P.
7		880		92	00			13.0			1675.2		378	
8		1760		92	00			13.8			1643.6		379	
9	W	2640		91	30			11.5	80.7		1638.1	○	380	
10			✓	268	30			11.6	80.8				CNK	
11	E	1430	✓				B 12.2		19.4	1657.5		Δ		
12			✓	269	40			11.1	19.4				CNK	
13		550	✓					3.7			1653.8		381	
14		0						5.0			1652.9	κ		GP 3 T.P.
15		330	✓					11.8			1645.7		382	
16		1210		91	00			12.5			1623.9		383	
17		2090		91	00			14.8			1606.2		384	
18	W	2970		91	06	07		12.0	69.3		1588.3	○	385	
19			✓	268	53	59		12.0	69.2				CNK	
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 234
 LINE No.(s) 86 PARTY No. 1195 DATE 10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: SNOW - FOG P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	1760		87 57 27					10.0	52.6	1535.6		Δ		
4		✓		87 02 45					10.0	52.7			CHK.		
5		880		87 50					4.0		1564.8			386	
6		@							5.0		1538.6		π	387	1530.6
7		880		92 10					11.7		1490.6			388	
8		1760		92 30					12.0		1446.8			389	
9	W	2310		92 40					13.9	121.4	1414.3		0		GR 3
10		✓		267 20					13.8	121.3			CHK		
11	E	2640		91 00					9.8	56.0	1476.3		Δ		
12		✓		269 00					9.9	56.1			CHK		
13		2090		91 50					9.8		1393.6			390	
14		1210		93 10					15.0		1388.6			391	
15		550		92 30					9.3	-33.3	1437.1		✓	392	
16		0							5.0		1465.3		π		GP 3
17		330		87 40					2.1	111.3	1481.7		✓	393	
18	W	1210		87 40					10.4	+38.8	1509.1		0	394	T.R
19		✓		270 20					10.5	38.7			CHK		
20															

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA. PAGE No. 235
 LINE No.(s) 86 PARTY No. 1195 DATE 10 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS. WEATHER: FOG - SNOW. P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	E 880	✓						9.4	9.4	1518.7		△		
4	✓			869 53 20				8.0	9.4			CHK.		
5	0							5.0		1513.7	×	395		
6	S 650			89 00				6.6	4.7	1523.3	○	TBM 1704		
7	✓			270 50				4.9	4.6			CHK.		
8				- -				-						
9										TBM 1704 = 1523.0		TIE = 1.3 HIGH		
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 236
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1												1523.0				
2																
3	S	650		89 00				6.6		4.7	1518.9		Δ			
4		✓		270.50				4.9		4.6			CHK			
5		0						5.0			1513.9		κ	395		
6		880	✓					12.6			1505.8			396		
7		1760		90 30				11.7			1491.2			397		
8	W	2640		90 40				13.7		44.6	1473.5		○	398	1473.8	
9		✓		269 20				14.4		44.9			CHK			
10	E	1760		93 33 05				13.0		121.9	1595.6		Δ			
11		✓		266 25 57				13.0		122.1			CHK			
12		880		93 00				9.7			1539.9			399		
13		0						5.0			1590.6		κ	400		
14		880		87 20				3.2			1633.3			401		
15	W	1430		87 20				12.7		53.7	1649.1		○		GP #3	
16		✓		272 40				13.1		53.5			CHK		1649.7	
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 237
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS, WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	880	✓					11.0		11.0	1660'		△			
4		✓		270 10				13.5		11.0			CHK.			
5		550	✓					3.7				1656.9		402		
6		0						5.0				1655.1	X		GP 3	
7		330	✓					10.0				1650.1		403		
8		1210		91 20				12.1				1619.8		404		
9	W	1540		91 40				10.7		55.5		1604.6	0		GP 2	
10		✓		268 20				10.6		55.5			CHK.		1605.4	
11	E	1760		87 10				11.5		75.3	1529.2		△			
12		✓		272 50				11.4		75.4			CHK.			
13		1210		87 10				4.0				1584.9		405		
14		330		87 10				3.0				1542.5		406		
15		0						5.0				1524.2	X		GP 2	
16		550		92 30				11.8				1493.5		407		
17		1430		93 00				11.7				1442.7		408		
18	W	2310		91 20				12.7		66.5		1462.8	0	409	1464.0	
19		✓		268 40				12.5		66.4			CHK.			
20																

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STADIA SURVEY NOTES

AREA NPR # A STATE or PROVINCE ALASKA PAGE No. 237
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	1430		92.50					14.3	84.9	1547.8		Δ			
4				267.10					14.4	85.0			CHK			
5		550		92.00					10.4		1518.2			A10		
6		0							5.0		1542.8		K		GP 3	
7		330		88.20					1.4		1556.0			A11		
8		1210		88.00					5.8		1584.1			A12		
9		2090		87.50					2.7		1623.9			A13		
10	W	2200		87.50					5.6	77.4	1625.2		O		GP1	
11		✓		872.10					5.6	77.4			CHK		1626.8	
12	E	472	✓						10.4	10.4	1635.6		Δ			
13		✓		269.50					9.0	10.4			CHK			
14		0							6.5	6.5	1629.1		O		TBM 1705	
15											1630.7				TBM 1705	
16											1.6			TIE.	1630.7	
17																
18																
19																
20																

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2nd _____

STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 238
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAINS WEATHER: FOG P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Δ B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3																
4																
5		0														
6		300 ✓														
7		1170 ✓														
8	W	2060		90 21 19												
9		✓		269 38 40												
10	E	550		88 20												
11		✓		271 40												
12		0														
13		330		93 00												
14		1210		94 20												
15	W	1540		94 10												
16		✓		265 49 33												
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 239
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FRANS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1		<u>N.B</u>	<u>DISTANCE BETWEEN 421-1 & 421-2</u>				<u>15</u>	<u>110'</u>								
2																
3	<u>E</u>	<u>2310</u>		<u>86 50</u>				<u>0.7</u>		<u>126.6</u>	<u>1346.7</u>		<u>Δ</u>			
4	<u>v</u>			<u>87 10 17</u>				<u>1.0</u>		<u>126.5</u>			<u>CHK</u>			
5		<u>1760</u>		<u>87 10</u>				<u>7.4</u>				<u>1426.1</u>		<u>419</u>		
6		<u>880</u>		<u>88 40</u>				<u>5.4</u>				<u>1366.7</u>		<u>420</u>		
7		<u>330</u>		<u>92 00</u>				<u>3.5</u>				<u>1331.7</u>			<u>GP 3</u>	
8	<u>N.B. 110ft</u>	<u>0</u>						<u>5.0</u>				<u>1341.7</u>		<u>421</u>	<u>N.B. 110' SHORT</u>	
9	<u>SHORT.</u>	<u>770</u>		<u>89 10</u>				<u>3.2</u>				<u>1354.7</u>		<u>422</u>		
10		<u>1540</u>		<u>88 10</u>				<u>2.4</u>				<u>1393.5</u>		<u>423</u>		
11	<u>W</u>	<u>1870</u>		<u>88 10</u>				<u>5.9</u>		<u>53.8</u>		<u>1400.5</u>		<u>○</u>	<u>GP 2</u>	
12	<u>v</u>			<u>87 50 20</u>				<u>6.0</u>		<u>53.9</u>				<u>CHK</u>		
13	<u>E</u>	<u>2310</u>		<u>90 50</u>				<u>14.7</u>		<u>48.4</u>	<u>1449.1</u>		<u>Δ</u>			
14	<u>v</u>			<u>86 08 25</u>				<u>14.0</u>		<u>48.6</u>				<u>CHK</u>		
15		<u>1760</u>		<u>91 30</u>				<u>15.0</u>				<u>1388.0</u>		<u>424</u>		
16		<u>880</u>		<u>94 10</u>				<u>13.1</u>				<u>1372.2</u>		<u>425</u>		
17		<u>0</u>						<u>5.0</u>				<u>1444.1</u>		<u>κ</u>	<u>426</u>	
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 240
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3		880		88 20				3.6			1471.1		A27		
4		1760		88 20				8.3			1491.9		A28		
5	W	2640		88 10				4.2	80.1		1529.1	○	A29		
6		1		371 50 54				5.0	80.0			CHK			
7	E	1650		92 50				11.6	93.1	1622.2		△			
8		1		267 12 57				3.0	93.1			CHK			
9		770		92 10				13.5			1529.6		A30		
10		0						5.0			1617.2	κ		GP 4	
11		110	✓					2.6			1619.6		A31	T.P.	
12	W	660	✓			B	14.1		17.4		1604.8	○		GP 3	
13		1		269 42 19				14.0	17.4			CHK			
14	E	2970	✓					6.0	6.2	1611.1		△			
15		1		269 58 43				5.0	6.2			CHK			
16		2640	✓			B	6.7				1591.0		A32		
17		1760		91 10				11.1			1564.1		A33		
18		880		92 40				14.6			1555.3		A34		
19		0						5.0			1606.1	κ	A35		
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 241
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3		880		87 00				1.4			1655.6	436		
4		1760		86 30				5.7			1712.5	437		
5	W	2090		86 30				12.5	114.8		1725.9	0	GP 2	
6		✓		87 30				12.3	114.9			CHK.		
7	E	660		90 50				14.2	23.8	1749.7		Δ		
8		✓		269 10				14.1	23.8			CHK.		
9		110	✓					5.8			1744.2	438		
10		0		93				5.0			1744.7	✓	GP 1	
11		770		90 30				14.0			1729.0	439		
12	W	1320		90 40				11.9	27.3		1722.5	0	GP 3	
13		✓		269 20				11.7	27.2			CHK.		
14	E	1760		87 38.7				13.0	59.2	1663.3		Δ		
15		✓		272 21.27				13.0	59.2			CHK.		
16		1430		87 40				11.4	46.8		1710.0	✓	440	
17		550		87 30				4.3	19.7		1682.7	✓	441	
18		0						5.0			1658.3	✓	GP 3	
19														
20														

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALABAMA PAGE No. 242
 LINE No.(s) 86 PARTY No. 1195 DATE 11 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3		330		92 40				14.1				1633.8		442		
4		1210		93 40				13.9				1512.1		443		
5		2090		93 50				11.5				1512.3		444		
6	W	2970		93 40				8.8	198.5			1464.9	○	445		
7	✓			86 20				8.5	198.4				CHK			
8	E	1760		87 40				6.4	65.1	1399.9			△			
9	✓			87 20				6.7	65.0				CHK			
10		880		88 10				7.5				1420.5		446		
11		0						5.0				1394.9	×	447		
12		880		94 30				13.5				1317.6		448		
13		1210		94 40				13.2				1288.6			GP2 Milligwa River	
14		1430		93 00				1.5				1323.6			GP3	
15		1760		91 50				14.7				1328.9		449		
16	W	2640		91 00				12.4	58.6			1341.4	○	450		
17	✓			89 00				12.2	58.5				CHK			
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 243
 LINE No.(s) 86 PARTY No. 195 DATE 12 Day 4 Mo. 11 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion				INST.	ROD			
1																
2																
3	E	230		92 40				8.4		115.9	1457.2		Δ			
4		✓		37 20				8.3		115.8			CHK			
5		1430		93 40		H.R.	12.°	6.°	18.0			1397.7		A51		
6		550		92 30				13.2				1420.0		A52		
7		0						5.0				1452.2		τ	GP 3	
8		330		88 20				2.2				1464.6		A53		
9	W	880		88 40				7.3		13.2		1470.4		○	GP 3	
10		✓		27 20				7.3		13.2				CHK		
11	E	880	✓					9.7		9.7	1480.1		Δ			
12		✓		269 50				7.1		9.7				CHK		
13		550	✓					8.5				1471.6		A54		
14		0						5.0				1475.1		τ	GP 3	
15		330	✓					11.1				1469.0		A55		
16		1210		91 00				10.4				1448.5		A56		
17		1760		90 40				13.7				1415.1			GP 3	
18		2090		90 20				14.7				1453.1		A57		
19	W	2970	✓							9.3		1489.3		○	A58	
20		✓		270 14 19				5.4		9.2				CHK		

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AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 244
 LINE No.(s) 86 PARTY No. 1195 DATE 12 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2640		90 40				14.5	45.4	15346		△			
4		✓		89 20				14.5	45.4			CHK			
5		1760		90 30				13.1			1506.1		459		
6		880		90 30				13.1			1513.8		460		
7		0						5.0			1529.6	x	461		
8		880		88 40				1.7			1553.4		462		
9		1760		88 20				9.8			1575.9		463		
10	W	2640		88 20				1.7			1609.5	=	464		
11	W	2970		88 10				7.2	87.6		1622.3	⊙		GP 2	
12		✓		87 50				7.1	87.6			CHK			
13	E	2310		91 30				10.6	71.2	1693.4		△			
14		✓		88 30				10.5	71.1			CHK.			
15		1760		91 30				10.5			1636.8		465		
16		880		91 30				8.4			1661.9		466		
17		0						5.0			1688.4		467		
18		880		88 30				4.1			1712.3		468		
19		1760		88 30				4.7			1734.7		469		
20															

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STADIA SURVEY NOTES

AREA NPR # A STATE or PROVINCE ALASKA PAGE No. 245
 LINE No.(s) 86 PARTY No. 1195 DATE 12 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	W	2310		88 30				12.1		48.2		1741.8	○		GP 3
4		1		871 30				11.7		48.4			CHK		
5	E	660	✓			T	10.3			7.0	1748.8		Δ		
6		✓		270 10				8.8		6.9			CHK		
7		330	✓			T	4.5					1745.9	⊗	470	TR
8		0						5.0				1743.8	✕		GP 2
9		550		91 10				10.2				1727.9		471	
10		1430		91 30				13.9				1697.7		472	
11		2310		91 30				11.3				1676.9		473	
12	W	2860		91 30				14.7		89.7		1659.3	○		GP 3
13		✓		288 30				14.2		89.5			CHK		
14	E	1540		90 30				14.0		27.5	1686.7		Δ		
15		✓		289 30				13.9		27.4			CHK		
16		1210		90 30				14.9				1661.3		474	
17		330	✓					7.6				1679.1		475	
18		0						5.0				1681.7	T		GP 2
19	S	1850		86 00				7.1		79.9		1766.7	○		TBM 1707
20		✓		274 00				6.9		80.0			CHK		

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1769.3 TBM 1707.

-2.6 TIE

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CHECKED BY 1st _____

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 246
 LINE No.(s) 86 PARTY No. 1195 DATE 12 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2													1769.3			
3																
4	S	1250		86 00						79.9	1689.3			Δ		
5	✓			274 00						80°				CHK		
6	0									5.5			1684.3	X		475 - GP2
7		550	✓							12.5			1676.8		476	
8	W	1100		90 30						28.5			1660.9	○		GP 3
9	✓			269 10						28.4				CHK		1660.7
10	E	1540		87 50						47.9	1613.1			Δ		
11	✓			272 10						47.8				CHK		
12		1210		87 50						6.5			1652.3		477	
13		330		87 50						2.9			1622.7		478	
14		0								5.0			1608.2			GP2
15		550		92 10						14.6			1577.7		479	
16		1430		92 40						12.1			1534.3		480	
17		1980		92 30						11.9			1514.8			GP 3
18	W	2310		91 50						7.8	81.8		1531.3	○	481	1531.8
19	✓			268 10						7.8	81.8			CHK		
20																

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 247
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS - WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	1210		92 10						58.6	1589.9		Δ			
4				267 50						58.6			CHK			
5		330		91 30								1572.9		482		
6		0										1584.9	κ			GP3.
7		550		89 00								1594.9		483		
8		1430		89 00								1610.4		484		
9	W	1980		89 00						23.9		1613.8	○			GP3
10				271 00						23.9			CHK			Hand 1613.7
11	E	1760		88 40						28.4	1585.5		Δ			
12				271 20						28.4			CHK			
13		1430		88 40								1611.3		485		
14		550		88 50								1596.6		486		
15		0										1580.5	κ			GP3
16		330		91 20								1564.7		487		
17		1210		92 40								1517.8		488		
18		2090		92 40								1477.4		489		
19		2640		92 40								1433.1				GP3
20																

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STADIA SURVEY NOTES

AREA NPR*4 STATE or PROVINCE ALASKA PAGE No. 248
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	W	2970		92 30						138°		1447.1	0	490	1447.2	0
4		✓		267 30						138.1			CHK			
5	E	2970		71-10						70.8	1518.2		Δ			
6		✓		268 50						70.8			CHK			
7		2090		92 40								1408.9		491		
8		1210		95 30								1390.2		492	1389.3	
9		330		94 20								1478.1		493		
10		0										1513.2	κ		GDZ	
11		550		86 50								1543.0		494		
12	W	660		86 50						26.9		1545.1	0		GP1	4.8
13		✓		273 10						26.9			CHK		1545.1	
14	E	770	✓							14.1	1559.3		Δ			
15		✓		269 50						14.1			CHK			
16	E	420	✓									1551.8			2 X LINES 86 & 84	
17	SE	425	✓									1554.3			SP 569 LINE 6A	
18																
19																
20		0										1554.3		495		

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 249
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair-Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	W	770		92 00						13.8	40.2	1519.0	0		GPA 37
4		✓		26800						13.4	40.2		CHK		1519.0
5	E	2640	✓							8.3	8.8	1528.1		△	
6		✓		269 55 A9						6.0	9.1			CHK	
7		2530	✓			B	6.7					1508.7			496
8		1650		92 30						12.6		1443.6			497
9		770		95 00						14.4		1446.9			498
10		0								5.0		1523.1	κ		GPA
11		110	✓							6.4		1521.7			499
12		990		88 50						3.7		1544.6			500
13	W	1870		88 50						12.4	25.6	1553.6	0		501 15537 3
14		✓		871 10						12.6	25.5			CHK	
15	E	2310	✓			B	5.8				17.5	1571.3		△	
16		✓		269 50						11.0	17.6			CHK	
17		1430		90 36 55						3.3		1552.4			502
18		550		91 27 53						3.5		1553.7			503
19		0								5.0		1566.3	κ		GP 3
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 250
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1571.3				
2																
3		330	✓										1567.3		504	
4		1210	✓										1569.3		505	
5	W	1760	✓							13.4			1557.9	○		GP3
6		✓		270 00						13.4				CHK		1557.9
7	E	2970	✓							7.1	7.3	1565.9		Δ		
8		✓		270 00						7.5	7.5			CHK		
9		2640	✓			B	5.3						1546.7		506	
10		1760		91 40									1502.9		507	
11		880		93 30									1499.6		508	
12		0											1560.4	π	509	
13	W	880		86 20						10.1	46.0		1611.9	○	510	1611.6
14		✓		273 40						10.2	46.0			CHK		
15	E	2970		91 24						13.3	86.0	1697.5		Δ		
16		✓		268 36						13.6	86.2			CHK		
17		2090		91 20						10.3			1638.5		511	
18		1210		91 30						11.3			1654.5		512	
19		330	✓							15.0			1682.5		513	
20		0								5.0			1692.5	π		GP2

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 251
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J SPRAGUE RODMAN G. FRANKS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	SEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		550	✓									1695.9		514		
4	w	880	✓							13.4		1684.1	○		GP2	20
5		✓		270 0211						14.0			CHK		1684.5	
6	E	1430		87 10						5.3		65.3	1618.9	△		
7		✓		272 50						5.4		65.2		CHK		
8		880		87 20						1.1			1658.7		515	
9		0								5.0			1613.9	κ	516	
10		880		93 00						12.1			1560.8		517	
11	w	1650		93 20						14.8	110.6		1508.2	○	GP4	28
12		✓		266 40						14.9	110.7			CHK	1508.4	
13	E	890		85 10						5.3		69.4	1436.8	△		
14		✓		274 50						5.3		69.4		CHK		
15		770		85 20						2.9			1498.3		518	
16		0								5.0			1433.8	κ	GP4	
17		110		94 00						14.0			1417.1		519	
18		440		96 20						13.7			1376.9		GP2	NUKA RIVER
19		660		93 30						3.5			1395.1		GP3	
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 252
 LINE No.(s) 86 PARTY No. 1195 DATE 13 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN _____ WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		990		91 50								1396.0		520		
4		1870		90 30								1407.9		521		
5	W	2750				B	7.4			21.3		1417.4	0	522	1417.4	67
6	V			269 49 31						21.9				CHK		
7	E	2970		92 24 24						137.8	15.55 ³			Δ		
8	V			267 35 22						137.9				CHK		
9		2090		98 30								1454.0		523		
10		1210		92 30								1489.5		524		
11		330		90 40								1537.8		525		
12		0										1550.3	X			GR2
13		550		89 00								1563.7		526		
14		1430		89 00								1575.5		527		
15	W	2310		89 00						28.5		1583.7	0	528	1583.9	30
16	I			871 00						28.9				CHK		
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR # STATE or PROVINCE ALASKA PAGE No. 253
 LINE No.(s) 86 PARTY No. 1195 DATE 14 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	1650		9100					10.4		39.2	1623.0		△		
4		✓		269 00					10.5		39.3			CHK		
5		770		90 40					15.0			1599.0			529	
6		0							5.0			1618.0		X		GP4
7	SE	162	✓						11.1		11.1	1611.9		○	TBM 1709	11.2
8		✓		270 10					11.6		11.1			CHK		1612.0
9												1612.0			TBM 1709 LISTED	
10															9 TIE.	(8)
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR #A STATE or PROVINCE ALASKA PAGE No. 254
 LINE No.(s) 86 PARTY No. 1195 DATE 14 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FRANKS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3																
4																
5	SE	162	✓							11.1	11.1	1623.1				
6		✓		870 10						11.6	11.1			CHK		
7		0								5.0				1618.1		
8		110	✓							2.0				1621.1	530	IRON PIPE
9		990		88 40						2.8				1643.3	531	
10		1870		88 30						6.4				1665.6	532	
11	W	2750		88 30						5.3	66.5			1689.6	533	1690.0
12		✓		871 30						5.4	66.3					
13	E	2640		91 30						13.4	82.6	1772.5				
14		✓		868 30						14.0	82.9					
15		1760		91 30						7.8				1718.6	534	
16		880		91 00						12.2				1744.9	535	
17		0								5.0				1767.5	536	
18	W	880		89 20						6.8	3.4			1775.9	537	1776.7
19		✓		870 40						6.9	3.4					
20																

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STADIA SURVEY NOTES

AREA NPR # 1 STATE or PROVINCE ALASKA PAGE No. 255
 LINE No.(s) 86 PARTY No. 1195 DATE 14 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	880		88 50						12.3	1763.6			Δ		
4		v		271 10						12.3				CHK.		
5		0										1758.6		κ	538	
6		880		91 40								1723.5			539	
7		1760		92 10								1687.0			540	
8		2310		92 00								1673.0				GP 3
9	w	2640		91 40						86.5		1676.8		0	541	1678.1
10		v		268 20						86.7				CHK.		
11	E	2640		91 50						97.5	1774.3			Δ		
12		v		268 10						97.5				CHK.		
13		1760		91 40								1711.9			542	
14		880		91 30								1738.8			543	
15		0										1769.3		κ	544	
16		880		88 30								1795.1			545	
17		1760		88 10								1829.3			546	
18		2640		88 00								1861.4			547	
19	w	2970		88 00						99.7		1874.1		0		GP 2
20				272 00						99.9				CHK.		1876.1

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 256
 LINE No.(s) 86 PARTY No. 1195 DATE 1A Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		880		90 30					12.9		20.6	1894.7		Δ		
4		✓		269 26 34					12.0		20.6			CHK.		
5		336	✓						7.3			1887.4			548	
6		0							5.0			1889.7		κ		GP2 TP.
7		550	✓						11.8			1882.9			549	
8		W 1100		90 50					14.5		30.5	1864.2		0		GP3
9		✓		269 05 25					13.0		30.5			CHK.		1866.4
10		E 8090		87 50					8.8		70.1	1794.2		Δ		
11		✓		272 10					8.9		70.0			CHK.		
12		1760		87 30					6.8			1853.8			550	
13		880		88 00					2.1			1822.8			551	
14		0							5.0			1789.2		κ	552	
15		880		92 00					11.0			1752.5			553	
16		1760		91 30					14.6			1733.5			554	
17		W 2640		91 20					12.0		73.6	1720.6		0	555	1723.4
18		CHK		268 40					12.0		73.6			CHK.		
19																
20																

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 LINE No.(s) 86 PARTY No. 1195 DATE 14 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2640		88 20						69.3	1651.3			Δ		
4		✓		271 40						69.4				CHK.		
5		1760		88 20								1698.3			556	
6		880		88 40								1669.7			557	
7		0										1646.3		X	558	
8		880		91 30								1616.8			559	
9		1760	✓									1651.3			560	
10	W	2640		89 10						32.9			1684.2	○	561	1687.7
11		✓		270 50						32.9				CHK		
12	E	2640		91 30						83.0	1767.3			Δ		
13		✓		268 30						83.0				CHK.		
14		1760		91 20								1714.9			562	
15		880		91 00								1740.9			563	
16		0										1762.3		X	564	
17		880		89 20								1773.1			565	
18	W	1760		89 20						6.9			1774.2	○	566	1778.2
19		✓		270 40						7.0				CHK		
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 258
 LINE No.(s) 86 PARTY No. 1195 DATE 14 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. TRAVIS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	1870		89 00					8.9	23.7	1750.6			Δ	
4	✓			271 00					8.9	23.7				CHK	
5		990		89 00					2.6			1765.2		567	
6		110	✓						3.5			1747.1		568	
7		0							5.0			1745.6		K	GP1
8		770	✓			B	14.8	3.9	18.7			1731.9		569	
9		1650		90 50					10.4			1716.1		570	
10	W	2530		91 00					10.3	54.6		1696.1		571	1700.7
11		✓		269 00					10.0	54.4				CHK	
12	E	880		88 16					4.8	23.3	1672.7			Δ	
13		✓		271 50					4.6	23.4				CHK	
14		0							5.0			1667.7		572	
15	W	123	✓						11.8			1660.9			INTERSECTION L-122
16	Sw	488	✓			T	5.4	2.5	2.9			1669.8			SP 480 L-122
17	W	880		92 40					12.7	53.6		1619.1		573	
18		✓		267 20					12.7	53.6				CHK	1623.9
19															
20															

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 259
 LINE No.(s) 86 PARTY No. 1195 DATE 15 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAWS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E	2310		87 20					7.5	99.7	1519.5		Δ	510	
4	✓			87 40					7.7	99.6			CHK.		
5		1430		88 50					1.7			1546.8		574	
6		550		93 00					11.9			1478.8		575	
7		0							5.0			1514.5	✓	GP 3.	
8	S	1680		87 20					8.4	69.6		1589.0	⊙	TBM 2208	
9	✓			87 40					8.6	69.5			CHK		
10												1594.3	⊙	TBM 2208	1594.3
11													TIE	5.3	✓
12															
13															
14															
15															
16															
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 260
 LINE No.(s) 86 PARTY No. 1195 DATE 15 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3															
4															
5	S	1680		87 20						69.6	1524.8		Δ		
6		✓		272 40						69.5			CHK		
7		0								5.0					
8		330		90 30										576	
9		1210		87 50										577	
10	W	1760		87 20						75.6					GP3
11		✓		272 40						75.6					
12	E	330	✓							10.7	1611.0		Δ		
13		✓		270 10						10.7					
14		0								5.0				578	T.P.
15		880	✓							9.0				579	
16		1760	✓				B 8-3	8.8						580	
17	W	2310		90 30						29.2					GP3
18		✓		269 30						29.1					
19															
20															

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STADIA SURVEY NOTES

AREA NDR # 4 STATE or PROVINCE ALASKA PAGE No. 261
 LINE No.(s) 86 PARTY No. 1195 DATE 15 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	W.	2090		89 30					5.1	13.°	1568.9		Δ		
4		✓		270 30					5.1	13.°			CHK		
5		1760	✓				T	2.4				1575.2		581	
6		880	✓						10.5			1558.4		582	
7		0							5.0			1563.9	T	583	
8		880	✓						9.6			1559.3		584	
9		1760	✓				T	2.8	8.8			1574.9		585	
10	W	2640		89 10					3.6	34.6		1603.6	0	586	
11		✓		270 50					3.4	34.7				CHK	
12	E	1210	✓				T	10.2		4.2	1607.8		Δ		
13		✓		270 20					11.1	4.1				CHK	
14		330	1				T	1.9				1607.5		587	T.P.
15		0							5.0			1602.8	T		GP 2
16		550		90 50					13.0			1586.7		588	
17		1430		91 10					13.8			1564.8		589	
18	W	2310		90 50					10.0	43.7		1564.2	0	590	
19		✓		269 10					9.7	43.6				CHK	
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE MISSISSIPPI PAGE No. 262
 LINE No.(s) 86 PARTY No. 185 DATE 15 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction			Center Hair	INST.		
1														
2														
3	E	880		92 40	33			13.0	54.1	1618.2		Δ		
4		✓		267 19	47			13.0	54.0			CHK		
5		0						5.0		1613.2		591		
6		880		89 10				2.3		1628.7		592		
7		1760		89 10				5.1		1638.6		593		
8	W	2640		89 10				12.4	25.8	1644.1		○ 594		
9		✓		270 50				12.4	25.8			CHK.		
10	E	2640		89 11	39			74.0	23.0	1621.4		Δ		
11		✓		270 41	43			14.0	22.7			CHK.		
12		1760		89 10				6.6		1640.3		595		
13		880		89 10				2.7		1631.4		596		
14		0						5.0		1616.4		κ 597		
15		880		92 10				10.0		1578.1		598		
16		1760		92 00				14.5		1545.4		599		
17		2090		92 20				12.7		1523.6			GP 2	
18		2640		91 10				9.3		1558.2		600		
19	W	2970		90 40				8.7	43.4	1577.6		○	GP 2	
20		✓		269 20				9.3	43.7			CHK		

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 263
 LINE No.(s) 86 PARTY No. 1195 DATE 16 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FRANKS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	1430		91 40				14.1		55.7	1633.3		Δ			
4		✓		268 20				14.1		55.7			CHK			
5		880		91 10				13.3			1602.1			601		
6		0						5.0			1628.3		κ	602		
7		880		89 20				5.8			1637.8			603		
8	W	1210		89 25 15				14.8		2.6	1630.8		○			GP 2
9		✓		270 34 56				14.8		2.6			CHK			
10	E	2640	✓					3.6		3.7	1634.5		Δ			
11		✓		270 00				3.5		3.7			CHK			
12		2090	✓					3.5			1631.0			604		
13		1210	✓					6.0			1628.5			605		
14		330	✓					5.9			1628.6			606		
15		0						5.0			1629.5		κ			GP 2
16		550	✓					8.4			1626.1			607		
17		1430	✓					11.5			1623.0			608		
18	W	2000	✓				B	13.0		23.1	1611.4		○			GP 3
19		✓		269 40				11.4		23.1			CHK			
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 264
 LINE No.(s) 86 PARTY No. 1195 DATE 16 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAIN WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	3080		89 00						48.2	1563.1		Δ			
4		↓		271 00						48.2			CHK			
5		2750		89 00								1603.6		609		
6		1870		89 10								1585.7		610		
7		990	↓									1558.3		611		
8		110	↓									1551.7		612		
9		0										1558.1	τ		GP1	
10		770	↓				T	8.2	3.9			1560.8		613		
11		1650		89 10								1581.3		614		
12	W	2200		89 10						20.7		1583.8	0		GP 3	
13		↓		270 50						20.7			CHK			
14	E	1540	↓				T	8.1		0.4	1584.2		Δ			
15		↓		270 10						0.4			CHK			
16		1210	↓									1577.9		615		
17		660		92 40								1540.0			GP3	
18		330	↓				B	15.0				1567.6		616		
19		0										1579.2	τ		GP 2	
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 265
 LINE No.(s) 86 PARTY No. 1195 DATE 16 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		550		89 00								1589.5		617		
4	W	1100		89 10						5.9		1590.1	○		GP 3	
5		✓		270 50						5.9			CHK			
6	E	2970		89 10						35.0	1555.1		△			
7		✓		270 50						35.1			CHK			
8		2640		89 10								1586.6		618		
9		1760	✓			B	9.1					1537.7		619		
10		880		90 30								1534.7		620		
11		330		94 20								1517.2		GP 3	COLVILLE RIVER.	
12		0										1550.1		621		
13		880		86 20								1605.3		622		
14	W	990		86 10						53.2		1608.4	○		GP 1	
15		✓		273 50						53.3			CHK.			
16	E	1110		90 30						23.3	1631.6		△			
17		✓		269 30						23.3			CHK.			
18		330	✓									1625.6		623		
19		0										1626.6	κ		GP 2	
20																

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 266
 LINE No.(s) 86 PARTY No. 195 DATE 16 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3		550 ✓						7.1			1624.5	624		
4		1430 ✓						10.3			1621.3	625		
5	W	2090 ✓						5.1	5.2		1626.9	626		
6		✓	270 00					4.7	5.0			CHK		
7	E	2640 ✓						14.8	14.9	1641.4		Δ		
8		✓	270 00					14.5	14.8			CHK.		
9		1760 ✓						9.3			1632.1	627		
10		880 ✓						8.6			1632.8	628		
11		0						5.0			1636.4	629		
12	W	880 ✓				T	4.9		0.5		1641.0	630		
13		✓	270 20					5.4	0.4			CHK		
14	E	880 ✓						9.7	9.7	1650.7		Δ		
15		✓	270 00					9.6	9.7			CHK		
16		0						5.0			1645.7	631		
17	W	570 ✓						6.0	-6.0		1644.8	631	TBM 3201	
18	N		270 00					5.8	5.9			CHK		
19											1644.6	TBM 3201		
20											0.2	TIE.		

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 267
 LINE No.(s) 86 PARTY No. 1195 DATE 17 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR S. SPRAGUE RODMAN G. P. RAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1															
2															
3	E 10 90	✓													
4	✓			270 00											
5	880	✓													
6	0														
7	880	✓													
8	W 1760	✓													
9	✓			270 10											
10	E 1760	✓													
11	✓			270 00											
12	880	✓													
13	0														
14	880	✓													
15	W 1760	✓													
16	✓			270 00											
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 268
 LINE No.(s) 86 PARTY No. 1195 DATE 17 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. FAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	SEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	1760		89 00				2.6		28.°	1618.1		Δ			
4	✓			271 00				2.6		28.°			CHK.			
5		880		89 00				4.3				1629.2		640		
6		0						5.0				1613.1	x	641		
7		880		90 30				13.6				1596.8		642		
8		1760		90 30				11.1				1591.6		643		
9	W	2640		90 40				8.9		39.8		1578.3	○	644	1576.1	
10	✓			269 20				8.9		39.8			CHK.			
11	E	990		91 00				12.8		30.1	1608.4		Δ			
12	✓			268 00				12.8		30.1			CHK.			
13		110	✓					6.3				1602.1		645		
14		0						5.0				1603.4				GP1
15	W	770	✓				B	14.7		18.6		1589.8	○	646.	1587.2	
16	✓			269.30				11.9		18.6			CHK.			
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 269
 LINE No.(s) 86 PARTY No. 1195 DATE 17 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2310		88 00				7.2		73.3	1516.7		Δ			
4		✓		872 00				7.5		73.1			CHK.			
5		1430		88 00				5.1				1561.4		647		
6		550		88 40				1.3				1528.1		648		
7		0						5.0				1511.7	κ		GP 3	
8		330		90 40				14.5				1498.3		649		
9		1210		92 00				14.4				1460.0		650		
10		2090		90 20				10.7				1493.7		651		
11	W	2480	✓			B	129			24.5		1492.0	○		TBM 3202	
12		✓		869 40				10.4		24.7			CHK.			
13												1488.4			TBM 3202	
14												+3.6	TIE.		1488.4	
15																
16																
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR 4 STATE or PROVINCE ALASKA PAGE No. 270
 LINE No.(s) 86 PARTY No. 1195 DATE 17 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF.S. - S.S.	Station	REMARKS	
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD				
1																	
2																	
3																	
4	E 1380			88 00						43°	1449.4		1488.4	Δ			USE ELEVATION FROM 3201 RUN - Pg. 269 & 11 ELE. LISTED FOR 3202 IS 14' LOW.
5	✓			272 00						12.6				CHK			
6	880			88 00									1475.1		652		
7	0												1444.4	X	653		
8	880			92 20									1403.1		654		
9	1760			92 30									1361.0		655		
10	W 2640			92 40						135.0			1313.8	○	656	1310.5	
11	✓			267 20						135.6				CHK		1311.4	
12	E 1430			88 00						46.7	1266.8			Δ			
13	✓			872 00						46.9				CHK			
14	550			88 40									1276.3		657		
15	0												1261.8			GP 3	
16	330			92 40									1236.9		658		
17	880			94 10									1189.0			GP 3	
18	1210			93 00									1189.7		659		
19	W 2090			92 30						101.8			1165.7	○	660	1161.7	
20	✓			267 30						101.7				CHK		1163.4	

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 280
 LINE No.(s) 86 PARTY No. 195 DATE 17 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E 2640	J						10.0		10.1	1175.2		Δ			
4		J		270 00				9.9		10.1			CHK			
5		1760		91 40				11.5				1112.5		661		
6		1210		93 10				13.7				1094.7			GP 3	
7		880		93 10				10.7				1116.0		662		
8		0						5.0				1170.2	κ	663		
9		880		87 20				2.5				1213.6		664		
10		1760		87 10				2.6				1259.4		665		
11	W 2640			87 00				10.6		127.2		1302.5	0	666	1299.4	
12		J		273 00				10.9		127.3			CHK		1302.2	
13	E 2954			92 20				9.1		129.4	1431.9		Δ			
14		J		267 40				8.9		129.3			CHK			
15		2120		92 40				10.3				1323.0		667		
16		1210		92 50				13.3				1358.8		668		
17		315		91 20				12.1				1412.5		669		
18		0						5.3				1426.6	0		TBM 3203	
19												1427.0			TBM 3203	
20												0.1		T.I.E.	1423.5	

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1427.0

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 281
 LINE No.(s) 86 PARTY No. 1195 DATE 17 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1			<u>TAKE OFF</u>			<u>TBM</u>	<u>32</u>	<u>03</u>				<u>1427.0</u>			
2															
3															
4		<u>0</u>						<u>5.3</u>			<u>1432.3</u>	<u>Δ</u>			
5		<u>566</u>	<u>✓</u>					<u>6.5</u>				<u>1425.8</u>	<u>670</u>		
6	<u>W</u>	<u>900</u>	<u>✓</u>					<u>14.6</u>	<u>14.6</u>			<u>1417.7</u>	<u>○</u>	<u>GPZ</u>	
7		<u>✓</u>		<u>270 00</u>				<u>14.6</u>	<u>14.6</u>				<u>CK.</u>	<u>1417.7</u>	
8	<u>R</u>	<u>1430</u>		<u>87 50</u>				<u>4.0</u>	<u>50.0</u>		<u>1367.7</u>	<u>Δ</u>			
9		<u>✓</u>		<u>272 10</u>				<u>3.9</u>	<u>50.0</u>				<u>CK.</u>		
10		<u>880</u>		<u>87 40</u>				<u>4.6</u>				<u>1398.8</u>	<u>671</u>		
11		<u>0</u>						<u>5.0</u>				<u>1362.7</u>	<u>π</u>	<u>672</u>	
12		<u>880</u>		<u>92 10</u>				<u>9.5</u>				<u>1321.9</u>	<u>673</u>		
13		<u>1760</u>		<u>91 50</u>				<u>14.5</u>				<u>1296.8</u>	<u>674</u>		
14	<u>W</u>	<u>2640</u>		<u>91 50</u>				<u>15.0</u>	<u>99.6</u>			<u>1268.2</u>	<u>○</u>	<u>675</u>	<u>1268.1</u>
15		<u>✓</u>		<u>268 10</u>				<u>14.8</u>	<u>99.5</u>				<u>CHK.</u>		
16															
17															
18															
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 282
 LINE No.(s) 86 PARTY No. 1195 DATE _____ Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E	2640		89 00				5.7	40.2	1227.9		Δ			
4		✓		87 00				5.6	40.3			CHK			
5		1760		89 20				2.9			1245.4		676		
6		880		91 20				13.3			1194.1		677		
7		0						5.0			1222.9	κ	678		
8		880		90 20				12.9			1209.9		679		
9		1760		90 20				13.2			1204.4		680		
10	W	2640	✓			B	2.7		16.0		1211.9	○	681	1211.7	
11				269 50				8.1	16.0			CHK			
12	E	1760		91 00				10.3	41.1	1252.9		Δ			
13		✓		269 00				10.0	40.9			CHK			
14		880		90 30				14.1			1231.1		682		
15		0						5.0			1247.9	κ	683		
16		880	✓					5.4			1247.5		684		
17	W	1760	✓			T	9.8		1.1		1251.9	○	685	1251.6	
18		✓		270 10				5.9	1.0			CK			
19															
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 203
 LINE No.(s) 86 PARTY No. 195 DATE 18 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1												1251.9			
2															
3	E	2640		89 20						23.0	1228.6		Δ	685.	
4		✓		270 40						23.3			CHK.		
5		1760		89 30								1240.0		686	
6		880	✓									1220.6		687	
7		0										1223.6	κ	688	
8		880	✓									1220.1		689	
9	W	1760		89 20						14.6		1243.3	○	690	1242.9
10		✓		270 40						14.8			CHK	=	
11	E	1760	✓	✓		T	8.0	8.8		0.7	1242A		Δ		
12		✓		270 20						0.9			CHK.		
13		880	✓			T	5.0	4.4				1243.0		691	1241.7
14		0										1237.9	κ	692	
15		880	✓									1228.8		693	
16		1760	✓									1227.7		694	
17	W	2640	✓							2.5		1240.0	○	695	1239.5
18		✓		270 00						2.4			CHK.		
19															
20															

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AREA NDR #1 STATE or PROVINCE ALASKA PAGE No. 284
 LINE No.(s) 86 PARTY No. 1195 DATE 18 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMANS. S. PRINS. WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF.S. -S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2640		91 20					9.2	70.8	1310.7		Δ			
4	✓			868 40					9.0	70.7			CHK.			
5		1760		92 40					10.3		1218.5			696		
6		1210		94 10					14.5		1208.5					GP 3
7		880		94 20					12.6		1231.7			697		
8		0							5.0		1305.7		✕	698		
9	W	193		89 00					2.4	1.0	1311.6		0			TBM 3204
10	✓			871 10					3.0	0.9			CHK.			
11											1311.0					TBM 3204 LISTED
12											0.0					TIE 1311.0
13																
14																END of Post
15																
16																
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 285
 LINE No.(s) 86 PARTY No. 1195 DATE 18 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PRINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3															
4															
5	E	355	✓												
6		✓		270 10											
7		0													
8		330	✓			B	13.5	1.7	15.2						
9		1210		91 20											
10		2090	✓			B	10.6								
11	W	2640	✓			B	10.2								
12		✓		269 40											
13	E	1540		88 50											
14		✓		271 10											
15		1210		89 00											
16		330	✓												
17		0													
18		550	✓												
19	W	1100		90 50											
20		✓		269 20											

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 286
 LINE No.(s) 86 PARTY No. 1195 DATE 18 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3	E 880			9040				12.8	23.1	1261.8		Δ			
4	J			289 20				12.8	23.1			CHK			
5	666			93 00				12.2			1215.1		704	GP. 4	
6	550			92 30				14.1			1223.8		705		
7	0							5.0			1256.8		K	GP 3	
8	330			88 20				2.5			1268.9		706		
9	W 880			88 20				9.0	16.6		1278.4		O	GP 3	
10				271 40				9.0	16.6				CHK	1278.2	
11	E 2090	V					T 11.1		0.7	1279.1		Δ			
12		V		270 10				6.7	0.7				CHK		
13	1760	V					T 7.9				1280.0		707		
14	880	V						4.9			1274.2		708		
15	0							5.0			1274.1		K	709	
16	880	V						9.5			1269.6		710		
17	1760	V						3.2			1275.9		711		
18	W 2640	V						9.5	9.6		1269.5		O	712 1269.1	
19		V		270.00				9.4	9.6				CHK		
20															

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STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 287
 LINE No.(s) 26 PARTY No. 1195 DATE 18 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3														
4	E	2090		90 40				12.7	37.1	1306.6		△		
5		✓		269 20				12.7	37.1			CHK		
6		1210		90 40				12.2			1280.3	713		
7		330 ✓						12.0			1294.6	714		
8		0						5.0			1301.6	K	GP 2	
9		550 ✓				B	12.9	2.8	15.7		1290.9	715		
10		1430 ✓						12.3			1294.3	716		
11	W	1980 ✓						11.0	11.1		1295.6	○	GP 3	
12		✓		270 00				11.0	11.1			CHK	1295.1	
13	E	2090 ✓				B	10.6		21.1	1316.8		△		
14		✓		269 40				9.1	21.2			CHK		
15		1760		90 30				13.0			1288.4	717		
16		880		90 30				14.3			1294.8	718		
17		0						5.0			1311.8	K	719	
18	W	791 ✓				T	5.7		1.8		1315.1	○	TBM 3205	
19		✓		270 10				4.0	1.7			CHK	1314.5	
20											1314.5	TBM 3205	LISTED.	

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STADIA SURVEY NOTES

AREA NPR*4 STATE or PROVINCE ALASKA PAGE No. 288
 LINE No.(s) 86 PARTY No. 195 DATE 19 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD		
1			TAKE	OFF		TBM	3205.					1314.5			
2															
3	E	2730		90 30				11.9		35.9	1350.1		Δ		
4		✓		269 30				11.4		35.6			CHK		
5		2640		90 30				10.9				1316.0		720	
6		1760		90 40				13.2				1316.4		721	
7		880		90 30				14.1				1328.3		722	
8		0						5.0				1345.1	κ	723	
9		880		88 50				1.2				1366.8		724	
10	W	1760		88 40				14.0		26.9		1377.1	○	725	1376.8
11		✓		271 20				13.8		27.0			CHK		
12	E	2640		90 40				14.7		45.6	1422.5		Δ		
13		✓		269 20				14.4		45.4			CHK		
14		1760		90 40				13.3				1388.7		726	
15		880		90 50				11.0				1398.7		727	
16		0						5.0				1417.5	κ	728	
17		880		88 20				1.3				1446.8		729	
18	W	1760		88 13				13.5		41.2		1463.9	○	730	1463.2
19		✓		271 47				13.1		41.4			CHK		
20															

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STADIA SURVEY NOTES

AREA NPR #4 STATE or PROVINCE ALASKA PAGE No. 229
 LINE No.(s) 86 PARTY No. 1195 DATE 19 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	E	2640		89 40					7.4		7.8	1455.9	Δ			
4		✓		270 20					7.1		8.0		CHK			
5		1760	✓				T	4.3				1460.4		731		
6		880	✓						2.4			1453.5		732		
7		0							5.0			1450.9	T	733		
8		880	✓				T	4.3				1456.0		734		
9		1760	✓				T	7.1				1457.6		735		
10	W	2310	✓				T	8.5			2.9	1459.0	○		GP 3	
11		✓		270 20					10.1		3.1		CHK		1457.9	
12	E	2970		90 20					10.8		28.3	1487.1	Δ			
13		✓		269 40					10.5		28.1		CHK			
14		2640		90 30					12.3			1451.6		736		
15		1760		90 30					10.2			1461.5		737		
16		880	✓						11.7			1475.4		738		
17		0							5.0			1482.1	T	739		
18		880		90 30					15.0			1464.4		740		
19		1760		90 40					12.6			1454.0		741		
20																

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STADIA SURVEY NOTES

AREA NPR#4 STATE or PROVINCE ALASKA PAGE No. 290
 LINE No.(s) 86 PARTY No. 1195 DATE 19 Day A Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. PAINE WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD-READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲B.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3	W	2640		9020					11.7	27.2		1460.0	○	742	1458.5	
4		✓		26940					11.6	27.2			CHK			
5	E	2310		9130					14.3	74.9	15348		△			
6		✓		26830					14.3	74.9			CHK			
7		1430		9140					14.5			1478.7		743		
8		550		9130					14.7			1505.7		744		
9		0							5.0			1529.8	κ		GD3	
10		330		8940					1.3			1535.5		745		
11	W	610		8940					4.2	0.7			○		TBM 3206	
12		✓		27020					4.2	0.7		1534.3	CHK		1532.5	
13												1532.5		TBM	3206	
14												1.7	TIE			
15																
16																
17																
18																
19																
20																

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STADIA SURVEY NOTES

AREA N.P.R.#4 STATE or PROVINCE ALASKA PAGE No. 291
 LINE No.(s) 86 PARTY No. 1195 DATE 19 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. RAINS WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.		
1														
2														
3	E	3570		87 50				6.0	128.6	1405.3		Δ	TBM 3206.	
4		✓		272 10				5.9	128.7			CK.		
5		2970		87 50				11.1		1506.4		TA6		
6		2090		88 40				5.3		1448.7		TA7		
7		1326		89 40				1.2		1412.0			# 4 T.S. (TA8)	
8		440	✓					7.1		1398.4			# 8 T.S. #4	
9		0						5.0		1400.3		τ	#10 T.S. #8	
10		440	✓					12.9		1392.6			#12 T.S. #10	
11		1320		90 30				11.3		1382.7			#16 T.S. #12	
12	W	1760		90 40				16.5	31.0	1374.7		○	#18 T.S. #14	
13		✓		269 20				10.1	30.8			CHK		
14	E	2200		89 30				1.8	17.3	1357.3		Δ		
15		✓		270 30				1.5	17.4			CHK.		
16		1760	✓				T A,3			1361.7			#20 T.S. #16	
17		880	✓					4.0		1353.3			#24 T.S. #20	
18		0					(ADDED)	5.0		1352.3			#28 T.S. #24	
19		N.B.		SP 7A8			DRILLED							AFTER LINE WAS SURVEYED SAME ELEVATION.
20	AS	GROUP #A		T.S. - A			GROUPS DROP							OFF EAST END OF LINE ON T.S.

TI-588B

THEREFORE GROUP 8 BECOMES GROUP #A. ETC.

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA NPR # 4 STATE or PROVINCE ALASKA PAGE No. 292
 LINE No.(s) 26 PARTY No. 1195 DATE 19 Day 4 Mo. 77 Yr. BOOK No. _____
 SURVEYOR J. SPRAGUE RODMAN G. P. RAINES WEATHER: _____ P.T.S. No. _____

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		B.S. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1																
2																
3		880		90 50					11.7			1332.7			32	T.S. #28
4		1760		90 50					10.2			1321.4			36	T.S. #32
5	W	2640		90 50					7.9	46.4		1311.0	○		40	T.S. #36
6		✓		269 10					7.5	46.2	1			CHK		
7	E	880		89 30					3.8	3.9	1307.2		△			
8		0							5.0			1302.2	κ		44	T.S. #40
9	W	880		91 20					5.0	25.5		1281.7	○		48	T.S. #44
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																

TI-588B

WORKED BY _____ CHECKED BY 1st _____ 2nd _____