

STADIA SURVEY NOTES

AREA Ikpikpuk RIVER STATE Alaska PAGE No. 1
 LINE No. U-3 PARTY No. 1173 DATE Day 27 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Sighting or Sight	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS	
		Stadia Distance	Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction			Center Hair	INST.			ROD
	0	✓						5.0	-15.0	15.0	426.1	421.12	Δ	78089	(SP 10) PIPE
	0	✓						5.0	15.0				Δ		
	0	✓						5.0		-5.0		421.1	π	78089	
	1760	90	30	43				9.0		-24.7		401.4	•	9	
	2090	90	26	55				9.0		-32.3		393.8	○	8+1430	
	✓ 269	20	21					9.0					○		
	1430	89	01	03				9.0		-15.1	378.7		Δ		
	✓ 270	56	53					9.0					Δ		
	0	✓						5.0		-5.0		373.7	π	8	
	720	92	43	27				9.0		-45.6		338.1	π	7890	
	1760	90	55	25				9.0		-37.4		341.3	π	7	
	3574	89	47	15				9.0		+3.2		387.9	○	78698	
	✓ 270	10	45					9.0					○		
												380.8			
												+1.9 MISTAKE			
	3574	89	47	15				9.0		-3.2	377.6	380.8	Δ	78090	
	✓ 270	10	45					9.0					Δ		
	0	✓						5.0		-5.0		372.6	π	8	

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AREA Ikpikpak RIVER STATE Alaska PAGE No. 2
 LINE No. U-3 PARTY No. 1173 DATE Day 27 Mo. 1 Yr. 78 BOOK No. 1
 SURVEYOR R. Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. 1

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
												377.6			
		3850	89	42	07			9.0		+10.0		387.6	0	5+1430	
		✓ 270	16	06				9.0					0		
		2782	89	31	32			9.0		-13.3	374.3		Δ		
		✓ 270	26	34				9.0					Δ		
		1352	90	15	50			9.0							
		0	✓					5.0		-15.2		359.1		5	
		408	91	17	30			9.0		-5.0		369.3	7	5+408	
		1618	89	25	21			9.0		-18.2		356.1		4	
		✓ 270	32	48				9.0		+6.9		381.2	0	3+550	
		1100	89	29	45			9.0					0		
		✓ 270	28	42				9.0		-0.4	380.8		Δ		
		550	90	33	02			9.0							
		0	✓					5.0		-14.3		366.5		3	
		1210	90	02	38			9.0		-5.0		325.8	7	2+1210	
		1540	89	51	31			9.0		-9.9		370.9		2	
		✓ 270	06	35				9.0		-5.6		375.2	0	1+1430	
		1760	89	07	31			9.0					0		
		✓ 270	51	12				9.0		-17.5	3527		Δ		
		330	23	00	30			11.0		-28.3		329.4		1	

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 3
 LINE No. U-3 PARTY No. 1173 DATE Day 27 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hair			INST.	ROD		
												357.7			
		0	✓					5.0			-5.0	352.7	κ	SP+330	
		1430	90	03	45			9.0			-10.6	347.1		TS 1	
		3080	89	39	10			9.0			+9.7	367.4	○	TS 4 1650	
		2860	90	29	55			9.0			+33.9	401.3	Δ		
		2750	90	33	30			9.0			-35.8	365.5		TS 2	
		990	90	13	30			9.0			-12.9	388.4		TS 3	
		0	✓					5.0			-5.0	396.3	κ	TS 3+990	
		770	89	42	03			9.0			-5.0	396.3		TS 4	
		2530	89	53	18			9.0			-4.1	397.2		TS 5	
		4290	89	56	46			9.0			-5.0	396.3		TS 6	
												387.6			REFER L-2 P.2
		0	✓					5.0			+5.0	392.6	Δ	S+1430	
		0	✓					5.0					Δ		
		0	✓					6.0			-5.0	387.6	κ	S+1430	
		330	✓					12.7			-12.7	379.9	○	S.R.6	

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 4
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No.
 SURVEYOR R. Eppisch RODMAN K Barr WEATHER Clear P.T.S. No.

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
	N	1210	89	35	00			9.0		-2.6	423.7	421.22	✓	10	TBM 78089
		✓ 270	15	38				9.0					Δ		
		0	✓					3.0					Δ		
	S	550	90	55	00			9.0		-5.0		418.7	Δ	10+1210	
		1320	91	07	56			9.0		-17.8		405.9		11	
		2310	90	31	32			9.0		-35.1		382.6		11+770	
		✓ 229	25	41				9.0		-31.1		392.6	○	12	
		2759	96	48	02			9.0		+98.2	440.8		Δ		
		✓ 269	09	57				9.0					Δ	13	
		990	91	08	12			9.0		-28.6		412.2	Δ	13	
		0	✓					5.0		-5.0		435.8	Δ	13+990	
		770	89	26	00			9.0		-1.4		439.4	Δ	14	
		1165	89	52	50			9.0		-7.0		433.8	○	14+330	
		✓ 270	05	11				9.0					○		
		1870	89	41	21			9.0		-0.6	433.2		Δ		
		✓ 270	16	33				9.0					Δ		
		990	90	59	06			9.0		-26.0		407.2		14+1210	
		440	90	59	38			9.0		-16.6		416.6		15	
		0	✓					5.0		-5.0		428.2	Δ	15+440	

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 5
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 1950 BOOK No. 1173
 SURVEYOR R. Tippisch RODMAN K. Barr WEATHER Clear P.T.S. No. 1173

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ BS ○ FS - SS	Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
												433.2				
		1320	91	21	11			9.0			-40.2		393		16	
		2310	91	0.5	51			9.0			-54.0		279.2	○	16+990	
		✓ 268	51	55				9.0						○		
		1320	91	06	52			9.0			+35.1	414.3		△		
		✓ 268	51	10				9.0						△		
		550	92	57	58			9.0			-37.5		376.8		17	
		0	✓					5.0			-5.0		409.3	✕	17+550	
		1210	90	23	02			9.0			-17.1		397.2		18	
		1760	90	05	08			9.0			-12.2		402.1	○	18+550	
		✓ 269	52	38				9.0						○		
		1789	90	23	48			9.0			+21.9	424.0		△		
		✓ 269	34	04				9.0						△		
		579	90	35	43			9.0			-15.0		409.0		19	
		0	✓					5.0			-5.0		419.0	✕	19+579	TB= 780.88
													417.0	○	= TB= 780.88	(419.02)

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 6
 LINE No. 03 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Tappisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
													417.0	TBM 78088 = S.P. 19 + 579	
		0	0					5.0			+5.0	422.0		19+579	
		0	0					5.0							
		0	0					5.0			-5.0		417.0	19+579	
		860	92	93	31	15		9.0			-62.0		360.0	19+1480	
		1180	92	36	48			9.0			-62.8		359.2	20	
		2940	90	58	58			9.0			-60.6		361.4	21	
		✓ 268		58	45			9.0						0	
		2310	90	38	20			9.0			+35.5	396.9		0	
		✓ 269		19	25			9.0						0	
		550	91	52	12			9.0			-26.9		370.0	22	
		0	✓					5.0			-5.0		391.9	22+580	
		1210	88	47	58			9.0			-16.4		380.5	23	
		2970	88	47	02			9.0			+52.9		449.8	24	
		✓ 271		10	24			9.0						0	
		3119	90	25	53			9.0		+33.6	+50.1	483.4		0	
		✓ 269		31	43			9.0						0	
		1140	90	59	15			9.0			-28.6		454.8	25	
		0	✓					5.0			-5.0		478.4	25+9139	
													478.4	TBM 78087 = S.P. 25 + 1139	

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STADIA SURVEY NOTES

AREA Ikpikpuk RIVER STATE Alaska PAGE No. 7
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Tippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS	
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hair			INST.	ROD			
		0	✓					5.0			+5.0	483.4	478.4		(= 50 25 + 1140
		0	✓					5.0						Δ	78087	= 50 25 + 1140
		0	✓					5.0			-5.0		478.4	π	78081	
		620	✓					10.4			-10.4		473.0	-	26	
		1830	89	47	39			15.0			-9.1		474.3	0	26 + 1 2 10	
		✓ 270	09	55				15.0						0		
		1100	88	56	56			15.0			-14.8	459.5		Δ		
		✓ 271	00	50				15.0						Δ		
		530	89	47	20			9.0			-7.0		452.5		27	
		0	✓					5.0			-5.0		454.5	π	27+550	
		660	90	38	12			9.0			-16.3		443.2		27+1210	
		1210	89	59	56			9.0			-9.0		450.5		28	
		2200	89	31	59			9.0			+8.0		467.5	0	28+990	
		✓ 270	25	12				9.0						0		
		2530	91	03	58			9.0			+57.1	524.6		Δ		
			268	53	08			9.0						Δ		
		1760	91	00	44			9.0			-40.1		484.5		29	
		0	✓					5.0			-5.0		519.6	π	30	

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STADIA SURVEY NOTES

AREA Ispikpuk RIVER STATE Alaska PAGE No. 8
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K. Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS	
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			▲ BS ○ FS - SS
		1210	87	43	47			9.0			+38.5	524.6	563.1	○	30+1210	
		✓ 272	13	26				9.0						○		
		550	88	51	43			9.0			-1.7	561.4		Δ		
		✓ 271	06	00				9.0						Δ		
		0	✓					5.0			-5.0		536.4	π	31	
		1430	94	39	12			9.0			-50.8		510.6	○	31+1430	
		✓ 268	18	60				9.0						○		
	2200	2420	87	23	15			9.0		-90.3	+100.5	420.3		Δ		
		✓ 272	33	44				9.0						Δ		
		1870	87	28	45			9.0			+73.3		493.6		32	
		660	91	23	51			9.0			-25.1		395.2		32+1210	
		110	88	20	55			9.0			-5.8		414.5		33	
		0	✓					5.0			-5.0		415.3	π	33+110'	
		1650	91	18	44			9.0			-46.8		373.5		34	
		2200	90	41	30			9.0			-3.4		383.9	○	34+550	
		✓ 269	15	44				9.0						○		
		2420	90	57	52			9.0			+50.7	434.6		Δ		
		✓ 268	59	24				9.0						Δ		
		1210	90	51	25			9.0			-27.1		407.5		35	

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STADIA SURVEY NOTES

AREA Ikpihpuk RIVER STATE Alaska PAGE No. 2
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hoir			INST.	ROD		
												434.6			
		0 ✓						5.0			-5.0	429.6	π	35+12.0	
		550 ✓	89	21	31			9.0			-2.8	431.8		36	
		2310 ✓	88	22	56			9.0			+55.3	489.9	○	37	
		✓	271	34	20			9.0					○		
		1870 ✓	90	59	30			9.0			+42.1	532.0	Δ		
		✓	268	57	37			9.0					Δ		
		880 ✓	92	49	30			9.0			-67.7	464.3		37+990	
		110 ✓	93	57	40			9.0			-16.6	515.4		38	
		0 ✓						5.0			-5.0	527.0	π	38+110	
	880	400 ✓	84	07	37			9.0			780.8	612.8	○	38+120990	
		✓	275	49	25			9.0					○		
		356 ✓	90	55	15			9.0			+14.9	627.7	Δ		
		✓	269	01	50			9.0					Δ		
		0 ✓						5.0			-5.0	622.7	π	38+1346	
												624.2		780.86 = S.P. 38+1346	
														-1.5 MISTLE	

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STADIA SURVEY NOTES

AREA Ikpikpuk RIVER STATE Alaska PAGE No. 10
 LINE No. U-3 PARTY No. 1173 DATE Day 29 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Ippisch RODMAN K Barr WEATHER wind, clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
		0	✓						5.0		+5.0	629.2	624.2	780.80	
		0	✓						5.0					583.8	1346
		0	✓						5.0		-5.0		624.2	38+1346	
		414	90	41	41				9.0		-14.0		615.2	39	
		964	91	29	29				9.0		-34.5		594.7	39+550	
		✓ 268	27	37					9.0					0	
		4400	29	18	33				9.0		-40.9	553.8		0	
		✓ 270	36	30 34					9.0					0	
		3190	90	37	45				9.0		-44.0		509.8	40	
		2200	93	23	28				9.0		-139.2		414.6	40+990	
		1430	95	12	53				9.0		-139.1		414.7	41	
		0	✓						5.0		-5.0		548.8	41+1430	
		330	84	04	40				6.0		+28.1		581.9	42	
		660	84	29	40				9.0		+54.1		608.2	0	42+330
		✓ 275	27	15					9.0					0	
		660	91	21	52				9.0		+25.0	633.2		0	
		✓ 268	35	30					9.0					0	
		0	✓						5.0		-5.0		628.2	42+990	

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 11
 LINE No. U-3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No. 1
 SURVEYOR R. Tippisch RODMAN K Barr WEATHER Clear P.T.S. No.

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Incl. Elev. Diff.	ELEVATIONS		▲ BS ○ FS - SS	Station	FINAL ELEVATIONS	
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD				
												633.2					
		660	91	32	06			9.0			-27.0		606.2	○	42+1650		
		✓ 268	24	55				9.0						○			
		660	86	00	20			9.0			-36.8	569.4		△			
		✓ 273	57	04				9.0						△			
		550	86	00	57			9.0			+29.2		598.6	+	43		
		0	✓					9.0			-5.0		564.4	+	48+550		
		1210	95	21	26			9.0			-122.1		447.3	+	44	44	316.0
		1760	94	51	40			9.0			-67.1	*x → *	501.7		44+550	149.1	410.6
		2420	92	24	55			9.0			-111.0		458.4		44+12.10		
		2970	92	03	56			9.0			-116.1		453.3		45		
		4490	89	12	18			9.0			+51.8		621.2	○	45+1520		
		✓ 270	45	20				9.0						○			
												621.2			TBM 780.85		
												-0.0			MISTIE		

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STADIA SURVEY NOTES

AREA Ikpiqruk RIVER STATE Alaska PAGE No. 12
 LINE No. U-3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No.
 SURVEYOR R Tippisch RODMAN K Barr WEATHER Clear P.T.S. No.

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS	
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hoir			INST.	ROD.			
		3760	89	08	05			9.0			-46.4	574.8	621.2	Δ	78081	45+520
	✓	270	49	26				9.0						Δ		
		3520	89	17	10			9.0			+34.9		609.7	Δ	46	
		1760	93	19	08			9.0			-110.9		463.9	Δ	47	
		1430	95	10	47			9.0			-138.2		436.6	Δ	47+330	
	0	✓						5.0			-5.0		569.8	π	48	
		990	85	37	15			9.0			+66.3		641.1	0	48+990	
	✓	274	20	18				9.0						0		
		440	90	35	14			9.0			+13.7	654.8		Δ		
	✓	269	22	10				9.0						Δ		
	0	✓						5.0			-5.0		649.8	π	48+1430	
		330	90	22	24			9.0			-11.2		643.6	0	49	
		440	90	41	20			9.0			-14.4		640.4	0	49+110	
	✓	269	16	17				9.0						0		
		2420	85	20	17			9.0			-187.0	453.4		Δ		
	✓	274	37	20				5.0						Δ		
		770	89	08	12			21.0			-24		444.0	0	50	
	0	✓						5.0			-5.0		448.4	π	50+770	
		990	99	44	21			4.5			-172.6		280.8	51		

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2nd

STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 13
 LINE No. U-3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hoir			INST.	ROD		
												453.4			
		2750	93	45	10			9.0			-190.0		263.4	○	52
		✓ 266	12		28			9.0						○	
		640	93	16	28			15.0			+52.8	315.2		△	
		✓ 266	40		54			15.0						△	
		0	✓					5.0			-5.0		310.2	△	
		350	93	55	50			9.0			-33.0		282.2	△	52+640
		1120	90	45	24			15.0			-29.8		285.4		53
		2880	89	53	15			15.0			-13.4		301.8		54
		3210	89	53	0.6			10.0			-5.4		309.8	○	54+330
		✓ 270	04		57			10.0						○	
		1827	92	01	57			10.0			+75.4	385.2		△	
		✓ 267	55		53			10.0						△	
		947	93	11	44			10.0			-62.8		322.4	△	55+1810
		397	92	34	24			10.0			-27.8		357.4		55
		0	✓					5.0			-5.0		380.2	△	55+397
													382.6	TD	78034

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STADIA SURVEY NOTES

AREA Ikpikpuk River STATE Alaska PAGE No. 14
 LINE No. W-3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD.		
	0 ✓														
	0 ✓									+5.0		387.6		78084	
	0 ✓											382.6			
	0 ✓									-5.0		382.6	▲	78084	
		4183	89	36	26							10.0		56	
		1363	90	25	47							10.0		57	
		✓ 269	32	10								10.0		0	
		2090	89	34	33							10.0		0	
		✓ 270	23	23								10.0		▲	
		1210	90	16	19							10.0		58	
		330	89	53	15							10.0		59	
	0 ✓											5.0		59+330	
		550	90	35	09							10.0		60	
		1430	89	47	12							10.0		61	
		✓ 270	10	37								10.0		0	
		1210	88	59	46							10.0		▲	
		✓ 270	58	21								10.0		▲	
		330	89	54	09							10.0		62	
	0 ✓											5.0		62+330	
		550	91	07	00							10.0		63	

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⊗ 89-56-09

STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 15
 LINE No. U-3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
												346.2			
		1420	91	37	41			15.0			-55.6		290.6		63
		2200	90	39	0.0			10.0			-35.7		310.5	○	64+770
		✓ 269	18	53				10.0						○	
		1870	92	31	29			10.0			+92.9	403.4		Δ	
		✓ 267	26	40				10.0						Δ	
		1760	92	57	55			4.5			-95.6		307.8		65
		880	93	00	57			10.0			-56.3		347.1		66
		0	✓					5.0			-5.0		398.4	π	67
		880	88	01	56			10.0			+70.2		423.6		68
		1430	88	30	27			10.0			+26.9		430.3	○	68+550
		✓ 271	27	56				10.0						○	
		917	90	26	26			10.0			+173	447.6		Δ	
		✓ 269	31	38				10.0						Δ	
		587	90	22	12			10.0			-14.0		433.6		69
		0	0					5.0			-5.0		442.6	π	69+537
												440.6		TBM	78083
															MISTIE

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AREA Ikpikpuk RIVER STATE Alaska PAGE No. 16
 LINE No. U3 PARTY No. 1173 DATE Day 30 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Jppisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hoir Read	Reading	Correction	Center Hair			INST.	ROD		
		0	✓						5.0		+5.0	445.6	440.6	Δ	78083 = 57 69 + .587
		0	✓						5.0					Δ	
		0	✓						5.0		-5.0	440.6		π	78083
		293	88	23	29				10.0		-1.8	443.8		0	70
		1173	89	32	43				10.0		-1.0	444.6		0	71
		✓ 270	25	33					10.0					0	
		3080	90	11	36				10.0		+21.6	466.2		Δ	
		✓ 269	45	44					10.0					Δ	
		2200	90	20	32				10.0		-24.1	442.1			72
		1320	90	57	50				10.0		-32.2	434.0			73
		440	90	70	38				10.0		-12.6	453.6			74
		0	✓						5.0		-5.0	461.2		π	74+440
		440	91	42	14				10.0		-23.1	443.1			75
		1320	91	49	18				10.0		-52.0	424.2			76
		2200	90	46	48				10.0		-38.6	427.6			77
		3080	90	44	43				10.0		-51.3	419.9		0	78
		✓ 269	12	31					10.0					0	
		2640	90	44	08				10.0		+45.0	459.9		Δ	
		✓ 269	12	55					10.0					Δ	

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CHECKED BY _____

2nd _____

STADIA SURVEY NOTES

AREA Ekpikpuk RIVER STATE Alaska PAGE No. 17
 LINE No. U-3 PARTY No. 1173 DATE Day 31 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K. Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		▲ BS ○ FS - SS	Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
												459.9				
		1760	91	04	34			10.0			-43.1	416.8		79		
		880	91	13	58			10.0			-28.9	431.0		80		
		0	✓					5.0			-5.0	454.9	π	81		
		880	87	22	07			10.0			+30.4	490.3		82		
		1760	86	11	10			10.0			+107.1	567.0		83		
		2640	85	39	56			15.0			+183.6	643.5	○	84		PIRE
		✓ 274	17	20				15.0					○			
		1760	89	17	29			10.0			-11.1	632.4	Δ			
		✓ 270	40	02				10.0					Δ			
		0	✓					5.0			-5.0	627.4	π	86		SEE NEXT PAGE FOR BS
		1860	88	50	58			2.0			+2488	657.2	○			
		✓ 271	06	33				2.0					○			
												654.0	π	TBM 78082		
														TBM		ELEVATION POSSIBLY FALSE CARRIED ELEVATION TH TO 78081 AND GOT ACC. TIE IF ELEVATION OF TB. IS CORRECT, REFLECTION EVIDE. 2nd PRESENT.

WORKED BY _____

CHECKED BY _____

TBM - ELEVATION POSSIBLY FALSE
CARRIED ELEVATION THROUGH
TO 78081 AND GOT ACC.
TIE

IS CORRECT, REFLECTION EVIDE.
2nd PRESENT.

AREA Ikpikpak RIVER STATE Alaska PAGE No. 18
 LINE No. U-3 PARTY No. 1173 DATE Day 31 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Tippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
	1360	1550	88	50	58			2.00			-27.8	632.4		Δ	
	✓	271	06	33				2.00						Δ	
		880	89	11	00			10.0			+2.5	634.9		85	
	0	✓						5.0			-5.0	627.4		π	86
	330	91	18	06				10.0			-17.6	614.8		0	86+330
	✓	268	29	00				10.0						0	
	1100	86	23	25				10.0			-52.8	556.0		Δ	
	✓	273	33	40				10.0						Δ	
	550	88	42	34				10.0			+2.4	558.4		87	
	0	✓						5.0			-5.0	551.0		π	87+550
	330	90	20	06				10.0			-11.9	544.1		88	
	1210	89	20	36				10.0			+3.9	559.9		89	
	2090	87	47	54				10.0			+20.3	626.3		90	
	2200	87	49	07				10.0			+72.9	628.9		0	90+110
	✓	272	08	12				10.0						0	
	1540	89	31	22				10.0			-2.9	626.6		Δ	
	✓	270	26	12				10.0						Δ	
	770	91	29	56				10.0			-30.1	598.8		91	536.6
	0	✓						5.0			-5.0	523.9		π	91+770

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STADIA SURVEY NOTES

AREA Ikpikpak RIVER STATE Alaska PAGE No. 19
 LINE No. U-3 PARTY No. 1173 DATE Day 31 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R. Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		BS FS SS	Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
											626.6					
		110	91	26	27			10.0		-12.8		616.1	0	92		613.8
		✓ 268	30	30				10.0					0			
		1760	84	29	04			10.0		-158.7	457.4		Δ			
		✓ 275	28	18				10.0					Δ			
		880	86	11	56			10.0		+48.4		505.8		93		
		330	88	51	48			10.0		-3.5		453.9		93+550		
		0	✓					5.0		-5.0		452.4	π	94		
		880	90	14	18			10.0		-13.7		443.7		95		
		1760	88	58	44			10.0		+21.4		478.8		96		
		2640	88	16	58			10.0		+68.2		525.6	0	97		
		✓ 271	40	44				10.0					0			
		990	93	03	19			10.0		+63.1	588.7		Δ			
		✓ 266	54	18				10.0					Δ			
		110	90	08	40			10.0		-10.3		578.4		98		
		0	✓					5.0		-5.0		583.7		98+110		
		770	87	16	17			10.0		+26.7		615.4		99		
		1650	87	02	08			15.0		+70.4		659.1		100		
		2035	87	11	08			15.0		+84.3		673.0	0	100+385		
		✓ 272	46	30				15.0					0			

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STADIA SURVEY NOTES

AREA Ikrolikuk River STATE Alaska PAGE No. 20
 LINE No. 11-3 PARTY No. 1173 DATE Day 31 Mo. 1 yr. 78 BOOK No. _____
 SURVEYOR R Tippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		BS FS - SS	Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
		22.55	88	24	24			15.0		-46.8	626.2		Δ	100+785		
		17 27.1	32	46				15.0					Δ			
		17.60	89	05	48			10.0		+17.7	643.9			101		
		8.80	90	14	45			10.0		-13.8	612.4			102		
		0	✓					5.0		-5.0	621.2		X	103		
		8.80	87	47	03			10.0		+24.0	650.2			104		
		17.60	87	23	18			10.0		+70.2	696.4			105		
		26.40	86	57	38			10.0		+130.0	756.2			106		
		30.36	86	57	15			10.0		+150.2	776.4		0	78081	= SP 106 + 395	
		✓ 27.3	00	15				10.0					0			
											776.2			TBM 78071		
											776.2					
		35.45	91	10	03			10.0		+83.5	859.7		Δ	78081		
		✓ 26.8	47	32				10.0					Δ	= SP 106 + 395		
		30.60	91	22	00			10.0		-83.0	776.7			107		
		21.80	93	23	41			10.0		-142.3	717.4			108		
		13.00	94	11	09			10.0		-105.0	754.7			109		
		4.20	95	51	40			10.0		-52.9	806.8			110		

WORKED BY _____

CHECKED BY _____

2nd _____

STADIA SURVEY NOTES

AREA Ikpikpuk RIVER STATE Alaska PAGE No. 21
 LINE No. U-3 PARTY No. 1173 DATE Day 31 Mo. 1 Yr. 78 BOOK No. _____
 SURVEYOR R Ippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD		
												859.7			
		0 ✓						5.0			-5.0				
		460	87	53	41			10.0			+6.9	854.7	π	110+420	
		1240	88	06	23			10.0			+34.3	866.6		111	
		2220	87	30	38			10.0			+84.8	894.0		112	
		✓ 272	27	02				10.0				944.5	○	113	
		880	91	11	38			10.0			+28.6	973.1	○		
		✓ 268	46	03				10.0					Δ		
		0 ✓						5.0			-5.0				
		880	89	08	23			10.0			+2.9	968.1	π	114	
		✓ 270	49	25				10.0				976.0	○	115	
		2750	88	47	26			10.0			-46.1	929.9	Δ		88-4A-26
		✓ 271	07	37				10.0					Δ		271 07 37
		1870	88	40	17			10.0			+33.4	963.3		116	
		990	89	08	44			10.0			+4.8	934.7		117	
		440	91	02	07			10.0			-8.0*	* 921.9		117+550	7.9 - 912.6
		110	90	29	34			10.0			-10.9	919.0	π	118+110	
		0 ✓						5.0			-5.0	924.9	π	118+110	
		770	89	38	13			10.0			-5.1	924.8		119	

WORKED BY _____

CHECKED BY _____

2nd

STADIA SURVEY NOTES

AREA Ikpikpuk RIVER STATE Alaska PAGE No. 22
 LINE No. U-3 PARTY No. 1173 DATE Day 1 Mo. 2 Yr. 78 BOOK No. _____
 SURVEYOR R. Tippisch RODMAN K Barr WEATHER Clear P.T.S. No. _____

LINE	Bearing or Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Station	FINAL ELEVATIONS					
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction			Center Hair	INST.		ROD	▲ BS ○ FS - SS				
										929.9									
		16.50	89	59	10			10.0	-9.6		920.3		120						
		19.80	90	05	03			15.0	-19.5		910.4	0	120+830						# 18.6
		✓ 23.10	269	52	10			15.0				0							
		✓ 23.10	88	45	41			15.0	-23.0		877.4		Δ						
		✓ 17.60	271	11	27			15.0				Δ							
		880	88	54	14			10.0	+23.7		906.1		121						
		880	88	50	04			10.0	+7.9		885.3		122						
		0	✓					5.0	-5.0		872.4	π	123						
		880	89	42	34			10.0	-5.5		871.9		124						-REFER P. 20 FOR T.A.
		14.30	90	10	59			10.0	-15.6		861.8	0	124+550						ON REA
		✓ 26.9	46	27				10.0				0							
		✓ 20.90	88	46	10			10.0	-34.2		827.5		Δ						
		✓ 27.1	11	50				10.0				Δ							
		17.60	88	45	47			15.0	+23.0		850.5		125						
		880	88	34	49			10.0	+11.8		839.3		126						
		0	✓					5.0	-5.0		822.5	π	127						LAST SP.
		55.0	95	26	12			10.0	-62.2		765.3		27+550						
		880	91	49	18			10.0	-38.0		789.5		TJ 1						
		17.60	90	19	15			10.0	-19.9		807.6		TJ 2						

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2nd _____

