

STADIA SURVEY NOTES

AREA IKPIKPUK RIVER - KEY CREEK STATE or PROVINCE ALASKA PAGE No. 1  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 1977 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR JOEL SWANSON RODMANTUA VAN ALEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Searing 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				90	33	38									
6		1815		269	26	48									
7				269	17	15									
8															
9		495		89	29	25									
10															
11		825		89	45	54									
12															
13		2145		90	04	23									
14				269	55	45									
15				269	47	35									
16															
17															
18															
19															
20															

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_

**STADIA SURVEY NOTES**

AREA IKPIKPUK-KEY STATE or PROVINCE ALASKA PAGE No. 2  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 77 Yr. BOOK No.       
 SURVEYOR J.S. RODMAN T.V. 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		3960		89	35 46				+15.0	-13.2		108.1		Δ	17	
2				270	24 33				+15.0	13.6				Δ		
3																
4		2640		89	59 41				-15.0	-14.6			93.4		19	
5																
6		1320		89	53 09				-15.0	-12.3			95.7		18	
7																
8		1320		89	32 24				-15.0	-4.4			103.7		16	
9																
10		2640		89	24 20				-15.0	+12.5			120.6		15	
11																
12		3960		89	30 52				-15.0	+18.9			126.8	0	14	129.9
13				270	28 53				-15.0	18.6				0		
14																
15																
16																
17																
18																
19																
20																

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd

### STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 3  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR JOEL SWANSON RODMAN TIM VAN ALEN 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		4125		89 47 14					+15.0	-0.7		125.9		Δ	10 + 1155	
2				270 13 08					+15.0	-1.1				Δ		
3				270 04 50					+5.0	-1.1						
4		2805		90 02 44					-15.0				108.8	13		
5																
6		1485		89 33 19					-15.0	-3.4			122.5	12		
7																
8		165		89 04 21					-10.0	-7.3			118.6	11		
9															7	
10		1155		90 04 17					-15.0	-16.4			109.5	10		
11																
12		2475		90 09 34					-15.0	-21.8			104.0	9		w.l.
13				269 50 08					-15.0	22.0			0			107.6
14																
15																
16		2640		90 05 14					+15.0	+18.9			123.1		Δ	7
17				269 54 10					+15.0	19.3					Δ	
18																
19		1320		90 10 30					-15.0	-19.0			104.1			8 w.l.
20																

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_ *MSW*

**STADIA SURVEY NOTES**

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 4  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. WEATHER: \_\_\_\_\_ 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		1320		89	42 02				-15.0	-8.1		115.1		6		
2																
3		2640		89	46 32				-15.0	-4.5		118.6		5		
4																
5		3960		89	24 41				-15.0	+26.0		149.0	0	4	152.2	
6				270	35 06				-15.0	25.8			0			
7																
8		3960		89	34 37				+15.0	-14.6	134.2		Δ	SP1	PIPE MARKER	
9				270	25 45				+15.0	15.0			Δ			
10																
11		2640		89	29 32				-15.0	+8.5		142.8		SP3		
12																
13		1320		89	21 28				-15.0	-0.2		134.1		SP2		
14																
15		1155		89	59 01				-15.0	-14.6		119.6		TAIL 4		
16																
17		2475		90	03 48				-15.0	-17.6		116.0	0	TAIL 8	119.6	
18				269	54 33				-15.0	18.8			0			
19																
20																

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_ *[Signature]*

### STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 5  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. 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.	ROD			ABS. OF.S. -S.S.
1		2640		89 38 27					+15.0	-1.7		114.0		Δ	16	TAIL
2				270 22 20					+15.0	-2.3				Δ		
3																
4		1320		89 52 20					-15.0	-12.0		102.0			12	TAIL
5																
6		1320		89 37 41					-15.0	-6.4		107.6			20	TAIL
7																
8		2640		89 58 05					-15.0	-13.4		100.7			24	TAIL
9																
10																
11		2640		89 37 58					-15.0	+2.1		116.3		0	8	
12				270 22 34					-15.0	2.5				0		
13																
14		2475		90 03 52					+15.0	+17.7		133.7		Δ	SP 1	
15				269 58 54					+15.0	17.1				Δ		
16																
17		3960		270 25 48					-15.0	15.0		148.4		0	SP 4	
18				89 34 41					-15.0	+14.5				0		
19																
20																

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_

### STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 6  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S RODMAN T.V. 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		3960		89 24 39					+15.0	-26.0	122.0		Δ	sp 7	
2				270 36 06					+15.0	26.9			Δ		
3															
4		2640		90 05 56					-15.0	-19.4		102.7	0	9	
5				269 54 31					-15.0	19.1			0		
6															
7				<del>90 10 37</del>					+15.0				<del>Δ</del>	<del>11</del>	
8				<del>269 50 28</del>					+15.0				<del>0</del>		
9															
10		2475		90 10 21					+15.0	+22.3	125.0		Δ	10+	1155'
11				269 49 55					+15.0	22.1			Δ		
12															
13		4125		89 47 42					-15.0	+0.1		125.4	0	14	
14				270 12 54					-15.0	0.8			0		
15															
16															
17		3960		89 30 57					+15.0	-18.8	106.5		Δ	17	
18				270 29 15					+15.0	-19.0			Δ		
19															
20															

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_



**STADIA SURVEY NOTES**

AREA 1 KPIKPUK RIVER - KEY CREEK STATE or PROVINCE ALASKA PAGE No. 7  
 LINE No.(s) 106 PARTY No. 1182 DATE 11 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. 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		3960		89	35 56			-	-15.0	+13.1		120.0	0	20	
2				270	24 48				-15.0	13.9					
3															
4		2145		90	05 12				+15.0	+18.1		137.9	Δ	21 +	825
5				269	55 45				+15.0	17.6			Δ		
6															
7		1815		90	33 59				-15.0	-32.9		104.9	0	23	SP 23 = SP 37
8				269	25 51				-15.0	-33.0			0		LINE 105
9												106.5			SEE P. 6.1
10												CLOS=	-1.6		
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_

### STADIA SURVEY NOTES

AREA IKPIKPUK RIVER - KEY CREEK STATE or PROVINCE ALASKA PAGE No. 8  
 LINE No. (s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR JOEL SWANSON RODMAN TIM VANALEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

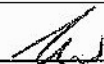
LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.B.S. OF S. - S.S.	Station	REMARKS	
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD.				
1																109.7	
2																	STARTING ELEV. AT SP 37
3																	LINE 105, P 6.9
4																	
5		2475		90	09 37				45.0	+21.8		128.1		Δ	24		1155
6					269 50 54				75.0	21.4				Δ			
7					269 36 46				+5.0								
8																	
9		1155		90	25 30				-15.0			104.6			24		
10																	
11		165		90	59 21				-5.0			120.3			25		
12																	
13		1485		89	53 33				-15.0			115.9			26		
14																	
15		2805		90	02 13				-15.0			111.5			27		
16																	
17		4125		90	04 21				-15.0	-19.9		108.4	0	0	28		111.2
18					269 55 51				-15.0	11.6							
19																	
20																	

TI-588B

WORKED BY \_\_\_\_\_

CHECKED BY 1st \_\_\_\_\_

2nd \_\_\_\_\_





**STADIA SURVEY NOTES**

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 9  
 LINE No.(s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. 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		4125		89	54 21				+15.0	+7.9	115.8		Δ	31+	165'	
2				270	06 18				+15.0	7.1			Δ			
3																
4		2805		89	42 05				-15.0		114.8			29		
5																
6		1485		89	48 13				-15.0		106.0			30		
7																
8		165		89	24 03				-10.0		107.6			31		
9																
10		1155		89	47 41				-15.0		105.0			32		
11																
12		2475		89	58 00				-15.0		102.4			33		
13																
14		3795		89	48 28				-15.0		113.9			34		
15																
16		4620		89	37 45				-15.0	+15.3	131.3		0	34+	825	
17				270	22 25				-15.0	15.6			0		134.0	
18				270	15 03				-5.0				0			
19																
20																

TI-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_ *WJ*

### STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 10  
 LINE No. (s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. 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.	ROD			
1		4455		89 17	07				45.0	-41.0		90.1		Δ	38	
2				270 43	11				45.0	-41.4				Δ		
3																
4		3960		89 48	48				-15.0				88.4		35	
5																
6		2640		89 51	45				-15.0				81.6		36	
7																
8		1320		89 40	28				-15.0				82.7		37	
9																
10		1320		89 44	45				-15.0				81.0		39	
11																
12		2640		89 55	54				-15.0	-11.7			78.7	0	40	PIPE MARKER
13				270 04	51				-15.0	-11.1				0		81.9
14																
15				<del>91 04</del>	<del>47</del>				<del>45.0</del>							
16				<del>266 06</del>	<del>42</del>				<del>45.0</del>							
17																
18	$\frac{800}{1600}$	1600		91 04	27				45.0	+44.9		123.4	118.0	Δ	TAIL 5 + 115'	
19				268 56	24				45.0	44.5				Δ		
20																

TI-588B

WORKED BY \_\_\_\_\_

CHECKED BY 1st \_\_\_\_\_

2nd \_\_\_\_\_

*sw*

**STADIA SURVEY NOTES**

AREA IKPIKPUK-KEY STATE or PROVINCE ALASKA PAGE No. 11  
 LINE No.(s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 77 Yr. BOOK No.  
 SURVEYOR J.S. RODMAN T.V. 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.	ROD		
1		1452		<del>92 25</del>	<del>25</del>									TAIL 4	
2															
3		875		90 05	40							117.0		TAIL 8	
4															
5		1163		89 26	22					-3.6		119.9		D 78+	248'
6				270 33	59					-3.5				O	123.4'
7															
8		0		90								125.0		Δ	
9															
10		706		92 15	00							82.3		T 12	
11															
12	<del>1012/2024</del>	2024		90 02	02							108.9		T-16	
13															
14		3344		90 26	02							84.9		T-20	
15															
16															
17															
18															
19															
20															

5 10 15 20 25

TI-588B

WORKED BY

CHECKED BY 1st

2nd

STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 12  
 LINE No.(s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR JOEL SWANSON RODMANTIM VAN ALAN 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		9818													
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

T1-588B

WORKED BY \_\_\_\_\_ CHECKED BY 1st \_\_\_\_\_ 2nd \_\_\_\_\_

### STADIA SURVEY NOTES

AREA IKPIKPUK - KEY STATE or PROVINCE ALASKA PAGE No. 13  
 LINE No.(s) 106 PARTY No. 1182 DATE 12 Day MAR Mo. 7 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR J.S. RODMAN T.V. 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		0		90					+5.1			136.5	131.4	Δ	34+825	
2																
3		4620		90	0822				-15.0	-25.8			111.0	0	31+165	
4				269	5205				-15.0	25.2				0		
5																
6		2805		89	53 37				+15.0	+9.6			120.5	Δ	29	
7				276	06 43				+15.0	9.4						
8																
9		5445		89	49 02				-15.0	+3.0			123.3	0	24+1155	
10				270	10 44				-15.0	2.6				0		
11																
12		2475		89	24 56				+15.0	-10.4			112.9	Δ	23	
13				270	35 16				+15.0	10.5				Δ		
14																
15		0		90					-5.4	-5.4			107.5	0	23= 37 LINE 105	
16													106.5		PG 9	
17																
18													CLOS = + 1.0			
19																
20																

TI-588B

WORKED BY \_\_\_\_\_

CHECKED BY 1st \_\_\_\_\_

2nd \_\_\_\_\_