

**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 1  
 LINE No.(s) 88 PARTY No. 1184 DATE 17 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN DJENSEN 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 SP			356		L	107			1589.0		1589.5
2															
3	E	1760		92-38-14				14.0	+95.0	+95.1	1684.1		Δ		
4	"	1760		86-21-24				14.0	+95.2				Δ		
5		0					H	5.7		-5.7		1678.4		471	X MARVER PIPE
6	S	880		90-41-50				4.0		-14.7		1669.4	-	478	INTERSECTION
7	"	1760		90-18-10				14.0		-23.3		1660.8	-	473	L-88 SP 471
8	"	2640		90-18-23				14.0	-28.1	-28.1		1656.0	0	474	L-107 SP 358
9	"	2640		29-41-33				14.0	-28.2				0		
10	N	1430		89-01-40				14.0	-10.3	-10.3	1645.7		Δ		
11	"	1430		270-58-44				14.0	-10.4				Δ		
12	"	550		89-09-33				4.0		+4.1		1649.8	-	475	
13		0												475-3	
14	S	330		92-07-35				4.0		-16.2		1629.5	-	476	
15	"	1210		91-55-11				4.0		-44.5		1601.2	-	477	
16	"	2090		91-38-15				4.0		-63.7		1582.0	-	478	
17	"	2970		90-55-30				14.0	-61.9	-61.8		1583.9	0	479	
18	"	2970		269-04-44				14.0	-61.7				0		
19															
20															

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STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 2  
 LINE No.(s) 88 PARTY No. 1184 DATE 17 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1583.9				
2															479	
3	N	2640						10.3		+10.3	1594.2		Δ			
4	"	2640		89-55	00			14.0	10.2				Δ			
5	"	1760		90-06	00			4.0		-7.1	1587.1		-	480		
6	"	880		90-22	17			4.0		-9.7	1584.5		-	481		
7		0						5.9		-5.9	1588.3			482		↑
8	S	880		87-31	00			4.0		+34.1	1628.3		-	483		↑
9	"	1760		87-10	33			4.0		+82.7	1676.9		-	484		
10	"	2640		86-44	35			5.0	145.0	+145.0	1739.2		0	485		
11	"	2640		273-15	30			5.0	145.1				0			
12	N	880		91-54	44			10.0	39.4	+39.4	1778.6		Δ			
13	"	880		268-05	15			10.0	39.4				Δ			
14	S	880		92-17	07			4.0		-39.1	1739.5		-	487		
15	"	1760		91-59	33			14.0		-75.2	1703.4		-	488		
16		0						5.6		-5.6	1773.0			486		
17	S	2640		91-34	00			14.0	-86.2	-86.2	1692.4		0	489		
18	"	2640		268-26	05			14.0	-86.1				0			
19																
20																

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## STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 3  
 LINE No.(s) 88 PARTY No. 1184 DATE 17 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1692.4				
2																
3	N	2640		90-13-22				10.0	20.3	+20.1		1712.5		Δ		
4	"	2640		269-47-05				10.0	19.9					Δ		
5	"	1760		90-14-00				4.0		-11.2		1701.3		-	490	
6	"	880		90-13-35				4.0		-7.5		1705.0		-	491	
7		0						5.9		-5.9		1706.6			492	π
8	S	880		89-35-40				4.0		+2.2		1714.7		-	493	
9	"	1760		89-44-35				14.0	-6.1	-6.1		1706.4		0	494	
10	"	1760		70-15-20				14.0	-6.1					0		
11	N	3190		90-28-11				10.0	36.2	+35.9		1742.3		Δ		
12	"	3190		269-32-20				10.0	35.7					Δ		
13	"	2310		90-55-37				4.0		-41.4		1700.9		-	495	
14	"	1430		91-27-45				4.0		-40.5		1701.8		-	496	
15	"	550		93-06-00				4.0		-33.7		1708.6		-	497	
16		0													497-3	π
17	S	330		94-13-00				4.0		-28.3		1714.0		-	498	
18	"	1210		91-47-40				4.0		-41.9		1700.4		-	499	
19	"	2090		90-44-22				4.0		-31.0		1711.3		-	500	
20																

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**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 4  
 LINE No.(s) 88 PARTY No. 1184 DATE 17 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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	Correction			Center Hair	INST.			
1											1742.3				
2															
3	S	2970		90-11-25				10.0	-19.9	-19.9		1722.4	0	501	
4	"	2970		269-48-38				10.0	-19.8				0		
5		880		90-19-22				14.0	19.0	+18.9	1741.3		Δ		
6		880		269-41-05				14.0	18.8				Δ		
7		0													
8	N	880		89-15-50				5.9		-5.9		1735.4		502	
9	"	1760		89-02-45				4.0		+7.3		1748.6	-	503	
10	"	2640		88-57-15				4.0		+25.3		1766.6	-	504	
11										+44.2		1785.5	-	505 MARKER PIPE	
12															
13															
14															
15															
16															
17															
18															
19															
20															

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### STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE OR PROVINCE ALASKA PAGE No. 5  
 LINE No.(s) 88 PARTY No. 1184 DATE 18 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W.D. HELANDER RODMAN DJENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
1				TAKE OFF			SP 356		L-107				1589.0			1589.5
2																
3	E	1760		92-39-25					14.0	95.6	+95.5	1684.5		Δ		
4	"	1760		86-21-11					14.0	95.3				Δ		
5		0													471	INT L-88 L-107
6	N	880		90-54-00					14.0		-27.8	1656.7		-	470	L-88 SP 471
7	"	1760		91-11-05					24.0		-60.3	1624.2		-	469	L-107 SP 358
8	"	2640		90-24-30					14.0	-32.8	-32.8	1651.7		0	468	MARKER PIPE
9	"	2640		86-35-40					14.0	-32.7				0		1652.6
10	S	1430		95-11-50					10.0	139.5	+139.5	1791.2		Δ		
11	"	1430		86-48-00					10.0	139.6				Δ		
12	"	550		95-51-50					4.0		-60.2	1731.0		-	467	
13		0														466-2 T
14	N	330		87-29-45					4.0		+10.4	<del>1741.4</del>		-	466	1801.6
15	"	440		87-57-25					6.0	9.7	+9.7	1800.9		0	465	1801.9
16	"	440		87-02-55					6.0	9.7				0		
17	S	2730		89-27-44					5.0	-20.6	-20.4	1780.5		Δ		
18	"	2730		87-31-44					5.0	-20.2				Δ		
19	"	1960		89-43-50					4.0		+5.2	1785.7		-	464	
20	"	1080		92-15-17					4.0		-46.5	1734.0		-	464	

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62+685  
 130  
 559

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**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 6  
 LINE No.(s) 88 PARTY No. 1184 DATE 18 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1780.5				
2																
3	S	200		93-16	46				4.0		-15.4		1765.1	-	463	
4		0														462+680 π
5	N	680		91-58	22				14.0		-37.4		1743.1	-	462	
6	"	1560		92-06	12				14.0		-71.3		1709.2	-	461	
7	"	2440		92-08	35				14.0	-105.2	-104.9		1675.6	0	460	1677.1
8	"	2440		267-52	22				14.0	-104.6				0,		
9	S	1760		89-04	00				5.0	-23.7	-23.8	1651.8		Δ		
10	"	1760		270-56	40				5.0	-24.0				Δ,		
11	"	880		89-14	05				5.0		+6.8		1658.6	-	459	
12		0							H1 5.8		-5.8		1676.0	-	458	π
13	N	880		92-21	33				14.0		-50.2		1601.6	-	457	
14	"	1760		92-49	15				21.0		-107.6		1544.2	-	456	
15	"	2640		90-33	00				14.0		-39.3		1612.5	-	455	
16	"	3190		90-23	50				14.0	-36.1	-35.9		1615.9	0	454-2	1617.8
17	"	3190		269-36	28				14.0	-35.8				0,		
18	S	2090		89-17	40				14.0	-11.7	-11.7	1604.2		Δ		
19	"	2090		270-42	15				14.0	-11.7				Δ,		
20	"	1760		89-26	55				4.0		+12.9		1617.1	-	454	

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**STADIA SURVEY NOTES**

AREA KYLILWA RIVER STATE or PROVINCE ALASKA PAGE No. 7  
 LINE No.(s) 88 PARTY No. 1184 DATE 18 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1604.2				
2																
3	S	880		87-32-17				4.0		+3.1		1607.3	-	453		
4		0						5.8		-5.8		1598.4	-	452	X	
5	N	880		71-00-33				4.0		-19.5		1584.7	-	451		
6	"	1760		71-05-17				12.0		-43.4		1560.8	-	450		
7	"	2310		71-11-22				14.0	-62.0	-62.0		1542.2	0	449-2	1544.5	
8	"	2310		268-48-33				14.0	-62.0				0.			
9	S	1540		88-57-00				5.0	-23.2	-23.2	1519.0		Δ			
10	"	1540		271-03-05				5.0	-23.3				Δ <sub>1</sub>			
11	"	1210		89-47-40				14.0		-9.7		1509.3	-	449		
12	"	330		89-07-25				4.0		+1.0		1520.0	-	448		
13		0												447-3		
14	N	550		92-21-11				4.0		-26.6		1492.4	-	447		
15	"	1430		92-04-44				4.0		-55.9		1463.1	-	446		
16	"	2310		71-20-40				14.0		-68.2		1450.8	-	445		
17	"	3190		90-57-55				14.0	-67.7	-67.5		1451.5	0	444	1451.0	
18	"	3190		268-02-33				14.0	-67.3				0.		1453.7	
19																
20																

12.7  
5.0  
77

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STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 8  
 LINE No.(s) 88 PARTY No. 1184 DATE 18 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1451.5				
2														444		
3	S	2640		89-32-00				5.0	-16.5	-16.5	1435.0		Δ			
4	"	2640		270-28-05				5.0	-16.6				Δ			
5	"	1760		89-44-50				4.0		+3.8		1438.8	-	443		
6	"	880		89-44-15				4.0		0.0		1435.0	-	442		
7		0						HI 5.9		-5.9		1429.1		441		π
8	N	880		90-42-40				4.0		-14.9		1420.1	-	440		
9	"	1760		90-25-47				4.0		-17.2		1417.8	-	439		
10	"	2640		90-20-33				10.0	-25.8	-25.7		1409.3	0	438		1408.8
11	"	2640		269-39-42				10.0	-25.6				0			1411.9
12	S	880		94-37-56				14.0	85.0	+85.0	1494.3		Δ			
13	"	880		765-22-06				14.0	85.1				Δ			
14		0						HI 5.9		-5.9		1488.4		437		π
15	N	880		85-34-00				10.0	58.0	+58.0		1552.3	0	436		1551.9
16	"	880		274-26-14				10.0	58.1				0			1555-1
17	"	550		89-31-17				14.0	10.4	+10.4	1562.7		Δ			
18	"	550		270-22-33				14.0	10.4				Δ			
19		0												435-2		π
20																

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STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 9  
 LINE No.(s) 88 PARTY No. 1184 DATE 19 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1562.7				
2																
3	N	330		91-25-30				4.0		-12.2		1550.5	-	435		
4	"	1210		90-59-30				4.0		-24.9		1537.8	-	434		
5	"	2090		90-51-40				10.0		-41.4		1521.3	-	433		
6	"	2970		89-42-15				5.0		+10.3		1573.0	-	432		
7	"	3300		89-27-15				5.0	26.4	+26.6		1589.3	0	431	B	1588.7
8	"	3300		270-33-11				5.0	26.9				0			1592.3
9	S	4070		91-43-42				10.0	132.8	+132.7	1722.0		4			
10	"	4070		268-16-27				10.0	132.6				4			
11	"	3520		92-22-21				4.0		-149.9		1572.1	-	431		
12	"	2640		92-36-00				4.0		-123.8		1598.2	-	430		
13	"	1760		93-22-00				14.0		-117.4		1604.6	-	429		
14	"	880		93-20-31				10.0		-61.3		1660.7	-	428		
15	"	0						HI 5.9		-5.9		1716.1		427		T
16	N	880		89-30-30				20.0		-12.4		1709.6	-	426		
17	"	1760		89-42-55				20.0		-11.3		1710.7	-	425		
18	"	2640		89-43-25				20.0		-7.3		1714.7	-	424		
19	"	3520		89-44-33				20.0		-4.2		1717.8	-	423		
20	"															

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**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE OR PROVINCE ALASKA PAGE No. 10  
 LINE No.(s) 88 PARTY No. 1184 DATE 19 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												1722.0				1872.7
2																
3	N	4070		89-35-08				14.0	15.4	+15.6		1737.6	0	422-2	1737.0	
4	"	4070		270-25-11				14.0	15.8				0		1741.3	
5	S	1760		93-22-10				14.0	117.4	+117.3		1854.9				
6	"	1760		266-38-27				14.0	117.1							
7	"	1430		92-40-17				24.0		-90.6		1764.3	-	422		
8	"	550		93-10-57				4.0		-34.5		1820.4	-	421		
9		0												420-2		
10	N	330		88-30-44				5.0	3.6	+3.6		1858.5	0	420	1858.0	
11	"	330		274-29-45				5.0	3.6				0		1862.4	
12	W	773		90-06-33				14.0	15.5	+15.5		1874.0				
13	"	773		269-53-44				14.0	15.4							1862.2
14		0						41	5.2	-5.2		1868.8			Δ BRADY	X
15																
16												1872.7			ELEV	1872.7
17												<del>3.9</del>			MISTLE	
18																
19																
20																

13.73  
6.00 F  
773

TI-565B

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**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 11  
 LINE No.(s) 88 PARTY No. 1184 DATE 19 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
1				TAKE OFF				TRI STA				1872.7				
2																
3		0										1877.9	Δ			
4	W	773		90-06-33					14.0	-15.5	-15.5	1862.4	0	420		1862.5
5	"	773		219-53-44					14.0	-15.4			0			
6	S	2090		87-02-20					10.0	-98.0	-98.2	1764.2	Δ			
7	"	2090		272-58-25					10.0	-98.4			Δ			
8	"	1210		88-05-36					4.0		+36.3	1800.5	-	419		
9	"	330	✓						2.3		-2.3	1761.9	-	418		
10		0												417		3 X
11	N	550		95-02-48					4.0		-52.4	1771.8	-	417		
12	"	1430		93-54-08					4.0		-101.3	1662.9	-	416		
13	"	2310		93-40-50					10.0	-158.3	-158.1	1606.1	0	415		1606.5
14	"	2310		266-19-55					10.0	-157.8			0			
15	S	2640		93-26-13					14.0	172.3	+172.1	1778.2	Δ			
16	"	2640		266-34-14					14.0	171.9			Δ			
17	"	1760		94-54-18					24.0		-174.5	1603.7	-	414		
18	"	880		95-01-38					24.0		-101.1	1677.1	-	413		
19		0							41		-5.8	1772.4		412		X
20																

TI-589B

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

**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 12  
 LINE No.(s) 88 PARTY No. 1184 DATE 19 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W.D. HELANDER RODMAN D. JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1											1778.2				
2															
3	N	330	✓					7.8	-7.8		1770.4	0	411-3	1771-0	
4	"	330		89-36-46				100	-7.8			0			
5	S	2310		86-12-13				2.0	-150.9	-151.1	1619.3	4			
6	"	2310		273-48-22				2.0	-151.3			4			
7	"	1760		86-54-11				4.0		+91.1	17104	-	411	10 MILE PIPE	
8	"	880		89-34-31				4.0		+2.5	1621.8	-	410	←	
9		0						H 5.9		-5.9	16134		409	↘	
10	N	880		94-21-38				4.0		-70.9	15484	-	408		
11	"	1760		92-04-05				4.0		-67.5	1551.8	-	407		
12	"	2640		90-16-50				10.0	-22.9	-22.8	1596.5	0	406	1597-4	
13	"	2640		269-43-38				10.0	-22.6			0			
14	"	1210		91-48-18				14.0	52.1	+52.1	1648.6	A		INTERSECTION:	
15	"	1210		268-12-00				14.0	52.0			A		L-88 SP 404+227	
16	"	330		91-53-00				4.0		-14.8	1633.8	-	405	L-86 SP 441+793	
17	"	0												404-3 MARKER PIPE	
18	"	1030		93-40-43				10.0		-76.1	1572.5	-	443	L-86	
19															
20															

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14.3  
4.5  
10.8

### STADIA SURVEY NOTES

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 13  
 LINE No.(s) 88 PARTY No. 1184 DATE 19 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											1648.6				
2															
3	N	550		90-42-05				5.0	-11.7		1636.9	-	404		
4	"	880		90-43-22				14.0	-25.1	-25.1	1623.5	0	403-3	1624.5	
5	"	880		269-17-00				14.0	-25.0			0			
6	S	2640		84-53-53				5.0	-229.8	-229.9	1593.6				
7	"	2640		275-06-24				5.0	-230.0						
8	"	2090		85-07-30				4.0		+173.6	1567.2	-	403		
9	"	1210		86-03-22				4.0		+79.2	1472.8	-	402		
10	"	330		86-43-53				4.0		+14.8	1408.4	-	401		
11		0											400-3		
12	N	550		94-43-44				4.0		-49.3	1344.3	-	400		
13	"	1430		93-31-05				4.0		-91.7	1301.9	-	399		
14	"	2310		92-31-28				14.0		-115.7	1277.9	-	398		
15	"	3190		91-20-50				14.0	-89.0	-88.8	1304.8	0	397	1306.2	
16	"	3190		268-39-33				14.0	-88.6			0			
17	S	3520		91-28-35				14.0	104.7	+104.5	1409.3				
18	"	3520		268-31-55				14.0	104.2						
19	"	2640		92-10-55				4.0		-104.5	1304.8	-	396		
20	"	1760		92-54-22				4.0		-93.2	1316.1	-	395		

TI-588B

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**STADIA SURVEY NOTES**

AREA KILIGWA RIVER STATE or PROVINCE ALASKA PAGE No. 14  
 LINE No.(s) 88 PARTY No. 1184 DATE 20 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1											1409.3				
2															
3	S	880		93-44-15				14.0	-71.4		1337.9	-	394		
4		0						5.9	-5.9		1403.4	-	393	π	
5	N	880		90-36-20				14.0	-23.3		1386.0	-	392		
6		1760		90-28-40				20.0	-34.7		1374.6	-	391		
7		2640		90-29-44				14.0	-36.8	-36.7	1372.6	0	390	1374-4	
8		2640		269-30-37				14.0	-36.6			0			
9	S	1760		91-40-40				14.0	65.5	+65.5	1438.1				
10		1760		263-19-40				14.0	65.4						
11		880		91-31-26				10.0		-33.4			389		
12		0						5.9		-5.9			388	π	
13	N	880		89-52-00				4.0		-2.0			387		
14		1760		89-59-30				5.0	-4.7	-4.6			386	1435.6	
15		1760		270-01-10				5.0	-4.4						
16	S	1760		89-19-48				5.0	-15.6	-15.7	1417.8				
17		1760		270-40-50				5.0	-15.9						
18		880		89-09-00				4.0		+9.1			385		
19		0						5.9		-5.9			384	π	
20	N	880		92-28-40				10.0		-48.0			383		

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*W.D. Helander*

**STADIA SURVEY NOTES**

AREA COLVILLE RIVER

STATE or PROVINCE

ALASKA

PAGE No. 15

LINE No.(s) 88

PARTY No. 1184

DATE 20 Day 4 Mo. 77 Yr.

BOOK No.

SURVEYOR WD HELANDER RODMAN D JENSEN

WEATHER:

P.T.S. No.

LINE	Bearing of Sight	Stadio 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											1417.8				
2															
3	N	1650		72-40-00				10.0	-86.8	-86.8	1331.0	0	382-1	1333.3	
4	"	1650		267-20-00				10.0	-86.8			0			
5	S	2750		88-52-22				5.0	-49.1	-49.0	1282.0	Δ			
6	"	2750		271-07-22				5.0	-48.9			Δ			
7	"	2040		89-02-50				4.0		+39.9	1321.9	-	382		
8	"	1760		89-47-42				4.0		+2.3	1274.3	-	381		
9	"	880	✓					2.5		-2.5	1279.5	-	380		
10		0						5.9		-5.9	1276.1	-	379	π	
11	N	880		90-20-10				4.0		-9.2	1272.8	-	378		
12	"	1760		90-20-45				10.0	-20.6	-20.6	1261.4	0	377	1264.0	
13	"	1760		269-39-35				10.0	-20.5			0			
14	S	3520		91-50-45				10.0	123.4	+123.3	1384.7	Δ			
15	"	3520		268-09-30				10.0	123.1			Δ			
16	"	2640		72-55-20				4.0		-138.6	1246.1	-	376		
17	"	1760		93-03-55				24.0		-118.1	1266.6	-	375	J	
18	"	880		72-16-10				24.0		-58.8	1325.9	-	374		
19		0						5.9		-5.9	1378.8	-	373	π	
20															

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**STADIA SURVEY NOTES**

AREA COLVILLE RIVER STATE or PROVINCE ALASKA PAGE No. 16  
 LINE No.(s) 88 PARTY No. 1184 DATE 20 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAND JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		A.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1384.7				
2																
3	N	880		89-49-15				5.0	-2.2	-2.2		1382.5	0	372	1385.4	
4	"	880		270-11-00				5.0	-2.2				0			
5	W	493	✓					6.4		+6.4		1388.9	A			
6	"	493		90-09-36				5.0	6.4				A			
7		0														T
8	E	2240		89-48-53				5.0	2.2	+2.3		1391.2	0	BAS	8806	
9	"	2240		270-11-30				5.0	2.5				0			
10												1394.3		ELEV	1394.3	
11												-3.1		MISTLE		
12																
13																
14																
15																
16																
17																
18																
19																
20																

9.95  
 8.0  
 1.2

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### STADIA SURVEY NOTES

AREA Colville River STATE or PROVINCE Alaska PAGE No. 17  
 LINE No.(s) 88 PARTY No. 1184 DATE 20 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN w. Helander WEATHER: OK. P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction	Center Hair			INST.	ROD			
1																
2																
3	E	2240		89-48	-53											✓
4	"	2240		210-11	-30											
5		-0-														
6	W	493	✓										1385.4			π
7	"	493		90-09	-36								1385.6		372	1385.5
8	S	2640		90-15	-79											
9	"	2640		269-44	-35											
10	"	1760		90-42	-48											
11	"	880		90-28	-35								1381.6		371	
12		-0-											1396.2		370	
13	N	880		89-52	-49								1401.7		369	π
14	"	1760		89-42	-45								1405.3		368	
15	"	1760		270-17	-53								1406.5		367	1406.1
16	S	1430		91-12	-26											
17	"	1430		268-47	-58											
18	"	550		91-35	-58											
19		-0-														
20	N	330		89-54	-47								1415.2		366	
													1444.8		365-2	π
													1447.1		365	

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**STADIA SURVEY NOTES**

AREA Colville River STATE or PROVINCE Alaska PAGE No. 18  
 LINE No.(s) 88 PARTY No. 1184 DATE 20 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: OK P.T.S. No. \_\_\_\_\_

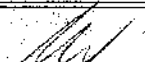
LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		AB.S. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1450.6				
2	N	1210		90-03-43				10.0	-11.3	-11.2		1439.4	0	364	1438.9	
3	"	1210		269-56-52				10.0	-11.1				0			
4	S	1760		89-11-38				10.0	-14.8	-14.9	1424.5		Δ			
5	"	1760		270-48-57				10.0	-15.1				Δ			
6	"	880		90-26-25				4.0		-10.8		1413.7	-	363		
7		-0-						5.8		-5.8		1418.7	-	362	T	
8	N	880		92-20-30				4.0		-40.0		1384.5	-	361		
9	"	1760		92-06-26				4.0		-68.7		1355.8	-	360		
10	"	2640		91-24-45				10.0	-75.1	-75.0		1349.8	0	359	1348.7	
11	"	2640		268-35-38				10.0	-74.8	-68.7			0			
12	S	2750		90-33-59				10.0	37.2	+37.0	1386.5		Δ			
13	"	2750		269-26-34				10.0	36.7				Δ			
14	"	1870		92-02-27				4.0		-20.6		1315.9	-	358		
15	"	990		92-16-53				14.0		-53.4		1333.1	-	357		
16	"	110		92-08-46				4.0		-8.1		1378.4	-	356		
17		-0-						5.8		-5.8		1380.7	-	355-4	T	
18	N	770		90-53-56				18.0		-30.1		1356.4	-	355		
19	"	1650		91-03-23				18.0		-48.4		1338.1	-	354		
20	"												-			

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STADIA SURVEY NOTES

AREA Colville River STATE or PROVINCE Alaska PAGE No. 19  
 LINE No.(s) 88 PARTY No. \_\_\_\_\_ DATE 21 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Wet & Mushy P.T.S. No. \_\_\_\_\_

LINE	Searing 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	Correction	Center Hair			INST.	ROD			
1																
2	N	2530		90-03-35		90-33-24		5.0	-29.6	-29.2	1386.5	1357.3	0	353	1356.3	
3	"	2530		269-27-43				5.0	-28.8				0			
4	S	2640		91-46-12				10.0	91.5	+91.4	1448.7		Δ			
5	"	2640		268-14-10				10.0	91.3				Δ			
6	"	1760		92-05-29				4.0		-68.2		1380.5	-	252		
7	"	880		92-42-06				4.0		-45.5		1403.2	-	251		
8		0~						5.8		-5.8		1442.9	-	250	π	
9	N	880		86-16-27				4.0		+53.2		1501.9	-	249		
10	"	1650		85-59-24				10.0	105.4	+105.5		1554.2	0	348	1552.9	
11	"	1650		274-01-04				10.0	105.6				0			
12	S	342	✓					14.0		+14.0	1568.2		Δ			
13	"	342		270-00-24				14.0					Δ			
14	"	232		91-14-40				4.0		-9.0		1559.2	-	348		
15		~0~						HI	5.9	-5.9		1562.3	0		π MARKER PIPE	
16												1561.0	Elev.		1561.0	
17												+1.3				
18																
19																
20																

15.4  
16.0  
34

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STADIA SURVEY NOTES

AREA Colville River STATE or PROVINCE Alaska PAGE No. 20  
 LINE No.(s) 88 PARTY No. \_\_\_\_\_ DATE 21 Day 4 Mo. 71 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Partly Cloudy 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. -5.3.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1															
2															
3		<u>0</u>													
4	<u>N</u>	<u>650</u>		<u>91-32-19</u>											
5	"	<u>1530</u>		<u>91-08-33</u>											
6	"	<u>1860</u>		<u>90-09-35</u>											
7	"	<u>1860</u>		<u>269-51-28</u>											
8	<u>S</u>	<u>2310</u>		<u>88-37-40</u>											
9	"	<u>2310</u>		<u>271-22-04</u>											
10	"	<u>1760</u>		<u>88-58-20</u>											
11	"	<u>880</u>		<u>89-35-37</u>											
12		<u>0</u>													
13	<u>N</u>	<u>880</u>		<u>89-59-15</u>											
14	"	<u>1760</u>		<u>89-22-58</u>											
15	"	<u>2640</u>		<u>89-21-21</u>											
16	"	<u>2970</u>		<u>89-22-24</u>											
17	"	<u>2970</u>		<u>270-38-14</u>											
18	<u>S</u>	<u>2310</u>		<u>89-25-23</u>											
19	"	<u>2310</u>		<u>270 35 26</u>											
20	"	<u>1760</u>		<u>89-28-24</u>											

14.6  
3.  
11.6

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**STADIA SURVEY NOTES**

AREA Colville River STATE or PROVINCE Alaska PAGE No. 21  
 LINE No.(s) 88 PARTY No. 1184 DATE 22 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Clear P.T.S. No. \_\_\_\_\_

13.8  
6.0  
7.8

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												1516.1				
2	S	880		90-42	-43			4.0		-14.9		1501.2	-	338		
3		~0~						5.8		-5.8		1510.3	-	337	X	
4	N	880		89-46	-42			18.0		-14.6		1501.5	-	336		
5	"	1760		89-48	-58			14.0		-8.4	/	1507.7	/-	335		
6	"	2640		89-32	-40			13.0	8.0	+8.2	/	1524.3	0	334	1525.7	
7	"	2640		270-27	-58			13.0	8.5		/		0			
8	S	770		88-45	-31			5.0	-11.7	-11.7	/	1512.6				
9	"	770		271-14	-44			5.0	-11.7		/					
10		~0~						5.8		-5.8	/	1506.8	/	333	-1	
11	N	990		95-07	-12			14.0	-100.9	-100.9	/	1411.7	0	332	1413-3	
12	"	990		264-58	-10			14.0	-100.8		/		0			
13	S	2640		84-52	-57			5.0	-230.5	-230.5	/	1181.2				
14	"	2640		275-07	-01			5.0	-236.5		/					
15	"	1760		90-18	-21			4.0		+109.4	/	1290.6	-	331		
16	"	880		86-56	-58			4.0		+42.8	/	1224.0	-	330		
17		~0~						5.8		-5.8	/	1175.4		329	X	
18	<del>N</del>	<del>880</del>		<del>92-18</del>	<del>-40</del>			<del>4.0</del>						<del>328</del>		
19	<del>"</del>	<del>1760</del>		<del>91-57</del>	<del>-07</del>			<del>4.0</del>						<del>327</del>		
20																

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**STADIA SURVEY NOTES**

AREA Colville River STATE or PROVINCE Alaska PAGE No. 22  
 LINE No.(s) 88 PARTY No. \_\_\_\_\_ DATE 22 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Clear P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		Abs. of S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1181.2				
2	E	2180.		91-13-09				10.0	-56.4	-56.2		1125.0	0			1127.2
3	"	2180		268-47-19				10.0	-56.1				0.1			
4	W	1110	✓					4.6	4.6		1129.4		Δ			
5	"	1110		270-30-36				14.0	4.1				Δ <sub>1</sub>			
6		~0~						6.1		-6.1		1123.3			BAS 8804 X	
7												1125.6			ELEV	1125.6
8												-2.3				Mistic
9																
10									TAKE OFF BAS 8804							
11												1125.6	0		ELEV	
12		-0-						6.1		+6.1	1131.7		Δ			
13	W	1110	✓					4.6	4.1	-4.1		1127.6	0			✓
14	"	1110		270-30-36				14.0	4.1				0.1			
15	E	2020		90-21-39				10.0	22.7	+22.3	11499		Δ			
16	"	2020		269-39-37				10.0	22.0				Δ <sub>1</sub>			
17	N	880		90-41-09				4.0		-14.5		1135.4				327
18	"	1760		91-03-57				4.0		-36.7		1113.2				326
19	"	2640		90-50-55				10.0	-44.1	-48.7		1101.2	0			325
20	"	2640		269-10-06				10.0	-48.3				0.1			1101.1

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### STADIA SURVEY NOTES

AREA Colville River STATE or PROVINCE Alaska PAGE No. 23  
 LINE No.(s) 88 PARTY No. \_\_\_\_\_ DATE 22 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: clear P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion			Center Hair	INST.			
1											1101.2				
2	S	2640		89-46	-15			10.0	-0.6	-0.6	1100.6		325		
3	"	2640		270-13	+42			10.0	-0.5						
4	"	1760		89-56	-42			4.0		-2.3	1098.3		324		
5	"	880		90-06	-29			4.0		-5.7	1094.9		323		
6		-0~						5.8		-5.8	1094.8		322	π	
7	N	880		89-58	-40			4.0		-3.7	1096.9		321		
8	"	1760		89-51	+05			4.0		+0.6	1101.2		320		
9	"	2640		89-39	-43			5.0	10.6	+10.7	1111.3	0	319	111-1	
10	"	2640		270-20	-35			5.0	10.8			0			
11	S	2640		89-52	-48			14.0	+8.5	+8.3	1119.6				
12	"	2640		270-07	-44			14.0	+8.1						
13	"	1760		89-59	-51			5.0		-4.9	1114.7		318		
14	"	880		89-58	-02			4.0		-3.5	1116.1		317		
15		-0~						5.8		-5.8	1113.8		316	π	
16	N	880		90-13	-44			4.0		-7.5	1112.1		315		
17	"	1760		90-14	-30			4.0		-11.4	1108.2		314		
18	"	2640		90-14	-12			5.0	-15.9	-15.6	1104.0	0	313	1103-7	
19	"	2640		269-46	-33			5.0	-15.3			0			
20															

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**STADIA SURVEY NOTES**

AREA Colville River

STATE or PROVINCE \_\_\_\_\_

PAGE No. 24

LINE No.(s) 88

PARTY No. 1184

DATE 22

Day 4 Mo. 17

Yr. BOOK No. \_\_\_\_\_

SURVEYOR D. Jensen

RODMAN W. Helander

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											1104.0				
2	S	1760		89-28-22				5.0	-11.2	-11.3	1092.7		A		
3	"	1760		270-32-05				5.0	-11.4				A <sub>1</sub>		
4	"	880		89-31-39				4.0		+3.3	1096.0		-	312	
5		~0~						5.8		-5.8	1086.9		-	311	
6	N	880		92-08-08				4.0		-36.8	1055.9		-	310	
7	"	1760		91-19-30				4.0		-44.7	1048.0		-	309	
8	"	2640		91-00-02				10.0	-56.1	-55.8	1036.9		0	308	
9	"	2640		269-00-39				10.0	-55.6				0 <sub>1</sub>		
10	S	3520		92-48-28				10.0	182.4	+181.7	1218.6		A		
11	"	3520		267-12-51				10.0	181.1				A <sub>1</sub>		
12	"	2640		93-28-10				19.0		-178.8	1039.8		-	307	
13	"	1760		93-17-45				10.0		-111.2	1107.4		-	306	
14	"	880		93-12-25				4.0		-53.2	1165.4		-	305	
15		0.						5.8		-5.8	1212.8		-	304	
16	N	880		87-34-45				10.0	27.2	+27.3	1245.9		0	303	
17	"	880		272-25-57				10.0	27.3				0 <sub>1</sub>		
18	S	3520		88-45-33				14.0	-62.2	-62.5	1183.4		A		
19	"	3520		271-15-06				14.0	-62.9				A <sub>1</sub>		
20															

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STADIA SURVEY NOTES

AREA Avana River

STATE or PROVINCE Alaska

PAGE No. 25

LINE No.(s) 88

PARTY No. 1184

DATE 23 Day 4

Mo. 77

Yr. BOOK No.

SURVEYOR D. Jensen

RODMAN W. Helander

WEATHER: Cloudy

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												1183.4				
2	S	2640		88-59-04				4.0		+42.8		1226.2	-	302		
3	"	1760		89-49-48				4.0		+1.2		1184.6	-	301		
4	"	880		89-49-48	90-48-18			4.0		-16.4		1167.0	-	300		
5		~0~						5.8		-5.8		1177.6		299		
6	N.	880		89-02-11				5.0	9.8	+9.9		1193.3	0	298		1192.8
7	"	880		270-58-25				5.0	10.0				0 <sub>1</sub>			
8	S	2090		89-47-31				10.0	2.4	+2.1	1195.4		Δ			
9	"	2090		270-13-23				10.0	1.9				Δ <sub>1</sub>			
10	"	1210		90-14-12				4.0		-9.0		1186.4	-	297		
11	"	330		90-05-56				4.0		-4.6		1190.8	-	296		
12		~0~						5.8		-5.8		1189.6		295-3		π
13	N	550		91-20-56				4.0		-16.9		1178.5	-	295		
14	"	1430		90-43-22				4.0		-22.6		1173.4	-	294		
15	"	2310		90-20-46				4.0		-18.0		1177.4	-	293		
16	"	3190		90-21-09				10.0	-29.6	-29.3		1166.1	0	292		1165.5
17	"	3190		269-39-33				10.0	-29.0				0 <sub>1</sub>			
18	S	1760		89-30-00				5.0	-10.4	-10.6	1155.5		Δ			
19	"	1760		270-30-57				5.0	-10.8				Δ <sub>1</sub>			
20																

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## STADIA SURVEY NOTES

AREA Awana River STATE or PROVINCE Alaska PAGE No. 26  
 LINE No.(s) 88 PARTY No. 1184 DATE 23 Day 4 Mo. 77 Yr. BOOK No.   
 SURVEYOR P. Jensen RODMAN V. Helander WEATHER: Cloudy 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												1155.5				
2	S	880		89-45-07				4.0		-0.2		1155.3	-	291		
3		~0~						5.8		-5.8		1149.7	-	290		X
4	N	880		88-57-56				4.0		+11.9		1167.4	-	289		
5	"	1760		88-26-24				5.0	42.9	+43.0		1198.5	0	288		10MM MARKER PIPE
6	"	1760		271-33-54				5.0	43.1				0			1197.9
7	S	2640		90-43-32				10.0	42.4	+43.1	1241.6		A			
8	"	2640		269-17-13				10.0	42.9				A			
9	"	1760		90-47-54				6.0		-30.5		1211.1	-	287		
10	"	880		90-26-46				4.0		-10.9		1230.7	-	286		
11		~0~						5.8		-5.8		1235.8	-	285		
12	N	880		89-03-09				4.0		+10.6		1252.2	-	284		
13	"	1760		89-08-33				14.0	12.3	+12.5		1254.1	0	283		1253.4
14	"	1760		270-51-59				14.0	12.6				0			
15	S	2090		90-43-00				13.0	39.1	+38.9	1293.0		A			
16	"	2090		269-17-42				13.0	38.7				A			
17	"	1210		90-48-20				10.0		-27.0		1266.0	-	282		
18	"	330		90-16-26				4.0		-5.6		1287.4	-	281		
19		~0~						5.8		-5.8		1287.2	-	280-3		X
20	N	550		89-54-16				4.0		-3.1		1289.9	-	280		

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**STADIA SURVEY NOTES**

AREA AWUNA River STATE or PROVINCE Alaska PAGE No. 27  
 LINE No.(s) 88 PARTY No. 1184 DATE 23 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Cloudy P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1												1293.0				
2	N	1430		89-34-48				6.0		+4.5		1297.5		279		
3	"	1760		89-40-28				13.0	-3.0	-2.9		1290.1	0	278-3	1289.3	
4	"	1760		270-20-06				13.0	-2.7				0			
5	S	2640		89-38-39				5.0	-11.4	-11.7		1278.4				
6	"	2640		270-22-09				5.0	-12.0							
7	"	2090		89-52-25				4.0		+0.6		1279.0		278		
8	"	1210		90-55-37				4.0		-23.6		1254.8		277		
9	"	330		90-55-40				4.0		-9.3		1269.1		276		
10		~0~						5.8		-5.8		1272.6		275-3	K	
11	N	550		91-5-29				4.0		-16.1		1262.3		275		
12	"	1430		90-36-19				4.0		-19.1		1259.3		274		
13	"	2310		90-27-14				4.0		-22.3		1256.1		273		
14	"	3190		90-21-47				10.0	-30.2	-29.8		1248.6	0	272	1247.7	
15	"	3190		269-39-08				10.0	-29.4				0			
16	S	1650		90-32-22				10.0	-25.5	-25.5		1274.1				
17	"	1650		269-28-00				10.0	25.4							
18	"	770		90-22-39				10.0		-5.1		1269.8		271	1259.0	
19		-0~						5.8		-5.8		1268.3		270-1	K	
20	N	110		92-18-35				4.0		-8.4		1265.7		270		

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**STADIA SURVEY NOTES**

AREA Awuna River STATE or PROVINCE Alaska PAGE No. 2  
 LINE No.(s) 88 PARTY No. 1184 DATE 23 Day 4 Mo. 77 Yr. BOOK No.       
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Cloudy 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												1274.1				
2	N	990		92-15	23			14.0		-53.0		1221.1	—	269		
3	"	1870		92-04	25			4.0		-71.7		1202.4	—	268		
4	"	2750		91-45	56			5.0	-89.7	-89.5		1184.6	0	267	1183.7	
5	"	2750		268-14	42			5.0	-89.2				0			
6	S	2640		89-43	41			5.0	-30.6	-30.7	1153.9		Δ			
7	"	2640		270-46	44			5.0	-30.9				Δ			
8	"	1760		89-28	10			4.0		+12.3		1166.2	—	266		
9	"	880		89-52	28			4.0		-2.1		1151.8	—	265		
10		-0-						5.8		-5.8		1148.1		264	κ	
11	N	880		90-21	56			4.0		-9.6		1144.3	—	263		
12	"	1760		90-22	15			4.0		-15.4		1138.5	—	262		
13	"	2640		40-21	16			5.0	-21.3	-21.1		1132.8	0	261	1131.8	
14	"	2640		269-39	20			5.0	-20.9				0			
15	S	2640		89-24	53			14.0	-13.0	-13.0	1119.8		Δ			
16	"	2640		270-35	11			14.0	-13.0				Δ			
17	"	1760		89-17	20			10.0		11.8		1108.0	—	260	1131.6	
18	"	880		89-09	50			11.0		1.8		1118.0	—	259	1121.6	
19		-0-						5.8		-5.8		1114.0		258	κ	
20																

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### STADIA SURVEY NOTES

AREA Awuna River STATE or PROVINCE Alaska PAGE No. 29  
 LINE No.(s) 88 PARTY No. 1184 DATE 23 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: Cloudy 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												1119.8				
2	N	880		89-37-52				10.0	-4.3	-4.3		1115.5	0	257	1114-2	
3	"	880		270-22-36				10.0	-4.2			1115.3	0 <sub>1</sub>			
4	S	1210		88-52-31				10.0	-13.8	-13.8		1101.6	Δ			
5	"	1210		271-08-04				10.0	-14.0				Δ <sub>1</sub>			
6	"	330		88-40-01				4.0		+3.7		1105.3	-	256		
7	"	-0-						5.8		-5.8		1095.8		255-3	X	
8	N	550		92-21-41				4.0		-26.7		1074.9	-	255		
9	"	1430		91-23-00				4.0		-38.5		1063.1	-	254		
10	"	2310		96-39-20				5.0	-36.8	-36.6		1071.0	0	253	1069.9	
11	"	2310		269-22-12				5.0	-30.4				0 <sub>1</sub>			
12	S	2640		90-15-22				13.0	24.8	+24.7		1095.7	Δ			
13	"	2640		269-44-53				13.0	24.6				Δ <sub>1</sub>			
14	"	1760		90-15-18				10.0		-17.8		1077.9	-	252		
15	"	880		90-15-14				4.0		-7.9		1097.8	-	251		
16	"	-0-						5.8		-5.8		1089.9		250	X	
17	N	880		89-45-26				4.0		-0.3		1095.4	-	249		
18	"	1760		89-45-28	89-46-48			10.0	-3.2	-3.1		1092.6	0	248	1091.4	
19	"	1760		270-13-57				10.0	-2.9				0 <sub>1</sub>			
20																

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**STADIA SURVEY NOTES**

AREA Awana STATE or PROVINCE Alaska PAGE No. 30  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: 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.	ROD			
1												1092.6				
2	S	2640		89-19-29				10.0	-21.1	-21.2	1071.4		Δ	248		
3	"	2640		270-40-35				10.0	-21.2				Δ <sub>1</sub>			
4	"	1760		89-31-36				4.0		+10.5		1081.9	-	247		
5	"	880		89-52-24				4.0		-2.1		<del>1079.8</del>	-	246	1069.4	
6		~0~						5.8		-5.8		1065.6		245	π	
7	N	880		89-57-29				4.0		-3.4		1068.0	-	244		
8	"	1760		89-42-20				4.0		+5.0		1076.4	-	243		
9	"	2640		89-02-33				10.0	34.1	+34.1		1105.5	0	242	1104.2	
10	"	2640		270-58-01				10.0	34.1				0 <sub>1</sub>			
11	S	2640		90-29-49				10.0	32.9	+32.8	1138.3		Δ			
12	"	2640		269-30-28				10.0	32.7				Δ <sub>1</sub>			
13	"	1760		91-03-26				4.0		-36.5		1101.8	-	241		
14	"	880		91-19-24				4.0		-24.3		1114.0	-	240		
15		~0~						5.8		-5.8		1132.5		239	π	
16	N	880		87-53-00				4.0		+28.5		1166.8	-	238		
17	"	1760		87-48-50				14.0	+53.1	+53.2		1191.5	0	237	1190.1	
18	"	1760		272-11-39				14.0	+53.4				0 <sub>1</sub>			
19	S	1210		91-53-04				10.0	49.8	+49.8	1241.3		Δ			
20	"	1210		268-06-48				10.0	49.8				Δ <sub>1</sub>			

TI-5888

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**STADIA SURVEY NOTES**

AREA Awana River STATE or PROVINCE Alaska PAGE No. 31  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR D. Jensen RODMAN W. Helander WEATHER: 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											1241.3				
2	S	330		93-28	-39			4.0		-24.0		1217.3	—	236	
3		-0-						5.8		-5.8		1235.5		235-3	X
4	N	550		88-46	-52			4.0		+7.7		1249.0	—	235	
5	"	610		88-50	-36			5.0	7.3	+7.4		1248.7	0	234+	820 BAS 8801
6	"	610		271-09	-52			5.0	7.4				0,		
7												1247.3			ELEV. 1247.3
8												11.4			Mistie
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

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115.6  
16

**STADIA SURVEY NOTES**

AREA LILI CREEK STATE OR PROVINCE ALASKA PAGE No. 32  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W. W. HELANDER RODMAN D. JENSEN 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				TAKE OFF BAS						8801			1247.3			MARKER PIPE AT
2																8801 WHICH IS AT
3	S	2580		88-43-13					5.0	-52.6	-52.7	1194.6		Δ		SP 234+820
4	"	2580		27-17-11					5.0	-52.9				Δ		
5	"	1760		88-50-33					4.0		+31.6		1226.2	-	234	
6	"	880		89-30-50					4.0		+3.5		1198.1	-	233	
7		0							H1 5.9		-5.9		1188.7		232	↑
8	N	880		71-20-26					4.0		-24.6		1170.0	-	231	
9	"	1760		91-14-27					14.0		-52.1		1142.5	-	230	
10	"	2640		91-01-30					14.0	-61.2	-61.1		1133.5	0	229	
11	"	2640		28-58-56					14.0	-60.9				0		
12	S	2640		89-15-00					14.0	-20.6	-20.6	1112.9		Δ		
13	"	2640		270-45-03					14.0	-20.6				Δ		
14	"	1760		89-22-30					4.0		+15.2		1128.1	-	228	
15	"	880		89-21-38					4.0		+5.8		1118.7	-	227	
16		0							H1 5.9		-5.9		1107.0		226	↑
17	N	880	✓						3.4		-3.4		1109.5	-	225	
18	"	1760		89-37-05					4.0		+7.7		1120.6	-	224	
19	"	2640		89-18-22					5.0	27.0	+27.2		1140.1	0	223	
20	"	2640		270-42-20					5.0	27.5				0		

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### STADIA SURVEY NOTES

AREA LILI CREEK STATE or PROVINCE ALASKA PAGE No. 33  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W. W. HELANDER RODMAN D. JENSEN 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												1140.1			
2														223	
3	S	1760		89-19-40				14.0	-6.6	-6.8	1133.3		Δ		
4	"	1760		270-40-56				14.0	-7.0				Δ		
5	"	880		89-15-17				4.0		+7.4		1140.7	-	222	
6		0						HI 5.9		-5.9		1127.4		221	π
7	N	880		90-43-50				4.0		-15.2		1118.1	-	220	
8	"	1760		90-38-00				4.0		-23.5		1109.8	-	219	
9	"	2640		<del>70-09</del> 13 90-08-55				14.0	-20.8	-20.5		1112.8	0	218	
10	"	2640		269-51-53				14.0	-20.2				0		
11	S	1760		70-42-30				14.0	35.8	+35.5	1148.3		Δ		
12	"	1760		269-18-38				14.0	35.2				Δ		
13	"	880		90-53-53				4.0		-17.8		1130.5	-	217	
14		0						HI 5.9		-5.9		1142.4		216	π
15	N	563	✓					4.5		-4.4		1143.9	0	Δ LET	BAS #3832
16	"	563		270-04-06				5.0	-4.3				0		MARKER PIPE
17												1144.0		ELEV	INTERSECTION
18												-0.1		MISTIE	L-88SP15+317
19															L-138SP1163+137
20															

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STADIA SURVEY NOTES

AREA LILL CREEK STATE or PROVINCE ALASKA PAGE No. 34  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W.W. HELANDER RODMAN D. JENSEN 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 Δ LET								1144.0				
2																
3	S	867	88-22	33				5.0	-19.6	-19.6	1124.4		Δ			
4	"	867	271-37	23				5.0	-19.6				Δ			
5	"	550	88-76	30				4.0		+12.6		1137.0	-	215		
6		0													214-2	π
7	N	330	93-05	12				4.0		-21.8		1102.6	-	214		
8	"	1210	92-58	56				14.0	-77.0	-76.8		1047.6	0	213	✓	
9	"	1210	267-02	00				14.0	-76.6				0			
10	S	550	87-20	30				5.0	-20.5	-20.6	1027.0		Δ			
11	"	550	272-40	38				5.0	-20.7				Δ			
12		0													212-2	π
13	N	230	96-46	22				16.0		-54.9		972.1	-	212		6-FOLD BEGINS
14	"	880	95-01	21				14.0	-91.0	-90.9		936.1	0	211-6		BWTH THE SPREAD
15	"	880	264-59	40				14.0	-90.8				0			BETWEEN SP212
16	S	2970	88-00	26				5.0	-98.3	-98.5	837.6		Δ			AND SP211 BEING
17	"	2970	272-00	07				5.0	-98.8				Δ			1760 FEET
18	"	1760	89-45	00				4.0		+3.7		841.3	-	211		
19		0						HL 5.9		-5.9		831.7	-	210	π	
20	N	1760	89-14	10				4.0		+19.5		857.1	-	209		

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13.8  
8  
8

STADIA SURVEY NOTES

AREA LILI CREEK STATE OR PROVINCE ALASKA PAGE No. 35  
 LINE No.(s) 88 PARTY No. 1184 DATE 24 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W. W. HELANDER RODMAN D. JENSEN 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												837.6				
2																
3	N	2530		88-19-00				5.0	69.3	+69.7		907.3	0	208-5	907.4	
4	"	2530		271-42-05				5.0	70.1				0			
5	S	2750		85-46-43				10.0	-192.4	-192.4	714.9		Δ			
6	"	2750		274-13-26				10.0	-192.5				Δ			
7	"	1760		86-07-52				4.0		+114.8		829.7	-	208		
8		0						HI 5.9		-5.9		709.0		207	↑	
9	N	1760		92-36-53				4.0		-84.3		630.6	-	206		
10	"	2970		90-07-31				10.0	-16.5	-16.2		698.7	0	205-3	698.8	
11	"	2970		269-53-10				10.0	-15.9				0			
12	S	1540		86-29-22				5.0	-89.3	-89.4	609.3		Δ			
13	"	1540		273-31-03				5.0	-89.5				Δ			
14	"	990		86-26-17				4.0		+57.5		666.8	-	205		
15		0												204-4	↑	
16	N-	770		24-01-30				4.0		+76.2		685.5	-	204		
17	"	1540		82-50-40				10.0	181.8	+181.9		791.2	0	203-5	791.3	
18	"	1540		277-09-48				10.0	182.0				0			
19	S	1100		93-42-38				10.0	81.2	+81.1	872.3		Δ			
20	"	1100		266-17-53				10.0	81.0				Δ			

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STADIA SURVEY NOTES

AREA LILI CREEK STATE OR PROVINCE ALASKA PAGE No. 36  
 LINE No.(s) 88 PARTY No. 1184 DATE 26 Day 4 Mo. 77 Yr. BOOK No.   
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												872.3				
2																
3	S	110		94-03-33				4.0		-11.8		860.5	-	203		
4		0												202-8	X	
5	N	1650		90-47-25				4.0		-26.8		845.5	-	202		
6	"	1980		90-19-44				10.0	-21.4	-21.2		851.1	0	201-7		HILL ELEV 840'
7	"	1980		269-41-00				10.0	-20.9				0			851.3
8	S	2640		89-15-47				5.0	-29.0	-29.3	821.8		Δ			
9	"	2640		270-45-14				5.0	-29.7				Δ			
10	"	1210		89-22-26				4.0		+9.2		831.0	-	201		
11		0												200-3	X	
12	N	550		91-47-07				14.0		-31.1		790.7	-	200		
13	"	2310		<del>91-51-15</del> 91-50-56				10.0	-84.5	-84.4		737.4	0	199		737.6
14	"	2310		<del>269-09-42</del> 268-09-28				10.0	-84.3				0			
15	S	1760						14.9		+14.8	752.2		Δ			
16	"	1760		269-51-05				10.0	14.6				Δ			
17		0						HI 5.9		-5.9		746.3		198	X	
18	N	1430		90-26-42				10.0	-21.1	-21.0		731.2	0	197-2		731.4
19	"	1430		269-33-57				10.0	-20.8				0			
20																

11.9  
2.8 1/2  
15.5 ED.  
3.0 1/2  
12.3

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# STADIA SURVEY NOTES

AREA LILI CREEK STATE or PROVINCE ALASKA PAGE No. 37  
 LINE No.(s) 88 PARTY No. 1184 DATE 26 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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. -5.5.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1													731.2			
2																
3	S	2640		87-11-20				5.0	-124.5	-124.7	606.5			Δ		
4	"	2640		<del>87-11-20</del> 87-11-20			272-49-15	5.0	-124.9					Δ <sub>1</sub>		
5	"	2310		87-14-00				4.0		+107.5		714.0		-	197	
6	"	550		88-59-14				4.0		+5.7		612.2		-	196	
7		0													195-6	π
8	N	1210		91-48-38				4.0		-42.2		564.3		-	195	
9	"	2970		90-54-26				10.0	-57.0	-56.7		549.8		0	194	550-1
10	"	2970		269-06-24				10.0	-56.3					0 <sub>1</sub>		
11	S	1430		70-35-58				14.0	29.0	+28.9	578.7			Δ		
12	"	1430		269-24-22				14.0	28.8					Δ <sub>1</sub>		
13		0													193-2	π
14	N	330		90-49-40				4.0		-8.8		569.7		-	193	
15	"	1320		90-14-42				10.0	-15.6	-15.5		563.2		0	192-4	563-5
16	"	1320		269-45-37				10.0	-15.4					0 <sub>1</sub>		
17	S	1760		89-18-34				5.0	-16.2	-16.2	547.0			Δ		
18	"	1760		270-41-20				5.0	-16.2					Δ <sub>1</sub>		
19	"	990		89-22-00				4.0		+6.9		553.9		-	192	
20		0													191-4	π

TI-588B

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STADIA SURVEY NOTES

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 38  
 LINE No.(s) 88 PARTY No. 1184 DATE 26 Day 4 Mo. 77 Yr. BOOK No.           
 SURVEYOR WDHELANDER RODMAN D JENSEN WEATHER:          P.T.S. No.         

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correction			Center Hair	INST.			
1											547.0				
2															
3	N	770		72-01-55				4.0	-31.3		515.7	-	191		
4	"	2530		91-24-42				10.0	-72.3	-72.0	475.0	0	190	475.3	
5	"	2530		268-36-13				10.0	-71.7			0			
6	S	2530		90-15-24				10.0	21.3	+21.2	496.2	Δ			
7	"	2530		269-45-06				10.0	21.0			Δ			
8	"	770		90-16-42				4.0	-7.7		488.5	-	189		
9		0											188.3	π	
10	N	990		90-09-25				4.0	-6.7		489.5	-	188		
11	"	2750		89-53-00				14.0	-8.4	-8.2	488.0	0	187	488.4	
12	"	2750		270-07-40				14.0	-7.9			0			
13	S	990	✓					12.5		+12.5	500.5	Δ			
14	"	990		270-05-20				14.0	12.5			Δ			
15		0											186.4	π	
16	N	770		91-56-37				10.0	-36.1	-36.1	464.4	0	186	464.8	
17	"	770		268-04-03				10.0	-36.0			0			
18	S	1760		88-29-00				5.0	-41.6	-41.7	422.7	Δ			
19	"	1760		271-31-31				5.0	-41.8			Δ			
20		0						H1 5.9		-5.9	416.8		185	π	

14.7  
2.0  
12.7 1/2  
14.6 1/2  
2.2

2.0 F  
2.0  
13.8 1/2  
2.2

TI-688B

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**STADIA SURVEY NOTES**

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 39  
 LINE No.(s) 88 PARTY No. 1184 DATE 26 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

L N J	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												422.7				
2																
3	N	1760		70-10	25			10.0	-15.3	-15.2		407.5	0	184	407.9	
4	"	1760		269-50	13			10.0	+15.0				0			
5	S	2310		88-55	51			5.0	-38.1	-38.2	369.3		Δ			
6	"	2310		271-04	30			5.0	-38.3				Δ <sub>1</sub>			
7	"	550		89-36	50			10.0		-6.3		363.0	-	183		
8		0												182.6	π	
9	N	1210		90-22	52			4.0		-12.0		357.3	-	182		
10	"	1760		89-59	00			5.0	-4.5	-4.4		364.9	0	181-6	365.3	
11	"	1760		270-01	26			5.0	-4.3				0			
12	S	2970		87-36	00			5.0	-119.4	-119.6	245.3		Δ			
13	"	2970		272-24	36			5.0	-119.9				Δ <sub>1</sub>			
14	"	1760		89-04	42			4.0		+24.3		269.6	-	181		
15		0						HI 5.9		-5.9		239.4		180	π	
16	N	1430		86-39	52			14.0	69.2	+69.3		314.6	0	179-2	315.1	
17	"	1430		273-20	33			14.0	69.4				0			
18																
19																
20																

14.6  
3.0 1/2

13.8 1/2  
6.0 1/2

TI-588B

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

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

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

STADIA SURVEY NOTES

AREA MEADE RIVER STATE OR PROVINCE ALASKA PAGE No. 40  
 LINE No.(s): 88 PARTY No. 1184 DATE 27 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELGENDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion.	Center Hair			INST.	ROD			
1													314.6			
2															179-2	
3	S	1540		92-06-00				14.0	70.4	+70.4	✓	385.0		Δ		
4	"	1540		267-54-17				14.0	70.3					Δ		
5	"	1210		92-23-55				4.0		-54.6			330.4	-	179	
6		0														
7	N	550		89-23-48				5.0	0.8	+0.8	✓		385.8	0	178-3	X
8	"	550		270-36-28				5.0	0.8					0	178	LINE BEND ✓
9	S	990		70-42-35				10.0	22.3	+22.3	✓	408.1		Δ		386-3
10	"	990		269-17-40				10.0	22.2					Δ		
11		0														
12	N	770		90-43-22				4.0		-13.7	✓		394.4	-	177	X
13	"	2530	✓					1.5		-1.4	✓		406.7	0	176	407-2
14	"	2530		270-05-00				5.0	-1.3		✓			0		
15	S	2750	✓					14.1		+14.0	✓	420.7		Δ		
16	"	2750		269-35-05				10.0	13.9					Δ		
17	"	990		92-06-37				4.0		-40.5			380.2	-	175	
18		0														
19	N	770		89-40-44				4.0		+0.3			421.0	-	174	X
20																10 MILE PIPE

TI-558B

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

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

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

12.8 1/2  
5.0  
78

8.5  
3.0 F

5.0 F

14.7 1/2  
2.2

15.7  
2.0  
13.7



**STADIA SURVEY NOTES**

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 41  
 LINE No.(s) 88 PARTY No. 1184 DATE 27 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											420.7				
2															
3	N	2530		89-15-03				5.0	28.1	+28.2		448.9	0	173 449.5	
4	"	2530		270-45-22				5.0	28.4				0		
5	S	1760		91-13-40				10.0	47.7	+47.6		496.5	Δ		
6	"	1760		268-44-40				10.0	47.5				Δ		
7		0													
8	N	1760		<del>87-12-00</del> 87-11-40				5.9		-5.9		490.6		172 X	
9	"	1760		272-48-26				5.0	81.1	+81.1		577.6	0	171 578.2	
10	S	550		90-36-50				14.0	81.2				0		
11	"	550		269-23-05				14.0	19.9	+19.9		597.5	Δ		
12		0													
13															
14	N	1210		90-18-33				HI 5.8		-5.8		591.7		170-6 X RECIP. ANGLE	
15	"	1210		269-41-26				14.0	-20.5	-20.5		577.0	0	170 POINT (4.2)	
16	"	1210		269-41-26				14.0	-20.5				0	577.6	
17	S	2750		89-05-08				5.0	-38.9	-39.1		537.9	Δ		
18	"	2750		270-55-30				5.0	-39.4				Δ		
19	"	990		90-17-10				4.0		-8.9		529.0	-	169	
20		0												168.4 X	
21	N	770		91-27-50				4.0		-23.7		514.2	-	168	

TI-508B

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

15.7 1/2  
3.0

12.5  
21.0  
8.5

15.7  
2.1  
13.7

STADIA SURVEY NOTES

AREA KULUGRA RIDGE STATE or PROVINCE ALASKA PAGE No. 42  
 LINE No.(s) 88 PARTY No. 1184 DATE 27 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												537.9				
2																
3	N	2530		71-43-05				22.5		-98.4	/	439.5	-	167		
4	"	3080		91-36-11				14.0	-100.2	-99.9		438.0	0	166-6	438.7	
5	"	3080		268-24-22				14.0	-99.7		/		0.			
6	S	1980		91-29-24				10.0	61.5	+61.5		499.5				
7	"	1980		268-30-40				10.0	61.4							
8	"	770		91-26-30				4.0		-23.4		476.1	-	166		
9		0												165-5		π
10	N	990		90-17-00				4.0		-8.9	/	490.6	-	165		
11	"	1540	✓					13.5		-13.4		486.1	0	164-6	RECIP. ANGLE POINT	
12	"	1540		<del>90-08-00</del>			269-52-32	10.0	-13.3		/		0.		486.8	(44.1) ✓
13	S	2970		88-44-40				10.0	-55.1	-55.2		430.9				
14	"	2970		271-15-35				10.0	-55.3							
15	"	1760		88-45-33				4.0		+34.1		465.0	-	164		
16		0						HI 5.9		-5.9		425.0		163		π
17	N	1760		90-50-00				4.0		-29.6	/	401.3	-	162		
18	"	2530		90-36-05				10.0	-36.6	-36.5		394.4	0	161-5	395-1	
19	"	2530		269-24-05				10.0	-36.4				0.			
20																

TI-588B

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

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

**STADIA SURVEY NOTES**

AREA SHANINGAROK CREEK STATE or PROVINCE ALASKA PAGE No. 43  
 LINE No.(s) 88 PARTY No. 1184 DATE 27 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												394.4				
2															161-5	
3	S	2750		89-17-00				5.0	-29.4	-29.6	364.8		Δ			
4	"	2750		270-43-33				5.0	-29.8				Δ <sub>1</sub>			
5	"	1760		89-22-05				4.0		+15.4		380.2	-	161		
6		0						H1 5.9		-5.9		358.9		160	π	
7	N	1760		90-34-40				10.0	-27.7	-27.7		337.1	0	159	337.9	
8	"	1760		269-25-30				10.0	-27.7				0.			
9	S	1760		89-31-20				5.0	-9.7	-9.6	327.5		Δ			
10	"	1760		270-28-24				5.0	-9.5				Δ <sub>1</sub>			
11		0						H1 5.8		-5.8		321.7		158	π RECIP ANGLE POINT ✓	
12	N	1210		90-57-20				10.0	-30.2	-30.2		297.3	0	157-3	298.1	(+2.9)
13	"	1210		269-02-22				10.0	-30.3				0.			
14	S	2310		87-57-05				5.0	-77.6	-77.7	219.6		Δ			
15	"	2310		272-03-15				5.0	-77.8				Δ <sub>1</sub>			
16	"	1760		88-08-37				4.0		+53.0		272.6	-	157		
17		0						H1 5.9		-5.9		213.7		156	π	
18	N	1760		90-10-20				4.0		-9.3		210.3	-	155		
19	"	2750 ✓						8.8		-8.6		211.0	0	154-4	211.8	
20	"	2750		270-02-10				10.0	-8.3				0 <sub>1</sub>			

TI-588B

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**STADIA SURVEY NOTES**

AREA SHANINGAROK CREEK STATE or PROVINCE ALASKA PAGE No. 44  
 LINE No.(s) 88 PARTY No. 1184 DATE 27 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D. JENSEN 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												211.0				
2														154.4		
3	S	2530		88-57-50				10.0	-35.7	-36.0	175.0		Δ			
4	"	2530		271-02-44				10.0	-36.2				Δ			
5	"	1760		89-19-00				4.0		+17.0		192.0	-	154		
6		0						HI 5.9		-5.9		169.1	-	153		π
7	N	1760		89-07-45				4.0		+22.7		197.7	-	152		
8	"	2750		88-55-33				5.0	46.6	+46.6		221.6	0	151.4		222.5
9	"	2750		271-04-40				5.0	46.7				0			
10	S	2860		91-11-22				10.0	69.4	+69.1	290.7		Δ			
11	"	2860		268-49-14				10.0	68.9				Δ			
12	"	2090		92-10-38				4.0		-83.4		207.3	-	151		
13	"	330		94-26-22				4.0		-29.5		261.2	-	150		
14		0												149-7		π
15	N	1430		87-09-25				10.0	60.9	+61.1		351.8	0	149		RECIPANGLE POINT ✓
16	"	1430		272-51-11				10.0	61.2				0			352.7 (+0.3)
17	S	2750		90-14-27				14.0	25.6	+25.6	377.4		Δ			
18	"	2750		269-43-40				14.0	25.5				Δ			
19	"	990		90-24-07				4.0		-10.9		366.5	-	148		
20		0												147-4		

TI-588B

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

14.6  
2.0  
  
15.7  
3.0  
13.7  
  
14.8 1/2  
6.5  
14.3

15.1 1/2  
2.0  
7

**STADIA SURVEY NOTES**

AREA SHANINGAROK RIDGE STATE or PROVINCE ALASKA PAGE No. 45  
 LINE No.(s) 88 PARTY No. 1184 DATE 28 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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												377.4				
2																
3	N	770		89-39-30				4.0		+0.6		378.0	-	147		
4	"	2530		89-04-00				4.0		+37.2		414.6	-	146		
5	"	3300		89-01-00				5.0	51.6	+51.9		429.3	0	145.5	Recip angle Point	
6	"	3300		270-59-44				5.0	52.3				0.1		430.2	(+0.7)
7	S	2750						11.0		+10.9	440.2		0			
8	"	1750		269-52-52				5.0	10.7				0.1			
9	"	1760		90-10-13				4.0		-9.2		431.6	-	145		
10		-0-					HI	5.9		-5.9		434.3		144	π MARKER PIPE	
11	N	1430		89-15-15				10.0	8.6	+8.7		448.9	0	143.2	Recip Angle Point	
12	"	1430		270-45-11				10.0	8.8				0.1		449.9	(+0.2)
13	S	2090		87-54-20				10.0	-66.4	-66.4	382.5		0			
14	"	2090		272-05-56				10.0	-66.5				0.1			
15	"	1760		87-51-13				4.0		+61.4		443.9	-	143		
16		0					HI	5.9		-5.9		376.6		142	π	
17	N	1760		92-09-11				21.0		-84.6		297.9	-	141		
18	"	2530		91-46-38				10.0	-88.5	-88.3		294.2	0	140.5	295.2	
19	"	2530		268-14-48				10.0	-88.1				0.1			
20																

TI-588B

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

### STADIA SURVEY NOTES

AREA SHANINGAROK RIDGE STATE or PROVINCE ALASKA PAGE No. 46  
 LINE No.(s) 88 PARTY No. 1184 DATE 28 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											294.2				
2													140-5		
3	S	880		94-25-44				10.0	78.0	+78.0	372.2	Δ			
4	"	880		265-31-40				10.0	77.9			Δ <sub>1</sub>			
5		0											140-1	π	
6	N	110	✓					0.5		-0.5	371.7	-	140		
7	"	880		88-05-44				10.0	19.2	+19.3	391.5	0	139-5	392.5	
8	"	880		271-54-50				10.0	19.4			0 <sub>1</sub>			
9	S	2750		90-40-33				10.0	42.4	+42.4	433.9	Δ			
10	"	2750		269-19-24				10.0	42.5			Δ <sub>1</sub>			
11	"	1760		90-44-14				4.0		-26.6	407.3	-	139		
12		0						HI	5.9	-5.9	428.0		138	π	
13	N	1760		88-32-55				4.0		+40.6	474.5	-	137		
14	"	2750		88-36-16				14.0	53.0	+53.2	487.1	0	136-4	RECIP ANGLE POINT ✓	
15	"	2750		271-24-15				14.0	53.4			0 <sub>1</sub>		488-2 (0.0)	
16	S	2530		87-45-10				14.0	-85.2	-85.4	401.7	Δ			
17	"	2530		272-15-33				14.0	-85.7			Δ <sub>1</sub>			
18	"	1760		87-45-50				4.0		+64.7	466.4	-	136		
19		0						HI	5.9	-5.9	395.8		135	π	
20															

TI-588B

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### STADIA SURVEY NOTES

AREA SHANINGAROK RIDGE STATE or PROVINCE ALASKA PAGE No. 47  
 LINE No.(s) 88 PARTY No. 1184 DATE 28 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D. JENSEN 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												401.7				
2																
3	N	1760		90-40-11				4.0		-24.6		377.1	-	134		
4	"	2750		90-14-56				10.0	-21.9	-21.7		380.0	0	133-4	381.1	
5	"	2750		269-45-38				10.0	-21.5				0			
6	S	2530		87-05-10				5.0	-35.4	-35.7	344.3		Δ			
7	"	2530		270-55-40				5.0	-36.0				Δ			
8	"	1760		89-04-30				4.0		+24.4		368.7	-	133		
9		0					HI	5.9		-5.9		338.4	-	132	π	
10	N	1760		91-02-55				4.0		-36.2		308.1	-	131		
11	"	2530		90-46-53				10.0	-44.5	-44.5		299.8	0	130-5	301.0	
12	"	2530		269-13-17				10.0	-44.4				0			
13	S	2420		89-04-33				14.0	-25.0	-25.2	274.6		Δ			
14	"	2420		270-55-55				14.0	-25.4				Δ			
15	"	1430		89-01-25				4.0		+20.4		295.0	-	130		
16		0												129-2	π	
17	N	330		91-00-10				4.0		-9.8		264.8	-	129		
18	"	2090		89-17-11				5.0	21.0	+21.0		295.6	0	128	296.8	
19	"	2090		270-42-45				5.0	21.0				0			
20																

TI-588B

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

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

15.5  
2.0 1/2  
3.5

14.7  
2.0  
12.7

14.6 1/2  
2.0  
12.6

14.9  
4.5 1/2  
10.4

### STADIA SURVEY NOTES

AREA SHANINGAROK RIDGE STATE or PROVINCE ALASKA PAGE No. 48  
 LINE No.(s) 88 PARTY No. 1184 DATE 28 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											295.6			
2													128	
3	S	2530		90-13-31				10.0	19.9	+19.8	315.4		Δ	
4	"	2530		269-46-50				10.0	19.7				Δ	
5	"	770		90-33-22				4.0		-11.5		303.9	-	127
6		0												126-5 π
7	N	990	✓					6.1		-6.1		309.3	-	126
8	"	2750	✓					8.8		-8.6		306.8	0	125 308.0
9	"	2750		269-55-50				5.0	8.3				0	
10	S	1760	✓					10.8		+10.8	317.6		Δ	
11	"	1760		269-48-55				5.0	10.7				Δ	
12		0					H1	5.9		-5.9		311.7		124 π
13	N	1726	✓					6.3		-6.2		311.4	0	123+34' RECIPANGLE POINT ✓
14	"	1726		270-08-00				10.0	-6.0				0	312.7 (3.0)
15	S	2564		89-49-37				5.0	-2.7	-2.9	308.5		Δ	
16	"	2564		270-11-00				5.0	-3.2				Δ	
17	"	2530		89-49-35				4.0		+3.7		312.2	-	123
18	"	770	✓					<del>4.0</del>	1.7	-1.7		306.8	-	122
19		0												121-5 π
20														

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STADIA SURVEY NOTES

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 49  
 LINE No.(s) 88 PARTY No. 1184 DATE 29 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											308.5				
2															
3	N	990		90-24-20				4.0	-11.0		297.5	-	121		
4	"	2750		90-11-44				10.0	-19.4	-19.2	289.3	0	120	290.6	
5	"	2750		269-48-56				10.0	-18.9			0			
6	S	2530		<del>89-48-28</del>		89-48-22		5.0	-3.6	-3.8	285.5	Δ			
7	"	2530		<del>70-12-12</del>		270-12-12		5.0	-4.0			Δ			
8	"	770	✓					6.2		-6.2	279.3	-	119		
9		0	✓										118.5	π	
10	N	990		90-19-10				4.0		-9.5	276.0	-	118		
11	"	2750	✓					13.2		-13.0	272.5	0	117	RECIP ANGLE POINT ✓	
12	"	2750		269-56-33				10.0	-12.8			0		273.8 (+9.9 267.6)	
13	S	2750		88-04-46				10.0	-82.2	-82.5	190.0	Δ			
14	"	2750		271-56-10				10.0	-82.9			Δ			
15	"	990		88-23-03				4.0		+23.9	213.9	-	116		
16		0											115.4	π	
17	N	770		90-32-17				4.0		-11.2	178.8	-	115		
18	"	2530		87-50-52				5.0	1.7	+1.8	191.8	0	114	RECIP ANGLE POINT ✓	
19	"	2530		270-09-34				5.0	2.0			0		193.2 (+8.6 185.2)	
20														TEM. mile MARKER	

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**STADIA SURVEY NOTES**

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 50  
 LINE No.(s) 88 PARTY No. 1184 DATE 29 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN WEATHER: \_\_\_\_\_ P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING				Angular Elev. Diff.	Final Elev. Diff.	ELEVATIONS		ABS. OF.S. - S.S.	Station	REMARKS
			Level	Inclined	Angle or Factor	Hair Read	Reading	Correc-tion	Center Hair			INST.	ROD			
1													191.8			
2															114	
3	S	2750		89-13-47				5.0	-32.0	-31.8	160.0			Δ		
4	"	2750		270-45-47				5.0	-31.6					Δ		
5	"	990		90-26-20				4.0		-11.6		148.4		-	113	
6		0													112-4	X
7	N	770		88-40-30				4.0		+13.8		173.8		-	112	
8	"	2530		87-42-33				5.0	96.1	+96.1		256.1		0	111	RECIP ANGLE POINT ✓
9	"	2530		272-17-15				5.0	96.0					0		257.5 (+9.1 247.0)
10	S	2530		90-02-04				10.0	16.7	+16.7	272.8			Δ		
11	"	2530		269-51-05				10.0	16.6					Δ		
12	"	770		90-33-44				4.0		-11.6		261.2		-	110	
13		0						H1 5.8		-5.8		267.0			109-5	X RECIP ANGLE POINT
14	N	990		90-32-05				4.0		-13.2		259.6		-	109	(+9.2 257.8)
15	"	2750		90-11-03				10.0	-18.8	-18.8		254.0		0	108	
16	"	2750		269-49-00				10.0	-18.8					0		255.5
17	S	2970		89-44-20				10.0	-3.5	-3.6	250.4			Δ		
18	"	2970		270-15-50				10.0	-3.7					Δ		
19	"	1210		90-47-20				4.0		-20.7		229.7		-	107	
20		0													106-3	X

15.3  
11.8  
13.8  
  
15.6  
12.0  
12.2  
  
14.0  
11.8  
12.2

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### STADIA SURVEY NOTES

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 51  
 LINE No.(s) 88 PARTY No. 1184 DATE 29 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR W D HELANDER RODMAN D JENSEN 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												250.4				
2																
3	N	330	✓													
4	"	2090		89-45-22												
5	"	2860		89-42-07												
6	"	2860		87-18-35												
7	S	1540	✓													
8	"	1540		27-10-10												
9	"	550		90-37-20												
10		0						H1								
11	N	1210		90-29-44												
12	"	1210		269-30-25												
13	S	2530		90-18-20												
14	"	2530		269-42-18												
15	"	770		90-28-33												
16		0														
17	N	990		90-45-45												
18	"	2750	✓													
19	"	3080	✓													
20	"	3080		269-59-00												

(FROM LINE 83 FINAL ELEVATION)  
 256.8  
 257.1

X RECIPROCAL POINT  
 (-6.9 - 247.5)

9.71/2

14.2  
2.3  
12.20

15.6  
3.2  
12.4

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### STADIA SURVEY NOTES

AREA MEADE RIVER STATE or PROVINCE ALASKA PAGE No. 52  
 LINE No.(s) 88 PARTY No. 1184 DATE 29 Day 4 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR WD HELANDER RODMAN D JENSEN 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											257.8			
2													RECIP ANGLE POINT	
3	S	1430		89-42-20			10.0	2.7	+2.7	260.5		Δ	AT SP 99+550	
4	"	1430		270-17-50			10.0	2.6				Δ	ELEV 249.0	
5		0					HI 5.9		-5.9		254.6		99 π	
6	N	1760		90-38-11			10.0	-29.5	-29.5		231.0	0	98 232.5	
7	"	1760		269-22-12			10.0	-29.4				0		
8	S	2530		89-49-20			14.0	6.1	+6.0	237.0		Δ		
9	"	2530		270-11-00			14.0	5.9				Δ		
10	"	770 ✓					3.5		-3.5		233.5	-	97	
11		0											96.5 π	
12	N	990		90-44-36			4.0		-16.8		220.2	-	96	
13	"	2750		90-13-27			10.0	-20.8	-20.6		216.4	0	95 217.9	
14	"	2750		269-47-00			10.0	-20.4				0		
15	S	1760 ✓					9.7		+9.6	226.0		Δ		
16	"	1760		269-51-20			5.0	9.4				Δ		
17		0					HI 5.9		-5.9		220.1		94	
18	N	1760 ✓					11.5		-11.4		214.6	0	93 LAST SP ON L-88	
19	"	1760		269-57-40			10.0	-11.2				0	MARKER PIPE ✓	
20													216.1 (+10.8 203.8)	

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### STADIA SURVEY NOTES

AREA BRADY. STATE or PROVINCE AK. PAGE No. 1.  
 LINE No.(s) 88 (TEST) PARTY No. 1186 DATE 17 Day 5 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR L. LYMAN. RODMAN G. CONRAD. WEATHER: SNOW, fog. 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												1640.2	0		± L-88 SP. 404 + 227	
2																
3															L-86. SP. 441 + 793.	
4																
5															(IRON-PIPE)	
6																
7	N	650		88-40				+ 13.9	- 1.2		1639.0		Δ			
8		0	-					- 5.2				1633.8		405	T.O. ELEV.	
9	S	440		90-50				- 12.0	- 19.4			1619.6	0	405	A.	
10		2200		88-10				+ 4.8	- 65.5		1554.1		Δ			
11		1320		89-05				- 4.7	+ 18.3			1572.4		406	A.	
12	N	440		91-00				- 13.2	- 20.9			1533.2		407	A.	
13		0	-					- 5.2				1548.9		408		
14	S	440		86-30				- 4.3	+ 22.5			1576.6		408	A.	
15		880		85-50				- 4.0	+ 59.8			1613.9	0	409		
16												(1613.4)				
17																
18																
19																
20																

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### STADIA SURVEY NOTES

AREA \_\_\_\_\_ STATE or PROVINCE AK. PAGE No. 2.  
 LINE No.(s) 88 TEST PARTY No. 1186 DATE 17 Day S. Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR L. LYMAN RODMAN G. CONRAD WEATHER: SNOW 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											1613.9	○	409		
2		2200		93-40				+	152.9	1766.8		△			
3		1760		94-50				-	158.5		1608.3		409	A.	
4	N	880		96-50				-	115.6		1651.2		410	A.	
5		0	-					-	5.2		1761.6		411	A.	
6	S	380		87-00				-	12.7		1774.0	○			
7		2700		86-30				+	2.1		1611.6	△			
8		2700		86-40				-	5.0		1734.3		412	A.	
9		1720		89-10				-	6.5		1624.3		413	A.	
10	N	440		94-00				-	12.3		1568.7		414	A.	
11		0	-					-	5.2		1606.4		415	(1606.1)	
12	S	440		88-00				-	3.7		1623.2		415	A.	
13		1320		86-30				-	5.5		1686.5		416	A.	
14		2200		86-10				-	6.4		1752.0	○	417	A.	
15															
16															
17															
18															
19															
20															

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L. J. L.

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

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

### STADIA SURVEY NOTES

AREA \_\_\_\_\_ STATE or PROVINCE AK. PAGE No. 3.  
 LINE No.(s) 88 TEST. PARTY No. 1186 DATE 17 Day 5 Mo. 77 Yr. BOOK No. \_\_\_\_\_  
 SURVEYOR L. LITMAN. RODMAN G. CONRAD. WEATHER: SNOW. P.T.S. No. \_\_\_\_\_

LINE	Bearing of Sight	Stadia Distance	BEAMAN OR VERNIER			ROD READING			Center Hair	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				INST.	ROD			
1												1752.0	0	417	A.	
2		1760		92-50				+ 11.0	+ 97.9		1849.9		Δ			
3	N	880		95-00				- 10.7	- 87.1		1762.8			418	A.	
4		0	-					- 5.2			1844.7			419	A.	
5	S.	605		87-34	17			- 15.0	+ 10.6		1860.5	0				
6		2030		86-20				+ 11.3	- 118.3		1742.2		Δ			
7		1760		86-20				- 5.4	+ 106.9		1849.1			420	A.	
8	N	880		86-20				- 6.6	+ 49.6		1791.8			421	A.	
9		0	-					- 6.0			1786.2			422	A.	
10	S.	880		93-00				- 11.0	- 57.0		1685.2			423	A.	
11		1760		92-10				- 4.4	- 70.9		1671.3			424	A.	
12		2640		91-00				- 2.8	- 48.9		1693.3			425	A.	
13		3520		90-10				- 5.9	- 16.1		1726.1	0		426	A.	
14	N	440		89-00				+ 6.2	- 1.5		1724.6		Δ			
15		0	-					- 5.3			1719.3			427	(1714.1)	
16	S	440		91-50				- 13.8	- 27.9		1696.7			427	A.	
17		1320		93-20				- 12.5	- 89.1		1635.5			428	A.	
18		1760		93-20				- 13.6	- 115.8		1608.8	0		429		
19											(1604.6)					
20																

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