

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Harrison Bay STATE/COUNTY Alaska BOOK NO. B PAGE 81 OF 1
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR MCGRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	Δ	SP 412	3080		89 51 16	11						1		
2					270 08 48	11	3.0					2		
3		413	2690		89 48 22	11						3		
4		414	2200		89 47 06	11						4		
5		415	1760		89 42 24	11						5		
6		416	1320		89 38 17	11						6		
7		417	880		89 32 12	11						7		
8		418	440		88 59 21	11						8		
9	⊗	419	-0-		90	5.3		104.9				9		
10												10		
11	⊙	LINE INTERSECTION	87'	87'	90	5.6		99.3				11	IRON PIPE L-30/L-21 1974	
12												12		
13		SP 420	440		89 25 43	11						13		
14		421	880		89 37 55	11						14		
15		422	1320		89 50 48	11						15		
16		423	1760		89 52 37	11						16		
17												17		

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SYMBOLS Δ = BACKSIGHT ⊗ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Harrison Bay STATE/COUNTY ALASKA BOOK NO. 3 PAGE 82 OF 2
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Will CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊕	STATION	VERTICAL							HORIZONTAL			REMARKS	
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		LR OR DI	RIGHT TURNED HORIZONTAL ANGLE		LINE
			SLOPE	HORIZ					INST	ROD				
1		SP 424	2200		89 51 46	11	-7.6		97.3			1		
2		TS 425	2640		89 54 21	11	-6.5		98.4			2		
3		TS 426	3080		89 54 55	11	-6.3		98.6			3		
4		TS 427	3520		89 56 06	11	-6.8		98.1			4		
5		TS 428	3960		89 57 09	11	-7.3		97.6			5		
6	⊕	TS 429	4400		89 58 32	11	-8.8		96.1			6		
7					270 01 25	11						7		
8												8		
9	Δ	TS 429	1760		89 55 13	11						9		
10					270 04 46	11						10		
11		430	1320		89 52 30	11	-8.1		96.5			11		
12		431	880		89 52 37	11	-9.1		95.5			12		
13		432	440		89 37 06	11	-8.1		96.6			13		
14		433	-0-		90	59		104.6	99.2			14		
15		434	940		89 17 40	11	-5.6		99.1			15		
16		435	880		89 57 30	11	-10.3		94.3			16		
17	⊕	436	1320		90 05 12	11	-13.0		91.7			17		

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊕ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

3

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 83 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 27 BY 03 MO 01 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		RIGHT TURNED HORIZONTAL ANGLE	
				SLOPE	HORIZ					INST			ROD
1	Δ	100	4400	1320'	89-48-24 270-14-28	6'	89-32-11		323.8		1	SP 100 ELEV =	
2	S	TS 88	5960		89-50-20	6'	270-27-41		319.6		2	323.8'	
3	S	TS 89	3520		89-48-38	11			320.1		3		
4	S	TS 90	3080		89-45-48	11			321.0		4		
5	S	TS 91	2640		89-42-19	11			321.3		5		
6	S	TS 92	2200		89-43-27	11			318.8		6		
7	S	TS 93	1760		89-47-34	11			314.5		7		
8	S	TS 94	1320		89-35-33	11			317.5		8		
9	S	TS 95	880		89-53-38	11			309.8		9		
10	S	TS 96	440		92-05-18	4			299.1		10		
11	Δ	TS 97	-0-			5.6		319.1	313.5		11		
12	S	TS 98	440		89-46-09	4			316.9		12		
13	S	TS 99	880		89-41-17	4			319.9		13		
14	⊙	100	1320		89-32-11	6					14		
15					270-27-41	6	+4.7		323.8		15		
16											16		
17											17		

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 SYMBOLS Δ = BACKSIGHT = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 84 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 27 BY 3 MO 81 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T.2 CREW NO. 1186

LINE	 	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	
				SLOPE	HORIZ					INST'				ROD
1		100	2640			89-45-24	6						1	328.8' =
2						27-14-38	6	+1.4		328.8			2	STARTING ELE.
3	S	101	2200			89-37-56	11						3	
4	S	102	1760			89-54-29	11						4	
5	S	103	1320			89-59-06	11						5	
6	S	104	880			89-57-38	11						6	
7	S	105	440			89-55-27	11						7	
8		106	- 0 -				5.7			328.4			8	
9	S	107	440			88-58-17	11						9	
10	S	108	880			89-34-32	11						10	
11	S	109	1320			89-57-24	11						11	
12	S	110	1640			90-01-34	11						12	
13	S	111	2200			90-02-35	11						13	
14		112	2640			90-04-54	11						14	
15						267-55-06	11	+17.6					15	
16													16	
17													17	

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. B PAGE 85 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 27 BY 03 MO 81 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	 	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			LR OR DI	RIGHT TURNED HORIZONTAL ANGLE
									SLOPE	HORIZ			
1		112	2640		89-54-14	11						1	
2					270-05-45	11	-6.4		308.8			2	
3	S	113	2200	89-57-09	82-54-14	11						3	
4	S	114	1760	90-22-26	87-59-09	35						4	
5	S	115	1320		90-11-56	11						5	
6	S	116	880		89-44-19	11						6	
7	S	117	440		89 07 20	11						7	
8		118	-0-			56			315.2			8	
9	S	119	440		90-07-22	11						9	
10	S	120	880		89-48-34	11						10	
11	S	121	1320		89-34-31	11						11	
12	S	122	1760		89-33-51	11						12	
13		123	2200	89-37-39	89-37-39	11						13	
14		124	2640		270-22-15	11	+3.4					14	
15												15	
16												16	
17												17	

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 SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP = SIDESHOT = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA _____ STATE/COUNTY AK BOOK NO. B PAGE 86 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 27 BY 03 MO 81 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T.2 CREW NO. _____

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS				
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE	HORIZ					INST					ROD
1	Δ	123	2640			89-45-55	11						1		
2						270-14-00	11	+1		318.6			2		
3	S	124	2200			89-58-02	11						3		
4	S	125	1760			89-54-28	11						4		
5	S	126	1320			89-44-58	11						5		
6	S	127	880			89-41-00	11						6		
7	S	128	440			89-23-12	11						7		
8	T	129	-0-				5.6			318.7			8		
9	S	130	440			89-06-55	11						9		
10	S	131	880			89-26-40	11						10		
11	S	132	1320			89-27-16	11						11		
12	S	133	1760			89-17-23	11						12		
13	⊙	134	2200			89-22-32	11						13		
14						270-37-22	11	+13.0		298.7			14		
15													15		
16													16		
17													17		

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SYMBOLS Δ = BACKSIGHT T = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 87 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 27 BY 03 MO 81 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	 	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE
			SLOPE	HORIZ					INST	ROD			
1		134	1760		90-02-43	11			331.7			1	
2					269-57-17	11	+12.3					2	
3		135	1320		89-56-40	11						3	
4		136	880		89-46-37	11						4	
5		137	440		89-21-55	11						5	
6		138	-0-			53	54	344				6	
7		139	440		89-25-23	11						7	
8		140	880		90-05-50	11						8	
9		141	1320		90 14 28	11	+16.5		327.5			9	
10					269 45 30	11						10	
11												11	
12												12	
13												13	
14												14	
15												15	
16												16	
17												17	

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

= BACKSIGHT
 = INSTRUMENT SET-UP
 = FORESIGHT
 SS = SIDESHOT

HORIZONTAL AND VERTICAL SURVEY NOTES

8

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 88 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 8 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> T <input type="checkbox"/> SS <input type="checkbox"/> O	STATION	VERTICAL						HORIZONTAL		LINE	REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION				LR OR DR	RIGHT TURNED HORIZONTAL ANGLE
				SLOPE					HORIZ	INST				
1	Δ	81031		52.53.95	90-03-38	6'	+11.0					1	Elev. 333.42	
2					769-56-52	6'	+10.6					2		
3	T	138	-0-		90	5.6		344.0				3		
4	O	141	1320		90-14-28	11	-4.9	2.1				4		
5					269-45-30	11						5		
6					89-59-50	11						6		
7	Δ	141	2200		230-00-06	11	+10.8					7		
8	S	142	1760		89-58-18	11						8		
9	S	143	1320		89-57-37	11						9		
10	S	144	880		89-57-53	11						10		
11	S	145	440		89-29-04	11						11		
12	T	146	-0-			5.5		338.3				12		
13	S	147	440		90-54-11	4						13		
14	S	148	880		90-10-04	4						14		
15	S	149	1320		89-58-05	4						15		
16		150	1760		89-53-48	4						16		
17												17		

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SYMBOLS Δ = BACKSIGHT T = INSTRUMENT SET-UP SS = SIDESHOT O = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

9

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 89 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 81 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	 SS C	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		151	2200		89-51-19	11	-5.3					1		
2					270-08-44	11			333.0			2		
3												3		
4		151	1925		89-51-19	11	+6.0					4		
5					270-08-51	11						5		
6	S	152	1485		89-56-10	11						6		
7	S	153	1045		90-04-55	11						7		
8	S	154	605		90-09-09	11						8		
9	S	155	165		91-08-25							9		
10		7P1	-0-			5.6			339.0			10		
11	S	156	275		89-44-31	11						11		
12	S	157	775		90-21-45	11						12		
13	S	158	1755		90-28-19	11						13		
14	S	159	1575		90-42-55	11						14		
15		160	2035		90-43-20	11	-3.6					15		
16					269-16-40	11			302.4			16		
17												17		

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SYMBOLS = BACKSIGHT
 = INSTRUMENT SET-UP
 SS = SIDESHOT
 = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 90 OF 10
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 78 BY 3 MO 81 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T.2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS	
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			RIGHT TURNED HORIZONTAL ANGLE
									SLOPE	HORIZ		
1	Δ	160	2640		89-36-25	11	-7.3				1	
2					270-23-35	11					2	
3	S	161	2200		89-42-00	11					3	
4	S	162	1760		89-50-23	11					4	
5	S	163	1320		89-54.43	11					5	
6	S	164	880		90-15-20	11					6	
7	S	165	440		90-38-45	11					7	
8	Δ	166	-0-			5.6		85.2			8	
9	S	167	440		88-16-22	11					9	
10	S	168	880		88-46-15	11					10	
11	S	169	1320		88-58-04	11					11	
12	S	170	1760		89-05-23	11					12	
13	⊙	171	2200		89-21-02	11	+14.0				13	
14					270-38-51	11			309.2		14	
15						11					15	
16											16	
17											17	

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SYMBOLS Δ = BACKSIGHT Δ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 91 OF 11
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 81 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE
									SLOPE	HORIZ			
1	Δ	171	3080		89-34-48	11	-11.8					1	
2					270-25-07	11	11.7					2	
3	S	172	2640		89-35-06	11						3	
4	S	173	2200		89-25-21	11						4	
5	S	174	1760		89-35-29	11						5	
6	S	175	1320		89-38-14	11						6	
7	S	176	880		89-29-38	11						7	
8	S	177	440		89-17-30	11						8	
9	Δ	178	-0-		---	56		297.4				9	
10	S	179	440		90-36-40	11						10	
11	S	180	880		90-36-23	11						11	
12	S	181	1320		90-43-56	11						12	
13	S	182	1760		90-22-16	11						13	
14	S	183	2200		90-22-36	11						14	
15	⊙	184	2640		90-17-19	11	21.2					15	
16					269-42-43	11		273.3				16	
17												17	

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SYMBOLS Δ = BACKSIGHT Δ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 92 OF 12
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 81 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE
									SLOPE	HORIZ				
1	Δ	184	2640		89-33-03	11	9.8					1		
2					270-26-51	11						2		
3	S	185	2200		89-45-28	11						3		
4	S	186	1760		89-45-28	11						4		
5	S	187	1320		89-46-30	11						5		
6	S	188	880		89-43-36	11						6		
7	S	189	440		88-55-08	11						7		
8	⊕	190	-0-			5.5		263.A				8		
9	S	191	440		89-22-35	11						9		
10	S	192	880		89-35-58	11						10		
11	S	193	1320		89-04-41	11						11		
12	S	194	1760		89-01-00	11						12		
13	⊙	195	2200		89-09-30	11	+21.A					13		
14					89-50-27	11			284.B			14		
15					210.50 27	11						15		
16												16		
17												17		

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SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 93 OF 13
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 81 YR
 SURVEYOR JoLus INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE
									SLOPE	HORIZ			
1	Δ	195	2975		90-21-13	1517	+32.1					1	
2		196			269-38-14	1517						2	
3	S	196	2035		90-21-15	25						3	
4	S	197	1595		90-16-20	25						4	
5	S	198	1155		90-29-34	11						5	
6	S	199	715		89-48-12	11						6	
7	S	200	275		89-10-52	11						7	
8	⊕	TP 2	-0-			5.5		317.0				8	
9	S	201	165		92-11-42	4						9	
10	⊙	202	605		91-48-49	11	-30.1	286.9				10	
11		203	1045		268-11-01	11						11	
12												12	
13	Δ	202	3080		89-33-24	11	-13.0					13	
14					270-26-27	11						14	
15	S	203	2640		90-21-40	11						15	
16	S	204	2200		90-57-45	11						16	
17	S	205	1760		90-38-34	11						17	

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 94 OF 14
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 01 YR
 SURVEYOR JOHNS INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL							HORIZONTAL		REMARKS	
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR D/I		RIGHT TURNED HORIZONTAL ANGLE
			SLOPE	HORIZ					INST	ROD			
1	S	206	1320		90-35-20	11						1	
2	S	207	880		90-41-36	11						2	
3	S	208	440		89-54-20	11						3	
4	⊕	209	-0-			55		273.9				4	
5	S	210	440		90-32-47	11						5	
6	S	214	880		90-22-04	11						6	
7	S	212	1320		90-51-48	20						7	
8	S	213	1760		90-55-30	20						8	
9	S	214	2200		90 54 40	20						9	
10	S	215	2640		90 38 25	11						10	
11	⊙	215	3080		90 32 05	11	-39.5	234.3				11	
12					269-27-44	11						12	
13												13	
14	Δ	216	2640		89-50-43	11						14	
15					89-09-12	11						15	
16	S	217	2200	90-50-43	89-50-43	11						16	
17	S	218	1760	90-25-05	90-00-26	11						17	





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SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

15

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 95 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 01 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T.2 CREW NO. 1186

LINE		STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			LR OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE
									SLOPE	HORIZ				
1		216	2200		89-50-43	11		+5.0				1		
2					270-09-12	11						2		
3	S	217	1760	90-00-26	90-50-43	11						3		
4	S	218	1320	90-25-05	90-25-05	11						4		
5	S	219	880		90-21-12	11						5		
6	S	220	440		90-07-13	11						6		
7		221	-0-			5.5			239.2			7		
8	S	222	440		90-38-44	11						8		
9	S	223	880		91-21-48	11						9		
10	S	224	1320		90-47-32	11						10		
11	S	225	1760		90-14-34	11						11		
12	S	226	2200		89-43-18	11						12		
13	S	227	2640		89-35-36	11						13		
14	S	228	3080		89-40-35	11						14		
15		229	3520		89-39-22	6		+15.4		254.6		15		
16					270-20-37	6						16		
17												17		

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SYMBOLS  = BACKSIGHT  = INSTRUMENT SET-UP  = SIDESHOT  = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA _____ STATE/COUNTY AK BOOK NO. 3 PAGE 96 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 28 BY 3 MO 81 YR
 SURVEYOR Johns INSTRUMENT DESC/SERIAL NO. WILD T-2 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	ELEVATION			LR OR DI	RIGHT TURNED HORIZONTAL ANGLE
				SLOPE	HORIZ				INST	ROD			
1	Δ	229	2640		89 55 41	6		+2.5				1	
2					270 04 11	6						2	
3	S	230	2200		89 57 39	11						3	
4	S	231	1760		90 09 27	11						4	
5	S	232	1320		91 01 55	11						5	
6	S	233	880		91 29 59	11						6	
7	S	234	440		91 47 03	11						7	
8	⊗	235	-0-			5.6			259.2			8	
9	S	236	440		88 39 40	11						9	
10	S	237	880		89 02 12	11						10	
11	⊙	238	1320		89 19 30	11		4.6		261.8		11	
12					270 40 22	11						12	
13												13	
14												14	
15												15	
16												16	
17												17	

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SYMBOLS Δ = BACKSIGHT ⊗ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

17

GSI AREA Unsett STATE/COUNTY ALASKA BOOK NO. 13 PAGE 97 OF
 LINE/LOOP NO. c-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DY 3 MO 81 YR
 SURVEYOR M. O'Leary INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1												1		
2	Δ	SP 238	1160		89 23 32	11		-2.7					2	
3					270 36 15	11							3	
4		SP 239	1320		89 20 24	11							4	
5		" 240	880		89 14 05	11							5	
6		" 241	440		89 42 25	11							6	
7	Δ	" 242	-0-		90	5A			254.0				7	
8		SP 243	440		91 37 44	11							8	
9		244	880		91 02 55	11							9	
10		245	1320		91 07 29	11							10	
11	⊙	246	1760		90 55 01	11		-39.1		214.9			11	
12					269 01 40	11							12	
13					269 01 43	11							13	
14													14	
15	Δ	SP 246	2640		89 49 59	11		+3.2					15	
16					270 09 53	11							16	
17													17	

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SYMBOLS Δ = BACKSIGHT = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

18

GSI AREA Umiaat STATE/COUNTY Alaska BOOK NO. 3 PAGE 78 OF
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DY 3 MO 81 YR
 SURVEYOR M. O'BEARDY INSTRUMENT DESC/SERIAL NO. T-2 4514 CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		SP 247	2200		90 11 10	11						1		
2		248	1760		90 29 35	11						2		
3		249	1320		90 38 52	11						3		
4		250	880		90 32 53	11						4		
5		251	440		89 20 55	11						5		
6	⋈	252	-0-		90	5.3		218.1				6		
7		253	440		90 24 16	11						7		
8		254	880		91 53 35	11						8		
9		255	1320		90 23 35	11						9		
10		256	1760		90 14 21	11						10		
11		257	2200		89 44 28	11						11		
12		258	2240		89 35 49	11						12		
13	⊙	259	3080		89 33 43	11		+10.7				13		
14					270 26 08	11		+12.7	235.8			14		
15												15		
16												16		
17												17		

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SYMBOLS Δ = BACKSIGHT ⋈ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

19

GSI AREA Umiat STATE/COUNTY ALASKA BOOK NO. 3 PAGE 99 OF
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL			REMARKS		
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR D/I		RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	Δ	SP 259	2640		89 37 26	11		-6.5				1		
2					270 22 30	11						2		
3		260	2200		89 30 13	11						3		
4		261	1760		89 43 02	11						4		
5		262	1320		90 02 41	11						5		
6		263	880		90 17 54	11						6		
7		264	440		90 31 06	11						7		
8	⊗	SP 265	0-		90	5.3			224.3			8		
9		266	440		88 48 06	11						9		
10		267	880		89 13 33	11						10		
11		268	1320		89 21 10	11						11		
12	⊙	269	1760		89 27 26	11		+5.7				12		
13					270 32 22	11				236.1		13		
14												14		
15	Δ	SP 269	5355		89 23 04	11		-25.2				15		
16					270 36 57	11						16		
17					89							17		

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SYMBOLS Δ = BACKSIGHT ⊗ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Umia STATE/COUNTY Alaska BOOK NO. B PAGE 100 OF 20
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DY 3 MO 81 YR
 SURVEYOR M. GLADY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		LINE	REMARKS		
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION				L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE
				SLOPE					HORIZ	INST				
1		SP 270	2915		89 17 54	11						1		
2		271	2875		89 18 54	11						2		
3		272	2835		89 15 55	11						3		
4		273	1595		89 08 54	11						4		
5		274	1155		89 02 18	11						5		
6		275	715		89 17 30	11						6		
7		276	275		89 00 56	11						7		
8	⊖	TP 274+275	0-		90	5.2			204.9			8		
9			16-									9		
10	⊙	645TD	2440		89 24 44	5.0	+20.2		225.1			10	228.0	
11					270 35 08	5.0						11	228.0-225.1 = 2.9 + IE	
12												12		
13	⊖	645TD	2140		89 24 44	5.0	-20.1					13		
14					270 35 08	5.0						14		
15												15		
16	⊖	TP 276+275	0-		90	5.2			207.9			16		
17												17		

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SYMBOLS

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SS = SIDESHOT

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Umiat STATE/COUNTY Alaska BOOK NO. 3 PAGE 101 OF
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DAY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	 SS	STATION	VERTICAL						HORIZONTAL			REMARKS		
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR DJI		RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		SP 277	165		90 07 15	11						1		
2		278	605		90 38 18	11						2		
3		279	1095		90 24 13	11						3		
4		280	1485		90 17 28	11						4		
5		281	1925		90 17 00	11						5		
6		282	2365		90 13 38	11						6		
7		283	2805		90 09 33	11						7		
8		284	3245		89 57 05	11	-8.1		199.7			8		
9					210 02 40	11						9		
10												10		
11		SP 284	2200		89 34 01	11						11		
12					210 25 54	11	-5.7					12		
13		285	1760		89 28 05	11						13		
14		286	1320		89 17 37	11						14		
15		287	880		89 10 37	11						15		
16		288	440		89 05 01	11						16		
17												17		

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SYMBOLS = BACKSIGHT = INSTRUMENT SET-UP SS = SIDESHOT = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Umiat STATE/COUNTY Alaska BOOK NO. 3 PAGE 102 OF 22
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 29 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. J-2 wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ○	STATION	VERTICAL							HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR DJI		RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	<input checked="" type="checkbox"/>	SP 289	0		90	5.3			194.			1		
2		SP 290	440		89 58 47	11.						2		
3		291	880		90 09 13	11						3		
4		292	1320		90 18 09	11						4		
5		293	1760		90 23 49	11						5		
6		294	2200		90 30 22	11						6		
7	○	295	2640		90 36 14	11	-38.7	155.3				7		
8					769 23 46	11						8		
9												9		
10	Δ	SP 295	2640		89 55 14	11						10		
11					270 04 53	11	+7.2					11		
12		296	2200		89 56 38	11						12		
13		297	1760		90 00 03	11						13		
14		298	1320		89 54 30	11						14		
15		299	880		89 36 06	11						15		
16		300	440		89 07 09	11						16		
17												17		

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SYMBOLS Δ = BACKSIGHT = INSTRUMENT SET-UP SS = SIDESHOT ○ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Umiaf STATE/COUNTY Alaska BOOK NO. B PAGE 103 OF 23
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'BRADY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE		VERTICAL ANGLE OBS. 	ROD RDG OR HI	ELEV DIFF 	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE
			SLOPE 	HORIZ 					INST	ROD				
1	<input checked="" type="checkbox"/>	SP 301	-0-		90	54			162.5			1		
2		302	440		90 19 21	11						2		
3		303	880		90 22 27	11						3		
4		304	1320		90 16 24	11						4		
5		305	1760		90 05 14	11						5		
6		306	2200		90 13 27	11						6		
7		307	2640		90 11 09	11						7		
8	<input checked="" type="checkbox"/>	308	3080		90 09 03	11						8		
9					269 50 43	11		-19.0	143.5			9		
10												10		
11	<input checked="" type="checkbox"/>	SP 308	2640		89 53 51	11						11		
12					270 06 16	11		+6.1				12		
13		309	2200		89 46 49	11						13		
14		310	1760		89 48 57	11						14		
15		311	1320		89 49 28	11						15		
16		312	880		89 45 47	11						16		
17												17		

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SYMBOLS

Δ = BACKSIGHT

⊕ = INSTRUMENT SET-UP

SS = SIDESHOT

⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Umist STATE/COUNTY Alaska BOOK NO. B PAGE 104 OF 24
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. F-2 Wild CREW NO. 186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		SP 313	440		89 20 53	11						1		
2	⊙	34	0		90	5.4		149.5				2		
3		315	410		89 31 42	11						3		
4		316	880		89 30 20	11						4		
5	⊙	317	1320		89 42 26	11						5		
6					270 17 28	11	4.2		145.4			6		
7												7		
8												8		
9												9		
10												10		
11												11		
12												12		
13												13		
14												14		
15												15		
16												16		
17												17		

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SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Unit 4 STATE/COUNTY Alaska BOOK NO. 3 PAGE 05 OF 25
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 BY 3 MO 81 YR
 SURVEYOR M.O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 1286

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DJI	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	Δ	SP 317	2640		89 30 16	11						1		
2					270 29 38	11	-11.9					2		
3		318	2200		89 27 38	11						3		
4		319	1760		89 19 51	11						4		
5		320	1320		89 12 29	11						5		
6		321	880		89 35 43	11						6		
7		322	440		89 07 14	11						7		
8	⊕	323	- 0 -		90	5.3		133.4				8		
9		324	440		89 13 51	11						9		
10		325	880		89 36 38	11						10		
11		326	1320		89 43 03	11						11		
12		327	1760		89 49 24	11						12		
13		328	2200		89 48 00	11						13		
14	⊙	329	2640		89 50 25	11						14		
15					270 09 22	11	-3.6	129.8				15		
16												16		
17												17		

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Umipit STATE/COUNTY Alaska BOOK NO. B PAGE 106 OF 26
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DAY 3 MO 81 YR
 SURVEYOR M. O'Grady INSTRUMENT DESC/SERIAL NO. T-2 w/ B CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	Δ	SP 319	2640		89 47 10	11						1		
2					270 12 49	11	+1.0					2		
3		330	2200		89 34 58	11						3		
4		331	1760		89 54 39	11						4		
5		332	1320		89 45 41	11						5		
6		333	880		89 33 25	11						6		
7		334	440		89 16 53	11						7		
8	⊕	335	-0-		90	5.3		130.8				8		
9		336	440		89 51 37	11						9		
10		337	880		89 59 56	11						10		
11		338	1320		89 58 52	11						11		
12		339	1760		90 01 48	11						12		
13	⊙	340	2200		89 52 18	11						13		
14					270 07 38	11	-6.0	124.8				14		
15												15		
16												16		
17												17		

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SYMBOLS Δ = BACKSIGHT ⊕ = INSTRUMENT SET-UP SS = SIDESHOT ⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA _____ STATE/COUNTY Alaska BOOK NO. 3 PAGE 107 OF _____
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 8 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	 	STATION	VERTICAL						HORIZONTAL		REMARKS				
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE	HORIZ					INST					ROD
1		SP 340	2690		89 48 04	11						1			
2					270 11 51	"	+1.7					2			
3		341	2200		90 06 49	"						3			
4		342	1760		89 57 36	"						4			
5		343	1320		89 51 48	"						5			
6		344	880		90 06 13	"						6			
7		345	440		89 31 14	"						7			
8		SP 346	- 0 -		90	5.4		126.6				8			
9		347	440		89 52 42	"						9			
10		348	880		90 08 26	"						10			
11		349	1320		90 06 57	"						11			
12		350	1760		90 04 43	"						12			
13		INTERSECTION	42									13			
14		L 28-21 & C-81										14			
15		350+83'			90 02 46	"	-12.4	114.2				15			
16		351	2200		90 02 37	"						16			
17												17			

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


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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Harrison Bay STATE/COUNTY ALASKA BOOK NO. 3 PAGE 208 OF
 LINE/LOOP NO. C-81 TYPE SURVEY Vert. CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'BEARY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 11810

LINE	 SS 	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		352	2690		90 03 09	11						1		
2					269 56 43	11	-13.3	113.2				2		
3												3		
4		352	2690		89 51 20	11						4		
5					270 08 43	11	+4.2					5		
6		353	2200		90 06 02	11						6		
7		354	1760		89 52 50	11						7		
8		355	1320		89 49 07	11						8		
9		356	880		89 47 36	11						9		
10		357	440		89 44 01	11						10		
11		358	-0-		90	5.4		117.4				11		
12		359	440		89 18 15	11						12		
13		360	880		89 47 50	11						13		
14		361	1320		90 02 45	11						14		
15		362	1760		90 10 00	11						15		
16		363	2200		90 08 03	11						16		
17												17		

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  = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Harrison Bay STATE/COUNTY Alaska BOOK NO. 3 PAGE 109 OF 29
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 1186

LINE	 SS 	STATION	VERTICAL						HORIZONTAL		REMARKS	
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	ELEVATION		L/R OR DJI		RIGHT TURNED HORIZONTAL ANGLE
			SLOPE	HORIZ				INST	ROD			
1		36A	2640		89 56 41	11					1	
2		36B	3080		89 55 24	11					2	
3					270 09 37	11	-6.7	110.7			3	
4											4	
5		SP 36C		490'	90	5.6					5	
6											6	
7		BAR MARKER	-0-		90	5.5		116.3			7	
8		81422									8	
9											9	
10		BAR MARKER	-0-		90	5.5		110.8			10	BM 81422 ELE =
11		81422								110.8	11	- 107.3 =
12										TIE	12	3.5
13		BAR MARK	-0-		90	5.5					13	
14		81422									14	
15		BAR						112.8			15	
16		SP 36C		490	90	5.6			107.2		16	
17											17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Harrison Bay STATE/COUNTY Alaska BOOK NO. 3 PAGE 110 OF 30
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS				
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE	HORIZ					INST					ROD
1	Δ	SP 365	3080			89 48 35	11						1		
2						270 11 27	11		+ .0				2		
3		366	2640			89 52 12	11						3		
4		367	2200			89 54 47	11						4		
5		38	1160			89 50 01	11						5		
6		369	1320			89 37 13	11						6		
7		370	880			89 34 12	11						7		
8		371	440			89 16 20	11						8		
9	k	372	- 0 -			90	5.4			107.8			9		
10		373	440			89 00 54	11						10		
11		374	880			89 37 53	11						11		
12		375	1320			89 45 46	11						12		
13		376	1760			89 47 05	11						13		
14	⊙	377	2200			89 51 27	11						14		
15						270 08 30							15		
16						270 08 30	11		-5.4		102.3		16		
17													17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Harrison Bay STATE/COUNTY Alaska BOOK NO. B PAGE 711 OF 31
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DIA	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1	Δ	SP 377	1320		89 50 41	11						1		
2					270 06 21	11		+8.5				2		
3		378	880		89 44 19	11						3		
4		379	440		89 16 04	11						4		
5	⊖	JP 380	-0-		90	54		110.9				5		
6		381	140		90 06 19	11						6		
7		382	880		90 08 28	11						7		
8		383	1320		90 04 06	11						8		
9		384	1760		89 57 23	11						9		
10		385	2200		89 59 53	11						10		
11	⊙	JP 386	2640		90 01 30	11						11		
12					269 58 24	11		-12	98.8			12		
13												13		
14	Δ	SP 386	2640		89 43 10	11						14		
15					270 16 46	11		-2.0				15		
16		387	2200		89 42 49	11						16		
17												17		

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SS = SIDESHOT

⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Harrison Bay STATE/COUNTY Alaska BOOK NO. 3 PAGE 712 OF
 LINE/LOOP NO. C-81 TYPE SURVEY Vert CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'BRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL							HORIZONTAL		REMARKS		
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR D/A		RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		388	1760		89 48 06							1		
2		389	1320		89 37 00							2		
3		390	850		89 48 23							3		
4		391	410		90 06 56							4		
5	A	392	- 0 -		90	5.4		96.7				5		
6		393	416		89 34 42							6		
7		394	880		89 51 50							7		
8		395	1326		89 45 54							8		
9		396	1760		89 56 22							9		
10		397	2200		89 52 31							10		
11		398	2640		89 57 02							11		
12	⊙	399	3080		89 56 19		7.6		89.2			12		
13					270 03 34							13		
14												14		
15	A	SP399	3080		89 56 28							15		
16					270 03 39		7.6		89.2			16		
17												17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Harrison Bay STATE/COUNTY ALASKA BOOK NO. 3 PAGE 113 OF 113
 LINE/LOOP NO. C-81 TYPE SURVEY VERT CLIENT USGS DATE 30 DY 3 MO 81 YR
 SURVEYOR M. O'GRADY INSTRUMENT DESC/SERIAL NO. T-2 Wild CREW NO. 1186

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input checked="" type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE					HORIZ	INST				
1		SP 400	2640		89 55 43	11						1		
2		401	2200		89 54 19	11						2		
3		402	1760		89 51 21	11						3		
4		403	1320		89 43 03	11						4		
5		404	880		89 31 30	11						5		
6		405	440		89 18 13	11						6		
7	Δ	406	0		90	5.3		96.8				7		
8		407	440		89 12 06	11						8		
9		408	880		89 33 23	11						9		
10		409	1320		89 40 22	11						10		
11		410	1760		89 43 40	11						11		
12		411	2200		89 37 03	11						12		
13	⊙	412	2640		89 39 06	11						13		
14					210 26 51	11	5.2	101.9				14		
15												15		
16												16		
17												17		

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