

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Waikowaiti STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 23 OF \_\_\_\_\_  
 LINE/LOOP NO. 262W TYPE SURVEY \_\_\_\_\_ CLIENT Hushy DATE 13 DY 1 MO 80 YR  
 SURVEYOR Andrew Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

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	LINE
				SLOPE 					HORIZ 	INST				
1									71.4			80312	1	
2		80312	165		87 17 30	11.4	+3.6	75.0					2	
3		80312	✓		292 43 20	11.4							3	
4		TP 1	0		90	5.0	-5.0		70.0				4	
5		TS 1 a	1155		93 23 10	4.0	-72.2		2.8				5	
6		2 a	2475		91 35 40	4.0	-72.9		2.1				6	
7		3 a	3795		91 02 50	4.0	-73.4		1.6				7	
8		4 a	5115		90 46 30	4.0	-73.2		1.8				8	
9		5	6435		90 37 00	4.0	-73.3		1.7				9	
10		1	7755		90 30 50	4.0	-73.6		1.4				10	
11									71.4	=	80312=SP 1		11	
12		SP 1	3960		90 02 10	11.4	+13.1	85.3					12	
13		1	✓		269 58 40	11.4							13	
14		2	2690		89 57 40	11.4	-9.6		75.7				14	
15		3	1320		89 51 50	11.4	-8.3		77.0				15	
16		4	0		90	5.0	-5.0		80.3				16	
17		5	1320		89 42 55	11.4	-4.8		80.5				17	

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

### HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 24 OF \_\_\_\_\_  
 LINE/LOOP NO. 26KW TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 13 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1187

LINE	   	STATION	VERTICAL						ELEVATION		LR OR DI	HORIZONTAL		REMARKS
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD		RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE										
1									85.3				1	
2		SP 6	2640		90 00 20	114		-11.7		73.6				2
3		7	3960		90 06 30	114		-18.1		67.2				3
4		7	✓		269 59 20	114								4
5														5
6		7	3960		90 02 20	114		+24.7	92.8					6
7		7	✓		267 40 30	114								7
8		8	2640		90 16 10	114		-20.7		72.1				8
9		9	1320		90 13 15	114		-16.5		76.3				9
10		10	0		90	5.0		-5.0		87.8				10
11		11	1320		89 55 55	114		-9.8		83.0				11
12		12	2640		89 53 48	114		-6.5		86.3				12
13		13	3960		89 37 00	114		+15.1		107.9				13
14		13+326	4286		89 37 48	114		+17.2		108.3	=			14
15		13+326	✓		290 23 02	114				110.0	=	BATON (uses)		15
16										± 1.7	=	Mistie		16
17														17

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 25 OF \_\_\_\_\_  
 LINE/LOOP NO. 26XL TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

LINE	△ SS ◎	STATION	VERTICAL						HORIZONTAL			REMARKS		
			DISTANCE		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														
2	△	SP 13+178	<del>2462</del> 1442		89 27 23	9.3	-14.2	95.8						
3	△	SP 13+178	✓		870 32 32									
4		SP 14	1320		89 59 10	11.4	-9.2		86.6					
5	π	15	0		90 —	5.0	-5.0		90.8					
6	◎	16	1320		89 47 50	11.4	-6.7		89.1					
7	◎	16	✓		270 12 10	11.4								
8								989	90.0					
9	△	16	2640		89 58 19	11.4	+10.0	<del>88.9</del>						
10	△	16	✓		270 01 30	11.4								
11		17	1320		89 56 40	11.4	-10.7		<del>78.8</del>		88.8			
12	π	18	0		90 —	5.0	-5.0		<del>83.9</del>		93.9			
13		19	1320		89 47 00	11.4	-6.4		<del>82.5</del>		92.5			
14		20	2640		89 37 36	11.4	+5.9		<del>94.8</del>		104.8			
15	◎	20+523	≠ 3163		89 36 45	11.4	+10.1	111.3	109.2					
16	◎	20+523	✓		270 22 56	11.4			109.0	=	Milan (USGS)			
17									+ 0.2	=	Mistie			

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### HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Uainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 26 OF \_\_\_\_\_  
 LINE/LOOP NO. 26XW TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		LR OR DI	HORIZONTAL		REMARKS
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD		RIGHT TURNED HORIZONTAL ANGLE	LINE	
1														
2		SP 20+523	2117		89 15 10	11.4	-1.62	92.2	109.0		Milaw (uses)	1		
3		20+523	✓		270 44 34	11.4						2		
4		21	1320		89 23 10	11.4	+2.7		94.9			3		
5		22	0		90 —	5.0	-5.0		87.2			4		
6		23	1320		89 43 40	11.4	-5.1		87.1			5		
7		23+1155	±2475		89 51 09	11.4	-5.0		87.2			6		
8		23+1155	✓		270 08 30	11.4						7		
9												8		
10		23+1155	4125		89 43 20	11.4	77.4 -8.8 ✓	77.4 ✓			78.4	9		
11		23+1155	✓		270 16 25	11.4						10		
12		24	3960		89 44 55	11.4	+5.9		<del>83.9</del>		83.3	11		
13		25	2640		90 12 50	11.4	-21.3		56.1			12		
14		26	1320		90 10 20	11.4	-15.4		62.0			13		
15		26+	0		90 —	5.0	-5.0		72.4			14		
16		27	1320		89 08 10	11.4	+8.5 ✓		85.9			15		
17		28	2640		89 26 50	11.4	+14.1		91.5			16		

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### HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 27 OF \_\_\_\_\_  
 LINE/LOOP NO. Z62W TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

LINE	   	STATION	VERTICAL						HORIZONTAL			REMARKS	
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	ELEVATION		LR OR DR	RIGHT TURNED HORIZONTAL ANGLE		LINE
			SLOPE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS				INST	ROD				
1												1	
2		SP 29	396.0		89 33.45	11.9	+19.0	77.4	96.4			2	
3		SP 29	✓		270 26.00	11.9						3	
4												4	
5		SP 29	810		89 56.90	11.9	+10.6	107.0				5	
6		29	✓		270 03.00	11.9			101.8			6	
7		80314	0		90 —	5.2	-5.2		101.8			7	
8		80314	0		90 —	5.2	-5.2		103.4	=	80314	8	
9		80314	0		270 —	5.2	-5.2		106.8	=	80314	9	
10									± 1.6	=	Mistie	10	
11												11	
12												12	
13												13	
14												14	
15												15	
16												16	
17												17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 28 OF \_\_\_\_\_  
 LINE/LOOP NO. 2626 TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

LINE	△ ⊥ SS ⊙	STATION	VERTICAL						ELEVATION		L/R OR D/I	HORIZONTAL		REMARKS
			DISTANCE	<input type="checkbox"/> FEET	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD		RIGHT TURNED HORIZONTAL ANGLE	LINE	
				<input type="checkbox"/> METERS										
1														
2	A	80314	0		96 ——— 5.2		+5.2	106.9				80314		
3	A	80314	0		270 ——— 5.2									
4	⊥	80314	0		90 ——— 5.2		-5.2		101.7					
5	⊙	29	810		89 56 47 11.4		-10.5-2		-96.3					
6	⊙	29	✓		270 00 00 11.4									
7														
8	A	SP 29	2145		89 35 10 11.4		-4.1	91.9						
9	A	29	✓		270 29 30 11.4									
10		30	825		88 56 00 11.4		+4.2		96.1					
11	⊥	30 + 825	0		90 ——— 5.0		-5.0		86.9					
12		31	495		90 30 10 11.4		-15.9		76.2					
13		32	1815		90 26 00 11.4		-25.1		66.8					
14	⊙	33	3135		90 17 25 11.4		-27.2		64.7					
15	A	33	✓		269 42 15 11.4									
16														
17														

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 29 OF \_\_\_\_\_  
 LINE/LOOP NO. 26XW TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		LR OR DI	RIGHT TURNED HORIZONTAL ANGLE	LINE	REMARKS	
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST					ROD
				SLOPE	HORIZ										
1													1		
2		SP 33	3960			89 13 20	11.4	126.6		91.1			2		
3		33	✓			269 46 20	11.4						3		
4		34	2640			90 17 10	11.4	+25.4		91.4	65.7		4		
5		35	1320			90 20 50	11.4	-19.4			41.7		5		
6		36	0			90	5.0	-5.0			86.1		6		
7		37	1320			89 04 00	11.4	+1.0			92.1		7		
8		38	2140			89 07 40	11.4	-1.0			90.1		8		
9		38a	✓			270 13 15	11.4						9		
10													10		
11		38	-3960			89 28 05	11.4	-25.6		64.1			11		
12		38	✓			270 31 45	11.4						12		
13		39	2640			89 25 20	11.4	+15.2			79.3		13		
14		40	1320			89 15 10	11.4	+5.8			69.9		14		
15		41	0			90	7.50	-5.0			59.1		15		
16		42	1320			89 39 10	11.4	-3.4			60.7		16		
17		43	2640			89 46 40	11.4	+3.4			67.5		17		

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### HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 30 OF \_\_\_\_\_  
 LINE/LOOP NO. 26XW TYPE SURVEY \_\_\_\_\_ CLIENT Arday DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

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		L/R OR DI		RIGHT TURNED HORIZONTAL ANGLE	LINE
				SLOPE 					HORIZ 	INST				
1									64.1				1	
2	0	SP 44	396.0		89 45 20	11.4		45.6		69.7			2	
3	0	44	V		270 14 17	11.4							3	
4													4	
5	Δ	44	269.0		90 06 36	11.4	+16.4		85.9				5	
6	Δ	44	✓		269 53 10	11.4							6	
7		46	132.0		89 49 50	11.4	-7.5		78.4				7	
8	⊥	46	0		90 —	5.0	-5.0		80.9				8	
9		47	132.0		90 28 45	11.4	-9.5		76.4		65.2		9	
10	0	48	269.0		90 05 50	11.4	-15.8		70.1				10	
11	0	48	✓		269 53 55	11.4							11	
12													12	
13	Δ	48	181.5		90 21 30	11.4	+22.8	92.6					13	
14	Δ	48	✓		269 38 10	11.4							14	
15		49	495		89 38 10	11.4	-8.3		84.3				15	
16	⊥	50 49+495	0		90 —	5.0	-5.0		87.6				16	
17		50	82.5		89 57 30	11.4	-10.8		81.9				17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Wainwright STATE/COUNTY Alaska BOOK NO. \_\_\_\_\_ PAGE 31 OF \_\_\_\_\_  
 LINE/LOOP NO. 26XW TYPE SURVEY \_\_\_\_\_ CLIENT Husky DATE 14 DY 1 MO 80 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. 1182

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	LINE
				SLOPE					HORIZ	INST				
1								92.6				1		
2		SP 51	2145		89 49 50	11.4	-5.1		87.5			2		
3		80315	2899		89 54 03	11.4	-6.4		87.6			3		
4		80315	2879		270 05 36	11.4			86.2	=	80315	4		
5									± 1.4	=	Mistie	5		
6	1											6		
7	A	80315	3226		89 46 30	11.4	-1.5	84.6	86.2	=	80315	7		
8	A	80315	✓		270 13 30	11.4						8		
9		TS 1	2640		89 46 10	11.4	-7.8		76.8			9		
10		2	1320		89 44 10	11.4	-5.3		79.3			10		
11		3	0		90	5.6	-5.0		79.6			11		
12		4	1320		90 14 10	11.4	-16.8		67.8			12		
13		5	2640		90 17 20	11.4	-24.7		59.9			13		
14		6	3960		90 03 30	11.4	-15.4		69.2			14		
15												15		
16												16		
17												17		

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