

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY ALASKA BOOK NO. 3 PAGE 1 OF 73
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT Husky DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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		LINE
				SLOPE					HORIZ	INST			
1	Δ	INSTRUMENT SET OVER O.M. 78288								1865.3		1	REFERENCE: O.A.S. SURVEY
2	-	E.V.P. 824 LINE R3 XS										2	
3	⊕	BM 78-288 824	0		—	+57	-	+5.7	1871.0			3	
4		822	220		93 07 25	-2	-12.0	-14.0		1857.0		4	
5		820	440		93 35 10	-147	-27.5	-42.2		1828.8		5	
6		818	660									6	
7		816	880		93 07 50	-52	-48.1	-53.3		1817.7		7	
8		814	1100									8	
9		812	1320		92 36 42	-52	-60.1	-65.3		1805.7		9	
10		810	1540									10	
11		808	1760		92 07 50	-52	-65.0	-70.2		1800.8		11	
12		806	1980									12	
13		804	2200		91 37 49	-70	-62.6	-72.6		1798.4		13	
14		802	2420		91 10 08	-5	-49.4	-54.5		1816.5		14	
15	○	800	2640		90 57 42	-5	-44.3	-49.3		1821.7		15	90 59 15 -4
16	-				269 01 45	-	-44.7	-49.3				16	268 59 44 4
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 HOWARD PASS STATE/COUNTY ALASKA BOOK NO. _____ PAGE 8 OF 8
 LINE/LOOP NO. R3 X3 TYPE SURVEY _____ CLIENT Husky DATE 25 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL							HORIZONTAL		REMARKS		
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR DI		RIGHT TURNED HORIZONTAL ANGLE	
			SLOPE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS					INST	ROD				
1												1		
2		1158	9240	9315.59	89 30 05	+6.0	04		09		V ₁	000 00 14	2	180 07 55
3					270 29 20		40		93		L	180 09 09	3	
4		1242 +				-5.6	07		31				4	
5					269 15 38	-6.0	79		15		V ₂	180 00 10	5	
6		1280	4180	4079.51	90 43 40		9	51	55		L ₁	00 08 05	6	180 07 35
7							4079	51	59				7	
8									9315	59			8	
9		1242 +	4180	4079.51	89 16 20	+4.0					V ₁	000 00 20	9	177 59 30
10					270 43 02						L	177 59 50	10	
11		1280				-5.6			04				11	
12					97 26 35	-4.0			45		V ₂	180 00 16	12	
13		B.M. 79		4536.88	272 32 50				53		R	357 59 42	13	177 59 26
14									36				14	
15									6	88			15	
16									4536	88			16	
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA MISHEGUK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 75 OF 3
 LINE/LOOP NO. RSXS TYPE SURVEY _____ CLIENT MUSKIE DATE 21 DAY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R OR D/I	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		848	2640 ✓		90 32 42	5			1890.7			1		
2	-				269 26 48	-	+30.2 ✓	1920.9 ✓				2	1920.9	
3		850	2420									3		
4		852	2200		90 35 20	9 ²	-26.7	1894.2				4		
5		854	1980									5		
6		856	1760		92 36 44	4 ²	-5.9	1915.0	1891			6		
7		858	1540									7		
8		860	1320		90 36 08	4 ²	-18.0	1902.9				8		
9		862	1100									9		
10		864	880		90 38 08	4 ²	-14.0	1906.9				10		
11		866	660									11		
12		868	440		90 44 38	4 ²	-9.9	1911.0				12		
13		870	220									13		
14		872	0		-	5 ⁶	-5.6	1915.3				14		
15		874	220									15		
16		876	440		90 20 55	5 ²	-7.9	1913.0				16		
17		878	660									17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA MISHNEGUK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 4 OF _____
 LINE/LOOP NO. R3X5 TYPE SURVEY _____ CLIENT Husky DATE 21 DY 3 MO 79 YR
 SURVEYOR W.D. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R 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									1920.9				1	
2		880	880		89 11 15	5 ²		+5.8		1926.7			2	
3		882	1100										3	
4		884	1320		89 18 15	5 ²		+10.9		1931.8			4	
5		886	1540										5	
6		888	1760		89 18 45	5 ²		+16.0		1936.9			6	
7		890	1980										7	
8		892	2200 ✓		89 21 15	5 ²							8	
9	-	894			89 21 49	5		+24.5					9	
10		896			270 38 03	-		+19.5 ✓		1940.4			10	1940.4
11													11	
12													12	
13		892	1944 ✓		90 42 37	+5		+24.1					13	
14	-				269 17 19	-		+29.0 ✓		1969.4			14	
15		894	1724 ✓										15	
16		896	1504 ✓		91 02 35	9 ⁵		-36.8		1932.6			16	CREEK BED
17		898	1284 ✓										17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA MISHEGOR MTN STATE/COUNTY ALASKA BOOK NO. 3 PAGE 5⁷⁷ OF
 LINE/LOOP NO. R3YS TYPE SURVEY CLIENT Husky DATE 21 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		L/R OR DJ	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 	HORIZ 										
1									1969.4			1		
2		900	1064 ✓			91 02 25	95		-28.8		1940.6		2	
3		902	844 ✓										3	
4		904	624 ✓			90 58 20	92		-14.8		1954.6		4	
5		906	404 ✓										5	
6		908	184 ✓			91 06 32	42		-7.8		1961.6		6	
7		⊗ 909 + 74	0			-	56		-5.6		1963.8		7 INT.	
8		⊙ 1684 L-R6XW	110			88 09 50	5		-14.9		1954.5		8 VP. 909 + 74 L-R3XS	
9		1636 L-R6XW	110			89 03 20	2		-0.2		1969.2		9 VP. 1635 L-R6XW	
10		910	36 ✓										10	
11		912	256 ✓			89 46 15	52		-4.2		1965.2		11 S.S. BM. # 79311	
12		914	476 ✓									2600'	12 83 03 23 10	
13		916	696 ✓			89 31 28	52		+0.6		1970.0		13 27.6 52 40 -	
14		918	916 ✓										14	
15		⊙ 920	1136 ✓			89 39 40	5	+6.7					15	
16		-				270 20 50	-		+1.8 ✓		1971.2		16 1971.3	
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA MISHEGON MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 6 OF 78
 LINE/LOOP NO. KSYS TYPE SURVEY _____ CLIENT Husky DATE 2 LDY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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	<input type="checkbox"/> FEET <input type="checkbox"/> METERS HORIZ					INST	ROD			
1		INTERSECTION:										1	
2		1635, LINE R6 X21										2	
3		909 + 74.83XS	0						1969.4			3	SEE L-14 P6.3
4	SS	BAS 79311	2600		83-08-23	1010						4	
5					876.5	1010						5	
6					↑	↑			2272.0		REFERENCE G.I.S. SURVEY	6	
7					(83 16 12	+0°	+304.7	+304.7	2273.9			7	
8					276 43 13	+0°	+304.3	+304.3	+ 1.9		MISCLOSURE	8	
9												9	
10												10	
11												11	
12												12	
13												13	
14												14	
15												15	
16												16	
17												17	

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SYMBOLS

= BACKSIGHT

= INSTRUMENT-SET-UP

SS = SIDESHOT

= FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. 3 PAGE 79 OF 7
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT HURST DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R 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		920	1980 ✓		90 44 55 +5	+25.9	+30.9		1971.2		REFERENCE: P. 5 LINE 15, THIS BOOK	1		
2	-				269 14 29	-	+26.2	+31.2	2002.3			2		
3		922	1760									3		
4		924	1540		90 53 40 -42	-24.0	-28.2		1974.2			4		
5		926	1320									5		
6		928	1100		91 05 37 -4	-21.0	-25.0		1977.3			6		
7		930	880									7		
8		932	660		91 15 20 -42	-14.5	-18.7		1983.6			8		
9		934	440									9		
10		936	220		90 52 36 -4	-3.4	-7.4		1974.9			10		
11		938	0	←	-	56	-	-5.6	1996.7			11		
12		940	220									12		
13		942	440									13		
14		944	660		89 27 12 -52	+6.3	+1.1		2003.4			14		
15		946	880									15		
16		948	1100		88 59 32 -52	+17.3	+14.1		2016.4			16		
17		950	1320									17		

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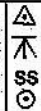








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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Howard Pass STATE/COUNTY ALASKA BOOK NO. _____ PAGE 8 OF _____
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT Husky DATE 24 DY 3 MO 72 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE		STATION	VERTICAL						ELEVATION		L/R OR D/I	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										2002.3			1		
2		952	1540			88 55 52	4	+28.7	+24.7		2027.0			2	
3		954	1760 ✓			88 45 35	5	+38.1	+33.1		2035.3			3	2035.6
4	-					271 14 00	-	+37.9	+32.9					4	
5														5	
6		954	1760 ✓			90 51 56	+5	+26.6	+31.6	2067.0				6	
7	-					269 07 48	-	+26.7	+31.7					7	
8		956	1540											8	
9		958	1320			91 08 00	4 ²	-26.1	-30.3		2036.7			9	
10		960	1100			91 03 53	4 ²	-20.4	-24.6		2042.4			10	
11		962	880											11	
12		964	660			91 16 58	4 ²	-14.8	-19.0		2048.0			12	
13		966	440											13	
14		968	220			90 38 21	4	-2.5	-6.5		2060.5			14	
15		970	0			-	56	-	-5.6		2061.4			15	
16		972	220											16	
17		974	440			90 03 50	5.2	-0.5	-5.7		2061.3			17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. _____ PAGE 81 OF _____
 LINE/LOOP NO. R3 X3 TYPE SURVEY _____ CLIENT LUVRY DATE 24 DY 3 MO 72 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R 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									2067.0				1	
2		976	660		89 19 28	4	+ 7.8	+ 3.8		2070.8			2	
3		978	890										3	
4		980	1100		88 51 19	2	+ 22.0	+ 20.0		2087.0			4	
5		982	1320										5	
6		984	1540		88 41 50	5 ²	+ 35.0	+ 29.8		2096.8			6	
7		986	1760										7	
8		988	1880		88 49 48	15	+ 40.4	+ 25.4		2092.4			8	
9		990	2200										9	
10		992	2420		88 49 18	5 ²	+ 49.8	+ 44.6		2111.6			10	
11		994	2690										11	
12		996	2860		88 49 18	12 ¹	+ 58.8	- 46.7		2020.3			12	
13		998	3080										13	
14		999	3190 ✓		88 ^{49 05} 48 36	5	+ 65.8	+ 60.8		2127.7			14	2128.7
15	-				271 10 34	-	+ 65.5	+ 60.5					15	
16													16	
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. _____ PAGE 10 OF 82
 LINE/LOOP NO. R3 X3 TYPE SURVEY _____ CLIENT HURST DATE 24 DY 3 MO 72 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R 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 										
1		997	2530.1		91 03 25	+5	+46.7	+51.7	2179.6			1		
2	-				268 56 00	-	+47.1	+52.1				2		
3		1000	2420		91 07 56	-4	-47.8	-51.8		2127.8		3		
4		1002	2200									4		
5		1004	1980		91 09 50	-4 ²	-40.2	-44.4		2135.2		5		
6		1006	1760		91 26 42	-4 ²	-44.4	-48.6		2131.0		6		
7		1008	1540		91 25 42	-4 ⁰	-38.4	-42.4		2127.2		7		
8		1010	1320									8		
9		1012	1100		91 25 50	-14	-27.5	-41.5		2138.1		9		
10		1014	880									10		
11		1016	660		91 47 28	-4 ²	-20.6	-24.8		2154.8		11		
12		1018	440									12		
13		1020	220		92 53 00	-42	-11.1	-15.3		2164.3		13		
14		1022	0		-	-56	-	-5.6		2174.0		14		
15		1024	220		90 15 50	-4	-1.0	-5.0		2174.6		15		
16		1026	440									16		
17		1028	660		88 30 15	-52	+17.2	+12.0		2191.6		17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY ALASKA BOOK NO. 3 PAGE 11 OF 83
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT MUSKY DATE 24 DAY 3 MO 10 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		L/R OR D/I	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									2179.6			1		
2		1030	880									2		
3		1032	1100			88 31 05	52	+21.2	+16.0		2195.6		3	
4		1034	1320										4	
5		1036	1540			88 15 22	52	+46.9	+41.7		2221.3		5	
6		1038	1760										6	
7		1040	1980			88 03 23	52	+67.2	+62.0		2117.6	22 41.6	7	
8		1042	2200										8	
9		1044	2420			87 53 20	52	+89.1	+83.9		2263.5		9	
10		1046	2640										10	
11		1048	2860			87 50 08	52	+108.0	+102.8		2292.4		11	
12	⊙	1049	2970			87 49 33	5	+113.5	+108.5		2287.9		12	2289.5
13						272 10 48	-	+113.0	+108.0				13	
14													14	
15													15	
16													16	
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY Alaska BOOK NO. _____ PAGE 84 OF 12
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT Harvey DATE 29 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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	1049	2860 ✓		93 51 22	+5	+192.3	+197.3	2485.3			1		
2	-				266 08 30	-	+192.4	+197.4				2		
3		1050	2750									3		
4		1052	2530		94 17 25	-42	-189.3	-193.5			2291.8	4		
5		1054	2310									5		
6		1056	2090		94 59 35	-4	-181.9	-185.9			2299.4	6		
7		1058	1880									7		
8		1060	1690		95 47 05	-42	-166.3	-170.5			2314.8	8		
9		1062	1420 1325									9		
10		1064	1210		96 27 05	-117	-136.0	-147.7			2337.6	10		
11		1066	990									11		
12		1068	770		96 33 15	-42	-87.9	-92.1			2393.2	12		
13		1070	550									13		
14		1072	330		96 09 20	-42	-35.4	-39.6			2445.7	14		
15		1074	110									15		
16	Δ	1075	0		-	56	-	-5.6			2479.7	16		
17		1076	110		86 35 15	-52	+6.5	+1.3			2486.6	17		

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY ALASKA BOOK NO. _____ PAGE 13 OF _____
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT HURKS DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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		RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE	HORIZ					INST				ROD
1									2485.3			1		
2		1078	330									2		
3		1080	550			88 40 27	-10	+12.7	+2.7	2488.0		3		
4		1081	660 ✓			88 41 57	-13	+15.0	+2.0	2487.7		4	2488.8	
5	-					271 17 42	-	+15.7	+2.7			5		
6												6		
7			2530 ✓			87 37 55	+5	-104.5	-99.5	2388.3		7		
8	-					272 21 38	-	-104.2	-99.2			8		
9		1082	2420									9		
10		1084	2200			88 36 38	-2	+53.3	+61.3	2439.6		10		
11		1086	1980			89 19 32	-42	+23.3	+19.1	2407.4		11		
12		1088	1760			89 30 38	-42	+15.0	+10.8	2399.1		12		
13		1090	1540									13		
14		1092	1320			89 34 15	-42	+9.9	+5.7	2394.0		14		
15		1094	1100									15		
16		1096	880			90 01 00	-42	-0.3	-4.5	2383.8		16		
17		1098	660									17		

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. 3 PAGE 14 OF 86
 LINE/LOOP NO. R2 XS TYPE SURVEY _____ CLIENT HVAST DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDIKT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> \odot	STATION	VERTICAL						ELEVATION		L/R OR DJ	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									2388.3			1		
2		1100	440		90 09 00	42	-1.2	-5.4		2382.9		2		
3		1102	220									3		
4		π 1104	0			56	-	-5.6		2382.7		4		
5		1106	220									5		
6		1108	440		91 00 45	52	-7.8	-13.0		2375.3		6		
7		1110	660									7		
8		1112	880		91 26 25	15	-22.1	-37.1		2351.2		8		
9		1114	1100									9		
10		1116	1320		91 26 25	29	-33.2	-62.2		2326.1		10		
11		1118	1540									11		
12		1120	1760		91 28 32	22	-45.3	-67.3		2321.0		12		
13		1122	1980									13		
14		1124	2200		91 09 40	52	-43.9	-49.1		2339.2		14		
15		1126	2420									15		
16		\odot 1128	2640 ✓		90 22 50	5	-17.5	-22.5		2365.6		16	2367.4	
17		-			269 36 48	-	-17.8	-22.8				17		

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SYMBOLS Δ = BACKSIGHT π = INSTRUMENT SET-UP SS = SIDESHOT \odot = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY ALASKA BOOK NO. 3 PAGE 15 OF 87
 LINE/LOOP NO. R3 X5 TYPE SURVEY _____ CLIENT Hukey DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		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	L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	
			SLOPE 	HORIZ 									
1	Δ	1028	1540		90 36 35	+5	+16.4	+21.4	2387.1			1	
2	+				269 22 52	-	+16.6	+21.6				2	
3		1030	1320									3	
4		1032	1100		91 19 25	-42	-25.4	-29.6		2357.5		4	
5		1034	880									5	
6		1036	660		91 34 00	-42	-18.0	-22.2		2364.7		6	
7		1038	440									7	
8		1040	220		92 16 08	-42	-8.7	-12.9		2374.2		8	
9	π	1042	0		-	-59	-	-5.4		2381.7		9	
10		1044	220		90 44 55	-15	-2.9	-17.9		2369.2		10	
11		1046	440									11	
12		1048	660		94 52 55	-52	-56.2	-61.4		2325.7		12	
13		1050	880									13	
14		1052	1100		93 37 33	-52	-69.6	-74.8		2312.3		14	
15		1054	1320									15	
16		1056	1540		91 35 30	-52	-42.8	-48.0		2339.1		16	
17												17	

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. PAGE 16 OF 88
 LINE/LOOP NO. R3 XS TYPE SURVEY CLIENT Husky DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. CREW NO. 1184

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		
1											23532	
2	⊙	1958	1760 ✓		90 08 08	-5	-30.7	-35.7		2351.1	20 59 53	
3	-				268 58 09	-	-31.2	-36.2			268 58 47	
4											21 00 15 ✓	
5	Δ		2200 ✓		87 00 28	+5	-114.8	-109.8	2241.4		268 59 05 ✓	
6	-				272 59 13	-	-114.6	-109.6				
7		1060	1980		87 06 90	-5	+99.8	+94.8		2336.2		
8		1062	1760		88 16 16	-5	+53.1	+48.1		2289.5		
9		1064	1540		90 39 38	-5	-17.8	-22.8		2218.6		
10		1066	1320		93 03 38	-5	-20.5	-25.5		2165.9		
11		1068	1100		93 14 03	-25	-62.1	-87.1		2154.3		
12		1070	880									
13		1072	660		93 02 20	-15	-35.0	-50.0		2191.4		
14		1074	440									
15		1076	220		92 56 23	-4	-11.3	-15.3		2226.1		
16	Δ	1078	0		-	-56	-	-5.6		2235.8		
17		1080	220									

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY Alaska BOOK NO. 3 PAGE 17 OF 69
 LINE/LOOP NO. B2 XS TYPE SURVEY _____ CLIENT Husky DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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			RIGHT TURNED HORIZONTAL ANGLE	LINE	
				SLOPE					HORIZ	INST				ROD
1									2241.4			1		
2		1092	440		88 46 08	52	+9.5	+4.3		2245.7			2	
3		1184	660		88 56 40	4	+12.2	+8.2		2249.6			3	
4		1186	880		88 56 40	X							4	
5		1188	1100		88 58 52	52	+19.6	+14.4		2255.8			5	
6		1190	1320										6	
7	⊙	1192	1540 ✓		89 00 25	10	+26.7	+25.7		2267.2			7	2267.3
8					270 59 50	-	+26.8	+25.8					8	
9													9	
10	△	1192	2040 ✓		89 54 53	+10	-3.9	-2.9	2264.4				10	
11					270 04 40	-	-3.6	-2.6					11	
12		1194	2420										12	
13		1196	2200		90 01 05	42	-0.7	-4.9		2259.5			13	
14		1198	1980		90 00 18	X							14	
15		1200	1760		90 00 18	42	-0.2	-4.4		2260.0			15	
16		1202	1540										16	
17		1204	1320		90 08 00	42	-3.1	-7.3		2257.1			17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. 3 PAGE 90 OF 18
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT HUSKIE DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R OR DI	HORIZONTAL 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									2264.4			1		
2		1206	100									2		
3		1208	880			90 13 38	42	3.5	7.7		2256.7		3	
4		1210	660									4		
5		1212	440			90 16 40	42	2.1	6.3		2258.1		5	
6		1214	220									6		
7		1216	0			—		56	—	5.6	2258.8		7	
8		1218	220									8		
9		1220	440			90 12 10	52	1.6	6.8		2257.6		9	
10		1222	660									10		
11		1224	880			90 15 17	52	3.9	9.1		2255.3		11	
12		1226	1100									12		
13		1228	1320			90 08 15	52	3.2	8.4		2256.0		13	
14		1230	1540									14		
15		1232	1760			90 02 48	52	1.9	7.1		2257.3		15	
16		1234	1980									16		
17		1836	2200			89 59 59	52	± 0.0	5.2		2259.2		17	






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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Howard Pass STATE/COUNTY Alaska BOOK NO. 3 PAGE 19 OF 91
 LINE/LOOP NO. R3 x3 TYPE SURVEY _____ CLIENT Husky DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 SS	STATION	VERTICAL						ELEVATION		L/R 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 	HORIZ 										
1										2264.4			1	
2		1238	2420										2	
3		1240	2640			89 57 18	52	+2.1	-3.1		2261.3		3	
4		1242	2860 ✓			89 50 35	5	+7.8	+2.8		2267.0		4	2269.9
5	-					270 08 45	-	+7.3	+2.3				5	
6													6	
7			2420 ✓			87 58 49	+5	-85.0	-80.0	2187.1			7	87 59 10 5
8	-						-	-84.7	-79.7				8	272 00 25
9		1244	2200			88 25 47	42						9	
10		1246	1940			88 25 47	-42	+54.3	+50.1		2231.1 2227.0		10	
11		1248	1760			88 33 00	-42	+44.5	+40.3		2227.4		11	
12		1250	1590										12	
13		1252	1320			88 50 40	-92	+26.6	+22.4		2209.5		13	
14		1254	1160										14	
15		1256	880			89 03 43	-92	+14.4	+10.2		2197.3		15	
16		1258	660										16	
17		1260	440			89 59 10	4	+0.1	-3.9		2183.2		17	

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA HOWARD PASS STATE/COUNTY ALASKA BOOK NO. 3 PAGE 92 OF
 LINE/LOOP NO. R3 XS TYPE SURVEY CLIENT HEAVY DATE 24 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. CREW NO. 1184

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				INST	ROD					
1									2187.1			1		
2		1262	220									2		
3	<input checked="" type="checkbox"/>	1264	0			56	-	-5.6		2181.5			3	
4		1266	220									4		
5		1268	440			89 02 03	52	+7.4	+2.2	2189.3			5	
6		1270	660									6		
7		1272	880			89 02 03	52	+4.8	+9.6	2196.7			7	
8		1274	1100									8		
9		1276	1320			89 04 34	52	+21.3	+16.1	2203.2			9	
10		1278	1540									10		
11	<input type="checkbox"/>	1280	1760 ✓			89 01 48	5	+29.8	+24.8	2211.8			11	2215.1
12						27 05 47	-	+29.6	+24.6				12	
13	<input type="checkbox"/>												13	
14	-												14	
15	<input checked="" type="checkbox"/>	1280					5.6	-	+5.6	2217.4			15	
16	<input type="checkbox"/>	B.M. 7931B		4536.88	97 23 18	75	+206.7	+199.2		2421.0	REFERENCE: B.A.S. SURVEY		16	
17	-				272 36 05	-	208.9	+198.4		2416.2			17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

21

GSI AREA MISHEGOK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 1 OF 8
 LINE/LOOP NO. R3X3 TYPE SURVEY _____ CLIENT _____ DATE 22 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

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	HORIZ										
1		BM 79311									✓	00 00 51	1		
2	-										L	193 15 25	2		
3		BM 78288										193-14-34	3		
4		B.O.L 800	2640' [⊙]								V ²	180 00 98	4		
5	-										R	13 15 28	5		
6												193-14-40	6	193-14-37	
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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HORIZONTAL AND VERTICAL SURVEY NOTES

22

GSI AREA MISHNEK MTD STATE/COUNTY ALASKA BOOK NO. _____ PAGE 2 OF 8
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT _____ DATE 22 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		HORIZONTAL		REMARKS
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD	L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	
			SLOPE	HORIZ									
1		BM. 79311								V	00 00 15	1	
2	-									L	13 16 50	2	
3		Bm. 79-288 824									13-16-35	3	
4		909 + 74								V	180 00 20	4	
5	-	INT.								R	193 16 55	5	
6											13-16-25	6	13-16-30
7												7	
8		Bm. 824			90 36 00					V	00 00 23	8	
9	-				9440.89	269 23 55				V	180 00 26	9	
10		INT- 909+74										10	
11	SS	1619 + 58	1702°							L	93 01 36	11	
12	-									R	273 01 48	12	93-01-18
13	SS	Bm. 79311	2600°							L	108 50 03	13	
14	-									R	288 50 12	14	108-49-43
15		920	1136°			89 34 05				L	169 57 55	15	
16	-					270 25 50				R	349 59 03	16	169-57-35
17												17	

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

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA MISHEGUK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 3 OF 8
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT _____ DATE 23 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R OR D/I	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										
1		909 + 74			90 25 38	6					V ¹	00 00 20	1	
2	-	INT.			269 35 35	-					L	168 04 22	2	
3		920										168-04-02	3	
4		938			89 19 22	4					V	180 00 20	4	
5	-				270 39 44	4					R	348 04 30	5	
6												168-04-10	6	168-04-06
7													7	
8		920			90 42 08	6					V	00 00 18	8	
9	-				269 17 00	-					L	174 29 22	9	
10		938										174-29-04	10	
11		999			89 50 08	115					V ²	00 00 20	11	
12	-				271 09 30	-					R	354 29 26	12	
13												174-29-06	13	174-29-05
14													14	
15													15	
16													16	
17													17	

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

HORIZONTAL AND VERTICAL SURVEY NOTES

24

GSI AREA MISHEGUK MTA STATE/COUNTY ALASKA BOOK NO. _____ PAGE 4 OF 8
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT _____ DATE 23 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R OR D/I	HORIZONTAL		REMARKS
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD		RIGHT TURNED HORIZONTAL ANGLE	LINE	
			SLOPE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS HORIZ										
1		938			91 00 30		115					00 00 27	1	
2	-				268 58 40		-					184 24 02	2	
3		999										184-23-35	3	
4		1022			88 58 32		6					180 00 41	4	
5	-				271 01 20		-					04 24 08	5	
6												184-23-27	6	184-23-31
7													7	
8		999			91 02 48	6				V		00 00 37	8	
9	-				268 56 42	-				L		193 45 16	9	
10		1022										193-44-39	10	
11		1049			87 50 49	6				V		180 00 50	11	
12	-				272 09 20	-				R		13 45 23	12	
13												193-44-33	13	193-44-36
14													14	
15													15	
16													16	
17													17	

TI-23471B

WORKED BY _____ CHECKED BY 1ST _____ 2ND _____

SYMBOLS

= BACKSIGHT

= INSTRUMENT SET-UP

SS = SIDESHOT

= FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

25

GSI AREA MISHKEGAK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 5 OF 8
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT _____ DATE 25 DY 3 MO 79 YR
 SURVEYOR W.D. HELANDER INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		L/R 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 <small>CHAINED</small>	HORIZ <small>2970</small>										
1		1032		<input checked="" type="checkbox"/> D		92-13-20					V ₁	25	1	
2		1049		<input checked="" type="checkbox"/> R		267-46-20					D	187-13-47	2	
3		1076	<small>CHAINED 2970</small>	-								187-13-22	3	
4				<input checked="" type="checkbox"/> D		⁰²⁻⁵¹⁻¹⁴ 86-08-46					V ₂	180-00-20	4	
5				<input checked="" type="checkbox"/> R		273-50-50					R	07-13-48	5	
6												187-13-28	6	187-13-25
7													7	
8													8	
9													9	
10													10	
11		1049		<input checked="" type="checkbox"/> D		93-52-24					V ₁	20	11	
12				<input checked="" type="checkbox"/> R		266-07-05					D	193-54-36	12	
13		1076										193-54-16	13	
14		1081	<small>CHAINED 550</small>	<input checked="" type="checkbox"/> D		²⁰⁻⁰¹⁻²⁵ 89-58-55					V ₂	180-00-29	14	
15				<input checked="" type="checkbox"/> R		270-00-52					R	13-54-39	15	
16												193-54-10	16	193-54-13
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

26

GSI AREA MISHEGUK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 6 OF 8
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT _____ DATE 25 DY 3 MO 79 YR
 SURVEYOR W.P. HELANDER INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	 	STATION	VERTICAL						ELEVATION		HORIZONTAL		REMARKS
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST	ROD	L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	
			SLOPE	HORIZ									
1		1076			D 89-58-27						V	29	
2					R 270-00-57						D	179-39-57	
3		1081										179-39-28	
4		1142	6710	6707.80	D 90-54-05						V	180-00-37	
5					R 269-05-30						R	359-40-04	
6												179-39-27	179-39-27
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													

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

HORIZONTAL AND VERTICAL SURVEY NOTES

27

ESPAREA Howard Pass STATE/COUNTY ALASKA BOOK NO. _____ PAGE 7 OF B
 LINE/LOOP NO. R3 XS TYPE SURVEY _____ CLIENT HUSKY DATE 25 DY 3 MO 7 YR
 SURVEYOR B. BENEDIAT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> K <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		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	L/R OR DI	RIGHT TURNED HORIZONTAL ANGLE	
				SLOPE									
1	Δ	1091			89 05 44	+6.0		06		V	00 00 14	1	179 00 34
2	-		6710	6707.80	270 53 30			67		L	179 00 48	2	
3	K	1142				5.6		70				3	
4	⊙	1158	1760	1755.50	91 03 08	+		07		V	180 00 14	4	
5	-				268 56 18	-6.0		7	80	R	359 00 55	5	179 00 41
6								6707	80			6	
7												7	
8	Δ	1142			88 59 28	+6.0		01		V	000 00 11	8	174 52 34
9	-		1760	1755.50	271 00 20			17		L	174 52 45	9	
10	K	1158				5.6		75				10	
11	⊙		9240	9315.59	90 31 45	-4.0		55		V	180 00 09	11	
12	-	1242 +			259 27 33			5	50	R	354 52 40	12	174 52 31
13								1755	50			13	
14												14	
15												15	
16												16	
17												17	

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SYMBOLS

Δ = BACKSIGHT

K = INSTRUMENT SET-UP

SS = SIDESHOT

⊙ = FORESIGHT

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA MISHKOOK MTN STATE/COUNTY ALASKA BOOK NO. _____ PAGE 2 OF _____
 LINE/LOOP NO. R3XS TYPE SURVEY _____ CLIENT HUSKY DATE 21 DY 3 MO 79 YR
 SURVEYOR B. BENEDICT INSTRUMENT DESC/SERIAL NO. _____ CREW NO. 1184

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> \odot	STATION	VERTICAL						ELEVATION		L/R OR DJ	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	HORIZ										
1		INSTRUMENT SET OVER E.M. 78288	TAKE OFF	BAS	78288					1865.3			1	79-288	
2	Δ	B.M. E 824, R3XS	0			-	+5.6	-	+5.6	1870.9			2	L-R3XS STARTED AT	
3		826	220			89 33 20	52		-3.5	1867.4			3	IRON PIPE SP770+505	
4		828	440			89 33 20	52		-1.8	1869.1			4	L-R3	
5		830	660										5	VP 824 L-RXS common	
6		832	880			90 09 55	8		-10.5	1860.4			6	WITH SP770+505 L-R3	
7		834	1100										7		
8		836	1320			90 05 45	125		-14.7	1856.2			8	LINE R3XS LAID 1/2	
9		838	1540										9	MILE + 50 GRP TAIL	
10		840	1760			89 57 20	52		-3.8	1867.1			10	TO NORTH OF VP 824	
11		842	1980										11		
12		844	2200			89 36 57	52		+9.7	1880.6			12		
13		846	2420										13		
14	\odot	848	2640			89 27 45	5	+22.8	+19.8	1890.7			14	1890.7	
15	-					270 31 50	-						15		
16													16		
17													17		

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 SYMBOLS Δ = BACKSIGHT Δ = INSTRUMENT SET-UP SS = SIDESHOT \odot = FORESIGHT