

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA BARLOW STATE/COUNTY ALASKA BOOK NO. 2 PAGE 341 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT HUSKY NIP DATE 14 DY 3 MO 79 YR  
 SURVEYOR A. PENDLETON INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

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 DI		RIGHT TURNED HORIZONTAL ANGLE
				SLOPE					HORIZ	INST			
1									67.9		791.50	1	
2		791.50	3460 <sup>2270</sup>	2640	89 53 50	9.0	+4.1	72.0				2	
3		T.S. 1	2640 <sup>1980</sup>	1760	90 04 50	4.0	-6.4	65.6	65.6			3	
4		T.S. 2	1720 <sup>990</sup>	880	90 11 40	4.0	-7.0		65.0			4	
5		T.S. 3	0		90 —	5.0	-5.0		62.0			5	
6		T.S. 4	1520 <sup>990</sup>	880	90 02 00	4.0	-4.5		67.5			6	
7		T.S. 5	2640 <sup>1980</sup>	1760	90 01 10	4.0	-4.5		67.5			7	
8		T.S. 6	3460 <sup>2220</sup>	2640	89 59 50	4.0	-3.7		68.3			8	
9												9	
10					WEST END OF LINE							10	
11												11	
12									67.9		791.50	12	
13		791.50	3460 <sup>2220</sup>	2640	89 55 00	9.0	+5.1	72.9				13	
14		S.P. 1	✓		270 04 40	9.0						14	
15		2	2640 <sup>1980</sup>	1760	90 00 00	9.0	-8.9		64.0			15	
16		3	1520 <sup>990</sup>	880	90 03 10	15.0	-15.8		57.1			16	
17		4	0		90 —	5.0	-5.0		67.9			17	

TI-23471B

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

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA BARLOW STATE/COUNTY ALASKA BOOK NO. 2 PAGE 342 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky N/A DATE 14 DY 3 MO 79 YR  
 SURVEYOR A. PENDLETON INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE	LINE	REMARKS
			DISTANCE	<input checked="" 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		S.P. 5	<del>123</del> 890		89 24 20	90		+0.2		73.1			2	
3		6	<del>244</del> 1980 1760		89 43 40	90		-0.7		72.2			3	
4			✓		270 16 00	90							4	
5													5	
6		6	2090		90 09 10	90		+14.5	86.2				6	
7			✓		269 50 50	90							7	
8		7	<del>556</del>		90 52 00	90		-27.3		58.9			8	
9		8	330		89 41 10	90		-7.2		79.0			9	
10		8 + 330	0		90 —	5.0		-5.0		81.2			10	
11		9	550		89 36 20	90		-5.2		81.0			11	
12		10	<del>150</del> 1430		89 58 00	90		-8.1		79.1			12	
13		11	2310		90 09 40	90		-15.4		70.8			13	
14		12	3190		90 19 30	150		-32.9		53.3			14	
15		13	4070		90 10 10	90		-20.7		65.5			15	
16			✓		269 49 50	90							16	
17													17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Barrow STATE/COUNTY ALASKA BOOK NO. 2 PAGE 343 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT HEUSKY WA DATE 14 DY 3 MO 29 YR  
 SURVEYOR A. PENDER 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	ELEVATION			L/R OR D/I	RIGHT TURNED HORIZONTAL ANGLE
				SLOPE	HORIZ				INST	ROD			
1												1	
2		SP. 13	4400		90 19 10	9.0	+33.2	98.3				2	
3			✓		269 40 40	9.0						3	
4		14	3520		90 25 50	9.0	-35.2		63.1			4	
5		15	2640		90 27 10	9.0	-29.7		53.1			5	
6		16	1760		90 16 00	9.0	-17.1		68.6			6	
7		17	880		90 00 20	9.0	-9.1		81.2			7	
8		18	0		90 —	5.0	-5.0		89.2			8	
9		19	880		89 48 40	9.0	-6.1		93.3			9	
10		20	1760		89 56 30	9.0	-7.1		92.2			10	
11		21	2640		90 03 50	15.0	-17.8		91.2			11	
12		22	3520		90 08 20	9.0	-17.3		80.5			12	
13		23	4400		90 00 10	9.0	-8.8		81.0			13	
14			✓		269 59 50	9.0			89.5			14	
15												15	
16		23	4400		89 39 10	9.0	-18.4	70.8				16	
17			✓		270 21 20	9.0						17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 344 OF         
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 15 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.        CREW NO. 1182

LINE	  	STATION	VERTICAL							LR OR DI 	LINE	REMARKS	
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION				
													INST
1		SP 24	3520		89 38 20	9.0	-13.4	70.8	57.4		1		
2		25	2640		89 52 00	9.0	-2.7		68.1		2		
3		26	1760		89 49 50	9.0	-3.7		67.1		3		
4		27	880		89 44 10	9.0	-4.9		65.9		4		
5		28	0		90 —	5.0	-5.0		65.8		5		
6		29	880		89 47 10	9.0	-5.7		65.1		6		
7		30	1760		89 57 00	9.0	-7.4		63.4		7		
8		30 + 537	2297		89 53 30	9.0	-4.6		66.2		8	= (610) 176 + 81	
9		SP 176 (610)	2298		89 52 40	9.0	-4.0		66.8		9		
10		SP 175 (610)	2360		90 00 00	2.0	-1.7		69.1	79.90 - BALL	10	SP 175 (610) = 79090	
11		= 79090	✓		270 00 00	1.7			70.5	79.80 - 1182	11	478	
12									± 1.4	MISTIE	12		
13	A	780901	2360		90 00 00	2.0	+1.7	70.5	67.7		13		
14			✓		270 00 00	1.7					14		
15		SP 31	2640		89 53 40	9.0	-4.0		66.5		15		
16		SP 32	3520		89 56 10	9.0	-4.8		65.7		16		
17	A	28	1760		90 —	5.0	-5.0		65.5		17		

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 345 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 15 BY B MO 79 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		RIGHT TURNED HORIZONTAL ANGLE		LINE
				SLOPE					HORIZ	INST			
1		SP 33	4400		89 54 50	9.0	-2.0		68.5			1	
2			✓		270 05 10	9.0						2	
3												3	
4		SP 33	4400		90 04 10	9.0	+13.9	82.1	67.2			4	
5		34	✓		269 55 50	✓						5	
6		34	3520		90 05 10	9.0	-14.0		68.1			6	
7		35	2640		90 21 00	19.0	-35.0		47.1			7	
8		36	1760		90 09 00	9.0	-13.5		68.6			8	
9		37	880		89 59 00	9.0	-8.7		73.4			9	
10		38	0		90 -	5.0	-3.0		77.1			10	
11		39	880		89 37 20	9.0	-3.2		78.9			11	
12		40	1760		89 48 50	9.0	-3.2		78.9			12	
13		41	2640		89 59 10	9.0	-8.2		73.9 ✓			13	
14		42	3520		90 01 10	15.0	-15.4		66.7			14	
15			✓		269 59 50	✓						15	
16												16	
17												17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 346 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 15 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1102

LINE	  	STATION	VERTICAL					ELEVATION		LR OR DR	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	A	SP 42	4400		<input checked="" type="checkbox"/>	89 54 20	15.00		+7.4	73.6			1		
2	A		✓			270 05 40	✓							2	
3		43	3520			89 56 30	9.0		-5.2	68.4				3	
4		44	2640			89 54 10	9.0		-4.8	68.8				4	
5		45	1760			89 53 50	9.0		-5.8	67.8				5	
6		46	880			89 51 00	9.0		-6.7	68.9				6	
7	T	47	0			90 —	5.0		-5.0	68.6				7	
8		48	880			89 39 10	9.0		-3.7	69.9				8	
9		49	1760			89 53 20	9.0		-5.5	68.1				9	
10		50	2640			89 56 10	9.0		-5.9	67.7				10	
11		51	3520			89 54 30	9.0		-3.1	70.5				11	
12	0	52	4400			89 52 50	9.0		+0.5	74.1				12	
13	0		✓			270 07 00	✓							13	
14														14	
15	A	52	3520			90 02 30	9.0		+11.4	85.4				15	
16	A		✓			269 57 20	✓							16	
17		53	2640			90 03 10	9.0		-11.3	74.1				17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 347 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 15 DY 3 MO 79 YR  
 SURVEYOR A. Penikese 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	
				SLOPE					HORIZ	INST				ROD
1		88 54	1760		90 02 00		9.0	-10.0		85.4	75.4			1
2		55	880		89 48 50		9.0	-6.1			79.3			2
3		56	0		90 —		5.0	-5.0			80.4			3
4		79151	1300		89 50 00		9.0	-5.2			80.20	79151-BARR		4
5			✓		270 10 00		9.0				81.40	79151-1182		5
6										± 1.20		MISFE		6
7														7
8														8
9											80.2	79151		9
10		79151	1300		89 50 00		9.0	+5.2	-84.8					10
11			✓		270 10 00		9.0							11
12		56	0		90 —		5.0	-5.0			79.8			12
13		57	880		90 34 10		9.0	-17.7			67.1			13
14		58	1760		90 16 50		9.0	-17.6			67.2			14
15		59	2640		90 12 00		9.0	-18.1	✓		66.7			15
16		60	3520		89 55 00		9.0	-3.6	✓		81.2			16
17														17

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 348 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husby NPA DATE 15 DY 3 MO 79 YR  
 SURVEYOR A. Penellatan INSTRUMENT DESC/SERIAL NO.      CREW NO. 482

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		SP 61	4400		89 53 50	9.0	3	-0.7		84.1			1	
2			✓		270 06 10	✓							2	
3													3	
4		SP 61	3520		89 48 30	9.0	2	+3.0		80.5			4	
5			✓		270 11 30	✓		3.0		78.1			5	
6		62	2640		89 52 20	9.0		-14.3		66.2			6	
7		63	1760		90 10 30	9.0		-14.4	✓	66.1	✓		7	
8		64	880		90 21 10	9.0		-12.3		67.2			8	
9		65	0		90 —	5.0		-5.0		75.5			9	
10		66	880		90 16 40	9.0		-14.0		66.5			10	
11		67	1760		90 09 50	9.0		-14.0		66.5			11	
12		68	2640		90 06 40	9.0		-14.0		66.5			12	
13		69	3520		90 04 00	9.0		-12.8		67.7			13	
14		70	4400		90 03 00	9.0	2	-12.4		68.10			14	
15			✓		269 57 00	✓							15	
16													16	
17													17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barron STATE/COUNTY Alaska BOOK NO. 2 PAGE 349 OF         
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Hushy NPR DATE 15 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.        CREW NO. 1182

LINE	  	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				
1		SP 70		4400	89 57 00	9.0		+4.8	72.6			1		
2					270 03 00	9.0						2		
3		71		3520	89 55 40	9.0		-4.3		68.3		3		
4		72		2640	89 54 44	9.0		-4.8		67.8		4		
5		73		1760	89 49 10	9.0		-3.4		69.2		5		
6		74		880	89 49 10	9.0		-6.2		66.4		6		
7		74 + 344		536	89 40 50	9.0		-6.0		66.6		7	= Int. (612) SP 2 (6080)	
8		75		0	90 -	5.0		-5.0		67.6		8	= S.P. 74 + 344 - 6601	
9		26 (612)		542	89 40 10	9.0		-5.9		66.7		9		
10		79078		2625	89 39 30	9.0		+6.7		79.3	79078-BARR	10		
11				✓	270 20 20	✓				80.7	79078-1182	11		
12										1.4	M. 5576	12		
13		79078		2625	89 39 30	9.0		+6.7	72.7			13		
14				✓	270 20 20	✓						14		
15		75		0	90 -	5.0		-5.0		67.7		15		
16		76		880	89 42 20	9.0		-4.5		68.2		16		
17												17		

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 350 OF       
 LINE/LOOP NO. 60B TYPE SURVEY 1 CLIENT Husky Oil DATE 16 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1102

LINE	  	STATION	VERTICAL						HORIZONTAL		REMARKS		
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	ELEVATION		L/R OR DI		RIGHT TURNED HORIZONTAL ANGLE	LINE
									INST				
1		SP 77	1760		89 40.30	15.07	-5.0		67.7			1	
2			✓		270 19.20	15.07						2	
3												3	
4												4	
5		77	4400		89 51.10	15.07	+3.4	71.2				5	
6			✓		270 08.40	15.07						6	
7		79	3520		89 54.50	9.0	-3.5		67.7			7	
8		79	2640		89 53.50	9.0	-4.1		67.1			8	
9		80	1760		89 51.30	9.0	-4.6		66.6			9	
10		81	880		89 51.20	9.0	-6.8		64.4			10	
11		82	0		90 —	5.0	-5.0		66.2			11	
12		83	880		89 48.40	9.0	-6.1		65.1			12	
13		84	1760		89 56.10	9.0	-7.0		64.2			13	
14		85	2640		89 57.20	9.0	-6.8		64.4			14	
15		86	3520		89 58.00	9.0	-6.7		64.5			15	
16		87	4400		89 51.30	9.07	+2.1		73.3			16	
17			✓		270 08.10	9.07						17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 351 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Huck, NPR DATE 16 BY 3 MO 7 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		LIR OR OII	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	A	SP 97	44.00	89 48.00	89 48 00	9.0		-6.4	67.1				1	
2	A		✓	270 11 30	270 11 30	9.0							2	
3		88	3520		89 53 20	9.0		-7.9	65.2				3	
4		89	2640		89 53 20	9.0		-3.7	63.4				4	
5		90	1760		89 53 30	9.0		-3.6	61.5				5	
6		91	880		89 57 50	9.0		-6.9	60.2				6	
7	T	92	0		90 —	5.0		-5.0	62.1				7	
8		93	880		89 53 20	9.0		-7.3	59.8				8	
9		94	1760		89 56 30	9.0		-7.1	60.0				9	
10		95	2640		89 57 10	9.0		-6.7	60.4				10	
11		96	3520		89 59 00	9.0		-7.7	59.4				11	
12	O	97	4400		89 59 50	9.0		-8.4	58.7				12	
13	O		✓		269 59 40	9.0							13	
14													14	
15	A	SP 97	3190		90 06 10	9.0		+14.8	73.7				15	
16	A	97	✓		269 53 00	9.0							16	
17		98	2310		90 09 10	9.0		-15.1	58.1				17	

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

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 352 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky Oil DATE 16 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1102

LINE	 	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	
1		SP 99	1430		90 14 30	9.0		-15.0		58.7			1	
2		100	550		90 35 40	9.0		-14.7		59.6			2	
3		100+550	0		90 —	9.0		-5.0		68.7			3	
4		101	330		90 23 20	9.0		-10.3		63.4			4	
5		102	1210		89 58 20	9.0		-8.4		65.3			5	
6		103	2090		90 02 10	9.0		-10.2		63.5			6	
7		104	2970		90 05 40	9.0		-13.7		60.0			7	
8		105	3850		90 05 10	9.0		-14.7		59.0			8	
9		✓			269 54 30	9.0							9	
10													10	
11	A	105	4400		89 54 30	9.0		+1.8	61.0				11	
12	A	✓			270 05 10	9.0							12	
13		106	3520		89 52 00	9.0		-0.6		60.4			13	
14		107	2640		89 53 00	9.0		-3.5		67.5			14	
15		108	1760		89 52 30	9.0		-5.1		55.9			15	
16		109	880		89 44 40	9.0		-5.1		55.9			16	
17		110	0		90 —	5.0		-5.0		56.0			17	

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SYMBOLS

= BACKSIGHT






= INSTRUMENT SET-UP

SS = SIDESHOT

= FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 353 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Hucky NPR DATE 26 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE		STATION	VERTICAL					ELEVATION		L/R OR D/I	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		SP 111	880		89 38 20 9.0			-3.4	67.6			1		
2		112	1760		89 52 40 9.0			-5.2	55.8			2		
3		113	2640		89 56 10 9.0			-5.9	55.1			3		
4		114	3520		89 58 30 9.0			-7.2	53.8			4		
5	0	115	4400		89 59 30 9.0			-8.4	52.6			5		
6	0		✓		269 59 50 9.0							6		
7												7		
8	A	115	4400		89 56 40 9.0			+4.6	57.3			8		
9	A				270 03 00 9.0							9		
10		116	3520		89 56 20 9.0			-5.0	52.3			10		
11		117	2640		90 02 10 9.0			-10.5	46.8			11		
12		118	1760		89 56 50 9.0			-7.3	70.0 <sup>50.0</sup>			12		
13		119	880		89 44 00 9.0			-4.9	52.4			13		
14	A	120	0		90 — 5.0			-5.0	52.3			14		
15		121	880		89 55 40 9.0			-7.9	49.4			15		
16		122	1760		90 01 10 9.0			-9.5	47.8			16		
17		123	2640		90 00 10 9.0			-9.0	48.3			17		

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 354 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Hashy NPR DATE 16 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

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			
1																
2		SP 123+260	2900		90 00 40	9.0		-9.5		47.8						
3		= INT 601/614	2900		269 59 10	9.0										
4																
5	A	SP 123+260	3626		89 54 20	9.0		12.8	50.6							
6	A		3626		270 05 40	9.0										
7		79 (614)	0		90 —	5.0		-5.0	45.6							
8		79070	2520		89 43 50	9.0		+3.0	53.6		79070-BARR					
9		79070	2520		270 16 10	9.0		+3.0	52.8		79070-1182					
10									±1.3							
11											MISTIE					
12																
13																
14																
15																
16																
17																

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 355 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 16 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	△ ⊕ SS	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	ROD					
1	A	SP 123+26	4140		89 53 30	9.0		+0.8	49.0	47.8		REFER L-2	1	PAGE 354
2	A		✓		270 06 30	9.0							2	
3		124	3520		89 52 00	9.0		-1.3	46.6	47.7			3	
4		125	2640		89 50 10	9.0		-3.6		45.4			4	
5		126	1860		89 49 40	9.0		-5.6		43.4			5	
6		127	880		89 46 40	9.0		-5.1		43.9			6	
7	⊕	128	0		90 -	5.0		-5.0		44.0			7	
8		129	880		89 44 50	9.0		-6.5		42.5			8	
9		130	1760		89 55 20	9.0		-7.3		41.7			9	
10		131	2640		89 58 00	9.0		-7.2		41.8			10	
11		132	3520		89 58 30	9.0		-7.2		41.8			11	
12	⊕	133	4410		89 58 20	9.0		-6.6		42.4			12	
13	⊕		✓		270 01 30	9.0							13	
14													14	
15	A	SP 133	3520		89 56 10	9.0		+4.8	47.3	1			15	
16	A		✓		270 03 50	9.0							16	
17		134	2640		89 55 20	9.0		-5.3		42.0			17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 356 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPR DATE 16 BY 3 MO 79 YR  
 SURVEYOR A. Penleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 11 80

LINE	 SS 	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		<del>872</del>							47.3			1		
2		SP 135	1760			89 53 00	9.0		-5.4		41.9		2	
3		136	880			89 49 10	9.0		-6.2		41.1		3	
4		137	0			90 —	5.0		-5.0		42.3		4	
5		138	880			89 48 40	9.0		-6.1		41.2		5	
6		139	1760			89 38 30	9.0		+2.2		49.55		6	
7			<del>    </del>			270 21 50	9.0						7	
8													8	
9													9	
10		SP 139	4460			89 49 30	9.0		+4.8		45.1		10	
11						270 10 30	9.0						11	
12		<del>140</del>	3520			89 58 20	9.0		-7.0		38.4		12	
13		141	2640			89 59 50	9.0		-8.7		36.4		13	
14		142	1760			89 59 30	9.0		-8.7		36.4		14	
15		143	880			89 58 30	9.0		-8.6		36.5		15	
16		144	0			90 —	5.0		-5.0		40.1		16	
17		145	880			89 44 10	9.0		-4.9		40.2		17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 357 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky 0.1 DATE 10 DY 3 MO 79 YR  
 SURVEYOR A. Perdletor INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

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		
1															
2		SP 146	1760		89 56 30	9.0	-7.1		45.1	38.8					2
3		147	2640		89 57 40	9.0	-6.3			38.8					3
4		148	3520		89 57 50	9.0	-6.5			38.0					4
5	0	149	4400		89 58 30	9.0	-6.7			38.4					5
6	0		✓		270 01 30	9.0									6
7															7
8															8
9	A	149	1760		90 01 10	9.0	+9.5		48.4						9
10	Δ		1760		269 58 50	9.0	-5.7								10
11		150	880		89 47 10	9.0	-5.7			42.7					11
12	⊥	151	0		90 —	5.0	-5.0			43.4					12
13		152	880		90 06 00	9.0	-10.5			37.9					13
14		153	1760		90 09 40	9.0	-13.9			34.5					14
15		154	2640		90 07 50	9.0	-14.9			33.5					15
16		155	3520		90 03 50	9.0	-12.7			35.1					16
17															17






















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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 358 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 18 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1192

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														
2		SP 156	4400		90 07 00	9.0		-17.6		48.4	38.8			2
3			4400		269 53 00	9.0								3
4														4
5		SP 156	4400		89 56 30	9.0		+4.1		35.0				5
6					270 03 30	9.0								6
7		157	3520		89 57 30	12.0 <sup>HA</sup>		-16.2			19.81			7
8		158	2640		89 49 40	9.0		-0.9			35.10			8
9		159	1760		89 50 50	9.0		-4.2			31.87			9
10		159 + 402	1358		89 47 50	9.0		-4.2			31.87			10
11		161	0		90 —	5.0		-5.0			31.07			11
12		92 (616)	1464		90 10 40	15.0		-19.5			16.5			12
13			✓		269 49 20	15.0					14.1			13
14		92 (616)	1464		90 10 40	15.0		+19.5		35.2				14
15			✓		269 49 20	15.0								15
16		159 + 402	1358		89 47 50	9.0		-4.2			31.0			16
17			✓		270 12 10	9.0								17

INTERSECTION  
 = (616) 90 + 713  
 = S.P. 159 + 402 - L 601

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 359 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Haskey NPR DATE 18 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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														
2	A	SP 159.40	3998		89 52 40	9.0	+0.2	31.6	29.7				2	
3	A		✓		270 07 10	9.0							3	
4		160	3520		89 53 20	9.0	-1.9		29.7				4	
5		161	2640		89 51 10	9.0	-2.1		29.5				5	
6		162	1760		89 42 40	9.0	-0.1		31.5				6	
7		163	880		89 30 40	9.0	-1.5		30.1				7	
8	π	164	0		90 —	5.0	-5.0		26.6				8	
9													9	
10	⊙												10	
11													11	
12													12	
13													13	
14													14	
15													15	
16													16	
17													17	

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 = SIDESHOT   
 = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 360 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky Oil DATE 18 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1/82

LINE		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	
1														
2		SP 165	880		90 30 00	8.0	-16.7		31.6	14.9				1
3		166	1760		90 17 50	9.0	-18.1			13.5				2
4		167	2640		90 12 30	9.0	-18.5			13.1				3
5		168	3520		90 11 10	9.0	-20.2			11.4				4
6		169	4400		90 01 20	9.0	-10.3			21.3				5
7			✓		269 58 40	9.0	-							6
8														7
9														8
10		169	2310		89 54 10	9.0	+4.9		26.5					9
11			✓		270 06 00	9.0								10
12		170	1430		89 41 30	9.0	-1.3			25.2				11
13		171	550		89 27 20	9.0	-3.8			22.7				12
14		171 + 550	0		90 —	5.0	-5.0			21.5				13
15		172	330		90 31 20	9.0	-12.0			14.5				14
16		173	1210		90 23 10	9.0	-17.1			9.4				15
17		174	2090		90 26 20	9.0	-24.9			1.6				16

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 361 OF       
 LINE/LOOP NO. 601 TYPE SURVEY 1 CLIENT Husky NPA DATE 18 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1142

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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									26.5				1	
2		50 175	2970		90 08 10	9.0		-15.9		10.6			2	
3	0	176	3800		90 07 20	9.0		-16.9		9.6			3	
4	0		✓		269 58 30	9.0							4	
5													5	
6													6	
7	B	176	4400		90 04 40	9.0		+14.6	24.6				7	
8	A		✓		269 55 20	9.0							8	
9		177	3520		90 06 10	9.0		-15.1		9.5			9	
10		178	2640		90 08 20	9.0		-15.3		9.3			10	
11		179	1760		90 12 10	9.0		-15.2		9.4			11	
12		180	880		90 24 40	9.0		-15.3		9.3			12	
13	π	181	0		90 —	5.0		-5.0		19.6			13	
14		182	880		90 19 40	9.0		-14.0		10.6			14	
15		183	1760		90 10 30	9.0		-14.3		10.3			15	
16		184	2640		90 06 20	9.0		-13.7		10.9			16	
17		185	3520		90 04 00	9.0		-12.8		11.8			17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 362 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 18 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	△ SS ◎	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									24.6			1		
2	⊙	58 186	4400		90 02 20	9.0		-11.6		13.0		2		
3	⊙		✓		269 57 40	9.0						3		
4												4		
5												5		
6	△	786	3520		89 56 10	9.0		+4.8	18.1			6		
7	△		3520		270 03 50	9.0						7		
8		187	2640		89 52 50	9.0		-3.4		14.7		8		
9		188	1760		89 53 30	9.0		-5.6		12.5		9		
10		189	880		89 50 30	9.0		-6.6		11.5		10		
11	△	190	0		90 —	5.0		-5.0		13.1		11		
12		191	880		89 35 30	9.0		-2.7		15.4		12		
13	SS	191 + 568	1448		89 56 30	9.0		-7.5		10.6		13	= Int (618) SP 141 + 232	
14	SS	141 (618)	1486		89 55 30	9.0		-7.0		9.11		14	= S.P. 791 + 568 / 601	
15		192	1760		89 59 50	9.0		-8.9		9.2		15		
16		193	2640		90 00 30	9.0		-9.2		8.9		16		
17		194	3520		90 01 30	15.0		-10.3		7.8		17		

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

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA \_\_\_\_\_ STATE/COUNTY \_\_\_\_\_ BOOK NO. 2 PAGE 963 OF \_\_\_\_\_  
 LINE/LOOP NO. \_\_\_\_\_ TYPE SURVEY \_\_\_\_\_ CLIENT \_\_\_\_\_ DATE \_\_\_\_\_ BY \_\_\_\_\_ MO \_\_\_\_\_ YR \_\_\_\_\_  
 SURVEYOR \_\_\_\_\_ INSTRUMENT DESC/SERIAL NO. \_\_\_\_\_ CREW NO. \_\_\_\_\_

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										18.1			1	
2	⊙	79031	409.6		89 53 10	9.0		-0.5		17.6		79031-BARR	2	
3	⊙	= 194 + 496			270 06 50	9.0				14.8		79031-1182	3	
4												11397E	4	
5	Δ	79031	<del>409.6</del> 3134		89 56 10	9.0		+5.2	23.1	-2.9			5	
6	Δ	= 194 + 496			270 04 10	9.0							6	
7		195	2750		96 02 20	9.0		-11.2		11.9			7	
8		196	1870		89 57 30	9.0		-7.6		15.5			8	
9		197	990		89 58 00	9.0		-8.4		14.7			9	
10		198	110		89 11 30	9.0		-7.5		15.6			10	
11	⊗	198+110	0		90	5.0		-5.0		18.1			11	
12		199	770		90 20 20	9.0		-13.5		9.6			12	
13		200	1650		90 10 30	9.0		-14.0		9.1			13	
14		201	2530		90 07 10	9.0		-14.1		9.0			14	
15		202	3410		90 05 20	9.0		-14.1		9.0			15	
16	⊙	203	21290		90 04 40	9.0		-14.4		8.7			16	
17	⊙				269 55 20	9.0							17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 364 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husk, NPA DATE 19 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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													1	
2	A	203	3520		89 56 30	9.0		+5.2	14.1				2	
3	A				270 03 30	9.0							3	
4		204	2640		89 55 00	9.0		-5.0		9.1			4	
5		205	1760		89 55 40	9.0		-6.7		7.4			5	
6		206	880		89 35 10	9.0		-2.6		11.5			6	
7	π	207	0		90 —	5.0		-5.0		9.1			7	
8		208	880		89 47 20	9.0		-5.7		8.4			8	
9		209	1760		89 32 00	9.0		+5.4		19.5			9	
10	θ	210	2640		89 44 20	9.0		+3.1		17.2			10	
11	θ				270 15 30	9.0							11	
12													12	
13	A	210	4510		89 55 10	9.0		+2.2	19.8				13	
14	A				270 04 50	9.0							14	
15		211	3630		89 55 50	9.0		-4.3		15.5			15	
16		212	2750		89 53 40	9.0		-3.8		16.0			16	
17		213	1870		89 58 00	9.0		-7.8		12.0			17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 365 OF         
 LINE/LOOP NO. 601 TYPE SURVEY        CLIENT Husky NPR DATE 19 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.        CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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													1	
2		50 214	990		90 01 30	9.0	-9.4		19.8	10.4			2	
3		215	110		89 55 20	9.0	-8.9			10.9			3	
4		215+110	0		90 —	5.0	-5.0			14.8			4	
5		216	770		90 06 50	15.0	-16.5			3.3			5	
6		217	1650		90 02 10	9.0	-10.0			9.8			6	
7		218	2530		89 58 50	9.0	-8.0			11.0			7	
8		219	3410		90 00 40	9.0	-9.4			10.4			8	
9		220	4290		90 02 40	9.0	-12.0			7.0			9	
10					269 57 20	9.0							10	
11													11	
12		220	4400		90 04 20	9.0	+14.3		22.2				12	
13					269 55 30	9.0							13	
14		221	3520		90 02 10	15.0	-17.0			5.2			14	
15		222	2640		89 58 50	9.0	-8.0			14.2			15	
16		223	1760		89 54 00	9.0	-5.9			16.3			16	
17		225	0		90 —	5.0	-5.0			17.2			17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 366 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 19 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	△ ⊥ SS ⊙	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	ROD								
1									22.2			1		
2	⊙	SP 223+166	1594		89 51 00	9.0		-4.8		17.4		= BARA (79153)	2	
3	⊙	79153	✓		270 09 00	9.0				16.4		= 1182	3	
4										± 1.0		Mistie	4	
5													5	
6										17.4		79153	6	
7	△	SP 223+166	1594		89 51 00	9.0		+4.8	22.3				7	
8	△	79153	✓		270 09 00	9.0							8	
9		SP 224	880		89 49 30	9.0		-6.3		16.0			9	
10	⊥	225	0		90 —	5.0		-5.0		17.3			10	
11		226	880		89 35 40	9.0		-2.8		19.5			11	
12	⊙	227	1760		89 45 20	9.0		-1.4		20.9			12	
13	⊙		✓		270 14 40	9.0							13	
14													14	
15	△	227	2640		90 08 10	9.0		+15.1	36.2				15	
16	△		✓		269 51 50	9.0							16	
17		228	1760		90 07 10	9.0		-12.6		23.6			17	

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SYMBOLS      △ = BACKSIGHT      ⊥ = INSTRUMENT SET-UP      SS = SIDESHOT      ⊙ = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 367 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky 0.1 DATE 19 BY 3 MO 79 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		UR OR DR		RIGHT TURNED HORIZONTAL ANGLE	LINE
							INST	ROD						
1												1		
2		SP 229	880		89 45 30	9.0	-5.3	36.2	30.9			2		
3		230	0		90 —	5.0	-5.0		31.2			3		
4		231	880		90 00 00	9.0	-9.0		27.2			4		
5		232	1760		90 01 00	9.0	-9.5		26.7			5		
6		233	2640		90 01 50	9.0	-10.3		25.9			6		
7		234			269 58 00	9.0						7		
8												8		
9		233	4400		89 44 20	9.0	-11.5	14.6				9		
10					270 15 40	9.0						10		
11		234	3520		89 53 30	9.0	-2.1		12.5			11		
12		235	2640		89 52 20	9.0	-3.0		11.6			12		
13		236	1760		89 56 20	9.0	-4.0		10.6			13		
14		237	880		89 47 30	9.0	-5.8		8.8			14		
15		238	0		90 —	5.0	-5.0		9.6			15		
16		239	880		89 43 20	9.0	-4.7		9.9			16		
17		240	1760		89 38 50	9.0	+1.9		16.5			17		

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 368 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 14 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	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									14.6				1	
2	⊙	SP 240 + 100	1860			89 40 30	9.0		+1.6		16.2	79166-PARR	2	INT = 240+100/601
3		= 79166 INT	✓			270 19 20	9.0				15.7	79166-1182	3	= 125+501/622
4											± 0.5	MISTIE	4	
5													5	
6													6	
7											16.2	79166	7	
8	A	SP 240 + 100	2540			90 00 30	9.0		+9.5	25.4			8	
9	A	= 79166	✓			269 54 10	9.0						9	
10		241	1760			90 07 20	9.0		-12.7		12.7		10	
11		247	880			90 10 30	9.0		-11.7		13.7		11	
12	π	243	0			90 —	5.0		-5.0		20.4		12	
13		244	880			90 36 30	9.0		-18.3		7.1		13	
14		245	1760			90 14 20	9.0		-18.8		6.6		14	
15	⊙	246	2640			90 11 20	9.0		-17.6		7.8		15	
16	⊙		✓			269 48 40	9.0						16	
17													17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 369 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 20 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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														1
2	A	SP 246	2640		89 56 10	9.0	+5.8	13.4						2
3	A		✓		270 04 10	9.0								3
4		247	1760		89 48 00	9.0	-2.8	10.6						4
5		248	880		89 42 00	9.0	-4.4	9.0						5
6	T	249	0		90 —	5.0	-5.0	8.4						6
7		250	880		89 42 40	9.0	-4.6	8.8						7
8		251	1760		89 39 40	9.0	+1.5	14.9						8
9		252	2640		89 46 10	9.0	+1.8	15.2						9
10	B	253	3520		89 48 40	9.0	+3.1	16.3						10
11	B		—		270 11 50	9.0								11
12														12
13	A	253	2640		90 00 50	9.0	+9.5	25.4						13
14			✓		269 59 10	9.0								14
15		254	1760		89 55 10	12.0 <sup>AP</sup>	-16.5	8.9						15
16		255	880		89 36 40	9.0	-3.0	22.4						16
17	T	256	0		90 —	5.0	-5.0	20.4						17

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 370 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 20 DY 3 MO 79 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 D/I		RIGHT TURNED HORIZONTAL ANGLE
				SLOPE					HORIZ	INST			
1									25.4			1	
2		SP 257	880		90 33 30	9.0	-17.6		7.8			2	
3		258	1760		90 16 20	9.0	-17.3		8.1			3	
4		259	2640		90 10 00	9.0	-16.5		8.9			4	
5	0	260	3520		90 08 20	9.0	-17.3		8.1			5	
6	0		✓		269 51 40	9.0						6	
7												7	
8	A	260	3520		89 59 30	9.0	+8.2	16.0				8	
9	A		✓		270 10 30	9.0						9	
10		261	2640		89 59 50	9.0	-8.7		7.3			10	
11		262	1760		89 56 50	9.0	-7.3		8.7			11	
12		263	880		89 50 30	9.0	-6.6		9.4			12	
13	π	264	0	9	90 —	5.0	-5.0		11.0			13	
14		265	880		89 41 20	9.0	-4.2		11.8			14	
15		266	1760		89 49 20	9.0	-3.5		12.5			15	
16		267	2640		89 57 40	9.0	-7.1		8.9			16	
17												17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 371 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 20 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 9182

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 D/I	RIGHT TURNED HORIZONTAL ANGLE								
				SLOPE					HORIZ	INST				ROD							
1																					
2	⊙	SP 267+382	3022			90 03 10	9.07		-11.6		16.0	4.4									
3	⊙		<del>3022</del>			269 56 50	9.0														
4																					
5	Δ	SP 267+382	4348			89 58 50	9.07		+7.1		11.2										
6	⊙					270 01 10	9.07														
7		268	3850			89 58 40	9.0		-7.2			4.0									
8		269	2970			90 00 00	9.0		-8.8			2.4									
9		270	2090			90 00 00	9.0		-8.9			2.3									
10		271	1210			90 01 20	9.0		-9.4			1.8									
11		272	330			90 01 10	9.0		-9.1			2.1									
12	⊕	272+330	0			90 —	9.0		-5.0			6.2									
13		273	550			89 29 10	9.0		-4.1			7.1									
14		274	1430			89 52 20	9.0		-5.8			5.4									
15		275	2310			89 58 20	9.0		-7.8			3.4									
16		276	3190			89 59 40	9.0		-8.5			2.7									
17			<del>407</del>																		

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# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 372 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 24 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1192

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
				SLOPE					HORIZ	INST			
1									11.2			1	
2		SP 277	4070		90 00 10	9.0		-8.9		2.3		2	
3			✓		269 59 50	9.0						3	
4												4	
5	A	277	4400		90 00 30	9.0		19.0	10.8	1		5	
6	B		✓		269 59 40	9.0						6	
7		278	3520		90 00 30	9.0		-9.3		1.5		7	
8		279	2640		90 00 10	9.0		-9.0		1.8		8	
9		280	1760		89 52 50	9.0		-5.3		5.5		9	
10		281	880		89 45 10	9.0		-5.2		5.6		10	
11	π	282	0		90 —	5.0		-5.0		5.8		11	
12		283	880		89 59 50	9.0		-8.9		1.9		12	
13		284	1760		89 59 40	9.0		-8.8		2.0		13	
14		285	2640		89 59 10	9.0		-8.2		2.6		14	
15		286	3520		89 55 30	9.0		-4.1		6.7		15	
16		287	4400		89 59 30	9.0		-8.0		2.8		16	
17			✓		270 00 30	9.0						17	

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# HORIZONTAL AND VERTICAL SURVEY NOTES

33

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 373 OF         
 LINE/LOOP NO. 601 TYPE SURVEY        CLIENT Husky NPA DATE 20 BY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.        CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	HORIZONTAL	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									2.8			1		
2		287	4400		90 02 50	9.0		+12.3	14.9			2		
3			—		269 57 00	9.0						3		
4		288	3520		90 02 26	9.0		-11.1		3.8		4		
5		289	2640		90 03 00	9.0		-11.2		3.7		5		
6		290	1760		90 04 20	9.0		-11.2		3.7		6		
7		291	880		90 04 20	9.0		-10.1		4.8		7		
8		292	0		90 —	5.0		-5.0		9.9		8		
9		293	880		89 48 30	9.0		-6.0		8.9		9		
10		294	1760		89 57 10	9.0		-7.5		7.4		10		
11		295	2640		89 56 30	9.0		-6.2		8.7		11		
12			✓		270 03 30	9.0						12		
13												13		
14		295	2640		89 58 00	9.0		+7.3	15.6			14		
15			—		270 02 00	9.0						15		
16		296	1760		89 58 40	9.0		-8.3		7.3		16		
17		297	880		89 57 00	9.0		-8.2		7.4		17		

TI-23471B

WORKED BY \_\_\_\_\_ CHECKED BY 1ST \_\_\_\_\_ 2ND \_\_\_\_\_

SYMBOLS

= BACKSIGHT

= INSTRUMENT SET-UP

= SIDESHOT

= FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 374 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Hush NPR DATE 20 BY 3 MO 79 YR  
 SURVEYOR A. Pendlator INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

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									15.6				1	
2		SD 299	0		90 —	5.0		-5.0		10.6			2	
3		299	880		89 57 40	9.0		-8.4		7.2			3	
4		300	1760		89 59 40	9.0		-8.8		6.8			4	
5		301	2640		89 59 00	9.0		-8.1		7.5			5	
6		301 + 645	3285		89 56 30	9.0		-5.4		10.2		79155-BARR	6	
7		=79155	✓		270 03 30	9.0				13.3		79155-1182	7	
8										<u>±</u> 3.1		MISTIE	8	
9													9	
10										10.2		79155	10	
11		301 + 645	2875		89 55 00	9.0		+4.6	14.8				11	
12		=79135	—		270 05 10	9.0							12	
13		302	2640		89 58 20	9.0		-7.6		7.2			13	
14		TS 1	1760		90 05 30	4.0		-6.8		8.0			14	
15		TS 2	880		90 05 30	4.0		-5.4		9.4			15	
16		TS 3	0		90 —	5.0		-5.0		9.8			16	
17		TS 4	880		90 05 30	4.0		-5.4		9.4			17	

WORKED BY      CHECKED BY 1ST      2ND     

SYMBOLS = BACKSIGHT   
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 = FORESIGHT

# HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA Barrow STATE/COUNTY Alaska BOOK NO. 2 PAGE 375 OF       
 LINE/LOOP NO. 601 TYPE SURVEY      CLIENT Husky NPR DATE 20 DY 3 MO 79 YR  
 SURVEYOR A. Pendleton INSTRUMENT DESC/SERIAL NO.      CREW NO. 1182

LINE	  	STATION	VERTICAL						ELEVATION		L/R OR D/I	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														1	
2		TS 5	1760			90 04 00	4.0		-6.0			8.8			2
3		TS 6	2640			90 02 50	4.0		-6.0			8.8			3
4															4
5															5
6															6
7															7
8															8
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11															11
12															12
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14															14
15															15
16															16
17															17

WORKED BY \_\_\_\_\_ CHECKED BY 1ST \_\_\_\_\_ 2ND \_\_\_\_\_

**SYMBOLS**    
 = BACKSIGHT    
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 = SIDESHOT    
 = FORESIGHT