

HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA BARROW STATE/COUNTY ALASKA BOOK NO. 2 PAGE 490 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT HUSKY OIL CO. DATE 1 DY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		L/R OR DJI	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										6.1			1		
2	Δ	79014	4767.0		89 58 58	6.0	+3.9	10.0					2		
3	Δ		✓		270 01 16	6.0	+3.9	✓					3		
4		SP1	5280		90 02 01	6.0	-8.5			1.5			4	TAKEN SPREAD 1-6 SEA LEVEL	
5		SP2	4400		90 01 40	6.0	-7.7			2.3			5		
6		SP3	3520		90 01 45	6.0	-7.5			2.5			6		
7		SP4	2640		90 01 04	6.0	-6.7			3.3			7		
8		SP5	1760		90 01 04	6.0	-6.5			3.5			8		
9		SP6	880		89 58 03	6.0	-5.5			4.5			9		
10	⊗	SP7-1670-SP10-1550	0		9000 0 0	5.0	-5.0			5.0			10		
11		SP8	880		89 55 32	6.0	-4.8			5.2			11		
12	⊙	SP9	1760		89 47 38	6.0	+0.5			10.5			12		
13	⊙		✓		270 12 38	6.0	✓						13		
14													14		
15													15		
16													16		
17													17		

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

HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA BARROW STATE/COUNTY ALASKA BOOK NO. 2 PAGE 491 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky oil co. DATE 8 DY 4 MO 19 YR
 SURVEYOR Stone INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	SYMBOL	STATION	VERTICAL						ELEVATION		HORIZONTAL		REMARKS	
			DISTANCE	FEET 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									10.5			1		
2	A	SP-9			89 58 33	6.0		+3.7	14.2			2		
3	A	✓	4400		270 01 31	6.0		+3.7				3		
4		SP-10	3520		90 00 15	6.0		-6.0	8.2			4		
5		SP-11	2640		90 01 36	6.0		-7.1	7.1			5		
6		SP-12	1760		89 55 10	6.0		-3.5	10.7			6		
7		SP-13	880		89 55 27	6.0		-4.8	9.4			7		
8	X	SP-14	0		90 00 00	5.0		-5.0	9.2			8		
9		SP-15	880		89 56 50	6.0		-5.2	9.0			9		
10		SP-16	1760		89 57 06	6.0		-4.5	9.7			10		
11		SP-17	2640		89 58 42	6.0		-4.9	9.3			11		
12		SP-18	3520		89 57 40	6.0		-3.5	10.7			12		
13	⊙	SP-19	4400		89 57 06	6.0		-1.8	12.4			13		
14	⊙	✓	✓		270 03 06	6.0		✓				14		
15												15		
16												16		
17												17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA BARRON STATE/COUNTY ALASKA BOOK NO. 2 PAGE 492 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT HUSKY oil DATE 8 DY 9 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	△ ⊥ SS ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	□ FEET □ 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												1		
2	△	SP-19	✓		89 59 21	6.0		+4.7	17.1				2	
3	△	✓	4400		270 00 50	6.0		-					3	
4		SP-20	3520		89 59 10	6.0		-4.9	12.2				4	
5		SP-21	2640		89 59 51	6.0		-5.7	11.4				5	
6		SP-22	1760		89 59 30	6.0		-5.7	11.4				6	
7		SP-23	880		90 00 50	6.0		-6.2	10.9				7	
8	⊥	SP-24	0		90 00 00	5.0		-5.0	12.1				8	
9		SP-25	880		89 57 46	6.0		-5.4	11.7				9	
10		SP-26	1760		90 01 20	6.0		-6.6	10.5				10	
11		SP-27	2640		90 02 51	6.0		-8.1	9.0				11	
12		SP-28	3520		90 02 51	6.0		-8.7	8.4				12	
13	⊙	SP-28+4A	3564		90 03 18	6.0		-9.1	8.0				13	
14	⊙	✓			269 56 53	6.0		-					14	
15													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 493 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky Oil Co. DATE 8 DY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> ∇ <input type="checkbox"/> SS <input type="checkbox"/> \odot	STATION	VERTICAL						HORIZONTAL		REMARKS			
			DISTANCE	<input type="checkbox"/> FEET <input type="checkbox"/> METERS	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			L/R OR DJI	RIGHT TURNED HORIZONTAL ANGLE	
				SLOPE					HORIZ	INST				ROD
1												1		
2	Δ	SP-28+44	v		89 59 27	6.0		+4.8	12.8				2	
3	Δ	v	4293		(270 00 50)	6.0		v					3	
4		SP-29	3520		89 58 47	6.0		-4.5	8.3				4	
5		SP-30	2640		89 58 56	6.0		-5.0	7.8				5	
6		SP-31	1760		89 58 00	6.0		-4.9	7.9				6	
7		SP-32	880		89 55 41	6.0		-4.9	7.9				7	
8	∇	SP-33	0		90 00 00	5.0		5.0	7.8				8	
9		SP-34	880		89 56 00	6.0		-5.0	7.8				9	
10		SP-35	1760		89 58 45	6.0		-5.3	7.5				10	
11		SP-36	2640		89 54 36	6.0		-1.7	11.1				11	
12		SP-37	3520		89 58 03	6.0		-3.8	9.0				12	
13	\odot	SP-38	4400		89 58 10	6.0		-3.0	9.8				13	
14	\odot	v	v		(270 02 16)	6.0		v					14	
15													15	
16													16	
17													17	

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA BARRON STATE/COUNTY ALASKA BOOK NO. 2 PAGE 494 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky oil co. DATE 8 BY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	SYMBOL	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												1		
2	Δ	SP-38	-		89 59 28	6.0		+4.8	146			2		
3	Δ	-	4400		270 00 40	6.0		-				3		
4		SP-39	3520		89 59 50	6.0		-5.6	9.0			4		
5		SP-40	2640		90 00 10	6.0		-6.0	9.6			5		
6		SP-41	1760		89 59 00	6.0		-5.4	9.2			6		
7		SP-42	880		89 56 15	6.0		-5.0	9.6			7		
8	\times	SP-43	0		90 00 00	5.0		-5.0	9.6			8		
9		SP-44	880		89 59 10	6.0		-5.8	8.8			9		
10		SP-45	1760		89 59 44	6.0		-5.8	8.8			10		
11		SP-46	2640		90 01 25	6.0		-6.9	7.7			11		
12		SP-47	3520		90 01 28	6.0		-7.3	6.3			12		
13	\odot	SP-48	4400		89 59 27	6.0		-5.8	8.8			13		
14	\odot	-	-		269 59 08	6.0		-				14		
15												15		
16												16		
17												17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA BARRON STATE/COUNTY ALASKA BOOK NO. 2 PAGE 495 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky Oil Co DATE 8 BY 4 MO 79 YR
 SURVEYOR Stone INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						ELEVATION		L/R OR DJI	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												1		
2	Δ	SP48	✓		90 11 26	6.0		+20.2	28.9			2		
3	Δ	✓	4400		269 48 42	6.0		-				3		
4		SP49	3520		90 11 37	6.0		-17.6	11.3			4		
5		SP50	2640		90 16 10	6.0		-18.3	10.6			5		
6		SP51	1760		90 23 15	6.0		-17.8	11.1			6		
7		SP52	880		90 20 30	14.0		-15.2	13.7			7		
8	⊎	SP53	0		90 00 00	5.0		-5.0	23.9			8		
9		SP54	880		89 48 17	6.0		-3.0	25.9			9		
10		SP55	1760		89 59 20	6.0		5.6	23.3			10		
11	⊙	SP56	2640		90 06 41	6.0		-10.9	18.0			11		
12	⊙	✓	✓		269 53 50	6.0						12		
13												13		
14												14		
15												15		
16												16		
17												17		

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HORIZONTAL AND VERTICAL SURVEY NOTES

GSI AREA BARRON STATE/COUNTY ALASKA BOOK NO. 3 PAGE 496 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky Oil Co. DATE 8 DY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 1182

LINE	SS ◎	STATION	VERTICAL						ELEVATION		LR OR DR	RIGHT TURNED HORIZONTAL ANGLE	LINE	REMARKS	
			DISTANCE	FEET METERS		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	INST					ROD
				SLOPE	HORIZ										
1															
2	△	SP-56	✓		90 03 25	6.0		+9.6	27.7						
3	△	✓	4175		269 56 50	6.0		✓							
4		SP-57	3295		90 06 46	6.0		-12.3	15.4						
5		SP-58	2415		90 10 46	6.0		-13.4	14.3						
6		SP-59	1535		90 22 55	6.0		-16.2	11.5						
7		SP-60	655		90 40 08	6.0		-13.6	14.1						
8	⊗	SP-60+655-SP-81442	0		90 00 00	5.0		-5.0	22.7						
9		SP-59+659-N	442		90 00 00	3.7		-3.7	24.0						
10									VER. Tie. = -0.9					ELL 2.49 SP-659-N Ref. Page 438 LINE # 6	
11		SP-61	225		90 29 40	6.0		-7.9	19.8						
12		SP-62	1105		90 28 13	6.0		-15.0	12.7						
13		SP-63	1985		90 18 16	6.0		-16.5	11.2						
14		SP-64	2865		90 06 30	6.0		-11.3	16.4						
15		SP-65	3745		90 06 50	6.0		-13.2	14.5						
16	◎	SP-66	4625		90 02 07	6.0		-8.3	19.4						
17	◎	✓	✓		269 58 00	6.0									

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HORIZONTAL AND VERTICAL SURVEY NOTES

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GSI AREA BARRON STATE/COUNTY ALASKA BOOK NO. 2 PAGE 497 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky oil co. DATE 8 DY 4 MO 79 YR
 SURVEYOR Stout INSTRUMENT DESC/SERIAL NO. CREW NO. 1102

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> T <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			LIR OR DIR	RIGHT TURNED HORIZONTAL ANGLE
				SLOPE	HORIZ					INST	ROD			
1													1	
2	Δ	SP-66	✓		(89 57 36)	6.0		-3.2	22.6					2
3	Δ	✓	3520		(270 02 35)	6.0		✓						3
4		SP-67	2640		90 03 20	6.0		-8.4	14.2					4
5		SP-68	1760		90 03 30	6.0		-7.7	14.9					5
6		SP-69	880		89 58 30	6.0		-5.6	17.0					6
7	T	SP-70	0		90 00 00	5.0		-5.0	17.6					7
8		SP-71	880		90 29 36	6.0		-13.6	9.0					8
9		SP-72	1760		90 05 38	6.0		-8.8	13.8					9
10		SP-73	2640		90 08 07	6.0		-12.1	10.5					10
11	⊙	SP-74	3520		(90 02 10)	6.0		-7.9	14.6					11
12	⊙	✓	✓		(269 57 54)	6.0		✓						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 BARRON STATE/COUNTY ALASKA BOOK NO. 2 PAGE 498 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky Oil Co. DATE 8 BY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO. 182

LINE	<input type="checkbox"/> Δ <input type="checkbox"/> T <input type="checkbox"/> SS <input type="checkbox"/> ⊙	STATION	VERTICAL						HORIZONTAL		REMARKS	
			DISTANCE		VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION			RIGHT TURNED HORIZONTAL ANGLE
			SLOPE	HORIZ					FEET	METERS		
1											1	
2	Δ	SP-74	-		89 57 37	6.0	+3.9	18.6			2	
3	Δ	✓	2640		270 02 38	6.0	-				3	
4		SP-75	1760		89 52 02	6.0	-1.9	16.7			4	
5		SP-76	880		90 04 43	6.0	-7.2	11.4			5	
6	T	SP-77	0		90 00 00	5.0	-5.0	13.6			6	
7		SP-78	880		90 03 40	6.0	-6.9	11.7			7	
8		SP-79	1760		89 57 04	6.0	-4.4	14.2			8	
9		SP-80	2640		89 59 35	6.0	-5.5	13.1			9	
10	⊙	SP-81	3520		90 00 40	6.0	-6.3	12.3			10	
11	⊙				269 59 36	6.0					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 BARROW STATE/COUNTY ALASKA BOOK NO. 2 PAGE 499 OF
 LINE/LOOP NO. 670 TYPE SURVEY CLIENT Husky Oil DATE 8 DY 4 MO 79 YR
 SURVEYOR STONE INSTRUMENT DESC/SERIAL NO. CREW NO.

LINE	△ K SS ◎	STATION	VERTICAL							HORIZONTAL		REMARKS		
			DISTANCE	□ FEET	VERTICAL ANGLE OBS.	ROD RDG OR HI	ELEV DIFF	FINAL ELEVATION DIFF	ELEVATION		L/R OR DI		RIGHT TURNED HORIZONTAL ANGLE	
				□ METERS					SLOPE	HORIZ				INST
1												1		
2	△	SP-81	✓		89 42 18	6.0		-7.8	4.5				2	
3	△	✓	2640		270 17 55	6.0		✓					3	
4		TS-1	1760		90 01 40	40		-4.8		-0.3			4	TS-1-6 SEA-LEVEL
5		TS-2	880		90 04 55	40		-5.2		-0.7			5	
6	K	TS-3	0		90 00 00	50		-5.0		-0.5	Ver Tie = -0.5		6	
7		TS-4	880		90 07 14	40		-5.8		-0.8			7	
8		TS-5	1760		90 04 14	40		-6.1		-1.6			8	
9	◎	TS-6	2640		90 03 10	40		-6.2		-1.7			9	
10	◎	✓	✓		269 57 10	40		✓					10	
11													11	
12													12	
13													13	
14													14	
15													15	
16													16	
17													17	

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