LINE	30	DATE	228	YEAR	1980	GOUGE DEPTH DISTRIBUTION: > 1 METER									
SEGMENT	1.0-1.2	1.2-1.4	1.4-1.6	1.6-1.8	1.8-2.0	2.0-2.2	2.2-2.4	2.4-2.6	2.6-2.8	2.8-3.0	3.0-3.2	3.2-3.4	3.4-3.6	3.6-3.8	3.8-4.0
NNOO	5	1	1	—	—	—	—	—	—	—	—	—	—	—	—
OOPP	4	2	3	2	2	—	—	—	—	—	—	—	—	—	—
PPQQ	6	0	1	—	—	—	—	—	—	—	—	—	—	—	—
QQRR	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—

ICE GOUGE DATA RECORD — 1980

BEGINNING SEG. SCALE 1:2008

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

ACHLINE 55	DATE 53	SEGMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ° DOM / SUB	ADJUSTED ORIENTATION °T DOM	ADJUSTED ORIENTATION °T SUB	ORIENTATION CONFIDENCE HIGH LOW VARIABILITY	NUMBER OF INCISIONS OBS	CORRECTION FACTOR ⊥	GOUGE DENSITY PER KM	INCISION DEPTH DISTRIBUTION METERS NMP	.2-.4	.4-.6	.6-.8	.8-1.0	>1	MAX	MAXIMUM INCISION WIDTH M	MAXIMUM RIDGE HEIGHT M	MAXIMUM GOUGE LENGTH M	MULTI-INCISION GOUGES NUMBER	MAXIMUM INCISIONS PER GOUGE	MAXIMUM DISRUPTION WIDTH (M)	DOMINANT ORIENTATION (°T)	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
AB		1	0656.0	2.3		090	— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.2	—	NO SONAR
BC		2	0703.5	2.5			— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.7	—	NO SONAR
CD		3	0711.0	2.9			— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.7	—	NO SONAR
DE		4	0718.3	3.3			— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	—	NO SONAR
EF		5	0725.9	3.8			— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.9	—	NO SONAR
FG		6	0731.8	4.2			145 / —	235	—	L	19	1.13	21.5	19	0	0	0	0	0	<.2	3	<.2		0	—	—	—	15.1	125	ROUGH SEAS - SOME DISTORTION ON ALL RECORDS - ALL GOUGES IN ONE SMALL AREA
GH		7	0738.9	4.6			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	10.8		SOME BOTTOM FEATURES (FUNNY BOTTOM?) SHOWING THROUGH SURFACE SEDIMENTS.
HI		8	0745.2	4.9			40 / —	130	—	L	4	1.20	4.8	4	0	0	0	0	0	<.2	5	<.2		0	—	—	—	11.0		BOTTOM OUTCROPS MAY BE SED. WAVE FORMS - ORIEN: 240°T - APPEAR ON SONAR AND FATHO.
IJ		9	0752.9	5.0			30 / ←	120	—	L	3	1.38	4.1	3	0	0	0	0	0	<.2	2	<.2		0	—	—	—	8.5		BED FORM/WAVE PATTERN DIES OUT BY END OF SEGMENT.
JK		10	0801.3	5.3			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	9.0		
KL		11	0810.0	5.3			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	10.1		
LM		12	0818.0	4.2			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	9.7		
MN		13	0826.0	5.0			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	9.8		SEDIMENT WAVES
NO		14	0833.9	5.1			— / —	—	—	—	0	—	0	0	0	0	0	0	0	0	0	0		0	—	—	—	11.0		SEG. SCALE 1:1524 SEDIMENT WAVES
OP		15	0843.0	5.3			140 / 60	230	150	M	3	1.20	3.6	3	0	0	0	0	0	<.2	1	<.2		0	—	—	—	14.3		SEDIMENT WAVES - FUNNY BOTTOM IN TROUGHS, GOUGES ON CRESTS. VERY SMALL GOUGES.
PQ		16	0853.0	6.8			30 / —	120	—	L	2	1.38	2.8	2	0	0	0	0	0	<.2	2	<.2		0	—	—	—	15.2		SAME AS SEGMENT OP. SMALL PATCH OF SEDIMENT RIPPLES.

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

CRUISE	DATE	SEGMENT
55	53	

SEGMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ° DOM / SUB	ADJUSTED ORIENTATION °T DOM	ADJUSTED ORIENTATION °T SUB	ORIENTATION VARIABILITY 2 SIGMA FOR 10	NUMBER OF INCISIONS OBS	CORRECTION FACTOR ⊥	GOUGE DENSITY PER KM	INCISION DEPTH DISTRIBUTION METERS NMP	.2-.4	.4-.6	.6-.8	.8-1.0	>1	MAX	MAXIMUM INCISION WIDTH M	MAXIMUM RIDGE HEIGHT M	MAXIMUM GOUGE LENGTH M	MULTI-INCISION GOUGES NUMBER	MAXIMUM INCISIONS PER GOUGE	MAXIMUM DISRUPTION WIDTH (M)	DOMINANT ORIENTATION °T	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
QR 17	0903.2	6.7		090	30 / —	120	—	L	3	1.38	4.1	3	0	0	0	0	0	<.2	1	<.2		0	—	—	—	12.5	125	SEDIMENT WAVES - FUNNYBOTTOM IN TROUGHS, GOUGES ON CRESTS.
RS 18	0913.0	7.0			20 / —	110	—	L	5	1.73	8.7	5	0	0	0	0	0	<.2	2	<.2		1	2	9	110	12.0		SAME AS SEGMENT QR. SEG. SCALE 1:2008
ST 19	0921.1	7.2			30 / —	120	—	L	4	1.38	5.5	4	0	0	0	0	0	<.2	7	<.2		1	3	13	120	14.0		SED. WAVES - SAME AS SEG. QR.
TU 20	0930.2	9.2			150 / —	240	—	L	6	1.38	8.3	6	0	0	0	0	0	<.2	8	<.2		1	2	14	240	13.5		
UV 21	0939.0	10.1		080	45 / 140	125	220	L	13	1.13	14.7	13	0	0	0	0	0	<.2	3	<.2		1	2	7	105	14.1		SEG. SCALE 1:1524
VW 22	0948.2	10.1			45 / 145	125	225	M	8	1.13	9.0	8	0	0	0	0	0	<.2	4	<.2		1	3	8	225	14.9		FUNNYBOTTOM TYPE OUTCROPS. SED. WAVES.
WX 23	0955.9	10.0			145 / 30	225	110	M	25	1.28	32.0	25	0	0	0	0	0	<.2	11	<.2		0	—	—	—	15.4		SED. WAVES. SAME AS SEG. VW. FUNNYBOTTOM IN TROUGHS - GOUGING THROUGHOUT THE SEGMENT. 1:2008
XY 24	1003.2	10.9			— / —	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	15.8		NO SONAR THIS SEGMENT. 1:1524
YZ 25	1012.0	12.0			150 / 30	230	110	M	70	1.38	96.6	68	2	0	0	0	0	.3	13	.3		3	3	25	230	17.4		
ZAA 26	1020.9	12.4			45 / 155	125	235	M	34	1.13	38.4	34	0	0	0	0	0	<.2	6	<.2		6	3	18	235	17.0		
ABB 27	1029.6	12.7			30 / 150	110	230	M	18	1.38	24.8	18	0	0	0	0	0	<.2	6	<.2		2	2	3	245	17.5		
BCC 28	1038.2	13.1			25 / 175	105	255	M	45	1.51	69.3	45	0	0	0	0	0	<.2	10	<.2		1	23	90	255	18.7		
CDD 29	1047.6	13.5			165 / 10	245	90	L	35	2.00	70.0	33	2	0	0	0	0	.2	4	<.2		3	8	40	250	18.7		1:2008 .25 KM OF SONAR MISSING - COUNT ADJUSTED.
DEE 30	1055.2	13.9			20 / 140	100	220	M	36	1.73	62.3	32	4	0	0	0	0	.3	11	.4		0	—	—	—	18.3		.25 KM OF SONAR MISSING - ADJUSTED
EFF 31	1103.3	14.6			30 / 140	110	220	M	23	1.38	31.7	20	2	1	0	0	0	.5	21	.3		2	3	4/3	090	20.5		
FGG 32	1112.0	14.8		355	40 / —	035	—	L	10	1.20	12.0	8	2	0	0	0	0	.2	22	.3		0	—	—	—	—		SWELL DISTORTS RECORDS. SONAR POOR.

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

TRACKLINE 55	DATE 253	SEGMENT KM	START TIME HOURS MINUTES	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ø DOM/SUB	ADJUSTED ORIENTATION °T DOM	SUB	ORIENTATION CONFIDENCE CODE	NUMBER OF INCISIONS OBS	CORRECTION FACTOR ⊥	GOUGE DENSITY PER KM	INCISION DEPTH DISTRIBUTION METERS NMP	.2-.4	.4-.6	.6-.8	.8-1.0	>1	MAX	MAXIMUM INCISION WIDTH M	MAXIMUM RIDGE HEIGHT M	MAXIMUM RIDGE LENGTH M	MULTI-INCISION GOUGES NUMBER	MAXIMUM INCISIONS PER GOUGE	MAXIMUM DISRUPTION WIDTH (m)	DOMINANT ORIENTATION (°T)	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
GHH	33	1119.9	15.3			355	140/170	135	165	M	12	1.20	14.4	3	3	2	1	0	0	.6	22	.5		0	—	—	—	—	125	Poor Sonar due to swell. SMALLER GOUGES CAN NOT BE SEEN.
HII	34	1127.2	15.3				135/65	130	060	L	36	1.13	40.7	17	4	6	5	2	2	1.2	13	.8		3	2	48	130	—		(1:1524)
JJJ	35	1136.5	15.7				140/165	135	160	L	27	1.20	32.4	14	8	4	1	0	0	.6	15	.5		3	6	25	135	—		RECORDS VERY POOR. SMALL GOUGES DO NOT SHOW.
JKK	36	1147.0	16.0				140/—	135	—	L	22	1.20	26.4	20	1	1	0	0	0	.5	10	.4		1	6	25	160	—		
KLL	37	1157.0	16.5				50/—	045	—	L	6	1.08	6.5	—	—	—	—	—	—	—	20	—		0	—	—	—	—		NO FATHOGRAM GOUGE COUNTS TOO LOW!
LMM	38	1207.6	—				135/—	130	—	L	11	1.13	12.4	—	—	—	—	—	—	—	8	—		0	—	—	—	—		PT. LL NOT ON FATHOGRAM. NO FATHOGRAM
MNN	39	1218.0	17.1				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		SONAR UNUSABLE
NOO	40	1228.0	17.3				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		NO SONAR
OPP	41	1239.4	—				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		NO FATHOGRAM (PT OO NOT ON FATHOGRAM) NO SONAR
PQQ	42	1249.0	—				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		NO FATHOGRAM (PT PP NOT ON FATHOGRAM) SONAR UNUSABLE
QRR	43	1258.8	18.7				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		3 to 5 ft. waves SONAR UNUSABLE
RSS	44	1308.2	18.8				—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	—		SONAR UNUSABLE
STT	45	1318.0	18.7				135/—	130	—	L	18	1.13	20.3	16	1	0	1	0	0	.7	10	1.2		0	—	—	—	—		SEG. SCALE 1:1106 — SONAR VERY POOR WAVES MAKE FATHOGRAM VERY POOR.
TUU	46	1331.0	18.9				115/150	110	145	M	25	.99	24.8	20	3	2	0	0	0	.6	10	.4		0	—	—	—	—		
UVV	47	1343.0	18.9				120/150	115	145	M	35	1.01	35.4	29	6	2	0	0	0	.4	13	.4		0	—	—	—	27.2		
VWW	48	1356.0	19.0				115/130	110	125	M	45	.99	44.6	33	10	2	0	0	0	.4	22	.5		0	—	—	—	27.5		

ICE GOUGE DATA RECORD — 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

TRACKLINE 55	DATE 253	SEGMENT

KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ° DOM/SUB	ADJUSTED ORIENTATION °T DOM	ADJUSTED ORIENTATION °T SUB	ORIENTATION VARIABILITY HIGH MED LOW	NUMBER OF INCISIONS OBS	CORRECTION FACTOR ⊥	GOUGE DENSITY PER KM	INCISION DEPTH DISTRIBUTION METERS NMP	.2-.4	.4-.6	.6-.8	.8-1.0	>1	MAX	MAXIMUM INCISION WIDTH M	MAXIMUM RIDGE HEIGHT M	MAXIMUM GOUGE LENGTH M	MULTI-INCISION GOUGES NUMBER	MAXIMUM INCISIONS PER GOUGE	MAXIMUM DISRUPTION WIDTH (M)	DOMINANT ORIENTATION °T	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
IWXX 49	1408.0	18.8		355	120/155	115	150	M	107	.99	105 .9	90	10	5	2	0	0	.6	17	.5		3	4	25	150	26.5	125	(1:1106) GOUGES OF ORIEN. 150°T APPEAR YOUNGER THAN THOSE OF 115°T ORIEN.
XYY 50	1420.0	18.9			155/115	150	110	M	79	1.54	121 .7	65	13	1	0	0	0	.4	15	.2		2	3	16	150	—		
JYZZ 51	1431.0	18.9			120/150	115	145	L	56	.99	55 .4	44	12	0	0	0	0	.3	13	.2		2	4	27	150	—		
ZAAA 52	1441.2	19.2			—/—	—	—	—	—	—	—	—	—	—	—	—	—	.7	—	—		—	—	—	—	28.0		NO SONAR THIS SEGMENT
AABBB 53	1449.2	19.5			125/145	120	140	L	44	1.04	95 .8	30	11	3	0	0	0	.5	18	.5		0	—	—	—	27.4		(SEG. SCALE 1:1695)
BBCCC 54	1457.7	19.7			130/—	125	—	L	31	1.08	33 .5	21	8	2	0	0	0	.5	15	.3		1	4	20	005	29.7		
CDDD 55	1506.8	19.7			105/155	100	150	H	23	.97	22 .3	16	6	1	0	0	0	.4	13	.5		1	4	20	005	30.6		
DEEE 56	1513.8	19.4			130/—	125	—	L	9	1.08	9.7	6	3	0	0	0	0	.3	11	<.2		0	—	—	—	—		GOUGES APPEAR TO BE INFILLED.
EFFF 57	1522.0	19.3			45/140	040	135	M	2	1.13	2.3	2	0	0	0	0	0	<.2	7	<.2		0	—	—	—	30.5		BLANKET OF RECENT SEDIMENT COVERS BOTTOM ?
FGGG 58	1530.0	19.0		340	130/—	110	—	L	4	1.08	4.3	3	1	0	0	0	0	.2	3	<.2		0	—	—	—	—		
GHHH 59	1538.0	19.1			130/90	110	070	L	7	1.08	7.6	7	0	0	0	0	0	<.2	13	<.2		0	—	—	—	—		
HIII 60	1546.0	20.0		315	140/165	095	120	L	48	1.20	57 .6	45	3	0	0	0	0	.3	18	.4		2	2	15	120	30.0		
IJJJ 61	1554.1	20.5			145/30	100	345	L	75	1.28	96 .0	61	9	5	0	0	0	.5	33	.5		1	3	26	155	29.3		(1:2008)
JJKKK 62	1601.8	20.0			120/160	095	115	M	131	1.01	132 .3	99	24	6	2	0	0	.7	15	.8		4	3	17	095	29.8		SUBBOTTOM HAS GOUGE CHARACTER. (1:1524)
KKLLL 63	1611.7	20.2		340	125/15	105	355	L	105	1.04	109 .2	77	20	7	1	0	0	.7	10	.7		6	4	37	130	27.6		
LMMM 64	1620.0	20.2			125/20	105	000	M	87	1.04	90 .5	49	24	10	3	1	0	.9	15	1.0		4	3	20	105	28.3		

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	KT6

LINE	DATE	SEGMENT
55	53	

KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ° DOM/SUB	ADJUSTED ORIENTATION °T DOM	ADJUSTED ORIENTATION °T SUB	ORIENTATION VARIABILITY HIGH OR LOW	NUMBER OF INCISIONS OBS	CORRECTION FACTOR ⊥	GOUGE DENSITY PER KM	INCISION DEPTH DISTRIBUTION METERS NMP	.2-.4	.4-.6	.6-.8	.8-1.0	>1	MAX	MAXIMUM INCISION WIDTH M	MAXIMUM RIDGE HEIGHT M	MAXIMUM GOUGE LENGTH M	MULTI-INCISION GOUGES NUMBER	MAXIMUM INCISIONS PER GOUGE	MAXIMUM DISRUPTION WIDTH (M)	DOMINANT ORIENTATION (°T)	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
MNNN 65	1629.0	20.5		340	115/150	095	130	L	79	.99	78 .2	61	18	7	2	1	0	.8	23	.7		1	2	7	105	27.8	125	SUB BOTTOM HAS GOUGE CHARACTER
NOOO 66	1638.9	20.6		358	140/45	138	043	M	63	1.20	75 .6	16	37	6	2	2	0	.9	8	1.2		3	11	45	138	30.4		
OPPP 67	1648.0	21.0			60/115	058	113	L	47	1.01	47 .5	0	44	7	2	1	0	.8	20	.5		1	4	22	113	—		(1:1106) CAN SONAR VERY POOR. NOT SEE ALL GOUGES
PQQQ 8	1700.0	21.3			105/145	103	143	M	70	.97	67 .9	36	28	5	1	0	0	.7	20	1.2		0	—	—	—	27.0		
QQQ END	1710.4	21.5																								27.4		