K-1-80-AR

ICE GOUGE DATA RECORD 1980

START SEG. SCALE 1:1695

VESSEL	KARLUK
TEMPLATE SIZE	4.0 KTS

...CHLINE 22 / ...ATE -20 / ...GMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION Ø 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
AB 1	1607.0	14.4		000	60 / –	060	–	L	40	1.01	40 / .4	14	25	1	0	0	0	.4	11	.4		0	–	–	–	–	125	SONAR QUALITY POOR.
BC 2	1615.2	15.0			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.4	–	.4		–	–	–	–	19.0	–	NO SONAR - FATHOGRAM ONLY
CD 3	1623.6	15.5			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.3	–	.3		–	–	–	–	19.6	–	
DE 4	1632.2	15.7			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.3	–	.8		–	–	–	–	21.0	–	GOUGE OR CHANNEL TYPE SUBBOTTOM FROM PT. D TO PT. I.
EF 5	1642.0	16.0			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.3	–	.2		–	–	–	–	21.5	–	SUBBOTTOM APPEARS TO HAVE 2 CHANNELS IN THIS SEGMENT. LARGEST - 1/2 KM WIDE, 2 METERS DEEP
FG 6	1652.0	16.5			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.3	–	.4		–	–	–	–	22.6	–	
GH 7	1702.3	16.9			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.5	–	.4		–	–	–	–	23.2	–	
HI 8	1712.2	17.3			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.5	–	.6		–	–	–	–	23.0	–	
IJ 9	1722.5	17.5			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.4	–	.5		–	–	–	–	24.3	–	
JK 10	1732.0	18.0			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.4	–	.4		–	–	–	–	23.8	–	
KL 11	1741.1	18.3			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.5	–	.5		–	–	–	–	22.9	–	
LM 12	1750.7	18.2			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.4	–	.7		–	–	–	–	22.3	–	
MN 13	1800.0	18.5			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.4	–	.7		–	–	–	–	23.8	–	
NO 14	1809.0	18.7			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.6	–	.8		–	–	–	–	24.1	–	GOUGE OR CHANNEL TYPE SUBBOTTOM FROM PT. N TO PT. Q.
OP 15	1818.2	19.0			– / –	–	–	–	–	–	–	–	–	–	–	–	–	.5	–	.9		–	–	–	–	23.5	–	
PQ 16	1827.1	19.0			– / –	–	–	–	–	–	–	–	–	–	–	–	–	1.0	–	.9		–	–	–	–	25.5	–	

ICE GOUGE DATA RECORD 1980

TRACKLINE	22
DATE	220
SEGMENT	

VESSEL	KARLUK
TEMPLATE SIZE	4.0 KTS

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	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 DISTRIBUTION WIDTH (M)	DOMINANT ORIENTATION (°T)	DEPTH TO FIRST REFLECTOR (M)	SONAR RANGE (M)	REMARKS
QR 17	1836.2	19.0		000	— / —	—	—	—	—	—	—	—	—	—	—	—	—	1.2	—	.8		—	—	—	—	25.9	—	NO SONAR
RS 18	1846.2	19.1			— / —	—	—	—	—	—	—	—	—	—	—	—	—	1.0	—	.8		—	—	—	—	24.4 / 27.2	125	
ST 19	1855.8	19.5			65 / 130	065	130	M	65	.99	64 .4	0	38	23	3	1	0	.9	11	1.0		0	—	—	—	25.5 / 28.0		DOUBLE SUBBOTTOM FORMS LENS SHAPE AND THEN FORMS INTO ONE SUBBOTTOM AT SEG. END
TU 20	1905.0	20.3			125 / 70	125	070	M	56	1.04	58 .2	1	38	10	6	1	0	.8	12	.8		0	—	—	—	26.5		GOUGE OR CHANNEL TYPE SUBBOTTOM FROM PT. T TO PT W. SONAR QUALITY POOR FOR ENTIRE
UV 21	1914.1	21.0			60 / 120	060	120	M	49	1.01	49 .5	21	21	7	0	0	0	.5	12	1.0		1	2	32	035	27.0		TRACKLINE. SMALLER GOUGES CAN NOT BE SEEN.
VW 22	1923.8	20.7			50 / 125	050	125	M	83	1.08	89 .6	27	40	11	5	0	0	.7	12	.8		3	4	17	045	26.9		
WX 23	1932.1	20.0			55 / 125	055	125	L	99	1.04	103 .0	26	33	19	12	5	4	1.1	13	1.0		3	6	23	010	28.5		
XY 24	1941.9	21.1			50 / 135	050	135	M	94	1.08	101 .5	17	45	17	9	4	2	1.2	10	.8		4	4	36	050	—		
YZ 25	1950.8	21.2			55 / 125	055	125	M	110	1.04	114 .4	40	42	21	3	3	3	1.2	14	1.0		1	3	30	055	26.5		
ZAA 26	2000.0	20.8			50 / 120	050	120	M	112	1.08	121 .0	31	50	19	7	4	1	1.0	10	1.0		0	—	—	—	—		
ABB 27	2009.8	21.4			125 / 60	125	060	L	97	1.04	100 .9	35	37	15	8	1	1	1.1	8	.8		2	6	49	125	—		
BB END	2019.0	21.0																								26.2		

LINE	22	DATE	220	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
WX	4														
XY	2														
YZ	2	1													
ZAA	1														
AABB	1														

ICE GOUGE DATA RECORD

1980

START SEGMENT SCALE 1:1524

VESSEL	KARLUK
TEMPLATE SIZE	4.5 KTS

ACHLINE 28 — DATE 27 — GMENT

KM	START TIME (HOURS MINUTES TENTHS)	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ø DOM/SUB	ADJUSTED ORIENTATION °T DOM	SUB	ORIENTATION (HIGH CROSS 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 DISTRUPTION WIDTH (M)	DOMINANT ORIENTATION (°T)	DEPTH TO FIRST REFLECTOR M	SONAR RANGE M	REMARKS
AB 1	1157.0	19.4		000	110/—	110	—	L	60	.98	58 .8	34	21	5	0	0	0	.4	4	.5		1	3	14	010	—	125	.25 of SEG SONAR MISSING. COUNT ADJUSTED.
BC 2	1208.0	19.2			110/—	110	—	L	64	.98	62 .7	50	12	1	1	0	0	.7	7	.6		0	—	—	—	—		SUBBOTTOM LEVELS APPEAR TO GRADE DOWN FROM THE SEAFLOOR. MOST GOUGING STOPS HALFWAY THRU SEGMENT.
CD 3	1217.7	18.0			95/45	095	045	L	29	.98	28 .4	27	2	0	0	0	0	.2	3	.2		0	—	—	—	23.3		OTHER SUBBOTTOMS AT 22.1 & 27.3 (1:2008)
DE 4	1225.0	18.6			120/70	120	70	L	63	1.01	63 .6	52	9	1	1	0	0	.6	5	.3		0	—	—	—	26.1		
EF 5	1232.0	18.7			170/30	170	30	H	15	2.38	35 .7	11	4	0	0	0	0	.3	4	<.2		0	—	—	—	—		
FG 6	1240.0	16.6			50/—	050	—	L	6	1.08	6.5	4	2	0	0	0	0	.2	4	.2		2	2	7	050	24.8		
GH 7	1249.0	14.0		045	20/40	065	085	M	172	1.73	297 .6	167	5	0	0	0	0	.2	2	.5		1	55	167	065	—		POSSIBLE UPPER SUBBOTTOM LAYER AT 18M THAT DISAPPEARS UNDER SHOAL AND GRADES TO SEAFLOOR BOTH DIR.
HI 8	1257.2	9.7		000	145/15	145	015	L	59	1.28	75 .5	59	0	0	0	0	0	<.2	3	.4		2	6	27	015	—		GOUGING IS PRESSURE RIDGE TYPE ON SHOAL TOP - 10 M SHOAL. SOME PRESSURE RIDGE GOUGES STILL
IJ 9	1306.0	11.5			140/50	140	050	L	29	1.20	34 .8	28	1	0	0	0	0	.2	4	.2		0	—	—	—	—		
JK 10	1315.6	14.1			45/130	045	130	M	18	1.13	20 .3	18	0	0	0	0	0	<.2	2	.2		0	—	—	—	—		
KL 11	1323.5	16.8			155/00	155	000	M	18	1.54	27 .7	16	2	0	0	0	0	.3	9	<.2		2	3	12	000	—		
LM 12	1332.8	20.1			115/140	115	140	L	60	.99	59 .4	45	12	3	0	0	0	.4	12	.5		1	4	16	160	31.0		
MN 13	1341.0	22.0			70/100	070	100	M	114	.98	111 .7	72	31	11	0	0	0	.5	35	.8		0	—	—	—	—		HIGH DENSITY GOUGING
NO 14	1349.2	22.2			70/100	070	100	M	111	.98	108 .8	76	23	9	1	1	1	1.0	12	.8		1	3	21	085	—		(1:1695)
OP 15	1358.0	22.2		130	115/50	245	180	L	181	.99	179 .2	152	24	3	2	0	0	.6	33	.5		5	4	21	105	—		(1:1524) HIGH DENSITY MAKES IT DIFFICULT TO DEFINE MULTIPLE GOUGES.
PQ 16	1409.0	22.8		120	145/15	265	135	H	177	1.28	226 .6	142	25	10	0	0	0	.5	30	.8		8	2	26	230	—		(1:1695) " "

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.5 KTS

LINE	DATE	SEGMENT KM	START TIME (HOURS MINUTES TENTHS)	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ° DOM/SUB	ADJUSTED ORIENTATION DOM	ADJUSTED ORIENTATION SUB	°T	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
28	27	QR 17	1418.2	22.3		140	100/65	240	205	M	174	.97	168 .8	149	18	6	0	1	0	.8	30	1.1		5	4	35	300	—	125	HIGH DENSITY GOUGING ENDS AT SEGMENT END.
		RS 18	1427.7	21.3		150	40/05	190	155	L	11	1.20	13 .2	11	0	0	0	0	0	<.2	3	<.2		1	2	11	155	31.3		COMMING BACK UP ON SHOAL.
		ST 19	1436.2	19.5		↓	150/—	300	—	L	32	1.38	44 .2	32	0	0	0	0	0	<.2	4	<.2		4	3	17	295	—		SOME FATHOGRAM MISSING. GOUGING ON SHOAL FACE.
		TU 20	1445.0	16.4		120	130/165	250	285	L	50	1.08	54 .0	50	0	0	0	0	0	<.2	3	.2		3	15	55	075	—		PRESSURE RIDGE GOUGES ON CREST.
		UV 21	1454.0	16.1			140/20	260	140	M	69	1.20	82 .8	69	0	0	0	0	0	<.2	4	.2		4	7	19	265	—		
		VW 22	1503.6	16.7			135/15	255	135	L	89	1.13	100 .6	87	2	0	0	0	0	.2	5	<.2		5	9	49	255	29.2		SMOOTH BOTTOM WITH MANY SMALL GOUGES (RECENT?). SUBBOTTOM APPEARS AS GOUGED RELIEF FROM PT. V
		WX 23	1513.5	18.0		↓	140/30	260	150	L	28	1.20	33 .6	28	0	0	0	0	0	<.2	3	<.2		2	10	37	260	27.1		TO PT. Z
		XY 24	1522.2	18.9		270	30/155	300	245	M	45	1.38	62 .1	43	2	0	0	0	0	.2	3	<.2		3	3	12	300	28.5		BEGINNING OF SEDIMENT WAVES.
		YZ 25	1530.0	19.5			15/145	285	235	M	30	2.00	60 .0	28	2	0	0	0	0	.3	10	<.2		2	2	9	245	28.0		SEDIMENT WAVES IN GRAVEL – ORIEN. 145°T WIDTH – 2 to 3 meters HEIGHT – <20 CM SAND MAY BE POOLING IN DEPRESSIONS AS GOUGES AND WAVES HAVE A DISTINCT END AT SED. BOUNDARY.
		ZAA 26	1537.1	20.1			140/20	050	290	L	41	1.20	49 .2	41	0	0	0	0	0	<.2	3	<.2		0	—	—	—	27.1		APPROACHING SHOAL FROM EAST. SED. WAVES ORIEN. – 145°T WIDTH 3-4 METERS HEIGHT – ~10 CM.
		AABB 27	1545.1	16.9			150/25	060	295	L	134	1.38	184 .9	133	1	0	0	0	0	.2	6	.2		2	4/2	125	060	28.0		PRESSURE RIDGE GOUGING – 060°T ON CREST OF SHOAL
		BBCC 28	1555.1	13.5			150/30	060	300	L	132	1.38	182 .2	132	0	0	0	0	0	<.2	2	.2		3	9	22	060	—		PRESSURE RIDGE GOUGING ON SHOAL ORIENTATION – 060°T AVE. WIDTH – 2 M
		CCDD 29	1604.0	12.3			155/20	065	290	L	40	1.54	61 .6	40	0	0	0	0	0	<.2	1	<.2		2	18	51	065	—		
		DEE 30	1612.0	11.5			20/—	290	—	L	52	1.73	90 .0	51	1	0	0	0	0	.2	3	.4		4	12	23	290	—		
		EFF 31	1619.0	10.8			30/05	300	275	L	59	1.38	81 .4	57	2	0	0	0	0	.2	2	.4		3	4	16	300	—		GOING DOWN WEST SIDE OF SHOAL – GOUGING ON FACE – PRESSURE RIDGE TYPE. VERY SHALLOW (SMALL) GOUGES.
		FGG 32	1626.7	14.0			00/155	270	065	L	41	4.00	164.0	41	0	0	0	0	0	<.2	2	<.2		4	10	33	270	—		VERY SMALL GOUGES. MOST GOUGING IN THE FORM OF MULTIPLE GOUGES

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.5 KTS

ACHLINE 28 / DATE 27 / GMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION Ø 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
GHH 33	1634.3	14.3		270	30/170	300	080	L	9	1.38	12.4	9	0	0	0	0	0	<.2	2	<.2		0	—	—	—	24.0	125	SUBBOTTOM HAS ICE GOUGE CHARACTER FROM PT. GG TO PT. UU.
HII 34	1642.6	14.7			20/140	290	050	L	16	1.73	27.7	16	0	0	0	0	0	<.2	1	<.2		1	11	50	290	24.0		
JJ 35	1651.0	15.0			20/175	290	085	L	12	1.73	20.8	12	0	0	0	0	0	<.2	2	<.2		1	9	37	290	24.8		
JKK 36	1659.0	15.5			25/—	295	—	L	1	1.54	1.5	1	0	0	0	0	0	<.2	1	<.2		0	—	—	—	24.6		
KLL 37	1707.3	16.2			—/—	—	—	—	0	—	0.0	0	0	0	0	0	0	0	0	0		0	—	—	—	22.0		NO FATHOGRAM FOR SEGMENT NO GOUGES ON SONAR.
LMM 38	1716.2	—			—/—	—	—	—	0	—	0.0	0	0	0	0	0	0	0	0	0		0	—	—	—	—		PT LL NOT ON FATHOGRAM. NO GOUGES
MNN 39	1725.2	17.2			—/—	—	—	—	0	—	0.0	0	0	0	0	0	0	0	0	0		0	—	—	—	22.9		NO FATHOGRAM FOR MOST OF SEGMENT. NO GOUGES
WOO 40	1733.8	18.5			—/—	—	—	—	0	—	0.0	0	0	0	0	0	0	0	0	0		0	—	—	—	24.7		NO GOUGES
OPP 41	1743.0	18.7			—/—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	—	—	26.0		NO SONAR
PPQQ 42	1751.5	—			50/—	320	—	L	22	1.08	23.8	19	3	0	0	0	0	.2	12	<.2		0	—	—	—	—		PT PP NOT ON FATHOGRAM. GOUGES ARE DISCONTINUOUS AND APPEAR TO BE INFILLED.
QRR 43	1801.0	19.4			40/20	310	290	L	40	1.20	48.0	22	16	2	0	0	0	.5	14	.5		1	2	20	310	28.0		(1:1524)
RSS 44	1811.5	19.5			55/20	325	290	L	47	1.04	48.9	41	5	1	0	0	0	.5	13	.7		1	2	17	290	26.7		
STT 45	1821.1	19.5			60/135	330	045	L	96	1.01	97.0	61	32	3	0	0	0	.5	15	.6		1	6	25	290	26.0		
TUU 46	1831.0	19.0			55/155	325	065	L	79	1.04	82.2	66	12	1	2	0	0	.6	8	.7		0	—	—	—	25.7		
UU END	1840.7	18.5																								23.9		

LINE	28	DATE	227	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
NO	1														

ICE GOUGE DATA RECORD

1980

START SEGMENT SCALE 1:2008

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

LINE 30 — DATE 28 — SEGMENT

KM	START TIME (HOURS MINUTES TENTHS)	START DEPTH (M)	DISTANCE FROM COAST (KM)	SHIP'S COURSE (°T)	OBSERVED ORIENTATION (DOM/SUB)	ADJUSTED ORIENTATION (DOM)	ADJUSTED ORIENTATION (SUB)	ORIENTATION VARIABILITY (HIGH CROSS)	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	0940.0	17.6		000	125/60	125	060	M	101	1.04	105 .0	74	23	2	2	0	0	.6	20	1.1		4	2	49	065	26.9	125	
BC 2	0947.4	18.1			115/55	115	055	M	84	.99	83 .2	66	16	2	0	0	0	.5	15	.6		6	5	53	155	24.8		
CD 3	0954.7	18.5			130/65	130	065	M	107	1.08	115 .6	78	26	2	1	0	0	.6	12	1.0		5	5	38	065	25.4		
DE 4	1002.0	19.0			80/65	080	065	L	71	.97	68 .9	47	21	3	0	0	0	.4	17	.8		2	2	30	150	26.6		GOUGE OR CHANNEL SUBBOTTOM TYPE FROM PT. D TO PT. F.
EF 5	1009.6	19.1			95/125	095	125	L	62	.98	60 .8	34	21	5	2	0	0	.6	18	.9		2	2	96	090	28.2		
FG 6	1017.4	19.4			120/80	120	080	L	58	1.01	58 .6	43	13	2	0	0	0	.4	16	.5		1	2	21	000	29.6		
GH 7	1025.0	19.5			090/125	090	125	L	70	1.00	70 .0	64	6	0	0	0	0	.2	42	.6		2	3	33	125	—		
HI 8	1033.0	19.8			95/75	095	075	L	87	.98	85 .3	67	19	1	0	0	0	.4	27	.6		3	5	38	130	—		
IJ 9	1042.0	20.0			115/65	115	065	L	73	.99	72 .3	58	10	5	0	0	0	.5	17	.4		3	4	50	145	—		
JK 10	1050.2	20.0			100/130	100	130	L	88	.97	85 .4	70	17	1	0	0	0	.4	18	.6		6	4	60	050	—		
KL 11	1059.0	20.0			100/70	100	070	L	86	.97	83 .4	56	26	4	0	0	0	.5	19	1.0		1	2	23	140	25.8		
LM 12	1108.0	19.9			105/135	105	135	L	71	.97	68 .9	39	28	2	2	0	0	.7	7	.5		1	2	57	135	26.7		SUBBOTTOM HAS GOUGE OR CHANNEL TYPE RETURN FROM PT L TO PT R. SONAR OFF FOR 1MIN - COUNT CORRECTED
MN 13	1115.8	20.1			115/55	115	055	M	110	.99	108 .9	76	30	2	1	0	1	1.1	17	1.2		2	2	12	020	25.7		
NO 14	1123.1	20.0			110/50	110	050	L	151	.98	148 .0	110	37	4	0	0	0	.5	12	1.0		3	3	25	140	25.3		COMMING TO SHOREWARD SIDE OF SHOAL
OP 15	1131.0	19.6			115/145	115	145	L	164	.99	162 .4	111	40	7	5	1	0	.8	18	.7		3	2	12	165	25.8		
PQ 16	1138.2	18.2			125/50	125	050	H	248	1.04	251 .9	194	30	14	7	1	2	1.6	8	.9		0	—	—	—	24.4		SHOAL HIGH PT. IS 16.5 M DEPTH. VERY HIGH GOUGE DENSITY MAKES IT DIFFICULT TO SEE MULTIPLE GOUGES.

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

SCALING 30 / DATE 28 / SEGMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ø DOM/SUB	ADJUSTED ORIENTATION °T DOM	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
QR 17	1146.0	16.9		000	100/60	100	060	H	204	.97	197 .9	148	38	14	2	1	1	1.0	9	.9		2	5	32	135	24.0	125	(1:1695)
RS 18	1154.0	17.4			110/65	110	065	H	155	.98	151 .9	99	27	14	7	5	3	1.4	13	.9		3	2	17	070	28.4		
ST 19	1201.2	18.1			120/60	120	060	H	173	1.01	174 .7	121	22	7	4	3	16	2.0	36	1.3		4	2	22	050	24.2		
TU 20	1209.0	19.8			110/85	110	085	M	149	.98	146 .0	97	17	12	6	5	12	2.1	14	.9		0	–	–	–	26.3		
UV 21	1216.2	21.1			110/30	110	030	H	119	.98	116 .6	81	7	10	5	4	12	2.2	18	1.1		0	–	–	–	–		
VW 22	1224.0	23.6			120/55	120	055	L	93	1.01	93 .9	49	13	6	6	6	13	2.2	19	1.7		1	3	38	140	–		
WX 23	1231.3	26.2			100/60	100	060	L	65	.97	63 .1	30	18	4	3	4	6	2.1	13	.8		0	–	–	–	–		
XY 24	1238.9	29.1			75/95	075	095	M	68	.97	66 .0	38	10	8	3	2	7	1.7	23	1.1		0	–	–	–	–		
YZ 25	1246.2	33.8			100/55	100	055	L	33	.97	32 .0	6	9	3	4	1	10	1.8	53	.7		1	2	40	110	–		CAN ONLY SEE LARGE GOUGES.
ZAA 26	1253.2	37.0			110/70	110	070	L	61	.98	59 .8	31	7	10	3	2	8	1.5	41	.7		0	–	–	–	–		
AABB 27	1310.0	40.2		090	–/–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–		NO SONAR
BBCC 28	1326.0	42.1			160/15	250	105	L	40	1.73	69 .2	38	0	1	0	1	0	.9	13	.5		0	–	–	–	–		(1:977) RUNNING PARALLEL TO GOUGES AND THE FATHOGRAM WILL NOT GIVE GOOD DATA.
CCDD 29	1341.0	41.6			160/20	250	110	M	51	1.73	88 .2	43	2	5	0	0	1	1.0	12	.6		0	–	–	–	48.2		
DEE 30	1356.0	42.0			10/175	100	265	M	36	2.38	85 .7	–	–	–	–	–	–	–	14	–		0	–	–	–	48.1		FATHOGRAM NO GOOD.
EEFF 31	1410.0	42.1			175/10	265	100	M	32	2.00	64 .0	–	–	–	–	–	–	–	–	–		0	–	–	–	48.3		FATHOGRAM NO GOOD.
FGG 32	1424.0	41.8		180	–/–	–	–	–	–	–	–	–	–	–	–	–	–	2.2	–	1.1		–	–	–	–	48.1		NO SONAR

ICE GOUGE DATA RECORD 1980

VESSEL	KARLUK
TEMPLATE SIZE	4.6 KTS

...CHLINE 30 / ...ATE 228 / ...GMENT KM	START TIME HOURS MINUTES TENTHS	START DEPTH M	DISTANCE FROM COAST KM	SHIP'S COURSE °T	OBSERVED ORIENTATION ø DOM/SUB	ADJUSTED ORIENTATION °T DOM	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
GHH 33	1434.5	37.5		180	110/60	290	240	L	61	.98	59.8	22	11	6	4	2	16	3.8	34	.9		2	6	59	295	—	125	1:1695
HII 34	1444.2	31.4			105/80	285	260	L	113	.97	109.6	79	9	4	4	2	15	4.0	33	1.5		4	2	76	300	—		NOT COMPLETE FATHOGRAM (1:1106)
JJ 35	1454.0	—			100/80	280	260	L	156	.97	151.3	103	18	14	6	3	12	3.0	13	1.5		2	8	26	250	—		PT II NOT ON FATHOGRAM
JKK 36	1504.0	24.2			110/40	290	220	L	141	.98	138.2	81	11	9	10	3	27	2.1	30	1.2		4	3	22	290	—		1:1524
KLL 37	1515.0	21.9		90	170/145	260	235	M	142	2.38	338.0	90	13	16	6	5	12	1.3	20	.7		0	—	—	—	—		.5 KM OF SONAR MISSING - COUNT ADJUSTED.
LMM 38	1525.3	21.4		180	110/150	290	330	L	146	.98	143.1	68	25	13	8	7	25	2.1	23	1.0		1	3	42	225	—		
MNN 39	1535.0	19.3			115/65	295	245	M	171	.99	169.3	107	25	16	8	4	11	1.6	12	.8		4	8	32	220	—		
NOO 40	1543.2	18.7			115/60	295	245	H	190	.99	188.1	119	30	16	13	5	7	1.5	14	.7		8	4	38	290	30.0		
OPP 41	1551.7	18.2			110/160	290	345	L	161	.98	157.8	92	25	15	9	7	13	1.9	10	1.1		4	4	53	290	28.2		
PQQ 42	1559.0	18.8			120/40	300	220	L	162	1.01	163.6	104	18	17	7	9	7	1.4	8	.9		5	7	37	290	25.8		
QRR 43	1607.0	20.2			110/65	290	245	L	117	.98	114.7	43	31	17	15	5	6	1.3	10	1.4		2	3	13	290	26.8		
RR END	1615.0	20.2																								26.2		

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
MN	1														
PQ	1	0	0	1											
QR	1														
RS	1	1	1												
ST	8	1	2	3	1	1									
TU	5	5	1	0	0	1									
UV	5	0	2	1	1	0	1								
VW	7	2	1	0	1	1	1								
WX	2	0	2	0	1	1									
XY	4	0	2	1											
YZ	6	1	1	0	2										
ZAA	4	1	3												
CCDD	1														
GGHH	5	2	3	2	2	1	0	0	0	0	0	0	0	0	1
HHII	4	4	2	2	0	0	0	0	0	1	1	0	0	0	1
IIJJ	6	3	1	0	0	1	0	0	0	0	1				
JJKK	15	5	2	3	0	2									
KKLL	9	3													
LLMM	3	13	4	2	2	1									
MMNN	9	1	0	1											