



# United States Department of the Interior

GEOLOGICAL SURVEY  
RESTON, VA 22092

92019

24 August 1992

## Post-Cruise Report

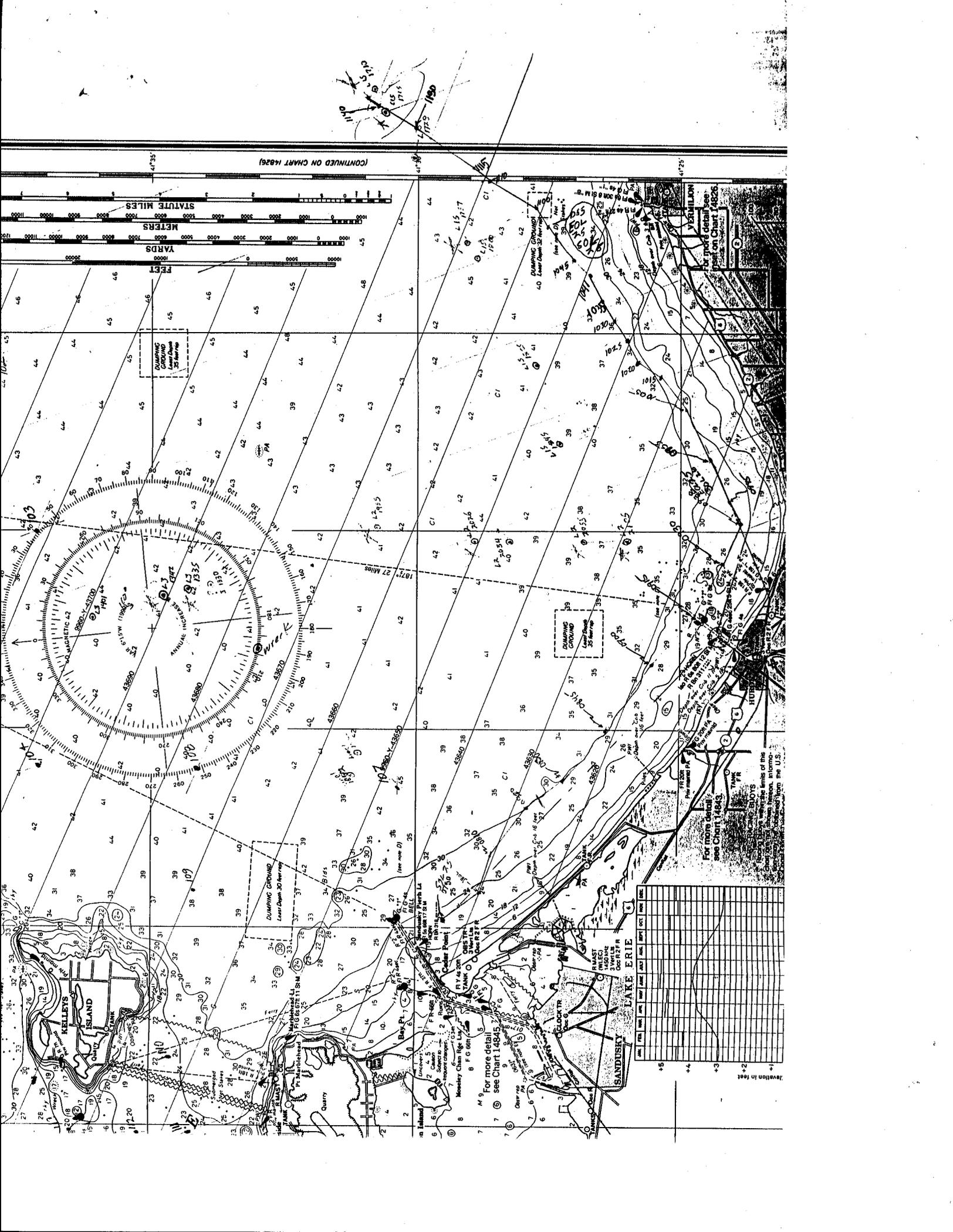
LEGS 2-8-92

TO: Tom Aldrich  
FROM: Ron Circé *Ron Circé*  
SUBJECT: Recent Lake Erie Cruise

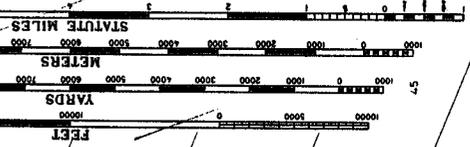
1. Ship: R/V GS-1 and R/V PIKE (U.S. Fish & Wildlife Service)
2. Cruise #: LEGS 2-8-92
3. Parent Proj: USGS/OGS Coop: Geological Framework of Lake Erie
4. Area of Ops: Offshore Lorain & Vermillion, Ohio
5. Dates: 14-23 August, 1992
6. Sci. Party: R. Circé & D. Blackwood (USGS); N. Fuller, D. Liebenthal, D. Guy, S. Mackey, D. Foye & M. Horwat (OGS)
7. Purpose: (a) test feasibility of operating sidescan sonar from a small (22') vessel in the very nearshore zone of Lake Erie;  
(b) ground-truth, via diving, unique bottom features observed on previous sidescan sonar records
8. Misc: Approximately 25nlm (Nautical Line Miles) were run in both the nearshore zone and as site specific lines over previously recorded features. A total of 14 dives were made (7 each by 2 divers) on 3 different sites. Bottom samples, descriptions and 8mm video were collected on each of the 3 sites. On 1 site, a 1.78 m core was taken. This core was later extruded, described and sub-sampled.

cc: USGS OGS

B. Oldale	S. Mackey	N. Fuller	D. Guy
B. Butman	D. Foye	M. Horwat	D. Liebenthal
D. Blackwood	-----		
J. Haines	N. Soderberg	H. Knebel	T. O'Brien
S. Barton	K. Parolski	D. Nichols	



(CONTINUED ON CHART 14826)



DUMPING GROUND  
Least Depth 30 fathoms

DUMPING GROUND  
Least Depth 35 fathoms

DUMPING GROUND  
Least Depth 30 fathoms

For more detail see Chart 14843

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

For more detail see Chart 14843

SANDUSKY LAKE ERIE

For more detail see Chart 14843

For more detail see Chart 14843

For more detail see Chart 14843

OHIO DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF GEOLOGICAL SURVEY

MEMORANDUM

August 10, 1992

TO: LAKE ERIE STAFF

FROM: DALE L. LIEBENTHAL, Operations 

RE: Field activities

August 14 - 17

Nate, Ron Circé and myself will test the USGS side scan in shallow water along Erie County. We have borrowed a 22 foot Boston Whaler from the U. S. Fish and Wildlife Biological Experiment Station. Dr. Ken Muth was very kind to allow us to borrow it on short notice. We will be able to keep it at the Musky II dock at Battery Park as the rest of the crew will be on the Musky II in Eastern Lake Erie for two weeks. We will be working from Sandusky.

August 18 - 22

We will transfer the side scan to the R/V GS-1 to begin "ground truthing" specific sites selected from previous seismic trips. We will use side scan, the fathometer and LORAN C to position ourselves. We will then drop two anchors bow and stern to hold the vessel immobile, and the divers will go over to investigate the bottom geology. Joining Ron Circé as chief diver will be another USGS diver, Dann Blackwood who will arrive on the 18th. We will work out of Sandusky. Ron and Dann will be staying at the Fairfield Inn, 621-9500.

Week of August 24 or August 31

We will deploy the large three-legged ARMS tripod now stored in the shop. This device is to be lowered to the lake bottom in 20 to 30 feet of water and left for 2 or 3 days. It is called an Acoustic Resuspension Measurement System. It measures the size and velocity of particles in the bottom 1.5 meters of water. We may move this once or twice more. Nate and I will disassemble it and test hoist it on the GS-1 on Thursday, August 13. Rob Van Evra of the Ohio State University Coastal Engineering Lab who "owns" the device, will assist by diving to release cables and position the tripod on the Lake bottom. We are donating our time for this on a data-share agreement, charging only for actual costs until we see what kind of data is supplied and how it fits into our program.