92022 GS-1 3-9-92
104847

Co-Chief Scientist Log

Legs 3-9-92

UNITED STATES

DEPARTMENT OF THE INTERIOR

DI-9

(Approved December 1941)

8-23 Sept. 92

Ron

92022nav

LAKE ERIE TD'S

Sept. 1991

1.	43624.0	57044.6
2.	43645.6	57058.3
3.	43668.3	57071.2
4.	43704.9	57069.7
5.	43725.8	57082.2
6.	43750.0	57165.9
7.	43745.9	57175.0
8.	43741.0	57175.0
9.	43733.1	57174.5
10.	43724.9	57176.7
11.	43703.2	57177.4
12.	43693.0	57173.1
13.	43670.0	57172.0
14.	43730.0	57300.0
15.	43751.0	57300.0
16.	43815.0	57300.0
17.	43825.0	57300.0
18.	43890.0	57415.0
19.	43873.0	57415.0
20.	43796.0	57415.0
21.	43780.0	57415.0
22.	43755.0	57415.0
23.	43795.0	57505.0
24.	43825.0	57505.0
25.	43835.0	57505.0
26.	43918.0	57505.0
27.	43940.0	57505.0
28.	43995.0	57600.0
29.	43966.0	57600.0
30.	43880.0	57600.0
31.	43857.0	57600.0
32.	43950.0	57730.0
33.	43962.0	57730.0
34.	44034.0	57730.0
35.	44070.0	57730.0
36.	44120.0	57815.0
37.	44080.0	57815.0
38.	44011.0	57815.0
39.	43995.0	57815.0
40.	44040.0	57900.0
41.	44061.0	57900.0
42.	44125.0	57900.0
43.	44165.0	57900.0
44.	44210.0	58000.0
45.	44174.0	58000.0
46.	44122.0	58000.0
47.	44090.0	58000.0
48.	44140.0	58100.0
49.	44182.0	58100.0
50.	44224.0	58100.0
51.	44250.0	58100.0
52.	44315.0	58215.0
53.	44282.0	58215.0
54.	44255.0	58215.0
55.	44205.0	58215.0
56.	44265.0	58245.0
57.	44310.0	58268.0
58.	44345.0	58285.0
59.	43659.9	57110.0
60.	43691.9	57170.8
61.	43716.1	57214.1
62.	43723.9	57228.9
63.	43793.1	57251.7
64.	43775.0	57227.4
65.	43755.8	57195.7
66.	43738.9	57151.9
67.	43745.1	57152.0
68.	43740.4	57134.3
69.	43733.8	57106.0

WAYPOINT	Lat deg	Lat min	Long deg	Long min	data L/L	data L-C	TD's--	L-C 9960	comment
70						×	44327.0	58274.0	
71						×	44275.0	58240.0	
72						×	44225.0	58207.0	
73	42	0.30	80	35.05	×				C-50
74	41	58.50	80	36.20	×				C-51
75	41	58.80	80	39.30	×				C-52
76						×	44198.0	58150.0	
77						×	44232.0	58150.0	
78						×	44274.0	58150.0	
79						×	44279.0	58150.0	
80						×	44175.0	58026.0	
81						×	44118.0	58026.0	
82	41	54.70	80	51.40	×				C-53
83							44058.0	57929.0	
84	41	52.80	81	1.90	×				C-55
85							44121.0	57929.0	
86							44132.0	57850.0	
87							44099.0	57850.0	
88	41	50.01	81	9.60	×				C-56
89							44011.0	57850.0	
90	41	48.10	81	20.00	×				C-62
91	41	47.90	81	22.90	×				C-69
92	41	49.10	81	23.20	×				C-65
93	41	49.50	81	24.40	×				C-66
94						×	44012.0	57718.0	
95	41	34.30	81	45.02	×				VC-24
96	41	38.65	81	54.73	×				VC-2
97						×	43837.0	57400.0	
98	41	32.20	81	56.90	×				C-77
99	41	30.70	82	5.30	×				C-79
100						×	43736.0	57281.0	
101						×	43800.0	57281.0	
102						×	43728.9	57138.8	LV-38
103						×	43711.9	57095.9	CBC-4
104						×	43697.6	57044.0	CBC-2
105						×	43709.0	57035.0	
106						×	43692.0	56995.0	
107	41	30.33	82	36.51	×				Start of L-1
108						×	43676.0	57030.9	CBC-1
109						×	43669.6	57004.9	CBC-33

114	×	43685.3	56970.1	WB-115
115	×	43699.0	56978.8	WB-114
116	×	43713.2	56988.3	WB-113
117	×	43663.0	56925.0	
118	×	43641.4	56842.5	WB-89
119	×	43650.0	56850.0	
120	×	43656.1	56855.0	WB-109
121	×	43667.0	56867.0	
122	×	43674.9	56867.2	WB-110
123	×	43684.7	56872.6	WB-111
124	×	43698.8	56881.1	WB-112
125	×	43711.7	56890.3	WB-51
126	×	43724.8	56898.9	WB-48
127	×	43721.3	56882.8	WB-59
128	×	43723.7	56877.9	WB-86
129	×	43729.9	56874.2	WB-47
130	×	43725.8	56858.9	WB-46
131	×	43723.7	56839.8	WB-45
132	×	43743.6	56841.3	WB-40
133	×	43729.9	56831.3	WB-42
134	×	43717.0	56823.3	WB-33
135	×	43703.1	56815.1	WB-58
136	×	43690.0	56804.7	WB-56
137	×	43676.3	56797.0	WB-37
138	×	43660.7	56786.9	WB-36
139	×	43648.6	56780.4	WB-24
140	×	43648.4	56842.1	WB-88
141	×	43645.4	56817.8	WB-87
142	×	43658.0	56771.1	WB-35
143	×	43654.0	56754.5	WB-29
144	×	43650.9	56736.8	WB-11
145	×	43646.1	56719.6	WB-1
146	×	43641.8	56704.0	WB-27
147	×	43654.3	56711.7	WB-28
148	×	43668.7	56720.4	WB-4
149	×	43675.3	56725.6	WB-63
150	×	43683.2	56730.6	WB-7
151	×	43685.6	56747.1	WB-8
152	×	43691.0	56763.6	WB-9
153	×	43697.2	56781.0	WB-10
154	×	43699.1	56797.3	WB-32
155	×	43689.4	56742.2	WB-71

8 SEPT 92

[illegible]

9 SANDUSKY

Mob boat

10 SEPT

FINISH MOB - WEATHERED OUT -

11 SEPT

WEATHERED OUT - 0800 NW 15-25 kt
4-7'

2 12 SEPT 92 JD 255 Nate Fuller - Senior Chief Sci

0815 - left dock - hdg for WP 110 to begin equip test

0900 - bathy, 3.5 & boomer in H_2O

boomer @ 1055;

3.5 kHz - 1/8 sec swp, 1/8 sec line

GEOPULSE - 1/2 sec line, 1/4 sec swp

500 to 3 kHz 12db GAIN

SOL @ 0935 JD 255

41° 34.9522 43663.18

87° 44.4806 56960.32

0945 41° 35.24' 87° 45.95'

SSS record on EPC 4800 - wrap around - appears on center of "normal" record in row on port/stbd side of record - KP trying to fix

1040:20 WP 117 41° 36.99 CRS CHG TO HDG 251° to

87° 50.61 get to WP 118

0945 4135.24 JD255
8245.45

1000
41 35.72
82 46.86

1015 41 36.22
82 48.25

1030 41°36.69
82° 49.69

1040 41 36.99
82 50.61

1100 41 36.98
82 52.59

1115 41 36.69
82 54.07

1130 41 36.50
82 55.58

1145 41 36.60
82 57.12

WP 118 1201
4136.31
8258.74

WP 140b 4136.66
83 00.55

1215 41 36.63
83 00.08

1230 4137.22
83 01.32

1245 WP 146b
4138.
8307.46

1300 41 38.85
83 03.63

1315 41 39.70
83 04.82

1330 41 40.54
83 06.01

1345 41 41.37
83 07.18

EOL 1 - SOL 2 1356
41 41.99
83 08.06

EOL 1 @ 1356
41°41.99
83°08.06

21 NM

SOL 2 @ SAME POSITION
as EOL 1

MBG N TOWARD WP 132

PLOTTED TIMES AND
POSITIONS LISTED
ON NEXT PAGE

LINE 2 MOD

4142.30
8308.17

1415 4143.54
8308.15

WP 137 4144.29 @ 1424
8308.06

1430 4149.77
8308.03

1445 4146.00
8308.20

WP 136 4146.33
8308.21

LINE 2

1500 4147.23
8308.13

WP 135 @ 1511
4148.17
8307.96

1530 4149.69
8308.05

1532 4150.28
8308.09

1545 4150.92
8308.12

1601 WP 133
4152.3
8308.15

EOL 2 @ WP 132 @ 1625
4154.24
8307.97

SOL 3 @ 1629
4154.24
8308.05

EOL 3 1649 4154.11
8310.19

1700 4153.43
8310.76

1716 WP 161
4152.35
8311.88

WP 160 4151.09
8312.92

WP 159 @ 1750
4150.31
8314.21

1800 4149.91
8315.18

WP 155 @ 1819
4149.04
8316.97

WP 150 EOL 4
4148.57
8318.09

1605 - General comments - very nice weather
some of the best we've had for
geophysics but could be a bit cooler
for the folks in the cab

1625 - EOL 2 @ WP 132 - turning to begin
short line 3 - WP 132 - 162

LINE 2 12.5 NM

1629 SOL 3 @ WP 132 41°54.24' 83°08.05'

1649 EOL 3 @ WP 162 41°54.11 83°10.19'
SOL 4 @ " " " "

LINE 3 1.75 NM

1831 EOL 4 @ WP 150
41°48.57
83° 18.09

LINE 4 8.0 NM

TRACKLINE MILES THIS DAY
41.5 NM

13 SEPT 92 TD 256

NATE Fuller - SENIOR CHIEF SCI

on boat @ 0750
lv. dock @ 0810
onboard - Dale, Nate, Ron, Ken
Bob Oldale, Bryan Stone

HDG for WP 135

GEOPULSE @ 175j to see if we can get more penetration - surging and multiple way still be a problem but we'll see

1005 gear in water

SOL 5 @ 1014 @ 41°48.20
83°07.85

WP 135 41°48.20
83°07.95

1025 - CHG GEOPULSE BACK TO 105j

EOL 5 @ 1151 @ WP 150
41°48.51
83°18.07

LINE 5: 8 NM

SOL 5 @ 1014
41°48.20
83°07.85

1015 41° 48.28
WP135 83° 07.95

1030 41°48.28
83° 09.58

WP154 @ 1035
41°48.31
83°10.13

1045 41°48.47
83° 11.19

WP153 @ 1055
41°48.70
83°12.74

1100 41°48.62
83°12.76

1113 - WP152
41°48.38
83°14.14

1130 41°48.22
83° 15.80

1145 41°48.41
83°17.37

1151 EOL 5 - WP150
41°48.51
83°18.07

1155 WP150 - SOL 6
41° 48.49
83° 18.07

SOL 6 @ WP150 @ 1155
41°48.49
83° 18.07

EOL 6 @ WP 146 @ 1312
41°42.34
83° 17.93

LINE 6 6 NM

1215 41°46.90
83° 18.06

1230 41° 45.71
83°18.10

1245 41° 44.51
83° 18.01

1300 41° 43.31
83° 17.96

1312 - EOL 6 @ WP146
41°42.34
83° 17.93

SOL 7 1315
41° 42.36
83°17.89

SOL 7 @ 1315 @ 41° 42.36
83° 17.89

EOL 7 @ 1451 41° 42.05
83° 08.06

Line 7 7.5 NM

SOL 8 @ WP 138 @ 1459
41° 42.02
83° 01.10

LINE 8 2.5 NM

1335 41° 42.27
83° 15.84

1343 41° 42.24
83° 15.18

1353 41° 42.53
83° 14.17

1400 41° 42.45
83° 13.47

1415 41° 42.29
83° 11.90

1432 41° 42.25
83° 10.02

EOL 7
1451 41° 42.05
83 08.06

SOL 8 @ WP 138 @
~~1500~~
1459 41° 42.02
83° 08.10

1530 41 39.73
83 07.91

1524 41 40.20
83 07.90

29.0 NM THIS DAY
EXCLUDES BUBBLE PULSER
70.5 NM TO DATE

Ran Bubble Pulser @ EOC 8 - pretty good records
pulled surfboard - steam to Toledo ship channel
ran 3 lines over ship channel w/
Bubble pulser

1830 - pulled surfboard - hdg for Coast Guard
dock

1930 - @ Coast Guard dock

0715 - on boat 14 SEPT 92

Ken, Ron, Mark, Dale, Bryan

Bob O. on shore to go to Sandusky

underway @ 0733

gear in water @ 0920

SOL 9 @ WP 134 @ 0927

41° 50.25

83° 08.06

3.5 kHz @ 1/16 sec swp 1/8 sec line

GEOPURSE @ 1/8 swp 1/2 sec line 105j

500-3 kHz 12 db

555 @ 100 kHz 100 m

EOL 9 @ 1111 @ WP 126

41° 48.14

82° 58.15

LINE 9 9 NM

SOL 9 @ 0927
41 50.25
83 08.06

WP131 - 0943
41° 50.71
83° 06.33

1000 41° 50.40
83° 04.58

WP 130 41° 50.17
83° 03.85

WP129 1023
41° 50.18
83° 02.07

WP 127 41.48.28
83 00.06

SOL 10 @ WP126 @ 1111
41° 48.14
82° 58.15

1148 - CHG Geopulse to 1/4 sec swp to eliminate walkover by 3.5 kHz

1149 - CHG GEOPULSE BACK TO 1/8 sec swp

1215 - CHG GEOPULSE to 1/4 sec fin

1335 - SSS fish hit - lost fins and 1/2 of fin assembly

LINE 10 12 NM

21 NM THIS DAY
91.5 NM TO DATE

≈1400 - all gear in - hdg for dredge disposal area off Sandusky to check out Bubble Pulser - hdg to WP 43650
56980

The good Donut marks on record Shown 3,D

LC

L/L 41.55325 Ping # 522 43669.8
82.60126 Z: L1 F2 15-Sept 57026.0

15 SEPT 92

15 SEPT 92

0730

talked to Capt of MUSKIE II (Mike McCann) RE
trackliner of trawl
↳ Dr. Ken Muth
supvr

0815 - on board

0930 - left dock hdg for WP 117

1015 - gear in water

1018 - SOL 11 HDG 015 @ WP107

1045 - large sequence of donuts on SSS
6 donuts across record

EOL 11 @ WP 169 @ 1209 41° 39.61
82° 35.77

LINE 11 9NM

1030 41° 31.50
82° 34.[illegible]

1045 41° 32.69
82° 36.[illegible]

1100 41 34.70
82 35.84

1115 41 35.10
82 35.83

1130 41° 36.37
82° 35.88

1145 41 37.60
82 35.86

1200 41° 38.81
82° 35.76

EOL 11 @ WP169
41° 39.61
82° 35.77

SOL 12 @ WP 169 @ 1209 41° 39.61
82° 35.77

EOL 12 @ WP 114 @ 1245 41° 38.23
82° 44.96

LINE 12
41 39.59
82 36.28

1230 41 39.31
82 37.72

1245 41 39.09
82 39.10

1300 41° 38.88
82° 40.58

1315 41 38.68
82 42.05

1330 41 38.50
82 43.53

1345 - EOL 12 @ WP 114
SOL 13
41° 38.23
82 44.96

LINE 12 7 NM

SOL 13 @ WP 114 @ 1345
41° 38.23
82° 44.96

EOL 13 @ WP 116 @ 1433
41° 42.11
82° 44.77

LINE 13 4 NM

GEOPULSE DOWN - was set @ 175 j - too fast for 1/4 sec line - switched to 105 j

SOL 14 @ WP 116 @ 1433 41° 42.11
82° 44.77

1450 - GEOPULSE BACK ON-LINE

EOL 14 @ WP163 @ 1602 41°45.59
82° 52.47

LINE 14 7NM

SOL 15 @ WP163 HDG 185° @ 1602
41°45.59
82° 52.47

EOL 15 @ WP164 41°39.97
82°52.41

LINE 15 5NM

SOL 16 @ WP164 41° 39.97
82° 52.41

1700 41°41.16
82°52.39
~~1715 41~~
1730 41 39.94 82 52.84

EOL 16 @ WP168 @ 1748 41°40.24
82° 48.86

LINE 16 3NM

33NM THIS DAY
124.5NM TO DATE

1815 @ Put-In-Bay - Fish Hatchery
no one to meet us - don't know where
they are

15 Sept 92

0800 At boat

Ken, Ron, Nate, Dale, Byron, Bob, Rick Perry

From Night on South Bass

Calm with SW winds predicted

0930 SOL-17 41 40.24 82 48.85

1000

1015 EOL 17 Side Scan Recorder Down ~1000

1019 SOL 18 41 42.09 82 44.76

41 42.10 82 44.78

1025 minor course correction toward North to Clear Bay

Loran Plot from Lat Lon has shown ~.3 nat mile North of actual location around Islands

1123 Course Change

1142 WP 164 41°41.84 82°52.48

1145 EOL 18 } 41 42.34 82 58.32

SOL 19 } turn south

0945 43701 56963.8

1000 41 41.55 82 46.2

1030 41 42.15 82 45.80

1035 41 42.24 82 46.26

1045 41 42.28 82 47.21

1055 41 42.33 82 48.19

1110 41 42.43 82 49.64

1120 41 42.48 82 50.60

1130 41 42.34 82 51.50

1142 41 41.84 82 52.48

1145 41°40.09 82°47.63

0930 41°40.24 82°48.85

Line 17 3.6 NM

Line 18 10 Nm

Line 19 1.4 nM

1304 EOL 19 SOL 20 head SW trough

41 40.90 82 58.22

1412 EOL 20 SOL 21 41 38.02 82 52.45

Change Heading to put waves on stern

2' waves 3' occasional

1451 EOL 21

Line 20 5 nm

Line 21 3 nM

Day 23 nM

147.5 NM TO DATE

1500 - gear on board - HDG for dock in Put-In Bay

1200	41 41.87	82 54.07
1215	41 42.09	82 55.47
1230	41 42.27	82 56.42
1315	41 40.47	82 57.36
1330	41 39.84	82 56.07
1345	41 39.21	82 54.80
1400	41 38.56	82 53.53
1430	41 39.08	82 51.27
1445	41 40.03	82 50.29
1451	41 40.45	82 49.85

17 Sept 92 - Put-In-Bay

0815 - on board - weather day - general housekeeping / data curation -

Nate, Richie, Byron driving back to Sandusky -

Ken, Ron, Scudder, Bob on board

left Put-In-Bay @ 1213

on Sandusky - Battery Park Marina @ 1410

18 Sept 92 Sandusky - Battery Park Marina

on boat @ 0845 - weather day

winds SW - 15-25 kts 3-5'

Gale force late - switch to W

3 SKT this pm then to NW

19 - Sept 92 Sandusky Battery Park

on board ~ 1000 - weather day

Winds to drop off in PM

call whole day - bird sight

said we were wrong could have worked later

20 SEPT 92

0745 - onboard - making ready

Dale, Dale, Ron, Ken & Danielle

~0830 leave P.P.

Ken will be testing his hydrophone design as it trails off the Geopulse sled - we will use chan 3 on the EPC 4800 for recording

0920 - gear in water

SOL 22 @ WP111 0926

WP112 41° 35.1470 0941
82° 45.0460

WP113 @ 0956 41° 36.40
82° 45.04

EOL 22 @ WP114 @ 1019 @ 41° 38.22
82° 44.95

LINE 22 4.5 NM

SOL 23 @ WP114 @ 1021 41° 38.23
82° 44.97

1030 41° 38.03
82° 45.82

1045 41° 37.68 82 47.34

1100 41 37.31 82 48.86

1116 41 36.99 82 50.62 WP 117

1130 41 37.65 82 51.79

1138 EOL 23 @ WP 166 @ 41° 38.07
82° 52.45

LINE 23 6 NM

1140 SOL 24 @ WP 166 41°38.05
82°52.45

1154 EOL 24 @ WP 167 41°37.02
82°52.95

LINE 24 1 NM

1247 SOL 25 @ WP 112

WP 110 - 1307

EOL 25 @ WP 108 @ 1418 41° 34.08
82° 35.93

LINE 25 7 NM

SOL 26 @ WP 108 @ 1418 41° 34.08
82° 35.93

NOTE: LOTS OF NOISE in GeoPulse and SSS records.

EOL 26 @ 1455 41° 36.97
82° 35.61

LINE 26 3 NM

SOL 27 @ 1458 41° 36.94
82° 35.40

EOL 27 @ 1524 41° 37.18 WP 4
82° 32.97

LINE 27 2 NM

23.5 NM THIS DAY
171.0 NM TO LATE

1530 pulled gear - hdg for Battery Park Marina

1650 - at dock - Battery Park Marina

21 SEPT 96

0745 - on board - rain, Thunder, lightning
SW - 10-20 kt increasing to 15-25 kt
T-storm - seas - 2-4 ft
building 5-7 this pm
& 6-8 tonight

Tues - SW - 15-25 kt
switching NW to 35 kt - gale force
seas - 8-10 ft.

WEATHER DAY