LM-88-1

~~88-1-PR~~

~~SAN JUAN~~ SIDE SCAN SURVEY

LAKE MICHIGAN

TAPE & COMMENT

LOG

SIDESCAN LOG

NEECHO 88-1-LM
July 25-August 13, 1988
Lake Michigan
Folger/Foster

SIDESCAN LOG

NEECHO 88-2-LM
August 15-20, 1988
Lake Michigan-Indiana Shoals
Schlee/Risch

SCHLEA B

104670

DATE 07/27/88

GMT	COMMENTS AND OBSERVATIONS
0850	U/W FROM NTC AFTER CHECKING NAV BATHY CHECKS OK AT NTC DOCK (15.3')
1020	GEAR IN WATER NO NAV.
1030	SOL 1
1125	INCREASE SPEED
1135	STREAMER OUT
1734	SOL 1 DEPTH 256
1740	SOL 2
1802	SOL 2 / SOL 3
1845	CHANGE TO TAPE 5
1932	OBSM WRITES STRANGE LINES MAYBE BEFORE AUTO SCALE CHANGE
2002	SOL 3 / SOL 4 HUNTER OFF SS ONLY
2015	SOL 4 ~~SOL~~ ~~SOL 5~~
2024	SOL 5
2155	SOL 5 HUNTER MISFIRE

DATE 7/28

GMT	COMMENTS AND OBSERVATIONS
	SOL 15

DATE 7-29-88

GMT	COMMENTS AND OBSERVATIONS
1845	U/W TO CAL
030	WATER VELOCITY CHECKS :
	55' 4786
	45 4878
	30 4903
	15 4912
	0 4912
	AVG = 4878.2
035	BATHY RECORDER LOCKED UP - FIXED
	PUT IN 4878.2 M/SEC IN BATHY VEL.
043	SOL 54 RERUN
	START LINE BEFORE ~~BEAN~~
735	BREAK LINE TAL GONE ON SS
1814	RESTART 54 R
1833	HUNTER RESTART RESTART
1842	START HUNTER
1852	CHANGE TO TAPE 7
1846	EOL 54R
1935	SECURE

2130 VEL AT DEC

SURFACE = 4937

BOTTOM = 4914

N

DATE 30 JULY

MT	COMMENTS AND OBSERVATIONS
020	ON SITE
25	ON LINE 5A (CONT
[illegible]	REDUCE [illegible] FREQ RATE TO 1 SEC
10	END LINE 5A NO NAV
[illegible]	SOL 6 (FORSHORTENED FOR BAD NAV)
51	RUN ON [illegible] [illegible]
925	EOL 6

DATE 31 JULY

MT	COMMENTS AND OBSERVATIONS
00	CAL STATIONS
55	ARRIVE SOL 7 VEL 10' 4928
	5' 4914
	0' 4914
	AVG - 4912.3
07	SOL 7 ILLUMINATE
[illegible]	CHANGES TO 100 KHZ
48	NO ANNOTATION ON BATHY
56	PULL SIDE SCAN ON LINE 7
06	NO TIMES ANNOTATION ON ODOM
[illegible]	SOL 7 VELOCITIES 60' 4760 / 25' 4914
	55 4784 / 20 4914
	50 4794 / 15 4917
	45 4816 / 10 4917
	40 4840 / 5 4917
	35 4903 / 0 492
	30 4914
	AVERAGE 487

DATE 31 JUL + AUG 4 1988 JD 214

COMMENTS AND OBSERVATIONS

VELOCITY PROF AT SOL 13

60	4808	30	4914
55	4818	25	4917
50	4832	20	4917
45	4846	15	4917
40	4873	10	4917
36	4914	5	4920
		0	4914
			(4885)

SOL 13

SOL 13

1450 Z DAY 214 SOL 53

1524 REMOVE ANNOTATION FROM SIDE SCAN RECORD

1802 Z END REEL # 9
1806 Z START REEL # 10
1855 Z EOL 53
1856 S. SCAN OFF
1944 START LINE 19
2006 HONTEC BEGGINING TO MISFIRE

DATE 2 AUG 88

COMMENTS AND OBSERVATIONS

OFFSHORE LINE 19 BOL VEL.

4862 FT/SEC - 8 FT

4889 " - SURFACE

BOL 19

30 AUG 1 LINE TO ANSWER DISTRESS CALL

RESTART LINE 19

CHG TO TAPE 11

INCREASE SPD

CHG PAPER

EOL 19 VELOCITIES

60	4760	25	4920	ODEM AVG x 4868
55	4770	20	4923	
50	4786	15	4923	RBAR AVG = 4864
45	4813	10	4926	
40	4835	5	4934	
35	4878	0	4854	
30	4917			

SOL 18

~~EOL 18 SOL 19~~

DATE 3 AUG 88

COMMENTS AND OBSERVATIONS

COAST GUARD BASE PRISPARIS TO LIMIT

VELOCITIES FOR BOL 16

0 4846
5 4843
10 4840
15 4840 AV 4824
20 4805
25 4797
30 4794
~~35~~

SOL 16

BOL 16

SOL 15

CONTINUE TO TAPE 13

BOL 15

DATE 3 AUG 68

COMMENTS AND OBSERVATIONS

4 VELOCITIES AT END OF LINE 15

60 (FINAL)	4752	30	[illegible]
55	4784	25	4920
50	4805	20	4923
45	[illegible]	15	[illegible]
40	4846	10	[illegible]
35	4898	5	4934
AVG →	4876	0	4934

5 MOVE TO LINE 53 (CONT)

5 VELOCITIES 30L 53 (CONT)

40	—	15	4920
35	4770	10	4923
30	4797	05	4928
25	4892	00	4931
20	4912	Average	4884

DATE 3 AUG 88 11' 3"

COMMENTS AND OBSERVATIONS

BOL 53 CONT (SUBBTM, BATHY, SS)

BOL 53 CONT BREAK FOR WX
T STORMS

↓ DATE 8-4-88 ↓

SURFACE	4835
5	4824
10	4816
15	4810
~~20~~ 19	4810
AVE	4819

1553 Z SOL 26
1612 Z SIDE SCAN ON
1753 Z END OF ANALOG TAPE
REEL # 13

1757 START ANALOG REEL #.14
LINE 26

1758 EOL 26

DATE 4 AUG 88 LM 88-1

COMMENTS AND OBSERVATIONS

VELOCITY PROFILE
END LINE 26
BEGIN LINE 25

SURFACE	4900
5	4934
10	4928
15	4928
20	4928
25	4926
30	4923
35	4914
40	4903
45	4856
50	4824
55	4805
60	4780

AVE 4889

1818Z DAY 217 START LINE 25

1909 EOL 25
1914 HUNTEC MISFIRING
1916 SOL 24
1923 HUNTEC OFF
WILL CIRCLE AND LET SYSTEM COOL
2206 TAPE OFF REEL #14
2210 START REEL #15
2213Z EOL 24

DATE 8-4-88 Lake Michigan

COMMENTS AND OBSERVATIONS

VELOCITY PROFILE AT END OF
LINE 24 SURFACE 4865
5' 4851
10' 4835
AVERAGE 4851

2233 Z SOL 23
2323 Z EOL 23

VELOCITY PROFILE
AT END OF LINE 23

SURFACE	4900
5	4934
10	4930
15	4926
20	4914
25	4892
30	4840
35	4755
40	4747
~~45~~	
AVE	4871

DATE 8-5-88

LM-88-1

COMMENTS AND OBSERVATIONS

J. DAY 218 Line #53 Continued

	Velocity ~~Surface~~
SURFACE	4920
5	4920
10	4914
15	4900
20	4859
25	4749
~~2~~ 30	4749
~~23~~ ~~35~~	AVG 4859
~~40~~	
~~45~~	
~~50~~	
~~55~~	
~~60~~	

SOL 53 cont. DAY 218 @ 14:38 Z

TAPE START @ 15:14 Z

Note S.S CAN Bottomed @ START of Line & TAIL fin Bolts Replaces SS. on Line on about 15:40 Z.

TAPE # 15 End 3590 @ 17:26

START # 16 @ 0000 @ 17:30

FOL 53 cont. @ 218 17:47

DATE 5-5-88 LM-88-1

COMMENTS AND OBSERVATIONS

VELOCIMETER DROP - EOL 53

SURFACE	- 4912 FT/SEC
5'	- 4926
10'	- 4926
15'	- 4926
20'	- 4923
25'	- 4870
30'	- 4816
35'	- 4777

AVG - 4884

VELOCITY - SOL 30

SURFACE	- 4931 FT/SEC
5'	- 4948
10'	- 4928
15'	- 4928
20'	- 4926
25'	- 4926
30'	- 4926
35'	- 4926
40'	- 4926
45'	- 4920
50'	- 4843
55'	- 4813
60'	- 4797

AVG - ~~4895~~

SOL #30 C 18:552

DATE _____

COMMENTS AND OBSERVATIONS

Velocity drop SOL 30 depth = 12'

0 4835
5 4776
10 4821
15 4816
Av 4812

On Tape Reels (29) SOL # 28 @ 21:29
On Tape Reels (29) EOL # 28 @ 21:50:30Z

SOL # 27 @ 21:58:00Z
End Tape 16 @ 22:00Z
START Tape 17 @ 22:02Z
EOL # 27 @ 22:44:00

VELOCITY EOL 27
SURFACE - 4813
5' - ~~4821~~ 4813
10 - 4800
15 - 4789

DATE 8-6-88

COMMENTS AND OBSERVATIONS

Line 31 Velocities

Surface - 4856

5 4926

10 4926

15 4926

20 4926

25 4926

30 4923

35 4892

40 4848

45 4816

50 4802

55 4792

60 4742

Ave - 4869

SOL# 31 @ 16:34 Z

EOL# 31 18:31 Z

Side Scan on Entire Line 31.

Tape #17 @ 19:20

Tape #18 @ 19:24 Line 32

DATE 8-6-88

COMMENTS AND OBSERVATIONS

EO LINE 31 VELOCITIES

SURFACE 4917

5' 4914

10' 4912

~~15'~~ 4914 AVG.

~~20'~~

~~25'~~

~~30'~~

SOL # 32 @ 18:47

NO S. SCAN ON THIS LINE

EOL # 32 @ 19:38:30

SOL # 33 @ 19:41:00

TAPE (LINE 32)

EOL # 33 @ 21:41:30

Velocities	Surface	4937
OL 33	5'	4937
	10'	4928
	15' ~~20~~	4928
	20' ~~30~~	4928
	25'	4928
	30'	4926
	35'	4909
	40'	4854
	45'	4827
	50'	4810
	55'	4794
	60'	4721 Avg. 4879

DATE 8-2-88

COMMENTS AND OBSERVATIONS

Velocities
Line 53 continued

Surface	-	4928
5'	-	4926
10'	-	4926
15'	-	4926
20'	-	4881
25'	-	4840
30'	-	4827
35'	-	4816
40'	-	4763
45'	-	4760

Average - 4859

SOL 53 Continued @ 16:00:00 Z
Side Scan & Hunter
EOT # 18 @ 16
SOT # 19 @ 16:57
S.S. off Line @ 17:04:30 - Paper Ch
On Line @ 17:06:00
SS off @ 17:28:00
S.S. on Line @ 17:48:00
EOL 53 @ 18:32
Z

DATE 8-7-88

COMMENTS AND OBSERVATIONS

VELOCITY DROP EOL #53

10' ~~SURFACE~~ - 4920 SURF - 4926

15' ~~5~~' - 4892 5' 4926

20' ~~15~~' - ~~4870~~ 4813

25' ~~15~~' - 4797

30 ~~25~~' 4776 AVG - 4865

35' ~~25~~' - 4776

SOL #36 @ 19:04:00

SOL #36 @ 19:14:10

SOL [redacted] @ 19:14:10

SOL 19:54:48

Velocity Drop EOL 35

20' 4840

15' 4848

10' 4878

5' [illegible]

0' 4[illegible]

Ave 487[illegible]

SOL 34 20:04:30

EOTAPE 19 @ 20:46

EOL 34 22:35:00

START TAPE 20 @ 20:48

* NO SSCAN

Hurrec

DATE [redacted] 8/7/88

COMMENTS AND OBSERVATIONS

VELOCITY EOL 34

SURFACE	4937
5'	4937
10'	4934
15'	4928
20'	4928
25'	4928
30'	4928
35'	4928
40'	4926
45'	4906
50'	4884
55'	4843
60'	4786

AVERAGE = 4907

Line # 37 8-9-88

Velocity

SURFACE -	4912
5' -	4909
10' -	4898
15' -	4856
20' -	4846
25' -	4835

AVERAGE - 4876

OL 37 @ 1608 Z

TAPE 2Q End @ 17:34:30 S. Scan on this Line

TAPE 2B START @ 17:36:50

OL 37 @ 18:05 Z

DATE 8/9/88

COMMENTS AND OBSERVATIONS

Velocity End of Line 37

Surface	-	4937
5'	-	4933 4931
10'	-	4931
15'	-	4931
20'	-	4931
25'	-	4931
30'	-	4931
35'	-	4928
40'	-	4928
45'	-	4926
50'	-	4867
55'	-	4827
60'	-	4721
Average	-	4899

OL #38 @ 18:36:50

No S.Scan on this Line

Log Tape #21 Count 0525

OL # 38 @ 20:47

Velocity End of Line 38

Surface 4898

5'	4895	40'	4784
10'	4892	~~45~~	
15'	4878	~~50~~	
20'	4873		
25'	4840	AVG.	4854
30'	4824		
35'	4800		

DATE 8-9-84

COMMENTS AND OBSERVATIONS

OL # 39 @ 21:08:05 [illegible]

No Side Scan on This Line.

TAPE 21 End @ 21:41 Z

TAPE 22 START @ 21:44 Z

OL # 39 @ 21:54:00

	Velocity Profile
Surface	4917
5	4917
10	4914
[illegible]	
[illegible]	
AVG.	4916

DATE 9-10-88

COMMENTS AND OBSERVATIONS

OL #40 @ 15:40:30

Side Scan And Hunter

pe 23 continued @ Tape Cut 260 SPL.

Side Scan Data Not Good Due to Crosstalk.

Not much surficial geology as well as SPL.

Thermal Causing Probs. on S Scan. Ships Speed Too fast @ Time

OL #40 @ 18:02:20

Surf.	4931		
5'	4931	35	4928
10.	4931	40	4895
15	4931	45	48873
20	4931	50	4837
25	4931	55	4818
30	4931	60	4931

Avg =

L #41 @ 18:31:41 - velocities @ EOL 40!

No Side Scan This Line

Tape 22 Ends @ 19:00:00

Tape 23 Starts @ 19:03:00

#41 @ 20:52:49

locity of EOL # 41

Surface	4928	25'	4816
5'	4928	30'	4805
10'	4923	Average	
15'	4870		
20'	4843		

DATE 8-11-88

COMMENTS AND OBSERVATIONS

SOL 44 @ 17:58:03
No Side Scan Lin

SOL 44 @ 18:34:00

SOL 45 Velocities

Surf	4937	35	4928
5'	4931	40	4912
10'	4931	45	4912
15	4928	50	4867
20	4928	55	4827
25	4928	60	4768
30	4928	AVG	

SOL #45 @ 18:55:35 100 kHz Mat,
100 kHz Side Scan Test - 500 kHz Artifacts
Tape 24 Side 19:49:00
Tape 25 Side 19:51:00
Starts

SOL #45, 20:53:01
0' 4937
5' 4937 AVG. 4917
10' 4914
15' 4878

SOL #46 @ 21:03:00

SOL #46 @ 21:42:30

DATE 8-12-88

COMMENTS AND OBSERVATIONS

L# 47

Velocities SOL# 47 @ 14:48:52

0' 4937 Side Scan Line

5' 4934

Tape 25 Ends @ 16:16

Tape 26 ~~Ends~~ Starts @ 16:19

6:19:30 TO 16:56 NO DATA ON ANALOG

Due to Operator Error

L# 47 @ 17:05:41

0	4934	35	4928
5	4934	40	4928
10	4934	45	4926
15	4931	50	4926
20	4931	55	4917
25	4928	60	4810
30	4928	Avg	4919

L #48 @ [redacted] 17:56:29

No Side Scan Line

L# 48 16:28:19

L# 49 18:30:22

No Side Scan

L 49 20:22:54

Velocity

0	4942	10	4940
5	4942	15	4934
		Avg	4940

DATE 8/12/88

COMMENTS AND OBSERVATIONS

[illegible] 50C 21:20:57

Velocities -

0	4942	35	4835
5	4940	40	4776
10	4940	45	4755
15	4934	50	4749
20	4934	55	4749
25	4934	60	4731
30	4931	Avg	4851

Tape 27 START
Here Somewhere
Nichols

[illegible] 50C 22:56:28

8-13-88

50 Continues

Velocities

Surface	-	4934
5	-	4934
10	-	4934
15	-	4934
20	-	4934
25	-	4934
30	-	4928
35	-	4824
40	-	4744
45	-	4731
50	-	4729
55	-	4726
60	-	4718
Avg.		4847

DATE 8-13-88

COMMENTS AND OBSERVATIONS

e 50 Continued 14:[illegible]:03

Side Scan Continued

e 50 15:48:0[illegible]

Reshoot #43

59:30

Side Scan Line

55 [illegible] @ 16:[illegible]

43 @ 16:42:30 Tape 27 Ends 16:4[illegible]

Tape 28 Starts 16:[illegible]

0000 - Corp. of Engineers - Jetty

Line 50 @ 19:12:00

Leg To 51 @ 20:59:40

ity EOL 51 Tape 28 Ends 22[illegible]

Tape 29 Begins 22:[illegible]

4873 30 4757

4873 35 4757

~~[illegible]~~ 4859 ~~[illegible]~~

4802 ~~[illegible]~~

4760 Avg 4805

757

DATE 8/16/88

COMMENTS AND OBSERVATIONS

Velocities Profile
Shot Line 13

Surface 4865
5' 4845
10' 4840
15' 4837
20' 4824
25' 4821
30'
35'
Bmg.' 4839

13 @ 15:31:46 START TAPE 3
13 15:57:46

12 @ 15:02:26
12 16:30:16

11 @ 16:32:41
11 16:57:22

10 @ 17:02:58
10 17:26:45

9 @ 17:28:55
9 @ 17:51:13

8 @ 17:54:35
8 18:17:20

DATE

MT

COMMENTS AND OBSERVATIONS

SOL #7 18:19:00
EOL 7 18:43:01

SOL #6 18:46:37 End Tape 3 18:45
~~EOL~~ 6 Stopped Line - Hunter Mission START Tape 4 18:51
Resume Line 6 @ 19:38:17
End Line 6 @ 19:46:35

SOL #5 @ 19:47:52
EOL #5 19:53:59

SOL #4 @ 19:57:57
EOL #4 20:28:36

SOL #3 @ 20:33:24
EOL #3 21:04:52

SOL #2 @ 21:08:52
EOL #2 21:32:51

SOL #1 @ ~~21:36:44~~ 21:36:00
EOL #1 21:56:44

SOL #26 @ 22:08:54
EOL 26 22 46 01

DATE 8/16/88

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COMMENTS AND OBSERVATIONS

VELOCIMETER DROP EOL 26

0	4912	20	4805
5	4898	25	4789
10	4873	30	4786
15	4835	35	4786

AVG 4836