

ST. MARKS NWR
S.E.T.



Ben Meadows

1-800-241-6401

LEVEL BOOK

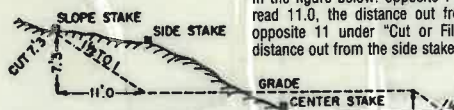
#101596

VOLUME I

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING

Roadway of any Width. Side Slopes 1½ to 1.

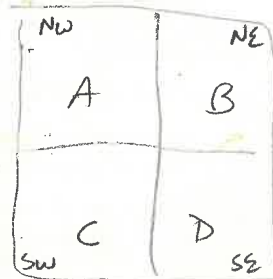
In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Light House
Boat Launch

1 = Subtidal SET
2 = SET 1, 2, 3
3 = Supratidal SET

33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	32
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	33
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	34
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	35
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	36
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	37
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	38
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	39



The paper in this book is made of 50% high grade rag stock with a WATER RESISTING surface sizing.

[illegible]

SITE MAPS

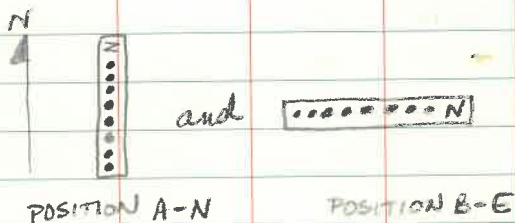
* BOARDS ARE E/W

* BOARDS ARE E/W

SHALLOW SETS

SHALLOW SETS ARE READ WITH THE
"N" END OF TABLE FACING NORTH
DIRECTION - THIS IS THE "N" MEASUREMENT

THEN THE "N" END OF TABLE IS
MOVED TO FACE THE EAST DIRECTION
AND THE "E" MEASUREMENT IS TAKEN



6-9-95

ST MARKS

10:58am

w/ FADS

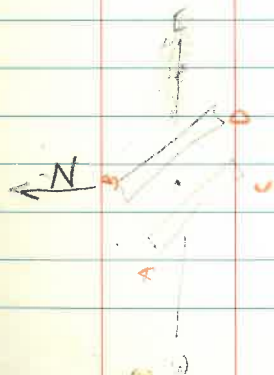
STATION 1

	A	B	C	D
1	34.5	35.0	35.0	34.7
2	35.1	34.9	34.6	34.8
3	35.7	33.7	35.1	34.9
4	34.8	35.4	34.4	35.8
5	34.9	35.7	34.9	X
6	35.6	36.8	35.4	X
7	35.1	35.2	35.1	X
8	35.2	35.1	35.3	X
9	35.6	35.1	34.7	X

SUM

AVE

Alignment of boards are E/W?



4

6-9-95

ST MARKS

11:32 am

STATION 2

	A	B	C	D
1	X	35.4	36.2	35.6
2	X	35.1	36.5	35.5
3	X	34.1	36.9	34.5
4	X	35.0	36.2	36.2
5	X	35.4	36.8	36.2
6	X	35.4	37.1	35.9
7	X	32.7	36.5	35.7
8	X	34.9	36.8	36.1
9	X	35.0	36.2	36.1

Sum

AVE

5

6-9-95

ST MARKS

12:05 pm

STATION 3

	A	B	C	D
1	35.4	35.7	31.2	X
2	35.1	36.6	35.7	X
3	35.7	36.5	35.2	X
4	35.3	36.4	35.7	X
5	35.3	36.8	35.4	X
6	35.1	35.8	35.5	X
7	X	35.5	35.3	X
8	X	34.4	34.8	X
9	X	35.2	35.4	X

SUM

AVE

6

Jim, Cliff

6-27-95

ST. MARKS

10:29am

STATION 1

UNITS = cm	A	B	C	D
1	33.9	34.8	35.0	34.6
2	35.1	34.4	34.0	35.0
3	35.1	35.1	35.8	34.9
4	34.9	35.0	35.4	35.2
5	35.0	32.9	35.0	X
6	34.8	35.2	35.7	X
7	34.3	35.2	35.6	X
8	34.7	35.4	35.6	X
9	X	35.2	34.9	X

7

6-27-95

ST MARKS

10:52am

STATION 2

UNITS = cm	A	B	C	D
1	X	36.0	39.5	35.3
2	X	35.4	38.0	35.3
3	X	35.7	37.8	34.2
4	X	36.0	38.5	35.1
5	X	35.1	38.9	35.6
6	X	35.6	38.8	35.0
7	X	35.2	38.8	35.4
8	X	36.2	39.3	36.3
9	X	36.0	39.8	35.9

8

6-27-95

ST. MARKS

11:10 am

STATION 3

Units = cm

A

~~B~~

C

~~D~~

1

35.5

35.1

27.3*

X

* IN
BURROW

2

35.5

35.7

36.0

X

3

35.4

35.5

34.6

X

4

35.8

36.4

36.1

X

5

35.6

35.4

36.0

X

6

35.5

35.7

34.5

X

7

35.4

34.7

36.6

X

8

X

34.0

35.5

X

9

X

34.9

35.5

X

BRAD, JIM, CLIFF
Reader

9

10-25-95

ST MARKS

STATION 1

Units = cm

A^{NW}B^{NE}C^{SW}D^{SE}

1

34.9

35.4

35.0

32.8

2

36.1

34.8

34.8

35.4

3

35.4

34.0

35.1

35.1

4

35.8

35.3

35.7

34.0

5

34.7

35.3

35.4

X

6

34.4

35.5

35.3

X

7

34.4

34.8

35.8

X

8

35.0

35.3

35.3

X

9

X

34.7

35.2

X

Cryo Pbl

A

C

Est.

6/9/95

6/9/95

1

No Sp

10.1

2

10.5

10

10-25-95

ST. MARKS

STATION 2

UNITS=CM	A ^{NW}	B ^{NE}	C ^{SW}	D ^{SE}
1	X	35.7	36.5	35.3
2	X	34.4	36.2	31.8
3	X	34.3	35.7	32.7
4	X	35.0	35.7	34.6
5	X	35.2	36.1	35.4
6	X	35.2	36.3	34.9
7	X	32.5	36.0	34.5
8	X	34.4	36.2	35.6
9	X	35.6	36.3	35.8

Cryo Plot

A

C

Date Est.

6/9/95

6/9/95

1

2.1

2

4.4

3

6.8

4

11

10-25-95

ST. MARKS

STATION 3

UNITS=CM	A	B [✓]	C	D [✓] B
1	35.1	35.4	36.1	X
2	34.8	35.3	36.8	X
3	34.7	35.3	35.8	X
4	35.6	35.7	36.0	X
5	34.8	36.4	36.0	X
6	34.8	35.2	35.8	X
7	35.5	34.2	35.2	X
8	X	34.2	34.9	X
9	X	33.6	35.9	X

SUM

AUG

Cryo Plot

A

C

Date Est.

6/9/95

6/9/95

1

8.4

—

2.2

—

2

9.6

—

4.3

—

3

12.3

—

5.5

—

4

6.5

—

—

*SOUTH END

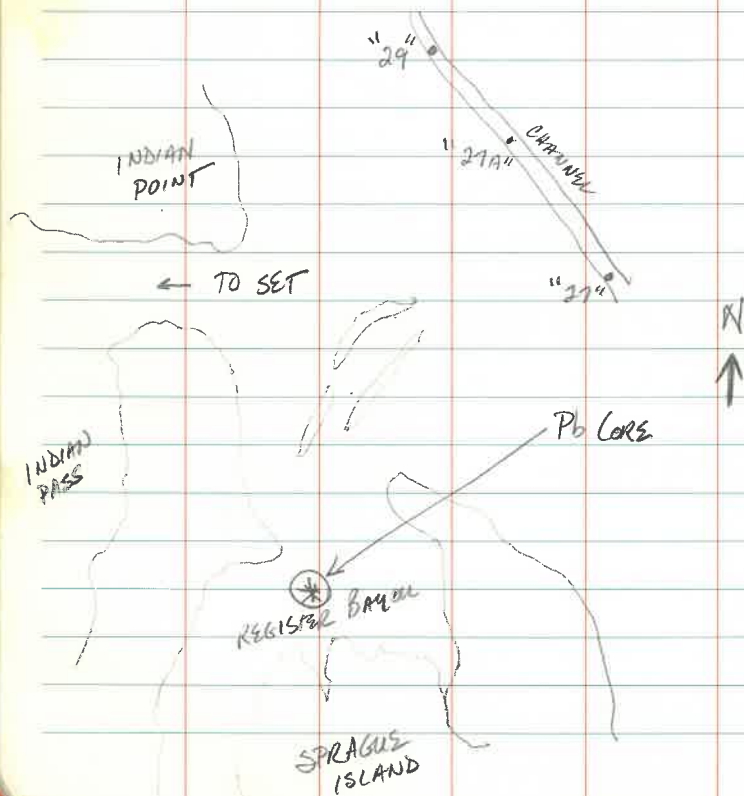
⑦ p-31

1-17-96

ST. MARKS

65° - nice, breezy

Collected ONE Pb CORE

MEASUREMENTS WERE NOT TAKEN IN FIELD FOR
COMPACTION CALCULATIONSCORE WAS TAKEN SOUTHEAST OF ST MARK SETS
(w/ ONE MILE) IN REGISTER BAYOU

1-17-96

ST. MARKS

Pb CORE 1-17-96 IS SUBTIDAL CORE
TAKEN FROM SUBTIDAL AREA PROTECTED
FROM WIND, WAVES, MOST BOATS, STILL
SOME TIDAL CURRENT PRESENT.

8-6-96

ST MARKS

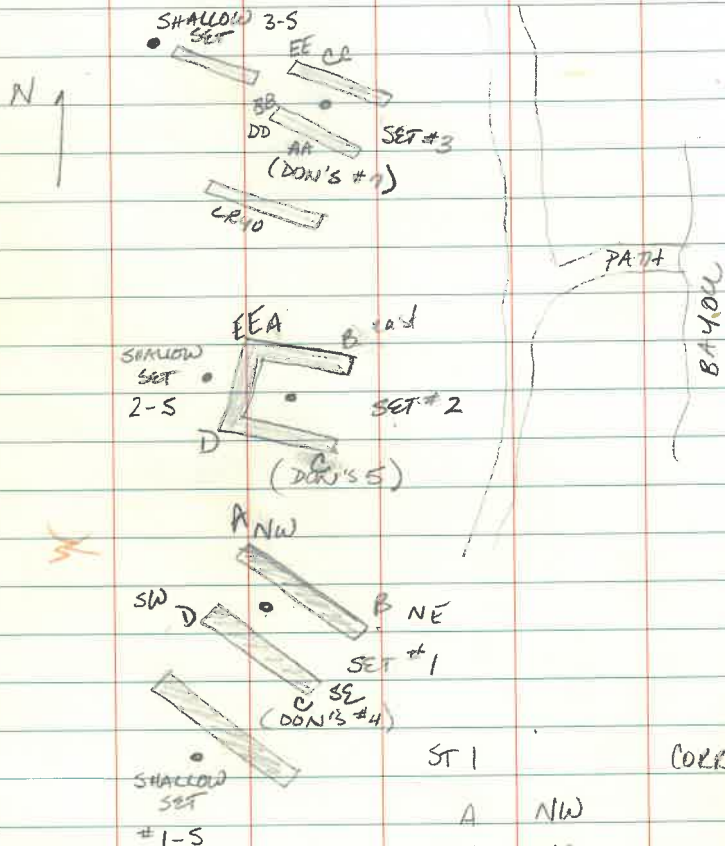
SHALLOW SETS ESTABLISHED

50 cm DEEP

3" ALUMINUM

CEMENTED WITH

15 cm ABOVE SURFACE



ST 1

CORRECT

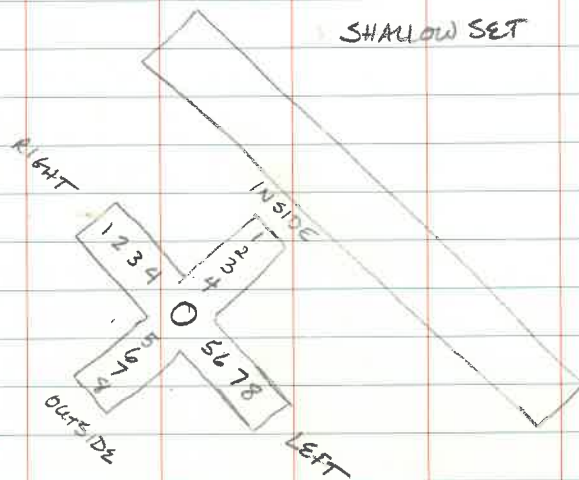
A NW

B NE

C SE SW

D SW SE

POSITION A



POSITION B

? pg 41

16

8-6-96

ST. MARKS
SHALLOW SETS

STATION 1-S

INSIDE
OUTSIDE

IO-A

IO-B

1

30.4

30.1

2

29.9

29.8

3

29.9

30.0

4

29.1

29.3*

* EDGE OF CONCRETE

5

31.6

31.4

6

29.5

30.2

7

28.7

29.7

8

28.1

28.3

"N ARM"

STATION ?

RIGHT
LEFT

RL-A

1

28.1

2

28.3

3

29.0

4

31.4*

* ON ROAD

5

X***

** ON CONCRETE

6

30.3

7

29.6

8

30.3

? p 41

CLIFF, CHEN

17

8-30-96

ST. MARKS

STATION 1

D

A

~~N~~ B)

E

~~S~~ C~~W~~

1

35.8

34.8

35.2

34.4

2

34.3

34.3

32.5

35.8

3

35.4

35.3

35.5

35.7

4

35.2

35.2

36.0

35.6

5

35.2

X

35.5

35.0

6

36.7

X

35.5

36.8

7

34.8

X

35.2

34.5

8

34.9

X

35.5

35.7

9

35.1

X

35.3

X

SUM

AVE

35.3

34.9

35.1

35.4

CRYOGENICS

DD

A

0

6.4

0

6.8

? pg 45

8.30.96

ST MARKS

STATION 2 ~~B~~ ~~B~~ ~~B~~ ~~A~~ ~~E~~
 N(?) ~~A~~ ~~B~~ E(?) ~~B~~ ~~A~~ S(?) ~~C~~ W(?) ~~D~~

1	35.4	35.3	X	X	
2	33.5	X	X	X	* hole
3	35.8	34.0	X	X	
4	35.5	35.4	X	X	
5	35.6	36.3	X	X	
6	36.1	34.6	X	X	
7	34.6	34.7	X	X	
8	35.4	36.2	X	X	
9	36.3	35.5	X	X	

Sum

Ave 35.4 35.3

CRYOGENICS

A
9.8
11.8
12.0

p. 46

8.30.96

ST. MARKS

STATION 3 ~~D~~ ~~B~~ ~~C~~ ~~A~~
 N(?) ~~A~~ ~~B~~ E(?) ~~B~~ ~~A~~ S(?) ~~C~~ W(?) ~~D~~

1	35.3	35.7	34.6	36.1	
2	36.4	35.3	36.0	35.3	
3	37.3	34.8	35.4	35.0	
4	36.0	X	36.4	36.0	
5	36.0	X	36.1	35.5	
6	37.4	X	35.1	36.2	
7	35.6	X	36.2	35.7	
8	34.5	X	X*	X	* HOLE
9	36.7	X	35.7	X	

Sum

Ave 36.1 35.3 35.7 35.8

CRYOGENICS

A
14.3
11.2
11.7
11.7

?

8-30-96

ST. MARKS

CRYOGENICS

CANHOUS	CANHOUS	CANHOUS
SET 6	SET 3	SET 2
EE	?	10.4
6.5	7.5	15.8
5.6	8.2	13.3
6.5	7.0	12.1

8-30-96

ST MARKS

SHALLOW SETS

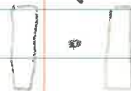
STATION 3-S

	N	E	
1	26.5	28.1	(east)
2	28.0	28.0	
3	28.1	28.1	
4	29.1	30.1	
5	28.7	28.8	
6	28.1	28.1	
7	27.8	28.0	
8	26.0	27.4	(west)

STATION 2-S

	N	E	
1	29.2	29.2	
2	28.6	28.0	
3	28.2	28.4	
4	27.2	27.0	hole
5	26.3	21.9	concrete
6	29.7	28.6	
7	28.6	28.9	
8	28.8	27.4	

Lighthouse



22

8-30-96

ST. MARKS
SHALLOW SET

STATION 1-S

	N	E	
1	30.9	30.5	East
2	29.9	30.3	
3	30.2	30.3	
4	30.2	30.5	
5	32.0	30.8	
6	30.4	30.1	
7	29.4	28.5	
8	28.4	28.5	

Chen
Adel
Cliff

23

1-8-97

ST MARKS - SPRING TIDE

FULL MOON - SPRING TIDE; CLOUDY + COOL; LOW TIDE LOCALLY 9:00 AM

STATION 1

	TIME 10:30	PHASE	LOW	
1	36.1	35.5	35.9	35.6
2	35.7	34.8	35.9	35.5
3	35.4	35.3	36.4	35.4
4	35.4	35.9	36.3	35.3
5	X	35.8	37.0	36.4
6	X	35.4	35.3	36.3
7	X	35.5	36.0	36.5
8	X	35.7	36.2	35.3
9	X	35.7	38.0	34.9

24

1-8-97

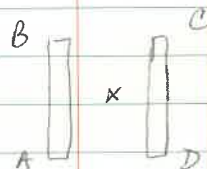
ST. MARKS - SPRING TIDE

STATION 2

11:05 AM

~~B~~ A^{NE}~~D~~ B^{NW}~~A~~ C^{SW}~~C~~ D^{SE}

1	36.7	X	X	36.0
2	Holz	X	X	35.8
3	35.7	X	X	35.3
4	36.1	X	X	36.0
5	35.8	X	X	36.4
6	35.6	X	X	37.0
7	36.0	X	X	35.0
8	36.6	X	X	36.3
9	36.8	X	X	36.5



25

1-8-97

ST. MARKS - SPRING TIDE

STATION 3

~~B~~ A^{NE}~~D~~ B^{NW}~~A~~ C^{SW}~~C~~ D^{SE}

1	X	35.1	34.6	35.5
2	X	35.6	34.3	35.2
3	X	34.9	35.3	35.9
4	X	35.1	34.0	35.6
5	X	35.4	33.4	35.8
6	X	35.5	35.2	36.0
7	X		X	36.8
8	X		X	35.9
9	X		X	34.4

?

1-8-97

ST. MARKS - SPRING TIDE

STATION 1

TIME 12:30 pm MID PHASE

	DA ^{NW}	CB ^{NW}	AC ^{SW}	BD ^{SE}
1	35.6	35.6	34.0	35.5
2	35.2	35.0	35.4	34.6
3	35.0	35.3	35.5	34.2
4	35.1	35.1	35.0	36.5
5	x	35.5	35.2	34.7
6	x	35.4	hole	35.5
7	x	35.3	35.2	36.6
8	x	35.8	35.0	34.8
9	x	35.9	36.0	35.0

CRYOGENICS

NONE
FOUNDNONE
FOUNDNONE
FOUND

1-8-97

ST. MARKS - SPRING TIDE

STATION 2

TIME: 12:50 pm

	BA ^{NW}	DB ^{NW}	AC ^{SW}	CD ^{SE}
1	36.6	x	x	36.3
2	35.2	x	x	35.7
3	35.8	x	x	35.5
4	36.1	x	x	36.7?
5	36.9	x	x	36.5
6	35.7	x	x	37.0
7	35.7	x	x	35.4
8	36.1	x	x	37.0
9	36.3	x	x	36.9

CRYOGENICS

A

9.7

7.2

8.7

10.2

?

1-8-97

ST MARKS - SPRING TIDE

STATION 3

TIME 1:05 pm

~~BA~~^{NE} ~~DB~~^{NW} ~~AC~~^{SW} ~~CD~~^{SE}

1	X	HOLE	35.5	35.5
2	X	35.7	36.3	35.6
3	X	34.7	34.9	36.3
4	X	35.6	35.9	35.7
5	X	35.8	36.8	36.0
6	X	34.6	34.1	36.0
7	X	36.0	35.9	35.4
8	X	35.3	X	35.1
9	X	35.7	X	33.9

CRYOGENICS

A

8.4

10.0

9.0

1-8-97

ST. MARKS - SPRING TIDE

STATION 1

TIME 2:30 pm

HIGH PHASE

~~DA~~^{NE} ~~CB~~^{NW} ~~AC~~^{SW} ~~BD~~^{SE}

1	34.7	35.4	35.2	35.2
2	34.5	34.6	35.8	36.1
3	35.1	35.7	35.2	35.3
4	35.5	35.9	36.6	36.0
5	X	35.4	35.2	36.3
6	X	36.7	35.0	36.2
7	X	36.3	35.5	35.0
8	X	36.0	35.5	35.4
9	X	35.8	X	34.9

1-8-97

ST MARKS - SPRING TIDE

STATION 2

TIME: 2:45 pm

~~B~~ A NE~~D~~ B NW

A E SW

~~D~~ C SE

1	36.8	X	X	35.9
2	HOLE	X	X	35.0
3	35.6	X	X	36.1
4	35.7	X	X	36.2
5	35.6	X	X	35.7
6	36.0	X	X	36.3
7	34.9	X	X	34.9
8	35.9	X	X	36.5
9	35.7	X	X	36.7

1-8-97

ST MARKS - SPRING TIDE

STATION 3

TIME: 3:00 pm

~~B~~ A NE~~D~~ B NW

A E SW

~~D~~ C SE

1	X	34.7	35.5	34.6
2	X	35.9	35.7	35.7
3	X	34.9	35.0	34.7
4	X	36.1	35.6	35.7
5	X	36.3	36.4	35.1
6	X	34.5	35.3	35.0
7	X	36.0	35.4	35.2
8	X	35.5	X	34.0
9	X	35.8	X	34.5

1-8-97 ST MARKS - SPRING TIDE

AVE FOR STATIONS 1-3

8:45 AM LOW TIDE = 35.7

MID TIDE = 35.3

3:30 PM HIGH TIDE = 35.5

NOTES: DEEP SET MEASUREMENTS TAKENThree times today during $\frac{1}{2}$ of
full tidal cycle - spring tide.

• official tide tables reported

low tide @ 7:38 AM -

• observation field tide recorded

slack tide & change to morning at 9⁰⁰ AM

CRYDGENICS - SITE 6 (LAHOUN)

8.0 8.0 10.3 10.2

?

1-8-97

ST MARKS - SPRING TIDE

SHALLOW SETS - LOW PHASE

STATION 3-S

	N	E
1	28.1	28.0
2	27.9	29.1
3	27.1	28.8
4	29.4	30.1
5	25.4	28.8
6	28.8	28.1
7	27.6	28.3
8	26.4	28.0

STATION 1-S

LOW PHASE

	N	E
1	29.2	30.4
2	29.6	30.5
3	30.2	30.5
4	31.0	CONCRETE (?)
5	30.5	30.0
6	30.2	29.5
7	30.1	30.0
8	30.3	29.9

1-8-97 ST MARKS - SPRING TIDE
SHALLOW SETS - LOW PHASE

STATION 2-S

	N	E
1	27.7	30.0
2	27.6	31.5
3	28.9	29.2
4	29.1	CONCRETE
5	CONCRETE	27.8
6	29.4	28.9
7	29.2	29.3
8	29.0	29.4

1-8-97

ST MARKS - SPRING TIDE
SHALLOW SETS - MID PHASE

STATION 3-S

	N	E
1	27.3	28.4
2	27.0	29.8
3	27.6	28.9
4	29.1	29.5
5	29.0	28.8
6	27.8	28.3
7	27.6	28.4
8	25.4	28.2

STATION 1-S

	N	E	MID PHASE
1	29.8	31.0	
2	30.1	30.3	
3	30.0	30.6	
4	31.1	concrete	
5	29.5	29.9	
6	30.5	29.8	
7	30.8	30.1	
8	30.3	29.5	

1-8-97

ST MARKS- SPRING TIDE

STATION 2-6

MID PASS

N

E

1

27.6

29.5

2

29.1

31.5

3

29.5

28.8

4

Concrete

Concrete

5

Concrete

29.0

6

29.6

29.4

7

29.3

29.5

8

29.2

29.3

4-21-97

ST MARKS

STATION 1

11:30am Low Tide

~~DANE~~~~CB~~~~AC~~~~BD~~

1

34.8

35.1

35.1

36.2

2

34.3

34.1

35.6

37.7

3

35.0

36.0

36.6

35.8

4

35.0

36.3

35.3

36.5

5

X

35.7

36.1

36.2

6

X

35.9

38.8

37.6

7

X

35.9

35.9

35.9

8

X

35.7

35.8

35.8

9

X

35.4

35.8

35.9

AVE

34.8

35.6

36.1

36.4 = 35.7



CORRECT

4-21-97

ST MARKS

STATION 2

TIME

11:52 am

~~B~~ A~~D~~ B~~A~~ C~~D~~ C

1	35.7	X	X	36.2
2	35.6	X	X	35.0
3	35.8	X	X	36.8
4	35.9	X	X	36.7
5	36.3	X	X	36.7
6	36.0	X	X	37.4
7	36.1	X	X	36.0
8	36.7	X	X	36.6
9	36.6	X	X	37.2

CRYOGENICS STATION 2E

A

9.7

11.1

8.2

9.7

4-21-97

ST MARKS

STATION 3

TIME

12:00 (NOON)

~~B~~ ~~D~~ A~~D~~ B~~A~~ C~~D~~ C

1	X	34.6	35.8	35.2
2	X	36.1	35.2	36.3
3	X	36.0	34.7	35.2
4	X	37.1	35.5	36.1
5	X	36.0	35.6	35.4
6	X	35.6	35.1	35.7
7	X	36.1	35.9	35.2
8	X	35.6	X	34.3
9	X	35.7	X	35.3

CRYOGENICS STATION 3E

A

5.1

7.6

6.0

6.2

4-21-97

ST MARKS
SHALLOW SETS

STATION 1-S

	N	E
1	29.3	30.4
2	29.8	30.5
3	29.9	30.5
4	30.8	32.0
5	31.0	29.6
6	30.9	29.8
7	30.7	29.7
8	30.7	29.0

S W

STATION 2-S

	N	E
1	29.1	30.3
2	29.2	30.4
3	29.0	29.7
4	28.6	29.4
5	29.2	29.0
6	28.9	29.3
7	29.0	29.5
8	29.1	29.8

4-21-97

ST MARKS
SHALLOW SETS

STATION 3-S

	N	E
1	27.5	28.7
2	27.5	28.0
3	29.9	28.5
4	29.0	30.2
5	28.6	28.8
6	28.5	28.5
7	27.9	28.3
8	26.4	28.6

4-21-97

ST MARKS

STATION 1

12:57

HARSH HIGH TIDE-STARTED FLOODING

~~DA~~~~CB~~~~AC~~~~BD~~

1	35.2	35.7	34.2	35.6
2	35.3	34.5	35.6	35.9
3	35.1	36.1	36.4	36.5
4	35.4	35.8	35.8	37.5
5	35.5	35.5	35.9	36.0
6	X	35.9	38.2	35.8
7	X	36.2	35.9	35.5
8	X	35.7	35.5	35.1
9	X	35.4	35.5	36.4
	35.3	35.6	35.9	36.0 = 35.7

STATION 1

2:45

HIGH TIDE

1" OVER BOARDS
TOTAL WATER DEPTH
10"~~DA~~~~CB~~~~AC~~~~BD~~

1	33.0	35.3	34.5	35.6
2	35.1	34.8	35.8	33.6
3	35.6	35.9	36.4	35.9
4	35.3	36.0	35.2	35.6
5	35.8	35.9	36.1	35.5
6	X	35.9	35.0	36.5
7	X	36.1	35.3	34.8
8	X	35.9	35.6	34.8
9	X	35.9	35.5	35.7
	35.0	35.7	35.5	35.3 = 35.4

4-21-97

ST MARKS

STATION 1

4:20

TOTAL WATER DEPTH 4"

~~DA~~~~CB~~~~AC~~~~BD~~

1	34.7	35.2	34.8	35.5
2	34.8	33.7	35.7	33.2
3	35.6	35.4	36.2	34.9
4	35.2	35.6	35.6	35.4
5	35.6	35.1	35.6	35.6
6	X	35.6	35.0	36.2
7	X	35.9	35.5	35.2
8	X	35.3	35.4	35.0
9	X	35.0	36.0	35.5
	35.2	35.2	35.5	35.2 = 35.3

STATION 1

TIME 5:06

TOTAL WATER DEPTH 1"

~~DA~~~~CB~~~~AC~~~~BD~~

1	34.9	35.8	34.7	35.1
2	34.4	34.1	35.6	37.1
3	34.9	36.0	36.6	36.4
4	34.6	36.1	35.6	35.0
5	35.2	36.3	35.5	35.4
6	X	36.4	34.9	36.2
7	X	36.1	35.2	34.6
8	X	35.8	35.5	34.5
9	X	35.9	35.3	35.5
	34.8	35.8	35.4	35.5 = 35.4

44

1-28-98

Jim L., Chen
Candy, Debra
Windy, Sunny

STATION 1

low tide changing to incoming

	A	B	C	D
1	34.4	34.8	34.5	34.6
2	35.7	35.1	33.7	34.0
3	35.5	35.0	35.0	34.7
4	35.2	34.9	35.4	35.0
5	33.6	35.4	35.3	35.0 X
6	34.7	35.5	35.3	34.6 X
7	34.6	34.9	35.0	35.0 X
8	34.6	34.7	35.1	X
9	Blocked	34.7	35.2	X

* LETTERS PLACED

CRYOBENTICS

DD

A

1

none

11.1

2

13.5

3

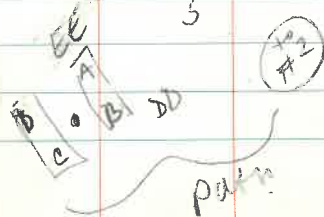
16.1

4

16.3

Discontinuous

N



45

1-28-98

Chick
letters
2 corner

STATION 2

	NE A B	SW C D	SE E F
1	34.5	35.7	36.0
2	34.2	35.1	33.1
3	34.9	33.6	34.1
4	34.3	34.8	35.3
5	34.4	35.7	35.9
6	34.4	36.3	35.0
7	35.1	34.4	35.2
8	33.9	35.7	35.7
9	34.6	36.1	35.5

CRYOBENTICS

A

1

none

2

3

4

1

N



46
1-28-98.

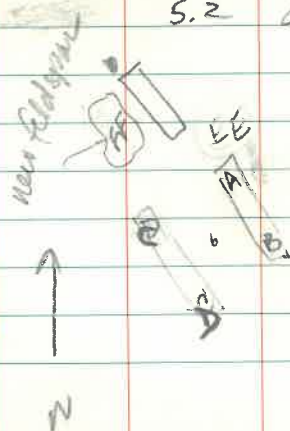
Light house is due south

STATION 3

	A	D	C	B
1	34.6	35.0	32.3	34.7
2	34.9	35.8	35.4	35.3
3	35.3	36.1	34.5	34.2
4	35.1	35.7	32.6	3↑
5	34.0	35.5	35.3	° E
6	34.2	35.0	35.6	° E
7	35.3	34.9	35.6	↓
8	↑ Blocked	34.1	35.5	↓
9	↓	33.3	35.2	↓

CRYOGENICS

	A		A
1	5.2	discontinuous	5.5 dist.
2			6.5
3			8.3
4			7.3



10 AM - cryo
100 pm sets 6-16-98 ST MARKS RIVER
Debra H. STATION 1 Jim C.

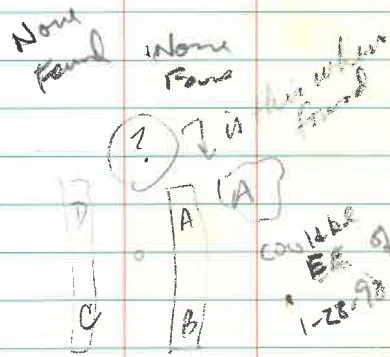
	A	B	C	D
1	33.9	35.4	34.9	35.6
2	35.2	34.7	25.1	34.7
3	35.5	34.8	35.0	35.6
4	35.3	35.1	36.6	34.5
5	35.0	34.5	35.3	35.0
6	33.1	35.3	35.0	x
7	35.3	34.4	35.7	x
8	35.3	34.7	35.2	x
9	34.7	34.6	35.4	x

at 100 pm water incoming tide about 4"
high in front of set - lesser at other stations 1"

Cryo A B C D

	A
1	18.7
2	14.6
3	15.7
4	27.0

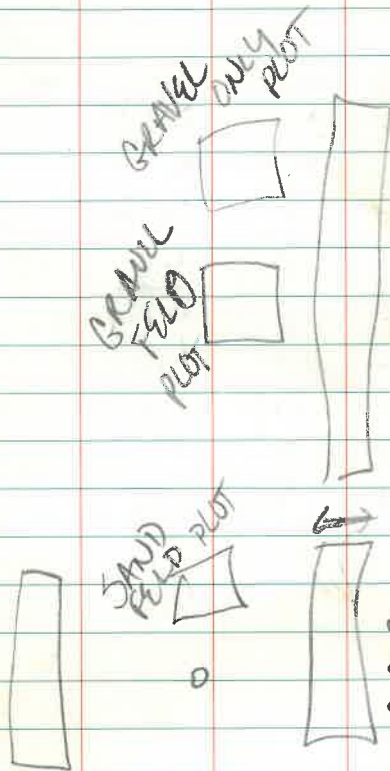
3 AM
2 AM
5 AM
brotherhood
down
disturbance



could be
EE of
1-28-98

6-16-99 STATION 3

Test
Plots
5L



TUBES

- GRAVEL FELD T
- SAND FELD T
- FELD TUB

dug out
filled with
tube with
marker



3" marker

2-3-99
ST. MARKS
STATION 1

CHEN
Jim L.
River

	A	B	C	D
1	ch 27.1	35.3	35.4	35.2
2	35.6	33.4	27.3 ^{ch}	34.5
3	36.2	35.9	35.2	34.7
4	34.8	35.5	35.6	34.9
5	33.9	35.5	35.1	X
6	35.3	35.9	35.0	X
7	34.3	35.1	35.8	X
8	34.6	34.5	35.2	X
9	block	35.1	35.1	X

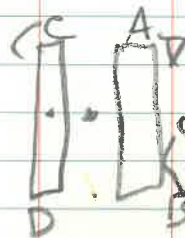
CRYO 1

2

3

4

3.4
A
No



New FELD
2-3-99
5L

2-3-99 CHEN
JIM L.
ST MARKS RV
STATION 2

	A NW	B NE	C SW	D S
1	x	35.9	35.9	37.3
2	x	34.0	35.9	C.H. 28.4
3	x	34.8	35.1	35.0
4	x	35.1	36.1	36.1
5	x	35.3	36.3	36.4
6	x	36.1	36.5	35.3
7	x	35.0	36.5	35.3
8	x	35.0	36.5	36.1
9	x	36.1	36.4	35.7

Cryo 1
2
3
4

2 Attempts
None

MISSING
D.C. BOARD

LYL
2-3-99

fledspar

A
B

2-3-99 CHEN
JIM L.
ST MARKS RV

STATION 3

	A	B	C	D
1	36.1	35.5	32.3	33.0
2	34.9	35.0	35.6	34.0
3	35.6	35.6	34.6	34.0
4	35.0	35.2	35.5	X
5	34.8	35.7	35.5	X
6	34.8	35.6	35.0	X
7	36.8	35.5	35.8	X
8	34.5	34.6	33.8	X
9	block	34.0	35.4	X

Cryo 1
2
3
4

ADDER

MISSING
D.C. BOARD

A
B

Gravel only (on surface)
See 6-16-98
explanation

Gravel
felt

SAND
FELT

Go to
Next
PAGE

1 - Markers thread for
Gravel & felt + sand
2 - Gravel + felt marker
3 - Markers for
Holes left
will check

2-3-99

- ① Sand + Feldspar 4.1, 4.6, 4.2
- ② Gravel + Feldspar 5.9, 5.75, 5.45 *
- ③ Gravel only → on surface

* NO Gravel seen @ #2, just Feldspar

Tubes

- ① sand & Feldspar - trace of sand on outside of bullet - NO reading
- ② Gravel + Feldspar - blobs throughout sample - unable to take reading
- ③ Feldspar only 10.6, 8.9
Too spread out through sample - reading from thick but discontinuous layer.

6-10-99

STATION I

	A NW	B NE	C SW	D SE
1	35.5	34.5	34.9	34.7
2	35.8	33.5	33.7	34.5
3	36.0	35.1	35.3	34.7
4	35.1	34.9	35.9	34.7
5	33.7	35.6	35.4	X
6	35.0	34.8	35.4	X
7	34.6	35.0	35.4	X
8	35.1	34.4	35.0	X
9	X	34.8	34.6	X

B (2/3/99)

Cryo

2

3

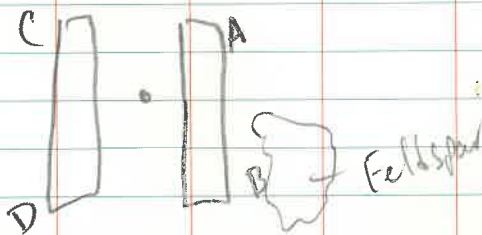
4

9.97

8.92

7.02

some
feldspar
still on
surface



6-10-99

STATION II

	A NW	B NE	C SW	D SE
1		35.0	36.0	32.0
2		35.1	35.7	CH
3		35.0	35.4	34.9
4		34.6	35.9	35.5
5		34.9	36.0	35.4
6		35.6	36.5	35.2
7		35.0	36.1	33.9
8		34.1	36.6	35.6
9		35.3	36.3	X

Cryo

2

3

4

C-D (2/3/99)

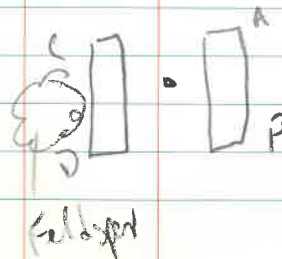
2.55

3.34

5.14

3.57

good
feldspar



6-10-99

STATION III

	C NW	B NE	A SW	D SE
1	CH	35.6	35.0	34.3
2	35.8	36.3	34.9	34.6
3	35.1	36.0	35.2	34.7
4	35.6	35.5	35.1	x
5	35.6	35.6	34.6	x
6	35.3	35.5	34.0	x
7	35.4	35.0	35.8	x
8	35.3	35.0	34.9	x
9	35.2	34.5	35.5	x

TS (11/6/98)

Cryo 1

16.1

2

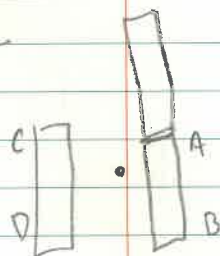
9.64

3

4

feldspar
only

Gravel
still
on
surface.

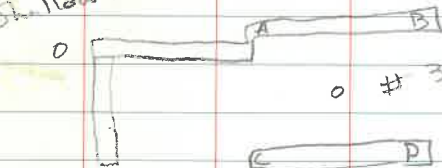


Jim L.
Debra
Brian
Matt W.

10/5/99

St. Mark's

Shallow Set



Shallow Set

(Fertilized)

(Note: Bring back to access)

Shallow Set



NW NE
A B
SW SE
C D

Shallow Set

CREEK

ST. MARKS

11-16-99

Brian
Jim L

STA 1

	A NW	B NE	C SW	D SE
1	35.8	35.1	35.2	35.1
2	35.4	35.1	34.4	33.9
3	35.7	35.4	35.1	34.6
4	34.3	35.3	35.5	34.8
5	33.5	35.3	36.1	—
6	34.5	36.1	35.7	—
7	34.8	34.9	36.3	—
8	34.5	34.3	36.0	—
9	—	35.6	35.5	—

* Need

to

move

board

Misses

1

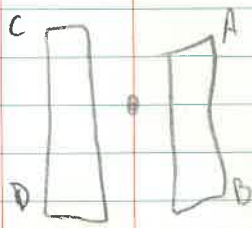
111

Cryo 1

2

3

4



PART II

→

ST. MARKS

11-16-99

Brian
Jim L

STA 2

	A	B	C	D	* Move Board
1		35.9	37.1	37.0	
2		35.2	36.2	37.0	94 (A)
3		35.1	35.8	36.1	
4		35.1	35.8	35.6	
5		35.3	35.7	36.0	
6		36.7	36.2	35.2	
7		34.0	35.2	34.6	
8		36.0	37.0	35.6	
9		36.7	36.4	35.5	

MISS

1

A?

CD

CD

Cryo 1

9.61

5.76

11.09

D. S.

2

9.54

6.18

15.97

3

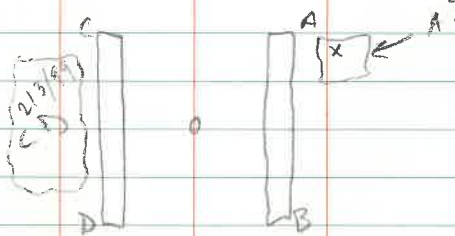
9.84

5.79

4

5.56

8.01



PART II

St. Marks

11/16/99

B. Fan
J. L.

Station 3

	A	B	C	D
1	35.5	34.9	C.H.	35.8
2	36.0	34.8	35.6	35.4
3	35.7	35.3	35.0	35.6
4	36.0	35.4	36.4	—
5	—	35.8	35.9	—
6	—	36.0	35.6	—
7	—	35.7	35.6	—
8	—	35.6	36.0	—
9	—	35.5	35.7	—

~~Mass
Board~~

MISS

1

1

7.04

CRYO

7.88

1

7.76

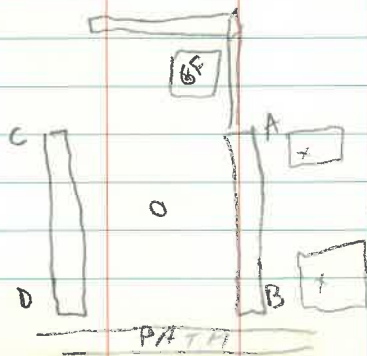
2

7.68

3

6.30

4



1/10/00

St. Marks

B. Fan
J. L.

Station 1

	A	B	C	D
1	35.4	35.7	35.3	35.2
2	36.55	CH 32.4	34.3	34.8
3	36.2	35.4	35.35	35.15
4	35.85	36.55	35.6	35.45
5	36.0	36.6	35.8	—
6	36.9	36.4	35.1	—
7	35.9	35.8	36.3	—
8	36.1	34.9	35.9	—
9	—	35.2	35.75	—

Shallow SET (mm)

	N	E	W
1	290	314	E
2	294	307	
3	289	303	
4	253	322	
5	280	284	
6	290	294	
7	296	280	
8	294	293	W

1/20/00	S1	Marks	Brown Alloy
S1.1.1.2	A	B	C
1	-	36.5	36.9
2	-	35.5	36.7
3	-	36.1	35.7
4	-	36.1	35.9
5	-	36.4	35.65
6	-	36.5	36.9
7	-	35.4	35.45
8	-	36.8	36.7
9	-	36.3	36.65

S1.1.1.2	SFT (mm)
N-S	F-W
S 1	305
2	294
3	272
4	277
5	282
6	289
7	283
N 8	281
	295
	W

1/20/00	S1	Marks	Brown Alloy
S1.1.1.3	A	B	C
1	34.55	35.65	36.1
2	35.3	36.0	36.2
3	35.4	35.95	35.5
4	35.15	35.2	36.2
5	-	35.7	36.0
6	-	35.45	31.0 EH
7	-	34.65	36.25
8	-	34.65	36.6
9	-	34.9	35.6

S1.1.1.3	SFT (mm)
N-S	F-W
N 1	441
2	439
3	451
4	451
5	439
6	439
7	443
S 8	441
	433
	W
	N
	277
	278
	E

3/17/00 St. Marks

M. 11
B...

Station 1

A B C D (cm)

1

2

3

4

5

6

7

8

9

Shallow SET #1

N.S. F.W. (mm)

1 288 320

2 298 309.5

3 290 298

4 281 275

5 260 266

6 274 291

7 295 282

8 290 285

N

W

3/17/00

St. Marks

M. 11
B...

Station 2

A B C D (cm)

1

2

3

4

5

6

7

8

9

Shallow SET #2

N.S. F.W. (mm)

1 292 297 W

2 293 291

3 289 289

4 284 279

5 282 273

6 291 287

7 282 285.5

8 284 298 E

BVG5!

3/17/00

SI Marks

Mull
Brass

St. Marks

Brass
Mark

High Tide

5/5/00

Very SET

Shallow SET

Station 1

	A	B	C	D	(cm)
1					
2					
3					
4					
5					
6					
7					
8					
9					

	A	B	C	D	(cm)
1	34.6	35.6	35.4	35.75	
2	35.8	35.1	34.65	34.25	
3	35.85	35.7	35.2	34.85	
4	36.25	35.5	35.5	35.3	
5	35.4	35.65	36.0	—	
6	34.8	34.6	34.9	—	
7	35.75	35.5	36.2	—	
8	35.45	36.0	35.7	—	
9	—	34.8	35.7	—	

Feet Shallow SET #3 W. Fertilizer

Feet	N-S	E-W	(mm)	N-S	E-W
1	443	441	E	256	279
2	446	439		289	286
3	445	438		296	284
4	445	441		280.5	285
5	444	455		289	291
6	438	426		234	280
7	436	429		276	274
8	433	432	W	225	272

Shallow SET

	N-S	E-W	E
1	295.0	322.0	
2	298.5	314.5	
3	295.0	305.5	
4	270.5	272.0	
5	274.5	197.5	*
6	288.5	294.0	
7	295.0	283.5	
8	293.5	287.5	W

*Crab Hole?

St. Marks

B. ...
M. H.

5/5/00

Station 2

	A	B	C	D (cm)
1	-	36.25	36.25	36.85
2	-	35.2	36.6	35.25
3	-	36.0	35.75	36.65
4	-	36.1	36.2	36.05
5	-	36.4	36.7	35.2
6	-	35.9	36.35	36.1
7	-	35.75	36.7	35.3
8	-	36.65	37.0	36.95
9	34.35	35.6	37.1	36.25

Shallow SET

	N-S	E-W	E
1	295.0	291.0	
2	295.0	295.0	
3	292.0	285.0	
4	285.0	273.0	
5	288.5	283.0	
6	290.0	287.5	
7	281.0	291.5	
N 8	254.5	297.5	W

St. Marks

B. ...
M. H.

5/5/00

Station 3

	A	B	C	D (cm)
1	35.35	36.1	28.4 ^{CH}	34.7
2	34.9	36.25	35.8	34.8
3	35.2	35.55	34.9	-
4	36.65	36.7	36.4	-
5	-	36.0	36.0	-
6	-	36.1	35.45	-
7	-	35.6	36.4	-
8	-	35.35	35.4	-
9	-	35.8	36.2	-

Fertilized
Shallow SET

	N-S	E-W (mm)
1	441.0	439.0
2	443.0	437.5
3	443.5	438.5
4	435.0	442.0
5	448.5	437.0
6	461.0	419.0
7	437.0	430.5
N 8	429.5	432.5

Unfertilized
Shallow SET

	N-S	E-W (mm)
1	253.5	276.0
2	288.5	273.0
3	298.5	276.0
4	283.5	288.0
5	288.0	279.0
6	257.0	277.0
7	279.5	276.5
N 8	219.0	269.5

5-10-2000

ST MARKS

JinL
Sta. 5

STA 1

	A NW	B NE	C SW	D SE
1	34.8	35.3	35.3	33.9
2	35.4	34.5	34.2	33.5
3	36.2	34.9	35.0	33.7
4	35.6	36.1	35.5	33.2
5	33.9	35.4	35.6	32.1
6	34.6	36.2	34.9	33.7
7	35.5	35.4	36.4	30.0
8	35.3	34.8	35.5	32.9
9	B	34.0	35.8	33.8

B(2/3/09)

Cryo 1

2

3

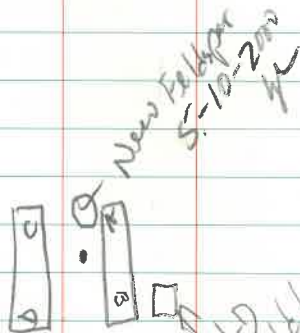
4

11.661

13.11

10.80

12.33

OLD
12/6/2000

5-10-2000 ST MARKS

JinL
Sta. 5

STA 2

	A	B	C	D
1		34.9	37.2	35.9
2		CH 33.5	36.8	34.8
3		35.2	36.1	35.2
4		34.0	35.5	35.6
5		34.2	36.4	35.1
6		34.4	36.2	35.0
7		34.6	36.9	34.9
8	35.4	35.8	36.9	35.8
9	35.6	35.3	36.5	35.7

CD

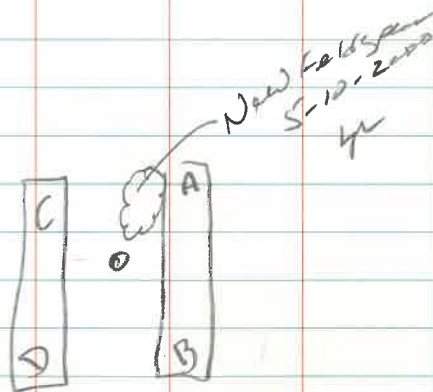
Cryo 1

2

3

4

4 Atty's



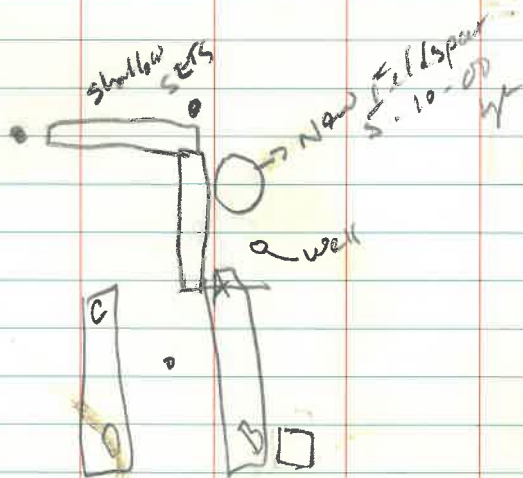
5-10-2000

ST MARKS

Steno 3
Jim C

	B	STA 3 A	D	C
	A	B	C	D
1	35.4	34.5	33.7	36.0
2	35.8	35.7		36.0
3	34.7	34.9		36.3
4	35.3	35.7		35.3
5	36.0			36.0
6	35.0			35.8
7	35.7			34.6
8	35.2			35.7
9	36.1			35.5

Cryo 1

2
3
4

8-7-2000

Jim C
Brian C

ST. MARKS River

STA 1

	NW A	NE B	SW C	SE D
1	35.4	35.6	35.4	33.7
2	35.5	33.5	(CH)	33.8
3	35.5	35.3	35.2	33.8
4	35.3	36.1	35.2	33.4
5	36.2	35.2	35.7	21.5 (CH)
6	(CH)	36.7	35.8	34.5
7	35.0	35.1	35.8	30.4
8	35.6	34.1	35.7	32.7
9	black	35.2	35.8	34.4

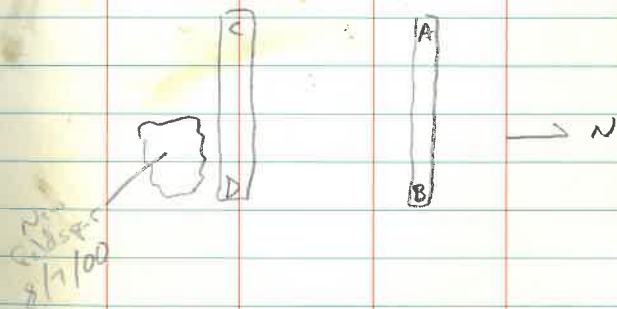
Misses III

Cryo 1

2

3

4

21.8? ← heavily disturbed
by borrowing

8-7-00

Jim L.
Briggs C.

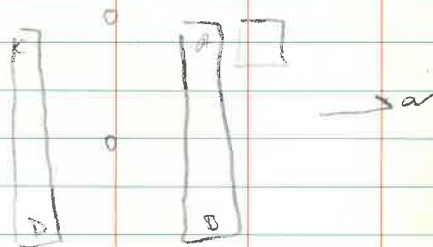
Station 2

	NW A	NE B	SW C	SE D
1	Blocked	36.9	36.9	36.4
2		36.2	35.9	34.8
3		36.8	35.6	36.7
4		35.0	35.8	35.7
5		36.3	36.7	36.1
6		35.6	36.4	37.1
7		35.3	36.0	35.6
8		36.0	34.3	36.3
9	35.6	35.8	36.5	35.7

Cryo

A

1	20.7?	inside bureau
2	9.6	
3	8.6	
4	8.6	



8-7-00

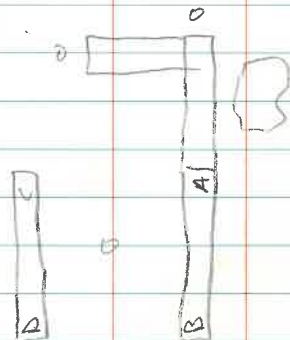
Jim L.
Briggs C.

Station 3

	NW A	NE B	SW C	SE D
1	35.1	36.1	35.2	33.4
2	33.9	36.3	35.7	34.9
3	35.6	35.9	34.7	
4	35.2	36.3	36.2	
5		36.2	35.7	
6		36.0	35.3	
7		33.4	36.0	
8		35.5	36.1	
9		35.5	35.8	

Cryo

1	5.0 (mm)
2	5.5
3	4.6
4	6.3
	2.9



8-7-00

J. L.
Brian C

Shallow SET #1

	N-S	E-W	E (mm)
N 1	287	314	
2	297	310	
3	289	302	
4	163	321	
5	287	286	
6	290	292	
7	301	282	
N 8	296	290	W

Shallow SET #2

	N-S	E-W	E (mm)
S 1	301	294	
2	294	289	
3	280	283	
4	284	287	
5	285	278	
6	288	286	
7	283	293	
N 8	281	296	W

8-7-00

J. L.
Brian C

Shallow SET #3 Fertilized

	N-S	E-W	E (mm)
S 1	442	436.5	
2	442	435	
3	442	434	
4	433	442	
5	449	440	
6	433.5	420	
7	441	428	
N 8	436	431	W

Shallow SET #3 Unfertilized

	N-S	E-W	E (mm)
S 1	259	275	
2	285	280.5	
3	286.5	281	
4	278	285	
5	288.5	290.5	
6	257	278	
7	268	278	
N 8	264.5	274	E

1/18/01

St. Marks River

Station 1

Brian C
Allen W

	A	B	C	D
1	37.7	35.65	35.7	35.2
2	36.05	34.6	35.1	35.3
3	35.7	35.5	35.2	35.7
4	35.85	35.6	36.2	35.3
5	34.45	36.2	35.5	
6	35.6	36.3	36.0	
7	36.4	35.6	35.1	
8	35.8	34.8	35.9	
9	—	36.2	36.2	

Cryo

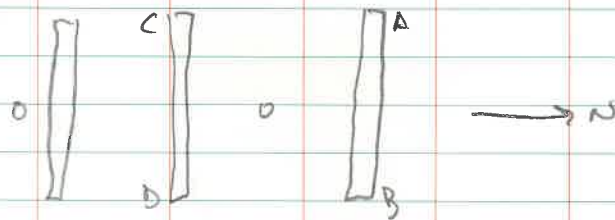
1

2

3

4

5



1/18/01

St. Marks River

Station 2

	A	B	C	D
1	/	36.1	37.25	37.3
2	/	34.8	36.4	38.0
3	/	35.9	35.65	37.6
4	/	35.5	36.35	36.6
5	/	36.7	36.3	35.85
6	/	35.8	36.5	37.6
7	/	35.7	35.8	34.6
8	/	36.2	36.5	36.3
9	35.8	36.4	36.9	36.9

Cryo

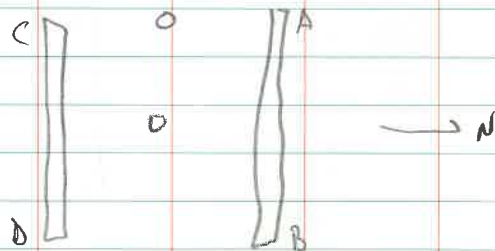
1

2

3

4

5



1/18/0

D. Marks
Station 3

	A	B	C	D
1	35.1	35.8	35.15	33.85
2	35.4	36.4	36.1	35.4
3	36.1	35.5	35.4	
4	37.9	36.5	35.9	
5		36.5	36.0	
6		35.4	35.3	
7		34.8	36.4	
8		35.7	35.8	
9		35.3	35.9	

Cryo

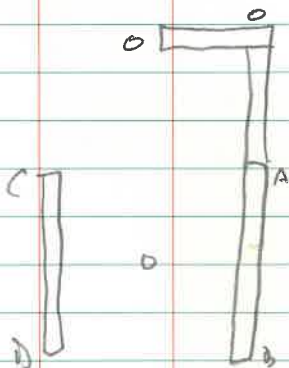
1

2

3

4

5



Shallow SET #1

	N-S	E-W
1	302	320
2	303	320
3	296	308
4	281	332
5	268	301
6	304	292
7	298	287
8	295	289

Shallow SET #2

	N-S	E-W
1	302	295
2	297	292.5
3	301	288
4	284	281
5	292	269.5
6	291	291
7	288	290
8	290	300

1/18/01

St. Marks

Shallow SET # 31 (S. 1)

	N-S	E-W
1	446	444
2	447	434
3	435	435
4	450	444
5	434	434
6	440	443
7	443	436
8	442	435

Shallow SET # 32 (cont.)

	N-S	E-W
1	260	272
2	288	285
3	286.5	286
4	294	286
5	290	300
6	258	288
7	274	304
8	270	277

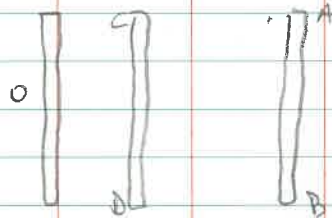
2/14/01

Station 1
St. MarksB. C.
A. W.
J. K.

	A	B	C	D
1	37.85	35.55	36.0	35.45
2	35.7	35.45	33.9	34.8
3	36.05	35.65	36.6	36.15
4	35.7	35.6	35.5	35.4
5	35.6	35.9	35.65	
6	35.65	35.7	35.85	
7	35.9	36.5	36.25	
8	36.1	34.7	36.2	
9	—	34.6	35.8	

Cryo

1
2
3
4
5

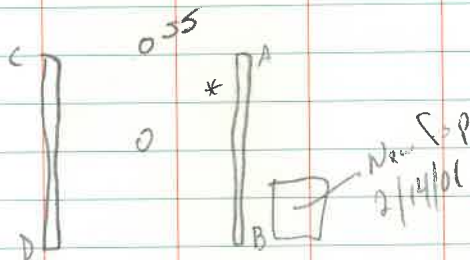


2/14/01 St. Marks
Station 2

	A	B	C	D
1		36.3	37.4	37.55
2		36.0	36.95	38.0
3		36.1	36.1	36.5
4		35.6	35.8	36.45
5		36.2	36.6	35.95
6		35.8	37.15	37.3
7		35.3	36.3	36.45
8	35.3	36.6	37.35	36.1
9	35.45	36.35	37.05	37.75

Cryo

1	6.70
2	7.88
3	8.34
4	7.02
5	

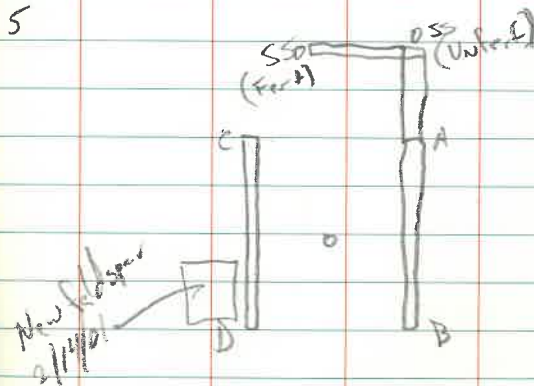


2/14/01 St. Marks
Station 3

	A	B	C	D
1	35.5	36.15	35.9	34.2
2	35.45	35.75	37.0	35.7
3	35.7	36.6	35.5	
4	35.7	36.8	36.35	
5		35.9	36.5	
6		35.95	36.1	
7		35.8	36.7	
8		35.6	36.2	
9		36.0	36.95	

Cryo

1	
2	
3	
4	
5	



2/14/01

St. Marks

Measurements
in
meters

Shallow SET #1

	N-S	E-W	E
1	308	319.5	
2	308	320.5	
3	308	306	
4	284	324	
5	252	298	
6	299	295	
7	299	290	
S 8	285	295.5	W

Shallow SET #2

	N-S	E-W	E
S 1	299	297	
2	300	295	
3	287	288	
4	281	280.5	
5	284.5	285.5	
6	291.5	287	
7	288	295	
N 8	288	294.5	W

2/14/01

St. Marks

~~Rec 1120
App 1120
S~~

Shallow SET #3 Fert.

	N-S	E-W	E
1	445.5	441.5	
2	445.5	439	
3	443	437.5	
4	433	445	
5	444	441	
6	437	435.5	
7	444	431	
N 8	446	435	W

Shallow SET #3 UnFert.

	N-S	E-W	W
S 1	279	279	
2	288	284	
3	291	285	
4	293	285.5	
5	289	289	
6	297.5	293	
7	273	277	
N 8	271.5	277	E

3/21/01

St. Marks

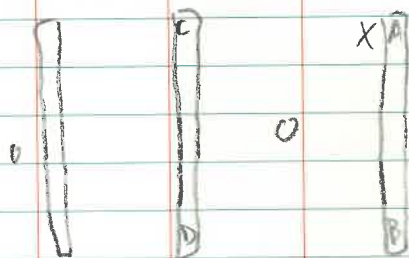
Station 1

Bridges
Katie H.
Alan W.

	A	B	C	D
1	36.8	36.65	35.65	35.7
2	36.1	35.45	35.4	35.6
3	35.6	35.6	35.3	35.3
4	36.6	36.8	35.3	35.3
5	35.9	36.4	36.5	
6	35.4	34.6	35.55	
7	36.2	36.6	37.1	
8	36.1	35.85	36.3	
9	-	35.8	36.0	

Cryo AA

1	7.87
2	9.45
3	9.65
4	9.20
5	5.80



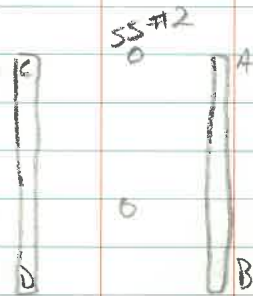
3/21/01

Station 2

	A	B	C	D
1		36.1	37.2	37.3
2		36.3	36.1	38.6
3		35.9	36.6	36.6
4		36.3	36.7	36.3
5		36.4	36.8	35.7
6		35.8	36.8	36.7
7		35.1	35.7	36.4
8	35.7	37.2	37.2	36.8
9	36.0	36.8	37.2	37.0

Cryo

1	
2	
3	
4	
5	



3/21/01

St. Marks

Station 3

	A	B	C	D
1	34.9	36.5	34.75	34.9
2	33.75	36.05	36.3	35.3
3	35.2	35.85	33.5	35.7
4	36.0	36.1	35.85	
5		36.55	36.2	
6		35.7	35.4	
7		35.4	36.25	
8		34.9	36.4	
9		35.45	35.8	

Cryo D
At Surface

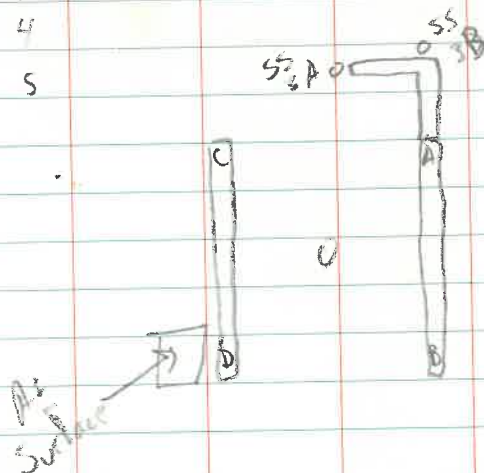
1

2

3

4

5



3/21/01

St. Marks

Shallow SET # 3A (Gr)

	N-S	E-W
1	440	441.5
2	450	445
3	449	432.5
4	450	444
5	439	437
6	444	437
7	446	437.5
8	448	437

Shallow SET # 3B (unber.)

	N-S	E-W
1	268	276
2	291	287
3	294	285
4	289	285
5	289	295
6	258	291
7	272	284
8	273	278

3/21/61

St. Marks

Shallow SET #1

	<u>N-S</u>	<u>E-W</u>
1	296	311
2	306	318
3	301	308
4	270	321
5	282	294
6	304	295
7	312	286
8	295	296

Shallow SET #2

	<u>N-S</u>	<u>E-W</u>
1	299	292
2	296	292
3	283	298
4	278	281
5	270	286
6	292	288
7	288	292
8	290	302

Jim L.
Bennett

St. Marks

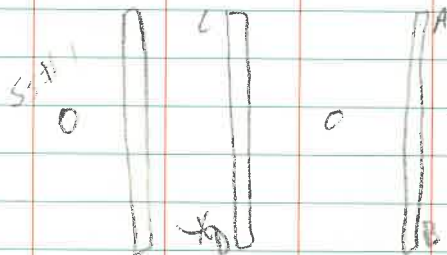
4/17/61

Station 1

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
1	36.6	35.4	35.2	35.4
2	35.9	34.7	34.5	34.5
3	36.2	35.5	34.7	34.9
4	35.9	35.3	35.5	35.5
5	35.4	35.9	35.7	
6	35.3	35.6	35.6	
7	35.7	36.3	35.7	
8	36.0	34.7	35.4	
9	—	35.3	35.7	

Cryo D

1	1.87
2	1.85
3	1.56
4	2.68
5	1.20



4/17/0

St. Marks

Station 2

	A	B	C	D
1	35.2	36.6	37.4	37.4
2	36.1	34.8	36.1	36.1
3		35.3	35.9	38.4
4		35.4	35.9	35.7
5		36.1	36.3	35.9
6		36.7	36.5	37.1
7		35.0	36.1	36.0
8		35.2	36.5	36.6
9		35.7	36.9	37.2

Cryo

B

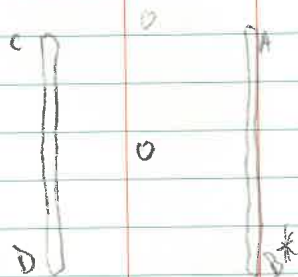
At Surface

2

3

4

5



4/17/01

St. Marks

Station 3

Broom C
3.2

	A	B	C	D
1	35.5	36.5	35.7	34.9
2	35.0	36.5	36.5	36.0
3	35.5	36.6	35.2	35.5
4	35.4	36.0	36.5	
5		36.4	36.0	
6		35.9	35.2	
7		35.1	36.2	
8		35.5	36.0	
9		35.8	36.2	

Cryo

D

EE

1

2

3

4

5

At Surface

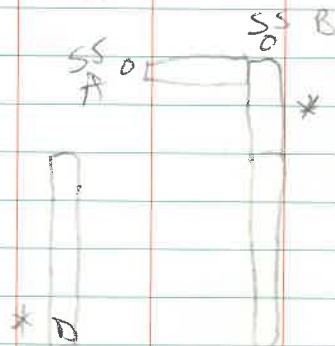
5.86

4.91

6.77

9.86

5.94



4/17/01

St. Marks

Shallow SET #1

N-S E-W

1	308	319
2	298	327
3	310	314
4	276	312
5	287	298
6	305	292
7	301	290
8	286	291

Shallow SET #2

N-S E-W

1	301	303
2	298	293
3	283	298
4	277	288
5	303	292
6	299	296
7	290	299
8	291	301

4/17/01

St. Marks

Shallow SET #3A (Full)

N-S E-W

1	454	441
2	455	443
3	450	434
4	445	443
5	449	441
6	441	458
7	449	438
8	446	436

Shallow SET #3B (UnSet)

N-S E-W

1	283	279
2	291	289
3	295	288
4	293	285
5	299	299
6	259	272
7	273	292
8	284	260

4/23/01

St. Marks

Jim L.
Cindy F.
Brian C.

Low Marsh Side (Tinted dat)

Data logger installed

First reading 11:45 am

New
Exp
4/21/01Tide
GaugeD
BC
A

20 ft

from grass
line

to SET pipe

27 ft.

to Juncus
specimen
interface

4/23/01

St. Marks

Jim L.
Cindy F.
Brian C.

High Marsh Side

Data logger installed

First good reading 12:30 p.m.

Tide

Gauge

A
CB
DNew Exp
Tinted
4/21/0156 ft. along H₂O to SET pipe

2 ft. to specimen/juncus interface

25.67 Conductivity

24.4°C

15.6 ppt Salinity

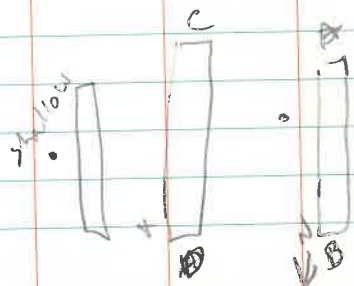
Sunny - breezy 8/20/01 11:47 AM 62:16

SITE 1

	A	B	C	D
1	35.6	35.6	35.6	34.9
2	36.4	34.7	34.7	34.9
3	36.6	35.6	35.1	35.1
4	36.3	35.6	34.8	35.3
5	35.4	35.7	35.1	33.1
6	36.1ch	36.1	35.4	34.6
7	36.1	35.5	35.3	35.3
8	36.4	34.8	35.6	34.1
9	36.2	35.1	36.1	34.7

D

Cry ^D	9.91
2	11.07
3	14.28
4	13.37
5	9.58



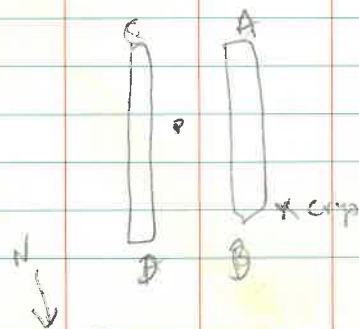
8/20/01

SITE 2

	A	B	C	D
1	35.5	36.1	36.1	34.1
2	35.2	35.3	36.1	31.4
3	36.3	36.2	36.1	36.1
4	35.5	35.7	35.8	35.7
5	35.2	35.7	35.4	34.5
6	35.6	35.6	36.3	35.4
7	35.1	35.3	35.8	35.4
8	35.4	36.4	36.6	36.3
9	35.6	36.4	36.7	36.2

B

Cry ^B	14.46
2	13.36
3	16.02
4	-
5	-



6/20/01

Site 3

	A	B	C	D
1	35.6	35.6	34.6	31.6
2	34.1	36.1	35.9	33.2
3	35.3	35.8	34.9	32.9
4	35.3	35.6	35.6	33.8
5	34.5	35.4	34.9	33.1
6	34.7	34.7	35.8	32.4
7	35.6	35.9	36.6	35.6
8	35.5	35.3	35.6	31.2
9	35.8	35.5	35.7	32.1

Cryo 1

D

1	6.78
2	4.95
3	5.30
4	
5	

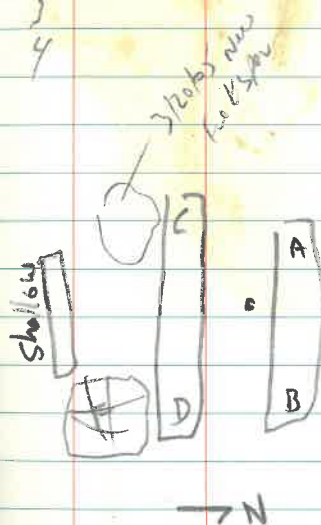
3/25/02
overcast

SET DATA

SITE 2

	A	B	C	D
1	35.9	35.4	35.9	36.1
2	35.7	36.0	24.0	34.6
3	36.3	36.6	35.5	34.8
4	37.5	36.7	35.6	35.4
5	35.0	35.4	35.4	34.6
6	35.3	36.9	36.2	29.4
7	36.0	36.3	36.7	35.8
8	36.2	35.3	36.1	34.5
9	35.9	36.1	35.6	35.2

Cryo 1 XXX



mm SITE 2

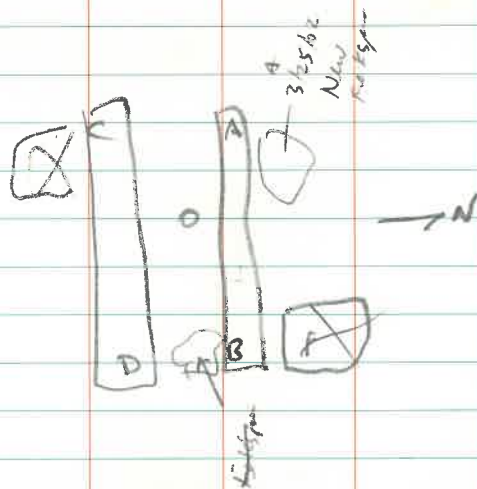
	A	B	C	D
1	34.7	37.4	37.6	37.2
2	34.9	36.4	36.6	36.5
3	36.0	36.9	36.4	35.9
4	35.1	36.9	36.7	36.5
5	35.3	36.0	36.0	34.7
6	36.3	36.4	37.2	36.6
7	36.2	37.1	36.4	36.1
8	35.9	37.0	37.3	36.5
9	35.6	37.2	37.4	36.2

Cryo 1 XX

2

1

4



3/25/02

mm 3/25/02 SET SITE 3

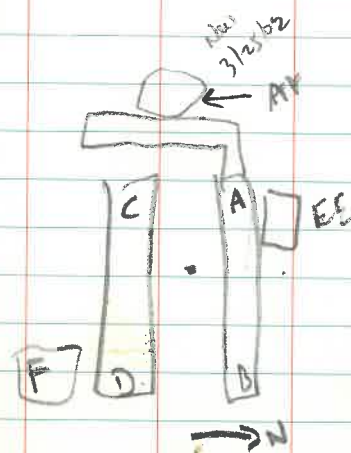
	A	B	C	D
1	35.2	36.5	37.1	34.5
2	34.2	36.3	35.9	34.7
3	35.8	36.2	34.8	35.3
4	34.7	36.3	36.3	32.1
5	34.0	36.0	35.1	31.4
6	35.1	36.3	35.5	33.7
7	35.2	36.4	36.0	35.8
8	35.6	36.1	36.7	34.9
9	35.5	36.3	35.9	35.6

Cryo 1 XXX Cryo X

2

1

4



Ladner
Farm

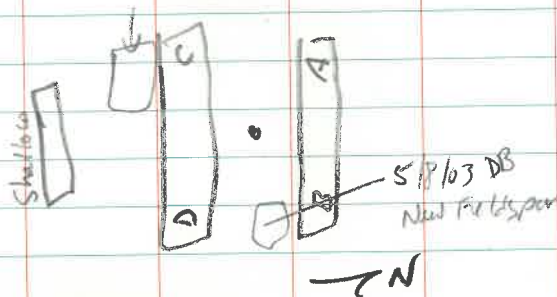
5/8/03

ST MARKS RV.

SET 1

	A	NW B	Ne C	SW D	se
1	35.9	36.3	35.7	34.3	
2	36.1	34.9	35.3	33.8	
3	36.1	35.3	35.2	34.3	
4	35.3	36.6	35.4	34.3	
5	35.1	35.5	35.2	34	
6	32.0 ^{CH}	36.3	35.7	33.9	
7	35.7	36.1	36.1	33.0	
8	36.0	35.2	36.2	33.6	
9	35.6	35.6	36.0	34.9	

Cryo 1 X
2 X
3 X
4

Ladner
Farm

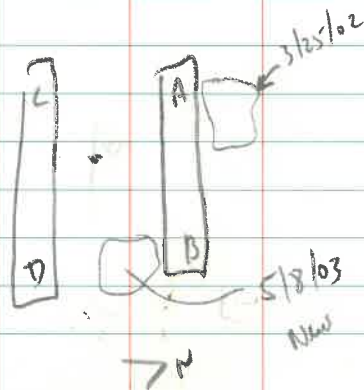
ST MARKS

5/8/03

SET 2

	A	B	C	D
1	19.4 ^{CH}	36.3	37.1	36.8
2	36.0	30.5 ^{CH}	36.4	35.6
3	35.2	36.3	36.2	35.5
4	36.1	35.9	36.1	34.7
5	36.0	35.5	35.6	34.5
6	34.2	35.8	36.6	36.3
7	36.4	34.9	35.1	35.4
8	34.9	36.4	36.4	36.0
9	35.7	36.1	36.3	35.9

Cryo 1 X
2 X
3 X
4



LADN
FAIR

5/8/03
ST MARKS
SET 3

	A	B	C	D
1	35.6	35.9	25.1 ch	33.4
2	35.6	36.0	36.1	34.8
3	36.2	35.4	34.8	32.5
4	33.8	35.3	35.8	33.7
5	34.7	35.6	34.7	31.7
6	35.1	35.3	35.6	32.8
7	35.9	35.5	35.8	35.4
8	35.7	35.7	35.9	33.5
9	35.9	32.2	35.7	34.9

Cryp 1 X
2 X
3
4



#2

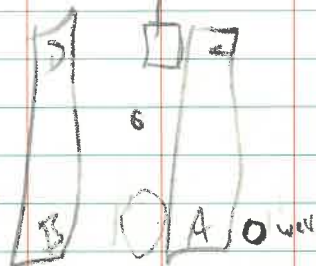
~~Separated~~
~~back mark~~

ST MARKS
SITE 4 up near

	A	B	C	D
1	34.4	30.5	31.6	33.2
2	38.1	33.0	34.0	28.9 ch
3	33.3	32.9	32.8	34.3
4	24.1 ch	33.0	32.5	33.6
5	33.7	30.9	29.4	33.0
6	34.5	26.7 ch	31.3	33.9
7	33.8	32.6	32.6	27.5 ch
8	35.0	32.6	32.8	33.8
9	32.9	32.5	33.1	32.6

Cryp 1 X
2 X
3 X
4

Cryp
5/18/2003 Field



N

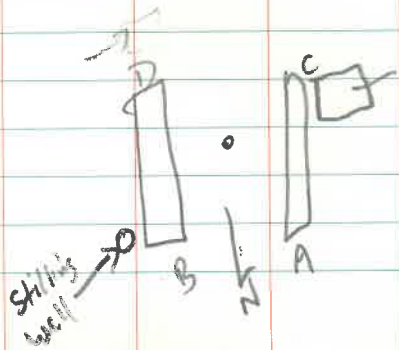
5/8/03

9/14/04 ST marks 12v. Low marsh
Subtidal site
Ladder
Phelps
Bals. 11.2

	NW A	B	SW C	SE D
1	28.6	28.6	44.3	41.7
2	27.2	28.1	39.8	42.2
3	26.4	29.1	41.2	43.6
4	28.2	26.9	44.3	43.5
5	26.7	27.9	43.2	43.4
6	27.1	28.5	43.2	43.5
7	29.2	26.4	43.9	42.3
8	26.5	26.8	42.9	41.7
9	25.8	28.2	40.6	43.2

Cryo
1 5426?
2 55.49?
3
4

~~Intertidal~~
~~Subtidal~~



9/14/04
Newfield
LADNER

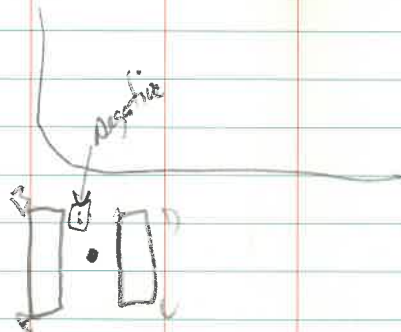
9/14/04 ST marks 12v. Low marsh
Subtidal site
Ladder
Phelps
Bals. 11.2

SITE 1

	A NW	B NE	C SW	D SE
1	36.1	36.1	35.6	34.9
2	36.8	35.3	35.2	34.7
3	36.2	34.9	35.8	34.7
4	36.2	35.9	35.3	35.0
5	35.0	34.9	35.0	34.3
6	35.8	35.2	36.1	33.4
7	36.2	35.4	36.0	35.0
8	36.2	34.9	36.0	34.6
9	35.8	35.1	35.7	35.3

4 Trials no recovery on cryo

Cryo
1
2
3
4

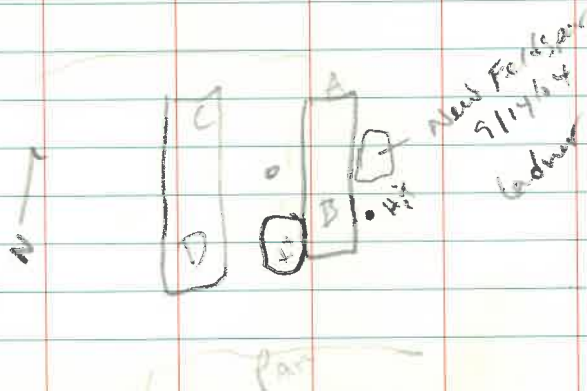


St Marks ~~1-19-04~~ SITE 2 9/14/04
Balsville
Phelps Lodge

	A NW	B NE	C SW	D SE
1	34.0	36.5	37.2	36.4
2	35.0	33.8	36.3	34.2
3	34.2	35.7	^{CH} 21.3	35.3
4	34.4	35.4	36.2	35.3
5	34.7	34.1	35.6	35.1
6	35.0	36.3	36.9	35.4
7	35.0	34.9	36.3	34.8
8	34.5	35.6	36.5	35.8
9	Blocked	35.8	36.7	36.1

2B (B03)

Cryo 1	10.95
2	10.66
3	12.89
4	16.5
	11.52



9/14/04 G-Maps SITE 3 Phelps Balsville Lodge

	A NW	B NE	C SW	D SE
1	35.6	36.3	35.2	26.1
2	35.2	36.7	35.8	34.8
3	35.4	35.7	35.4	34.9
4	33.5	35.9	35.9	32.0
5	34.6	35.6	34.8	30.3
6	33.1	35.8	35.8	34.2
7	35.4	35.6	36.4	36.0
8	34.9	34.9	36.0	33.7
9	35.2	34.2	36.4	35.6

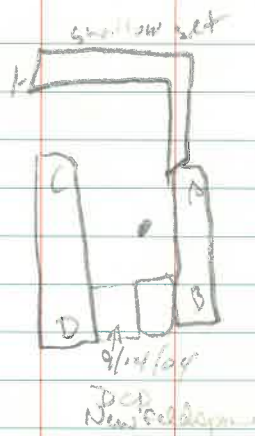
111 ? Triaxos recovery

Cryo 1

2

3

4



Phelps ST marks
Lodner Balsillia

9/14/04

Hi Marsh SITE (4)M

A NW

B NE

C SW

D SE

1	34.3	31.1	32.8	32.7
2	31.8	32.6	33.4	32.6
3	34.0	33.3	32.5	34.0
4	33.2	32.7	32.4	32.9
5	31.8	31.1	31.3	33.0
6	31.8	33.0	32.9	33.0
7	32.9	33.5	32.4	32.6
8	34.1	33.0	32.7	33.9
9	33.7	33.2	32.8	33.9

34.1 is no recovery

Craps 1

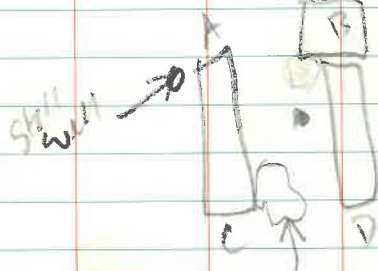
2

3

4

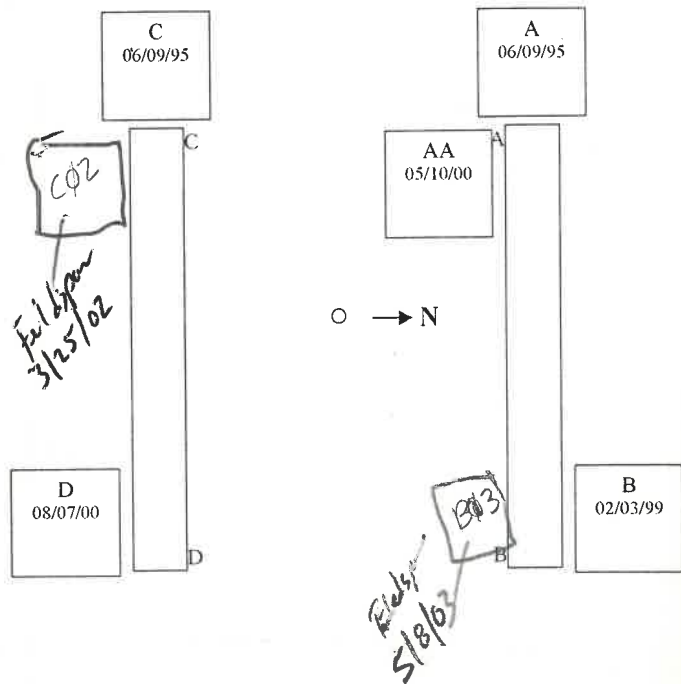
SUPRAZIDAL

Feldspar D-P
9/14/04



excess

Station 1—St. Marks River



Station 2—St. Marks River

