

(12)

Science of Sabine Lake 8/7/92 (13)

Preparation by Robert Smith LSU

RV ERDAI 25' x 8' Conrad Tonnage Capt.
 Navigation GPS 200 lbs Dyr Dams Wiesse USGS
 Jeff Davis Florida

Slip G-23 at Pearano Island Club

TPWD contact Craig LeBlanc

Beaumont - Maintenance

Angler Marine - Charles

Refueled by Mike at GNL Marine

More - Cruise - - Air Port Mamm

Boat would not run when in gear.

I drove to Austin Saturday.

8/11/92 Conrad & Dora setting 200 lbs/mile

10:53 AM set out from harbor

10:55:06 Wave pt 29 51:51.9 Harbor
93 55.035

Zulu Time ERDA 3-1.DAT

GPS Time 8/11/92

2.8 - 3.2 knots SPR 1200 Butte pulsed system

Boat Speed 4.2 knots (water)

K/sec SURSP. 250 ms scale

370 m (corrected) Each Grid 18.75 m

185 m Total Area

Numbers on chart are 5 minutes apart

(14)

Relatively smooth < 1' waves
Water Temp. 89°

Course WP 2 to 4 to 5 to 6 to 7 to 8

2.3 knots

Changed tape (band) at 5:24 PM 8/11
Lost under WP point 8 & 3 (North River)

15th Day completed at End of

Line 4. (Lines not marked on chart)

8/12/92

Sea Otter Huntac plate - geopulser power sup.
geopulser receiver

8/14/92 : Sabine Lake 2nd Day

Jack Kindinger has joined us

9:30 AM leaving Marina

WP 3 to WP 6; Calm < 0.5' Seas

Paper Roll 2 ERDA-92-3 (8/12/92)

Water Depth 6.6'

1/2 sec fire 5.5 knots (Water)

1/2 sec Sweep 3.2k (Land)

Setting 150 lines/in

NE of Wave Point 3

10:25 AM 29°56.20' 93°51.49'

5.1 knots To Wave point 6

7.6 29°57.123 9546.506

(15)

Blew a fuse on power supply -- had
to switch to back up
Running at 10:32

Line 5

07 (5 min mark)

1100 hr local 1600 Z 9' WD

3.2 knots horizontal distance

1/2

500m between 5 min marks

End of Line 5 1145 (17 = 5 min. marks)

11:47 9.9' Near wave point 6

11:48 on line from WP 6 to WP 8

Begin Line 6

End of Line 6 12:28 4.9' WD.

WP 8 (close to it) at

29°58.934 93°48.440

Start of Line (SOL) 7

Crossing of Line 5 13:02

W.D. 9.9'

Water is "glassy" at 13:11

W.D. 10.5' 1319 Local 29°55.747

Increased gain at 12 (5 min mark)

1340 Local

Crossing Line 1 1406 L

at 1449 Depth 8.6' 10 minutes

away from WP 9

15

①⑥
 1458 End of Line 7 4.6' deep.
 29°49.689
 093°48.909 Bst 27 5 min mark
 1500 Running to WP 10 to begin
 Line 8
 ~ 1505 Sled adjustment
 1510
 1515 SOL 8 from WP 10 to WP 11
 1518 6.6' WD 4.8k boat speed
 1531 8.6' WD (over water)
 1542 8.6' WD
 1540 & 1545 = Valley definition
 Down to about 18 m
 ~ 29°49.76 93°49.834 #36
 1550 8.9 WD 5 min line
 1555 Water Temp. 89.6°
 1556 9.2' Water Depth
 Calm weather conditions
 1605 - 1610 - good record for about
 1 min. (1606-1607)
 1610 9.2' WD.
 Good record after 1610 (#42)
 1620 8.9 WD Water Temp. 90.3°
 43 mi total track at 1623
 Best channel at 1630 (#46)
 1635 9.2 WD

①⑦
 1650 WD 9.9 Ft
 1656 9.5 Ft
 1703 8.9'
 1705 9'
 1706 9.2'
 1707 EOL 8 29°48.544
 93°55.820
 Line 9
 WP 11 - WP 12
 Running parallel to spoil Levee
 approx 300' off shore
 1710 two photos of Spoil Levee
 water included in photo
 Depth 70.2 at 1712
 Valley along Line 9 at 1710-15
 1717 WD 11.2'
 1718 WD 12.5'
 1724 WD 11.8'
 1727 Levee < 100'
 1728 9.2'
 1729 Levee ~ 50'
 1730 7.2'
 1732 End of Line 9 heading to WP 13
 29°47.039 1.7 mi away
 93°56.218 7.6' WD
 SOL 10 17

(18)

on Line 10, (WP 2 - WP 13)

WD 8.6 1740

1749 9.2 WD

1756 12.5' WD

1800 10.5 WD

1803 10.2 WD

1805 10.2 WD

10.8'

EOL 10 at WP 13 29° 47.7' 13

93° 54.3' 11

Completed Line for today.

4 mi. from harbor at 1811

8/13/92 Sabine Lake Seismic

ERDA

Very calm seas at 0740

Winds NE at 3 knots

Heading offshore in Gulf.

Paper Roll 3

2 1/4 mi. from WP 1 to near end of jetties

0838

Checking equipment in channel near
end of jetties (2 1/4 mi. from end)

Sabine Pass

First part of record in ship channel

8:44 40.2' WD

Huntac Plate - geopulser system

Fire 1/2 sec; 1/4 sec sweep.

4.8 knots

26.6' WD 0847 Local

Ran toward SW jetty for

short distance which reflected

shallow water depth as we left

main channel.

0859

Heading NW from end of west jetty toward

Wave point 14 29° 41' 93° 55'

Line 11 SOL 0900 Local

294° heading WP 16 to WP 14

(20)

On line 11 offshore from Sabine Pass

0902 20.7' WD

4.3 knots over ground heading ~ 294°
Distance ~ 5 mi to WP 14

0905 18.4' WD (02: 5-min mark)

0910 17' WD

0915 16' WD

Waves moving offshore by NE winds
Wave condition good < 1'

0920 15' WD

0927 14.8-15 WD

0935 13-14' WD

0941 14' WD

0950 13.5 WD

0955 12.5 WD

1000 11.5 WD 10:20

1005 10.5 WD 93° 54.4' 73

1010 9' 29° 40.6' 63

1020 5-6' WD Near Shore

End of Line 11 at WP 14

NO PENETRATION ON Line 11

SOL 12 (WP 14 to WP 15)

1025 8' WD 5.5 knots over water

2.6 nautical mi to WP 15

1030 12.5' WD

Sled flipped over

(21)

Back on track at 10:36

14.4' WD

16.7 WD 10:45

1050 WD = 17'

at end of offshore line 6 - Katy Anna

1105 20' WD Over WP 14

continuing on course ~ South

NO record of penetration

1110 21' WD

1115 20-22' WD SOL 12

Pulling in gear and running to area
East of jetties

Line East of jetties at Sabine
Pass. LINE 13

Due North from just East of

East Jetty at Long 93° 49.225

WD 35.4' WP 16 Lat. 29° 38.644

1155 3.3 knots over land

1200 21.3 WD

Getting good record

1205 seeing edge of valley

1207 26.6 WD 93° 49.205

1210 25.3' WD 29° 38.072

losing record after 1210

1215 23.3 WD

(22)

Continuing on line 13 east of SP
but still no record.

End of line 13 at 1220

Turned 180° (Heading offshore) 1221

on Long. 93°49.225

1225 23.0' WD

Good record back between 1225 & 1230

SOL 14 from near WP 16.6 Bearing 61°

1235 Long. 93°49.347 33.4' WD

Lat. 29°38.782

812

2.6 knots: speed over ground

waves 8, 1 ft

offshore winds and waves.

1241 31.1' WD

1245 29.5 WD

Valley between 1245 & 1250

1250 29.5 WD

Water Temp 86.5°

1257 28.9' WD

Generator Down at about 1301,
started again at 1303

1305 28.5' WD

Waves 1-2'

(23)

Continuing on Line 14

1310 28.5' WD

1325 28.9 WD

1330 Shot 20 (valley in record)

1335 27.9' WD

1345 27.9 WD

1400 Shot point 25 EOL 14

Turned on shore on line 15

27.9' WD heading North

1405 27.5 WD

1415 26.6 WD 29°41.386
93°46.210

1425 25.6 WD EOL 15 Shot point 31

SOL 16

1430 WP 20 29°40.4

93°49.12

Heading 250° then 240° 2.4 mi to WP 20.

24.3 WD at 1432 WP 20 is

1435 Shot point 32

at small

1440 27.3 WD

boat pass

1450 27.3

through East

Valley between shot points 36 & 37

1450 1455

1500 21.0'

Record became poor about 1 mi

from Sabine Pass

1505 20.3

EOL 16 at 1515 Shot pt. 39 23
~3 mi from jetty

(24)

8/13/92 Sabine Lake - Sabine Pass area
344° direction W Doyte 28.9

1610 on line SOL 17

Toward WP 1 5.6 mi

1623 9.5' WD 4.5 knots 2.9 knots
on water over ground

1625 shot point 2

1631 9.5 WD

1640 9.5 WD shot point 5

1645 12.5 WD shot point 6

Good Record Begins just after 1645

1700 10.5 WD shot point 9

1705 9.5 WD

1710 8.9 WD SP # 11

1715 8.6 WD

1720 8.6 WD

1725 8.2 WD

1730 8.4 WD sp 15 } Interesting record

1740 8.6 WD sp 17 } undulating surface at 10 mi valley?

1745 8.4 WD

1748 Motor boat affected record

1750 8.2 WD

1800 7.6 WD SOL 17 WP 1

29° 51.86' N just beyond WP 1

93° 55.92' W

(25)

8/14/92 0743 Sabine Lake

Underway from harbor near WP 1

Bit of a chop on lake & 1' waves

Partly cloudy, E to NE winds, forecast - 10k.

Huntac Plate geopulse system, 1/2 sec fire, 1/4 sec sweep

Paper Roll 14 SOL 18

started line back toward harbor

0805 to cross line 17 and begin line 18

0810 heading toward WP 2 2.5-3 knots ground speed

We were near sea wall and

turned and headed about 69° toward WP 2

0814 WD 7'

0815

0820 WD 7'

0830 shot point 04 8' WD

0835 WD 8'

0840 WD 8' shot point #6

0845 WD 8' shot point #7

0855 WD 8' shot point #9

0900 WD 9' shot point #10

EOL 18

SOL 19 toward WP 3 from WP 2

at shot P. 10; 3.3 nautical mi at 15°

0910 8-8.5' WD shot point 12

0930 shot point 16

0933 8' WD.

25

(26)

Continuing Line 19

0945 3' 9' W.D. S.P. #19

Generator Dried

Back up at 9:47

0950 S.P. 20

1000 8' W.D. sp. 22

1010 Crossed Wave Point 3

1020 sp. 26 W.D. 7'

1025 EOL 19 S.P. 27; 7' W.D.

29°56.612 N 093°51.126 W

Power change

Shallow water at 1036 -- Had to
turn off course (S) to get into
deeper water

SOL 20 due south (180°) 6' W.D. Toward

1040 29°56.903

29°55' WP 21

93°50.887

93°51' 21

1050 shot point 32

1055 8' W.D.

Caught Crab Trap; stopped boat to
clear it.

1103 back on track 4.1 knots (water sp.)

1105 W.D. 8.6' shot point # 35

1115 sp. 32 crossed WP 21 continuing S 9.2' W.D.

1125 sp. 39 [EOL 20] 29°54.45 N

(27)

Heading due West from EOL 20

Plan to start new strike line ^(W.H.E) when we reach line 9

1135 shot pt. 41 8.6' W.D.

1144 crossed Line 19

1145 [SOL 21] heading Due East 28' W.D.

shot point 43 29°54.393 93°52.188

1150 shot pt 44

Generator died -- crank rope
broke

1338 Generator fixed -- running back
to continue line 21.

Only 5 min. of line 21 completed.

1354
10.2' water depth

1348 [SOL 21] heading due east

1350 on line at Lat. 29°54.193 sp. #2

Heading toward WP 22 at 29°54.193

Heading 81° 93°46.180

1405 sp. 5 8.9' W.D.

1415 sp. 7

1416 10' W.D.

1425 10.5' W.D. sp. 9

Valley after 1425

1435 10.5 W.D. sp. 11

1445 sp. #13 10.5 W.D.

1500 sp #16 10.5 W.D.

(28)

Continuation of Line 21 across Schind L.

1520 shot point # 20 10' WD

1538 9'

1540 EOL 21 shot pt. 24 8' WD.

Changing Band on printer

1545 not yet on next line.

We are heading farther out into the bay before starting line because of poor record at the end of Line 21.

1550 SOL 22 shot point 26

Bearing: 190° 9.5' W.D.

29° 53.796 } shot point 26
93° 46.616 }

1555 W.D. 9.5'

1620 s.p. 32 9.2 W.D.

1625 Sp. 33 moving off shore southwest toward bay center to get better record

Then back to South at about 1632

1635 sp. 35 WD 9.2'

1640 sp. 36 EOL 22 ~ 29° 51.113
93° 47.533

1640 sp 36 Heading 272°

SOL 23

Heading to WPI (harbor)

6.5 nautical mi

1650 9.5' WD. s.p. 38

1655 10' WD Sp. 39

1715 shot pt. 43

1750 shot pt. 50

On this line best data began at 1745

1810 shot pt. 54 Valley

1820 shot pt 56 8.6 W.D.

1830 shot pt. 58 8.2 WD

834 EOL 23 (out of Paper)
about 5 to 10 min from

at 0.1 mi 29° 51.730 End of
from WPI 93° 54.840 Fall 4

29