*****NOTE: 04/23/2008: First effort scrubbed; see page 19 for start of actual cruise 91KI2*****

KIT JONES '91 LOG

in partial fulfillment of

the contract entitled:

COASTAL AND MARINE DEPOSITIONAL MODELS FOR HARD MINERAL EXPLORATION IN THE NORTHERN GULF OF MEXICO: FLORIDA PANHANDLE ZONE

conducted by

Louisiana Geological Survey
Box G, University Station
Louisiana State University
Baton Rouge, LA 70893

Randolph A. McBride

August 12, 1991^LKIT JONES '91

Louisiana Geological Survey (LGS)
Marine Minerals Technology Center (MMTC)
United States Geological Survey (USGS)

Purpose: To explore for hard mineral resources using high resolution seismic data and to test newtechnologies (Elics)

Research Crew of Leg 1:

1. Randy McBride (LGS)- Chief Scientist
2. Terry Kelly (USGS)- Chief Technician
3. Doug Lockhart (MMRI)- Engineer
4. Walter O'Niell (MMTC)- Scientist
5. Monty Simmons (MMTC)- Captain
6. Bob Shelton (MMTC)- Mate

Seismic Equipment

Seismic systems

1). High resolution system consisting of an Huntec sled and power supply (Scarborough, Canada); ORE amplifier and streamer; output onto a EPC 3200 (Ed P. Curley).

2). Converted ORE 3.5 KHz system consisting of four 3.5 transducers driven by an ORE 140 transceiver and outputed on an EPC 3200; Berkley's Nucleonics Delay generator to sync both recorders together.

NOTE: Both systems recorded on Hewlett-Packard 8-track analog recorder with a Datametrics time code generator; navigation was a Megapulse Accuifix 500 loran C processed on Pacific Marine Geology's software package (LC9) running on an IBM PC; EPC record annotator.

3). Elics Delph 1 Digital Seismic Acquisition System. 386-25 MHz PC (OCGI); Magneto optical drive (600 mb per optical disk); Gulton Geologger with Versatec emulation; navigation running on other 386-25 MHz. (5.1/4" floppy and 3.5" disk drives on both); 110 mb hard drive in each 386 PC. Storing navigation on one of the 110 MB hard drives; Storing Delph 1 software on other 110 MB disk drive; raw seismic data stored on Magneto optical mass storage system. Navigation is logging Magellan GPS. Navigation written by Frank Carnagio at Stennis Space Center, MS.

May 14, 1991 (Monday)

2200 Depart Point Cadet Harbor, MS and head for Mobile Bay entrance.

May 15, 1991 (Tuesday)

0420 Arrive at first waypoint (30:05,87:30). Just south of the western end of Dauphin Island, Alabama. Anchor and sleep until daybreak.

0620 Get up and start to mob for the day. Pull up anchor.

0700 Doug Lockhart having problems with power regulator. Alarm going off. Will bypass and plug directly into power.

0725 Deploy Huntek, ORE 3.5, and streamer. O'Neil out of control.

0745 Deployment complete.

0810 Running due east at about 1 kn. Test line for about the next hour.
30:05.55, 88:08.09

0826 30:05.420,88:07.373

0830 Speeding up to 4 kn.

0841 Hit mark on both fathometer and Geopulse record. Going about 5 kn. 75' water depth.
30:05.289,88:06.282

0855 Hit mark on fathometer.

0900 Turn fathometer off. 73' water depth. Still testing seismic system.

0904 Terry feels the seismic looks good. Will put in new paper and a new belt then we will start the official seismic data collection with line 1.

0928 Everything about ready to go.
30:05.160,88:01.975

0944 SOL 1 (Kit Jones 91-1)
30:05.1511,88:00.284
70' water depth; 96 degrees heading
77.1 water temperature

1006 Gradual shallowing- 67.5' water depth as we move east.

1015 Shallowing still- 64' water depth; heading 94 degrees; speed 4.5 knots
30:05.057,87:58.191.

1103 60' water depth; Problems with Elics system. Fixes across record when opti
cal mass storage system on.

1108 Elics totally down due to a blown chip. Doug Lockhart bummed.
30:04.884,87:50.632

1130 30:04.926,87:48.662

1200 30:04.883,87:45.444

1230 30:04.805,87:42.162
65.5' water depth;

1245 Paper ran out on 3.5. Both recorders stopped by Terry to change paper.1250 30:04.734,87:40.020

1255 3.5 back on

1309 30:04.632,87:38.099

1325 weather conditions: partly cloudy with winds out of the south at 5-10 knots
Wave conditions 1-3'. Conditions generally good.

1330 30 04.634,87:36.473
87.5' water depth

1345 Need to stop to clean off sargasm from sleds.

1355 Sleds cleaned.

1410 30:04.855,87:33.777

1436 McBride in Hammock

1440 30:04.970,87:31.3313

1454 30:04.9692,87:30.2684

1455 EOL 1

1459 SOL 2
30:05.0614,87:29.8320
Seas fairly calm- about 1' Course 52.3 degrees (heading towards Pensacola Beach).98.5' water depth

1510 30:05.614,87:29.045

1536 30:06.7873,87:27.386
89' water depth
Randy on mobile phone to Mark Byrnes and Paul Conner.

1555 30.75, 87.26.08

1609 30:08.178,87:25.093
77' water depth

1630 30:09.263,87:23.449

1700 30:10.4881,87:21.6295
74' water depth

1720 72' water depth

1730 30:11.8950,87:19.6200
75' water depth

1740 70' water depth

1750 70' water depth

1800 30:13.2950,87:17.5468
67' water depth

1810 70' water depth

1820 63' water depth

1830 30:14.3945,87:15.4127
65' water depth

1840 **EOL** 2

1840 68' water depth

1843 **SOL** 3
70' water depth

1900 **EOL** 3
30:13.9510,87:13.7122
Making turn to get on line 4.

1905 **SOL** 4
30:13.7025,87:13.8332
72' water depth

1920 74'water depth

1930 30:12.4798,87:15.0339
66 water depth

1940 70' water depth

1950 68' water depth

2000 30:11.7261,87:16.8485
68' water depth

2010 72' water depth

2020 67' water depth

2030 30:10.5907,87:18.5866
67' water depth

2040 65' water depth

2050 66' water depth

2100 30:09.3242,87:20.3195
      67' water depth

2110 High voltage shut down. Paper change on huntec.

2115 Paper change complete.

2120 78' water depth

2130 30:08.0776,87:22.0028
      83' water depth

2140 87' water depth

2150 84' water depth

2200 30:06.7617,87:23.8798
      77' water depth
      Tape changed on recorder, complete at 2104.

2210 78'water depth

2220 74'water depth

2030 30:05.4700,87:25.7504
      72' water depth

2040 74' water depth

2250 73' water depth

2300 30:04.1992,87:27.4794
      77' water depth

2310 85' water depth

2320 81' water depth

2330 30:02.9447,87:29.2260
      80' water depth

2350 replacing fathometer stylus
      86' water depth

2400 30:01.7050,87:30.9149
      100' water depth

May 16, 1991 (Wednesday)

0008 Switched fathometer scale to 100-155.

0010 **EOL** 4

0014 **SOL** 5
fathometer scale back to 50-100

0020 30:00.7208,87:31.6789
Overshot start of line 5 by about 800 meters.

0028 3.5 fading in and out. appears to have stabilized.

0030 30:00.3346,87:31.2274
97' water depth

0032 Change paper on 3.5 recorder.

0038 All systems back on line.

0040 97' water depth

0055 Seaweed removed from huntec and 3.5. Both systems back on line.

0100 29:59.7616,87:30.0204
85' water depth

0110 89' water depth

0120 92' water depth

0128 Switch scale on fathometer to 100-150.

1030 29:58.7861,87:28.6560
100' water depth

0140 105' water depth

0150 109' water depth

0200 **EOL** 5 beginning turn into line 6
29:57,7891,87:27,5623
107' water depth

0201 **SOL** 6

0210 103'water depth

0240 125' water depth

0230 Changed fathometer roll.

0240 29,59.2 87,25.2

0315 87`water depth
30,0.2 87,22.99

0345 95` water depth
30,1.5 87,21.5

0415 103 water depth
30 02.5, 87 19.6

0445 110' water depth
30,03.43 87,18.01

0450 Replaced disk in nav.

0515 113 water depth
30,04.7 87,16.0

0545 97' water depth
30,06.4 87,14.0

0615 95' water depth
30,07.2 87,12.8

0633 change tape from 3 to 4

0645 94`water depth
30,08.3 87 10.8

0715 78' water depth
30,09.4 87,08.73

0745 86/ water depth
30,10.6 87,06.7

0815 90` water depth
30,12.0 87,4.6

0820 turn to line 7

0825 on line 7

0845 100` water depth
30,11.0 87,3.0

0908 turn to line 8
30,10.0 87,2.0

0910 Randy called Mark Byrnes and ordered 2 fans, Epson printer ribbon, 3.5" DS/HD diskettes, and sharpie markers. Paul Conner or Matthew Chutes will bring to Pensacola, FL on Fri. or Sat. night.

0926 30:09.3416,87:03.1713
96.5' water depth; predominately clear skies with a few clouds. Wave conditions less than 1' with gentle 10 to 20 sec low swell.

0930 Huntek recorder ran out of paper- paper change and gap in record until 0940
.

0945 30:08.7341,87:04.0236

course 277 degrees. Striking along axis of former shoreline trend.

1000 30:08.2241,87:04.7503
103' water depth; 1/8 sec. sweep 1/4 sec. fire

1020 30:07.3600,87:05.8658
Fathometer scale has been changed back and forth between 50-105' to 100-150' ranges. See fathometer record for details.

1025 30:07.1735,87:06.2121

1030 30:07.0353,87:06.3948
92' water depth; Still have long swells (rollers 3-5') but otherwise seas are 1-1.5'

1037 97.5' water depth
Fathometer on 50-105' range

1050 30:06.2916,87:07.4725
95' water depth; course 233 degrees; Strike line along axis of former shoreline feature.

1100 30:05.9173,87:08.1032
94.5' water depth

1115 Fairly large swells (low amplitude) coming out of the south (3-5').

1120 These swells seem to have an effect on records.

1125 Fathometer trace depicting the ridges beautifully. Still can not determine if they are surface wave swells or actual bottom topography?

1130 30:04.0652,87:09.7026

1200 30:03.7585,87:11.3848

1205 Changed paper and stylus on the fathometer.

1222 Fathometer back on.

1230 30:02.6951,87:13.1605
125.5' water depth
In the very upper portion of DeSoto Canyon. Weather/sea conditions. Partly cloudy with a gentle swell. Overall, good conditions. Water temperature 81.9 degrees.

1239 Water depth starts to shallow.
3.5 record ran out of paper; data gap. Must change.

1235 to 1249 Data gap on 3.5 and Huntek due to paper change.

1255 Water shallowing

1300 30:01.4566,87:14.9792

1306 105' water depth

1330 30:01.1923,87:16.7326
Changed fathometer to 50-105' range.
104' water dept

1344 105' water depth
Changed fathometer to 100-155' range.

1346 29:59.3377,87:17.8535

1356 Changed fathometer to 50-105'range.

1400 29:58.6280,87:18.6895
Adjusted course slightly to 233 degrees.

1415 long period swells still occurring but not having a large effect.

1430 29:57.0979,87:20.4096

1436 Changed fathometer to 100-155' range.
Speed about 4 knots

1500 29:55.7028,87:22.3753
Slowed boat down slightly to just under 4 knots.
100' water depth

1506 start tape 5

1522 Course adjustment to 259 degrees

1525 29:54.8914,87:24.0594

1530 End of line 8
29:54.7643,87:24.3101

1534 29:54.4616,87:24.0439

SOL 9

course 138 degrees

1538 105' water depth

1550 108.5' water depth

1553 29:53.4576,87:23.0475

1601 29:52.8087,87:22.4483

1610 29:52.4273,87:21.8164

1620 29:52.6833,87:21.2787

1632 29:53.0504,87:20.6512

1701 29:53.9460,87:19.1575

1711 118' water depth

1730 29:54,9713,87:17.7768

1740 115' water depth

1750 113' water depth

1757 High voltage shut down , set back to 1/8 second sweep, 1/4 sec fire rate. New belt on seismic.

1800 new belt on 3.5

1805 25:56.2621,87:16.1151

1810 110' water depth

1820 112' water depth; fathometer down

1823 fathometer back on line

1830 29:57.1819,87:14.9604
112' water depth

1840 112' water depth

1850 110' water depth

1900 29:58.3261,87:13.4925
108' water depth

1910 113' water depth

1920 108' water depth

1930 29:59.2986,87:11.9733
110' water depth

1940 111' water depth

1950 113' water depth

2000 30:00.2094,87:10.5304
116' water depth

2010 114' water depth

2020 108' water depth

2030 30:01.2126,87:09.0187

110' water depth

2040 108' water depth

2050 112' water depth

2100 30:02.1603,87:07.5787
110' water depth

2110 110' water depth

2120 110' water depth

2130 30:03.1886,87:06.0421
110'water depth Well developed clinoforms showing up on the Huntek record (probably deltaic but could represent tidal inlet channelling.

2141 110' water depth

2150 110' water depth
current charts: 3.5 #4, seismic #3

2156 Shut down to change paper on seismic recorder.

2200 30:04.3134,87:04,4703
113' water depth

2217 Change fathometer paper, now on roll 5.

2225 Fathometer still offline.

2235 30:05,3506,87,02.9600

2238 109' water depth
fathometer back on line

2250 108' water depth

2300 30:06.1754,87:01.1745
109' water depth

2310 107' water depth
Changed tape on recorder. new tape #5

2325 108' water depth

2330 30:06.9751,87:00.0440
109' water depth Strong reflectors in seismic being masked by 1st multiple.

2340 109' water depth

2352 103' water depth

2400 Navigation down, using ships nav.
EOL 10

May 17, 1991 (Thursday)

0018 navigation back up
30:06.4863,86:57.8406
127' water depth

SOL 11

0030 154' water depth
30:06.0400,86:57.4075

1232 155' water depth
Scale changed 10 150-205 on fathometer.

0044 205' water depth
fathometer off chart
Changed Huntek record to 1/4 sec. sweep and 1/4 sec. fire.

0049 sweep 250 on seismic

0055 **EOL** 11

0100 **SOL** 12
30:04.7734,86:56.6318
Data gap on both 3.5 and Huntek due to paper change on 3.5.
3.5 delay set to 225

0107 3.5 delay set to 175

0120 Problems still with Huntek output. Had to wake up Terry.

0124 3.5 set to 1/2 sec, huntec set to 1/4

0126 285' water depth

0132 30:03.5748,86:58.5969

0147 All system down to clean sea weed off sleds.
213' water depth

0200 water depth approx 200-205

0207 30:02.2787,87:00.8512

0230 178` water depth
30,01.00 87,02.75

0300 175 water depth
29,59.88 87,4.6

0330 183` water depth
29,58.3 87,06.8

0350 turn to line

0405 170` water depth
29,58.11 87,8.8

0410 Noise problem on huntec seaweed on streamer.
cleaned at 0413

0430 123 water depth
29,59.2 87,10.4

0500 114 water depth
30,0.7 87,12.2

0530 118` water depth
30,02.4 87,14.4

0600 110 water depth
30,03.8 87,16.3

0630 112` depth
30,05.5 87,18.6

0700 86 depth
30,07.1 87,20.5

0730 80`water depth
30,08.6 87,22.4

0800 84` depth
30,10.3 87,24.6

0830 78` depth
30,11.9 87,26.7

0900 48`depth
30,13.55 87,28.8

0900 Fathometer fix

0925 30:14.5644,87:30.5197

0930 **EOL** 13

0935 **SOL** 14
30:14.8681,87:30.2229
35' water depth
Partly sunny with very low amplitude swells. Seas fairlycalm.
Winds from east-southeast at 7 knots.

1000 30:14.8996,87:28.4061
32' water depth

1015 fathometer fix

1030 30:14.9384,87:25.9635

1043 48' water depth

1045 Fathometer fix

1047 Stylus changed on fathometer- slight data gap.

1050 fathometer fix

1100 30:14.8789,87:23.7347
     51' water depth

1104 Fathometer changed to 50-105' range.

1110 Fathometer fix

1130 30:14.9506,87:21.1898
     48' water depth

1149 Fathometer fix and changed range to 50-105'.

1155 58' water depth

1200 30:14.9903,87:19.0102
      57' water depth

1210 Fathometer fix

1215 30:15.0226,87:17.7875

1230 30:14.9620,87:16.5229

1231 **EOL** 14

1237 **SOL** 15

1246 Fathometer fix

1300 30:13.8399,87:15.1575
     71.5' water depth
     Seas calm with a very light chop.

1314 30:13.2029,87:14.5006

1320 fathometer fix

1330 30:12.4343,87:13.7540
     81' water depth

1340 fathometer fix

1342 **EOL** 15

1345 30:12.0240,87:12.9424

1347 **SOL** 16

1401 30:12.9669,87:12.0644
EOL 16

1406 **SOL** 17

1416 30:13.6337,87:12.5778
Sunny blue skies with few clouds. Water temp. 81.1 degrees F; Seas calm except gentle long period swells. Fathometer fix

1432 30:14.5117,87:13.5454
72' water depth
course 312 degrees

1445 fathometer fix

1500 30:15.8707,87:15.9937

1514 47' water depth
Changed fathometer scale to 0-50".

1521 fathometer fix

1530 30:17.3377,87:16.5124
36' water depth

1542 30:17.9369,87:17.0081

1543 23' water depth

1545 **EOL** 17
21' water depth

1546 End of Kit Jones Leg 1!!!

1600 Equipment pulled out of water and heading to the Moorings Marina.

1710 Arrive at the Moorings Marina. Terry Kelly and Walter O'Niel heading home. Paul Conner will arrive on Saturday for 2nd leg. The rest of the research crew will remain the same.

1900 Head for the Dunes Hotel on Pensacola Beach.

KIT JONES 91-2

May 18, 1991 (Saturday)

1400 Fueled up and departed the Moorings Marina. Headedoffshore through Pensacola Pass. Seas 4-6'. Got out tosea buoy but then turned around. Weather day. Seas too rough for offshore seismic.

1530 Can't find a Marina with open slips.

1630 Finally find a Boy on a Dolphin Marina on the east side of the 3 mile
bridge.

1800 Kit Jones was locked up and went to diner. Stayed inPensacola at the Park
Inn.

May 19, 1991 (Sunday)

0930 Arrived at the Kit Jones.

1000 Having problems with Loran-C. Will not receive! Douglas is trying to reso
lve problem.

1050 Still having problems with Loran-C. Randy made phonecall to Terry K. for help in resolving Loran-C problem. Randy has decided to request a tech. from the USGS for the remainder of the second survey leg.

1115 Douglas has re**SOL**ved Loran-C problems and is nowreceiving wave points.

1130 All power is turned on and appears to be operating properly.

1155 Depart dock.

1220 (**SOL**-18)Start or survey line 18. Survey in Santa RosaSound.
19.5' water depth.

1230 20.5' water depth

1240 Adjust hydrophone. Too much noise
22.5' water depth.

1245 location N30:21:62 W87:05:72
21.0' water depth

1250 Printer on high re**SOL**ution not operating. no papermovement. (huntek) roll close to end.will remove roll 4 and insert a new roll 5.

1300 location N30:21:83 W87:04:56
21.5' water depth

1310 Stopped HP tape drive.

1315 location N30:22:17 W87:03:19
21.0' water depth

1317 Raytheon depth meter not operating.

1330 location N30:22:24 W87:02:95

1340 EPC recorder for the Huntec completely not working- no trigger. As aresult, we are turning around and heading back to the Boy on a Dolphin. Still trying to get a hold of Terry Kelly (USGS).

1355 location N30:21:89 W87:03:64

1400 location N30:21:74 W87:04:36

1415 location N30:21:49 W87:05:62

1430 location N30:21:24 W87:07:22

1437 **EOL** #18
location N30:21:16 W87:07:67

1500 Arrived at "Boy on a dolphin" Marina.

1600 Depart for Park Inn in Pensacola.

1730 Randy, Monty, and Bob decide to travel to Biloxi, MS and pick up extra
equipment (EPC
recorder, paper for Elics, etc.) while waiting on USGS tech.

2000 Arrive Biloxi, MS. Randy stays at Econo Lodge.

May 20, 1991 (Monday)

0830 Randy meets Monty at MMTC warehouse in Biloxi, MS and load equipment into Randy's vehicle.

1100 Meet Bob at Southwind Marina and check out possible Kit Jones docking location over Memorial Day weekend.

1430 Arrive at Boy on a Dolphin marina. Doug still working on equipment.

1645 Randy and Doug depart for the Hilton Hotel in Pensacola.

1715 Randy departs for airport to pick up the USGS tech (Dana). Stay at Hilton that night.

May 21, 1991 (Tuesday)

0830 Arrive at Boy on a Dolphin Marina. Terrible weather. Strong winds from the southeast at 25-30 knots. Bad chop in the bay.

1430 Fix all the equipment but weather still terrible. After several phone calls to LGS and USGS, decide to postpone seismic cruise until mid-July. Weather looks bad f
or several more days. Stay at Hilton hotel.

May 22, 1991 (Wednesday)

0900 Arrive at Boy on a Dolphin marina. Start demobing Kit Jones.

1130 Demob complete and everyone leaves in different directions via sea and land.

KIT JONES 91-2

Cooperative Research Seismic Cruise

Louisiana Geological Survey
Marine Minerals Technology Center
United States Geological Survey

July 8, 1991 (Monday)

Mobilization of Kit Jones begins; USGS travels from St. Pete (Jack, Terry, and Dana) to Biloxi, MS arriving at

1800. Unload equipment and set up seismic. Doug Lockhart (MMTC) arrives at Biloxi, MS. July 9, 1991 (Tuesday)

Finish mobilization of Kit Jones and perform shakedown. Randy McBride (LGS) arrives at Point Cadet Marina at 12:15. Monty must run a couple more errands. Depart Biloxi at 14:50. Head for the back side of Horn Island, MS to anchor for the night.

Seismic systems:

1). High resolution system consisting of an Huntec sled and power supply (Scarborough, Canada); ORE amplifier and streamer; output onto a EPC 3200 (Ed P. Curley).
Initial settings: 1/4 second fire and sweep

2). Converted ORE 3.5 KHz system consisting of four 3.5 transducers driven by an ORE 140 transceiver and outputed on an EPC 3200; Berkley's Nucleonics Delay generator to sync both recorders together.
Initial settings: 1/4 second fire and sweep

NOTE: Both systems recorded on Hewlett-Packard 8-track analog 1/4" tape recorder (3968a) with a Datametrics time code generator; navigation was with a Trimble GPS system and Apelco DXL 6800 Loran See recorded to Dap HHC and logged at 5 minute intervals.

3. Elics Delph 1 Digital Seismic Acquisition System. 386-25 mhz PC (OCGI); Magneto optical drive (600 mb per optical disk); Gulton Geologger with Versatec emulation. Navigation running on other 386-25 MHz. (5.1/4" floppy and 3.5" disk drives on both); 110 mb hard drive in each 386 PC. Storing navigation on one of the 110 mb hard drives; Storing Delph 1 software on other 110 mb disk drive; raw seismic data stored on Magneto optical mass storage system. Navigation is logging Magellan GPS. Navigation written by Frank Carnagio at Stennis Space Center.

1700 Arrive at eastern backside of Horn Island. Conduct beach survey activities.

July 10, 1991 (Wednesday)

0600 Up for breakfast.

0645 Depart for offshore.

0725 Deploy equipment just offshore of the western end of Petit Bois Island. Turn on equipment but problem with trigger or power supply connection.

0745 Huntek record working but ORE 3.5 not working-- no record yet.

0750 Turn off system. Problem with 3.5 sled.

0815 Heading east and problem fixed with 3.5. Everything working. 30:11.475,88:23.902

0830 30:11.540,88:22.667

0836 30:11.498,88:22.114

NOTE: Going to GREENWICH MEAN TIME!!

1352 30:11.376,88:20.815

1405 **SOL** 1
30:11.227,88:19.851
1/8 sec. sweep and 1/8 fire

1434 30:08.765,88:19.841

1440 Fathometer changed to 50-105'.

1445 Water depth 57.5'

Weather conditions: backside of a high-pressure zone with winds from the SW at 5-10 knots; seas about 1'. Skies mainly blue with some white haze. Air temp. about 80 degrees. 1500 30:06.565,88:19.687 water depth 58.5'

1516 30:15.316,88:19.585
water depth 59'

1530 30:04.386,88:19.626
water depth 60'

1534 Changed seismic to 1/4 sec. sweep and fire.
Elics system
Raw seismic file KJ2_1_A
Raw nav. 07100859.rnv
Processed nav. 07100859.log

1612 30:01.460,88:19.916
water depth 74'

1630 30:00.54,88:19.947
Water depth 88.5'

1700 29:57.67,88:19.95
Shot point #38
Seas 2 to 3 ft.
Water depth 99'

1704 Slow for ship traffic.

1730 29:55.374,88:19.965
water depth 102'

1736 Fathometer changed to 100-155' range.

1745 29:54.111,88:19.933
water depth 104'

1800 29:52.947,88:19.910
water depth 105'

1830 29:50.532,88:19.972

1847 Power turned off for several minutes.

1906 29:47.616,88:19.996

1915 New ground put on Huntec power supply; gap in record for several minutes.

1935 29:45.325,88:19.880

1951 water depth 125'

2000 29:43.218,88:19.791
water depth 124'

2030 29:41.012,88:19.691
water depth 120'

2100 29:38.591,88:19.768
water depth 125'

2120 water depth 128.5'

2130 29:36.276,88:19.802
water depth 131'

2200 29:34.015,88:19.80
water depth 137'

2215 29:32.820,88:19.843
water depth 141.5'

2230 29:31.726,88:19.872
water depth 150'

2235 sea state 1 to 2 ft

2300 29:29.500,88:19.89
water depth 159'
Shot point 110

2315 29:28347,88:19.898
water depth 158'
shot 113
McBride: Sound asleep on fan tail, visions of Sammy's dance through his head.

2330 29:27.287,88:19.8660
water depth 168
shot 116

2340 29:26.6884,88:19.8522
water depth 169'
shot 118

2350 29:25.8871,88:19.8196
water depth 171'
shot 120

JULY 11, 1991 (Thursday)

2400 29:25.1700,88:19.7841
water depth 172'
shot 122
Burger time...fucking toasty in here!

0010 29:24.452,88:19.757
water depth 174
tape out, being replaced
end tape 2
begin tape 3

0020 29:23.7051,88:19.7729
water depth 173'

shot 126

0030 29:23.0384,88:19.7842
water depth 177'
shot 128

0400 29:22.3517,88:19.7856
water depth 185

0048-0050 Changed paper on huntec.
end of roll 2
begin roll 3

0050 29:21.6451,88:19.7950
water depth 185'
shot 132

0100 29:20.9430,88:19.8013
water depth 190
shot 134

0111 water depth 198'

0115 19:19.9451,88:19.7010
water depth 199'
shot 137

0130 29:18.8819,99:19.8264
water 210' approx.
shot 140

0145 29:17.7684,88:19.8660
Fathometer shut down ...too deep.

0200 29:16.6752,88:19.9040
shot 146

0215 29:15.7542,88:19.8794
shot 149

0230 29:14.6798,88:19.8745
shot 152

0245 29:13.5190,88:19.8847
shot 155

0300 29:12.500,88:19.900
EOL 1 - #158
turning to line 2
Tape 1590'

0305 **SOL** 2

0310 shot rate 1/2 sec.
power increased on huntec
sweep 1/2

3.5kHz 1/2 sec swp

0315 29:12.3954,88:18.6096

0330 29:12.5986,88:17.4551
shot 164

0345 29:12.842,88:16.095
shot 167

0400 29:13.08,88:14.70
shot 170
tape 1954'

0415 29:13.3121,88:13.2959
shot 173

0428 end of tape 3

0429 start of tape 4

0430 29:13.5513,88:11.9466
shot 176

0445 29:13.8236,88:10.5871
shot 179

0500 29:14.0914,88:09.2612
shot 182

0515 29:14.3510,88:07.8797
shot 185

0530 29:14.647,88:06.497
shot 188

0545 29:14.9428,88:05.0247
shot 191

0547 turned north
29:15.0141,88:04.9619

0600 29:15.9015,88:04.8602
shot 194

0615 29:16.8613,88:04.9020
shot 197

0637 29:18.2275,88:04.9403

0645 29:18.7392,88:04.9647
shot 207

0700 29:19.6689,88:04.9367
shot 206

0710 3.5 rec off to check belt

0711 3.5 rec on

0715 29:20.6576,88:04.9261
shot 209

0730 29:21.5813,88:04.9225
shot 212

0745 29:22.5023,88:04.9604
shot

0800 3.5 off new belt

0808 3.5 on

0820 readjusted 3.5 fish tow lines

0830 29:25.3262,88:05.0001
shot 224

0845 29:26.3359,88:05.0309
shot 227
new tape mounted

0905 29:27.5963,88:04.9520
shot 231

0930 29:29.1262,88.04.9270
shot 236

0945 29:30.0401,88.04.9316
shot 239

1010 29:31.5535,88:04.9517
shot 244

1030 29:32.7700,88.04.9404
shot 248

1040 29:33.3181,88:04.9570
shot 250

1055 depth gauge start
130 ft

1100 29:34.4770,88:04.9143
shot 254

1120 29:35.64,88:04.84
water depth 132

1130 29:36.23,88:4.82
GPS no satellites for several

minutes, Satellites marginal
for next ~30 min.

1145 29:37.12,88:04.81
water depth 127'
shot 263

1200 29:37.91,88:04.81
depth 122'
shot 266

1215 29:38.62,88:04.82
depth 126'
shot 269

1230 29:39.42,88:04.85
depth 124
shot 272

1235 EOR #2 3.5 kHz
SOR #3

1245 EOT #5
SOT #6 0000'

1300 29:40.98, 88:04.93
depth 118'
shot 278

1315 29:41.74, 88:04.99
depth 117'
shot 281
tape 0409'

1330 29:42.48, 88:05.05
depth 122'
shot 283

1345 29:13.21, 88:05.08
depth 120'
tape 0725'

1400 29:43.92, 88:05.16
depth 117.5'
tape 0875'
EOR #2 PDR
shot 290

1415 29:44.60, 88:05.13
depth 112'
SOR # 3 PDR

1430 29:45.351,88:05.118
water depth 118.5'
shot 296

1445 29:46.050,88:05.130
water depth 116'
shot 299
tape 1240

1500 29:46.79, 88:05.14
tape 1365'
depth 112'
shot 302
Sea State 2 to 3 feet from NW

1510 29:47.26, 88:05.15

1515 29:47.53, 88:05.15
depth 113'
shot 305
tape 1462'

1530 29:48.39, 88:05.17
depth 112'
tape 1565'
shot 308

1545 29:49.16, 88:05.16
EOR #3 Huntec
SOR #4

1600 29:49.86, 88:05.14

shot 314
tape 1767'
depth 110'

1615 29:50.71/ 88:05.10
shot 317
depth 106'

1630 29:51.64, 88:05.04
depth 107'
tape 1945'

1645 29:52.59, 88:04.98
tape 2026'
depth 107'
shot 323

1650 EOT #6 2049'
SOT #7 0000'

1700 29:53.575,88:04.880
tape 0093
water depth 107'
shot 326

1701 Changed belt on 3.5. Short data gap.

1720 29:54.954,88:04.760]
water depth 104'
shot 330
tape 0414

1722 Fathometer changed to 50-105'.

1730 29:55.642,88:04.712
water depth 99.5'
tape 0505
shot 332

1745 29:56.728,88:04.654
water depth 102'
shot 335
tape 662

1800 29:57.812,88:04.672
water depth 96.5'
shot 338
tape 0816

1815 29:59.927,88:04.708
water depth 83.5'

1830 30:00.017,88:04.714
water depth 74'
shot 344
tape 1080
Speed over ground 3.6 knots.

1845 30:01.017,88:04.744
water depth

1900 30:02.134,88:04.895
water depth 74'
shot 350
tape 1324
speed 3.7 knots

1915 30:03.207,88:05.115
water depth 71.5'
tape 1433
shot 353
speed 3.6 knots

1930 30:04.249,88:05.176
water depth
tape 1532
shot 356

1940 Nice channel on huntec and 3.5 records.

1945 30:05.366,88:05.174
water depth 58'

shot 359

1952 Changing to 1/8 sec. sweep on Huntec.

1956 Changed 3.5 to 1/8 sec. sweep.

2000 30:06.516,88:05.085
water depth
tape 1745
shot 362

2004 Changed both Huntec and 3.5 back to 1/4 sec. sweep.

2005 **EOL** 3
Ended line slightly earlier because of rig activity at the entrance of
Mobile Bay channel.

2008 **SOL** 4

2012 30:06.769,88:03.920
tape 1829

2030 30:06.887,88:02.047
water depth 62.5'
shot 368
tape 1920

2045 30:06.950,88:00.491
water depth 61'
shot 371

2053 Interesting subsurface structure--probably channelling associated with Mobile Bay channel.

2100 30:06.910,87:58.912
shot 374
tape 2055

2107 EOT 7 2070'
SOT 8 0000'

2115 30:06.858,87:57.117
water depth 46.5'
tape 0092
shot 377

2130 30:06.822,87:55.432
water depth 50.5'
shot 380
tape 0313

2137 Lost record on both Huntec and 3.5.

GOING BACK TO CENTRAL DAYLIGHT TIME

1900 Huntec power supply is down. Won't supply high voltage.

1930 Decide to run to Mobile Bay and anchor for the night.

JULY 12, 1991 (Friday)

0730 Dana makes call to Huntec in Scarbourgh, Canada. They will send a
loaner to Mobile airport.

0830 Pull anchor and head for Biloxi, MS. for the night. Will send in secon leg crew once the Huntec power supply arrivers from Canada. This probably will be on Saturday. Actually it ends up to be 9 days later that everything is ready to go again!!!!

July 21, 1991 (Sunday)

Continuation of KJ91-2 after short interlude (9 days).

2005 Just pulled gear in on Line A.

2245 Arrive offshore Mobile Bay. Equipment in water.

2253 30:07.216,87:58.894
We will continue with line 4 where we ended on July 11, 1991 when the Huntec died.

GOING TO GREENWICH MEAN TIME!!!!!!!!!!!!!!!!!!!!!!!!

0402 30:07.176,87:58.038
Line 4 continued
Roll #4 on fathometer

0430 30:07.194,87:55.812
SOT #9 (start of tape)
water depth 52.5'
Shot pt. 7

0445 30:07.218,87:54.870
boat speed 2.3 knots
water depth 51'

0455 New Huntec roll, therefore gap in record.

0500 30:07.262,87:53.766
water depth 60'

0515 30:07.254,87:52.610
water depth 57'

0530 water depth 54.5
30:07.150,87:51.468

0535 ultra boring records

0540 water depth 55'

0545 30:07.065,87:50.636
water depth 52'

0551 major channel action

0553 **EOL** 4
30:06.929,87:49.923

0556 **SOL** 5
30:06.800,87:49.860

0600 30:06.689,87:49.803
water depth 53'

0615 30:05.949,87:49.558
water depth 63'

0630 30:05.109,87:49.552
water depth 64'
weather: Dark. Continued dark throughout the night.
sea state: fluid

0645 30:04.195,87:49.705
water depth 60'

0700 30:03.250,87:49.927
water depth 62'

0715 30:02.309,87:50.105
water depth 64'

0730 30:01.293,87:50.113
water depth 78'
tape count 1694

0745 30:00.195:87:50.066
water depth 73'

0800 29:59.076,87:50.016
tape 1875
water depth 90'

0815 29:57.830,87:49.976
water depth 103

0830 29:56.745,87:49.925
tape 2038
water depth 102

0845 29:55.516,87:49.886
water depth 100'

0855 water depth 93'

0900 29:54.375,87:49.876
tape at end 2065
water depth 94'

0908 29:53.6325,87:49.8243
new tape 10

0930 29:52.040,87:49.828
sp 67
water depth 115'

tape 0358

0945 29:50.868,97:49.826
sp 70
water depth 112'

1000 29:49.688,87:49.842
sp 73
water depth 115'
tape 686

1015 29:48.565,87:49.840
sp 76
water depth 115'

1030 29:47.27,87:49.84
sp 79
water depth 125
tape 983
gps in dr mode - using loran

1045 26:46.03,87:49.887
sp 82
water depth 115

1100 29:44.839,87:49.928
sp 85
water depth 123
tape 1215

1115 29:43.696,87:49.960
sp 88
water depth 129'

1130 29:42.378,87:50.013
sp 91

water depth 125'
tape 1438

1145 29:41.209,87:50.046
sp 94
water depth 124

1200 29:39.803,87:49.956
sp 97
water depth 130
tape 1664
started file kj21-2a on elics
might be recording ??

1215 29:38.660,87:49.951
sp 100
water depth 132'

1230 29:37.419,87:49.926
sp 103

1240 new 3.5 paper roll

1245 29:36.224,87:49.924
sp 106
water depth 120'
tape 1915

1300 29:34.912,87:49.898
sp 109
water depth 126'
tape 2008

1305 new tape 11

1315 29:33.714,87:49.887

sp 112
water depth 133'
tape 0013 (tape was stuck so some data missed)
speed 3.5 knots
water temp. 85 degrees

1330 29:32.467,87:49.958
sp 115
water depth 140.5'
tape 224

1345 29:31.247,87:49.987
sp 118
water depth 151'
tape 403

1400 29:29.823,87:49.996
sp 121
water depth 173'
tape 578
seas 0-1 with very low swell but basically calm
Weather partly sunny with some puffy white clouds.
 Conditionsgood!

1411 lost 3.5 record

1416 29:28.416,87:49.993
water depth 185.5'
shot pt. 124

1420 3.5 record back on

1430 29:27.242,87:49.977
shot pt. 127
water depth about 210' (fathometer trace just went off chart--
too deep)
tape 886

1435 Turning fathometer off.

1445 29:25.869,87:50.022
sp 130
water depth 215'
tape 1009

1450 Good growth fault

1500 29:24.593,87:50.053
sp 133
water depth
tape 1136

1515 29:23.247,87:50.102
sp 136
tape 1244

1530 29:21.920,87:50.113
sp139
tape 1360

1545 29:20.556,87:50.066

1558 **EOL** 5

1600 **SOL** 6
29:19.375,87:49.950

1605 29:19.497,87:49.433
sp 144

1615 29:19.669,87:48.500
sp 146
tape 1669
water depth 329'

1630 29:19.839,87:47.446
sp 149
tape 1781

1645 29:19.979,87:46.635
sp 152

tape 1854

1649 Paper change on Huntec. End of roll #6, SOR #7
gap in record

1700 29:20.131,87:45.884
sp 155
tape 1966

1715 29:20.336,87:44.445
tape 2002, end of tape
sp 158

1722 start tape 12

1730 29:21.012,87:43.445
tape 138
water depth approx 350'

1745 29:21.347,87:42.473
tape 335

1755 Short gaps in record.

1800 29:21.571,87:41.438
tape 510

1817 29:22.440,87:40.337
tape 700

1830 **EOL** 6
29:23.060,87:39.531
tape 818
SOL 7

1845 29:24.010,87:39.529
tape 969

1852 Bubbler pulser sound source added.
Records seem to be improved.

1900 29:24.547,87:39.556
huntec shut down. bubble pulser logged only
tape 1090

1915 29:25.5037,87:39.5880
huntec and bubble pulser both on line
tape 1208

1930 29:26.571,87:40.010
tape 1318

1945 29:27.554,87:39.581
tape 1426
sp 188

2000 29:28.574,87:39.575
tape 1533
water depth 210'

2020 29:30.200,87:39.868

2021 Fathometer back online
Roll # 5

2024 water depth is 183'

2030 29:31.012,87:39.495
water depth 181
tape 1734
sp 197

2050 29:32.244,87:39.460
tape 1857
water depth 177'

2100 29:33.073,87:39.443
water depth 155'

2115 29:34.158,87:39.700
new dapnav file - kj912a.dat
sp 0
water depth 147'

2130 29:35.214,87:39.431
sp 3
water depth 141'
tape end 12

2140 new tape 13

2145 29:36.359,87:39.437
sp 6
water depth 135'

2200 29:37.492,87:39.446
sp 9
water depth 122'
tape 362

2215 29:39.125,87:39.464
sp 12
water depth 118'
flat sea, no wind, clear

2230 29:40.327,87:39.476
sp 15
water depth 113
tape 689

2245 29:41.495,87:39.501
sp 18
water depth 120'

2300 29:43.169,87:39.522
sp 21
water depth 117'
tape 969

2315 29:44.371,87:39.558
sp 24
water depth 120'

2330 29:46.46,87:39.87
gps on dr, using loran
sp 27
water depth 122'
tape 1241

2400 7/23/91 29:48.423,87:39.473
sp 33
water depth 117'
tape 1438
end 3.5 roll 5 - roll 6 installed

July 22, 1991 (Monday)

0015 29:50.088,87:39.431
sp 36
water depth 111'

0030 29:51.326,87:39.379
sp 39
water depth 112'
tape 1642

0045 29:52.529,87:39.389
sp 42
water depth 108

0050 computer seismic aborted

0055 29:53.889,87:39.638
sp 44
water depth 100'
tape 1805

0112 29:55.423,87:39.670
water depth 97.5'

0130 29:57.060,87:39.739
sp 51
water depth 97'
tape 1998

0145 29:58.365,87:39.767
sp 54
water depth 96.5'
tape ended on 2010

0155 new tape in (Tape #14)

0200 29:59.751,87:39.776

sp 57
water depth
tape 50

0215 30:01.186,87:39.732
sp 60
water depth 88.5'
tape 260

0220 Seas almost perfectly calm--like glass! The way we like it. Light winds from the southeast-east. Skies partly sunny with some scattered thunderstorms in the distance but never affecting the boat. Presently have three seismic sources in the water--Huntec, 3.5, and bubble pulser. Seem to be getting better records when bubble pulser is on. Essentially increase power with extra source. The bubble pulser and huntec both outputted on EPC recorder. Record superimposes exactly on EPC 3200. 3.5 not very good with large amount of cross-talk. Very hard to find real 3.5 reflector.

0230 30:02.525,87:39.755
sp63
water depth 93.5'
tape 420
speed 3.5 knots
water temp. 87 degrees
seas calm; like glass!!

0245 30:03.969,87:39.796
sp 66
water depth 80'
tape 610

0300 30:05.217,87:39.835
sp 69
water depth 67'
tape 760

0315 30:06.496,87:39.831
sp 72
water depth 50'
tape 890

0330 30:07.877,87:39.840
sp 75
water depth 52'

tape 1030

0345 30:09.035,87:39.887
sp 78
water depth 41'
tape 1185

0400 30:10.251,87:39.962
sp 81
water depth 42.5'
tape 1257

0415 30:11.373,87:39.962

0430 30:12.587,87:39.947
sp 87
water depth 42'
tape 1470

0449 30:13.954,87:39.962
EOL 7
Changed Huntec roll. SOR 8 (start of roll 8)
Data gap in record.

0455 30:13.726,87:39.791
SOL 8
water depth 32'

0500 30:13.460,87:39.466
sp 93
water depth 35'
tape 1670
Currently running down axis of large shoreface attached sand ridge. No channelling observed below ridge.

0515 30:12.641,87:38.490
sp 96
water depth 37'
tape 1763

0530 30:11.775,87:37.448
sp 99
water depth 42.5'
tape 1857

0545 30:11.002,87:36.519
sp 102
water depth 43.5'
tape 1920

0553 end of tape 14
tape count 1940

0558 begin tape 15

0600 30:10.069,87:35.254
water depth 48'

0615 30:09.141,87:34.110
water depth 54'
tape 430
sp 108

0630 30:08.254,87:33.010
tape 607
water depth 88'

0645 30:07.228,87:31.286
tape 807
water depth 83'

0700 30:06.386,87:30.292
tape 927
water depth 78'

0716 30:05.347,87:29.090
water depth 84
tape 1081

0730 30:04.405,87:28.017
tape 1195
water depth 85'

0745 30:03.432,87:26.488
tape 1310
water depth 72'

0800 30:02.505,87:25.382
tape 1431
water depth 87'

0815 30:01.466,87:24.238
tape 1562
water depth 96'

0830 30:00.433,87:23.133
water depth 93
tape 1664
end fathometer roll #4
begin fathometer roll #5

0845 29:59.441,87:22.075
tape 1763
water depth 112'

0900 29:58.472,87:21.053
tape 1869
water depth 94'

0930 29:56.394,87:18.475
sp 147

water depth 95'
end tape 15 - start 16

0945 29:55.388,87:17.418
sp 150
water depth 108'
tape 162'

1000 29:54.418,87:16.370
sp 153
water depth 145'
tape 368

1015 29:53.455,87:15.317
sp 156
water depth 188'

1030 29:52.461,87:14.278
sp 159
depth recorder off
tape 700

1045 computer file kj2_8_b closed
computer file kj2_8_c opened
magellan gps down

1050 trimble gps position
29:51.318,87:12.992

1100 29:50.598,87:12.303
sp 165
tape 970
Dolphin school playing in hydrophones and ducers.

1115 29:49.720,87:11.233
sp 168
dapnav computer file closed - housekeeping

1125 renamed dapnav files
kj710.dat to kj1_a.dat
kj913.dat to kj2_a.dat
kj9104.dat to kj2_b.dat
kj912a.dat to kj2_c.dat

1130 turned onto leg 9 kj-91-2
29:48.979,87:09.909
dapnav file kj2_d.dat opened
sp 0
tape 1229
closed seismic comp file kj2_8_c

1135 opened seismic file kj2_9_a

1145 29:45.588,87:08.787
sp 3

1200 29:50.210,87:07.820
sp 6
tape 1438

1235 29:51.457,87:05.196
sp 13
new band, roll 7 installed on 3.5
seismic computer down

1245 29:52.115,87:04.431
sp 15
tape 1737

1300 29:52.522,87:03.481
sp 18
tape 1834

1330 29:54.185,87:01.881
sp 24
water depth ~540'
tape 1995
water temp. 85 degrees
speed 3.0 knots

1344 29:54.926,87:00.983
EOL 9
sp 26
water depth
tape 2012

1347 **SOL** 10

1348 EOT 15

1400 29:55.761,87:01.679
sp 30
water depth
tape 131

1430 29:57.362,87:03.431

sp 36
water depth 209'
tape 520

1436 Changing back to a 1/4 sec. sweep from 1/2 sec. Power to 3k.

1445 29:58.092,87:04.256
sp 39
water depth 195'
tape 667

1501 29:59.000,87:05.298
sp 42
water depth 177.5'
tape 834

Good record. Well developed clinoforms-- appears to be possibly deltaics????

1515 29:59.736,87:06.167
sp 45
water depth 155.5'
tape 957

1530 30:00.608,87:07.188
sp 48
water depth 130.5'
tape 1090

1545 30:01.362,87:08.091
sp 51
water depth 112'
tape 1201

1600 30:02.231,87:09.096
sp 54
water depth 97'
tape 1310
Good record. Seas relatively calm 0-1'. Skies blue with somehaze.

1616 30:03.352,87:10.205
sp 57
water depth 91.5'
tape 1445

1630 30:04.161,87:11.006
sp 60
water depth 89.5'
tape 1530

1645 30:05.174,87:11.956
sp 63
water depth 71'
tape 1634

1700 30:06.111,87:12.834
sp 66
water depth 92.5'
tape 1727

1715 30:07.079,87:13.520
water depth 86'
tape 1842
End roll 8 huntec data, begin roll 9.

1730 30:08.129,87:14.557
tape 1923
water depth 83

1745 30:09.075,87:15.505
tape 1985

water depth 78'

1753 end of tape 17

1755 begin tape 18

1800 30:10.071,87:16.532
tape 106
water depth 69'

1815 30:10.583,87:17.507
tape 302
water depth 59'

1830 30:11.493,87:18.478
tape 472
water depth 70

1845 30:12.478,87:19.503
tape 642
water depth 68

1900 30:13.384,87:20.461
tape 786
water depth 58'

1916 30:14.463,87:21.463
tape 938
water depth 52'

1930 30:15.397,87:22.334
tape 1054
water depth 45'

1945 30:16.270,87:23.264
tape 1176
water depth 30'

2000 30:17.3136,87:24.268
tape 1294
water depth 22

2003 **EOL** 10

2004 **SOL** 11

2004 30:17.611,87:24.892

2006 reduce Hutec power to 2k

2015 30:17.306,87:25.458
tape 1407
water depth 22'

2030 30:17.2094,87:26.550

tape 1505
water depth 25'

2045 30:17.051,87:28.130
tape 1611
water depth 24'

2100 30:16.486,87:29.240
tape 1707
water depth 23'

2115 30:16.297,87:30.397
sp 117
water depth 18'

2130 30:16.154,87:31.506
sp 120
tape 1895

water depth 25'
channel??

2145 30:15.556,87:33.038
sp 123
tape 1970
water depth 25'

2200 30:15.348,87:34.178
sp 126
water depth 28'
new tape #19
tape 90

2227 Huntec band change.

2230 30:15.187,87:35.482
end line 11 - start line 12
sp 132
water depth 30'
tape 487

2247 30:14.251,87:34.188

2300 30:13.359,87:33.199
sp 138
tape 787
water depth 38'

2315 30:12.269,87:32.123
sp 141
water depth 48'

2330 30:11.492,87:31.007
water depth 52'
sp 144

tape 1063

2345 30:10.520,87:29.477
sp 147
water depth 75'
depth paper change

2400 30:09.560,87:28.316
sp 150
water depth 70'
tape 1301

July 23, 1991 (Tuesday)

0015 7/24/91 30:09.024,87:27.167
sp 153
water depth 78'

0030 30:08.131,87:25.952
water depth 70'
sp 156

0045 30:07.124,87:24.398
sp 159
Seismic computer down.

0100 30:06.113,87:23.266
sp 162
tape 1716
water depth 79'

0115 30:05.218,87:22.308
sp 165
water depth
tape 1806

0130 30:04.309,87:21.225
sp 168

water depth 90'
tape 1889
Air temp in Pensacola- 74 degrees.

0145 30:03.364,87:19.993
sp 171
water depth 87'
tape 1966

0200 30:02.405,87:18.818
sp 174
water depth 95'
tape 1995

0210 SOT (start of tape) #20

0215 30:01.386,87:17.693

sp 177
water depth 115.5'
tape 127

0230 30:00.346,87:16.582
sp 180
water depth 90'
tape 339

0245 29:59.352,87:15.572
sp 183
water depth 108'
tape 509

0300 29:58.185,87:14.437
sp 186
water depth 101.5'
tape 687

0315 29:57.220,87:13.534
sp 189
water depth 120'
tape 828

0330 29:56.181,87:12.615
sp 192
water depth 175.5'
tape 960

0345 29:55.188,87:11.658
sp 195
water depth 170'
tape 1067
Well developed growth fault with about a 25 foot drop.

0348 Fathometer went off record. Water too deep. Will leave off until we get b
ack into water depth of less
than 210'.

0400 29:54.160,87:10.462
sp 198
water depth about 249'
tape 1210
speed 4 knots
water temp. 85 degrees
Weather conditions

0405 **EOL** 12
29:53.828,87:10.045

0408 **SOL** 13

0410 29:54.058,87:09.505

0430 29:54.970,87:07.775

sp 204
tape 1429

0445 29:55.697,87:06.306
sp 207
water depth 240'
tape 1538

0500 29:56.406,87:04.826
sp 210
water depth 207'
tape 1636

0515 29:57.075,87:03.134
tape 1734
sp 213

0530 29:57.522,87:01.409
tape 1834
sp 216

0533 3.5 recorder is acting weird. Moving slower than Huntec. Not marking record and 5 min. lines much closer than before. 3.5 down for belt change.

0539 3.5 up and running again.

0545 29:58.337,87:00.192
tape 1912
sp 219

0603 29:59.2616,86:58.4275
tape 1964
sp 222

0615 30:00.089,86:56.413
end tape 20

start tape 21

0622 end line 13
30:00.3027,86:57.130

0625 start line 14
30:00.370,86:57.168
tape 84
sp 227

0630 30:00.578,86:57.320
tape 176
sp 228

0645 30:01.370,86:58.109
tape 363
sp 231
water depth about 270

0700 30:02.172,86:58.567
tape 0631
sp 234

0715 30:02.595,86:59.400
tape 691
sp 237
actual geology on record...gosh

0730 30:03.390,87:00.244
tape 834
sp 240
water depth 180'

0745 30:04.195,87:01.124
tape 0975
sp 243
water depth 146'

0800 30:05.004,87:01.573
tape 1102
sp 246
water depth 117'

0815 30:05.425,87:02.413
tape 1221
sp 249
water depth 104'

0830 30:06.212,87:03.246
tape 1339
sp 252
water depth 102'

0845 30:07.032,87:04.129
tape 1440
sp 235
water depth 87'

0900 30:07.467,87:05.056
tape 1660
sp 258
water depth 79'

0915 30:08.283,87:05.555
sp 261
water depth 105'

0930 30:09.141,87:06.477
sp 264
tape 1746
water depth 72'

0947 30:10.099,87:07.523
water depth 85'

1000 30:10.465,87:08.350
sp 270
tape 1923
water depth 83'

1015 30:11.648,87:09.528
sp 273
water depth 82'
3.5 off for new band

1030 gps sats down, using loran
30:12.63,87:10.45
sp 276
water depth 88'
tape 21 end
tape 22 begin

1047 30:13.563,87:11.568
trimble gps position

1100 30:14.304,87:12.346
sp 282
tape 0366
water depth 76'
trimble position

1115 30:15.156,87:13.201
sp 285

1130 30:15.903,87:14.003
sp 288
water depth 62'
tape 700

1145 30:16.705,87:14.832
sp 291

1200 30:17.518,87:15.623
sp 294
water depth 56'
tape 974

1215 30:18.320,87:16.566
sp 297
water depth 69'

1218 30:18.429,87:16.663
tape 1112
water depth 18'
all eqpt off
dapnav file kj2_d closed
seismic file kj2_14_b closed
end of line

BACK TO CENTRAL STANDARD TIME

0900 Arrive at the Moorings Marina at Pensacola Beach. Refuel, tip off with fresh water, make phone calls, and buy groceries.

1200 Depart Moorings Marina and on our way offshore.

zulu time

1858 30:18.282,87:13.1295
start line 15
nav kj2_e
tape 1116
sp 0

1902 water depth 42
30:18.190,87:12.587

1915 30:17.237,87:11.573
tape 1246
water depth 54

1930 30:16.366,87:11.055
tape 1354
water depth 66'

1945 30:15.416,87:10.109
tape 1462
water depth 87

2000 30:14.475,87:09.216
tape 1561
sp 12
water depth 92

2013 Fathometer out of control.

2015 30:13.478,87:08.243
tape 1668
water depth 79'

2030 30:12.527,87:07.295
tape 1764
water depth 82'

2045 30:11.587,87:06.296
tape 1856
water depth 78'
end 3.5 roll 8
begin 2.5 roll 9

2100 30:11.110,87:05.339
tape 1929
water depth 85'

2115 30:10.173,87:04.342
tape 1964
water depth 98'

2130 30:09.327,87:03.420
sp 30
tape end
water depth 80'

2134 tape 23 started

2145 30:08.409,87:02.447
sp 33
water depth 79'

2200 30:07.479,87:01.542
sp 36
tape 376
water depth 84'

2217 30:06.468,87:00.543
water depth 102'

2230 30:06.020,87:00.087
sp 42
tape 706
water depth 116'

2245 30:05.052,86:59.251
water depth 155'
sp 45

2300 30:04.040,86:58.514
sp 48
tape 988
depth off scale

2302 Huntec paper change #11.

2306 Huntec roll #11 started.

2307 turn onto line 16

2320 loran position
30:04.46,86:57.97
sp 52

2328 closing kj2_15

2330 30:05.218,86:57.563
water depth 188'
sp 54
tape 1245

2345 30:06.368,86:57.527

sp 57

2350 started elics file kj2_16_a

2400 30:07.528,86:57.494
7/25/91
sp 60
tape 1460
depth 104'

July 24, 1991 (Wednesday)

0015 30:09.084,86:57.519
sp 63
depth 95'

0030 30:10.232,86:57.559
sp 66
tape 1603
depth 88'

0045 30:11.340,86:57.577
sp 69
depth 86'

0100 30:12.380,86:58.041
sp 72
tape 1824
depth 88'

0115 30:13.726,86:58.161
sp 75
tape 1922
depth 81'

0130 30:14.914,86:58.320
sp 78
water depth 96'
tape 1959

0145 30:16.115,86:58.476
sp 81
water depth 80'
tape 005 (SOT 24)

0200 30:17.149,86:58.597
sp 84
water depth 87.5'
tape 220

0215 30:18.359,86:58.553
sp 87
tape 430
water depth 72'

0230 30:19.500,86:58.518

sp 90
water depth 59.5'
tape 590

0245 30:20.565,86:58.490
EOL 16
sp 93
water depth 59'
tape 735

0246 **SOL** 17

0300 30:20.701,86:56.978
sp 96
water depth 60.5'
tape 893

0315 30:20.656,86:55.419
sp 99
water depth 71'
tape 1018

0319 30:20.636,86:55.101
EOL 17

0320 **SOL** 18
30:20.436,86:55.022
water depth 65'
tape 1069

0340 30:19.004,86:54.859
sp 104
water depth 70.5'
tape 1216

0400 30:17.264,86:54.848
sp 108
water depth 84'
tape 1376

0420 30:15.669,86:54.880
sp 112
water depth 73'
tape 1511

0430 30:14.781,86:54.875
sp 114
water depth 74'
tape 1582

0500 30:12.312,86:54.779
sp 120
water depth 91'
tape 1771

0515 30:10.543,86:54.487

tape 1860
water depth 96'
sp 123

0530 30:09.276,86:54.513
tape 1930
water depth 104'

0540 end tape 24

0544 start tape 25

0545 30:08.166,86:54.544
tape 0
water depth 110'
sp 129

0600 30:06.549,86:55.002
tape 254
sp 132
water depth 170 approx

0604 **EOL** 18
depth 200

0610 turning to line 19
fathometer off scale

0611 on line 19
30:05.581,86:54.5068
tape 395

0615 30:05.570,86:54.244
sp 135
tape 445

0630 30:05.517,86:53.022
tape 600
sp 138

0700 30:05.519,86:50.120
tape 0891
sp 144
EOL 19

0702 start line 20

30:06.019,86:50:028
tape 915

0715 30:06.539,86:49.572
tape 1033
sp 147
Too fucking deep for antique fume belching fathometer to function.

0730 30:07.400,86:49.5636
tape 1151
sp 150
water depth 161'

0745 30:08.892,86:49.959
tape 1270
sp 153
water depth 118'

0800 30:09.504,86:49.597
tape 1381
sp 156
water depth 105'

0815 30:10.858,86:49.942
tape 1497
sp 159
water depth 103

0830 30:11.359,86:49.552
tape 1593
sp 162
water depth 96'

0845 30:12.348,86:50.122
tape 1701
water depth 96'

sp 165

0855 end roll 9, 3.5 data
start roll 10, 3.5

0900 30:13.185,86:50.048
sp 168
tape 1789
water depth 106'

0915 30:14.283,86:50.048
sp 171
depth 77'

0935 30:15.509,86:50.015
sp 175
tape 1949
Depth recorder paper change.

1000 30:17.468,86:50.039
sp 180
tape 1962
depth 75'

1005 tape change - mount #26

1015 30:18.516,86:50.026

sp 183
depth 69'

1030 30:19.72,86:49.94
loran position
sp 186
tape 320
depth 70'

1045 30:20.89,86:49.94
loran position
sp 189
depth 65'

1055 30:21.65,86:49.98
loran position
turning to line 21
sp 191

1100 30:21.643,86:49.727
on line 21
sp 192
tape 670
depth 69'
close file kj2_20_a
huntec paper change

1106 huntec restarted

1115 30:20.744,86:48.660
sp 195

1135 30:19.459,86:47.359
sp 199
tape 994
depth 69
elics down
depth 68'

1200 30:17.849,86:45.792
using trimble gps
elics file kj2_21_a opened, closed
elics file kj2_21_b started
sp 204
tape 1211
depth rec. stylus replaced

1215 30:17.118,86:45.092
sp 207
depth 75'

1230 30:16.268,86:44.219
sp 210
tape 1410
depth 77'

1245 30:15.287,86:43.299
sp 213
depth 77'

1300 30:14.457,86:42.536
sp 216
tape 1624
depth 77'

1315 30:13.482,86:41.665
sp 219
depth 80'
tape 1724 (tape #26)

1330 30:12.514,86:40.703
sp 222
depth 86.5'
tape 1823

1345 30:11.823,86:39.956
sp 225
depth 87.5'
tape 1887
boat speed 4.1 knots
heading 137 degrees
Air temp. in Pensacola 79 degrees.

1350 Weather conditions: cloudy skies with calm seas 0 to .5'.
Experiencing high pressure zone in general but have scattered thunderstorms popping up around us.

1400 30:10.973,86:39.039
sp 228
depth 92'
tape 1929
speed 4.1 knots
heading 137

1410 SOT #27

1415 30:10.146,86:38.141
sp 231
depth 98'
tape 94 (tape #27)
speed 4.0 knots
heading 138 degrees

1430 30:09.391,86:37.262
sp 234
depth 101'
tape 297
speed 4.2 knots
heading 137

1445 30:08.476,86:36.204

sp 237
depth 108'
tape 514
speed 4.1 knots
heading 130 degrees

1500 30:07.756,86:35.309
sp 240
depth 123'
tape 658
speed 4.2 knots
heading 132 degrees

1515 30:06.974,86:34.358
sp 243
depth 133'
tape 814
speed 4.2 knots
heading 134 degrees

1530 30:06.176,86:33.415
sp 246
depth 136'
tape 951
speed 4.3 knots
heading 134 degrees
air temp in Pensacola is 81 degrees
seas calm 0 to .5'

1545 30:05.370,86:32.524
sp 249
depth 148'
tape 1059 (tape #27)
speed 4.2 knots
heading 135 degrees

1600 30:04.448,86:31.528
sp 252
depth 147'
tape 1192
speed 4.3 knots
heading 137 degrees

1630 30:02.664,86:29.712
sp 258
depth 145'
tape 1443
speed 4.2 knots
heading 135

1645 30:01.686,86:28.760
sp 261
depth 153'
tape 1540
speed 4.5 knots
heading 140 degrees

1700 30:00.865,86:27.982
sp 264
depth 155'
tape 1627
speed 4.6 knots
heading 141 degrees

1715 29:58.509,86:27.019
tape 1726
sp 267
water depth 171

1730 29:58.575,86:26.093
tape 1809
sp 270
water depth 180'
hdg 140
v 4.6

1745 29:58.018,86:24.596
EOL 21
start line 22
sp 273
tape 1894
water depth 195
hdg 57
v 5.0

1800 29:58.311,86:23.506
sp 276
tape 1925
hdg 64
v 5.3
water depth 182

1805 end tape 27
start tape 28

1815 29:59.063,86:22.270
tape 152
sp 279
hdg 61
v 5.2
water depth 168'

1830 29:59.395,86:20.500
sp 282
tape 392
hdg 67
v 5.3
water depth 161

1836 Huntec shut down, bubble pulser only.

1841 **EOL** 22

30:00.000,86:19.526
tape 498

1843 start line 23
30:00.109,86:19.545
hdg 342
v 4.2
tape 527
water depth 155

1852 huntec back on

1853 bubble pulser off

1858 bubble pulser on

1900 30:01.169,86:20.576
tape 707
hdg 318
v 5.0
sp 288
water depth 152'

1915 30:02.927,86:21.485
tape 839
hdg 317
v 5.2
sp 291
water depth 157'

1930 30:03.138,86:22.487
tape 987
sp 294
hdg 320
v 5.3
water depth 153'

1945 30:04.302,86:23.779

sp297
tape 1121
water depth unk
heading 319 degrees
speed 5.3 knots

2000 30:05.187,86:24.428
sp 300
tape 1231
hdg 318
v 5.4
water depth 137'

2015 30:06.188,86:25.395
sp 303
tape 1335

hdg 320
v 5.6
water depth 129'

2030 30:07.168,86:26.389
tape 1452
sp 306
hdg 315
v 4.9
water depth 118'

2045 30:08.094,86:27.395
tape 1557
sp 309
hdg 315
v 5.3
water depth 123

2100 30:09.097,86:28.428
tape 1662
hdg 318
v 5.4
sp 312
water depth 100'

2130 30:11.037,86:30.377
sp 318
tape 1850
depth 94'
hd 323
v 5.7
depth roll 9 installed

2138 new tape 29 mounted

2145 30:12.014,86:31.37
sp 321
depth 97'
hd 319
v 5.2

2150 30:12.186,86:31.549
sp 322
depth 104'

2200 30:12.562,86:32.330
sp 324
tape 324
depth 85'
hd 317
v 5.0

2215 30:13.529,86:33.311
sp 327
depth 79'

2230 30:14.469,86:34.267
sp 330
tape 918
depth 82'
hd 319
v 4.7

2245 30:15.390,36:35.188
sp 333
depth 69'

2252 roll 13 installed on huntec

2300 30:16.275,86:36.151
sp 336
tape 1390
depth 90'
hd 314
v 4.6

2315 30:17.244,86:37.099
sp 339
depth 78'

2330 30:18.081,86:37.559
sp 342
tape 1809
depth 68
hd 334
v 3.2
thunderstorm/squall

2245 30:18.467,86:38.271
sp 345
depth 67'

2400 30:19.403,86:39.146
sp 348
depth 65'
tape 2026
hd 320
v 4.3
end tape 29

July 25, 1991 (Thursday)

0010 begin tape 30

0015 30:20.258,86:39.563
sp 351
depth 69'

0030 30:21.135,86:40.432
sp 354
depth 67

tape 367
hd 316
v 4.0

0045 30:21.598,86:41.301
sp 357

0055 30:22.347,86:42.048
end of line 23
turning onto line 24
0058 on line 24

0100 30:22.398,86:41.516
sp 360
tape 675
depth 60'
hd 085
v 5.1
end dapnav file kj2_e

0105 begin dapnav file kj2_f

0118 30:22.700,86:39.034
water 61.5'
tape 880
heading 88 degrees
speed 5.0 knots

0130 30:22.688,86:38.870
sp 4
water depth 57'
tape 953
heading 85
speed 5.1 knots

0145 30:22.646,86:37.311
sp 7
water depth
tape 1081
heading 096
speed 5.057'

0200 30:22.617,86:35.714
sp 10
water depth 60'
tape 1210
heading 092
speed 5.1 knots

0215 30:22.562,86:34.108
sp 13
water depth 42'
tape 1329 (tape #30)
heading 092
speed 5.1 knots

0223 **EOL** 24
30:22.524,86:33.383
tape 1378
water depth
heading 096
speed 5.0 knots

0225 **SOL** 25

0230 sp 16
water depth 97'
heading 146 degrees
speed 4.9 knots

0245 30:20.984,86:31.887
sp 19
water depth 64'
tape 1542
heading 145
speed 4.3 knots

0300 30:19.926,86:31.041
sp 22
water depth 68'
tape 1634
heading 143 degrees
speed 5.0 knots

0315 30:18.790,86:29.996
sp 25
water depth 73'
tape 1735
heading 141 degrees
speed 5.0 knots

0330 30:17.669,86:28.931
sp 28
water depth 72.5'
tape 1826
heading 142
speed 5.6 knots

0345 30:16.553,86:27.919
sp 31
water depth 78'
tape 1906
speed 4.8 knots
heading 141

0400 30:15.595,86:26.980
sp 34
water depth 79.5'
tape 1938
speed 5.0

heading 143

0415 30:14.507,86:25.939
sp 37
water depth 87'
tape 1953
speed 4.8 knots
heading 140 degrees

0430 30:13.287,86:24.793
sp 40
water depth 87.5'
tape 017
speed 4.7 knots
heading 135 degrees

0445 30:12.295,86:23.838

sp 43
water depth 101'
tape 276 (tape #31)
speed 4.5 knots
heading 140 degrees

0500 30:11.417,86:22.950
sp 46
water depth 104'
tape 448
speed 4.8 knots
heading 140 degrees

0515 30:10.218,86:21.553
tape 614
hdg 136
v 4.7
sp 49
water depth 106'

0530 30:09.253,86:20.547
tape 764
hdg 137
v 4.7
sp 52
water depth 106'

0545 30:08.299,86:19.559
sp 55
tape 0897
hdg 139
v 5.0
water depth 114

0600 30:07.326,86:18.561
tape 1024
sp 58
hdg 139

v 5.2
water depth 106'

0615 30:06.306,86:17.533
tape 1154
sp 61
hdg 138
v 5.1
water depth 119'

0630 30:05.297,86:16.489
tape 1275
sp 64
hdg 139
v 4.9
water depth 107'

0638 **EOL** 25
30:04.541,86:16.102
tape 1341

0643 30:04.598,86:16.015
start line 26

0645 30:05.068,86:15.577
tape 1380
sp 67
hdg 20
v 3.9
water depth 117'

0700 30:05.585,86:15.262
tape 1495
sp 70
hdg 28
v 3.9
water depth 112'

0715 30:06.474,86:14.577
tape 1693
hdg 25
v 3.8
sp 73
water depth 107'

0730 30:07.660,86:14.470
tape 1689
sp 76
hdg 25
v 4.1
water depth 107'

0745 30:08.610,86:14.000
tape 1782
sp 79
hdg 25

v 4.0
water depth 106'

0800 30:09.510,86:13.460
tape 1860
sp 82
hdg 24
v 4.1
water depth 106'

0815 30:10.460,86:12.940
tape 1900
sp 85
hdg 24
v4.3
water depth

0820 end tape 31, start tape 32

0824 Replace ribbon on huntec recorder.

0825 **EOL** 26
30:11.090,86:12.550

0830 start line 27
30:11.440,87:12.480
tape 157
sp 88
hdg 335
v 5.0
water depth 102

0845 30:12.530,86:13.010
end fathometer roll 11
begin roll 12
tape 364
sp 91
hdg 337
v 4.8
water depth 98'

0900 30:13.619,86:13.439
tape 532
sp 94
hdg 343
v 4.8
water depth 96'

0915 30:14.422,86:13.539
sp 97
depth 93'
hd 341
v 5.0

0930 30:16.027,86:14.226
sp 100

tape 861
depth 87'
hd 343
v 4.9

0935 new 3.5 roll #12

0941 **EOL** line 27
30:16.478,86:14.362
tape 946

0945 30:16.453,86:14.533
on line 28
sp 986
depth 80'
hd 250
v 5.0
close file kj2_27_a
close file 07260318

0955 opened file kj2_28_a
opened file 07260445

1000 30:16.211,86:16.190
sp 106
tape 1104
depth 86'
hd 254
v 4.8

1015 30:16.161,86:16.323
sp 109
depth 92'
new roll huntec #14

1030 loran position, gps down
30:15.56,86:19.06
sp 112
tape 1342
depth 87'
hd 252
v 4.9

1045 30:15.081,86:20.521
sp 115
depth 88'
hd 253
v 5.2

1100 30:14.678,86:21.896
sp 118
tape 1561
depth 96'
hd 250
v 5.0

1115 30:14.191,86:23.517
sp 121
depth 98'
hd 254
v 5.1

1130 30:13.821,86:24.845
sp 124
tape 1750
depth 90'
hd 250
v 5.1

1145 30:13.426,86:26.263
sp 127
depth 88'
hd 254
v 5.0

1200 30:13.003,86:27.690
sp 130
tape 1890
depth 91'
hd 252
v 5.1

1215 30:12.341,86:29.044
sp 133
depth 67'
hd 250
v 5.0

1230 30:12.030,86:30.422
sp 136
tape 1930
depth 89'
hd 247
v 4.9

1245 30:11.420,86:31.420
sp 139
depth 88'
hd 252
v 5.0

1300 30:11.139,86:33.090
sp 142
tape 1958
depth 88'
hd 248
v 5.0

1315 30:10.758,86:34.589
sp 145
water depth 102'
tape 1971

speed 5.0 knots
heading 252 degrees

1330 30:10.325,86:35.845
sp 148
water depth 116'
tape 1977
speed 4.4 knots
heading 245 degrees

1345 30:09.869,86:37.082
sp 151
water depth
tape 246
speed 4.6 knots
heading 246 degrees

1400 30:09.357,86:38.333
sp 154
water depth 99'
tape 450
speed 4.4 knots
heading 242 degrees

1415 30:08.817,86:39.724
sp 157
water depth 110'
tape 611
speed 4.3 knots
heading 245 degrees

1430 30:08.399,86:40.715
sp 160
water depth 117'
tape 746
speed 4.3 knots
heading 247 degrees

1445 30:07.984,86:41.852
sp 163
water depth 128'
tape 910
speed 3.5 knots
heading 248 degrees

1500 30:07.618,86:42.881
sp 166
water depth 127'
tape 1032
speed 4.1 knots
heading 247 degrees

1515 30:07.185,86:44.097
sp 169
water depth 150'

1520 Water spout spotted 4 mi. off of port. Thunderstorms on port and starboard stern.

1530 30:06.866,86:45.041
sp 172
water depth 165'
tape 1280
speed 3.7 knots
heading 257 degrees

1545 30:06.654,86:46.025
sp 175
water depth 177'
tape 1387
speed 3.6 knots
heading 254 degrees

1550 Beautiful clinoforms for the past hour.

1551 **EOL** 28
30:06.601,86:46.623

1554 **SOL** 29
30:06.705,86:46.589

1600 30:07.214,86:46.445
sp 178
water depth 164'
tape 1522
speed 5.7 knots
heading 140 degrees

1615 30:08.449,86:46.264
sp 181
water depth 135'
tape 1610
speed 5.0 knots
heading 359 degrees

1626 **EOL** 29
30:09.366,86:46.420
water depth 124'
tape
speed 4.7 knots
heading 344

1628 **SOL** 30

1630 39:09.581,86:46.002
sp 184
water depth 112'
tape 1715 (tape #33)
speed 5.5 knots
heading 063

1645 30:10.137,86:44.619

sp 187
water depth 103'
tape 1806
speed 5.5 knots
heading 062

1700 30:10.667,86:43.191
sp 190
water depth 91'
tape 1892
speed 5.2 knots
heading 064 degrees

1715 30:12.213,86:41.735
sp 193
tape 1952
hdg 64
v 5.5
water depth 90'

1724 at waypoint 33
30:11.602,86:40.763

1730 30:11.778,86:40.177
sp 196
hdg 67
v 5.2
water depth 85'
end tape 33
start tape 34

1745 30:12.188,86:38.795
sp 199
hdg 69
v 5.2
tape 228
water depth 90'

1800 30:12.605,86:37.312
sp 202
records mislabelled
tape 425
water depth 95'
hdg 064
v 5.2

1815 30:13.151,86:35.865
sp 205
tape 588
hdg 65
v 5.2
water depth 93'

1824 30:13.435,86:34.978
EOL 30

water depth 77'

1830 **SOL** 31

30:13.787,86:34.493
sp 208
tape 746
hdg 47
v 5.5
water depth 84'

1845 30:14.590,86:23.291
tape 878
sp 211
hdg 49
v 5.4
water depth 75'

1851 waypoint 35
30:15.015,86:32.670
tape 945

1900 30:15.285,86:31.869
sp 214
tape 1016
hdg 76
v 5.3
water depth 80'

1908 waypoint 36

1915 30:15.855,86:30.401
sp 217
tape 1144
hdg 51
v 5.5
water depth 67'

1930 30:16.637,86:29.173
sp 220
tape 1257
hdg 51
v 5.4
water depth 68'

1935 waypoint 37

1945 30:17.227,86:27.720
sp 223
tape 1375
hdg 77
v 5.5
water depth 69'

2000 30:17.488,86:26.136
tape 1477

sp 226
hdg 81
v 5.4
water depth 64'

2005 waypoint 38

2010 end fathometer roll 12
start roll 13

2015 30:17.596,86:24.532
sp 229
tape 1584
hdg 101
v 5.1
water depth 73'

2027 waypoint 39

2030 30:17.446,86:23.072

sp 232
tape 1686
hdg 48
v 5.3
water depth 69'

2045 30:18.260,86:21.774
tape 1772
sp 235
hdg 53
v 5.4
water depth 68'

2100 30:19.059,86:20.492
tape 1854
sp 238
hdg 55
v 5.3
water depth 70'

2108 at waypt 40

2115 30:19.345,86:19.130
tape 1908
sp 241
hdg 083
v 5.0
water depth 63'

2130 30:19.362,86:17.301
sp 244
depth 64'
hd 84
v 4.8
tape 34 end

2138 tape 35

2140 waypoint 41

2145 30:19.461,86:16.121
sp 247
depth 63'
hd 056
v 5.0
tape 148
3.5 secured

2152 30:20.049,86:15.382
EOL 31
waypoint 41
depth 60'

2155 **SOL** 32

2200 30:20.221,86:16.093
sp 250
tape 335
depth 61'
hd 288
v 4.4

2218 30:20.433,86:17.297
hd 286
v 4.1

2230 30:20.513,86:18.242
sp 256
tape 609
depth 62'
hd 286
v 4.2

2245 30:21.047,86:19.310
sp 259
depth 67'
hsd 280
v 3.9
tape 679

2300 30:21.236,86:20.450
sp 262
tape 965
depth 64'
hd 284
v 4.1

2315 30:21.338,86:21.498
sp 265
depth 62'

hd 273
v 4.2

2330 30:21.388,86:23.037
sp 268
tape 1192
depth 61'
hd 274
v 4.3

2345 30:21.421,86:24.310
sp 271
hd 273
v 4.4
depth 61'

2400 30:21.432,86:25.353
7/27/91
sp 274
tape 1418
depth 62'
hd 267
v 4.2

July 26, 1991 (Friday)

0005 closed dapnav file kj2_f

0030 30:21.425,86:28.104
opened dapnav file kj2_g.dat
sp 0
tape 1630
depth 62'
hd 270
v 4.4

0045 30:21.403,86:29.247
sp 3
depth 63'
hd 270
v 4.3
closed file kj2_32_a
closed file 07261644

0053 opened file kj2_33_a
opened file 07261942

0100 30:21.357,86:30.408
sp 6
tape 1811
depth 66'
hd 267
v 4.5
printing elics

0115 30:21.573,86:32.015

sp 9
tape 1888
water depth 69'
heading 270 degrees
speed 4.5 knots

0130 30:21.650,86:33.449
sp 12
water depth 61.5'
tape 1925
heading 277 degrees
speed 4.9 knots

0145 30:21.762,86:34.777
sp 15
water depth 77'
tape 220
heading 278 degrees
speed 4.5 knots

0200 30:21.892,86:36.133
sp 18
water depth 69'
tape 318
heading 276 degrees
speed 4.6 knots

0215 30:22.034,86:37.479
sp 21
water depth 63'
tape 419
heading 276 degrees
speed 4.8 knots

0230 30:22.121,86:38.890
sp 24
water depth 64'
tape 515
heading 273 degrees
speed 4.8 knots

0245 30:22.195,86:40.316
sp 27
water depth 67'
tape 508
heading 271 degrees
speed 4.8 knots

0252 Sea conditions are calm with a slight swell (.5 to 2'). Winds from the north about 10 knots.

0300 30:22.171,86:41.641
sp 30
water depth 69'
tape 621'

heading 265 degrees
speed 4.8 knots

0315 30:22.073,86:43.205
sp 33
water depth 66.5'
tape 673
heading 267 degrees
speed 4.7 knots

0330 30:21.982,86:44.531
sp 36
water depth 62'
tape 756
heading 261 degrees
speed 4.8 knots

0345 30:21.811,86:45.921
sp 39
water depth 68'
tape 821
heading 264 degrees
speed 4.8 knots

0400 30:21.600,86:47.208
sp 42
water depth 69'
tape 889
heading 259 degrees
speed 4.7 knots

0415 30:21.378,86:48.667
sp 45
water depth
tape 962
heading 262 degrees
speed 4.6 knots

0430 30:21.189,86:49.929
sp 48
water depth 64.5'
tape 1022
heading 259 degrees
speed 4.7 knots

0445 30:21.007,86:51.469
sp 51
water depth 65.5'
tape 1094
heading 261 degrees
speed 4.6 knots

0500 30:20.850,86:52.614
sp 54
water depth 67'
tape 1049

heading 264 degrees
speed 4.5 knots

0518 30:20.606,86:54.369
hdg 266
v 4.3
tape 1229
water depth 69'

0530 30:20.490,86:55.303
tape 1270
sp 60
hdg 267
v 4.2
water depth 69'

0545 30:20.351,86:56.506
hdg 263
v 4.0
tape 1330
sp 63
water depth 68'

0600 30:20.212,86:57.688
tape 1385
sp 66
hdg 265
v 3.7
water depth 65'

0615 30:20.036,86:58.666
tape 1338
sp 69
hdg 254
v 3.4
water depth 63'

0630 30:19.187,86:59.662
tape 1492
sp 72
hdg 264
v 3.1
water depth 61'

0645 30:19.729,87:00.578
tape 1551
sp 75
hdg 260
v2.8
water depth 58'
rough seas

0700 30:19.572,87:01.480
tape 1602
v 2.7
hdg 263

sp 78
water depth 55'
Shut down for rough seas.