Bathymetry of MCR and Vicinity

Composite of 1999 Surveys

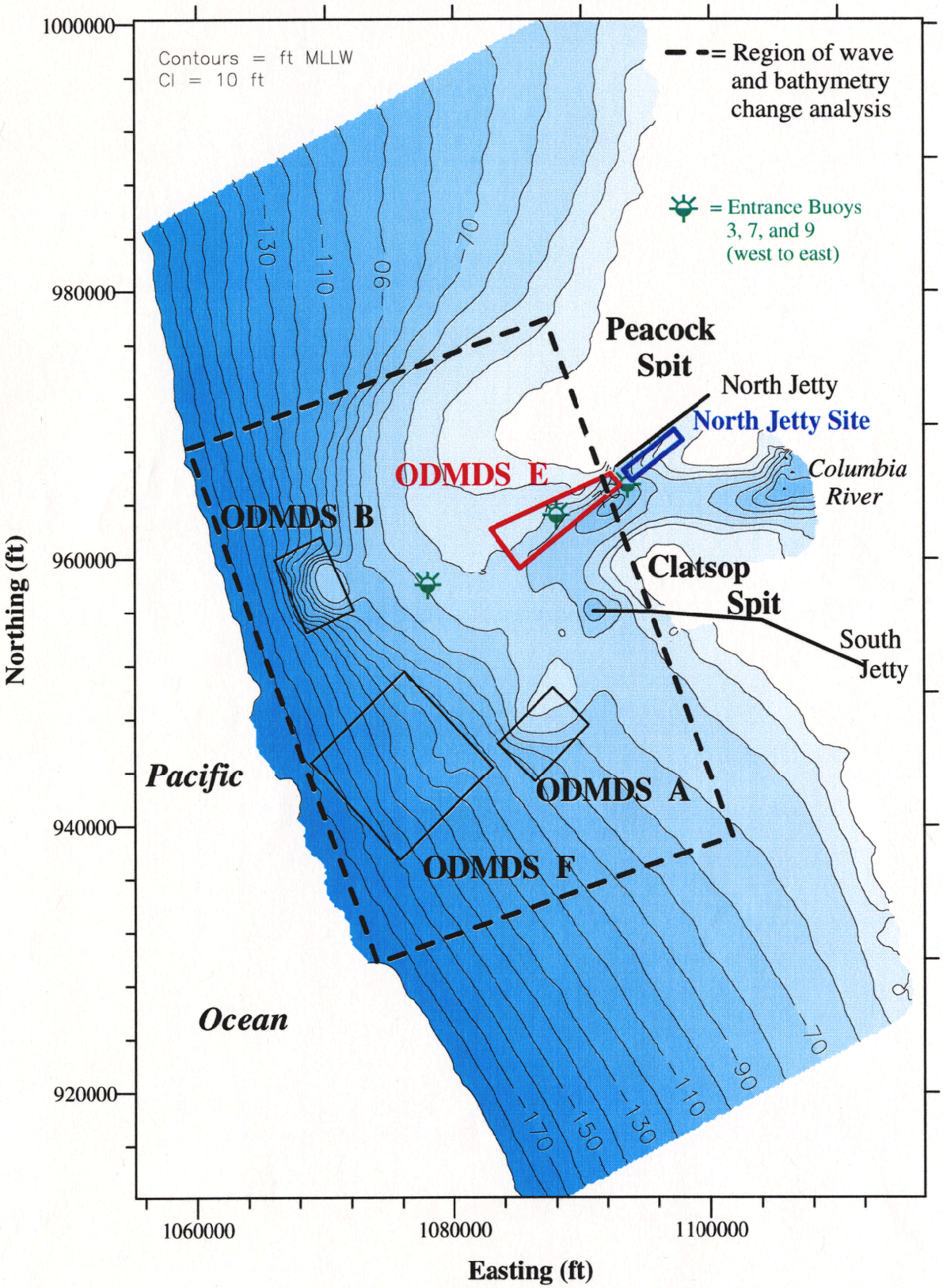


Figure 1

Project Baseline Bathymetry for ODMDS E

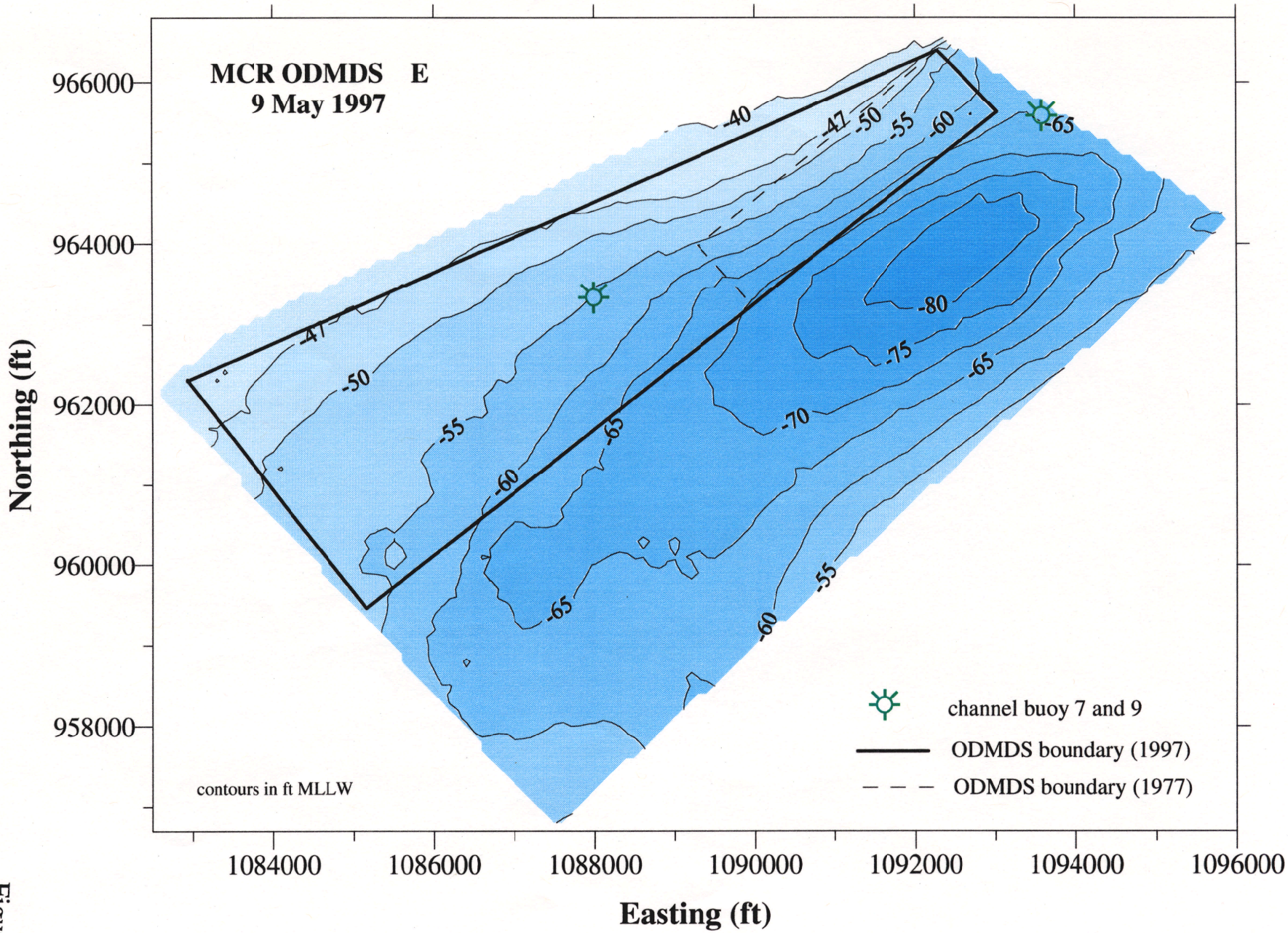
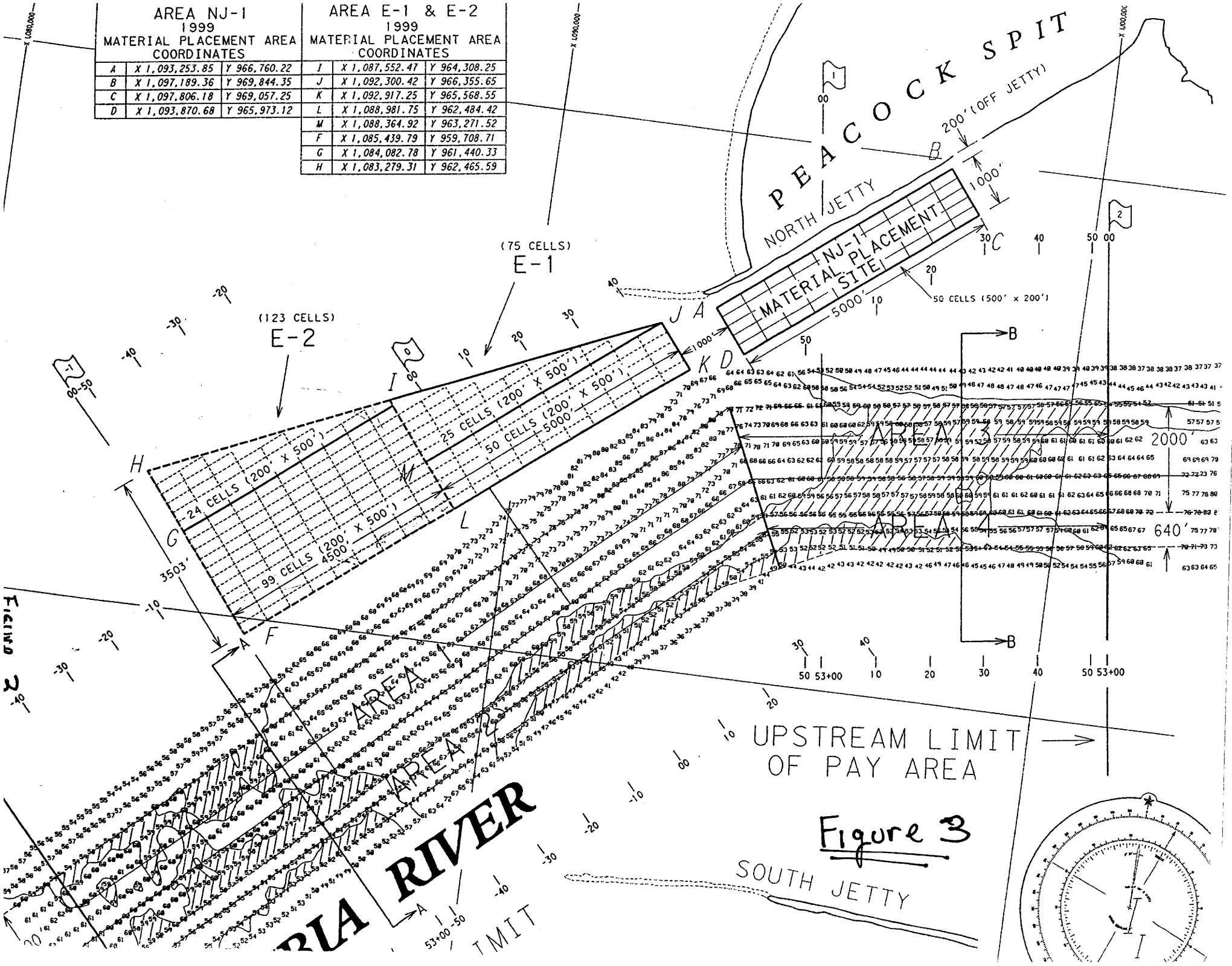


Figure 2

AREA NJ-1 1999 MATERIAL PLACEMENT AREA COORDINATES		
A	X 1,093,253.85	Y 966,760.22
B	X 1,097,189.36	Y 969,844.35
C	X 1,097,806.18	Y 969,057.25
D	X 1,093,870.68	Y 965,973.12

AREA E-1 & E-2 1999 MATERIAL PLACEMENT AREA COORDINATES		
I	X 1,087,552.47	Y 964,308.25
J	X 1,092,300.42	Y 966,355.65
K	X 1,092,917.25	Y 965,568.55
L	X 1,088,981.75	Y 962,484.42
M	X 1,088,364.92	Y 963,271.52
F	X 1,085,439.79	Y 959,708.71
G	X 1,084,082.78	Y 961,440.33
H	X 1,083,279.31	Y 962,465.59



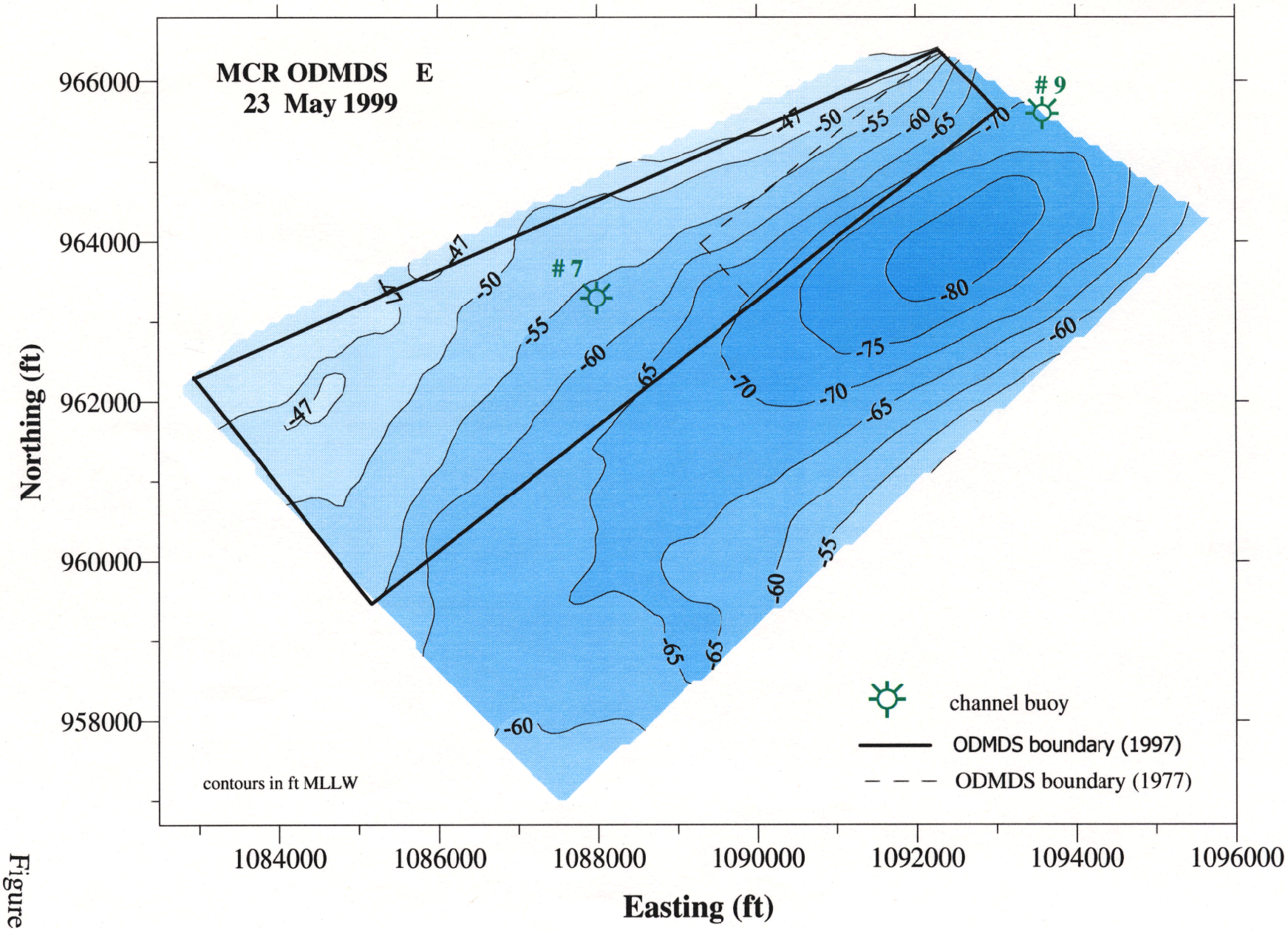

MCR ODMDS E
23 May 1999
7
9
-47
-50
-55
-60
-65
-70
-75
-80
contours in ft MLLW
channel buoy
ODMDS boundary (1997)
ODMDS boundary (1977)
966000
964000
962000
960000
958000
Northing (ft)
1084000
1086000
1088000
1090000
1092000
1094000
1096000
Easting (ft)

Figure 4

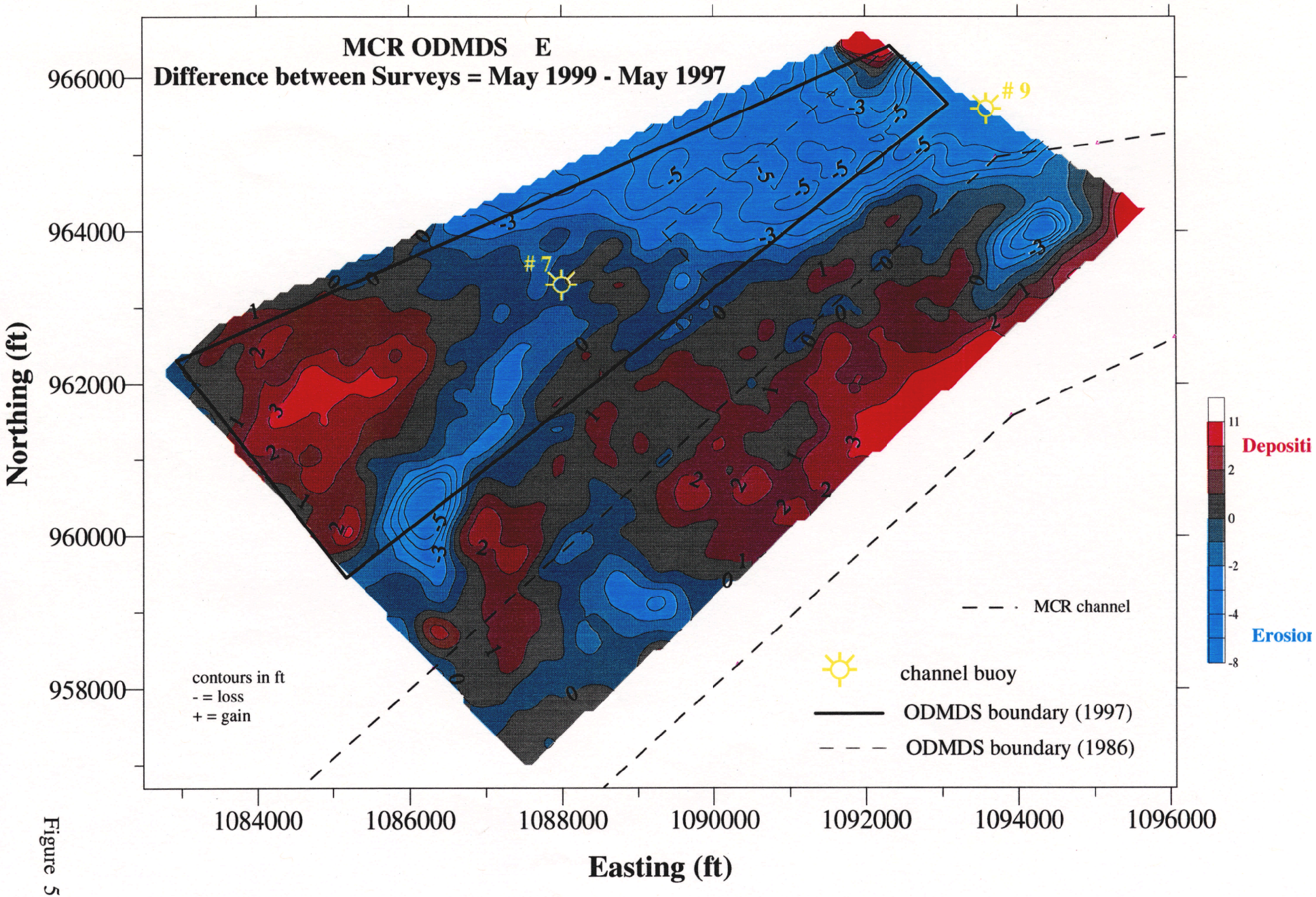

MCR ODMDS E
Difference between Surveys = May 1999 - May 1997
Northing (ft)
Easting (ft)
966000
964000
962000
960000
958000
1084000
1086000
1088000
1090000
1092000
1094000
1096000
7
9
contours in ft
- = loss
+ = gain
MCR channel
channel buoy
ODMDS boundary (1997)
ODMDS boundary (1986)
Depositi
Erosior
11
2
0
-2
-4
-8

Figure 5

Contractor Dredged Material Disposal at ODMDS E during 1999

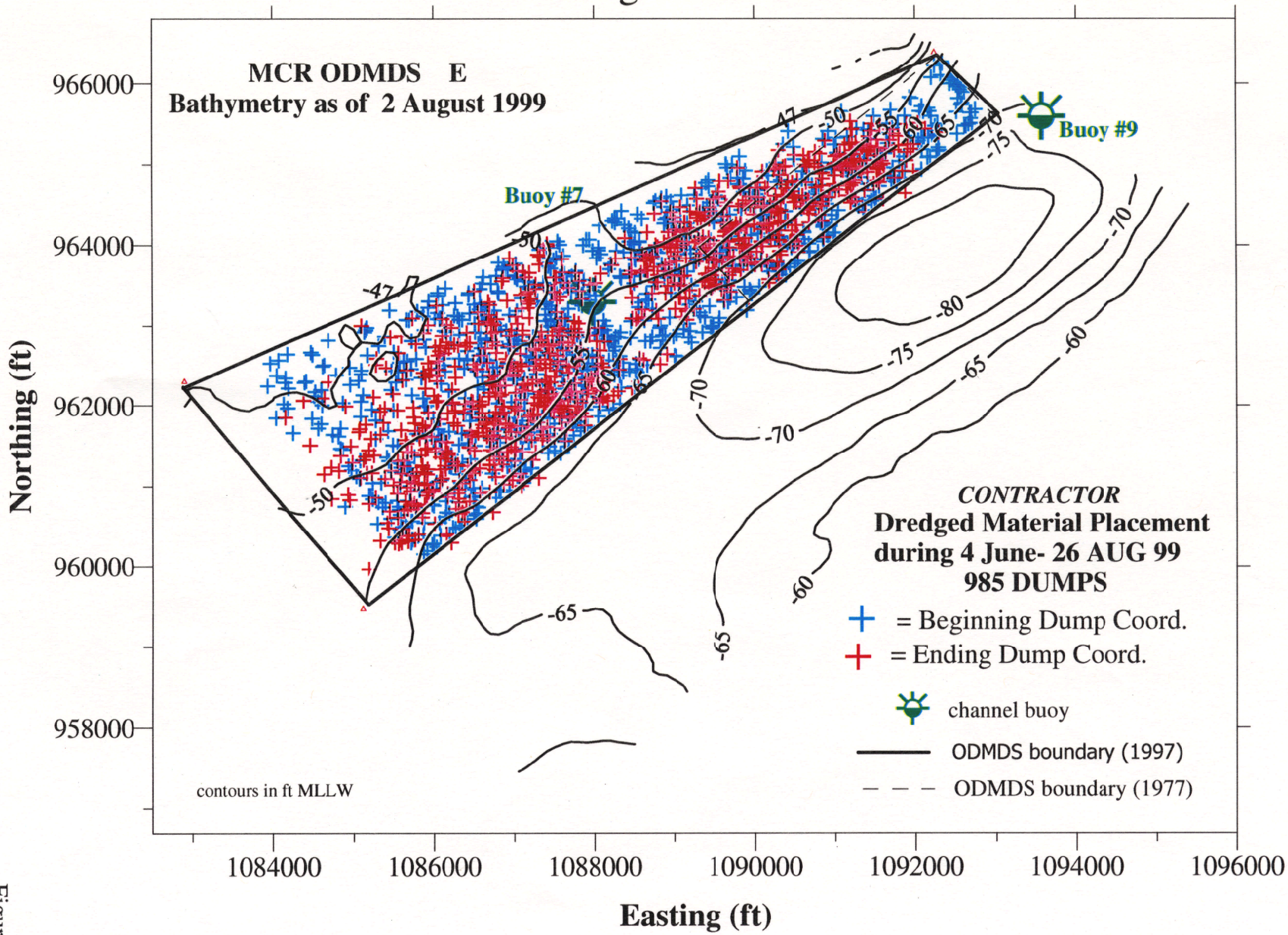


Figure 6

MCR ODMDS E
Accumulation of Dredged Material Placed by the Dredge
Padre Island

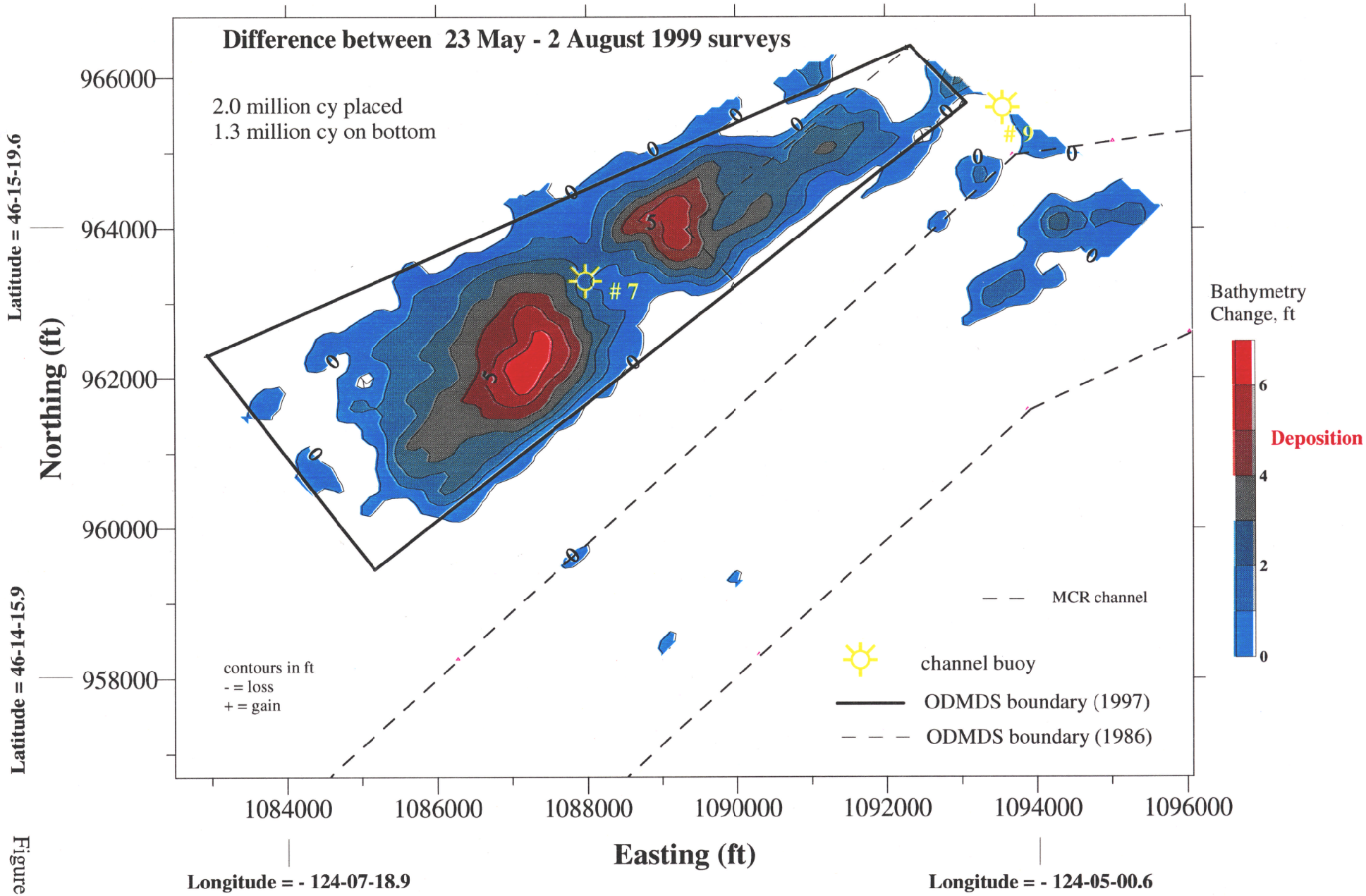


Figure 7

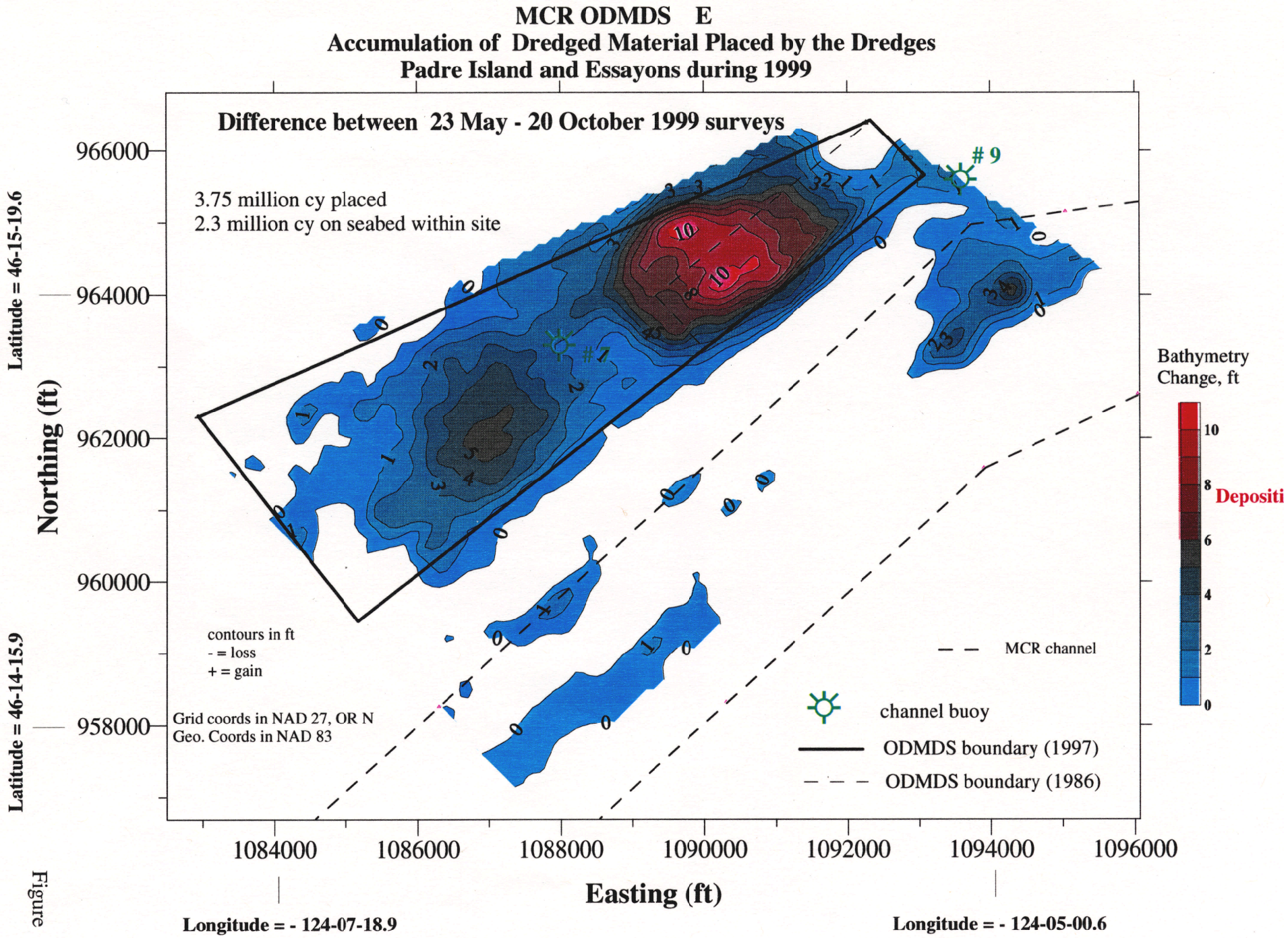

MCR ODMDS E
Accumulation of Dredged Material Placed by the Dredges
Padre Island and Essayons during 1999
Difference between 23 May - 20 October 1999 surveys
3.75 million cy placed
2.3 million cy on seabed within site
contours in ft
- = loss
+ = gain
Grid coords in NAD 27, OR N
Geo. Coords in NAD 83
9
#7
MCR channel
channel buoy
ODMDS boundary (1997)
ODMDS boundary (1986)
Bathymetry Change, ft
Depositi
Northing (ft)
Easting (ft)
Latitude = 46-15-19.6
Latitude = 46-14-15.9
Longitude = - 124-07-18.9
Longitude = - 124-05-00.6

Figure 8

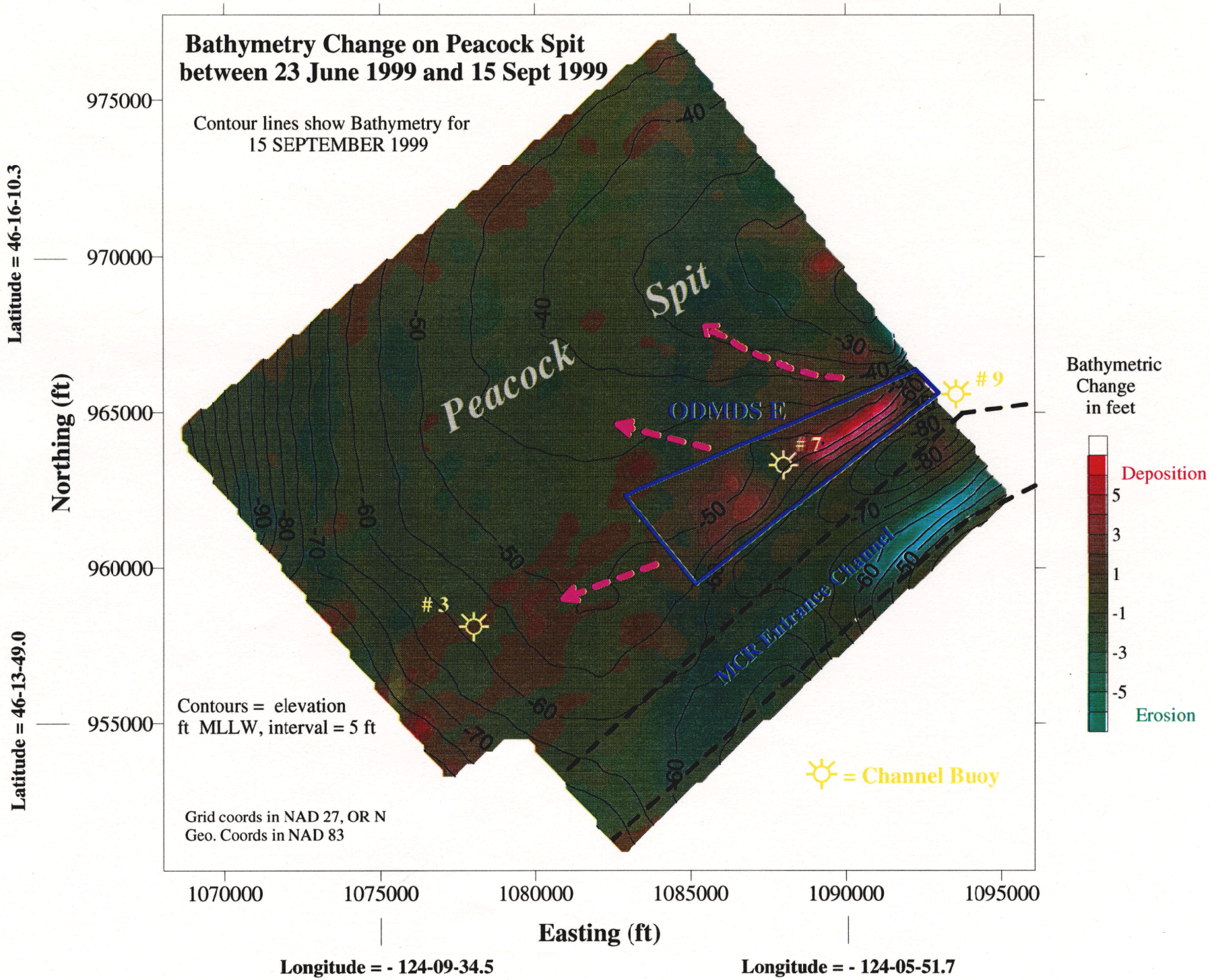

Bathymetry Change on Peacock Spit
between 23 June 1999 and 15 Sept 1999
Contour lines show Bathymetry for
15 SEPTEMBER 1999
Peacock
Spit
ODMDS E
MCR Entrance Channel
# 3
# 7
# 9
Contours = elevation
ft MLLW, interval = 5 ft
Grid coords in NAD 27, OR N
Geo. Coords in NAD 83
= Channel Buoy
Bathymetric
Change
in feet
Deposition
5
3
1
-1
-3
-5
Erosion
975000
970000
965000
960000
955000
Northing (ft)
Latitude = 46-16-10.3
Latitude = 46-13-49.0
1070000
1075000
1080000
1085000
1090000
1095000
Easting (ft)
Longitude = - 124-09-34.5
Longitude = - 124-05-51.7

Figure 9

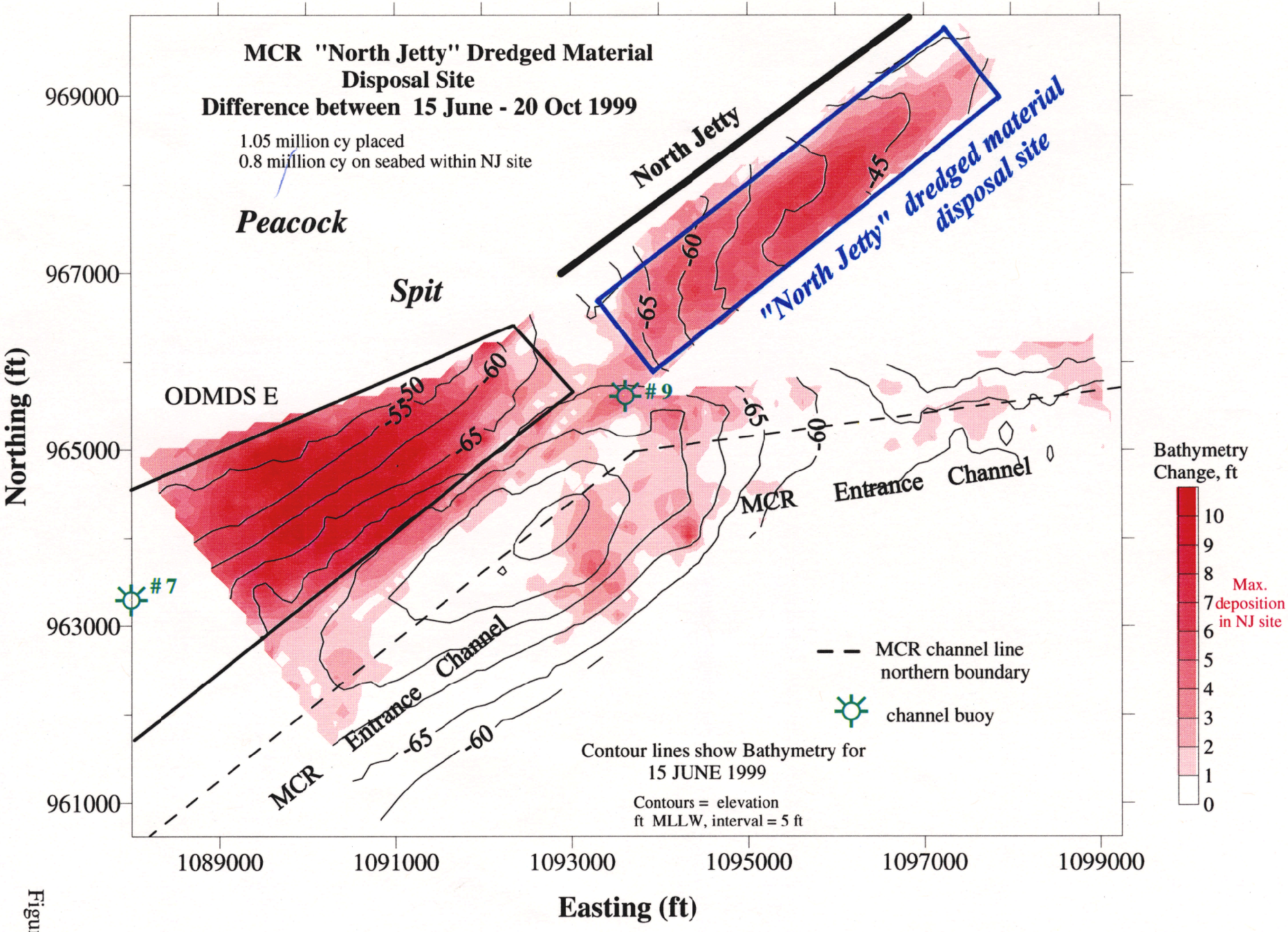

MCR "North Jetty" Dredged Material Disposal Site
Difference between 15 June - 20 Oct 1999
1.05 million cy placed
0.8 million cy on seabed within NJ site
Peacock
Spit
North Jetty
"North Jetty" dredged material disposal site
ODMDS E
-45
-60
-65
-50
-55
9
7
MCR Entrance Channel
MCR channel line northern boundary
channel buoy
Contour lines show Bathymetry for 15 JUNE 1999
Contours = elevation ft MLLW, interval = 5 ft
Bathymetry Change, ft
Max. deposition in NJ site
0
1
2
3
4
5
6
7
8
9
10
Northing (ft)
969000
967000
965000
963000
961000
Easting (ft)
1089000
1091000
1093000
1095000
1097000
1099000

Figure 10

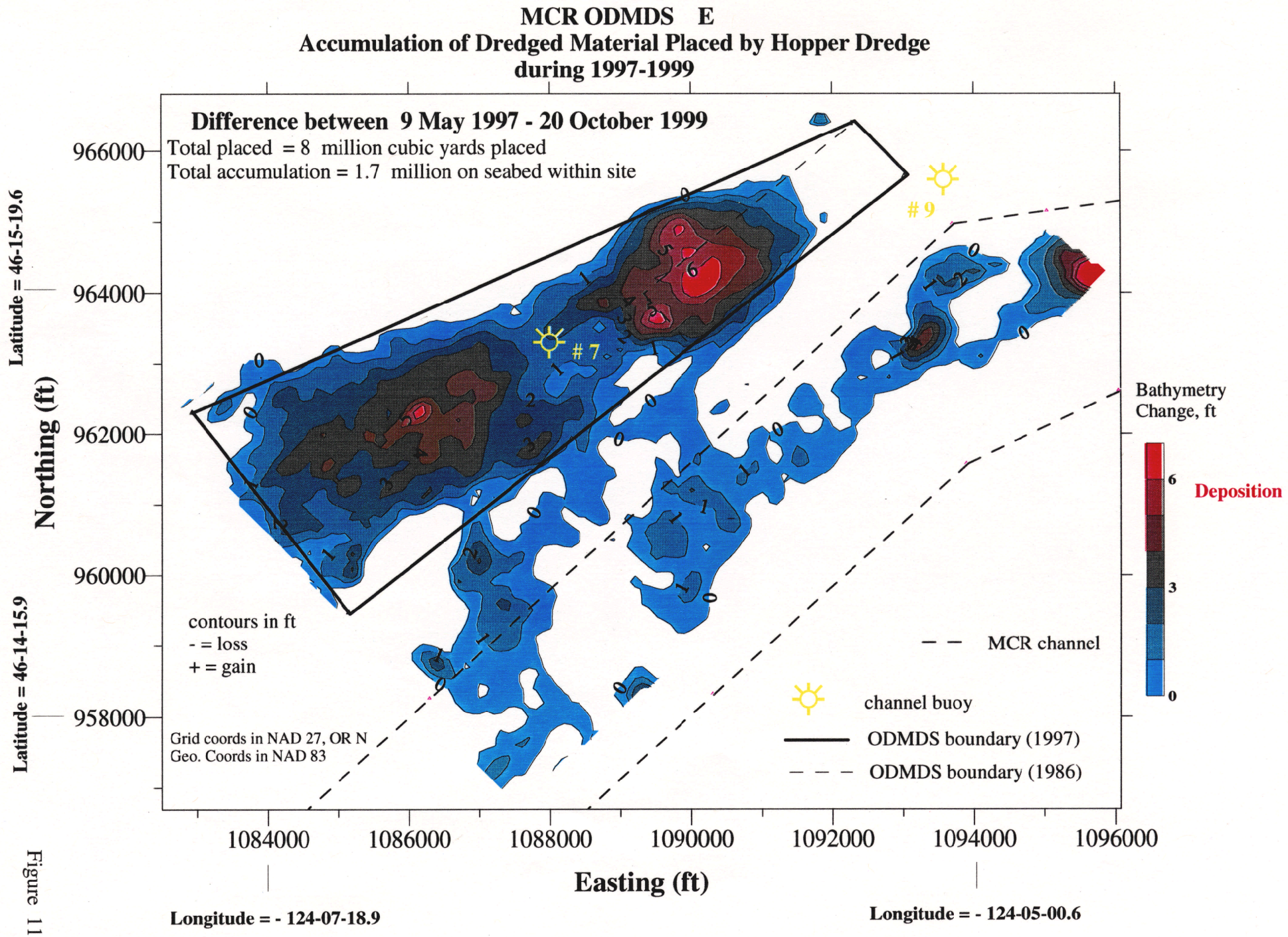

MCR ODMDS E
Accumulation of Dredged Material Placed by Hopper Dredge
during 1997-1999
Difference between 9 May 1997 - 20 October 1999
Total placed = 8 million cubic yards placed
Total accumulation = 1.7 million on seabed within site
7
9
contours in ft
- = loss
+ = gain
Grid coords in NAD 27, OR N
Geo. Coords in NAD 83
MCR channel
channel buoy
ODMDS boundary (1997)
ODMDS boundary (1986)
Bathymetry
Change, ft
Deposition
6
3
0
966000
964000
962000
960000
958000
Northing (ft)
Latitude = 46-15-19.6
Latitude = 46-14-15.9
1084000
1086000
1088000
1090000
1092000
1094000
1096000
Easting (ft)
Longitude = - 124-07-18.9
Longitude = - 124-05-00.6

Figure 11

MCR Bathymetry Difference: 1997 - 1999 within "Wave Analysis Area"

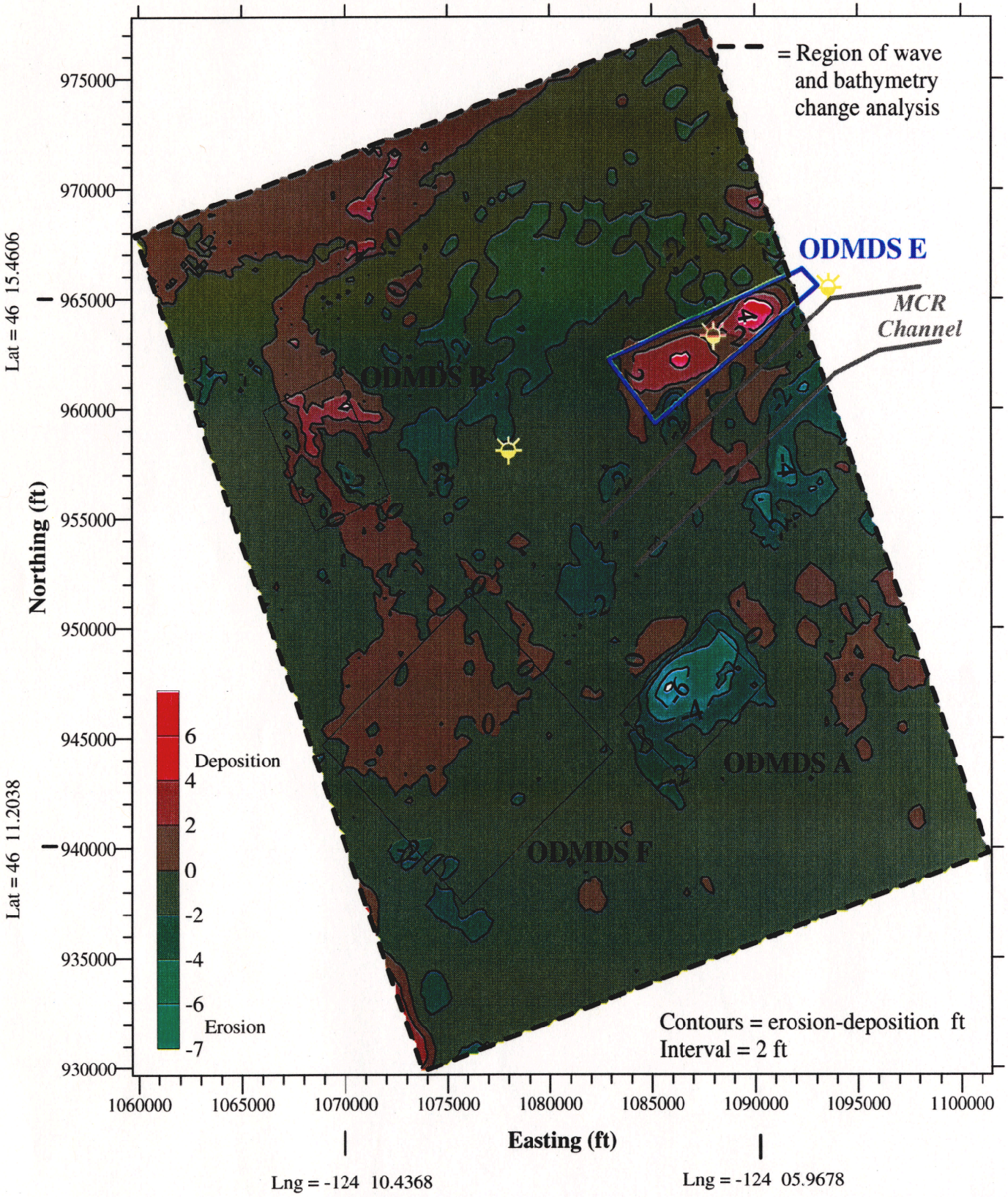
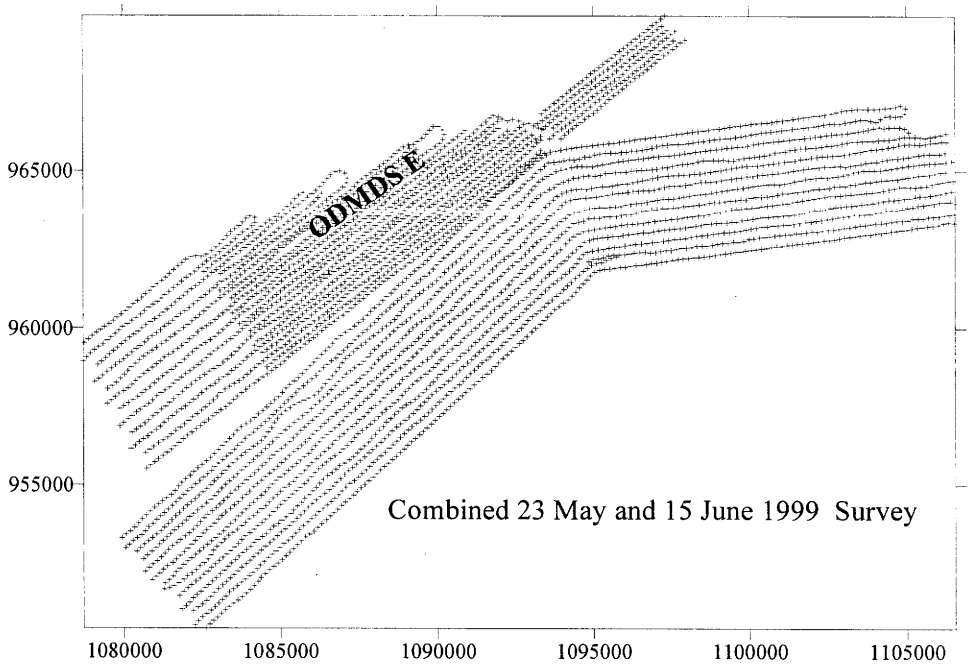


Figure 12


965000
960000
955000
ODMDS-E
Combined 23 May and 15 June 1999 Survey
1080000
1085000
1090000
1095000
1100000
1105000

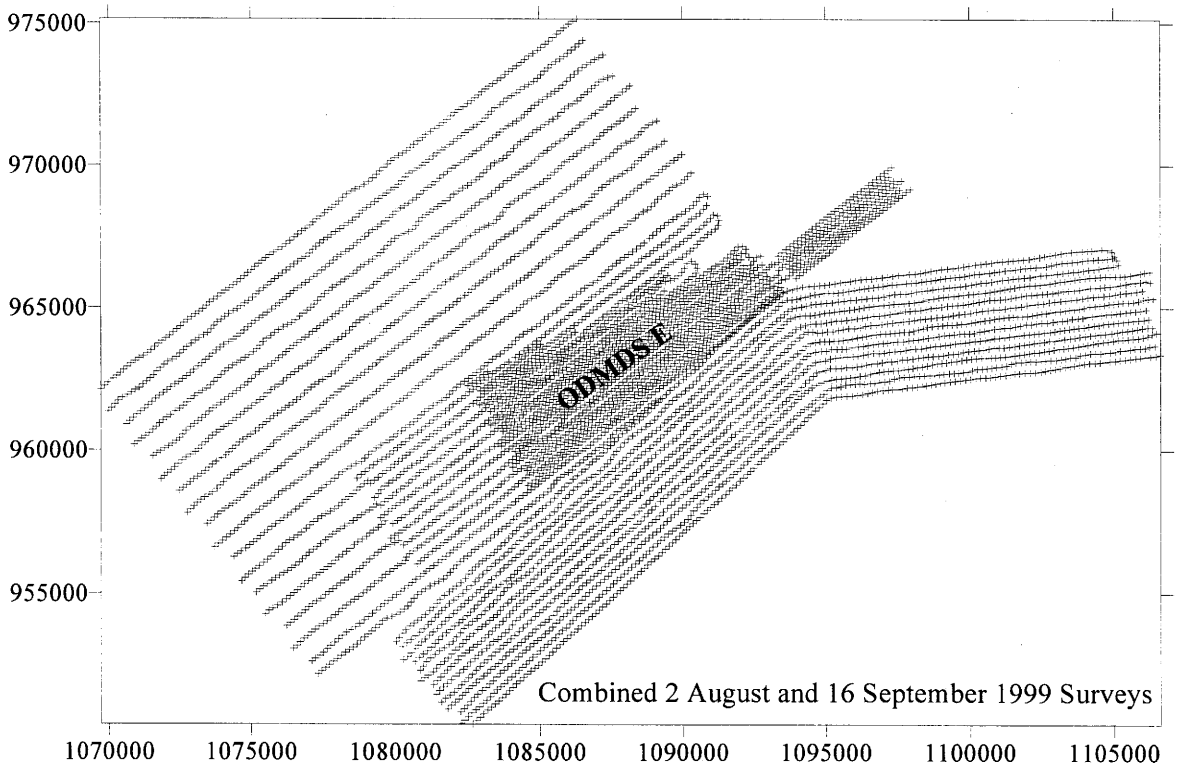

975000
970000
965000
960000
955000
ODMDS-E
Combined 2 August and 16 September 1999 Surveys
1070000
1075000
1080000
1085000
1090000
1095000
1100000
1105000

Figure 14

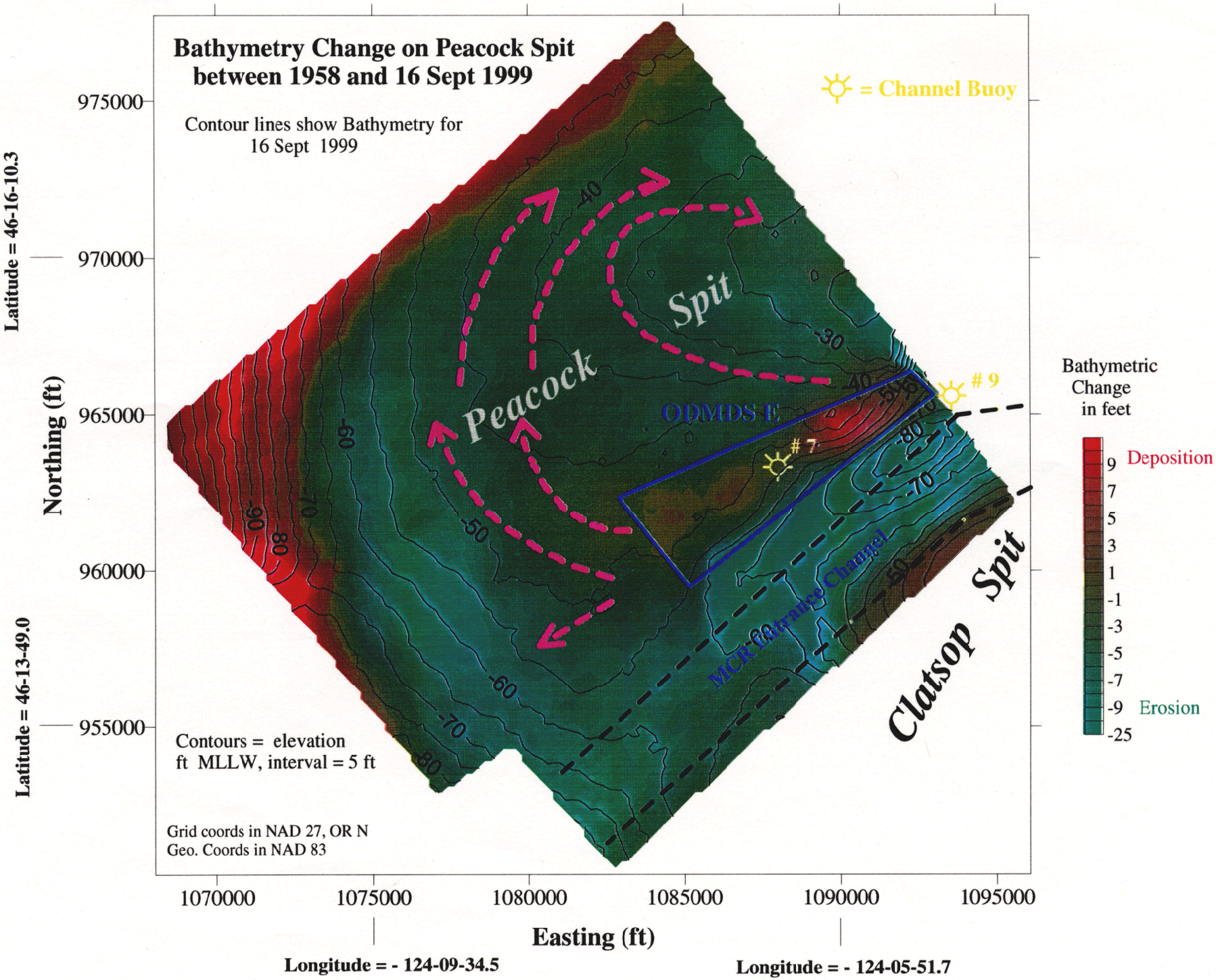

Bathymetry Change on Peacock Spit
between 1958 and 16 Sept 1999
Contour lines show Bathymetry for
16 Sept 1999
= Channel Buoy
Peacock
Spit
ODMDS-E
7
9
MCR Entrance Channel
Clatsop Spit
Contours = elevation
ft MLLW, interval = 5 ft
Grid coords in NAD 27, OR N
Geo. Coords in NAD 83
Bathymetric
Change
in feet
Deposition
Erosion
9
7
5
3
1
-1
-3
-5
-7
-9
-25
975000
970000
965000
960000
955000
Northing (ft)
Latitude = 46-16-10.3
Latitude = 46-13-49.0
1070000
1075000
1080000
1085000
1090000
1095000
Easting (ft)
Longitude = - 124-09-34.5
Longitude = - 124-05-51.7

Figure 13