

101

ISLAND RESOURCES FOUNDATION

MARINE ARCHAEOLOGICAL SURVEY OF WEST INDIAN CO., LTD., PROPOSED DREDGE AREA  
LONG BAY, ST. THOMAS, U.S. VIRGIN ISLANDS

APPENDIXES

TECHNICAL DATA SUPPLEMENT

Final Project Report

Date of Field Investigation: 25 July to 14 August, 1985

Date of Report: 6 September, 1985

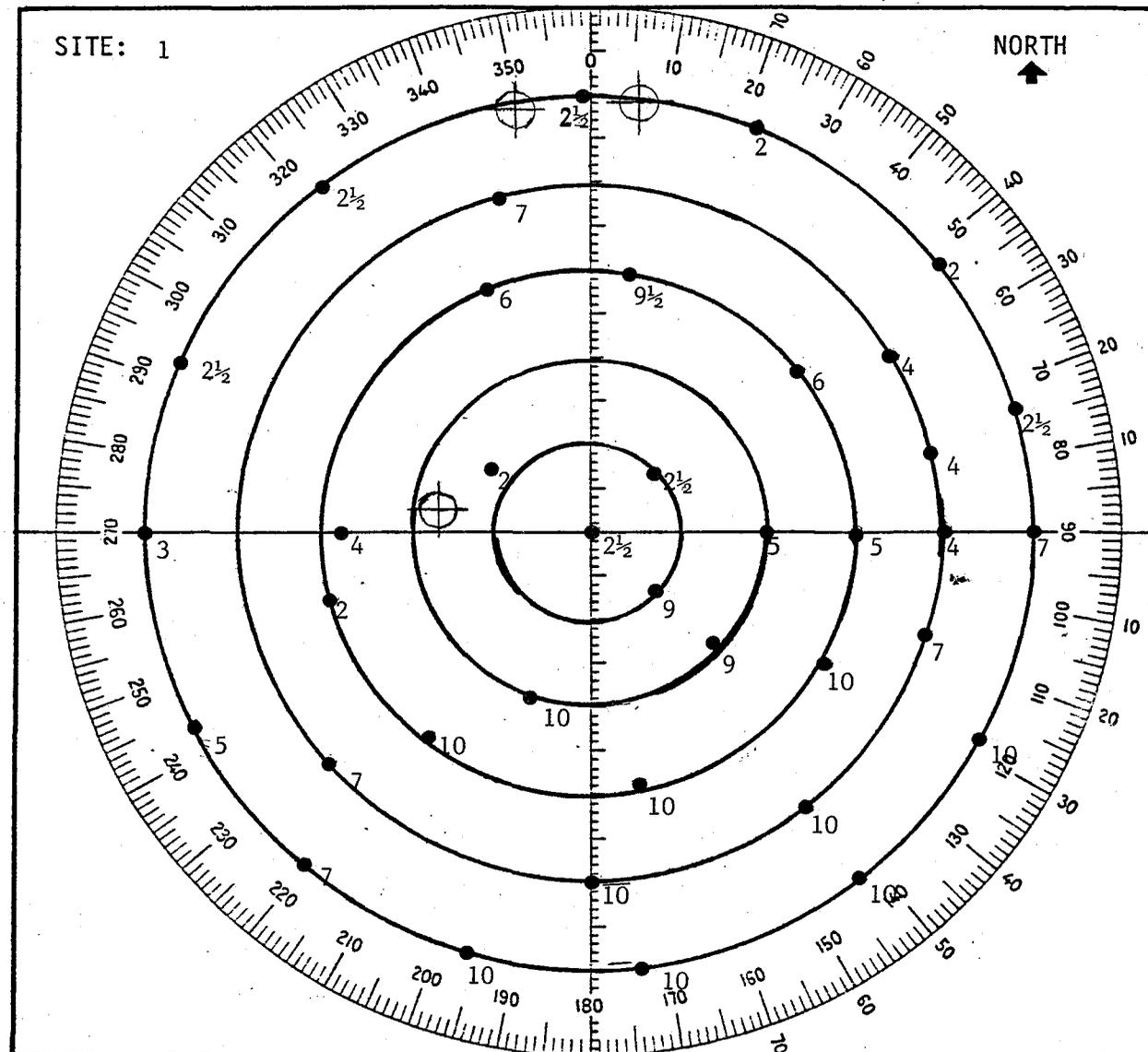
Prepared for the West Indian Co., Ltd.

by

Dr. Edward L. Towle, Project Director

**OFFICE COPY**

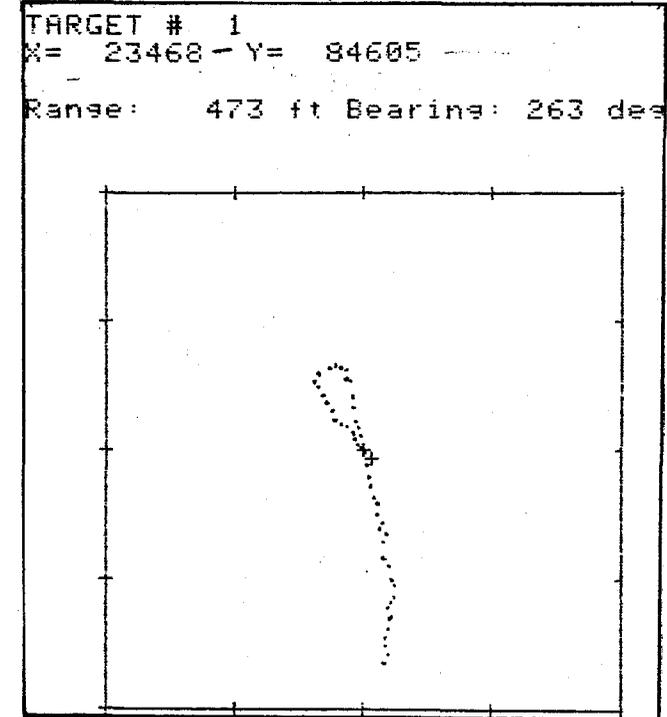
VOLUME II OF TWO VOLUMES



Concentric circle spacing = 1 meter

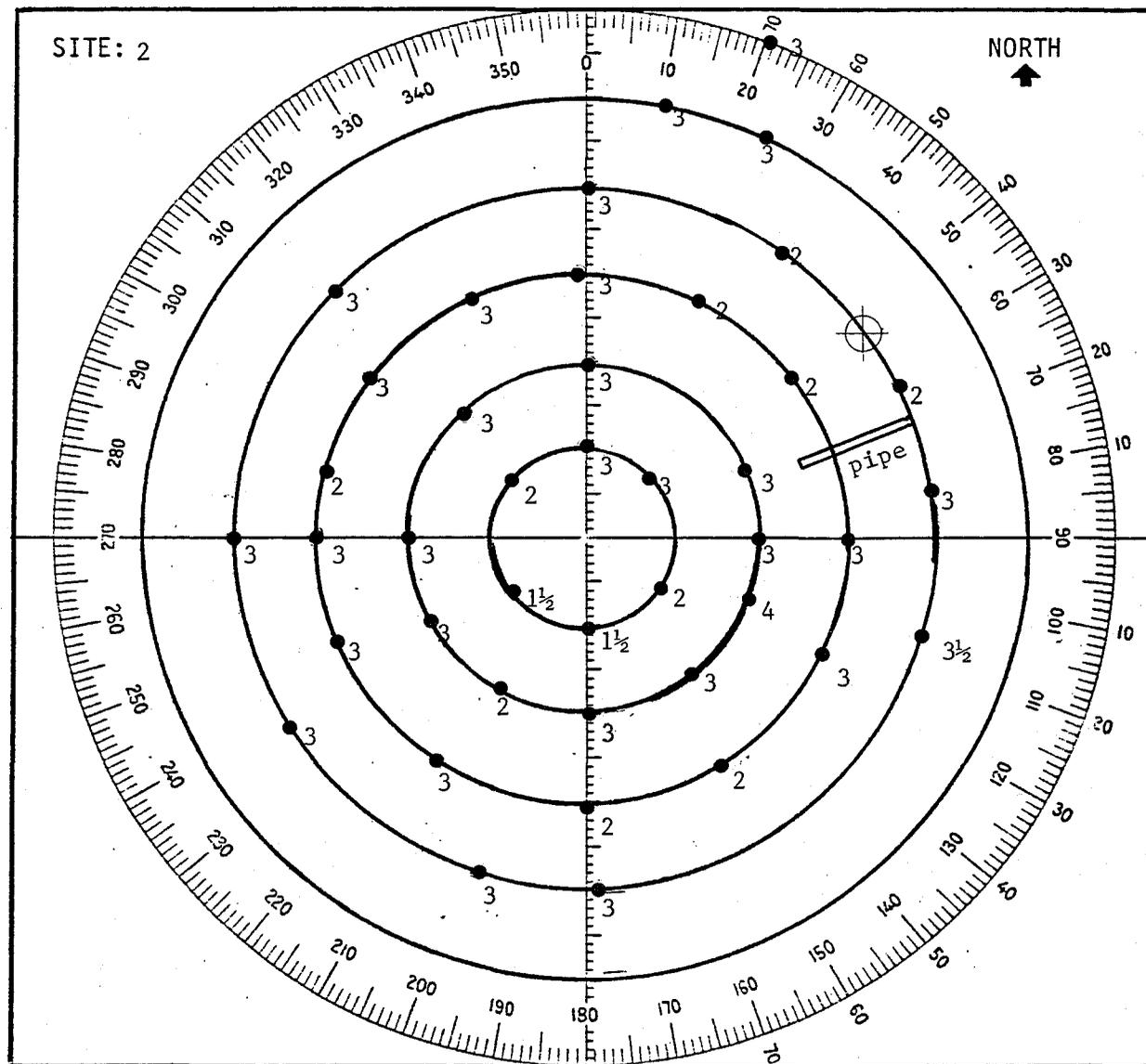
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 1

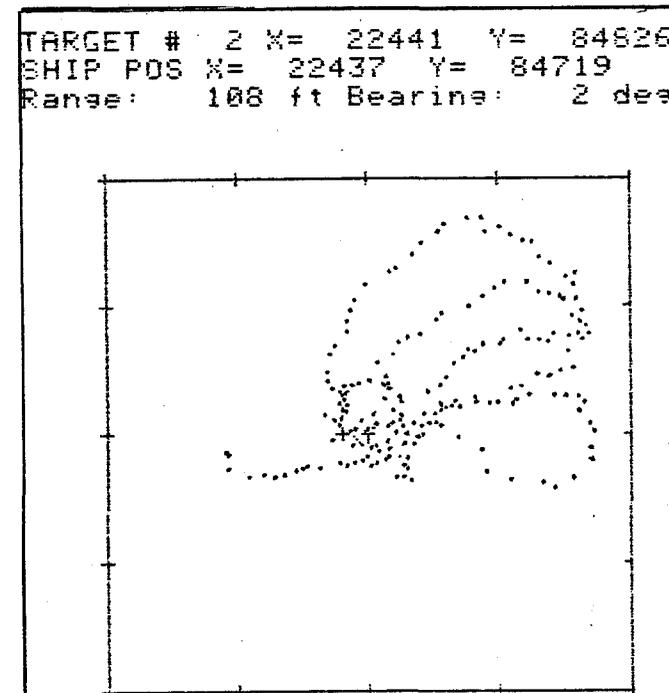
1. Target priority 1
2. Jet probe holes 40
3. Bottom area probed 78 square meters (m<sup>2</sup>)
4. Air lift excavation site(s) 3 Depths: 4 ft., 3 ft., 3 ft.
5. Bottom characteristics: Sand/silt surface, compacted coral rubble and shell at two-to-four foot depth in test holes but slopes steeply nearby to nine or ten feet beneath sea bed.
6. Findings: Negative (miscellaneous coal and broken pieces of red brick, trash)
7. Artifacts: LBI-101, LBI-102



Concentric circle spacing = 1 meter

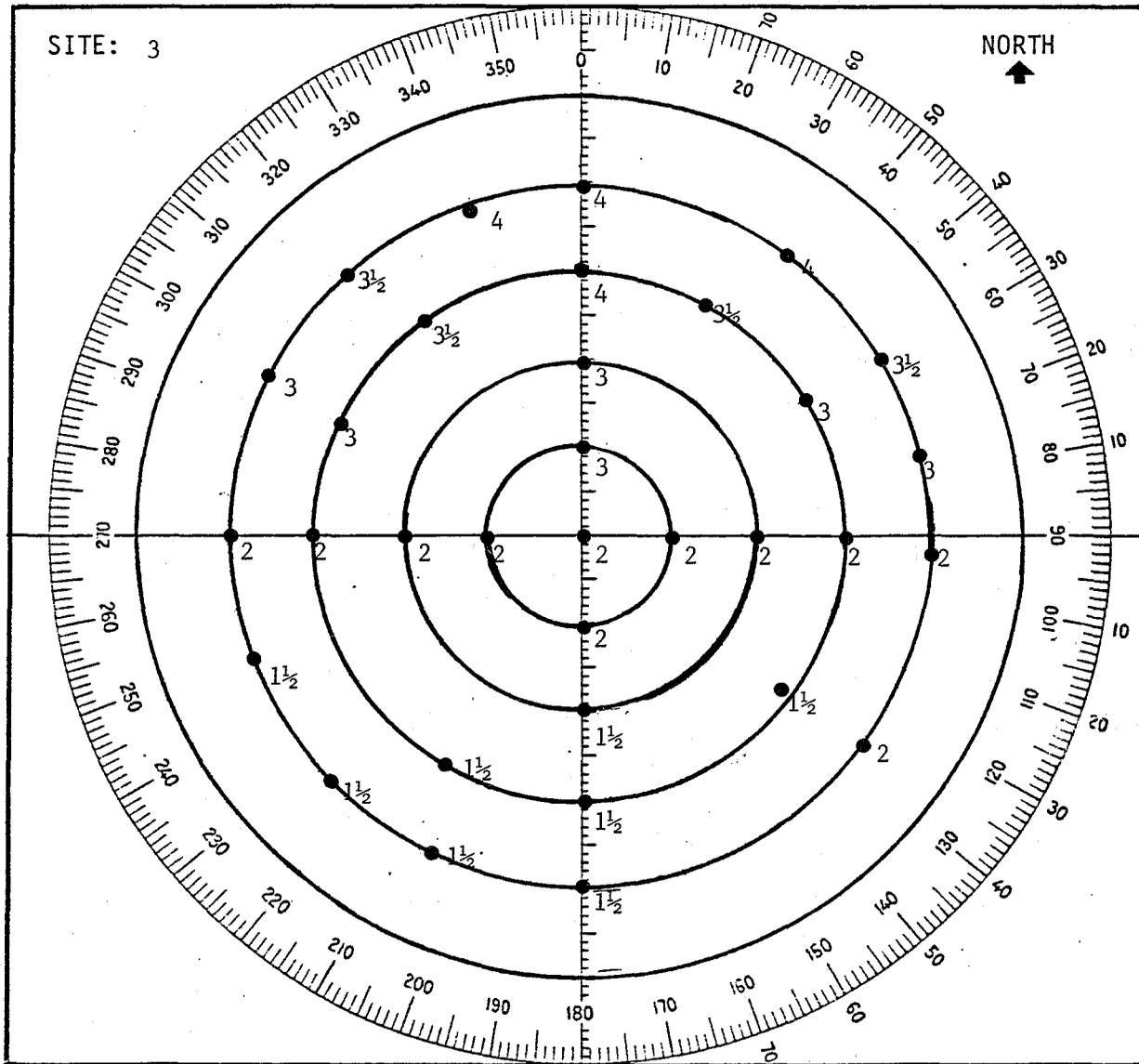
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 2 (on southern boundary)

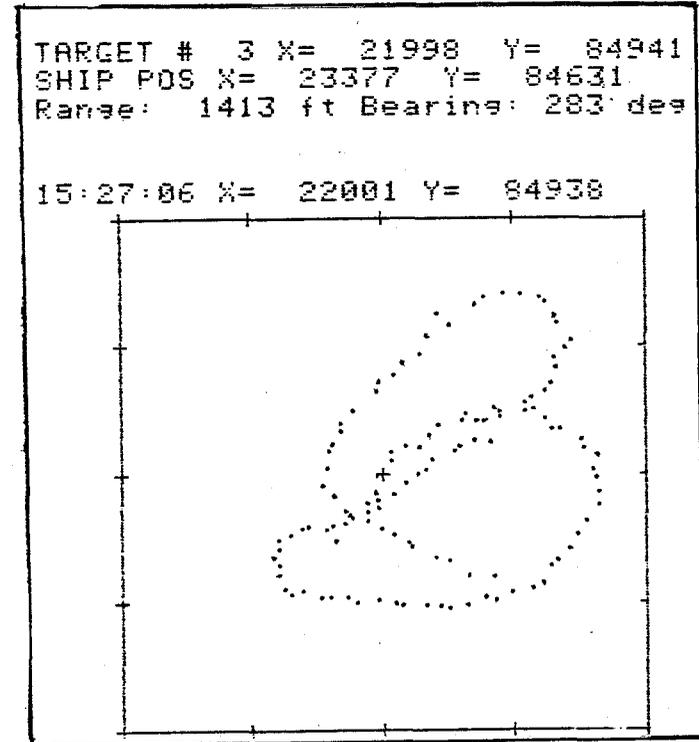
1. Target priority 1 (see also site 6)
2. Jet probe holes 48
3. Bottom area probed 56 square meters (plus probe line to site 6)
4. Air lift excavation site(s) 1 Depth: 5 ft.
5. Bottom characteristics: Two foot to 3" sand/silt layer over heavy broken coral rubble, large heads, impossible to break through - no magnetic signals, except from steel pipe, 5' x 2".
6. Findings: Steel pipe 4 x 3", otherwise negative for site 2 (and 6).
7. Artifacts: LB2-101



Concentric circle spacing = 1 meter

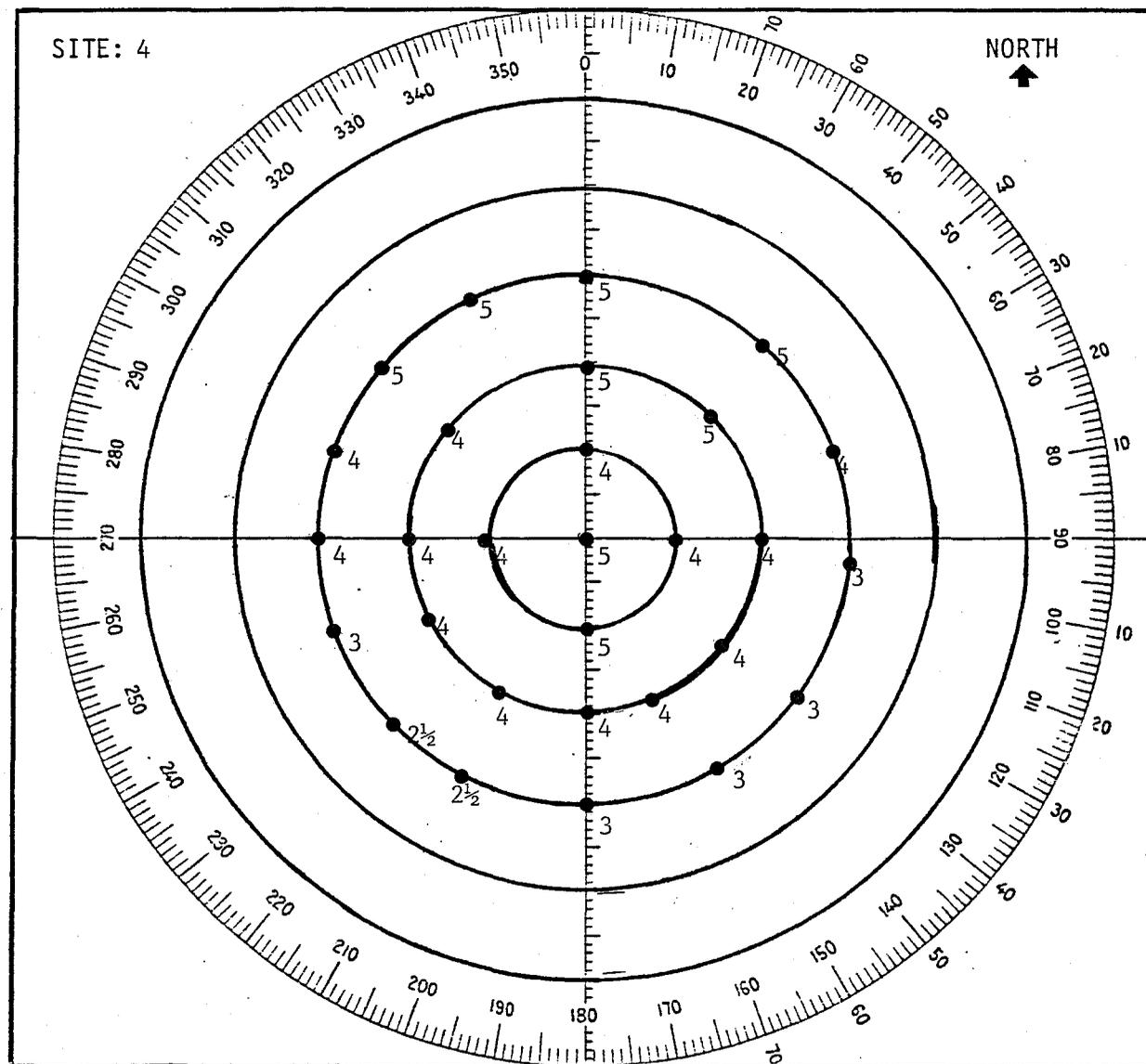
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 3

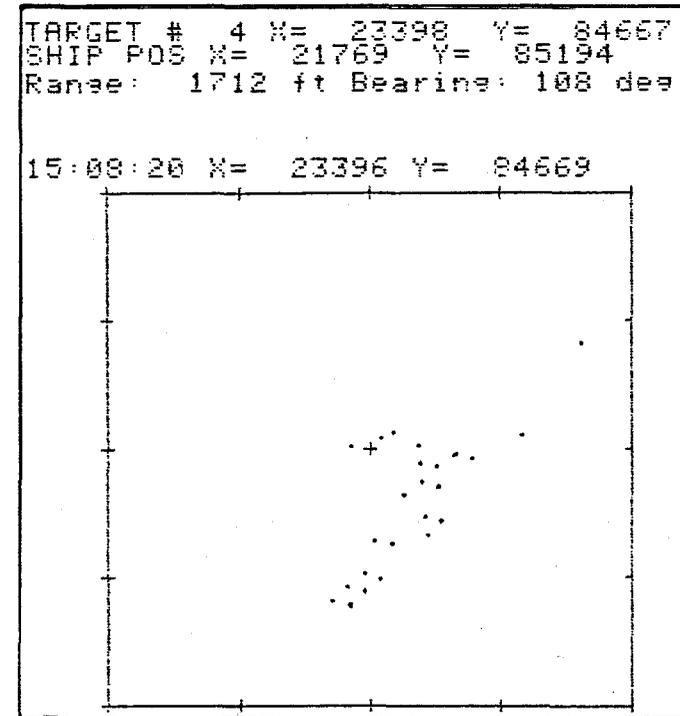
1. Target priority low
2. Jet probe holes 32
3. Bottom area probed 78 square meters
4. Air lift excavation site(s) none
5. Bottom characteristics: Flat; grassy, clay/sand covering hard consolidated sand, coral rubble (1 1/2" to 4' below sea bed).
6. Findings: negative
7. Artifacts: none



Concentric circle spacing = 1 meter

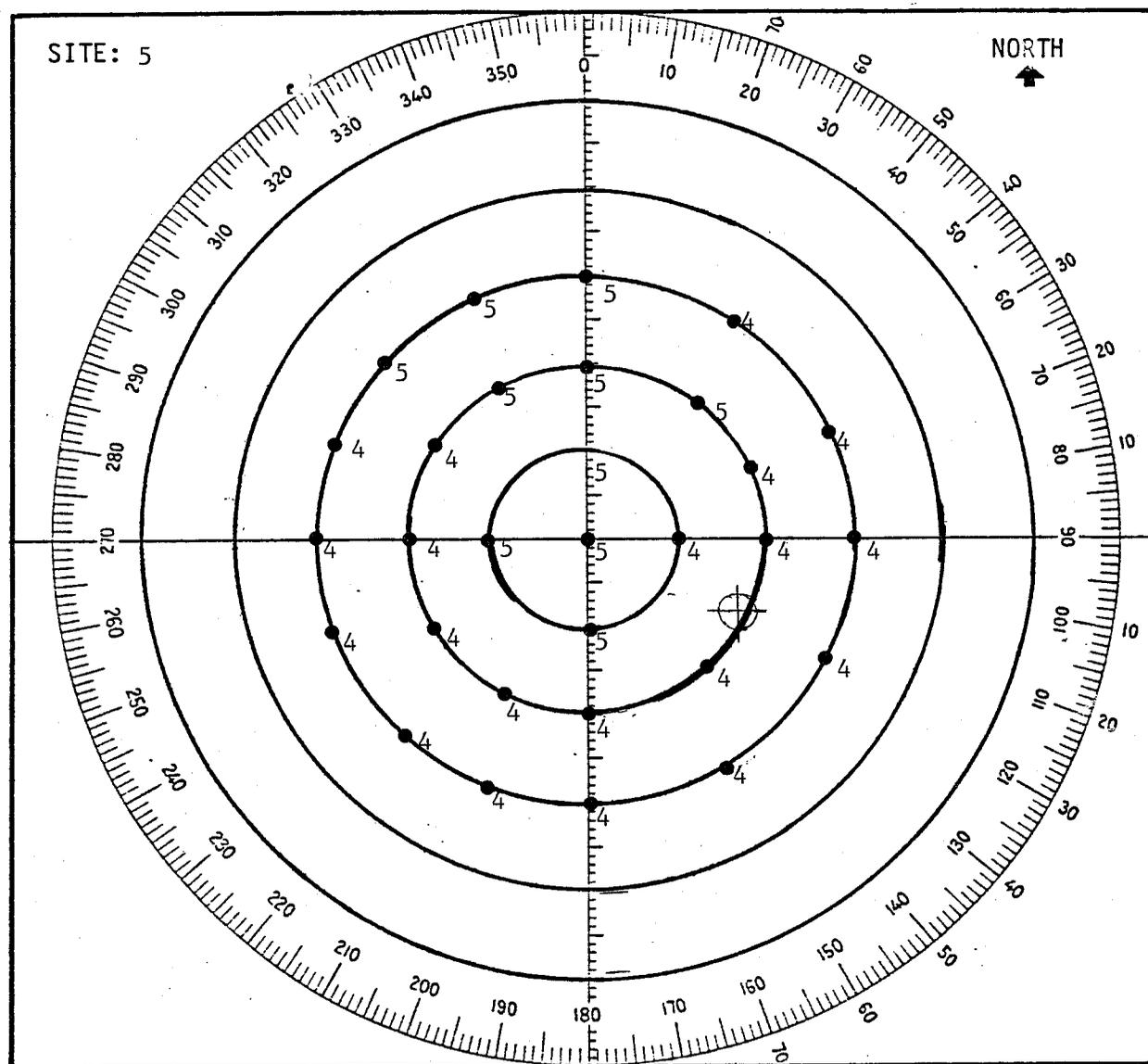
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 4

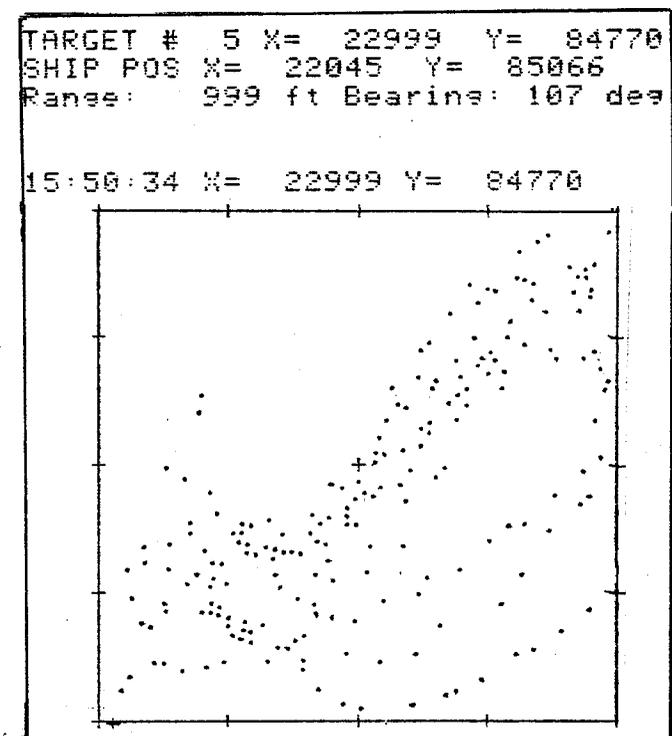
1. Target priority low
2. Jet probe holes 29
3. Bottom area probed 50 square meters
4. Air lift excavation site(s) none (visual, hand probe and mag)
5. Bottom characteristics: Mud/clay/sand sediment layer 4' to 5' thick covering consolidated coral/shell rubble layer as predicted.
6. Findings: Negative
7. Artifacts: None



Concentric circle spacing = 1 meter

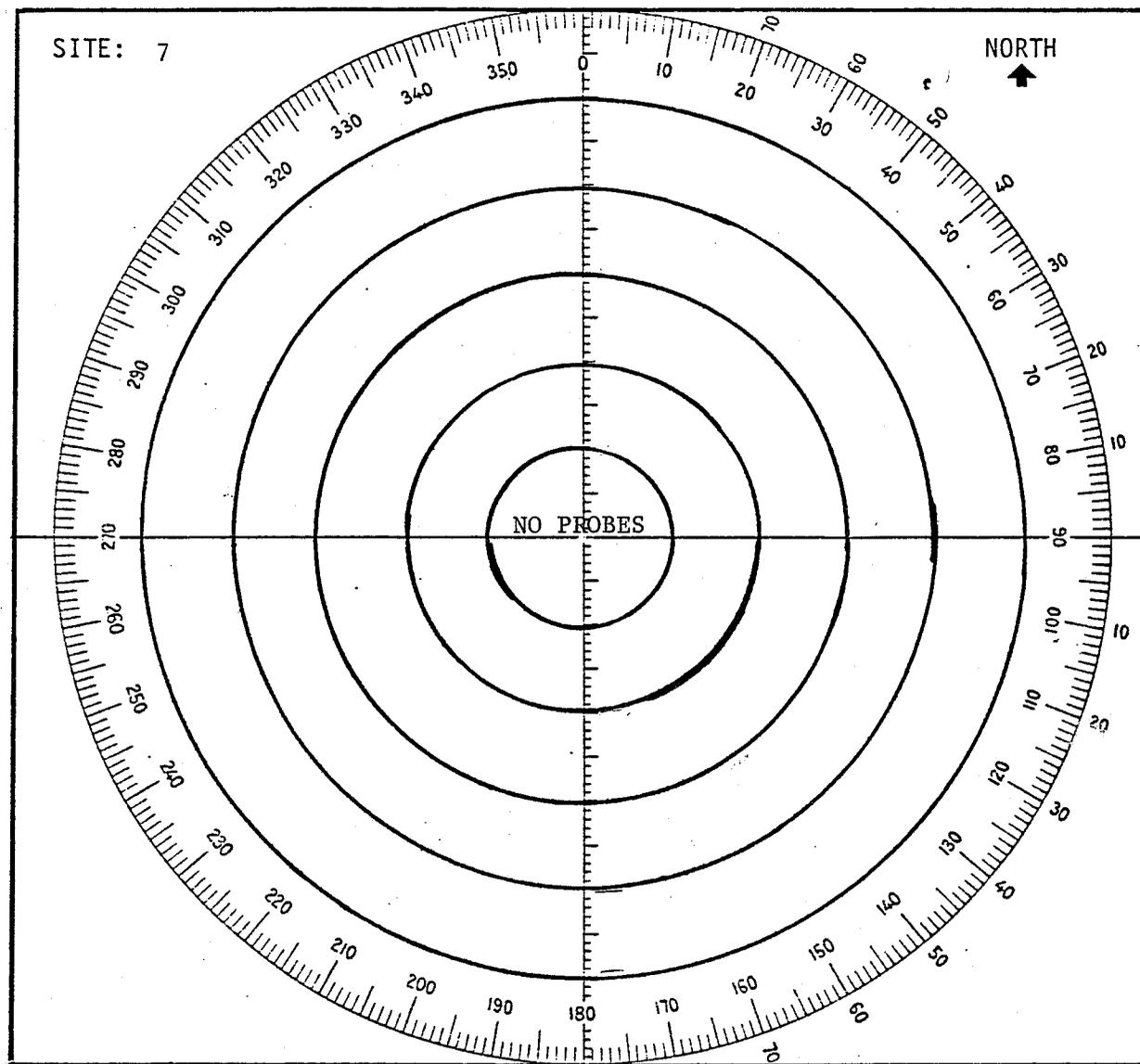
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 5 (see also site 36)

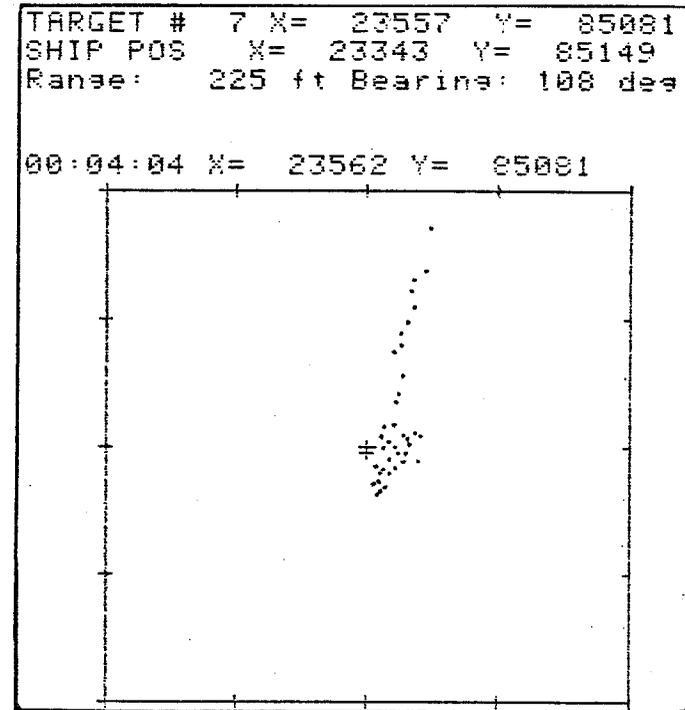
1. Target priority Med.
2. Jet probe holes 30
3. Bottom area probed 56 square meters
4. Air lift excavation site(s) 1 Depth: 6½ ft.
5. Bottom characteristics: Clay/sand to 4' to 5', overlaying a coral rubble/shell base - hard packed.
6. Findings: Negative
7. Artifacts: LB5-101



Concentric circle spacing = 1 meter

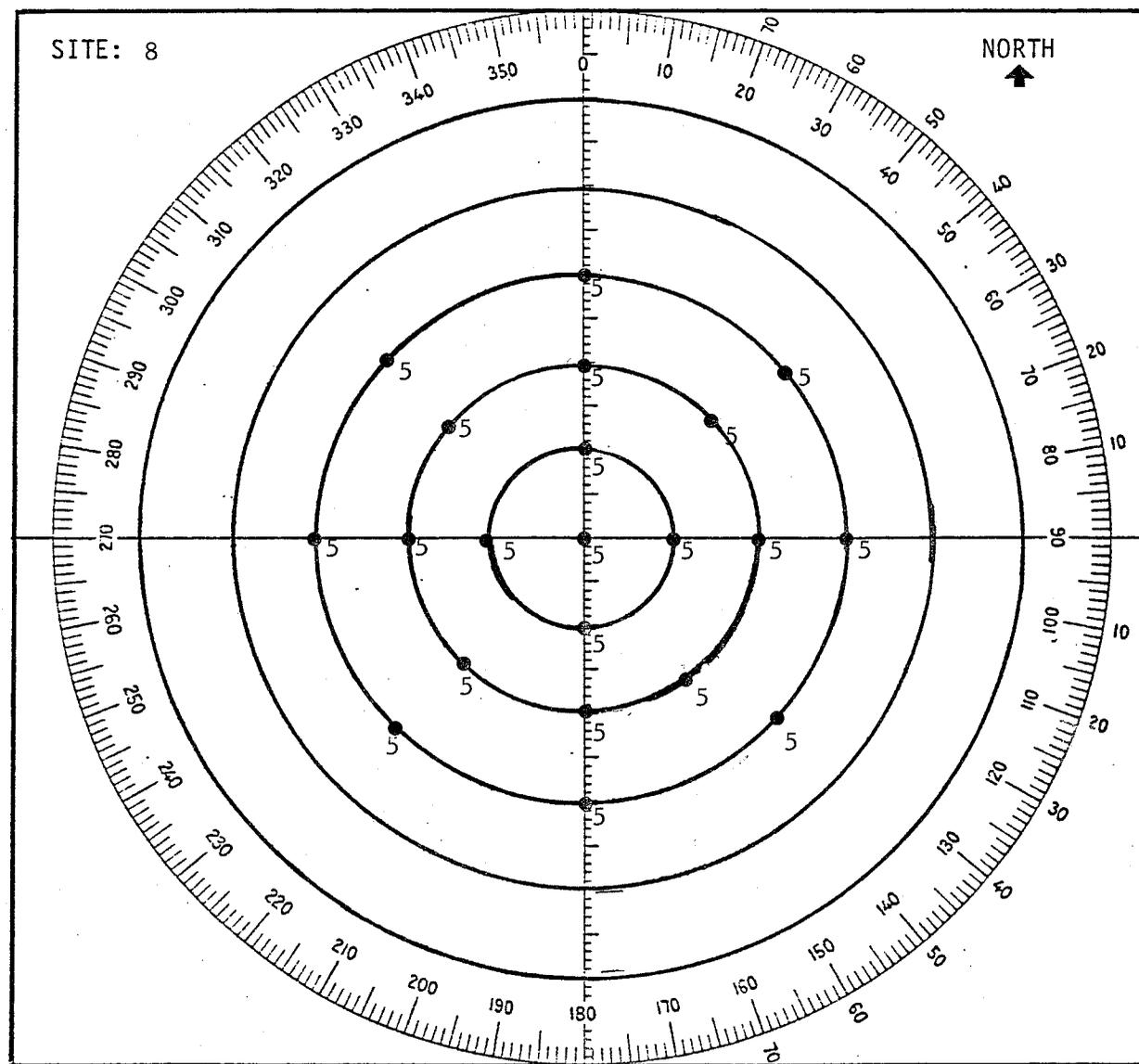
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 7

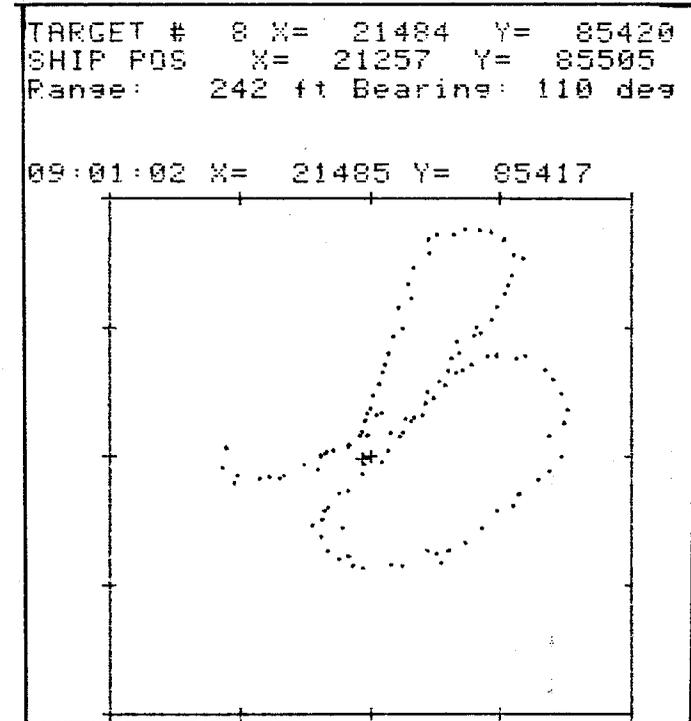
1. Target priority Med.
2. Jet probe holes None; (a) outside boundary, (b) yachts in way.
3. Bottom area probed: By hand with re-bar.
4. Air lift excavation site(s) None
5. Bottom characteristics: Trashy area, sand/silt.
6. Findings: None
7. Artifacts: None



Concentric circle spacing = 1 meter

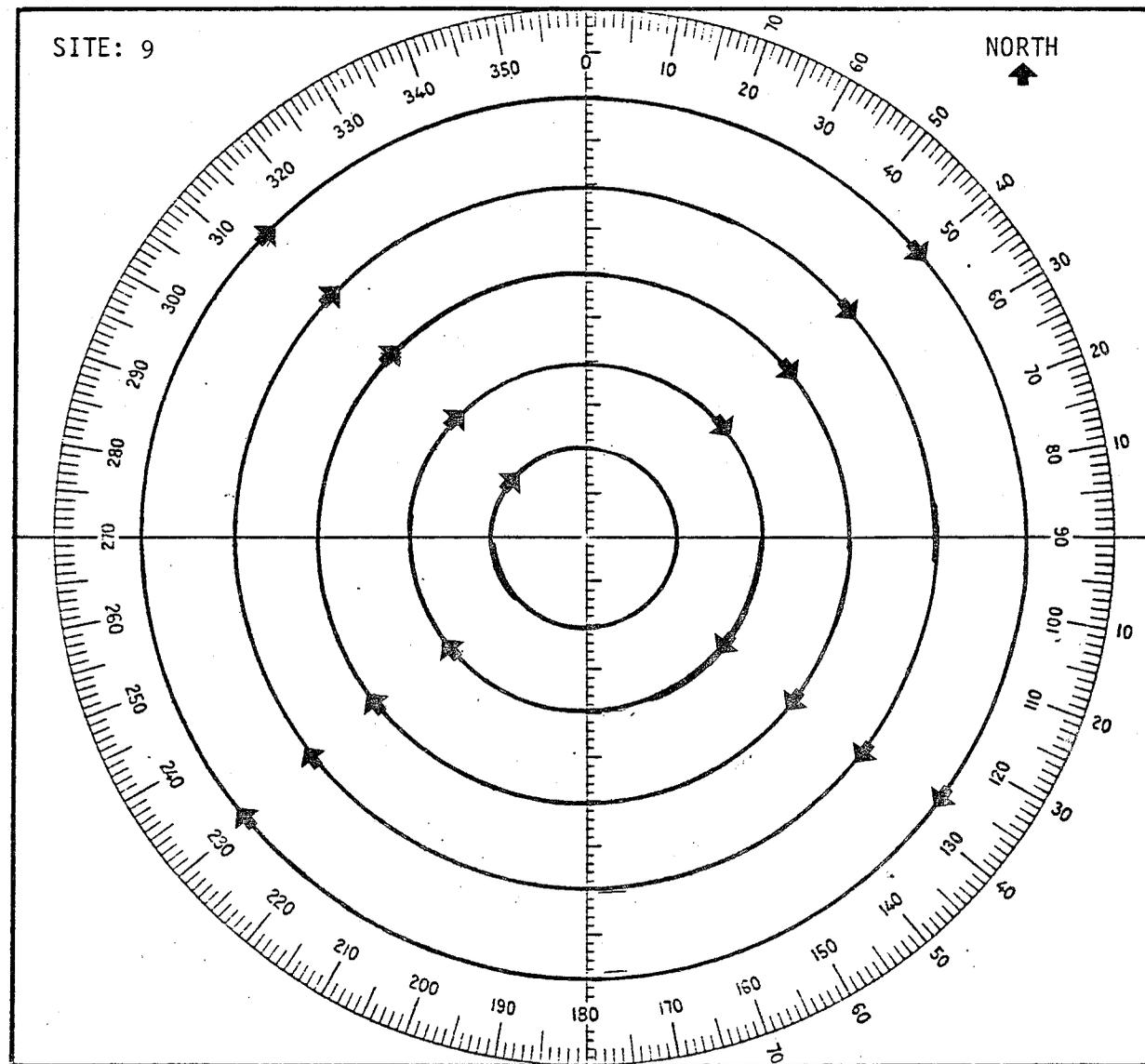
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 8

1. Target priority Low
2. Jet probe holes 22
3. Bottom area probed 50 square meters
4. Air lift excavation site(s) None
5. Bottom characteristics: Mud/clay, very hard and flat at 5' penetration. Unable to break through.
6. Findings: Negative (no magnetic indications)
7. Artifacts: None



Concentric circle spacing = 1 meter

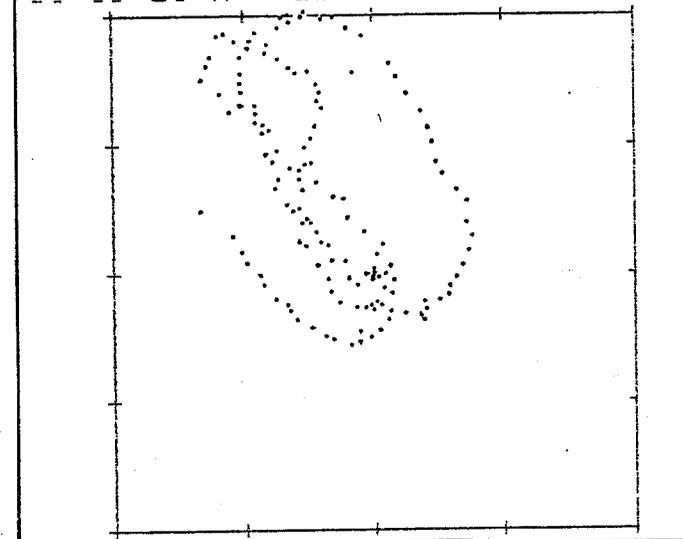
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations

➤ = Negative magnetometer sweeps to 8' sediment depths.

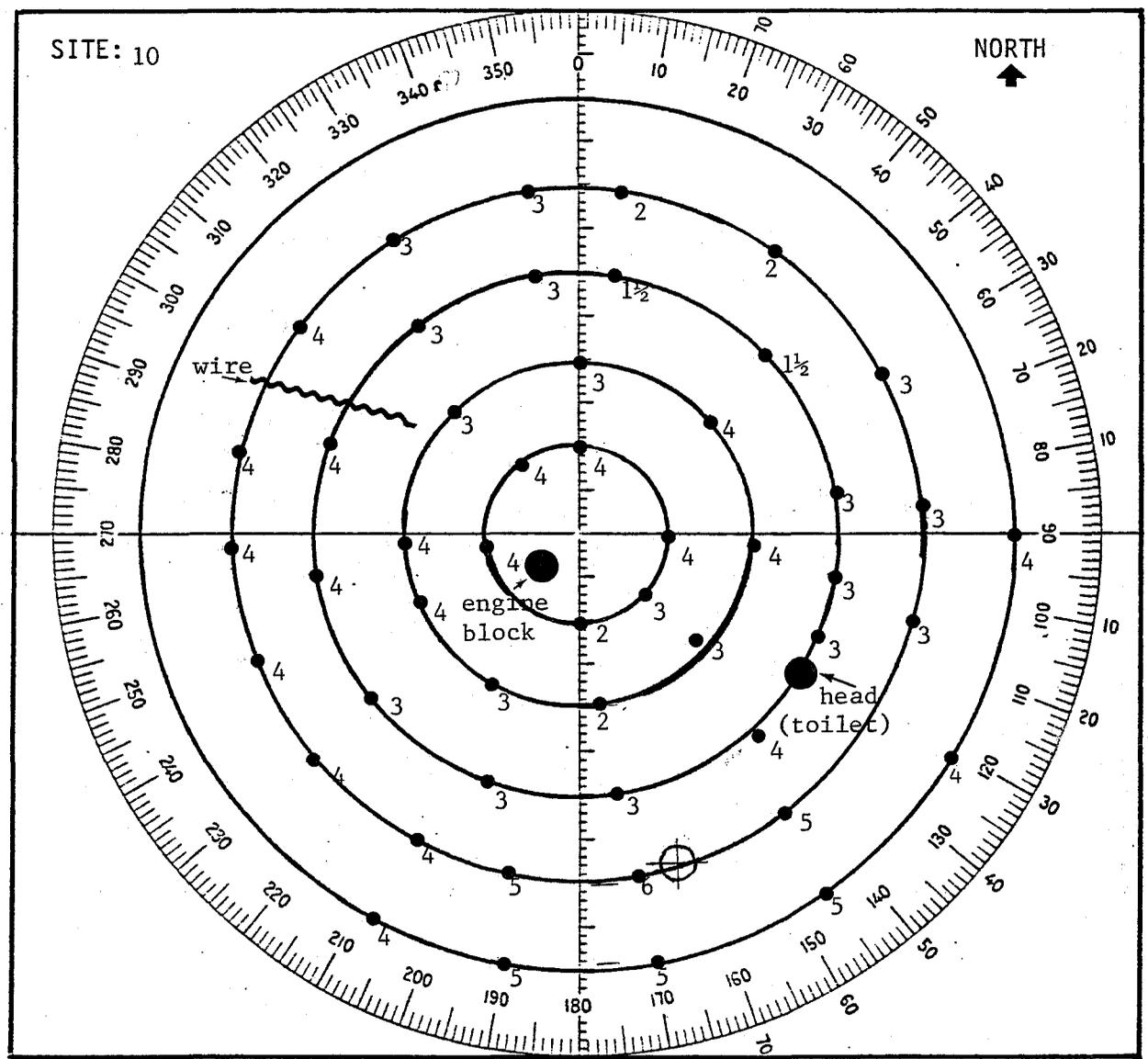
TARGET # 9 X= 22462 Y= 85294  
SHIP POS X= 21740 Y= 85004  
Range: 778 ft Bearing: 68 deg

10:09:24 X= 22465 Y= 85302  
10:09:25 X= 22463 Y= 85296



SITE/TARGET 9 (see also #22 and #25)

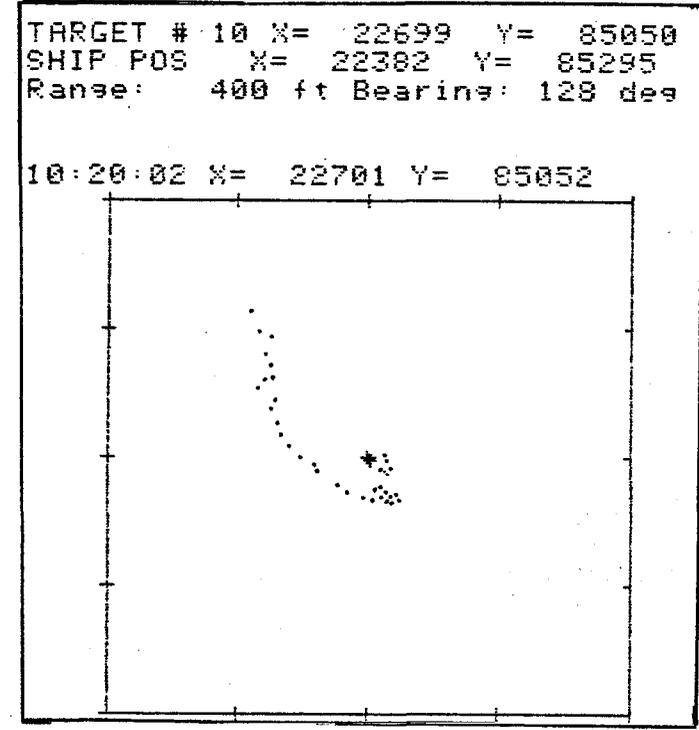
1. Target priority Low
2. Jet probe holes None (visual, hand magnetometer only).
3. Bottom area surveyed 28 square meters (magnetometer to 8' depth)
4. Air lift excavation site(s) None
5. Bottom characteristics: Sand/clay, modern debris.
6. Findings: Negative
7. Artifacts: None



Concentric circle spacing = 1 meter

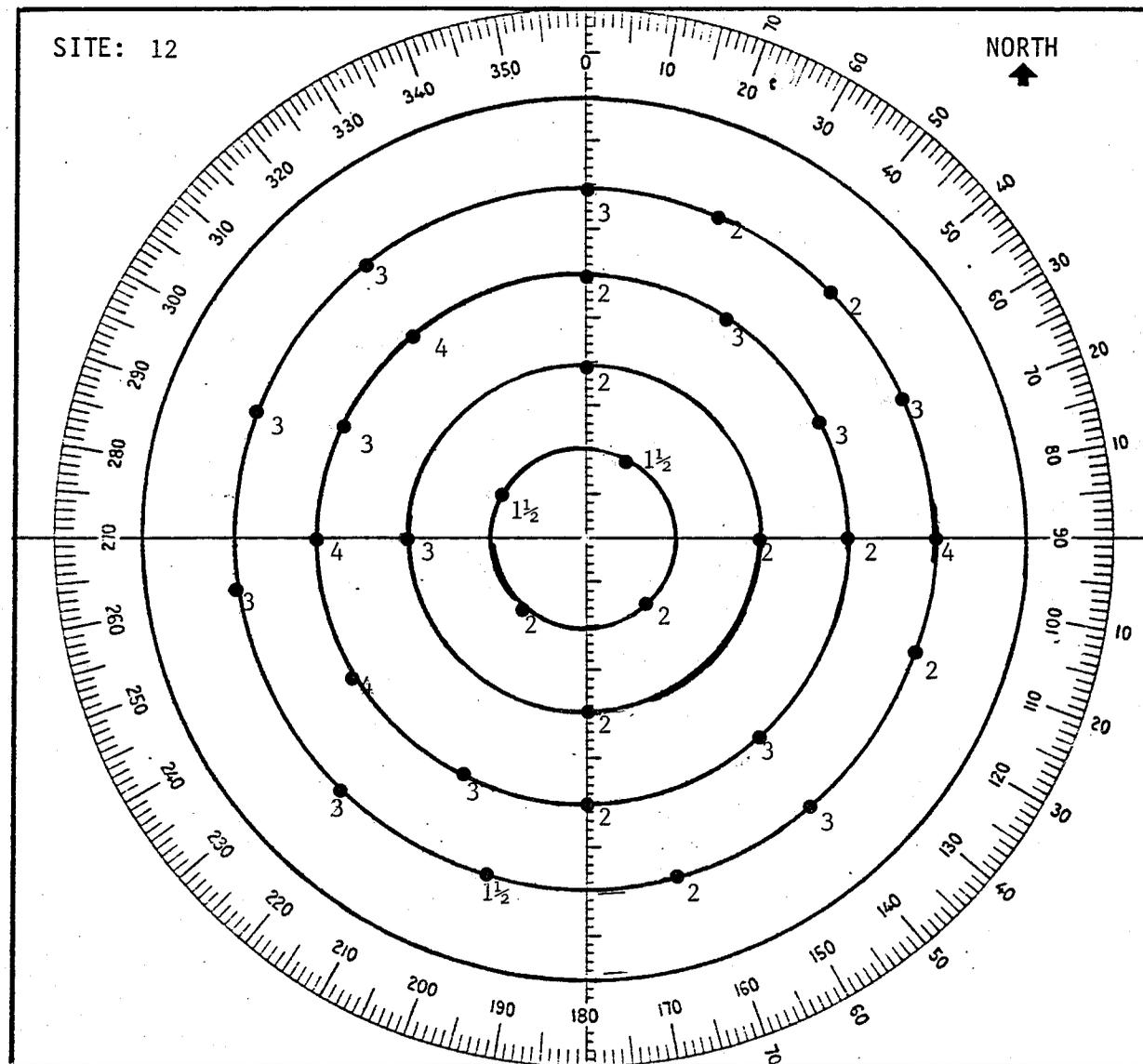
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 10 (part of cluster, with 11, 19 & 37)

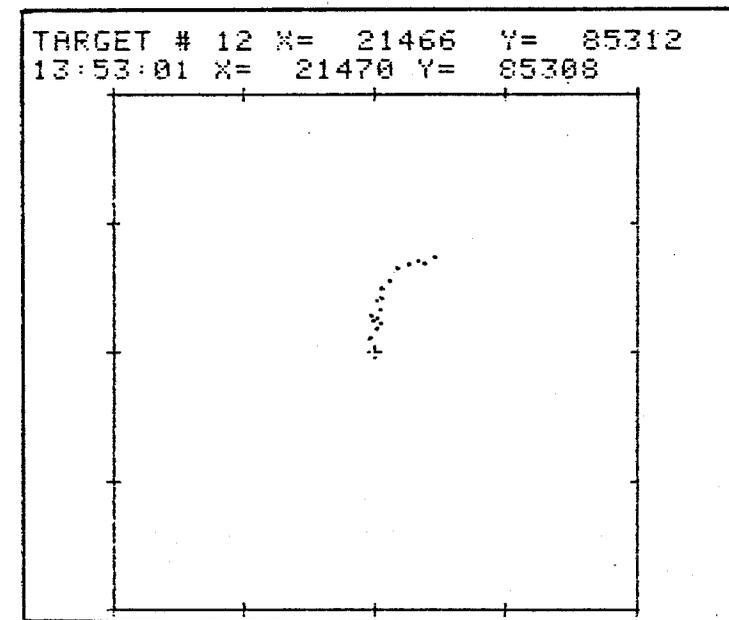
1. Target priority Med.
2. Jet probe holes 50
3. Bottom area probed 50 square meters (plus negative mag. sur.)
4. Air lift excavation site(s) One to 6' depth to hard coral rubble
5. Bottom characteristics: Sand/clay, 2-6' thick, over hard consolidated rubble coral/shell.
6. Findings: Negative (much ferrous debris)
7. Artifacts: 10-101, 10-102



Concentric circle spacing = 1 meter

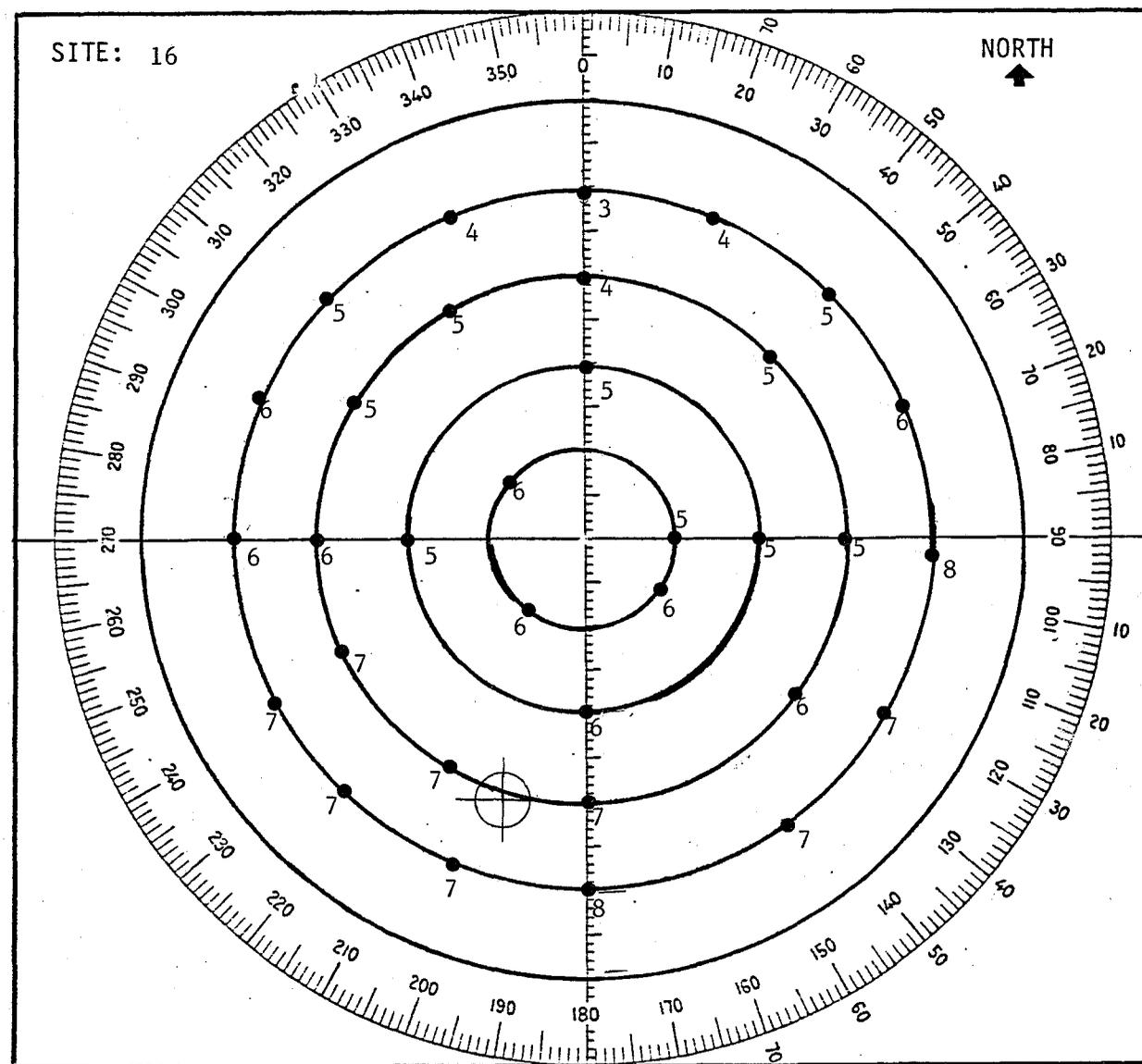
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 12

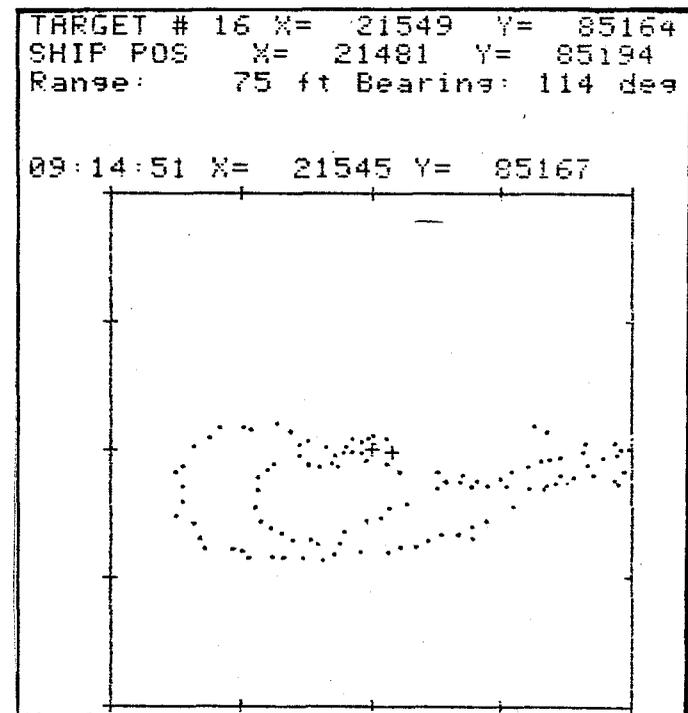
1. Target priority 3 (low)
2. Jet probe holes 32
3. Bottom area probed 50 square meters (hard coral rubble layer at 2' to 4")
4. Air lift excavation site(s) None (mag. survey negative)
5. Bottom characteristics: Grassy, hard bottom, no debris
6. Findings: Negative - magnetometer survey was negative to 8' in survey area
7. Artifacts: None



Concentric circle spacing = 1 meter

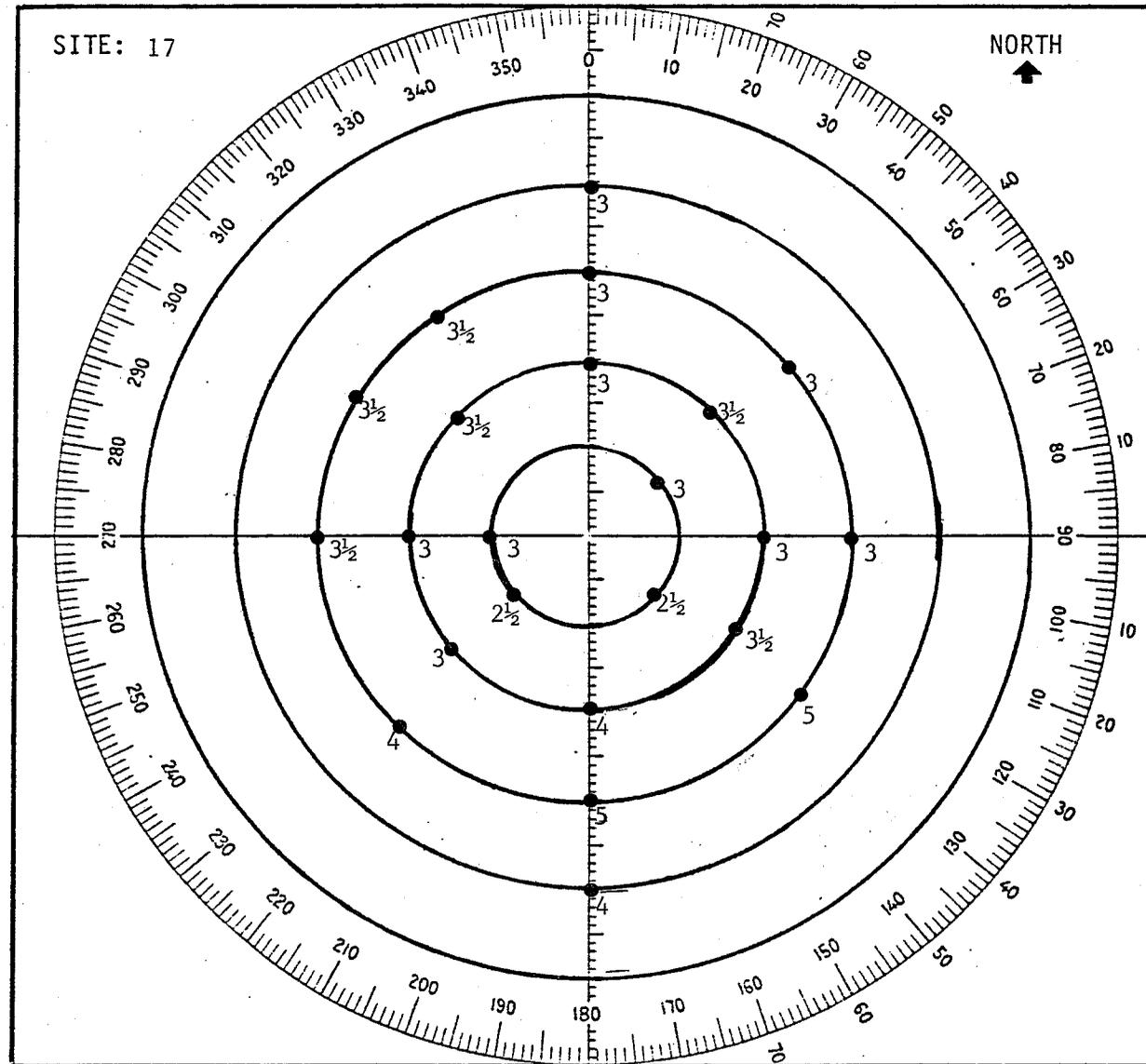
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 16 (see also site 30)

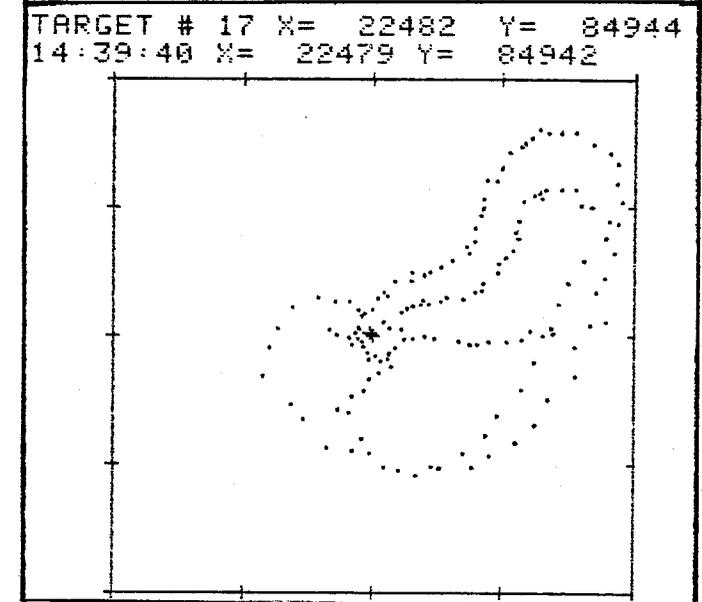
1. Target priority Med.
2. Jet probe holes 33
3. Bottom area probed 50 square meters
4. Air lift excavation site ~~(x)~~ Yes (7 feet)
5. Bottom characteristics: Sand/silt, deep coral rubble layer
6. Findings: Negative
7. Artifacts: 16-101, 16-102, 16-103



Concentric circle spacing = 1 meter

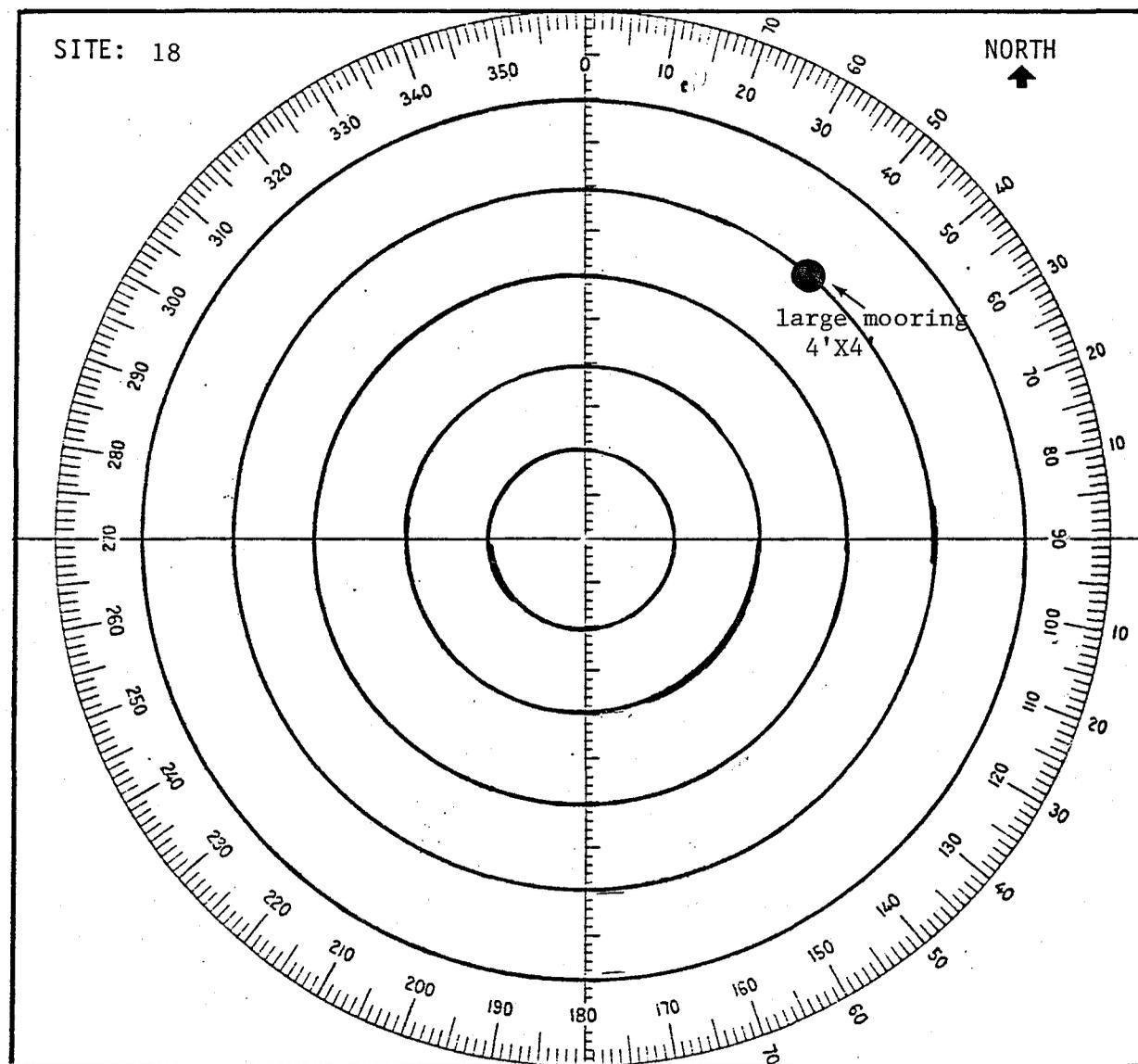
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 17

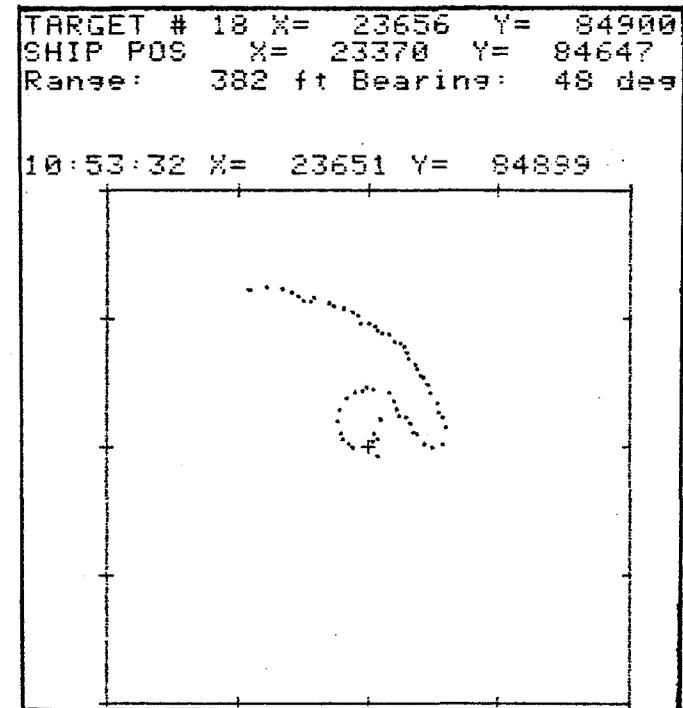
1. Target priority Low
2. Jet probe holes 22
3. Bottom area probed 28 square meters
4. Air lift excavation site(s) None
5. Bottom characteristics: Sand/silt, coral rubble at 3 to 5 foot layer
6. Findings: Negative (magnetic survey)
7. Artifacts: None



Concentric circle spacing = 1 meter

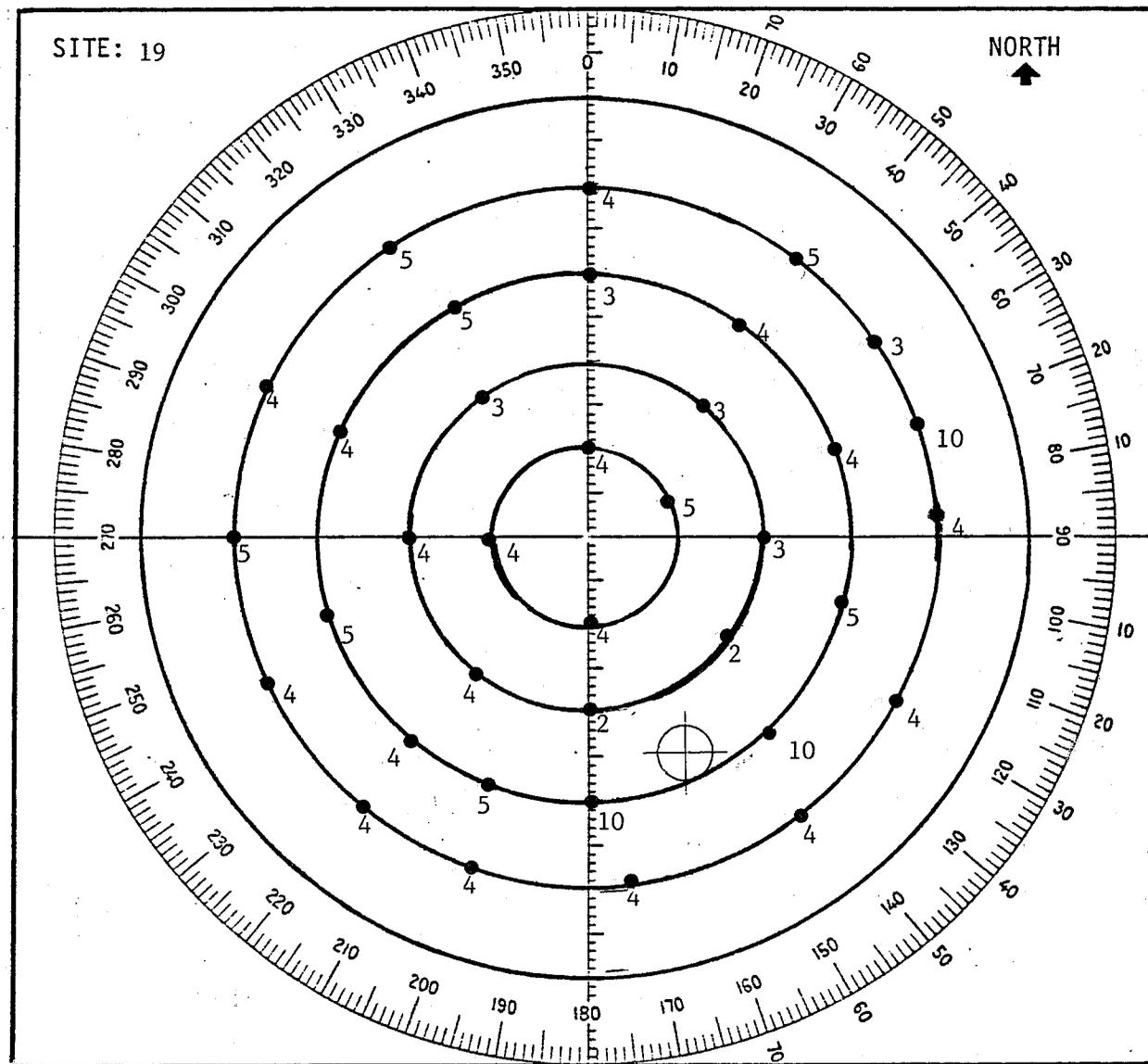
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 18 (surface survey only)

1. Target priority Outside dredge/survey area
2. Jet probe holes None
3. Bottom area ~~probed~~ 20 square meters examined.
4. Air lift excavation site(s) None
5. Bottom characteristics: Hard packed silt/clay
6. Findings: Large mooring, 4' X 4' embedded
7. Artifacts: None



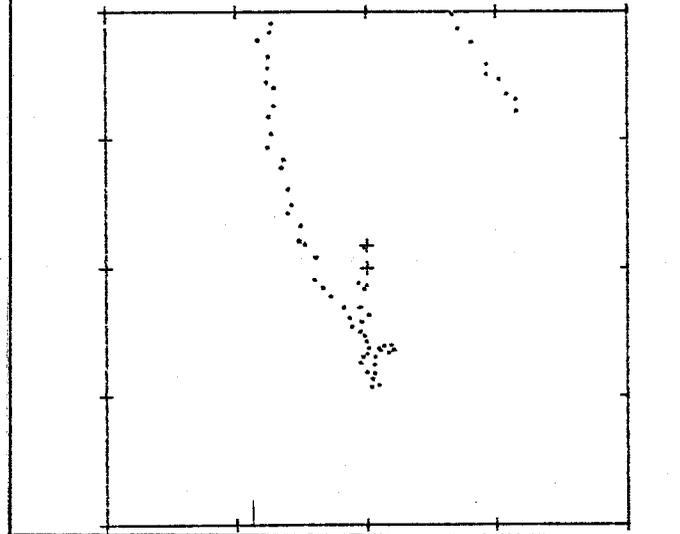
Concentric circle spacing = 1 meter

• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations

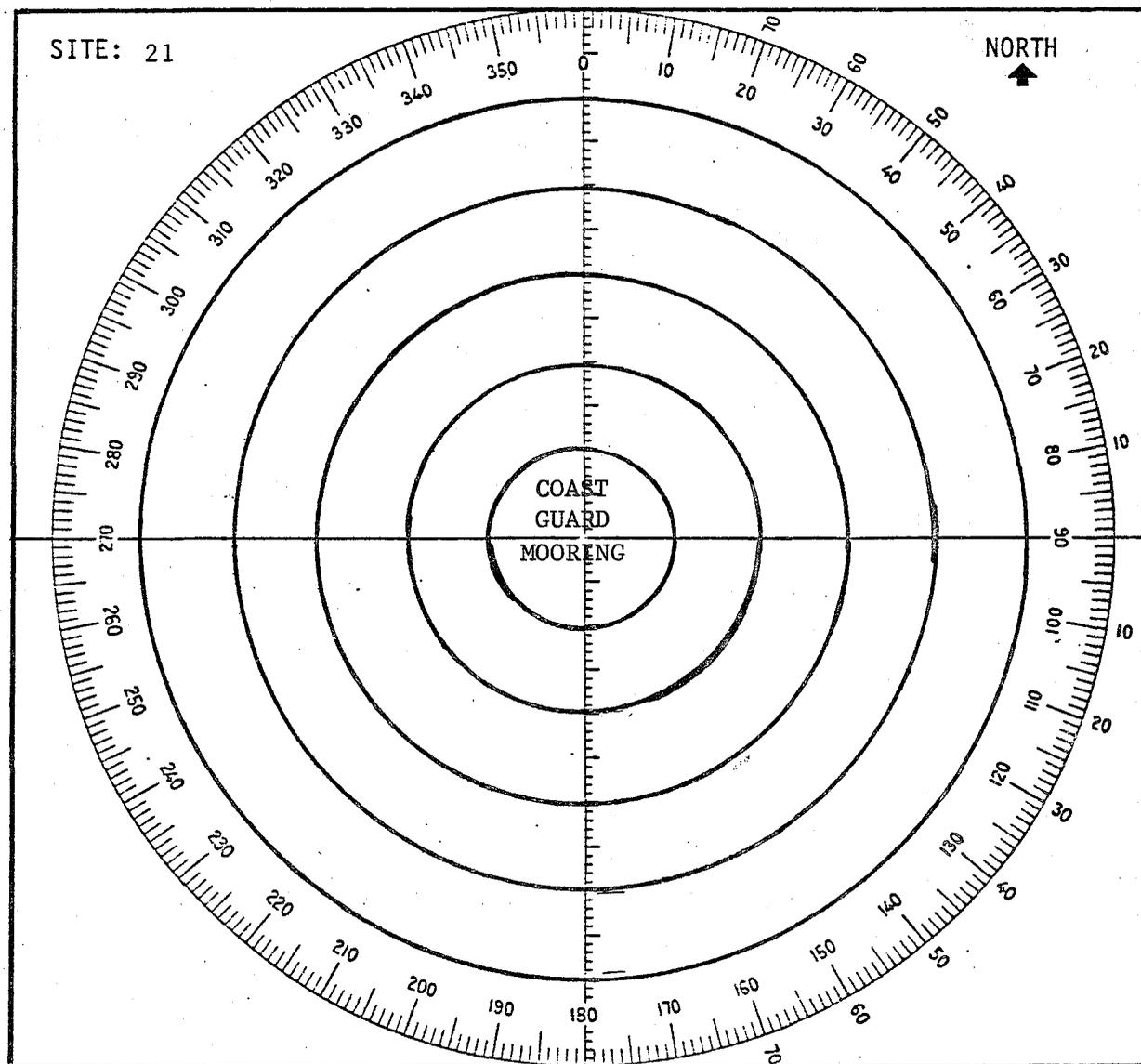
TARGET # 19 X= 22684 Y= 85015  
SHIP POS X= 22579 Y= 85128  
Range: 154 ft Bearings: 137 deg

10:27:04 X= 22686 Y= 85015



SITE/TARGET 19 (see also 10, 11, 37 - cluster/overlap)

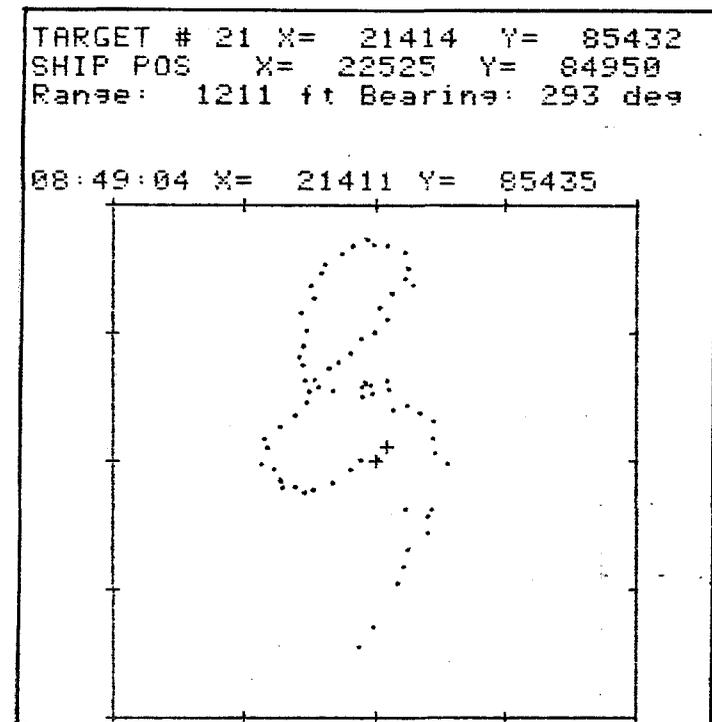
1. Target priority Med.
2. Jet probe holes 36
3. Bottom area probed 50 square meters
4. Air lift excavation site(s) One (Through coral rubble layer to 7' negative mag. sweep)
5. Bottom characteristics: Sand/silt, sloping hard coral rubble layer at 3-5', varying density. Jet probe broke through in two spots.
6. Findings: Negative
7. Artifacts: 19-101, 19-102, 19-103



Concentric circle spacing = 1 meter

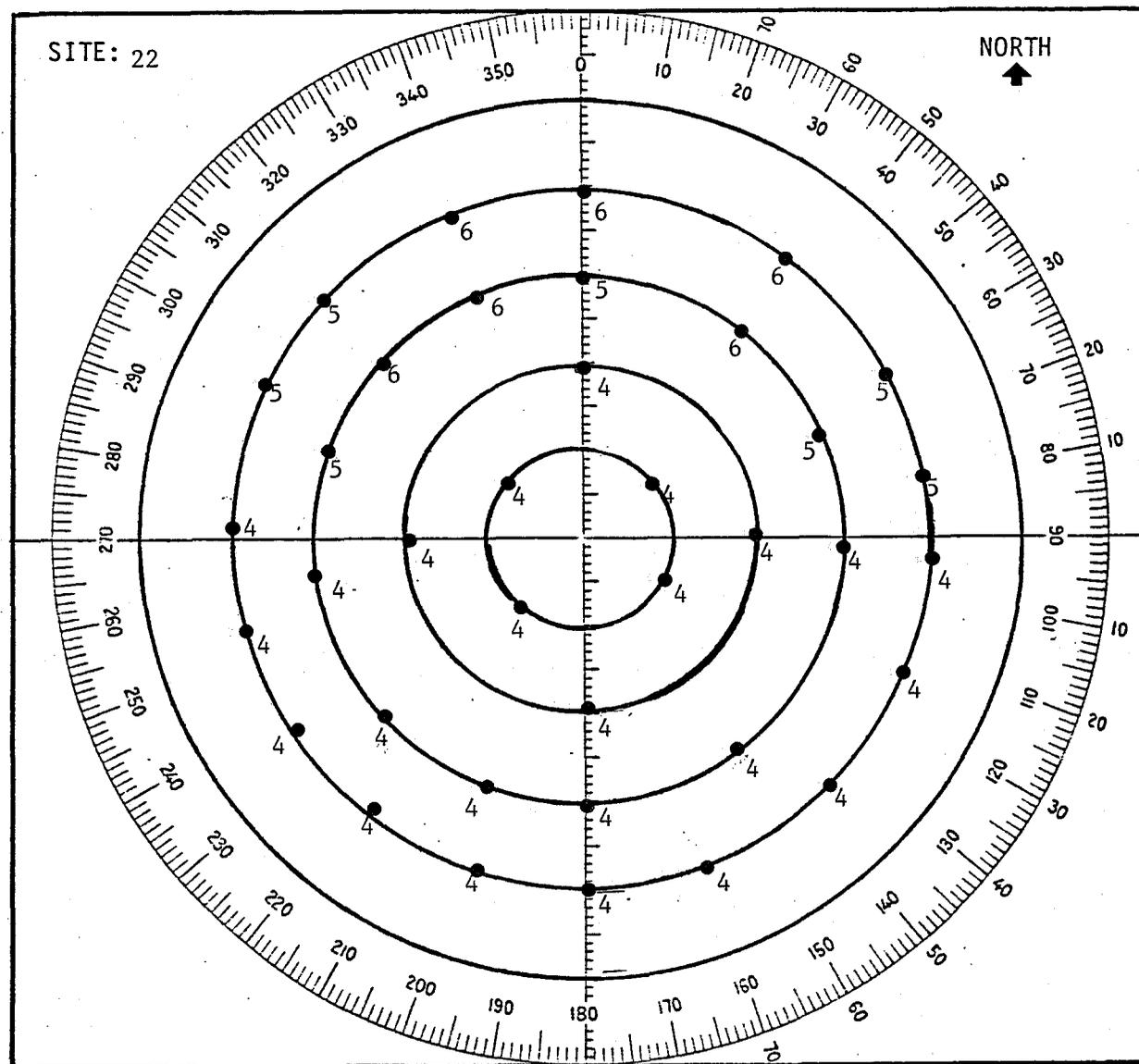
• = probe sites, penetration depth  
shown in feet.

⊕ = Airlift excavations



SITE/TARGET 21

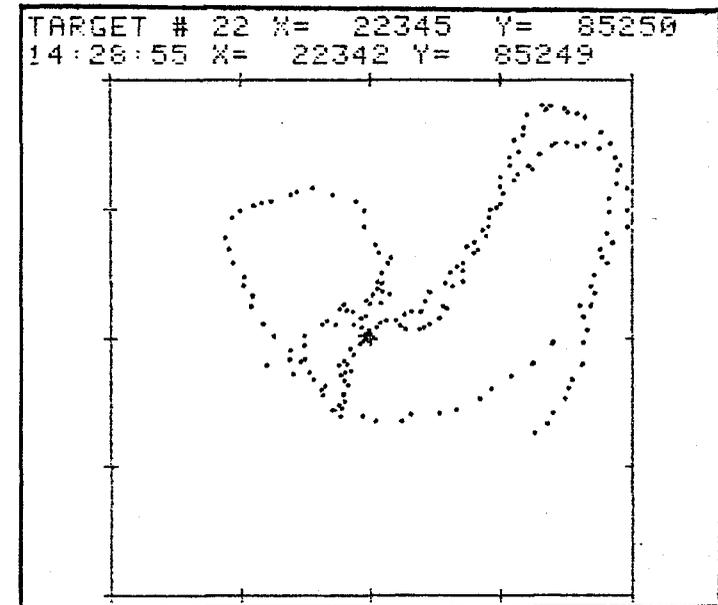
1. Target priority Med.
2. Jet probe holes N/A
3. Bottom area probed N/A square meters
4. Air lift excavation site(s) None
5. Bottom characteristics:
6. Findings: Coast Guard mooring (6'X6'X6' concrete and steel)  
plus 40 feet of heavy chain
7. Artifacts: None



Concentric circle spacing = 1 meter

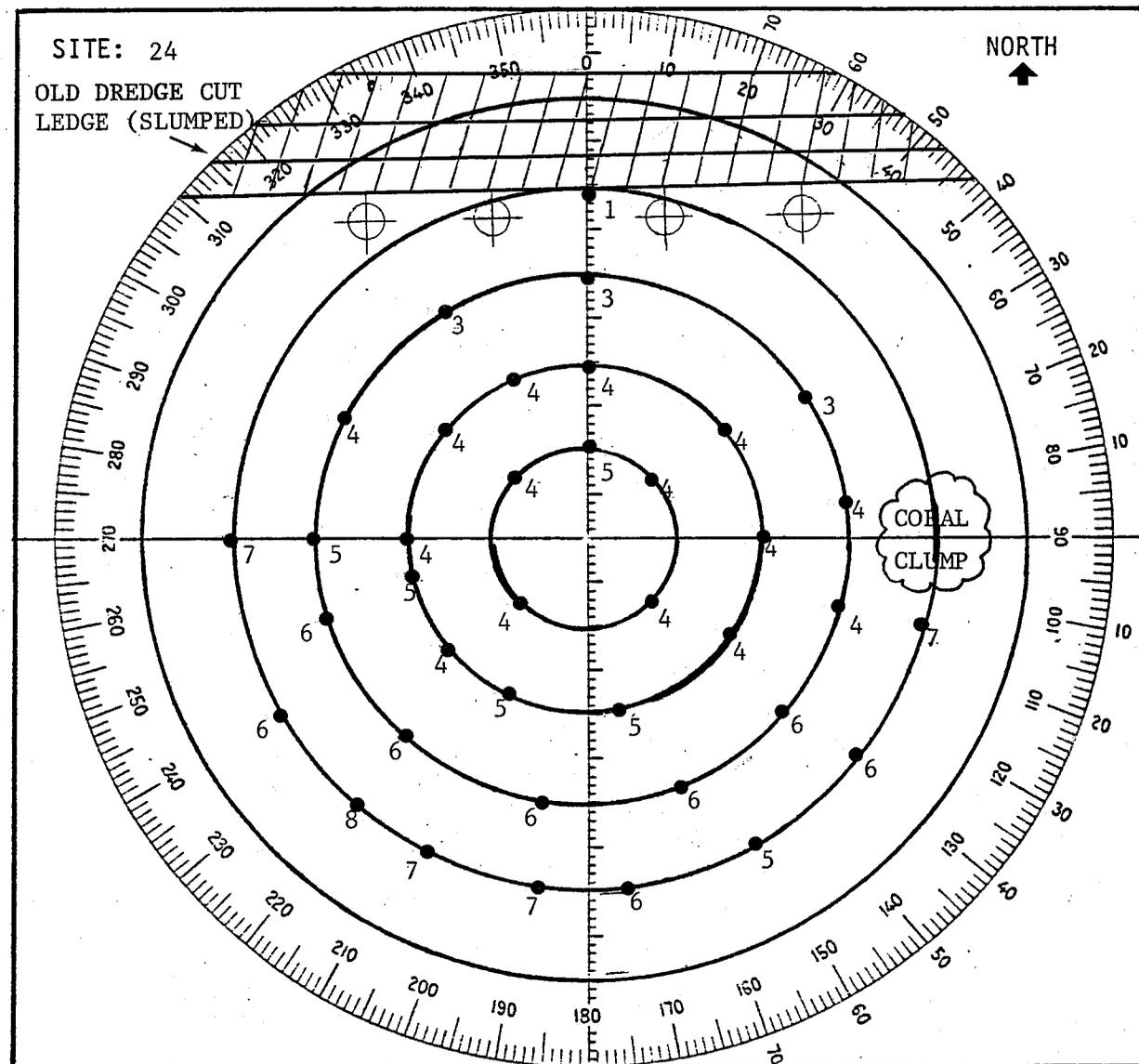
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 22

1. Target priority Low
2. Jet probe holes 37
3. Bottom area probed 50 square meters
4. Air lift excavation site(s) None Negative magnetic survey to 8 ft.
5. Bottom characteristics: Soft silty clay. Battiers and debris, hard clay under, shell and coral at 4-6 feet.
6. Findings: Negative
7. Artifacts: None



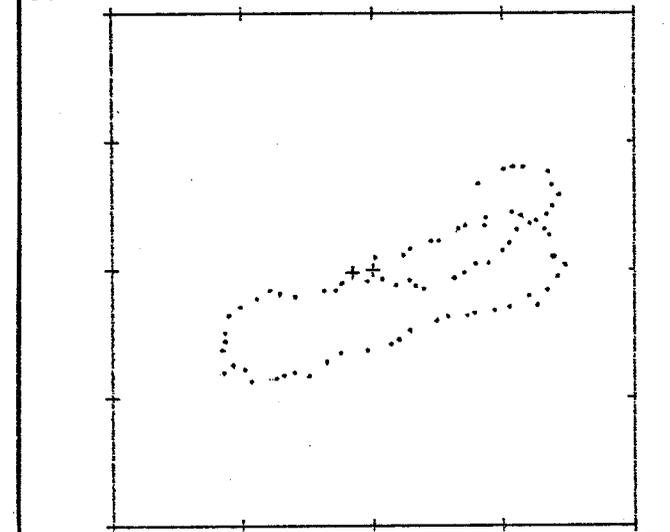
Concentric circle spacing = 1 meter

• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations

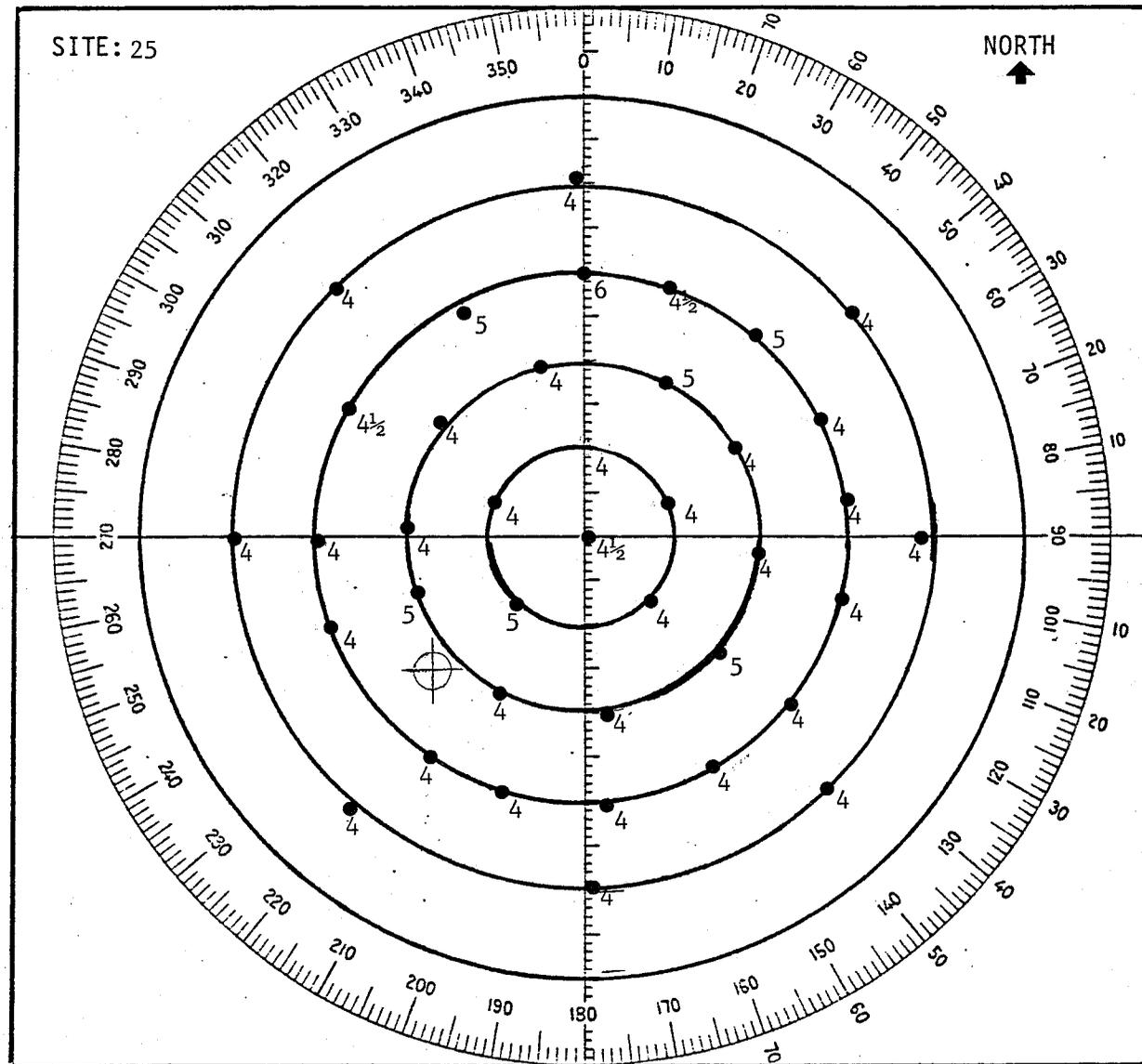
TARGET # 24 X= 21879 Y= 85483  
 SHIP POS X= 21540 Y= 85228  
 Range: 424 ft Bearing: 53 deg

09:25:42 X= 21878 Y= 85478



SITE/TARGET 24

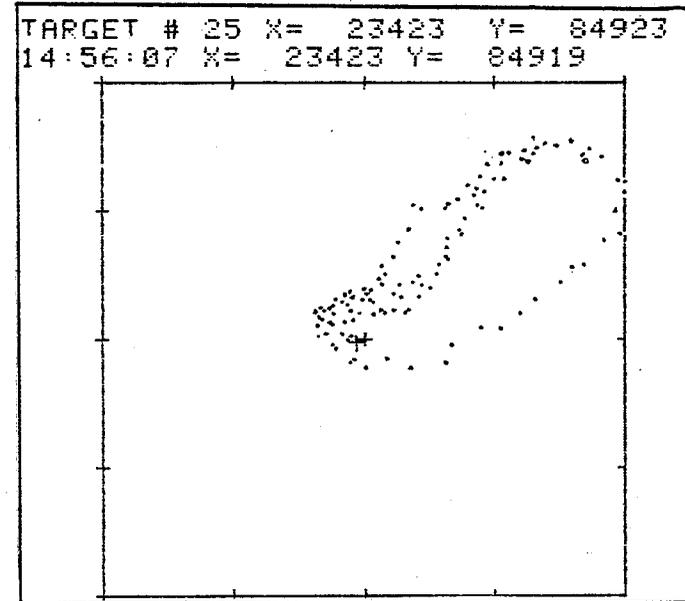
1. Target priority Med.
2. Jet probe holes 37
3. Bottom area probed 64 square meters (Neg. mag. sweep)
4. Air lift excavation site(s) Four (along base of old dredge cut ledge)
5. Bottom characteristics: Coral clump 4' diameter (to east), dredge cut to north, coral rubble at 5 to 7' under sand/clay bottom.
6. Findings: Negative
7. Artifacts: 24-101, 24-102, 24-103



Concentric circle spacing = 1 meter

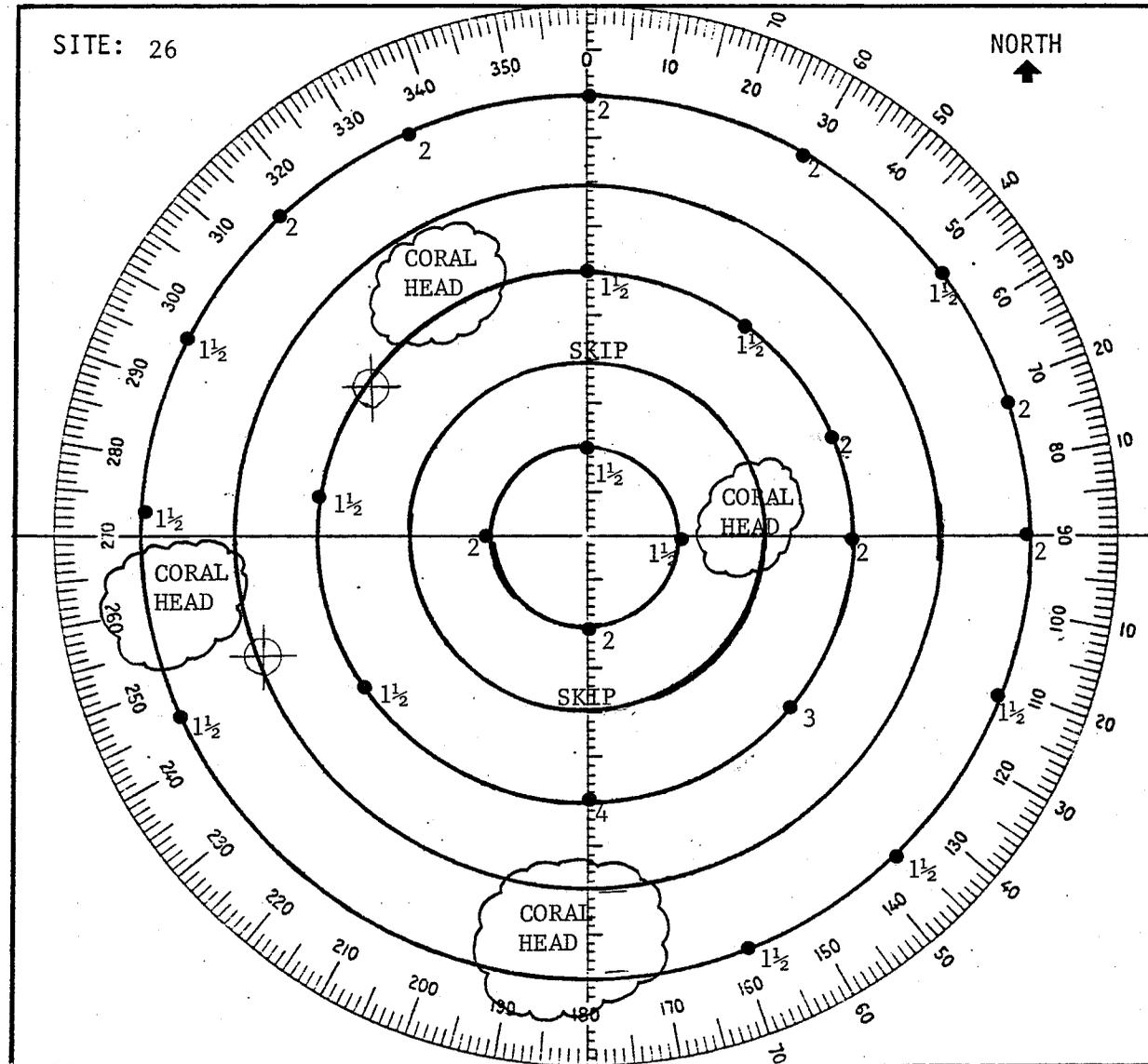
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 25

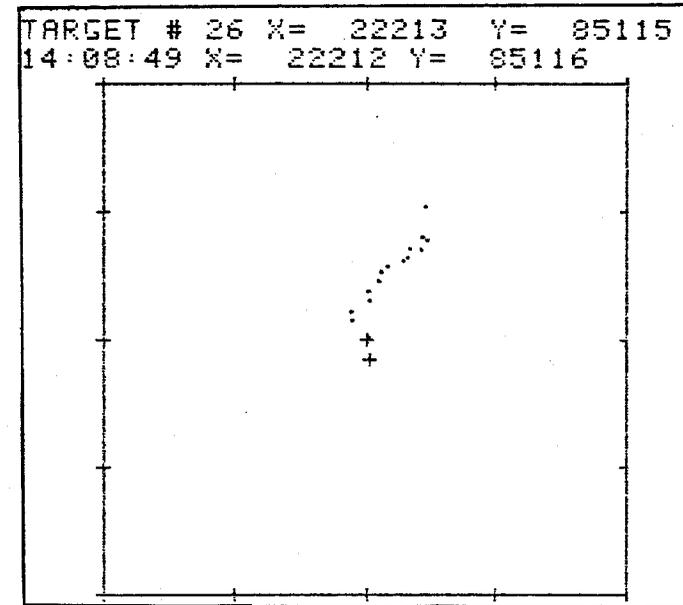
1. Target priority Med.
2. Jet probe holes 55
3. Bottom area probed 56 square meters
4. Air lift excavation site(s) None
5. Bottom characteristics: Silt/sand, layered, compacted coral/shell at 4-5 feet.
6. Findings: Negative (shell/coral layer - sand interface)
7. Artifacts: 25-101, 25-102



Concentric circle spacing = 1 meter

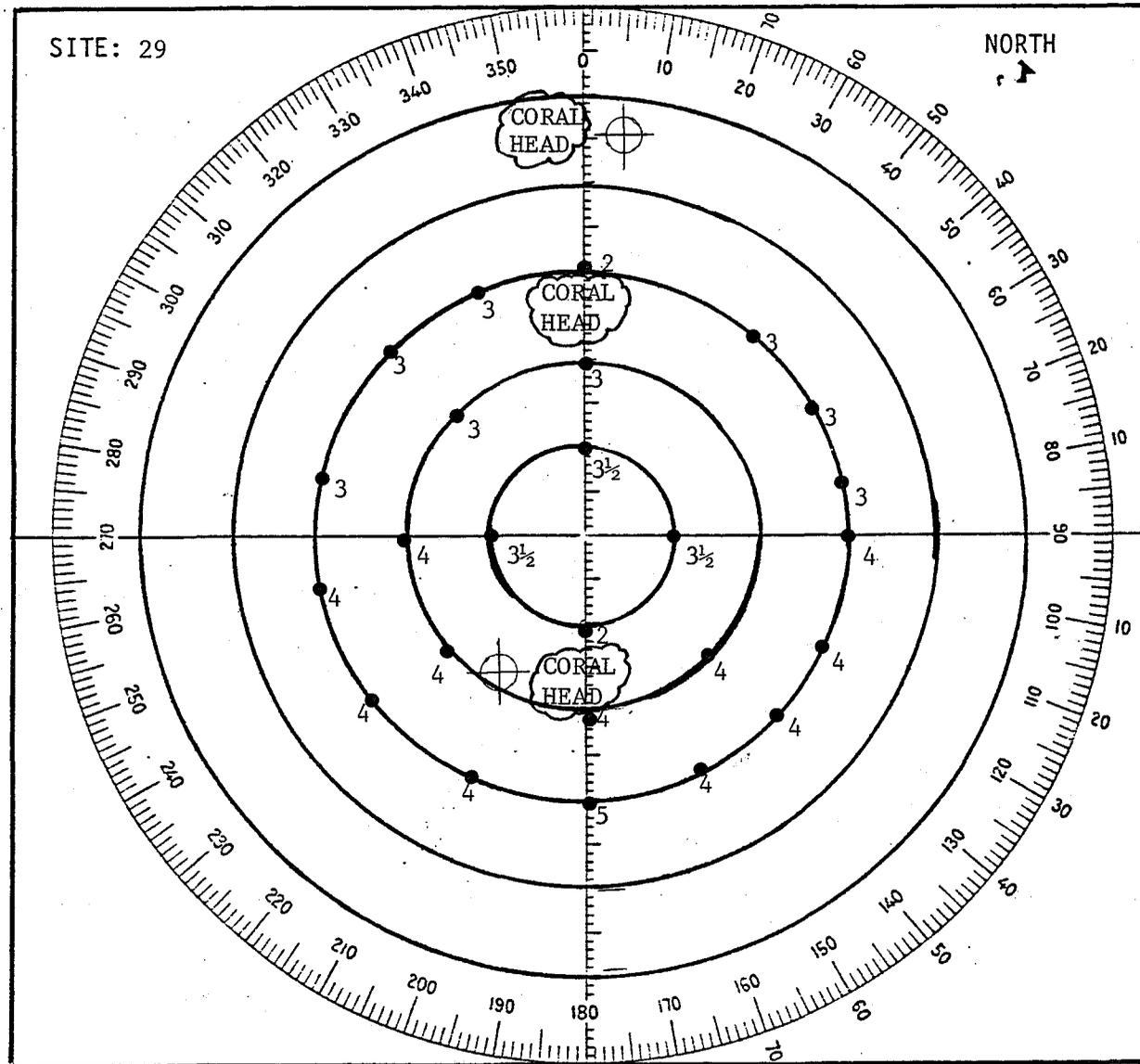
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 26

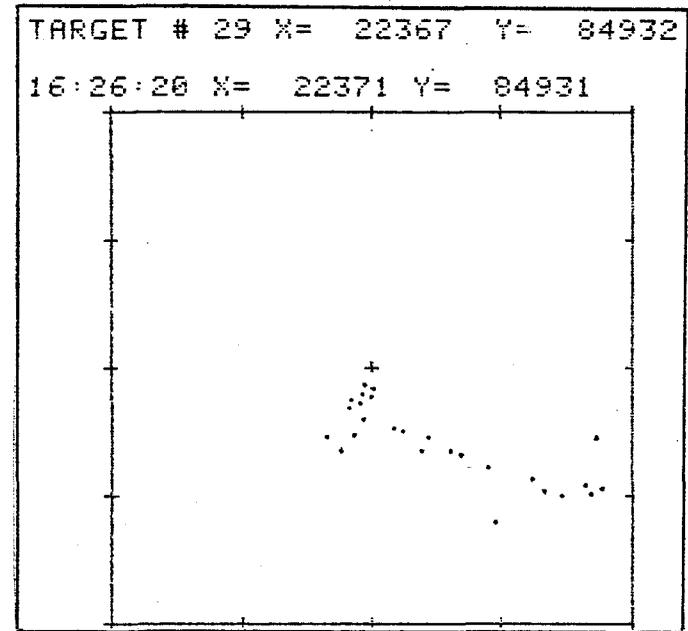
1. Target priority Med.
2. Jet probe holes 25
3. Bottom area probed 78 square meters
4. Air lift excavation site(s) Two
5. Bottom characteristics: Large coral heads emergent 18 inches to 2 feet above mud/clay/shell bottom
6. Findings: Negative
7. Artifacts: 26-101, 26-102, 26-103



Concentric circle spacing = 1 meter

• = probe sites, penetration depth shown in feet.

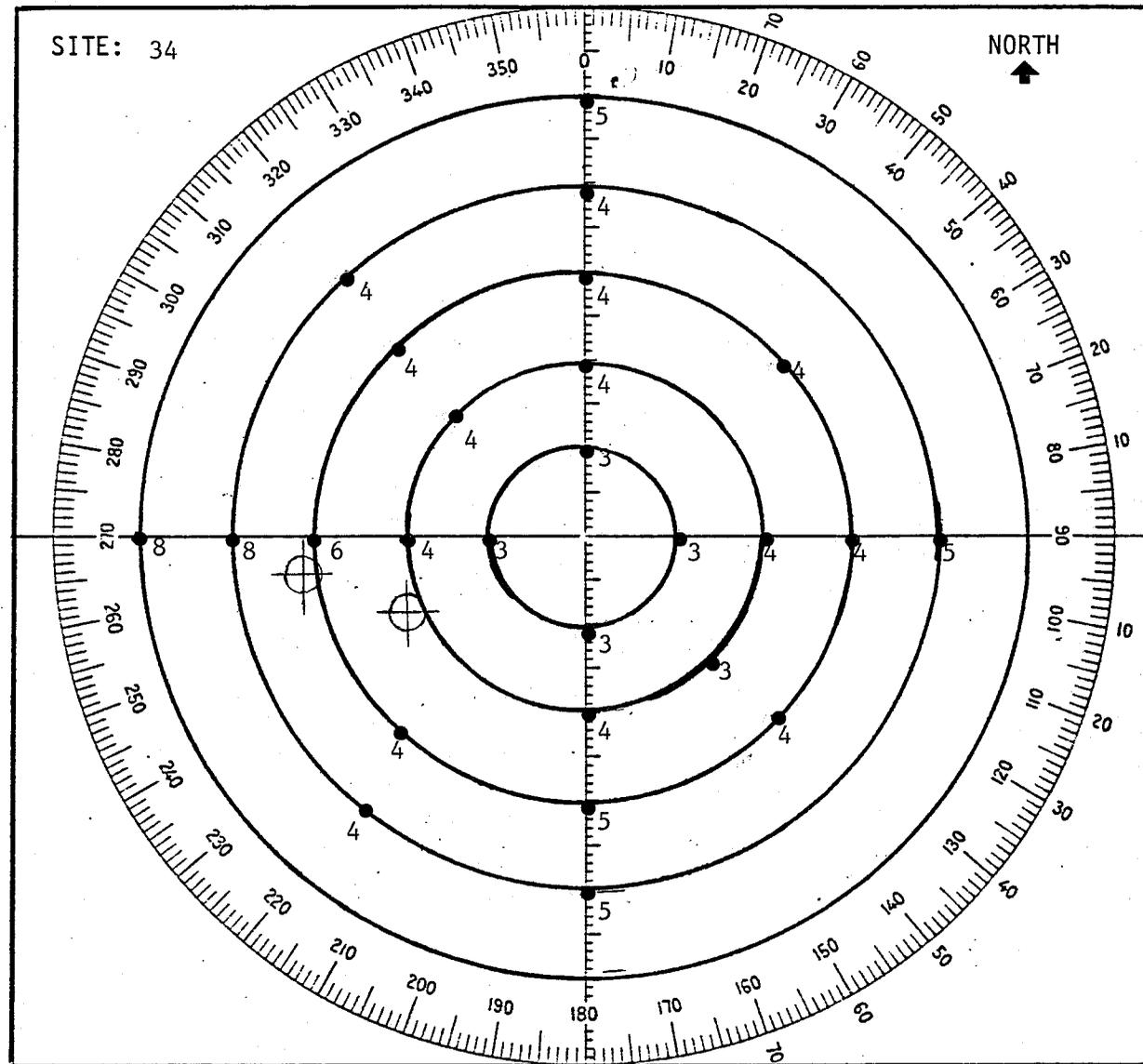
⊕ = Airlift excavations



SITE/TARGET 29

1. Target priority Low
2. Jet probe holes 25
3. Bottom area probed 28 square meters.
4. Air lift excavation site(s) Two (at four feet)
5. Bottom characteristics: Shell and coral debris, mixed with sand, emergent coral heads (3)
6. Findings: Negative
7. Artifacts: 29-101, 29-102

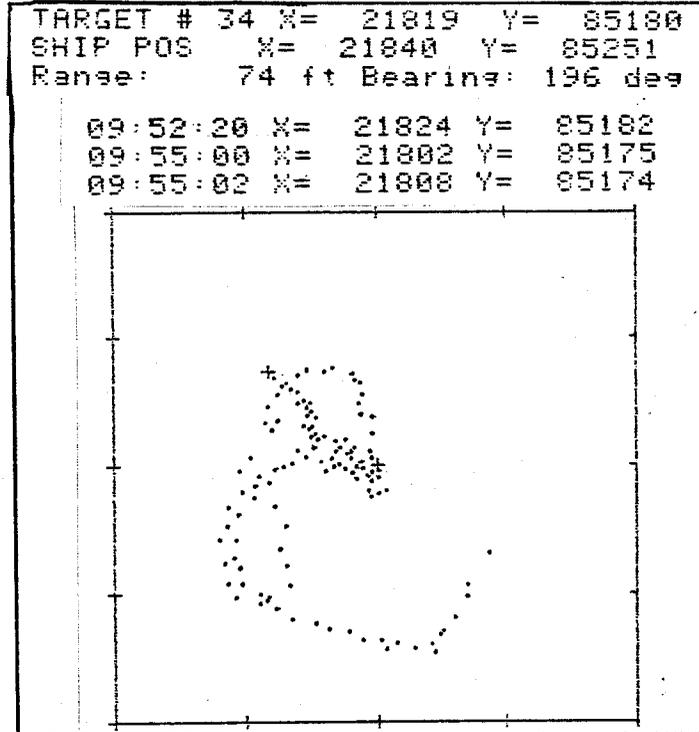




Concentric circle spacing = 1 meter

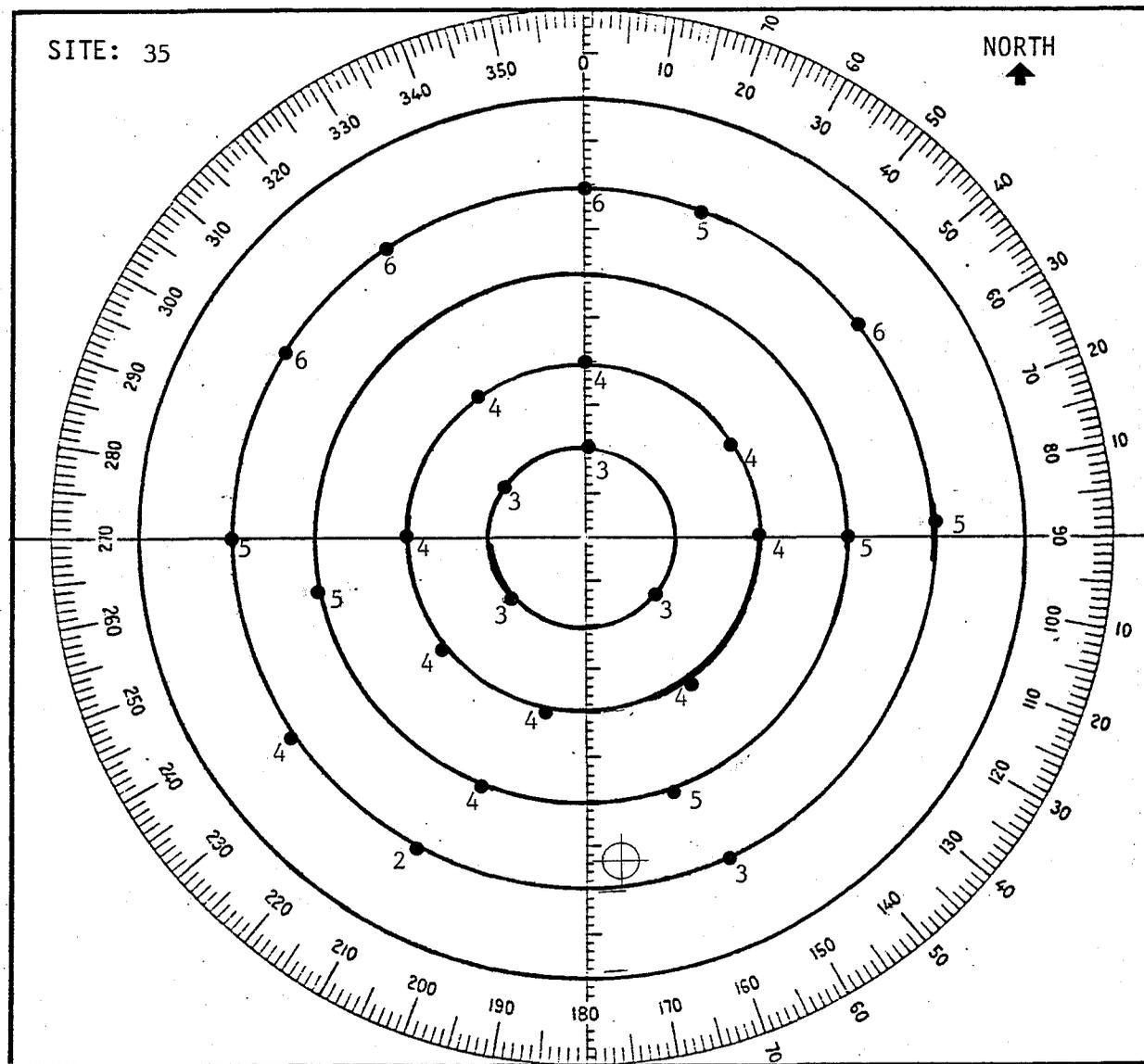
• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



SITE/TARGET 34

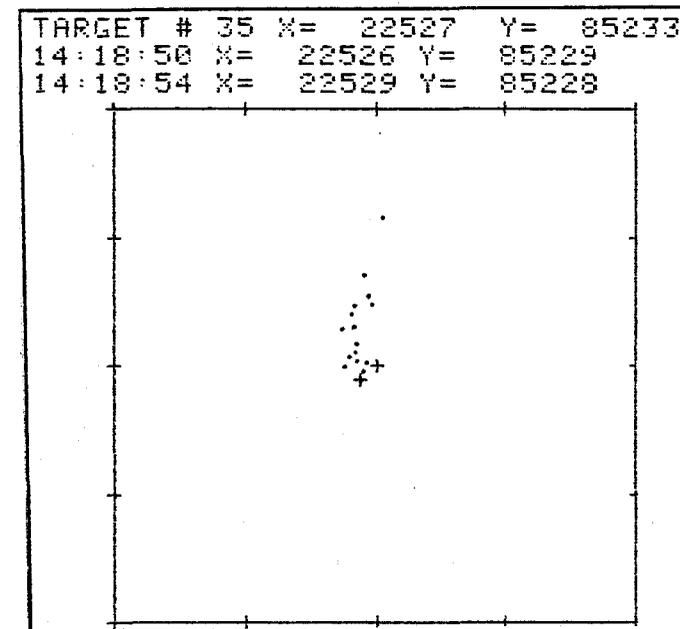
1. Target priority Med.
2. Jet probe holes 23
3. Bottom area probed 36 square meters
4. Air lift excavation site(s) Two (at five feet)
5. Bottom characteristics: No debris. Coral and shell layer at 3 to 8 foot depth, consolidated. Negative mag.
6. Findings: Negative
7. Artifacts: None



Concentric circle spacing = 1 meter

• = probe sites, penetration depth shown in feet.

⊕ = Airlift excavations



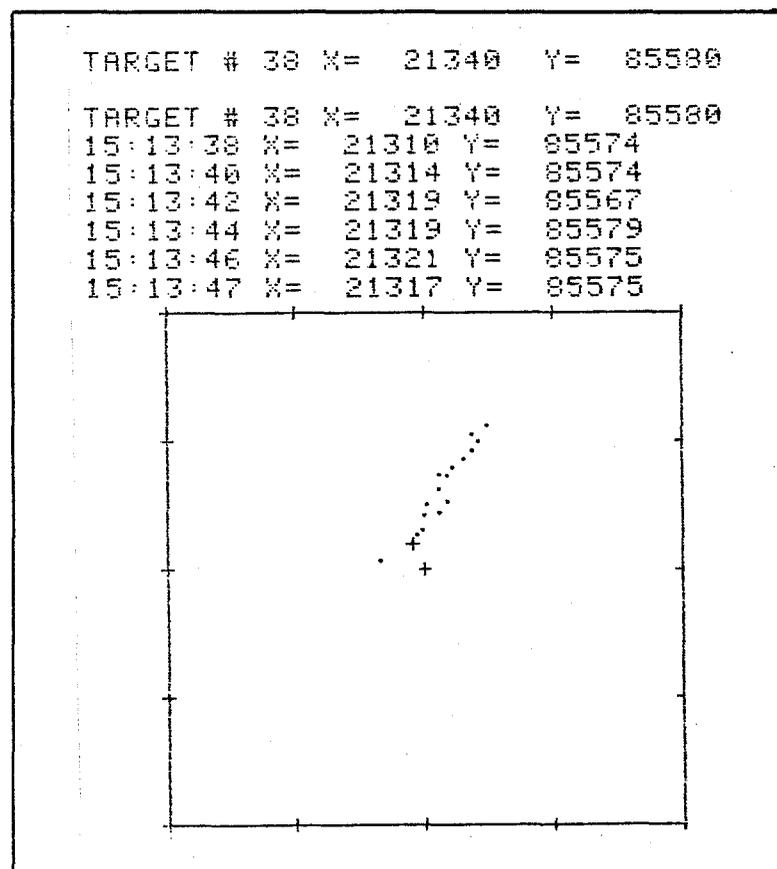
SITE/TARGET 35

1. Target priority Med.
2. Jet probe holes 25
3. Bottom area probed 50 square meters
4. Air lift excavation site(s) One (to 5', negative mag. sweep)
5. Bottom characteristics: Hard packed sand
6. Findings: Negative
7. Artifacts: 35-101

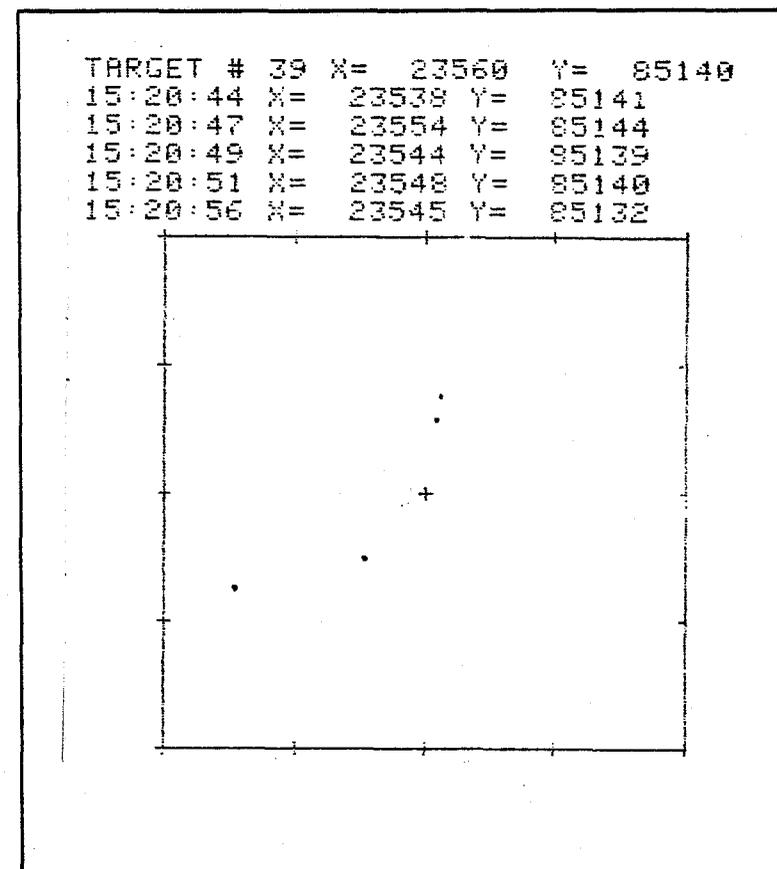
## ISLAND RESOURCES FOUNDATION LONG BAY MARINE ARCHAEOLOGICAL SURVEY, AUGUST 1985

Mini-Ranger Fixes on Dredge Area Corner Marker Buoys (Triangular Shape Orange Color)

NORTHWEST CORNER



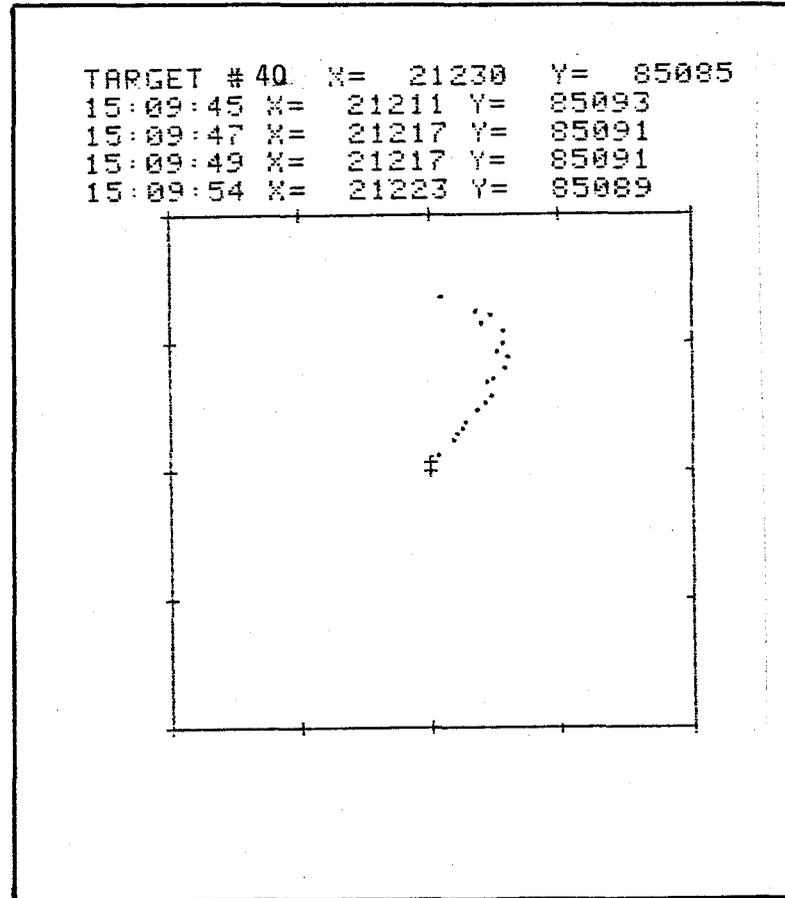
NORTHEAST CORNER



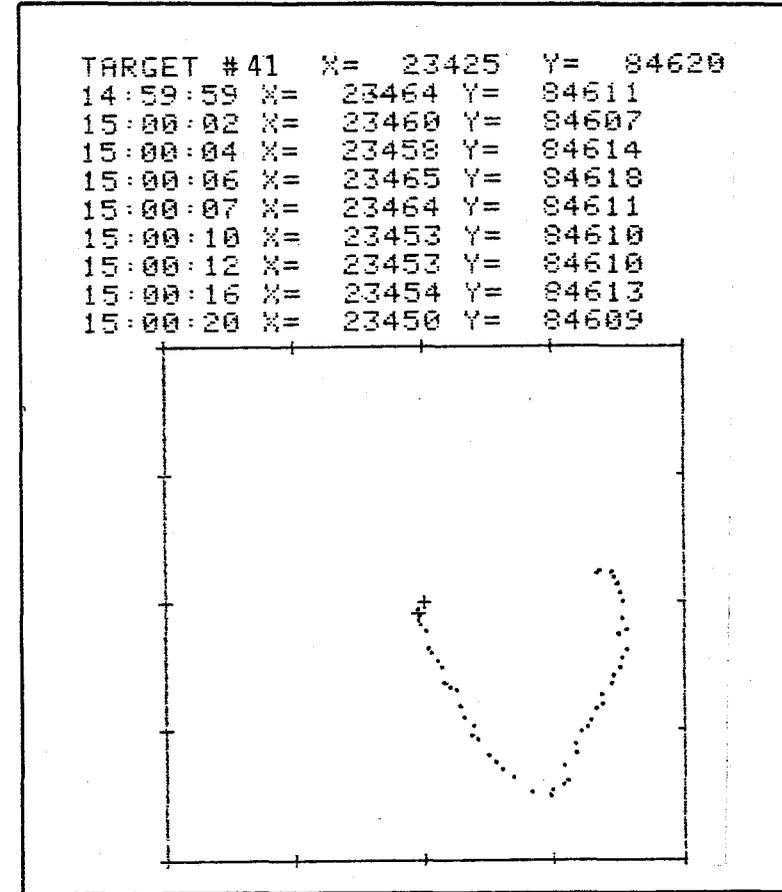
N.B. Variation due to surface buoy movement caused by wind, wave and current forces.

Mini-Ranger Fixes on Dredge Area Corner Marker Buoys (Triangular Shape Orange Color)

SOUTHWEST CORNER



SOUTHEAST CORNER



N.B. Variation due to surface buoy movement caused by wind, wave and current forces.

# ISLAND RESOURCES FOUNDATION

## LONG BAY MARINE ARCHAEOLOGICAL SURVEY

August 1985

List of Artifacts (by site), Recovered During the Air Lift Excavation  
Phase of the Study.

Site 1 : LB1-101, LB1-102  
Site 2 : LB2-101  
Site 3 : None  
Site 4 : None  
Site 5 : LB5-101  
Site 7 : None  
Site 8 : None  
Site 9 : None  
Site 10 : LB10-101, LB10-102  
Site 12 : None  
Site 16 : LB16-101, LB16-102, LB16-103  
Site 17 : None  
Site 18 : None  
Site 19 : LB19-101, LB19-102, LB19-103  
Site 21 : None  
Site 22 : None  
Site 24 : LB24-101, LB24-102, LB24-103  
Site 25 : LB25-101, LB25-102  
Site 26 : LB26-101, LB26-102, LB26-103  
Site 29 : LB29-101, LB29-102  
Site 33 : None  
Site 34 : None  
Site 35 : LB35-101

NB. The numbering system key is as shown:

LB3-101  
┌───┴───┬───┐  
Long Bay Site Artifact  
Number Number

