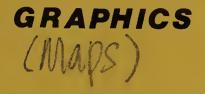


DEPARTMENT OF THE INTERIOR / MINERALS MANAGEMENT SERVICE

2D:88042794

DRAFT

ENVIRONMENTAL IMPACT STATEMENT



-Environmentar-Protection-Agenci-Region-9-

APR 2003

HERARY

PROPOSED 1983 OUTER CONTINENTAL SHELF OIL AND GAS LEASE SALE OFFSHORE CENTRAL CALIFORNIA

OCS SALE NO. 73

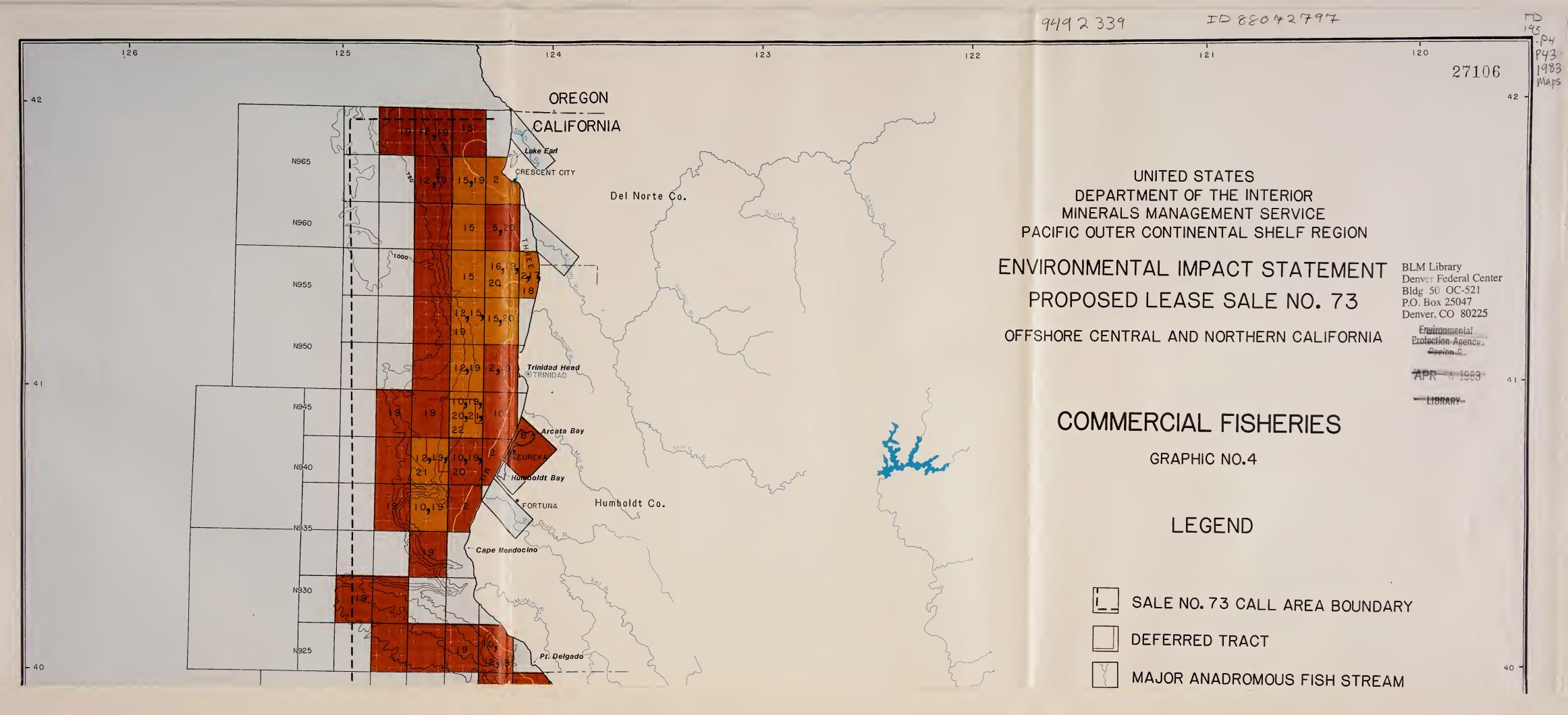
Prepared by the Minerals Management Service Pacific OCS Region

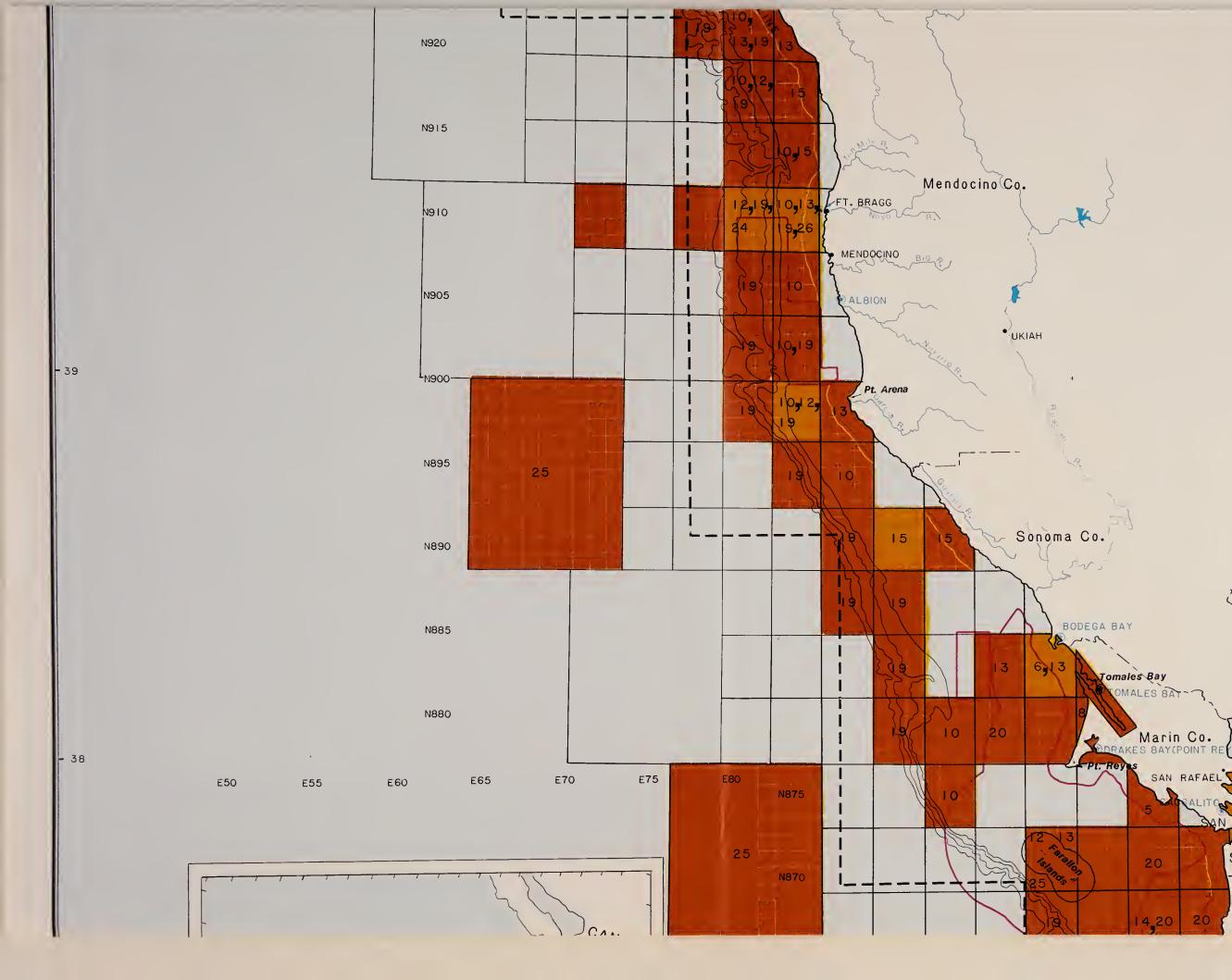
1340 West Sixth Street, Los Angeles, California 90017

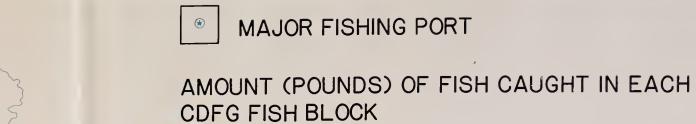
(4 pieces)



BLM Library Denver Federal Center Bldg. 50, OC-521 P.O. Box 25047 Denver, CO 80225







MORE THAN 1,000,000 LBS.



Napa Co.

San Pablo Bay

Source of the second

Solano Co

Alameda Co.

Contra Costa Co.

BERKELFY

OAKEAND

5

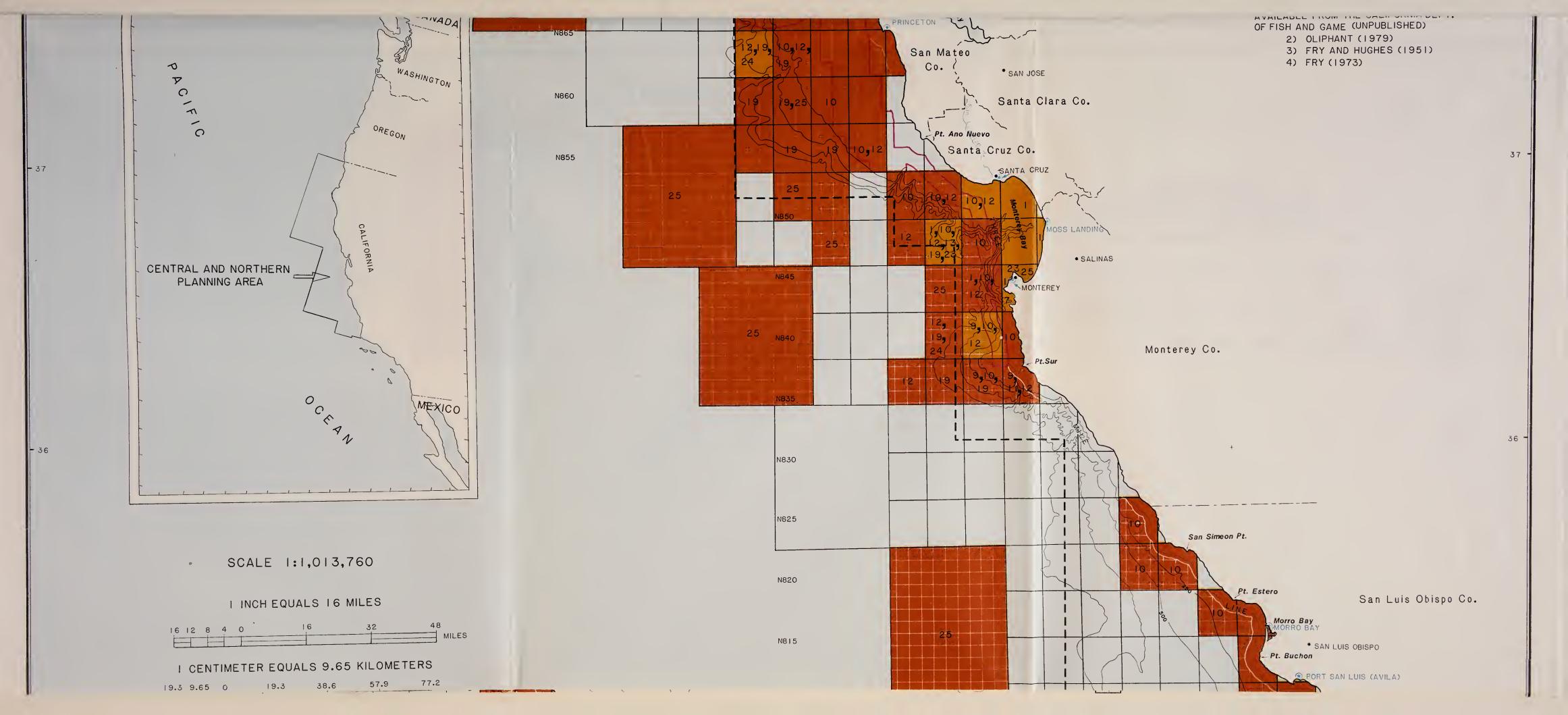
100,000 TO 999,999 LBS.

0 TO 99,999 LBS.

PRINCIPAL SPECIES (GREATER THAN 100,000 LBS.) CAUGHT IN EACH FISH BLOCK ARE INDICATED BY NUMBERS.

| | ANCHOVY, NORTHERN |
|-----|-----------------------|
| 2. | CRAB, DUNGENESS |
| 3. | CRAB, ROCK |
| 4. | CRAYFISH |
| 5. | FLOUNDER, STARRY |
| 6. | HERRING, PACIFIC |
| 7. | MACKEREL, JACK |
| 8. | OYSTER, GIANT PACIFIC |
| 9. | ROCKFISH, BOCACCIO |
| 10. | ROCKFISH, UNSPECIFIED |
| | ROCKFISH, YELLOWTAIL |
| | SABLEFISH |
| 13. | SALMON, CHINOOK |
| 14. | SANDDAB |
| 15. | SHRIMP, PACIFIC OCEAN |
| 16. | SHRIMP, UNSPECIFIED |
| 17. | SMELT, TRUE |
| 18. | SMELT. WHITEBAIT |
| 19. | SOLE, DOVER |
| 20. | SOLE, ENGLISH |
| 21. | SOLE, PETRALE |
| 22. | SOLE, REX |
| 23. | SQUID, MARKET |
| 24. | THORNYHEAD |
| 25. | TUNA, ALBACORE |
| 26. | URCHIN, SEA |
| | |

38



KILOMETERS ---------

250 M. BATHYMETRIC CONTOUR INTERVALS

BASE COMPILED FROM THE BUREAU OF LAND MANAGEMENT, PACIFIC OCS OFFICIAL PROTRACTION DIAGRAMS ORIGINATING AT THE INTERNATIONAL BORDER OF MEXICO TO THE OREGON BORDER.

> THIS MAP HAS BEEN CAREFULLY PREPARED FROM THE BEST EXISTING DATA SOURCES AVAILABLE AT THE TIME OF PREPARATION, BUT THE BUREAU OF LAND MANAGEMENT, U.S.D.I. DOES

RELIANCE THEREON. THIS IS A SPECIAL PURPOSE MAP AND IS NOT TO BE USED FOR NAVIGATION

NOT GUARANTEE THE ACCURACY TO THE RESPONSIBILITY OR LIABILITY FOR

E85 E90 E95

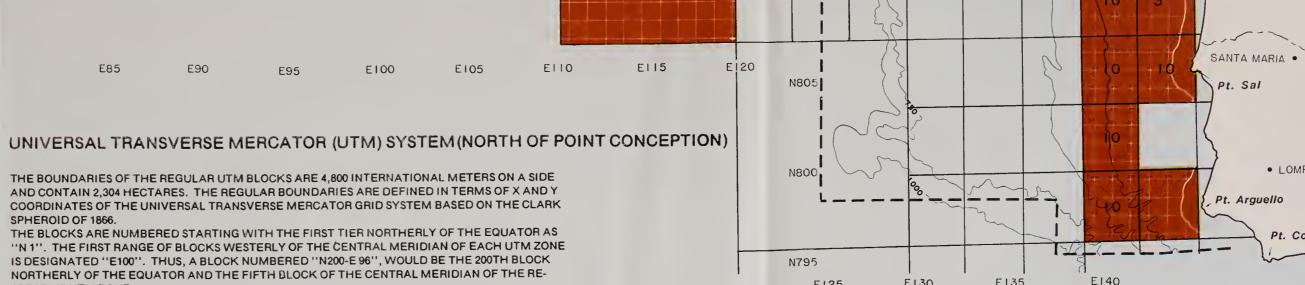
N810

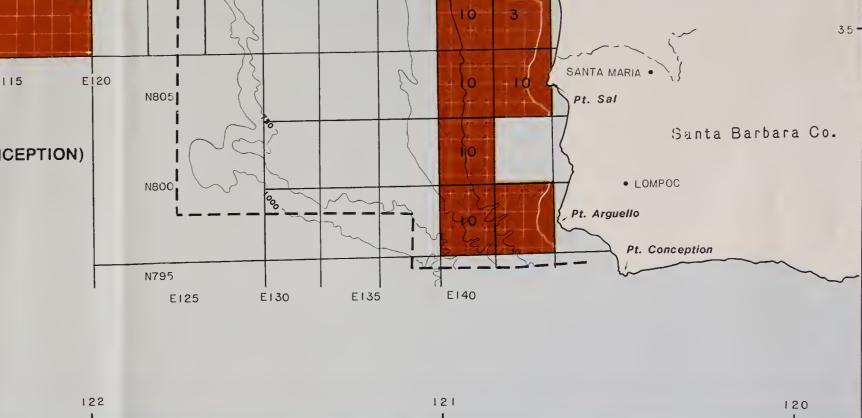
THE BOUNDARIES OF THE REGULAR UTM BLOCKS ARE 4,800 INTERNATIONAL METERS ON A SIDE AND CONTAIN 2.304 HECTARES. THE REGULAR BOUNDARIES ARE DEFINED IN TERMS OF X AND Y COORDINATES OF THE UNIVERSAL TRANSVERSE MERCATOR GRID SYSTEM BASED ON THE CLARK SPHEROID OF 1866.

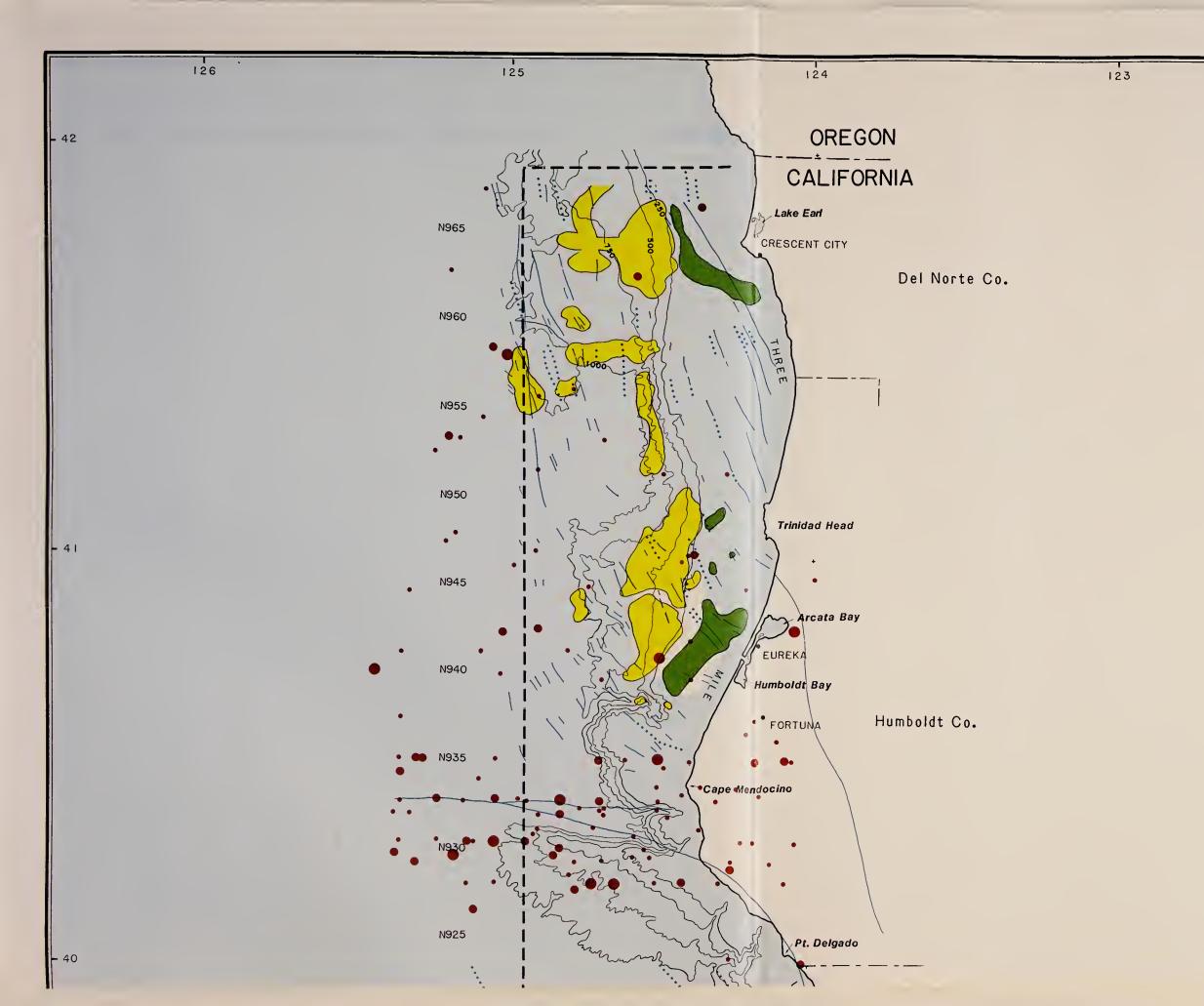
"N 1". THE FIRST RANGE OF BLOCKS WESTERLY OF THE CENTRAL MERIDIAN OF EACH UTM ZONE IS DESIGNATED "E100". THUS, A BLOCK NUMBERED "N200-E 96", WOULD BE THE 200TH BLOCK NORTHERLY OF THE EQUATOR AND THE FIFTH BLOCK OF THE CENTRAL MERIDIAN OF THE RE-SPECTIVE UTM ZONE.

| 126 | 125 | 124 | 123 |
|-----|-----|-----|-----|
| | | | I |

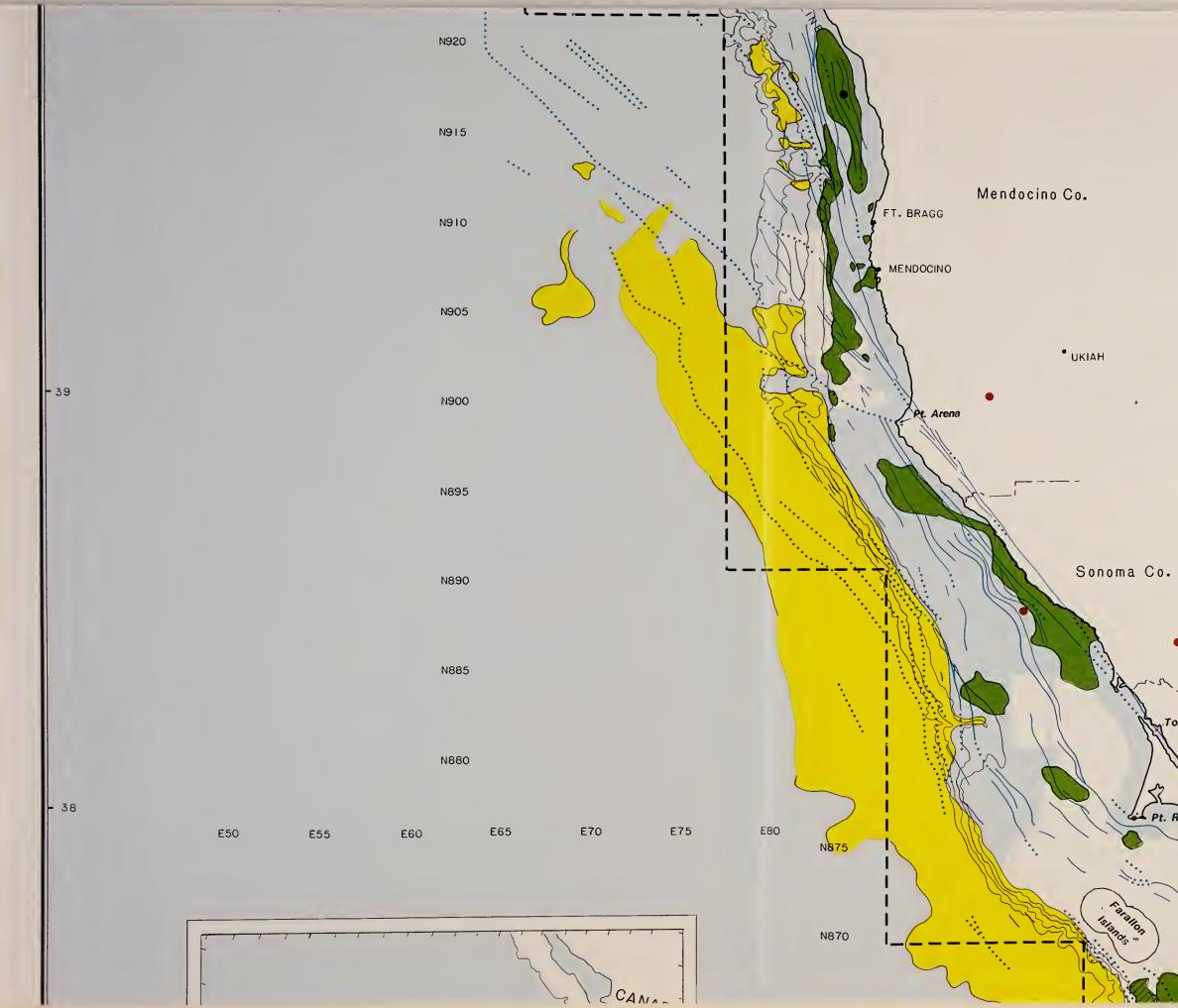
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TD ID 88072797 9492339 195 - P4 120 122 121 P43 27106 1983 MARS 42 UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE PACIFIC OUTER CONTINENTAL SHELF REGION ENVIRONMENTAL IMPACT STATEMENT PROPOSED LEASE SALE NO. 73 BLM Library Denver Federal Center OFFSHORE CENTRAL AND NORTHERN CALIFORNIA Bldg. 50. OC-521 P.O Box 25047 Denver, CO 80225 **GEOLOGIC HAZARDS** GRAPHIC NO. 3 APR 198 LIBRARY LEGEND SALE NO. 73 CALL AREA BOUNDARY DEFERRED TRACT 40 BURIED CHANNEL



POTENTIAL SLUMPING

EARTHQUAKE EPICENTERS OF KNOWN INTENSITY 1969 - 82

RICHTER SCALE RECORDINGS:

- 4.0 4.9
- 5.0 5.9
- OVER 6.0

FAULTS IN NEOGENE ROCKS



SURFACE EXPRESSION

INFERRED OR BURIED



FAULT ZONE



DEEP GAS ACCUMULATIONS



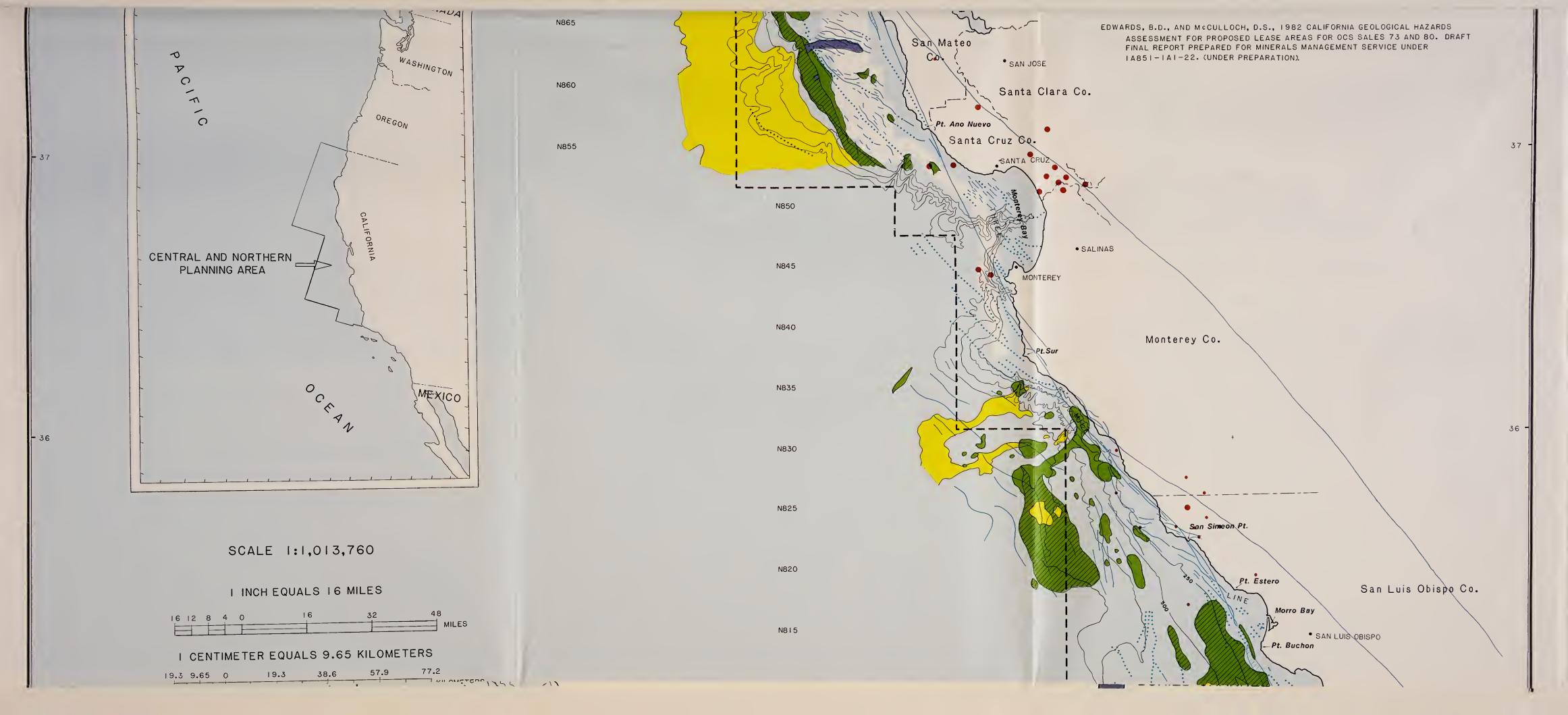
SHALLOW GAS ACCUMULATIONS

Marin Co. Reyas SAN RAFAEL SAN FRANCISCO OAKEAND Contra Costa Co. Alameda Co.

REAL, C.R., TOPPOZADA, AND AND PARKE, D.C., 1978, EARTHQUAKE EPICENTER OF CALIFORNIA 1900 THROUGH 1974 MAP SHEET 39. CALIFORNIA DIVISION OF MINES AND GEOLOGY

MCCULLOCH, D.S., GREEN, H.G., HESTON, K.S., AND RUBIN, D.M., 1980, A SUMMARY OF THE GEOLOGY AND GEOLOGIC HAZARDS IN PROPOSED SALE 53, CENTRAL CALIFORNIA OUTER CONTINENTAL SHELF: U.S.G.S. OPEN-FILE REPORT 80-1095., 13 PLATES 38

39



250 M. BATHYMETRIC CONTOUR INTERVALS

- 35

126

BASE COMPILED FROM THE BUREAU OF LAND MANAGEMENT, PACIFIC OCS OFFICIAL PROTRACTION DIAGRAMS ORIGINATING AT THE INTERNATIONAL BORDER OF MEXICO TO THE OREGON BORDER.

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NOT GUARANTEE THE ACCURACY TO THE RESPONSIBILITY OR LIABILITY FOR

E85 E90 E95 E100

UNIVERSAL TRANSVERSE MERCATOR (UTM) SYSTEM (NORTH OF POINT CONCEPTION)

THE BOUNDARIES OF THE REGULAR UTM BLOCKS ARE 4,800 INTERNATIONAL METERS ON A SIDE AND CONTAIN 2,304 HECTARES. THE REGULAR BOUNDARIES ARE DEFINED IN TERMS OF X AND Y COORDINATES OF THE UNIVERSAL TRANSVERSE MERCATOR GRID SYSTEM BASED ON THE CLARK SPHEROID OF 1866.

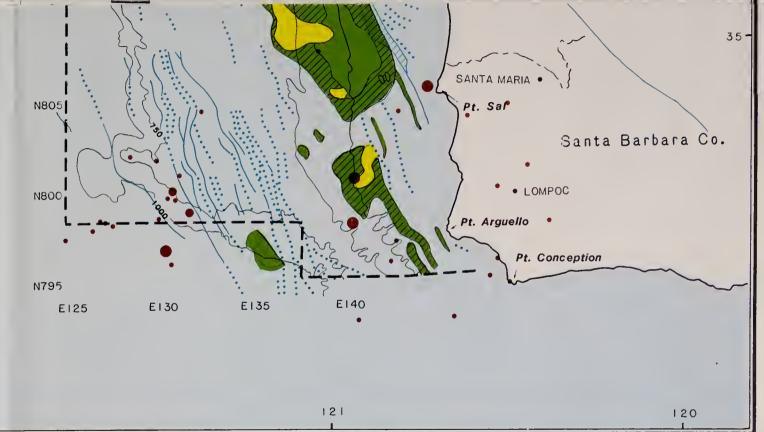
THE BLOCKS ARE NUMBERED STARTING WITH THE FIRST TIER NORTHERLY OF THE EQUATOR AS "N 1''. THE FIRST RANGE OF BLOCKS WESTERLY OF THE CENTRAL MERIDIAN OF EACH UTM ZONE IS DESIGNATED "E100". THUS, A BLOCK NUMBERED "N200-E 96", WOULD BE THE 200TH BLOCK NORTHERLY OF THE EQUATOR AND THE FIFTH BLOCK OF THE CENTRAL MERIDIAN OF THE RE-SPECTIVE UTM ZONE.

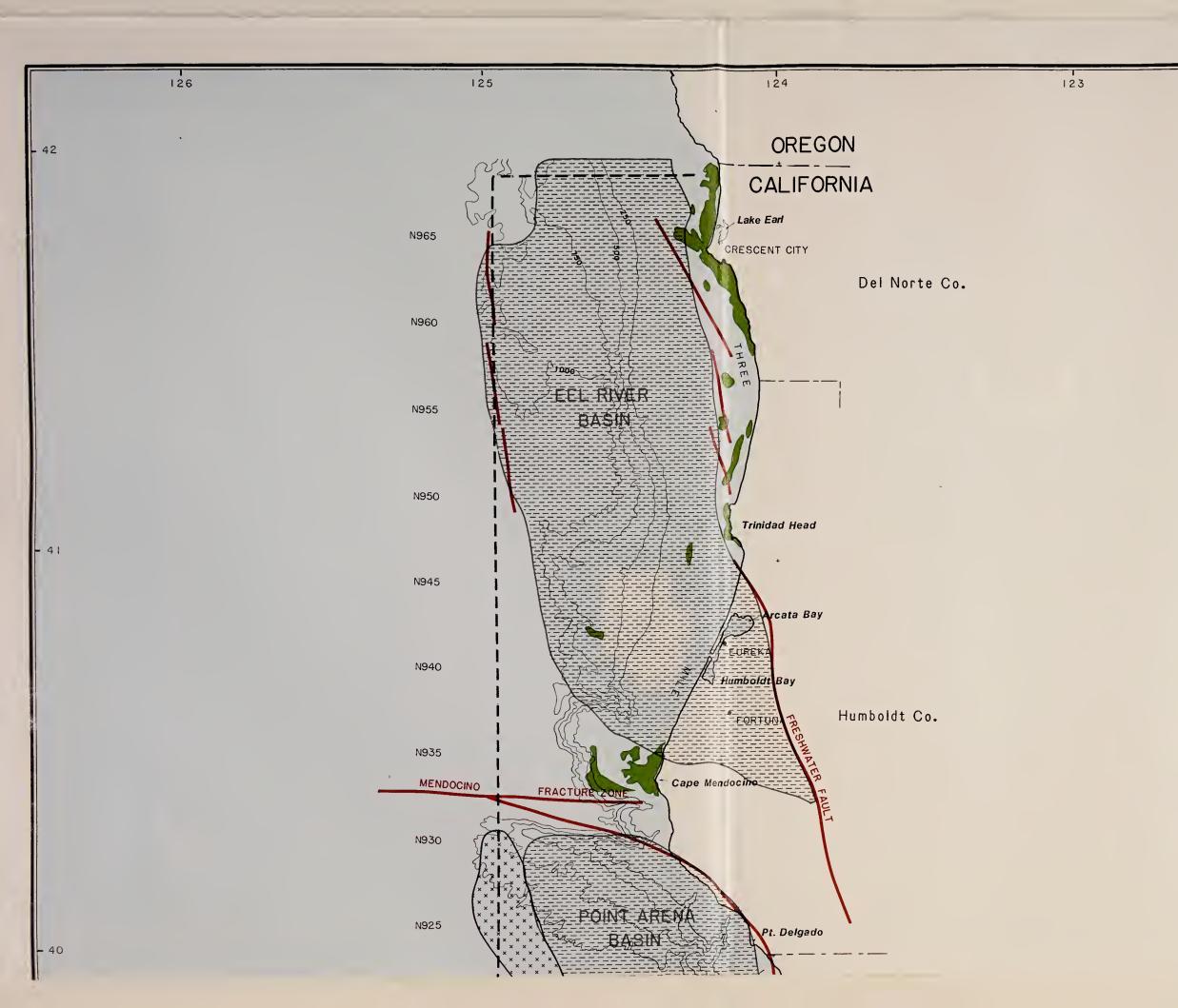
124

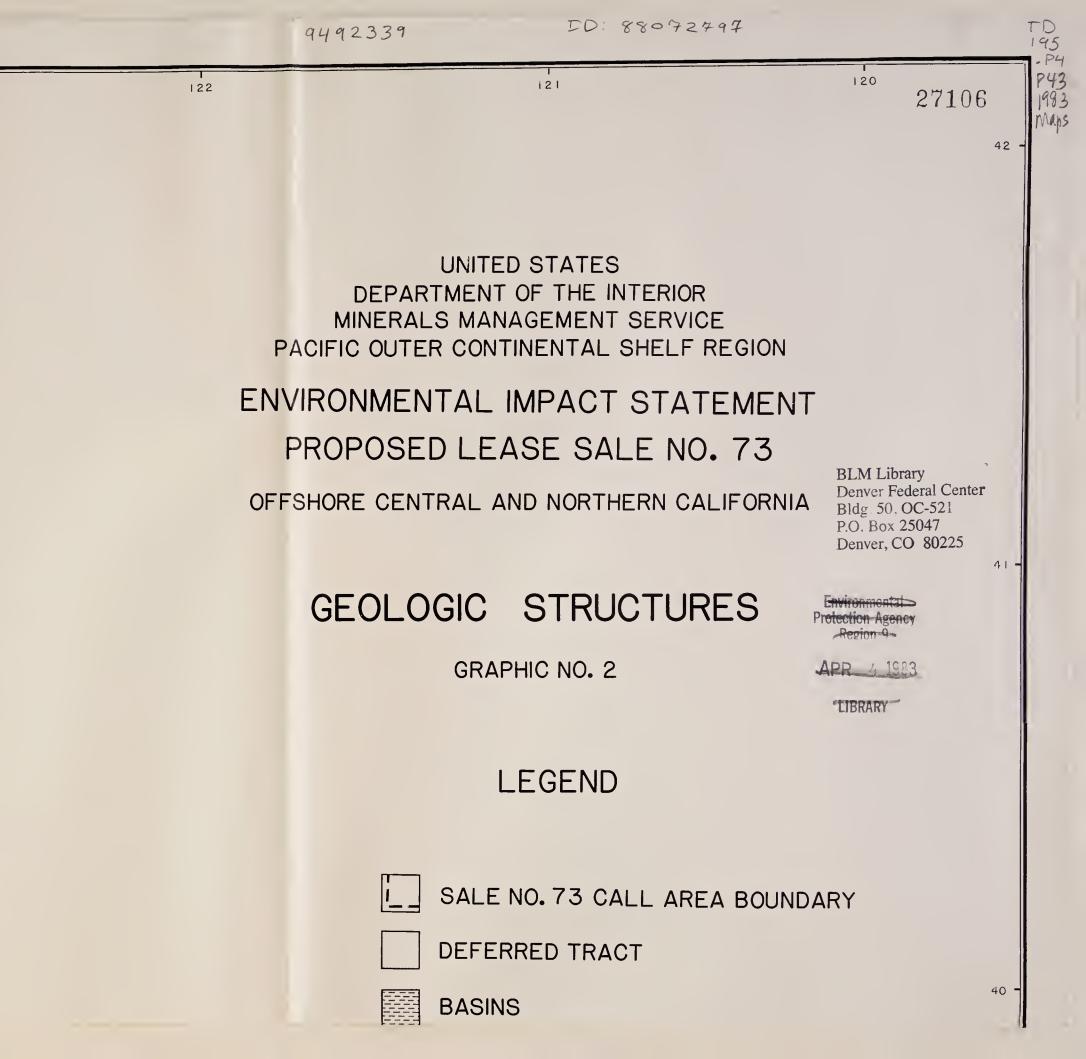
INILUMETERS 1 2 1ans 1

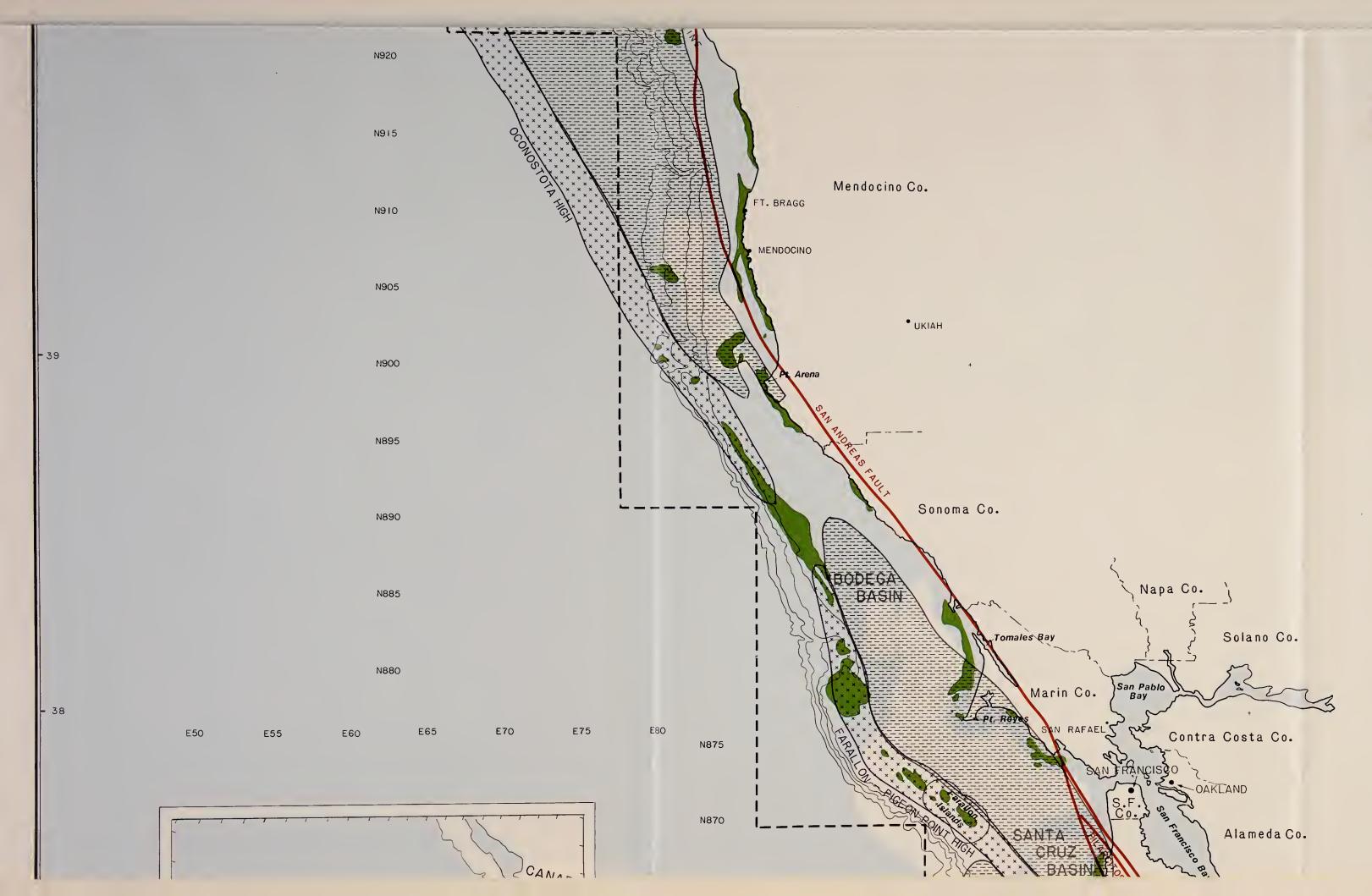


122





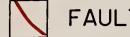




BEDROCK HIGHS



PRINCIPAL ROCKY OUTCROPS



FAULT ZONES

SOURCE: RICHMOND, W. C., AND BURDICK, D. J., 1981, GEOLOGIC HAZARDS AND CONSTRAINTS OF OFFSHORE NORTHERN AND CENTRAL CALIFORNIA: OFFSHORE TECHNOLOGY CONFERENCE, PROCEEDINGS PAPER OTC 4117, P. 9-12 FIGURE I.

38

39 .



250 M. BATHYMETRIC CONTOUR INTERVALS

- 35

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AT THE TIME OF PREPARATION, BUT THE BUREAU OF LAND MANAGEMENT, U.S.D.I. DOES

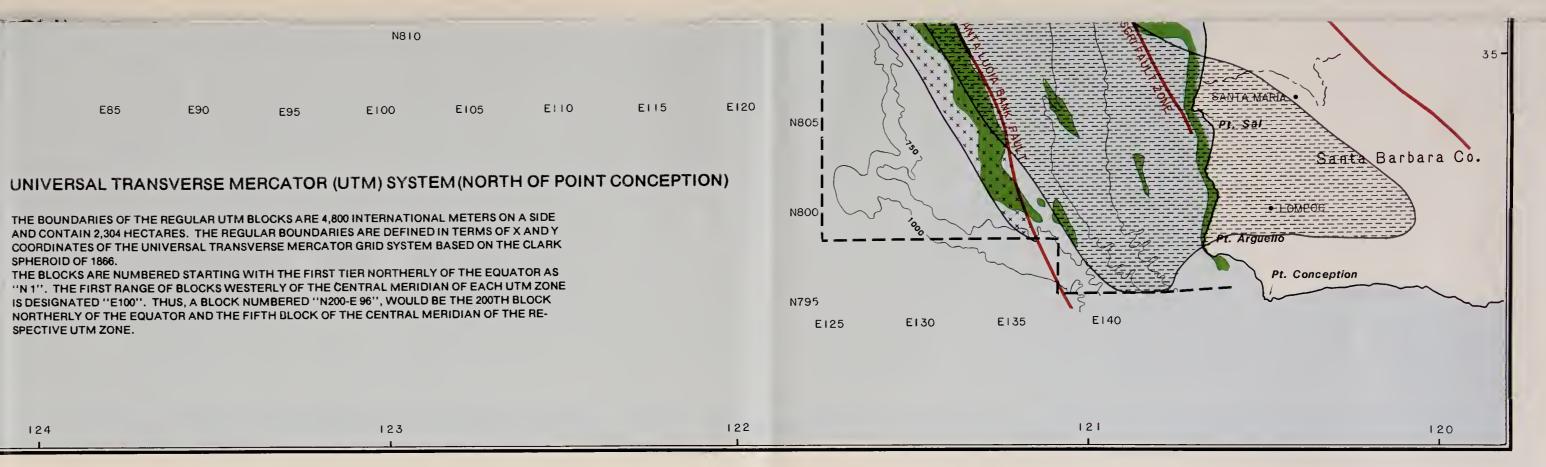
NOT GUARANTEE THE ACCURACY TO THE RESPONSIBILITY OR LIABILITY FOR

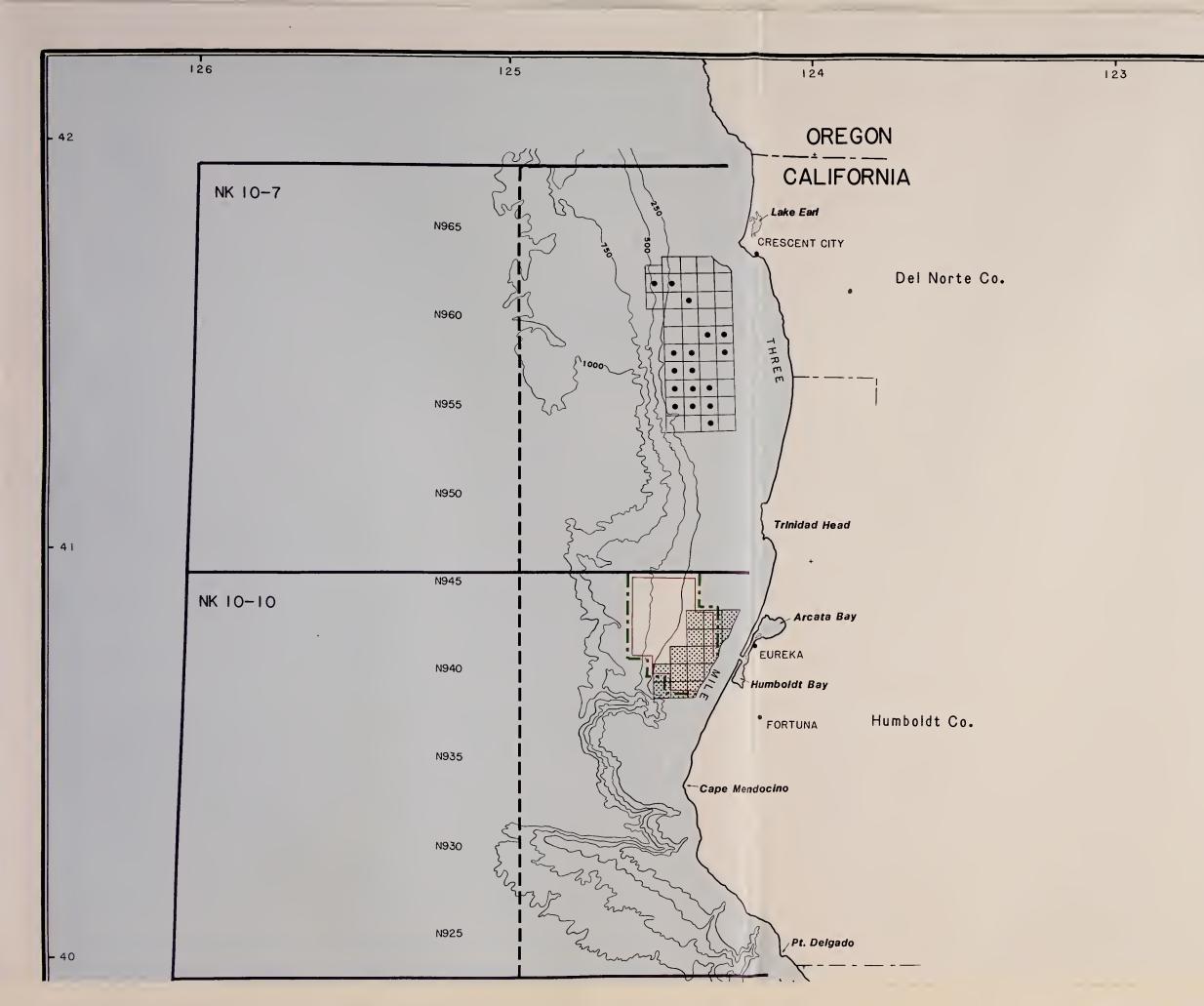
E100 E85 E90 E95

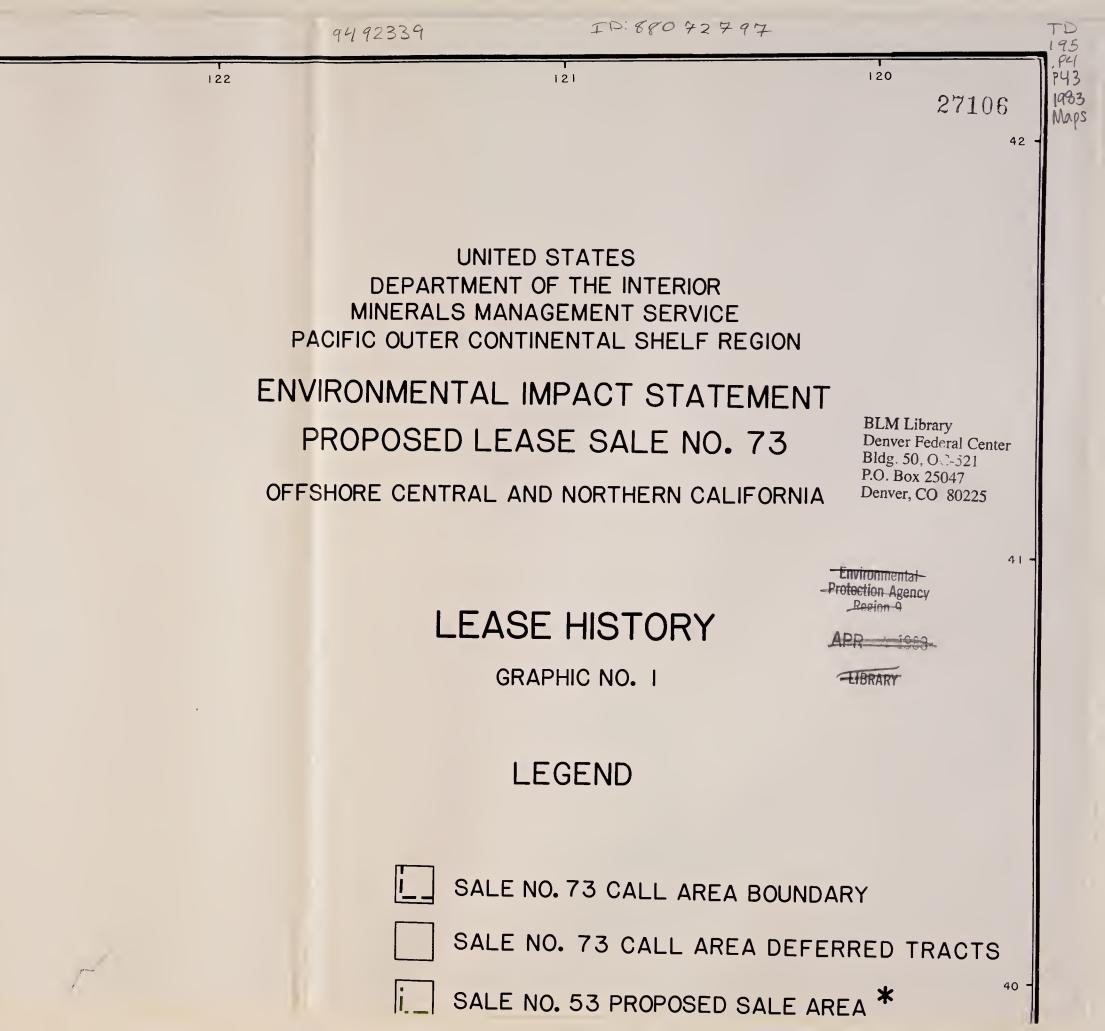
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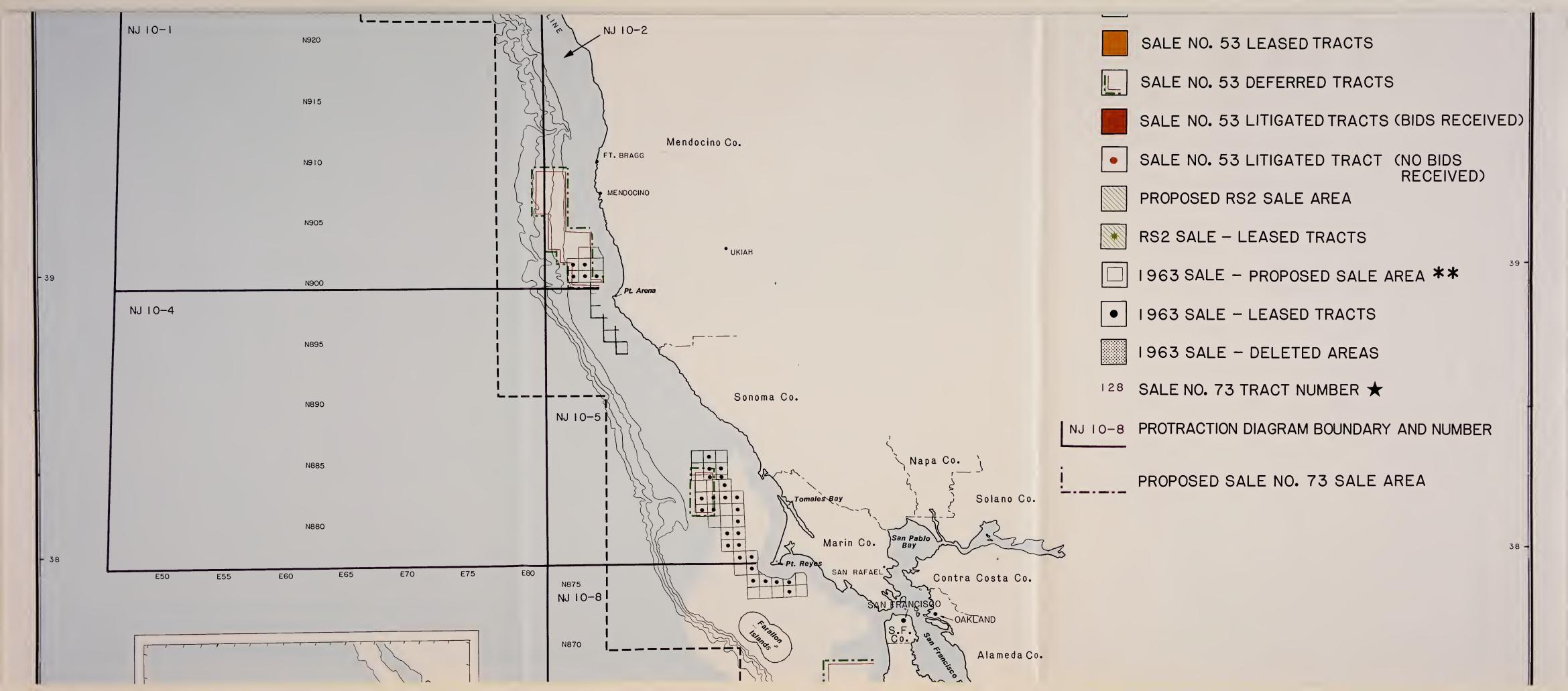
IS DESIGNATED "E100". THUS, A BLOCK NUMBERED "N200-E 96", WOULD BE THE 200TH BLOCK NORTHERLY OF THE EQUATOR AND THE FIFTH BLOCK OF THE CENTRAL MERIDIAN OF THE RE-SPECTIVE UTM ZONE.

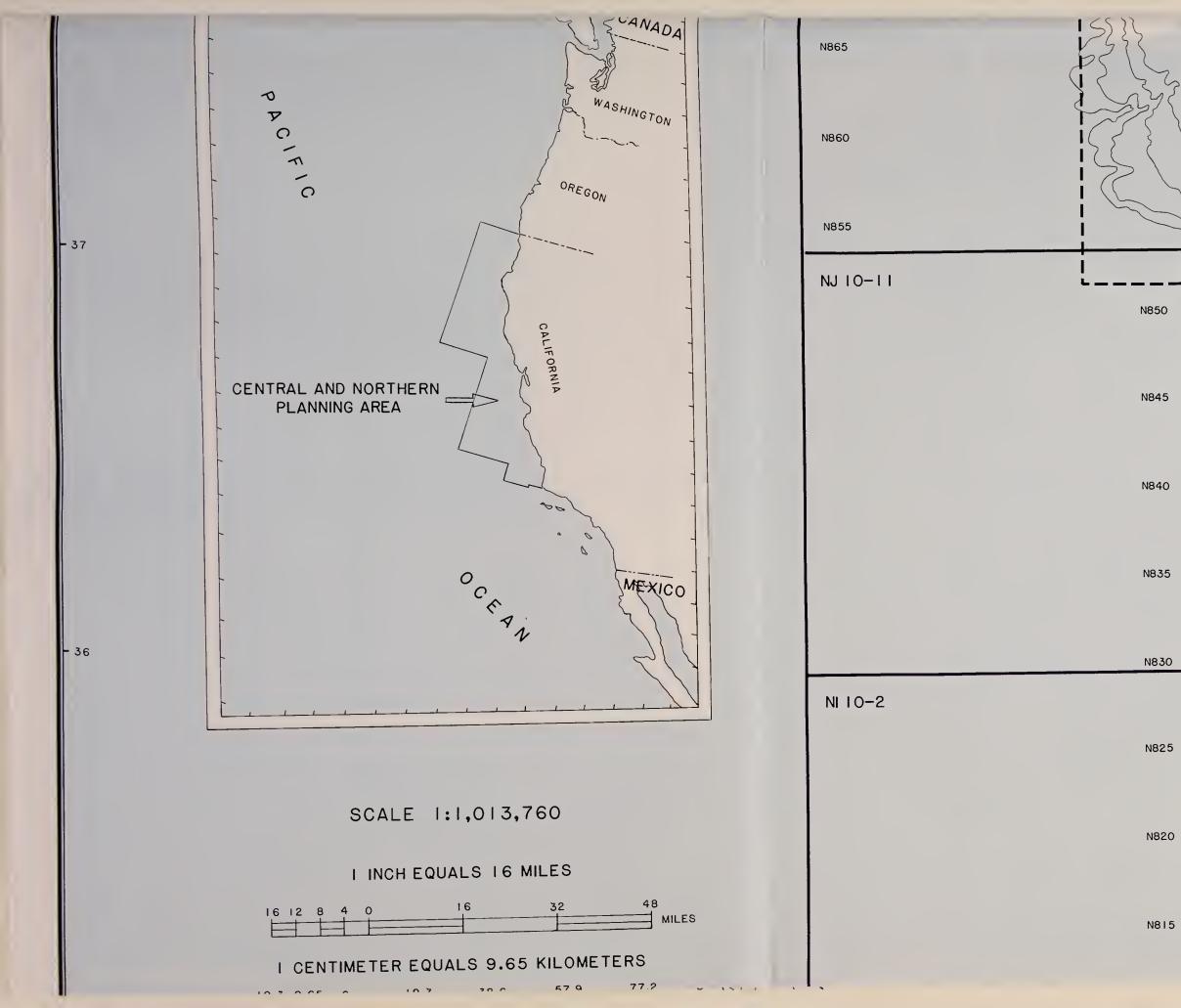
| 126 | 125 | 124 | 123 |
|-----|-----|-----|-----|

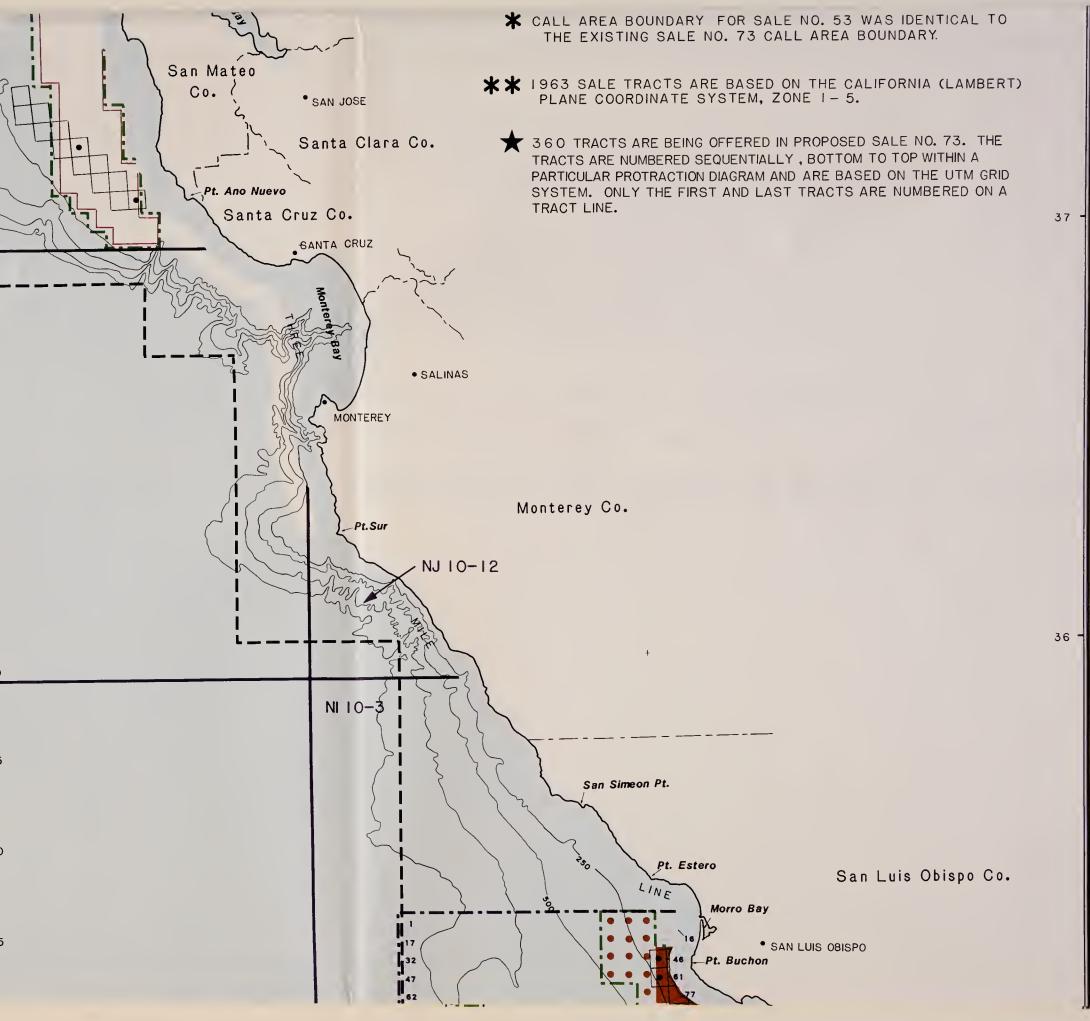


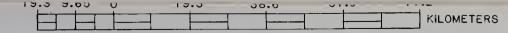










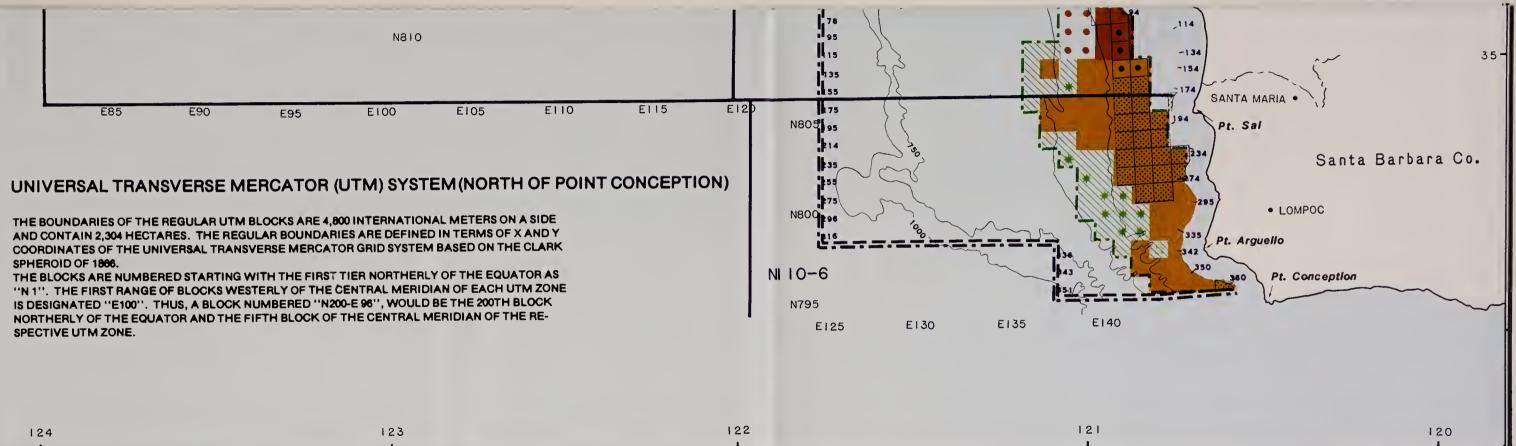


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> > 125



SPHEROID OF 1866.

SPECTIVE UTM ZONE.

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- 35

