MAGNETIC LINEATIONS

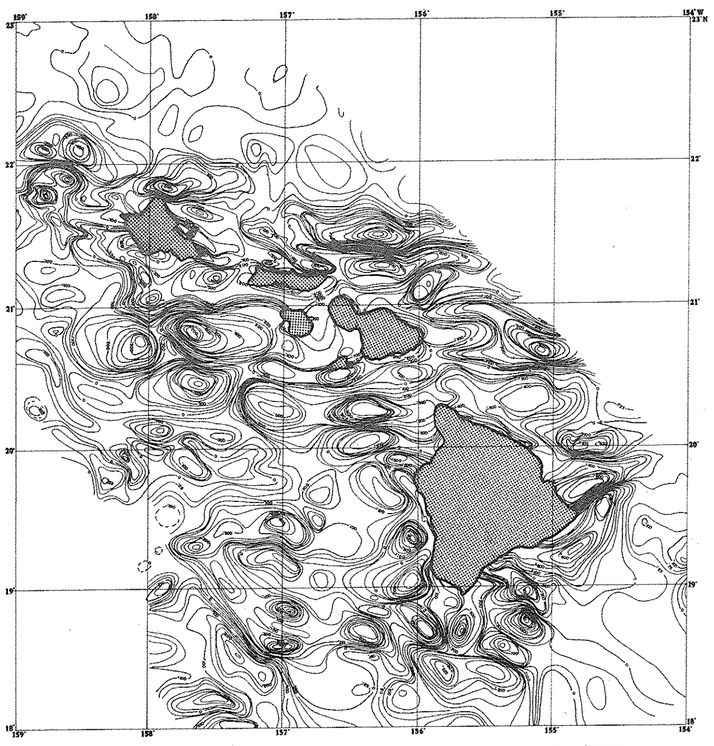


FIGURE 4. MAGNETIC LINEATIONS WITH CONTOURS IN GAMMAS. (FROM MALAHOFF AND WOOLLARD, 1966).

SEISMIC REFLECTION & REFRACTION

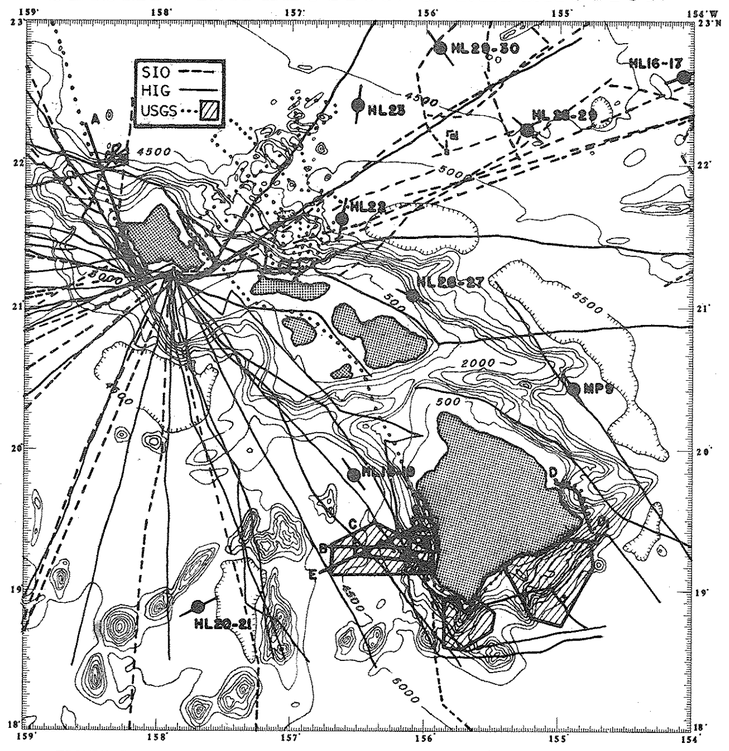


FIGURE 5. SEISMIC REFLECTION CRUISES AND REFRACTION STATIONS WITH AZIMUTHS. SEE BELOW FOR DATA SOURCES.

FOR INFORMATION ABOUT THESE CRUISES, CONTACT :
J.F. CAMPBELL - HAWAII INSTITUTE OF GEOPHYSICS, HONOLULU, HAWAII
S.M. SMITH (REFLECTION)
D. MC GOWAN (REFRACTION) SCRIPPS INSTITUTION OF OCEANOGRAPHY, LA JOLLA, CALIF.
A. WRIGHT - U.S. GEOLOGICAL SURVEY, MENLO PARK CALIF.

GRAVITY ANOMALY

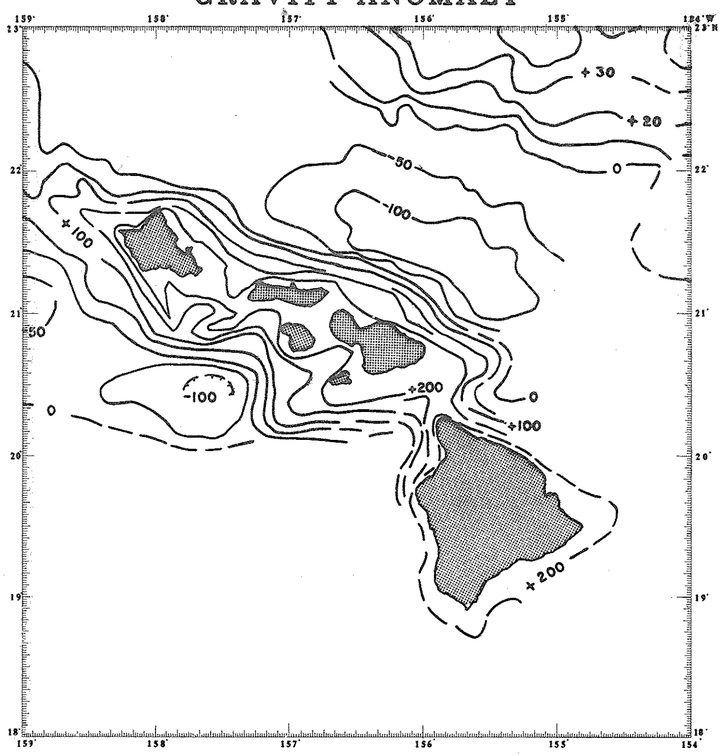
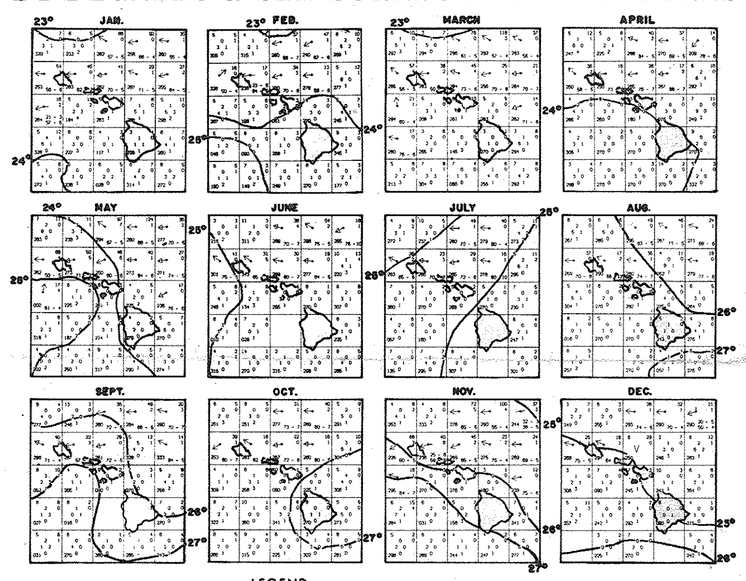
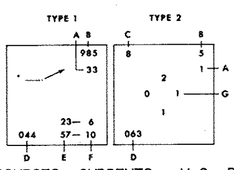


FIGURE 6. FREE AIR GRAVITY ANOMALIES. CONTOUR INTERVALS ARE 10 AND 50 MILLIGALS. (FROM MALAHOFF AND WOOLLARD, 1966).

MONTHLY SURFACE CURRENTS BY DEGREES & SEA SURFACE TEMPERATURES (°C)



LEGEND



A NUMBER OF CALMS (INCLUDED IN TOTAL OBSERVATIONS).

B TOTAL OBSERVATIONS (999 ALSO USED FOR 1000 OR MORE OBSERVATIONS).

C MEAN SPEED (0.8 KNOT) FOR ALL OBSERVATIONS.

D VECTOR RESULTANT DIRECTION (°T) FOR ALL OBSERVATIONS.

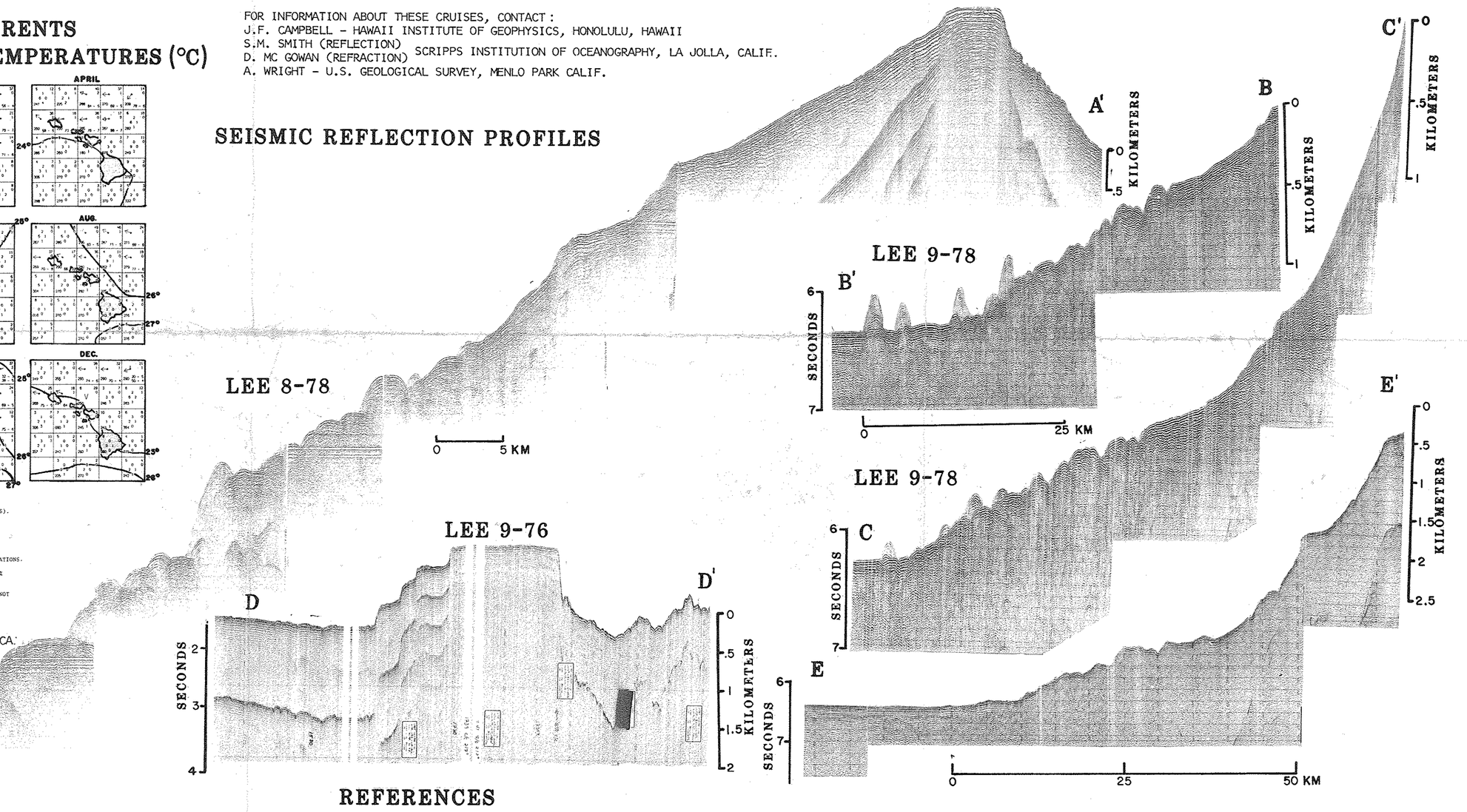
E PERCENT FREQUENCIES (57% PRIMARY DIRECTION, 23% SECONDARY DIRECTION).

F MEAN SPEEDS (1.0 KNOT PRIMARY DIRECTION, 0.6 KNOT SECONDARY DIRECTION).

G NUMBER OF OBSERVATIONS BY QUADRANT.

SOURCES: CURRENTS - H.O. PUB. 1402, NP 12
TEMPERATURES - J. RENNER, N.M.F.S., LA JOLLA, CA.

SEISMIC REFLECTION PROFILES



PAPERS

ABBOTT, A. T., AND S. W. POTTRATZ, 1969. MARINE POTHOLE EROSION, OAHU, HAWAII: PACIFIC SCI., V. 23, P. 276-290.

ADAMS, W. M., 1973. EXPECTED TSUNAMI INUNDATION FOR THE HAWAIIAN ISLANDS: MAR. TECH. SOC. JOUR., V. 7, P. 29-34.

ADAMS, W. M., 1974. FIRST STRONG MOTION INSTRUMENTATION IN HAWAII, WITH RESULTS FROM THE EARTHQUAKE OF APRIL 26, 1973: SEISMOL. SOC. AMERICA BULL., V. 64, P. 1909-1918.

AGASSIZ, L., 1889. THE CORAL REEFS OF THE HAWAIIAN ISLANDS: HARVARD COLL., MUS. COMPARATIVE ZOOL., V. 17, P. 121-170.

ALEXANDER, W. D., 1871. ON THE EARTHQUAKE AT OAHU, HAWAIIAN ISLANDS, ON FEBRUARY 18, 1871: AM. JOUR. SCI., V. 49, P. 43-48.

ANDREWS, J. E., J. D. CRANE, AND W. A. HARDY, 1977. INVESTIGATIONS OF THE DEEP-SEA FLOOR BY SIDE-SCAN CONAR TECHNIQUES: CENTRAL EASTERN PACIFIC: DEEP-SEA RES., V. 24, P. 975-985.

ANONYMOUS, 1938. THE MAUI EARTHQUAKE OF JANUARY 22, 1938: VOLCANO LETTER 457, P. 1-5.

BELLER, W. S., 1970. GEARING UP FOR COASTAL ZONE MANAGEMENT: ENVIRON. SCI. TECHNOL., V. 4, P. 482-486.

BROCK, V. E., AND T. C. CHAMBERLAIN, 1968. A GEOLOGICAL AND ECOLOGICAL RECONNAISSANCE OF WESTERN OAHU, HAWAII, PRINCIPALLY BY MEANS OF THE RESEARCH SUBMARINE ASHERAH: PACIFIC SCI., V. 22, P. 373-394.

BROWN, C. W., 1935. A SEAQUAKE OFF THE ISLAND OF HAWAII, T. H.: EARTHQUAKE NOTES, V. 7, P. 14.

COUCH, R. W., AND D. F. HEINRICHS, 1969. OCEANIC AND CONTINENTAL GRAVITY INVESTIGATIONS BY OREGON STATE UNIV.: EOS, V. 50, P. 546-548.

COULBOURN, W. T., J. F. CAMPBELL, AND R. MOBERLY, 1974. HAWAIIAN SUBMARINE TERRACES, CANYONS AND QUATERNARY HISTORY EVALUATED BY SEISMIC-REFLECTION PROFILING: MAR. GEOL., V. 17, P. 215-234.

COULBOURN, W. T., AND J. M. RESIG, 1975. ON THE USE OF BENTHIC FORAMINIFERA AS SEDIMENT TRACERS IN A HAWAIIAN BAY: PACIFIC SCI., V. 29, P. 99-115.

COX, D. C., 1963. THE TSUNAMI RESEARCH PROGRAM OF THE HAWAII INSTITUTE OF GEOPHYSICS, IN TENTH PACIFIC SCIENCE CONGRESS, PROCEEDINGS OF THE TSUNAMI MEETINGS, HAWAII, 1961: INTERNAT. UNION GEODESY AND GEOPHYSICS, MON. 24, P. 129-130.

DALRYMPLE, G. B., AND J. G. MOORE, 1968. ARGON-40 EXCESS IN SUBMARINE PILLOW BASALTS FROM KILAUEA VOLCANO, HAWAII: SCIENCE, V. 161, P. 1132-1135.

DALRYMPLE, G. B., E. A. SILVER AND E. D. JACKSON, 1973. ORIGIN OF THE HAWAIIAN ISLANDS: AM. SCI., V. 61, P. 294-308.

DIETZ, R. S., AND H. W. MENARD, JR., 1953. HAWAIIAN SWELL, DEEP, AND ARCH, AND SUBSIDENCE OF THE HAWAIIAN ISLANDS: JOUR. GEOL., V. 61, P. 99-113.

DUCE, R. A., 1969. ON THE SOURCE OF GASEOUS CHLORINE IN THE MARINE ATMOSPHERE: JOUR. GEOPHYS. RES., V. 74, P. 4597-4599.

DUCE, R. A., J. W. WINCHESTER AND T. W. VAN NAHL, 1965. IODINE, BROMINE, AND CHLORINE IN THE HAWAIIAN MARINE ATMOSPHERE: JOUR. GEOPHYS. RES, V. 70, P. 1775.

EASTON, W. H., 1973. SUBMARINE BENCH AT 5 M, OAHU, HAWAII: GEOL. SOC. AMERICA BULL., V. 84, P. 2275-2280.

EMERY, K. O., 1955. SUBMARINE TOPOGRAPHY SOUTH OF HAWAII: PACIFIC SCI., V. 9, P. 286-291.

EMERY, K. O., AND D. C. COX, 1956. BEACHROCK IN THE HAWAIIAN ISLANDS: PACIFIC SCI., V. 10, P. 382-402.

ESTILL, R.E. AND M.E. ODEGARD, 1978. HAWAIIAN RIDGE SEISMICITY FROM THE MAKAPUU OCEAN BOTTOM SEISMOGRAPH: GEOPHYS. RES. LETT., V.5, NO. 6, P. 485-486.

FAN, P. F., AND R. R. GRUNWALD, 1971. SEDIMENT DISTRIBUTION IN THE HAWAIIAN ARCHIPELAGO: PACIFIC SCI., V. 25, P. 484-488.

FISCHER, W. A., R. M. MOXHAM, F. POLCYN AND G. H. LANDIS, 1964. INFRA-RED SURVEYS OF HAWAIIAN VOLCANOES: SCIENCE, V. 146, P. 733-742.

FORNAN, D.J., U.G. MOORE, AND L. CALK, 1979. A LARGE SUBMARINE SAND-RUBBLE FLOW ON KILAUEA VOLCANO, HAWAII: JOUR. VOLCANOL. GEOTHERM. RES., V. 5, P. 239-256.

FORNAN, D.J., D.W. PETERSON, J.P. LOCKWOOD, ET AL., 1979. SUBMARINE EXTENSION OF THE SOUTHWEST RIFT ZONE OF MAUNA LOA VOLCANO, HAWAII: VISUAL OBSERVATIONS FROM U.S. NAVY DEEP SUBMERGENCE VEHICLE DSV SEA CLIFF: GEOL. SOC AMERICA BULL., V. 90, P. I 435-I 443.

FURUMOTO, A. S., G. P. WOOLLARD, J. F. CAMPBELL AND D. M. HUSSONG, 1968. VARIATION IN THE THICKNESS OF THE CRUST IN THE HAWAIIAN ARCHIPELAGO, IN CRUST AND UPPER MANTLE OF THE PACIFIC AREA: AM. GEPHYS. UNION MON. 12, P. 94-111.

GLASBY, G. P., AND J. E. ANDREWS, 1977. MANGANESE CRUSTS AND NODULES FROM THE HAWAIIAN RIDGE: PACIFIC SCI., V. 31, P. 363-379.

HILL, D. P., 1969. CRUSTAL STRUCTURE OF THE ISLAND OF HAWAII FROM SEISMIC-REFRACTION MEASUREMENTS: SEISMOL. SOC. AMERICA BULL., V. 59, P. 101-130.

HIRES, R.I. AND R.B. MONTGOMERY, 1972. NAVIFACIAL TEMPERATURE AND SALINITY ALONG THE TRACK FROM SAMOA TO HAWAII, 1957-1965: (PAPER) JOUR. MAR. RES., V. 30(2), P. 177-200.

HUBBARD, N. J., 1969. A CHEMICAL COMPARISON OF OCEANIC RIDGE, HAWAIIAN THOLEIITIC AND HAWAIIAN ALKALIC BASALTS: EARTH AND PLANETARY SCI. LETTERS, V. 5, P. 346-352.

INMAN, D. L., W. R. GAYMAN AND D. C. COX, 1963. LITTORAL SEDIMENTARY PROCESSES ON KAUAI, A SUBTROPICAL HIGH ISLAND: PACIFIC SCI., V. 17, P. 106-130.

JACKSON, E. D., 1968. THE CHARACTER OF THE LOWER AND UPPER MANTLE BENEATH THE HAWAIIAN ISLANDS, IN INTERNAT. GEOL. CONGRESS 23, PRAGUE, PROC. SEC. 1: PRAGUE, ACADEMIA, P. 135-150.

JAGGER, T. A., JR., 1930. OCEAN WAVES FROM SUBMARINE EARTHQUAKES: VOLCANO LETTER 274, P. 1-4.

JAGGER, T. A., JR., 1930. THE HUALALAI EARTHQUAKE CRISIS OF 1929: VOLCANO LETTER 309, P. 1-2.

JAGGER, T. A., JR., 1931. REVIEW OF HAWAIIAN EARTHQUAKES, 1929-1930: VOLCANO LETTER 358, P. 1-4.

JONES, A. E., 1931. PUNA SHORELINE SUSIDENCE: VOLCANO LETTER 361, P. 1-4.

JONES, A. E., 1935. HAWAIIAN TRAVEL TIMES: SEISMOL. SOC. AMERICA BULL., V. 25, P. 33-61.

JONES, A. E., 1938. EMPIRICAL STUDIES OF SOME OF THE SEISMIC PHENOMENA OF HAWAII: SEISMOL. SOC. AMERICA BULL., V. 28, P. 313-357.

KINOSHITA, W. T., 1967. 1963 EARTHQUAKES AND DEFORMATION IN THE KOAE FAULT ZONE, KILAUEA VOLCANO, HAWAII, (IN GEOLOGICAL RESEARCH 1967, CHAP. C): U.S. GEOL. SURV. PROF. PAPER 575-C, P. C173-C176.

KLEIN, D. P., AND J. C. LARSEN, 1978. MAGNETIC INDUCTION FIELDS (2-30 CPD) ON HAWAII ISLAND AND THEIR IMPLICATIONS REGARDING ELECTRICAL CONDUCTIVITY IN THE OCEANIC MANTLE: ROY. ASTRON. SOC. GEOPHYS. JOUR., V. 53, P. 61-77.

KOYANAGI, R. Y., AND E. T. ENDO, 1965. HAWAIIAN SEISMIC EVENTS DURING 1963, IN GEOLOGICAL SURVEY RESEARCH 1965: U.S. GEOL. SURV. PROF PAPER 525-B, P. B13-B16.

KOYANAGI, R. Y., 1968. EARTHQUAKES FROM COMMON SOURCES BENEATH KILAUEA AND MAUNA LOA VOLCANOES IN HAWAII FROM 1962 TO 1965: IN U.S. GEOL. SURV. PROF. PAPER 600-C, P. C120-C125.

KOYANAGI, R. Y., 1969. HAWAIIAN SEISMIC EVENTS DURING 1966, IN GEOLOGICAL SURVEY RESEARCH 1969, CHAP. B: U.S. GEOL. SURV. PROF. PAPER 650-B, P. B113-B116.

KOYANAGI, R. Y., 1969. HAWAIIAN SEISMIC EVENTS DURING 1967, IN GEOLOGICAL SURVEY RESEARCH 1969, CHAP. C: U.S. GEOL. SURV. PROF. PAPER 650-C, P. C79-C82.

KOYANAGI, R. Y., 1969. HAWAIIAN SEISMIC EVENTS DURING 1968, IN GEOLOGICAL SURVEY RESEARCH 1969, CHAP. D: U.S. GEOL. SURV. PROF. PAPER 650-D, P. D168-D171.

KOYANAGI, R. Y., AND T. E. ENDO, 1971. HAWAIIAN SEISMIC EVENTS DURING 1969: U.S. GEOL. SURV. PROF. PAPER 750, P. C158-C164.

KOYANAGI, R. Y., E. T. ENDO AND J. S. EBISU, 1975. REAWAKENING OF MAUNA LOA VOLCANO, HAWAII; A PRELIMINARY EVALUATION OF SEISMIC EVIDENCE: GEOPHYS. RES. LETTERS., V. 2, P. 405-408.

KU, T. L., M. A. KIMMEL AND W. H. EASTON, 1974. EUSTATIC SEA LEVEL 120,000 YEARS AGO ON OAHU, HAWAII: SCIENCE, V. 183, P. 959-962.

LANGFORD, S. A., AND R. C. BRILL, 1972. GIANT SUBMARINE LANDSLIDES ON THE HAWAIIAN RIDGE; A REBUTTAL: PACIFIC SCI., V. 26, P. 254-258.

LISITSYNA, N. A., G. Y. BUTUZOV, I. I. VOLKOV AND OTHERS, 1975. VLIYANIYE GAVAYSKOGO VULKANIZMA NA OSADKONAPLENIYE (THE INFLUENCE OF HAWAIIAN VOLCANISM ON SEDIMENTATION) IN PROBLEMY LITOGII I GEOKHIMII OSADO-CHNYKH POROD I RUD, PEYVE A. U. AND OTHER (EDS.): IZD NAUKA, MOSCOW, USSR, P. 130-149.

MACDONALD, G. A., 1951. THE KILAUEA EARTHQUAKE OF APRIL 22, 1951, AND ITS AFTERSHOCKS: VOLCANO LETTER 512, P. 1-3.

MACDONALD, G. A., 1952. THE SOUTH HAWAII EARTHQUAKES OF MARCH AND APRIL, 1952: VOLCANO LETTER 515, P. 1-5.

MACDONALD, G. A., 1960. DISSIMILARITY OF CONTINENTAL AND OCEANIC ROCK TYPES: JOUR. PETROLOGY, V. 1, P. 172-177.

MACDONALD, G. A., AND C. K. WENTWORTH, 1952. THE KONA EARTHQUAKE OF AUGUST 21, 1951: PACIFIC SCI., V.6, P. 269-287.

MAL, A. K., 1962, ATTENUATION OF LOVE-WAVES IN LOW-PERIOD RANGE NEAR VOLCANIC ISLAND MARGINS: GEOFISICA PURA E APPL., V. 51, P. 47-58.

MALAHOFF, A., AND W. E. STRANGE, 1965. THE PALEOMAGNETIC SIGNIFICANCE OF AEROMAGNETIC SURVEYS OF THE HAWAIIAN ISLANDS: PACIFIC SCI., V. 19, P. 390-392.

MALAHOFF, A., W. E. STRANGE AND G. P. WOOLLARD, 1966, MOLOKAI FRACTURE ZONE - CONTINUATION WEST OF THE HAWAIIAN RIDGE: SCIENCE, V. 153, P. 521-522.

MALAHOFF, A., AND G. P. WOOLLARD, 1966. MAGNETIC MEASUREMENTS OVER THE HAWAIIAN RIDGE AND THEIR VOLCANOLOGICAL IMPLICATION: BULL. VOLCANOL., V. 29, P. 735-759.

MALAHOFF, A., AND G. P. WOOLLARD, 1966. MAGNETIC SURVEYS OVER THE HAWAIIAN ISLANDS AND THEIR GEOLOGICAL IMPLICATIONS: PACIFIC SCI., V. 20, P. 265-311.

MALAHOFF, A. AND G. P. WOOLLARD, 1968. MAGNETIC AND TECTONIC TRENDS OVER THE HAWAIIAN RIDGE, IN THE CRUST AND UPPER MANTLE OF THE PACIFIC AREA: AM. GEOPHYS. UNION MON. 12, P. 241-276.

MALAHOFF, A., AND F. MCCOY, 1967. THE GEOLOGIC STRUCTURE OF THE PUNA SUBMARINE RIDGE, HAWAII: JOUR. GEOPHYS. RES., V. 72, P. 541-548.

MARTIN, J. H. AND G. A. KNAUER, 1973, THE ELEMENTAL COMPOSITION OF PLANKTON: GEOCHIM. ET COSMOCHIM. ACTA, V. 37, P. 1639-1653.

MATHEWSON, C. C., 1970. SUBMARINE CANYON AND THE SHELF ALONG THE NORTH COAST OF MOLOKAI ISLAND, HAWAIIAN RIDGE: PACIFIC SCI., V. 24, P. 235-244.

MCDOUGALL, I., 1971. VOLCANIC ISLAND CHAINS AND SEA FLOOR SPREADING: NATURE, V. 231, P. 141-144.

MENARD, H. W., 1969. GROWTH OF DRIFTING VOLCANOES: JOUR. GEOPHYS. RES., V. 74, P. 4827-4837.

MENARD, H. W., E. C. ALLISON, AND J. W. DURHAM, 1962. A DROWNED MIOCENE TERRACE IN THE HAWAIIAN ISLANDS: SCIENCE, V. 138, P. 896-897.

MOBERLY, R., JR., 1963. AMORPHOUS MARINE MUDS FROM TROPICALLY WEATHERED BASALT: AM. JOUR. SCI, V 261, P. 767-772.

MOBERLY, R., JR., L. D. BAVER, JR., AND A. MORRISON, 1965. SOURCE AND VARIATION OF HAWAIIAN LITTORAL SAND: JOUR. SED. PETROLOGY, V. 35, P. 589-598.

MOBERLY, R., JR., AND F. W. MCCOY JR., 1966. THE SEA FLOOR NORTH OF THE EASTERN HAWAIIAN ISLANDS: MARINE GEOL., V. 4, P. 21-48.

MOBERLY, R., JR., M. S. KIMURA, AND F. W. MCCOY, JR., 1968. AUTHIGENE MARINE PHYLLOSILICATES NEAR HAWAII: GEOL. SOC. AMERICA BULL., V. 79, P. 1449-1460.

MOBERLY, R., JR., 1968. LOSS OF HAWAIIAN LITTORAL SAND: JOUR. SED. PETROLOGY, V. 38, P. 17-34.

MOORE, J. G., 1964. GIANT SUBMARINE LANDSLIDES ON THE HAWAIIAN RIDGE: U.S. GEOL. SURV. PROF. PAPER 501-D, P. D95-D98.

MOORE, J. G., 1965. PETROLOGY OF DEEP SEA BASALT NEAR HAWAII: AM. JOUR. SCI., V. 263, P. 40-52.

MOORE, J. G. 1966. RATE OF PALAGONITIZATION OF SUBMARINE BASALT ADJACENT TO HAWAII: U.S. GEOL. SURV. PROF. PAPER 550-D, P. D163-D171.

MOORE, 1971. BATHYMETRY AND GEOLOGY EAST CAPE OF THE ISLAND OF HAWAII: U.S. GEOL. SURV. MISC. GEOL. INVEST. MAP. NO. I-677, SCALE 1:62,500.

MOORE, J. G. AND R. K. REED, 1963. PILLOW STRUCTURES OF SUBMARINE BASALTS EAST OF HAWAII, IN GEOLOGICAL SURVEY RESEARCH 1963: U.S. GEOL. SURV. PROF. PAPER 475-B, P. B153-B157.

MOORE, J. G. AND D.L. PECK, 1965. BATHYMETRIC, TOPOGRAPHIC, AND STRUCTURAL MAP OF THE SOUTH-CENTRAL FLANK OF KILANEA VOLCANO, HAWAII: U.S. GEOL. SURV. MISC. GEOL. INV. MAP I-456, SCALE 1:62,500.

MOORE, J. G. AND R. W. FISKE, 1969. VOLCANIC SUBSTRUCTURE INFERRED FROM DREDGE SAMPLES AND OCEAN-BOTTOM PHOTOGRAPHS, HAWAII: GEOL. SOC. AMERICA BULL., V. 80, P. 1191-1201.

MORRIS, G. B., R. W. RAITT AND G. G. SHOR, JR., 1969. VELOCITY ANISOTROPY AND DELAY-TIME MAPS OF THE MANTLE NEAR HAWAII: JOUR. GEOPHYS. RES., V. 74, P. 4300-4316.

NOBLE, C. S. AND J. J. NAUGHTON, 1968. DEEP-OCEAN BASALTS-INERT GAS CONTENT AND UNCERTAINTIES IN AGE DATING: SCIENCE, V. 162, P. 265-267.

NORMARK, W. R. AND G. G. SHOR, JR., 1968. SEISMIC REFLECTION STUDY OF THE SHALLOW STRUCTURE OF THE HAWAIIAN ARCH: JOUR. GEOPHYS. RES., V. 73, P. 6991-6998.

RUHE, R. V., J. M. WILLIAMS AND E. L. HILL, 1965. SHORELINES AND SUBMARINE SHELVES, OAHU, HAWAII: JOUR. GEOL., V. 73, P. 485-497.

SCHREIBER, B. C. 1969. NEW EVIDENCE CONCERNING THE AGE OF THE HAWAIIAN RIDGE: GEOL. SOC. AMERICA BULL., V. 80, P. 2601-2604.

SCLATER, J. G. AND C. E. CORRY, 1967. HEAT FLOW, HAWAIIAN AREA: JOUR. GEOPHYS. RES., V. 72, P. 3711-3715.

SHEPARD, F.P., G. A. MACDONALD AND D. C. COX, 1950. THE TSUNAMI OF APRIL 1, 1946: SCRIPPS INST. OCEANOGRAPHY BULL., V. 5, P. 391-528.

SHOR, G. G. 1960. CRUSTAL STRUCTURE OF THE HAWAIIAN RIDGE NEAR GARDNER PINNACLES: SEISMOL. SOC. AMERICA BULL., V. 50, P. 563-573.

SHOR, G. G. JR., AND D. D. POLLARD, 1964. MOHOLE SITE SELECTION STUDIES NORTH OF MAUI: JOUR. GEOPHYS. RES., V. 69, P. 1627-1637.

SKILBECK, J. N, AND J. A. WHITEHEAD, JR. 1978. FORMATION OF DISCREET ISLANDS IN LINEAR ISLAND CHAINS: NATURE, V. 272, P. 499-501.

SMITH, S. M. AND H. W. MENARD, 1965. THE MOLOKAI FRACTURE ZONE, IN PROGRESS IN OCEANOGRAPHY, V. 3: PERGAMMON PRESS, LONDON AND NEW YORK, P. 333-345.

STRANGE, W. E., G. P. WOOLARD AND J. C. ROSE, 1965. AN ANALYSIS OF THE GRAVITY FIELD OVER THE HAWAIIAN ISLANDS IN TERMS OF CRUSTAL STRUCTURE: PACIFIC SCI., V. 19, P. 381-389.

STEARNS, T. H., 1941. SHORE BENCHES ON NORTH PACIFIC ISLANDS: GEOL. SOC. AMERICA BULL., V. 52, P. 733-780.

STEARNS, H. T. 1961. EUSTATIC SHORELINES ON PACIFIC ISLANDS, IN PACIFIC ISLAND TERRACES - EUSTATIC? - (A SYMPOSIUM): ZEITSCHR. GEOMORPHOLOGIE, SUPPLEMENTBAND 3, P. 3-16.

STEARNS, H. T. 1974. SUBMERGED SHORELINES AND SHELVES IN THE HAWAIIAN ISLANDS AND A REVISION OF SOME OF THE EUSTATIC EMERGED SHORELINES: GEOL. SOC. AMERICA BULL., V. 85, P. 795-804.

STEARNS, H.T. 1978. QUATERNARY SHORELINES IN THE HAWAIIAN ISLANDS: BERNICE P. BISHOP, MUS. BULL., NO. 237, 52 PP.

STEARNS, H. T. AND W. H. EASTON, 1977. RADIOCARBON PROFILES OF HANAUMA REEF, OAHU, HAWAII: GEOL. SOC. AMERICA BULL., V. 88, P. 373-379.

TILLEY, C. E. AND I. D. MUIR, 1964. INTERMEDIATE MEMBERS OF THE OCEANIC BASALT-TRACHYTE ASSOCIATION: GEOL. FOREN. STOCKHOLM FOHM, V. 85, P. 436-444.

WAESCHE, H. H., 1937. EARTHQUAKES: VOLCANO LETTER 444, P. 1-4.

WELLMAN, P., 1967. THE AEROMAGNETIC ANOMALIES AND BATHYMETRY OF THE CENTRAL PART OF THE HAWAIIAN RIDGE: NEW ZEALAND JOUR. GEOL. GEOPHYSICS, V. 10, P. 1407-1423.

WENTWORTH, C. K., 1927. ESTIMATES OF MARINE AND FLUVIAL EROSION IN HAWAII: JOUR. GEOL., V. 35, P. 117-133.

WENTWORTH, C. K., 1938. MARINE BENCH-FORMING PROCESSES; PT. I, WATER-LEVEL WEATHERING: JOUR. GEOMORPHOLOGY, V. 1, P. 6-32.

WILKINSS, P. E., T. B. WARNER, AND R. A. CARR, 1971. SOME ASPECTS OF THE GEOCHEMISTRY OF F, FE, AND MN IN COASTAL WATERS AND IN FRESH-WATER SPRINGS ON THE SOUTHEAST COAST OF HAWAII: MARINE GEOL., V. 11. P. M39-M46.

WOOD, H. O., 1914. ON THE EARTHQUAKES OF 1868 IN HAWAII: SEISMOL. SOC. AMERICA BULL., V. 4, P. 169-203.

WORZEL, J. C., 1966. STRUCTURE OF CONTINENTAL MARGINS AND DEVELOPMENT OF OCEAN TRENCHES IN CONTINENTAL MARGINS AND ISLAND ARCS-INTERNAT. UPPER MANTLE COMM. SYMPOS., OTTAWA, 1965: CANADA GEOL. SURVEY PAPER 66-15, P. 357-375.

REFERENCES

BATHEN, K.H., 1972. CURRENT MEASUREMENTS IN PEARL HARBOR, OAHU, HAWAII: UNIV. HAWAII LOOK LABORATORY OF OCEANOGRAPHIC ENGINEERING REPT. UH-LL-72-M6.

BATHEN, K.H., 1972. A DESCRIPTIVE STUDY OF THE CIRCULATION AND WATER QUALITY IN KAILUA BAY, OAHU, HAWAII, DURING 1971 AND 1972: UNIV. HAWAII LOOK LABORATORY OF OCEANOGRAPHIC ENGINEERING REPT. NO. 29.

BATHEN, K.H., 1973. AN EXAMINATION OF THE OCEANOGRAPHIC CONDITIONS EXISTING ALONG THE WEST EWA BEACH COASTLINE, OAHU, HAWAII: ENVIRONMENTAL COMMUNICATIONS, INC.

BATHEN, K.H., 1974. RESULTS OF CIRCULATION MEASUREMENTS TAKEN DURING AUGUST 1972 TO MAY 1973 IN THE AREA BETWEEN BARBER'S POINT AND THE ENTRANCE TO PEARL HARBOR, OAHU, HAWAII: UNIV. HAWAII LOOK LABORATORY OF OCEANOGRAPHIC ENGINEERING, HONOLULU REPT. UH-LL-TR-94.

BATHEN, K.H., 1975. AN EVALUATION OF OCEANOGRAPHIC AND SOCIOECONOMIC ASPECTS OF A NEARSHORE OCEAN THERMAL ENERGY CONVERSION PILOT PLANT IN SUBTROPICAL HAWAIIAN WATERS: UNIV. HAWAII DEPT. OCEAN ENG., 309 P.

BATHEN, K.H., 1975. COMMENTS ON CIRCULATION, STRATIFICATION AND SEDIMENT QUALITY IN WEST LOCH, PEARL HARBOR, PERTINENT TO THE PROPOSED HONOULIULI WASTE WATER TREATMENT SYSTEM INTERCEPTOR LINE: PREPARED FOR AUSTIN, SMITH AND ASSOCIATES, HONOLULU.

BATHEN, K.H., 1975. OCEANOGRAPHIC AND SOCIO-ECONOMIC ASPECTS OF AN OCEAN THERMAL ENERGY CONVERSION PILOT PLANT IN SUBTROPICAL HAWAIIAN WATERS: PROC. THIRD WORKSHOP ON OTEC, HOUSTON TX, MAR 8, 1975, JOHNS HOPKINS UNIV. APPLIED PHYSICS LAB., P.162-171.

BATHEN, K.H., 1975. A FURTHER EVALUATION OF OCEANOGRAPHIC CONDITIONS FOUND OFF KEAHOLE POINT, HAWAII, AND THE ENVIRONMENTAL IMPACT OF NEARSHORE OCEAN THERMAL ENERGY CONVERSION IN SUBTROPICAL HAWAIIAN WATERS: UNIV. HAWAII DEPT. PLANNING AND ECON., 77 P.

BATHEN, K.H., 1977. THE BEHAVIOR OF NEAR SURFACE OCEAN CURRENTS, PLANKTON BIOLOGY, BENTHIC CURRENTS AND OCEAN TEMPERATURES TO DEPTHS OF 2200 FEET AT A POTENTIAL OCEAN THERMAL ENERGY CONVERSION SITE OFF KEAHOLE POINT, HAWAII: PROC. FIFTH OTEC CONF., FEB. 20-22, 1977, P.III-235--III-265.

BATHEN, K.H., 1978. CIRCULATION ATLAS FOR OAHU, HAWAII: UNIV. HAWAII SEA GRANT MISC. REPT. MR-78-05, 94 P.

BELSHE, J.C., 1967. SEASONAL MEASUREMENT OF OCEANOGRAPHIC PARAMETERS IN THE KAULAKAHI CHANNEL, HAWAII: UNIV. HAWAII INST. GEOPHYS. REPT. HIG-67-5, 86 P.

BELSHE, J. C., 1968. OCEAN SEDIMENTS SAMPLED DURING 1964-1967 IN THE HAWAIIAN ARCHIPELAGO: UNIV. HAWAII INST. GEOPHYS. REPT. HIG 68-7, 52 P.

BELT, COLLINS & ASSOCIATES LTD., 1962. WAIALUA BAY POLLUTION STUDY, HALEIWA, OAHU, HAWAII: PREPARED FOR: HARBORS DIVISION, STATE DEPARTMENT OF TRANSPORTATION, HONOLULU.

BELT, COLLINS & ASSOCIATES LTD., 1962. KAIAKA BAY SMALL BOAT HARBOR: PRELIMINARY ENGINEERING AND FEASIBILITY STUDY: PREPARED FOR HARBORS DIVISION, STATE DEPARTMENT OF TRANSPORTATION, HONOLULU.

BELT, COLLINS & ASSOCIATES LTD., 1962. KANEILIO POINT SMALL BOAT HARBOR WAIANAE, OAHU: PRELIMINARY ENGINEERING AND FEASIBILITY STUDY: PREPARED FOR HARBORS DIVISION, STATE DEPARTMENT OF TRANSPORTATION, HONOLULU.

BERNARD, E. N. 1976. A NUMERICAL STUDY OF THE TSUNAMI RESPONSE OF THE HAWAIIAN ISLANDS: UNIV. HAWAII INST. GEOPHYS. REPT. HIG-76-6, 73 P.

BRETSCHNEIDER, C.L., 1977. DESIGN WAVE AND CURRENT CRITERIA FOR POTENTIAL OCEAN THERMAL ENERGY CONVERSION SITES; NEW ORLEANS, LA; KEY WEST, FL; PUNTA TUNA, PR; KEAHOLE POINT, MI: CHARLES L. BRETSCHNEIDER, CONSULTANT, HONOLULU, HI, 295 P.

CAMPBELL, J. F., 1972. EROSION AND ACCRETION OF SELECTED HAWAIIAN BEACHES, 1962-1972: UNIV. HAWAII INST. GEOPHYS. REPT. HIG 72-20, 30 P.

CAMPBELL, J. F., W. T. COULBOURN, R. MOBERLY, JR., 1970. RECONNAISSANCE SAND INVENTORY OFF LEEWARD OAHU: UNIV. HAWAII INST. GEOPHYS. REPT. HIG-70-16, 14 P.

CAMPBELL, J. F., B. R. ROSENDAHL, W. T. COULBOURN AND OTHERS, 1971. RECONNAISSANCE SAND INVENTORY OFF LEEWARD MOLOKAI AND MAUI: UNIV. HAWAII INST. GEOPHYS. REPT. HIG 71-17, 8 P.

CHAVE, K.E. AND J.N. MILLER, 1977. BASELINE STUDIES AND EVALUATION OF THE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS OF A NEARSHORE DREDGE SPOIL DISPOSAL, PEARL HARBOR, HAWAII. PART A: BASELINE STUDIES, INVESTIGATION AND SELECTION OF A SUITABLE DREDGE SPOIL SITE: PACIFIC DIVISION NAVAL FACILITIES ENGINEERING COMMAND, HONOLULU, HAWAII. CONTRACT NO. N62742-76 C-0050.

CHAVE, K.E., J.R. TAIT, J.S. STIMSON, AND E.H. CHAVE, 1973. WAIKIKI BEACH EROSION PROJECT: MARINE ENVIRONMENT STUDY: FINAL REPT. PREPARED FOR THE U.S. ARMY CORPS OF ENGINEERS, HONOLULU.

CHEN, C. W. AND D. J. SMITH, J. D. JACKSON AND OTHERS, 1975. ORGANIC SEDIMENT MODEL FOR WASTEWATER OUTFALL, IN SYMPOSIUM ON MODELING TECHNIQUES: AM. SOC. CIVIL ENG., V. 1, P. 179-207.

CHOU, J. C. S., 1971. THERMAL PROPERTIES OF SEA WATER: UNIV. HAWAII WATER RES. CENT. TECH. REPT. NO. 49, 50 P.

CONOCO-DILLINGHAM, 1972. AN INVESTIGATION OF BARBER'S POINT: PREPARED FOR HAWAIIAN DREDGING AND CONSTRUCTION CO., HONOLULU.

CONOCO-DILLINGHAM, 1972. AN INVESTIGATION OF OCEANOGRAPHIC AND BATHYMETRIC CONDITIONS NORTH OF BARBER'S POINT: PREPARED FOR HAWAIIAN DREDGING AND CONSTRUCTION CO., HONOLULU.

COULBOURN, W. T., 1971. SEDIMENTOLOGY OF KAHANA BAY, OAHU, HAWAII: UNIV. HAWAII INST. GEOPHYS. REPT. HIG 71-14, 141 P.

COX, D. C. AND J. MORGAN, 1977. LOCAL TSUNAMIS AND POSSIBLE LOCAL TSUNAMIS IN HAWAII: UNIV. HAWAII INST. GEOPHYS. REPT. HIG 77-14, 118 P.

DOTY, M. S., 1974. CORAL REEF ROLES PLAYED BY FREE-LIVING ALGAE, IN PROC. SECOND INTERNATIONAL CORAL REEF SYMP., V. 1, PRODUCTIVITY, MICROORGANISMS AND ALGAE, (CAMERON, A. M. AND OTHERS, EDS.): THE GREAT BARRIER REEF COMM., BRISBANE, AUSTRALIA, P. 27-33.

ENGINEERING SCIENCE; SUNN, LOW, TOM AND HARA INC.; AND DILLINGHAM CORP., 1971. WATER QUALITY PROGRAM FOR OAHU WITH SPECI