

STATE OF HAWAII - U.S.A.
 DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT
 CONTRACT No. 2222
 AGREEMENT FOR ADVISORY SERVICES
 FOR THE GEOTHERMAL/CABLE PROJECT

THE KILAUEA EAST RIFT ZONE
 GEOTHERMAL EVALUATION OF THE EXISTING DATA

PLATE
 2

MAIN HYDROGEOLOGICAL FEATURES
 AND
 SEA LEVEL TEMPERATURE DISTRIBUTION

ENEL ENTE NAZIONALE PER L'ENERGIA ELETTRICA - ITALY

LEGEND

Crater, cone and rampart
 Spring pool pond and its temperature value
 Water and test well and its temperature value
 Deep well (Depth > 100m) and its temperature value
 Geothermal Resource Structure
 Main road

Inferred altitude of 30°C contour line at sea level

27°C
 30°C
 33°C
 36°C
 40°C

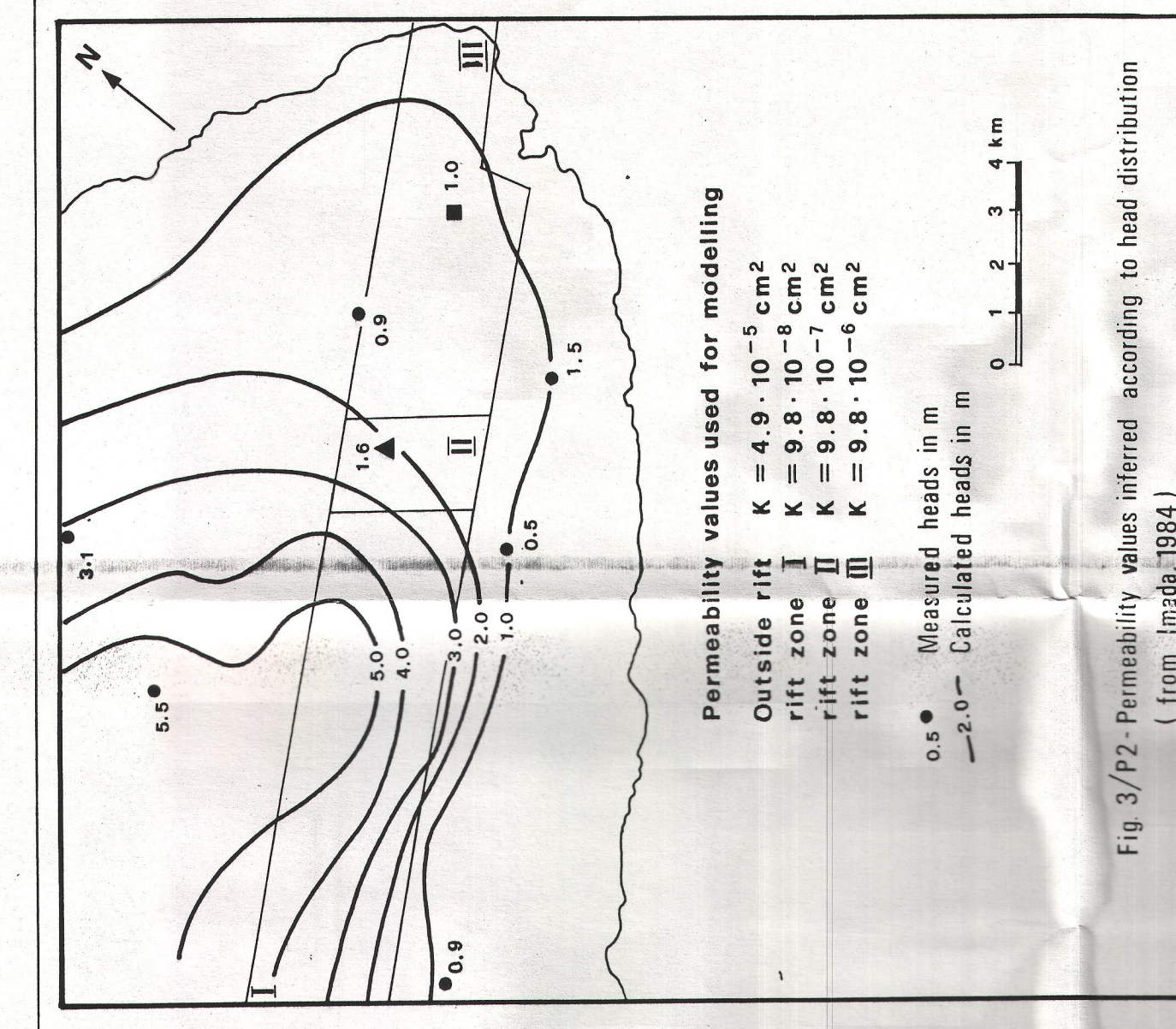


Fig. 1/P2 MEAN ANNUAL RAINFALL OF ISLAND OF HAWAII (Contour line in mm) (from Takihiro, 1953)

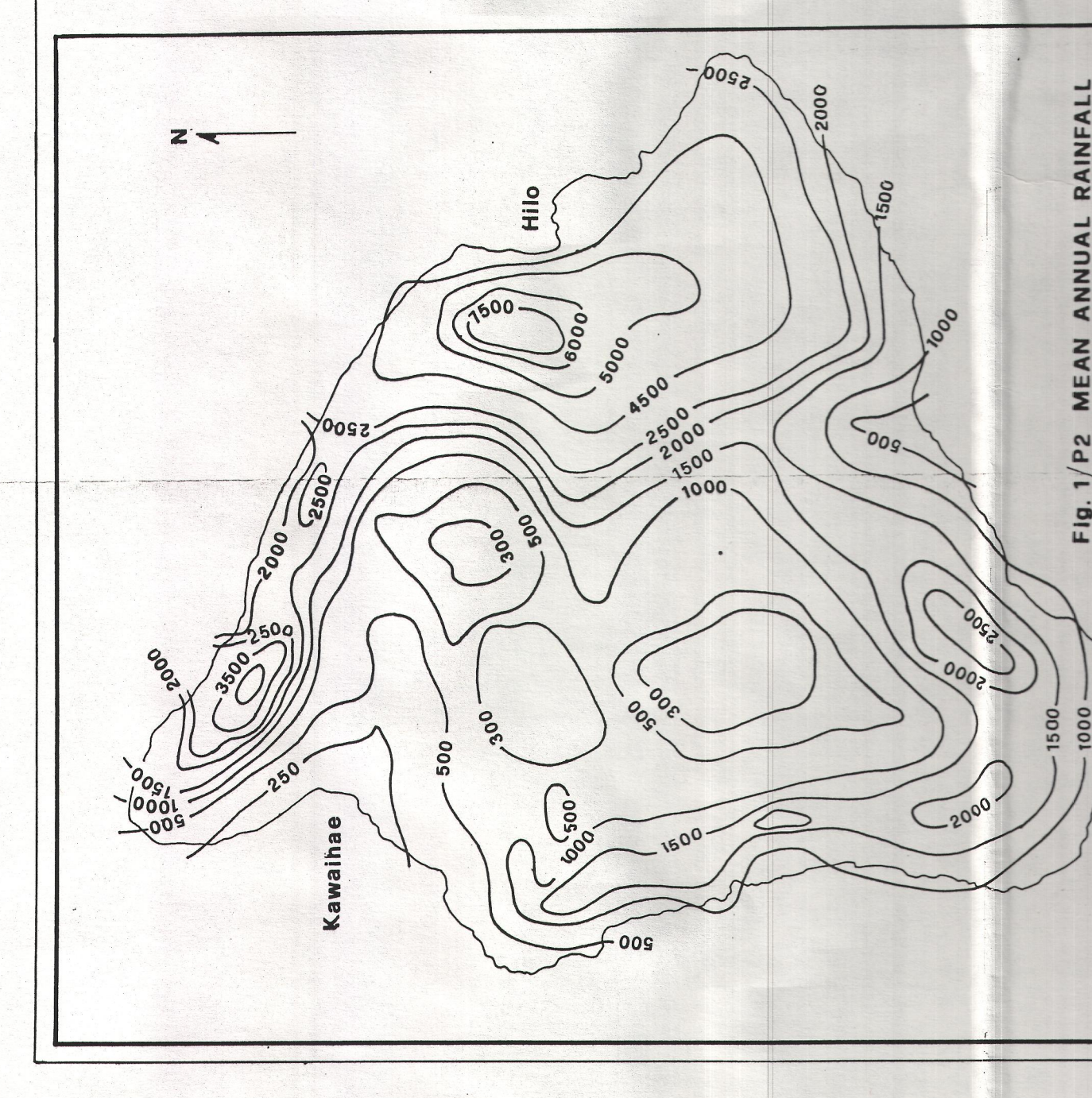


Fig. 2/P2 Schematic distribution of shallow waters (Redrawn from Driscoll and Fan, 1976)

Tab. 1/P2 MAIN DATA OF SHALLOW AND DEEP WELLS (From Driscoll and Fan 1976; Thomas and others, 1982; FFP and Malima, 1979; DOE, USA, 1983; Imada, 1984)

Name	USGS Well No.	Latitude	Longitude	Elev. (m)	Depth (m)	T _{max} to Depth (°C)	Water Elev. (m)
GW-1	2885-01	19° 26' 24" N	154° 53' 15" W	315.5	170.0	102.0	187.0
GW-2	2885-02	19° 26' 33" N	154° 55' 48" W	315.5	170.0	102.0	187.0
GW-3	2885-01	19° 29' 13" N	154° 52' 55" W	171.8	210.0	83.0	110.0
KAPOHO TEST	3081-01	19° 30' 24" N	154° 51' 59" W	187.4	101.0	34.5	87.0
MALAMA-KI	2885-01	19° 27' 28" N	154° 53' 1" W	82.5	96.0	55.0	90.0
PULAMA	2102-01	19° 21' 7" N	155° 2' 12" W	70.1	76.0	37.0	65.0
KAPOHO CRATER	3080-01	19° 30' 6" N	154° 50' 17" W	20.0	14.0	25.0	14.0
KEAUAHUNA 1	2887-02	19° 24' 44" N	154° 57' 17" W	225.0	241.0	24.0	0.0
KEAUAHUNA 2	2887-01	19° 24' 44" N	154° 57' 17" W	225.0	241.0	24.0	0.0
PAHOA 1	2886-01	19° 29' 6" N	154° 55' 37" W	214.8	230.2	22.5	5.4
PAHOA 2	2886-02	19° 29' 6" N	154° 55' 37" W	214.8	230.2	22.5	5.4
HAWAII SHORES 1	3185-01	19° 31' 1" N	154° 55' 59" W	130.0	136.0	21.5	3.2
HAWAII SHORES 2	3185-02	19° 31' 12" N	154° 55' 24" W	119.0	130.7	25.0	0.0
KEAUAHUNA (T1)	3005-01	19° 25' 45" N	155° 5' 33" W	342.9	15.6	22.7	241.5
KEAUAHUNA (T2)	3005-02	19° 25' 45" N	155° 5' 33" W	342.9	15.6	22.7	241.5
M. VIEW 2 (T1)	3208-01	19° 33' 38" N	155° 8' 17" W	380.8	18.6	18.6	487.5
M. VIEW 2 (T2)	3208-02	19° 33' 38" N	155° 8' 17" W	380.8	18.6	18.6	487.5
ASHIDA 1	2885-01	19° 26' 53" N	154° 55' 19" W	244.0	2229.8	288.0	2529.8
LANIPUNA 1	2883-04	19° 27' 37" N	154° 53' 9" W	184.0	2557.0	383.0	2557.0
LANIPUNA 2	2883-05	19° 28' 21" N	154° 53' 21" W	189.0	2322.0	343.0	1950.0
LANIPUNA 3	2883-06	19° 28' 21" N	154° 53' 21" W	189.0	1922.7	316.0	1583.0
LANIPUNA 4	2883-07	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 5	2883-08	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 6	2883-09	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 7	2883-10	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 8	2883-11	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 9	2883-12	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 10	2883-13	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 11	2883-14	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 12	2883-15	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 13	2883-16	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 14	2883-17	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 15	2883-18	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 16	2883-19	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 17	2883-20	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 18	2883-21	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 19	2883-22	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 20	2883-23	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 21	2883-24	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 22	2883-25	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 23	2883-26	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 24	2883-27	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 25	2883-28	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 26	2883-29	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 27	2883-30	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 28	2883-31	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 29	2883-32	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 30	2883-33	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 31	2883-34	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 32	2883-35	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 33	2883-36	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 34	2883-37	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 35	2883-38	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 36	2883-39	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 37	2883-40	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 38	2883-41	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 39	2883-42	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 40	2883-43	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 41	2883-44	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 42	2883-45	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 43	2883-46	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 44	2883-47	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 45	2883-48	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 46	2883-49	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 47	2883-50	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 48	2883-51	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 49	2883-52	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 50	2883-53	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0	1583.0
LANIPUNA 51	2883-54	19° 28' 21" N	154° 53' 21" W	189.0	1882.7	316.0 </tr	

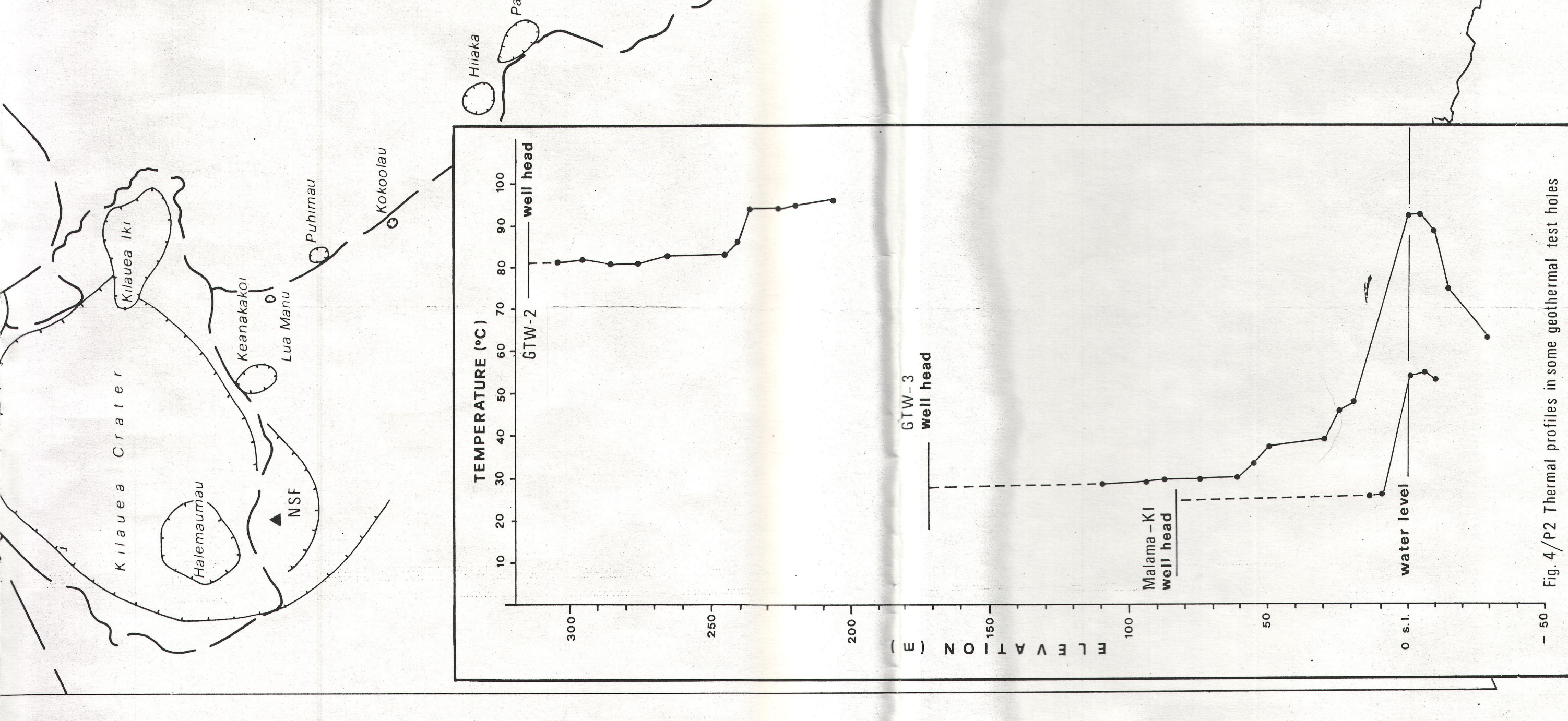


Fig. 4/P2 Thermal profiles in some geothermal test holes