

昭和 年 月 日 作成

地域	調査団 等名称	調査の種類		現地調査期間	作成部署	年月日	担当者氏名				
		調査の種類	現地調査期間								
番号	資料の名称	形態	版型	ページ数	コピー数	複製先名又は発行機関	部数	複製区分	所属 部署	担当者 氏名	納入予定日 複製済
1-5	CONCERTED ACTION FOR WATER MANAGEMENT OF DOHA/QATAR:Aug. 1984. Min. of Transport and Public Works, the Netherlands	報告書	A 4		COPY	MPW	1				
1-6	WATER RESOURCES AND AGRICULTURAL DEVELOPMENT PROJECT-PHASE III THE HYDRO-GEOLOGY OF QATAR:1982. B. L. Eccleston & I. E. Harhash	"	"		"	DEPT. OF A. W. R. MIA	1				
1-7	HYDRD-CLIMATOLOGICAL YEAR BOOK. 1980, PART I 1980, PART II	"	"		ORIG COPY	DEPT. OF A. W. R. MIA	1 1				
1-8	AGRICULTURAL STATISTICS YEAR BOOK1981	"	"		"	DEPT. OF A. W. R. MIA	1				
1-9	AGRO-HYDRO-METEOROLOGICAL YEAR BOOK 1982	"	"		"	DEPT. OF A. W. R. MIA	1				
1-10	TOPOGRAPHIC MAPS 1/200000 1/100000 1/50000 1/20000	地図	巻A I " " " "		ORIG " " COPY "	H. H. THE EMIR OF QATAR	1 4 15 4 35				
1-11	DOHA SEWERAGE: RECORD DRAWING	"	"		"						

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発項 題名	調査出 等名称	調査の種類		調査の時期		調査の年度		調査の 担当者名
		調査の種類	調査の時期	調査の年度	調査の年度			
番号	資料科の名称	形態	原型	ページ数	オリジナル コピー	部数	収集先名称又は発行機関	
1-12	QATAL GEOLOGICAL MAP, W/EXP- LANATORY BOOKLET, 1980 EDITION	地図	A 0		ORJG	1	IDTC	
1-13	FRESH WATER SEARCHING GUIDE MAP	"	"		"	1	IDTC	
1-14	TOTAL DISSOLVED SOLIDS IN PPM: Sep. 1982	"	B 3		"	1	DEPT. OF A. W. R. MIA	
	-do- : Sep. 1971	"	"		"	1		
1-15	GROUND WATER LEVEL: Sep. 1982	"	"		"	1	DEPT. OF A. W. R. MIA	
	-do- : Sep. 1971	"	"		"	1		
1-16	DOHA SEWERAGE SCHEME: 1/10000	"	特大		COPY	2	MPW	
1-17	QATAR, LAND OF PROSPERITY AND PROGRESS	本	B 4		ORIG	1		
1-18	GUIDE TO LIVING & WORKING IN QATAR	"	A 5		"	1		
1-19	ECONOMIC AND SOCIAL DEVELOPMENT IN QATAR	"	"		"	1		

収 集 資 料 リ ス ト

地 域	調 査 団	調 査 の 種 類	昭 和 年 月 日 作 成
国 名	等 名 称	現 地 調 査 期 間	作 成 部 課
		年 月 日 ~ 年 月 日	担 当 者 氏 名

番 号	資 料 の 名 称	形 態	版 型	ペ ー ジ 数	エ ン じ ン ン コ ピ ー の 別	部 数	収 集 先 名 称 又 は 発 行 機 関	重 複・異 同 (同 名 の 別)	取 扱 区 分	判 別 標 示	判 別 化 学 所 属 地 名	第 一 編 製 日
2-1	GROUNDWATER TABLE MONITORING RECORDS	記録帳	A 4		COPY	1	WATER DEPT, MEW					
2-2	DOHA SOUTH SEWERAGE TREATMENT WORKS, LABORATORY REPORT	文 書	"		"	1	CIVIL. ENG. DEPT, MPW					
2-3	DOHA SOUTH SEWERAGE TREATMENT WORKS, BRIEF DESCRIPTION ON NEW WORKS	"	"		"	1						
2-4	換 膚 地 質 資 料 SITE INVESTIGATION FOR MULTI-STORY CAR PARKS-DOHA, OSIRIS-CESCO	報 告 書	"		"	1	MIN. OF MUN. AFFAIRS					
2-5	PROPOSED MULTI-STORY CAR PARKS: REPORT ON SITE INVESTIGATION TOPOGRAPHIC MAPS 1/5,000 1/10,000	"	"		ORIG							
2-6	MAP OF QATAR PLANNING STUDIES, DOHA CITY LIMIT	地 図	A 1		COPY	9X2	MPW					
2-7	MAPS FOR QATAR AREA REFERENCE SYSTEM	"	"		"	2X2						
2-8	NEW DISTRICT OF DOHA, LAND USE PLAN	"	A 0		"	1	MIN. OF MUN. AFFAIRS					
		"	"		"	1	MIN. OF MUN. AFFAIRS					
		"	A 1		"	1	AMIR'S OFFICE					

収集資料リスト

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2-9	MAP FOR QATAR PLANNING STUDIES: NEW DISTRICT OF DOHA	地図	A 1		COPY	1	AMIR'S OFFICE						
2-10	NEW DISTRICT 工務現場地下水湧出写真及び位置図: PENCOOL	写真帳	A 4			1	MPW						
2-11	AGRICULTURAL YEAR BOOK 1983	報告書	"			1	DEPT. OF A. W. R., MIA						
2-12	BRIEF ANNUAL REPORT 1981-82. IRRIGATION AND DRAINAGE SECT.	"	"			1	MIA						
2-13	WELL WATER SURVEY IN QATARI FARM 1982/83	"	"			1	MIA						
2-14	DOHA RETURN EFFLUENT SCHEME: GENERAL LOCATION PLAN, Percol	図面	A 1			2	MIA						
2-15	GENERAL ANNUAL REPORT, SUMMARY	文書	A 4			1	MIA						
2-16	DOHA RETURN EFFLUENT SCHEME: FLOW METER RECORDS	文書	"			1	MIA						

5. 電気伝導度の結果

今回の調査で電気伝導度を調べたのでその結果を報告する。測定地点は図5-1を参照。

ECメーター：セントラル科学 MODEL PK-5 3レンジ

最大読取値 100,000 micromhos/cm

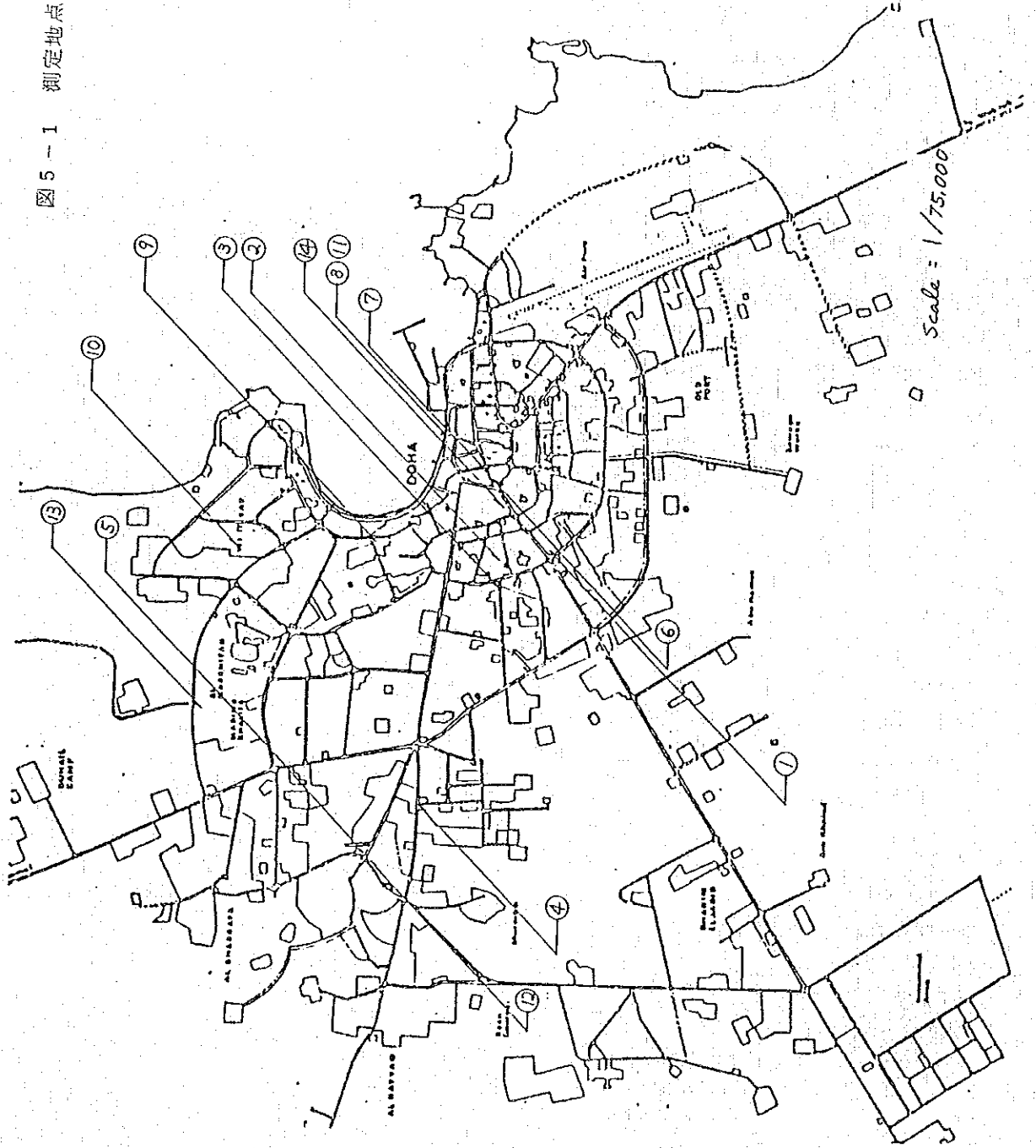
伝導計 No 79070・0・85

日/時	図5-1 上の番号	場 所	温度 ℃	micromhos /cm
9月				
29/ 7:45	(1)	ラマダホテル：飲料水	20	350
"/ 8:00	(1)	ラマダホテル：洗濯、洗浄水	28	370
"/ 8:00	(1)	ラマダホテル：日本からの純水	25	35
30/ 9:00	(2)	市内：電話電線ケーブルのマンホール地下水	34	6400
"/ 9:00	(2)	市内：上記マンホール近くの飲料水栓	10	290
"/ 9:30	(3)	市内：ダム貯水池内地下水試験場地下水	31	7000
"/10:10	(4)	市内：下水管埋設工事現場交差点、停滞地下水	31	22,500
"/11:10	(5)	ラヤン：農場入口、地表上の停滞水	35	over 100,000
10月				
1/10:10	(6)	市内：建築工事現場、基礎部 地下水	33	6400
7/ 9:40	(7)	市内(中心)：下水、雨水管埋設工事現場、地下水	32	5400
1/10:50	(8)	市内：地下水ポンプ場近くの街路樹の灌漑水	31	4400
"/11:00	(9)	ウエストベイ：埋立地内公園の入口部分の浸透水	35	13500
"/11:05	(9)	"：上記近くの浸透槽、浸透水	35	13000
"/11:40	(10)	"：ウエルポイント工事現場、停滞水	34	40000
10月				
3/10:30		市内：波止場近くの灌漑水	35	3800
"/14:30		ラヤン：放置された農場の集水槽、停滞水	34	23000
4/14:30		ウエストベイ：ドリーネ内の地下水	27	10500
9月				
30/15:50		市内：約5倍の水を加えた土	25	31000
30/16:00		ラヤン：" 農場入口近く	25	2300

図5-1 以外での調査結果

10月				
3/15:10		ドーハ市南西50kmエルラキヤ処理水、投棄場、パイプ内の水	35	6100
"/15:15		" 砂漠に出来た池の水	34	6000
10月				
4/13:30		ウムサイドゴルフ場外の停滞水	37	over 100,000
"/13:45		" 内の地下水調査のための試掘場地下浸透水	32	22000

图 5-1 测定地点



GULF TIMES, 9 October 1985

Japanese to help combat Qatar's water level rise

By T M Anantharaman
Staff Reporter

A semi-official Japanese agency is to tackle Qatar's rising water table problem with an improved drainage plan.

The Japanese International Cooperation Agency (JICA) yesterday signed an agreement on the project with the Qatar government at the Emiri Palace in Doha.

A six-member JICA team, led by Yasukazu Komori, has been in Qatar for the past 10 days doing a preliminary survey and getting a first-hand feel of the situation.

Mr Komori told *Daily Gulf Times* in an exclusive interview before leaving for Japan last night that the team would be back in November to do "test works."

Full-scale study of the problem will be done during winter at a time when some rainfall can be expected.

"The study area will cover Doha city and Rayyan area and vicinity," Mr Komori said.

The Japanese government and Qatar have a technical cooperation agreement under which Japan will provide the experts and equipment.

To Page 3 →



Yasukazu Komori

Health hazard from rising water level

← From Page 1

JICA will thus bear cost of the test-works.

Test-works include, according to Mr Komori, drainage of the area by digging trenches, collecting water and analysing it as well as studying types of drainage systems that can be used for the project.

He said water samples showed that it was saline and brackish, and would therefore need treatment if it was to be used for irrigation or disposed of into the sea. The water quality would have to be studied in greater detail.

The rising underground water table in Qatar has been a problem for some years. It has been studied by the Water Department, with the help of the British Hydrological Insti-

tute and a UN consulting team of water specialists.

A project to remedy the problem of the rising water table under Doha and its suburbs of Al Gharrafah, Al Rayyan, Al Wakrah, Al Wukair and Ummi Said, was proposed last year at a cost of QR50mn. The Japanese have been brought into the consultations for an urgent drainage plan.

According to an official, the rising water table not only results in seepage in areas where water pipe, electricity and telephone cable, have been laid but also endangers the foundations of buildings.

Authorities are said to be worried that the flooding of low-lying areas could pose a threat to the health of residents.

A study of the problem by the Water Department underlined the urgent need to tackle the problem.

Former director of the Water Department, Ahmed al-Jattal, now holding the post of Adviser to the department, has pointed out that in places water levels had risen by 8m in less than 10 years.

Prior to the era of rapid development there was a natural balance maintained at the underground level. But excessive use of imported waters and its wasteful use has led to the rise in the water table.

Also, abstraction of water from its natural source has not kept pace with recharging. Main sources of waste are leaking pipes, faulty drains, septic tanks and irrigation of gardens and farms.

LIST OF EQUIPMENT FOR ENGINEERING SERVICES

1. Level w/ tripod	2 sets
2. Leveling staff	4 sets
3. Surveying pole	4 pcs.
4. Handy talky	2 pcs.
5. Stop watch	3 pcs.
6. Small computer w/ programming function	2 pcs.
7. Word processing device	1 set
8. Copying machine	1 set
9. Water quality test apparatus	1 set

JICA