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2003/04/28

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1933

1962-1952

(Derro)

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... ()

Evaluation of oil potentials in the Derro Oil field (NE SYRIA) Through integrated interpretation of geophysical data

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ABSTRACT

The geophysical surveys on the Syrian oil fields had begun since (1933);it continued by the soviet groups (1952-1962) and were completed by the Syrian national groups. The Derro oil field had a good lot from these studies, because it was surveyed and studied by the all known geophysical methods (gravity, geoelectrics, siesmics, well logging).

This was possiple due to the fact that oil bearing formation in the above mentioned field lays in very shallow depths, in comparison with the known oil fields, the geoelectrical method was applied with good results and extreme low cost.

According to different analytical processes used for this integrated evaluation, we could establish:

- a set of regional and local gravity maps
 - a time cross section for the oil bearing formation (Top Jeribe)
 - a set of resistivity maps for different depths
- many correlation cross sections of different well logs measured in the exploration & production wells.

As a result of which, we could draw a new model for the Top Jeribe oil bearing formation and the Oil-water contact.

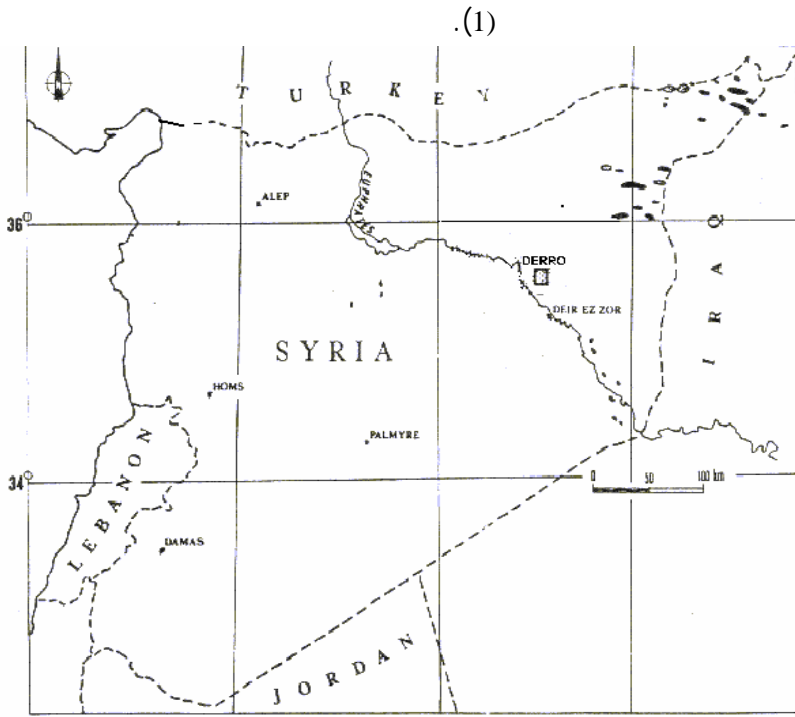
We could also define the sectors on which we hope to drill new oil wells, that may give commercial quantities of oil.

Key Words: Bouger anomaly, Correlation, Frequency Filter, Gravity interpretation, Gravity anomaly, Gravity Survy, Geoelectric Method, Gravity Method, Geophysical Survy, Hiegh path filter, Inegrated interpretation, Injection Well, Jeribe formation, Low path filter, O.W.C, Oil potentials, Structural map, Seismic secticon, Seismic survy, Transation Zone, Time map.

(Derro) (case study)

.(1) (1) ² 200 :

36



(1)

(1989– 1988)

1975 (DR)
 1984 1978 (DO) (MZ)
 .1990 1988 (C.G.G)

1985

(6)

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-
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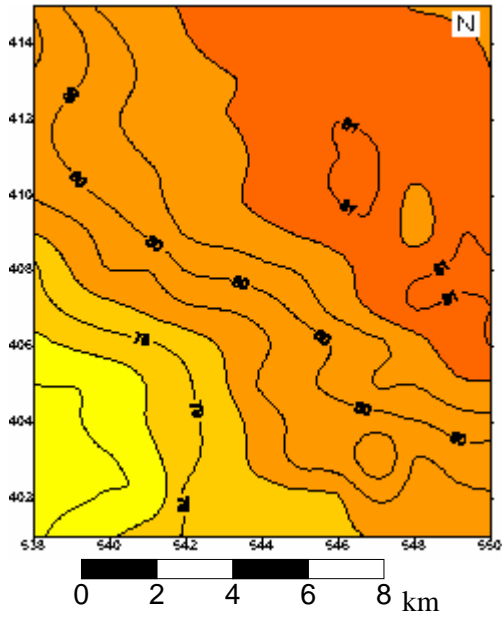
(2)

(10)

1

3 / 2.53

(COOPER-93,SURFER-6)



(10)

(2)

.(8)

1

700

$$g = g_0 - (g_1 + g_2 + g_3 + g_4 + g_5 + g_6 + g_7 + g_8) / 8 \quad :$$

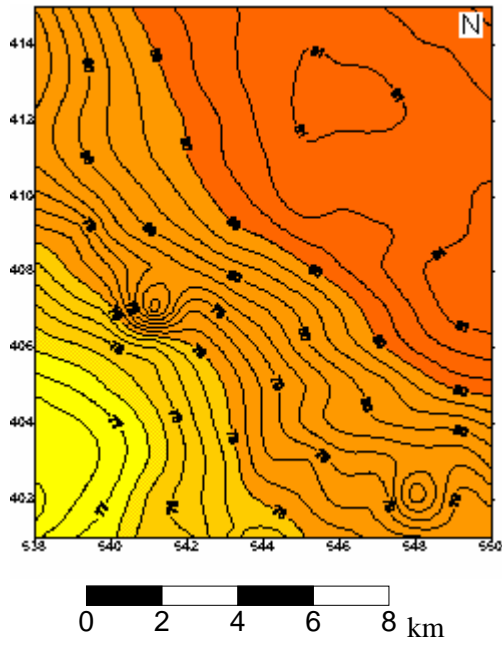
:g

:g₀

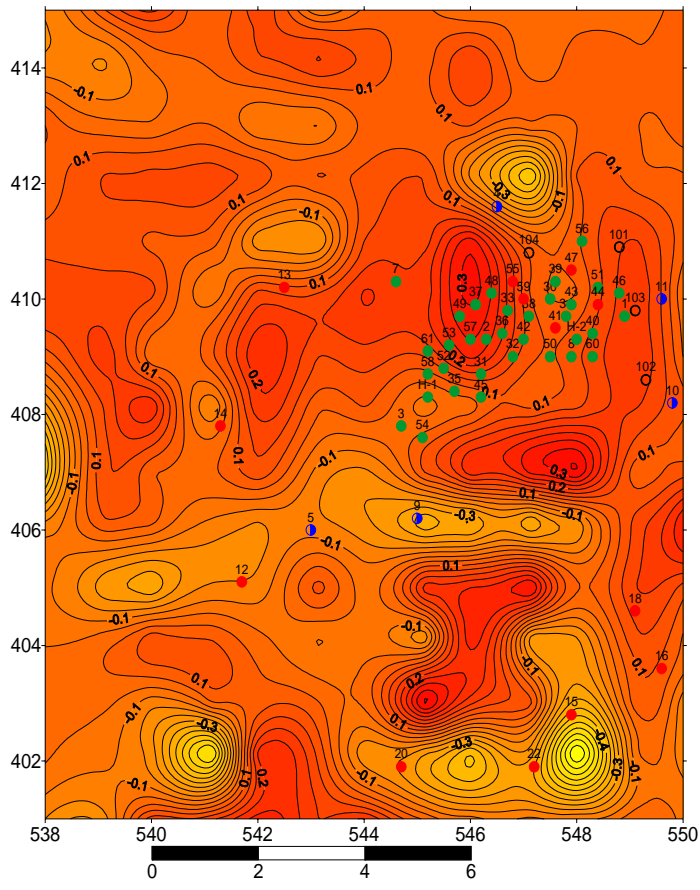
(g₁, g₂ ..)

(4)

(3)



(3)



(4)



« »

low-pass-

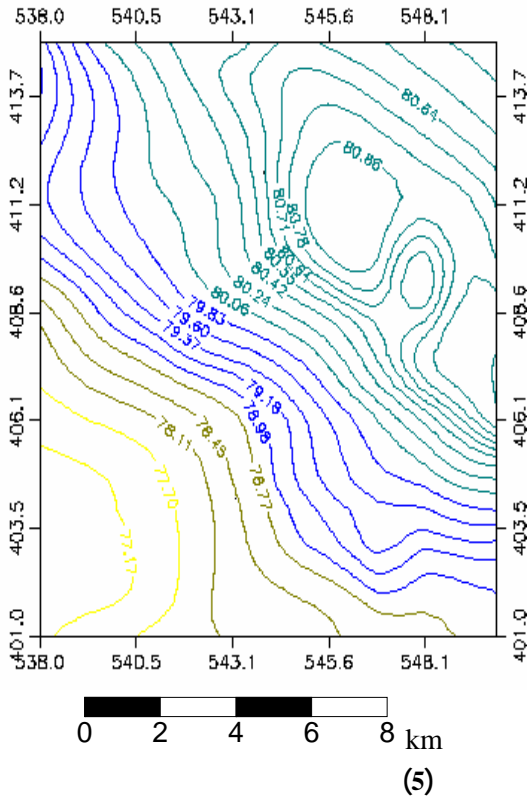
filter

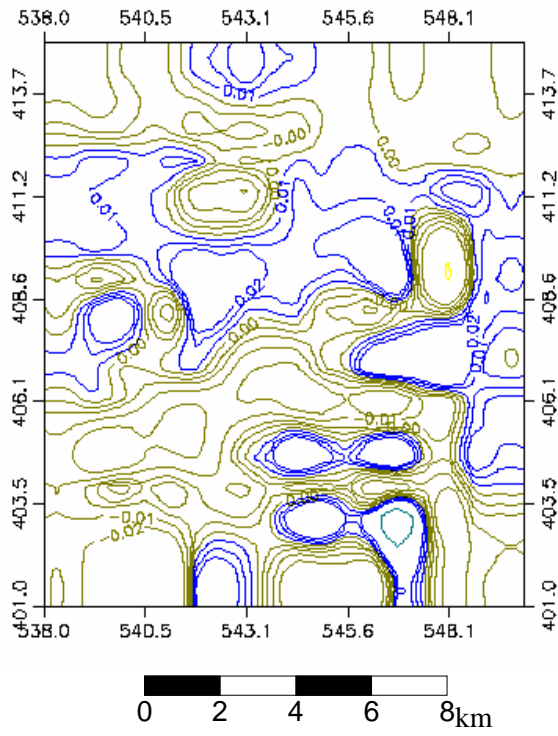
.(7) high pass filter

.(8)

) frequency filter

.(6 5





(6)

.(10)

: -1

(A1,A2,A3)

0.34

(A3)

(A2)

(A1)

-0.6

.(4)

: -2

.(6)

:

.(4)

(2)

(TWT)

(9)

(LOOPING)

.(7)

$$40 \quad ^2 \quad 8.5 \times 6 \quad :(A1)$$

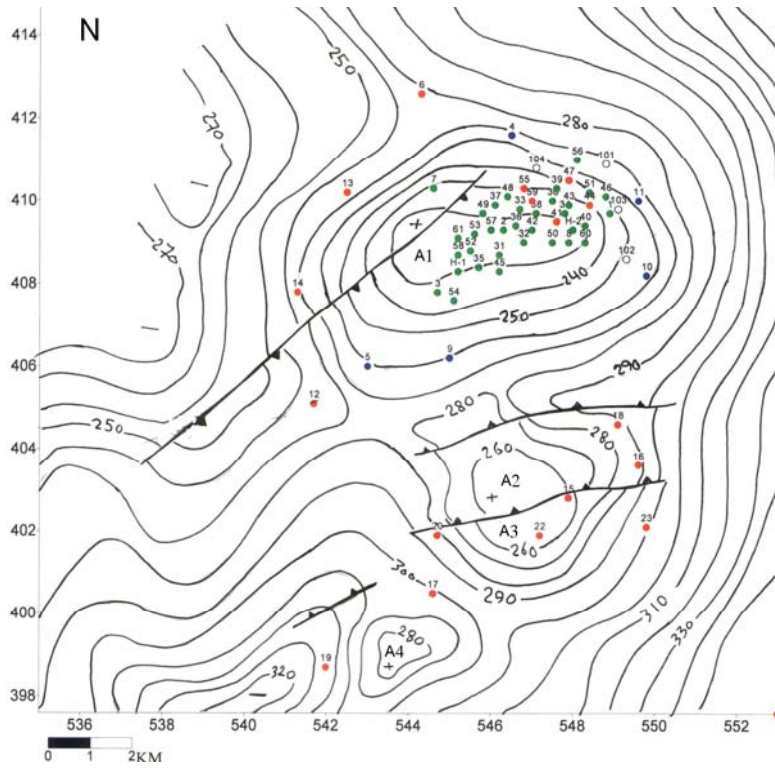
$$(A3) \quad (A1) \quad 30 \quad 290 \quad :(A2)$$

(16)

$$^2 \quad 2.5 \times 5.75$$
$$290$$
$$120-20$$

$$(18)$$
$$:(A3)$$

$$10 \quad 290 \quad :(A4) \quad ^2 \quad 2.5 \times 1.5$$



(7)



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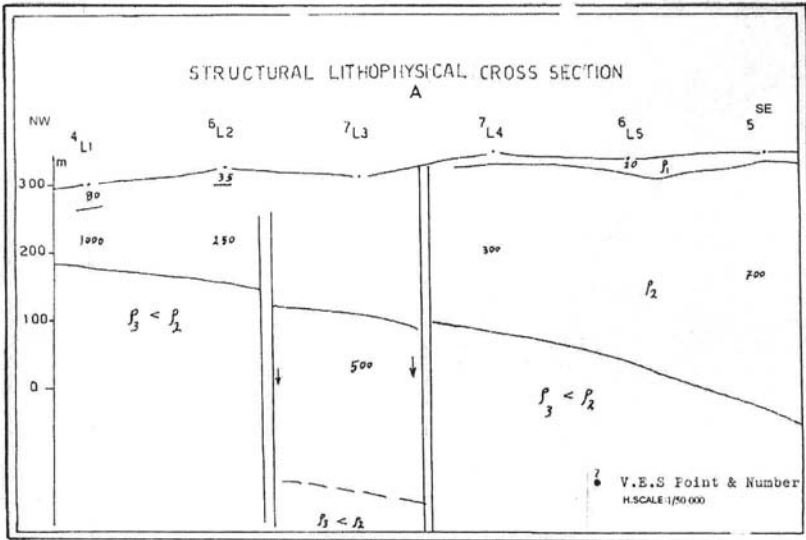
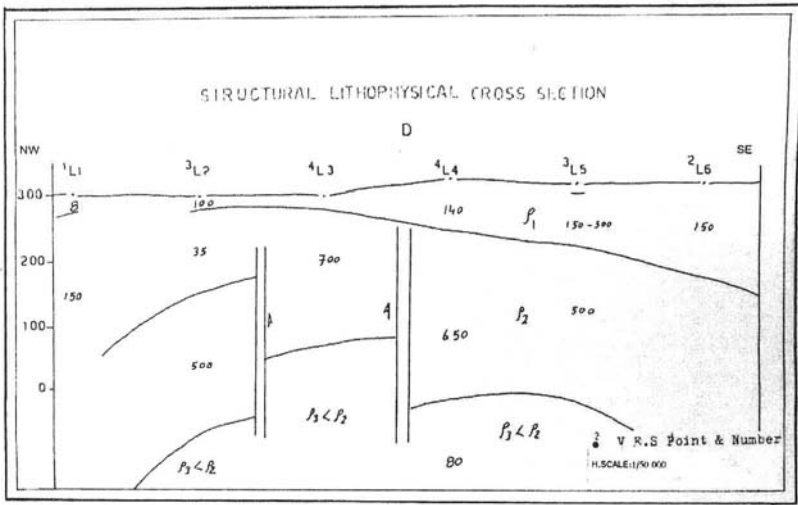
40

10

2000

21

. (7)



(1988)

(8)

AB/2=700m

550

. 300-100

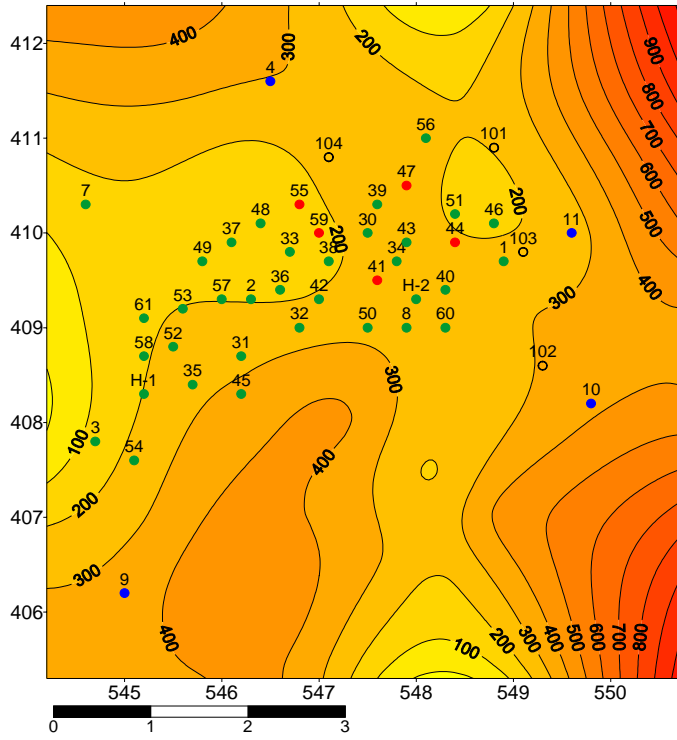
700

- 400

(flooded well)

. 300

.(9)



AB/2=700 m

(9)



AB/2=1000 m

3, 54, H1

. 400

4-

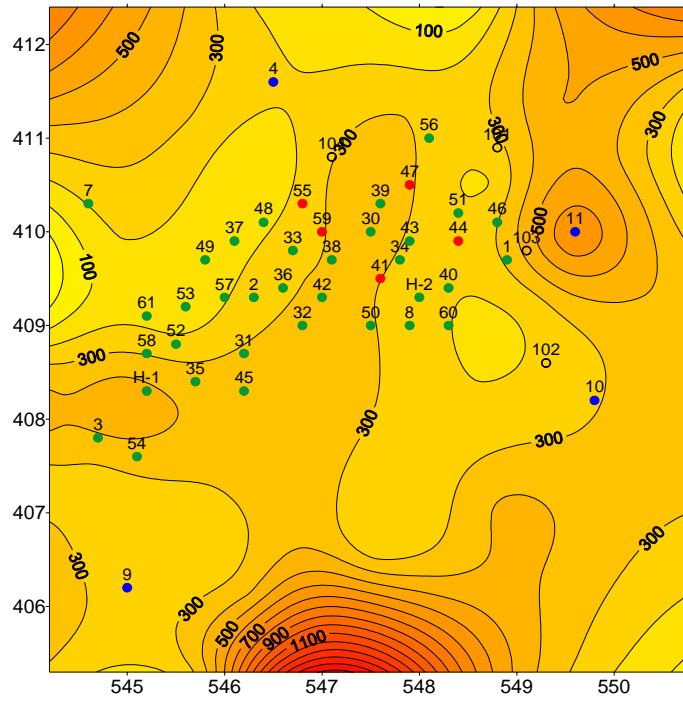
. 200

.(10)

L.fars

(2)

.(8)



AB/2=1000 m

(10)



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(SP, DLL, BHC, MSFL, GR, CNL, FMS, FDC)

.(2)

.(3)

(11)

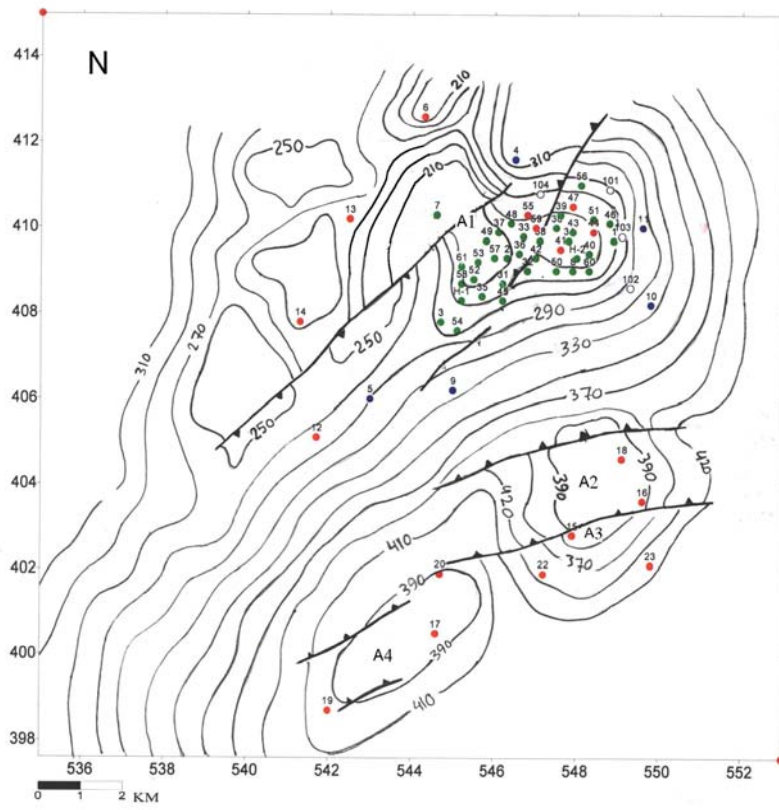
.(12)

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.(54)

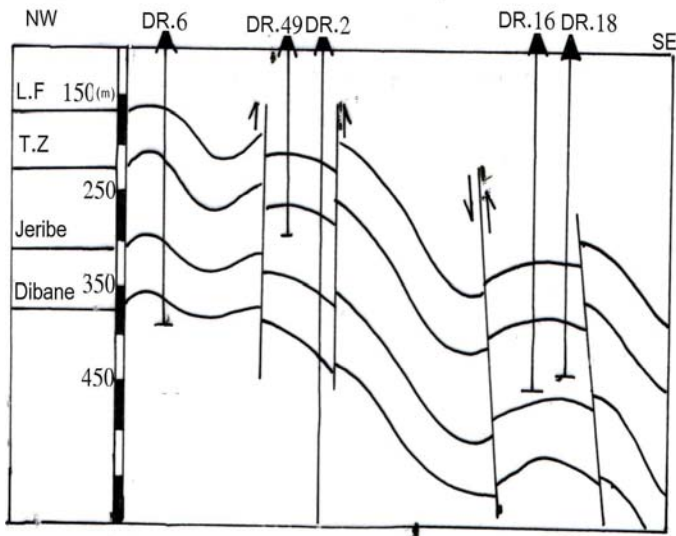
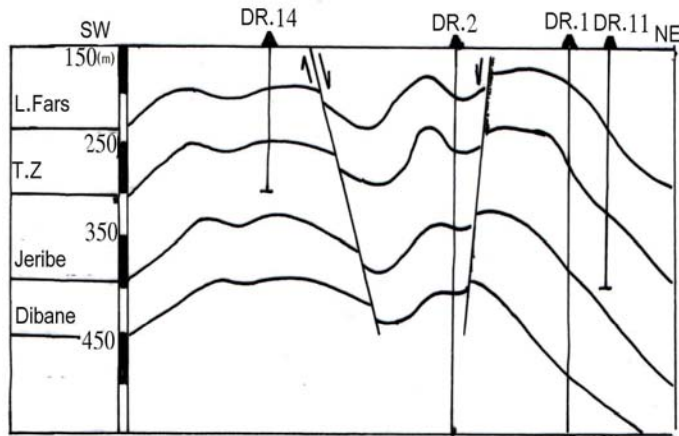
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:(A1)
2 6.5×3:(A2)
(18) (16) 2 2×5:(A3)
2 5×2:(A4)
2 4×1.5
(20) (17)



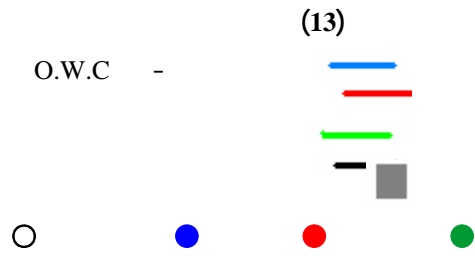
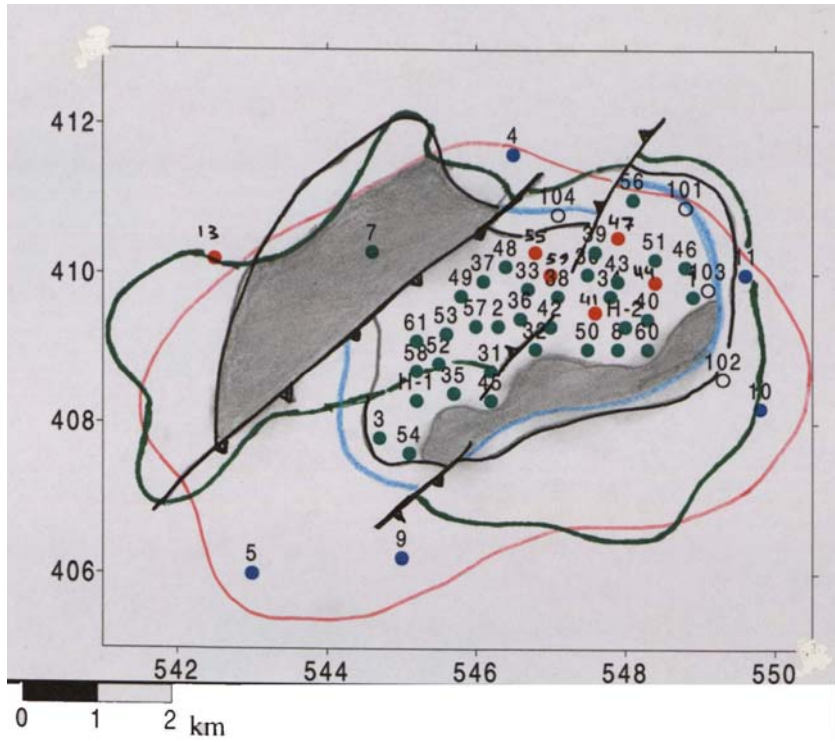
(11)





(12)

1/200000:



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(1 3) A1 -
-
A1 (7-)
-
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REFERENCES

	1/200000	-1
	.1966	
) 1984		-2
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	(1990-1974)	-4
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