

WILLIAM'S AIR FORCE BASE GL03009-8 of 8

Feb. 22, 1979
Hotel Utah Motor
SLC - Utah Lodge

State Coupled Project
Resource Assessment Team

Mower Ranches wells #1, #2

3000'-4000' Qual

Minimum 3000' Volcanics at depth. ≤ 1 ohm-m at depth from logs

Meeting with Group 7
Norm Hartfull - GKI & Fred
Jack Salisbury, Dick Hakman,
P. W. H. P. 20.

Trouble with Diemar & Schlumberger logs

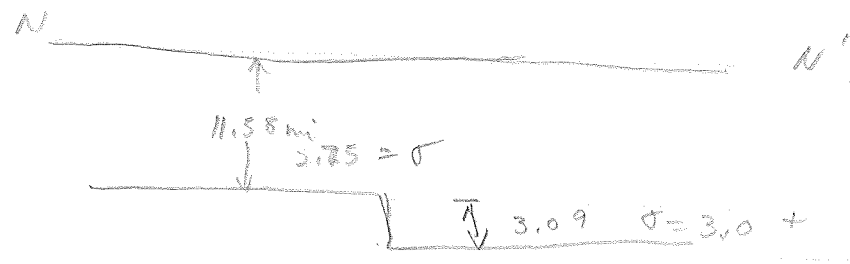
350°F in PR #2

#1 is 1500' So

385°F on max. reading therm.
Chloritization starts deeper.

Considerable geophysics after drilling -

Gravity - thinning crust to SW - reflects transition zone well -
Well located in transition zone.



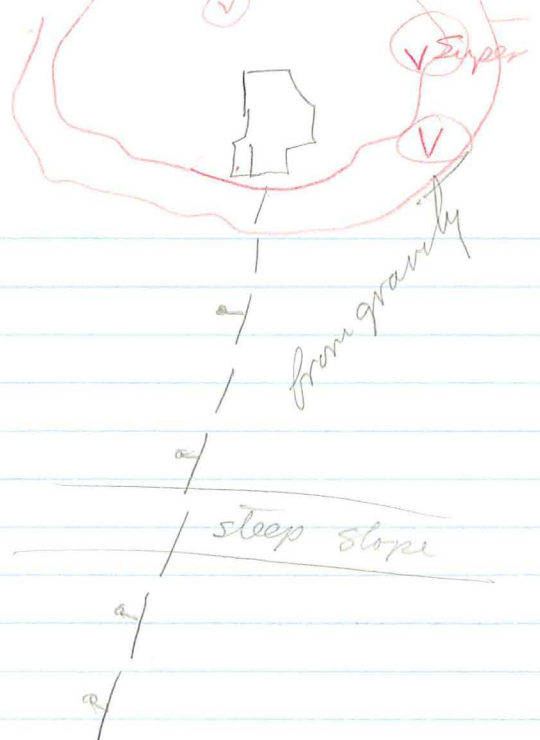
Moho Discontinuity 30 km near Phoenix

USGS GP-615 by Don Peterson: Detailed Gravity

Removed regional
Gradient is part of Texas Linement. - "Triple stepdown from
San Tanis to basement;
Low dominantly caused by Salt @ 2.1-2.2;

Key profile is c-c'; saddle @ WAFB; low to So.

$\Delta\rho = 0.55$ to 0.44 between vole and valley fill above,
from well logs;

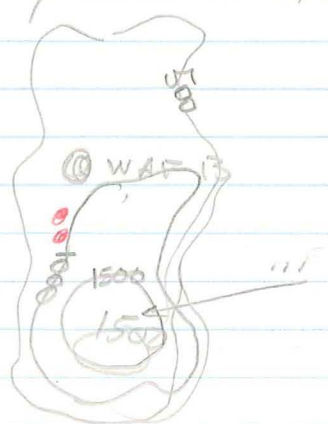


Statewide map @ 9000' by Summer

$$J = 250 \times 10^{-5} \text{ emu/cc}$$

$$d = 10,000'$$

Bipole-Dipole Mapping - Conductance high SE of Base -
 $C_d \approx 1500$
 Resultant



Compared Elee sounding log with 1/2 mi away EM Sounding.

Electrical Basement $\rho \times 10$ from overlying unit.

interface between cond vol & underlying basement.
 High mercury conc. along target zone
 2000 - 5000+ ppb

Na-K-Ca temps - predicted to 240°C with 90-96% mixing
 Volcanics could be 18000' thick -

certainly 1 mile thick
 Temps 350°F - 385°F; could have temps to 235°C or 200°C
 Assume 14 sq. mi, 1 mile thick; assume 30% porosity;
 [possible calc. reservoir output of 200 mwe for 100 years;
 - Assume continued fracturing, faulting today;

Well water 65000 ppm. - probably contaminated by water from anhydrite.

Questions on waters & there salinities - used waters in reserve pits for added drilling -

Well production problems - people from Waitangi for 3 months - couldn't keep them open - even using well stimulation problems

Interested in working with WAFB or DOE people to get support for drilling new wells;

JWS - refer to present Inc. Coupled Program - cut back of new funding possibilities since tax incentives have been initiated;

Loan Guarantee Program - not financing any wildcats;

Possible limited participation (?) in State Coupled Program.

Hill A.F.B. program - most of money come as pass thru from DOE -> DOD ->

N.E.A. National Energy Act.

Flow decreased because; used aeriated water initially to induce flow; Holes open to 9500' and 10,500'

1500 gal/min or lbs? Halthill

