

Project 864 - McCoy Soil Sampling

Objective:

The purpose of this project was to find conformatory correlations between self-potential geophysical means, and soil sampling geochemical means, of promising geothermal prospects.

Procedure:

The means by which the geochemical sample locations were decided on was dependent on purpose. The east-west traverses follow self-potential electrical anomalies as denoted by data compiled by Microgeophysics Corp. The northwest to southeast angling contours were provided as tie ins for line emplacement. The method of collection was by use of a hand trowel, wiped clean after each station, with two pound samples placed in twelve pound grocery sacks or cadco bags, and left to air dry. The samples were taken at the A_1 soil horizon, or at six inches of depth, whichever was available. Precaution to only sample soil from this depth protected against possible biological concentration of certain elements. A distance of 200 meters (eight per mile) between sample stations was the interval. The intervals were measured by pacing with corrections made at section corners and landmarks. Each sample station was marked with surveyor's flagging, and inscribed with a Roman numeral traverse identification, plus an Arabic numeral station identification.

Should further field checks be made immediately surrounding the marked stations, it should be noted that the Arabic numerals may or may not be in the same order as shown on the project map, as many reflect a subsequently revised numbering system. The Roman numeral heading on the tape is correct in all cases, and identifies the traverse.

Exact Traverse Locations:

$I_A - I_A,$ 071 - 100	T24N R38E. - T24N R39E Sections 22,23,24,19
$II_A - II_A,$ 121 - 179	T23N/T24N R38E - T23N/T24N R39E - T23N R40E Sections 34,35,36,31,32,33,34,35,1,6,5
$III_A - III_A,$ 180 - 239	T23N R39E - T22N R39E Sections 3,10,15,14,23,26,25,36,1
$IV_A - IV_A,$ 240 - 277	T23N R38E Sections 2,11,13,24,25
$V_A - V_A,$ 278 - 315	T23N R38E - T23N R39E Sections 14,13,18,17,16
$V_B - V_B,$ 316 - 360	T23N R39E - T23N R40E Sections 14, 13, 18, 17
$VI_A - VI_A,$ 361 - 409	T23N R39E - T23N R40E Sections 23, 26, 25, 30, 29

VII_A - VII_A,

409-444

T23N R39E - T23N R40E
Sections 35, 36, 31, 32

VIII_A - VIII_A,

445-482

T22N R39E - T22N R40E
Sections 12, 7, 18, 8

Dates:

This project was worked between June 21st and July 17, 1979 by the following persons:

Kevin Crain June 21st - June 28th
Scott Sarber July 7th - July 17th
John Cain June 21st - July 17th

Final Notes:

Although the samples were collected with the utmost of care, and were sifted in an attempted sterile environment, there is a slight question remaining on numbers one through thirty-nine of traverse two, which were improperly identified by Kevin Crain. In the unlikely event that this portion of traverse two is of reversed order, the chemical results will be opposite of s.p. results. Spot field checks were made, so I am reasonably sure the numbering is correct.

A finer than 80 mesh component was removed from a portion of the soil sample by a stainless steel 80 mesh sieve, with the coarser material being discarded. All sacks with the coarse component returned, are so marked. The soil was sifted onto a sterile paper plate, and immediately transferred to an amber 8 dram medicine bottle. The stainless steel sieve was cleaned after every sample with paper toweling and/or by tapping the sieve on the ground. A visual inspection of the sieve followed each cleaning, to check for residual dust which may contaminate the following sample.

The preceding statements are true to the best of my knowledge as of July 18, 1979.

John Cain