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PRINTED: 04/17/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: NANCY YOUNG CLAIMS

ALTERNATE NAMES:

YAVAPAI COUNTY MILS NUMBER: 1291

LOCATION: TOWNSHIP 9 N RANGE 6 W SECTION 4 QUARTER C
LATITUDE: N 34DEG 09MIN 03SEC LONGITUDE: W 112DEG 53MIN 04SEC
TOPO MAP NAME: O'NEILL PASS - 7.5 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:
URANIUM

BIBLIOGRAPHY:
ADMMR NANCY YOUNG CLAIMS FILE
ALSO IN SEC. 5

BEA Development Company

♦ MINING
♦ CONSTRUCTION

BOX ~~53~~ 1.
MONTELLO, NEVADA

MHJ/j
14 April 1971

Mrs. Nancy Walker Young
Box 53
Congress, Arizona, 85332

Dear Mrs. Young:

In compliance with your instructions, I have examined your mining claims (water well) West of Congress, Arizona and have written the attached report on the same.

The value of this report is $750.00 .

Yours sincerely,

Melvin H. Jones
Mining Geologist

1 - Incl.
Preliminary Geology
Report.

SUPPLEMENT to PRELIMINARY GEOLOGY REPORT, Nancy W. Young claims, West of Congress, Arizona, Yavapai County, Arizona. 12 April 1971.

In accordance with telephone call from Mrs. Young, on 15 April, 1971, I am amplifying and expanding my remarks relative to gold content of the water on the mining claims.

The apparently nebulous quantity of gold in the water, 0.4 ppm Au., is indicative of recoverable values that is economically feasible. The Au is no doubt colloidal and would be in particles from 10^{-7} to 5 X 10^{-5} cm, thusly, would be no larger than large molecules and would remain suspended indefinitely in water. The o.4 ppm Au will amount to 2/5 of a lb of Au for approximately 100,000 gals of water pumped. Each lb of Au has 12 troy ounces. At the U.S. mint price of $35.00 per oz, each 100,000 gals of water has $168.00 in AU. Based on pumping 30 gals of water per minute, the weekly value of gold recovered would be $504.00 . At the International free market of Au ($41.50 per oz. E/MJ Apr '71) this value would be $570.60 . Most authorities predict that the price of gold will go up in the not too distant future.

The gold can be readily and cheaply recovered by using the ion exchange process. Ion exchange is based on an exchange of ions between a solution and an insoluble resin. This method is particularly applicable to the removal of small amounts of solutes from large volumes of solutions. Anion exchange resins used for gold recovery are high molecular-weight organic polymers. They contain immobile amine groups and associated mobil ions such as chloride or hydroxyl ions. The resins are virtually insoluble but are porous and contain about 50% water so that the mobile ions can diffuse thru the resins. In practice, the resins are contacted with the solution (water in this case) and the gold is adsorbed by the resin. While the theory of ion exchange is quite complex, for practical purposes the gold passes into the resin molecule in exchange for another anion. This reaction is reversible. Resin life is usually 2 years or more.

Ion exchange is essentially a batch operation, but continuous operation is achieved by using multiple units of equipment with staggered operating cycles. In conventional systems the resin beds are in a fixed position in packed columns and the pregnant solution passes thru a series of columns. When the first column of the series becomes saturated(loaded), it is removed from the circuit and a newly regenerated column is added to the end of the series. The loaded column is washed and backwashed to remove any sediment and to rearrange the resin particles to prevent channeling. The column is then eluted, washed, and is again ready to reenter the loading circuit. Elution is usually done in multistages, which add in removing all of the gold and producing a richer eluate.

Resins are specifically made to extract the element or metal desired to be recovered. Thusly, the exact resin must be obtained for the intended purpose. During the past few months a woman scientist living in Israel has perfected a resin that adsorbs gold to the exclusion of other metals. This is a fabulous improvement that simplifies Au extraction. It is understood that these resins can be purchased for about $50.00 a cubic foot. Another type of resin would be used in extracting the uranium.

I would again like to emphasize that additional water samples should be taken and be re-anayalised for gold content, by at least two qualified assayers, before firm plans are made to erect a recovery plant. This is also applicable to the uranium.

MELVIN H JONES
Mining Geologist

April 17, 1971.

PRELIMINARY GEOLOGY REPORT

NANCY YOUNG CLAIMS
(Three miles West of Congress, Ariz.)
Arizona State Land Dept., P.P. 18243 -5/13/70

YAVAPAI COUNTY

ARIZONA.

April 12, 1971.

INTRODUCTION

At the request of (Mrs. Nancy Walker Young of Box 53, Congress, Arizona, the undersigned has made a preliminary geological study and examination of her mining claims located three(3) miles West of Congress, Arizona, immediately North of Highway 71 (in Yavapai County). These mining claims are on State of Arizona property and are held by Mrs. Young on a permit from the State Land Department, (P.P.18243, May 13, 1970). Two(2) claims are involved. Of principal interest is a well on the mining claims and the minerals contained im the water from the same. In the following report are my observations, findings, and recommendations resulting from six(6) or more, visits to the property over a period of five(5) years.

Originally (about five(5) years ago), a group of Blythe, California businessmen, formed what was known as the C&J Drilling Company, and moved on the mentioned property to drill for petroleum. After some months, a hold was drilled to a depth of 2300(plus) feet, which turned out to be a "dry hole" as far as oil was concerned. The company still believing there was oil at depth, ran out of money, and abandoned the well at the mentioned depth. I am told that some initial Geo-Chemical testing was done that indicated high Hydro-carbon surface anomalies, and from this was determined the site of the drill hole. While no oil was found, water was first encountered at the 826 foot level. As is required by the Arizona laws relative to dry oil well holes, the well was plugged with concrete, at the 1013 foot level. Prior to this capping, 1800 feet of drill pipe was removed, and there remains in the hole about 500 feet of drill pipe, that was not recovered due to operational recovery problems. Subsequently, Mrs. Young (and associates) took over the abandoned oil well under the applicable mining laws. The "discovery of mineral" consists of an assay revealing that the water in the well contained 51 ppm of Uranium.

GEOLOGY AND OTHER CONSIDERATIONS

The claims are on an alluvial apron on the South slope of the Date Creek mountain. This mountain is a pluton and is primarily composed of pre-cambrian granite. A pediment of the same should underly the mining claims. At the claims one stands on Quaternary alluvium that grades into colluvium near the foot of the mountain slope. This sedimentary rock is Pleistocene-Pliocene in age, and is the residue of pluvial and ephemeral stream action.

Reports of the drillers(oral) on the initial drilling indicated that all of the sedimentary rock being penetrated was alluvium of a composition similiar to the surface material; no other formations were encountered. This is verified by one megascopic examination of the cuttings made by the writer, (from 2000 feet). Apparently, the pediment was not encountered at the depths mentioned.

The Hydrology aspect of the mining claims, is that an underground flow of water was found at and below the 826 feet level of the drill hole, and it is considered probable that several conduits were encountered (according to the drillers). This is not a "water table" situation, but there are underground streams of unknown quantity flowing rapidly. This is confirmed by the writer (and Mr. Wm. Sergeant, Wickenburg, Arizona) by the following circumstances. After the drilling was finished, the hole was temporarily capped with an iron plug (cap) with a petcock affixed thereon. When the latter was opened, air was sucked into the drill hole indicating a high vacuum. This is normal characteristic of running water. This vacuum was present anytime during the day or night, thusly, eliminating the concept that a cavernous condition existed at the depths, causing air to be either sucked in or expelled, depending on the barometric-

head of the atmosph[illegible]e. Considering that the dri[illegible]ole area is part of the Sonora desert, an[illegible]at water has been only infre[illegible]ently found in the Congress vicinity, the discovery of this water is unusual, to say the least. The water capacity has not been tested as to total productivity. One driller, Mr. Sergeant, states that by bailing with a bucket on the drilling rig, he was able to bail 30 gpm without difficulty (the maximum possible with this equipage). In his opinion, the well will produce more water than the stated amount.

Concerning the Uranium in the water of 51 ppm (see Inclosure No.1), this is extremely high for U. in water. The sample of water that resulted in this test, was obtained from the well before the cement plug was placed in same. Subsequent samples from the upper level(after well was plugged) show a large reduction in the U. content. I was informed that an engineer from the Utah Construction and Mining Company probed the well and there exists a gamma ray log showing increased radiation in the water saturated zone. The paragenesis of the Uranium is probably supergenetic action of meteoric water on Telethermal deposits. As pure U. does not occur in nature, it is the opinion of the undersigned, that the U. in the water is either a sulphate or a carbonate. It is probably the latter, if we extrapolate that Liebigite ($2CaCO_3U(CO_3)_2\ 10H_2O$), a rare U. mineral and a carbonate, is found in limited amounts in the old Congress Mine (Au), which is about 3 miles in distance away from the claims.

Now, lets go into the economic geological aspects of a high U. content in water. First off, one should know that 10,000 ppm is 1% of the total (water in this case). 51 ppm(for example) = .051% of the total of 100%. Water weighs roughly 10 pounds to the gallon. Thusly 10,000 gals. weighs 100,000 lbs and if the water has .051% U., then it has 51 lbs of U. This Uranium at a minimum figure of $10.00 per lb would be valued at $510.00 . If the well produces only 30 gpm and is pumped 24 hours each day, then at the end of every 2 1/3 days approximately $510.00 in U. can be recovered, or $1530.00 per week. The U. can be easily and cheaply recovered by the ion-exchange process using resins. This process is used at a number of uranium mines, and by at least one large copper company, where U. is recovered from mine waters. I do not have the cost figures on U. recovery using this method, but it is minimumal. It can be seen that even with a large decrease in U. ppm, the water can be mined at a profit.

As an added incentive to the validity of mining the mentioned waters, another sample shows 0.4 ppm in gold (See inclosure No.2).

CONCLUSIONS

The mining claims of Mrs. Nancy Walker Young, located about 3 miles West of Congress, Arizona, should be retained by her, and be further investigated and developed. The water after processing for minerals, will also be valuable for agriculture useage.

RECOMENDATIONS

Mrs. Young should initiate action to:

1. Remove cement plug from the well.
2. Following this, the water should be re-sampled and tested for Uranium and other valuable minerals. The ph of the water should also be ascertained, as this has a bearing on its mineral bearing capabilities.
3. Test the well for water production (gallonage).

REGISTERED GEOLOGIST · STATE OF CALIFORNIA · Melvin H. Jones No. 841

MELVIN H. JONES
Mining Geologist.

April 12, 1971.
PO box 1
Montello, Nev. 89830.

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE
P.O. Box 112
GOLDEN, COLORADO 80401

10 April 1970

REFER TO

Misc. Accounts
Receivable

Mr. Melvin H. Jones
BEA Development Company
Box 406
Wickenburg AZ 85358

Dear Mr. Jones:

I have not received a replacement for the water sample lost in transit by spillage, and so have proceeded with the analysis of the other water sample for gold. The result is as follows:

Sample No.	Au in ppm
1 (Young)	0.4

If you have any questions concerning this analysis, please contact us.

Yours sincerely,

Dr. D. [illegible] Jones
Senior Project Engineer

REPORT

TRUESDAIL LABORATORIES, INC.

CHEMISTS - MICROBIOLOGISTS - ENGINEERS
RESEARCH — DEVELOPMENT — TESTING

4101 N. FIGUEROA STREET
LOS ANGELES 90065
AREA CODE 213 • 225-1564
CABLE: TRUELABS

AIR MAIL
A.N.Y. Company
CLIENT c/o Nancy Young
P.O. Box 305
Bullhead City, Arizona 86430

SAMPLE One-gallon of water

DATE May 27, 1968
RECEIVED May 24, 1968
LABORATORY NO. 95316

INVESTIGATION

Determination of dissolved solids and parts per million uranium in dissolved solids.

RESULTS

Concentration in the filtered water

Dissolved solids, ppm.....390.

Concentration of uranium in dissolved solids

Uranium (U), ppm..... 51.

NOTE: Parts per million (ppm) is equal to one milligram per liter (mg./l)

Respectfully submitted,

TRUESDAIL LABORATORIES, INC.

T.E.P. Jeffreys

T.E.P. Jeffreys, Ph. D.
Technical Director

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE
P.O. BOX 112
GOLDEN, COLORADO 80401

10 April 1970

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Yours sincerely,

[illegible]
Senior Project Engineer

Incl. #2