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Mr. and Mrs. Clement K. Chase,
285 W. Giaconda Way,
Tucson, Arizona. 85704.

Dear Friends:

Moab, Utah. August 25, 1970

Assuming that you might be interested in some early history pertaining to the "miraculous mineral", known as URANIUM, found extensively in this area--commonly referred to as the "Uravan Mineral Belt"--I am handing to you herewith a copy of a paper I presented at a comparatively recent meeting of the local chapter of the American Institute of Mining Engineers.

Respectfully submitted,

Howard H. Balsley

"In talking with the Talbot Brothers, in Paradox Valley, just over the state line, in Colorado, in the early 1900's, when I was a Forest Ranger, I was told that, in 1879, they had found a fissure vein carrying some odd mineral, which they assumed to be silver, and sent a sample thereof to the American Smelting & Refining Company's smelter, at Leadville, Colorado, to be assayed. However, the folks at the smelter advised them that they had no idea what the material was but they were sure it was not silver.

"In October, 1898, this same fissure vein was re-discovered and located by a man by the name of Tom Dolan, also of Paradox Valley. A sample of this discovery was sent to the Smithsonian Institution, in Washington, D. C., for analysis. Word came back that the ore was high-grade Uranium.

"This alleged fissure vein was located on Roc Creek, just across the La Sal Mountains, in Sindbad Valley, in Colorado. Incidentally, the name of the creek above mentioned is spelled "ROC", and the name of the valley is spelled "SINDBAD". Whoever gave that creek and that valley, as well as several other old landmarks in that part of the country, their names had unquestionably read a former very popular book entitled "Sindbad the Sailor", for these names were definitely taken from that book.

"Well, this so-called fissure vein turned out to be the very famous Rajah mine which eventually produced thousands of tons of very high-grade Uranium ore. On various occasions, while riding over in that general area, I have met strings of as many as fifty burros and pack mules, loaded with high-grade ore from this Rajah mine. This ore was all sacked before being loaded on the animals and packed to Paradox, from whence it was loaded on wagons and hauled to Placerville, Colorado. From there it was shipped by narrow-gauge railroad to Montrose, Colorado, where it was transferred to the broad-gauge railroad and sent on East, from whence most of it was shipped to France.

"For many years, the Rajah mine was claimed to embrace the only fissure vein of Carnotite (Uranium) ore ever discovered. Just in case someone present should not know the difference between a fissure vein and a blanket vein: A fissure vein is presumed to stand up and down, sometimes called a vertical vein, but they are not always exactly vertical, whereas, a blanket vein lies more or less flat. All of the Carnotite (Uranium) ore I know anything about has come in blanket veins or in pockets.

"Anyway, after many years, the geologists finally decided that this Rajah mine was really not in a fissure vein, but that a great shelf of sandstone, containing this blanket vein of Carnotite ore, from which the underlying strata had been eroded away through the ages, had broken off and stood on end, making what was thought, for years, to be a fissure vein. I just thought this might be a little interesting side-line for some of you folks.

"Quoting Mr. Frank Silvey, a veteran prospector in these parts for many years: 'Tom Francis, who was prospecting near the McIntyre Canyon District at the time, visited the Paradox District and was shown some specimens of Uranium ore. When Francis came back to camp he told us boys he thought we had Uranium here in McIntyre and he was quite sure he knew where there was some near camp. The next morning he went prospecting. Soon he came back on the run and yelled 'Hooray boys! We have it and enough for all of us.' Several of us started off with Francis that day and we staked a number of good Uranium claims. The date was March 9, 1898, so we were among the pioneer discoverers of this rare material.'

"In 1898, Messrs. Pouilot and Voilique, two prominent French chemists and scientists, visited Southwestern Colorado and Southeastern Utah, the territory surrounding the La Sal Mountains, which lie in both states, and investigated the Uranium deposits which were known to exist there. They proceeded to build and equip, so far as is known, the very first Uranium-concentrating plant in the world, over on the Dolores River, at Camp Snyder, San Miguel County, Colorado, near where State Highway No. 80 crosses the Dolores. I have a picture of that first Uranium-concentrating plant.

As I am quite sure, most of you know that Madame Marie Curie, a noted Polish physicist and chemist, with her husband Pierre, discovered the element Radium in Uranium ore

in 1898. She is credited with having been responsible for the coming of the said two Frenchmen and the construction of the Uranium-concentrating plant just mentioned.

"Madame Curie visited in Southwestern Colorado and the said mill in 1899. She is also credited with having given the name "Carnotite" to the type of Uranium ore that has been produced in this area during the past approximately 70 years. This type of ore was named "Carnotite" in honor of A. Carnot, French inspector general of mines.

"Carnotite" occurs in the Salt Wash member of the Morrison formation. This type of ore carries Uranium, Vanadium and Radium, as most of you know.

"In 1922, Madame Curie again visited the United States and a number of philanthropic persons in this country purchased and gave to her, in recognition of her wonderful contribution to science, in the discovery of Radium, one gram of Radium, for which they actually paid \$80,000, and that was the wholesale price. Radium, at that time, was retailing at \$120,000 per gram.

"As nearly as I have been able to establish, the first Uranium ore discovered in this immediate vicinity was by an old-time prospector by the name of Albert M. Rogers who, in later years, lived for some time in my home. This first ore was found on a famous old Uranium property up near the foot of Brumley Ridge, not far from the turnoff to the M-4 ranch, in upper Spanish valley, designated for many years as Poverty Flat. This mining property was later patented under the name of "Blue Goose".

"Ore from this Blue Goose property was mined and shipped to France and, reputedly, to Madame Curie's laboratory, in Paris. I have owned this property for many years and it has produced a very considerable quantity of unusually high-grade ore through the years. I have declined to sell this property, principally for sentimental reasons.

"I 'grub-staked' Al. Rogers on many occasions to go prospecting and he did discover and locate a number of very fine Uranium claims. Just in case some of you younger folks do not know what 'grub-staking' is: That was a custom that has prevailed in all mining areas in the West, almost since the beginning of time. For instance, I would buy enough food, supplies and tools to last the prospector for, say 30 days, together with grain for his pack and saddle animals. When the food and supplies were used up, if he still wanted to prospect, he would come in and get loaded up again. If, in the course of the prospecting expedition, one or more promising claims were found and located, one-half of the property thus acquired went to the person furnishing the supplies, etc.

"As nearly as I can recall, it was in the spring of 1915 that a long-time cowboy, who had turned Uranium prospector and miner, and was, at the time, working on the Blue Goose property, mentioned above, came to me and stated that he had just had a dream, in which he had plainly seen a yellow circle in a block of sandstone, up in the Upper Cane Springs Wash area, and he was sure it was Uranium and that he could find it.

"I never had much faith in dreams, but this man was so sincere, and I knew him to be honest and truthful, so I bought for him everything needed for his proposed prospecting expedition, including grain for his pack and saddle animals. (Just about everyone had his own horses or burros in those days).

"After perhaps ten days, this prospector--Charles Snell by name--came riding in and stated that he had actually found the yellow circle in the block of sandstone, just as he had dreamed, and that he was sure he had discovered a real Uranium ore deposit, and that he had staked five claims in the vicinity thereof, in his name and mine.

"Later, we located more claims in that area and the property has produced a vast tonnage of real good Uranium-bearing ore through the years--more than a million dollars' worth, in fact. Unfortunately for me, I sold the property a number of years ago--just at the start of the boom in the 1950's--for a very nominal sum, and I wasn't smart enough to retain even a low over-riding royalty. It is a fact that Thornburg Brothers, whom some of you know, sold their lease on this property of 20 claims for \$560,000 cash. Incidentally, a partner and I have, comparatively recently, re-acquired a one-fourth interest in this Yellow Circle property. I believe that there is still a lot of ore on the property, and quite an extensive drilling campaign is due to start up there very shortly. (Since writing the above, a very fine new body of ore has been discovered on this property and several hundred tons of real good ore have been shipped during the past two months.)

"When this Yellow Circle property--that is the name we gave it--was sold, the rock bearing the dreamed-of yellow circle was removed from its setting on the property and placed in my yard, here in Moab, where it can be seen at any time, should anyone be interested in seeing it.

"During the winter of 1918, we had a very heavy snow-fall in the area where this Yellow Circle property is located, some 21 miles southeasterly from Moab. I had 24 men

working on the property at the time, and they ran completely out of food supplies. One of the miners chopped down a cedar tree and fashioned from it a pair of crude skis and came down to advise me of the plight of the foodless miners. I went to Green River, Utah, bought a big bob-sled, brought it to Moab, where we hitched four horses to the sled and took in a load of groceries for the men. We had a real time breaking a trail through more than three feet of snow. By the time we got there, the men were pretty hungry, but they didn't go on strike.

"A year or so later, this same cow boy-pro prospector, Charles Snell, came to me and asked that I 'grub-stake' him on another prospecting trip--this time into the Lisbon Valley area so, again, I loaded up his two pack horses with supplies, horsefeed, etc., and he took off. Some four weeks later, I received from the treasurer of San Juan County, where Lisbon Valley is located, a check for \$27.00. I couldn't imagine why I was getting this check, or for what. About two weeks later, Charley rode in and the first thing he asked me was whether or not I had received a check from San Juan County for \$27.00. I stated that I had but I couldn't figure what it was for. Then Charley said: 'Well, I didn't find any Uranium I thought worth locating, but I did find a den of wolf pups--six of them. I killed them and took the pelts into the county clerk, at Monticello, and got \$54.00 in bounty money, paid by the state for the destruction of wolves, and that \$27.00 is your half of the bounty'. I said: 'Well, Charley, I certainly wouldn't have expected you to do that', whereupon, he said: 'Well, by George, I was eating your grub when I caught the wolves so half of the money is yours'.

"In the spring of 1934, I entered into a contract with the Vitro Manufacturing Company, of Pittsburgh, Pennsylvania, whereby I agreed to supply their requirements for Uranium ore. My contract provided that I deliver ore running a minimum of 1.50% in Uranium Oxide, and a minimum of 5% in Vanadium Oxide. Nowadays, we are real pleased if we can hold the minimum grade of our Uranium ore up to 20/100ths of 1%, but we did find a lot of high-grade ore in the 'old days'. For instance, I shipped to Vitro from Polar Mesa, on the north end of the La Sal Mountains, 34 50-ton carloads of ore that actually averaged 1.57% in Uranium oxide and 7.35% in Vanadium Oxide. And I also shipped a lot of high-grade from the Yellow Circle and Snowflake-Sunflower properties.

"I had warehouses or other storage arrangements in Blanding, Monticello, Moab, Cisco, Thompson and Green River, in Utah, and in Grand Junction, Newcastle, Meeker, Montrose, Naturita, Dove Creek and Egnar, in Colorado. My contract called for shipment in 50-ton carload lots, so I had to accumulate enough ore in the various warehouses on the railroad to load a car. I bought ore from more than 300 small producers, scattered all over the Colorado Plateau. I bought the ore in any sized lots, from 25 pounds to a carload, and every lot had to be broken up and hand sampled. I have had as many as 55 separate lots of ore in a single carload. Every bit of it had to be sacked in 100-pound bags. Then, I had to blend, on paper, as we called it, the various lots going into the carload, so that the required minimum grades could be maintained.

"I had a lot of difficulty in determining which lots to blend together--on paper, as I said--because I was buying and selling on a sliding-scale price list, and I could not afford to use too high-grade ore to bring to grade too much low grade. Please understand that practically every lot of this ore was different in its Uranium and Vanadium contents. Sometimes a lot would run quite high in Vanadium and very low in Uranium, and vice versa. So, believe^{me}, I had a real blending job.

"Of course, most of these small producers were always broke, financially, and had to have advances on their ore. Most of the time there was not a single Uranium assayer in the entire area, in which event I had to send the samples all the way to Pittsburgh for assaying, and that would require a minimum of two weeks. In the meantime, the producers and their families had to eat. So, I acquired an electroscope, which I have with me here tonight. This instrument is much more accurate in determining the actual grade of ore than is the modern Geiger counter and, should any of you be interested, I'll show you why. I actually have, in my warehouse, more than 6,000 pulverized samples of ore I have bought during the eleven years I was doing business with Vitro. With the aid of the electroscope, I could arrive fairly closely at the Uranium content of the sample, so I could go ahead and make a substantial advance to the producer. Of course, I just had to guess at the Vanadium content. Then, when the assay was received, I would pay the balance due, if such there was. Often I was talked out of considerably more of an advance than the ore delivered justified, but was always promised more ore to make up the difference--very frequently, it never arrived and I took a considerable loss on that account; just listening to 'sob stories'.

"I failed to tell you what Vitro did with this ore I shipped to them: Well, the firm was set up by two elderly German immigrants, for the purpose of supplying to the market ceramic colors from mineral pigments, to be used in potteries and glass factories. Their customers were numbered by the hundreds in this country and in many foreign lands. Vitro actually made 26 different shades of reds, green, browns and yellows from this Uranium ore. They also used considerable unfused Vanadium 'red cake' in their ceramic colors.

"Vitro also extracted the Vanadium from this ore and, what they did not use in their own business, they found a ready market for--in the form of Vanadic Acid--at the steel mills, of which there were and are, many in the vicinity of Pittsburgh. Vitro also recovered the radium from this ore. The radium salts thus recovered was shipped to Philadelphia to a noted Czechoslovakian scientist who prepared it for insertion into cancerous tissue. This radium had to be shipped by truck, in a heavy lead cask, inasmuch as neither the railroad nor postoffice would handle it.

"During the eleven years I was affiliated with Vitro, I was the only ore buyer on the Colorado Plateau who paid for both the Uranium and Vanadium in the same ore. There were a couple of other buyers who would pay for the Uranium content only, so I got most of the ore that was available from the smaller producers. Of course, during most of that time, the United States Vanadium Corporation, a wholly-owned subsidiary of Union Carbide & Carbon Corporation, was operating vanadium-extraction mills at both Uravan and Rifle, Colorado, and the Vanadium Corporation of America had a mill at Naturita; however, they only paid for the Vanadium content of the ore. Occasionally both of these concerns would turn some of their ore with a high Uranium content over to me.

"During the many years I have been in the Uranium-Vanadium ore business, I have ridden the market up and down a number of times. For instance, during the early 1900's, the only use for this ore was for its radium content. We producers got built up, what was considered in those days, a fairly good market for our Uranium. Then, all of a sudden, they came up with a rich strike of pitch-blende ore in the Belgian Congo, and we all went out of business over night.

"Then, eventually, the wonderful properties of Vanadium, as a steel alloy, especially where great tensile strength was required, were recognized and, for a time, we had a very promising market for the Vanadium content of our ore but, of course, we got nothing for the Uranium. Then, about 1921, the Vanadium Corporation of America came up with a whole mountain of Vanadium ore down in South America and, although this ore had to be packed on llamas over a 14,000-foot pass in the Andes mountains, we still could not compete with the price, even though that product had to be shipped by water to a port in the United States and thence by rail to a plant near Pittsburgh. So, we went out of business again.

"Thereafter, and up until the Government decided it needed an unlimited amount of Vanadium, early in 1942, sometimes we had a limited market for our ore--other than what I shipped to Pittsburgh--and sometimes we didn't. In May, 1942, the Government set up a Corporation, designated as the Metals Reserve Company, the object of which was to procure a lot of Vanadium in a hurry. A number of buying stations were set up around over the Carnotite-producing area. We had one here in Moab, just south of the old cemetery. I was in charge of it for a number of months. We were authorized to accept all of the Vanadium ore we could get, running 1 $\frac{3}{4}$ % or better in Vanadium Oxide, and many thousands of tons of this type of ore were delivered to the various buying stations. The ore received here at the Moab Buying Station was trucked to Durango, Colorado, a distance of 160 miles, where the U. S. Vanadium Corporation had another plant that extracted the Vanadium.

"Well, all was going well and many old mine dumps that ran very low in Uranium but fairly well in Vanadium were scooped up and sold to the Metals Reserve. However, late in February, 1944, the Government suddenly discovered that it had Vanadium 'running out of its ears', as it were, and orders were issued to cease buying Vanadium promptly at midnight on February 28 of that year. So, we went out of business again, except for my contract with Vitro. At the time the close-down order came from Washington, I had a considerable tonnage of ore accumulated over at Dove Creek, Colorado, that was too low in Uranium to ship to Vitro but it had a good Vanadium content. By working day and night with two good helpers, we got the last load of ore delivered to the Dove Creek stock pile at exactly five minutes before midnight, February 28, 1944.

"Then, late in 1944 and early in 1945, the Government needed Uranium badly, in connection with its Atomic Bomb program. That project was first handled by the Manhattan District, with headquarters in New York. After the bombs were dropped in Japan, the Manhattan District evolved into the Atomic Energy Commission and the headquarters were moved to Washington. In 1945, the Government commandeered all of the Uranium in the nation and took over the operation of all plants at which Uranium was handled for any purpose. The Vitro plant, at Canonsburg, Pennsylvania, not far from Pittsburgh, was taken over, a high fence was built around it and a heavy guard was on 24-hour duty. A carload or two of ore I had at the plant was taken over but eventually paid for.

"As late as January, 1947, no program had been set up by the newly-created Atomic Energy Commission for handling the Uranium-bearing ores of the West. After a considerable amount of correspondence and long-distance calls, Senators Edwin C. Johnson--later Governor of Colorado--and Eugene D. Millikin, both of Colorado, and both members of the Joint Congressional Committee on Atomic Energy, arranged for Mr. Fendoll A. Sitton, a prominent citizen and ore producer, of Dove Creek, Colorado, and myself to meet with the Atomic Energy Commission, in Washington, D. C., at noon on February 14, 1947.

"We met in the Senate Office Building, as scheduled, with the full Atomic Energy Commission, headed by the chairman, who had just been appointed to the position by the President, but whose appointment was still under fire in the Senate, and Senator Edwin Johnson present.

"After telling our story, the Chairman said, very frankly: 'I just as well tell you gentlemen, I don't know the first thing about Uranium. I don't even know where it comes from.' However, he said he would have a man flown down from New York that afternoon, who was in charge of a portion of the old Manhattan District that had not yet been moved down to Washington, following the creation of the Atomic Energy Commission, and that this man would know the answers.

"That afternoon, Mr. Sitton and I were ushered into the presence of this New Yorker, a certain Lieutenant-Colonel, under heavily-armed guard for, as some of you may have known, anything at that time pertaining to Uranium was strictly 'Hush! Hush!' Uranium was not even mentioned by name--a code word was used instead. Anyway, this man said: 'Well, there's no use in my trying to fool you folks--I don't know a d-- thing about Uranium.' Well, we didn't get too much satisfaction out of this missionary trip to Washington except that we did get a promise that a full investigation would be made, in due course of time, of the Uranium possibilities out here in Southwestern Colorado and Southeastern Utah, but it took a long time for that to materialize.

"Later in 1947, Mr. Ray A. Bennett, a business associate of mine, of Denver, and I made another trip to Washington, still without much encouragement, so we went on up to New York, to confer with the man who was in charge of the Geological branch of the Atomic Energy Commission, not yet transferred to Washington. This party stated, very definitely, to us: 'There just isn't enough Uranium in the West to be of any interest. We can get all the Uranium we want from Canada and South Africa.' How wrong this man's prediction turned out to be!

"In a letter dated December 16, 1947, signed by both Senators Johnson and Millikin, this was said: 'Dear Mr. Balsley: We have been urging the Atomic Energy Commission to take effective steps to encourage the exploration and development of our domestic Uranium-bearing ores. It is our understanding that the Atomic Energy Commission desires to have your viewpoint.'

"Then, under date of February 7, 1948, almost a year after our first trip to Washington, I had the following letter from Senator Ed. C. Johnson: 'Dear Balsley: Thanks for your good letter. Senator Millikin and I have had a long, hard fight for recognition of our Uranium production possibilities. During the past two weeks we are beginning to see our efforts bear fruit. You may be certain it makes us feel good and you may depend upon us to keep plugging.'

"Well, finally, an extensive and thorough exploration program was initiated by the Atomic Energy Commission here in our section of the country, resulting in an unbelievable amount of Uranium ore being discovered, which led to the historical and long-to-be remembered Uranium boom of the 1950's.

"Much has been written and recorded regarding that era, with which most of you are undoubtedly familiar. It would take a long time to re-tell that story, so I shall not attempt to go into the many ramifications of that tumultuous period at this time.

"In closing, may I present this little episode? For a number of years past, I have had stored in my warehouse, here in Moab, approximately a ton and a half of beautiful, canary-yellow high-grade Uranium ore. It was just too pretty and rare to sell to the mills, so I kept it--for sentimental reasons, I guess: As you know, the emanations from Uranium-bearing ore can be picked up from the air, with the assistance of a good Geiger counter or scintillator. Well, on several occasions during the Uranium boom, planes would circle around and around my place, picking up those emanations. Then, the folks from the planes would come to inform me that they had discovered a high-grade Uranium mine in my back yard, whereupon, I would tell them: 'Yes, I know, it is right over there in my storehouse.'

"Thank you."

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY Essex International, Inc.
Mr. E. Grover Heinrichs

DATE Sept. 9, 1970
Date Submitted 9-8-70

SAMPLE MARKED	GOLD OZ / TON	SILVER OZ / TON	PER CENT COPPER	PERCENT LEAD COPPER	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON
001			0.23	.23	<i>So. western check</i>		
002			1.13	1.18 +			
003			0.08	.07 -			
004			0.20	.20			
005			0.60	.62 +			
006			0.65	.65 +			
007			0.58	.59 -			
008			0.70	.73 +	<i>MOAB Area</i>		
009			0.37	.37			
010			0.48	.48			
011			0.01	.008 -			
012			0.68	.72 +			
013			0.55	.56 +	<i>Cashin</i>		
014			1.19	1.30 +	<i>Cashin</i>		

COPY

Prospect 4007

B3-03 (cont assay)

OK JH.

Invoice # 5268



CHARGES \$ 28.00

SXM

SOUTHWESTERN ASSAYERS & CHEMISTS, Inc.

SEP 11 1970

REGISTERED ASSAYERS

RECEIVED

FELIX K. DURAZO
WIL WRIGHT
ARIZONA REG. NO. 5875

P. O. BOX 7517
TUCSON, ARIZONA 85713

710 E. EVANS BLVD.
PHONE 602-294-5811

Essex International, Inc.
Mr. Howard Lanier
2030 E. Speedway
Tucson, Arizona 85719

JOB# 007481
RECEIVED 9-10-70
REPORTED 9-10-70

SAMPLE NUMBER	GOLD OZ.*	SILVER OZ.*	LEAD %	COPPER %	ZINC %	MOLYBDENUM %
001				.23		
002				1.18		
003				.07		
004				.20		
005				.62		
006				.68		
007				.59		
008				.73		
009				.37		
010				.48		
011				.008		
012				.72		
013				.56		
014				1.20		

*Moab
Check Assay on
Copper only*

COPY

*Prospect U007
G3-03 (East Valley)*

OK HL 9/11/70

CHARGE \$ 28.00

* Gold and Silver reported in troy oz. per 2,000 lb. ton.

INVOICE

AMERICAN ANALYTICAL and RESEARCH LABORATORIES

ASSAYERS - CHEMISTS - METALLURGISTS

TUCSON, ARIZONA 85713

SAMPLE SUBMITTED BY Essex International, Inc.

DATE Sept. 21, 1970

~~Project 7-100241-17003-02~~

Date Submitted 9-10-70

SAMPLE MARKED	GOLO OZ / TON	SILVER OZ / TON	PER CENT COPPER	PERCENT LEAD	PERCENT ZINC	PERCENT MOLYBDENUM	PERCENT IRON	Percent Ox Cu	
E 301			1.36	} Change to G 3-03 U 007				1.34	
302			1.38						1.33
303			1.41						1.40
304			1.39						2.83
305			1.41						1.39
306			1.37						1.36
307			1.34						1.34
308			1.40						1.36
309			1.38						1.36
310			1.35						1.34
311			0.14					0.11	
312			0.10					0.08	
313			0.08					0.06	
314			0.13					0.12	
315			0.15					0.13	
316			0.20					0.18	
317			0.23					0.21	
318			0.12					0.10	
319			1.36					1.34	
320			1.40					1.39	

OK Harris 9/24/70

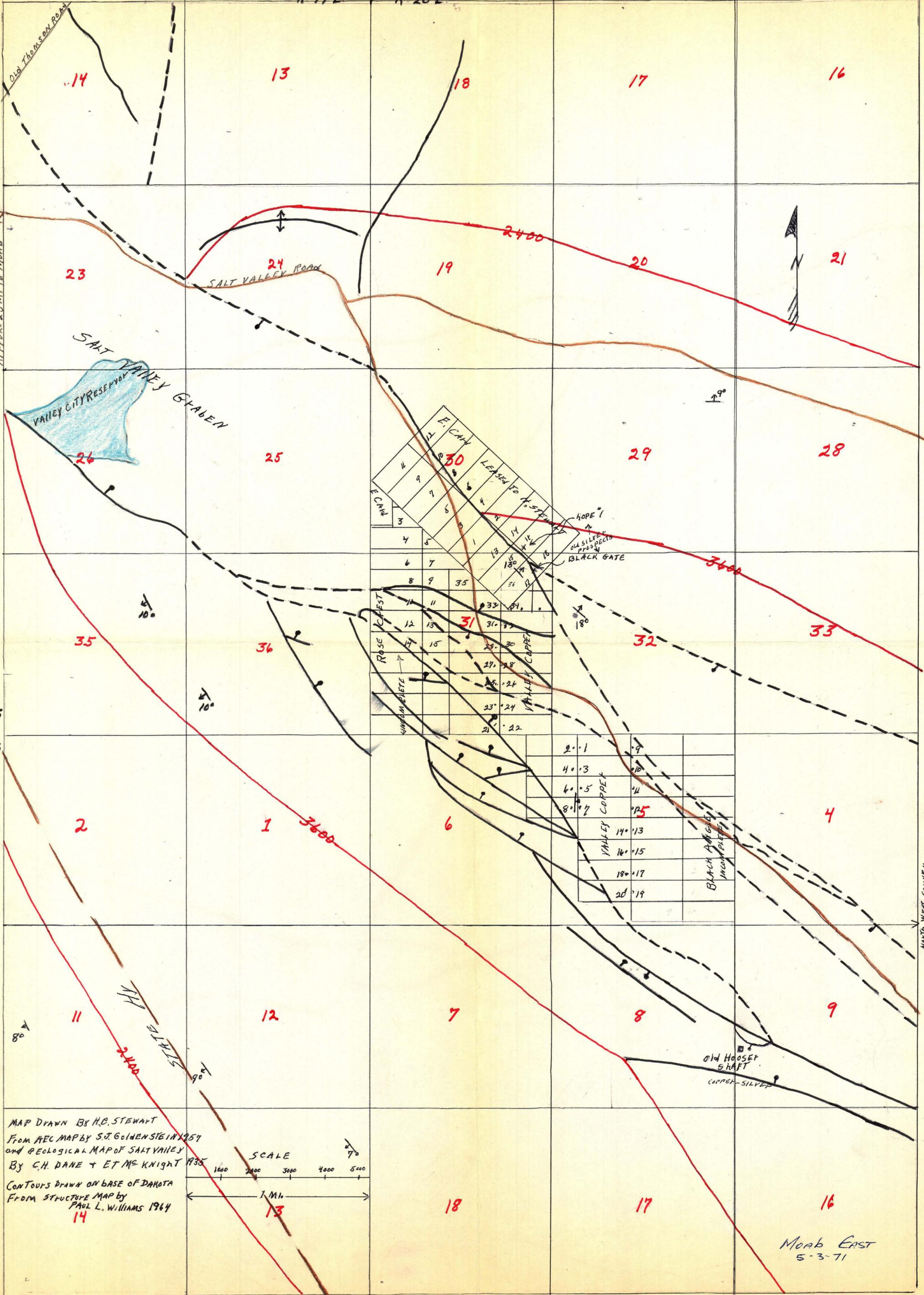


Invoice # 5315

CHARGES \$ 70.00

APPROX. 5 MI. TO R.R. CRESCENT JCT.
APPROX. 2.5 MI. TO MORAB

R 19 E R 20 E



E. CANON

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
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ROSE CREST

VALLEY COPPER

VALLEY COPPER

20	1	9
40	3	10
60	5	11
80	7	12
140	13	15
160	15	16
180	17	17
200	19	18

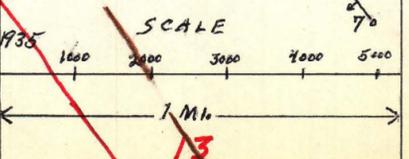
BLACK ANGEL INCOMPLETE

T 22 S
T 23 S

NORTH WEST CORNER
OF AYRES BATTERY 2 MILES EAST

MAP DRAWN BY H.O. STEWART
FROM AEC MAP BY S.J. GOLDENSTEIN 1957
AND GEOLOGICAL MAP OF SALT VALLEY
BY C.H. DANE + ET ME KNIGHT 1935

CONTOURS DRAWN ON BASE OF DAKOTA
FROM STRUCTURE MAP BY
PAUL L. WILLIAMS 1964



MORAB EAST
5-3-71