4080 0005

Carponento (293)
District
Them 5

Gentlemen:

Enclosed herewith please find engineering and geological reports on several Tungsten (Scheelite) claims acquired by our corporation.

As we are not in the mining business, we desire to sell these claims to someone more qualified to operate them and acquire the values therefrom.

Naturally, we desire to get a fair price for our interests and, if you are interested, we will consider your offer.

The reports of Zimmerman and McDonell were made during World War II and therefore the mining costs reported therein probably would not apply today; otherwise, we feel the reports sufficiently accurate to justify your consideration and investigation.

The property is posted against trespassing; therefore, we suggest that you contact us and obtain clearance before attempting any investigations or surveys.

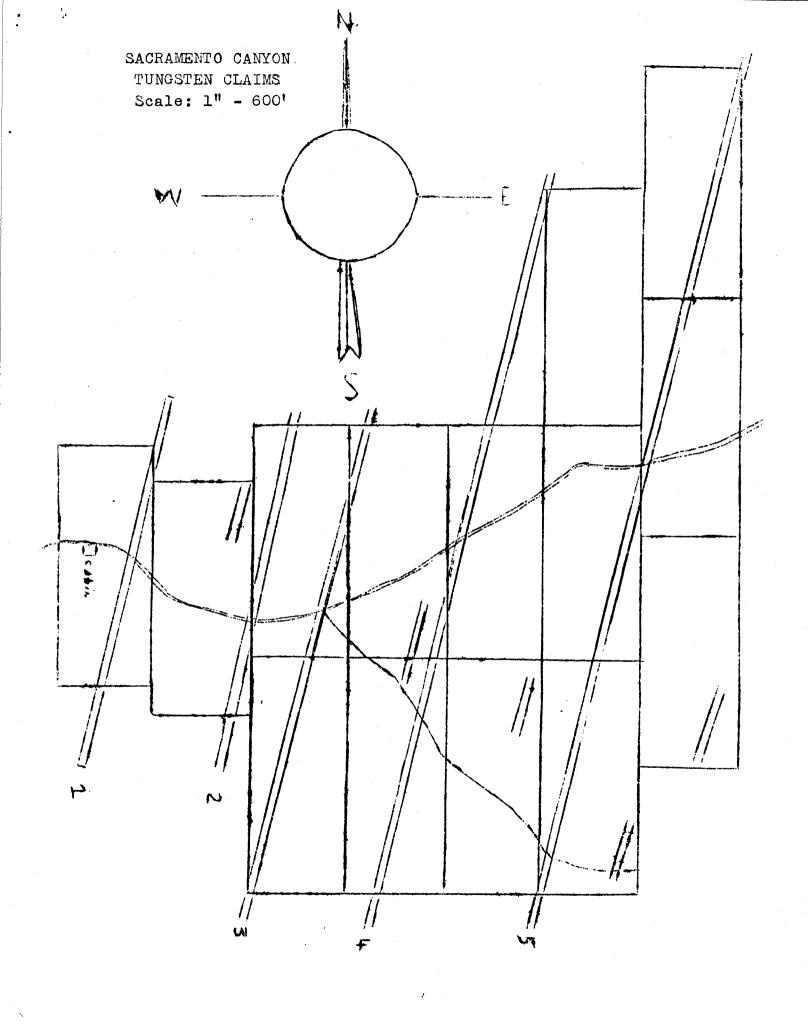
Our cost to date for these claims and development work is approximately \$15,000. This information is furnished for your guidance should you be interested in making us an offer.

Very truly,

SILVER STATE INVESTMENT CO.

By:H.I. Wilson, Sect'y.-Treas.

Address Reply to: H.I. Wilson 30 Montell Ave. Oakland 11, Calif.



PRELIMINARY REPORT ON TUNGSTEN (SCHEELITE) PROPERTY By: Bruce McDonell, E.M. Technical Consultant of the State Mining Board of California

This preliminary report will cover a group of 12 claims originally located after the discovery of an outstanding occurence of scheelite on July 6, 1941.

LOCATION

The group of claims is located in Sacramento Canyon, in the Humboldt Range, 17 miles north of the town of Lovelock, Pershing County, Nevada. It is two miles from Oreana, a station on the Southern Pacific Railroad and U.S. Highway # 40.

PHYSICAL FEATURES

A good usuable dirt road runs from Oreana to the mouth of the Sacramento Canyon which is the location of the first of the group of claims From this point it will be necessary to construct one-half of a mile of road up the canyon to cross to cross the entire property and to reach the many proposed working locations. The construction of this road would be on a very easy gradient as it would follow the floor of the canyon the entire distance, requiring no heavy cuts or blasting, and still be of a high enough elevation to be free from any winter storm damage. The construction of this road would require the use of one bulldozer for a period of four days.

Flowing down Sacramento Canyon through the claims (with undisputed water rights filed upon same) is an unnamed stream of water. The source of this water is mainly from springs with some coming from the snow in the upper reaches of the Humboldt Range. This stream flows all year round and the writer's estimate of the volume would be an all-year minimum of at least 286 gallons per minute.

This group of claims is bounded on the south by the Sillimanite holdings of the Champion Spark Plug Company. About two miles north, on the west side of the most westerly of the two most pronounced limestone outcroppings that runs through this property, is located the Scheelite deposits of the Little Tungsten Mine of the Nevada-Massachusetts Company. Still further to the north about twenty miles is located the main mine and mill of the Nevada-Mass. Tungsten Company.

GEOLOGY

The major structural feature of this particular section is the wide anticline into which the Triassic rocks have been folded. The dips of the western side of this anticline (which is the location of this property) are dipping at 35°W on the north side of the Sacramento Canyon while on the south side of the canyon the dip is 35°S.W. This undoubtedly is due to later faulting and rotation which took place along the line of Sacramento Canyon. Outside of a turning action upon the anticline there has been no other effect on the structure. The

East dips of this anticline which would be a considerable distance east of this property dip at an average of 65°E.

The general rock is a series of tuff, lava and breccia in many places more or less schistose and consisting of felsitic trachyte, material of an andesitic and greenstone appearance, and porphyritic rhyolite. On the south end of the property Dumortieritizied Trachyte of pink and blue coloring occurs in abundance.

The two types of faulting recognizable were (1) the faulting that accompanied the opening of the mineral-bearing fissures and (2) that which accompanied the block-faulting by which the range was unlifted. (The recognition of further faulting on this property is practically impossible because of the uniformity of the formation.)

LIMESTONE

There are two pronounced limestone outcroppings on the property. The first is more or less along the west side of the claims. The second is farther up the anticline about 1800' east of the first and both are lying in the bedding plane of the anticline although in between there is to be found signs of khyolite, tuff, and breccia interbedded with limestone.

GRANITE

Small dikes of porphyritic granite appear throughout the property containg large quartz crystals.

VEINS

There are seven parrellel veins containing scheelite that have been uncovered to date. However, only on five of them has trenching been done and assays run. Hereinafter the writer will, therefore, designate the veins as number 1,2,3,4, and 5 with # 1 being the most westerly and at the lowest exposed point of the anticline and working up the anticline or in an easterly direction. All the veins follow the dip and strike of the west dip of the amticline (35°W- north of Sacramento Canyon 350S.W. - south of the Canyon) and are exposed and traceable on the surface for a distance of 2000 feet. Vein # 1 outcrops on the surface about 200! east of the most westerly limestone outcropping. The vein filling is porphyritic granite and quartz with a width of 2' and containing many small scheelite crystals and giving an assay of 2 per cent (WO3). # 2 is located about 300 ' east of Vein #1 and is west of # 2 limestone outcropping. The width of this vein of quartz is 2' with large scheelite crystals giving an assay of 4 per cent (WO₃). Vein # 3 is located about 500' east of Vein # 1 and is west of the #2 limestone outcropping. The width of this vein of quartz where the sample was taken was 1' wide and assays 3.4 per cent (WO3), the scheelite crystals occuring in large bunches. Vein # 4 is located about 200' east of # 2 limestone outcropping, the quart vein is 10! wide and sampled 16 percent (WO3) to a depth of 7!. Vein # 5 is located about 500' east of the # 2 limestone outcropping. vein is a tourmaline quartz with a width of 5 to 20' for the 600' of

outcropping that was sampled. This gave a very uniform assay of 0.50 per cent (WO3) with the lowest sample going 0.34. As stated before all the veins cross Sacramento Canyon going up both sides and making backs at rate of 2 to 1. The writer used a minerlight on all his work, followed by acid tests. All samples mentioned in this report were cut by the author and assays were made by the Techow Laboratories, Sacramento, California.

DEVELOPMENT

As this property was discovered a short time ago, naturally, very little development work has been done. On # 1 and #2 veins only enough surface trenching has been done to determine the width of the veins and to enable sampling. Number 5 vein has a drift driven in on the vein for a distance of 25.

CONCLUSION

As this report has been made in the form of a preliminary report and all phases touched upon very lightly, it is quite questionable in the writer's mind if this report will do justice to the property because the geology and general occurrence of the ore plus the topography and water is such that very economical mining and milling could be carried on after the expenditure of a very small amount of money for development work that would be necessary to guarantee the ore production.

SUPPLEMENTARY REPORT ON TUNGSTEN (SCHEELITE)
By: Bruce McDonell, L.M. Technical Consultant
of the State Mining Board of California.

This report is a supplemental report to my report of August 28, 1941, on a group of 14 claims in the Sacramento Canyon, Pershing County, Nevada, upon which considerable Tungsten (Scheelite) has been found.

Since my original report was made, some work has been done on the numerous higrade narrow veins which has extended the length of the ore shoots. However, the main accomplishment has been the driving of a drift on the large lower grade vein, so that now there is an apparent block of ore 400' x 300' x 8' which equals 900,000 cubic feet. This material runs 9 cubic feet to the ton or 100,000 tons of ore which average one half of one percent (.50%) WO3.

This large tonnage of mill material, which can be mined and milled very economically, plus the highgrade showings on the narrow veins, which could be used to sweeten millheads, make the erection of 100 ton plant justifiable.

The width is from 5' to 20' - the vein has been opened and sampled for 400' going uphill at the rate of 2' to 1'. The dip of the vein is between 35° and 40° giving an average backs of 300'. The material is Tourmaline quartz.

GEOLOGICAL REPORT ON TUNGSTEN (SCHEELITE) PROPERTY By: Carl Zimmerman, Mining Geologist

This report is designed to cover the geology and tentative recommendations for operation on a group of 12 claims of tungsten property Scheelite, etc.) located in Sacramento Canyon of the Humboldt
Range, Pershing County, Nevada, about 17 miles north of Lovelock and
about 2 miles from Oreana, a shipping point station on the S.P.R.R.,
and on U.S. Highway # 40.

At once, upon entering the mouth of this canyon, the eye is caught by, first, an appreciable stream of water meandering westward down the caryon and on out into the flats beyond; second, the woll defined insistence of the bedding plane that slowly rises at about 35 degrees to a north-south anticlinal axis about 5 miles distant, showing this canyon to be down the west slope of a broad anticline; third, the high crasy dips and lower folds that flank both sides and roll out to the right and loft into the general mountain range; then, two definite limestone bads running parallel to the axis of the anticline and intersecting the canyon nearly at right angles. The first of these in just inside the canyon, and the second about 2500 feet above the first and the tangsten property herein referred to lies between these limed dikes, on the floor of the canyon and extending up the dips on each side.

Upon further examination, it develops that the Triassic rocks of the district consist of coarse granite, trachyte (a sort of intermediate between granite and diorite, depending on the type of feldspar present), felsitic and porphoritic rhyolite, mica and quartz diorite, syenite, greenstone and chlorite, beryl, tourmaline and schistose lava, breccia and tuff.

Throughout the formation some slight faulting occurred which might have opened up the fissures that now constitute the network of from 5 to 10 parallel veins of tungsten ores that transverge the canyon, some of which extend into the upper reaches of the slopes for half a mile or more. The mode of occurrence of this vein system, however, in such an acidic groundwork of ignious origin would suggest offhand the possible formation of the total ore body by other agencies also, any one of which may have produced a very desirable dept to the veins themselves. (A very indicative condition is the continuity of some from bedding plane to opposite summits). Thus viewing the terrain as a whole, there is suggested, perhaps, the huge, once un-sculptured anticlinoria produced by the tremendous upward flexure of the surface extending over a vast area, the geanticlinal being accompanied by subterranian erruptions and mineral depositions. Then again, a laccolithian movement localizing as anticlinoria, after which Nature set to work with rain and storm, snow, heat and cold, chemistry and disintegration and chiseled out canyons, cliffs, hogbacks, benches, sto. Today everything is changed. The laccolith shows only the upturned eiges of the sedimentary (limestone) beds on the sides or at the base of the erruptive core. Or perhaps show in parts of the cent-TRI wass, remnants of the interleaved strata. The overlying thinpedded limes are split open or pried apart, one section showing here and another there, perhaps two thousand feet away. In between are the intrusive dikes and sheets, breccias, lavas, tuffs and fragments of lime, and the massive and deep seated granitic, felsitic, rhyolitic and trachitic rocks. Porphoritic dikes intruding into these types justifies the assumption of ore bodies of ample proportions.

Then again, tremendous pressure, some movement and grinding causing multiple fissure and brecciated zones or contact fissure veins are all accorded great depth because of their dike associations and farreaching effect of the great violence that might have occurred here, resulting in a condition that is most conducive to, and a groundwork that is more permeable to mineralization by super-heated waters or gases carrying minerals in solution or vapor form.

However, after spending two weeks or so on this property (virgin) doing surface exploratory work with ultra-violet light equipment, and reviewing the existing proven tungsten fields to the north and south of this property on the same anticline, the whole ground mass here gives every indication of consistent mineral production, from the standpoint of country rock, vein arrangement and vein material, coupled with a review of observations by way of comparison, which I have personally made in the tungsten fields at Atolia, in the San Diego County and Kern fields, and the Kings River and Bishop fields.

The vein materials in which the scheelite is imbedded in small crystals to larger "spuds" consist of almost solid quartz in some, and mica schist or greison, somewhat brecciated, in some. Another is of quartz with massive tourmaline folded in or "floating", and others of fine and coarse porphoritic granite and quartz, the vein-width scope of the several veins ranging from 1 to 20 feet.

By assay, the scheelite will no doubt average at least 2% WO₃- an ultra-conservative estimate, in the light of the outside assay limits which run from 0.34% to 16.4% WO₃.

A minimum estimate of the ore in sight, or pay ore to handle, on just the one major vein alone, is over a half-million tons. A 100 ton mill should be considered as a minimum operation at the outset, and increased from there if desired.

A liberal estimate on the mining and milling costs is \$2.00 per ton for each.

There is no garnet or apparently any other interfering element to contend with, so a simple concentration process should be followed, possibly with a three 16 foot table (and accessories) circuit, which should produce a 70 to 80 percent concentrate.

SUPPLEMENTARY REPORT ON NEVADA TUNGSTEN PROPERTY By: Carl Zimmerman, Mining Geologist

This property lies in a contact-metamorphic zone between two sedimentary (limestone beds, one of which borders the eastern boundary and the other the western, thus creating one of several features of paramount importance in the process of approximating the dept of the veins and the potential tonnage of scheelite ore that constitutes them.

Another feature of importance is the synchronization of the existing conditions of today with the theory of magmatic segregation and selective or preferential concentration and the end-products thereof.

Considering the quartz-tourmaline vein, for instance, it is a generally accepted fact that tourmaline is one of those minerals whose formation was not of hydatogenic (formed simply by water) origin, but rather by the action of escaping gases and vapors far below the surface of the earth. As to the quartz, consideration of several steps in the "evolution of formation" are allowable; 1. basic magma; 2. to granite: 3. to feldspar-quartz; 4. to pure quartz.

A great depth is universally accorded rocks of this type and the geological actions that took place; and attributing the presence of the scheelite crystals as they exist in the vein today to selective concentration or replacement, it is most reasonable to presume that a most favorable condition of depth exists, comparable to that which exists under similar conditions at the Omeo District of Australia, the titaniferous zones of the Adirondacks in New York, the old Trumbull tungsten mines in Connecticut, and the tungsten and tin on the west slope of the Great Anticline of the Malay Peninsula.

Summarizing the characteristics of depth with respect to the largest vein, which is traceable on the surface for a distance of over a mile at an average width of twelve feet or so, it is my opinion that this vein alone should contain a half-million tons of easily workable ore.

Likewise, as to other veins on the property (I think there are seven). some of which are of the same origin as that described above. as well as those undoubtedly exhibiting replacement and contact characteristics, bear in their general mode of occurrence and their constituent elements (quartz, greisen, mica schist, topaz, porphyritic granite. etc.), the same relation to what might be termed a profitable depth, as do those that have obviously resulted from the same "machinations" of geology in other districts. For example: Little Lake, scheelite in quartz and mica-schist at 400 feet; Atolia, in quartzmonzanite and quartz-feldspar at 1500 feet; Empire Mine, Nevada County, in quartz at 3000 feet, et al. A most indicative feature in the makes up of these veins is the noticeable absence of glassy materials such as augite, phonolite, sanidin, orthoclase and other members of the Pyroxene group. Now, these stony materials, liquified by heat and rapidly cooled near the surface. The same materials SLOWLY cooled form crystalline granular rocks like the granite group, far below the surface of the earth. While analgous to the felsitic and trachitic rocks, all being made from the same mineral dough, they differ from each other

In their physical aspects because of the above contrast in their modes of formation. An elaboration of this theorem and its applications to the several visible evidences thereof as noted on this property, would be superfluous at this time. Suffice it to say, that I consider this feature an important factor in anticipating profitable vein depth.

TECHOW LABORATORIES Sacramenho California

17670

Samples of Ore

#	1	Tungstic	acid	***	3.40%		
#	2	Tungstic	acid		•34%	(surface	only)
#	3	Tungstic	acid	000 per des des per per per des des des des per per per per	.36%	(surface	only)
#	4	Tungstic	acid		17.42%		
#	5	Tungstic	acid		.92%	(gen. av	erage)
#	6	Gold			t.		

NOTE:

Sample # 1 is the composite of four 5-ft. openings along the 8 inch vein over a distance of 250 ft.

Sample # 5 is the composite of the first 150 ft. from portal on the big vein (tourmaline quartz).

Sample # 3 is the composite of the second 150 ft. going up the hill above Sample # 5.

Sample # 2 is the composite of the next 100 ft. above Sample # 3.

Sample # 4 is the composite of the high-grade vein one-ft. wide for a distance of 7 ft. the length of the opening that we have at this time.

Sample # 6 is the gold assay on the big vein in the drift that we are now running. The sulphides are showing here, whereas the surface assay on gold showed only \$1.40 per ton.

ASSAY CERTIFICATE

C.M. Ball Assayer Chemist

April 8, 1951

SILVER STATE INVESTMENT CO.

Our Number	Your Description	on of Sample	W03%	
19502 19503 19504 19505 19506 19507 19508	# 1 # 2 # 3 # 4 # 5 # 6 Bottom of Mill		0.65 0.80 0.82 0.75 0.85 0.72 0.45	
		Ounces Gold Per Ton	Gold At \$35	
19509	Bottom of Well	0.78	\$27.30	

Note:

10

These were made from pulverized samplings comparable to millheads and should represent the lowest possible assay on these veins.