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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CASEY JONES GROUP

ALTERNATE NAMES:

OATMAN HILL TOP
SWALLOW GROUP

MOHAVE COUNTY MILS NUMBER: 11A

LOCATION: TOWNSHIP 19 N RANGE 19 W SECTION 19 QUARTER SW
LATITUDE: N 35DEG 00MIN 41SEC LONGITUDE: W 114DEG 20MIN 39SEC
TOPO MAP NAME: MOUNT NUTT - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:

GOLD LODE

BIBLIOGRAPHY:

USGS MOUNT NUTT QUAD
ADMMR HOUSEHOLDER MAP
ADMMR MOHAVE CARD FILE
RANSOME, F.L., USGS BULL 743, MAP
ADMMR CASEY JONES GROUP FILE
ADMMR UNITED EASTERN MINE FILE,HAFF & COLWELL
MAP
ADDITIONAL WORKINGS SEC. 24-T19N-R20W

07/29/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: CASEY JONES GROUP

ALTERNATE NAMES:

OATMAN HILL TOP
SWALLOW GROUP
NEW YORK EXTENSION
KANSAS ANNEX

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ADMR UNITED EASTERN MINE FILE, HAFF & COLWELL
MAP
ADDITIONAL WORKINGS SEC. 24-T19N-R20W
ADMMR CASH ENTRY GROUP MINE FILE
AZBM MOHAVE MINE FILE
ADMMR MOHAVE CUSTOM MILL PROJECT
ADDITIONAL WORKINGS SEC. 16, SE, T19N-R20W

CASEY JONES GROUP

MOHAVE COUNTY

Kingman Mining Project, Underground maps 3 plan, 11/5/76

Oatman, Arizona, September 27th, 1915.

Casey Jones Mining Company,

Oatman, Arizona.

Gentlemen:

In compliance with your request I have examined that certain area known as the Casey-Jones Group of Mining claims, situated in the Tom Reed-Gold Road Mining District, Mohave County, Arizona, about one and one-half miles from the town of Oatman in an easterly direction.

The claims have been regularly surveyed and a map is now in preparation. Until this has been completed definite boundaries and the exact area cannot be given. There are, however, ten full and two fractional claims embracing, in all, somewhat more than two hundred acres of ground.

You are now in possession of all matters relating to the title to the ground, and I will proceed at once to a consideration of the physical and geological questions involved.

TOPOGRAPHICAL AND PHYSICAL RELATIONS:

The westerly end of the group saddles the top of the ridge which forms the sky line east of the town of Oatman and extends thence in a southeasterly direction a distance of approximately seven thousand feet. (See map.) The locality is very much broken with abrupt rises and sharp declivities. Steep lines of surface drainage beginning at the extreme top of the ridge score out deep gulches on each flank except on the central and eastern portion of the ground where the claim lines lie wholly on the northeast flank of the mountains. Standing on the top of the ridge the ground breaks off almost precipitously to the southwest and west, falling less steeply down the opposite flank of the range to the northeast and east.

From Oatman the Casey Jones Group is reached by a good wagon road as far as the camp site of the Oatman mine from which point a trail winds up to the top of the range. It would be possible without great expense to carry the wagon road up to the northwest corner of the group, but the body of the ground could not be reached by such a road from the Oatman side.

A much better means of approach to the center of the group is offered by following what is known as the Antelope Springs gulch leading up from the pumping station of the Gold Road mine. This is situated on the main thoroughfare leading from Gold Road to Kingman well down near the eastern base of the range. From this pumping station a road has already been completed to a point just below the eastern end of the Casey Jones Group, and it can be readily extended to the group itself by turning up one or another of two or three lateral gulches draining into the Antelope Springs Gulch from the southwest. That portion of the group lying on the top of the ridge cannot be reached by wagon road without too heavy cost of building and

must be reached in some other way for any operations located in this portion of the ground. Excellent tunnel-sites exist on either flank of the ridge which can be served by wagon road and through which development could be carried on. At one point well up on the eastern flank of the ridge it is possible to sink a shaft from which the vein could be cross-cut through a distance of two or three hundred feet, more or less. This shaft might possibly be served by a wagon road but the grade would be very heavy and transportation over it correspondingly expensive.

It will be necessary to bring in both water and fuel. The former can be had near by in sufficient amount for all immediate requirements. For future milling purposes an additional supply must be developed which will be possible from several springs issuing along the eastern base of the range below the property.

Vegetable and native woods are very scarce and of no economic importance.

GEOLOGY:

The surface rocks in this group are predominantly Latite with Tuff and smaller amounts of Spherulite and volcanic glass. The Latite is reddish in color and porphyritic in texture containing small, rounded particles of water-clear, transparent quartz thickly scattered through it. It forms the capping over the greater part of the property and is underlain by a thick bed of Tuff, creamy white in color and of texture common to plastic rocks of volcanic origin. Underlying the Tuff is the later Andesite which in turn rests upon the eroded surface of an older Andesite flow. The Older Andesite floors on the upturned and greatly eroded edge of a sedimentary series of marine origin. With the exception of a single well defined limestone and shale outcropping, the constituent members of this sedimentary series are unknown.

Dykes of quartz-porphyry cut the formation in this vicinity but no such dykes were observed traversing the Latite capping.

All the rocks in this locality have been greatly silicified. This is particularly true of the Tuff and Latite where the action has been intense. The silicification takes the form of opaline quartz filling all openings and seams in the rock and testifies to the wide extent and heated character of the circulating waters which have permeated this region. As it is known that gold is a frequent constituent of such siliceous thermal waters, the evidence here afforded becomes a valuable index by which to judge of the value of the veins occurring within this property.

The writer noted two well defined systems of faults. One of which is of origin antedating the period of gold-bearing vein formation, strikes generally in a northerly and southerly trend. The faults of this system are normal with down-throw to the east. The second system of origin later than the period of vein formation strikes generally northeast by southwest with down-throw to the west or northwest. The latter system extends across a wide belt and has broken and thrown the veins where these were intersected by the fault-planes. The effect of the movements involved in this later fault-system appears to be quite uniform throughout and has generally resulted in throwing the broken end of the veins on the west side of the fracture sharply to the north.

The amount of this offset between the broken ends of the veins is usually but a few feet but may extend up to as much as two hundred feet or more. An occasional exception to this rule has been noted, but it is believed that it will hold true in the majority of instances.

The net result of this later faulting has been to break the veins very generally into sections, and to throw these sections bodily to the north or northeast as the veins are followed westward on their strike. Obviously in following to the east along the strike of the veins, the sections will be found to be offset progressively to the south or southwest.

This tendency to off-set in the vein is plainly indicated in tracing out the course of the Oatman vein which extends through the greater portion of the Casey-Jones property and must be reckoned with in planning its development.

VEINS AND VEIN STRUCTURE:

The principal and probably most important vein within the boundaries of the Casey-Jones Group is that known as the "Oatman". This is a particularly strong, apparently well mineralized vein having an observed width at the surface of forty feet more or less and dips at a high angle to the northeast. Within the property lines of this group, the vein probably cuts the Later Andesite and is a true fissure. On the property of the Oatman Company west of the Casey-Jones it forms a contact vein between 4hyolite and Andesite. On the latter property the values are found in the Andesite wall rock on the Hanging Wall side of the vein. Since in the Casey-Jones ground both walls are probably Andesite below the overlying Latite and Tuff, it seems probable that the gold values, when encountered, will be found on both walls of the vein as well as within the vein matter between.

For its full length at, and near, the surface the Oatman vein shows gold in the pan, and the fact that good pannings are to be obtained along the slopes of the hill for a considerable distance below the outcrop of the vein itself testifies unmistakably to the uniformly gold bearing nature of this vein.

There is good reason to believe that the Casey-Jones Group contains within its lines at least seven thousand feet along the strike of the Oatman vein. Since the outcrop is concealed from view over a considerable portion of its course through the property and its identification dependent upon occasional visible outcroppings more or less closely aligned with the course of its trend, the exact length of the vein within the property lines cannot be definitely stated at this time.

Where its course could be determined, the trend is approximately north fifty five degrees west. Local migrations of the outcrop due to differences in elevation cause some small changes in the direction of the strike as followed on the surface.

The best exposure of the Oatman vein, at this time, is on the property of the Oatman Company. It conforms closely in character to the proved veins of the district. The vein filling is characterized by the minerals generally found to be associated with the ore in the veins now producing, and consists of predominant vein-quartz, iron and manganese oxides, calcite and secondary

feldspar of the variety known as Adularia.

Brecciated wall rock is abundant and this is generally altered into minerals of the chlorite group.

Evidence of faulting along the strike of the vein is well shown in smooth, slickensided surfaces which are encountered more or less closely spaced across the full width of the vein, giving it a sheeted appearance indicative of sheared faulting.

This is a peculiarly favorable structure for the development of strong, permanent ore-shoots by reason of its easy accessibility to underground flowage and replacement with ore.

Many stringers and spur-veins are found leading out from the main vein, and from many of these good pannings are obtained. At their points of intersection with the main vein well developed ore-shoots may be expected.

DEVELOPMENT:

The property is new and aside from small open-cuts and shallow pits there has been no development on the ground covered by the Casey-Jones Group. The character of the vein in the property must be judged from that shown in the Oatman workings indicated above. As the vein in both properties is one and the same, the character which it develops in one is a fair index of that to be expected in the other.

EQUIPMENT:

As this report is written, the Casey-Jones property contains no equipment of any kind worth mentioning. I am informed that it is the intention of those in control to equip the property for development in the very near future, and to actively explore the ground thereafter.

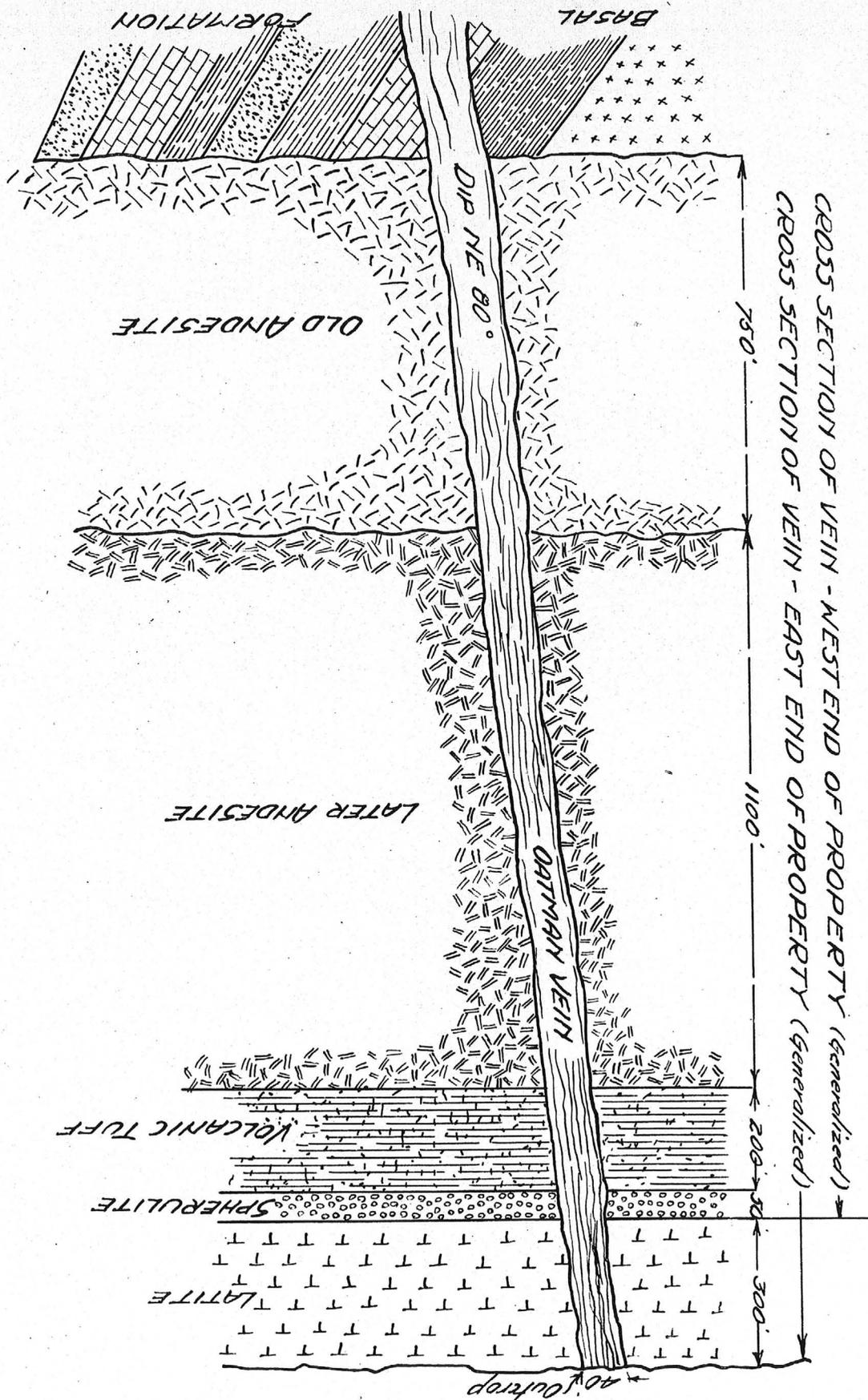
SUMMARY:

In conclusion I beg to say that I regard the Casey-Jones property as one well warranting its thorough development in the expectation that shoots of commercial ore will be found in that part of the Oatman Vein lying within the ground controlled by the Company. The ground is underlain by the full, original thickness of the Later Andesite within which the ore-bodies so far opened in the district appear to lie. This strongly favors extent and permanence of the ore-shoots when they are encountered. That such ore-shoots will be developed seems reasonably assured by the nature of the vein and the fact that it is known to yield values by panning along its entire outcrop; also by the further fact that the locality contains indisputable evidence that it has been thoroughly permeated by the circulation of thermal waters of a character known to be generally associated with the development of gold ores.

(Signed)

Edward W. Brooks.

Consulting Engineer.



CROSS SECTION OF VEIN - WEST END OF PROPERTY (Generalized)
 CROSS SECTION OF VEIN - EAST END OF PROPERTY (Generalized)

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