

Form 4-683  
(January 1963)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Mineral Survey number  
4650

State  
ARIZONA

Land District  
ARIZONA

FIELD NOTES

Of the Survey of the Mining Claim of *(name and address of Claimant)*

ORVILLE MARION PENDERGRASS  
209 N. ELDEN  
FLAGSTAFF ARIZONA 86001

Known as the *(name of group, if any)*

CONSISTING OF LOCATIONS NAMED AND LOCATED AS FOLLOWS

NAME OF LOCATION	DATE	
	LOCATED	AMENDED
COLLINS No.1	5/16/38	9/27/1966
COLLINS No.2	5/16/38	9/27/1966

Mining district WHITE MESA

County COCONINO

Section 13 & 24 Township T.23 N. Range R.7 E.

Meridian G. & S.R.

Survey under order dated Oct 3, 1966

Survey commenced OCT.16, 1966

Survey completed NOV.5, 1966

Name of Mineral Surveyor J.WILLIAM WAARA

170-23

180-12

10-8 180-12 170-23

170-23 180-12

180-12 170-23

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170-23

FEET

This survey was made with a Lietz Light Mountain transit No. 9303, with horizontal limb five inches in diameter, having two double opposite verniers reading to thirty seconds of arc, and full vertical circle five inches in diameter, having two double opposite verniers reading to one minute of arc; the eyepiece is equipped to receive a prismatic eyepiece with colored shade for direct observations upon the sun. The instrument was in good condition at the time of the survey and all adjustments were in good order.

All azimuths in this record were determined by the method of deflection angles referred to the meridian established by direct observations on the sun.

November 5, 1966 at a point N.66°-46' E. 357.4 feet from cor. No.4 of the COLLINS No.2 placer of this survey, Latitude 35°-22'N., Longitude 111°-35'W.; turning from the reference northwest, clockwise to the sun in the southwest.

True bearing of the reference point is S.66°-46'W.

The lines were measured with a 1/8 in. steel tape 500 feet long, graduated every foot with both end feet in 1/10th. foot graduations. This tape was compared with a standard 100 foot steel tape at the time of beginning the survey, and found correct.

All lines and connections of this survey were run by direct methods.

The Magnetic declination observed at each corner of this survey gave a uniform value of 14°-30'E.

SURVEY NO. 4650

COLLINS No.1 PLACER

At Cor.No.1 of the COLLINS No.1 placer, identical with Cor. No.4 of the COLLINS No.2 placer of this survey.

On line 1-2 Sur.No.4652 KINCANON NO.1 placer.

Set an iron pipe 36 inches long, 1/2 in. diameter, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked C 1-1, C 2-4 U S M S 4650 with its center for exact corner point; from which

The point for the northwest cor. of Sec. 19 T.23 N.R.8 E. of the Gila and Salt River Meridian bears N.87°-18'E. 1867.2 feet distant, reestablished from bearing trees.

FEET		
	<p>No other local bearing object or bearing trees available..</p> <p>Thence S.0°-56'E.</p>	
110.0	Cross mine road, bears northeast to southwest.	
1320.0	<p>Cor. No.2, identical with Cor. No.3 of the COLLINS No.2 placer of this survey.</p> <p>Set a 1/2 inch iron pipe 36 inches long, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked C 1-2, C 2-3 U S M S 4650 with its center for exact corner point; from which</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence S.66°-46'W.</p>	
713.3	<p>Cor. No.3</p> <p>Set a 1/2 inch iron pipe 36 inches long, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked C 1-3-U S M S 4650 with its center for exact corner point; from which</p> <p>No local bearing objects or bearing trees available.</p> <p>Thence N.0° -56'W.</p>	
1120.0	Enter plantsite area of operations.	
1320.0	<p>Cor.No.4</p> <p>On line 1-2 Sur.No. 4652 KINCANON NO.1 placer.</p> <p>This corner falls within the plant site area of operations where a monument cannot be established.</p> <p>Thence N.66°-46'E.</p>	
8.7	<p>Point selected for witness Cor.No.4</p> <p>Set a 1/2 inch iron pipe 36 inches long, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked W C C 1-4 U S M S 4650 with its center for exact corner point, from which</p> <p>The point for Cor. No. 2 Sur.No.4652 KINCANON NO.1 placer claim, bears S.66°-46'W. 258.0' feet distant.</p> <p>No other local bearing objects or trees available.</p>	

713.3	<p>Cor. No.1, and the place of beginning.</p> <hr/> <p style="text-align: center;">COLLINS No.2 PLACER</p> <p>At Cor. No.1 of the COLLINS No.2 placer.</p> <p>Set a 1/2 inch iron pipe 36 inches long, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked C 2-1-U S M S 4650 with its center for exact corner point; from which</p> <p style="padding-left: 40px;">The northwest cor. of Section 19, T. 23 N.R.8 E., G. &amp; S.R. meridian bears S.80°-57'E. 1235.2 feet distant; previously described.</p> <p style="padding-left: 40px;">No other local bearing objects or bearing trees available.</p> <p style="text-align: right; padding-right: 40px;">Thence S. 0°-57'E..</p>
1319.9	<p>Cor. No. 2</p> <p>Set a 1/2 inch iron pipe 36 inches long, 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, marked C 2-2 U S M S 4650 with its center for exact corner point; from which</p> <p style="padding-left: 40px;">No local bearing objects or bearing trees available.</p> <p style="text-align: right; padding-right: 40px;">Thence S.66°-46'W.</p>
713.3	<p>Cor. No. 3, identical with Cor. No.2 of the COLLINS No.1 placer of this survey.</p> <p style="text-align: right; padding-right: 40px;">Thence N.0°-56'W.</p>
1210.0	<p>Cross mine road, bears northeast to southwest.</p>
1320.0	<p>Cor. No.4, identical Cor. No.1 of the COLLINS No.1 placer of this survey.</p> <p>On line 1-2 Sur. No. 4652 KINCANON NO.1 placer.</p> <p style="text-align: right; padding-right: 40px;">Thence N.66°-46'E.</p>
257.4	<p>Cross mine road, bears northeast to southwest.</p>
357.4	<p>Cor. No.1 Sur.No. 4652 KINCANON NO.1. placer.</p>
713.1	<p>Cor. No.1, and the place of beginning.</p> <hr/> <p style="text-align: center;">SURVEY NO. 4650</p>

FEET	AREAS	Acres
	Total area, COLLINS No.1 placer	19.999
	Total area, COLLINS No.2 placer	19.996
	LOCATION	
	<p>This survey is located in the S.W.1/4 of S.E.1/4 and in Lot 4 Sec. 13, and in the N.W.ofN.E. 1/4 and, in Lot 1 Sec.24 T. 23 N.R.7 E.G &amp; S.R.Meridian, Arizona.</p> <p>The survey of the COLLINS No.1 and COLLINS No.2 placer claims is identical with the respective amended location as marked on the ground.</p>	
	EXPENDITURES	
	<p>The improvements and the value of the labor and improvements made upon or for the benefit of each of the placer locations embraced in said mining claims by the claimant or his grantors are as follows;</p>	
No.1	<p>The discovery and development open pit of the COLLINS No.1 placer, the center of which is the discovery point. The boundaries of the pit are described as follows: Beginning at the southeast corner of the pit, thence N.89°-45'W. 190 ft.; thence N.74°-00'W. 70 ft.; thence N.38°-45'W. 310 ft.; thence N.53°-30'E. 170 ft.; thence S.76°-30'E. 235 ft.; thence N.71°-00'E. 100 ft.; thence S.14°-15'W. 100 ft.; thence S.4°-15'E. 245 ft. to the place of beginning; from which Cor. No.2 of the COLLINS No.1 placer bears S.7°-30'E. 616 feet distant.</p> <p>The area of this pit is approximately 110,000 sq.ft. and has an approximate average depth of 15 ft. or 71,000 cubic yards of excavation.</p> <p style="text-align: right;">Value \$35,500.00</p>	
No.1	<p>The discovery and development open pit of the COLLINS No.2 placer, the center of which is the discovery. The boundaries of the pit are described as follows;</p> <p>Beginning at the northeast corner of the pit, thence S.15°-15'E. 185 ft.; thence S.43°-30'W. 45 ft.; thence S.1°E.; 80 ft.; thence S.36°-30'W. 85 ft.; thence S.58°W. 75 ft.; thence S.77°W. 80.0 ft.; thence N.59°-45'W. 55 ft.; thence N.17°-45'E. 75 ft.; thence N.18°-30'W. 150 ft.; thence N.42°-30'E. 85 ft.; thence N.59°-15'E. 220 ft. to the place of beginning, from which Cor. No.1 of the COLLINS No.2 placer bears N.37°-45'E. 615 feet.</p>	

FEET

The area of this pit is approximately 100,000 square feet and has an approximate average depth of 15 ft. or 55,000 cu. yds. of excavation.

Value \$27,500.00

OTHER CORNER DESCRIPTIONS

Survey No. 4652; Corners of this survey are 1/2 inch iron pipe 36 inches long, set 18 inches into the ground, surrounded by a substantial mound of stone, fitted with a three inch floor flange with copper plate bolted thereon, and marked with name, number of corner and survey.

A tie could not be made to other than the known and properly identified Northwest Corner Section 19, T.23 N.R.8 E. being the nearest public survey corner. The stone is missing, however the four recorded bearings were; standing three trees, fallen one tree, scribed as of record. The point for South 1/4 cor. Sec. 13, as determined by projection of the calls in the official record, falls in the plant site area of operations and is obliterated.

REPORT OF MINERAL SURVEYOR  
SPECIAL SURVEY DATA

This report covers the COLLINS No.1 placer and the COLLINS No.2 placer mining claims as observed in the field examination by me.

The claim is for residual volcanic deposit containing a pumice possessing unique chemical and physical properties different from the average pumice. It has been determined that this pumice, without calcining, is a true and effective pozzolanic material, and that its chemical and physical properties render it especially adaptable for use as a true and effective pozzolan, valuable for building, industrial and manufacturing purposes. This type of material was used in enormous quantities for mixing with concrete in the recent construction of the Glenn Canyon Dam by the U.S. Reclamation Service. The material is also used in lesser projects such as construction of the U.S. Arsenal at Belmont Arizona, presently on heavy concrete interchange and bridge construction on U.S. Military highway nearby. In addition it is used as sand for local consumption in the construction work, it being other than gold placer and still claimed under the PLACER MINING LAWS.

The valuable deposits consist principally of sand dune shaped bedding planes of fragmented material, consisting of a high percentage of sand and larger screen passing material. The presence of deeper bedding planes has not been explored, however the known plane is unlimited in extent.

FEET

There are no water holes, springs, or observable water courses; ground being extremely of pourous nature. The claim is in a cut-over timbered area, remaining trees being small size and larger seed type left over trees. The vegetation is sparce mountain grasses of 7500 foot elevation type. The claim is all placer ground, there being no known lodes. The claim is situated about one mile west of U.S.Highway No.89 and the adit road runs up a slightly rising plain, making the area extremely and advantageously accessible from the railroad, highways and cities. The construction of the proposed Marble Canyon Dam will open an immense market for this material.

*J. William Waara*  
 J. William Waara  
 U.S. Mineral Surveyor

Field assistants; Gene Garver  
 E.G. Chapman

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

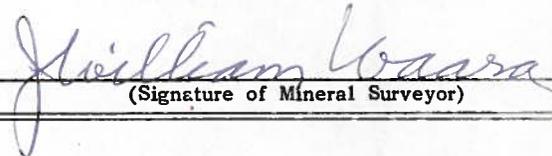
CERTIFICATE OF SURVEYOR

Name of Mineral Surveyor <b>J. WILLIAM WAARA</b>	Date <b>NOV. 23, 1966</b>
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I HEREBY CERTIFY That in pursuance of an order received from the **BUREAU OF LAND MANAGEMENT** at **PHOENIX ARIZONA** dated **OCT. 3**, 1966, I have carefully executed the survey of the claim of **ORVILLE MARION PENDERGRASS** known as the (lode, placer, or mill site) **COLLINS No.1 and COLLINS No.2 placers**, situated in **Sections 13 and 24**, Coconino National Forest, Township **23 N.**, Range **7 E.**, **Gila and Salt River** Meridian, in the State of **ARIZONA**

This survey, designated as number **4650**, has been executed by me and under my direction and has been made in strict conformity with said order, the Manual of Instructions for the Survey of Public Lands of the United States, and in the specific manner described in the foregoing field notes.

I FURTHER CERTIFY That the labor expended and improvements made upon and for the benefit of the (lode or placer) **COLLINS No.1 and COLLINS No.2 placer** location(s) embraced in the said mining claim by claimant(s) or **his** grantors are fully stated in my report. The character, extent, location, and itemized value are specified in full detail. No portion of, or interest in, said labor and improvements so credited to this claim has been included in the estimate of expenditures upon any other claim.

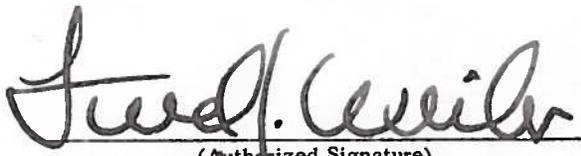
<b>Prescott Arizona</b> (Location)	 (Signature of Mineral Surveyor)
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CERTIFICATE OF APPROVAL

Bureau of Land Management

Office <b>Arizona State Office</b>
Location <b>Phoenix, Arizona</b>
Date <b>February 28, 1968</b>

The foregoing field notes of mineral survey number **4650**, in **Sections 13 and 24**, Township **23 N.**, Range **7 E.**, **Gila and Salt River** Meridian, in the State of **Arizona**, executed by **J. William Waara**, Mineral Surveyor, under order dated **October 3**, 1966, having been critically examined and the necessary corrections made prior to their certification by the surveyor, the field notes and the survey therein described are hereby approved.

 (Authorized Signature) <b>Fred J. Weiser</b>	<b>State Director</b> (Title)
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CERTIFICATE OF TRANSCRIPT

I CERTIFY That the foregoing transcript of field notes of the above described mineral survey number is a true copy of the original field notes.

(Authorized Signature)	(Title)
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Title 18, U. S. C. section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

NOV 23 1951

ALABAMA

DEPARTMENT OF

WATER RESOURCES

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