

CONTACT INFORMATION

Mining Records Curator Arizona Geological Survey 1520 West Adams St. Phoenix, AZ 85007 602-771-1601 http://www.azgs.az.gov inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRIN: ED: 11-04-2009

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: DE STORIES PLACER

ALTERNATE NAMES: WHISPERING WIND PLACER

YAVAPAI COUNTY MILS NUMBER: 767

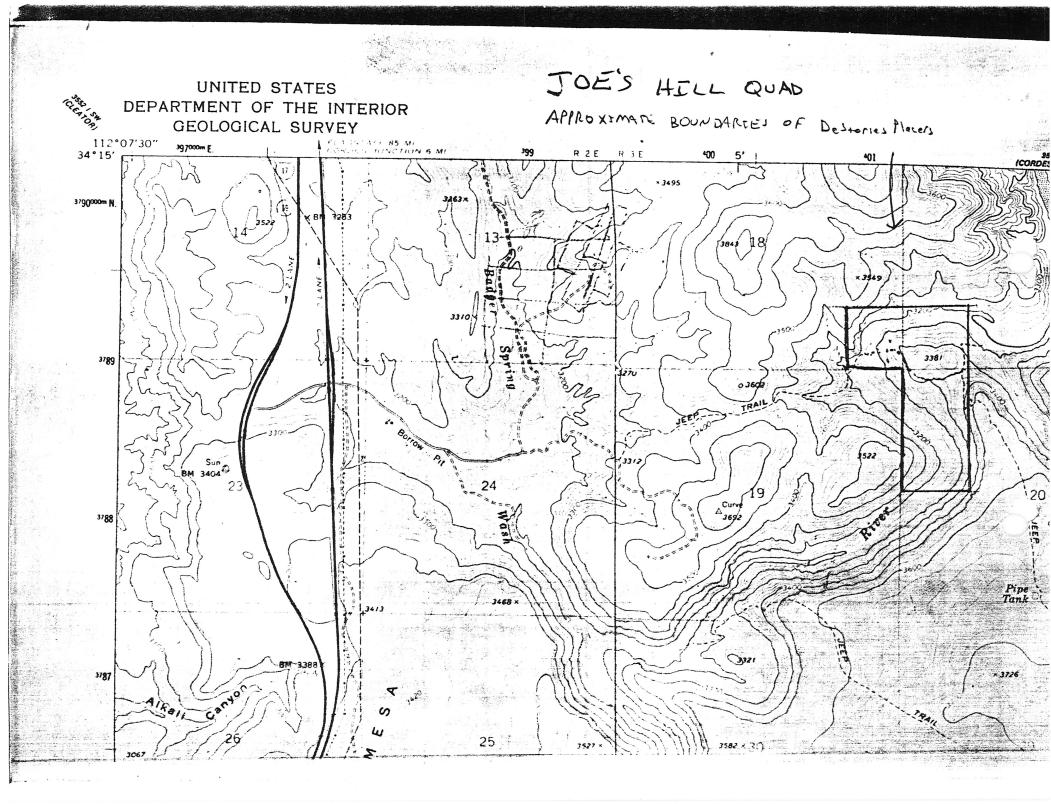
LOCATION: TOWNSHIP 10 N RANGE 3 E SECTION 17 QUARTER SW LATITUDE: N 34DEG 14MIN 25SEC LONGITUDE: W 112DEG 04MIN 25SEC TOPO MAP NAME: JOES HILL - 7.5 MIN

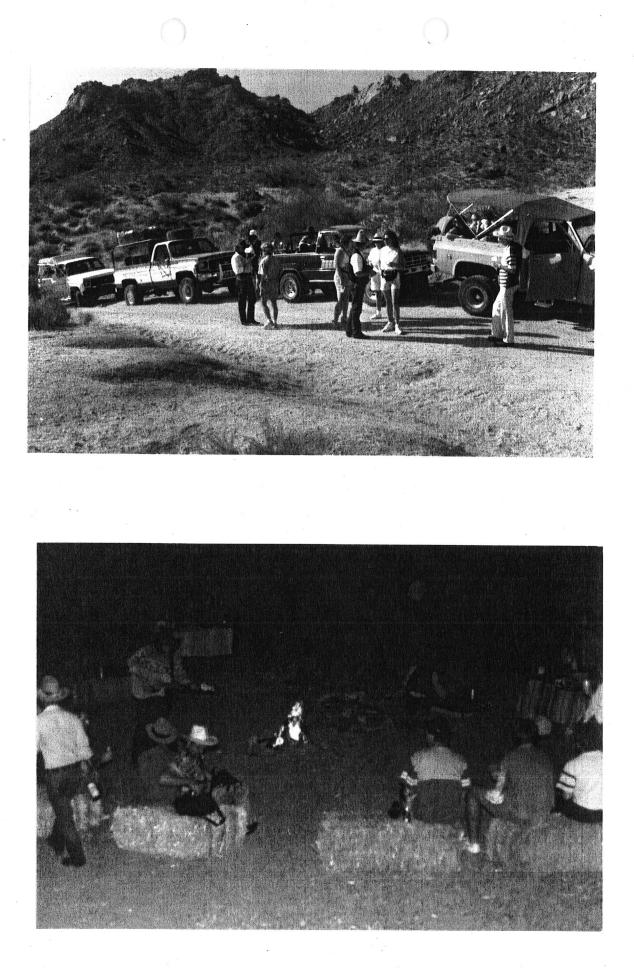
CURRENT STATUS: EXP PROSPECT

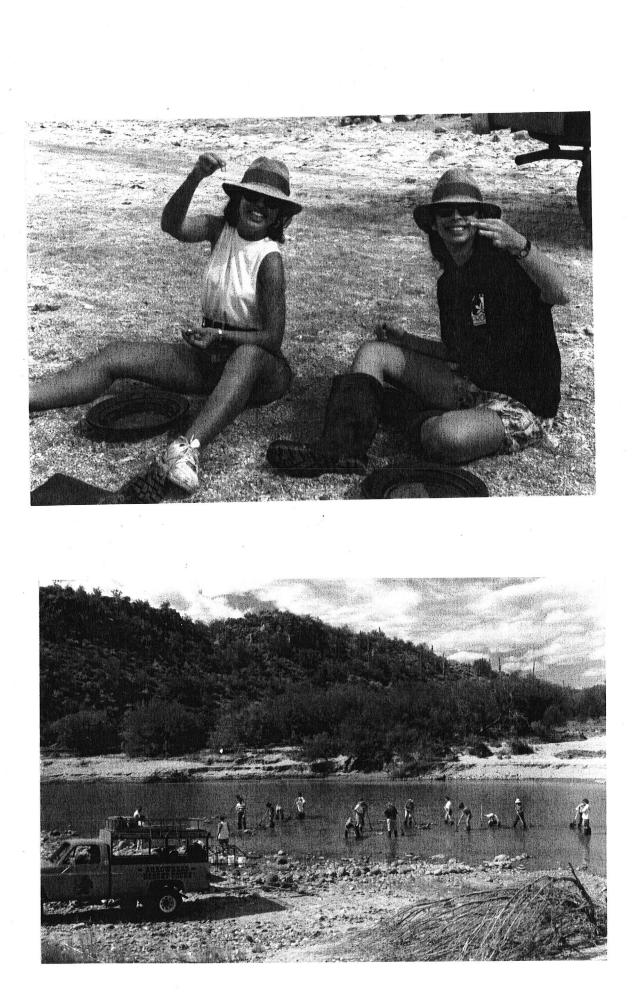
COMMODITY: GOLD PLACER

BIBLIOGRAPHY:

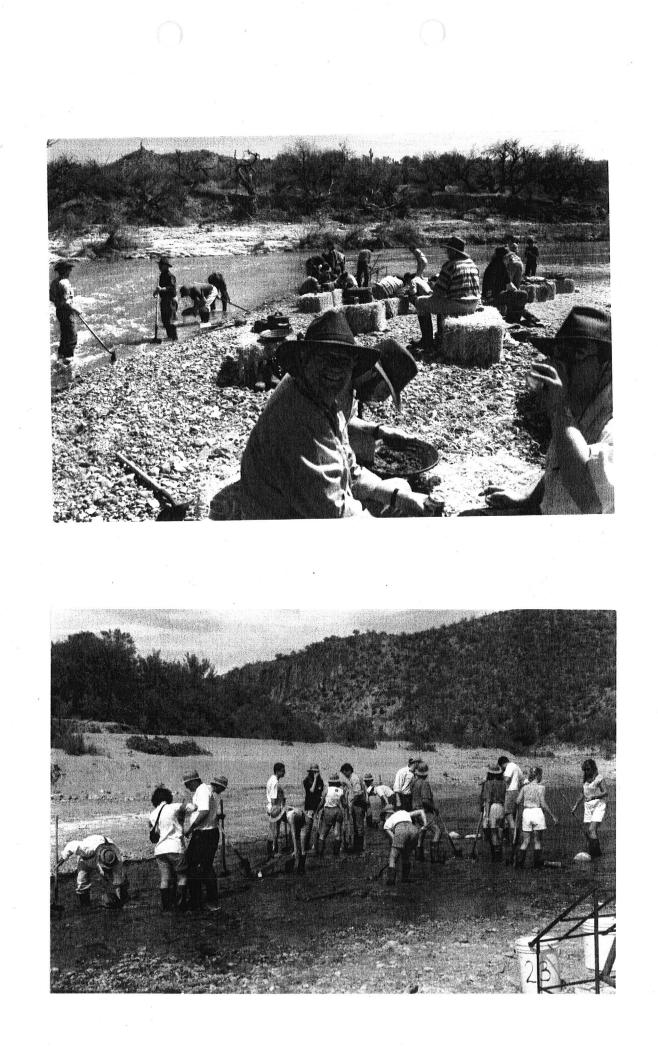
STATE OF AZ LAND DEPT PERMITS 786300 AND 783400 PERMIT EXTENDS INTO SEC. 18 ADMMR DE STORIES PLACER FILE

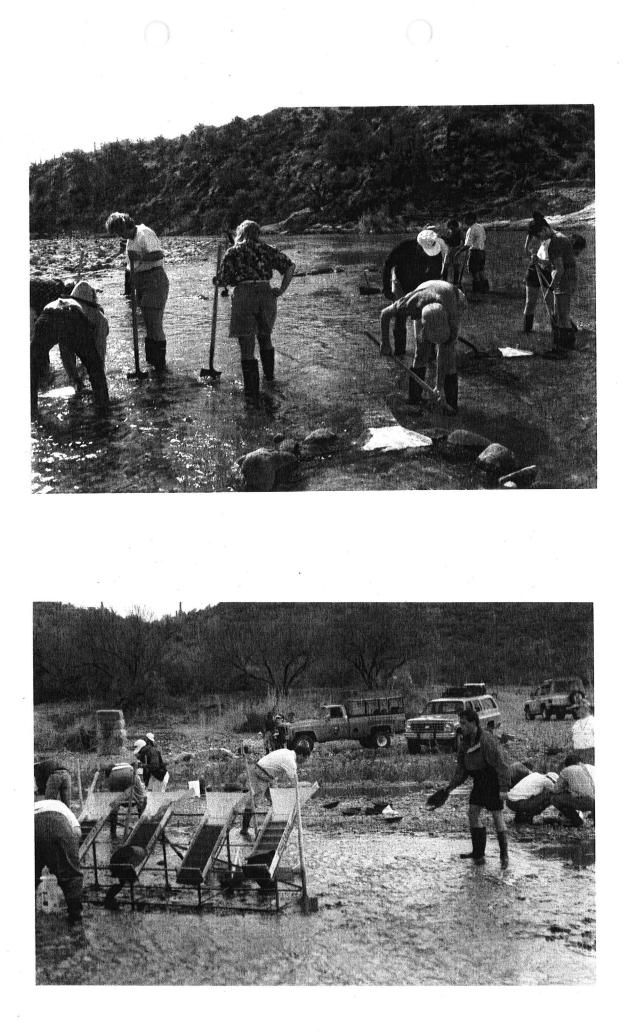


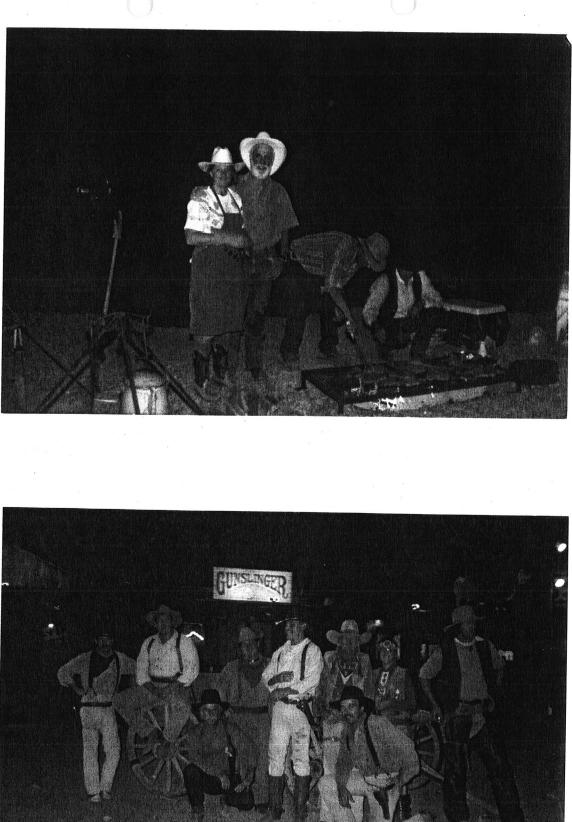
















DE STORIES PLACER

YAVAPAI COUNTY

NJN WR 4/13/84: Tom DeStories (c) called and reported that the DeStories Placer, Yavapai County has never come into production. Limited operations have indicated that for effective recovery a trommel and amalgamation plates need to be added to the concentrating plant there. Financial problems have hindered the operations. Mr. DeStories indicated Continental Matericals (c) has expressed an interest in the property.

NJN WR 11/8/85: Tom DeStories (c) called and reported that Mr. Thompson is working at the De Stories Placer (f) Yavapai Co. again, this time under the name Flow Tech Resources. The company had brought in new equipment and was in production mining residual material from the hill on the east side of the Aqua Fria river. The operation is currently closed as the company has defaulted on their lease with Mr. De Stories.

NJN WR 4/4/86: Tom DeStories reported that he is having his attorney cancel the lease agreement with Mr. Thompson on the De Stories placer (f) Yavapai County. He is interested in having a new party take over the property.

RRB WR 5/16/86: Visited the DeStories Placer (f) and talked to Larry Thompson of Whispering Winds, Tel: 374-9437. Mr. Thomson reports that they have started up several times but have had to shut down due to technology changes. They are working the banks and not the riverbed and he says that gold occurs as very small particles.

DE STORIES PLACER

YAVAPAI COUNTY

NJN WR 5/7/82: Tom De Stories reported that bulk sampling using a 100 TPD pilot mill at the De Stories Placer, Yavapai County is finally underway. Initial recovery from a bench 30' above the river has been \$8.00/ton (\$350.00/oz Au) with most of the fine gold being lost. He also reported that Gracon is still waiting for the state land dept. to finalize their lease. The lease is required before they can put up a permanent mill.

NJN WR 7/30/82: Pete Fernberg, Geologist with CanGold reported that have finished their sampling and testing at the De Stories Placers, Yavapai County. The property will make a viable three man operation with 2 crews working 15 days on/ 15 days off.

NJN WR 11/19/82: Tom De Stories reported that mining will start soon at the De Stories Placer, Yavapai County. The area of the prospecting permit has been reduced to 240 acres by the withdrawal of the State Land Department's archeologists. The pilot mill - sampling program last spring found Au average grade of \$7.50/yd at \$333.00 oz Au/ton. (.022 oz/Au/ton)

NJN WR 12/10/82: Tom De Stories reported that financing for equipment and 6 months operation has been approved for the De Stories Placer, Yavapai County. The equipment and plant are expected to arrive soon. Fred Finnel will be supplying the equipment for the recovery of the fine gold from clays.

RRB WR 7/29/83: Tom De Stories called to ask where to get a "non-Liability" form. He reports that a three way group (Canadian, Californian and Reno) is working his placer on the Agua Fria. They are screening to minus $\frac{1}{2}$ inch and feeding a 24" x 10' vibrating sluice at 300 gpm. The concentrate (black sands) is run over a very fine stainless steel dewatering screen and then to a sump where it is kept slurried by an upflow of water. It is then augered to a table. The finer material is centrifuged.

NJN WR 9/30/83: Tom De Stories reported that Gracon is in production at the De Stories Placer, Yavapai County. Gracon now refers to the property as Whispering Winds Placer.

KAP WR 10/28/83: Attempted to reach Gracon Joint Venture's Wispering Winds Placer (De Stories Placer) via the Badge Springs off ramp from 1-17. The dirt roads were not passable by automobile and there had not been any apparent traffic since the last rain (24-48 hours previous).

DE STORIES PLACER

YAVAPAI COUNTY

NJN WR 9/18/81: Tom De Stories reported he has sold the De Stories' Placer deposit, Yavapai County. A state lease on the Agua Fria at Badger Springs, to Larry Thompson. Mr. Thompson operates the Gracon Aggregate Company, a Sand and Gravel operation at Reno, Nevada. Mr. De Stories will bring in a geologic report by Bill Vandercall on the property for our files.

NJN WR 11/6/81: Tom De Stories (De Stories Placer file) reported that the Gracon Company is expecting a 100 ton/day pilot mill and D-9 Cat to arrive on the property soon. They are waiting for the state leases to be converted to Gracon before they improve the road to get the mill on site. A company by the name of Canada Gold has picked up 10% of Gracon's De Stories placer by providing the D-9.

NJN WR 11/27/81: Tom De Stories reported that the State Land Department is going to require an Archeological survey before operations commence at the De Stories Placer, Yavapai County. He also reported having done some sampling on his Liberty Mines Lode Claims.

NJN WR 12/18/81: Tom De Stories, De Stories Placer, Yavapai County, reported the archeological survey done by the State Land Department found 17 pueblo ruins and resulted in the withdrawal of 30 acres. A reclamation bond of \$13,000 was required and has been posted.

NJN WR 2/5/82: Tom DeStories called. He reported that following an 11th hour snag requiring photoes for the reclamation of the stream bed, all the permits have been gotten and all the paper work is finished. It took five months to get all the permits approved. Cracon Company has moved a D-9, crawler loader, dump truck, pilot mill, and mobile home/office to the site. Pilot testing is expected to begin next week.

NJN WR 3/19/82: Peter Fernberg, geologist with Cangold Ltd., 519 45th Street West, Saskatoon, Sask. 57L 5Z9, phone 303-664-8922 visited. He reported that flooding on the Agua Fria River was holding up operations at the De Stories' Placer, Yavapai County. As the waters recede they will be using a pilot mill testing of bulk samples. **KENNETH SKIFF**

ATTORNEY AT LAW 1832 EAST THOMAS ROAD PHOENIX, ARIZONA 85016 (602) 264-0258

March 27, 1989

CERTIFIED MAIL

Mr. Tom DeStories 841 East Paradise Lane Phoenix, Arizona 85022

Re: DeStories Placer Mine +

Dear Mr. DeStories:

I am counsel for a non-profit corporation entitled Arizona Trail Riders, Inc., which is an Arizona corporation. Many members spend their weekends traveling on public backroads and trails in remote areas, in compliance with applicable laws. Recently some incidents have occurred involving you and your claim, which is located east of the Badger Springs Road turnoff on I-17 (off-ramp 256), and known at the Department of Mines and Mineral Resources as the "DeStories Placer" which created the need for this letter.

I am told that on a number of occasions in the past several months riders crossing through the Agua Fria near your claim have been approached and confronted by you both physically and verbally in such a fashion as to make questionable their limited use of the road and stream by your claim to continue on their travel. It is the understanding of all members of our organization that such use was entirely lawful, but your repeated behavior and claims of danger from dynamite blasting necessitated further investigation.

Several weeks ago I met with Mr. Nyals Niemuth at the Department of Mines and Mineral Resources. He is familiar with your location, claim and the rights you have pursuant to that claim. He assured me that all the property in question has a public right-of-way, that you have absolutely no authority pursuant to the limited rights granted to you by the Department of Mines and Mineral Resources to restrict our travel, and that the nature of the limited rights granted to you do not permit you to blast with dynamite.

DEFT. OF MILLES & MINERAL RESOURCES

Mr. Tom DeStories Re: Arizona Trail Riders, Inc. Page 2

The need for you to completely understand the rights of citizens to use that area as we have been and the fact that your limited right to make use of that property gives you no lawful authority to restrict access became all the more acute several weeks ago. On Sunday, February 26, 1989, in separate incidents, you attempted to strike one person with your truck and discharged a firearm at or near three other young men, at least one of these incidents I understand having become the subject of a police investigation. If what I have been told about either of these incidents is correct, your conduct could result in your being charged with a felony; and, I cannot imagine that you would want to risk the consequence of the sentence of a fine or incarceration for your conduct.

The purpose of this letter is to remind you of the limitations on the rights you have been granted to make use of that property by the State of Arizona, and to notify you that continued lawful use of the property by members of our organization and other citizens will continue in the future. If you do in fact believe you have the authority to conduct yourself as you have recently with respect to people crossing your property I strongly suggest you consult with the people from whom any authority you have is derived, the Department of Mines and Mineral Resources, and an attorney if necessary.

Very truly yours Kenneth Skiff

KS/t1m

cc: Nyals Niemuth, Department of Mines and Mineral Resources

•:

Mr. Tom DeStories Re: Arizona Trail Riders, Inc. Page 3

P.S. Nyals:

The incidents I mention which, if arrested, amount to criminal conduct by Mr. DeStories occurred the weekend after the afternoon that I met you at your office. I spoke with a person who witnessed the incident with the truck and understand that Mr. DeStories gunned his truck forward from a stopped position as the rider attempted to proceed back on the dirt road after being confronted and detained by Mr. DeStories, and firmly believe that the rider would have been struck and very possibly seriously injured had he not been alert and skilled enough to narrowly avoid being struck. And, concerning the gunshot incident, I spoke by phone with Mr. Dale Estes who was scouting for javelina with his two brothers on three-wheelers and the only reason he does not know whether Mr. DeStories was trying to hit them or merely scare them was because he and his brothers were fleeing in fear and had their backs turned when he fired.

The scheduled enduro was relocated for other reasons, but I am certain similar use of this area will continue to be made by others in the future.

Thank you for your cooperation.

Arrowhead Jeep Tours **841 East Paradise Lane** Phoenix, Arizona 85022 (602) 942-3361 Fax (602) 993-3304 **Tom DeStories** 6) Since 1978 PRESIDENT 10-14-94 Niel Meimuth Seologies/Engineer Aenyoria State Menera Museum Hi Nile How are you all doing? Thing here have finally picked here up after a long to summer. Shope you two enjoysafurn to wherever! Del be in touch, say hello To france for me pecting Enclosed God Pros etc brochures Sincerly

MEMBER PHOENIX AND VALLEY OF THE SUN CONVENTION AND VISITORS BUREAU SCOTTSDALE CHAMBER OF COMMERCE



Hamm

DESTORIES (LA : A G) 85435700

SEP 30 1985

LARRY W. THOMPSON 12333 Rocky Mt. St. Reno. NV. 89506

Malinkasan in in the second of the

Sept. 27,1985

Arizona State Mine Inspectors 1700 West Washington Phoenix, AZ.

Attn: Mr. Jim Matts

Dear Mr. Matts:

In compliance with your request this week, I am hereby submitting the following for your records:

1. Name of Mine; Whispering Winds Mine - Yavapai County

- 2. Operator; L.W. Thompson, aka Flotech Resources K
- 3. Type of Operation; Placer/semi-grind. Primarily a gravity recovery type operation.
- 4. <u>Personnel on Site</u>; Unless otherwise notified, there will be personnel on site most of the day time hours; Monday thru friday; however, on weekends, there may or may not be personnel available.
- 5. Date of Production; It is expected that production will commence on or about the 30th of September 1985; however, with the present cloud that has been cast over the operation, production will be delayed until said cloud has been disipated. We will keep your office apprised.
- 6. Key Personnel; Key personnel are: Larry W. Thompson and George Dabbs.

Hoping the above is satisfactory, and in compliance, I remain.

Sincerely Yours,

Larry W. Thompson Project Mgr.

Geological Evaluation DeSTORIES PLACER PROSPECT Yavapai County, Arizona

ť.

" The start and

Car and the second second

a la state a

The placer ground of this report lies in the SE 1/4, SE 1/4 of Section 18; SW 1/4, SW 1/4 of Section 17 and W 1/2, NW 1/4 of Section 20, all in Township 10 North, Range 3 East; G&SRM, Yavapai County, Arizona. The property is located approximately 12 miles Northeast of Black Canyon City, Arizona, and is accessible via unimproved "Jeep" roads two miles from Interstate Highway 17.

Placer deposits are classified according to minerals deposited; the distance the mineral has traveled from its source, and the depositional environment in which the mineral is found. Accordingly, the deposit of this report is classified as a gold placer of the River Channel type, and has been transported a considerable dis-

SCOPE OF STUDY:

Initial field evaluation was limited to sampling and geologic examination of approximately half the property. Time was the limiting factor in this examination, so a representative area was selected by the author, based on accessibility, depositional characteristics, volume of material and topography.

One day was spent in the field examining the property for likely areas of heavy mineral deposition. Areas of interest were sampled, planned, and concentrates saved for laboratory evaluation.

On-site concentration products were recorded by the author according to size and approximate weight of Black Sand Heavies, identifiable minerals present, and size and number of gold particles.

Laboratory evaluation consisted of microscopic examination of Black Sand concentrates, separation of gold particles and microscopic examination of the gold recovered.

ORE DEPOSIT:

The ore deposit has been described previously as an Auriferous, Allochthonous placer of the River Channel type. As such, the placer "pay" can be considered to vary according to the type of channel structure in which the gold is found. For example, Channel Lag gravels will contain coarser particles than Channel Sand Bars. Longitudinal Sand Bars showed the most placer "pay" during this investigation. This "pay" was very fine grained from pinhead sized to too small to be seen with the unaided eye. The microscopic particles may comprise 80-90% of the values.

(1)

The deposit here being 'escribed occurs at a sharp b d in the Agua Fria River where ganite bedrock outcroppings tend to create a bottleneck in the river.

In general, river waters tend to maintain a discharge rate (amount of water passing a given point in a given time) by slowing down and widening as the river progresses down the mountains and into the valleys. Since suspended particles depend on velocity, as the river slows down the particles can no longer remain suspended and fall out. At a bottleneck, the width and depth of a river are minimized, causing an increase in velocity in order to maintain the discharge rate. This allows no falling out of particles. As the waters pass out of the bottleneck, the river widens, velocity drops and particles fall out, heaviest first. This process is most active during floods and may account for gold particles found on the hillside some distance from the main river channel without an apparent terrace and absent, for the most part, of associated river gravels.

1

.

1

÷

Longitudinal Sand Bars are caused by interacting sedimentary and hydrodynamic processes in the main river channel. They parallel the channel and are in more or less constant motion being "torn down" on the up-stream end, and contemporaneously built up on the down-stream end. They are generally long, snakelike sand bars that are most active during times of high water.

Channel Lag gravels are composed of gravel to boulder sized rocks which are moved along the channel bottom during floods. The gravels may contain the largest particles of gold, but usually the boulder fraction precludes efficient handling.

SOURCE AREA:

The placer gold found in the area under study is most likely derived from tributaries of the Agua Fria River, namely Lynx and Big Bug Creeks, which derive the gold from numerous widely scattered gold-quartz and gold-sulfide veins in adjacent parts of the Bradshaw Mountains. Mineralization in the Bradshaws is of both Pre-Cambrian and Larimide in age and placer gold could be derived from both. The gold particles examined in this report are very small and well rounded, indicating it traveled considerable distance from its source.

EXTENT OF PLACER:

Gold placers occur along the course of the Agua thia from its junction with Lynx Creek on downstream to where it empties into Lake Pleasant. In the area of this investigation, gold occurs sporatically in older alluvial deposits on the hillside adjacent to the present channel. No estimates, at this time, can be made concerning recoverable gold values present in the area.

SUMMARY OF GEOLOGICAL EVALUATION

DeStories Placer Project Yavapai County, Arizona

DeStories Placer ground consists of 160 acres of State land along the Agua Fria River, located in Sections 17, 18, 20; Jownship 10 North; Range 3 East; G&SRM, Yavapai County, Arizona.

The placer is classified as an Auriferous, Allochthonous placer of the River Channel type. Fine grained gold occurs in overbank sediments, sand bars, and channel gravels along the course of the river.

Sand bars show the most promise from a recovery standpoint. Although limited in areal extent, the sand is much more amenable to handling and concentration than boulders in the channel gravels or clay in the overbank deposits.

The placer gold particles are most likely derived from tributary creeks which drain the Northeastern flank of the Bradshaw Mountains. Mineralization in the Bradshaws is typically in widely scattered gold-quartz and gold-sulfide veins of Pre-Cambrian and Larimide in age.

Panned concentrates from 200 pounds of sand bar material was examined microscopically. Results show approximately 100 flour sized gold particles all water worn and bright yellow in color.

RECOMMENDATIONS:

Volumetric calculations are needed for each of the sand bar, channel gravel and overbank deposit types.

Each deposit type needs organized and systematic assay results.

The abundance of large boulders precludes working the channel gravels except in a small way with a dredge.

RESULTS OF LABORATORY EXAMINATION:

Panned concentrates were examined using a Bausch & Lomb Sterozoom Microscope at 45x. Identifiable minerals included Magnetite, Ilmanite, Garnet, Chalcopyrite, Galena and Gold. All minerals except Chalcopyrite and Galena were rounded and abraided. Particle size from 0.1 mm to 1.0 mm with a tendency toward 0.5 mm. Gold particles followed the same tendency with 80-90% of the particles flour sized and smaller. Approximately 50 particles were examined, an equal number were not examined; all of which were derived from 200 lbs. of river material. Without exception, particles were flat, well rounded and dark yellow in color. This gold appears to have no tarnish on the surface, indicating high purity, and particles are free from secondary coatings.

RECOMMENDATIONS:

- Calculate volume of workable sand bars on the property. Length times width times height divided by 27 cu. ft. per cu. yd. times 2.0 tons per cu. yd.
- Collect assay samples from every sand bar used in the above calculation (1 each). Use the average assay value for tenure calculations.
- 3) Forget about working the hillside without water pressure.
- 4) The abundance of large boulders precludes working the channel gravels except in a small way with a dredge. Try dredging between the boulders and assay the dredge concentrates. If the assay is good, .75 ozs./T or greater, calculate volume of workable gravel in the same manner as (1) above, but divide by two in the end to compensate for barren "Boulder" space.

Length x width x depth x 2 tons/cu.yd. = Volume 27 cu. ft.

Respectfully submitted,

1

William Vanderwall

(602) 246-9573

D.K. MARTIN & ASSOCIATES Mining Development & Administration

AVENUE

PHOENIE, ARIZONA 85015

Tom DeStories E. Paradise Lane - 341 enix, AZ, 85022

INVOICE NO.

DATE 1 July 1981

IONAL SERVICES

TRANSMITTAL

d is a copy of the "Summary of Geological Evaluation" on tories Placer Project submitted by William Vanderwall, st. **REFERENCES:**

Allen, M.A., 1922 Arizona Gold Placers: Arizona Bureau of Mines (ABM) Bull. 118, 24p. and the subscription of said a second second

Johnson, M.G., 1972, Placer Gold Deposits of Arizona: United States Geological Survey (U.S.A.S.) Bull. 1355, 103p.

Lindgren, W., 1926, Ore Deposits of the Jerome and Bradshaw Mountains Quadrangles; Arizona: U.S.A.S. Bull. 782, 192p.

Wilson, E.D., 1961, Gold Placers and Placering in Arizona (6th ed.) revised; ABM Bull. 168, 124p.

Wood, H.R., 1929, History of Mining in Yavapai County, Arizona: Mining Journal (Phoenix, Arizona) Vol. 13, No. 8.

MRELIMI

SUMMARY OF GEOLOGICAL EVALUATION

By P.K. Martin + Associates

DeStories Placer Project Yavapai County, Arizona

DeStories Placer ground consists of 160 acres of State land along the Agua Fria River, located in Sections 17, 18, 20; Township 10 North; Range 3 East; G&SRM, Yavapai County, Arizona.

The placer is classified as an Auriferous, Allochthonous placer of the River Channel type. Fine grained gold occurs in overbank sediments, sand bars, and channel gravels along the course of the river.

Sand bars show the most promise from a recovery standpoint. Although limited in areal extent, the sand is much more amenable to handling and concentration than boulders in the channel gravels or clay in the overbank deposits.

The placer gold particles are most likely derived from tributary creeks which drain the Northeastern flank of the Bradshaw Mountains. Mineralization in the Bradshaws is typically in widely scattered gold-quartz and gold-sulfide veins of Pre-Cambrian and Larimide in age.

Panned concentrates from 200 pounds of sand bar material was examined microscopically. Results show approximately 100 flour sized gold particles all water worn and bright yellow in color.

RECOMMENDATIONS:

Volumetric calculations are needed for each of the sand bar, channel gravel and overbank deposit types.

Each deposit type needs organized and systematic assay results.

The abundance of large boulders precludes working the channel gravels except in a small way with a dredge.

Geological Evaluation DeSTORIES PLACER PROSPECT Yavapai County, Arizona

The placer ground of this report lies in the SE 1/4, SE 1/4 of Section 18; SW 1/4, SW 1/4 of Section 17 and W 1/2, NW 1/4 of Section 20, all in Township 10 North, Range 3 East; G&SRM, Yavapai County, Arizona. The property is located approximately 12 miles Northeast of Black Canyon City, Arizona, and is accessible via unimproved "Jeep" roads two miles from Interstate Highway 17.

Placer deposits are classified according to minerals deposited; the distance the mineral has traveled from its source, and the depositional environment in which the mineral is found. Accordingly, the deposit of this report is classified as a gold placer of the River Channel type, and has been transported a considerable dis-

SCOPE OF STUDY:

Initial field evaluation was limited to sampling and geologic examination of approximately half the property. Time was the limiting factor in this examination, so a representative area was selected by the author, based on accessibility, depositional characteristics, volume of material and topography. One day was spent in the field examining the property for likely areas of heavy mineral deposition. Areas of interest were sampled, planned, and concentrates saved for laboratory evaluation.

On-site concentration products were recorded by the author according to size and approximate weight of Black Sand Heavies, identifiable minerals present, and size and number of gold particles.

Laboratory evaluation consisted of microscopic examination of Black Sand concentrates, separation of gold particles and microscopic examination of the gold recovered.

ORE DEPOSIT:

ş

The ore deposit has been described previously as an Auriferous, Allochthonous placer of the River Channel type. As such, the placer "pay" can be considered to vary according to the type of channel structure in which the gold is found. For example, Channel Lag gravels will contain coarser particles than Channel Sand Bars. Longitudinal Sand Bars showed the most placer "pay" during this investigation. This "pay" was very fine grained from pinhead sized to too small to be seen with the unaided eye. The microscopic particles may comprise 80-90% of the values. The deposit here being described occurs at a sharp bend in the Agua Fria River where granite bedrock outcroppings tend to create a bottleneck in the river.

In general, river waters tend to maintain a discharge rate (amount of water passing a given point in a given time) by slowing down and widening as the river progresses down the mountains and into the valleys. Since suspended particles depend on velocity, as the river slows down the particles can no longer remain suspended and fall out. At a bottleneck, the width and depth of a river are minimized, causing an increase in velocity in order to maintain the discharge rate. This allows no falling out of particles. As the waters pass out of the bottleneck, the river widens, velocity drops and particles fall out, heaviest first. This process is most active during floods and may account for gold particles found on the hillside some distance from the main river channel without an apparent terrace and absent, for the most part, of associated river gravels.

Longitudinal Sand Bars are caused by interacting sedimentary and hydrodynamic processes in the main river channel. They parallel the channel and are in more or less constant motion being "torn down" on the up-stream end, and contemporaneously built up on the down-stream end. They are generally long, snakelike sand bars that are most active during times of high water.

Channel Lag gravels are composed of gravel to boulder sized rocks which are moved along the channel bottom during floods. The gravels may contain the largest particles of gold, but usually the boulder fraction precludes efficient handling.

SOURCE AREA:

The placer gold found in the area under study is most likely derived from tributaries of the Agua Fria River, namely Lynx and Big Bug Creeks, which derive the gold from numerous widely scattered gold-quartz and gold-sulfide veins in adjacent parts of the Bradshaw Mountains. Mineralization in the Bradshaws is of both Pre-Cambrian and Larimide in age and placer gold could be derived from both. The gold particles examined in this report are very small and well rounded, indicating it traveled considerable distance from its source.

EXTENT OF PLACER:

Gold placers occur along the course of the Agua fina from its junction with Lynx Creek on downstream to where it empties into Lake Pleasant. In the area of this investigation, gold occurs sporatically in older alluvial deposits on the hillside adjacent to the present channel. No estimates, at this time, can be made concerning recoverable gold values present in the area.

RESULTS OF LABORATORY EXAMINATION:

Panned concentrates were examined using a Bausch & Lomb Sterozoom Microscope at 45x. Identifiable minerals included Magnetite, Ilmanite, Garnet, Chalcopyrite, Galena and Gold. All minerals except Chalcopyrite and Galena were rounded and abraided. Particle size from 0.1 mm to 1.0 mm with a tendency toward 0.5 mm. Gold particles followed the same tendency with 50-90% of the particles flour sized and smaller. Approximately 50 particles were examined, an equal number were not examined; all of which were derived from 200 lbs. of river material. Without exception, particles were flat, well rounded and dark yellow in color. This gold appears to have no tarnish on the surface, indicating high purity, and particles are free from secondary coatings.

RECOMMENDATIONS:

- Calculate volume of workable sand bars on the property. Length times width times height divided by 27 cu. ft. per cu. yd. times 2.0 tons per cu. yd.
- Collect assay samples from every sand bar used in the above calculation (l each). Use the average assay value for tenure calculations.
- 3) Forget about working the hillside without water pressure.
- 4) The abundance of large boulders precludes working the channel gravels except in a small way with a dredge. Try dredging between the boulders and assay the dredge concentrates. If the assay is good, .75 ozs./T or greater, calculate volume of workable gravel in the same manner as (1) above, but divide by two in the end to compensate for barren "Boulder" space.

 $\frac{\text{Length x width x depth}}{27 \text{ cu. ft.}} \times 2 \text{ tons/cu.yd.} = \text{Volume}$

Respectfully submitted,

William Vanderwall

CLEAR STATEMENT CONTRACTOR STATEMENT ST