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DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Ithaca Peak Prospect - Mineral Park

Date July 15, 1959

District Mineral Park, Mohave County

Engineer T.P. Lane

Subject: Visits of May 21 and July 8, 1959

Operator Duval Sulphur & Potash Co.

The property consists of some 150 or more claims located by Duval in the Mineral Park region early this year; also a number of properties have been optioned in the region on short term agreements. All of the property comprises a block with three closely grouped peaks -- Ithaca, Turquoise and C&A peaks -- in about the center of the block. The last named is the scene of a drilling project by Calumet and Arizona many years ago. More recently Kennecott drilled in this same area. The optioned properties include the Keystone, Evahom, Ark, Lind and others which were active producers at one time or another.

Supt. Everett Smith

Engineer: Wm. Roper

At the time of the first visit an office and sample preparation room were under construction and a contractor was building rocks and excavating drill terraces on the east slope of Ithaca Peak. The drill contractor, Winger Drilling Co., had moved one drill to the camp and expected to move in another within the next several days.

At the time of the second visit, work had been temporarily suspended because of a fatal accident on one of the drilling rigs.

The work has been going ahead with two drill rigs. Holes are being drilled on an 800' grid. 6 holes have been completed to depths of 200 to 400' and a 7th hole is being drilled.

The Company crew consists of Smith, Roper, and a geologist and assistant. Harrison Schmidt visits the project frequently in a consulting capacity.

ITHACA PEAK PROSPECT

MOHAVE COUNTY

Visited the Mineral Park prospect of Duval Sulfur and Potash Co. - 3 men working in addition to a temporary dozer operator and a contractor who is building a combination office - sample room and storage building with surrounding parking area. This headquarters building is located at the north base of Ithaca Peak and is about 3/4 mile south from the old Keystone Mill. Everett Smith is the superintendent for Duval. A Mr. Conover is doing geological field work. Mr. Roper will direct churn drilling which is to begin soon. The Winiger Drilling Co. is the drilling contractor. Two drill rigs will be used, one of which is now on the property at the drill camp. TPL WR 5-23-59

Visited the Duval prospect at Ithaca Peak. Everett Smith, formerly in charge, has been transferred to the Esperanza project. Mr. Roper is now in charge of the project. He reports that a diamond drill hole is being put down on top of the Peak, also one churn drill hole is being drilled at the base. Equipment and supplies for the diamond drilling were landed on the peak by a helicopter. The churn drill hole is the twelfth and is a redrilling of No. 11 which was unsatisfactory because of encountering drilling difficulties. The churn drill holes drilled to date encircle the peak at its base except in a southwest sector. No log information was available. The company crew consists of three men. The contract driller is operating both the diamond drill and the churn drill on two shifts per day. TPL Report 9-1-59

Visited Duval's Ithaca Peak exploration job - Mr. Roper in charge. One diamond drill is in operation, drilling hold No. 16 on a high point about 900' southwest of hold No. 10 which was drilled on the pinnacle of Ithaca peak. A helicopter was used to transfer the equipment from the site of hole No. 10. No information was available regarding the findings to date in the drilling. The company field crew has been increased lately (now 6 men). The surface work consists of surveying, mapping, and soil and surface sampling. TPL WR 10-24-59

Visited Recorder's office in Kingman and learned that the Duval people are transferring titles to the Company from many individuals who, acting independently, had staked claims for them in the Ithaca Peak area. TPL WR 11-21-59

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine	Ithaca Peak Prospect (Duval Sulphur & Potash Co.)	Date	Sept. 3, 1959
District	Mineral Park, Mohave Co.	Engineer	T. P. Lane
Subject:	Visit of Aug. 21, 1959		

✓ Everett Smith, formerly Supt., has been transferred to the Esperanza division of the company and Wm. Roper is now in charge at Ithaca Peak. Sayer (?) is geologist assisted by Conover and a sample helper.

At the time of visit the drilling contractor was putting down a diamond drill hole on top of Ithaca Peak and was drilling the twelfth churn drill on the base of the peak. This hole is being drilled near the site of hole No. 11 which encountered drilling difficulties. The churn drill holes that have been drilled to date surround the peak on its flanks except in a southeast sector. No information was available regarding the drilling results. The diamond drill and accessory equipment and supplies were landed on the rugged top of the peak by helicopter.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

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Date July 15, 1959

District Mineral Park, Mohave County

Engineer T.P. Lane

Subject: Visits of May 21 and July 8, 1959

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The Company crew consists of Smith, Roper, and a geologist and assistant. Harrison Schmidt visits the project frequently in a consulting capacity.

EXCERPT FROM ANNUAL REPORT OF DUVAL SULPHUR & POTASH CO. - 1960

The Company is conducting an extensive exploration and evaluation program on a porphyry copper deposit in northwestern Arizona. This property is located at Mineral Park, some fourteen miles from the city of Kingman. Fifty-two drill holes completed at year end developed a substantial area of copper-molybdenum enrichment. Additional drilling and evaluation work designed to further delineate the areas of proven and potential mineralization and appraise the commercial possibilities of the property will be carried on in 1961. Mineral rights in the area of interest are held by the Company under mining claims and locations. Certain of these were filed by the Company; others are held under lease and option from the owners.

DEPARTMENT OF MINERAL RESOURCES

**STATE OF ARIZONA
FIELD ENGINEERS REPORT**

Mine **Ithaca Peak Prospect (Duval Sulphur
& Potash Co.) - Mineral Park**
District **Mineral Park, Mohave Co.**

Date **Sept. 3, 1959**
Engineer **T. P. Lane**

Subject: **Visit of Aug. 21, 1959**

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ITHACA PEAK PROSPECT

MOHAVE COUNTY

Visited the Ithaca Peak prospect of Duval Potash & Chemical Corp. No one was present at the camp but voices on the hillside indicated a survey crew was working at some distance. It was evident that drilling had been discontinued. It is said locally that work will be suspended until next spring when the season is more favorable for outdoor work at elevated locations. The company is reported to have exercised a number of its options on properties. TPL WR 11-21-59

Visited the Mineral Park project of Duval Sulfur and Chemical Corp. Harrison Schmidt was present, also William Roper, supt. and Conover, geologist. With Schmidt & Roper I visited a churn drilling operation on the western edge of the already drilled area centered about Ithaca Peak. Other holes will be drilled within the grid of earlier drilling. No data are available regarding results to date, but there seems to be an air of optimism concerning the venture. 6 men are working on geological geophysical work and supervising of the drilling which is contracted. TPL WR 3-19-60

Visited the Duval project at Ithaca Peak. One rig is drilling, and six men are doing geological and geochemical (soil sampling) work. Since the beginning of the year the company has staked 50 placer claims mostly on the gentle sloping plains adjoining the west and southwest border of the lode claims now under exploration. Also, the company staked 24 additional lode claims in April. TPL WR 5-21-60

Learned at ASMOA meeting in Kingman that exploratory development was continuing at Duval's Ithaca Peak project. Drilling for water is in progress in the recently staked area in Sacramento Valley. One well has been drilled 1000' deep, but has not yet been tested. The management estimates that a minimum of 3000 gals. per min. sustained volume will be needed for milling and other project needs. TPL WR 9-23-60

Visited Duval's Ithaca Peak project. Drilling is in progress (Contractor, Mettler Bros.) with 2 diamond drills and one churn drill all working 1 shift per day. 8 men are working steadily on company account including the supt., Bill Roper. The water well in Sacramento Valley has not yet been tested for potential. The company has taken up some 30 mill site claims in an area a little north of the feldspar quarries of Consolidated Feldspar (which are about 7 miles east of Kingman) apparently for water development. TPL Memo 10-21-60

This property active Feb. 1961

Arizona keeps in the exploration news with more than 150 geologists of more than 30 companies seeking ore. Duval Sulphur & Potash Co.'s recent announcement of a copper-molybdenum discovery of major magnitude is Ithaca Peak, north of Kingman. Kennecott Copper Corporation drilled the area about ten years ago. Now Duval's 65 churn and diamond drill holes outline a deposit for open-pit mining with a favorable stripping ratio. Detailed geologic mapping played a key part in this discovery - Duval's second in less than ten years. Mining World 4-1961 p. 13

Visited Duval's Mineral Park project. No one was present and apparently work had been suspended very recently. TPL WR 6-24-61



American Mining Congress

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J. ALLEN OVERTON, JR., EXECUTIVE VICE PRESIDENT

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MINE DEVELOPMENT AT MINERAL PARK*

By
Thomas Jancic
Chief Mine Engineer
Copper Division
Duval Corporation
Sahuarita, Arizona

* Presented at the 1964 Metal Mining and Industrial Minerals Convention, American Mining Congress, Portland, Oregon, September 13-16.

Mineral Park is located in Mohave County, Arizona, some seventeen miles northwest of Kingman. It is situated on the west slope of the Cerbat Mountains, at the base of 7000-foot Cherum Peak. A macadam highway $4\frac{1}{2}$ miles long now connects the area with U.S. Highway 93, a route well travelled by Las Vegas bound fortune and excitement seekers. Three miles north of Mineral Park lies the well known but now inactive mining camp of Chloride with its abandoned Tennessee Mine that produced 50,000 ounces of gold, 1,500,000 ounces of silver, and small quantities of copper, lead, and zinc.

The first mining in the Mineral Park area is unrecorded. Many crude rock "sledge hammers" and other stone artifacts recently uncovered in ancient trenches and short narrow adits attest to turquoise mining by Indians of perhaps the Artec period, some 500 or more years ago.

Although gold was discovered in the Cerbat Mountains in 1863, the camp of Mineral Park is unmentioned until 1870 when rich silver ore was found in the Keystone Mine by prospectors from Pioche, Nevada. The richest ore in Mohave County was produced from the Keystone Mine and until it was finally abandoned in 1948, its intermittent production is reported to have totalled 3,000 ounces of gold, 450,000 ounces of silver and small amounts of copper, lead and zinc.

News of the Keystone discovery brought in many miners from Utah, Nevada and Northern California. In 1876 Mineral Park had become the county seat and boasted of a population of 500, a rather formidable number in those early days. In addition to a courthouse, the booming mining town supported two stores, one hotel, a restaurant, a blacksmith

EXCERPT FROM ANNUAL REPORT OF DUVAL SULPHUR & POTASH CO. - 1961

Field work consisting primarily of exploration drilling continued during the year at the Company's Mineral Park copper-molybdenum property near Kingman, Arizona. Near the end of the year a program of close pattern drilling and underground development work was initiated. The close pattern drilling will provide detailed information required in connection with the development of a plan for stripping and mining the mineral deposit. The underground development work will permit the checking of drill hole results, provide material for metallurgical testing and determine continuity of the deposit. All work now in progress will be completed by mid-1962, at which time final development of the property for production operations will be considered. The Mineral Park property is considered to be a significant molybdenum discovery. Its mineral reserves constitute an important addition to the reserves of the Copper Division.

' MINERAL PARK COPPER DEPOSIT
' (ITHACA PEAK)

July 20, 1961 - Visited the Duval Project and talked with Bill Roper, Conover and Gray. Drilling was suspended a month ago. A crew of 5 is surveying, mapping, etc.

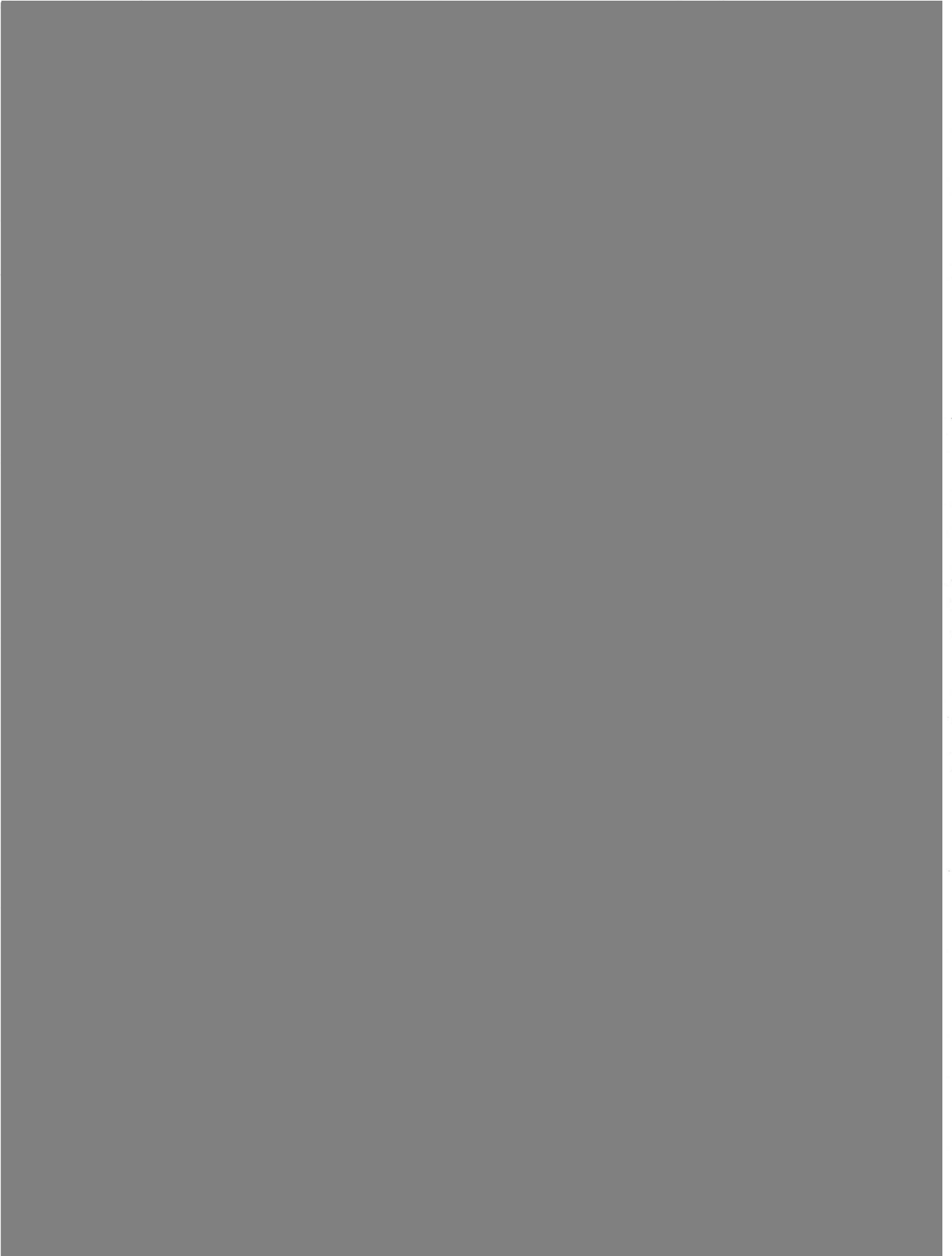
TRAVIS P. LANE - Weekly Report - July 22, 1961

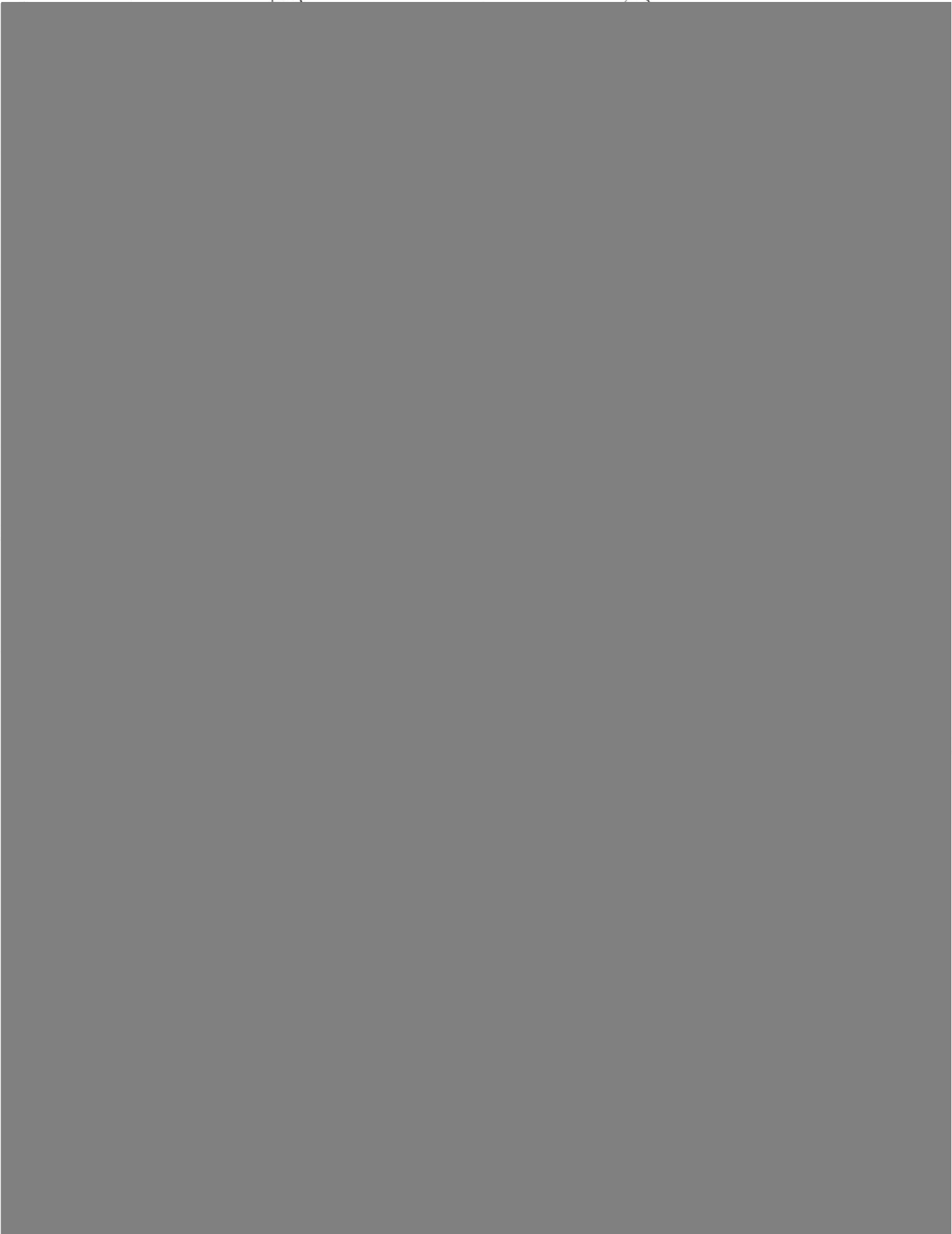
Active 10-1961

Nov. 22, 1961 - Visited the Mineral Park project of Duval Sulphur and Chemical. Drilling was resumed recently with 1 diamond drill crew (Mettler Bros.) and 1 churn drill crew (Wininger). Also, an adit has been started with "Pat" Patterson of Chloride as Contractor.

TRAVIS P. LANE - 11-22-61 - Weekly Report

This property active Feb. 1962 - 20 men working.





[illegible]



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Mineral Park Porphry Copper Deposit Date May 28, 1953
District Mineral Park (Wallapai) Engineer Geo. F. Reed
Subject: Former Drilling Results

Note:

This property now being drilled by Tom Chapman & Assoc., who would like someone to take over who has ample finance. See notes under this date on present drilling campaign, also April 15th and May 17th, 1953.

Churn Drilling in 1906:

In 1906 and 1907, three churn drill holes were put down in a high saddle about $\frac{1}{2}$ mile South 20 degrees East from Chapman's No.2 hole. This would be approximately on South line of Sec.24, Twp 23N, R18W, and about one eighth mile West of the center of South line of section. The three holes were numbered from North to South. Results were approximately as follows:

Hole No.1, collar 4640 Elev., 330 to 360 feet got 1.03% copper
graded down to 520 to 580 feet Tr. copper.

Hole No.2., collar 4550.elev., best result was about 65 feet of 0.42% copper, this was not broken down and might have half the thickness of better grade.

Hole No. 3, collar at 4485 elev., 220 to 250 feet gave 1.09% copper.

Kennecott Diamond Drilling:

Kennecott Copper did some drilling, six diamond drill holes, a couple of years ago. Their drilling was done mostly along the Eastern side of Ithica Peak near the Turquoise Diggings. Elevations of collars varied from about 4400 to 470 feet. Approximate location would be near common line of sections 19 and 30, and a foot hundred feet East of line between Ranges 17 and 18 West, Twp.23 North. This is about a mile East of the 1906 drilling. No. 1 hole was at about 4650 Elev., pointed about North 60 West and inclined down at about 40 degrees. About 75 feet vertically down it went into a vertical depth of 200 feet of 0.6% copper, according to Tom Chapman. A flat hole from same point straight into the hill didn't get ore. Another hole farther North at 15 degrees down, cut a vertical depth of 80 feet, core length 200 feet of 0.9% copper. It was barren 1st 100 feet. Last part ran about 0.2% copper. Some of the other holes were vertical and were in dikes most of their depth and were barren.

The above gives a rough idea of the type of results obtained to date in drilling.

Two old adits near Gross ranch were run by C. & A. about 1927. These are said to run around 0.20% copper and a little higher than the general average of 1. pound of Moly claimed by Chapman for the whole area.

property tied up by Mineral 1960
George F. Reed

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Mineral Park Porphyry Copper Deposit Date May 17, 1953
District Mineral Park (Wallapai) Engineer Geo. F. Reed
Subject: Additional Notes (see April 15, 1953)

Name of Property:-

This property as now rounded up by Tom Chapman & Associates comprises about three sections or roughly 2000 acres. The name given above is that used by Mr. Chapman, and Blakemore Thomas calls it a "Porphyry Copper Type", so it would seem that this name is quite suitable as well as descriptive.

Name of Owners:-

Tom Chapman, Box 243, Kingman, & Associates have rounded up about 80 claims and own an additional 50 themselves. These claims cover the full area of Sec. 24 & 25, Twp. 23N, R18W, and the Western halves of Sec. 19 & 30, Twp. 23N, R17W. Reference to the claim map shown between pages 4 & 5 of R. I. 4101, August 1947, "Examination of Lead-Zinc Mines in the Wallapai Mining Dist., Mohave County, Arizona", will give an idea of the claims, etc.

Addresses and names of owners, complete would take some research, partial list:

Tom Chapman & Assoc., Box 243, Kingman, 50 claims.

John Gross, Chloride, Arizona, 16 claims.

Lyon Kay, Kingman, Arizona, 13 claims.

Gates Ekdale, Pasadena, Calif., 12 patented claims.

Boehmen & Reynolds, 3 claims.

Guy Atlee, Kingman, Arizona, 4 claims.

Irma Prisk, 1 claim.

H. L. Jones, 1 claim.

Weaver Estate, 14 claims.

Wm. A. Epperson, 1 claim.

Walleck Family, 14 claims.

Progress of Drilling:-

First churn drill hole of present campaign went to about 275 feet near Ostrich Shaft of Kay Copper. Values were not as good as hoped for and hole started caving, so moved to South to near "White Mule" workings. Now drilling on this location.

George F. Reed

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

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STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Mineral Park Porphyry Copper Deposit

Date April 15, 1953.

District Mineral Park (Wallapai)

Engineer Geo. F. Reed

Subject: Present Status, General Description

Location, Ownership and General Conditions:

This porphyry copper deposit is located in the general Mineral Park Area of the Cerbat Mts. It is reached by 16 to 18 miles of road from Kingman via Boulder Dam Highway (paved) and last 4 to 6 miles on dirt roads. Tom Chapman, a Mr. Giffen of Boulder City and Roy Hardy (Getchell Mine, Nevada) have tied up about three square miles including some they own themselves and are starting to churn drill in the area. They have practically all of sections 24 & 25, Twp. 23N, R18W, and the Western halves of sections 19 & 30, Twp. 23N, R17W. This includes the John Cross holdings, the Kay Copper and several other groups.

Geology & Topography:

This area is mostly rugged topography from 4000 to over 5000 feet elev. The Northern part which covers part of the floor of Mineral Park is somewhat more level and is at lowest elevation. On the floor of the "Park", water stands in the shafts at about 20 feet from surface. The Ithaca Peak Granite Porphyry is a younger (Mesozoic ?) intrusive which has intruded the older Pre-Cambrian Granite, Gneiss and Schist. At shallow depth under the oxidised surface, sulphides of iron and copper begin to show and the primary ore here is said to assay 0.3% copper in large volumes. Local areas assay up to and over 1.0% copper according to Mr. Chapman.

According to Blakemore Thomas, three churn drill holes drilled in 1915 from quite high up in the area showed leached zone to 170, 180 and 290 feet, with the enriched zone going to 410, 520 and 340 feet. The first drill hole in the present campaign is being drilled near the Ostrich Shaft on Kay Copper where water level is only down about 20 feet. The limited workings and the dump at this (50 ~~feet~~ feet deep) shaft are said to run 1.0% copper or better.

George F. Reed

Grateful acknowledgement is made to the management of Duval Corporation for permission to present this paper.

This paper, or any portion thereof, cannot be published without the permission of the author or Duval Corporation.

U. S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
"Public Lands for Public Needs"

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Ph: 261-3873

FOR RELEASE: THURSDAY, JULY 14, 1966

BLM PATENT GIVES BOOST TO COPPER INDUSTRY

One of the largest single mining patents for multiple lode copper claims was issued today by the U. S. Bureau of Land Management to the Duval Corporation.

According to BLM Arizona Director Fred J. Weiler, 56 mining claims are included. The 961-acre patent is located in the "Mineral Park" district approximately 17 miles northwest of Kingman in the Cerbat Mountains. It is called the "Ithaca Mine".

This area had been a rich lead, zinc and copper producing region in early years, with considerable mining activity before the turn of the century.

The Duval Corporation has been mining the area since 1959, and applied for a mineral patent in 1964. It is estimated that 12,000 tons of copper ore are being mined each day.

"It is noteworthy that 54% of the nation's copper and 18% of the free world's copper production comes from Arizona. Mining, therefore, represents a key part of our state's economy", Weiler said.

(more)

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PHOENIX, ARIZONA

He pointed out that the Duval patent is an outstanding example of the Bureau of Land Management's aid to private industry to further mining and resources development.

"Patents give assurance of titles to mineral lands not afforded by unpatented mining locations. This encourages private enterprise to invest large sums in the development of new mines. Such investments assure the continued growth and economic stability of our state", he continued.

New properties such as the "Ithaca Mine" help to assure Arizona's continued leadership in copper production. Further explorations to locate new ore deposits in the region are planned, according to company officials.

MINERAL PARK

MOHAVE

Went on to Duval Corp., Mineral Park operation where Mr. Boone and Mr. Teissere said that their supplies of explosives, diesel fuel and natural gas were becoming increasingly short. They said the cost of explosives have increased almost 100% in a short period. Apparently ammonium nitrate is being utilized more for fertilizer than for explosives. GW WR 11/7/73

Went to the Mineral Park operation of Duval Corp. and visited with Messrs. Boone & Teissere who said they were continuing to have difficulty obtaining explosives (prills) and diesel fuel. There is no new activity to their knowledge. GW WR 12/5/73

Visited with Ron Teissere at Duval Corp., Mineral Park operation. They were down temp. reconditioning the mill motor windings. He doesn't have a copy of the report on their drilling and testing of the perlite deposit west of Yucca. He had read it sometime ago and said they drilled 3 or 4 holes from which firing tests were made which were favorable. He said the company would have entered into the manufactured product but they discovered that it was uncommercial to "puff" it at the mine and ship it to the west coast; this is elementary. GW WR 4-3-74

Went on to the Mineral Park operations of Duval Corp. where Messrs. Tessierre and Boone said things were rocking along as usual. Explosives are their biggest gripe having doubled in price during the past year. GW WE 5-1-74

Went on the Duval Corp. operation at Mineral Park where Messrs. Boone and Teissere said things were rocking along as usual except repair parts for the heavy equipment were becoming increasingly difficult to get in reasonable time. GW WR 8/27/74

I drove to the Mineral Park mine to meet Ron Teissere and renew acquaintance with Bill Roper. Neither was in. VBD WR 1/8/75

I drove to the Mineral Park mine where I met Ron Teissere for the first time. VBD WR 2/5/75

Duval's Mineral Park operation is on a 10 day "on" and 4 day "off" schedule. GW WR 8/26/75

MINERAL PARK DIVISION

MOHAVE

George Boone at the Mineral Park mine of Duval Corp. says they still have a small amount of Cu cons stockpiled but hope to get them shipped this month. They have increased mine production from 17,000 to 19,000 tons per day. GW WR 9/6/72

Went to the Duval Corp., Mineral Park, operation where a short visit was made with Messrs. Boone and Teissere (geologist) who said operations were normal and that they had recently completed a geologic reconnaissance of the north part of the Hualapai Mtns. They will have a look at the Golconda mine when its rehabilitated sufficiently for an examination. GW WR 11/1/72

Went on to Duval Corp's Mineral Park operation where Mr. Boone, Chief Engineer, said they were operating at about their usual rate. GW WR 12/6/72

George Boone at Duval's Mineral Park operation said they were progressing as usual also. GW WR 1/4/73

Visited with Mr. William Roper at Duval's Mineral Park mine where he said they were "rolling along" mining 19,000 tons/day with about 450 people. GW WR 2/8/73

Stopped at Duval Corp. operation in Mineral Park and visited with Mr. McLean, mill supt., who said they had about finished replacing the Transite tailings pipe with larger size steel pipe. The inclement weather has been rather bothersome to the pit operation although capacity has been maintained. GW WR 3/7/73

Got to the Mineral Park operation of Duval Corp. just at quitting time but delivered the printed matter to Mr. Teissere. He said they were hampered considerably by the wet muck sticking in the primary and secondary crushers. GW - WR 4-6-73

Mr. George Boone, chief engineer at the Mineral Park operation of Duval Corp. said they were drilling some development holes with a down the hole hammer; so far they haven't encountered ore. GW - WR 5-4-73

Visited briefly with Messrs. Teissere and Boone at the Mineral Park operation of Duval Corp. where they said they were still drilling a few holes and that there was no activity in the district. GW WR 6-6-73

Went to Duval Corp., Mineral Park operation, where a brief visit was made with Messrs. Boone, McLean and Teissere, none of whom had any new developments to report. Mr. Roper was out, so Mr. Boone made the changes on the Active Mine Directory. GW WR 10/3/73

Dir. of Mining - August, 1971 - 420 men.

Went to Duval's Mineral Park operation and met Messrs. Roper and Boone. Their operation is about as usual. GW WR 11/4/71

Visited the Mineral Park operation of Duval Corp. George Boone, chief engineer conducted a tour of the open pit which produces 17,000 tons per day by use of 4--8 cu yd. electric shovels, one 10 cu yd. diesel front-end loader and 3 - 40D Bucyruc-Erie diesel drill rigs which drill 43 ft. 9" diameter holes for blasting 35 ft. high benches. Almost in the center of the pit is an area of schist with a very high content of pyrite which presently is not being mined due to an adverse problem in milling this material. GW WR 12/2/71

The Mineral Park operation of Duval Corp. was not affected by the copper strike, other than their inability to sell their concentrates. GW QR 9/71

Went to the Mineral Park operation of Duval Corp., where Mr. Boone said they were down temporarily due to low gas pressure. He also said the daily concentrates were being shipped, but the stockpile couldn't be moved due to lack of smelter capacity. GW WR 1/5/72

Neither Mr. Boone nor Mr. Roper were available at Duval's Mineral Park Operation. GW WR 2/2/72

Went to Duval's Mineral Park operation where both Messrs. Boone and Roper were unavailable, but talked with Mr. McLean, mill superintendent, who was interested in the possibility of a market for their concentrates. GW WR 3/3/72

At Mineral Park, Duval Corporation is mining about 17,000 tons of ore a day from the open pit. The concentrates produced during last summer's strike of the copper smelters is still unsold. GW QR 2/72

Saw Mr. McLean, mill supt., at Duval's Mineral Park operation who said both Messrs. Roper and Boone were in Tucson. We briefly discussed the roadless literature. GW WR 4/7/72

Mr. Roper, Mgr., Mineral Park operation of Duval Corp., made a few changes in the active mine list and stated they still have approximately 7,000 tons of cons. He thinks they are recovering about 50% of the Cu from their dump leaching operation over a 5 year period. An irony crust forms which prevents penetration of the solution but they try to break it with a 7 foot long ripper tooth on a D-9 Cat. Spent 2 hours or more with Mr. J. Hubert Smith, Attorney in Chloride and received the history of mining in the Cerbatas from 1879 when his father arrived there. GW WR 6/8/72

MINERAL PARK COPPER DEPOSIT

MOHAVE COUNTY

Visited with Ken Lamb and Bill Roper at the Mineral Park - nothing unusual to report. FTJ WR 3-6-70

Mineral Park operating at usual rate. FTJ QR 4-3-70

Visited Mineral Park - changes in personnel are: Ken Lamb to mine supt. at Sierrita, Kenneth Kelley, asst. supt. at Mineral Park to mine supt., George P. Boone promoted to chief engineer and J.E. Moss to asst. mining engineer (ore control). FTJ WR 5-8-70

Active Mine List May 1970 - 400 men - W.J. Roper, Res. Mgr.

At Mineral Park interviewed Bill Roper. Duval drilling deep hole around the known orebody in hopes of enlarging reserves. FTJ WR 7-11-70

Duval's Mineral Park mine produced at its regular rate for the year. FTJ Annual Report 6-30-70

Visited Duval's Mineral Park mine - visited Bill Roper - no change in operations, but Mr. Roper gave me some leaching figures. FTJ WR 9-4-70

Visited Bill Roper at Mineral Park. They have been drilling some deep hole near Nugget PK and others around Mineral Park. FTJ WR 11-6-70

To Mineral Park - interview with Bill Roper. He said Phillips Petroleum were drilling same area as Bear Creek - adjacent to Duval's tailings pond. Duval own the surface and Santa Fe the minerals. Mineral Park mills 16,420 tpd. FTJ WR 1-8-71

Active Mine List Oct. 1970 - 415 men

Mineral Park mine was operating at its regular rate. FTJ QR 1-13-71

To Mineral Park. Interview with Bill Roper who said they were having difficulties with the ball mills due to welding failures, otherwise operations normal. FTJ WR 5-10-71

Mineral Park, division of Duval produced at its regular rate throughout the year. FTJ Annual Report 8-19-71

To Duval Corp. Mineral Park operation and talked with Mr. McLean, mill supt. and Mr. Boone, mine engr. They, like everyone, have had considerable high water lately.
GW - WR 9/3/71

MINERAL PARK COPPER DEPOSIT

MOHAVE COUNTY

Mr. James P. McCarty mill supt. for Duval at the Mineral Park, Arizona property was named resident manager at Battle Mountain.

Roland McLean replaced Mr. McCarty as mill supt. at Mineral Park.
Skillings Mining Review 3-2-68

Active Mine List Nov. 1967 - 390 men
Active Mine List April 1968 - 389 men

Interview with Bill Roper and Ken Lamb at Mineral Park - operations about normal.
FTJ WR 7-12-68

Visited Ken Lamb at Mineral Park - no changes in their operation. FTJ WR 9-10-68

Interview with Bill Roper of Mineral Park. There are no changes in operations. They were dozing a clearing on Turquoise Mts. Supposedly for Mr. Hardy (?) FTJ WR 11-8-68

Active Mine List Oct. 1968 - 385 men

Visited Mineral Park - interview with Ken Lamb and Bill Roper. They are pessimistic about future for copper and particularly molybdenum. FTJ WR 1-10-69

Interviewed Bill Roper at Mineral Park. Operations are normal. FTJ WR 3-7-69

Active Mine List April 1969 - 398 men - W.J. Roper, Res. Mgr., Duval Corp., P.O. Box 1271, Kingman

Mine visit - Ithaca Peak - Mineral Park. Sloppy roads around and in pit due to rains, but going okay. Are now interested in exploring in Cerbats as well as elsewhere.
FPK Field Trip Notes 5-15-69

Interviewed Bill Roper at Mineral Park. They were trying to control a break in their tailing line. FTJ WR 7-11-69

Mineral Park of Duval Corp. - mining and milling at their regular rate. FTJ QR 7-15-69

Bill Roper and Gordon Lyda visited at the Mineral Park mine. Apparently union in cooperation with mine inspector causing concern because of a fatal accident in August in the pit. FTJ WR 9-5-69

Active Mine List Oct. 1969 - 400 men - W.J. Roper Res. Mgr.

Visited Mineral Park - Bill Roper on vacation. Operations normal. FTJ WR 11-7-69

MINERAL PARK

MOHAVE COUNTY

Visited Duval's Mineral Park. Jim Eidel, geologist is resigning May 31 and will be geologist for M.A. Hanna Mining Co., who are opening office in Tucson. FTJ WR 5-6-66

Visit and interview with Bill Roper at Mineral Park. Operations normal. FTJ WR 9-9-66

15,500 to 16,000 tpd copper - 377 men working - FTJ 10-1966

Visited William Roper at Mineral Park. Operations normal. FTJ WR 11-4-66

Visited Duval's Mineral Park. Talked to the men in the Geology Department. They are not engaged at present in outside exploration. FTJ WR 1-7-67

Interview with William Roper at Mineral Park - no changes in operations - periodical trouble with grinding units. FTJ WR 3-10-67

Duval operated at capacity at Mineral Park. FTJ QR 4-5-67

Visited Bill Roper at Mineral Park - operations normal. FTJ WR 7-7-67

Visited Mineral Park - Interview with Bill Roper - operations satisfactory. FTJ WR 7-7-67

Interview with Gordon Lyda, geologist at Mineral Park. Operations normal. Bill Roper was in Tucson. FTJ WR 9-8-67

Interview with William Roper at Mineral Park. No change in their operations. FTJ WR 11-10-67

Interview with William Roper and Gordon Lyda. Operations about normal after storm closed them down for two days. Duval continues to look for outside prospects. FTJ WR 1-5-68

MINERAL PARK

MOHAVE COUNTY

Visited Duval's Ithaca Peak mine and mill - interviewed F. B. Phillips, gen. supt. Learned a test run was being made in one section of the mill. Slow delivery of electrical equipment is holding up completion of the mill. Mr. Phillips hoped the entire mill would be on stream between Dec. 1 and Dec. 15. EGW WR 11-6-64

Visited Duval's Ithaca Peak mine and mill. At the mill 3 of the 4 mills have been relined and are now using balls. It was explained that the autogenous grinding was too slow and balls will be used until they catch up with the stockpile. They are now milling expected tonnage. EGW WR 1-8-65

Visited Duval's Ithaca Peak mine and mill - interviewed Bill Roper, field engineer, in the absence of Edward E. Smith, new manager. Mr. Smith replaced F. B. Phillips who was transferred to Carlsbad. The mill is now taking 13,000 tpd. Work is in progress on the leach precipitating plant. A total of 299 men are now employed in the mine and mill. EGW WR 3-5-65

Mr. William Roper, the new resident manager, said leaching was taking about 750 gal. per minute. Shape of dump restricts the amount of water used. About 275 men are on payroll. Isbell had also cut employment. FTJ WR 9-10-65

Mr. J. J. Eidel, geologist for Duval Corp., Box 1271, Kingman, Arizona

MINERAL PARK

MOHAVE COUNTY

Visited Duval's Mineral Park project. Bill Roper, supt., reported that the contract adit job has already intersected a number of drill holes to check drill information and that one surface diamond drill rig and a churn drill rig are in continuous operation. Also, a crew of nine men is employed on geology, mapping, etc. TPL WR 5-19-62

This property active Oct. 1962

Visited Duval's Ithaca Peak Project. Interviewed Ben Messer, Chuck Benson and Al Patterson. Isbell is getting a good start on stripping. About 50 men working. EGW WR 1-11-63

Kingman, Arizona - Duval Sulphur & Potash will spend \$28 million to develop open pit mining. A 12,000 tpd concentrator is planned to produce copper and molybdenum concentrates. E&MJ Jan. 1963 p. 81

Duval Sulphur & Potash Co. started construction of its copper-molybdenum open-pit project at Mineral Park. Concentrates produced by the 12,000 tpd operation will be shipped to custom smelters. It is estimated that ore grade will run from 0.08% to 0.12% Mo and between 0.60% and 0.70% Cu. Total tonnage is estimated to be around 50 million. Construction is expected to be completed by late 1964. E&MJ Jan. 1963 p. 124

Visited Duval's Ithaca Peak project. They now have 1 Bucyrus-Erie 8 yd. shovel in operation and 1 being assembled. 4 Le Tournew-Westinghouse Haulpack 65 ton trucks in operation and 6 more expected. 1 40 10E rotary drill in operation and 1 more on the way. Office and repair shop have been constructed. 86 men working. EGW WR 3-13-63

Interviewed Chas. Benson and Herb Jesse - 130 men now working. Visited mill site. Parson-Jurden Corp. of New York City have 50 men working. EGW WR 5-9-63

Visited Duval's Mineral Park project. Isbell now working 136 men on Ithaca Peak and 23 men excavating for mill foundations. EGW WR 7-19-63

Active Mine List Oct. 1963 - 159 men

Visited Duval's Ithaca Peak Project, 121 men working at the mine and 350 working for Parsons Con. Co. on the mill. Hope to have mill operating some time in July. EGW WR 3-13-64

Visited Duval's Ithaca Peak Project mine and mill. Mill construction is progressing nicely and was told a test run is expected between Aug. 15 and Sept. 1. There is a large stockpile at the mine waiting. EGW WR 7-14-64

Visited Duval's mill and interviewed F. B. Phillips, mgr., Mr. Phillips thinks the mill will be ready to start the first part of October. There are 744 men now at the mill and 109 at the mine. Visited the mine and interviewed Ed Covington. EGW WR 9-15-64

Duval Corp. Property At Mineral Park, Ariz.

By Thomas Jancic

Chief Mine Engineer, Copper Div., Duval Corp.

gether with



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Kingman Resource Area
2475 Beverly Avenue
Kingman, Arizona 86401

IN REPLY REFER TO

MN 81-48
(KRA)

April 29, 1981

Mr. Bill Vanderwall
Post Office Box 716
Scottsdale, Arizona 85252

Dear Mr. Vanderwall:

Enclosed is the information that you requested regarding Duval Corporation's Mineral Park Operation.

If we can be of any further assistance, please let us know.

Sincerely,

Roger G. Taylor
Area Manager

Enclosures
cc: Duval Corporation



POST OFFICE BOX 3009 KINGMAN ARIZONA 86401

March 31, 1981

Bureau of Land Management
Kingman Resource Area
2475 Beverly Avenue
Kingman, Arizona 86401

RECEIVED
APR 5 1981

KINGMAN RESOURCE AREA

Dear Mr. Taylor:

As per your letter MN PDO 81-48, I submit the following:

- 1) Detail Drawing, 002-01-524-4, showing the proposed diversion channel we plan. 1" = 200' scale.
- 2) Same Drawing showing access road to proposed channel which will entail cuts of up to 3 feet in depth.
- 3) Nature of Proposed Channels:
Since a major rain storm and the resultant high runoff might substantially increase any hazard associated with impoundment behind our existing tailings dam on Section 36 and since this dam is constructed across an active water course, a diversion channel to by pass any flood waters is necessary as a precautionary measure.

Sincerely,

G. P. Boone
Mine Engineer

PD0-81-48

NOTICE - DISTURBANCE OF 5 ACRES OR LESS

Kingman DISTRICT OFFICE
BUREAU OF LAND MANAGEMENT
2475 Beverly Avenue
Kingman, Arizona 86401

RECEIVED
MAR 17 1981

KINGMAN RESOURCE AREA

The undersigned mining claim owner, Duval Corporation of 4715 E. Fort Lowell Road, Tucson, Arizona 85712, will be conducting mining activities on the following listed claims in Mohave County.

CLAIM NAME

SERIAL NUMBER

Duke Mill Site No. 50
Duke Mill Site No. 51

AMC# 28202
AMC# 28203

These activities will consist of the following (Approximate date, type of equipment, description of work): We plan a disturbance of less than 5 acres in T22N, R18W, Sec. 1. This disturbance will be in the form of a diversion channel to divert the flood waters of the Chico and Todd Basins around our existing tailings dam. Equipment will consist of a crawler dozer, jack hammers, air-trac and necessary blasting. The starting date is scheduled for March 2, 1981. Material from the cut will be saved and replaced in the channel as necessary to control elevation of channel.

Access will be by means of (existing routes) (~~construction of ----- miles of road using a crawler tractor as shown on the attached plat.~~) Construction of access (will) (~~will not~~) involve cuts of three feet or more on the inside edge.

Activities on and reclamation of the disturbed area will be in accordance with the standards of 43 CFR Sec. 3809.1-3 (d).

This measure is being taken to prevent erosion of tailings dam during 50 year precipitation run-off.

By George F. Bone Agent
Duval Corporation
4715 E. Fort Lowell Road
Tucson, Arizona 85712

35 36

2 1

PROPOSED
ACCESS ROAD
SPILLWAY CUT

DUKE
MILL SITE
NO. 46

DUKE
MILL SITE
NO. 47

DUKE
MILL SITE
NO. 48

DUKE
MILL SITE
NO. 49

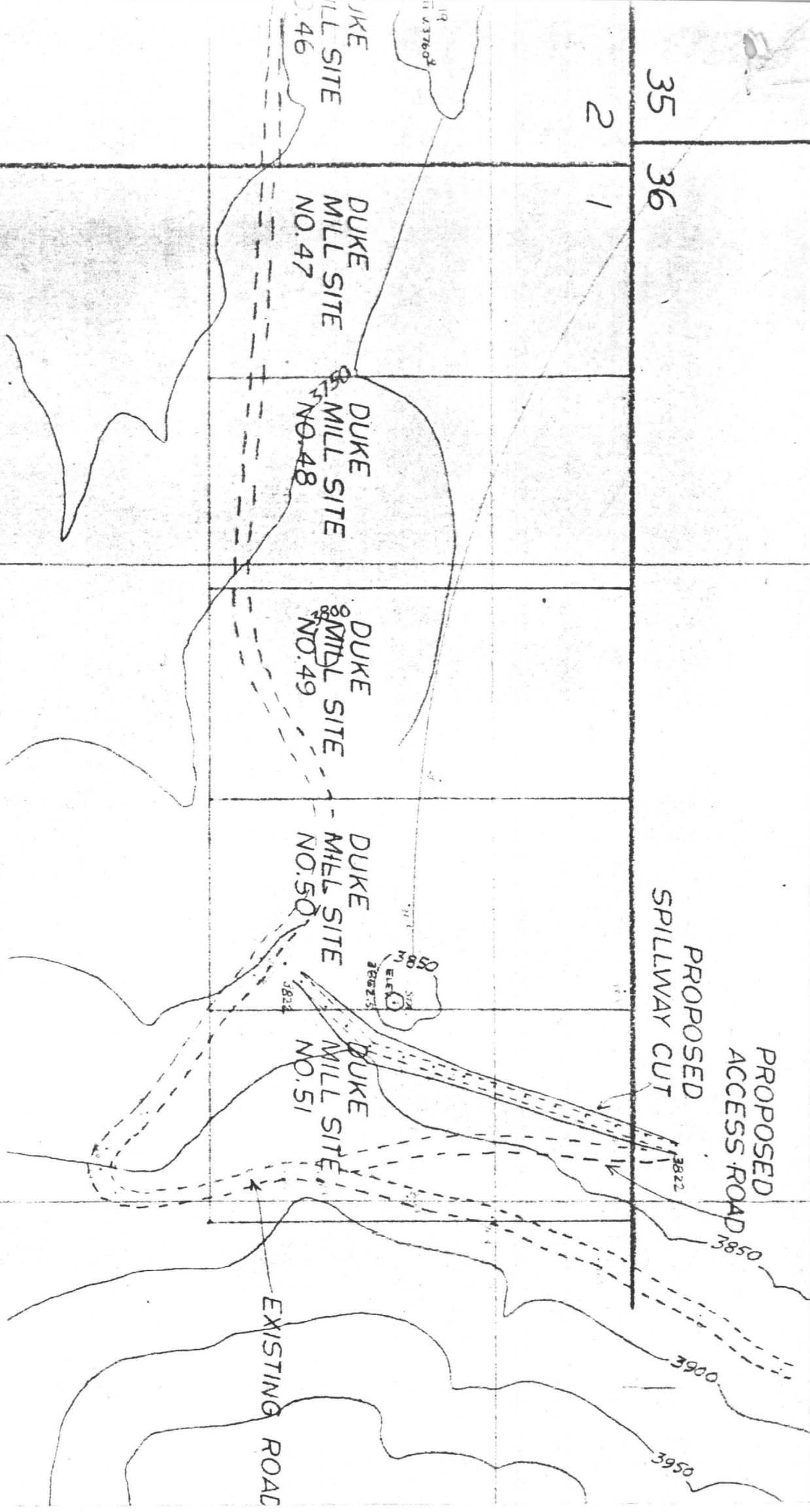
DUKE
MILL SITE
NO. 50

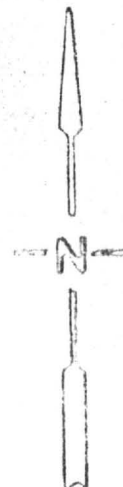
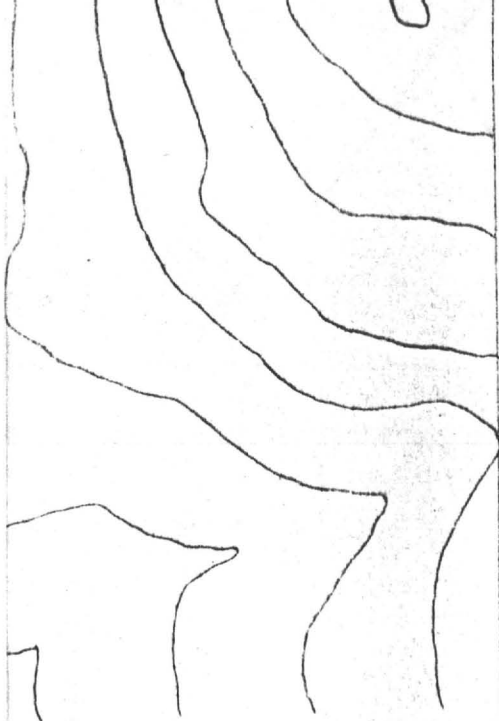
DUKE
MILL SITE
NO. 51

T22N

R 18 W

EXISTING ROAD





DUVAL CORPORATION

COPPER DIVISION
MINERAL PARK PROPERTY KINGMAN, ARIZONA

LOCATION OF PROPOSED TAILINGS DAM SPILLWAY

DATE	DESCRIPTION

Design'd by MAL	Scale 1" = 200'	Date 3-11-81
App'd by	Drawn by MAL	REVISION NO. Δ Drawing No. 002-01-04-
App'd by	Ch'k'd by GPB	524-4