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12/14/94

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: LAZY MULE CLAIMS

ALTERNATE NAMES:

MAIN SHAFT
GOLDEN RULE
SKY BLUE

PINAL COUNTY MILS NUMBER: 19

LOCATION: TOWNSHIP 1 N RANGE 11 E SECTION 21 QUARTER C
LATITUDE: N 33DEG 25MIN 00SEC LONGITUDE: W 111DEG 13MIN 25SEC
TOPO MAP NAME: IRON MOUNTAIN - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:

GOLD
LEAD
SILVER
ZINC
COPPER OXIDE

BIBLIOGRAPHY:

ADMMR LAZY MULE FILE
JINKS, JIMMIE E., MINERAL INVESTIGATION OF
THE SUPERSTITION WILDERNESS & CONTIGUOUS
RARE II FURTHER PLANNING AREAS, GILA,
MARICOPA & PINAL COUNTIES, AZ., MLA 136-82
USBM P. 14-16 & PLATE 1

LAZY MULE CLAIMS

REFERENCES

PINAL COUNTY

BLM AMC Lead File 82270

MILS Sheet sequence numbers 0040210602 and 0040210603

Jinks, Jimmie E., Mineral Investigation of the Superstition Wilderness
and Contiguous Rare II further Planning Areas, Pinal County
1982, p. 14 - Geology File

TIN, RII E, Sec 21 C

eleven
11
IN E

" LAZY MULE " PROSPECT.

Date of Examination:

April 18th to 21st inclusive, -1967.

Property & Location:

The "Lazy Mule" prospect is covered by 56 unpatented mining claims owned by Carl Smith, of Mesa, Arizona. The area is in the Superstition Mountain Mining District in unsurveyed Township I North Range II East. Smith thinks the claims are in Sections 20 and 21 of this township, but this is subject to checking to make sure that they are not in School Section 16.

The few claim location notices found bearing Smith's name are dated June, 1966. On claim No.46 a location notice was found bearing the name of Genevera Harris under date of December 1965. The title hole has not been dug so this location is invalid. Near the central and northern end of the group several location notices bearing the names of Malinda and Adolph Hanenstein under date of December 1964 were found but the title holes have not been dug so these claims are also invalid. Accordingly, I think that ownership of the ground does lie legitimately with Carl Smith.

However, as nearly as can be determined by the map of the Tonto National Forest, the whole group lies in this Forest, and the northern half of the group may also be included inside the boundary of the Superstition Wilderness Area. This latter possibility could be a serious obstacle to any intent to mine the deposits. Accordingly, determination of the exact location of the claims as it may pertain to this Wilderness Area should have initial priority if further investigation of ore potentials should be contemplated. The fact that a Forest Service fence crosses the middle of the property in a somewhat zig-zag fashion in a S.W.-N.E. direction looks suspicious. A portion of the Tonto National Forest map is attached hereto showing boundaries of the Wilderness Area and probable location of the claims.

From Florence Junction the road to the claims is paved as far as Whitlow Dam, and then follows a bladed road (No.172 on the Tonto Forest Map) up Hewett Wash to a point a mile south of the "Main" shaft on Claim No.1. This last mile to the shaft is not bladed and use of a 4 W.D. vehicle is essential.

History & Discussion:-

The property was brought to the attention of the Company by the owner, Carl Smith, about mid-April, 1967. Subsequent conversation with Mr. Smith revealed that he had been interested in a general way in the area for the past eight or nine years. For three years of this period he lived at the "C.J." (Martin) ranch located in a wash about a mile west of the claims. It is quite possible that he had located most of the ground well prior to the June, 1966 locations that I ran across.

However, I very much doubt that he sank either the "Main" shaft; the 90' shaft; or the 45' shaft shown on his claim map. These look like very old diggings to me.

At the "Main" shaft I think that he probably ran part of the lateral openings at the 80' level as shown on attached sketch of that level.

A pile of unsorted ore of about 15 tons taken from these lateral workings presumably by Smith, gave a chip sample assay as follows:-

Gold,--0.61 oz.	(Later,-4/28) Smith reports that this
Silver-0.20 oz.	pile is reject after sorting out
Lead,- 3.80 %	several tons of high grade which he
Zinc,- 2.90 %	has at his home in Mesa. I saw this
Copper,- 0.36 %	pile there so this report is correct.

FG.

It seems rather odd that more digging has not been done on these prominent mineralized zones. The answer could be that the complex nature of the ore was discouraging, especially so in view of the fact that the scant digging did not disclose any direct shipping ore.

Geology & Ore Deposits:-

Basal rock of the area is Pre-Cambrian granite. In the area covered by the claims, major faulting has occurred in a north-south direction and minor faulting in an east-west direction. These faults occur over an east-west width of at least a half mile and a north-south direction of more than two miles. Rock alteration occurred along the fault zones accompanied by mineralization which introduced much silica, minor manganese and calcite, and the sulphides of iron, lead, zinc, and copper. In addition to intense movement along the various fault planes, brecciation of adjacent granite occurred and this too is mineralized. Brecciation and alteration of the adjacent granite extends outward for varying distances, in some places only a few feet, and in others as much as forty or fifty feet. In general this brecciated granite occurs on the west side of the faulted material, but some was also noted on the east side, especially on Claim No. 14 between the 90' and 45' shafts. The lengths of the mineralized fault zones, or reefs, vary from as little as 100' up to 1500' or more. Widths of these reefs, including the adjacent brecciated granite, vary from a few feet up to as much as 150 feet. The reefs usually terminate rather abruptly on both the north and south ends, probably on unmineralized cross faults which are hard to discern in the weathered surface. In the southern part of the area the reefs dip steeply to the east; in the central part they seem to be about vertical; and in the northern part dip steeply to the west. Various white quartz veins with an east-west strike occur and which usually terminate endwise against a reef. None seem to cut across the reefs, and all are unmineralized. They are probably younger than the reefs.

The rather idealized portrayal of the reefs on the claim map is somewhat misleading, as actually they are much more irregular in shape than as depicted, especially at the junctions with the mineralized cross faults. Due to the large amount of silification by dark colored quartz and the presence of manganese, the reefs are darker in color than the enclosing granite, and the large amount of silica present results in a cox-comb surface expression which is quite noticeable even at a considerable distance.

The color photos which will be added to this account, when available, will show examples of this feature.

The sulphide mineralization in both the brecciated granite and the fault-zone reefs occurs as disseminated crystals and as the filling of veinlets in the fractures. It is not at all uniform in distribution. Unfortunately, (from the standpoint of inspection) most of the limited amount of digging has been done in the brecciated granite adjoining the silicified reef material. The brecciated granite is much softer than the reefs, and this probably explains the location of the shafts and pits. It is much easier to drill and break.

The only two excavations in reef material are the doghole on the 80' level of the main shaft as shown on Hammer's (Magma geologist) sketch of this level, and the 45' shaft on the No. 14 claim. It may or may not be significant that the two samples cut by Hammer in this doghole show more copper than in the adjoining brecciated granite, and the dump at the 45' shaft shows only chalcopyrite with no galena or sphalerite. The 45' shaft is in a narrow reef.

Sulphides occur both in the reef material and in the adjoining brecciated granite within a few feet of surface, but conversely, oxidation and leaching are in evidence on the 80' level of the "Main" shaft. Ground water level at the "Main" shaft is probably at the 85' level; at the 90' shaft it is about 45'; and at the 45' shaft about 20 feet. It is rather surprising in this desert area that the ground water level is not far deeper than seems to be the case.

My conception of the ore structures and genesis does not conform with that of Mr. Hammer. His concept is that the reefs were formed by intrusions of granite porphyry into the normal granite with subsequent later mineralization. If this is the case, then post-mineral faulting occurred, which is entirely possible. However, this does not explain the mineralized breccia adjacent to the reefs. This breccia shows no slip or fault planes and in my opinion represents normal granite-fracturing contemporaneous with the faulting that produced the reefs. After all, this is purely an academic question unrelated to the possible economic importance of the deposits.

At the south face of the workings on the 80' level of the "Main" shaft I cut a sample to check against that taken by Hammer at the same place. The comparative results are as follows:-

<u>Hammer's Sample</u>	<u>Gibbs' Sample</u>
Au.-0.008 oz.	Au.- Tr.
Ag.-0.09 oz.	Ag.- Tr.
Cu.-0.90 %	Cu.- 0.15%
Pb.-1.5 %	Pb.-0.40 %
Zn.-1.2 %	Zn.-1.30 %

Hammer's sample was taken with a geology pick. Gibbs' sample was taken with single jack and moil.

From the mine dump at the 90' shaft on Claim No. II I picked out at random chunks of ore which gave the following assay:-

Au.- 0.06 oz.	Zn.- 4.30%
Ag.- 0.30 oz.	Cu.- 0.52 %
Pb.- 11.80 %	

Conclusion and/or Recommendation:-

Due to the paucity of underground openings, especially in the reefs, there is no way to arrive at a decision as to whether or not a profitable mine or mines can be developed on these claims without doing some core drilling. There is no question but what several of the mineralized structures are large enough to provide sufficient tonnage to permit of a medium sized mining operation, nor is there any question in my mind as to persistence of these reefs to good depths. Due to favourable topography and the availability of ample water supplies right on the ground, an initial small exploratory drilling program could be carried out at modest expense. Enough drilling sites at the right locations could be provided in a few hours by using the small ²⁸dozer owned by Smith and already on the claims.

Accordingly, because I feel that there is sufficient evidence of possible important concentrations of economic metals to justify it, I recommend that an initial program consisting of three core drill holes each of 300 feet depth be carried out, provided that the question of location of the claims on locatable public domain is favourably resolved, and that a satisfactory deal can be made with Smith.

I think that one of these holes should be located about 300' south of the "Main" shaft on Claim No.I, and the other two in the vicinity of the 90' and 45' shafts on the No.II and No.I4 claims. They should be drilled easterly from sites on the west side of and down hill from the reefs at 45 degree or 60 degree angles. Both of these reefs dip very steeply to the west.

An I.P.geophysical survey over the reefs on No.I, No.6, No.II, and No.I4 claims would be desirable prior to the drilling, but it is not necessarily a "must".

Fred Gibbs.

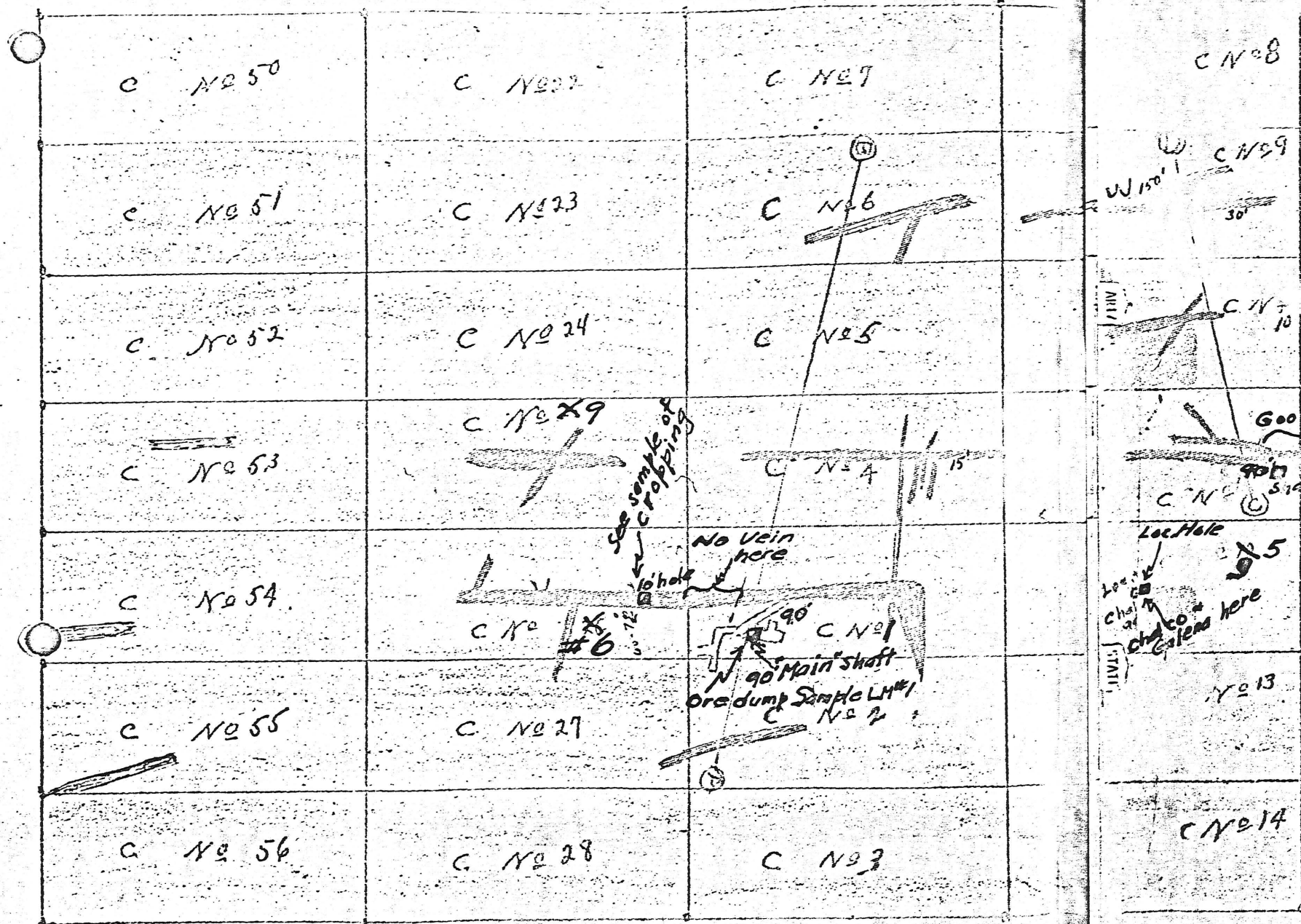
N.B.:-- Maps and sketches attached hereto were made by Mr.Hammer of Magma Copper Co.

Snapshots in color showing the reefs; the slickensided fault planes; the location of the shafts in respect to the reefs; and the general landscape, will be added hereto when received from the processor.

Fred Gibbs
4/27/67

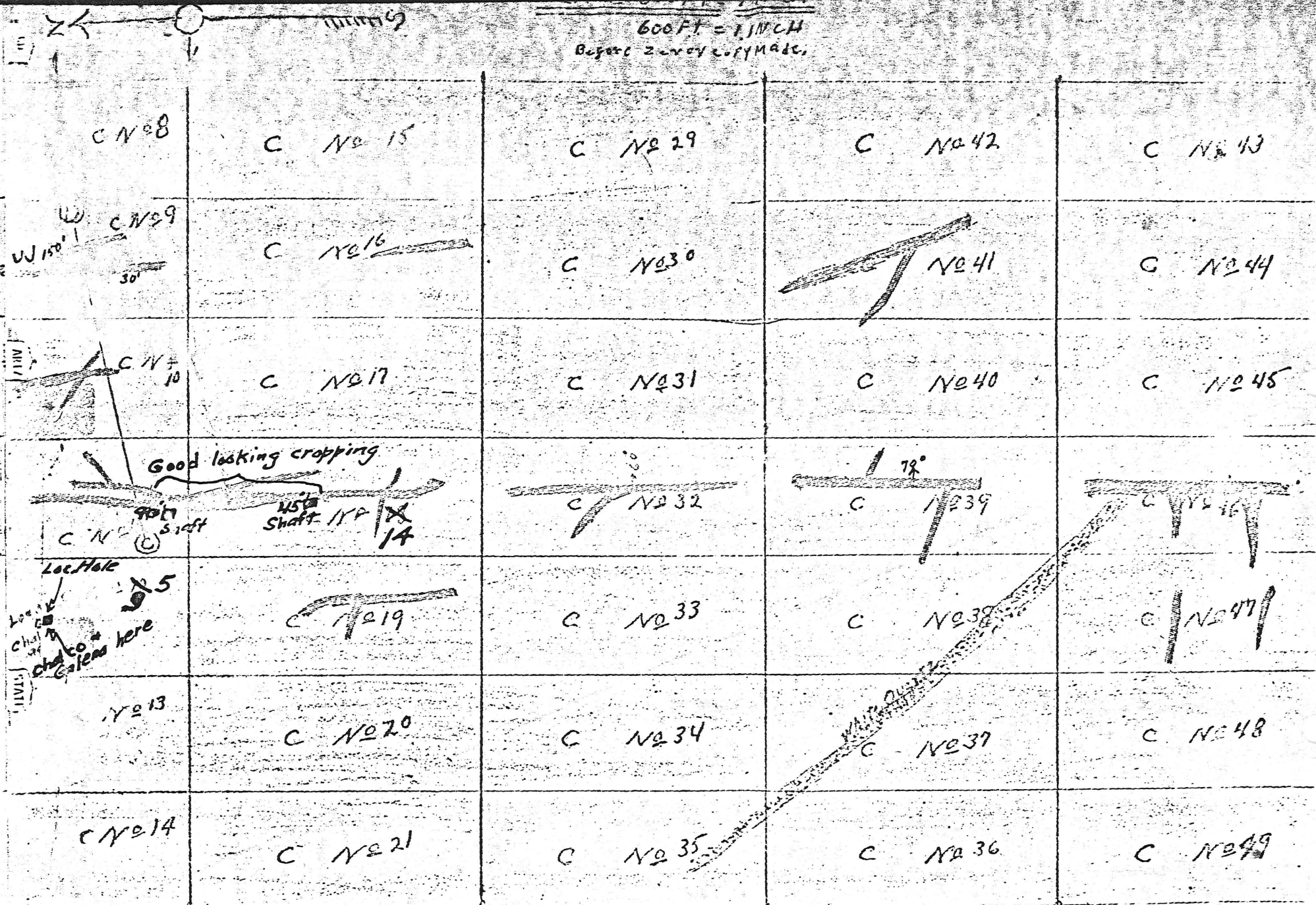
(Later, -4/29) Smith reports that his claims are not included in the Wilderness Area and presented latest Area map to support his claim. Wilderness boundary has been changed (1966) to exclude his claim area and that of the Martin ranch from this Wilderness area. Still, some checking of the location of the northern half of his claim area is probably advisable. This can only be done on the ground.

FG.



CH MAP
OF THE
Y M U
LODE MINING CL

600 FT = 1 INCH
 Before 2nd copy made.



CH MAP
 OF THE
 Y MULE G
 LOBE MINING CLAIMS

INTRUSIVE granite } → VEINS
 Porphyry : GRANITE
 WHITE QUARTZ VEIN

Sound Later

LEGEND

Staff Cross

Slightly fractured granite (F.G.)

04451-75" Cu Mn Hg
 0.75 Trace 1.03
 Ag Pb Zn
 0.004 0.6 0.0

80° Fault

94250 60'

041152-38' CU MO AG AU PB ZN
 0.49 Trace 0.09 0.004 1.2 0.9

94249-40' 0.24 Trace 0.10 0.015 0.9 0.0
 194249-40' 0.68 Trace 0.11 0.009 0.9 4.1

Vein is cut off & terminated to North by this fault (F.G.)

"Main" Shaft
 80' deep

Fool wall

94248 45' 0.78 0.04 0.62 0.030 1.9 4.5
 94247 45' 0.65 0.01 0.58 0.009 2.4 4.2
 94296 65' 0.75 0.02 0.62 0.110 2.7 3.4
 Vein → Vein on surface 30' wide (F.G.)
 94245 30' 0.95 0.45 0.010 1.7 1.3
 94244 40' 0.90 Trace 0.09 0.008 1.5 1.2

Gibbs Sample LM42-52"

Ru - Tr
 Ag - Tr
 Pb - 0.13 %
 Zn - 0.40 %
 Zn - 1.30 %

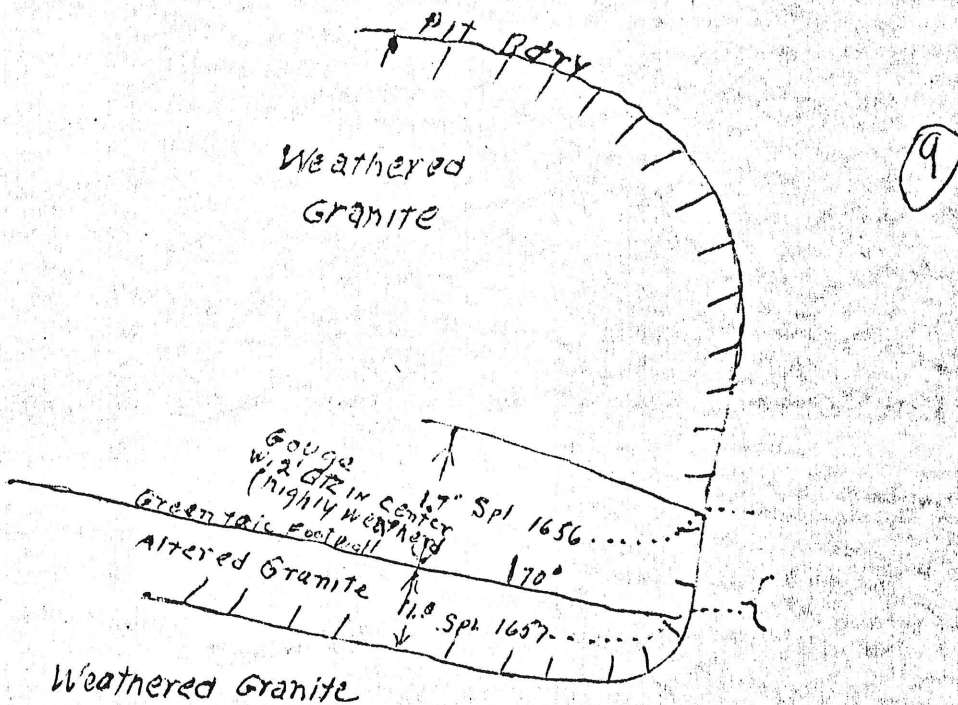
6-8" Cellina Vein 5' from Foot Wall - not sampled

1300 Mule Prospect

ASSAY 910 - 8' Level
 DATE
 DRAWN BNH
 SCALE 1" = 20'
 A

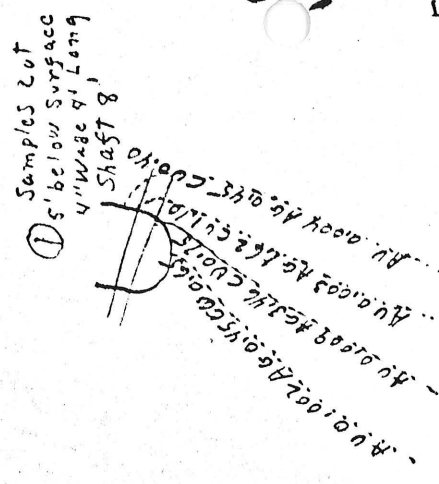
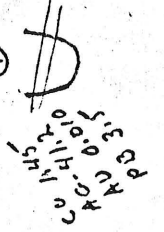
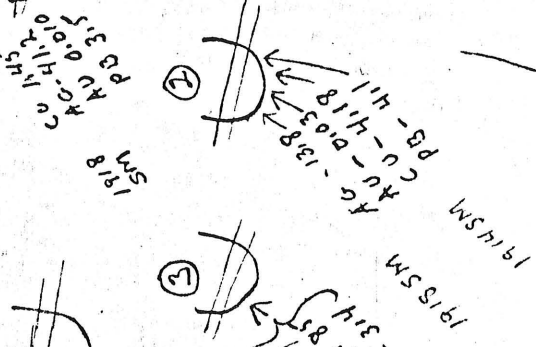
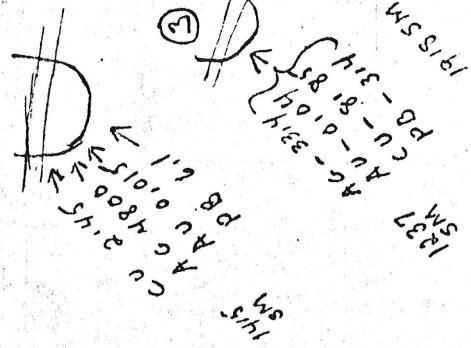
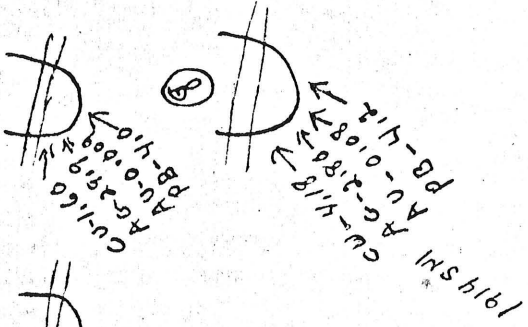
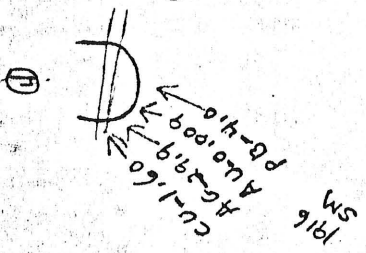
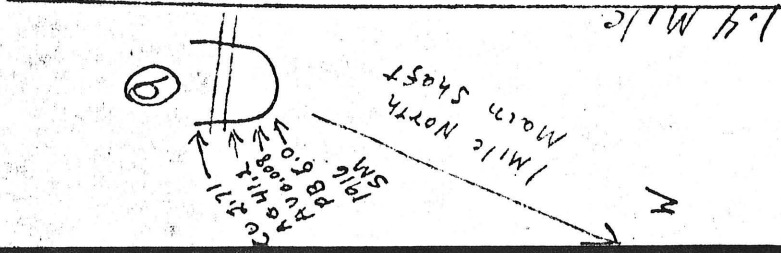
7-27-66

CARL SMITH-SILVER
PINAL CO, ARIZ



Note Spls cut 3' below ground surface
Qtz vein ± 2' to 3' thick highly weathered
Carries Silver Pb, 1916-SM 42.9

N
1.5 MILES



Wash

Cuts on top of ridge
in narrow veins (2' x 3')
about 1 1/2 miles N.E. of 20' shaft
on claim #1.

old Tunnel Silver
Caved in - abandoned - 1916

AG	2.46
CU	1.10
AU	0.002
PB	2.1

Dump

200' long
Siliceous vein
outcrop
Not on other
MAP

CU	0.76
CV	0.44
AG	0.003
AU	0.003
PB	4.1

16' wide

Siliceous vein

1 mile east
5' x 5' wide

CU	0.78
AG	3.40
AU	0.005
PB	0

(F.G.)

CONCLUSION:
 ① No Flotation Problems Indicated
 ② Not Fully Amenable to I.K. Circuit Variation - MINERALOGIC



AMERICAN CYANAMID COMPANY

July 9, 1967

Mr. Jack Pierce
 Shattuck Denn Mining Corp.
 Iron King Branch
 Humbolt, Arizona

Subject: Lazy Mule Ore
 Flotation Tests on
 50 ton lot sample

Dear Mr. Pierce:

These flotation tests on the sample of Lazy Mule ore you submitted indicate that both lead and zinc recovery will be low when treated by present Iron King procedure.

Test 1 (Standard Iron King Lab. Procedure)

	% Weight	Assays:			% Distribution		
		% Pb	% Zn	Ag Oz/t	Pb	Zn	Ag
Lead Concentrate	14.0	65.3	9.4	4.4	58.6	23.7	50.7
Zinc Concentrate	5.9	10.7	40.6	2.7	4.1	43.1	13.0
Tailing	80.1	7.28	2.30	0.55	37.3	59.8	26.3
Head	100.0	15.60	5.56	1.22	100.0	100.0	100.0

A considerable portion of the zinc floats readily along with the lead at low pH without copper sulphate activation. Lead recovery, copper recovery, and silver recovery can be increased by floating oxidized minerals with sodium sulphide and AERO Xanthate 350 after a preliminary sulphide mineral flotation step. This procedure results in a bulk concentrate containing 93.7% of the lead, 94.9% of the silver, 78.3% of the copper, and 69.5% of the zinc.

Test 5 (Sulphidizing Flotation)

	% Weight	Assays				% Distribution			
		%Pb	%Zn	%Cu	oz/T Ag	Pb	Zn	Cu	Ag
Sulphide Conc.	21.3	51.7	16.4	2.00	4.4	68.6	60.9	56.1	69.8
Oxide Conc.	9.9	40.6	5.0	1.70	3.4	25.1	8.6	22.2	25.1
Tailing	67.8	1.5	2.5	0.24	0.1	6.3	30.5	21.7	5.1
Head	100.0	16.0	5.7	0.76	1.34	100.0	100.0	100.0	100.0
Total Conc.	31.2	48.2	12.8	1.90	4.1	93.7	69.5	78.3	94.9

The information, including suggestions, contained herein is based upon the best laboratory and technical information available to us. Any recommendations or suggestions are made without warranty or guarantee, since the conditions of use are beyond our control. Nothing contained herein shall be construed to imply the non-existence of any relevant patents nor to constitute a permission, inducement or recommendation to practice any invention covered by any patent owned by American Cyanamid Company or by others, without authority from the owner of the patent.

Detailed log sheets of tests 1, 3, and 5 are attached. We will be pleased to discuss results of these tests further with you.

Very truly yours,

AMERICAN CYANAMID COMPANY

D. E. Zipperian

Donald E. Zipperian

CONDITIONS AND REAGENTS

POINT OF ADDITION	CONDITIONS			REAGENTS POUNDS PER TON										
	TIME MINS	% SOLIDS	PH	Soda Ash	ZnSO ₄	NaCN	AP-409	AX-301	Cresylic Acid	CaOH	CuSO ₄	AX-303	Pine Oil (1)	AF-71 (1)
Grind	13	60	7.0	1.0	0.2	0.05	0.05							
Condition	1/2								0.03	0.032				
Flotation	4													
Condition	1/2									0.016				
Flotation	2													
Condition	7		9.2							6.0	1.0	0.10	0.028	
Flotation	5													

REMARKS

METALLURGICAL RESULTS

PRODUCT	WEIGHT		ASSAYS					% DISTRIBUTION			
	%	GMS	Pb	Zn	Cu	Au	Ag	Pb	Zn	Cu	Ag
Conc. 1	14.01	70.0	65.3	9.4	0.90	0.02	4.4	58.6	23.7	18.1	50.7
Conc. 2	2.26	11.3	17.2	36.2	2.30	0.02	1.9	2.5	14.7	7.5	3.5
Conc. 3	3.64	18.2	6.7	43.4	2.80	0.01	3.2	1.6	28.4	14.6	9.5
Tail	80.08	400.0	7.29	2.30	0.52	Tr	0.55	37.3	33.2	59.8	26.3
Head	100.0	499.5	15.60	5.56	0.70	-	1.22	100.0	100.0	100.0	100.0
Conc. 2+3	5.90	29.5	10.7	40.6	2.61	-	2.7	4.1	43.1	22.1	13.0

RATIO OF CONCENTRATION

REMARKS

GRIND 15' @ 60% Solids
 11% +200 Mesh

Head Assay

<u>Non Sulphide</u>		<u>Sulphide</u>		<u>Cu</u>	<u>Ag</u>	<u>Ag</u>
<u>Pb</u>	<u>Zn</u>	<u>Pb</u>	<u>Zn</u>			
3.82	1.80	11.7	3.4	0.75	0.02	1.6

CONDITIONS AND REAGENTS

POINT OF ADDITION	CONDITIONS			REAGENTS POUNDS PER TON										
	TIME MINS	% SOLIDS	PH	Soda Ash	ZnSO ₄	NaCN	AP-404	AX311	Cresylic Acid	AR242	CaOH	CuSO ₄	AX303	Pine Oil / 71
Grind	15	60		2.0	0.2	0.05	0.05							
Condition	1/2		7+					0.03	0.032	0.016				
Flotation	4													
Condition	1/2								0.016	0.016				
Flotation	2													
Condition	10		9.4								8.0	1.0	0.10	0.02
Flotation	7													

REMARKS

METALLURGICAL RESULTS

PRODUCT	WEIGHT		ASSAYS					% DISTRIBUTION		
	%	GMS	Pb	Zn	Cu	Ag	Ag	Pb	Zn	
Conc. 1	15.33	76.3	65.3	10.8	1.50	0.01	1.1	62.7	27.3	
Conc. 2	5.75	28.6	17.9	33.8	4.30	0.01	4.0	6.4	32.1	
Conc. 3	1.55	7.7	11.0	8.9	2.20	Tr	2.0	1.1	2.3	
Tail	77.37	385.0	6.16	3.0	0.34	0.01	0.30	29.8	38.3	
Head	100.0	497.6	15.98	6.06						

RATIO OF CONCENTRATION

REMARKS

CONDITIONS AND REAGENTS

POINT OF ADDITION	CONDITIONS			REAGENTS POUNDS PER TON							
	TIME MINS	% SOLIDS	PH	ZnSO ₄	NaCN	AP 404	AX 301	Cresylic Acid	AF242	Na ₂ S	AX 350
Grind	11		6.6	0.2	0.40	0.10					
Condition	1/2						0.03	0.048	0.032		
Flotation	4										
Condition	5									3.0*	0.03*
Flotation	3										

REMARKS

* Added in three stages

METALLURGICAL RESULTS

PRODUCT	WEIGHT		ASSAYS					% DISTRIBUTION			
	%	GMS	Pb	Zn	Cu	Au	Ag	Pb	Zn	Cu	As
Conc. 1	21.29	106.6	51.7	16.4	2.00	0.02	4.4	68.6	60.9	56.1	69.8
Conc. 2	9.92	49.7	40.6	5.0	1.70	0.01	3.4	25.1	8.6	22.2	25.1
Tail	68.79	344.5	1.48	2.54	0.24	Tr.	0.10	6.3	30.5	21.7	5.1
Head	100.0	500.8	16.05	5.74	0.76		1.34	100.0	100.0	100.0	100.0
Conc. 1+2	31.21	156.3	48.2	12.8	1.90		4.1	93.7	69.5	78.3	94.9

RATIO OF CONCENTRATION

REMARKS