Kaiser Cement and Gypsum Corporation Core Boring KC-5 Core Log, Continued

Box No.	Core Recovery	Depth	Description	Notes
	100%	255	Chloritized biotite in upper portion to unaltered in lower portion, fractures coated with gouge	Less alteration and harder rock.
21	70%			
	90%	260		Alternating zones of altered and unaltered quartz monzonite.
	80%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, core is bldly broken, biotite 5% in unaltered grains, plagioclase feldspar is kaolinized, fracture surfaces sometimes coated with gouge, pyrolusite dendrites sometimes present in fractures, slight limonite stain surrounds biotite.	
	100%	265		
22	70%	270		Zone of alteration and soft rock, hematite stain kaolin and sericite are abundant.
				Chloritic stain in intensely altered rock. Hematite stain and gouge on fracture surfaces. Broken zone - abundant kaolinization and soft rock.
	80%	275		Hard rock - core recovered in two foot length. Pyrolusite dendrites on fracture surfaces.

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued

Box No.	Core Recovery	Depth	Description	Notes
22	80%	280	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains associated with some limonite stain.	Abundant pyrolusite dendrites on fractures.
	100%	285		Abundant pyrolusite dendrites on fractures.
23	100%	290		Pyrolusite dendrites on fractures, Hematite stain in plagioclase near "healed" fractures. Rock alteration near fractures.
	100%	295	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in dark grains surrounded by some limonite stain, plagioclase feldspar is zoned.	Sericite in fracture planes up to 1/4 inch. Orthoclase stained by hematite. Pyrolusite dendrites on fractures.
24	15%	300		

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No.	Cobe Recovery	Depth	Description	Notes.
		12		
	15%	11		
		10		
25		305		
		9		
		8		
	40%	7	310	
		6		
		5		
		315	Quartz-monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black platy grains, some sericite and clay alteration	Hard fractured rock.
		4		
	50%	3		
		2	320	Pyrolusite dendrites on fracture surfaces. Limonite stain on fractures.
26	90%	1		
	100%	0		Soft altered rock to 326 feet. Hematite stained gouge on fracture planes.

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No.	Core Recover	Depth	Description	Notes.
26	100%	325		Slickensided fracture surfaces.
			Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black platy grains, some kaolin and sericite alteration.	Kaolinized zone - possibly alteration of basalt-diabase phase, contains pyrolusite and quartz veinlets
		330		
27	90%			Fracture surfaces coated with tiny quartz crystals.
				Kaolin coated fracture surface.
				Fracture surfaces coated with tiny quartz crystals.
		335	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black platy grains, some limonite stain with biotite.	Kaolin and pyrolusite on fractures. Fractures coated with tiny quartz crystals.
	100%			
28				
	90%	340		
				Soft altered rock.
	60%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, some kaolin and sericite alteration.	Hematite and chlorite stained gouge in a fault plane. Pyrolusite dendrites on fracture planes.
		345		
29				Orthoclase feldspar stained with hematite.
				Massive quartz with kaolin filled fractures.

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes.
		12		
				Kaolin gouge in fault planes.
29		11 350		
	95%			
		10	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, rock is recovered in alternating hard and soft zones, fine fragments to 12 inch lengths, intensely fractured at high angles, fractures are healed, slickensides are present.	Fractures coated with tiny quartz crystals.
	100%			
		9		Zone of sericite alteration.
		355		Pyrolusite on fracture surfaces.
	80%	8		
				Intensely crushed soft zone. Some chloritized biotite
30		7		Pyrolusite dendrites on fractures.
	60%			Soft kaolinized zone.
		6 360		
			Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, alternating soft and hard zones, abundant kaolin in soft zones, core recovered badly broken in soft zones and in 2-8 inch lengths in hard zones.	Very soft altered zone
		5		
	100%			
		4		
		365		Intense low angle fracturing, some rock alteration
		3		
1	86%	2		
		1 370		Fault gouge on low angle fracture planes.
2	100%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz	Quartz veinlet in high angle fractures. Hard rock recovered in 2-12 inch lengths.

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No	Core Recovery	Depth	Description	Notes.
32	100%	375	biotite 5% in black grains, alternating soft and hard zones, abundant kaolin in soft zones, core recovered badly broken in soft zones and in 2-8 inch lengths in hard zones.	Limonite stain surrounding biotite.
	90%	380		Plastic clay fault gouge in 2 inch zone with slickensided surface. Fault gouge in low angle fracture planes (30-32 degrees) and in high angle fracture planes (77-80 degrees). Light hematite stain in plagioclase feldspar. Fault gouge has light hematite red stain. Soft rock easily split with finger pressure. Fault gouge and slickensides on fractures, rock is crushed. Intensely broken zone.
	60%	385	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, core is intensely fractured and broken, most alteration along low angle 30-32 degree fracture planes, Intensely fractured zones swell.	Broken zone - fault gouge in fracture planes. Chloritic alteration of biotite.
33	100%	390		Intense fracturing, slickensides, kaolin alteration. Intense fracturing and fault gouge, chlorotized biotite.
	28%	395		Intense alteration and some chloritic stain.

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes.
33	28%			
	50%	400	Quartz monzonite porphyry, orthoclase phenocrysts in a groundmass of plagioclase and quartz, orthoclase up to 1/2 by 1 inch. Plagioclase and quartz average 1/4 inch in rectangular grains, orthoclase makes up 50-60% of rock, biotite 5% in black grains, intensely fractured, pyrolusite dendrites on fracture surfaces	9/23/68 Fault gouge and fractured zone.
34	100%	405		Fault gouge on low angle fractures 1/4 inch thick. Abundant hematite stain in fractured zone. Plagioclase stained pale yellowish brown, soft fault gouge zone.
	100%	410		
	90%		Quartz monzonite porphyry, orthoclase phenocrysts in a groundmass of plagioclase and quartz, biotite 5% in black platy grains, fractures contain fault gouge up to 1/4 inch in thickness having a pale red hematite stain.	
35	100%	415		Pyrolusite dendrites on fractures, intensely altered and crushed, chloritized veinlets traverse the rock and destroy most of primary rock structure. Slickensided surfaces covered with chlorite colored gouge and pyrolusite dendrites and stain. Fault gouge and quartz veinlet.
		420		

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
	50%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, rock is crushed and altered, very soft, kaolin and pyrolusite dendrites on fractures	Fault gouge on fracture planes.
	100%	425		
36				Fractures coated with tiny quartz crystals.
	100%			
	15%	430	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, rock is alternately hard and soft, some intervals crushed.	9/24/68 Broken zone in hard rock - crushed along closely spaced fractures.
				Soft crushed zone with chlorite stain. Gouge in healed fracture. Several slickensided surfaces with fault gouge.
		435		
37	95%			Hard rock recovered in up to 24 inch lengths.
	95%	440		
38	100%		Quartz monzonite, nearly equigranular orthoclase, plagioclase and quartz, a few phenocrysts of orthoclase are present, biotite 5% in black grains, hard, fresh, recovered in up to 4 foot lengths.	Fractures coated with tiny quartz crystals.
	100%			

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes.
38	100%	445		
		450	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, fresh, hard rock, recovered in lengths up to four feet.	
39	100%	455		Gouge in healed fractures, fractures coated with tiny quartz crystals.
	95%			Chloritized biotite and chlorite stain, Fault gouge in fracture planes.
	100%	460	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, fault gouge along "healed" fractures up to 1/2 inch in thickness, hard, fresh rock, recovered in lengths up to 36 inches.	
40	95%	465		Fracture surfaces coated with tiny quartz crystals.

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
1	95%	470	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, fault gouge along "healed" fractures in thin coatings, hard, fresh rock, fractured zones are present.	Pyrolusite dendrites on fractures. Quartz crystals on a 60-70 degree fracture.
	90%	475		Fine textured aplite zone.
2	100%	480	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, hard, fresh rock, recovered in lengths up to 36 inches.	Tiny quartz crystals on fractures, pyrolusite dendrites on fractures. Tiny quartz crystals on fracture surfaces.
	100%			
	95%	485		
	95%	490	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, hard fresh rock, recovered in intensely fractured fragments to 14 inch lengths.	9/25/68 Tiny quartz crystals on fracture surfaces.
	95%			

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
43	95%	495		
			Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black platy grains, hard, fresh rock, some zones are fractured badly both vertically and at 35 degrees and 80 degrees.	Pyrolusite dendrites on fractures.
44	86%	500		
				Fracture contains abundant limonite grains.
				Quartz replacement of orthoclase.
	100%	505		
			Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 3-5% in black grains, some hematite associated with biotite, hard, fresh rock, badly fractured in lower 6 feet of interval.	Pyrolusite dendrites in fracture surfaces.
	90%			Tiny quartz crystals on fracture surfaces.
		510		
				Soft crushed and altered zone 2 inches thick.
45	60%			Aplite zone with more abundant biotite. Pyrolusite dendrites on fractures.
		515		
	80%			Begin soft kaolinized zone, intensely fractured and slickensided.

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
45	80%			
		520	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, intensely crushed and altered, very soft, core easily split with finger pressure, abundant kaolin, abundant hematite stain, sheared zones contain chlorite stain.	9/26/68 Fractures coated with chlorite stain. Fractures coated with tiny quartz crystals
	18%			
		525		Hematite stain with biotite.
46	90%			Intensely fractured zone with possible slight copper stain. Kaolin alteration — abundant hematite impregnation near a 60 degree fracture plane.
		530		Intensely fractured and altered zone — hematite coated fractures spaced 1/8 inch apart, possible slight copper (malachite) stain.
	29%			
		535		Hematite stained closely spaced fractures, sericite and kaolin, some limonite stain.
	95%		Intensely kaolinized and crushed quartz monzonite porphyry, rock is soft, core easily split with finger pressure when wet, abundant limonite and hematite stain.	Abundant tiny secondary quartz crystals in veinlets, soft rock — non-coherent.
47		540		

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes.
47	72%	545		Possible slight copper(Malachite stain)
	40%	550	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, intensely crushed and altered, local harder zones, altered zones vary from fractured slightly altered rock to intensely altered rock which bears no resemblance to the original structure and texture, intensely silicified and kaolinized.	Abundant limonite stain. Possible slight malachite stain.
	90%			Harder slightly altered rock.
48		555		Possible slight malachite stain.
	75%	560		Harder less altered zone, biotite is altered to a dull black kaolin like mass containing limonite grains, minerals are crushed into tiny fragments.
49	100%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in dull altered grains of kaolin like material with limonite stain, intensely fractured coherent rock.	
	95%			

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
49	95%	565	altered with chlorite and possible slight malachite stain along closely spaced fractures, less altered than three intervals above.	
				Possible slight malachite stain.
	100%	570	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in altered dull grains with some chlorite alteration, plagioclase is altered to a dull green talc like material, unaltered stained material is hard, possibly antigorite or simply plagioclase with some stain, possible slight malachite stain along shear fractures locally spaced in intervals of approximately 1/8 inch, rock is intensely altered to kaolin and quartz.	Intensely sheared zone with chlorite in veinlets
50	40%	575		
	100%			Open space quartz crystals, dark brown sulfide void, abundant alteration of plagioclase. Light yellowish brown limonite stain in plagioclase, limonite grain with biotite.
		580		Unaltered quartz monzonite.
51	100%	585	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains with some chlorite alteration in zones, Two thin zones of aplite are present with concentrations of biotite and abundant hematite stain.	Aplite zone with hematite stain. Limonite stained fault gouge in fractures. Intensely fractured zone - rock texture is obscured. Grains of limonite in chloritized biotite.

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes.
	100%	590	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, some local chlorite alteration of biotite containing limonite grains, hard, fractured, fresh rock, orthoclase slightly stained with hematite, recovered in lengths up to 24 inches.	
51	100%			
		595		
	95%			Hematite stained kaolin fault gouge.
		600	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, core is fractured into 6- to 12 inch lengths, some epidote stain is present on plagioclase feldspar.	9/26/68 Limonite stain on fractures, pyrolusite dendrites on fractures Epidote on fracture surfaces.
	100%			
		605		
53				Epidote stain on plagioclase, limonite stain on fractures, pyrolusite stain on fractures, sericite alteration in fractures.
	80%		Sericite, pale green, soft, soapy feel.	
	90%	610	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains	

Kaiser Cement and Gypsum Corporation Core Boring KC-5, Core Log , Continued.

Box No.	Core Recovery	Depth	Description	Notes
	90%		some epidote and hematite stain is present on plagioclase feldspar.	
54	90%	615		Heavy limonite stain on fractures. Pyrolusite near fracture planes. Pale green silicate alteration of plagiocla
	100%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, hard rock fractured into 1 to 8 inch lengths.	Pyrolusite on fracture planes.
55	90%	620		
		625		Soft intensely fractured rock with epidote alteration.
	50%			
	50%	630	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, hard, fractured rock with intensive epidote alteration in biotite, in fractures, and in plagioclase feldspar.	
56	95%			

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
	95%	635		More intense healed fractures and alteration to epidote, hematite stain on orthoclase.
56	40%	640		
	25%	645	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, intense fracturing and epidote alteration, some limonite and pyrolusite stain.	10/2/68
57	95%	650		Epidote alteration along veinlet with sparse limonite pseudomorphs.
58	50%	655	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, rock is fractured vertically, fractures are slickensided and contain a thin coating of gouge with hematite stain, some zones are intensely fractured	10/8/68

Kaiser Cement and Gypsum Corporation, Core Boring KC-5, Core Log, Continued.

Box No.	Core Recovery	Depth	Description	Notes
	100%		epidote alteration is present in fractures and grains replacing biotite, possible sparse sulfide in biotite.	
58	100%	660		Pyrolusite dendrites in fractures. Thin sericite bed. Green alteration in plagioclase.
	100%		Sericite, pale yellowish green, soft, contains black grains of a mica like mineral which disintegrates in nitric acid, but is not decomposed, negative silver test, dark mineral is probably present in carbonates which effervesce in nitric acid.	Hematite alteration of biotite mica.
	100%	665		Pyrolusite dendrites in fractures
59	95%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 5% in black grains, rock is fractured into 1 to 8 inch lengths, fractures are slickensided and coated with a thin gouge coating with hematite stain, more low angle fracturing than above interval but less alteration to sericite	
	100%	670		Cubic limonite pseudomorphs in biotite.
	100%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, plagioclase has an incipient green silicate alteration, probably epidote, biotite 5% in black grains, upper half of interval is hard unaltered rock, lower half is intensely crushed and altered, fractures are coated with hematite stained thin gouge coatings, possibly deuteric effects.	8/8/68 Limonite pseudomorphs in biotite. Tiny crystals of probable sulfide near limonite filled veinlets. Intensely crushed zone, altered, slickenside crushed quartz veinlets are present, abundar hematite stain on slickensided surfaces, locally makes up a large portion of rock.
50	90%	675		Crushed zone with some rock alteration, cubic limonite pseudomorphs.
51	100%			

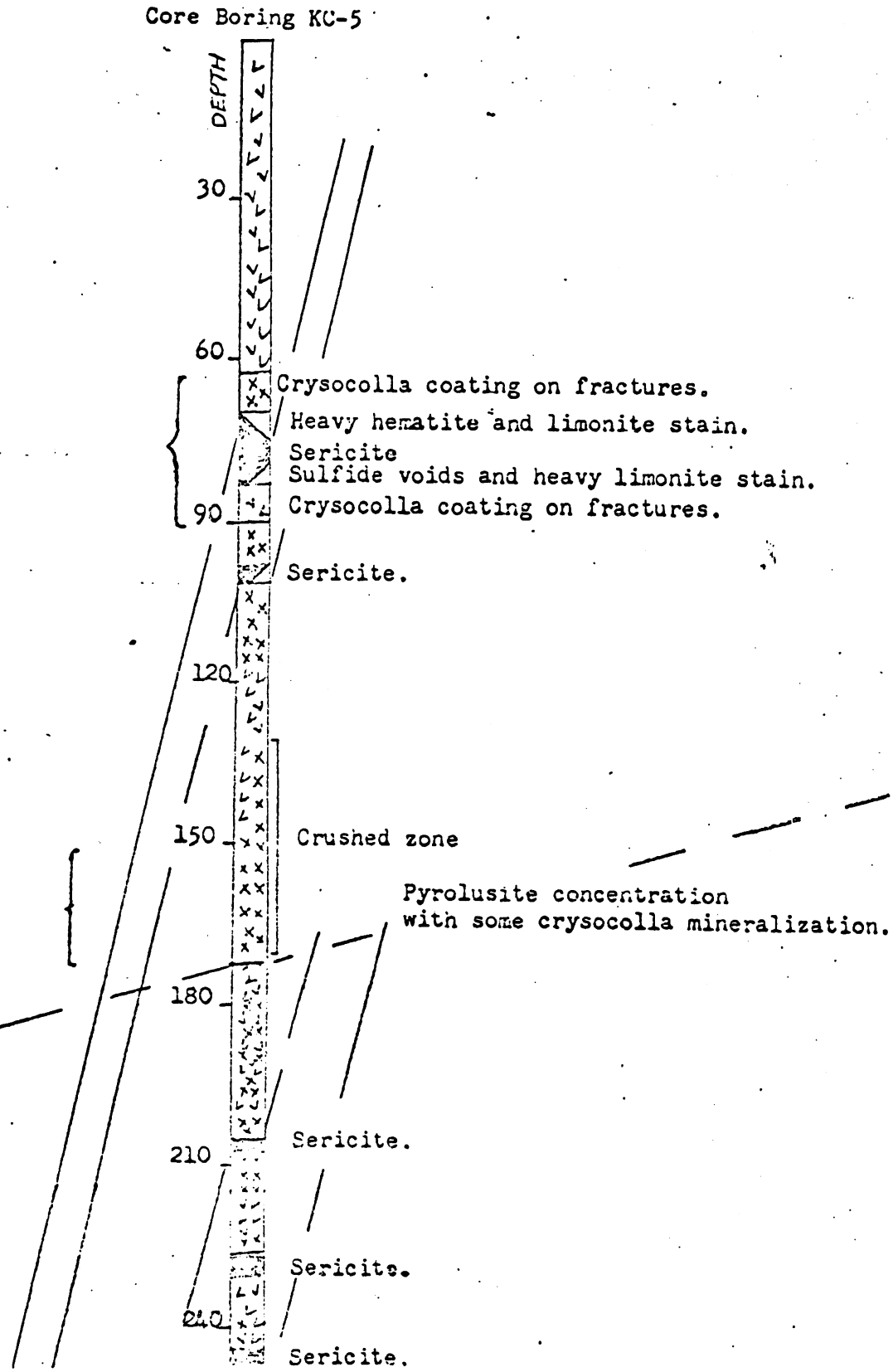
Box No.	Core Recov.	Depth	Description	Notes.
51	95%	681 685	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, bleached plagioclase has some pale yellowish brown limonite stain, intensely fractured rock with little alteration, recovered in what drillers term "gravel" to 8 inch lengths.	Very sparse tiny grains of sulfide in orthoclase cleavage - bornite? Pyrolusite on fracture surfaces. Sparse sulfides in tiny grains in orthoclase cleavage.
	45%	689		Sparse tiny grains of sulfide in orthoclase cleavage.
52	30%	693	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 2-3% in black grains, intensely crushed and broken, slickensided surfaces are coated with hematite stained gouge, some zones intensely altered to kaolin, some epidote or talc alteration in plagioclase.	Very fine fragments recovered in broken zone. Sparse very fine grained sulfide in biotite.
	65%	697		Intense slickensided and altered zone.
	90%	701		Sparse tiny grains of sulfide in orthoclase cleavage.
53	80%	705	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 2-3% in black grains, core is fractured into 1 to 2 inch lengths by 30 degree fractures, slickensided surfaces are coated with hematite stained fault gouge, rock is hard and unaltered but badly fractured.	
	57%	709 713		
54	50%	717	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz,	Pyrolusite dendrites on fractures.

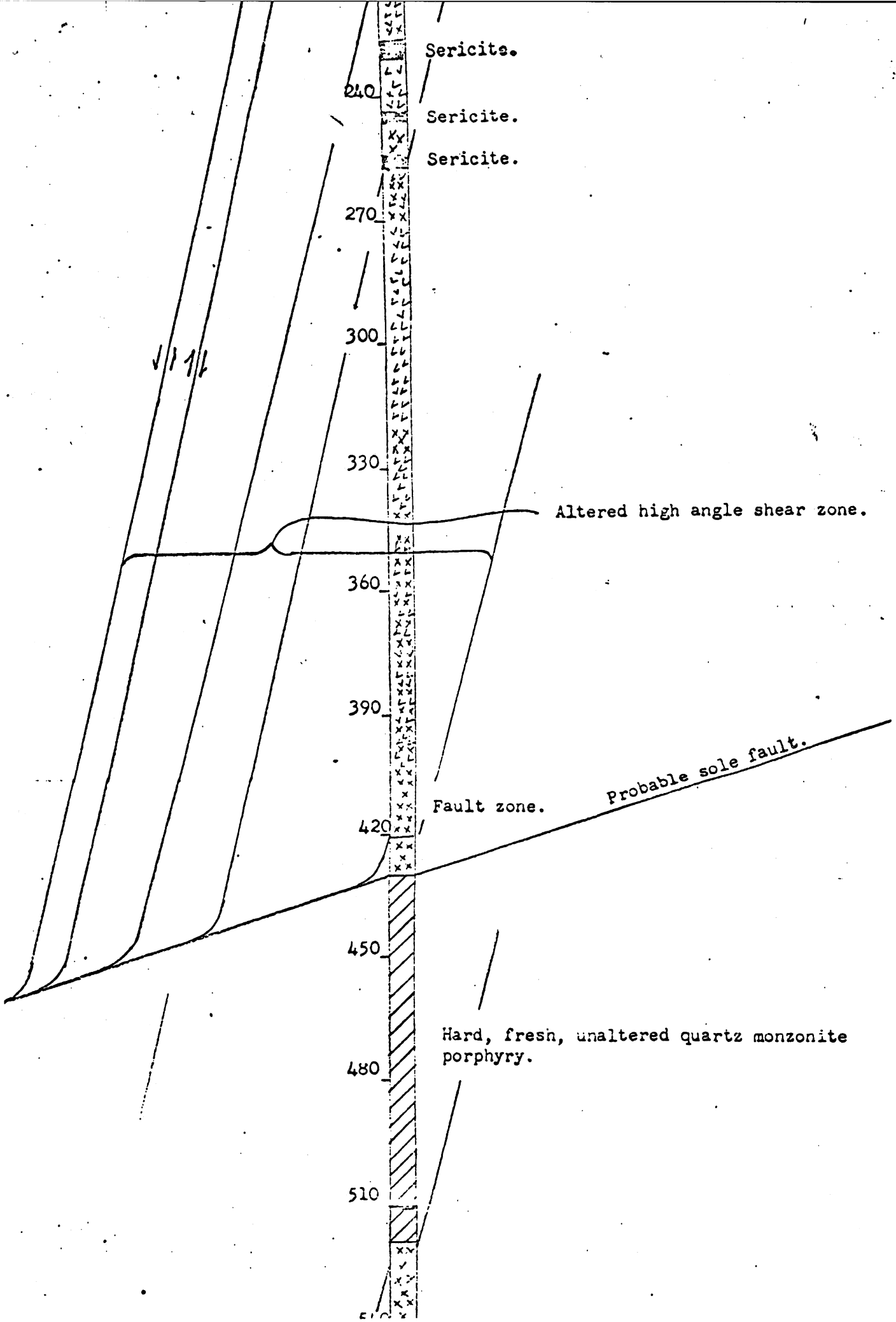
Box No.	Core Recovery	Depth	Description.	Notes.
	50%		plagioclase bleached and stained with limonite, biotite 2-3% in black platy grains, rock is less altered than interval above, sheared into closely spaced healed fractures.	
		719		Intensely sheared zone with silicified feldspars
54	75%			Intensely altered zone, kaolin and quartz
				Slickensided and altered zone.
		723		
	100%			
	100%	727	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, plagioclase is altered to kaolin and bleached, biotite 2-3% in black grains, rock is sheared at 70 to 80 degrees by closely spaced fractures, hard rock recovered in 1 to 18 inch lengths.	Abundant tiny quartz crystals coating fractur
	100%			Pyrolusite dendrites on fractures.
		731		
55				Sparse tiny grains of gunmetal metallic sulfi
	100%			
		735		Abundant tiny quartz crystals coating fractur 10/8/68
	80%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, plagioclase is kaolinized and stained pale yellowish brown by limonite, rock is alternating hard sheared zones and soft, crushed and altered rock.	
		739		Intensely kaolinized zones, soft rock.
				Silicified zone.
	50%			
		743		
66				Sparse blue metallic sulfide grains in biotite.
	100%			
		747	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, plagioclase bleached and slightly kaolinized, hard rock, recovered in lengths up to 14 inches, some chlorite alteration of biotite.	Possible tiny grains of metallic sulfide in biotite. Limonite grains in biotite and chlorite alteration of biotite.
	100%	751		
67				Small grains of metallic sulfides in biotite.
		755		

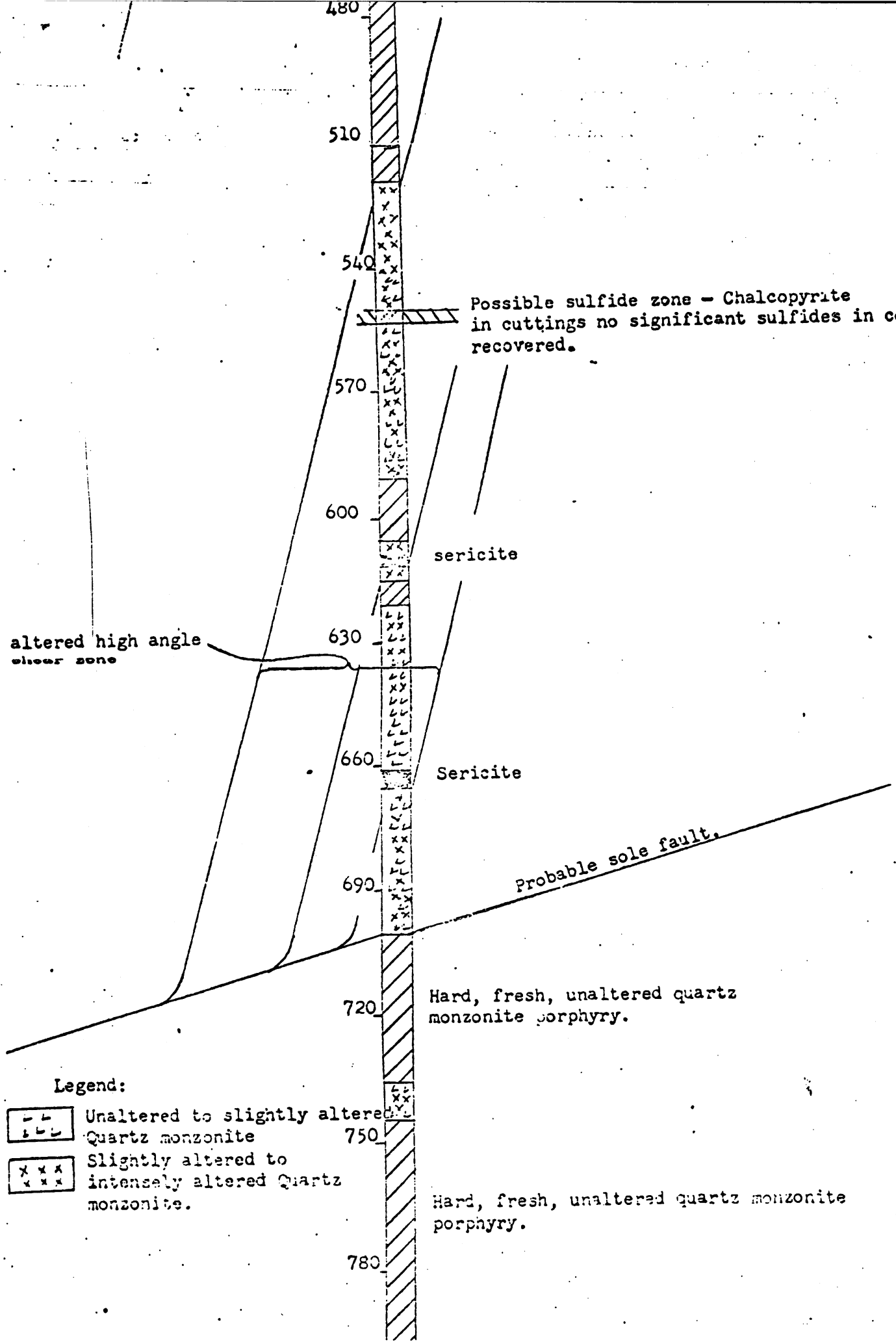
Box No	Core Recovery	Depth	Description	Notes
67	95%	757		
68	100%	761	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 3-5% in black platy grains, some zones have chlorite alteration of biotite, hard rock, recovered in lengths up to 12 inches, fractures are at angles of 30 degrees and 45 degrees.	Iridiscent grains of bornite or pyrolusite on fractures. Epidote and chlorite alteration of biotite to 767.
		765		
	10%			
69	100%	769	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 3-5% in black platy grains, chlorite and epidote is present in fractures and in biotite, hard rock, rocovered in lengths up to 15 inches, widely spaced fractures have 30 degree and 45 degree dip.	Limonite grains associated with biotite are present.
		773		Abundant probable limonite with biotite.
70	90%	777	Massive orthoclase rock, contains 10-15% of quartz, plagioclase, and mica, orthoclase is stained by hematite, large phenocrysts up to 2 inches by 2 inches in size, coarse textured biotite.	One grains of unweathered pyrite or chalcopyrite with biotite. Entire interval has 1-2% limonite and hematite grains with biotite, only one sulfidd void was noted,
		781		
71	100%	785	Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase and quartz, biotite 3-5% in black platy grains, limonite grains in biotite make up 1/2 to 1 percent of rock, hard, unweathered, slight hematite stain in orthoclase, epidote alteration is present in a small number of biotite grains, recovered in lengths up to 30 inches, widely spaeed fractures dip at 30 degrees.	784 to 794 - Limonite grains in biotite make up 1/2 to 1 percent of rock.
	100%	789		Pyrolusite dendrites in fractures.
		793		

Box No.	Core Recovery	Depth	Description	Notes.
71	100%		Quartz monzonite porphyry, phenocrysts of orthoclase in a groundmass of plagioclase i and quartz, biotite 3-5% in black platy grains, limonite grains in biotite make up 1/2 to 1 percent of rock, rock is hard, broken into tiny chips and up to 8 inch lengths, fractures dip 45 and 70 degrees.	
		795		
72	100%			
		799		
			Total Depth - 800 feet.	

Generalized Graphic Log of Core Boring KC-5 Showing Rock Alteration and Interpreted Faulting.




Sericite.
240
Sericite.
Sericite.
270
300
330
Altered high angle shear zone.
360
390
Probable sole fault.
Fault zone.
420
450
Hard, fresh, unaltered quartz monzonite porphyry.
480
510


480
510
540
570
600
630
660
690
720
750
780
Possible sulfide zone - Chalcopyrite in cuttings no significant sulfides in core recovered.
sericite
altered high angle
shear zone
Sericite
Probable sole fault.
Hard, fresh, unaltered quartz monzonite porphyry.
Hard, fresh, unaltered quartz monzonite porphyry.
Legend:
Unaltered to slightly altered Quartz monzonite
Slightly altered to intensely altered Quartz monzonite.

DN

INTER-OFFICE MEMORANDUM

TO John E. Kinnison
AT Tucson

DATE April 24, 1972

FROM Joseph J. Durek J.D. (la)
AT Oakland, 2026 KB

J. E. K.

MAY 2 1972

COPIES TO

SUBJECT COPPER-ARIZONA
Red Hills Property

Enclosed is data copied from the Kaiser Cement & Gypsum file on exploration of the Red Hills property, southeast of Florence. No copy is being retained in Oakland.

The sections and graphical logs have not been assembled, and fracture diagrams at the right side of the log for KC-10 were not copied

Your appraisal of this property as spaced shear zones appears confirmed. Note manganese and weathered (?) biotite logged below 2,000-feet, and also speculated thrust faulting.

The project geologist appears to have lacked experience and had a great imagination, but he has been good in his descriptive work, if not in the interpretative efforts. Note the "cyclic" chalcocite-oxide discussion, which must have been influenced by Humphrey, the geophysical consultant. Also, the pyrrhotite logged at depth is probably introduced and is something like cobalt-bonded bit matrix, perhaps.

Please hold this information until the competitive picture is clarified, as stated in my previous memo. I will contact you on April 28 if possible.

Looking May 2 JJD

JJD:la
enclosure

WILLARD C. LACY
4034 EAST BURNS STREET
TUCSON, ARIZONA 85711

October 28, 1968

Mr. Donald F. Towse
Kaiser Cement and Gypsum Corp.
Permanente, California 95014

Florence Prospect
Project 11A

Dear Don,

I'm sorry to be delayed in getting this note off to you to report on my visit to the Florence Prospect with Bob Reppert on October 23rd. It was a most interesting and informative visit.

There are two types of deposits which may exist within the claim area: 1) oxidized copper mineralization along shear zones that may widen into pipe-like bodies at intersections, and 2) bulk-low-grade deposits.

Drilling in both holes #1 and #5 have been directed toward exploring the first type. They have been located in areas of outcrop displaying these steeply dipping and altered shear zones. They have verified the depth continuity of mineralized zones displayed on the surface, and they have also shown that there is little mineralization disseminated between the shears. There is a reasonable chance that shallow holes directed to intersections of the shear zones would result in the discovery of several million tons of leachable oxide copper ores, located near the surface and mineable by small pits or glory-holes. If this is an attractive target to Kaiser, then I would suggest using rotary-percussion type drilling and shallow holes on 50-foot grids at the intersections. A likely grade would be 1-1.5% copper.

None of the drilling to date has been truly directed toward the second type of a deposit. The major portion of the area overlying the geophysical anomaly is hidden by alluvial cover, so we know very little about alteration and mineralization of this area. Weak copper mineralization along shears and confined alteration does occur in the outcrops peripheral to the covered anomaly. It was the attraction of this anomaly that drew you to the area in the first place, and it would make little sense to abandon the project without putting down a test hole in the center of the anomalous area -- testing not for shear intersections but for wide disseminations.

The principal rock type in the area is Precambrian granite, cut by Late Precambrian diabase dikes, with the entire complex cut by Laramide (?) dikes of latite and quartz latite, etc. The entire area is capped locally by tuffaceous beds (ignimbrite) and alluvium. I see nothing in the exposed rock to eliminate the strong possibility of a Laramide stock coincident with the location of the anomaly.

Respectfully submitted,

Willard C. Lacy

cc:WCH

Kaiser Cement and Gypsum Corporation - Project A-11, Florence, Arizona.

Introduction

The project area includes all or parts of Section 2, Section 3, Section 10 and Section 11, T5S, R11E and is located approximately 12 miles east of Florence, Arizona. Outcrops are present over the northeast corner of Section 3, the northeast 2/3 of Section 2, and the eastern portion of Section 11, T5S, R11E. The southwest 1/3 of section 2, nearly all of the portion of section 3 covered by Kaiser Claims, and section 10 are covered by alluvium. Alluvium is present in thicknesses greater than the 70 to 100 foot depth penetrated by Core Boring KC-2, KC-3, and KC-4 drilled relatively close to the bedrock outcrops. Probably a fault is present which protected the alluvium from erosion. Major structural trends are northwest (basin and range structures - possibly laramide), northeast (probably Pre-Cambrian), and east-west (typically Pre-Cambrian). Several later stages of mineralization may follow Pre-Cambrian structural patterns where open space or pre-existing lines of structural weakness are present. Structural features are most easily studied in Box O wash which is immediately east of Section 2 and trends North-South.

Rock Type Definitions and Descriptions:

Quartz Monzonite: A porphyritic quartz monzonite is present over the entire area in surface exposures and in the core borings drilled to date. This definition is purely subjective and descriptive of the rock as it is present in outcrops and in the core recovered. One of the rock forming minerals is large orthoclase phenocrysts which may have resulted from "potassic" alteration which is commonly present with a porphyry copper orebody. If the orthoclase phenocrysts are epigenetic the rock is probably a quartz monzonite or sodic granite with light gray orthoclase or microcline, (microscopic examination is neceasary to determine microcline), sodic plagioclase, and quartz.

From examination under the binocular microscope the orthoclase present in cuttings has some widely spaced twinning indicative of perthite (intergrown orthoclase and albite) but it has not been determined which orthoclase generation contributed the albite twinning. Microscopic examination will be necessary to determine the mineral types present. Microcline is unfavorable in some cases to porphyry copper mineralization indicating an unfavorable chemical equilibrium for ore formation.

Quartz: Quartz is present in two or more generations. Igneous quartz is present as anhedral grains as would be expected in normal igneous rock. Grains of tiny intergrown crystals of similar size to igneous quartz are present. Greenish black secondary biotite is present as intergrowths in this quartz occurrence. A third occurrence is present as quartz veinlets in fractures where more intense silicification occurs. The rock is very hard in these zones as would be expected when rock forming minerals are saturated with quartz.

Diabase: Diabase is a textural term defining a rock containing plagioclase feldspar laths of calcic composition in a groundmass of dark minerals which are usually pyroxene. The rock is therefore a gabbro with an easily recognized texture. Diabase is present in narrow dikes which locally widen at intersections, and as irregular pods in low-angle north dipping fault planes. Mineralization was noted in shear zones associated with the diabase, however, no mineralization is present in the diabase as in the occurrence at Ray, Arizona to the east.

Quartz Monzonite Dikes: A fine textured dike rock is present with orthoclase phenocrysts in a groundmass of plagioclase and quartz of possible laramide age. The most extensive occurrence is shown on Cross Section II accompanying this report. Much float is present in the area of our geophysical anomaly in section 2 of this rock type, however, the finer textured phases are more resistant and are intermixed with other alluvium. Possibly a greater concentration of this "Laramide" rock is present in this area.

The argument against a large amount of fine textured quartz monzonite at this location is that most occurrences with finer textures form bold outcrops.

Quartz Diorite and Quartz Latite: Dikes occur with thicknesses of up to 50 feet. When weathered this rock has a phaneritic appearance and a light gray color. Fresh rock is green colored on fracture surfaces. This is the rock type which was termed "diorite" in core boring KC-1 in the interval from 80 to 150 feet. This is an unfavorable rock type for porphyry mineralization. The rock present near the dike walls is magnetiferous and has been classified tentatively as a basalt. Rock classifications reported are subject to revision when a petrographic microscope is available to study the rock forming minerals in greater detail.

"Pegmatitic" Orthoclase-Quartz Phase: Dikes are present northwest and north of Core Boring KC-1 and north and south of Core Boring KC-5 containing coarse to fine textured pegmatitic phase granite. Locally abundant tourmaline and some muscovite mica are present. Gradations to massive quartz are also present. The trend is north-south near core boring KC-1 and east-west near core boring KC-5. This occurrence can be attributed to pre-Cambrian igneous activity when the enclosing coarse textured rock was formed. A second alternative much more optomistic to exploration is the result of "potassic"alteration accompanying mineralization which may be indicated by orthoclase phenocrysts in the coarse textured granitic phase.

Volcanic Ash or Tuff: A prominent ridge in Section 2 is capped by indurated volcanic ash of aphanitic texture with visible biotite crystals. Areas are also present to the east and north floored by indurated volcanic ash. Abundant tuff float is present northwest of Core Boring KC-5 but none was found in place.

Regional Relationships:

A small plug of fine textured quartz monzonite occurs at an intersection in the east central portion of Section 2, T5S, R11E (See Cross Section II).

The texture and occurrence is similar to the "Laramide" intrusive postulated in this area. In the north 35 degrees east structural trend to the southwest in core boring KC-5 an extremely altered zone is postulated as this quartz monzonite rock. Highly prospective drilling locations are slightly south of core boring KC-5 and in the location of a geophysical anomaly to the northwest of boring KC-5.

The proposed location for drilling the geophysical anomaly in section 2, T5S, R11E in a complex structural intersection. The north 45 degrees west zone dipping south penetrated by boring KC-5, a north 60 degrees west zone dipping north, and the north 80 degrees east zone shown near the northern edge of Cross Section II will all intersect in this anomalous area. The greatest problem is to avoid kaolin altered rocks which may be the result of weathering by ground water.

Major north dipping faults in Box O Wash north of Section 2, T5S, R11E are associated with intrusive diabase and diorite near or in the fault zone. Core Boring KC-1 appears to be near a similar contact with a north dipping dike rock. Mineralization is present in shear zones associated with these zones in Box O wash outcrops. Mineralized shear zones in the Kaiser claim group are postulated to result from mineralization by solutions emanating along this major structural zone of weakness. The depth of the major sole fault is a matter of speculation, however, the fault located near core boring KC-1 is expected to be of major proportions. Faults are anticipitated at 175 to 200 foot intervals and can be confirmed by gouge zones and at greater depth by mineralization. At locations where low angle (30 to35 degree) fractures accompanied by alteration and gouge zones a thrust fault has been interpreted. Mineralized 80 to 85 degree fracture zones were encountered in Core Boring KC-1 below 395 feet depth.
The veinlets containing sulfides are irregularly spaced - occurring from a few inches to several feet apart. A number of the fractures were weathered to the total depth drilled and contained limonite.

Structural Geology: Low angle thrust faults are present dipping both north and south. The south dipping fault zones do not contain intrusive rocks but alteration to sericite and mineralization has been observed to occur in the north 45-60 degrees west and north 60 degrees east fault and shear zones in core boring KC-5. The north dipping fault zones contain dikes and sill like igneous intrusive rocks in outcrops observed in Box O Wash. Copper mineralized shear zones accompany the finer textured rocks which have been explored by pits and shallow shafts. Generally the zones are narrow but some have widths up to 100 feet at intersections. The copper mineralization is paint and incrusted fracture planes with crysocolla mineralization. Shearing obscures true dip in many cases, however, the outcropping quartz diorite dikes south of core boring KC-1 was encountered in drilling at 73 feet indicating a 45 degree north dipping igneous body occupying a fault plane. Mineralized sericite outcropping 25 feet north of core boring KC-5 was encountered at 62 feet depth proving a south dipping mineralized zone. The structural interpretation shown on the accompanying cross-sections is in agreement with these observations. Thick zones of unaltered intensely crushed rock were encountered in Core Boring KC-5. Rock textures were not obscured, however, the core rocovered could be easily split by finger pressure. A fine textured quartz monzonite plug in the same north 45 east trend (See cross-section II) appears to be forcibly emplaced. If the crushed rock was formed in a similar manner an intrusive "Laramide" plug may be present in or very near Core Boring KC-5. Shear zones are slightly silicified and bleached in the north 80 degrees west to east-west to north 80 degrees east directions. The northwest fault zones usually are sericitized and contain copper silicates. The north 60 degrees east zones are sericitized and contain intersections of "high grade" copper carbonates and silicates.

Mineralization occurs where steep dipping and low dipping fault planes intersect.and/or where dip changes occur. Copper mineralization has been observed to occur in areas where outcrops are found indicating more resistance to erosion probably because of silicification.

Rock Alteration:

Potassic Alteration: Core Boring KC-1 and KC-5 both contain probable secondary orthoclase feldspar highly prospective to accompany porphyry copper mineralization. "Fresh" rock has a light gray appearance and lacks the pink phenocrysts of orthoclase interpreted as secondary feldspar. More intense alteration is probably confirmed by pegmatitic granite dikes near core boring KC-1 and KC-5. Epidote alteration sometimes occurs in the granitic pegmatite dikes. At Ajo, Arizona the pegmatite dikes were surrounded by large amounts of sulfide mineralization. (The pegmatitic rocks were mined out before 1944). On this basis both Core Boring KC-1 and KC-5 were extremely well located from a geologic point of view.

Sericite and Kaolin Alteration: Sericite is a phase of "potassic" alteration whereby potassium mica (muscovite) is formed rather than feldspar in the presence of water. Sericite is a later stage than orthoclase and the two probably span the time when sulfide mineralization occurs. Orthoclase is an all pervasive alteration type which effects largelareas. Sericite also effects large areas in some cases, however, in the project A-11 area the intense sericite alteration is confined to fractures and shear zones with less intense zones grading outward from the linear alteration center. A controversy exists as to the origin of kaolin alteration from weathering or from hydrothermal alteration. An excellent possibility exists that the intensely clay altered rock in core boring KC-5 resulted from hydrothermal solutions. The proximity of an intrusive igneous plug is postulated as the source of this intense alteration.

In the deeper part of core boring KC-1 more sericite and kaolin alteration is present accompanied by a much higher sulfide content and sparse molybdenite. The high sulfide content appear to be concentrated near fault planes. Oxidation and reduction cells may be present to control deposition of native copper near the water table.

Conclusions and Recommendations:

1. A drill hole is tentatively recommended 300 feet south of Core Boring KC-5 to test for disseminated ore and possible high grade intersections.

2. A drill hole is recommended to test the center of a geophysical anomaly present in section 2, T5S, R11E.

3. Drill holes inclined to follow sericite zones and test mineralized intersection as shown on Section 1 is recommended.

4. From a practical standpoint an open pit could be developed more easily in Box O Wash because of the open face present there. It is recommended that additional geophysical and geologic effort be expended to test this possibility.

5. Further testing is recommended to determine what proportion of the excavation cost for an open pit could be paid by leaching surface copper showings and/or whether a leach operation could be initiated to produce copper on a commercial scale.

6. Major north dipping thrust faults are associated with intrusive fine textured igneous rocks and surface showings of copper mineralization.

7. Major south dipping thrust faults have wide gouge zones, sericite alteration, and copper mineralization assiciated with their formation.

8. Because of a lack of identifiable markers no estimate of fault displacement has been attempted. Field evidence indicates, however, that major displacements were earlier than the tuff which caps the prominent ridge in Section 2, T5S, R11E. and is present in other scattered outcrops in the surrounding area.

9. Chlorite alteration coincides with zones of lower or no sulfide content. Chlorite alteration is postulated to be later than sulfide deposition or a phase where mineralization did not occur.

10. Sulfide mineralization occurs associated with dark minerals and in veinlets filling high angle fractures.

11. Sparse molybdenite mineralization occurs at approximately 810 feet depth in Core Boring KC-1.

CAMBIOR

November 12, 1992

Martin McKenna
GILA RED HILLS MINING LTD.
2290 W. Broadway Road
Apache Junction, AZ 85220

Dear Martin:

Enclosed are the locations and results from the last sampling which Cambior conducted on your Red Hills property. I wish you the best of luck with your claims. If I can be of any help don't hesitate to call.

Sincerely,

CAMBIOR EXPLORATION USA, INC.

Randy Moore
Senior Geologist

RM:lat
Encl.

Cambior Exploration USA, Inc.

230 South Rock Blvd., Suite #23, Reno, Nevada 89502-2345, USA, Telephone 702-856-5189, Fax 702-856-4549

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

R E P O R T S U M M A R Y Report:[9200881 R]

A N A L Y T I C A L R E P O R T

Origin Inception Date:[Oct 13, 1992]

Client:	135	Cambior Exploration USA, Inc.
Contact:		Nick Barr
Project:	0	304
Amount/Type:	42	Rock

Analytical Requisition

Geochemical:[ICP(AqR)30]
Assay:[Cu>.2% = OxCu Cu>1% = Assay] ICP:[30]
Comments:[None]

Delivery Information Reporting Date:[Oct 15, 1992]

Principal Destination (Hardcopy,Fascimile,Invoice)

Company:[Cambior Exploration USA, Inc.]
Address:[230 South Rock Blvd., Suite 23]
City/Province:[Reno, NV]
Country/Postal:[USA 89502-2]
Attention:[Randy Moore/Nick Barr]
Fascimile:[702/856-4549]

Secondary Destination (Hardcopy)

Company:[ ]
Address:[ ]
City/Province:[ ]
Country/Postal:[ ]
Attention:[ ]
Fascimile:[ ]

2 data pages in this report. Approved by: _____

B.C. Certified Assayers

iPL CODE: 921015-15:33:40

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Report: 9200881 R Cambior Exploration USA, Inc. Project: 304

Sample Name	Type	Cu %	Ox Cu %	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm
06268	Rock 4'	--	--	1.9	537	<2	6	<5	<5	<3	9	<10	<2	<0.1	2	3	78
06269	Rock 3'	--	0.21	0.1	2384	5	9	7	<5	<3	4	<10	<2	<0.1	2	4	26
06270	Rock 3'	--	0.73	<0.1	7974	5	19	11	<5	<3	7	<10	<2	<0.1	3	6	23
06271	Rock 4'	--	--	0.1	166	16	<1	10	<5	<3	22	<10	<2	<0.1	1	2	81
06272	Rock 4'	--	0.26	<0.1	4107	30	38	62	<5	<3	6	<10	<2	<0.1	3	4	41
06273	Rock	4.44	4.26	<0.1	4.7%	31	56	60	<5	<3	22	<10	<2	<0.1	2	5	193
06274	Rock 8'	--	--	2.0	530	374	3	88	<5	<3	15	<10	13	<0.1	4	6	160
06275	Rock 4'	--	--	<0.1	224	3	4	<5	<5	<3	4	<10	<2	0.1	1	5	20
06276	Rock 2'	--	--	<0.1	124	4	2	<5	<5	<3	2	<10	<2	<0.1	2	3	7
06277	Rock 4'	1.72	1.68	0.8	18636	120	289	25	<5	<3	3	<10	5	<0.1	6	4	193
06278	Rock	2.36	2.22	0.7	2.2%	23	28	22	<5	<3	10	<10	2	0.1	40	12	113
06279	Rock 6'	--	0.23	0.5	2878	4	6	9	<5	<3	6	<10	<2	<0.1	10	3	25
06280	Rock 2'	--	--	<0.1	464	<2	6	11	5	<3	4	<10	<2	<0.1	2	5	29
06281	Rock 1'	2.55	2.44	<0.1	2.5%	22	34	9	<5	<3	8	<10	19	<0.1	9	6	35
06282	Rock 2'	--	0.89	0.2	9764	6	10	22	<5	<3	2	<10	<2	0.1	1	2	14
06283	Rock 1'	8.58	8.20	4.6	9.1%	19	80	10	<5	<3	18	<10	<2	<0.1	3	4	190
06284	Rock 10'	--	--	<0.1	463	12	17	13	<5	<3	4	<10	<2	0.6	3	3	17
06285	Rock 5'	--	--	<0.1	235	<2	6	8	<5	<3	5	<10	<2	<0.1	2	4	79
06286	Rock 15'	--	--	0.5	809	68	24	28	5	<3	20	<10	5	<0.1	22	12	35
06287	Rock 5'	--	--	<0.1	190	<2	11	<5	<5	<3	3	<10	<2	<0.1	6	3	17
06288	Rock 20'	--	--	0.2	585	<2	6	<5	<5	<3	2	<10	<2	<0.1	2	3	15
06289	Rock 3'	--	--	<0.1	34	<2	<1	5	<5	<3	3	<10	<2	<0.1	3	5	10
06290	Rock 2'	2.23	2.20	<0.1	2.3%	15	37	15	<5	<3	8	<10	<2	<0.1	2	6	147
06291	Rock Dump	1.96	1.96	<0.1	2.1%	24	25	259	<5	<3	14	<10	<2	<0.1	2	3	26
06292	Rock 15'	--	--	<0.1	1705	55	5	398	<5	<3	49	<10	3	<0.1	3	3	17
06293	Rock FW	1.26	1.19	<0.1	12252	37	12	194	<5	<3	8	<10	<2	<0.1	1	2	30
06294	Rock	--	0.38	<0.1	4152	9	35	11	<5	<3	4	<10	<2	<0.1	12	13	143
06295	Rock 5' } cond. Chip	--	0.19	<0.1	2330	7	24	19	<5	<3	7	<10	<2	<0.1	9	8	110
06296	Rock 6' }	--	0.99	0.2	9735	11	14	18	<5	<3	11	<10	<2	<0.1	4	6	75
06297	Rock 7' }	--	0.56	<0.1	5956	12	41	20	<5	<3	6	<10	<2	<0.1	10	11	157
06298	Rock 1'	1.30	1.27	<0.1	13415	48	12	31	<5	<3	11	<10	<2	<0.1	1	1	12
06299	Rock 1'	--	--	1.3	217	8	1	7	5	<3	21	<10	<2	<0.1	2	5	26
06300	Rock 2'	--	0.33	<0.1	3808	10	11	23	<5	<3	4	<10	<2	0.1	1	2	34
06585	Rock	1.50	1.47	<0.1	15950	15	41	122	8	<3	2	<10	<2	<0.1	3	8	229
06586	Rock	--	--	0.1	1037	2	77	9	<5	<3	2	<10	<2	<0.1	15	17	395
06587	Rock 2'	--	--	3.6	213	7	<1	7	<5	<3	8	<10	<2	<0.1	1	3	135
06588	Rock 9'	1.82	1.77	<0.1	17591	10	46	11	5	<3	2	<10	<2	<0.1	11	13	329
06589	Rock	3.42	3.41	<0.1	3.5%	62	50	43	6	<3	11	<10	28	<0.1	45	9	975
06590	Rock 3'	2.20	2.17	0.4	2.3%	18	52	29	8	<3	4	<10	<2	<0.1	2	2	205
Minimum Detection		0.01	0.01	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2
Maximum Detection		100.00	100.00	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	10000.0	10000	10000	10000
Method		Assay	Assay	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Report: 9200881 R Cambior Exploration USA, Inc. Project: 304

Sample Name	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
06268	<5	79	15	39	4	14	1	1	<0.01	0.34	0.07	2.55	0.09	0.30	0.01	0.02
06269	<5	98	15	38	5	58	<1	1	0.01	0.42	0.21	2.01	0.06	0.24	0.02	0.02
06270	9	99	19	34	3	39	<1	2	<0.01	0.41	0.17	2.11	0.05	0.21	0.02	0.03
06271	6	92	20	20	3	44	<1	1	<0.01	0.36	0.10	2.35	0.02	0.16	0.01	0.01
06272	10	47	33	170	<2	35	1	2	0.01	0.75	0.61	2.85	0.13	0.26	0.02	0.03
06273	31	54	28	195	<2	21	<1	1	<0.01	0.43	0.20	3.97	0.05	0.21	0.01	0.10
06274	46	125	70	32	<2	13	1	<1	0.01	0.08	0.11	10%	0.03	0.06	0.01	0.03
06275	5	124	8	28	6	9	<1	1	0.01	0.29	0.24	1.76	0.03	0.28	0.01	0.02
06276	21	62	12	22	22	10	<1	<1	0.04	0.27	0.06	6.1%	0.03	0.27	0.01	0.01
06277	11	92	17	180	7	14	<1	1	<0.01	0.40	0.37	2.36	0.07	0.30	0.02	0.09
06278	33	77	50	215	<2	23	<1	1	<0.01	0.33	0.12	8.9%	0.02	0.13	0.02	0.10
06279	13	119	16	57	3	24	<1	1	<0.01	0.30	0.16	2.92	0.03	0.24	0.02	0.03
06280	<5	59	39	47	3	19	2	1	0.01	0.59	0.30	4.89	0.05	0.26	0.02	0.03
06281	16	65	32	136	5	7	1	1	0.01	0.54	0.10	5.6%	0.14	0.30	0.01	0.07
06282	6	100	15	19	6	123	<1	1	<0.01	0.50	0.17	1.19	0.02	0.18	0.01	0.03
06283	31	93	20	18	<2	20	<1	2	<0.01	0.25	0.10	2.31	0.03	0.17	0.01	0.17
06284	<5	77	20	76	3	13	<1	3	0.01	0.36	5.23	1.62	0.10	0.18	0.03	0.05
06285	<5	118	22	47	3	42	<1	1	0.02	0.53	0.25	2.43	0.22	0.31	0.02	0.02
06286	31	126	39	266	4	23	1	1	0.01	0.35	0.56	7.2%	0.05	0.24	0.02	0.06
06287	<5	109	12	65	3	7	<1	1	<0.01	0.26	0.10	1.28	0.03	0.24	0.02	0.02
06288	<5	100	7	36	11	5	<1	1	0.02	0.27	0.02	2.67	0.02	0.27	0.02	0.01
06289	38	23	20	43	8	6	<1	1	0.01	0.30	0.03	8.9%	0.02	0.27	0.01	0.02
06290	13	66	28	62	<2	20	<1	1	0.01	0.63	0.20	2.56	0.14	0.31	0.02	0.07
06291	10	82	24	23	4	28	<1	1	<0.01	0.46	0.15	1.95	0.03	0.18	0.01	0.06
06292	11	43	47	38	3	86	2	<1	0.01	0.39	0.30	6.9%	0.02	0.18	0.01	0.02
06293	5	118	12	18	3	106	<1	<1	<0.01	0.38	0.09	0.75	0.01	0.13	0.01	0.04
06294	5	69	43	218	5	15	1	2	0.07	1.01	0.20	2.53	0.82	0.62	0.04	0.06
06295	5	61	38	73	<2	25	2	1	0.06	0.73	0.16	2.93	0.33	0.46	0.02	0.03
06296	17	64	37	42	2	27	2	1	0.03	0.54	0.12	2.56	0.17	0.33	0.02	0.04
06297	5	81	43	101	2	21	2	2	0.07	0.92	0.21	2.98	0.46	0.56	0.03	0.05
06298	13	60	18	25	3	49	<1	<1	<0.01	0.40	0.12	2.02	0.03	0.25	0.01	0.04
06299	45	75	22	27	3	20	1	<1	0.01	0.23	0.02	6.1%	0.01	0.19	0.01	<0.01
06300	19	107	14	26	4	77	<1	1	<0.01	0.35	0.03	1.63	0.03	0.29	0.02	0.02
06585	15	62	28	61	3	19	1	1	0.01	0.65	0.15	1.98	0.27	0.36	0.02	0.06
06586	<5	69	62	235	5	25	3	4	0.14	1.30	0.25	3.26	1.19	0.82	0.07	0.06
06587	11	92	8	16	4	23	<1	<1	<0.01	0.33	0.03	1.63	0.02	0.18	0.01	0.01
06588	9	40	51	126	5	35	4	3	0.09	1.22	0.19	3.28	0.64	0.63	0.03	0.06
06589	42	86	39	107	2	15	<1	1	<0.01	0.32	0.04	4.21	0.02	0.16	0.01	0.08
06590	13	92	8	36	4	10	<1	1	<0.01	0.23	0.07	1.21	0.02	0.20	0.01	0.06
Minimum Detection	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	1000	10000	10000	10000	10000	10000	10000	10000	1.00	5.00	10.00	5.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

---=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Report: 9200881 R Cambior Exploration USA, Inc. Project: 304

Sample Name	Type	Cu %	Ox Cu %	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm
06591	Rock	1.31	1.28	<0.1	12895	6	18	9	<5	<3	4	<10	3	<0.1	1	3	148
06592	Rock 15' } cond.	--	0.88	0.3	8746	11	20	27	<5	<3	6	<10	4	<0.1	3	4	287
06593	Rock 15' } chip.	--	--	0.5	1772	10	42	23	5	<3	3	<10	4	0.2	8	6	78
Minimum Detection		0.01	0.01	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2
Maximum Detection		100.00	100.00	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	10000.0	10000	10000	10000
Method		Assay	Assay	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

INTERNATIONAL PLASMA LABORATORY LTD.

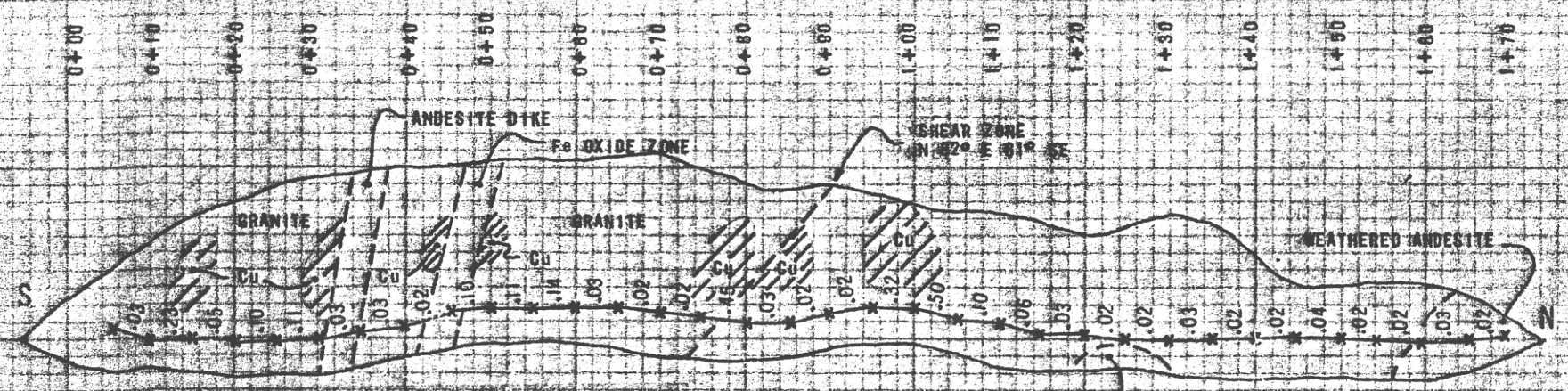
2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Report: 9200881 R Cambior Exploration USA, Inc. Project: 304

Sample Name	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
06591	8	97	8	41	5	9	<1	<1	0.01	0.28	0.05	1.77	0.02	0.27	0.01	0.05
06592	16	90	11	61	7	14	<1	1	<0.01	0.27	0.07	2.22	0.02	0.25	0.01	0.05
06593	<5	81	7	279	6	9	<1	1	<0.01	0.39	0.09	1.63	0.10	0.28	0.01	0.04
Minimum Detection	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	1000	10000	10000	10000	10000	10000	10000	10000	1.00	5.00	10.00	5.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

WEST FACE - LOOKING WEST



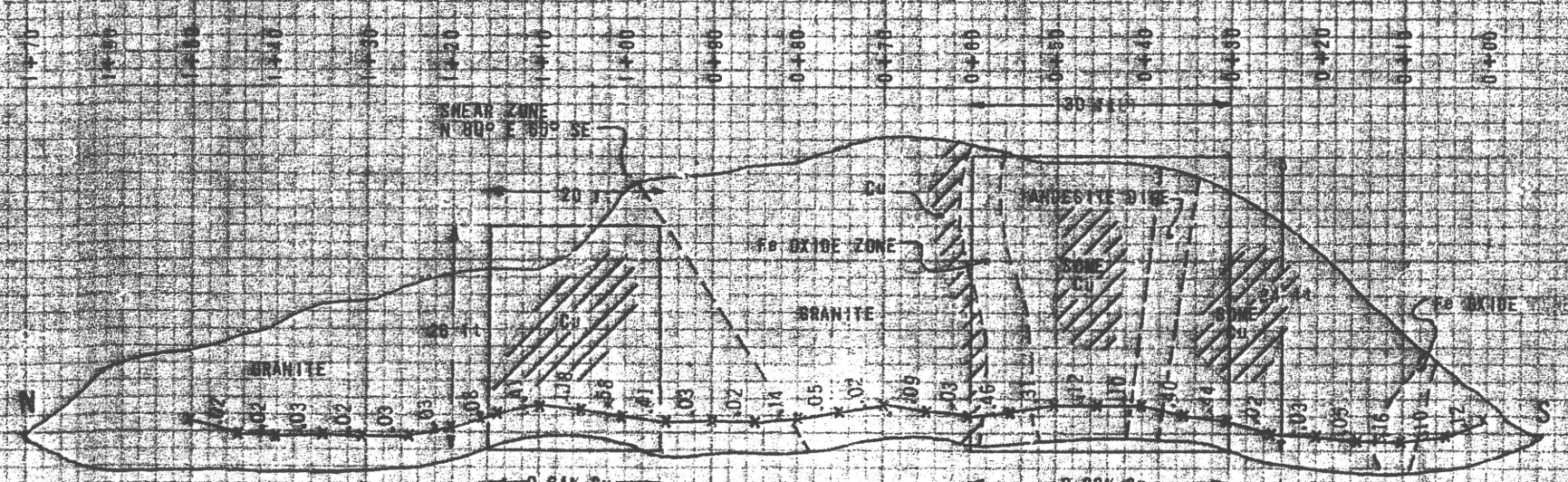
MSTNRICHS
GEOEXPLORATION COMPANY
TOM DRIVER, JR. SUITE, TUCSON, ARIZONA, 85705
Phone: 882-6126 Cable: GEOEX, Tucson
geophysical engineers

JUNE 1970

TRENCH NO. 4 - STRIKE N 7° W

SCALE: 1" = 20' ASSAY INCREMENTS BETWEEN X

EAST FACE - LOOKING EAST



ORE RESERVE CALCULATIONS FOR TRENCH NO. 4

AREA = 26 ft x 20 ft = 520 ft^2

AREA & GRADE = 520 ft^2 x 0.64% = 332.8% Cu ft^2

AREA = 30 ft x 34 ft = 1020 ft^2

AREA & GRADE = 0.30% Cu x 1020FT^2 = 306% Cu ft

PROBABLE ORE

$$\text{AVERAGE AREA} = \frac{520\ ft^2 + 1020\ ft^2}{2} = 770\ ft^2$$

$$\text{AVERAGE GRADE} = \frac{306\%\ Cu\ ft^2 + 332\%\ Cu\ ft^2}{520 + 1020} = 0.41\%\ Cu$$

VOL. = 770 ft^2 x 200 ft = 154,000 ft^3

$$\text{TON} = \frac{154{,}000 \times 162.0}{2000} = 12{,}474\ \text{TONS}$$

HEINRICHS
GEOEXPLORATION COMPANY
JUNE 1970
POST OFFICE BOX 8871, TUCSON, ARIZONA, 85703
Phone: 602/623-0578
Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney

UPPER CHANNEL AVERAGE GRADE - 10 SAMPLES - 20 FEET - 0.213% Cu
MIDDLE CHANNEL AVERAGE GRADE - 10 SAMPLES - 20 FEET - 0.209% Cu
LOWER CHANNEL AVERAGE GRADE - 10 SAMPLES - 20 FEET - 0.286% Cu
3)0.708(0.25% Cu

AREA: 11 ft x 19 ft = 299 ft^2

AREA x GRADE: 209 ft^2 x 0.25% Cu = 52.25 ft^2 % Cu

PROVEN ORE
AVERAGE GRADE - TRENCH 1 & 2

$$\text{AVE GRADE} = \frac{52.2\ ft^2\ \%\ Cu + 167.7\ ft^2\ \%\ Cu}{390\ ft^2 + 209\ ft^2}$$

$$\text{AVE GRADE} = \frac{219.95}{599} = 0.32\%\ Cu$$

$$\text{AVE END AREA} = \frac{390\ ft^2 + 209\ ft^2}{2}$$

AVE END AREA = 300 ft^2

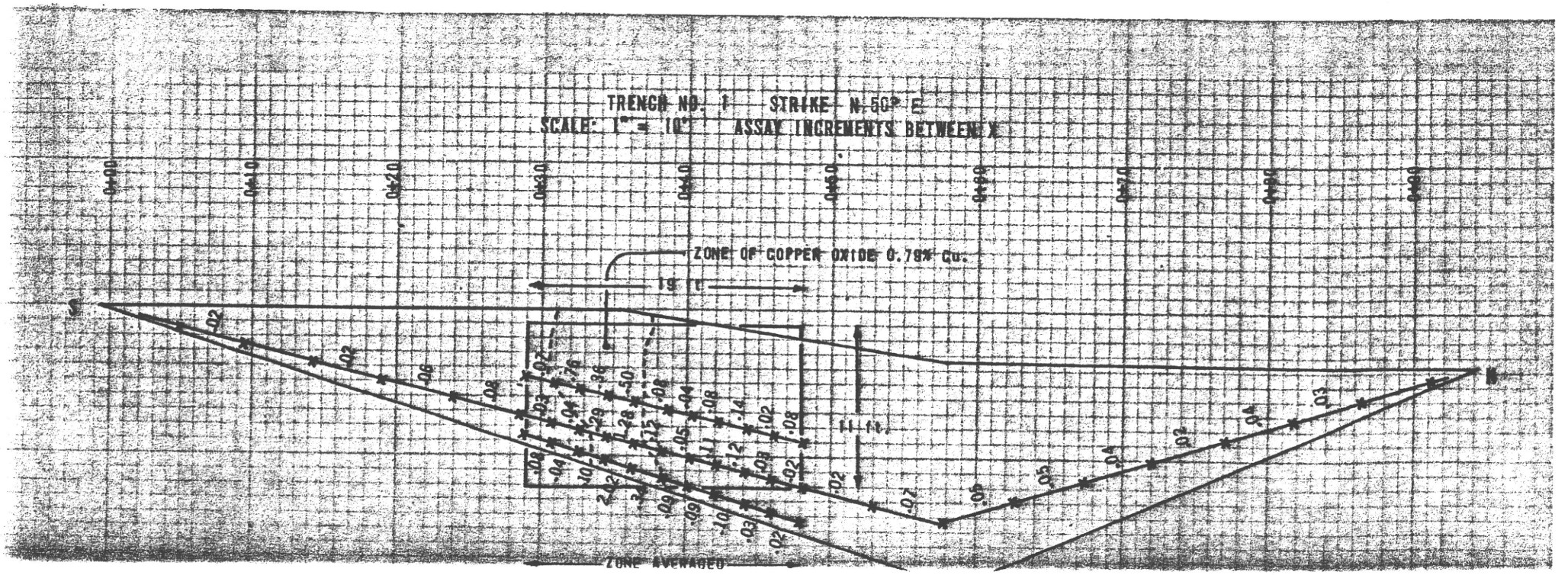
DENSITY OF ROCK ABOUT 162.0 lb/ft^3

VOL. = 100ft x 300 ft^2 = 30,000 ft^3

$$\text{TONS} = \frac{30{,}000\ ft^3 \times 162.0\ lb/ft^3}{2000\ lb/ton} = 2430\ \text{TONS}$$
@ 0.32% Cu

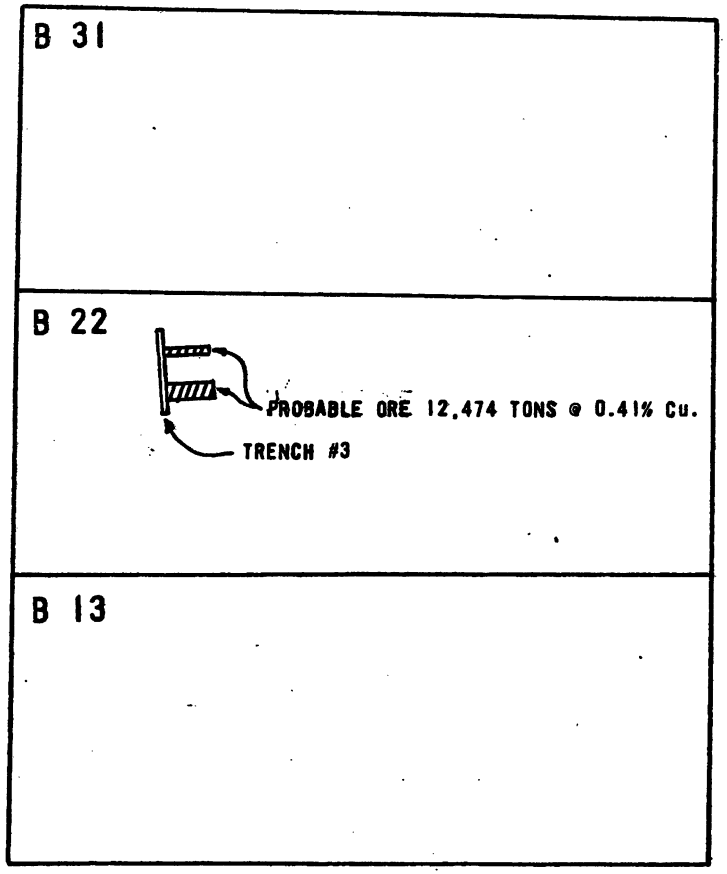
HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney

JUNE 1970

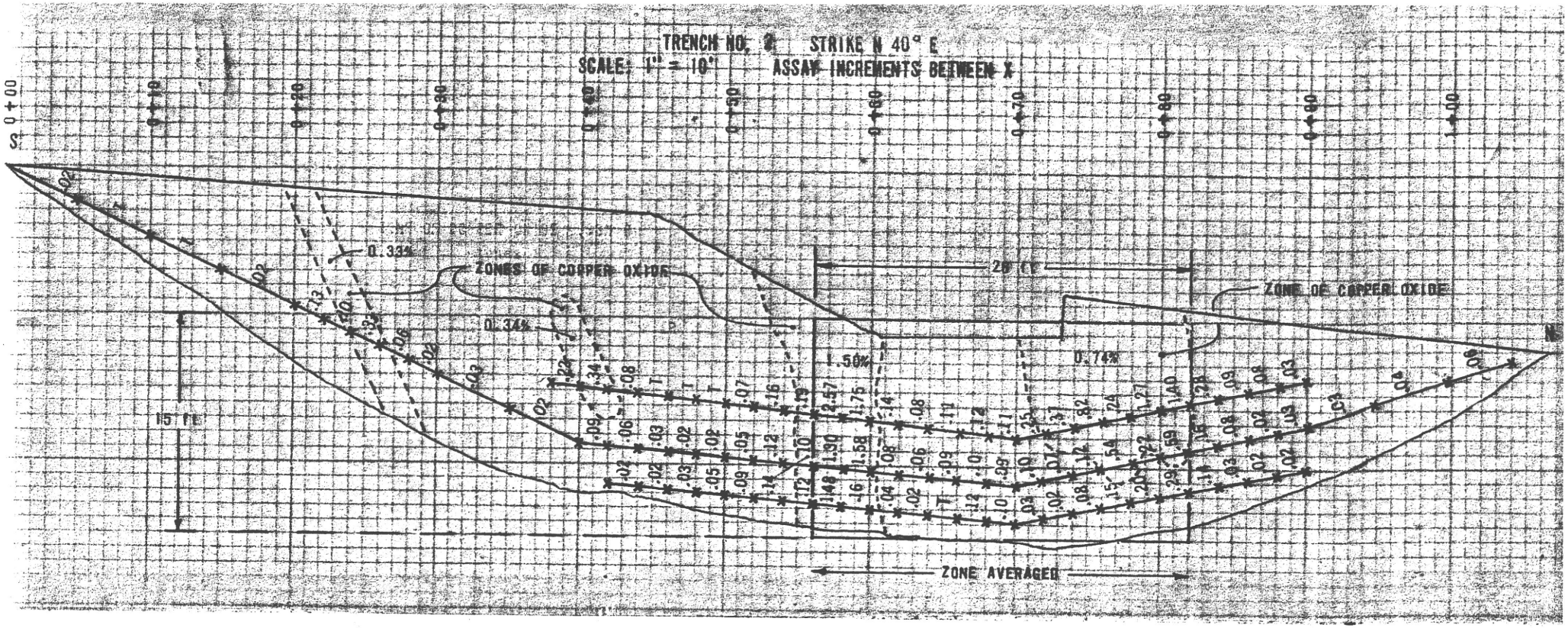


LOCATION OF ORE RESERVES
for
BELL WESTERN CORPORATION
by

HEINRICHS
GEOEXPLORATION COMPANY
geophysical engineers
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
vancouver
sydney



SCALE: 1" = 400'
JUNE 1970



SEE TRENCH 1 FOR TONNAGE CALCUATIONS

UPPER CHANNEL AVERAGE GRADE – 13 SAMPLES – 26 FEET – 0.71% Cu
MIDDLE CHANNEL AVERAGE GRADE – 13 SAMPLES – 26 FEET – 0.37% Cu
LOWER CHANNEL AVERAGE GRADE – 13 SAMPLES – 26 FEET — 0.21% Cu

3)1.29(0.43% Cu

AREA: 26 ft x 15 ft = 390 ft^2

AREA & GRADE: 390 ft^2 x 0.43% Cu = 167.7 ft^2 % Cu

PROBABLE ORE

AREA = 390 ft^2

DENSITY OF ROCK: 162.0 lbs/ft^3

GRADE = 0.43% Cu

VOL. = 390ft^2 x 100 ft = 39,000ft^3

$$TON = \frac{39,000 \times 162.0}{2000} = 3159 \text{ TONS @ } 0.43\% \text{ Cu}$$

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney

JUNE 1970

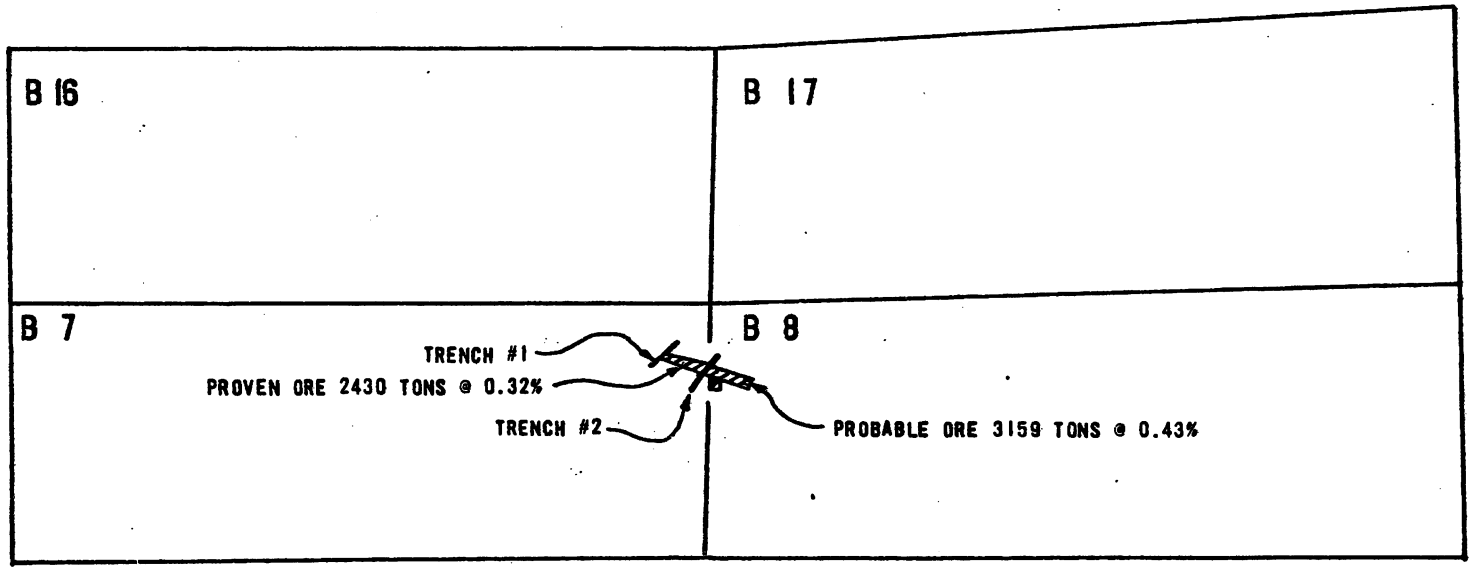
LOCATION OF ORE RESERVES

for

BELL WESTERN CORPORATION

by

HEINRICHS
GEOEXPLORATION COMPANY
POST OFFICE BOX 5671, TUCSON, ARIZONA, 85703
Phone: 602/623-0578 Cable: GEOEX, Tucson
geophysical engineers
vancouver
sydney



SCALE: 1" = 400'
JUNE 1970

CAMBIOR USA, INC.

MEMORANDUM

To: Michel Drouin

From: Jock McGregor

Date: February 10, 1992

Subject: RED HILLS COPPER PROPERTY

Attached is a memo from Gary Parkison regarding the Red Hills copper property. When we became involved with the evaluation of this project, we were under the impression that significantly more meaningful drilling had been completed, and the project was ready to moved forward to development. This has turned out not to be the case, but we believe there is good exploration potential, so I am forwarding this memo to you for your review.

I hope to come over and visit with you soon, when my involvement with Omai starts to diminish as the engineering nears completion.

Attachment

cc: Jean Boissonnault

REC - CAMBIOR USA
FEB 1 8 1992

CAMBIOR USA, INC.

MEMORANDUM

To: Jock McGregor

From: Gary Parkison GAP

Date: February 5, 1992

Subject: EVALUATION OF THE RED HILLS COPPER PROPERTY
PINAL COUNTY, ARIZONA

SUMMARY AND CONCLUSIONS

The Red Hills copper property represents a very attractive exploration opportunity which has good potential for hosting a shallow, copper oxide deposit exceeding some 20 million tons in size. While past drilling is fairly extensive, the drill holes were located to test for a possible deep, sulfide porphyry deposit. Those holes, which were located within or adjacent to the extensive (5,000' by 2,000') zone of outcropping alteration and mineralization, generally have no available assays. Therefore, while the property has had fairly significant past production and drilling, further evaluation of the potential of the property would be of an exploratory, essentially grass-roots nature.

It is recommended that the information on this property be forwarded to Cambior's Reno Exploration office for its review. As I have been on the property several times and have met with the owners, I will make myself available to Reno personnel for site trips or additional discussions with the owners.

INTRODUCTION

As a result of a systematic review of the copper properties in central Arizona, the Red Hills property was singled out for further evaluation as a possible exploration/development opportunity. I have visited the area briefly on two occasions and have met with the owners of the property. Information obtained from the owners, the Arizona Department of Mines and Minerals Resources, and my own observations were utilized in the preparation of this report.

LOCATION AND LAND STATUS

The Red Hills area is located approximately ten miles due east of Florence, Arizona, in Pinal County, about four miles south of the Gila River. Terrain in the area is quite flat but with several north-trending dry washes bisecting the area. Elevation of the area is generally about 2,000 feet with characteristic vegetation consisting of desert-type trees and shrubs.

The primary area of interest lies in Section 26, 27, 28, 33, 34, and 35, T4S, R11E and Sections 1, 2, and 3, T5S, R11E. The sections of interest in T4S are state sections with the minerals held by the U.S. Government; in T5S, Section 1 and 3 are all federal sections, while Section 2 is wholly a state section.

The bulk of the area of interest is held by the Redbird #1-88 claims owned by Gila Red Hills Mining Ltd. (2290 W. Broadway Road, Apache Junction, Arizona 85220, (602) 982-8224, 280-9087). The three principal partners are brothers, Mark and Martin McKenna, and Jim Simpson, who all live in the Phoenix area. Within the area of the Redbird claims are the Grande 1-16 claims. These claims are thought to be invalid because they were located while prior existing claims (owned by Troy Ray) were still valid.

Other small claim blocks are present in the SW portion of Section 26 and the NE portion of Section 3. Other possible prospective ground in the area of interest is open for location.

HISTORY

Exploration and mining of the Red Hills area dates back to the early 1900s with the main emphasis being the production of small lots of high-grade, direct-shipping ore from numerous shallow pits and shafts.

The first known "commercial" scale development of the property was undertaken by Arizona Consolidated Gold and Copper Co. (ACG&CC) in the mid- to late 1940s. ACG&CC funded several geological reports and drilled five core holes on the property.

During the late 1960s, a Texas company, Red Hills Mining Corp., acquired the property and subsequently leased it to Bell Western Corp. Bell Western placed the property into production in early 1971 but operated for only six to nine months. Ore was mined from two shallow surface pits. Run-of-mine ore material was deposited into two unlined leach pads. Copper was apparently recovered by cementation. The operation supposedly failed due to lack of capital and expertise, and loss of solutions. Also during 1971, Bell Western started drilling several fairly deep core holes (RH-series). In 1973, Bell Western entered into a joint venture on the property with Phelps-Dodge (PD). PD geologically mapped the area and may have drilled some of the known RH-series holes (RH-1 through RH-8). PD was apparently looking for a large, deep, sulfide-type porphyry copper deposit.

On adjacent property to the south, Kaiser Cement acquired property in 1969 and subsequently drilled three deep core holes (KC-1, -5, and -10), with the primary focus on defining the source of an airborne EM anomaly located in Sections 2 and 3, T5S, R11E. In 1970, Quintana

Minerals staked claims and drilled one deep hole in Section 4, T5S, R11E to test for the possible covered continuation of outcropping mineralization in the Red Hills area to the north. This hole apparently never encountered bedrock.

Significant work on the property apparently ceased around 1974. Claims in the property were allowed to lapse and new claims in the area were located by Mr. Troy Ray. Mr. Ray held the claims until 1991 when they were declared abandoned by the US BLM. The area was then claimed by Gila Red Hills Mining, Ltd.

GEOLOGY AND MINERALIZATION

Most of the Red Hills area is underlain by Precambrian-age Oracle Granite. This rock type is widespread throughout central Arizona and is a favorable host rock for significant copper mineralization such as at the Poston Butte or Florence deposit. The Oracle Granite has been intruded by a Laramide-age(?) pyritic quartz monzonite stock within the center of the area of interest. A series of east-west trending and somewhat younger but co-magmatic dikes cut through both the Oracle Granite and the Laramide stock. The dikes appear to be generally steeply-dipping and follow pre-existing faults or fractures. Overall, the geologic setting of the area is very much like that at Poston Butte.

Examination of surface exposures and somewhat meager drill logs suggest that copper mineralization is predominantly controlled by fractures. Copper mineralization, either oxide or sulfide, is often accompanied by brecciated rock, quartz veining, pronounced wallrock alteration, and the introduction of significant amounts of iron oxides and/or sulfides. Quite often the mineralized zones also are adjacent to, within, or in close proximity to one of the various phases of east-west trending dikes. Available drilling records suggest significant oxidation to depths exceeding 750 feet.

PD mapping suggests that the most intense wallrock alteration is within the central part of Section 34 and spatially related to the eastern portion of the Laramide stock. However, the most obvious surface mineralization is within the eastern portion of Section 33 which, over an area averaging about 5,000 feet north-south and 2,000 feet east-west, has numerous areas of red, gossan-appearing rocks and abundant prospect pits and shafts exposing CuOx-bearing (chrysocolla and malachite) material.

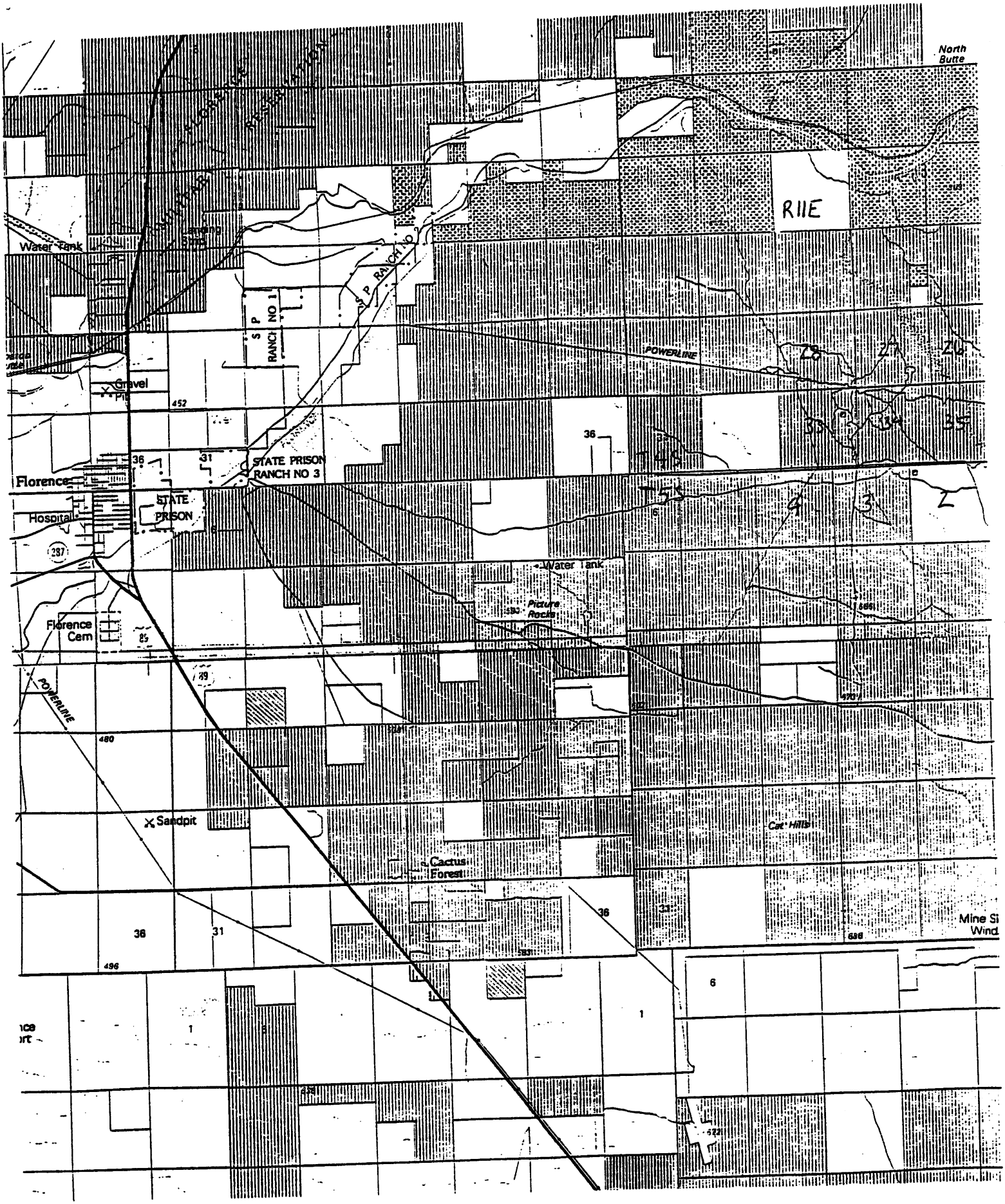
EXPLORATION

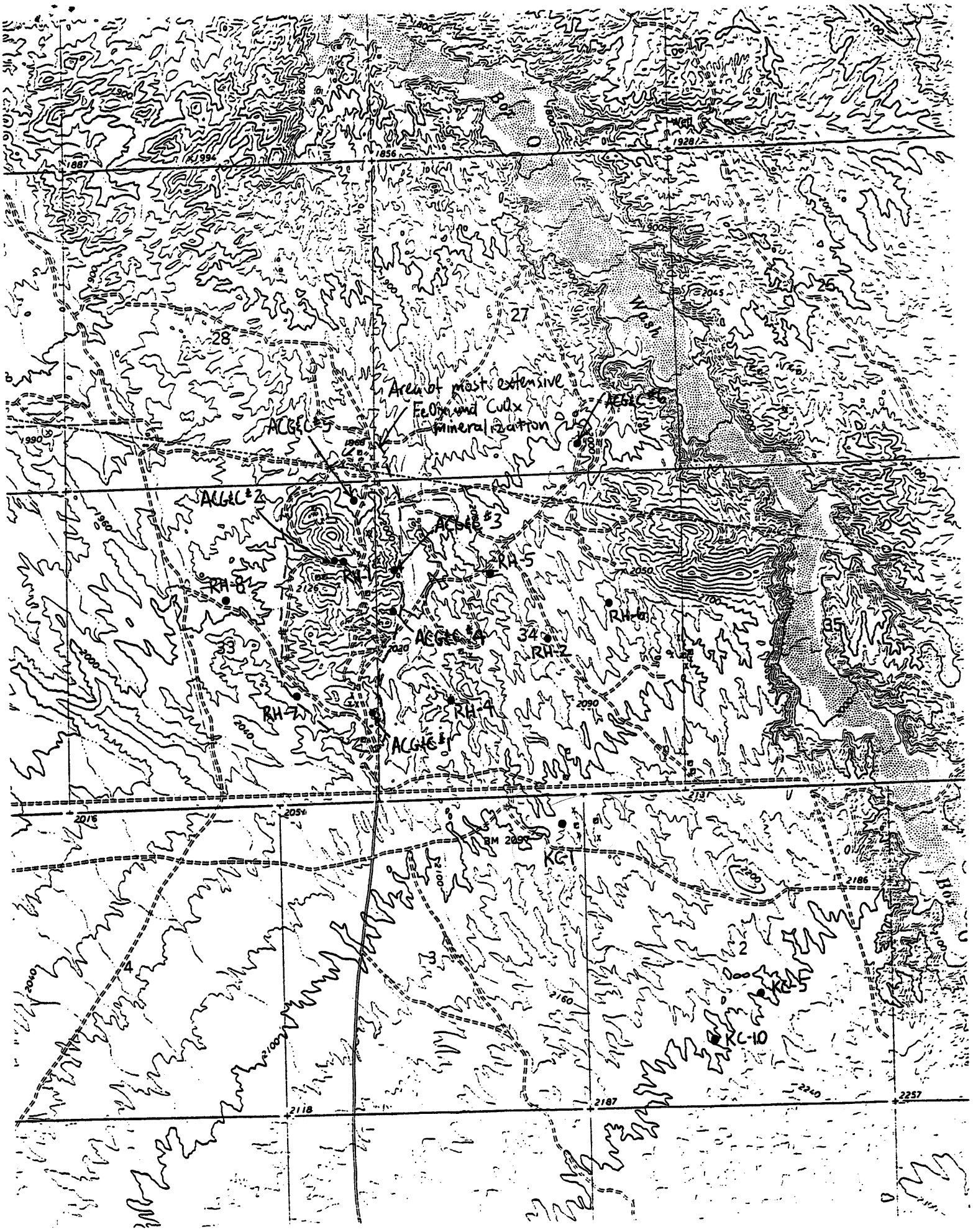
It appears that no systematic exploration of the property has ever been undertaken. Known drill hole locations are mostly peripheral to the most obvious mineralized area noted above and apparently were sited to test a very large, deeply buried porphyry copper target rather than a shallow, oxide-type deposit, which is our primary interest. The various geologic reports which are available for review provide little significant information upon which to readily evaluate the potential of the area for shallow, oxide-type mineralization. In addition, as stated above, most drill holes are peripheral to the most intensely mineralized area.

All known drill holes are tabulated below, with most holes being core holes. No core is known to exist.

Drill Hole	Date Drilled	Company	Depth	Log	Assays	Mineralization
ACG&CC #1	1949?	ACG&CC	395'	Yes	No	?
ACG&CC #2	1949?	ACG&CC	795'	Yes	No	?
ACG&CC #3	1949	ACG&CC	521'	Yes	No	?
ACG&CC #4	1949	ACG&CC	911'	Yes	No	?
ACG&CC #5	1949	ACG&CC	580'	Yes	No	?
ACG&CC #6	1949	ACG&CC	584'	Yes	No	?
All ACG&CC holes had very poor core recovery, typically <40%						
KC-1	1968	Kaiser	820'	Yes	Below 503 only	Yes, low grade
KC-5	1968	Kaiser	800'	Yes	Yes	Yes, 62-85', 0.70%
KC-10	1969	Kaiser	2,227'	Yes	No	No
RH-1	1972	Red Hills Mining	750'	Yes	Yes	Yes, 130-160', 0.17%
RH-2	1972	Red Hills Mining	2,473'	Yes	Yes	Yes
RH-3	1972?	PD?	?	No	No	?
RH-4	1972?	PD?	?	No	No	?
RH-5	1972?	PD?	?	No	No	?
RH-6	1972?	PD?	?	No	No	?
RH-7	1972?	PD?	?	No	No	?
RH-8	1972?	PD?	?	No	No	?

Known drill results are not sufficient to define any type of reserves and do not provide support for any step-out drilling.


North Butte
R11E
Water Tank
Gravel Pit
S P RANCH NO 1
S P RANCH NO 2
POWERLINE
STATE PRISON RANCH NO 3
Florence
STATE PRISON
Hospital
Water Tank
Picture Rocks
Florence Cem
POWERLINE
Sandpit
Cat Hills
Cactus Forest
Mine Si
Wind
T4S
T5S
452
480
496
470
686
36
31
6
1


Area of most extensive
Fe2O3 and CuOx
mineralization
ACGEC #5
ACGEC #6
ACGEC #2
ACGEC #3
ACGEC #4
ACGEC #1
RH-1
RH-2
RH-4
RH-5
RH-6
RH-7
RH-8
KC-1
KC-5
KC-10
Wash
BM 2097
27
28
26
33
34
35
4
3
2

CAMBIOR

July 28, 1992

Martin McKenna
GILA RED HILLS MINING
2290 W. Broadway Road
Apache Junction, AZ 85220

Dear Martin:

Enclosed are the sample results that Cambior has generated on the Red Hills property. One soil line was run from south to north to test the copper response.

Rock chip and soil samples are located on the enclosed map with the sample widths indicated on the assay sheets.

If you have any questions please feel free to contact me at the Reno office.

Sincerely,

CAMBIOR EXPLORATION USA, INC.

Randy Moore
Senior Geologist

RM:lat
Encl.

Cambior Exploration USA, Inc.

230 South Rock Blvd., Suite #23, Reno, Nevada 89502-2345, USA, Telephone 702-856-5189, Fax 702-856-4549

CAMBIOR USA, INC.

April 15, 1992

Mr. Mark Martin
Gila Red Hills Mining Lt.d
2290 W. Broadway Rd.
Apache Junction, AZ 85220

Dear Mark:

Sorry to be so long in getting back to you regarding your Red Hills property, but my recent attempts to phone you or Martin have been unsuccessful, hence, I am writing this letter.

As indicated to you and/or Jim Simpson(?), your partner, about two months ago, due to the relative lack of available drill hole information it was determined that your property would be more appropriately evaluated by Cambior's Reno-based exploration group.

To this end, Randy Moore, from our Reno office, and myself examined your Red Hills property last month. Randy and I are both quite interested in performing additional work on the property which may result in a decision to lease/purchase the property under terms similar to those discussed last December.

As Randy is currently directing Cambior's efforts on your property, he will try to contact you in the near future. Randy can be reached at Cambior USA, Inc., 230 S. Rock Blvd., Suite 23, Reno, Nevada 89502 (702) 786-5189, fax (702) 786-4549.

Cambior's Denver office recently moved and our new address is 8101 E. Prentice Ave., Suite 800, Englewood, CO 80111. The telephone and fax numbers remained the same, (303) 694-4936 and (303) 773-0733, respectively.

Both Randy and myself would appreciate hearing from you or your partners at your earliest convenience.

Sincerely,

Gary A. Parkison

Gary A. Parkison
Chief Geologist

GAP/ss

cc: Randy Moore

8101 East Prentice Avenue, Suite 800, Englewood, Colorado 80111
303-694-4936 Fax 303-773-0733

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

R E P O R T S U M M A R Y Report:[9200881 R]

A N A L Y T I C A L R E P O R T

Origin

Inception Date:[Oct 13, 1992]

Client:	135	Cambior Exploration USA, Inc.
Contact:		Nick Barr
Project:	0	304
Amount/Type:	42	Rock

Analytical Requisition

Geochemical:[ICP(AqR)30]
Assay:[Cu>.2% = OxCu Cu>1% = Assay] ICP:[30]
Comments:[None]

Delivery Information

Reporting Date:[Oct 15, 1992]

Principal Destination (Hardcopy,Fascimile,Invoice)

Company:[Cambior Exploration USA, Inc.]
Address:[230 South Rock Blvd., Suite 23]
City/Province:[Reno, NV]
Country/Postal:[USA 89502-2]
Attention:[Randy Moore/Nick Barr]
Fascimile:[702/856-4549]

Secondary Destination (Hardcopy)

Company:[ ]
Address:[ ]
City/Province:[ ]
Country/Postal:[ ]
Attention:[ ]
Fascimile:[ ]

2 data pages in this report. Approved by: _____

B.C. Certified Assayers

iPL CODE: 921015-15:33:40

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Report: 9200881 R Cambior Exploration USA, Inc. Project: 304

Sample Name	Type	Cu %	Ox Cu %	Ag ppm	Cu ppm	Pb ppm	Zn ppm	As ppm	Sb ppm	Hg ppm	Mo ppm	Tl ppm	Bi ppm	Cd ppm	Co ppm	Ni ppm	Ba ppm
06268	Rock 4'	--	--	1.9	537	<2	6	<5	<5	<3	9	<10	<2	<0.1	2	3	78
06269	Rock 3'	--	0.21	0.1	2384	5	9	7	<5	<3	4	<10	<2	<0.1	2	4	26
06270	Rock 3'	--	0.73	<0.1	7974	5	19	11	<5	<3	7	<10	<2	<0.1	3	6	23
06271	Rock 4'	--	--	0.1	166	16	<1	10	<5	<3	22	<10	<2	<0.1	1	2	81
06272	Rock 4'	--	0.26	<0.1	4107	30	38	62	<5	<3	6	<10	<2	<0.1	3	4	41
06273	Rock	4.44	4.26	<0.1	4.7%	31	56	60	<5	<3	22	<10	<2	<0.1	2	5	193
06274	Rock 8'	--	--	2.0	530	374	3	88	<5	<3	15	<10	13	<0.1	4	6	160
06275	Rock 4'	--	--	<0.1	224	3	4	<5	<5	<3	4	<10	<2	0.1	1	5	20
06276	Rock 2'	--	--	<0.1	124	4	2	<5	<5	<3	2	<10	<2	<0.1	2	3	7
06277	Rock 4'	1.72	1.68	0.8	18636	120	289	25	<5	<3	3	<10	5	<0.1	6	4	193
06278	Rock	2.36	2.22	0.7	2.2%	23	28	22	<5	<3	10	<10	2	0.1	40	12	113
06279	Rock 6'	--	0.23	0.5	2878	4	6	9	<5	<3	6	<10	<2	<0.1	10	3	25
06280	Rock 2'	--	--	<0.1	464	<2	6	11	5	<3	4	<10	<2	<0.1	2	5	29
06281	Rock 1'	2.55	2.44	<0.1	2.5%	22	34	9	<5	<3	8	<10	19	<0.1	9	6	35
06282	Rock 2'	--	0.89	0.2	9764	6	10	22	<5	<3	2	<10	<2	0.1	1	2	14
06283	Rock 1'	8.58	8.20	4.6	9.1%	19	80	10	<5	<3	18	<10	<2	<0.1	3	4	190
06284	Rock 10'	--	--	<0.1	463	12	17	13	<5	<3	4	<10	<2	0.6	3	3	17
06285	Rock 5'	--	--	<0.1	235	<2	6	8	<5	<3	5	<10	<2	<0.1	2	4	79
06286	Rock 15'	--	--	0.5	809	68	24	28	5	<3	20	<10	5	<0.1	22	12	35
06287	Rock 5'	--	--	<0.1	190	<2	11	<5	<5	<3	3	<10	<2	<0.1	6	3	17
06288	Rock 20'	--	--	0.2	585	<2	6	<5	<5	<3	2	<10	<2	<0.1	2	3	15
06289	Rock 3'	--	--	<0.1	34	<2	<1	5	<5	<3	3	<10	<2	<0.1	3	5	10
06290	Rock 2'	2.23	2.20	<0.1	2.3%	15	37	15	<5	<3	8	<10	<2	<0.1	2	6	147
06291	Rock Dump	1.96	1.96	<0.1	2.1%	24	25	259	<5	<3	14	<10	<2	<0.1	2	3	26
06292	Rock 15'	--	--	<0.1	1705	55	5	398	<5	<3	49	<10	3	<0.1	3	3	17
06293	Rock FH	1.26	1.19	<0.1	12252	37	12	194	<5	<3	8	<10	<2	<0.1	1	2	30
06294	Rock	--	0.38	<0.1	4152	9	35	11	<5	<3	4	<10	<2	<0.1	12	13	143
06295	Rock 5'	--	0.19	<0.1	2330	7	24	19	<5	<3	7	<10	<2	<0.1	9	8	110
06296	Rock 6' } cont. Chip	--	0.99	0.2	9735	11	14	18	<5	<3	11	<10	<2	<0.1	4	6	75
06297	Rock 7 }	--	0.56	<0.1	5956	12	41	20	<5	<3	6	<10	<2	<0.1	10	11	157
06298	Rock 1'	1.30	1.27	<0.1	13415	48	12	31	<5	<3	11	<10	<2	<0.1	1	1	12
06299	Rock 1'	--	--	1.3	217	8	1	7	5	<3	21	<10	<2	<0.1	2	5	26
06300	Rock 2'	--	0.33	<0.1	3808	10	11	23	<5	<3	4	<10	<2	0.1	1	2	34
06585	Rock	1.50	1.47	<0.1	15950	15	41	122	8	<3	2	<10	<2	<0.1	3	8	229
06586	Rock	--	--	0.1	1037	2	77	9	<5	<3	2	<10	<2	<0.1	15	17	395
06587	Rock 2'	--	--	3.6	213	7	<1	7	<5	<3	8	<10	<2	<0.1	1	3	135
06588	Rock 4'	1.82	1.77	<0.1	17591	10	46	11	5	<3	2	<10	<2	<0.1	11	13	329
06589	Rock	3.42	3.41	<0.1	3.5%	62	50	43	6	<3	11	<10	28	<0.1	45	9	975
06590	Rock 3'	2.20	2.17	0.4	2.3%	18	52	29	8	<3	4	<10	<2	<0.1	2	2	205
Minimum Detection		0.01	0.01	0.1	1	2	1	5	5	3	1	10	2	0.1	1	1	2
Maximum Detection		100.00	100.00	100.0	20000	20000	20000	10000	1000	10000	1000	1000	10000	10000.0	10000	10000	10000
Method		Assay	Assay	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

INTERNATIONAL PLASMA LABORATORY LTD.

2036 Columbia Street
Vancouver, B.C.
Canada V5Y 3E1
Phone (604) 879-7878
Fax (604) 879-7898

Sample Name	W ppm	Cr ppm	V ppm	Mn ppm	La ppm	Sr ppm	Zr ppm	Sc ppm	Ti %	Al %	Ca %	Fe %	Mg %	K %	Na %	P %
06268	<5	79	15	39	4	14	1	1	<0.01	0.34	0.07	2.55	0.09	0.30	0.01	0.02
06269	<5	98	15	38	5	58	<1	1	0.01	0.42	0.21	2.01	0.06	0.24	0.02	0.02
06270	9	99	19	34	3	39	<1	2	<0.01	0.41	0.17	2.11	0.05	0.21	0.02	0.03
06271	6	92	20	20	3	44	<1	1	<0.01	0.36	0.10	2.35	0.02	0.16	0.01	0.01
06272	10	47	33	170	<2	35	1	2	0.01	0.75	0.61	2.85	0.13	0.26	0.02	0.03
06273	31	54	28	195	<2	21	<1	1	<0.01	0.43	0.20	3.97	0.05	0.21	0.01	0.10
06274	46	125	70	32	<2	13	1	<1	0.01	0.08	0.11	10%	0.03	0.06	0.01	0.03
06275	5	124	8	28	6	9	<1	1	0.01	0.29	0.24	1.76	0.03	0.28	0.01	0.02
06276	21	62	12	22	22	10	<1	<1	0.04	0.27	0.06	6.1%	0.03	0.27	0.01	0.01
06277	11	92	17	180	7	14	<1	1	<0.01	0.40	0.37	2.36	0.07	0.30	0.02	0.09
06278	33	77	50	215	<2	23	<1	1	<0.01	0.33	0.12	8.9%	0.02	0.13	0.02	0.10
06279	13	119	16	57	3	24	<1	1	<0.01	0.30	0.16	2.92	0.03	0.24	0.02	0.03
06280	<5	59	39	47	3	19	2	1	0.01	0.59	0.30	4.89	0.05	0.26	0.02	0.03
06281	16	65	32	136	5	7	1	1	0.01	0.54	0.10	5.6%	0.14	0.30	0.01	0.07
06282	6	100	15	19	6	123	<1	1	<0.01	0.50	0.17	1.19	0.02	0.18	0.01	0.03
06283	31	93	20	18	<2	20	<1	2	<0.01	0.25	0.10	2.31	0.03	0.17	0.01	0.17
06284	<5	77	20	76	3	13	<1	3	0.01	0.36	5.23	1.62	0.10	0.18	0.03	0.05
06285	<5	118	22	47	3	42	<1	1	0.02	0.53	0.25	2.43	0.22	0.31	0.02	0.02
06286	31	126	39	266	4	23	1	1	0.01	0.35	0.56	7.2%	0.05	0.24	0.02	0.06
06287	<5	109	12	65	3	7	<1	1	<0.01	0.26	0.10	1.28	0.03	0.24	0.02	0.02
06288	<5	100	7	36	11	5	<1	1	0.02	0.27	0.02	2.67	0.02	0.27	0.02	0.01
06289	38	23	20	43	8	6	<1	1	0.01	0.30	0.03	8.9%	0.02	0.27	0.01	0.02
06290	13	66	28	62	<2	20	<1	1	0.01	0.63	0.20	2.56	0.14	0.31	0.02	0.07
06291	10	82	24	23	4	28	<1	1	<0.01	0.46	0.15	1.95	0.03	0.18	0.01	0.06
06292	11	43	47	38	3	86	2	<1	0.01	0.39	0.30	6.9%	0.02	0.18	0.01	0.02
06293	5	118	12	18	3	106	<1	<1	<0.01	0.38	0.09	0.75	0.01	0.13	0.01	0.04
06294	5	69	43	218	5	15	1	2	0.07	1.01	0.20	2.53	0.82	0.62	0.04	0.06
06295	5	61	38	73	<2	25	2	1	0.06	0.73	0.16	2.93	0.33	0.46	0.02	0.03
06296	17	64	37	42	2	27	2	1	0.03	0.54	0.12	2.56	0.17	0.33	0.02	0.04
06297	5	81	43	101	2	21	2	2	0.07	0.92	0.21	2.98	0.46	0.56	0.03	0.05
06298	13	60	18	25	3	49	<1	<1	<0.01	0.40	0.12	2.02	0.03	0.25	0.01	0.04
06299	45	75	22	27	3	20	1	<1	0.01	0.23	0.02	6.1%	0.01	0.19	0.01	<0.01
06300	19	107	14	26	4	77	<1	1	<0.01	0.35	0.03	1.63	0.03	0.29	0.02	0.02
06585	15	62	28	61	3	19	1	1	0.01	0.65	0.15	1.98	0.27	0.36	0.02	0.06
06586	<5	69	62	235	5	25	3	4	0.14	1.30	0.25	3.26	1.19	0.82	0.07	0.06
06587	11	92	8	16	4	23	<1	<1	<0.01	0.33	0.03	1.63	0.02	0.18	0.01	0.01
06588	9	40	51	126	5	35	4	3	0.09	1.22	0.19	3.28	0.64	0.63	0.03	0.06
06589	42	86	39	107	2	15	<1	1	<0.01	0.32	0.04	4.21	0.02	0.16	0.01	0.08
06590	13	92	8	36	4	10	<1	1	<0.01	0.23	0.07	1.21	0.02	0.20	0.01	0.06
Minimum Detection	5	1	2	1	2	1	1	1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Maximum Detection	1000	10000	10000	10000	10000	10000	10000	10000	1.00	5.00	10.00	5.00	10.00	10.00	5.00	5.00
Method	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP

--=No Test ReC=ReCheck ins=Insufficient Sample m=Est/1000 %=Est % Max=No Est

SEE CENTERFOLD FOR CHOICE REAL ESTATE OFFERING

ANOTHER THORP AUCTION

CONSTRUCTION EQUIPMENT & REAL ESTATE

AUCTION

Custom Blade Service, Inc., & Red Hills Mining Corp., & Others

TEMPE (Phoenix), ARIZONA

Saturday, April 15, 1972

Sale starts at 11:00 A.M. **Lunch on grounds**

LOCATION ½ mile North of Arizona State University on Scottsdale Road, Tempe, Arizona.

AIR TRAVEL Schedule commercial flights to Sky Harbor International Airport, 20 minutes from sale site.

INSPECTION DATES Anytime after April 10, 1972.

For further information contact Gordon Schmeiser or Rodney Christensen or Dave Kessen, Thorp Commercial Corporation Office, P.O. Box 20603, Phoenix, Arizona. Phone: 602 - 252-8907, evenings Phone: 602 - 979-6252.

AUCTIONEER: Herman Behm, Phone: 414 - 862-2892.

Sale Arranged and Conducted by

THORP SALES CORPORATION THORP

Box 409 Thorp, Wisconsin 54771 715 - 669-5551

TERMS OF SALE

THORP ON-THE-SPOT CREDIT

SUMS OF $1500 and under, cash. Over $1500 may be financed on regular Thorp terms. Longer terms can be arranged with the clerk before the sale.

LEASE PLANS available on items of $5,000 or more (except over-the-road trucks, tractors and trailers). Contact Sales Credit department at least 10 days prior to sale date. Phone 715-669-5551 Ext. 219.

PAYMENT may be made by personal or company checks — certification not required.

SETTLEMENT MUST BE MADE ON SALE DAY and may be made anytime during the sale. No property may be removed from premises before making settlement.

INSPECTION of equipment may be made prior to sale date.

DEMONSTRATIONS will be given upon request.

DESCRIPTION OF EQUIPMENT

Descriptions of equipment have been conscientiously set forth by the owners and are believed to be correct; however, the descriptions are not the representations of the Auctioneers. Neither the owners nor the Auctioneers are responsible for any errors in description or condition.

The definitions of the terms used in describing the equipment are as follows:

EXCELLENT: Purchased recently. Limited use. Will show some signs of handling and use, but practically in new mechanical condition.

VERY GOOD: May have been overhauled or may never have been used enough to require an overhaul. In exceptionally good condition.

GOOD: In operating condition. However, may have some worn parts that require repairing or replacing soon. No known mechanical defects except any that may be described.

FAIR: May be old or may have suffered hard use. Has seen considerable service and may require general overhaul soon.

If you are not presently on our mailing list and would like to receive catalogs of future Thorp auctions, fill in this coupon and mail to the address on the reverse side.

Company: _____

By: _____
(Title)

Address: _____

City: _____ State: _____ Zip: _____

EVERYTHING WILL BE SOLD TO THE HIGHEST BIDDER . . .
NO RESERVATIONS, MINIMUM OR LIMIT!

★ ON THE SPOT CREDIT AVAILABLE ★

PROJECT: **CARLOTA, ARIZONA** #: 0104-2

TITLE: MINING LEASE WITH OPTION TO PURCHASE AND SUBLEASE AGREEMENT

DATE: 8/1/89 TERM: 20+ years EXPIRATION DATE: 7/31/2009+

OWNERSHIP: Fee _____ FEDERAL: __X__ STATE: ____ OTHER: ____

COUNTY: Gila County, Arizona

PROPERTY DESCRIPTION: 12 unpatented mining claims

(Brewery, Clipper, Old Abe, Thomas Jefferson, Blue Jay Fraction, Vat, Lost Knife No. 1 [Amended], Lost Knife No. 2 [Amended], Manganese Cap [Amended], Galena [Amended], Dew, Ladd)

PARTIES:				With copy to:
	1)	Sherwood B. Owens P.O. Box 769 Tucson, AZ 85702	(Owner)	Richard E. Mieritz (Agent) 2940 N. Casa Tomas Phoenix, AZ 85016
	2)	Westmont Mining Inc.		

COMMITMENTS: Minimum payments: ~~Negotiate lease form~~ had 6 month exclusive evaluation period starting 2/1/89 – if wanted to drill, then needed to execute lease.

$10,000	8/1/89	Upon execution
$15,000	1/31/90	
$20,000	7/31/90	and every 6 months thereafter (1/31/91, 7/31/91, etc.) ***prior to commencement*** of construction of mining facility or actual mining operations on property

---

No payments due during period starting with commencement of contruction and ending with actual commencement of production of a saleable product.

$ 3,000/month Due on 1st day of month - ***Upon commencement of commercial production.***

Purchase Price: $3,000,000. [See Credit/Offset]

MISCELLANEOUS:

Credit/Offset: All minimum payments paid to Owner ***after the commencement of production*** of Minerals shall be credited against any production royalties that accrue and against the purchase price.

NSR: 5% (to be paid quarterly).

Option to Purchase: Westmont may exercise the Purchase Option at any time during Primary Term by delivering written notice to Owner or having paid the Purchase Price (with credit/offsets).

Termination: Westmont may terminate at any time by giving a good and sufficient Surrender of this Agreement to Owner. *Upon written request from Owner* within 6 months of termination, Westmont to supply Owner with non-interpretive data.

Assessment Work: Westmont is responsible for assessment work every year in which Westmont continues beyond July 1.

Taxes: Westmont to pay taxes attributable to equipment or operations of Westmont.

Assignment: Either party may assign.

11/10/89 se

```
Text View: B:\pinal                          Col 0          940,032 Bytes          10%
0040210101OWNER01    OWNER-OP      USA ARIZONA          1956
0040210101O-NAM02    VIA,CLARENCE
0040210101OWNER02    OWNER-OP      USA ARIZONA          1979
0040210101B-BIB 001 USGS SONORA QUAD
0040210101B-BIB 002 ADMR TROY MINES FILE
0040210101B-BIB 003 RANSOME,F L RAY FOLIO 1923 P 22
0040210101B-BIB 004 ADMR U FILE
0040210102STATE      ARIZONA              PINAL
0040210102IDENT      ALMA GROUP                          SURF-UNDERG DEVEL
DEPOSIT
0040210102LOCAT      N330209W1105841ORE BODY 100M   658100MS
0040210102UTM        12N3655068502049
0040210102TOPOG      MESA                SONORA          7.5 MINMIXED
0040210102BASIN      GILA RIVER               60P
0040210102HUC        00000000
0040210102REFER      ADMR                            M1981
0040210102PLS        GILA & SALT R 003 S013 E24NW    SURVEY
0040210102COMMO01    COPPER        OXIDE                 P
0040210102COMMO02    SILVER                              P
0040210102COMMO03    GOLD          LODE                  C
0040210102N-NAM01    COPPER KING M S 2881,PATENTED
0040210102N-NAM02    ALMA M S 2881,PATENTED
0040210102B-BIB 001 ADMR A OLD MINES FILE
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

ASARCO PROP. W. of Roy Pine

```
Text View: B:\pinal                          Col 0          940,032 Bytes          11%
0040210102N-NAM02    ALMA M S 2881,PATENTED
0040210102B-BIB 001 ADMR A OLD MINES FILE
0040210102B-BIB 002 ADMR MONITOR GROUP FILE-SKETCH
0040210102B-BIB 003 BLM MINING DIST SHEET 637
0040210102B-BIB 004 USGS SONORA QUAD
0040210103STATE      ARIZONA              PINAL
0040210103IDENT      ALVAREZ CLAIMS                      SURF-UNDERG PAST
PRODUCER
0040210103LOCAT      N330208W1111256ORE BODY 100M   623 10MS
0040210103UTM        12N3655058479871
0040210103TOPOG      MESA                NORTH BUTTE     7.5 MINMIXED
0040210103BASIN      GILA RIVER               60P
0040210103HUC        00000000
0040210103REFER      ADMR                            M1981
0040210103PLS        GILA & SALT R 004 S011 E33SE    SURVEY
0040210103COMMO01    COPPER        OXIDE                 P
0040210103COMMO02    STONE                               P
0040210103COMMO03    IRON                                P
0040210103COMMO04    GOLD          LODE                  B
0040210103N-NAM01    BEN ALVEREZ GROUP
0040210103N-NAM02    RED HILLS PROPERTY
0040210103N-NAM03    ARIZONA CONS AU AND AG PROPERTY
0040210103N-NAM04    MUNSEY PROPERTY
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

Red Hills

```
Text View: B:\pinal                          Col 0          940,032 Bytes          11%
0040210103N-NAM03   ARIZONA CONS AU AND AG PROPERTY
0040210103N-NAM04   MUNSEY PROPERTY
0040210103N-NAM05   ARIZONA COPPER GROUP
0040210103O-NAM01   MURRELL SMITH
0040210103OWNER01   OWNER          USA ARIZONA          1975
0040210103O-NAM02   BEN ALVEREZ
0040210103OWNER02   OWNER          USA ARIZONA          1964
0040210103O-NAM03   FRANK ALVEREZ
0040210103OWNER03   OWNER          USA ARIZONA          1964
0040210103O-NAM04   JESS BIRD
0040210103OWNER04   OWNER          USA ARIZONA          1964
0040210103O-NAM05   RED HILLS MINING CO.
0040210103OWNER05   OPERATOR       USA ARIZONA          1976
0040210103O-NAM06   BELL WESTERN
0040210103OWNER06   OPERATOR       USA TEXAS            1973
0040210103B-BIB 001 USGS WORTH BUTTE QUAD
0040210103B-BIB 002 ADMR ALVAREZ CLAIMS FILE
0040210103B-BIB 003 ENGINEERING AND MINING JOURNAL VOL.172,NO.2,FEB.1971,P132
0040210103B-BIB 004 ADMR ARIZONA COPPER GROUP FILE
0040210103B-BIB 005 ADMR ARIZ.CONS.AU AND CU MINE FILE
0040210103B-BIB 006 ADMR U FILE
0040210103B-BIB*001 CLAIMS EXTEND INTO SEC.32 AND 34
0040210104STATE     ARIZONA              PINAL
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

```
Text View: B:\pinal                    Col 0         940,032 Bytes         32%
0040210329IDENT     EXXON CORP                        UNDERGROUND DEVEL
DEPOSIT
0040210329LOCAT     N331011W1110750MAIN ENT 100M   504 10MS
0040210329UTM       12N3669918487827
0040210329TOPOG     MESA              CHANDLER HEIGHTS 7.5 MINPRIVATE
0040210329BASIN     GILA RIVER              60P
0040210329HUC       00000000
0040210329REFER     ADMR                            M1981
0040210329PLS       GILA & SALT R 003 S007 E15SESWNWSURVEY
0040210329COMMO01   COPPER                            P
0040210329COMMO02   GOLD                              P
0040210329O-NAM01   EXXON CORP
0040210329OWNER01   OWNER         USA TEXAS           1981
0040210329B-BIB 001 USGS CHANDLER HEIGHTS QUAD
0040210329B-BIB 002 STATE OF AZ-LAND DEPT LEASES
0040210329B-BIB 003 BLM MINING CLAIMS LEAD FILE 42041
0040210329B-BIB 004 ADMR MINERAL BUTTE AND GOLDMINE MTN AREAS
0040210330STATE     ARIZONA             PINAL
0040210330IDENT     EXXON CORP PROPERTY                PROSPECT    EXP PROSPECT
0040210330LOCAT     N330243W1110950ORE BODY 100M   671 10MS
0040210330UTM       12N3656127484697
0040210330TOPOG     MESA              NORTH BUTTE      7.5 MINMIXED
0040210330BASIN     GILA RIVER              60P
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit

Text View: B:\pinal                    Col 0         940,032 Bytes         32%
0040210330TOPOG     MESA              NORTH BUTTE      7.5 MINMIXED
0040210330BASIN     GILA RIVER              60P
0040210330HUC       00000000
0040210330REFER     ADMR                            M1981
0040210330PLS       GILA & SALT R 004 S011 E36NENENESURVEY
0040210330COMMO01                                     P9999
0040210330O-NAM01   EXXON CORP
0040210330OWNER01   OWNER         USA ARIZONA         1981
0040210330B-BIB 001 USGS NORTH BUTTE QUAD
0040210330B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 1947
0040210331STATE     ARIZONA             PINAL
0040210331IDENT     EXXON CORP PROPERTY                PROSPECT    EXP PROSPECT
0040210331LOCAT     N330138W1111108ORE BODY 100M   664 10MS
0040210331UTM       12N3654128482671
0040210331TOPOG     MESA              NORTH BUTTE      7.5 MINBLM ADMIN
0040210331BASIN     GILA RIVER              60P
0040210331HUC       00000000
0040210331REFER     ADMR                            M1981
0040210331PLS       GILA & SALT R 005 S011 E 1NWSWNWSURVEY
0040210331COMMO01                                     P9999
0040210331O-NAM01   EXXON CORP
0040210331OWNER01   OWNER         USA ARIZONA         1981
0040210331B-BIB 001 USGS NORTH BUTTE QUAD
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

near Red Hills Dist - Area

```
Text View: B:\pinal                          Col 0          940,032 Bytes          32%
0040210331OWNER01    OWNER          USA ARIZONA          1981
0040210331B-BIB 001 USGS NORTH BUTTE QUAD
0040210331B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 1947
0040210332STATE      ARIZONA              PINAL
0040210332IDENT      EXXON CORP PROPERTY                  UNDERGROUND DEVEL
DEPOSIT
0040210332LOCAT      N330150W1111110MAIN ENT 100M   628 10MS
0040210332UTM        12N3654498482619
0040210332TOPOG      MESA               NORTH BUTTE      7.5 MINMIXED
0040210332BASIN      GILA RIVER               60P
0040210332HUC        00000000
0040210332REFER      ADMR                            M1981
0040210332PLS        GILA & SALT R 005 S011 E 2NENENESURVEY
0040210332COMMO01                                     P9999
0040210332N-NAM01    RED CLAIMS
0040210332O-NAM01    EXXON CORP
0040210332OWNER01    OWNER          USA ARIZONA          1981
0040210332B-BIB 001 USGS NORTH BUTTE QUAD
0040210332B-BIB 002 BLM UNPAT MINING CLAIM LEAD FILE 1947
0040210333STATE      ARIZONA              PINAL
0040210333IDENT      EXXON LEASES                         PROSPECT    EXP PROSPECT
0040210333LOCAT      N325400W1114350ORE BODY 100M   425100MS
0040210333UTM        12N3640246431675
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit

Text View: B:\pinal                          Col 0          940,032 Bytes          33%
0040210333LOCAT      N325400W1114350ORE BODY 100M   425100MS
0040210333UTM        12N3640246431675
0040210333TOPOG      TUCSON             CASA GRANDE EAST 7.5 MINMIXED
0040210333BASIN      GILA RIVER               60P
0040210333HUC        00000000
0040210333HOL        STATE LEASE
0040210333REFER      ADMR                            M1981
0040210333PLS        GILA & SALT R 004 S011 E23S2S2SWSURVEY
0040210333COMMO01                                     P9999
0040210333N-NAM01    RED CLAIMS
0040210333O-NAM01    EXXON CORP
0040210333OWNER01    OWNER          USA ARIZONA          1981
0040210333B-BIB 001 USGS CASA GRANDE EAST QUAD
0040210333B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 1947
0040210333B-BIB*001 STATE LEASES EXTEND INTO SECTS 15,29,AND 32
0040210334STATE      ARIZONA              PINAL
0040210334IDENT      EXXON LEASE                          PROSPECT    EXP PROSPECT
0040210334LOCAT      N325730W1111500ORE BODY 100M   652100MS
0040210334UTM        12N3646504476634
0040210334TOPOG      TUCSON             NINETYSIX HILLS  7.5 MINMIXED
0040210334BASIN      GILA RIVER               60P
0040210334HUC        00000000
0040210334HOL        STATE LEASE
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

```
Text View: B:\pinal                        Col 0         940,032 Bytes         33%
0040210334HUC        00000000
0040210334HOL        STATE LEASE
0040210334REFER      ADMR                                M1981
0040210334PLS        GILA & SALT R 005 S011 E32          SURVEY
0040210334COMMO01                                            P9999
0040210334O-NAM01    EXXON CORP
0040210334OWNER01    OWNER          USA ARIZONA          1981
0040210334B-BIB 001  USGS NINETYSIX HILLS NW QUAD
0040210334B-BIB 002  STATE OF AZ LAND DEPT LEASES 1980
0040210334B-BIB*001  STATE LEASES EXTEND INTO SECTS 3,4,5,6,7,8 AND 9 T6S,R11E
0040210336STATE      ARIZONA                PINAL
0040210336IDENT      EXXON LEASES                         PROSPECT    EXP PROSPECT
0040210336LOCAT      N325230W1110500ORE BODY 100M   975100MS
0040210336UTM        12N3637241492204
0040210336TOPOG      TUCSON              NINETYSIX HILLS  7.5 MINMIXED
0040210336HUC        00000000
0040210336HOL        STATE LEASE
0040210336REFER      ADMR                                M1981
0040210336PLS        GILA & SALT R 005 S012 E26          SURVEY
0040210336COMMO01                                            P9999
0040210336O-NAM01    EXXON CORP
0040210336OWNER01    OPERATOR       USA ARIZONA          1981
0040210336B-BIB 001  USGS NINETYSIX HILLS NE QUAD
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```


```
Text View: B:\pinal                        Col 0         940,032 Bytes         33%
0040210334HUC        00000000
0040210334HOL        STATE LEASE
0040210334REFER      ADMR                                M1981
0040210334PLS        GILA & SALT R 005 S011 E32          SURVEY
0040210334COMMO01                                            P9999
0040210334O-NAM01    EXXON CORP
0040210334OWNER01    OWNER          USA ARIZONA          1981
0040210334B-BIB 001  USGS NINETYSIX HILLS NW QUAD
0040210334B-BIB 002  STATE OF AZ LAND DEPT LEASES 1980
0040210334B-BIB*001  STATE LEASES EXTEND INTO SECTS 3,4,5,6,7,8 AND 9 T6S,R11E
0040210336STATE      ARIZONA                PINAL
0040210336IDENT      EXXON LEASES                         PROSPECT    EXP PROSPECT
0040210336LOCAT      N325230W1110500ORE BODY 100M   975100MS
0040210336UTM        12N3637241492204
0040210336TOPOG      TUCSON              NINETYSIX HILLS  7.5 MINMIXED
0040210336HUC        00000000
0040210336HOL        STATE LEASE
0040210336REFER      ADMR                                M1981
0040210336PLS        GILA & SALT R 005 S012 E26          SURVEY
0040210336COMMO01                                            P9999
0040210336O-NAM01    EXXON CORP
0040210336OWNER01    OPERATOR       USA ARIZONA          1981
0040210336B-BIB 001  USGS NINETYSIX HILLS NE QUAD
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```


```
Text View: B:\pinal                        Col 0         940,032 Bytes         33%
0040210336OWNER01    OPERATOR       USA ARIZONA          1981
0040210336B-BIB 001  USGS NINETYSIX HILLS NE QUAD
0040210336B-BIB 002  STATE OF AZ-LAND DEPT LEASES 1980
0040210336B-BIB*001  STATE LEASES EXTEND INTO SECTS 13,23,24,25,35 AND 36 AND 1N
0040210336B-BIB*002     T5S,R13E NINETYSIX HILLS SE QUAD SECTS 16,18,19,30,31,32
0040210336B-BIB*003     AND SECTS 1 AND 2 T6S,R12E AND SECTS 5,6,7 AND 8
```

```
T6S,R13E
0040210337STATE     ARIZONA              PINAL
0040210337IDENT     EXXON LEASES                          PROSPECT    EXP PROSPECT
0040210337LOCAT     N330000W1112730ORE BODY 100M   448100MS
0040210337UTM       12N3651189457183
0040210337TOPOG     TUCSON             FLORENCE         7.5 MINMIXED
0040210337BASIN     GILA RIVER               60P
0040210337HUC       00000000
0040210337REFER     ADMR                              M1981
0040210337PLS       GILA & SALT R 005 S009 E 8S2      SURVEY
0040210337COMMO01                                         P9999
0040210337O-NAM01   EXXON
0040210337OWNER01   OPERATOR      USA ARIZONA         1981
0040210337B-BIB 001 USGS FLORENCE QUAD
0040210337B-BIB 002 STATE OF ARIZ LAND DEPT LEASES 1980
0040210337B-BIB*001 STATE LEASES EXTEND INTO SECT 11,T5S,R8E AND SECTS 17 AND
0040210337B-BIB*002    18 T5S,R9E
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

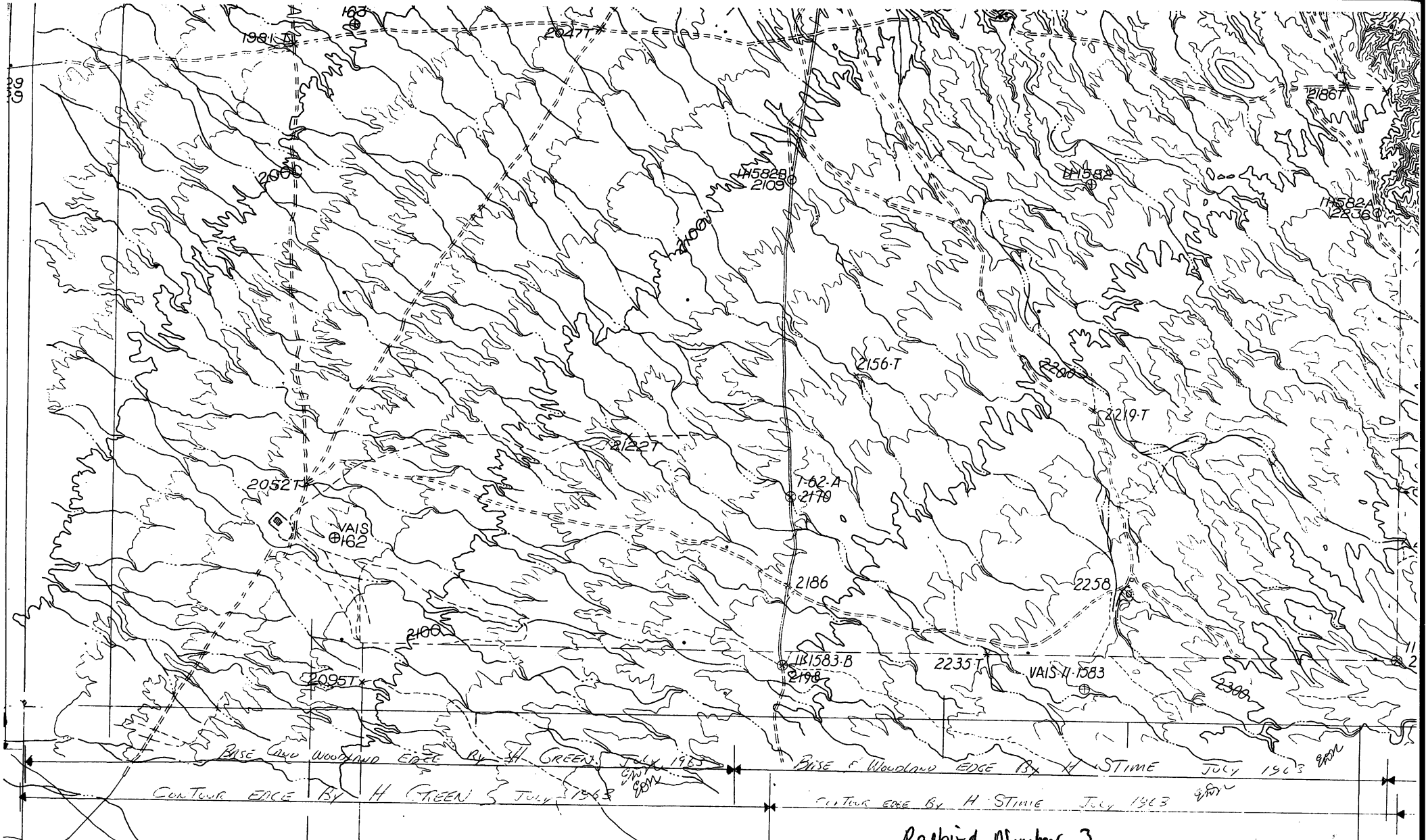
Red Hills Min. Dist. E. of Florence

```
Text View: B:\pinal                          Col 0          940,032 Bytes          74%
0040210809STATE      ARIZONA                 PINAL
0040210809IDENT      SUPERIOR OIL CO PROPERTY              SURF-UNDERG DEVEL
DEPOSIT
0040210809LOCAT      N330149W1111211ORE BODY 100M   646 10MS
0040210809UTM        12N3654470481037
0040210809TOPOG      MESA                NORTH BUTTE       7.5 MINMIXED
0040210809BASIN      GILA RIVER                60P
0040210809HUC        00000000
0040210809REFER      ADMR                              M1981
0040210809PLS        GILA & SALT R 005 S011 E 3E2NENESURVEY
0040210809COMMO01                                        P9999
0040210809O-NAM01    SUPERIOR OIL CO
0040210809OWNER01    OWNER          USA ARIZONA        1981
0040210809B-BIB 001  USGS NORTH BUTTE QUAD
0040210809B-BIB 002  WORKINGS EXTEND INTO SEC.2
0040210809B-BIB 003  BLM UNPAT MINING CLAIMS LEAD FILE 19713
0040210810STATE      ARIZONA                 PINAL
0040210810IDENT      SUPERIOR OIL PROPERTY                 SURF-UNDERG DEVEL
DEPOSIT
0040210810LOCAT      N330232W1111257ORE BODY 100M   625 10MS
0040210810UTM        12N3655797479846
0040210810TOPOG      MESA                NORTH BUTTE       7.5 MINMIXED
0040210810BASIN      GILA RIVER                60P
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit

Text View: B:\pinal                          Col 0          940,032 Bytes          74%
0040210810TOPOG      MESA                NORTH BUTTE       7.5 MINMIXED
0040210810BASIN      GILA RIVER                60P
0040210810HUC        00000000
0040210810REFER      ADMR                              M1981
0040210810PLS        GILA & SALT R 004 S011 E33E2NE  SURVEY
0040210810COMMO01                                        P9999
0040210810O-NAM01    SUPERIOR OIL CO
0040210810OWNER01    OWNER          USA ARIZONA        1981
0040210810B-BIB 001  USGS NORTH BUTTE QUAD
0040210810B-BIB 002  BLM UNPAT MINING CLAIMS LEAD FILE 19713
0040210811STATE      ARIZONA                 PINAL
0040210811IDENT      SUPERIOR OIL CO PROPERTY - AREA 1  SURF-UNDERG DEVEL
DEPOSIT
0040210811LOCAT      N330217W1111235ORE BODY 100M   628 10MS
0040210811UTM        12N3655334480416
0040210811TOPOG      MESA                NORTH BUTTE       7.5 MINMIXED
0040210811BASIN      GILA RIVER                60P
0040210811HUC        00000000
0040210811REFER      ADMR                              M1981
0040210811PLS        GILA & SALT R 004 S011 E34NWNESWSURVEY
0040210811COMMO01                                        P9999
0040210811O-NAM01    SUPERIOR OIL CO
0040210811OWNER01    OWNER          USA ARIZONA        1981
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```

```
Text View: B:\pinal                        Col 0          940,032 Bytes          74%
0040210811O-NAM01   SUPERIOR OIL CO
0040210811OWNER01   OWNER         USA ARIZONA          1981
0040210811B-BIB 001 USGS NORTH BUTTE QUAD
0040210811B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 19713
0040210812STATE     ARIZONA              PINAL
0040210812IDENT     SUPERIOR OIL CO PROPERTY - AREA 2  SURF-UNDERG DEVEL
DEPOSIT
0040210812LOCAT     N330158W1111215ORE BODY 100M   640 10MS
0040210812UTM       12N3654747480934
0040210812TOPOG     MESA               NORTH BUTTE      7.5 MINMIXED
0040210812BASIN     GILA RIVER               60P
0040210812HUC       00000000
0040210812REFER     ADMR                              M1981
0040210812PLS       GILA & SALT R 004 S011 E34SWSE  SURVEY
0040210812COMMO01                                        P9999
0040210812O-NAM01   SUPERIOR OIL CO
0040210812OWNER01   OWNER         USA ARIZONA          1981
0040210812B-BIB 001 USGS NORTH BUTTE QUAD
0040210812B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 19713
0040210813STATE     ARIZONA              PINAL
0040210813IDENT     SUPERIOR OIL CO PROPERTY - AREA 3  SURF-UNDERG DEVEL
DEPOSIT
0040210813LOCAT     N330158W1111153ORE BODY 100M   649 10MS
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit

Text View: B:\pinal                        Col 0          940,032 Bytes          75%
DEPOSIT
0040210813LOCAT     N330158W1111153ORE BODY 100M   649 10MS
0040210813UTM       12N3654746481504
0040210813TOPOG     MESA               NORTH BUTTE      7.5 MINMIXED
0040210813BASIN     GILA RIVER               60P
0040210813HUC       00000000
0040210813REFER     ADMR                              M1981
0040210813PLS       GILA & SALT R 004 S011 E34SESE  SURVEY
0040210813COMMO01                                        P9999
0040210813O-NAM01   SUPERIOR OIL CO
0040210813OWNER01   OWNER         USA ARIZONA          1981
0040210813B-BIB 001 USGS NORTH BUTTE QUAD
0040210813B-BIB 002 BLM UNPAT MINING CLAIMS LEAD FILE 19713
0040210814STATE     ARIZONA              PINAL
0040210814IDENT     SUPERIOR RAY COPPER CO PROPERTY    UNDERGROUND PAST
PRODUCER
0040210814LOCAT     N331650W1110605ORE BODY 100M   853100MS
0040210814UTM       12N3682202490558
0040210814TOPOG     MESA               SUPERIOR         7.5 MINNAT FOREST
0040210814BASIN     GILA RIVER               60P
0040210814HUC       00000000
0040210814PLS       GILA & SALT R 002 S012 E 3SE    SURVEY
0040210814COMMO01   COPPER                                P
1Help   2Unwrap 3       4Hex    5       6       7Search 8Viewer 9       10Quit
```



4-63 4/63 4/63

2031

2116

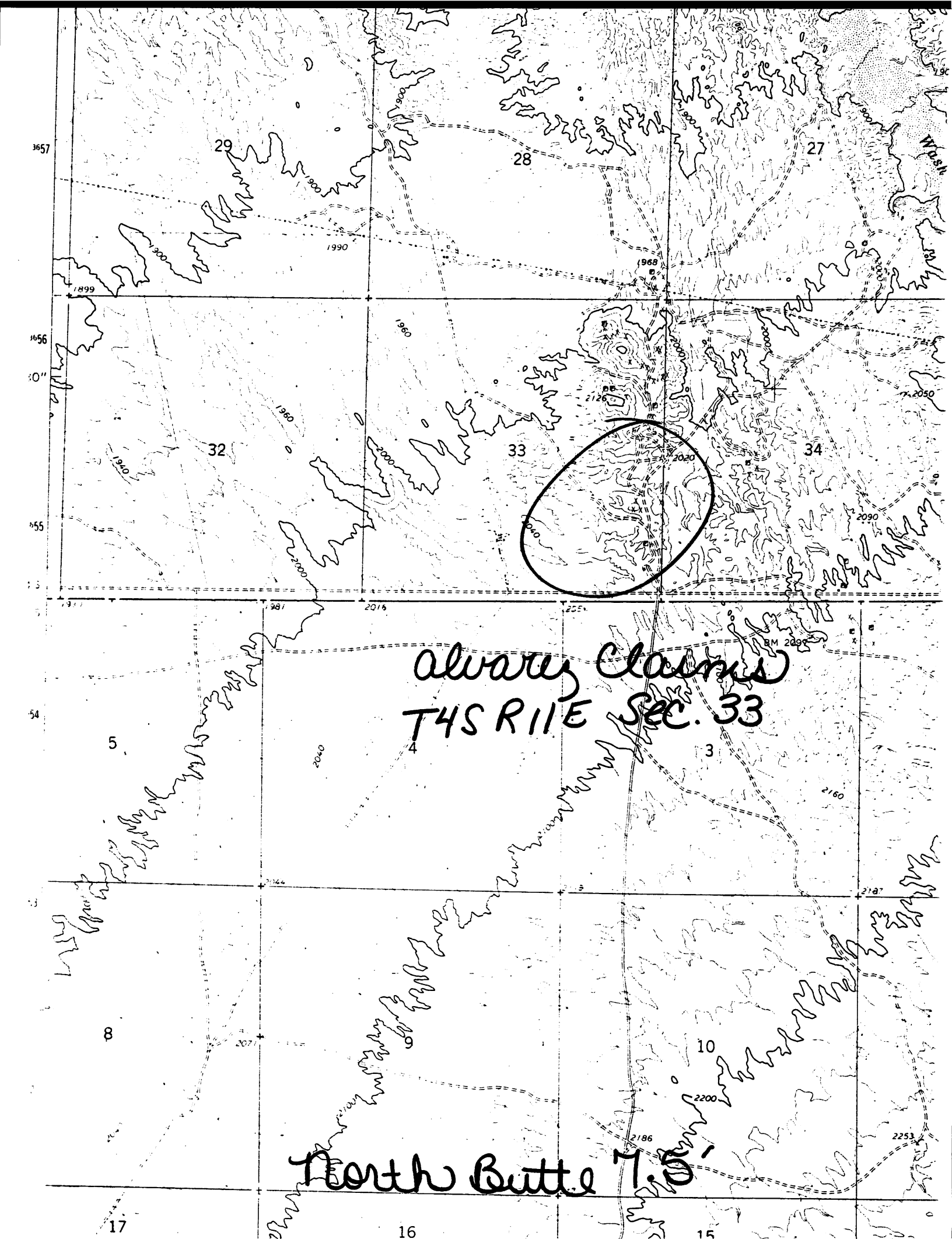
V Blount
H Green 47
W Green
D Slone
H Stime

5-20-63 8-9-63

8-12-63

PHOTOGRAPHY VAIS 1-61 thru 1-68
11-1577 thru 11-1583
2-360 thru 2-367

Redbird Number 3
Rec. 6/20/91
Book 1754 pg 733
Gila Red Hills Lim. Ptnship
3738 E. Hashknife Draw
Queen Crk, AZ 85242
Loc. 1 May, 1991
Sec. 33, T4S R11E
loc. by Martin J. McKenna Trust
2290 W. Broadway Apache Junct
AZ 85220


29
28
27
32
33
34
5
4
3
8
9
10
17
16
15
1990
1968
1899
1960
2126
2020
2050
2090
2040
2160
2200
2186
2253
BM 2099
alvarez claims
T4S R11E Sec. 33
North Butte 7.5'

Dep.	Dist.	Cty.
- Renfro Group	- Ruppy Spg Dist	- Gila
Rattler Mine	- " "	Rural
(Troy Ranch)	" "	" "
San Juan (Burkhardt)	Owl Head (Dunbar-Sunizo)	Rural
Apache Mine (Victor)	" "	Rural

Martin McKenna = owner of Alvarez group ■ has added maps and stuff for PD, etc.
R Gila Red Hills Ltd. Partnership. - get from old owner of properties, see drill logs.
2290 W. Broadway Apache AZ 85220
(602) 982-8224 ; phone number in Phoenix 280-9087

Copper Hill	Cottonwood	Rural ✓
~~Black Diamond~~	~~Prescott~~	~~Rural~~
Wooley	Wooley	Rural
Silver King	Ruppey	Rural
~~Wooley~~	~~Wooley~~	~~Rural~~

Claim Name	Lead File	Locator
SB # 1 -	297348	McBroom, Nash
Redbird Number 1D-	315060	Gila Red Hills McKenna
Grande 1-16	221291	Grande Mining
Redbird Number 1-10	313938	Gila Red Hills
Billy Boy #1-8	58049	Kubler

(602) 340-9579 '31, 214

11/27 Talk w/ Amnon Hallum - Gila River Indian
- said he has received letter, but needs to talk w/ someone else at tribe to see if would consider mining. - he will call me next week to see - we can call him.

11/27 Fred Borco, Borco ~~Inc~~ Inc., Globe

building offices at Rita Valley
does lots of concrete work.
sounds like a good guy, will be sending rep info on his business
- has building just refurbished in Miami by tailings.

11/27 Talk w/ Ross Corn re Copper Spring property -
he says that road to property is now fixed up, can drive all the way in.

11/27 Talk w/ Martin McKenna
Simply reflecting propr

Will meet @
8:30 Thursday
12th of December
in Apache Jct.

4 S., 11 E.,

Talked vaguely about confidentiality agreement - mentioned that had potential problem w/ as possibly solving deals on other properties in the area - did not want to place us in a bad situation - left this up in the air

12/12/91

Morton

Joe Simpson

Mike & ~~Mike~~ McKenna
Mike lives in Apache Jct.
Morton lives in Phoenix

Troy Ray had the claim, but did not file assmt work for 90-91 - he had big tax problems, and he apparently left the country, so did not do any work, can't be found

Troy Ray apparently was working w/ a Nicholas Marcuccio

Troy Ray got claim in a judgment dated 11/25/79, was out over Alvarez brothers,

Phillips claim invalid because located in their claim in 1984 on top of valid claim held by Troy Ray.

Geology Stuff - 20m .80 4.8 4.8 1.60 3. ~~6~~ holidays $0 (20 20)

0 - $
6 - $
12 - $
18 - $ 1.30
24 - $ 1.15
30 - $1.00
20 .85
10 .70

1.5 years

		$/mo
3 mos, due diligence		0
18 mos,	work committment $150K	50K
18 mos	"	50K
18 mos	"	50K

- $40. buy-out -

GILA RED HILLS MINING, LTD.

2290 West Broadway Road
Apache Junction, AZ 85220
(602) 982-8224 / 280-9087

Gary Parkison
District Geologist
Cambior, USA, Inc.
4949 South Syracuse Street
Suite 4200
Denver, Colorado 80237

Jan 7, 1992

Dear Gary,

The material you requested was shipped UPS to Cambior ATTN: Gary Parkison this morning. Expected delivery is Friday, 1/10/92. Carrier Number is #1013, shipping order No 1787. Cover letter and receipts are enclosed.

Regards,

Martin McKenna
General Parnter

- Carla Henrich - 773-1000 - social worker at Heritage
  - dentist — do exam and cleaning - should be next Tuesday for this.
  - available for assistance regarding

Talk w/ Nigel Nemenzo - couldn't find much - any of the files, but will leave it out for Technoprint

---

85-150 ton trenches -
which way to go, electric or mechanical

Talk w/ John Rio - ask him

Talk w/
11/18 - Mike McKenna (602) 982-8224 Mike is brother of Morton McKenna Phone #(602) 290-9087
- competitive, bid, etc. re. Red Hills Property

have spent some time rounding up old reports from previous owners

ASARCO and P.D. data - they have some of this data, trying to get more reports,
- Their approach is to get data package together, send out to many companies, make deal w/ highest bidder
lots of bulldozer work done, dump has exposed lots of veins
[Mike will ask Morton to send up info to me] - acknowledge that are some title problems, conflicting claims
- chalcocite blanket at 670'

PD business rel - took option from other leasing company - had 9 year lease, PD drilled in "center" of property - now looking for altered rock. - why drilled to 170'? -

→ Talk w/ Montra McKenna (602) 280-9087
partners in Red Hill Partnership

trying to fill-up some gaps, holes in property, etc.,
getting it ready to show to major investors

concluded that original leaching effort was doomed from the start.

- Geol. map of PD, drill rights for Red Hills Mining,
did some drilling which was fairly deep.
- Talked about Carlotta project, etc.

- ~~Sec. 31 [illegible]~~

Troy Ray was major location
Civil case awarded the claims in Sec 33
to Troy Ray
- Grande Mining then located claims
over Troy Ray claims, so that Grande
claims were invalid.
- So that his claims are void.

Derick that should meet and talk, told him he is
AZ week of 9th, should try and get together - should
call him next Tues., need to arrange place, time, etc.