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15/15/12

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50/15/2

40/10/12

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70/15/4

30/15/4

360/15/6

440/20/2

75/20/30

60/10/12

90/40/12

25/20/12

750/25/2

50/20/12

75/5/4

15/5/4

15/15/8

10/15/6

20/10/4

40/10/12

110/180/12

420/15/12

120/20/6

550/10/4

155/5/40

35/195/120

40/5/4

385/35/450

155/15/12

125/5/2

40/5/12

90/10/2

30/20/4

205/10/2

190/15/2

20/15/230

210/5/6

120/15/2

800/5/4

70/10/2

60/10/4

10/15/2

10/15/8

230/5/4

480/25/4

50/5/4

295/5/2

40/5/8

65/5/8

115/15/4

220/15/20

10/10/6

75/15/6

2/50/20

15/15/4

90/15/4

365/10/2

15/15/6

115/10/2

130/15/2

30/10/8

475/10/6

130/5/4

15/10/2

15/15/6

60/20/8

15/5/2

130/30/4

15/75/4

85/10/12

165/1030/6100

5/20/6

70/10/45

30/10/2

55/15/2

30/10/6

130C/10,250/160

220/10/2

15/15/2

100/5/24

30/10/24

10/15/12

105/75/8

5/10/4

30/10/4

10/5/2

30/10/12

5/15/8

50/20/12

10/10/2

10/20/8

30/15/2

5/20/4

10/15/4

10/20/2

30/25/4

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KERR-McGEE CORPORATION

istrict Goose Lake
ole Number Bear Creek # 2
pudded
ompleted
otal Depth 249
riller Bear Creek
ogged By D. A. Wolfe

Unsplit intervals 0-50'
100-200'
220-to TD

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
100%			Syenite or monz. w/ breccia frag.	lt. gr., mg., bio. rich syenite or monz. poss. feldspathoid contains many breccia frags. of diorite? and gabbro?. v. int. alt.	py. is 30-50 % cpy. appears to be 50-90% oxid., int. sec. k-feld. or feldspathoid, diss. and vlts. of sec. bio., qtz. & feldspar vlts. local ser. and clay	diss. and veined py = 2% to 4% of rock. cpy. on vlts. partially oxid. cpy. diss. 80-100% oxid. cpy. poss. .2%?
			intrusive breccia	abun. P€ gneiss and gabbro frags. w/ minor syenite(?) matrix	int. alt. to sec. bio. k-feld. 30-40% oxid. on frac; minor ser. and clay. assoc. w/ py. oxid.	minor diss. and veined cpy. .2% Total py. before leaching 2-4%. diss. cpy. almost entirely leached 50' - [illegible] py. 1% or less
			intrusive syenite w/ numerous breccia frag.	as above 0-50'	int. alt. w/ser.-clay alt. superimposed poss. from oxid. of py., numerous qtz-py-cpy-bio. vlts. vlts. 30-40% oxid.	diss. v.f.g. py. + veined py. 2-4%. diss. cpy. minor, still partially oxidized.
			same	more int. shattering sm. frags. from core	abun. qtz.-py. vlts.	py. content increases to variable 4-10%, minor cpy; local, sm. concentrations of cc. replacing py. 200' - [illegible] vertical magnet

[illegible]

Depth	Int.
0-50'	50
50	70'
120	35'
155'	49

District Goose Lake Hole Number Bear Creek # 7 Page Number 2

% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
					fresh feld. & sec. bio, all other minerals alt. to chly. ser.	200' - diss. cpy increases- perhaps only from decr. of oxid.; ~~[illegible]~~ 1 to 2% pyrite
			P frag.	increas. of cpy.	sparse qtz. vlts.	215' - MoS_2 assoc. w/smoky qtz. vl
			Intrusive syenite w/breccia frags.	as above	numerous qtz-py. bio. vlts.	237' - 1% disseem. mag.; 1-3% on vlts. only.
					incr. ser. to TD	abun. diss. and veined py. 5-10%
					some possible alunite	minor diss. cpy.
10-25%				last 45' intensely argillized shear		

Location Goose Lake Hole Number Bear Creek # 7 Page Number 2

Depth	Int.
204	19
223	
394'	TD

KERR-McGEE CORPORATION

District Goose Lake
Hole Number Bear Creek # 7
Spudded
Completed
Total Depth 3.4'
Driller Bear Creek
Logged by D. A. Wolfe

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

° Unsplit intervals, 0-50'
100-200'
220-to TD

% Core Recv	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
100%			Syenite br monz. w/ breccia frag.	lt. gr., mc. bio. rich syenite or monz. poss. feldspathoid contains many breccia frags. of diorite? and gabbro?. v. int. alt.	py. is 30-50 % cpy. appears to be 50-90% oxid., int. sec.k-feld. or feldspathoid, diss. and vlts. of sec. bio., qtz. & felderar vlts. local ser. and clay	diss. and veined py = 2% to 4% of rock. cpy. on vlts. partially oxid. cpy. diss. 80-100% oxid. cpy. poss. .2%?
			intrusive breccia	abun. Pg gneiss and gabbro frags. w/ minor syenite(?) matrix	int. alt. to sec. bio. k-feld. 30-40% oxid. on frac; minor ser. and clay. assoc. w/ py. oxid.	minor diss. and veined cpy. .2% Total py. before leaching 2-4%. diss. cpy. almost entirely leach 60' - [illegible] per 1% or less
			intrusive syenite w/ numerous breccia frag.	as above 0-50'	int. alt. w/ser.-clay alt. superimposed poss. from oxid. of py., numerous qtz-py-cpy-bio. vlts. vlts. 30-80% oxid.	diss. v.f.g. py. + veined py. 2-4%. diss. cpy. minor, still partially oxidized.
			ser.	more int. shattering sm. frags. from core	abun. qtz.-py. vlts.	py. content increases to variabl 4-10%, minor cpy; local, sm. concentrations of cc. replacing py. 200' - [illegible] vertical [illegible] vlts.

Depth	Int.
0-50'	50
50	20'
120	35'
155'	49

District Goose Lake Hole Number Bear Creek # 7 Page Number 2

% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
					fresh feld. & sec. bio, all other minerals alt. to clay, sec.	200' - diss. cpy increases- perhaps only from decr. of oxid.; [illegible] 1-2% pyrite
			P frag.	increas. of cpy.	sparse qtz. vlts.	215' - MoS_2 assoc. w/smoky qtz. vlt
			Intrusive	as above	numerous qtz-py.	
			syenite		bio. vlts.	237' - Pl. disseminated mag; 1-3% on vlts. only
			w/breccia			
			frags.		incr. ser. to TD	abun. diss. and veined py. 5-10%
					some possible alunite	minor diss. cpy.
10-25%				last 45' intensely argillized shear		

Depth	Int.
204	19
223	
394'	TD

KERR-McGEE CORPORATION

District Goose Lake
Hole Number Bear Creek # 7
Spudded
Completed
Total Depth 394'
Driller Bear Creek
Logged By D. A. Wolfe

Unsplit intervals 0-50'
100-200'
220-to TD

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

Depth	Int.	% Core Rcvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
0-50'	50	100%			Syenite or monz. w/ breccia frag.	lt. gr., mg., bio. rich syenite or monz. poss. feldspathoid contains many breccia frags. of diorite? and gabbro?, v. int. alt.	py. is 30-50 % cpy. appears to be 50-90% oxid., int. sec.k-feld. or feldspathoid, diss. and vlts. of sec. bio., qtz. & feldspar vlts. local ser. and clay	diss. and veined py = 2% to 4% of rock. cpy. on vlts. partially oxid. cpy. diss. 80-100% oxid. cpy. poss. .2%?
50	70'				intrusive breccia	abun. Pé gneiss and gabbro frags.w/ minor syenite(?) matrix	int. alt. to sec. bio. k-feld. 30-40% oxid. on frac; minor ser. and clay, assoc.w/ py. oxid.	minor diss. and veined cpy. .2% Total py. before leaching 2-4%. diss. cpy. almost entirely leached 100' - dissem. py. 1% or less.
120	35'				intrusive syenite w/ numerous breccia frag.	as above 0-50'	int. alt. w/ser.-clay alt. superimposed poss. from oxid. of py., numerous qtz-py-cpy-bio. vlts. vlts. 30-60% oxid.	diss. v.f.g. py. + veined py. 2-4%. diss. cpy. minor, still partially oxidized.
155'	49				same	more int. shattering sm. frags. from core	abun. qtz.-py. vlts.	py. content increases to variable 4-10%, minor cpy; local, sm. concentrations of cc. replacing py. 200' - mean vertical magneti vlts.

District Goose Lake Hole Number Bear Creek # 7 Page Number 2

Depth	Int.	% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
							fresh feld. & sec. bio,	200' - diss. cpy increases-
							all other minerals	perhaps only from decr. of oxid.;
							alt. to clay, ser.,	~~[illegible]~~ 1 to 2% pyrite
204	19				P frag.	increas. of cpy.	sparse qtz. vlts.	215' - MoS_2 assoc. w/smoky qtz. vlt.
223					Intrusive	as above	numerous qtz-py.	
					syenite		bio. vlts.	239' - 1% dissem. mag.; 1-3% py.
					w/breccia			on vlts. only.
					frags.		incr. ser. to TD	abun. diss. and veined py. 5-10%
							some possible alunite	minor diss. cpy.
		10-25%				last 45' intensely		
						argillized shear		
394'	TD							

District New World Hole Number DDH-6-60 Page Number 2

Core	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
						cc incr. below 220'
				vuggy		
						240'- abund. qtz. vlts. decr. py.
				80-90% large frag.	decr. ser.	on frag.
				below 240'		T.S. - 1%
				acc. bio. vlts.	some qtz. vlts.	decr. cc.
					contain feld. & feldsp.	little to no mineralization in
					frag.	PG granite except along vlts.
				280' more abun.		
				actinote vlts.	possible alunite.	locally variable cpy.
					abund. acc. bio.	
						290' - incr. in py. content 3-5%
						cc returns - mostly on fractures
					qtz-actinolite vlts.	303' minor py & cpy mostly on frac.;
						315-325' .15-.25% cpy
			Possible PE	appearance of Ti in fractures		cc replacement of py.
				340' frac. are more	abund. qtz. vlts.	
				sparse. Inc. k-felds	some oxid.	py/cpy on fractures = 1/1; < 1% total sulfides
				in vlts.	minor ser. @ bottom	minor cpy.

KERR-McGEE CORPORATION

District New World
Hole Number DDH-6-60
Spudded
Completed
Total Depth 345
Driller Bear Creek
Logged By S. J. Heller & J. Russell

Unsplit intervals 6-130'
145'-

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

% Core Recv	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			Por. granite	local syenite	50-80% oxidized	py. on vlts., little to no cpy.
			& gabbro	stringers		CPY probably oxid.
			gneiss			
				decr. porp. material	oxid. decr. rapidly	numerous qtz-py. vlts.
				and incr. fresh	@ 91'. Int. qtz-ser.	minor cpy. Py-1%
				feldspars below 100'	alt.	
						135' inc. cpy on vlts. qtz-py.
			Intrusive	vuggy	Int. alt. gabbroic	vlts. still 50% oxid. mod. cc.
			breccia		frag. @ 150'	
				more dense @ 160'		
					160' some poss.	150'- qtz-py vlts. abun. cpy.
					alunite	mod. abun.
				fragments are decr.		
				in number & size	local actinolite in	165'- cpy 40-60% replaced by cc.
					cavities	moly (?)
					170' dec. sev. alt.	cpy still oxid. @ 171'
			Diorite	possible dike of	local actinolite vlts.	repl. cpy by cc. especially on
				country rx.		vlts. cpy-.2-.4%. py.-2-5%
						mt. on vlts.
			Intr. breccia		ser. & cc. on vlts.	
					incr. below 220'	220' - local massive cpy on qtz.
						vlts.

[illegible]-MOORE CORPORATION

District New World

Hole No. [illegible]

Started [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

County [illegible]-Park State Montana

[illegible]

Location [illegible]

Depth	Int.
6-100'	94'
90'	
100-171'	
171-193'	
193-355'	

District New World Hole Number DDH-6-60 Page Number 2

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
						cc incr. below 220'
				vuggy		
						240'- abund. qtz. vlts. decr. py.
				80-90% large frag.	decr. ser.	on frag.
				below 240'		T.S. - 1%
				acc. bio. vlts.	some qtz. vlts.	decr. cc.
					contain feld. & feldsp.	little to no mineralization in
					frag.	P& granite except along vlts.
				280' more abun.		
				actinote vlts.	possible alunite.	locally variable cpy.
					abund. sec. bio.	
						290' - incr. in py. content 3-5%
						cc returns - mostly on fractures
					qtz-actinolite vlts.	303' minor py & cpy mostly on frac.;
						315-325' .15-.25% cpy
			Possible PE	APPEARANCE OF Ti IN TEXTURE		cc replacement of py.
				340' frac. are more	abund. qtz. vlts. some oxid.	py/cpy on fractures = 1/1 ; < 1% total sulfides
				sparse. Inc. k-felds		
				in vlts.	minor ser. @ bottom	minor cpy.

KERR-McGEE CORPORATION

District New World
Hole Number DDH-6-60
Spudded
Completed
Total Depth 355'
Driller Bear Creek
Logged By S. J. Heller & J. Russell

Unsplit intervals 6-130'
145'-

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

% Core Rcvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			Por. granite	local syenite	50-80% oxidized	py. on vlts., little to no cpy.
			& gabbro	stringers		CPY probably oxid.
			gneiss			
				decr. porp. material	oxid. decr. rapidly	numerous qtz-py. vlts.
				and incr. fresh	@ 91'. Int. qtz-ser.	minor cpy. Py-1%
				feldspars below 100'	alt.	
						135' inc. cpy on vlts. qtz-py.
			Intrusive	vuggy	Int. alt. gabbroic	vlts. still 50% oxid. mod. cc.
			breccia		frag. @ 150'	
				more dense @ 160'		
					160' some poss.	150'- qtz-py vlts. abun. cpy.
					alunite	mod. abun.
				fragments are decr.		
				in number & size	local actinolite in	165'- cpy 40-60% replaced by c
					cavities	moly (?)
					170' dec. sev. alt.	cpy still oxid. @ 171'
			Diorite	possible dike of	local actinolite vlts.	repl. cpy by cc. especially on
				country rx.		vlts. cpy-.2-.4%. py.-2-5%
						mt. on vlts.
			Intr. breccia		smr. & cc. on vlts.	
					incr. below 220'	220' - local massive cpy on qtz
						vlts.

KERR-McGEE CORPORATION

District New World
Hole Number DDH-6-60
Spudded
Completed
Total Depth 355'
Driller Bear Creek
Logged By S. J. Heller & J. Russell

Unsplit intervals 6-130'
145'-

County Park State Montana
Claim Reeb Sec. T.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

Depth	Int.	% Core Rcvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	M
6-100'	94'				Por. granite	local syenite	50-80% oxidized	py. on vlts., lit
					& gabbro	stringers		CPY probably oxi
					gneiss			
90'						decr. porp. material	oxid. decr. rapidly	numerous qtz-py.
						and incr. fresh	@ 91'. Int. qtz-ser.	minor cpy. Py-1%
						feldspars below 100'	alt.	
100-								135' inc. cpy on
171'					Intrusive	vuggy	Int. alt. gabbroic	vlts. still 50%
					breccia		frag. @ 150'	
						more dense @ 160'		
							160' some poss.	150'- qtz-py vl
							alunite	mod. abun.
						fragments are decr.		
						in number & size	local actinolite in	165'- cpy 40-60%
							cavities	moly (?)
							170' dec. sev. alt.	cpy still oxid.
171-					Diorite	possible dike of	local actinolite vlts.	repl. cpy by cc
193'						country rx.		vlts. cpy-.2-.4
								mt. on vlts.
193-								
355'					Intr. breccia		ser. & cc. on vlts.	
							incr. below 220'	220' - local mas
								vlts.

District New World Hole Number DDH-6-60 Page Number 2

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
						cc incr. below 220'
				vuggy		
						240'- abund. qtz. vlts. decr. py.
				80-90% large frag.	decr. ser.	on frag.
				below 240'		T.S. - 1%
				acc. bio. vlts.	some qtz. vlts.	decr. cc.
					contain feld. & feldsp.	little to no mineralization in
					frag.	P4 granite except along vlts.
				280' more abun.		
				actinote vlts.	possible alunite.	locally variable cpy.
					abund. acc. bio.	
						290' - incr. in py. content 3-5%
						cc returns - mostly on fractures
					qtz-actinolite vlts.	303' minor py & cpy mostly on frac.
						315-325' .15-.25% cpy
			Possible PE	appearance of Tr in texture		cc replacement of py.
				340' frac. are more	abund. qtz. vlts. some oxid.	py/cpy on fractures = 1/1 ; < 1% ma
				sparse. Inc. k-felds		sulfides
				in vlts.	minor ser. @ bottom	minor cpy.

KERR-McGEE CORPORATION

District New World
Hole Number DDH-6-60
Spudded
Completed
Total Depth 355'
Driller Bear Creek
Logged By S. J. Heller & J. Russell

Unsplit intervals 6-130'
145'-

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

Depth	Int.	% Core Rcvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
6-100'	94'				Por. granite	local syenite	50-80% oxidized	py. on vlts., little to no cpy.
					& gabbro	stringers		CPY probably oxid.
					gneiss			
90'						decr. porp. material	oxid. decr. rapidly	numerous qtz-py. vlts.
						and incr. fresh	@ 91'. Int. qtz-ser.	minor cpy. Py-1%
						feldspars below 100'	alt.	
100-								135' inc. cpy on vlts. qtz-py.
171'					Intrusive	vuggy	Int. alt. gabbroic	vlts. still 50% oxid. mod. cc.
					breccia		frag. @ 150'	
						more dense @ 160'		
							160' some poss.	150'- qtz-py vlts. abun. cpy.
							alunite	mod. abun.
						fragments are decr.		
						in number & size	local actinolite in	165'- cpy 40-60% replaced by cc.
							cavities	moly (?)
							170' dec. sev. alt.	cpy still oxid. @ 171'
171-					Diorite	possible dike of	local actinolite vlts.	repl. cpy by cc. especially on
193'						country rx.		vlts. cpy-.2-.4%. py.-2-5%
								mt. on vlts.
193-								
355'					Intr. breccia		ser. & cc. on vlts.	
							incr. below 220'	220' - local massive cpy on qtz.
								vlts.

District New World Hole Number DDH-6-60 Page Number 2

Depth	Int.	% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
								cc incr. below 220'
						vuggy		
								240'- abund. qtz. vlts. decr. py.
						80-90% large frag.	decr. ser.	on frag.
						below 240'		T.S. - 1%
						acc. bio. vlts.	some qtz. vlts.	decr. cc.
							contain feld. & feldsp.	little to no mineralization in
							frag.	P€ granite except along vlts.
						280' more abun.		
						actinate vlts.	possible alunite.	locally variable cpy.
							abund. sec. bio.	
								290' - incr. in py. content 3-5%
								cc returns - mostly on fractures
							qtz-actinolite vlts.	303' minor py & cpy mostly on frac.;
								315-325' .15-.25% cpy
					Possible	appearance of Ti		cc replacement of py.
					P€	in Texture	abund. qtz. vlts.	
						340' frac. are more	some oxid.	py/cpy on fractures = 1/1 ; < 1% TOTAL
						sparse. Inc. k-felds		sulfides
						in vlts.	minor ser. @ bottom	minor cpy.

KERR-McGEE CORPORATION

District New World (Goose Lake)
Hole Number # 5
Spudded
Completed
Total Depth 410'
Driller Bear Creek
Logged By D. A. Wolfe

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

t.	% Core Recv	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
				Syenite	fg-mg.mod. fr.,syen.	numerous qtz. vlts.	local cc. replacing py.
				w/breccia		50-100% oxid. decr.	v. minor cpy.
				frags.		sharply @ 60'	Total sulfides 1% or less
						some sericite, clay	
							cc. decr. sharply @ 60'
						poss. almenite @ 98'	
						numerous vlts. of	
						same material.	
						100' minor sec. bio.	little to no cpy or py.
						in ser. blebs. incr.	
						fresh sulfides	
						occ. qtz-feldspar vlt.	
						w/minor py.	
					quite similar to		
					200'		
					some frag. of Pg		
					below 225'		252'-qtz-k-feldspar-moly vlt
							below 260' - minor cc. replac
							py., little to no visable cpy

New World (Copper Lake)

Park

Monte

Depth	In
0-60	60'

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Number 2

% Core Recov.	Samp. No.	Assays	Rock Char.	Rock Description	Alteration	Mineralization
			frag(?)			moly paint on surface
				intrusive material ? intensely alt.	inc. qtz-actinolite alt.	cpy + cc. on py in vlts.
						occ. moly-qtz-feldspar vlt. little to no cpy.

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Nu

Depth	Int.	% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration
275					Pc frag(?)		
300'						intrusive material ? intensely alt.	inc. qtz-actinolite alt.

KERR-McGEE CORPORATION

District New World (Goose Lake)
Hole Number # 5
Spudded
Completed
Total Depth 410'
Driller Bear Creek
Logged By D. A. Wolfe

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

% Core Recv	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			Syenite	ff-mg.mod. fr., syen.	numerous qtz. vlts.	local cc. replacing py.
			w/breccia		50-100% oxid. decr.	v. minor cpy.
			frags.		sharply @ 60'	Total sulfides 1% or less
					some sericite, clay	
						cc. decr. sharply @ 60'
					poss. almenite @ 98'	
					numerous vlts. of	
					same material.	
					100' minor sec. bio.	little to no cpy or py.
					in ser. blebs, incr.	
					fresh sulfides	
					occ. qtz-feldspar vlt.	
					w/minor py.	
				quite similar to		
				200'		
				some frag. of Pe		
				below 225'		252'-qtz-k-feldspar-moly vlt.
						below 260' - minor cc. replacing
						py., little to no visable cpy.

Depth	In
0-60	60'

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Number 2

Int.	% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
				Pc frag(?)			moly paint on surface
					intrusive material ? intensely alt.	inc. qtz-actinolite alt.	cpy + cc. on py in vlts.
							occ. moly-qtz-feldspar vl little to no cpy.

Depth

225

300'

KERR-McGEE CORPORATION

District New World (Goose Lake)
Hole Number #5
Spudded
Completed
Total Depth 410'
Driller Bear Creek
Logged By D. A. Wolfe

County Park State Montana
Claim Reeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

% Core Recv	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			Syenite	fg-mg.mod. fr., syen.	numerous qtz. vlts.	local cc. replacing py.
			w/breccia		50-100% oxid. decr.	v. minor cpy.
			frags.		sharply @ 60'	Total sulfides 1% or less
					some sericite, clay	
						cc. decr. sharply @ 60'
					poss. almenite @ 98'	
					numerous vlts. of	
					same material.	
					100' minor sec. bio.	little to no cpy or py.
					in ser. blebs. incr.	
					fresh sulfides	
					occ. qtz-feldspar vlt.	
					w/minor py.	
				quite similar to		
				200'		
				some frag. of Pf		
				below 225'		252'-qtz-k-feldspar-moly vlt.
						below 260' - minor cc. replacing
						py., little to no visable cpy.

Depth	In
0-60	60'

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Number 2

epth	Int.	% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralizat
5					Pe frag(?)			moly paint on surface
0'						intrusive material ? intensely alt.	inc. qtz-actinolite alt.	cpy + cc. on py in vlt
								occ. moly-qtz-feldspar little to no cpy.

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Number 2

Int.	% Core Recov.	Samp.	Assays	Rock Type	Rock Description	Alteration	Mineralization
				fg frag(?)			moly paint on surface
					intrusive material ? intensely alt.	inc. qtz-actinolite alt.	cpy + cc. on py in vlts.
							occ. moly-qtz-feldspar vlt. little to no cpy.

District Goose Lake Hole Number 2 Page Number 5

Int.	% Core Recvy	Samp. No.	(ppm) Assays Cu	Pb	Zn	Mo	Rock Type	Rock Description	Alteration	Mineralization
18'							Intrusive Breccia	numerous PC frags. in monz. matrix	qtz-carbonate vlts. & carbonate vlts; inc. sericite	minor cpy. assoc. w/carbonat vlts.; total sulfides 3-4%, v. minor cpy.
	150-160	26028	280	<5	90	2				
								intensely shattered	abun. carbonate & qtz-K-spar frac. fillings; abun. fresh. sec. bio. on frac.	dec. in py:cpy ratio to 5-10:1 w/3-5% total sulfide
	160-170	26029	355	<5	80	2				
							Monz.	v. dk. gray, fg. monz.; intensely shattered, sheared, granulated. dk. gray color from 2-3x magnetite inc., also bio.	abun. magnetites & sec. bio.; local chlorite; plag & majority of K-spar altered to clay or clouded, orig. bio. altered to chlorite clay. locally abun. bio.-mag. vlts.	py:cpy ratio = 2-3:1 w/1% total sulfides. numerous K-feldspar-mag. vlt carry cpy and minor py.
									1/4" qtz-bio. vlt. @ 30° cut by numerous ser. and K-spar vlts @ 70-90°	
	170-180	26030	470	10	85	3				
									K-spar & plag. are becoming fresher w/depth	bio-mag content and cpy. remain high
	180-190	26031	255	10	100	2				

KERR-McGEE CORPORATION

District New World (Goose Lake)
Hole Number # 5
Spudded
Completed
Total Depth 410'
Driller Bear Creek
Logged By D. A. Wolfe

County Park State Montana
Claim Raeb Sec. T. R.
Elevation
Hole Size
Core Size
Hole Angle
Collar Coords. N.
E.

Depth	Int.	% Core Rcvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
0-60	60'				Syenite	fg-mg.mod. fr.,syen.	numerous qtz. vlts.	local cc. replacing py.
					w/breccia		50-100% oxid. decr.	v. minor cpy.
					frags.		sharply @ 60'	Total sulfides 1% or less
							some sericite, clay	
								cc. decr. sharply @ 60'
							poss. almenite @ 98'	
							numerous vlts. of	
							same material.	
							100' minor sec. bio.	little to no cpy or py.
							in ser. blebs. incr.	
							fresh sulfides	
							occ. qtz-feldspar vlt.	
							w/minor py.	
						quite similar to		
						200'		
						some frag. of Pf		
						below 225'		252'-qtz-k-feldspar-moly vlt.
								below 260' - minor cc. replacing
								py., little to no visable cpy.

District New World (Goose Lake) Hole Number # 5 Bear Creek Page Number 2

Depth	Int.	% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
275					P frag(?)			moly paint on surface
300'						intrusive material ? intensely alt.	inc. qtz-actinolite alt.	cpy + cc. on py in vlts.
								occ. moly-qtz-feldspar vlt. little to no cpy.

KERR-McGEE CORPORATION

PRELIMINARY

District New World - Goose Lake
Hole Number # 4
Spudded 1959-1960
Completed
Total Depth 40'
Driller Bear Creek
Logged by D. A. Volle

County Park State Montana
Claim Sec. T. R.
Elevation 10,000
Hole Size
Core Size
Hole Angle vertical
Collar Coords. N.
E.

% Core Recov	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
coring @	17'					
			Syenite Por. Breccia	lt.med.gy, mg-cg syenite por. brecciated, numerous frags.	intense ser. med. oxidation, occas. bio. or actinolite vlt., v. few qtz. vlts. bio. altering to chl. ser; some fresh sec. bio. on fractures	locally abun. vfg. dissem. cp w/10-20% cc grd/or cv replacement. Total sulfides 1% 28-35'; vfg. moly on qtz.vlts @ 10° to core axis. Moly appears to be replacing py. cubes. also along ser. vlt. @ 10% some possible cv replacement of sl.?
				intense ser. alt. w/ v. minor py; lg. feld or feldspathoid crystals have fresh hard faces but of questionable sec. origin.		occ. mag.-silica vlts. cpy, cv and py. have decreased to <1%, almost none.
				locally abun. qtz. and actinolite-bio. vlts. also abun. mag., fresh K-feld abun. sphene		minor to no sulfides sulfides increase below 55'

Depth	Int.
	Starte
17	17
38	5'
43	12'

District New World-Goose Lake Hole Number # 4 Page Number 2

% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			Syenite Por. Breccia?	as above w/occ. dk. gy., vfg dikes or frags., dioritic in composition	mafics (hornblende) actinolite) 40-80% altered to ser.	56.5' - ¼" qtz-acinolite cpy vlt.
				57-58'-dk. gray dike	silicified, some possible alunite	ser.-bio. vlts @ 0-10° to core axis, 1/16-1/8" thick carry abun. cpy w/variable but intense cc replacement
				60-62' same		
			Syenite Por.		seri-actinolite-qtz. vlts w/abun. cpy, minor cc.	64'-mod. intense cc. replacement of py., cpy, on ser. vlt. @ 10-15%
					active leaching of py, cpy. number of qtz. vlts. incrased slightly feld. are fresh	sulfides minor 1% mag. 2-5%
					sericite after mafics and fesh feld continues	
					increasing mustard colored clay and/or ser. containing 1:1 py:mag w/cc replacing py.	overall sulfide content 1%
				88'-dk. gray dike? w/abun. fresh bio. felds cut by white vfg. feld vlt.		minor py. cpy.

District New World-Goose Lake Hole Number # 4 Page Number 2

Depth	Int.	% Core Recov.	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
55	2				Syenite Por. Breccia?	as above w/occ. dk. gy., vfg dikes or frags., dioritic in composition	mafics (hornblende) actinolite) 40-80% altered to ser.	56.5' -¾" qtz-acinoli
57						57-58'-dk. gray dike	silicified, some possible alunite	ser.-bio. vlts @ 0-10 axis, 1/16-1/8" thick cpy w/variable but in
						60-62' same		replacement
61					Syenite Por.		seri-actinolite-qtz. vlts w/abun. cpy, minor cc.	64'-mod. intense cc. of py., cpy, on ser.
							active leaching of py, cpy. number of qtz. vlts. incrased slightly feld. are fresh	sulfides minor 1% m
							sericite after mafics and fesh feld continues	
82'							increasing mustard colored clay and/or ser. containing L:1 py:mag w/cc replacing py.	overall sulfide cont
						88'-dk. gray dike? w/abun. fresh bio. felds cut by white vfg. feld vlt.		minor py, cpy.

District New World - Goose Lake Hole Number #4 Page Number 3

% Core Recov	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
					fresh felds surrounded	
					on grain boundaries	
					by arg-ser.?alt. - no	
					fresh mafics	
			same		abun. mag. actinolite	minor ccs~1% cpy + cc
					bio. vlts., sphene;	
					actinolite alt. to	py-serc. vlts. 1/8" @ 10° to core
					ser. sparse qtz. vlt.	
					141'-white k-feld vlt.	141
					increasing qtz, bio.	
					+ actinolic vlts.	
						148-qtz.-ser-py-cpy vlt. 1/8" @
					rock infresher, fresh	10°
					bio., k-feld.	
					actinolite, minor ox.	<~1% total sulfides
			Syenite	fg. felds.sec. bio.	ser. clots from	vfg. dissem. cpy~1 bleb every
				minor mag.	original mafics.	1/4x100 mm
					occas. bio. or qtz.	
					vlt.	occas. near horizontal mag. vlt.
20-30%				abun. fractures @		
				80° to core axis.		204'-spec. on py-cpy vlt.
				core recovery poor		
						280'-1/8" cpy vlt. @ 80°
					argillic alt.	
					270-300'	5-10% mag., v. little py. minor cpy

District New World - Goose Lake Hole Number # 4 Page Number 3

Depth	Int.	% Core Recov	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineral
							fresh felds surrounded	
							on grain boundaries	
							by arg-ser.?alt. - no	
							fresh mafics	
100	48				same		abun. mag. actinolite	minor ccs~1% cpy +
							bio. vlts., sphene;	
							actinolite alt. to	py-serc. vlts. 1/8"
							ser. sparse qtz. vlt.	
							141'-white k-feld vlt.	141
							increasing qtz, bio.	
							+ actinolie vlts.	
								148-qtz.-ser-py-cp
							rock isfresher, fresh	10°
							bio., k-feld,	
							actinolite, minor ox.	<<1% total sulfid
156								
					Syenite	fg. felds.sec. bio.	ser. clots from	vfg. dissem. cpy~1
						minor mag.	original mafics,	½%<100 ppm
							occas. bio. or qtz.	
							vlt.	occas. near horizon
176		20-30%				abun. fractures @		
312						80° to core axis.		204'-spec. on py-cp
						core recovery poor		
								280'-1/8" cpy vlt.
							argillic alt.	
							270-300'	5-10% mag., v. littl

District Goose Lake-New World Hole Number # 4 Page Number 4

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			as above		increasing qtz-py. vlts.	increasing amts of py. on fractures decreasing mag. increasing ser. vlts @ 0-10° w/py.cpy.
						333' - 3" qtz-feld-py vlt.
					local silica rich zones to 350'	cpy increases slightly in silica zones. py:cpy ~1:1 w/total sulfides 1% primarily on frac.
					mafics continue to be altered to arg-ser.	
					increasing qtz-ser-feld. vlts. below 350'	increased py. to ~1%
			Syenite		fresh plag.; little to no ser. except on fractures; fresh bio.	minor py. and rare cpy on occs. fracture.
		401 TD				

District New World - Goose Lake Hole Number # 4 Page Number 3

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
					fresh felds surrounded on grain boundaries by arg-ser.?alt. - no fresh mafics	
			same		abun. mag. actinolite bio. vlts., sphene; actinolite alt. to ser. sparse qtz. vlt.	minor ccr-1% cpy + cc py-serc. vlts. 1/8" @ 10° to core
					141'-white k-feld vlt. increasing qtz. bio. + actinolie vlts.	141
					rock isfresher, fresh bio., k-feld, actinolite, minor ox.	148-qtz.-ser-py-cpy vlt. 1/8" @ 10° <-1% total sulfides
			Syenite	fg. felds.sec. bio. minor mag.	ser. clots from original mafics, occas. bio. or qtz. vlt.	vfg. dissem. cpy-1 bleb every ½"<-100 ppm occas. near horizontal mag. vlt.
20-30%				abun. fractures @ 80° to core axis. core recovery poor		204'-spec. on py-cpy vlt. 280'-1/8" cpy vlt. @ 80°
					argillic alt. 270-300'	5-10% mag., v. little py. minor cp

District New World - Goose Lake Hole Number # 4 Page Number 3

Depth	Int.	% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Minerali
							fresh felds surrounded	
							on grain boundaries	
							by arg-ser.?alt. - no	
							fresh mafics	
100	48				some		abun. mag. actinolite	minor ccs-1% cpy +
							bio. vlts., sphene;	
							actinolite alt. to	py-serc. vlts. 1/8"
							ser. sparse qtz. vlt.	
							141'-white k-feld vlt.	141
							increasing qtz, bio.	
							+ actinolie vlts.	
								148-qtz.-ser-py-cpy
							rock isfresher, fresh	10°
							bio., k-feld.	
							actinolite, minor cx.	<<1% total sulfide
156								
					Syenite	fg. felds.sec. bio.	ser. clots from	vfg. dissem. cpy-~1
						minor mag.	original mafics.	½"<<100 ppm
							occas. bio. or qtz.	
							vlt.	occas. near horizont
176		20-30%				abun. fractures @		
312						80° to core axis.		204'-spec. on py-cpy
						core recovery poor		
								280'-1/8" cpy vlt. @
							argillic alt.	
							270-300'	5-10% mag., v. little

District Goose Lake-New World Hole Number # 4 Page Number 4

% Core Recvy	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
			as above		increasing qtz-py. vlts.	increasing amts of py. on fractures decreasing mag. increasing ser. vlts @ 0-10° w/py.cpy.
						333' - ¼" qtz-feld-py vlt.
					local silica rich zones to 350'	cpy increases slightly in silica zones. py:cpy ~1:1 w/tots sulfides 1% primarily on frac.
					mafics continue to be altered to arg-ser.	
					increasing qtz-ser-feld. vlts. below 350'	increased py. to ~1%
			Syenite		fresh plag.; little to no ser. except on fractures; fresh bio.	minor py. and rare cpy on occs. fracture.
		401 TD				

KERR-McGEE CORPORATION

PRELIMINARY

District New World - Goose Lake
Hole Number # 4
Spudded 1959-1960
Completed
Total Depth 400'
Driller Bear Creek
Logged by D. A. Wolfe

County Park State Montana
Claim Sec. T. R.
Elevation 10,000
Hole Size
Core Size
Hole Angle vertical
Collar Coord. N.
E.

Core Footage	Samp. No.	Assays	Rock Type	Rock Description	Alteration	Mineralization
coring @ 17'						
			Syenite Por. breccia	lt.med.gy, mg-cg syenite por. brecciated, numerous frags.	intense ser. mod. oxidation, occas. bio. or actinolite vlt., v. few qtz. vlts. bio. altering to chl, ser; some fresh sec. bio. on fractures	locally abun. vfg. dissem. cp w/10-20% cc and/or cv replacement. Total sulfides 1% 24-35': vfg. moly on qtz.vlts @ 10° to core axis. Moly appears to be replacing py. cpbcc. also along ser. vlt. @ 10% some possible cv replacement of sl.?
				intense ser. alt. w/ v. minor py; lg. feld or feldspathoid crystals have fresh lara faces but of questionable sec. origin.		occ. mag.-silica vlts. cpy, cv and py. have decreased to-[illegible] almost none.
				locally abun. qtz. and actinolite-bio. vlts. also abun. mag., fresh K-feld abun. sphene		minor to no sulfides sulfides increase below 55'

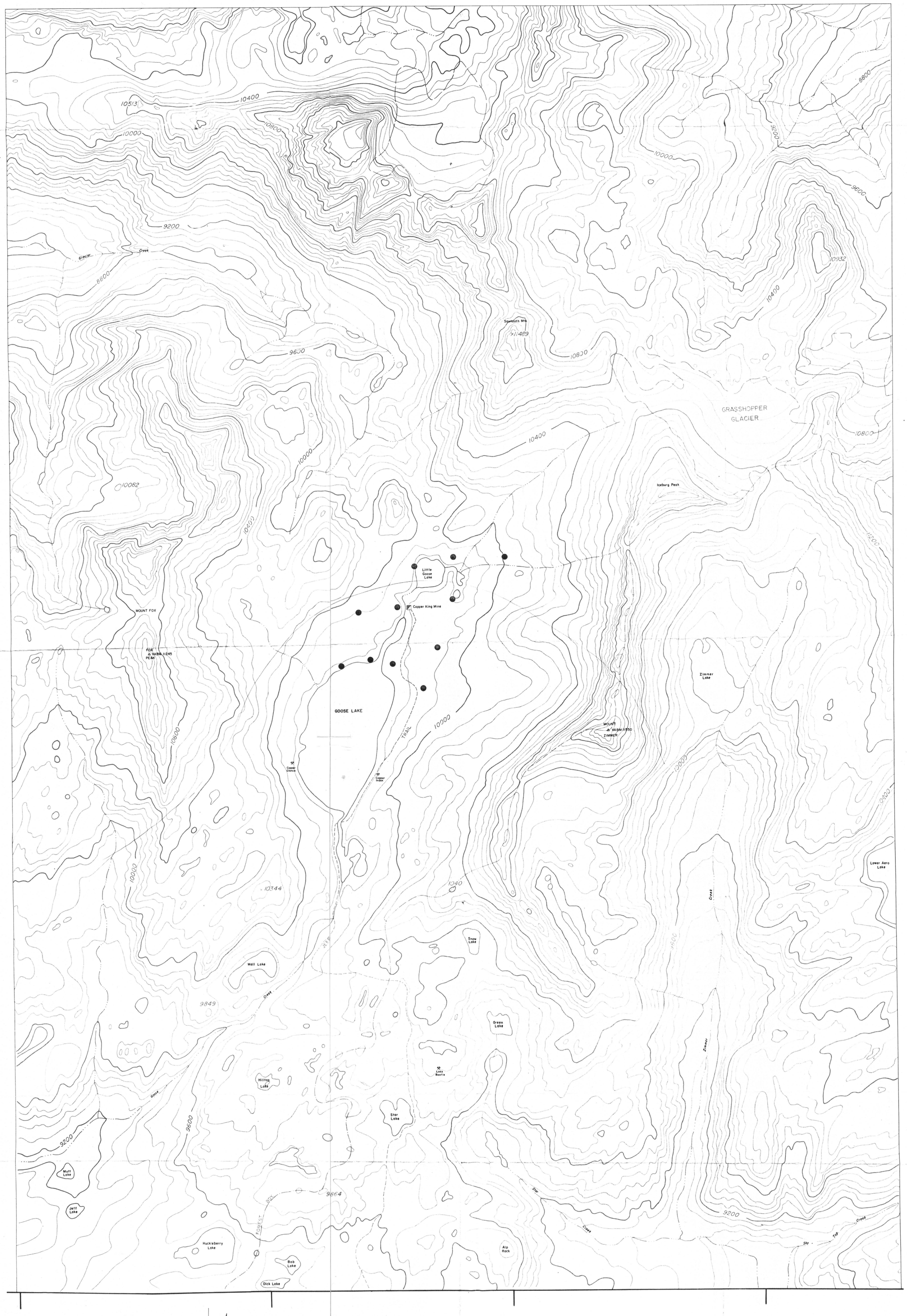
Depth	Int.
	Start
17	17
38	5'
43	12'

District New World-Goose Lake Hole Number # 4 Page Number 2

Core Depth	Samp.	[illegible]	[illegible]	[illegible]	[illegible]	Mineralization
			Syenite Por. Breccia?	as above w/occ. dk. gy., vfg dikes or frags., dioritic in composition	mafics (hornblende) actinolite) 40-80% altered to ser.	56.5' -¼" qtz-acinolite cpy vlt.
				57-58'-dk. gray dike	silicified, some possible alunite	ser.-bio. vlts @ 0-10° to core axis, 1/16-1/8" thick carry abun. cpy w/variable but intense cc replacement
				60-62' same		
			Syenite Por.		seri-actinolite-qtz. vlts w/abun. cpy, minor cc.	64'-mod. intense cc. replacement of py., cpy, on ser. vlt. @ 10-15%
					active leaching of py, cpy. number of qtz. vlts. increased slightly feld. are fresh	sulfides minor 1% mag. 2-5%
					sericite after mafics and fesh feld continues	
					increasing mustard colored clay and/or ser. containing 1:1 py:mag w/cc replacing py.	overall sulfide content 1%
				88'-dk. gray dike? w/abun. fresh bio. felds cut by white vfg. feld vlt.		minor py. cpy.

Depth	Int.
55	2
57	
61	
82'	

EXPLANATION:
Territory
Tsp Syenite Porphyry
Tg Gabbro
Precambrian
PCgg Gabbro Gneiss
PCgc Goose Creek Granite
Fine Grained Breccia
Breccia
Fault
Contact/approximate/inferred
Mine
GEOLOGIC MAP
DAW
Oct.1971-D.A.W.&B.J.H.
PCgc
PCgc+Tsp
Tg
Tsp
PCgg



● Kerr-McGee Drillhole

● Bear Creek Drillhole

KERR . McGEE CORPORATION MINERAL EXPLORATION DEPARTMENT		Goose Lake, Montana	STATE : Montana .	GEOLOGY BY :	REVISIONS : (Name & Date)
			COUNTY : Park	CONTOURED ON :	
			AREA :	CONTOUR INTERVAL : 80 ft.	
DATE : February, 1971	SCALE : 1" = 500'		DISTRICT :	COMPILED BY : D.A.W.	REFERENCE : Cooke City 15' Quad.
			SURVEY :	DRAFTED BY : B.J.N.	

EXPLANATION:

Tertiary

- Tsp — Syenite Porphyry
- Tg — Gabbro

Precambrian

- P€gg — Gabbro Gneiss
- P€gc — Goose Creek Granite
- Fine Grained Breccia
- Breccia
- Fault
- Contact /approximate/inferred
- Mine

KERR - McGEE CORPORATION MINERAL EXPLORATION DEPARTMENT	GEOLOGIC MAP Goose Lake, Montana	STATE : Montana .	GEOLOGY BY : D.A.W.	REVISIONS : (Name & Date)
		COUNTY : Park	CONTOURED ON :	Oct, 1971 - D.A.W. & B.J.N.
		AREA :	CONTOUR INTERVAL : 80 ft.	
		DISTRICT :	COMPILED BY : D.A.W.	REFERENCE : Cooke City 15' Quad.
DATE : Februgry, 1971	SCALE : 1" = 500'	SURVEY :	DRAFTED BY : B.J.N.	

Rotopositive + Blueline print

EXPLANATION:

Tertiary

Tsp	Syenite Porphyry
Tg	Gabbro

Precambrian

P€gg	Gabbro Gneiss
P€gc	Goose Creek Granite

Fine Grained Breccia

Breccia

Fault

Contact / approximate / inferred

Mine

TRUE NORTH 17°

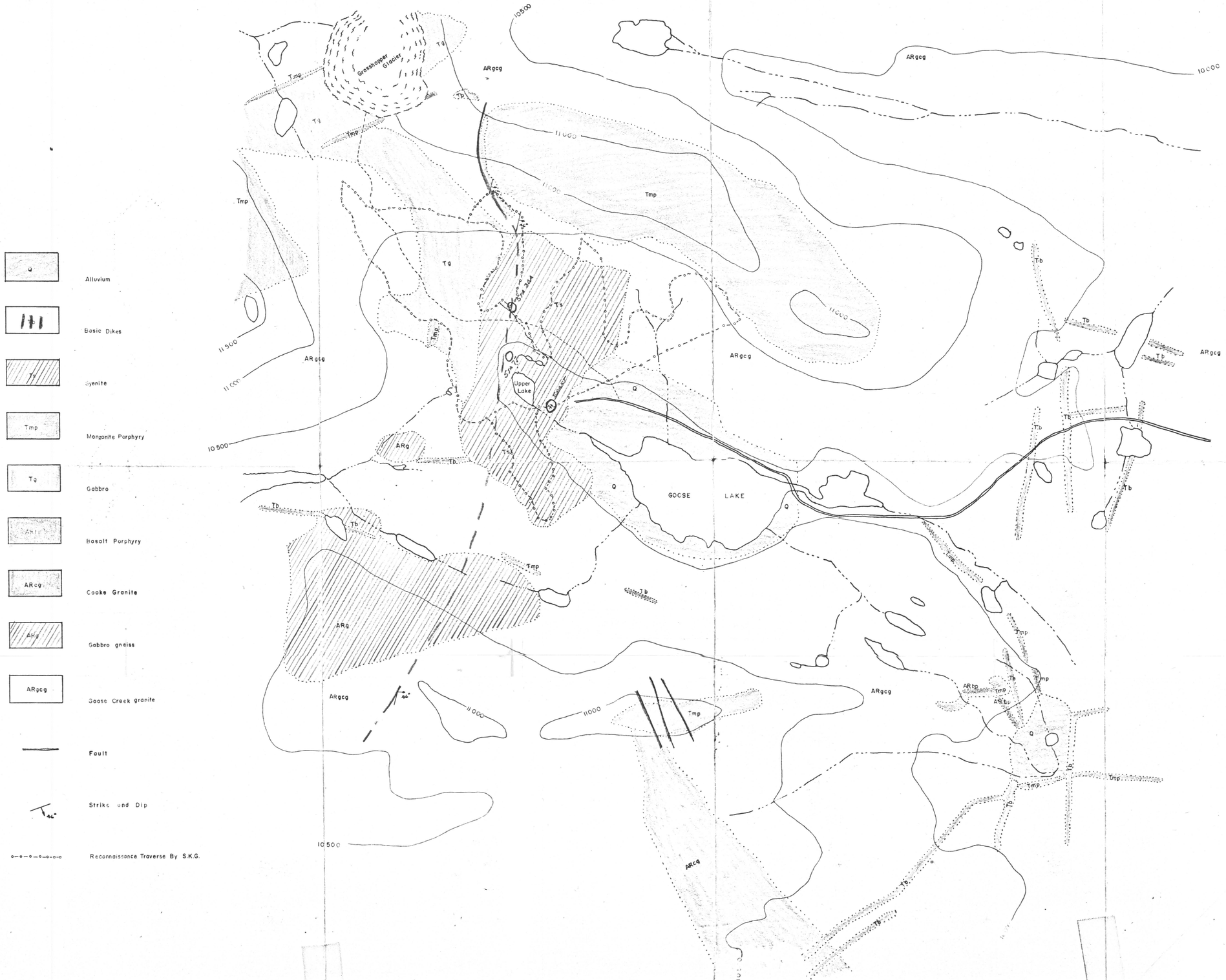
Magnetic Susceptibility

1800 gammas

1200 gammas

800 gammas

KERR - McGEE CORPORATION MINERAL EXPLORATION DEPARTMENT	GEOLOGIC MAP Goose Lake, Montana	STATE: Montana	GEOLOGY BY: D.A.W.	REVISIONS: (Name & Date) Oct, 1971 - D.A.W. & B.J.N.
		COUNTY: Park	CONTOURED ON:	
		AREA:	CONTOUR INTERVAL: 80 ft.	
DATE: February, 1971	SCALE: 1" = 500'	DISTRICT:	COMPILED BY: D.A.W.	REFERENCE: Cooke City 15' Quad.
		SURVEY:	DRAFTED BY: B.J.N.	



CORONADO COPPER & ZINC CO.

WALLACE, IDAHO

COPPER KING PROPERTY
PARK COUNTY, MONTANA
TOPOGRAPHIC & GEOLOGIC MAP

DATE: 11-20-57	DRAWING Nº WB-8
SCALE: 1"=1000'	
DRAWN BY:	FILE:

Bear Creek Map
Redrafted

Bear Creek Map
Redrafted

Symbol
Description
gg
old granitic and other gneiss or schist
gab
gabbro, diabase, basalt
sy
phased syenitic complex
syg
syenitic rocks with gabbroic xenoliths
peg
pegmatite, aplite
qm
quartz monzonite
alteration, kaolinitic and leaching
quartz vein
fault or shear
fractures, joints
Sample Footage
oz. Au. oz. Ag. % Cu oz. Pt.
Contour Interval 25 Feet
LAKE VIEW SUR. Nº 8106
COPPER QUEEN SUR. Nº 8104
COPPER KING SUR. Nº 8103
CALUMET SUR Nº 8105
UPPER LAKE
LITTLE LAKE
STA. Nº 77
STA. Nº 30A
SHAFT
N
10,000
10,100
10,200
CORONADO COPPER & ZINC CO.
WALLACE, IDAHO
Reeb-Copper King Prospect Area
Goose Lake
SE Park County, Montana
Date 10-31-57
Scale 1" = 100'
Drawing No.
WX-7