60001583

Mining District File Summary Sheet

DISTRICT	Rosebud
DIST_NO	4010
COUNTY If different from written on document	Pershing
TITLE If not obvious	Rosebud Drill Hole File - Hole No. KM-1
AUTHOR	C. Wilsey; R. Beaty; R. Andrus; D. Mason; A. Park; L. Pesanti; W. Rose; D. Bird
DATE OF DOC(S)	1985 - 2000
MULTI_DIST Y / (N?) Additional Dist_Nos:	
QUAD_NAME	Sulphur 7.5'
P_M_C_NAME (mine, claim & company names)	Rosebud Mine; Rosebud Project; Dreamland; Freeport - McMoran Gold Co.; Dreamland Nos. 1-3; Lac Minerals Exploration (Texas) Inc. Monterey No. 2 Beaty Geological, Inc.; Lac Minerals (USA) Inc. Lucky Boy Nos. 1, 3; Wild Nos. 1-9, 15, 18-20; RB Nos 1-3, 5-25
COMMODITY If not obvious	gold silver
NOTES	Drill log; geology; assay; total depth 605' handwritten notes; correspondence; claim map; location map.

~~72~~ p. 72

Keep docs at about 250 pages if no oversized maps attached (for every 1 oversized page (>11x17) with text reduce the amount of pages by ~25)

SS: DD 6/2/08
Initials Date

DB: mah
Initials Date

SCANNED: NV Blue
Initials Date

Revised: 1/22/08

Drill log Km-1
Rosebud

60601583 4010

6000 1583

LAC MINERALS EXPL. (TEXAS) INC.

DRILL LOG SUMMARY SHEET

PROJECT Rosebud

HOLE NUMBER KM-1 TOTAL DEPTH 605' LOGGED BY _____

Date started _____

Date completed _____

Initial bearing S 12 W

Initial inclination -75

Elevation 5489.5

Collar coordinates:

N 2203247.0

E 484087.6

Contractor _____

Drill Type _____

Hole Size _____

Comments _____

Data by MCH, PC Explor 6/91

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Easting)	Y (Northing)	Z (Elevation)
0	605		-75	S12W			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 1 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ARGILLIC W M S	SILICIFICATION W M S	PROPYLITIC W M S	COMMENTS	LIMONITE W M S	HEMATITE W M S	JAROSITE W M S	% SULFIDES	OTHER COMMENTS	Au	Au ✓	Ag	As	Hg	Sb	Se
0		TQS - Bud Dia, lt gray to wkly burg bwn, local fine qtz stkw wk dk gray py rich SiO2, wk clay gouge, clasts bleached, mod biotite phenos; FeOx → fracts, SiO2 qvan to pervasive epiclastic to pyroclast, tuff silt to sand, 2 stg Diation	Δ v v Δ Xp Xs c				POSS	poss wk epidote + celad tr. sericit				1%	hem str matrix	<.02						
5		TQS - pervasively bleached, lt gray to lt burgundy wk calced vns tr xtal qtz tr sacroid qtz vns pervasive dissem. biotite matrix mod hemitic; locally rimming clasts 2 stg brecciation	Δ v v Δ Xs Xv					tr. wh clay poss. tr epid wk celad				tr py.	tr Mn poss tr Fe sulfate	<.02						
10		Bud Dia, lt gray to lt burgundy to lt PINKINK - BUFF hemit rich matrix, fine qtz stockwork, clasts bleached pervasive dissem biotite → trace, pervasive SiO2 2 stg brecciation	Δ Δ Xc X					wk celad poss tr epid.					tr MnO	<.02						
15		BUD Dia, lt gray to PNKISH-burgundy pervasively bleached, wk sacroidal; calcedonic qtz vns fine gr tuffaceous to Diated w/ bleached clasts; hemitic matrix, 2 stg Dia, matrix - micro Dia	Δ Δ Xc			tr TRACE						< 1%	tr MnO	<.02						
20		Bud Dia - 2 stg. clasts - buff w/ burg-hemit matrix, bleached clasts, trace stockwork qtz wk local clay ALT OF " tuffaceous Dia, trace druzy qtz, pervasive dissem biotite	Δ Δ Xc Xstd										tr. MnO	<.02						
25		tuffaceous Breccia, burgundy brown wkly fractured w/ hem fill 2 stg Dia clasts bleached to locally clay altered, local str clay gouge, wk to tr calced vns	Δ Δ Δ Xc				TRACE	chl-te poss tr. sericite	TRACE				tr MnO	<.02						
30		Bud tuff Dia bleached fn gr tuff to hemitic matrix Dia w/ bleached clasts 2 stg Dia local clasts w/ wk limon flush, lt gray to buff to burg bwn. to PINK wk	Δ Δ Xs				tr	tr epidote					tr MnO	<.02						
35		Bud breccia - burgundy bwn clasts bleached w/ local wk hemit flush trace calcedonic SiO2 wk clay alt of clasts 2 stg Dia tr. sacroidal SiO2, str hemit matrix, tr. blue gray SiO2	Δ Δ Δ Xs				poss tr	trace epidote ± chl	TRACE			poss tr. sulf.	tr MnO	<.02						
40		Bud Breccia - burgundy bwn matrix clasts: bleached, buff to pink to lt gray w/ local tr limon flush, tr clay alt of phenos, tr pink + sericite 2 stg Dia, tr blue gray SiO2 w/ poss sulf., tr limonitic clay gouge	Δ Δ Δ Xs					tr epid. celad ?				poss tr.		<.02						
45		fine gr tuff, buff to tan w/ wk blue gray SiO2 - granular, tr. granul SiO2 strong clay alt - gouge zone, wk brecciation - diff to distingu.	Xs					tr. epidote celad ?	TRACE	TRACE				<.02						
50																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KAY-1 PAGE 2 OF 12

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
50-	Bud Breccia - finely Diated tuff lt green to pinkish-purp tan, mod clay alt, trace blue-gray SiO2 vns pervasively bleached to clay alt, wk local granul SiO2 flush	A Xs			tr ace		mod celad + clay						<.02						
55-	fine gr brecciated granular tuff, buff to lt green to tan, tr blue gray SiO2, mod str clay alt - pervasive locally finely Diated clasts bleached to clay alt	A Xs			tr ace		mod celad + clay	tr ace					<.02						
60-	fine gr welded tuff, buff pervasively, tr SiO2 veinlets, wk blue gray SiO2 vns, mod str clay alt, local tr hemititic clay locally finely Diated	A Xs Xv					mod str celad + clay	tr ace			tr Mn		<.02						
65-	fine gr granular buff to green gray tuff, finely brecciated mod str clay alt, wk blue gray SiO2 pervasively alt	A Xv					mod str celad + clay	tr ace					<.02						
70-	buff to lt green to gray fine gr tuff mod str clay alt finely brecciated, mod blue gray SiO2 vns, trace fine qtz veinlets	Xv					mod celad + mod str clay	tr ace	tr ace				<.02						
75-	tuff: fn gr lt green-gray locally finely Diated w/ clay alt clasts, pervasive mod str clay alt secondary biotite present, mod blue gray SiO2	A Xs					mod celad	tr ace	tr ace				<.02						
80-	tuff: buff to lt gray green granular SiO2 finely brecciated to mod burg brn, wk dk gray SiO2 hemititic matrix where not arg alt, mod str clay alt, Dia clasts: bleached	A Xs					wk celad	tr ace					<.02						
85-	fine gr tuff breccia, lt green gray to burg brn mod clay alt, granular	A					wk celad	tr ace					<.02						
90-	fine gr tuff breccia, lt green - mod gray granular wk - mod clay alt clasts: bleached to clay alt mod primary biotite	A					mod celad	tr ace					<.02						
95-	finely brecciated tuff clasts - bleached to clay alt lt to med green gray to buff granular pervasive wk to mod clay alt w/ pervasive fine gr biotite	A					mod celad						<.02						
100-																			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 3 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
100		Fine gr tuff - granular, buff to lt green gray wk clay alt, locally finely brecciated clasts: bleached matrix: med gray	A					wk celad						<.02						
105		Fine gr tuff - granular, locally finely brecciated buff to lt green gray, wk clay alt, clasts: bleached	A					wk celad		tr A C C				<.02						
110		Fine gr. granular tuff, buff to lt gray green, w/ wk hem/± limnite vns, mod gray clay gouge ↳ xtalline, trace tr qtz stockework	X hem					wk celad / chl?	tr	tr A C C				<.02						
115		Fine gr tuff - granular buff to lt gray green finely brecciated, local hemit matrix, clasts: bleached, mod gray clay gouge, trace translucent qtz vns - xtal, trace sericite	A X v					wk celad / chl? alt		tr A C C				<.02						
120		Fine grained granular tuff, buff to gray green finely brecciated, tr calcd vn, wk clay alt weakly bleached	A X v					mod celad / chl?	tr A C C	tr A C C				<.02						
125		Fine grained granular tuffaceous breccia, w/ bleached clasts med gray to burg gray-brn, trace calcedonic SiO_2 matrix burg brn to med gray granular, tr pinkish	A A X v					poss chl / celad	tr A C C	tr A C C				<.02						
130		Fine gr granular tuffaceous breccia clasts: bleached local clasts w/ celad, matrix burg brn to gray, tr → wk granular qtz vns w/ assoc FeOx	A X v					tr celad / chl / epid	tr	tr A C C				<.02						
135		fine gr granular tuffaceous breccia finely Δ'ated clasts: bleached locally w/ tr limon flush, + tr clay alt, buff to pink to burg brn to med gray tr white clay vns	A A X v					wk celad / chl	tr	tr				<.02						
140		fine gr granular tuffaceous breccia, finely Δ'ated tr. FeOx SiO_2 veinlets vns, buff to burg-brn to med gray mottled tr wk clay alt, wk bleaching	A X v					wk celad	tr	tr				<.02						
145		fine gr granular tuff locally brecciated, mottled burg brn to med gray tr. translucent qtz vns tr zoned calcedonic SiO_2 filling vugs, local tr bleach	A X v					wk celad / chl	tr					<.02						
150																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 4 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
150–155		fine gr granular tuffaceous Δia - 2 stg, pervasive hemitite flush, wk translucent SiO2 vns, trace calcedonic stockwork, clasts locally bleached med burn to gray color, poss tr sericite matrix - hemititic few xtals tr clay	A, Xc, Xv					wk celad chl / poss tr seric	+ R					<.02						
155–160		fine gr granular tuff wkly brecciated w/ calcedonic fill w/ xtal SiO2 core, pervasively med burg burn to lt gray calced is zoned in Δ fill, tr SiO2 rimmed in hemitite	A, Xc		+ R			wk celad - chl	+ R					<.02						
160–165 (FAULT ZONE)	CLAY	fine gr granular tuff locally brecciated clasts: bleached to wkly clay alt, mod green - dk gray clay alt, pervasive burn gray color	A, Xv					wk celad / chl	+ R					<.02						
165–170		fine gr granular tuffaceous breccia w/ hemititic matrix ↑ Δiation clasts: bleached to locally wkly FeOx to wkly celadonitic, trace to wk CALCITE BUD BRECCIA, tr. fine qtz stockwork	A, Xv, R					mod celad + chl / tr-wk CaCO3						<.02						
170–175		dry - buff, wet - buff to green to red fine gr granular tuffaceous breccia, clasts: bleached to local wk FeOx flush to chl alt, few hemit vnlets, 2 stg; poss 3 stg Δiation wk burg bun clay gouge	A, Xv, P					wk mod celad chl						<.02						
175–180		fine gr granular tuffaceous Δia - clasts: bleached + wk local celad matrix: str hemitite, local tr sericite wk burg bun clay gouge tr white clay, tr white qtz vns tr. Calcite, tr qtz stockwork	A, Xv, S					wk celad + chl / tr CaCO3						<.02						
180–185		granular tuff Δia clasts: bleached matrix: burg bun mod burg bun clay, matrix ≥ clay → earthy strongly weathered	A					wk CaCO3 vns / poss chl celad						<.02						
185–190 (STRC CLAY)		fine gr granular tuff Δia: Strong clay gouge - burg - gray bun - pervasive str alteration - gouge	A, CaCO3					mod CaCO3 / tr chl						<.02						
190–195 (CLAY)		dry - med gray wet: medium gray brown - strong clay alt - gray bun, fine gr gran. tuffaceous Δia w/ bleached clasts, burg bun matrix, mod calcite veining	A, CaCO3					wk-mod CaCO3 + chl ± celad	+ R	T R				<.02						
195–200		dry - lt gray, wet: med gray - burg bun, fn gr granular tuffaceous Δia, locally clasts w/ wk limon flush, wk alunite vning, matrix - micro Δia - burg - bun, 2 stg Δia, local clasts epidote alt						tr epid chl / wk CaCO3 vns						<.02						

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 5 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
200		dry - earthy burg bwn + bleached wet - same fine gr granular tuff Δia, bleached clasts ± chl, FeOx matrix, earthy burg bwn, mod burg bwn clay alt 2 stg Δiation - matrix micro Δia, wk alunite	A P					tr chl + celad / mod CaCO3	+ R	T R				<.02						
205		fine gr granular tuff, locally brecciated, pervasively dk gray to burg bwn, tr qtz vns, strongly clay alt clasts bleached locally w/ tr epidote	A P X V					wk to mod epi/chl / wk CaCO3						<.02						
210		earthy burg gray brown w/ str clay alt, fine gr granular tuff locally brecciated, clasts locally bleached, mod calcite vns,	A P					tr epid / mod CaCO3					dk gray clay poss w/ sulfide	<.02						
215		medium brown to buff to burg-red bwn, fine gr granular tuff breccia clasts: bleached w/ locally wk FeOx flush, also gray hemititic matrix mod calcite veing	A P					mod CaCO3 / poss tr chl	+ R					<.02						
220 CHANGE		brecciated bleached tuff - brecciated mass celad. green, dominantly celad alt, ~7% oxid Δia - hem. rich clasts - bleached to celad alt w/ rich celad matrix wk fine qtz stockwork, tr fibrous gypsum	A Cd P					strong celad, tr chl + epid / mod CaCO3	T R			1% dissem + pods fresh		<.02						
225		fine gr tuff locally flow banded - wkly, locally brecciated, fine qtz stockwork, mod calcite veining wk calcedonic SiO2 primary leaching, strongly pervasive dissem celad.	A Cd X C X K					mass celad. / mod CaCO3 vn / poss tr chl	+ R			tr		<.02						
230		celad rich fine gr tuff moving into oxidized tuff wk white clay alt, wk calcedonic SiO2 local Δiation minor relict flow banding ~2% dk gray silic tuff w/ poss sulfides	A Ca P X C					pervasive celad wk + chl / wk Calc X vns mod	+ R	+ R		tr+		<.02						
235		mod celad fine gr tuff grading into oxidized red-bwn-tan, wkly bleached locally, wk fine qtz stockwork, locally brecciated, local flow banding wk silicif of dk gray tuff, py -	A P Cd					mod chl / wk cela / wk CaCO3	+ R			tr fresh	py assoc w/ celad rich	<.02						
240		fine gr granular tuff - gray green, wk calcedonic SiO2 filling vugs - wkly + vugly, wk clay alt local wk brecciation, local fine SiO2 stockwork	A P X CV					wk pervas. celad. / wk chl / wk+ CaCO3		+ R		1-2% + v. fine dk		<.02						
245		mottled buff to gray bwn fine gr tuff, calcedony filling vugs, primary bleached w/ overprint celad, wkly clay alt, wk local Δiation	P X C V					wk celad tr chl / wk CaCO3				3% assoc w/ Calced vug fill	tr limon repla py	<.02						

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 6 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
250		mottled gray buff w/ wk chl, tr lim-hem clay, wk calced vug fill, wk clay alt, poss finely Δiated	Δ χcv p					wk chl / wk CaCO3 vn; fill poss celad		tr		2% fresh +	→ rim vugs filled w/ calcite; in pods copper color	<.02						
255		mottled green-gray buff previously bleaching calcite filling vugs; vns, wk clay alt, poss wk sericite alt, local vugs filled w/ celad rich calced w/ assoc sulfides? ± sericite + hemit brecciated 2to3 stg → limon replac	Δ χcv p					mod celad w/ chl / wk-mod CaCO3		TR		~1% hem replac		<.02						
260		mottled green gray brwn fine gr tuffaceous breccia wk local fine celad rich qtz stockwork; vug fill local small pods limon/sericite/celad(chl?) vug fill	Δ χcv p					mod st celad alt / wk CaCO3 poss tr chl		TR		<1%		<.02						
265		dry-buff → lt green wet → mottled green-dk gray to buff fine gr granular tuff → brecciated 2-3 stg tr white trans/clear qtz vns, wk fine celad ± SiO2 stockwk w/c bleaching, pervasively alt	Δ χv p					wk dissem CaCO3 / pervas celad		TR		tr. lim repl	tr hem assoc w/ wk seri	<.02						
270		dry-lt buff green wet → mottled green gray to buff w/ fine dk green stockwork fine gr granular tuff celad veinlets fill, tr white qtz vns, locally Δiated	Δ χv p c					wk-mod chl / wk CaCO3 vn		TR		tr lim repl		<.02						
275		lt green gray buff mottled granular fn gr tuff fine dark gray and celad green stockwork trace local Δiation few hemit veinlets, local white zoned calced vug fill	Δ χcv c					wk CaCO3 vn						<.02						
280		mottled dk gray to burgbrwn to celad green fine gr granular tuff, pervasive celad alt, locally Δiated celad vug fill, previously bleached	Δ p χcv					str celad / wk chl / wk CaCO3		TR		tr limon repl		<.02						
285		lt gray green fn gr granular tuff, wkly finely vuggy w/ celad fill w/ over all tr in celad alt, trace qtz vn	χv c p					tr CaCO3 vns		TR				<.02						
290		lt gray weakly green fn gr granul tuff, tr calcite vns, trace phenos	c p					tr chl / tr celad		TR				<.02						
295		lt gray tuff, fine gr granular, local fine qtz stockwork	χkp c					local wk CaCO3 vnlets w/ assoc celad wk chl						<.02						
300																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 7 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
300		fine gr granular tuff - medium gray brown tr white qtz vns, fairly hard, trace calcite veinlets along fracts	P χv					wk chl / poss tr celad						<.02						
305		med brn w/ mottled green fn gr granular tuff mod hem along fracts, local alt phenos to CaCO3 celad ± chl	Ca					tr CaCO3 vns						<.02						
310		med brn-gr wk mottled green, fn gr granular tuff tr limonite clay, fairly hard, tr sericite	Ca Cd P					wk chl / tr CaCO3 / wk celad	T tr					<.02						
315		medium gray-brn fine gr granular tuff mod hard	Ca Cd P					wk celad / tr assoc calcite						<.02						
320		lt gray mottled w/ hemitite, fine gr granular tuff trace pink intrusive w/ local limon veins, tr. white qtz vns, poss sericite assoc w/ hemitite → w local FeOx	χv Ca P					tr calcite vns / tr celad wk chl				<1% lim replac		<.02						
325		lt-med gray brown, mottled hemititic fine gr granular tuff w/ tr white qtz vns	χv Ca P					wk chl / tr CaCO3 vns						<.02						
330		lt-med gray brn mottled w/ hemitite fine gr gran tuff w/ poss sericite on w/ hem., trace brilliant orange golden clay	Ca χv P					wk chl / tr epidot						<.02						
335		med gray ± brn mottled w/ hemitite, fine gr granular tuff, wk fine qtz vns, trace epidote	Ca χv P					wk qtz vn / wk CaCO3 vns / wk chl						<.02						
340		medium gray brown mottled w/ hemitite → tuff wk white qtz vns & vnlets local wk alteration, wk fracturing, wk limon clay alt	χv P					wk chl / wk CaCO3 / tr epid					tr hemit vns	<.02						
345		lt-med gray ± brn mottled w/ hemitite fine gr gran tuff, mod str hem clay w/ few alt phenos to chl/cal *	P					wk chl / tr CaCO3						<.02						
350																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 8 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
350		medium gray mottled w/ hemitite fine gr granular tuff, phenos chl alt, trace qtz vns	Ca P Xv					wk chl tr CaCO3 vns wk celad				<1% fresh	← brass golden	<.02						
355		medium gray brown mottled hemit tuff, → granul poss tr. cinnibar, tr SiO2 vnlets	Xv P Ca					wk CaCO3 tr chl tr celad				<1% fresh	"	<.02						
360		lt gray brn mottled w/ hemitite, granular tuff wk hemit clay poss w/ sericite, phenos chl alt	P Ca					tr CaCO3 vns wk chl tr celad				tr fresh		<.02						
365		med brn to gray brn mottled w/ hemitite fine gr tuff w/ Xtals - bleached wk calcite vns w/ hemitite rim, local trace intrusive w/ chl phenos	P Ca					tr CaCO3 vns tr celad tr chl				tr limon replac		<.02						
370		buff to lt gray - brn mottled w/ hemitite, fine gr granular tuff, local weak bleaching py, calcite, chl all assoc, poss tr cinnibar vnlets wk hem clay	Ca P					wk chl				~1% fresh to lim repla		<.02						
375		med gray fine gr granular tuff mottled w/ hemitite local wk SiO2 vnlets, poss tr cinnabar wk hemititic clay	P Ca					wk chl wk CaCO3				tr fresh to limon replac py		<.02						
380		med brn to gray mottled w/ calcited granular tuff; mottled buff brn intrusive w/ pink calcedony fill wk - tr qtz vns, intrusive w/ str calcite ± chl	Xcv Ca P					wk calcite wk calced vug fill				tr fresh		<.02						
385		tuff + intrusive (?) w/ green calcedonic vug fill + calcite locally, tr hemit clay, wk fine qtz stockwork tuff - fine gr.	Ca P Xcv					wk chl				tr fres		<.02						
390		pervasive green gray granular tuff locally brecciated, wk celad calced vug fill SiO2 + chl ± epidote breccia matrix ↳ calced	P Xcv					str chl tr whit qtz wk CaCO3				tr hem repl		<.02						
395		green gray granular tuff w/ calcite/chl ± SiO2 vug fill, locally brecciated tr white clay blue green alt - celad? wk hemit clay, blue green clay present possibly moving in to pyroclastics some flow features present	Ca Xcv					wk chl tr CaCO3						<.02						
400																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 9 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
400		medium gray to gray brn fine gr tuff fractured to local Δiated w/ $CaCO_3$ + SiO_2 fracture fill to stockwork - fine matrix support Δia wk calcedonic vug fill tr limon clay, mod hard poss local wk bleaching	Δ, χ_{ca}, χ_K, $p\chi_v$					wk chl ± wk celad						<.02						
405		med gray to gray brn fine gr tuff, tr mod hard white clay - alunite, wk SiO_2 VNS, wk tr limon clay wk calcedonic vug fill, pervasive mod stockwork	χ_{ca}, χ_v					chl + SiO_2 stockwork vug fill						<.02						
410		medium gray to brn gray fine gr tuff, wk limon clay, local fine qtz stockwork mod fractured to brecciated w/ matrix: w/ SiO_2, chl, wk $CaCO_3$ vn; fract fill	Δ, χ_v, $p\chi_K$					wk pervas chl + SiO_2 vug fill				te limon replac		<.02						
415		medium brn gray fine gr tuff mod fractured to locally brecciated, fine qtz stockwork w/ SiO_2 + chl matrix: SiO_2 rich, tr lt brn-pk clay	Δ, χ_K, p					wk chl tr celad					te MnO	<.02						
420		medium brn to gray brn fine gr tuff wk tan clay chl + SiO_2 vug fill, wk fine qtz stockwork, tr bleach + Δiation tr pink SiO_2	Δ, p, χ_K					wk chl poss tr celad						<.02						
425		green gray to brn gray fine gr tuff poss tr cinnabar + SiO_2 veinlets wk qtz + chl stockwork poss wk sericite phenos - replac by ± celad ± SiO_2 ± chl	Δ, p, χ_v					wk chl tr $CaCO_3$ te celad				te limon replac		<.02						
430		lt gray brn mottled fine gr tuff, wk tan clay tr qtz stockwork	p, χ_K					chl + te epid				wk limon replac		<.02						
435		lt - med gray brn fine gr tuff, tr qtz stockwk wk VNS: SiO_2 + chl + limon replac py ± sericite local phenos SiO_2 replac, tr tan clay	Δ, p, χ_K					chl				wk limon replac		<.02						
440		mottled gray brn, fn gr tuff, fract fill w/ hemit ± sericite + SiO_2, tr bleached phenos tr tan clay	χ_v, p					te chl						<.02						
445		med gray brn mottled w/ hemit tr qtz VNS - w/ local assoc epidote tr fn qtz stockwork few phenos SiO_2 replac tr wk Δiation w/ SiO_2 + chl matrix, tr tan clay ↑ hemitite	Δ, p, χ_v					te chl						<.02						
450																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 10 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
450		medium brn fine gr tuff, tr qtz vns, tr tan clay tr SiO2 replac phenos wk tan clay ± sericite	P Xv					tr celad + chl						<.02						
455		med brn to gray fine gr tuff tr SiO2 + chl vns tr tan clay, wk fine qtz stockwork	P Xv					chl wk CaCO3 vns						<.02						
460		lt-med gray brn fine gr tuff, wk tan clay wk tan clay, tr-wk qtz vns & stockwork tr copper colored metallic — seric + hemit's	Xk Xv P					tr CaCO3 vns tr chl						<.02						
465		medium brn gray fine gr tuff, trace SiO2 fract fill, mod limon clay	P Xv					tr chl				tr limn replac		<.02						
470		mod gray brn fn gr tuff wk sericite + hem fract fill wk qtz + chl vns, mod hem/clay tr SiO2 phenos	P Xv					wk chl						<.02						
475		med brn-gray fine gr tuff w/ fine xtals tr white qtz vns, local fine (very) qtz stockwk local phenos SiO2 replac	P Xv Xk					wk chl on fracts						<.02						
480		med-lt gray to gray brn fine gr tuff w/ few xtals, tr qtz vns locally w/ chl, tr tan clay	P Xv					tr chl				tr limon replac		<.02						
485		med gray fine gr tuff w/ crystal clear CaCO3 tr hemit + sericite fract fill	P Ca					wk calcite tr chl						<.02						
490		medium gray fine gr tuff w/ few SiO2 replac xtals, wk clear CaCO3 xtals, tr hem + seric on fract faces	Ca					tr chl						<.02						
495		mottled gray brn-lt, pinkish fine gr tuff w/ tr SiO2 replac phenos	P Ca					tr CaCO3 vns tr chl						<.02						
500																				

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LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 11 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
500		lt-med brn fine gr tuff w/ few SiO2 phenos sericite assoc w/ ↑ hemit, wk fine qtz stockwk tr Alation	P Ca K					tr CaCO3 VNS tr chl						<.02						
505		medium brown, pinkish gray fine gr tuff w/ fine CaCO3 stockwork wk hem + sericite fracture fill, local SiO2 phenos	P					wk CaCO3 stock VNS tr chl						<.02						
510		mottled brown gray, wk calcite ± epid VNS tr hemit + sericite fract fill	P					wk CaCO3 VNS tr chl					tr MnO	<.02						
515		med gray brn fine gr tuff, tr hem + sericite fract fill, tr limon assoc w/ CaCO3, tr Alation	P K					wk CaCO3 stock wk tr chl						<.02						
520		medium gray brn fn gr tuff tr SiO2 rich phenos, tr wk hem + seric fract fill	P K					wk CaCO3 VNS tr chl						<.02						
525		lt gray - tan to medium brn fine gr tuff poss wk bleach locally wk chl alt phenos wk hem + seric fract fill, tr limon clay	P					wk CaCO3 VNS tr chl						<.02						
530		lt gray fine gr tuff w/ fine chl or SiO2 alt phenos, hem + seric fract fill w/ assoc CaCO3 + chl	P					tr chl tr CaCO3 VNS						<.02						
535		med gray to gray brn fine gr tuff w/ calcedonic vug fill w/ asso Amon + hemit locally, hem + seric on fracts locally poss tr wk cinnabar?	Ca V					wk chl						<.02						
540		lt gray, possibly bleached w/ fine CaCO3 stockwork possibly an intrusive + fine gr tuff poss tr cinnabar	P					med CaCO3 tr chl						<.02						
545		lt gray to med brn intrusive, fine gr tuff poss local bleaching, wk CaCO3 stockwk	P K					tr chl wk-tr CaCO3 stwk						<.02						
550																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 12 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION ? intrusive ↓ to bottom?	GRAPHIC LOG	COLOR FINES	ALTERATION ARGILLIC W M S	SILICIFICATION W M S	PROPYLITIC W M S	COMMENTS	MINERALIZATION LIMONITE W M S	HEMATITE W M S	JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES Au	Au V	Ag	As	Hg	Sb	Se
550		lt gray tomed brn intrusive w/ local wk bleaching flush, tr fine qtz stockwork, poss wk sericite wk $CaCO_3$ vns & vugs fill py as dissem & vns	+ + + P X_K					$CaCO_3$				<1% fresh to local oxid		<.02						
555		lt gray to brn intrusive, mod pervasive dissem hematite; wk calcedonic vug fill + minor fine gr tuff	+ + + P X_{cv}					wk $CaCO_3$ fill						<.02						
560		mottled pinkish gray brn intrusive wk $CaCO_3$ vug fill + vns, tr qtz vnlets + minor fine gr tuff OR JUST TUFF?	+ + + P X_v					wk $CaCO_3$ tr chl				tr lim replac		<.02						
565		lt gray brn fine gr tuff wk hem + sericite along fracts	P					wk $CaCO_3$ vns						<.02						
570		lt gray-brn fn gr tuff w tr $CaCO_3$ clasts and veinlets	P					tr $CaCO_3$ tr chl						<.02						
575		lt brn to gray brn to pink fin gr tuff wk $CaCO_3$ vnlets	P					wk-mod $CaCO_3$ vns tr chl				tr lim repla		<.02						
580		medium pinkish brn granular tuff mod str calcite dissem throughout	P X_v					wk $CaCO_3$ vns tr chl				tr fresh		<.02						
585		same @ above	P X_v					wk $CaCO_3$ tr chl				tr fresh		<.02						
590		med gray granular tuff w/ strong calcite veining, trace calcedonic SiO_2 as vug fill	X_{cv} Ca					v. str $CaCO_3$ tr chl				tr		<.02						
595		lt gray to brn granular tuff Δ pyroclast evident - tr, tr calcedonic SiO_2 vug fill	X_{cv} Ca					wk $CaCO_3$ vns tr chl						<.02						
600																				

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROAST AA oz/ton	COLD CN oz/ton
KM-1	0	5	Brown/purple volc.; fragmental							
	5	10	Lt. gray/brown fragmental; mod. perv. clay altrn							
	10	45	Variable color, mottled breccia; loc. siliceous groundmass, loc. hematitic groundmass,							
			loc. weak clay altrn.							
	45	80	Same; stronger clays							
	80	100	Same + tr. white calcite rhoms							
	100	115	Gray/green/purple fragmental; decr. silica, hem, clay, calcite.							
	115	150	" " "; incr. calcite & clay.							
	150	160	" " reddish fragmental; loc. xtln calcite on fracs, tr. clay, hematitic GM							
	160	165	" " " "; stronger calcite							
	165	185	More reddish; fragmental; mod. calcite							
	185	190	Increasing clays (to mod.); calcite loc. strong							
	190	220	Reddish-brown fragmental; loc. str calcite; loc. mod. clays on fracs							
Δ	220	230	Rx Δ: Light green felsic fragmental, loc. Py to 2%; loc. white clays on fracs							
	230	235	Lt. grn fels fragmtl w/wh Py, clays + dkr. red/brown frag.							
	235	240	Back to mostly dkr. fragmtl + wh green fragmtl							
	240	245	Predominantly dkr fragmtl ± wh green fragmtl							
	245	265	" " " ± wh. calcite							
	265	290	" " "; Incr. lt. grn fragmtl							
	290	300	" " "; Lost lt. grn lithology							
	300	350	Strictly dkr. red/brown fragmental; minor contamination							
			± tr. Py							
	350	385	[illegible] coloration locally							
	385	445	Mostly mod-dk reddish-brown fragmental with wh-mod lt. grn to gray fragmtl							
	445	485	Same ± wh. white xtln calcite							
	485	495	Same + str. calcite							
	495	530	same ± wh. loc. calcite							
	530	540	same + mod. lt. gray fragmtl ± loc. calcite							
	540	545	Mostly lt.-med. gray fragmtl							

ANOMALY NAME _____ HOLE NO. _____ SHEET _____ OF _____

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROASTED oz/ton	COLD CN oz/ton
KM-1	545	570	Same + hematitic Gm. ± loc. calcite							
	575	585	Lt-med gray f-gmtl ± Hem. ± loc. calcite							
	585	590	" " " " ± Hem + mod. calcite							
	590	600	Same + v. str. calcite							

ANOMALY NAME _____ HOLE NO. _____ SHEET ____ OF ____

KM-1 QUICK LOG Feb. 6, 1990.

20-45 Red matrix breccia - pyro.

45-85 Intensely clay alt volcanic sediment

85-145 gray to green speckled FGT

145-220 Burg brown matrix breccia w/ local tuffaceous interbeds

220-235 Green Bud like pyroclastic

235-605 Gray fine grained tuff w/ chl ons & alt
↳ into burg brn - hematite stained
Chocolate Tuff?

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DRILL LOG SUMMARY SHEET

PROJECT Rosebud

HOLE NUMBER KM-1 TOTAL DEPTH 605' LOGGED BY _____

Date started _____

Date completed _____

Initial bearing S 12 W

Initial inclination -75

Elevation 5489.5

Collar coordinates:

N 2203247.0

E 484087.6

Contractor _____

Drill Type _____

Hole Size _____

Comments _____

Data by MCH, PC Explor 6/91

DOWN HOLE SURVEY INFORMATION

FROM	TO	SURVEY POINT	INCLI-NATION	BEARING	X (Easting)	Y (Northing)	Z (Elevation)
0	605		-75	S12W			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 1 OF 12

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
0–5	TQS - Bud Dia, lt gray to wkly burg brn, local fine qtz stkw, wk dk gray py rich SiO2 wk clay gouge, clasts bleached, most biotite phenos; FeOx → fracts, SiO2 gran to pervasive, epiclastic to pyroclast., tuff silt to sand, 2 stg Diation	Xp Xs Xc				POSS	poss wk epidote + celad / tr. sericit				1%	hem str matrix	<.02						
5–10	TQS - pervasively bleached, lt gray to lt burgundy wk calced vns tr xtal qtz, tr sacroidal qtz vns, pervasive dissem. biotite matrix mod hemitic; locally rimming clasts 2 stg brecciation	Xs Xv					tr. wh clay / poss. tr epid wk celad				tr py.	tr MnO / poss tr Fe sulfate	<.02						
10–15	Bud Dia, lt gray to lt burgundy to lt PINKINK-BUFF hemit rich matrix, fine qtz stockwork, clasts bleached pervasive, dissem biotite → trace, pervasive SiO2 2 stg brecciation	Xc					wk celad / poss tr epid.					tr MnO	<.02						
15–20	BUD Dia, lt gray to PINKISH-burgundy pervasively bleached, wk sacroidal; calcedonic qtz vns fine gr tuffaceous to Diated w/ bleached clasts; hemitic matrix, 2 stg Dia, matrix - micro Dia	Xc			TRACE						<1%	tr MnO	<.02						
20–25	Bud Dia - 2 stg clasts - buff w/ burg-hemit matrix, bleached clasts, trace stockwork qtz wk local clay ALT of " tuffaceous Dia, trace druzy qtz, pervasive dissem biotite	Xc Xstd										tr MnO	<.02						
25–30	tuffaceous Breccia, burgundy brown wkly fractured w/ hem fill 2 stg Dia clasts bleached to locally clay altered, local str clay gouge, wk to tr calced vns	Xc				TRACE	chl-te / poss tr. sericite	TRACE				tr MnO	<.02						
30–35	Bud tuff Dia bleached fn gr tuff to hemitic matrix Dia w/ bleached clasts, 2 stg Dia local clasts w/ wk limon flush, lt gray to buff to burg brn. to PINK wk	Xs				te	tr epidote					tr MnO	<.02						
35–40	Bud breccia - burgundy brn, clasts bleached w/ local wk hemit flush trace calcedonic SiO2 wk clay alt of clasts, 2 stg Dia, tr. sacroidal SiO2, str hemit matrix, tr. Blue gray SiO2	Xs				POSS tr	trace epidot ± chl	TRACE			poss tr sulf.	tr MnO	<.02						
40–45	Bud Breccia - burgundy brn matrix clasts: bleached, buff to pink to lt gray w/ local tr limon flush, tr clay alt of phenos; tr pink + sericite 2 stg Dia, tr blue gray SiO2 w/ poss sulf., tr limonitic clay gouge	Xs					tr epid. celad ?				poss tr.		<.02						
45–50	fine gr tuff, buff to tan w/ wk blue gray SiO2 - granular, tr. granul SiO2 strong clay alt - gouge zone, wk brecciation - diff to distingu.	Xs					tr. epidot celad ?	TRACE	TRACE				<.02						

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KAY-1 PAGE 2 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
50		Bud Breccia - finely diated tuff lt green to pinkish-purp tan, mod clay alt, trace blue-gray SiO2 vns pervasively bleached to clay alt, wk local granul SiO2 flush				trace		mod celad + clay						<.02						
55		fine gr brecciated granular tuff, buff to lt green to tan, tr blue gray SiO2, mod str clay alt - pervasive locally finely diated clasts bleached to clay alt				tr trace		mod celad + clay	tr trace					<.02						
60		fine gr welded tuff, buff pervasively, tr SiO2 veinlets, wk blue gray SiO2 vns mod str clay alt, local tr hemititic clay locally finely diated						mod str celad + clay	tr trace			tr mno		<.02						
65		fine gr granular buff to green gray tuff, finely brecciated mod str clay alt, wk blue gray SiO2 pervasively alt						mod str celad + clay	tr trace					<.02						
70		buff to lt green to gray fine gr tuff mod str clay alt, finely brecciated, mod blue gray SiO2 vns, trace fine qtz veinlets						mod celad + mod str. clay	tr trace	tr trace				<.02						
75		tuff: fn gr lt green-gray locally finely diated w/ clay alt clasts, pervasive mod str clay alt secondary biotite present, mod blue gray SiO2						mod celad	tr trace	tr trace				<.02						
80		tuff: buff to lt gray green granular SiO2 finely brecciated to mod burg brn wk dk gray SiO2 hemititic matrix where not arg alt, mod str clay alt, dia clasts: bleached						wk celad	tr trace					<.02						
85		fine gr tuff breccia; lt green gray to burg brn mod clay alt, granular						wk celad	tr trace					<.02						
90		fine gr tuff breccia, lt green - mod gray granular wk - mod clay alt clasts: bleached to clay alt mod primary biotite						mod celad	tr trace					<.02						
95		finely brecciated tuff clasts - bleached to clay alt lt to med green gray to buff granular pervasive wk to mod clay alt w/ pervasive fn gr biotite						mod celad						<.02						
100																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 3 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
100		Fine gr tuff - granular, buff to lt green gray wk clay alt, locally finely brecciated clasts: bleached matrix: med gray						wk celad						<.02						
105		Fine gr tuff - granular, locally finely brecciated buff to lt green gray, wk clay alt, clasts bleached						wk celad		tr ace				<.02						
110		Fine gr. granular tuff, buff to lt gray green, w/ wk hem/± limonite vns, mod gray clay gouge → xtalline, trace fine qtz stockwork						wk celad / chl?	tr	tr ace				<.02						
115		Fine gr tuff - granular buff to lt gray green finely brecciated, local hemit matrix, clasts bleached, mod gray clay gouge, trace translucent qtz vns - xtal, trace sericite						wk celad / chl? alt		tr ace				<.02						
120		Fine grained granular tuff, buff to gray green finely brecciated, tr calcd vn, wk clay alt weakly bleached						mod celad / chl?	tr ace	tr ace				<.02						
125		Fine grained granular tuffaceous breccia, w/ bleached clasts med gray to burg gray-brn trace calcedonic SiO_2 matrix burg brn to med gray granular, tr pink cly						poss chl / celad	tr ace	tr ace				<.02						
130		Fine gr granular tuffaceous breccia clasts: bleached local clasts w/ celad, matrix burg brn to gray, tr → wk granular qtz vns w/ assoc FeOx						tr celad / chl / epid	tr	tr ace				<.02						
135		fine gr granular tuffaceous breccia finely laminated clasts: bleached; locally w/ tr limon flush + tr clay alt, buff to pink to burg brn to med gray tr white clay vns						wk celad / chl	tr	tr				<.02						
140		fine gr granular tuffaceous breccia, finely laminated tr. FeOx SiO_2 veinlets, vns, buff to burg-brn to med gray mottled tr wk clay alt, wk bleaching						wk celad	tr	tr				<.02						
145		fine gr granular tuff locally brecciated, mottled burg brn to med gray, tr. translucent qtz vns tr zoned calcedonic SiO_2 filling vugs, local tr bleach						wk celad / chl	tr					<.02						
150																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 4 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLITIC W M S	COMMENTS	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au ✓	Ag	As	Hg	Sb	Se
150–155		fine gr granular tuffaceous Δia - 2 stg pervasive hemitite flush, wk translucent SiO_2 vns, trace calcedonic stockwork, clasts locally bleached med burn to gray color, poss tr sericite matrix-hemititic, few xtals, tr clay	A, Xc, Xv					wk celad chl / poss tr sericite	+ R					<.02						
155–160		fine gr granular tuff, wkly brecciated w/ calcedonic fill w/ xtal SiO_2 core, pervasively med burg brn to lt gray, calced is zoned in Δ fill, tr SiO_2 rimmed hemitite	A, Xc		+ R			wk celad - chl	+ R					<.02						
160–165 FZ OR FAULT	CLAY	fine gr granular tuff locally brecciated clasts: bleached to wkly clay alt, mod green-dk gray clay alt, pervasive burn gray color	A, Xv					wk celad / chl	+ R					<.02						
165–170		fine gr granular tuffaceous breccia w/ hemititic matrix ↑ Δiation clasts: bleached to locally wkly FeOx to wkly celadonitic, trace to wk CALCITE BUD BRECCIA, tr. fine qtz stockwork	A, Xv, R					mod celad + chl / tr-wk $CaCO_3$						<.02						
170–175		dry-buff, wet - buff to green to red fine gr granular tuffaceous breccia, clasts: bleached to local wk FeOx flush to chl alt, few hemit vnlets, 2 stg; poss 3 stg Δiation wk burg brn clay gouge	A, Xv, P					wk mod celad chl						<.02						
175–180		fine gr granular tuffaceous Δia - clasts: bleached + wk local celad matrix: str hemitite, local tr sericite wk burg brn clay gouge tr white clay, tr white qtz vns tr. calcite, tr qtz stockwork	A, Xv, S					wk celad - chl / tr $CaCO_3$						<.02						
180–185		granular tuff Δia clasts: bleached matrix: burg brn mod burg brn clay, matrix & clay → earthy strongly weathered	A					wk $CaCO_3$ vns / poss chl, celad						<.02						
185–190 STR CLAY		fine gr granular tuff Δia: strong clay gouge - burg - gray brn - pervasive str alteration - gouge	A, $CaCO_3$					mod $CaCO_3$ / tr chl						<.02						
190–195 CLAY		dry - med gray wet: medium gray brown - strong clay alt - gray brn fine gr gran. tuffaceous Δia w/ bleached clasts; burg brn matrix, mod calcite veining	A, $CaCO_3$					wk-mod $CaCO_3$ + chl + celad	+ R	T R				<.02						
195–200		dry - lt gray, wet: med gray - burg brn, fn gr granular tuffaceous Δia, locally clasts w/ wk limon flush, wk alunite vning, matrix - micro Δia - burg-brn, 2 stg Δia, local clasts epidote alt						tr epid chl / wk $CaCO_3$ vns						<.02						

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 5 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLITIC W M S	COMMENTS	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
200		dry - earthy burg bwn + bleached wet - same fine gr granular tuff Δia, bleached clasts ± chl FeOx matrix: earthy burg bwn, mod burg bwn clay alt 2 stg Δiation - matrix micro Δia, wk alunite	A P					tr chl + celad / mod CaCO3	+ R	T R				<.02						
205		fine gr granular tuff locally brecciated pervasively dk gray to burg bwn, tr qtz vns, strongly clay alt clasts bleached locally w/ tr epidote	A P Xv					wk to mod epi/chl / wk CaCO3						<.02						
210		earthy burg gray brown w/ str clay alt, fine gr granular tuff locally brecciated, clasts locally bleached, mod calcite vns,	A P					tr epid / mod CaCO3					dk gray clay poss w/ sulfide	<.02						
215		medium brown to buff to burg-red bwn, fine gr granular tuff breccia clasts: bleached w/ locally wk FeOx flush, also gray hemititic matrix mod calcite veing	A P					mod CaCO3 / poss tr chl	+ R					<.02						
220 CHANGE		brecciated bleached tuff - brecciated mass celad. green, dominantly celad alt. ~7% oxid Δia - hem. rich clasts - bleached to celad alt w/ rich celad matrix wk fine qtz stockwork, tr fibrous gypsum	A Cd P					strong celad. / tr chl + epid / mod CaCO3	T R			1% disse pods fresh		<.02						
225		fine gr tuff locally flow banded - wkly, locally brecciated fine qtz stockwork, mod calcite veining wk calcedonic SiO2 primary leaching, strongly pervasive dissem celad.	A Cd Xc K					mass celad. / mod CaCO3 vn / poss tr chl	+ R			tr		<.02						
230		celad rich fine gr tuff moving into oxidized tuff wk white clay alt, wk calcedonic SiO2 local Δiation minor relict flow banding ~2% dk gray silic tuff w/ poss sulfides	A Ca P Xc					pervasive celad wk + chl / wk CaCO3 vns mod	+ R	+ R		tr+		<.02						
235		mod celad fine gr tuff grading into oxidized red-bwn-tan, wkly bleached locally, wk fine qtz stockwork, locally brecciated, local flow banding wk silicif of dk gray tuff, py -	A P Cd					mod chl / wk celad / wk CaCO3	+ R			tr fresh	py assoc w/ celad rich	<.02						
240		fine gr granular tuff - gray green, wk calcedonic SiO2 filling vugs - wkly + vugy, wk clay alt local wk brecciation, local fine SiO2 stockwork	A P Xcv					wk pervas. celad. / wk chl / wk + CaCO3		+ tr		1-2% + v. fine dk		<.02						
245		mottled buff to gray bwn fine gr tuff calcedony filling vugs primary bleached w/ overprint celad, wkly clay alt, wk local Δiation	P Xcv					wk celad tr chl / wk CaCO3				3% assoc w/ calced vug fill	tr limon repla py	<.02						

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 6 OF 12

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC W M S	ALTERATION: SILICIFICATION W M S	ALTERATION: PROPYLITIC W M S	COMMENTS	MINERALIZATION: LIMONITE W M S	MINERALIZATION: HEMATITE W M S	MINERALIZATION: JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
250-	mottled gray buff w/ wk chl, tr lim-hem clay, wk calced vug fill, wk clay alt, poss finely Δiated	A χcv P					wk chl / wk CaCO3 VN, fill poss tr celad		tr		2% fresh +	→ vm vugs filled w/ calcd 1's in pods copper color	<.02						
255-	mottled green-gray buff previously bleaching calcite filling vugs; vns, wk clay alt, poss wk sericite alt local vugs filled w/ celad rich calced w/ assoc sulfides? ± sericite + hemit brecciated 2 to 3 stg → limon replac	A χcv P					mod celad w/c chl / wk-mod CaCO3		TR		~1% hem replac		<.02						
260-	mottled green gray brun fine gr tuffaceous breccia wk local fine celad rich qtz stockwork; vug fill local small pods limon/sericite/celad(chl?) vug fill	A χcv P					mod st celad alt / wk CaCO3 / poss tr chl		TR		<1%		<.02						
265-	dry - buff → lt green wet → mottled green - dk gray to buff fine gr granular tuff → brecciated 2-3 stg tr white translucent qtz vns, wk fine celad ± SiO2 stockwk w/c bleaching pervasively alt	A χv P					wk dissem CaCO3 / pervas celad		TR		tr. lim repl	tr hem assoc w/ wk seri	<.02						
270-	dry - lt buff green wet → mottled green gray to buff w/ fine dk green stockwork fine gr granular tuff celad veinlets fill, tr white qtz vns, locally Δiated	A χv P C					wk-mod chl / wk CaCO3 VN		TR		tr lim repl		<.02						
275-	lt green gray buff mottled granular fn gr tuff fine dark gray and celad green stockwork trace local Δiation few hemit veinlets, local white zoned calced vug fill	A χcv C					wk CaCO3 VN						<.02						
280-	mottled dk gray to burg brun to celad green fine gr granular tuff, pervasive celad alt, locally Δiated celad vug fill, previously bleached	A χcv P					str celad w/ chl / wk CaCO3		TR		tr limon repl		<.02						
285-	lt gray green fn gr granular tuff, wkly finely vuggy w/ celad fill w/ over all tr in celad alt, trace qtz VN	χv C P					tr CaCO3 VNS		TR				<.02						
290-	lt gray weakly green fn gr granul tuff, tr calcite VNS, trace phenos	C P					tr chl / tr celad		TR				<.02						
295-	lt gray tuff, fine gr granular, local fine qtz stockwork	χ P C					local wk CaCO3 veinlets w/ assoc celad w/ chl						<.02						
300-																			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 7 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
300		fine gr granular tuff - medium gray brown tr white qtz vns, fairly hard, trace calcite veinlets along fracts	P χv					wk chl / poss tr celad						<.02						
305		med brn w/ mottled green fn gr granular tuff mod hem along fracts, local alt phenos to $CaCO_3$; celad ± chl	Ca					tr $CaCO_3$ vns						<.02						
310		med brn-gr wk mottled green, fn gr granular tuff tr limonite clay, fairly hard, tr sericite	Ca Cd P					wk chl / tr $CaCO_3$ / wk celad	T					<.02						
315		medium gray-brn fine gr granular tuff mod hard	Ca Cd P					wk celad / tr / assoc calcite						<.02						
320		lt gray mottled w/ hemitite, fine gr granular tuff trace pink intrusive w/ local limon veins, tr. white qtz vns, poss sericite assoc w/ hemitite w/ local FeOx	χv Ca P					tr calcite vns / tr celad / wk chl				<1% lim replac		<.02						
325		lt - med gray brown, mottled hemititic fine gr granular tuff w/ tr white qtz vns	χv Ca P					wk chl / tr $CaCO_3$ vns						<.02						
330		lt-med gray brn mottled w/ hemitite fine gr gran tuff w/ poss sericite on w/ hem., trace brilliant orange golden clay	Ca χv P					wk chl / tr epidot						<.02						
335		med gray ± brn mottled w/ hemitite, fine gr granular tuff, wk fine qtz vns, trace epidote	Ca χv P					wk qtz vn / wk $CaCO_3$ / wk chl						<.02						
340		medium gray brown mottled w/ hemitite → tuff wk white qtz vns & veinlets local wk ∆ration, wk fracturing, wk limon clay alt	χv P					wk chl / wk $CaCO_3$ / tr epid					tr hemit vns	<.02						
345		lt-med gray ± brn mottled w/ hemitite fine gr gran tuff mod str hem clay w/ few alt phenos to chl/cal *	P					wk chl / tr $CaCO_3$						<.02						
350																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 8 OF 12

RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
350	medium gray mottled w/ hemitite fine gr granular tuff, phenos chl alt, trace qtz vns	Ca P Xv					wk chl tr CaCO3 vns wk celad				<1% fresh	← brass golden	<.02						
355	medium gray brown mottled hemit tuff, → granul poss tr. cinnibar, tr SiO2 vnlets	X P Ca					wk CaCO3 tr chl tr celad				<1% fresh	"	<.02						
360	lt gray brn mottled w/ hemitite, granular tuff wk hemit clay poss w/ sericite, phenos chl alt	Ca P					tr CaCO3 vns wk chl tr celad				te fresh		<.02						
365	med brn to gray brn mottled w/ hemitite fine gr tuff w/ Xtals - bleached wk calcite vns w/ hemitite rim, local trace intrusive w/ chl phenos	Ca P					tr CaCO3 vns tr celad tr chl				tr limon replac		<.02						
370	buff to lt gray - brn mottled w/ hemitite, fine gr granular tuff, local weak bleaching py, calcite, chl all assoc, poss tr cinnibar vnlets wk hem clay	Ca P					wk chl				~1% fresh to lim repla		<.02						
375	med gray fine gr granular tuff mottled w/ hemitite local wk SiO2 veinlets, poss tr cinnabar wk hemititic clay	Ca					wk chl wk CaCO3				tr fresh to limon replac py		<.02						
380	med brn to gray mottled w/ calcited granular tuff; mottled buff brn intrusive w/ pink calcedony fill wk - tr qtz vns, intrusive w/ str calcite ± chl	Xv Ca P					wk calcite wk calced vug fill				tr fresh		<.02						
385	tuff + intrusive(?) w/ green calcedonic vug fill + calcite locally, tr hemit clay, wk fine qtz stockwork tuff - fine gr.	Ca P Xv					wk chl				tr fres		<.02						
390	pervasive green gray granular tuff locally brecciated, wk celad calced vug fill SiO2 + chl ± epidote breccia matrix ↳ calced	A P Xv					str chl tr whit qtz wk CaCO3				tr hem repl		<.02						
395	green gray granular tuff w/ calcite/chl ± SiO2 vug fill, locally brecciated tr white clay blue green alt - celad?, wk hemit clay, bluegreen clay present possibly moving in to pyroclastics some flow features present	A Ca Xv					wk chl tr CaCO3						<.02						
400																			

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 9 OF 12

Depth	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION ARGILLIC W M S	ALTERATION SILICIFICATION W M S	ALTERATION PROPYLITIC W M S	COMMENTS	MINERALIZATION LIMONITE W M S	MINERALIZATION HEMATITE W M S	MINERALIZATION JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES Au	Au V	Ag	As	Hg	Sb	Se
400		medium gray to gray brn fine gr tuff fractured to locally diated w/ $CaCO_3$ + SiO_2 fracture fill to stockwork – fine matrix support dia wk calcedonic uvg fill tr limon clay, mod hard poss local wk bleaching						wk chl ± wk celad						<.02						
405		med gray to gray brn fine gr tuff, tr mod hard white clay – alunite, wk SiO_2 vns, wk tr limon clay wk calcedonic uvg fill, pervasive mod stockwork						chl + SiO_2 stockwork uvg fill						<.02						
410		medium gray to brn gray fine gr tuff, wk limon clay, local fine qtz stockwork, mod fractured to brecciated w/ matrix: w/ SiO_2, chl, wk $CaCO_3$ vn; fract fill						wk pervas chl + SiO_2 uvg fill				te limon replac		<.02						
415		medium brn gray fine gr tuff mod fractured to locally brecciated, fine qtz stockwork w/ SiO_2 + chl matrix: SiO_2 rich, tr lt brn-pk clay						wk chl tr celad					te MnO	<.02						
420		medium brn to gray brn fine gr tuff, wk tan clay chl + SiO_2 uvg fill, wk fine qtz stockwork, tr bleach- + diation tr pink SiO_2						wk chl / poss tr celad						<.02						
425		green gray to brn gray fine gr tuff poss tr limonite + SiO_2 veinlets, wk qtz + chl stockwork poss wk sericite phenos-replac by ± celad ± SiO_2 ± chl						wk chl / tr $CaCO_3$ / te celad				te limon replac		<.02						
430		lt gray brn mottled fine gr tuff, wk tan clay tr qtz stockwork						chl + te epid				wk limon replac		<.02						
435		lt to med gray brn fine gr tuff, tr qtz stockwk wk vns: SiO_2 + chl + limon replac py ± sericite local pheno SiO_2 replac, tr tan clay						chl				wk limon replac		<.02						
440		mottled gray brn, fn gr tuff, fract fill w/ hemit ± sericite + SiO_2, tr bleached phenos tr tan clay						te chl						<.02						
445		med gray brn mottled w/ hemit. tr qtz vns - w/ local assoc epidote tr fn qtz stockwork few phenos SiO_2 replac, tr wk diation w/ SiO_2 + chl matrix, tr tan clay + hemitite						te chl						<.02						

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LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 10 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au-V	Ag	As	Hg	Sb	Se
450		medium brn fine gr tuff, tr qtz vns, tr tan clay tr SiO_2 replac phenos w/c tan clay ± sericite	P X_V					tr calcite + chl						<.02						
455		med brn to gray fine gr tuff tr SiO_2 + chl vns tr tan clay, wk file qtz stockwork	P X_V					chl wk $CaCO_3$ vns						<.02						
460		lt-med gray brn fine gr tuff, wk tan clay wk tan clay, tr-wk qtz vns & stockwork tr copper color metallic — seric + hemit?	X_K X_V P					tr $CaCO_3$ vns tr chl						<.02						
465		medium brn gray fine gr tuff, trace SiO_2 fract fill, mod limon clay	P X_V					tr chl				tr limn replac		<.02						
470		med gray brn fn gr tuff wk sericite + hem fract fill wk qtz + chl vns, mod hem/clay tr SiO_2 phenos	P X_V					wk chl						<.02						
475		med brn-gray fine gr tuff w/ fine xtals tr white qtz vns, local fine (very) qtz stockwk local phenos SiO_2 replac	P X_V X_K					wk chl on fracts						<.02						
480		med-lt gray to gray brn fine gr tuff w/ few xtals, tr qtz vns locally w/ chl, tr tan clay	P X_V					tr chl				tr limon replac		<.02						
485		med gray fine gr tuff w/ crystal clear $CaCO_3$ tr hemit + sericite fract fill	P Ca					wk calcite tr chl						<.02						
490		medium gray fine gr tuff w/ few SiO_2 replac xtals wk clear $CaCO_3$ xtals, tr hem + seric on fract faces	Ca					tr chl						<.02						
495		mottled gray brn-lt, pinkish fine gr tuff w/ tr SiO_2 replac phenos	P Ca					tr $CaCO_3$ vns tr chl						<.02						
500																				

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LAC

PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 11 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION	GRAPHIC LOG	COLOR FINES	ALTERATION: ARGILLIC (W M S)	ALTERATION: SILICIFICATION (W M S)	ALTERATION: PROPYLITIC (W M S)	COMMENTS	MINERALIZATION: LIMONITE (W M S)	MINERALIZATION: HEMATITE (W M S)	MINERALIZATION: JAROSITE (W M S)	% SULFIDES	OTHER COMMENTS	ANALYSES: Au	Au V	Ag	As	Hg	Sb	Se
500		lt-med brn fine gr tuff w/ few SiO2 phenos sericite assoc w/ ↑ hemit, wk fine qtz stockwk tr Alation						tr CaCO3 VNS tr chl						<.02						
505		medium brown, pinkish gray, fine gr tuff w/ fine CaCO3 stockwork wk hem + sericite fracture fill, local SiO2 phenos						wk CaCO3 stock VNS tr chl						<.02						
510		mottled brown gray, wk calcite ± epid VNS tr hemit + sericite fract fill						wk CaCO3 VNS tr chl					tr MnO	<.02						
515		med gray brn fine gr tuff, tr hem + sericite fract fill, tr limon assoc w/ CaCO3, tr Alation						wk CaCO3 stock wk tr chl						<.02						
520		medium gray, brn fn gr tuff tr SiO2 rich phenos, wk hem + seric fract fill						wk CaCO3 VNS tr chl						<.02						
525		lt gray - tAN to medium brn fine gr tuff poss wk bleach locally, wk chl alt phenos wk hem + seric fract fill, tr limon clay						wk CaCO3 VNS tr chl						<.02						
530		lt gray fine gr tuff w/ fine chl or SiO2 alt phenos, hem + seric fract fill w/ assoc CaCO3 + chl						tr chl tr CaCO3 VNS						<.02						
535		med gray to gray brn fine gr tuff w/ calcedonic vug fill w/ asso limon + hemit locally, hem + seric on fracts locally poss w/ wk cinnabar?						wk chl						<.02						
540		lt gray, possibly bleached w/ fine CaCO3 stockwork, possibly an intrusive + fine gr tuff poss tr cinnabar						mod CaCO3 tr chl						<.02						
545		lt gray to med brn intrusive, ± fine gr tuff poss local bleaching wk CaCO3 stockwk						tr chl wk-tr CaCO3 stwk						<.02						
550																				

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PROJECT ROSEBUD LOGGED BY KLK HOLE NO. KM-1 PAGE 12 OF 12

	RECOVERY	LITHOLOGIC DESCRIPTION ? intrusive ↓ to bottom?	GRAPHIC LOG	COLOR FINES	ALTERATION ARGILLIC W M S	SILICIFICATION W M S	PROPYLITIC W M S	COMMENTS	MINERALIZATION LIMONITE W M S	HEMATITE W M S	JAROSITE W M S	% SULFIDES	OTHER COMMENTS	ANALYSES Au	Au V	Ag	As	Hg	Sb	Se
550		lt gray to med brn intrusive w/ local wk bleaching flush, tr fine qtz stockwork, poss wk sericite wk $CaCO_3$ vns & vugs fill py as dissem & vns	+ + + p X_K					$CaCO_3$				<1% fresh to local oxid		<.02						
555		lt gray to brn intrusive mod pervasive dissem hematite; wk calcedonic vug fill + minor fine gr tuff	+ + + p X_{cv}					wk $CaCO_3$ fill						<.02						
560		mottled pinkish gray brn intrusive wk $CaCO_3$ vug fill + vns, tr qtz vnlets + minor fine gr tuff OR JUST TUFF?	+ + + p X_v					wk $CaCO_3$ tr chl				tr lim replac		<.02						
565		lt gray brn fine gr tuff wk hem + sericite along fracts	p					wk $CaCO_3$ vns						<.02						
570		lt gray-brn fn gr tuff w tr $CaCO_3$ clasts and veinlets	p					tr $CaCO_3$ tr chl						<.02						
575		lt brn to gray brn to pink fine gr tuff wk $CaCO_3$ vnlets	p					wk-mod $CaCO_3$ vns tr chl				tr lim repla		<.02						
580		medium pinkish brn granular tuff mod str calcite dissem throughout	p X_v					wk $CaCO_3$ vns tr chl				tr fresh		<.02						
585		same @ above	p X_v					wk $CaCO_3$ tr chl				tr fresh		<.02						
590		med gray granular tuff w/ strong calcite veining, trace calcedonic SiO_2 as vug fill	X_{cv} Ca					v. str $CaCO_3$ tr chl				tr		<.02						
595		lt gray to brn granular tuff ∆ pyroclast evident - tr, tr calcedonic SiO_2 vug fill	X_{cv} Ca					wk $CaCO_3$ vns tr chl						<.02						
600																				

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROAST AA oz/ton	COLD CN oz/ton
KM-1	0	5	Brown/purple volc.; fragmental							
	5	10	Lt. gray/brown fragmental; mod. perv. clay altrn							
	10	45	Variable color, mottled breccia; loc. siliceous groundmass, loc. hematitic groundmass,							
			loc. weak clay altrn.							
	45	80	Same; stronger clays							
	80	100	Same + tr. white calcite rhombs							
	100	115	Gray/green/purple fragmental; decr. silica, hem, clay, calcite.							
	115	150	" " "; incr. calcite & clay							
	150	160	" " reddish fragmental; loc. xtlln calcite on fracs, tr. clay, hematitic GM							
	160	165	" " " "; stronger calcite							
	165	185	More reddish; fragmental; mod. calcite							
	185	190	Increasing clays (to mod.); calcite loc. strong							
	190	220	Reddish-brown fragmental; loc. str calcite; loc. mod. clays on fracs							
Δ	220	230	Rx Δ: Light green felsic fragmental, loc. Py to 2%; loc. white clays on fracs							
	230	235	Lt. grn fels fragmtl w/wh Py, clays + dkr. red/brown frag.							
	235	240	Back to mostly dkr. fragmtl + wh green fragmtl							
	240	245	Predominantly dkr fragmtl ± wh green fragmtl							
	245	265	" " " ± wh. calcite							
	265	290	" " "; Incr. lt. grn fragmtl							
	290	300	" " "; Lost lt. grn lithology							
	300	350	Strictly dkr. red/brown fragmental; minor contamination							
			± tr. Py							
	350	385	[illegible] coloration locally							
	385	445	Mostly mod-dk reddish-brown fragmental with wh-mod lt. grn to gray fragmtl							
	445	485	Same ± wh. white xtlln calcite							
	485	495	Same + str. calcite							
	495	530	same ± wh. loc. calcite							
	530	540	same + mod. lt. gray fragmtl ± loc. calcite							
	540	545	Mostly lt.-med. gray fragmtl							

ANOMALY NAME _____ HOLE NO. _____ SHEET _____ OF _____

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROASTED oz/ton	COLD CN oz/ton
KM-1	545	570	Same + hematitic G.M. ± loc. calcite							
	575	585	lt-med gray fg mott ± Hem. ± loc. calcite							
	585	590	" " " " ± Hem + mod. calcite							
	590	600	Same + v. str. calcite							

ANOMALY NAME _____ HOLE NO. _____ SHEET ____ OF ____

KM-1 QUICK LOG Feb. 6, 1990.

20-45 Red matrix breccia - pyro

45-85 Intensely clay alt volcanic sediment

85-145 gray to green speckled FGT

145-220 Burg brown matrix breccia w/ local tuffaceous interbeds

220-235 Green Bud like pyroclastic

235-605 Gray fine grained tuff w/ chl vns & alt
↳ into burg brn - hematite stained
Chocolate Tuff?

FREEPORT-McMoRan
GOLD COMPANY
A Subsidiary of Freeport-McMoRan Inc.

6110 Plumas Street
P. O. Box 41330
Reno, Nevada 89504
Phone (702) 826-3000
TWX 910-395-7008

October 3, 1986

Mr. Ross J. Beaty
Beaty Geolgocial Incorporated
208-2786 West 16th Avenue
Vancouver, British Columbia V6K 3C4

Re: Kamma Mountain Project (Rosebud Property)

Dear Mr. Beaty:

Enclosed for your information is a summary of Freeport's activities on the Kamma Mountain properties along with copies of the geologic data.

Thank you again for allowing us the opportunity to evaluate your property.

Sincerely,

Cy L. Wilsey

Cy L. Wilsey
Land Administrator

CLW/co
Enclosures
cc: R.B. Andrus
D.S. Mason
A.M. Park
L.D. Pesanti
W.A. Rowe

Rosebud (146)

OCT 22 1986

INTER-OFFICE LETTER

Subject: SUMMARY OF EXPLORATION ACTIVITIES ON TH "RB" AND "WILD" CLAIMS KAMMA MOUNTAIN PROJECT, PERSHING COUNTY, NEVADA

To: W.A.Rowe/Files

Place: Reno, Nevada

From: D.A.Bird DAB

Date: August 15, 1986

The 25 "RB" and 21 "WILD" unpatented lode claims are controlled by Beatty Geological, Ltd., of Vancouver, B.C., and are being explored by Freeport as part of the Kamma Mountain Project. The project is located on the eastern edge of the Rosebud District in Pershing County, Nevada about 50 miles west of Winnemucca.

Freeport first looked at the property in the spring of 1985, when D. A. Bird and D. C. Flint were evaluating the Rosebud District and surrounding areas for precious metals potential.

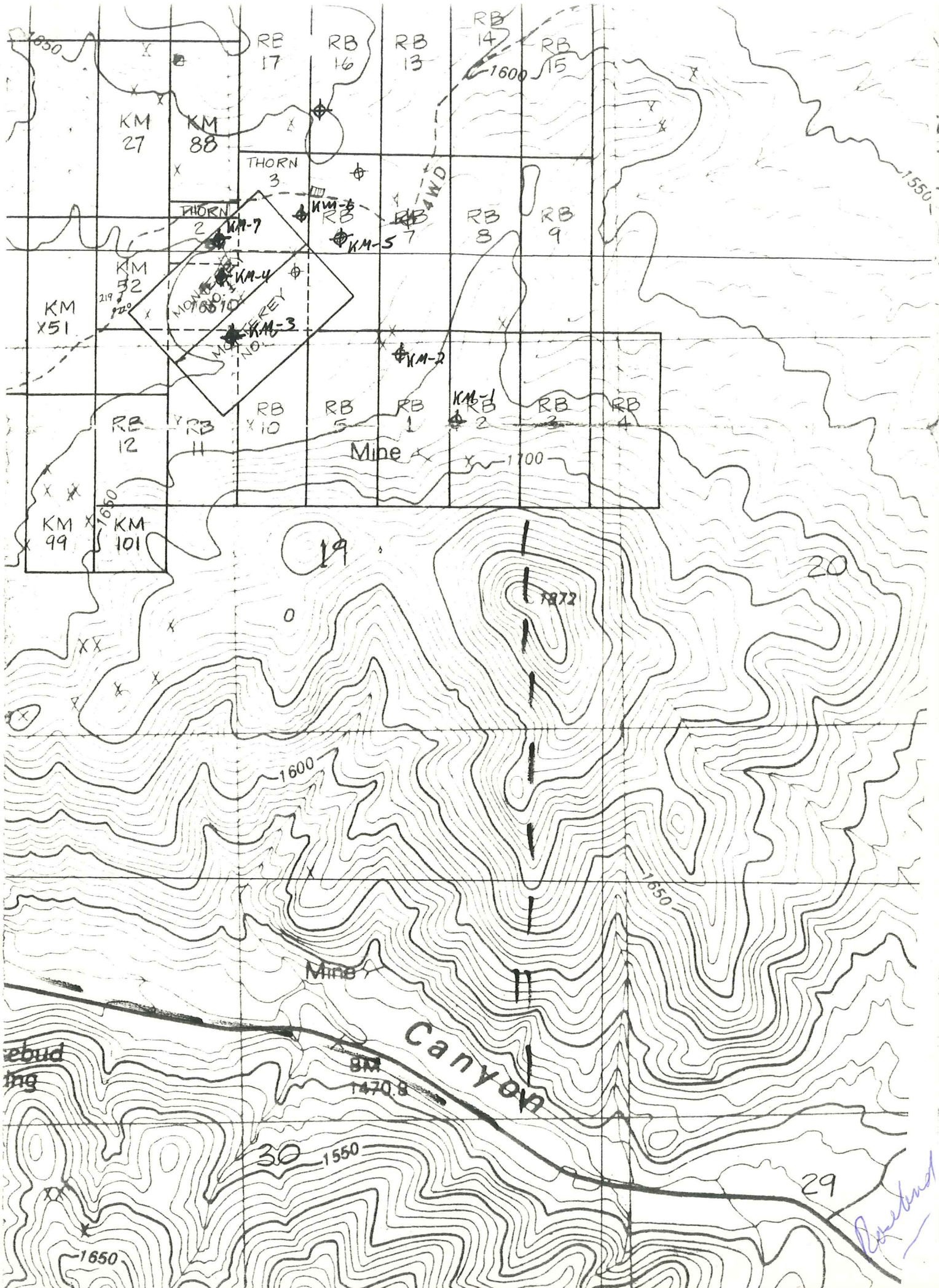
The geology of the area consists of a thick sequence of rhyolitic, latitic, and andesitic volcanics and volcaniclastics. These volcanics are steeply-dipping locally (up to 55° east), and structural activity is locally complex. Jurassic/Triassic sediments are exposed within one mile east of Beatty ground.

Three interesting targets were identified on Beatty ground. Two were silicified structures carrying anomalous gold, silver, and trace elements, with accessory jarosite and barite. The third target was a major northeast-southwest - trending structural zone that was generally recessive, but silicified in one area and forming a prominent hill we refer to as "Dozer Knob."

The northernmost silicified structure has a strike length of about 1500 feet and an average width of about 50 feet. Silicification is mostly cherty, locally brecciated, with pods of moderate hematite and limonite staining. Scattered disseminated pyrite casts were observed, and clays have been introduced along fractures. Rock chip samples from the structure carried highs of .23 ppm gold and 6.5 ppm silver. After careful sampling and mapping, it was determined that this area had little potential for increased grades or tonnage, and no drilling was performed.

The southern structure has a strike length of about 3500 feet and is silicified for about 1500. Silicification is again mostly cherty, locally brecciated with zones of strong limonite, hematite, and local crystalline jarosite and barite. Rock chip samples along this structure ran up to .37 ppm gold and 31.0 ppm silver. One angle hole (KM-1, 605'T.D.) was drilled here to intersect the structure at about 300 feet, but the hole was barren of gold throughout its depth.

OCT 22 1986


RB 17
RB 16
RB 13
RB 14
RB 15
KM 27
KM 88
THORN 3
THORN 2
KM-7
KM-6
KM-5
KM-4
KM-3
KM-2
KM-1
RB 7
RB 8
RB 9
KM 52
KM 51
MONTEREY NO.
RB 12
RB 11
RB 10
RB 5
RB 1
RB 2
RB 3
RB 4
Mine
KM 99
KM 101
19
20
0
1872
1600
1650
1700
1550
Mine
Canyon
BM
1470.8
30
29
1650

Memo To: W. A. Rowe
From: D. A. Bird
Subject: Summary of Activities on Kamma Mountain Area
(Continued - Page 2)

The final target to be drill-tested was the northeast-southwest - trending structural zone, expressed by the large valley transecting the property. Local silicification along the fault was responsible for "Dozer Knob", which stands in relief above the valley floor. Where the structure outcrops and can be sampled, it carries values up to .25 ppm gold and 12.7 ppm silver. Similarly favorable geochemistry from adjacent ground led to the placement of three rotary drill holes (KM-2, 605' T.D.; KM-5, 400' T.D.; KM-6, 400' T.D.) to test for mineralization of the structural zone. Hole KM-2 had three intercepts: .010 Oz/T Au at 100-105'; .020 Oz/T Au at 390-395', and .020 Oz/T at 600-605'. Holes KM-5 and KM-6 had no intercepts over .27 ppm gold.

A soil sample grid on 200-foot centers was carried out on recessively weathered ground on claims RB-1, 5, 6, 7, and 10 in hopes of delineating new anomalies across the fault zone. Unfortunately, nothing new was encountered, and anomalies were obtained where expected at known structural traces.

A number of rock chip samples were collected along the north-south length of the claim block in an attempt to identify one of the volcanic units as a potentially-favorable host for gold or silver dissemination. However, mineralization proved to be structurally-controlled, and no lithologies were found to be favorable hosts for concentrated gold or silver values.

DAB:lp

DAB

CONE GEOCHEMICAL INC.
910 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8069
20-Dec-85

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 0- 5		<.02
KM-1 5- 10		<.02
KM-1 10- 15		<.02
KM-1 15- 20		<.02
KM-1 20- 25		<.02
KM-1 25- 30		<.02
KM-1 30- 35		<.02
KM-1 35- 40		<.02
KM-1 40- 45		<.02
KM-1 45- 50		<.02
KM-1 50- 55		<.02
KM-1 55- 60		<.02
KM-1 60- 65		<.02
KM-1 65- 70		<.02
KM-1 70- 75		<.02
KM-1 75- 80		<.02
KM-1 80- 85		<.02
KM-1 85- 90		<.02
KM-1 90- 95		<.02
KM-1 95-100		<.02
KM-1 100-105		<.02
KM-1 105-110		<.02
KM-1 110-115		<.02
KM-1 115-120		<.02
KM-1 120-125		<.02
KM-1 125-130		<.02
KM-1 130-135		<.02
KM-1 135-140		<.02
KM-1 140-145		<.02
KM-1 145-150		<.02
KM-1 150-155		<.02
KM-1 155-160		<.02
KM-1 160-165		<.02
KM-1 165-170		<.02
KM-1 170-175		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqReg

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ANALYTICAL REPORT

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P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 175-180		<.02
KM-1 180-185		<.02
KM-1 185-190		<.02
KM-1 190-195		<.02
KM-1 195-200		<.02
KM-1 200-205		<.02
KM-1 205-210		<.02
KM-1 210-215		<.02
KM-1 215-220		<.02
KM-1 220-225		<.02
KM-1 225-230		<.02
KM-1 230-235		<.02
KM-1 235-240		<.02
KM-1 240-245		<.02
KM-1 245-250		<.02
KM-1 250-255		<.02
KM-1 255-260		<.02
KM-1 260-265		<.02
KM-1 265-270		<.02
KM-1 270-275		<.02
KM-1 275-280		<.02
KM-1 280-285		<.02
KM-1 285-290		<.02
KM-1 290-295		<.02
KM-1 295-300		<.02
KM-1 300-305		<.02
KM-1 305-310		<.02
KM-1 315-320		<.02
KM-1 320-325		<.02
KM-1 325-330		<.02
KM-1 330-335		<.02
KM-1 335-340		<.02
KM-1 340-345		<.02
KM-1 345-350		<.02
KM-1 350-355		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqReg

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Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 355-360		<.02
KM-1 360-365		<.02
KM-1 365-370		<.02
KM-1 370-375		<.02
KM-1 375-380		<.02
KM-1 380-385		<.02
KM-1 385-390		<.02
KM-1 390-395		<.02
KM-1 395-400		<.02
KM-1 400-405		<.02
KM-1 405-410		<.02
KM-1 410-415		<.02
KM-1 415-420		<.02
KM-1 420-425		<.02
KM-1 425-430		<.02
KM-1 430-435		<.02
KM-1 435-440		<.02
KM-1 440-445		<.02
KM-1 445-450		<.02
KM-1 450-455		<.02
KM-1 455-460		<.02
KM-1 460-465		<.02
KM-1 465-470		<.02
KM-1 470-475		<.02
KM-1 475-480		<.02
KM-1 480-485		<.02
KM-1 485-490		<.02
KM-1 490-495		<.02
KM-1 495-500		<.02
KM-1 500-505		<.02
KM-1 505-510		<.02
KM-1 510-515		<.02
KM-1 515-520		<.02
KM-1 520-525		<.02
KM-1 525-530		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqReg

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PO #
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SAMPLE NUMBER	PPM AG	PPM AU
KM-1 530-535		<.02
KM-1 535-540		<.02
KM-1 540-545		<.02
KM-1 545-550		<.02
KM-1 550-555		<.02
KM-1 555-560		<.02
KM-1 560-565		<.02
KM-1 565-570		<.02
KM-1 570-575		<.02
KM-1 575-580		<.02
KM-1 580-585		<.02
KM-1 585-590		<.02
KM-1 590-595		<.02
KM-1 595-600		<.02
KM-1 600-605		<.02
KM-2 0- 5		<.02
KM-2 5- 10	<.2	<.02
KM-2 10- 15		<.02
KM-2 15- 20	<.2	<.02
KM-2 20- 25		<.02
KM-2 25- 30	<.2	<.02
KM-2 30- 35		<.02
KM-2 35- 40	<.2	<.02
KM-2 40- 45		<.02
KM-2 45- 50	<.2	<.02
KM-2 50- 55		<.02
KM-2 55- 60	<.2	<.02
KM-2 60- 65		<.02
KM-2 65- 70	0.6	<.02
KM-2 70- 75		0.18
KM-2 75- 80	0.7	0.05
KM-2 80- 85		<.02
KM-2 85- 90	2.5	0.04
KM-2 90- 95		0.16
KM-2 95-100	2.7	0.20
METHOD	AA/BC	A.A.

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20-Dec-85

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PO #
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85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-2 100-105		1.04 — .01 oz/t
KM-2 105-110	1.8	0.08
KM-2 110-115		<.02
KM-2 115-120	<.2	<.02
KM-2 120-125		<.02
KM-2 125-130	<.2	<.02
KM-2 130-135		<.02
KM-2 135-140	<.2	<.02
KM-2 140-145		<.02
KM-2 145-150	<.2	<.02
KM-2 150-155		<.02
KM-2 155-160	<.2	<.02
KM-2 160-165		<.02
KM-2 165-170	<.2	<.02
KM-2 170-175		<.02
KM-2 175-180	0.3	<.02
KM-2 180-185		<.02
KM-2 185-190	<.2	<.02
KM-2 190-195		<.02
KM-2 195-200	0.3	<.02
KM-2 200-205		<.02
KM-2 205-210	0.6	<.02
KM-2 210-215		<.02
KM-2 215-220	<.2	<.02
KM-2 220-225		<.02
KM-2 225-230	0.2	<.02
KM-2 230-235		<.02
KM-2 235-240	1.0	0.03
KM-2 240-245		<.02
KM-2 245-250	0.4	<.02
KM-2 250-255		0.04
KM-2 255-260	<.2	<.02
KM-2 260-265		<.02
KM-2 265-270	<.2	<.02
KM-2 270-275		<.02

METHOD	AA/BC	A.A.
DIGESTION	[illegible]	[illegible]

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ANALYTICAL REPORT

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PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-2 275-280	<.2	0.10
KM-2 280-285		<.02
KM-2 285-290	<.2	<.02
KM-2 290-295		<.02
KM-2 295-300	<.2	<.02
KM-2 300-305		<.02
KM-2 305-310	<.2	<.02
KM-2 310-315		<.02
KM-2 315-320	1.0	<.02
KM-2 320-325		0.07
KM-2 325-330	<.2	<.02
KM-2 330-335		<.02
KM-2 335-340	<.2	<.02
KM-2 340-345		<.02
KM-2 345-350	<.2	<.02
KM-2 350-355		0.03
KM-2 355-360	<.2	<.02
KM-2 360-365		<.02
KM-2 365-370	5.6	0.18
KM-2 370-375		0.06
KM-2 375-380	2.0	0.04
KM-2 380-385		0.05
KM-2 385-390	4.5	<.02
KM-2 390-395		0.54
KM-2 395-400	35.5	0.30
KM-2 400-405		<.02
KM-2 405-410	<.2	<.02
KM-2 410-415		<.02
KM-2 415-420	0.7	<.02
KM-2 420-425		0.04
KM-2 425-430	0.5	<.02
KM-2 430-435		<.02
KM-2 435-440	<.2	<.02
KM-2 440-445		<.02
KM-2 445-450	<.2	<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqRes

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Job 8069
20-Dec-85

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-2 450-455		<.02
KM-2 455-460	0.2	<.02
KM-1 310-315		<.02

METHOD AA/BC A-A-

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Job 8081
23-Dec-85
Page 1

ANALYTICAL REPORT

Winthrop A. Rowe
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-2 460-465	0.6	<.02
KM-2 465-470	2.5	0.03
KM-2 470-475	1.1	0.02
KM-2 475-480	0.3	<.02
KM-2 480-485	0.4	<.02
KM-2 485-490	2.6	0.05
KM-2 490-495	0.4	<.02
KM-2 495-500	2.6	<.02
KM-2 500-505	<.2	0.02
KM-2 505-510	<.2	<.02
KM-2 510-515	<.2	<.02
KM-2 515-520	0.2	<.02
KM-2 520-525	<.2	<.02
KM-2 525-530	<.2	<.02
KM-2 530-535	<.2	<.02
KM-2 535-540	<.2	<.02
KM-2 540-545	<.2	<.02
KM-2 545-550	<.2	<.02
KM-2 550-555	0.6	<.02
KM-2 555-560	0.4	<.02
KM-2 560-565	0.2	<.02
KM-2 565-570	0.3	<.02
KM-2 570-575	3.2	<.02
KM-2 575-580	0.9	0.18
KM-2 580-585	0.6	0.19
KM-2 585-590	0.5	0.15
KM-2 590-595	11.7	0.21
KM-2 595-600	12.6	0.32
KM-2 600-605	5.9	0.64

D715

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CONE GEOCHEMICAL INC.
310 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8098
23-Dec-85
Page 1

FIRE ASSAY REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	OZ/TON GOLD
KM-2 100-105	0.010

METHOD 1 AT

[redacted]

[redacted]

KM-5	0- 5	<.02
KM-5	5- 10	<.02
KM-5	10- 15	<.02
KM-5	15- 20	<.02
KM-5	20- 25	<.02
KM-5	25- 30	<.02
KM-5	30- 35	<.02
KM-5	35- 40	<.02
KM-5	40- 45	<.02
KM-5	45- 50	<.02
KM-5	50- 55	<.02
KM-5	55- 60	<.02
KM-5	60- 65	<.02
KM-5	65- 70	<.02
KM-5	70- 75	<.02
KM-5	75- 80	<.02
KM-5	80- 85	<.02
KM-5	85- 90	<.02
KM-5	90- 95	<.02
KM-5	95-100	<.02

METHOD	AA/BC	A.A.
DIGESTION	[illegible]	[illegible]

CONE GEOCHEMICAL INC.
310 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8087
27-Dec-85

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-5 100-105		<.02
KM-5 105-110		<.02
KM-5 110-115		<.02
KM-5 115-120		<.02
KM-5 120-125		<.02
KM-5 125-130		<.02
KM-5 130-135		<.02
KM-5 135-140		<.02
KM-5 140-145		<.02
KM-5 145-150		<.02
KM-5 150-155		<.02
KM-5 155-160		<.02
KM-5 160-165		0.03
KM-5 165-170		0.16
KM-5 170-175		0.11
KM-5 175-180		0.17
KM-5 180-185		0.06
KM-5 185-190		0.04
KM-5 190-195		<.02
KM-5 195-200		<.02
KM-5 200-205		0.07
KM-5 205-210		<.02
KM-5 210-215		<.02
KM-5 215-220		<.02
KM-5 220-225		<.02
KM-5 225-230		0.04
KM-5 230-235		0.02
KM-5 235-240		<.02
KM-5 240-245		<.02
KM-5 245-250		<.02
KM-5 250-255		<.02
KM-5 255-260		<.02
KM-5 260-265		<.02
KM-5 265-270		<.02
KM-5 270-275		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqRec

CONE GEOCHEMICAL INC.
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ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-5 275-280		<.02
KM-5 280-285		<.02
KM-5 285-290		<.02
KM-5 290-295		<.02
KM-5 295-300		<.02
KM-5 300-305		<.02
KM-5 305-310		<.02
KM-5 310-315		<.02
KM-5 315-320		<.02
KM-5 320-325		<.02
KM-5 325-330		<.02
KM-5 330-335		<.02
KM-5 335-340		<.02
KM-5 340-345		<.02
KM-5 345-350		<.02
KM-5 350-355		<.02
KM-5 355-360		<.02
KM-5 360-365		<.02
KM-5 365-370		<.02
KM-5 370-375		<.02
KM-5 375-380		<.02
KM-5 380-385		<.02
KM-5 385-390		<.02
KM-5 390-395		<.02
KM-5 395-400		<.02

METHOD	AA/BC	A.A.
DIGESTION	[illegible]	[illegible]

CONE GEOCHEMICAL INC.
810 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8092
3-Jan-86
Page 1

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-6 0- 5		0.02
KM-6 5- 10	<.2	<.02
KM-6 10- 15		<.02
KM-6 15- 20	<.2	<.02
KM-6 20- 25		<.02
KM-6 25- 30	<.2	<.02
KM-6 30- 35		<.02
KM-6 35- 40	<.2	<.02
KM-6 40- 45		<.02
KM-6 45- 50	0.2	<.02
KM-6 50- 55		0.03
KM-6 55- 60	1.5	0.05
KM-6 60- 65		0.03
KM-6 65- 70	3.6	0.03
KM-6 70- 75		0.06
KM-6 75- 80	2.8	0.08
KM-6 80- 85		0.11
KM-6 85- 90	1.0	0.02
KM-6 90- 95		0.02
KM-6 95-100	1.6	0.03
KM-6 100-105		0.03
KM-6 105-110	1.6	0.04
KM-6 110-115		0.03
KM-6 115-120	1.4	0.07
KM-6 120-125		0.02
KM-6 125-130	1.8	<.02
KM-6 130-135		0.04
KM-6 135-140	1.1	0.09
KM-6 140-145		0.03
KM-6 145-150	1.5	0.02
KM-6 150-155		0.04
KM-6 155-160	1.4	0.03
KM-6 160-165		0.16
KM-6 165-170	2.2	0.11
KM-6 170-175		0.10

METHOD	AA/BC	A.A.
DIGESTION	Aqua	

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PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-6 175-180	1.1	0.03
KM-6 180-185		0.06
KM-6 185-190	1.2	0.09
KM-6 190-195		0.07
KM-6 195-200	1.4	0.07
KM-6 200-205		0.03
KM-6 205-210	1.5	0.04
KM-6 210-215		0.22
KM-6 215-220	1.5	0.08
KM-6 220-225		0.16
KM-6 225-230	1.3	0.05
KM-6 230-235		0.07
KM-6 235-240	1.4	0.06
KM-6 240-245		0.04
KM-6 245-250	1.2	0.06
KM-6 250-255		0.04
KM-6 255-260	0.8	0.17
KM-6 260-265		0.06
KM-6 265-270	1.0	0.06
KM-6 270-275		0.27
KM-6 275-280	0.8	0.03
KM-6 280-285		0.16
KM-6 285-290	1.0	<.02
KM-6 290-295		<.02
KM-6 295-300	0.8	<.02
KM-6 300-305		0.10
KM-6 305-310	1.4	0.07
KM-6 310-315		0.05
KM-6 315-320	0.9	<.02
KM-6 320-325		<.02
KM-6 325-330	0.3	<.02
KM-6 330-335		<.02
KM-6 335-340	<.2	<.02
KM-6 340-345		<.02
KM-6 345-350	0.3	<.02
METHOD	AA/BC	A.A.

CONE GEOCHEMICAL INC.
810 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8092
3-Jan-86
Page 3

ANALYTICAL REPORT

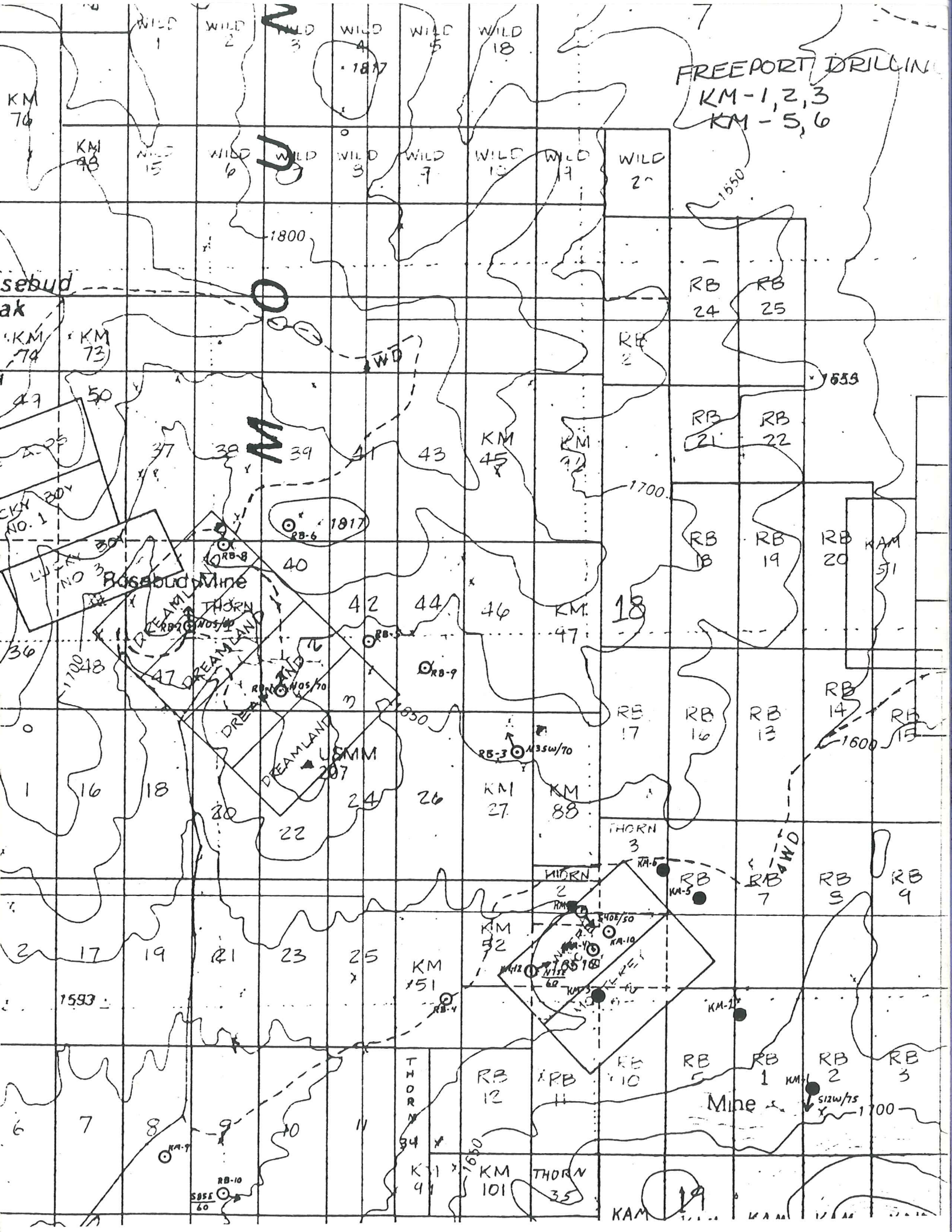
Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-6 350-355		<.02
KM-6 355-360	<.2	<.02
KM-6 360-365		<.02
KM-6 365-370	0.3	<.02
KM-6 370-375		<.02
KM-6 375-380	<.2	<.02
KM-6 380-385		<.02
KM-6 385-390	<.2	<.02
KM-6 390-395		<.02
KM-6 395-400	<.2	<.02

[redacted]

[redacted]


FREEPORT DRILLING
KM-1,2,3
KM-5,6
Rosebud Mine
DREAMLAND
THORN
USMM 207
Mine
WILD
RB
KM
THORN
KAM
1800
1817
1700
1650
1600
1550
1593
1559
RB-6
RB-8
RB-5
RB-9
RB-3
RB-4
RB-10
KA-1
KA-5
KA-6
KA-10
KA-9
N05/40
N05/70
N35W/70
S12W/75

LAB

CONE GEOCHEMICAL INC.
910 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8069
20-Dec-85

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 0- 5		<.02
KM-1 5- 10		<.02
KM-1 10- 15		<.02
KM-1 15- 20		<.02
KM-1 20- 25		<.02
KM-1 25- 30		<.02
KM-1 30- 35		<.02
KM-1 35- 40		<.02
KM-1 40- 45		<.02
KM-1 45- 50		<.02
KM-1 50- 55		<.02
KM-1 55- 60		<.02
KM-1 60- 65		<.02
KM-1 65- 70		<.02
KM-1 70- 75		<.02
KM-1 75- 80		<.02
KM-1 80- 85		<.02
KM-1 85- 90		<.02
KM-1 90- 95		<.02
KM-1 95-100		<.02
KM-1 100-105		<.02
KM-1 105-110		<.02
KM-1 110-115		<.02
KM-1 115-120		<.02
KM-1 120-125		<.02
KM-1 125-130		<.02
KM-1 130-135		<.02
KM-1 135-140		<.02
KM-1 140-145		<.02
KM-1 145-150		<.02
KM-1 150-155		<.02
KM-1 155-160		<.02
KM-1 160-165		<.02
KM-1 165-170		<.02
KM-1 170-175		<.02
METHOD	AA/BC	A.A.

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Job 8069
20-Dec-85

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PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 175-180		<.02
KM-1 180-185		<.02
KM-1 185-190		<.02
KM-1 190-195		<.02
KM-1 195-200		<.02
KM-1 200-205		<.02
KM-1 205-210		<.02
KM-1 210-215		<.02
KM-1 215-220		<.02
KM-1 220-225		<.02
KM-1 225-230		<.02
KM-1 230-235		<.02
KM-1 235-240		<.02
KM-1 240-245		<.02
KM-1 245-250		<.02
KM-1 250-255		<.02
KM-1 255-260		<.02
KM-1 260-265		<.02
KM-1 265-270		<.02
KM-1 270-275		<.02
KM-1 275-280		<.02
KM-1 280-285		<.02
KM-1 285-290		<.02
KM-1 290-295		<.02
KM-1 295-300		<.02
KM-1 300-305		<.02
KM-1 305-310		<.02
KM-1 315-320		<.02
KM-1 320-325		<.02
KM-1 325-330		<.02
KM-1 330-335		<.02
KM-1 335-340		<.02
KM-1 340-345		<.02
KM-1 345-350		<.02
KM-1 350-355		<.02
METHOD	AA/BC	A.A.
DIGESTION		

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PO #
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85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 355-360		<.02
KM-1 360-365		<.02
KM-1 365-370		<.02
KM-1 370-375		<.02
KM-1 375-380		<.02
KM-1 380-385		<.02
KM-1 385-390		<.02
KM-1 390-395		<.02
KM-1 395-400		<.02
KM-1 400-405		<.02
KM-1 405-410		<.02
KM-1 410-415		<.02
KM-1 415-420		<.02
KM-1 420-425		<.02
KM-1 425-430		<.02
KM-1 430-435		<.02
KM-1 435-440		<.02
KM-1 440-445		<.02
KM-1 445-450		<.02
KM-1 450-455		<.02
KM-1 455-460		<.02
KM-1 460-465		<.02
KM-1 465-470		<.02
KM-1 470-475		<.02
KM-1 475-480		<.02
KM-1 480-485		<.02
KM-1 485-490		<.02
KM-1 490-495		<.02
KM-1 495-500		<.02
KM-1 500-505		<.02
KM-1 505-510		<.02
KM-1 510-515		<.02
KM-1 515-520		<.02
KM-1 520-525		<.02
KM-1 525-530		<.02
METHOD	AA/BC	A.A.

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PO #
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85-539

SAMPLE NUMBER	PPM AG	PPM AU.
KM-1 530-535		<.02
KM-1 535-540		<.02
KM-1 540-545		<.02
KM-1 545-550		<.02
KM-1 550-555		<.02
KM-1 555-560		<.02
KM-1 560-565		<.02
KM-1 565-570		<.02
KM-1 570-575		<.02
KM-1 575-580		<.02
KM-1 580-585		<.02
KM-1 585-590		<.02
M-1 590-595		<.02
M-1 595-600		<.02
KM-1 600-605		<.02
KM-2 0- 5		<.02
KM-2 5- 10	<.2	<.02
KM-2 10- 15		<.02
KM-2 15- 20	<.2	<.02
KM-2 20- 25		<.02
KM-2 25- 30	<.2	<.02
KM-2 30- 35		<.02
KM-2 35- 40	<.2	<.02
KM-2 40- 45		<.02
KM-2 45- 50	<.2	<.02
KM-2 50- 55		<.02
KM-2 55- 60	<.2	<.02
KM-2 60- 65		<.02
KM-2 65- 70	0.6	<.02
KM-2 70- 75		0.18
KM-2 75- 80	0.7	0.05
KM-2 80- 85		<.02
M-2 85- 90	2.5	0.04
1-2 90- 95		0.16
M-2 95-100	2.7	0.20
METHOD	AA/BC	A.A.

ROSEBUD DRILLING DATA: FREEPORT HOLES

KM1

FROM	TO	1 AU PPM	2 AU PPM	3 AU PPM	4 AU PPM	5 AU PPM	AVG AU PPM	AVG AU O/T
0.0	5.0	-0.020	0.016	0.009	0.000	0.000	0.016	0.000
5.0	10.0	-0.020	0.009	0.000	0.000	0.000	0.009	0.000
10.0	15.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
15.0	20.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
20.0	25.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
25.0	30.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
30.0	35.0	-0.020	-0.005	-0.005	0.000	0.000	-0.010	-0.000
35.0	40.0	-0.020	0.011	0.000	0.000	0.000	0.011	0.000
40.0	45.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
45.0	50.0	-0.020	0.007	-0.005	0.000	0.000	0.007	0.000
50.0	55.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
55.0	60.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
60.0	65.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
65.0	70.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
70.0	75.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
75.0	80.0	-0.020	0.026	0.016	0.000	0.000	0.021	0.001
80.0	85.0	-0.020	0.018	0.000	0.000	0.000	0.018	0.001
85.0	90.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
90.0	95.0	-0.020	0.015	0.000	0.000	0.000	0.015	0.000
95.0	100.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
100.0	105.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
105.0	110.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
110.0	115.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
115.0	120.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
120.0	125.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
125.0	130.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
130.0	135.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
135.0	140.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
140.0	145.0	-0.020	0.006	0.000	0.000	0.000	0.006	0.000
145.0	150.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
150.0	155.0	-0.020	0.009	0.000	0.000	0.000	0.009	0.000
155.0	160.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
160.0	165.0	-0.020	0.007	-0.005	0.000	0.000	0.007	0.000
165.0	170.0	-0.020	-0.005	-0.005	0.000	0.000	-0.010	-0.000
170.0	175.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
175.0	180.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
180.0	185.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
185.0	190.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
190.0	195.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
195.0	200.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
200.0	205.0	-0.020	0.018	0.000	0.000	0.000	0.018	0.001
205.0	210.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
210.0	215.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
215.0	220.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
220.0	225.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
225.0	230.0	-0.020	0.011	0.000	0.000	0.000	0.011	0.000
230.0	235.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
235.0	240.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
240.0	245.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
245.0	250.0	-0.020	0.034	0.000	0.000	0.000	0.034	0.001
250.0	255.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
255.0	260.0	-0.020	0.011	-0.005	0.000	0.000	0.011	0.000
260.0	265.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
265.0	270.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
270.0	275.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
275.0	280.0	-0.020	-0.005	-0.005	0.000	0.000	-0.010	-0.000

280.0	285.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
285.0	290.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
290.0	295.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
295.0	300.0	-0.020	0.009	0.000	0.000	0.000	0.009	0.000
300.0	305.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
305.0	310.0	-0.020	0.024	0.000	0.000	0.000	0.022	0.001
310.0	315.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
315.0	320.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
320.0	325.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
325.0	330.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
330.0	335.0	-0.020	0.015	0.000	0.000	0.000	0.015	0.000
335.0	340.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
340.0	345.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
345.0	350.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
350.0	355.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
355.0	360.0	-0.020	0.011	0.000	0.000	0.000	0.011	0.000
360.0	365.0	-0.020	0.008	0.000	0.000	0.000	0.008	0.000
365.0	370.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
370.0	375.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
375.0	380.0	-0.020	0.009	0.000	0.000	0.000	0.009	0.000
380.0	385.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
385.0	390.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
390.0	395.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
395.0	400.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
400.0	405.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
405.0	410.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
410.0	415.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
415.0	420.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
420.0	425.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
425.0	430.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
430.0	435.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
435.0	440.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
440.0	445.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
445.0	450.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
450.0	455.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
455.0	460.0	-0.020	-0.005	-0.005	0.000	0.000	-0.010	-0.000
460.0	465.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
465.0	470.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
470.0	475.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
475.0	480.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
480.0	485.0	-0.020	0.005	0.000	0.000	0.000	0.005	0.000
485.0	490.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
490.0	495.0	-0.020	0.011	0.000	0.000	0.000	0.011	0.000
495.0	500.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
500.0	505.0	-0.020	0.021	0.000	0.000	0.000	0.021	0.001
505.0	510.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
510.0	515.0	-0.020	0.008	-0.005	0.000	0.000	0.008	0.000
515.0	520.0	-0.020	0.022	0.000	0.000	0.000	0.021	0.001
520.0	525.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
525.0	530.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
530.0	535.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
535.0	540.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
540.0	545.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
545.0	550.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
550.0	555.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
555.0	560.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
560.0	565.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
565.0	570.0	-0.020	0.007	0.000	0.000	0.000	0.007	0.000
570.0	575.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000
575.0	580.0	-0.020	-0.005	0.000	0.000	0.000	-0.013	-0.000

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Job 8069
20-Dec-85
Page 1

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PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 0- 5		<.02
KM-1 5- 10		<.02
KM-1 10- 15		<.02
KM-1 15- 20		<.02
KM-1 20- 25		<.02
KM-1 25- 30		<.02
KM-1 30- 35		<.02
KM-1 35- 40		<.02
KM-1 40- 45		<.02
KM-1 45- 50		<.02
KM-1 50- 55		<.02
KM-1 55- 60		<.02
KM-1 60- 65		<.02
KM-1 65- 70		<.02
KM-1 70- 75		<.02
KM-1 75- 80		<.02
KM-1 80- 85		<.02
KM-1 85- 90		<.02
KM-1 90- 95		<.02
KM-1 95-100		<.02
KM-1 100-105		<.02
KM-1 105-110		<.02
KM-1 110-115		<.02
KM-1 115-120		<.02
KM-1 120-125		<.02
KM-1 125-130		<.02
KM-1 130-135		<.02
KM-1 135-140		<.02
KM-1 140-145		<.02
KM-1 145-150		<.02
KM-1 150-155		<.02
KM-1 155-160		<.02
KM-1 160-165		<.02
KM-1 165-170		<.02
KM-1 170-175		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AqReg

CONE GEOCHEMICAL INC.
810 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 175-180		<.02
KM-1 180-185		<.02
KM-1 185-190		<.02
KM-1 190-195		<.02
KM-1 195-200		<.02
KM-1 200-205		<.02
KM-1 205-210		<.02
KM-1 210-215		<.02
KM-1 215-220		<.02
KM-1 220-225		<.02
KM-1 225-230		<.02
KM-1 230-235		<.02
KM-1 235-240		<.02
KM-1 240-245		<.02
KM-1 245-250		<.02
KM-1 250-255		<.02
KM-1 255-260		<.02
KM-1 260-265		<.02
KM-1 265-270		<.02
KM-1 270-275		<.02
KM-1 275-280		<.02
KM-1 280-285		<.02
KM-1 285-290		<.02
KM-1 290-295		<.02
KM-1 295-300		<.02
KM-1 300-305		<.02
KM-1 305-310		<.02
KM-1 315-320		<.02
KM-1 320-325		<.02
KM-1 325-330		<.02
KM-1 330-335		<.02
KM-1 335-340		<.02
KM-1 340-345		<.02
KM-1 345-350		<.02
KM-1 350-355		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AgReg

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Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU
KM-1 355-360		<.02
KM-1 360-365		<.02
KM-1 365-370		<.02
KM-1 370-375		<.02
KM-1 375-380		<.02
KM-1 380-385		<.02
KM-1 385-390		<.02
KM-1 390-395		<.02
KM-1 395-400		<.02
KM-1 400-405		<.02
KM-1 405-410		<.02
KM-1 410-415		<.02
KM-1 415-420		<.02
KM-1 420-425		<.02
KM-1 425-430		<.02
KM-1 430-435		<.02
KM-1 435-440		<.02
KM-1 440-445		<.02
KM-1 445-450		<.02
KM-1 450-455		<.02
KM-1 455-460		<.02
KM-1 460-465		<.02
KM-1 465-470		<.02
KM-1 470-475		<.02
KM-1 475-480		<.02
KM-1 480-485		<.02
KM-1 485-490		<.02
KM-1 490-495		<.02
KM-1 495-500		<.02
KM-1 500-505		<.02
KM-1 505-510		<.02
KM-1 510-515		<.02
KM-1 515-520		<.02
KM-1 520-525		<.02
KM-1 525-530		<.02
METHOD	AA/BC	A.A.
DIGESTION	4Acid	AgReg

CONE
GEOCHEMICAL INC.
910 Quail Street, Suite I
Lakewood, Colorado 80215
(303) 232-8371

Job 8069
20-Dec-85

ANALYTICAL REPORT

Dave Bird
Freeport McMoRan Gold Co.
P.O. Box 41330
Reno, NV 89504

PO #
PROJECT
85-539

SAMPLE NUMBER	PPM AG	PPM AU.
KM-1 530-535		<.02
KM-1 535-540		<.02
KM-1 540-545		<.02
KM-1 545-550		<.02
KM-1 550-555		<.02
KM-1 555-560		<.02
KM-1 560-565		<.02
KM-1 565-570		<.02
KM-1 570-575		<.02
KM-1 575-580		<.02
KM-1 580-585		<.02
KM-1 585-590		<.02
KM-1 590-595		<.02
KM-1 595-600		<.02
KM-1 600-605		<.02
KM-2 0- 5		<.02
KM-2 5- 10	<.2	<.02
KM-2 10- 15		<.02
KM-2 15- 20	<.2	<.02
KM-2 20- 25		<.02
KM-2 25- 30	<.2	<.02
KM-2 30- 35		<.02
KM-2 35- 40	<.2	<.02
KM-2 40- 45		<.02
KM-2 45- 50	<.2	<.02
KM-2 50- 55		<.02
KM-2 55- 60	<.2	<.02
KM-2 60- 65		<.02
KM-2 65- 70	0.6	<.02
KM-2 70- 75		0.18
KM-2 75- 80	0.7	0.05
KM-2 80- 85		<.02
KM-2 85- 90	2.5	0.04
KM-2 90- 95		0.16
KM-2 95-100	2.7	0.20
METHOD	AA/BC	A.A.

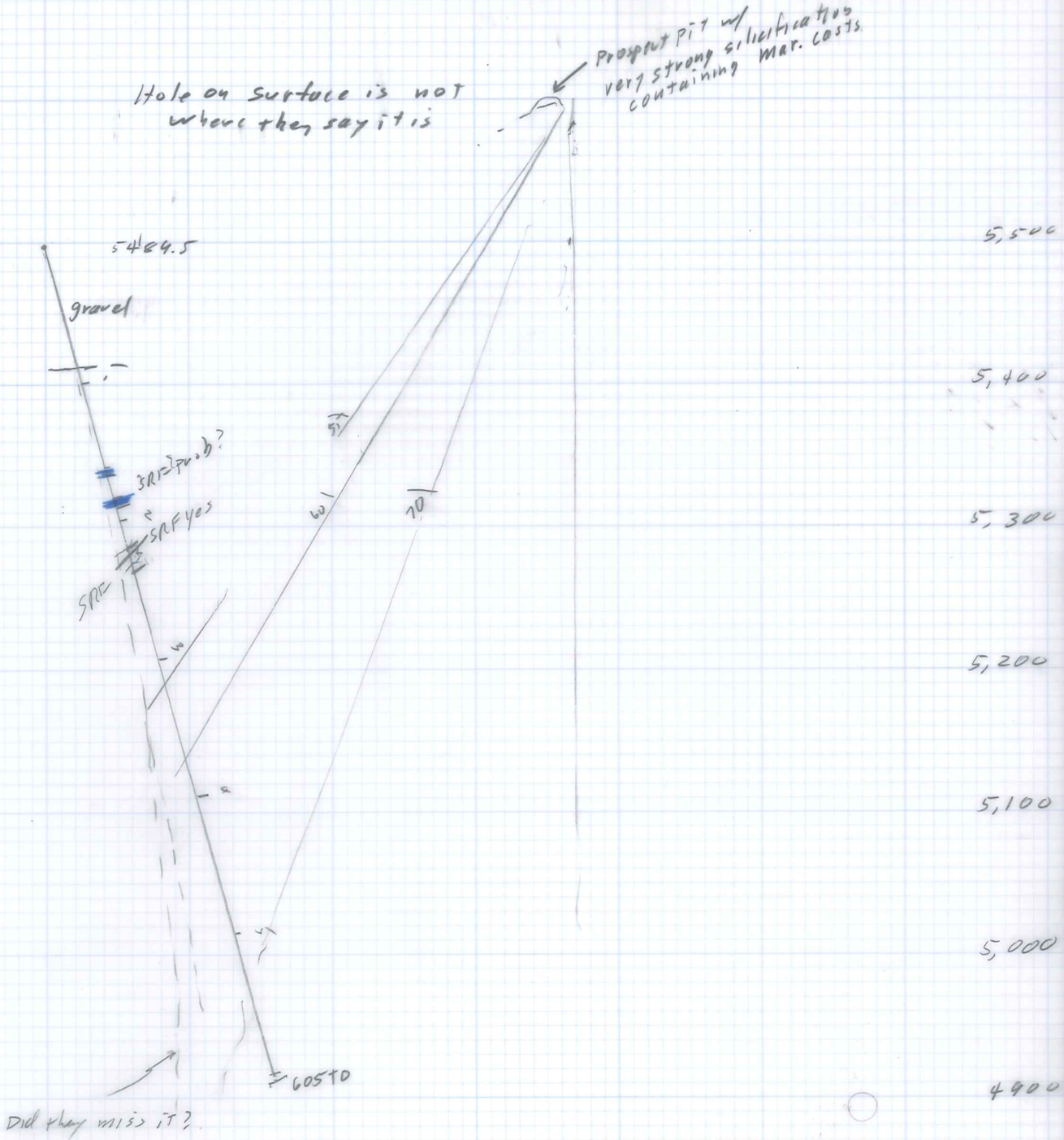
ANALYSIS REPORT

American Assay Laboratories

REPORT : SP 002930

Sample	Au PPB	[illegible] PPB
8069 KM-1 500-505	0.021	
8069 KM-1 505-510	<0.005	
8069 KM-1 510-515	0.008	<0.005
8069 KM-1 515-520	0.022	
8069 KM-1 520-525	<0.005	
8069 KM-1 525-530	<0.005	
8069 KM-1 530-535	<0.005	
8069 KM-1 535-540	<0.005	
8069 KM-1 540-545	<0.005	
8069 KM-1 545-550	<0.005	
8069 KM-1 550-555	<0.005	
8069 KM-1 555-560	<0.005	
8069 KM-1 560-565	<0.005	
8069 KM-1 565-570	0.007	
8069 KM-1 570-575	<0.005	
8069 KM-1 575-580	<0.005	
8069 KM-1 580-585	0.008	
8069 KM-1 585-590	<0.005	
8069 KM-1 590-595	0.005	
8069 KM-1 595-600	<0.005	
8069 KM-1 600-605	<0.005	
8069 KM-2 0-5	0.041	
8069 KM-2 5-10	0.006	
8069 KM-2 10-15	<0.005	
8069 KM-2 15-20	<0.005	

Please refer to the cover sheet for further analysis details.



sec S 12° W

Rosebud

KM-1

1" = 100'

Sec → S 12° W

PROJECT: ROSEBUD	STATE: Nevada	NORTHING:	TOTAL: 605' Page 1/3
LOGD BY: HSM 03/07/97	COUNTY: Pershing	EASTING:	BEARING:
UTM#: NK 11-10-06	SEC. T. N., R.	ELEVATION:	ANGLE:

HOLE#: DRD KM-1

| DRILLING NOTES | | |

PROJECT: ROSEBUD	STATE: Nevada	NORTHING:	TOTAL: 605'	Page 2/3	HOLE#:
LOGD BY: HSM 03/07/97	COUNTY: Pershing	EASTING:	BEARING:		DRB KM-1
DTM#: NK 11-10-06	SEC. T. N., R.	ELEVATION:	ANGLE:		

DRILLING NOTES		COLOR (WET)	STRATIGRAPHY/LITHOLOGY																			STRCT	ALTERATION & MINERALIZATION																COMMENTS	SAMPLE No
TOOL	Rates: H'O Gasing Bits Hole C		ALLUVM	BADGER	CHOCOLT	BUD	BRADY	MKR POR	BUD	DOZER	WILDROS	SURGTUF	SHOFLO	AVAO	AUTOBXA	INTRUSV	BASALT	ANDESIT	RHYOLIT	BROKEN	GOUGE	GRAPHIC	OXD'T'N MANGAN	HEMAT	LIMON	PYRITE	GRAPHIC	UNALTRD	PROPYLT	ARG	RPL SIL	STKWKS	VEINS	CALCITE		GRAPHIC	Sample Recovery / Composite Geochem Intervals	
DEPTH in FEET			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27													
	255																																									255
260	260																																								GENERALLY APPEARS PHENOCRYST POOR FOR BOTH BRADY & AAA ROCKS.	260
	265																																									265
270	270																																									270
	275																																									275
280	280																																									280
	285																																									285
290	290																																									290
	295																																									295
300	300																																									300
	305																																								300-315': VFG/APHANITIC. LOOKS LIKE A CHILL MARGIN ALMOST WHEN COMPARED WITH LAVA ABOVE & BELOW.	305
310	310																																									310
	315																																									315
320	320																																									320
	325																																									325
330	330																																									330
	335																																									335
340	340																																									340
	345																																									345
350	350																																									350
	355																																									355
360	360																																									360
	365																																									365
370	370																																									370
	375																																									375
380	380																																								~383': WELDED/SEMIWELDED TUFF INTERVAL	380
	385																																									385
390	390						?																																			390
	395																																									395
400	400						?																																			400
	405																																									405
410	410																																									410
	415																																									415
420	420																																									420
	425																																									425
430	430																																									430
	435																																									435
440	440																																									440
	445																																									445
450	450																																									450
	455																																									455
460	460																																									460
	465																																									465
470	470																																									470
	475																																									475
480	480																																									480
	485																																									485
490	490																																								485-495': SPARRY COARSE CALCITE.	490
	495																																									495
500	500																																									500

PROJECT: ROSEBUD	STATE: Nevada	NORTHING:	TOTAL 605' Page 3/3
LOGD BY: HSM 03/07/97	COUNTY: Pershing	EASTING:	BEARING:
UTM#: NK 11-10-06	SEC. T. N., R.	ELEVATION:	ANGLE:

HOLE#: DRB KM-1

DRILLING NOTES		COLOR (WET)	STRATIGRAPHY/LITHOLOGY																	STRCT		GRAPHIC	ALTERATION & MINERALIZATION																	GRAPHIC	COMMENTS	SAMPLE No
TIME	Dates, H20, Casing, Bits, Hole C		ALUVM0	BADGER	CHOCOLT	BUD	BRADY	MKR POR	BUD	OZER	WILDROS	SURGTUF	ASH0FLO	LAVA00	AUTOBXA	INTRUSV	BASALT	ANDESIT	RHYOLIT	BROKEN	GOUGE		OXD'T'N GANGAN	HEMAT	LIMON	PYRITE		UNALTRD	PROPYLT	ARG	RPL SIL	STKWKS	VEINS	CALCITE								Sample Recovery	
DEPTH in FEET			1	2	3	4	5	6	7	8	9	10	11	12	13	11	12	13	14	15	16		17	18	19	20		21	22	22	23	24	25	26	27							Composite Geochem Intervals	
	510																																										505 510 515 520
	520																																										
	530																																										525 530 535 540
	540																																										
	550																																										545 550 555 560
	560																																										
	570																																										565 570 575 580
	580																																										
	590																																										585 590 595 600
	600																																									590-595': SPARRY CALCITE.	
	610																																										605 610 615 620
	620																																										
	630																																										625 630 635 640
	640																																										
	650																																										645 650 655 660
	660																																										
	670																																										665 670 675 680
	680																																										
	690																																										685 690 695 700
	700																																										
	710																																										705 710 715 720
	720																																										
	730																																										725 730 735 740
	740																																										
	750																																										745 750

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROAST AA oz/ton	COLD CN oz/ton
KM-1	0	5	Brown/purple volc.; fragmental							
	5	10	Lt. gray/brown fragmental; mod. perv. clay altrn							
	10	45	Variable color, mottled breccia; loc. siliceous groundmass, loc. hematitic groundmass,							
			loc. weak clay altrn.							
	45	80	Same; stronger clays							
	80	100	Same + tr. white calcite rhoms							
	100	115	Gray/green/purple fragmental; decr. silica, hem, clay, calcite.							
	115	150	" " "; incr. calcite & clay							
	150	160	" " reddish fragmental; loc. xtlln calcite on fracs, tr. clay, hematitic GM							
	160	165	" " " "; stronger calcite							
	165	185	More reddish; fragmental; mod. calcite							
	185	190	Increasing clays (to mod.); calcite loc. strong							
	190	220	Reddish-brown fragmental; loc. str. calcite; loc. mod. clays on fracs							
Δ	220	230	Rx Δ: Light green felsic fragmental, loc. Py to 2%; loc. white clays on fracs							
	230	235	Lt. grn fels fragmtl w/wh Py, clays + dkr. red/brown frag.							
	235	240	Back to mostly dkr. fragmtl + wh green fragmtl							
	240	245	Predominantly dkr fragmtl ± wh green fragmtl							
	245	265	" " " ± wh. calcite							
	265	290	" " "; Incr. lt. grn fragmtl							
	290	300	" " "; Lost lt. grn lithology							
	300	350	Strictly dkr. red/brown fragmental; minor contamination							
			± tr. Py							
	350	385	Darker coloration locally							
	385	445	Mostly mod-dk reddish-brown fragmental with wh-mod lt. grn to gray fragmtl							
	445	485	Same ± wh. white xtlln calcite							
	485	495	Same + str. calcite							
	495	530	same ± wh. loc. calcite							
	530	540	same + mod. lt. gray fragmtl ± loc. calcite							
	540	545	Mostly lt-mod dark fragmtl							

ANOMALY NAME _____ HOLE NO. _____ SHEET _____ OF _____

SAMPLE NUMBER	INTERVAL FROM	TO	DESCRIPTION	FM	Graphic	DIP	DHT	FIRE oz/ton	ROAST AA oz/ton	COLD CN oz/ton
KM-1	545	570	Same + hematitic G.m. ± loc. calcite			–				
	575	585	Lt-med gray f-gmtl ± Hem. ± loc. calcite							
	585	590	" " " " ± Hem + mod. calcite							
	590	600	Same + v. str. calcite							

ANOMALY NAME _____ HOLE NO. _____ SHEET ____ OF ____

6-16-00
DLM

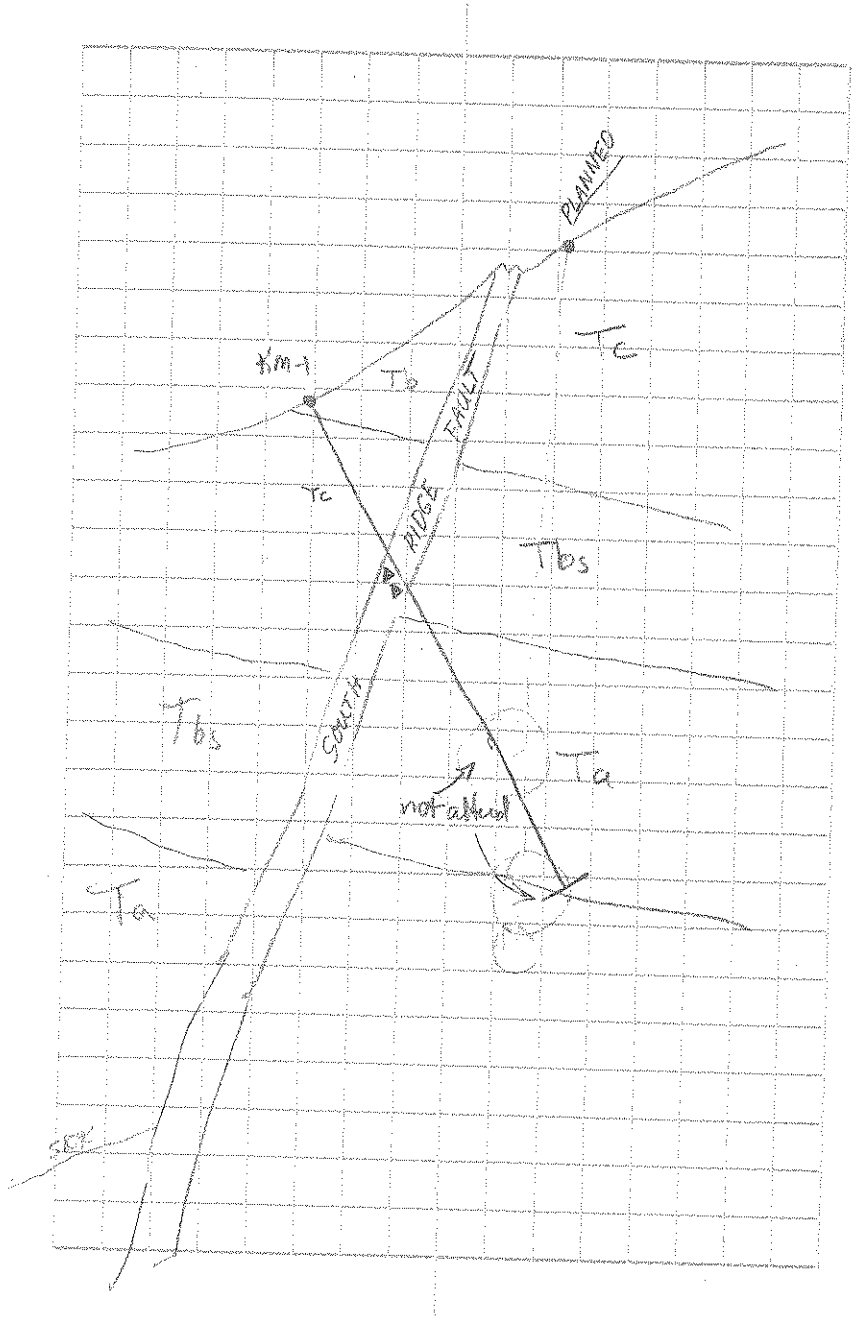
KM-1

0-15 cover

15 - 220 Budyc.

220 - 240 South Ridge Fault (Yes)

240 - 400 LBT


PLANNED
Tc
km-1
Tb
FAULT
Tc
RIDGE
Tbs
Tbs
SOUTH
Ta
not allowed
Ta
SEE