No drill log # R1-R11
No Maps
No Photos
Bulk

N.T.S. 114-P.12

# SUMMARY REPORT ON WINDY CRAGGY CLAIMS ALSEK AREA, B.C. 1960

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1429

# SUMMARY REPORT ON
# WINDY CRAGGY CLAIMS
# ALSEK AREA, B.C.
# 1960

## I N D E X

# SUMMARY REPORT ON
# WINDY-CRAGGY CLAIMS
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FORWARD:

This report covers work done on the Windy-Craggy copper deposit during August of 1960 and combines it with a summary of that done previously, a report on which was prepared in 1959. The deposit is still a prospect of which we know little and any future reports will have much to add.

SUMMARY AND CONCLUSIONS:

During 1960 a transit controlled geological survey was made of all the accessible portions of the Windy-Craggy deposit. In addition a number of short packsack drill holes designed primarily for assessment work purposes were put in. With the exception of the northernmost of these holes, little new information on the property was gained with such drilling remaining a hopelessly inadequate means of evaluating the mineral deposit. Actually most holes had to be collared 20 to 30 feet further into the leaner footwall than those of 1959 when an unusually large recession of a snow cap, brought about by exceptionally good weather, allowed collaring nearer the central portion of the deposit. Thus grades are lower than those shown by previous work. Structure appears to be one of tight flat to northerly plunging folds occurring along a sheared and possibly disconformable contact of schistose pillow lavas with a less altered complex of shales, slates, argillites and andesitic volcanics. Sulphide mineralization occurs more or less continuously along a measured length exceeding 6000 feet but is more intense in the vicinity of the folds. Snow and ice effectively conceal

the true width of the deposit and the 1960 work added little to this unknown factor. The grade of the footwall portion of the deposit is not high enough to support mining in this location and the only chance is that such will increase with depth towards the more central unexposed portion where future work with an adequate drill should be directed. Cupriferous shale bands were discovered but not adequately tested.

LOCATION AND ACCESS:

The Windy-Craggy deposits are located in the extreme northwestern portion of B.C. between the Alsek and Tatshenshini Rivers and are about 20 miles north of their junction. They are 45 miles west of the Haines Cut-off Highway and about 40 miles north of a scattered settlement at the mouth of the Alsek in Alaska. (See Map MC 1/60 - Inset). The showings occur at elevations ranging from 5000 to 6500 feet between a headwall cirque at the top end of Tats Glacier and precipitous bluffs to the north leading down to Frobisher Glacier. (Except for a few main topographic features such as the Alsek and Tatshenshini Rivers, all names used in this one remaining unmapped section of B.C. are our own, coined by the writer to facilitate exploration work.)

Access to the deposit is gained by taking a float plane to Tats Lake and walking northerly 8 miles along Tats Glacier and associated gravel flats. More efficient access is gained by use of a helicopter and all of our work in the area since discovery has been supported by either a Bell G2 or Hiller 12E machine.

PROPERTY HISTORY AND DEVELOPMENT:

The deposit was discovered in 1958 while on a Super Cub recce following the finding of considerable high-grade copper float in morainal

debris near the foot of Tats Glacier. A ground search revealed chalcopyrite-bearing pyrrhotite for about 6000 feet along a poorly exposed zone and although the grade was lower than hoped for, the intense mineralization and associated alteration present over so large an area, coupled with the presence of high-grade float, prompted the staking of the 14 Craggy and Windy Claims. At the time of writing these claims are in good standing until 1965.

During a 2-week period in 1959, 5 packsack drill holes totalling 305 feet were put in near the south end of the showing and an attempt made to prospect the remaining sections. The precipitous cliffs at the north or Craggy end of the deposit are only partially accessible from below and then only with considerable danger because of loose rock and possible minor avalanches. An attempt to examine the main cliff showings - which appear as a confused ill-defined rusty weathering, 1000-foot wide mass of black sulphides and country rock (See Photo #9)- by rope descent from the overlying unmineralized cap rock was halted by overhanging snow and ice which we are not experienced enough to cope with. Nevertheless a few of the exposures were sampled. Except for open cracks (bergschrund - see Photo #4) between the ice and the mineralized bluffs above, the Windy extension to the south is not nearly as dangerous and all subsequent work has been concentrated there.

In August of 1960, 14 short packsack drill holes, totalling 567 feet and including 5 through the ice, were put in, and the accessible portion of the zone (the Windy section) geologically mapped. A prefab 9' x 12' building suitable for 4 men was flown in and erected on the property.

Those having worked on the deposit to date, besides Alex Smith and the writer, include Meade Hepler, Bill Wilkinson, Dave Kimball, Stan Bridcut, Gerry Davis, Mike Donahue, Jim Robertson, Mark Brandon, Earl Dodson, John Peterkin and Roy Hepworth. Visitors included Gordon Walker of Ventures in 1958 and Stu Holland of the B.C. Dept. of Mines in 1959.

GENERAL GEOLOGY:

The sulphide body in question occurs in a meta sediment - meta volcanic environment and is possibly indirectly related to a granitic stock occurring a few miles away.

The most important rock type which occurs as a basin-like, possibly in-folded remnant (?), consists of well defined but highly chloritized pillow lava. This unit, termed the Tats Greenstone on earlier maps, comprises a circular area about 6 miles in diameter. A thickness in excess of 2000 feet is indicated but unfortunately practically all contacts except those occasionally occurring on rugged inaccessible mountain sides are snow or ice covered. (See Map 59 "B" accompanying 1959 "Northern Prospecting" Report.) Individual of the elongate pillows reach 2 feet in length but in general are less than 1 foot long. (See Photo #6) The long axis in general parallels to strike of the mineral zone. This occurrence of pillow lavas is the only one of any consequence noted by the writer during reconnaissance mapping of over 50,000 square miles in the St. Elias section of B.C. and the Yukon and the association of this rock type with mineralization, although common in the Shield, is rare in Western Canada. Occasional outcropping of similar lavas elsewhere in the north has been dated as Upper Triassic.

Near the mineral deposit the lavas are of a deep green colour

brought about by intense chloritization and the presence of minor epidote. These materials with minor carbonate form the rims and intersticial material. In the highly altered areas containing massive sulphide the pillows have lost their identity, and their presence is attested only by remnants of the green chlorite. Occasionally within the group their development is meager or lacking but this reflects original emplacement conditions rather than later alteration. Minor shale bands are probably present between some of the flows but subsequent structural complexities have confused this issue.

Bounding and apparently underlying the pillows on the west is a stratified thin bedded sequence of shales, phyllites, argillites, and slates whose distribution is confused by an equal volume of erractically occurring but apparently interbedded andesite and andesite porphyry sills or flows. The extent of the sedimentary group is not known but is believed widespread. In the Tats-Windy area a minimum 2500-foot thickness is indicated with the bounding rocks being nowhere in evidence. Such thin bedded rocks are the most common in the whole St. Elias system as studied and thicknesses could well be over 20,000 feet. Superimposed cleavage or schistosity undoubtedly accounts for part of the thin bedded appearance, especially in the locale of the sulphide deposit, but again the overall control must be one of primary deposition. Calcareous members, unfortunately, are rare in the section of interest but appear to be brought in along strike to the northwest via a facies change.

The included volcanic rocks, although fresh appearing, nevertheless have a superimposed cleavage developed with an attitude approximating the contact with the bounding sediments. They thus break down as does the shale and in talus slides can, from a distance, easily be confused with the sediments. As shown on the accompanying geological map the thicknesses of

the volcanics may range from a few feet to a few hundred feet with a probable control being one of primary structure existing before their emplacement.

These rocks have not been studied in detail but megascopically they are composed of a basic andesite exhibiting occasional porphyritic phases.

Occasionally dykes and sills occur but these are evident mainly on the inaccessible Craggy cliffs. Their composition suggests an andesite also although possibly more basic than that in the banded rocks further to the south. What talus these cliffs have thrown is lost down the ever-occurring bergschrund only to re-appear mixed with every rock in the area at the foot of the receding glacier several miles below. As the cliffs are almost swept bare, rock types can only be guessed at.

Toward the north end of the Craggy claims one dyke-like body closely resembling diorite was noticed. This is the only granitic occurrence yet evident for several miles in all directions although such could occur at depth or be snow covered.

Local structure is impossible to determine without detailed stratigraphic studies involving much more work than we were able to afford. Snow and ice on precipitous and diffused cliffs effectively prevent tracing and thus correlating any one unit or structural trend any great distance. Certainly all rocks involved at the mountain crests have been moderately folded or rumpled. Several sizeable remnant symmetrical synclines are visible in the sedimentary-volcanic complex. Smaller and more difficult to decipher synclinal troughs selectively replaced by sulphides occur nearer the deposit but again are practically inaccessible. However such do appear to plunge northward as does a larger, absolutely inaccessible

anticlinal crest on the cliffs. Some of the folds in the mineralized area may be drag resulting from an as yet inevident major fault possibly existing along the pillow lava contact, but those existing well away from it cannot be so classified. Major faults have been mapped just outside the area (i.e. near the Tats showings and along the front of the Noisy Range Stock) of interest but these probably do not affect local conditions.

Alteration away from the mineral deposit is not intense. Certainly no high degree of thermal metamorphism is present but dynamic metamorphism has resulted in the formation of low grade schists and phyllites in the main rock units, particularly the thin bedded shales.

DESCRIPTION OF MINERAL DEPOSIT:

The main Windy-Craggy sulphide deposits occur along an apparently disconformable and much altered contact between the pillow lavas and the sedimentary-andesitic volcanic sequence.

The deposit appears to parallel the complexly folded upper contact of the pillow lava system rather than the latter, away from whose strike it diverges northerly at 15-20° (see Map WC 1/60). This suggestion of a stratigraphic disconformity may be more apparent than real because of, as previously mentioned, other structural complexities plus thickening of the irregular, possibly intrusive andesites, along this contact tend to confuse matters. The sulphide appears to replace portions of both groups and to thicken where folds are encountered.

The sulphide zone as presently known is about 6,200 feet long. Width of low grade mineralization, including intensely pyritized alteration areas, varies between 200 and 1000 feet. The width of the massive, and possibly irregular sulphide masses is unknown as we have not been able to see the hangingwall due to the down dip, down slope ice mass. Drilling

indicates some of the lens like (?) masses to be over 100 feet thick with their lengths unknown as they appear to plunge into the hill at a low angle despite apparent dip-slope tendencies.

If alteration is a guide, continuity between those massive deposits exposed on the Windy Group and those on the Craggy is probable. The tops of these deposits, occupying a proposed low angle plane cutting through the mountain, are then out of sight just below the snow level on the Windy and crop out in an inaccessible area at approximately the same elevation on the Craggy cliffs. Mineralization occurring on the mountain ridge separating the two groups is then of secondary importance being one largely of alteration associated with the underlying deposits.

Mineralization consists of massive, non-magnetic cobaltiferous pyrrhotite with varying amounts of pyrite and chalcopyrite. Nickel is present in as yet unknown but very small amounts. The pyrrhotite has replaced members of both rock groups. The copper content appears to increase toward the center (away from the footwall) of the deposit as does the pyrrhotite content in general, although all the massive pyrrhotite is not (in the converse) copper bearing.

ASSAYS AND RESERVES:

The problem involved in presenting assays and reserves can well be appreciated by reference to Map MC 1/60. We have not yet determined if the outcrop area presented represents 10% or 90% of that which would show up if the ice and snow were removed.

The total tonnage factor of exposed massive sulphide mineralization on the Windy claims is about 2,800 tons/vert. foot. The lower grade and gossan zones combined with the pyrrhotite brings the total to 7,000 tons/vert. foot. (These types were all represented in the drilling.) Assuming the

deposit to be 100 feet wide and 3400 feet long, a possible tonnage factor of 27,000 tons/vert. foot would exist. If it could be measured, the outcrop on the Craggy claims might total nearly as much as that of the Windy, say 20,000 tons including 2200 tons measurable.

Grade is variable but low with the better of the tested sections showing as high as 3% copper and the lower grade sections going little better than 1/2 of 1%. Thus the average grade so far indicated by the scattered drilling, depending on cut off, is little better than 1%. Iron content is approximately 50% and the cobalt content about 0.15%. Slight gold-silver values are present.

Thus in summary about all that can be said about the main Windy-Craggy deposit is that about 5000 tons/vert. foot massive sulphide is reasonably exposed along a length of 6200 feet through an elevation difference of about 1000 feet. Possible additional low grade "ore" is about 8 tims this figure.

Random samples of a black shale band occurring poorly exposed in an area of slide rock below and west of the main outcrop on the Windy claims assayed over 2-1/2% copper. This is downhill several hundred feet below the gobs of massive cuprite found last year. No work was done on this showing of unknown size and shape. There is the possibility that the band has been surface enriched.by copper charged waters although other rock over which the same waters pass showed only trace amounts of copper. The suggestion is that a second unexposed mineralized zone occurs in this area accounting for values in the black shale, rusty spring deposits below near the glacier, and the cuprite above. The same conditions could be explained by a fault cutting the exposed mineralized zone above and bringing some of the copper-charged runoff down in this direction but no such fault

has yet been clearly shown.

CONCLUSIONS AND RECOMMENDATIONS:

The size, altitude and grade of the Windy copper prospect remains undeciphered. There is undoubtedly a multi-million ton deposit of low grade (1% copper) material but the amount of required 2-3% material available is still as unknown as it was in 1958.

The general dip attitude of the complexly folded deposit appears in large part to be downhill and extensions toward the hangingwall as well as the major portion of the hangingwall itself are buried by a local ice cap.

Except for local testing of the "cupriferous" black shale described, further work with a packsack drill would be of no value whatsoever now that assessment work has been completed. The showings must be tested downdip and only a BBS1 drill capable of driving casing through a possible 200 feet of ice should be considered. An alternate to ice drilling would be to set up beyond the footwall and to drill flatter down-dip holes - probably the best approach should the deposit steepen at depth.

It is suggested that rather than commit ourselves to a series of ice holes alone that two holes be put in from each of the downhill and uphill sites and the location of the remaining holes be decided in the field. The orebodies may occur largely as flatly plunging shoots more related to the pillow lava contact than to the attitude of the sediments in which case drilling restricted to that through the ice 6 to 800 feet downdip would be similarly inconclusive.

Close geological mapping especially of minor structural features would be of value, such, for obvious reasons of time, having not been done to date.

It is suggested that during August and the first half of September next year between 3 - 5000 feet of exploratory BBSl drilling be allowed for in the Windy Group as generally outlined. The packsack drill can be used to test the cupriferous shale horizons. Immediately prior to this several BBSl holes could take care of the assessment work requirements on the O'Connor Gypsum located in the same part of the country. It has been suggested in the past that a couple holes probing the Maid of Erin deposit at depth might be warranted and this could conveniently be done following the Windy work. Close structural mapping such as was done at Ruddock Creek would be in order on the Windy deposit of which we have learned little since locating.

Vancouver, B. C.

March 8, 1962

J. J. McDougall

PROPERTY [illegible]

HOLE NUMBER 31

SHEET NUMBER

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. 123' 352° from 26th. #4,
DEP.

ELEVATION OF COLLAR 5157 ft.

DATUM

DIRECTION AT START: BEARING -90°
DIP

STARTED August 25th, 1959

COMPLETED August 26th, 1959

ULTIMATE DEPTH 40 ft.

PROPOSED DEPTH

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 - 40 | Unmineralized greenstone cap rock - slight pyrite last 10 feet. | | | Not assayed | | | | |
| | (Drilled into unmineralized cap rock as no water available elsewhere). | | | | | | | |
| | C.J./S.S. | | | | | | | |

N.M.P.-FORM A

PROPERTY WINDY GROUP, ALSEK

HOLE NUMBER 42

SHEET NUMBER 1

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. Not previously surveyed and collar no longer exposed. Approx. location is "D" on map CW2-
DEP. 2760. 30' E of Stn., L.P. #17.

ELEVATION OF COLLAR 5500 ± Estimate 5496 ft.

DATUM .....

DIRECTION AT START: BEARING West
DIP -45°

STARTED August 29th, 1959

COMPLETED August 30th, 1959

ULTIMATE DEPTH 96 ft.

PROPOSED DEPTH .....

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | Ag | Cu | | |
|---|---|---|---|---|---|---|---|---|
| 0 - 5 | Massive pyrrhotite, Cons. pyrite, 2% diss. pyrite, R.weathering | | | 5 | | .99 | | |
| 5 - 10 | do Cons. pyrite 5% C.P. | | | 5 | | 2.02 | | |
| 10 - 15 | do do 5% C.P.-stringers | | | 5 | | 1.21 | | |
| 15 - 20 | do do 4% Banded | | | 5 | 0.1 | 1.14 | | |
| 20 - 25 | do do appears to be 5% C.P. | | | 5 | 0.09 | .60 | | |
| 25 - 30 | do do Minor C.P. 2% | | | 5 | | .58 | 6)654 | 1.09 |
| 30 - 35 | do do do do | | | 5 | | .63 | | |
| 35 - 40 | 20% Greenstone, few white quartz stringers, with pyr & C.P. veins. | | | 5 | | .35 | | |
| 40 - 45 | Brecciated greenstone, 50% replaced & veined by S2, streaks C.P. | | | 5 | | .51 | | |
| 45 - 50 | do do | | | 5 | | .37 | | |
| 50 - 55 | do 25% do do (50% Core Rec) | | | 5 | | .71 | | |
| 55 - 60 | Brownish, brecciated & sheared volc. possible dyke rock, 3% S2. | | | 5 | | .66 | | |
| 60 - 65 | Quartzose greenstone breccia - 5% Core Rec. | | | 5 | | .17 | | |
| 65 - 70 | Sl.Min.Greenstones & dyke rock. less than 5% C.P. | | | 5 | | .12 | | |
| 70 - 75 | do do 1% C.P. do 5% C.P. | | | 5 | | .30 | | |
| 75 - 80 | Brecciated & sheared greenstones. & sl S2. 1% C.P. | | | 5 | 0.2 | .05 | | |
| 80 - 85 | Unmineralized greenstones | | | 5 | | .07 | | |
| 85 - 90 | Greenstones containing 10% pyrr with 1% diss C.P. | | | 5 | | .12 | | |
| | (Collared near edge of copper zone and drilled into wall rock) | | | | | | | |
| | D.D./S.P. | | | | | | | |

N.M.P.-FORM A

PROPERTY WINDY GROUP

HOLE NUMBER D3

SHEET NUMBER 1

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. .....
DEP. Approx. 50 ft N of D2 - Not exposed

ELEVATION OF COLLAR .....

DATUM Estimate 5500 ft.

DIRECTION AT START: BEARING Westerly
DIP -55°

STARTED August 30th, 1959

COMPLETED August 31st, 1959

ULTIMATE DEPTH 50'

PROPOSED DEPTH .....

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | Gold | Ag | Cu |
|---|---|---|---|---|---|---|---|
| 0 - 5 | Massive pyrrhotite, 25% ammin. gns. 2% C.P. | | | 5' | | | .45 |
| 5 - 10 | do do | | | 5' | | | .44 |
| 10 - 15 | Gns. qtz. breccia zone 20% C. Rec. | | | 5' | | | .12 |
| 15 - 20 | do Sl. diss. C.P. | | | 5' | | | .12 |
| 20 - 25 | Highly fractured greenstones, V sl diss. S2 | | | | | | |
| | and C.P. 30% Core Rec. | | | 5' | | | .10 |
| 25 - 30 | do do | | | 5' | | | .05 |
| 30 - 35 | Dark Grey gns (cap rock) 10% pyrr. 1% C.P. | | | 5' | | | .12 |
| 35 - 40 | do do | | | 5' | .010 | .06 | .15 |
| 40 - 45 | do do | | | 5' | | | .07 |
| 45 - 50 | do do | | | 5' | | | .06 |
| | | | | | | | |
| | (Drilled into greenstone wall rock as unable | | | | | | |
| | to reach proposed site) | | | | | | |
| | Partial composite 0.103% cobalt. | | | | | | |

N.M.P.-FORM A

PROPERTY WINDY GROUP

HOLE NUMBER Hole D4

SHEET NUMBER 1

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. As D #2
DEP.

ELEVATION OF COLLAR 5500'±

DATUM

DIRECTION AT START: BEARING Westerly
DIP -70°(?)

STARTED September 2nd, 1959

COMPLETED September 4th, 1959

ULTIMATE DEPTH 90'

PROPOSED DEPTH

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | | Ag | Cu |
|---|---|---|---|---|---|---|---|
| 0 - 5 | Massive S2, pyrite more than pyrrhotite - 6-8% diss C.P. 75% C. Rec. | | | 5' | | | 2.01 |
| 5 - 10 | " | | | 5' | | | 1.92 |
| 10 - 15 | " 10-15% diss C.P. | | | 5' | | | 3.26 |
| 15 - 20 | " 10% " | | | 5' | | | 2.31 |
| 20 - 25 | " 4% " | | | 5' | | | 1.10 |
| 25 - 30 | " 4% | | | 5' | | | 1.49 |
| 30 - 35 | Massive f.c. pyrr & pyrite, 6% diss C.P. | | | 5' | | | 2.01 |
| 35 - 40 | " " veinlets of C.P. | | | 5' | | | 1.68 |
| 40 - 45 | " 5% C.P. | | | 5' | | | 1.63 |
| 45 - 50 | Pyrr & pyrite & 5% C.P. 35% Core rec. | | | 5' | | | 1.25 |
| 50 - 55 | " " " | | | 5' | | | .84 |
| 55 - 60 | " 3% C.P. 50% Core rec. | | | 5' | | | .56 |
| 60 - 65 | " 1% C.P. 20% Core rec. | | | 5' | | | .60 |
| 65 - 70 | " & fractured spotty C.P. | | | 5' | | | .43 |
| 70 - 75 | " " 2% C.P. 40% Core rec. | | | 5' | | | .60 |
| 75 - 80 | Banded pyrr. & gns less than 1% C.P. | | | 5' | | | .65 |
| 80 - 85 | " " " Cobs grey quartz, 1-2% C.P. | | | 5' | | | .56 |
| 85 - 90 | 75% pyrr replacing gns veined with 2% C.P. | | | 5' | | | .97 |
| | (Collared in high grade - partial composite 0.1% Cobalt) | | | | | | |
| | S.D./S.S. | | | | | | |

N.M.P.-FORM A

PROPERTY WINDY GROUP

HOLE NUMBER 5

SHEET NUMBER 1

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. .....
DEP. .....

ELEVATION OF COLLAR .....

DATUM 5000±

DIRECTION AT START: BEARING Westerly
DIP -68°

STARTED September 4th, 1959

COMPLETED September 5th, 1959

ULTIMATE DEPTH 30'

PROPOSED DEPTH .....

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | Ag | Cu | | |
|---|---|---|---|---|---|---|---|---|
| 0 - 5 | Volcanic cap rock, no visible $S_2$ | | | | | .07 | | |
| 5 - 10 | Brecciated quartzose gns. sl. veinlets, C.P. pyrrhotite | | | | | .58 | | |
| 10 - 15 | Transition zone to [illegible] replaced gns. Considerable C.P. central portion. 50% C. Rec. | | | | | 1.2% | | |
| 15 - 20 | Diss. pyrrhotite & C.P.(2%) in gns - 10% $S_2$ 35% C. Rec. | | | | | .27 | | |
| 20 - 25 | do do - 60% $S_2$ | | | | | .40 | | |
| 25 - 30 | 30% pyrrhotite, 1% C.P. 20% Core Rec. | | | | | .38 | 6129+ | .49% |
| | (Drilled through overhanging volcanic cap rock as unable to reach mineralized outcroppings farther north due to lack of water) | | | | | | | |
| | S.D./S.B. | | | | | | | |

N.M.P.-FORM A

PROPERTY ALSEA COPPER - CRACCY & WINDY CLAIMS

HOLE NUMBER

SHEET NUMBER

SECTION FROM ..... TO .....

# DIAMOND DRILL RECORD

LOCATION: LAT. Packsack Drill Holes
DEP. #1 to #11

ELEVATION OF COLLAR Transit Chain & Stadia Survey

DATUM Locations plotted on Map CW2-2/66

DIRECTION AT START: BEARING

DIP

STARTED August 7th, 1966

COMPLETED August 31st, 1966

ULTIMATE DEPTH

PROPOSED DEPTH

| DEPTH FEET | FORMATION | FROM | TO | WIDTH OF SAMPLE | | | | |
|---|---|---|---|---|---|---|---|---|
| | KEY TO LOG ABBREVIATIONS | | | | | | | |
| V 1 | Relatively unaltered andesitic and/or basaltic volcanics, pillow lavas in part. | | | | | | | |
| V 2 | Green slightly schistose pillows, chloritized, carbonate boundaries. | | | | | | | |
| V 3 | | | | | | | | |
| D 1 | Light (felsitic) dyke(?) rock. | | | | | | | |
| SS 1 | Black shale, slightly limey in part, plus phyllite. | | | | | | | |
| SC 1 | Grey shale, argillite, and slate | | | | | | | |
| MS | Thin-bedded meta-sediments, possibly meta-volcanics in part. | | | | | | | |
| $S_2$ | Generally pyrrhotite and/or pyrite containing chalcopyrite (cp). | | | | | | | |
| | CORE RECOVERY: Greater than 95%, unless otherwise noted. | | | | | | | |
| | DRILLING: Jim Robertson, Dave Kimball. | | | | | | | |

N.M.P.-FORM A