

DIAMOND DRILLING



42B01NW0042 47 KEITH

010

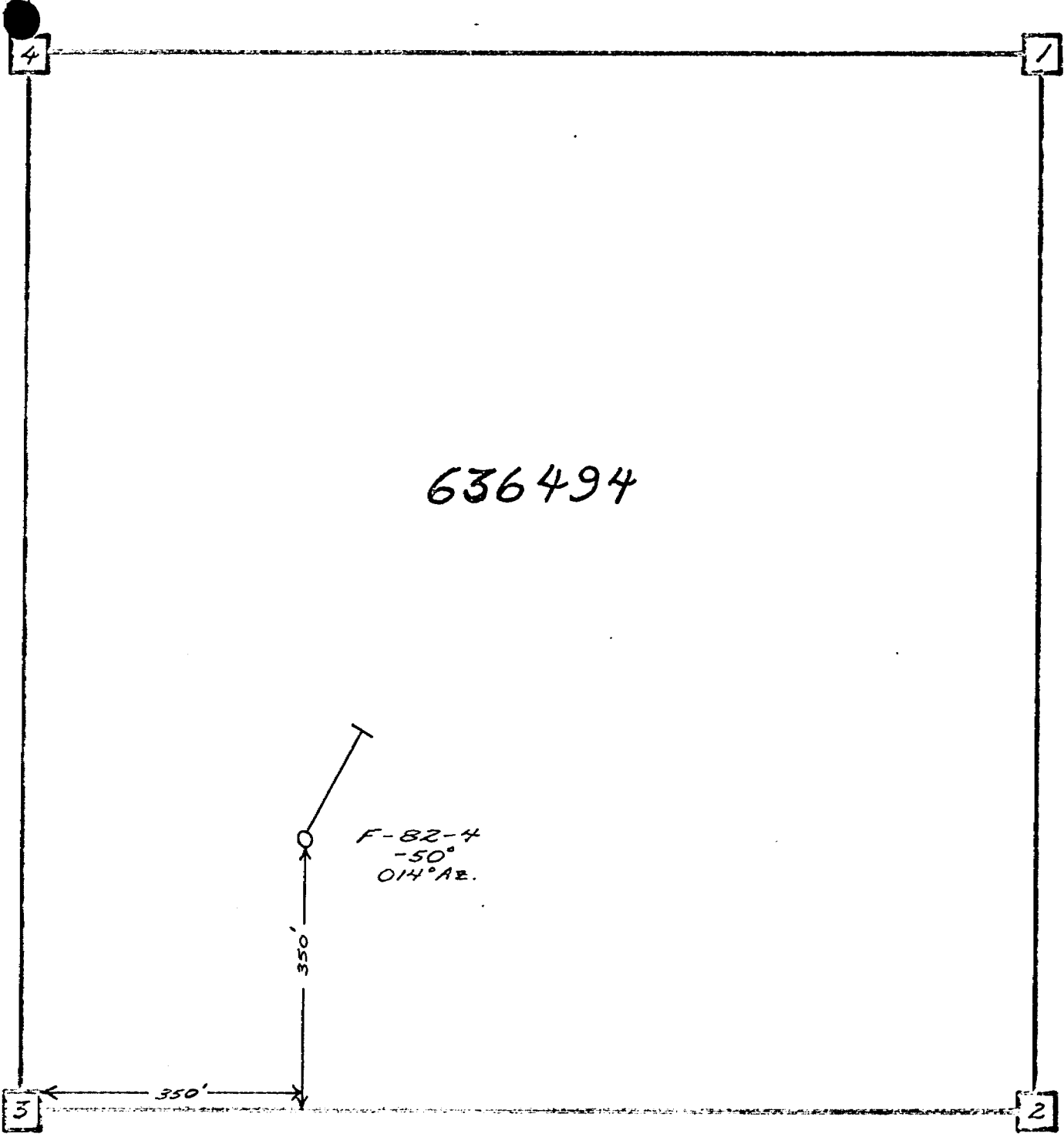
TOWNSHIP: Keith

REPORT No.: 47

WORK PERFORMED BY: Hudbay Mining Ltd.

<u>CLAIM No.</u>	<u>HOLE No.</u>	<u>FOOTAGE</u>	<u>DATE</u>	<u>NOTE</u>
P 636494	F-82-4	132.8m	Nov/82	(1)
P 626290	F-82-3	158.8m	Nov/82	(2)
P 626290	F-82-7	120.7m	Nov/82	(2)
P 626294	F-82-8	224.3m	Nov/82	(2)

NOTES: (1) #12-83  
(2) #13-83



636494

F-82-4  
-50°  
014° A.E.

350'

350'

HUDBAY MINING LTD.  
DDH LOCATION SKETCH

Scale: 1:2000  
(Imperial)

DIAMOND DRILL RECORD & LOG

LOCATION: CARBONATE GROUP

PROPERTY: FOLEYET

HOLE NO: F-82-4

LATITUDE: L 7+15W DEPARTURE: 1+00S  
 INCLIN: -50°  
 AZIMUTH: 014°  
 STARTED: 1982-11-08  
 COMPLETED: 1982-11-10  
 PURPOSE: To test an EM Conductor

LENGTH: 132.8m  
 CORE SIZE: B.Q.  
 DIP TESTS: @132.8m - 55°

ELEVATION:  
 DRILLED BY: Bradley Bros. Ltd.  
 DRILLED FOR: Hudbay Mining Ltd.

CLAIM NO. P636494  
 SECTION:  
 LOGGED BY: M.P. Corrigan  
 DATE LOGGED: 1982-11-11

*M.P. Corrigan*

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS							
From	To			From	To		Au oz/T	Ag oz/T						
0	5.4	Overburden												
5.4	29.6	<u>Mafic Tuff</u> - dark grey-black to dark green - fine grained ash predominates, but lapilli beds are common, light grey lapilli are sub-rounded and invariably carbonatized making them distinct from the matrix ash. - unit is high fractures @ various angles TCA; fractures are < 2mm, carbonate-filled, and often have gossany surfaces. - unit is very highly silicified with 10-15% carbonate (locally to 30%) - @ 13.9m, a 50cm fault zone @ 45° TCA; vuggy - @ 14.7, a 40 cm fault zone; vuggy & gossany - localized minor rock movements marked by quartz-carbonate stringer offsets & networks; stringer frequency increases with depth. - 50-55 fractures per meter of core, 10-15 f/m average; @40-60° TCA & 25° TCA. - @ 23.4m, 5 cm "chill zone"; pinkish-brown in colour; fractured, with interstitial chlorite developed; local "bleaching" during silicification of fractures - @21.8 rounded lapilli to 3-4 cm (1-2 cm average) in a 30cm bed within a micaceous/chloritic matrix (matrix-supported); dark green to black 2-3mm glassy fiamme (?) may represent the remnants of carbonatized fragments - Tr Po + Py along fractures - lower contact undulatory & partially lost in fracturing, @ 20° TCA	787	8.0	9.5	1.5	nil	nil						
			788	11.3	12.8	1.5	nil	nil						
			789	13.9	15.1	1.2	nil	nil						
			790	19.2	20.7	1.5	nil	nil						
			791	24.0	25.5	1.5	nil	nil						

PROPERTY: FOLEYET

PAGE NO: 2 of 7

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au oz/T	Ag oz/T	Zn %
29.6	31.3	<u>GRAPHITIC PELITE</u> - conductive - dark grey to black - fine grained to aphanitic - initial 1.0m is a chloritized pelite which has been overprinted by silicification - several 5cm serated graphite clasts (?) occur - the graphitic bed is silicified such that it has a conchoidal fracture - Po occurs as spherical to fusilinear-shaped masses to 3cm (avg. 1cm), whisps, and fine disseminations; @ 30.1m Cpy occurs with Po along a fracture plane; 10-20% Po + tr Cpy; Po lineation @ 15° TCA - 10-15% matrix carbonate & occasional 1-2mm stringers. - lower contact sharp @ 15° TCA	792	29.6	31.3	1.7	0.001	nil	0.18
31.3	35.5	<u>PELITE-MAFIC TUFF</u> - mixed zone of fine grained clastic beds & ash flows; occasional lapilli as @ 33.4m - main rock types as before - 10-15% matrix carbonate + 1-3mm stringers @ 45° TCA - pelite has 10% biotite - unit is initially chloritic, but silicification increases with depth - Tr Po + Py along fractures - lower contact sharp @ 60° TCA	793	31.3	32.8	1.5	nil	nil	—

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO:

F-82-4

PROPERTY: FOLEYET

PAGE NO: 3 of 7

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au oz/T	Ag oz/T	Zn %
35.5	36.3	<u>GRAPHITE</u> - conductive - as before @ 29.6m except: - preceded by a 30 cm grey quartz vein - 5% carbonate in stringers - Tr - 1% Cpy in spherical Po masses & along fractures - lower contact diffuse, very highly serated; set @ 40° TCA	794	35.5	36.3	0.8	0.006	tr	0.22
36.3	44.0	<u>RHYODACITE (LAPILLI) TUFF</u> - initially light grey /green, but colour becomes darker with depth due to mixing with metasediments - predominantly ash but lapilli occur as @ 38.0m; lapilli to 4cm average 0.5-1cm; 4:1 elongation ratio; fusilinear-shaped lapilli; compositionally equivalent to the matrix, but lighter in colour; @ 15° TCA - unit is very highly sericitized to 41.1m which is overprinted by silicification (silicification increases with depth); lower 0.5m is marked by a 3-5mm quartz-carbonate vein parallel to bedding which displays evidence of brecciation - @ 41.1m to 43.6m, the unit becomes very fine grained, more mafic, and possibly intercalated with metasediments - entire unit is marked by a pronounced absence of matrix carbonate; < 5% carbonate in 1-2mm stringers @ various angles TCA - @ 42.5m a 40 cm quartz-carbonate vein terminates a lapilli bed on the upper surface while paralleling a lapilli bed at the lower contact; graphite/Po xenoliths occur in the vein; evidence of brecciation with angular quartz fragments - Tr Po/Py along fractures; locally to 5% - lower contact sharp @ 20° TCA	795 796 797 798	38.4 41.5 42.5 42.9	39.9 42.5 42.9 44.0	1.5 1.0 0.4 1.1	nil nil nil nil	nil nil nil nil	— 0.04 — —

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO:

F-82-4

PROPERTY: FOLEYET

PAGE NO: 4 of 7

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au oz/T	Ag oz/T	Zn %
44.0	68.6	<u>DACITE TUFF</u> - greyish-green - fine grained - ~ equivalent to the preceeding unit, but slightly more mafic (as in the lower section of above unit) - initial 3.0m is brecciated & marked by 15-25% quartz-carbonate veinlets (1-10mm) @ 40-60° TCA; this portion of the unit is chloritized & contains 5-10% matrix carbonate - ash beds occur beyond this zone; prominent, white, carbonatized xenocrysts in a dark matrix - localized breccia zones @ 50.5m & 51.4m - unit becomes increasingly mafic with depth (similar to the unit @ 5.4m); alternating Mafic/Dacitic beds, however mafics dominate - occasional chloritic lapilli beds as @ 57.0m, 61.4m; @30-35° TCA - unit becomes very tight with depth, <5% carbonate stringers + 10-20% matrix carbonate surrounding lapilli and ash - very highly silicified, increases with depth - Tr Po/Py, along fractures - lower contact sharp @ 20° TCA	799	44.0	45.5	1.5	nil	nil	-
			800	45.5	47.0	1.5	nil	nil	-
			1376	60.8	62.3	1.5	nil	nil	-
			1377	67.1	68.6	1.5	nil	nil	-
68.6	70.4	<u>GRAPHITE</u> - as before @ 35.5m except: - silicified, < 5% carbonate which is mainly in the initial stringer sulfide zone; 10-20% Po - initial 40cm of the sulfide zone contains Tr - 1% Cpy along fracture planes, followed by spherical masses, blebs, & disseminations of Po; sulfides are subparallel to parallel TCA - lower contact undulatory, but sharp; set @ 20° TCA	1378	68.6	70.4	1.8	0.001	tr	0.26

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO:

F-82-4

PROPERTY: FOLEYET

PAGE NO: 5 of 7

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au	Ag	Zn
							oz/T	oz/T	%
70.4	75.4	<u>DACITE LAPILLI TUFF</u> - light grey - similar to the previous Dacite @ 44.0m, however distinct, black, relatively circular, unflattened, lapilli are common (< 1 cm) - unit is very tight, with < 1% matrix and stringer carbonate to 73.5m beyond which graphitic xenoliths? (fragments) and 1-10mm quartz-carbonate veinlets occur (~ 5%) @ 40° TCA - buff-coloured Rhyolitic fragments displaying internal cooling fractures occur @ 70.7m and 72.2m - 1-5% disseminated and stringer Po; Po lineation @ 30° TCA - lower contact sharp @ 45° TCA	1379 1380 1381	70.4 71.9 73.4	71.9 73.4 75.4	1.5 1.5 2.0	nil nil nil	nil nil nil	— — —
75.4	75.9	<u>GRAPHITE</u> - as before @ 68.6 except: - no stringer sulfide zone - 10-20% Po as disseminations & spherical masses - lower contact undulatory, but sharp; set @ 30° TCA	1382	75.4	75.9	0.4	0.002	tr	0.27
75.9	94.6	<u>DACITE (LAPILLI) TUFF</u> - dark grey to black - similar to the Dacite @ 70.4m - indistinct grey lapilli in a darker matrix - very tight, < 5%, 1-10mm, carbonate stringers - alternating ash & lapilli beds - unit becomes increasingly felsic & heterolithic with depth; both silicic & chloritic fragments occur; approaches a Rhyodacite; @ 35° TCA - increasingly sericitized with depth - @ 87.6 a 1.2m intersection of several 5-10cm zones of brecciated fragments in a bleached carbonatized matrix - 1-3% disseminated Po + Py along fracture planes; Po lineation @ 35° TCA - lower contact sharp @ 15° TCA; marked by a dramatic increase in matrix carbonate	1383 1384 1385 1386 1387 1388	75.9 77.4 78.9 83.8 85.3 90.2	77.4 78.9 80.4 85.3 86.8 91.7	1.5 1.5 1.5 1.5 1.5 1.5	nil nil nil nil nil nil	nil tr nil nil nil nil	— — — — — —

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO:

F-82-4

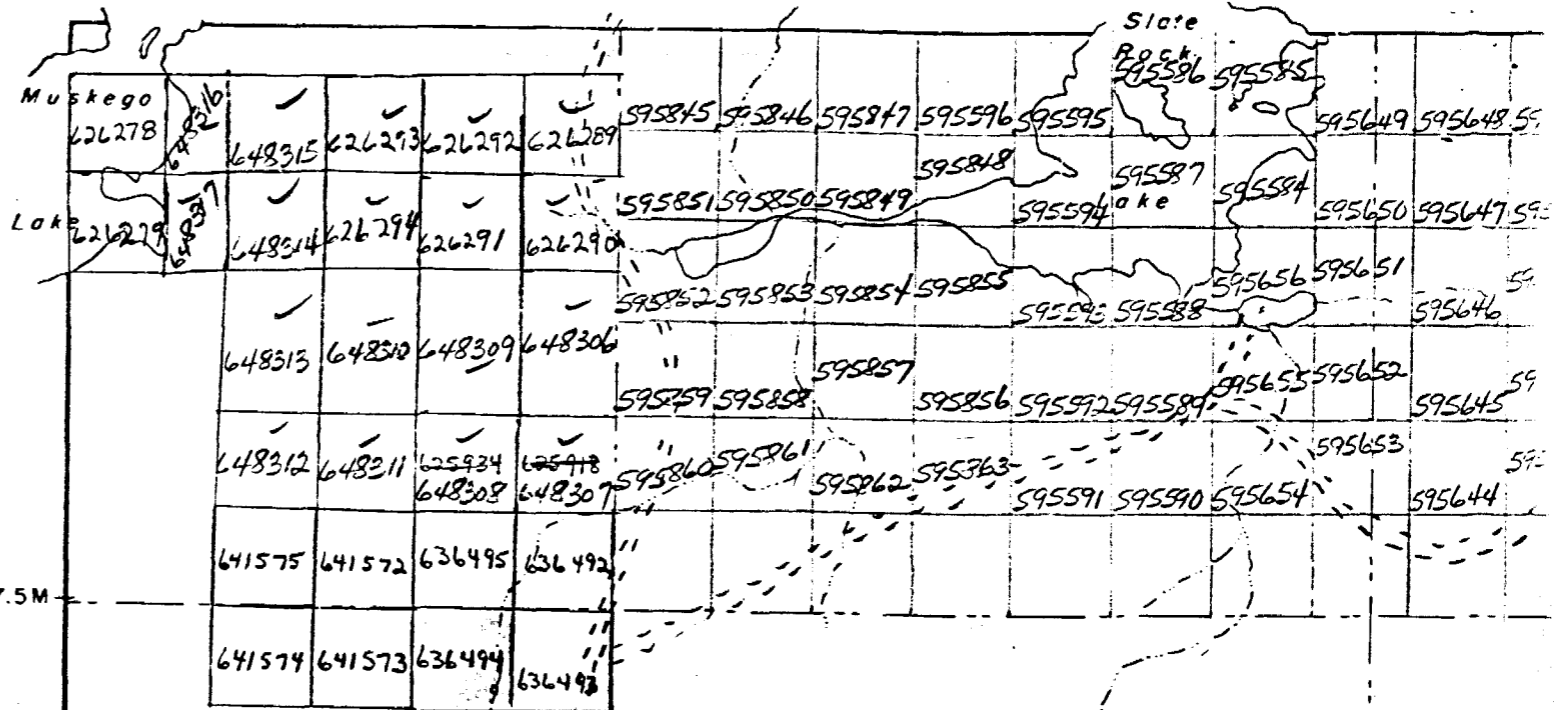
PROPERTY: FOLEYET

PAGE NO: 6 of 7

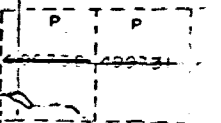
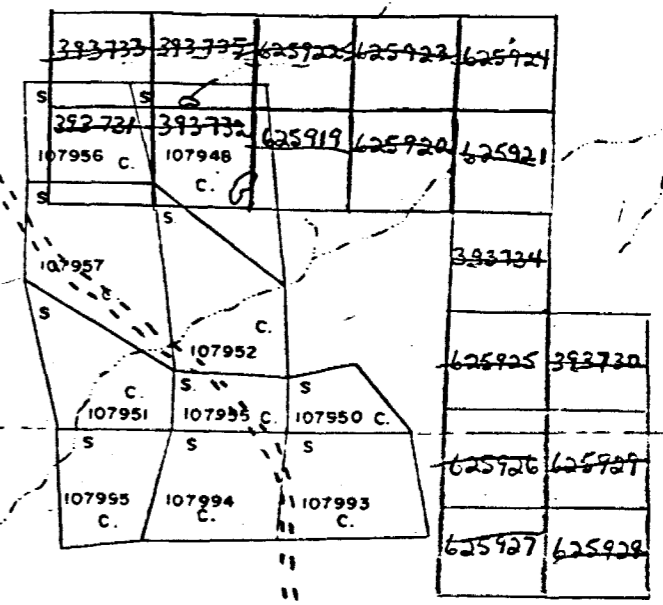
METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
94.6	97.9	<u>ANDESITIC TUFF</u> - dark green to grey - fine grained to aphanitic; occasional lapilli as @ the start of unit - 10-15% carbonate in 1-5mm concordant/discordant stringers @ 0-80° TCA; 5-10% matrix carbonate - chloritized, but overprinted by silicification - no significant mineralization - lower contact sharp @ 35° TCA	1389	96.3	97.8	1.5	nil	nil				
97.9	132.8	<u>DACITIC TUFF</u> - dark grey to brownish - fine grained - predominately ash, but lapilli are common - initial 1.0m of core displays carbonate stringers as in previous unit (5-10%) but unit becomes very tight beyond with < 5% matrix carbonate - @ 100.1m a 50cm sericitized zone - @100.6m a 2.8m matrix-supported lapilli unit; lapilli are angular to sub-rounded, to 3cm, silicic; slightly stretched (1:2 ratio), and grey (against a tan matrix); lapilli are generally indistinct but >> harder than the matrix; size decreases with depth; occasional chloritic lapilli - @ 107.0m a 1.8m silicic ash bed, with occasional lapilli - @108.8 lapilli as before, but smaller in size (2-5mm) - beyond, predominately ash which is darker in colour & more silicified - @ 110.0 m; a 10cm breccia zone	1390	101.9	103.4	1.5	nil	nil				
			1391	105.4	106.4	1.0	nil	tr				
			1392	106.4	106.7	0.3	nil	tr				
			1393	106.7	107.7	1.0	nil	nil				
			1394	113.1	114.6	1.5	nil	tr				
			1395	119.4	120.1	0.7	nil	nil				
			1396	120.1	120.9	0.8	nil	nil				
			1397	125.2	126.7	1.5	nil	nil				
			1398	131.3	132.3	1.0	nil	nil				





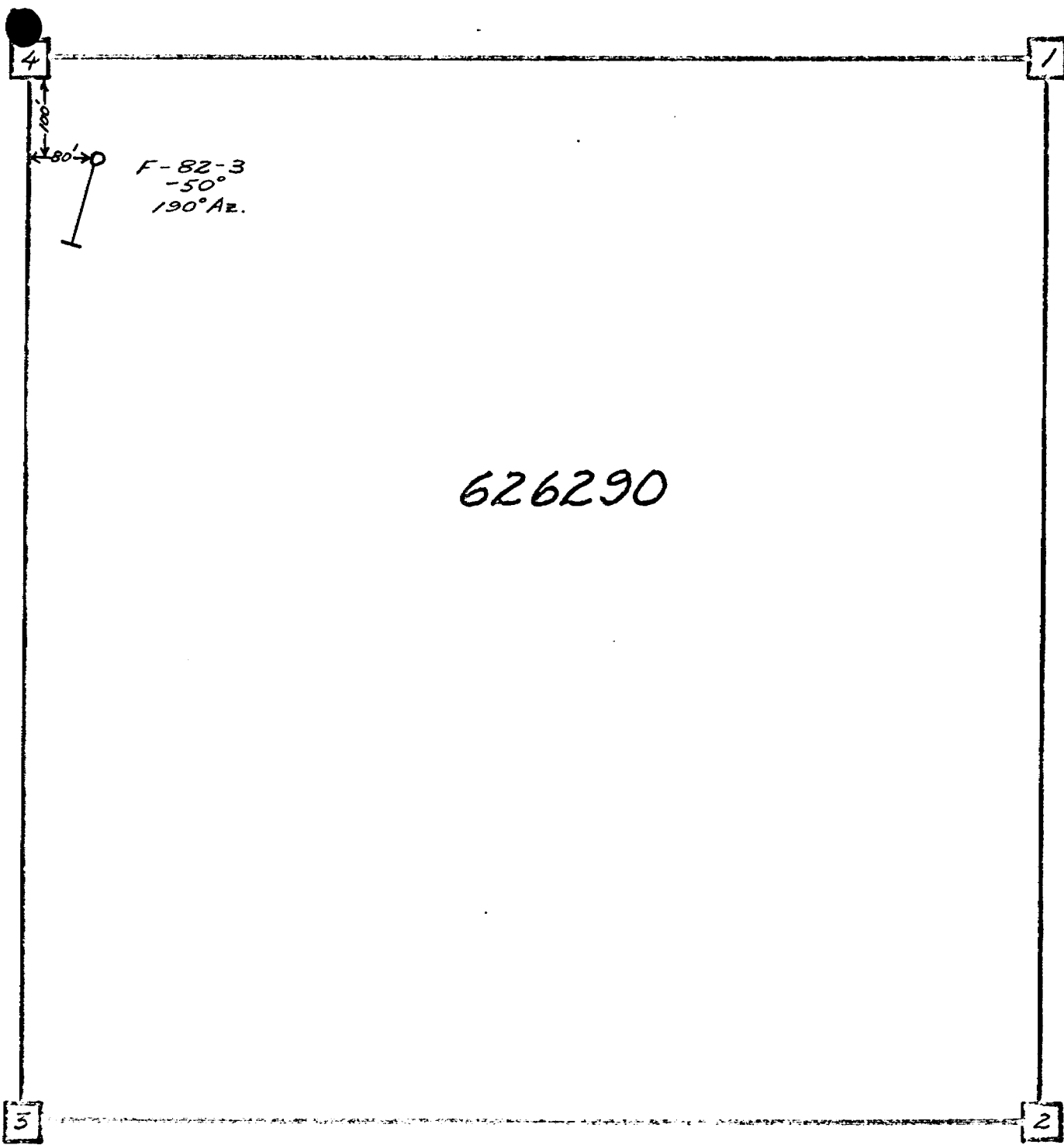


*Kick jump  
m-962  
#13-83*



qwb

51)



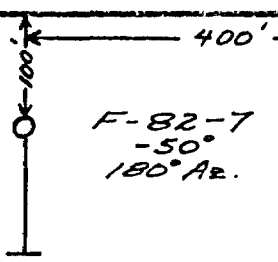
626290

HUDBAY MINING LTD.  
DDH LOCATION SKETCH

Scale: 1:2000  
(Imperial)

4

1



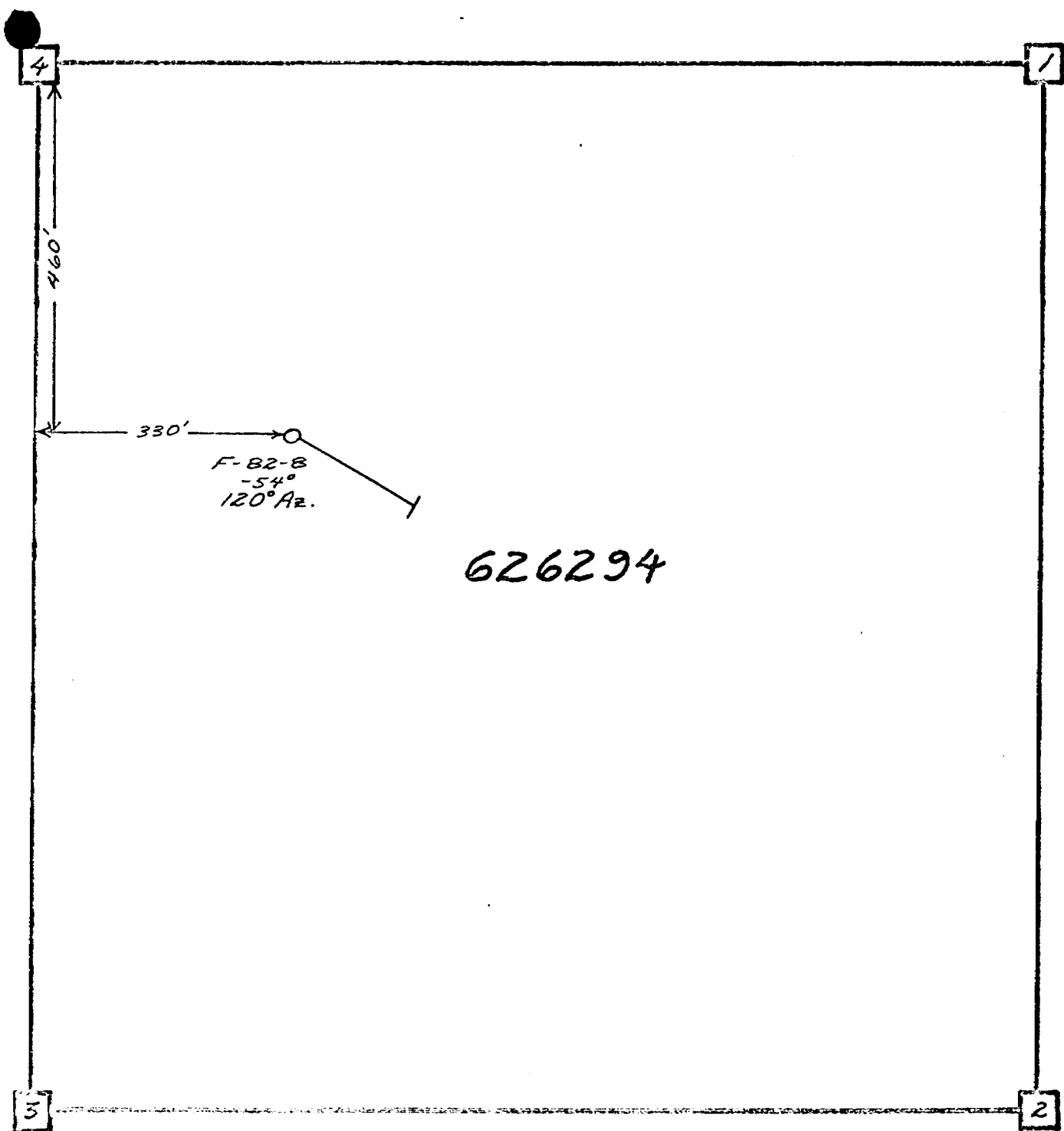
626290

5

2

HUDBAY MINING LTD.  
DDH LOCATION SKETCH

Scale: 1:2000  
(Imperial)



626294

HUDBAY MINING LTD.  
DDH LOCATION SKETCH

Scale: 1:2000  
(Imperial)

DIAMOND DRILL RECORD & LOG

LOCATION: BOUNDARY GROUP

PROPERTY: FOLEYET

HOLE NO: F-82-3

LATITUDE: L4+00W

DEPARTURE: 0+20N

LENGTH: 158.8m

ELEVATION:

INCLIN: -50°

CORE SIZE: BQ

AZIMUTH: 190°

DIP TESTS: -48° @ 117.7m

STARTED: 1982-11-04

COMPLETED: 1982-11-06

PURPOSE: To test an EM Conductor

DRILLED BY: Bradley Bros Ltd.

DRILLED FOR: Hudbay Mining Ltd.

CLAIM NO. P626290

SECTION:

LOGGED BY: M.P. Corrigan

DATE LOGGED: 82-11-07

*M.P. Corrigan*

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au oz/T	Ag oz/T	Cu %
0	27.4	Overburden							
27.4	37.0	<u>DACITIC TUFF</u> - light brown to grey - 1-2mm distinct ash - massive, no apparent bedding - @ 36.3m lapilli appear - @34.4m unit becomes brecciated & carbonate content increases to 10-15%; sub-rounded to sub-angular breccia fragments are highlighted by carbonate - breccia zone is intercalated with underlying unit, but it lacks graphite - 32.3m to 34.3m, 70% core recovery - 1-5% Po disseminated along fracture planes & as stringers; % sulfides increases with increasing carbonate content - lower contact sharp @ 45° TCA	753	35.5	37.0	1.5	nil	nil	0.03

DIAMOND DRILL RECORD & LOG

HOLE NO: F-82-3

PROPERTY: FOLEYET

PAGE NO: 2 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T	Zn %			
37.0	45.7	<p><u>GRAPHITIC PELITE/PSAMMITE</u></p> <ul style="list-style-type: none"> <li>- Conductive</li> <li>- unit consists of silicified graphite beds alternating with pelite/psammite beds</li> <li>- grey in colour</li> <li>- @ 37.0m, a 60cm graphite bed with 3-5% Po + Py in stringers and disseminated along bedding planes &amp; ~1% Cpy in lower 20cm of the bed; 5% carbonate in gash veins</li> <li>- @ 37.6m, a 2.8m psammite bed with occasional 2-3mm quartz clasts; 2-3 beds occur in a fining downhole sequence; upper portion of the beds is sericitized while the lower 10cm is silicified; contains 3-5% finely disseminated Po + Py.</li> <li>- unit becomes heterogenous beyond the psammite beds; graphite beds of several cm's to 60cm in width, @ 50° TCA; graphite is "dirty", non-conductive, appears to be fragmentary, and contains 3-5% Py in stringers &amp; disseminations + Tr Cpy</li> <li>- graded bedding @ 37.6m &amp; 43.6m; fining downhole</li> <li>- @43.2m possible cross-bedding; grain lineation defines a curvilinear bedding surface.</li> <li>- chloritized, 5-10% carbonate (concentrated in graphite beds)</li> <li>- lower contact gradational due to mixing with underlying unit; @ 50° TCA</li> </ul>	754	37.0	37.6	0.6	tr	nil	0.47			
			755	39.4	41.1	1.7	nil	nil	0.09			





PROPERTY: FOLEYET

PAGE NO: 4 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
61.9	63.7	<u>PSAMMITE</u> - initially dark grey to black, but colour lightens with depth due to decrease in % biotite - initially medium grained, but size decreases to fine with depth - initial 15cm bed is followed by one thick bed which displays excellent grading; matrix supported. - unit resembles a "pisolitic tuff" due to rounded 1-3mm milky quartz + bluish feldspar grains - occasional chloritic fragments (?) as @ 63.3m - no significant mineralization - lower contact undulatory; but sharp @ 60° TCA	758	61.9	63.7	1.8	nil	nil				
63.7	75.5	<u>RHYODACITE TUFF</u> - light grey/green - fine grained with occasional lapilli to 1 cm - ash is generally indistinct and unit has a massive flow-like appearance - lapilli are slightly harder than the matrix & contain sulfides as @ 67.2m - occasional black "fiamme-like" fragments, 0.5 cm in size - unit is tight with occasional breccia zones as @ 74.5m - 15-20% matrix carbonate & occasional discordant stringers - sericite content increases with depth, while chlorite content decreases - Tr - 5% disseminated & stringer Py - banding @ 65° TCA - 3cm zone of 5-8mm amygdules @ 75.1m - lower contact diffuse; set @ 55° TCA	759	67.0	67.2	0.2	nil	nil				
			760	74.1	75.5	1.4	nil	nil				

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO: F-82-3

PROPERTY: FOLEYET

PAGE NO: 5 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
75.5	80.3	<u>PSAMMITE</u> - as before @ 61.9m, except: - colour is homogeneously grey - several beds visible, grading evident with fining downhole - "pisolitic" appearance as before - silicified with 5-10% matrix carbonate & occasional stringers @ various angles TCA - plagioclase grains are partially sausseritized - biotite content is >> than before - Tr disseminated euhedral Py - lower contact sharp @ 60° TCA	761	78.7	80.2	1.5	nil	nil				
80.3	86.2	<u>RHYODACITE TUFF</u> - as before @ 63.7m, except; - initially lapilli, to several cm's, are common but unit becomes more ash-like with depth, however lapilli persist - lapilli have a 3:1 elongation ratio as @ 83.5m; 50° TCA - initially sericitized, but silicification increases with depth - 10-15% matrix carbonate + stringers @ various angles TCA - again, sulfides appear to be concentrated in & about lapilli - Tr - 1% disseminated & wisps of Py; locally to 5% over 10-15cm in lapilli-rich zones - lower contact sharp @ 50° TCA										
86.2	88.2	<u>CRYSTAL TUFF (?)</u> - grey - fine grained matrix with 0.5-1cm subhedral randomly oriented, porphyritic plagioclase laths (whitish in colour); uniform lath size - similar in appearance to psammite beds except the laths are distinct, less ordered, and well-developed - mafic to intermediate in composition - 10% matrix carbonate - no significant mineralization - lower contact sharp @ 45° TCA	762	86.2	88.2	2.0	nil	nil				

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO: F-82-3

PROPERTY: FOLEYET

PAGE NO: 6 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS				
From	To			From	To		Au oz/T	Ag oz/T			
88.2	115.9	<u>RHYODACITE (LAPILLI) TUFF</u> - locally conductive - similar to previous Rhyodacite except: - more siliceous - lapilli are more distinct & larger; @ 50° TCA - initially tuffaceous, lapilli appear @ 94.1m - lapilli are buff-coloured and Rhyolitic in composition (similar to underlying unit); 2-3 cm breccia zones often found around these lapilli  - sulfides are located in the more felsic portions of the unit & are associated with carbonate; pyrite is often euhedral to subhedral; some of the sulfides appear as fragments; Py is concentrated in the central portion of the unit & is flanked by Po; up to 10% Py + 5% Po in disseminations and whisps in a zone @ 95.6m to 103.4m - unit becomes tuffaceous beyond sulfide zone, distinct ash - overall the unit is very siliceous and contains 20-25% matrix & stringer carbonate - lapilli reappear @ 105.6m & again a sulfide rich zone occurs; 5-8% Po & Py in whisps & disseminations - carbonate content increases to 50% with depth - @ 109.8, a 1.5m carbonatized breccia zone, followed by a chloritized ash unit - @ 112.9, a 70 cm crystal tuff bed as @ 86.2m but the plagioclase crystals have a preferred (weakly developed) orientation & display zoning - the lower portion of the unit is a mixed lapilli & ash zone - lower contact sharp @ 45° TCA	763	94.1	95.6	1.5	nil	nil			
			764	95.6	96.7	1.1	nil	nil			
			765	96.7	98.2	1.5	nil	nil			
			766	98.2	99.7	1.5	nil	nil			
			767	99.7	100.4	0.7	nil	nil			
			768	100.4	101.9	1.5	nil	nil			
			769	101.9	103.4	1.5	nil	nil			
			770	106.7	108.2	1.5	0.004	nil			
			771	109.8	110.8	1.0	0.016	nil			

## DIAMOND DRILL RECORD &amp; LOG

HOLE NO: F-82-3

PROPERTY: FOLEYET

PAGE NO: 7 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS		
From	To			From	To		Au oz/T	Ag oz/T	Zn %
115.9	130.4	<u>RHYOLITIC TUFF</u> - hosts a portion of the conductor - buff to light green - very fine grained to aphanitic with occasional angular lapilli - 10-20% matrix carbonate - unit is very tight; banded @ 50° TCA - @ 121.8m to 127.9m (6.1m) 70-80% Py + 1-3% Po; Rhyolite fragments in sulfide zone are common; Py is massive to subhedral/euhedral; upper sulfide contact @ 50° TCA, lower @ 60° TCA  - beyond the sulfide zone unit is as before - lower contact sharp @ 55° TCA	772	117.6	119.1	1.5	tr	nil	—
			773	119.1	120.6	1.5	tr	nil	—
			774	120.6	121.8	1.2	nil	nil	—
			775	121.8	123.3	1.5	nil	nil	—
			776	123.3	124.8	1.5	tr	nil	—
			777	124.8	126.3	1.5	nil	nil	—
			778	126.3	127.9	1.6	nil	nil	—
			779	127.9	129.9	2.0	nil	nil	—
			780	129.9	130.4	0.5	nil	nil	—
130.4	133.3	<u>DACITE (ANDESITE) TUFF</u> - initial 0.5m is brecciated with 60-70% carbonate and quartz veining & 1-3% disseminated Po - followed by distinct ash to 3-4mm - @131.4m pisolites? (very similar to psammite previously described) - light grey, generally fine grained - variably chloritic - Rhyolitic blocks in lower portion of the unit - 10-15% matrix & stringer carbonate - 1-3% disseminated Po with an occasional stringer - lower contact sharp @ 60° TCA	781	130.4	130.9	0.5	nil	nil	0.07

DIAMOND DRILL RECORD & LOG

HOLE NO: F-82-3

PROPERTY: FOLEYET

PAGE NO: 8 of 8

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
133.3	158.8	<u>RHYOLITIC TUFF</u> - as before @ 115.9m except: - portions of the unit are Dacitic - initial 1.5m hosts fracture -filling sulfides - @ 137.0m, a 1.4m black lamprophyre dyke; 5-10% anhedral carbonate crystals occur locally (over 10-20cm); to 3mm - unit is mainly tuffaceous, but blocks & lapilli are common as @ 144.0m - @155.6m sulfide fragments (?); 8-10% Po from 154.6m to 156.8m - unit is variably silicified & chloritized with minor sericite - 10-20% matrix carbonate; stringers occur in the Dacitic portions of the unit  NOTE: Core checked with spectrometer and U.V. lamp; no anomalous results were obtained.	782	133.3	134.8	1.5	nil	nil				
			783	137.0	138.4	1.4	nil	nil				
			784	143.4	144.9	1.5	nil	nil				
			785	150.3	151.8	1.5	nil	nil				
			786	154.6	156.8	2.2	nil	nil				



PROPERTY: FOLEYET

PAGE NO: 2 of 4

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS						
From	To			From	To		Au oz/T	Ag oz/T					
30.8	65.8	con't - silicification increases with depth as does carbonatization (to 30%) - tr - 1% disseminated & stringer Po & Py & tr Cpy @ the start of the unit - lower contact sharp @ 55° TCA											
65.8	75.2	<u>CRYSTAL TUFF</u> - light grey - fine to coarse grained, equant, subhedral, white plagioclase phenocrysts in a sericite/chlorite matrix - plagioclase has "pressure shadows" and displays a moderately strong preferred orientation @ 60° TCA, to 66.9m - initial 40cm is very highly chloritized & contains up to 40% matrix carbonate; original mineralogy has been obscured - @ 66.9m a Dacitic (lapilli) tuff bed occurs; felsic lapilli are common - crystal tuff re-appears @ 69.1m (2.2m bed); contains chloritized whisps to several centimetres within a quartz veining network; crystals are more random than before; crystal size decreases downhole and annealing of phenocrysts occurs - @ 71.3m the unit again takes on a fragmental/tuff appearance, with occasional felsic lapilli - @74.0m a 1.2m pisolitic bed; no obvious grading; 50% matrix carbonate - overall, 20-30% matrix & stringer carbonate - tr - 3% disseminated & stringer Po/Py - lower contact sharp @ 55° TCA	1475	66.9	68.4	1.5	nil	nil					
			1476	69.1	71.3	2.2	nil	nil					

PROPERTY: FOLEYET

PAGE NO: 3 of 4

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
75.2	87.5	<u>RHYODACITE (DACITE) TUFF</u> - grey-green - @ 75.2m, 4.1m of indistinct sericitized ash beds - @ 79.3m a 30cm bed of distinct 3-5mm black ash set in a whitish-grey carbonatized matrix - @79.6 a 1.4m pisolitic tuff bed, displaying gross fining downhole; pisolites are weakly sausseritized plagioclase - lapilli to several cm's appear beyond the pisolite bed; lapilli are annealed felsic fragments that are relatively distinct from the matrix & impart a banded appearance @ 60° TCA - tr-3% disseminated & whisps of Po/Py - lower contact gradational, set @ 65°TCA	1477	75.2	76.7	1.5	nil	nil				
			1478	77.7	79.2	1.5	nil	nil				
			1479	84.5	86.0	1.5	nil	nil				
			1480	86.0	87.5	1.5	nil	nil				
87.5	91.6	<u>RHYOLITE TUFF</u> - buff to light green - aphanitic to fine grained matrix with "ghost" ash & lapilli outlined by Po - hosts the conductor which is initially Po, followed by Py; to 10% sulfides in disseminations, whisps, masses to 2cm, and fracture-fillings - very siliceous; sericitization is overprinted by silicification; < 5% carbonate as fracture fillings - lower contact sharp @ 60° TCA	1481	87.5	89.4	1.9	nil	nil				
			1482	89.4	90.7	1.3	nil	nil				
			1483	90.7	91.6	0.9	nil	nil				



PROPERTY: FOLEYET

PAGE NO: 4 of 4

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au oz/T	Ag oz/T				
91.6	108.8	<u>ANDESITIC (DACITIC) TUFF</u> - light to medium green, changes to tan by lower contact - ash with occasional indistinct lapilli - 1-2mm chloritoid (?) clots @ 91.6m, 40cm - initially Andesitic in composition, but approaches a Rhyodacite @ the lower contact; very gradual compositional changes; banding @ 60°TCA - initially very chloritic, but chlorite content decreases with depth, as sericitization increases - 20-30%, 2-10mm, concordant to discordant carbonate stringers; 10-15% matrix carbonate - minor, localized brecciation as @ 97.8m & 98.6m - felsic fragment @ 105.0m - tr-1% Po/Py in whisps, disseminations, & along fracture planes - lower contact sharp @ 60° TCA	1484	91.6	93.2	1.6	nil	nil				
			1485	93.2	94.7	1.5	nil	nil				
			1486	96.1	97.6	1.5	nil	nil				
			1487	99.1	100.6	1.5	nil	nil				
			1488	105.0	106.5	1.5	nil	nil				
108.8	112.5	<u>CRYSTAL TUFF</u> - light grey - fine to medium grained - crystals are initially indistinct, but visible; composed of 1-3mm partially sausseritized plagioclase - distinct crystals @ 111.6m - no preferred alignment - minor sericitization; < 5% matrix carbonate + rare stringers - no significant mineralization - lower contact sharp @ 55° TCA	1489	108.8	110.3	1.5	nil	trace				
112.5	120.7	<u>DACITE LAPILLI TUFF</u> - light grey/green -- distinct fusiform-shaped matrix-supported lapilli; buff-coloured felsic fragments to 2cm (0.5cm avg.) - unit is initially Rhyolitic, to 114.6m - very highly sericitized; 15-20% matrix carbonate + 5% stringers subparallel to fragment alignment (@ 40°-55° TCA) - no significant mineralization  NOTE: Core checked with spectrometer & U.V. lamp; no anomalous results were obtained	1490	117.7	119.2	1.5	nil	nil				

## DIAMOND DRILL RECORD &amp; LOG

LOCATION: BOUNDARY GROUP  
(WEST CONDUCTOR)

PROPERTY: FOLEYET

HOLE NO: F-82-8

LATITUDE: L1+25 S DEPARTURE: 0+75 W  
INCLIN: -54°  
AZIMUTH: 120°  
STARTED: 1982-11-26  
COMPLETED: 1982-11-30  
PURPOSE: to test EM conductor

LENGTH: 224.3m  
CORE SIZE: BQ  
DIP TESTS: test did not work

ELEVATION:

DRILLED BY: Bradley Bros. Ltd.  
DRILLED FOR: Hudbay Mining Ltd.

CLAIM NO. P626294  
SECTION:  
LOGGED BY: M. P. Corrigan  
DATE LOGGED: 1982-12-05, 06

*M. P. Corrigan*

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Ag	Ag				
							oz/T	oz/T				
0	21.3	Overburden										
21.3	106.8	<u>Rhyodacite Tuff</u>										
		- light grey-green	1491	27.7	29.3	1.6	nil	nil				
		- predominantly ash to 5mm; felsic lapilli are common	1492	33.3	35.2	1.9	nil	nil				
		- unit is variably sericitized, averaging <10%, but in and about vuggy fractures, sericitization masks the original mineralogy; sericite % increases with depth	1493	35.2	36.5	1.3	nil	nil				
		- unit is silicified and contains 20-25% matrix carbonate + <5% carbonate stringers @ various angles TCA; silicification increases slightly with depth	1494	36.5	37.9	1.4	nil	nil				
		- unit is silicified and contains 20-25% matrix carbonate + <5% carbonate stringers @ various angles TCA; silicification increases slightly with depth	1495	41.4	42.9	1.5	nil	nil				
		- @ 48.9 a 1.8m section of badly broken and vuggy core (10% lost core); no evidence of fault gouge; a similar section of core re-appears @ 49.0m for 1.5m of length	1496	48.9	50.7	1.8	nil	nil				
		- @ 54.9 an 0.7m feldspar-phyric crystal tuff bed occurs; equant subhedral to euhedral plagioclase displays partial sausseritization and no preferred alignment	1497	54.9	56.4	1.5	nil	nil				
		- @ 56.4 a 4.0m section of badly broken and vuggy core (10% lost core); no evidence of fault gouge; a similar section of core re-appears @ 49.0m for 1.5m of length	1498	56.4	57.7	1.3	nil	nil				
		- @ 57.7 a 4.0m section of badly broken and vuggy core (10% lost core); no evidence of fault gouge; a similar section of core re-appears @ 49.0m for 1.5m of length	1499	57.7	59.2	1.5	trace	nil				
		- @ 59.2 a 4.0m section of badly broken and vuggy core (10% lost core); no evidence of fault gouge; a similar section of core re-appears @ 49.0m for 1.5m of length	1500	59.2	60.8	1.6	nil	nil				
		- @ 60.8 a 4.0m section of badly broken and vuggy core (10% lost core); no evidence of fault gouge; a similar section of core re-appears @ 49.0m for 1.5m of length	1501	60.8	62.3	1.5	nil	nil				
		- prominent rhyolite bands appear @ ~56.0m; these bands may represent large fragments; clear to whitish, 3-5mm, quartz "eyes" occur in several of these bands as @ 64.8m.	1502	62.3	63.8	1.5	nil	nil				
		- prominent rhyolite bands appear @ ~56.0m; these bands may represent large fragments; clear to whitish, 3-5mm, quartz "eyes" occur in several of these bands as @ 64.8m.	1503	63.8	65.3	1.5	nil	nil				



PROPERTY: FOLEYET

PAGE NO: 3 of 4

METRES		DESCRIPTION	SAMPLE NO.	METRES		LENGTH	ASSAYS					
From	To			From	To		Au	Ag				
118.2	136.5	<p><u>Andesite (Tuff)</u></p> <ul style="list-style-type: none"> <li>- medium green in colour</li> <li>- fine grained to aphanitic</li> <li>- unit is initially tuffaceous, but becomes massive with depth (still resembling a tuff)</li> <li>- initial 6.0m of unit is very highly chloritized and carbonatized (up to 40%-50% matrix carbonate + 10% 1-3mm stringers @ various angles TCA); chlorite content decreases slightly with depth and partial silicification occurs.</li> <li>- @124.2, an 0.5m grey plagioclase porphyry dyke occurs; contacts are sharp and chilled, upper contact @ 40° TCA, lower contact @ 55° TCA</li> <li>- unit becomes massive beyond the dyke</li> <li>- @ 131.1, a black 1.5m lamprophyre dyke occurs; composed of hornblende pyroxene + biotite + Na-plagioclase (white, porphyritic) + 20-30% matrix carbonate; upper and lower contacts are sharp, chilled and sub-parallel to banding</li> <li>- @ 134.8 an 0.6m lamprophyre dyke occurs; similar to previous ore, however the country rock is highly brecciated and contains up to 40% quartz-carbonate stringers</li> <li>- Chlorite content increases near the lower contact, as does matrix carbonate, relative to the central portion of the unit</li> <li>- banding @ 30-40° TCA</li> <li>- lower contact irregular but sharp @ 30° TCA</li> </ul>	1522	118.2	119.7	1.5	oz/T nil	oz/T nil				
			1523	123.4	125.9	1.5	nil	nil				
			1524	129.6	131.1	1.5	nil	nil				
			1525	131.1	132.6	1.5	nil	nil				
			1526	134.8	135.4	0.6	nil	nil				
			1527	135.4	136.5	1.1	nil	nil				



qwt dtr

1-951)

