



Project: Mt Read **Location:** West Tasmania **Tenement:** EL47/2003
Prospect: New North Farrell **Location Descriptor:** 150m north of Vanderfeen House, off Innes Tk. And Mackintosh Dam Rd.

Hole ID: FDD01

Total Depth: 265	Drill Type: Diamond	Dip: -58.00	Drilling Contractor: Boart Longyear
MGA_East: 385796	Start Date: 7-Sep-05	UTM Az: 90.00	Rig: LY38
MGA_North: 5379551	End Date: 28-Sep-05	Mag Az: 103	Core Size: HQ/NQ
Local East: 9940	RL: 191m	Logged by: A.Habets	Driller: J.Kaye
Local North: 10852	Grid: AMG66	Designed by: A.Habets	Other:

Objective & Results: Obtain an intersection between 9 and 10 Level of the New North Farrell Mine around. Intersected lower level 6, an area extensively worked. Recovered back fill and mined high grade ore pebbles of 11.7%Pb, 1.15%Zn & 190g/t Ag.

Analytical Results											
depth from (m)	depth to (m)	Sample Type	Interval	Sample ID	Au ppm	Ag ppm	Pb ppm	Cu ppm	Zn ppm	Fe %	BatchNo
154.20	154.40	0.5NQ C	0.20	133826	-0.01	2	50	100	60	4.77	EL47-006
177.50	178.00	0.5NQ C	0.50	133827	0.02	7	1910	40	2350	6.92	EL47-006
208.00	209.25	0.5NQ C	1.25	133828	0.03	2	320	120	570	5.16	EL47-006
212.15	215.30	0.5NQ C	3.15	133829	0.05	190	117000	470	11500	4.72	EL47-006
215.30	215.70	0.5NQ C	0.40	133830	-0.01	48	2250	430	2910	6.35	EL47-006
215.70	216.60	0.5NQ C	0.90	133831	-0.01	3	250	20	120	6.03	EL47-006
216.60	217.00	0.5NQ C	0.40	133832	0.02	3	660	90	1570	4.75	EL47-006
217.00	218.00	0.5NQ C	1.00	133833	-0.01	2	120	40	100	4.91	EL47-006

218.00	219.00	0.5NQ C	1.00	133834	-0.01	1	140	50	300	6.59	EL47-006
219.00	220.00	0.5NQ C	1.00	133836	-0.01	7	2250	90	790	5.15	EL47-006A
220.00	221.00	0.5NQ C	1.00	133837	-0.01	3	850	60	1200	4.74	EL47-006A
221.00	222.00	0.5NQ C	1.00	133838	0.28	2	470	80	1610	5.21	EL47-006A
222.00	223.00	0.5NQ C	1.00	133839	0.01	4	820	130	2420	8.01	EL47-006A
223.00	223.60	0.5NQ C	0.60	133840	0.14	7	2440	70	6100	6.68	EL47-006A
223.60	224.00	0.5NQ C	0.40	133841	0.1	11	5650	30	3420	6.91	EL47-006A
224.00	225.00	0.5NQ C	1.00	133842	0.09	7	1650	20	5150	13.6	EL47-006A
225.00	226.00	0.5NQ C	1.00	133843	0.09	6	250	60	260	5.51	EL47-006A
231.00	232.00	0.5NQ C	1.00	133844	0.35	8	470	110	670	5.31	EL47-006A
232.00	233.00	0.5NQ C	1.00	133845	0.07	13	4660	30	270	2.72	EL47-006A
233.00	234.00	0.5NQ C	1.00	133846	0.06	9	4330	20	1040	4.06	EL47-006A
234.00	235.00	0.5NQ C	1.00	133847	-0.01	3	310	110	370	4.53	EL47-006A
235.00	236.00	0.5NQ C	1.00	133848	-0.01	3	360	100	180	6.34	EL47-006A
236.00	237.00	0.5NQ C	1.00	133849	-0.01	3	270	60	190	5.54	EL47-006A
237.00	238.00	0.5NQ C	1.00	133850	-0.01	2	60	20	160	1.2	EL47-006A
Geology Logging											
depth from (m)	depth to (m)	Description					Mineralisation				
0.00	7.45	Pebbles & boulders of Qzte, pink feldspathic volcanics, slates, lithic fragments & sand. Glacial gravel.									

7.45	8.05	Mg grn-gry pyroclastic. 7.8 - 8.05 vuggy Qv with chlorite fill.	
8.05	16.50	Fg-aphanitic, vitric pyroclastic gry-buff. Strongly cleaved 8.5-9.6m 20° to core. Silicified in parts. Some from structure apparent at 50° t core. Carbonate vlts parallel to flow structure 13.5-16.5m	Vf dissem py throughout
16.50	25.60	Fg-mg pyroclastic (andesite). Grn-buff-pink. Becoming cg porphyry with pink feldspars at 19.0-21.0m & 22.5-23.9m. Minor chlorite in erratic Q-carbonate vlts	
25.60	26.70	Fg-aphanitic lava, gry-buff with carbonate vlts.	Brecciated 25.6-25.8m with up to 5% disseminated py. Vf py in carbonate vlts
26.70	29.70	Fg-mg porphyritic lava. Pink altered feldspars at 28.0-28.4m. Varying degrees of silicification. Brecciated shear zone at 29.7m	20-30% galena in a chlorite matrix within shear 29.7m - 100mm
29.70	61.00	Vitric lava (?), vf gry-buff-pink well banded, silicified. 45.8-46.8m distinct creamy pink marker band. PETROGRAPHIC DESCRIPTION SAMPLE NUMBER 133783: <i>Fine grained altered, deformed and veined siltstone. Shows preservation of fine grained detrital grain texture of diffuse compositional layering. Low grade metamorphism has occurred, leading to fine grained recrystallisation to an assemblage of quartz 60%, sericite 30%, and carbonate (dolomite) 9%. Minor Q-carbonate throughout. Eutaxitic texture see</i> PETROGRAPHIC DESCRIPTION SAMPLE NUMBER 133784: <i>Fine grained, recrystallised, weakly to moderately foliated and veined felsic pyroclastic or epiclastic rock. Replacement by an assemblage dominated by quartz and sericite, with minor chlorite and carbonate & traces of biotite, pyrite, leucoxene, apatite & hematite. Sericite is commonly more concentrated in layers. There may be up to three events of veining.</i>	Traces of pyrite, leucoxene and zircon
61.00	62.85	Mgporphyritic lava, gry-pink/buff.Banded. Clean Q-carb vlts throughout	Tr of py blebs & dissem py & chpy 62.50
62.85	69.60	Grn-gry, fg vitric lava. High angle flow banding 60°-70° evident	Vf py/chpy disseminated, <1%

69.60	93.30	Mg porphyritic lava (andesite), pink altered feldspar. Gry-grn chloritised matrix. Q-carbonate veins: 73.5m (80mm), 73.60m (50mm), 76.4m (40mm), 82.3m (40mm), 86.35m (40mm), 90.45m (200m). Pink-Orange alteration of feldspars 78.35-79.3m, 81.3-81.8m, 82.1-82.3m. Becoming uniform dark grey and finer grained at 85.5m	
93.30	139.90	Vitric lava (?) vfg. Gry-buff-pink. Silicified well banded flow structure. Massive Qv at 94.5m (200mm) & 94.95m (350mm). Cleavage parallel to flow structure. Distinct orange Q-carbonate alteration at 94.60 - 95.50m. Polished cleaved surfaces. Chloritic groundmass in parts. Erratic Q-carb throughout. Distinct alternating flow band structure pink - grn/gry 125.0 - 134.0m	104.85m vf scattered py in cleavage surfaces
139.90	150.20	Cg porphyritic lava. Grn/gry-buff with coarse phenocrysts of feldspar to 10mm. Various degrees of chloritisation and silicification. Becoming buff/grn - possible sericite alteration 150.20m	Rare py cubes, vf throughout
150.20	153.40	Vitric lava dominant showing increasing lithic appearance as lithology changes approaches. Possible fault zone through lithology change.	
153.40	154.90	FARRELL GROUP SEDIMENTS. Interbedded mudstones with volcanic fragments. Poorly sorted in parts with white hydrous Q-carbonate infill. Possibly ash flow.	Blebs of py with tr of sph at 154.20- 154.40m. 20% over 200m
154.90	188.80	F bedded blk shale - mudstone. Puggy clay zone at 157.0m FAULT ZONE . Orientation not evident. Zone of intense massive & stringer Q across bedding 157.0 - 164.85m. Q is clean, possible chlorite in parts. Tr of cream carbonate blebs. Clay pug zone 164.80 (300mm). Broken pebble core 173.20m (100mm). Zone of Q & Q-carbonate (likely Q replacement of carbonate) 174.40m - 177.0m (Hanging wall Q). 177.60 brecciated hydrous infilling of Q-carb, shales and sulphides	Narrow bands of py in Q at 161.80m. F vltts of py parallel to bedding at 176.90m. 177.60 - 178.0m disseminated py cubes + vf galena(?) in brecciated hydrous infill. 179.30m cg py cubes in cleavage surfaces. 179.35 - 179.45m brecciated with py & vf galena.
188.80	189.50	Interbedded bry gritty siltstone/greywacke.	
189.50	202.40	F evenly bedded mudstone, some tuff interbeds. Cleavage semi parallel to bedding. V minor brecciated hydrous infilling at 198.6m - 199.70m	199.70m Infill of Q-carbonate, sph & py. Tr py wisps in bedded mudstones 199.70m 202.40m
202.40	204.20	Q-Q carbonate zone. Minor dediments within sequence. Lower contact 50° to core.	
204.20	209.25	Contorted mudstone, kink folding with a brecciated hydrous Q-carbonate infill at 205.10 - 206.0m and 208.50 - 209.0m. HIT HIGH PRESSURE WATER	Disseminated py throughout, up to 5%

		AT 205.40m	
209.25	212.15	Siltstone or Greywacke with limonite staining on cleavage surfaces. LOST CORE 1.90m 211.4 - 214.4m. LOST CORE 0.5m 214.4 - 215.0m ORE ZONE in black Farrell sediments. Backfill in a stope. Recovered 2 x 50mm pebbles of massive galena in a Q-carbonate	Massive galena in Q-carbonate recovery 100mm between 212.15 & 215.0. Limonite staining 219.0 - 220.0m. Sph, gal, py in a hydrous breccia infill at 223.60m (150mm). Up to 20% sulphides. See PETROLOGY SAMPLE 133785 222.40m <i>Hydrothermal breccia of strongly veined & brecciated, low grade metamorphosed & deformed black shale. The rock has been recrystallised into a quartz + sericite assemblage with minor graphitic material & disseminated pyrite. Veining, grading into brecciation, has occurred, with early infill by fine to medium quartz + carbonate, with local pyrite aggregates & a little biotite-chlorite, followed by the main infill of med-course grained carbonate, with minor quartz and a little biotite-chlorite & pyrite, & followed by late quartz-rich veining. The last veining has epithermal textures. Modal mineral proportions are quartz 55%, carbonate (ankerite or siderite) 20%, sericite 19%, pyrite 3%, biotite/chlorite & graphite each 1%, traces of leucoxene/rutile, sphalerite, galena, chalcopyrite & pyrrhotite</i>
215.00	236.60	Pyritic black shale with minor hydrous Q-carbonate brecciated infilling: 215.6 - 218.8m, 222.5 - 222.8m, 223.6 - 225.0m, 236.2 - 236.4m CAVITY 0.30m 223.4 - 225.0m	224.05 - 225.0 (plus through cavity ?) gal, py & sph through brecciated hydrous infill. Sulphide content 5%. 232.40m 50mm minor py + gal up to 5% on pebbles (from workings backfill ?). 232.80m spal on a cleavage plane over 100mm up to 5%. 233.30m 100mm sph on cleavage plane & Q-carb hydrous infill up to 5%
236.60	265.40	Clay pug zone of a fault zone becoming well bedded gry-tan greywacke with poorly sorted interbeds of grit. Upper contact 20° to core.	

EOH

Geology Summary		
depth from (m)	depth to (m)	Geological Code
0.00	7.45	GS
7.45	150.20	CVC
150.20	153.40	IBZ
153.40	157.00	FS
157.00	164.85	Qz Vn Zone
164.85	174.40	FS
174.40	177.00	Qz Vn Zone
177.00	179.00	Lode zone
179.00	223.60	FS
223.60	225.00	Lode zone

Petrology	
Report ID:	133783
Depth:	45.80
Sample ID:	133783
Lithology:	CVC
Type:	TS
Petrologist:	Paul Ashley ANU
Date Reported:	17/11/2005
Hand Specimen:	Yes
Report ID:	133784
Depth:	59.20
Sample ID:	133784

225.00	236.60	FS
236.60	265.40	mct

Lithology:	CVC
Type:	TS
Petrologist:	Paul Ashley ANU
Date Reported:	17/11/2005
Hand Specimen:	Yes
Report ID:	133785
Depth:	224.00
Sample ID:	133785
Lithology:	FGS
Type:	PTS
Petrologist:	Paul Ashley ANU
Date Reported:	17/11/2005
Hand Specimen:	Yes

Core Recovery			
depth from (m)	depth to (m)	Recovery	Recovery %
0.00	4.00	0.15	3.75
4.00	7.00	0.30	10.00
7.00	7.40	0.35	87.50
7.40	10.40	2.10	70.00
10.40	13.40	2.90	96.67
13.40	16.40	2.80	93.33
16.40	19.40	3.00	100.00
19.40	22.40	2.90	96.67
22.40	25.40	3.10	103.33
25.40	28.40	2.90	96.67
28.40	31.40	2.75	91.67
31.40	34.40	2.95	98.33
34.40	37.40	2.70	90.00
37.40	40.40	3.00	100.00
40.40	43.10	2.55	94.44
43.10	46.20	3.05	98.39
46.20	49.20	3.05	101.67
49.20	52.40	3.20	100.00
52.40	55.40	3.15	105.00
55.40	58.40	2.80	93.33
58.40	61.40	2.95	98.33

61.40	64.40	3.05	101.67
64.40	67.40	3.00	100.00
67.40	70.40	2.90	96.67
70.40	73.40	3.05	101.67
73.40	76.40	3.00	100.00
76.40	79.40	3.00	100.00
79.40	82.40	3.00	100.00
82.40	85.40	3.00	100.00
85.40	88.40	3.05	101.67
88.40	91.40	3.00	100.00
91.40	94.40	2.95	98.33
94.40	97.40	3.00	100.00
97.40	100.40	2.90	96.67
100.40	103.40	2.96	98.67
103.40	106.40	3.00	100.00
106.40	109.40	2.85	95.00
109.40	112.40	2.90	96.67
112.40	115.40	2.95	98.33
115.40	118.40	3.00	100.00
118.40	121.40	2.92	97.33
121.40	124.40	3.00	100.00
124.40	127.40	3.00	100.00
127.40	130.40	3.00	100.00
130.40	133.40	3.00	100.00
133.40	136.40	2.85	95.00
136.40	139.40	2.85	95.00
139.40	142.40	3.00	100.00
142.40	145.40	2.75	91.67
145.40	148.40	3.00	100.00
148.40	151.30	2.90	100.00
151.30	154.40	2.90	93.55
154.40	157.40	2.45	81.67
157.40	160.00	2.15	82.69
160.00	162.30	1.95	84.78
162.30	163.40	1.05	95.45
163.40	166.10	2.40	88.89
166.10	167.60	1.55	103.33
167.60	169.40	1.65	91.67
169.40	172.40	2.85	95.00
172.40	173.20	0.75	93.75
173.20	175.40	1.90	86.36
175.40	178.40	2.68	89.33
178.40	181.40	3.00	100.00
181.40	184.40	2.80	93.33
184.40	187.40	2.30	76.67
187.40	190.40	2.80	93.33
190.40	193.40	2.90	96.67
193.40	196.40	2.80	93.33
196.40	199.40	2.90	96.67
199.40	202.40	2.60	86.67
202.40	205.40	2.60	86.67
205.40	208.40	2.60	86.67
208.40	211.40	2.75	91.67
211.40	214.40	0.80	26.67
214.40	215.00	0.08	13.33
215.00	215.60	0.35	58.33
215.60	218.30	2.50	92.59
218.30	220.40	1.95	92.86

220.40	223.40	3.00	100.00
223.40	226.40	2.50	83.33
226.40	229.40	2.90	96.67
229.40	232.40	2.65	88.33
232.40	235.40	2.95	98.33
235.40	238.40	2.80	93.33
238.40	241.40	2.95	98.33
241.40	244.40	2.90	96.67
244.40	247.40	2.85	95.00
247.40	250.40	3.00	100.00
250.40	253.40	3.00	100.00
253.40	256.40	2.95	98.33
256.40	259.40	2.95	98.33
259.40	262.40	3.05	101.67
262.40	265.40	3.00	100.00

Survey						
depth (m)	Dip	UTM Azimuth	Mag Azimuth	Instrument	Operator	Date Read
0	-58.00	90.00	103		J.Kaye	
25	-57.75	94.00	107	Multi-shot	J.Kaye	12-Sep-05
50	-55.50	92.00	105	Multi-shot	J.Kaye	13-Sep-05
75	-53.00	91.00	104	Multi-shot	J.Kaye	14-Sep-05
100	-51.00	91.00	104	Multi-shot	J.Kaye	16-Sep-05
120	-48.25	90.00	103	Multi-shot	J.Kaye	19-Sep-05
140	-45.50	90.00	103	Multi-shot	J.Kaye	20-Sep-05
160	-44.00	88.00	101	Multi-shot	J.Kaye	21-Sep-05
180	-44.00	88.00	101	Multi-shot	J.Kaye	23-Sep-05

Significant Intersections			
depth from (m)	depth to (m)	m	Ag g/t
208.00	209.25	1.25	2.0
212.15	226.00	13.85	47.8
231.00	238.00	7.00	5.9

depth from (m)	depth to (m)	m	Zn %	Cu ppm	Fe %
223	225	2	0.5	40	9.1