

# Appendix 1

Potentially high yielding sites. Including the locality maps of boreholes and the boreholes profiles.







# Potential High Yielding Site

1

Compiled by: Fanie Botha

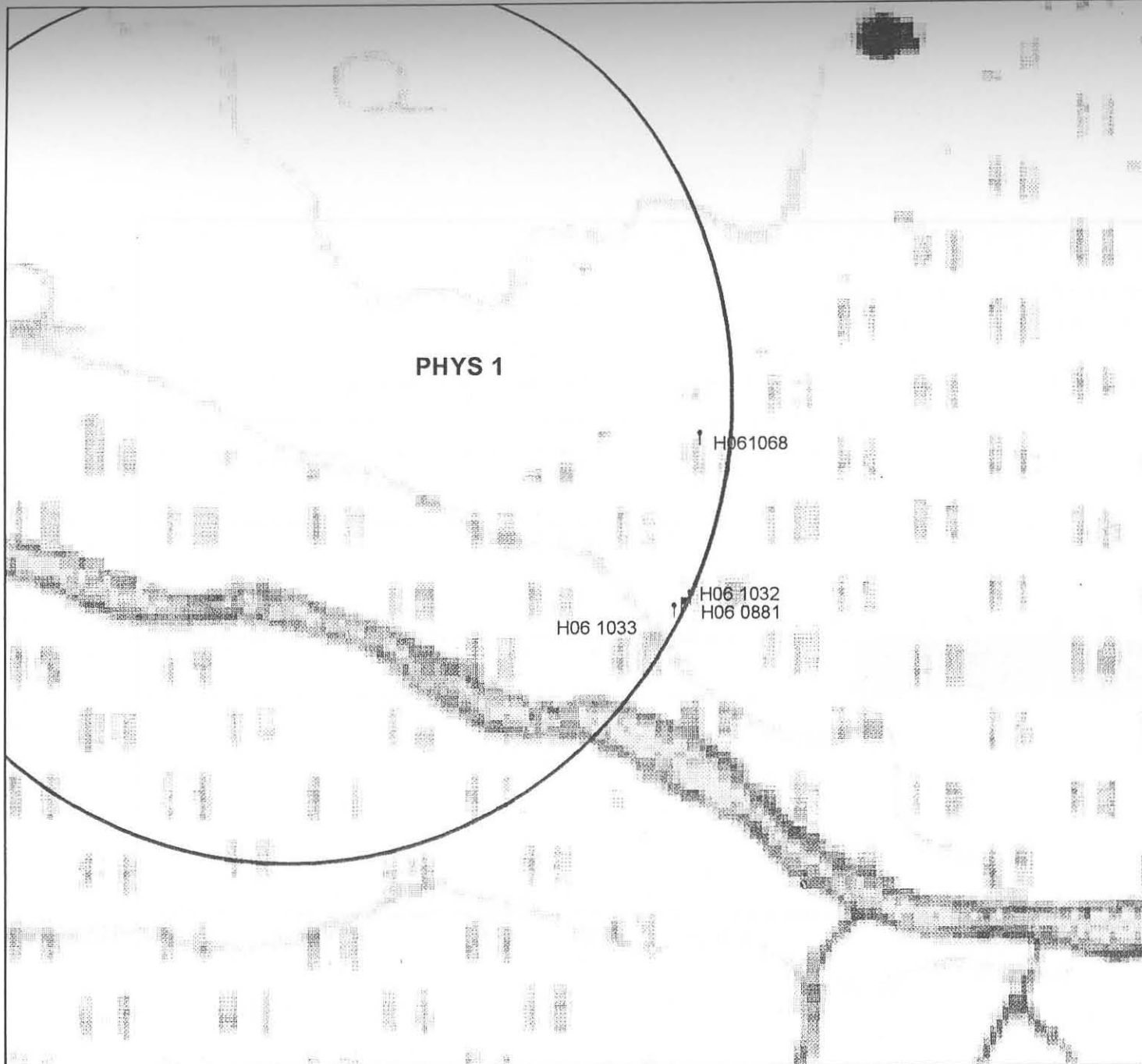
Assisted by: Robert Whitehead

## LEGEND

-  PHYS identified
-  New borehole positions
-  Closed borehole
-  Monitor or dry borehole
-  Observation borehole
-  Borehole pump tested

PHYS 1

70 0 70 Meters

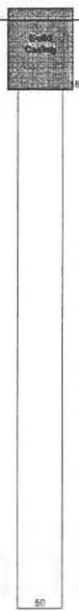


DWAFF Private Bag X8606 PIETERSBURG 0700 TEL NO (015) 290-1333 FAX NO (015) 285-3248			PERCUSSION DRILLING RECORD			PHYS : 1 Method: Geophysics				
			CLIENT: DWAFF	JOB N°: N001	Borehole No: H06 1032					
			PROJECT: Neso Research	SITE: Ngwatozi	WATER TABLE: 7.8					
			LOG: Fanie Botha	DRILLER: DWAFF	ELEVATION: 825.87					
			DATE STARTED:		LATITUDE: 24.80784					
					LONGITUDE: 28.97898					
BOREHOLE CONSTRUCTION	WATER STRIKE (°S)	STRIKE DEPTH (m)	S.W.L (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION				
Casing height	0.25m				0					
			7.80	0						
				5				Aluminum		
				5					Slightly moist, brown, clayey silt with fine grains	
				5					Weathered dolerite	
				10					Grey black, coarse sand with gravel	
				10					Dolerite	
				15						
				20						
				25						
				30						
				30						
				35	0.86	34			Contact	
				35					White pink, fine sand with gravel (20mm)	
				35					Fresh granite	
				40						
45										
50										
55										
60										
65										
70										
75										
80										
85										
90										
95										
100										
105										
110										
115										
120										
125										
130										
135										
140										
145										
150										

DWAf Private Bag X8566 PIETERSBURG 0700 TEL NO (015) 290-1233 FAX NO (015) 295-3249		PERCUSSION DRILLING RECORD				HPYS : 1	
		CLIENT	DWAf	JOB N°		Method Geophysics	
		PROJECT	Nelson Research	BOREHOLE N°		N301	
		SITE	Nqwanzi	WATER TABLE		HB 1033	
		LOG	Fane Botha	ELEVATION		7.45	
		DRIILLER	DWAf	LATITUDE			
		DATE STARTED		LONGITUDE			
BOREHOLE CONSTRUCTION	WATER STRIKE (°S)	STRIKE DEPTH (m)	S.V.L (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION	
Casing height				0		0	
				5	Aluminum		
			7.45	5	Slightly moist, brown, clayey sil with fine grains	5	
				10	Weathered dolerite	10	
				15	Grey black, coarse sand with gravel	15	
				20	Dolerite	20	
				25		25	
				30	Contact	30	
				35		35	
				40		40	
				45		45	
				50		50	
	1.80	52		55	White pink, fine sand with gravel (20mm)	55	
				60	Fresh granite	60	
				65		65	
				70		70	
				75		75	
				80		80	
				85		85	
				90		90	
				95		95	
				100		100	
				105		105	
				110		110	
				115		115	
				120		120	
				125		125	
				130		130	
				135		135	
				140		140	
				145		145	
				150		150	



DWAf Private Bag X9506 PETERSBURG 0700 TEL NO (015) 290-1320 FAX NO (015) 295-3248		PERCUSSION DRILLING RECORD			HPV5 - 1 Method: Geophysics		
BOREHOLE CONSTRUCTION		WATER STRIKE (b/s)	STRIKE DEPTH (m)	S.W.L (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION
Casing height	0.25m					0	0
	12m			7.80		5	Alluvium Slightly moist, brown, clayey silt with fine grains Weathered dolomite
						10	Grey black, coarse sand with gravel Dolomite
						15	
						20	
						25	
						30	
		0.66	34			34	Contact
						35	White pink, fine sand with gravel (20mm) Fresh granite
						40	
						45	
						50	
						55	
						60	
						65	
						70	
						75	
						80	
						85	
						90	
						95	
						100	
						105	
						110	
						115	
						120	
						125	
						130	
						135	
						140	
						145	
						150	

DWAf Private Bag X0508 PETERSBURG 0700 TEL NO (015) 296-1233 FAX NO (015) 296-3249		PERCUSSION DRILLING RECORD			PHYS 1.1 Method: Observation		
BOREHOLE CONSTRUCTION Casing diameter (mm): 165 Casing thickness (mm): 4		WATER STRIKE (m)	STRIKE DEPTH (m)	S.W.L. (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION
Casing height					0		
					5	Colluvium	
					10	Dark brown to grey clayey sand Highly to total weathered dolerite	
					15	Black grey medium to fine grained sand Fresh dolerite	
					20		
					25		
					30		
					35		
					40		
					45		
					50		
					55		
					60		
					65		
					70		
					75		
					80		
					85		
					90		
					95		
					100		
					105		
					110		
					115		
					120		
					125		
					130		
					135		
					140		
					145		
					150		







# Potential High Yielding Site

2

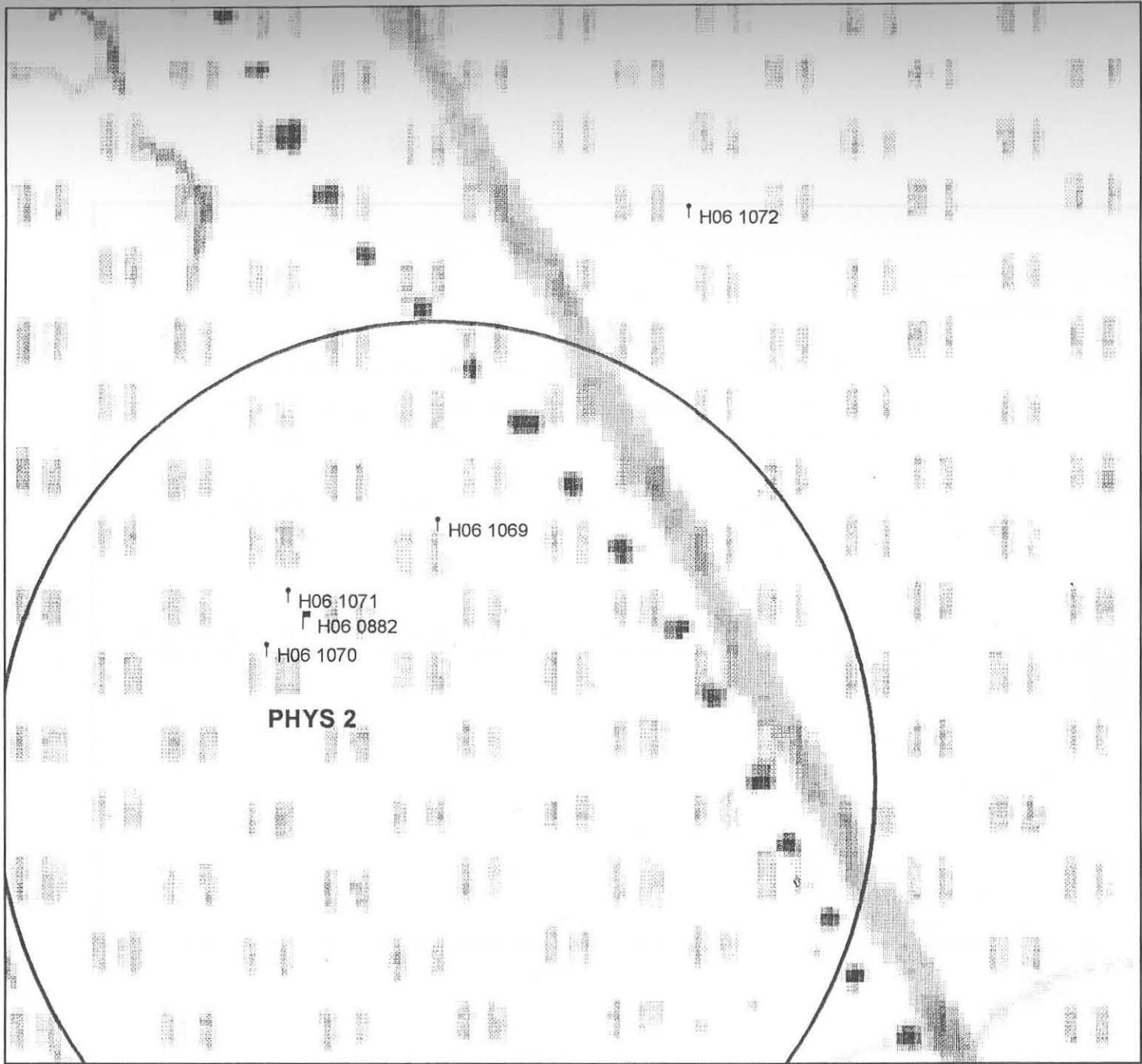


Compiled by: Fanie Botha  
Assisted by: Robert Whitehead

## LEGEND

-  PHYS identified
-  New borehole positions
-  Closed borehole
-  Monitor or dry borehole
-  Observation borehole
-  Borehole pump tested

### PHYS 2



DWAF  
Private Bag X8506  
PIETERSBURG  
0700  
TEL NO (015) 290-1333  
FAX NO (015) 295-3249

PERCUSSION DRILLING RECORD

CLIENT DWAF  
PROJECT Nebo Research  
SITE Ngwenya  
LOG Fanie Botha  
DRILLER DWAF  
DATE STARTED Wednesday, November 19, 1997

PHYS: 2

Method: Geophysics  
JOB N° N001  
BOREHOLE N° H08 0902 / W5103  
WATER LEVEL 4.9  
ELEVATION 990.22  
LATITUDE 24 61869  
LONGITUDE 29 70881

BOREHOLE CONSTRUCTION

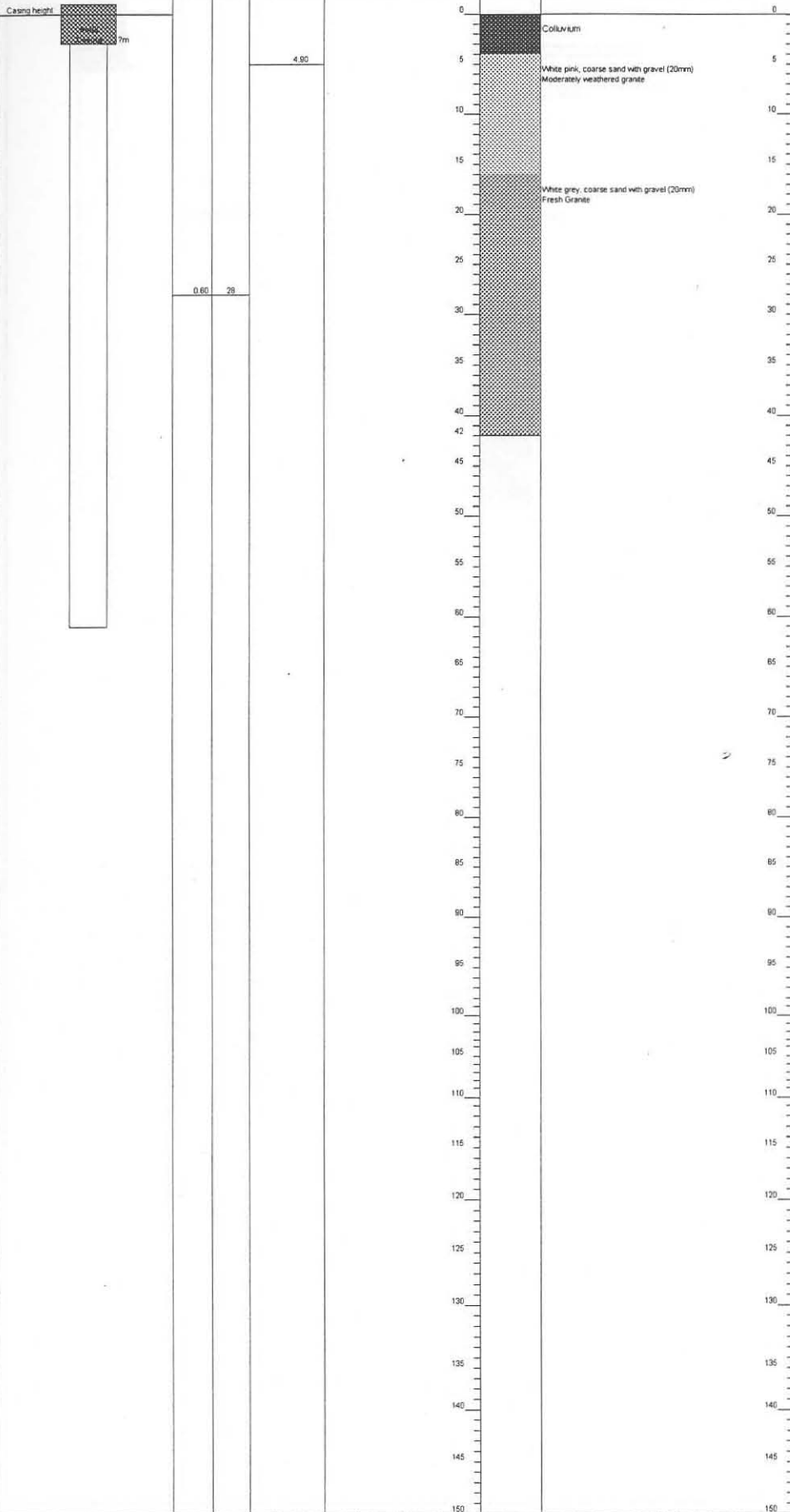
WATER STRIKE (°)  
STRIKE DEPTH (m)

S.W.L. (m)

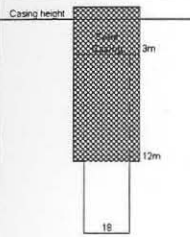
DEPTH (m)

PROFILE

MATERIAL DESCRIPTION



DWAf Private Bag X8506 PIETERSBURG 0700  TEL NO (015) 290-1333 FAX NO (015) 292-3288		PERCUSSION DRILLING RECORD			PHYS : 2		Method	Observation
		CLIENT	DWAf	JOB N°	N001			
		PROJECT	Nebi Research	BOREHOLE N°	H06 1069 / M6616			
		SITE	Ngwentsi	WATER LEVEL	1.7			
		LOG	Fanie Botha	ELEVATION	834.27			
		DRILLER	DWAf	LATITUDE	24 61415			
		DATE STARTED	Friday, January 29, 1999	LONGITUDE	29 59245			
BOREHOLE CONSTRUCTION	WATER STRIKE	STRIKE DEPTH	S.W.L.	DEPTH	PROFILE	MATERIAL DESCRIPTION		
Casing diameter (mm)	165							
Casing thickness (mm)	4							
Casino height					0		0	
					5	Colloquium Dark brown to grey clayey sand Highly to total weathered dolerite	5	
					10	Black grey medium to fine grained sand Fresh dolerite	10	
					20	Fracture	20	
					25		25	
					30		30	
					35		35	
					40		40	
					45		45	
					50		50	
					55		55	
					60		60	
					65		65	
					70		70	
					75		75	
					80		80	
					85		85	
					90		90	
					95		95	
					100		100	
					105		105	
					110		110	
					115		115	
					120		120	
					125		125	
					130		130	
					135		135	
					140		140	
					145		145	
					150		150	

DWAf Private Bag X9506 PETERSBURG 0700 TEL NO (015) 295-1333 FAX NO (015) 295-3249			PERCUSSION DRILLING RECORD			PHYS : 2		Method: Observations
BORHOLE CONSTRUCTION Casing diameter (mm) 185 Casing thickness (mm) 4			WATER STRIKE (PS)	STRIKE DEPTH (m)	S.W.L (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION
Casino height 				1.50	g			
						0		0
						5	Colluvium Dark brown to grey clayey sand Highly to total weathered dolerite	5
						10	Dark brown gravel (30mm) with sand Fracture	10
						15	Black grey medium to fine grained sand Fresh dolerite	15
						20		20
						25		25
						30		30
						35		35
						40		40
						45		45
						50		50
						55		55
						60		60
						65		65
						70		70
						75		75
						80		80
						85		85
						90		90
						95		95
						100		100
						105		105
						110		110
						115		115
						120		120
						125		125
						130		130
						135		135
						140		140
						145		145
						150		150

DWAf Private Bag X8506 PIETERSBURG 0700 TEL NO (015) 290-1333 FAX NO (015) 295-3248			PERCUSSION DRILLING RECORD			HPYS : 2 Method: Observation	
BORHOLE CONSTRUCTION Casing diameter (mm) 165 Casing thickness (mm) 4			CLIENT DWAf	PROJECT Neto Research	JOB No N031	BORHOLE No H06 1071	Method Observation
WATER STRIKE (ft)			DEPTH (m)	DEPTH (m)	DEPTH (m)	DEPTH (m)	MATERIAL DESCRIPTION
STRIKE (ft)			DEPTH (m)	DEPTH (m)	DEPTH (m)	DEPTH (m)	MATERIAL DESCRIPTION
DATE STARTED			DEPTH (m)	DEPTH (m)	DEPTH (m)	DEPTH (m)	MATERIAL DESCRIPTION
Casing height							
3m							0 Colloquium
12m							5 Dark brown to grey clayey sand Highly to total weathered dolerite
24							10 Dark brown gravel (30mm) with sand Fracture
							15 Black grey medium to fine grained sand Fresh dolerite
							20
							25
							30
							35
							40
							45
							50
							55
							60
							65
							70
							75
							80
							85
							90
							95
							100
							105
							110
							115
							120
							125
							130
							135
							140
							145
							150

DWAf			PERCUSSION DRILLING RECORD				PHYS : 2	
Private Bag X9508 PIETERSBURG 0700			CLIENT	DWAf	JOB N°	Method Observation		
TEL NO (015) 290-1333 FAX NO (015) 295-3245			PROJECT	Neso Research	N001			
			SITE	Ngwari	BOREHOLE N°	H06 1072		
			LOG	Fane Botha	WATER LEVEL	1.68		
			DRILLER	DWAf	ELEVATION	933		
			DATE STARTED	Monday, February 01, 1999	LATITUDE	24 81233		
					LONGITUDE	29 8709		
BOREHOLE CONSTRUCTION		WATER	STRIKE	S.W.L	DEPTH	PROFILE	MATERIAL DESCRIPTION	
Casing diameter (mm)	215	4	(°S)	(m)	(m)			
Casing thickness (mm)								
Casing height	3m					0	0	
						0-1.68	Colluvium	
			0.50	7		1.68-5	Brown grey white, sand with gravel (20mm) Weathered dolerite with calcare	
						5-10	Dark brown gravel (30mm) with sand Fracture	
						10-15	Black grey medium to fine grained sand Fresh dolerite	
						15-18		
						18		
						20		
						25		
						30		
						35		
						40		
						45		
						50		
						55		
						60		
						65		
						70		
						75		
						80		
						85		
						90		
						95		
						100		
						105		
						110		
						115		
						120		
						125		
						130		
						135		
						140		
						145		
						150		

BOREHOLE CONSTRUCTION			PERCUSSION DRILLING RECORD		PHYS: 2 Method: Geophysics	
DMAF Private Bay 20506 PIETERSBURG 0700 TEL NO (015) 290-1333 FAX NO (015) 295-3248			CLIENT: DMAF PROJECT: Nebo Research SITE: Ngwantsi LOG: Fanie Botha DRILLER: DMAF DATE STARTED:		JOB No: N001 BOREHOLE No: H06 0882 WATER TABLE: 2.35 ELEVATION: 933.47 LATITUDE: 24 61471 LONGITUDE: 28 8887	
WATER STRIKE (PS)	STRIKE DEPTH (m)	S.W.L (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION	
		2.35	0			0
			5		Alluvium	5
			5		Slightly moist, brown, clayey silt with fine grains	
			5		Weathered dolomite	
			10		Grey black, coarse sand with gravel	
			10		Dolomite	
8.00	14		15			15
			20			20
			25			25
			30			30
			33.3			33.3
			35			35
			40			40
			45			45
			50			50
			55			55
			60			60
			65			65
			70			70
			75			75
			80			80
			85			85
			90			90
			95			95
			100			100
			105			105
			110			110
			115			115
			120			120
			125			125
			130			130
			135			135
			140			140
			145			145
			150			150



33.3

Potential for ...

# Potential High Yielding Site

3











Compiled by: Fanie Botha

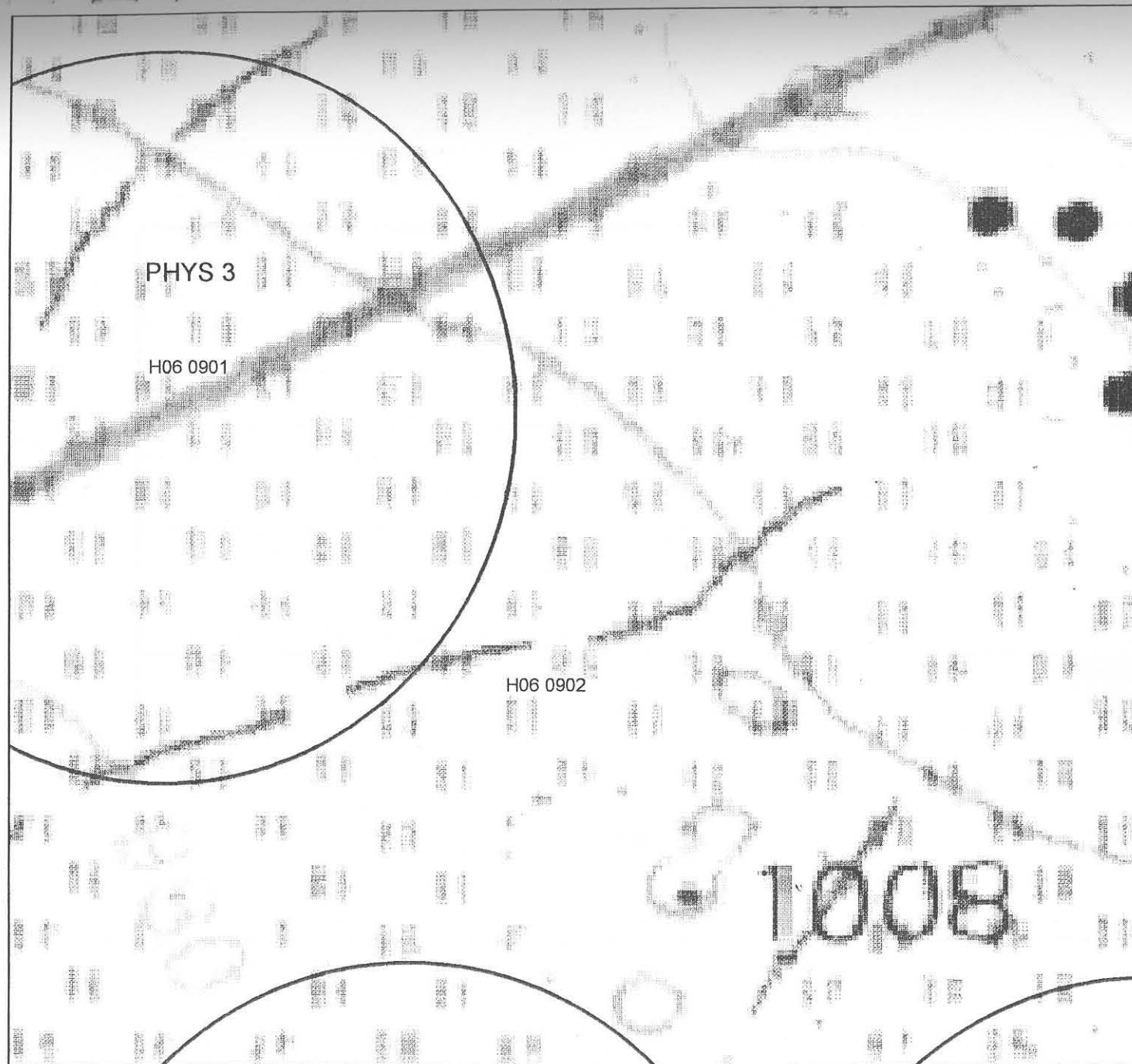
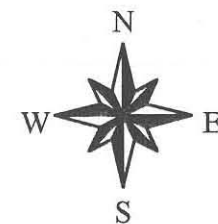
Assisted by: Robert Whitehead

## LEGEND

-  PHYS identified
-  New borehole positions
-  Closed borehole
-  Monitor or dry borehole
-  Observation borehole
-  Borehole pump tested

**PHYS 3**

70 0 70 Meters



DWAF  
Private Bag X2506  
PETERSBURG  
0700  
TEL NO (015) 290-1333  
FAX NO (015) 285-2249

PERCUSSION DRILLING RECORD  
CLIENT DWAF  
PROJECT Noto Research  
SITE Ngwantsi  
LOG Fane Botha  
DRILLER DWAF  
DATE STARTED Tuesday, November 19, 1997

PHYS 13 Method: Geophysics  
JOB Nr: H06  
BOREHOLE Nr: H06 0801 / W5102  
WATER TABLE: 7  
ELEVATION: 893.88  
LATITUDE: 24 81456  
LONGITUDE: 28 79802

BOREHOLE CONSTRUCTION	WATER STRIKE (%)	STRIKE DEPTH (m)	S.W.L. (m)	DEPTH (m)	PROFILE	MATERIAL DESCRIPTION
Casing height				0		
				5		Alluvium
				5		White pink, coarse sand
				5		Fresh granite
				10		
				15		
				20		
				25		
				30		
				35		
				40		
				45		
				50		
				55		
				60		
				65		
				70		
				75		
				80		
				85		
				90		
				95		
				100		
				105		
				110		
				115		
				120		
				125		
				130		
				135		
				140		
				145		
				150		



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DWAf Private Bag X8506 PIETERSBURG 0700 TEL NO (015) 280-1333 FAX NO (015) 285-3240		PERCUSSION DRILLING RECORD			PHYS. 2 JOB No BOREHOLE No WATER LEVEL ELEVATION LATITUDE LONGITUDE		Method: Geophysics
BOREHOLE CONSTRUCTION		WATER STRIKE	DEPTH	S.W.L.	DEPTH	PROFILE	MATERIAL DESCRIPTION
		(%)	(m)	(m)	(m)		
Casing height	7m			4.80			
							0
							Colluvium
							5
							White pink, coarse sand with gravel (20mm) Moderately weathered granite
							10
							15
							20
							White grey, coarse sand with gravel (20mm) Fresh Granite
							25
		0.60	28				30
							35
							40
							42
							45
							50
							55
							60
							65
							70
							75
							80
							85
							90
							95
							100
							105
							110
							115
							120
							125
							130
							135
							140
							145
							150