

CHAPTER 5

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APPENDICES

- Appendix A: Historic Geological Maps of the Vredefort Dome.
- Appendix B: GIS Map of Gold-mines
- Appendix C: Mine Coordinates and data (Granite Quarries, Amazon, Veldschoen and Red Reefs).
- Appendix D: GIS Map of Granite Quarries
- Appendix E: Risk rating of mines

Appendix A.

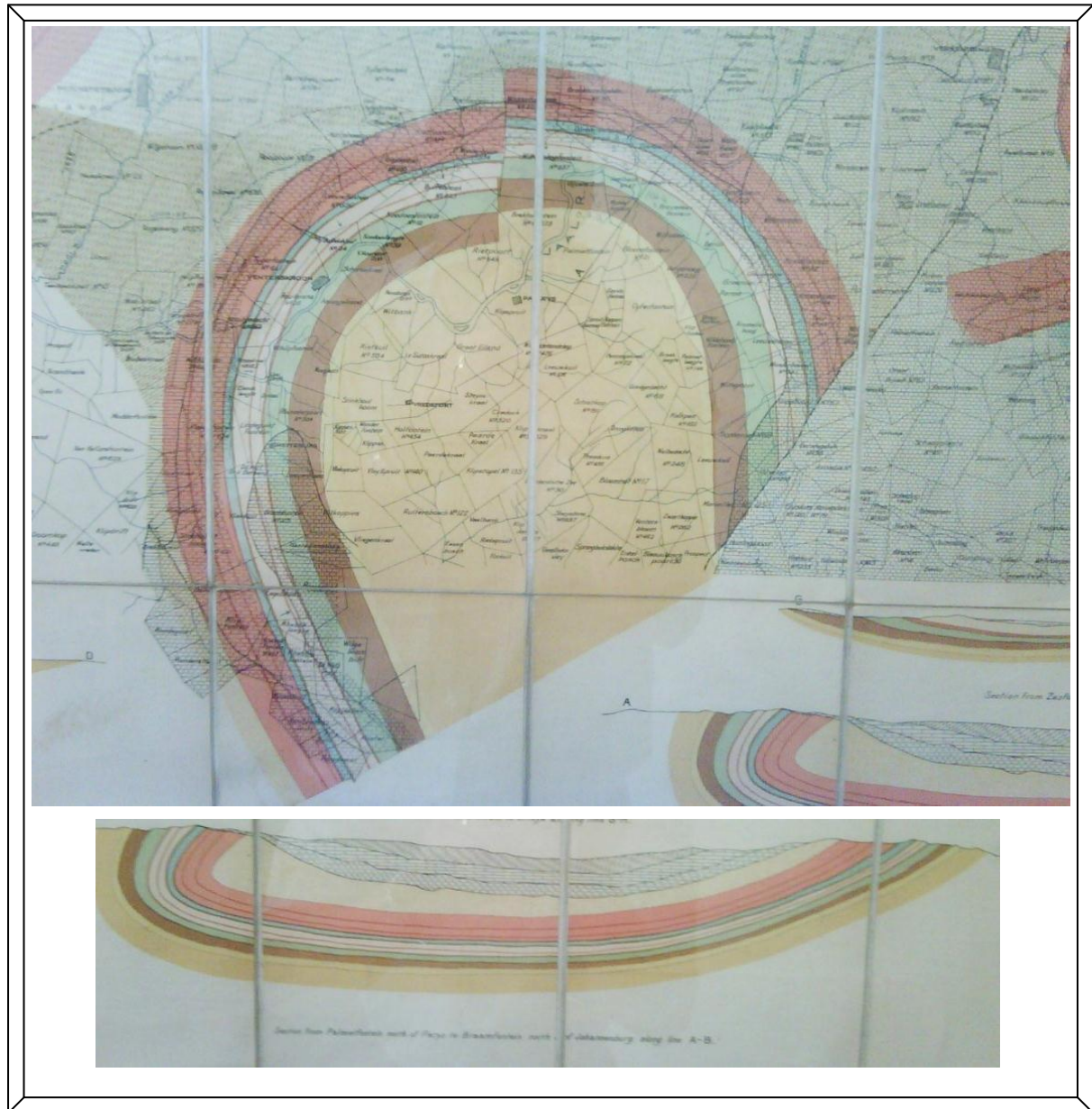


Figure 5. WE Belloch's geological map and section of the Vredefort Dome (photographed by JM Jansen van Rensburg, 23 May, 2010, Chamber of Mines building, Council for Geosciences)

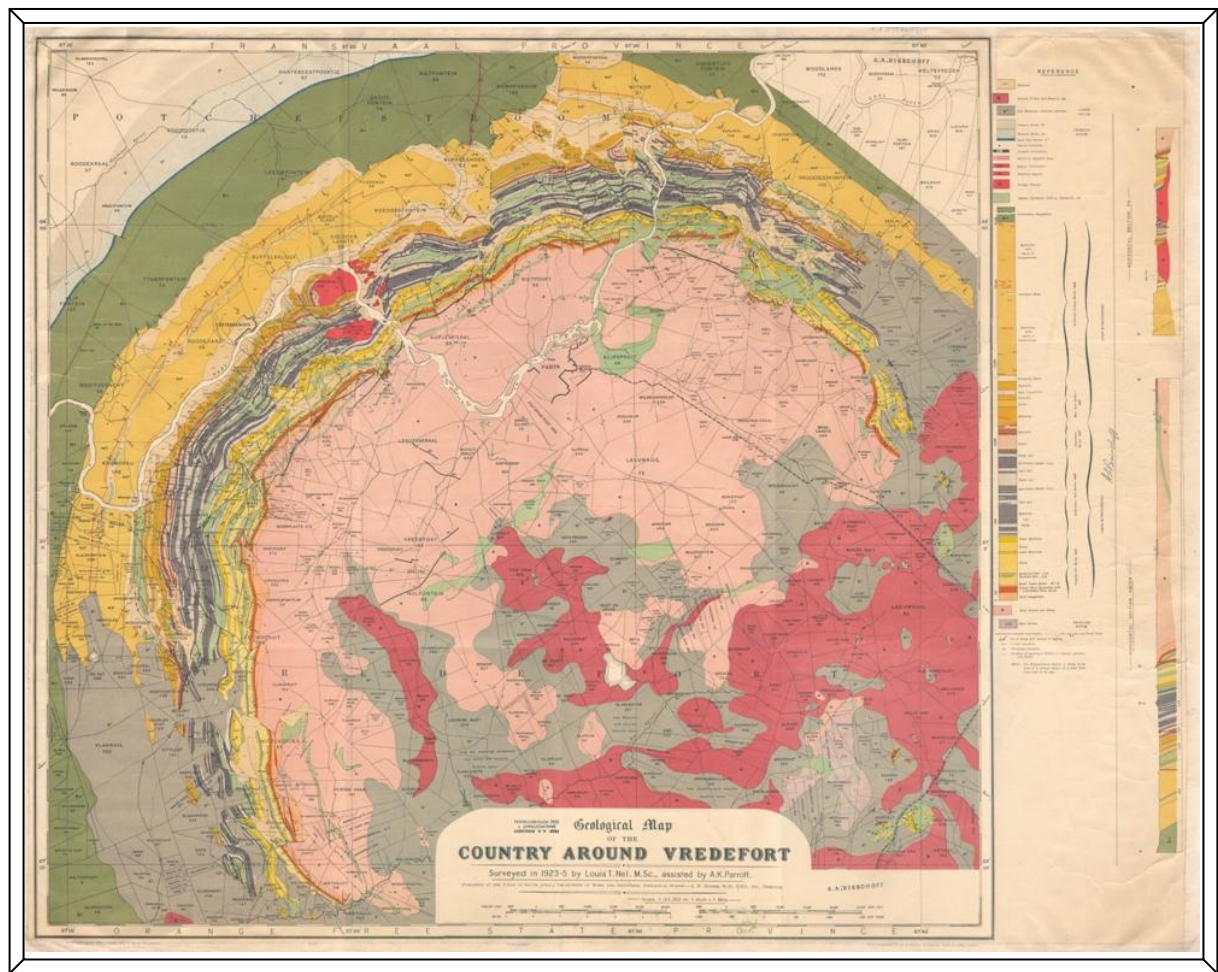
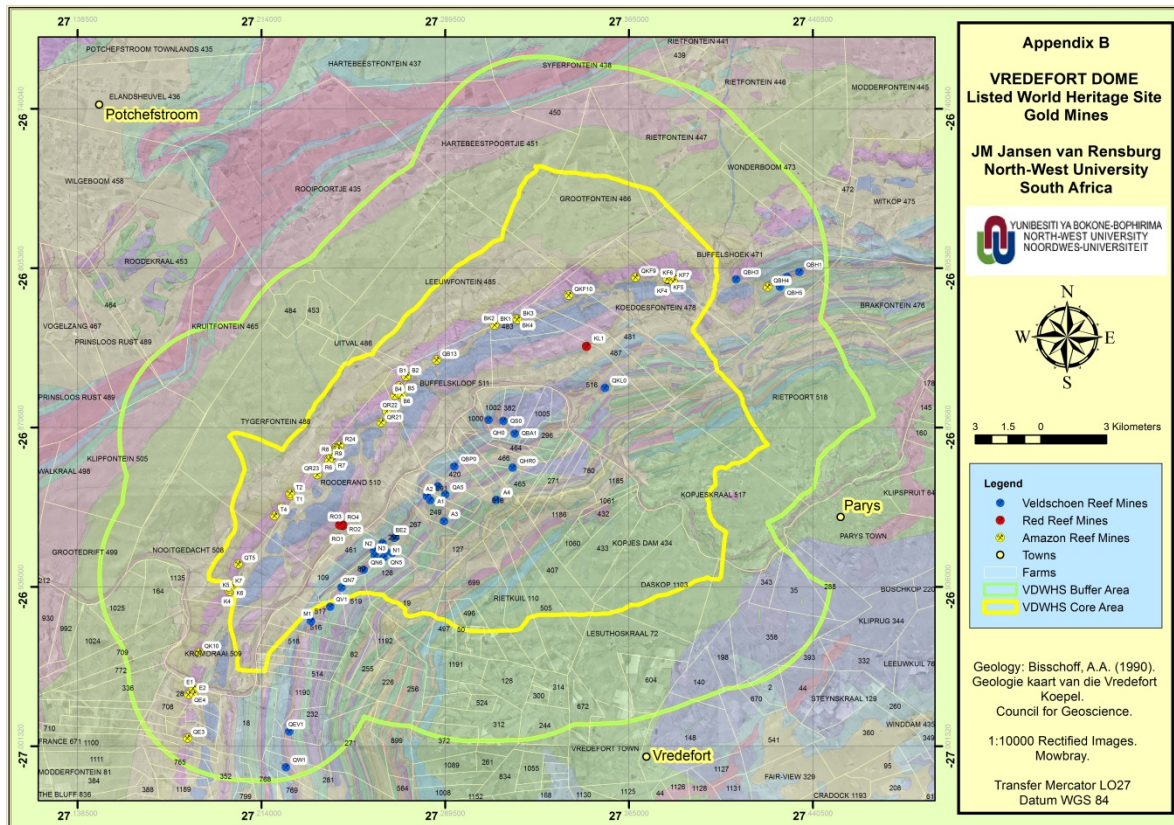


Figure 6. Louis T Nel's geological map of the Vredefort Dome.(Source: Prof. MS Coetzee, May 2010).

Appendix B



Granite Quarry Details

Appendix C

	Mine	Long	Lat	Farm	Name	Development	Reef	Infrastructure	Condition	Geology	Strike	Dip	isibilit	Access	General	Contact	
1	GQ1	27.4250000	-26.9114833	Kopjeskraal	Padretti Quarry	Percussion drilled and flame cutting grooves.	Granite		Vertical pit walls.				No	Close to road	Tourism potential.	Angelo Padretti	084 653 0188
2	GQ2	27.4023167	-26.8895500	Kopjeskraal	Salvamento Quarry	Percussion drilled and flame cutting grooves.	Granite	Abundant dimensionstone blocks - fractured.	Vertical pit walls.	Core drilling holes cemented back.			Yes	Close to road	Tourism potential.	Kerneels Terblanche	083 652 5555
3	GQ3	27.4081000	-26.8965333	Kopjeskraal	Leeukop Quarry	Percussion drilled	Granite	High line teambuilding and abseiling equipment.	Very high vertical pit walls. Rock dumps unstable. Sinkholes and erosion channels.				Yes	Close to road	Tourism potential.	Jaque (Real Adventures)	072 749 8169
4	GQ4	27.4235800	-26.8671453	Rietpoort 518IQ	Prinsloo Quarry	Percussion drilled and flame cutting grooves.	Granite		Water filled permanent. Dangerous rock dump with sinkholes. High vertical pit walls. Remains of capping of rock dump visible. Blocks used for dam wall.				Yes	Not visible from road.	Tourism potential.	Prinsloo	
5	GQ5	27.4110342	-26.8776406	Rietpoort 518IQ	Hougaard Quarry	grooves.	Granite		Vertical pit walls. Water filled permanent				No	Not visible from road.	Tourism potential.	Thomas/ Pieter Hougaard	082 4769 223
6	GQ6	27.4105756	-26.8756983	Rietpoort 518IQ	Hougaard Quarry 1	Percussion drilled and flame cutting grooves.	Granite		Vertical pit walls. Not waterfilled				No	Not visible from road.	Tourism potential.	Thomas/ Pieter Hougaard	083 4769 223
7	GQ8	27.4334839	-26.8998633	Kopjeskraal	Danhauser Quarry	Percussion drilled. Flame cutting. Limited wire cutting.	Granite	In excess of 50 blocks.	Vertical pit walls. Water filled permanent. Rock dump seven metres high.	Pseudotachylite and age relationships.			Yes	Close to road	Tourism potential.	Jannie Danhauser	082 463 6876
8	GQ7	27.4205983	-26.8716700	Rietpoort 518IQ	Henning Quarry		Granite		Vertical pit walls.				Yes	Close to road			
9	GQ10	27.3680000	-26.9810000	Lesutoskraal 604			Granite	Borrowpit	Small pit steep walls				Yes	Close to road			
10	GQ11	27.3500000	-26.9120000	Rensburgs Drift 432		Percussion drilled and flame cutting grooves.	Granite	Mine	Vertical pit walls. Not waterfilled. Rehabilitated, with rubble dumped in quarry face.	ranophyre dike adjacent to quarry			Yes	Close to road	Not recommended for tourism. Rehabilitated quarry face is covered and sinkholes exist. Two rock dumps are unstable.	Wally Dedwith	0568181352
11	GQ12	27.3560000	-26.9260000	Zuid Witbank 433			Granite	Mine								Carl Marx	
12	GQ13	27.3420000	-26.9130000	Spitzkop 1060		Percussion drilled and flame cutting grooves.	Granite	Pivot steelstructure	Vertical pit walls. Not waterfilled				Yes	Close to road	Tourism potential.	Carl Marx	
13	GQ14	27.3550000	-26.9450000	Lesutoskraal 72			Granite	Mine					Yes	Close to road		Dennis Dedwith	0832506275
14	GQ15	27.3530000	-26.9450000	Lesutoskraal 72			Granite	Mine					Yes	Close to road		Dennis Dedwith	0832506275
15	GQ16	27.4110000	-26.8930000	Kopjeskraal			Granite	Mine					No	Difficult to locate and not visible from road.			

Amazon Mine Details

Mine	Long	Lat	Farm	Development	Infrastructure	Condition	Geology	Strike	Dip	Visibility	Access	General	Contact		
1 R1	27.2438833	-26.881167	Rooderand 510 IQ	Adit	Slimes dam with tracks leading to it from presumably east infrastructure.	Sleep rockdumps. Sinkholes.	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.	Tourism potential.	Hannes Haggard	082 829 4238	
2 R19	27.2435500	-26.8809833	Rooderand 510 IQ	Main Adit tunnel.		Sleep rockdumps. Sinkholes.	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.	Tourism potential.	Hannes Haggard	082 829 4238	
3 R24	27.2460000	-26.8780000	Rooderand 510 IQ	Adit	60m deep, second reeftdrive left links up with R1		1.5m thick M-LPPSC.			Yes	Close to road cattle fence with pedestrian access but private warning.	Tourism potential.	Hannes Haggard	082 829 4238	
7 E1	27.1859961	-26.9775683	Elandslaagte 28	Shaft	Cement structures, cyanide pads, railway track base	Open vertical shaft water filled. Slime dams draining into River.				No	Difficult to locate and not visible from road.	Tourism potential.	Piet Erasmus	082 335 9851	056 9310952
6 E2	27.1860000	-26.9800000	Elandslaagte 28	Adit	Railway track base.	Open adit				No	Difficult to locate and not visible from road.	Tourism potential.	Piet Erasmus	082 335 9851	056 9310952
4 B2	27.2735500	-26.8498500	Buffelskloof 511 IQ	Adit	Claim boards visible at entrance dated 1933 and 1954	Closed end				No	Difficult to locate and not visible from road. On private resort with hiking trail	Tourism potential.	Peggy vd Merwe	056 8181116	
5 B6	27.2699486	-26.8570717	Buffelskloof 511 IQ	Adit			Bad hangingwall block.			No	Difficult to locate and not visible from road. On private resort with hiking trail	Tourism potential.	Peggy vd Merwe	056 8181116	
8 BK2	27.30985	-26.8284200	Buffelskloof 483 IQ	Reef drive. 11 Metres long		Closed end - gasses.	VS-4 MS Olig. Congl. 85Cm thick.	N36E	32	No	Difficult to locate and not visible from road. Hiking trail planned!	Tourism potential. Bats present.	Warren Floris	083 506 3446	
9 BK4	27.31882	-26.8259900	Buffelskloof 483 IQ	Reef drive 14 Metres.		Dead end unventilated. Small rock dump.	Grit-VSP, PS, Olig Congl. 5 cm thick. Heavily faulted and off reef at face.			No	Difficult to locate and not visible from road. Hiking trail planned!	Tourism potential. Bats present.	Warren Floris	083 506 3446	
10 K3	27.2013000	-26.9363000	Nooitgedacht 508 IQ	Adit leading to stope.	Crushing and extraction infrastructure.	Material in stope fall down. Closure evident from crushed pillars.					Close too road cattle fence.	Tourism potential. Used for abseiling. Porcupine breeding.	GP Schoeman	018 2911649	082 3655125
11 KF2	27.3812600	-26.8099100	Koedoesfontein 478 IQ	Winze	1 Ruin Rocks without mud	> 20m deep waterfilled	20 cm (Sp, Olig, PSC), 40 cm int. Qtzite, 30 cm spc		23 deg	No	Difficult. Private ground away from road and not visible from road.	Waste and reef dump sorted	Willie Nel	056 8181515	
44 R10	27.2426333	-26.8816667	Rooderand 510 IQ		Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
45 R11	27.2427167	-26.8814000	Rooderand 510 IQ		Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
46 R12	27.2439167	-26.8802167	Rooderand 510 IQ		Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
47 R13	27.2443333	-26.8799500	Rooderand 510 IQ	Vertical shaft	Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
48 R14	27.2443167	-26.8797667	Rooderand 510 IQ	Winze decline.	3 Metres.	Not fenced and dangerous.	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
49 R15	27.2440333	-26.8792167	Rooderand 510 IQ		Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
50 R16	27.2446833	-26.8794333	Rooderand 510 IQ	Winze.	10 Metres.	Fenced	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
51 R17	27.2447167	-26.8800333	Rooderand 510 IQ	Winze.	Slimes dam with tracks leading to it from presumably east infrastructure.	Fenced	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
52 R18	27.2452667	-26.8799500	Rooderand 510 IQ	Main Adit tunnel.	Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
53 R2	27.2437667	-26.8811667	Rooderand 510 IQ	Adit	Collapsed		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
54 R20	27.2437500	-26.8810833	Rooderand 510 IQ	Stope	Supported		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
55 R3	27.2437833	-26.8811333	Rooderand 510 IQ	Reef drive	Slimes dam with tracks leading to it from presumably east infrastructure.	Seasonal flooding. Shale parting separation.	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
56 R4	27.2433333	-26.8821667	Rooderand 510 IQ		Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
57 R5	27.2432000	-26.8821833	Rooderand 510 IQ	Prospecting trench, 2 metres	Slimes dam with tracks leading to it from presumably east infrastructure.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
58 R6	27.2430167	-26.8823000	Rooderand 510 IQ	Winze.	Slimes dam with tracks leading to it from presumably east infrastructure.	Partially fenced but dangerous. 100 Metres deep	Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
59 R7	27.2430667	-26.8820333	Rooderand 510 IQ	Raise top hole	Boor war shelter facing SW to road.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
60 R8	27.2428000	-26.8822167	Rooderand 510 IQ	Prospecting trench and reef	Reef drive 2 metres.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
61 R9	27.2417500	-26.8838833	Rooderand 510 IQ	Prospecting trench	3 Metres deep.		Poorly sorted upwards firing well packed, oligomictic small to very large pebble conglomerate. Reefs lenticular in places. Top contact mined.			Yes	Close to road cattle fence with pedestrian access but private warning.		Hannes Haggard	082 829 4238	
19 K1	27.2018830	-26.9351333	Nooitgedacht 508 IQ	Reef drive dead end.	Crushing and extraction infrastructure.	Dangerous. Close to road dead end. Unstable collapsed ground.	Poorly sorted grit to large pebble matrix supported conglomerate. 1 Metre thick.				Close too road cattle fence.				
20 K2	27.2017500	-26.9361000	Nooitgedacht 508 IQ	Winze 6 metres	Crushing and extraction infrastructure.	Dangerous.	Small pebble conglomerate, 3 metres thick, channelised.				Close too road cattle fence.				
21 K4	27.2011000	-26.9367833	Nooitgedacht 508 IQ	Adit leading to stope.	Crushing and extraction infrastructure.	Stope closure, water filled winze out of reeftdrive.					Close too road cattle fence.		GP Schoeman	018 2911649	082 3655125
22 K5	27.2006500	-26.9371833	Nooitgedacht 508 IQ		Crushing and extraction infrastructure.						Close too road cattle fence.		GP Schoeman	018 2911649	082 3655125
23 K6	27.2010500	-26.9377833	Nooitgedacht 508 IQ	Winze 30 metres.	Crushing and extraction infrastructure.	Water at base.	3 Metres thick pebble supported small pebble conglomerate				Close too road cattle fence.		GP Schoeman	018 2911649	082 3655125
24 K7	27.2013130	-26.9368833	Nooitgedacht 508 IQ	Adit partially closed.	Crushing and extraction infrastructure.	Partially closed.	4 Metres thick pebble supported small pebble conglomerate				Close too road cattle fence.		GP Schoeman	018 2911649	082 3655125
25 K8	27.2008500	-26.9360833	Nooitgedacht 508 IQ	Stope top hole.	Crushing and extraction infrastructure.		5 Metres thick pebble supported small pebble conglomerate				Close too road cattle fence.		GP Schoeman	018 2911649	082 3655125
28 QKF10	27.3402722	-26.8164344	Koedoesfontein 478IQ							No	Difficult to locate and not visible from road.		Andre/Lenise Pretorius (Berakah)	082 339 9177	056 8181313
26 QKF9	27.3676911	-26.8090711	Koedoesfontein 478IQ							No	Difficult to locate and not visible from road.		Andre/Lenise Pretorius (Berakah)	082 339 9177	056 8181313
17 BK1	27.3098200	-26.8286600	Buffelskloof 483 IQ	Vertical pit 2X3 metres, 3 metres deep.		Dangerous steep walls. Unbarricaded.			34	No	Difficult to locate and not visible from road. Hiking trail planned!		Warren Floris	083 506 3446	
18 BK3	27.31911	-26.8263700	Buffelskloof 483 IQ	Adit turning into reeftdrive 100 metres long (Comm. Warren Floris, 18 May 2010)		Large rock dump with reef blocks. Water filled. Adit entrance dangerous overhang.		N74E	46	No	Difficult to locate and not visible from road. Hiking trail planned!		Warren Floris	083 506 3446	
12 B1	27.2738500	-26.8498833	Buffelskloof 511 IQ	Adit		Closed end	faulted reef MPOLig Congl MSC			No	Difficult to locate and not visible from road. On private resort with hiking trail		Peggy vd Merwe	056 8181116	
13 B3	27.2734500	-26.8498167	Buffelskloof 511 IQ	Adit		Closed end	Bad hangingwall block and open stope holing. 70 Cn 5-LPMSC			No	Difficult to locate and not visible from road. On private resort with hiking trail		Peggy vd Merwe	056 8181116	
16 B4	27.2705739	-26.8537936	Buffelskloof 511 IQ	Adit						No	Difficult to locate and not visible from road. On private resort with hiking trail		Peggy vd Merwe	056 8181116	
14 B5	27.2687892	-26.8574592	Buffelskloof 511 IQ	Adit			Bad hangingwall block.			No	Difficult to locate and not visible from road. On private resort with hiking trail		Peggy vd Merwe	056 8181116	
15 B7	27.2716892	-26.8571561	Buffelskloof 511 IQ	Adit	Rock structures	Collapsed				No	Difficult to locate and not visible from road. On private resort with hiking trail		Peggy vd Merwe	056 8181116	

Mine	Long	Lat	Farm	Development	Infrastructure	Condition	Geology	Strike	Dip	Visibility	Access	General	Contact		
27 KF1	27.3831900	-26.8111200	Koedoesfontein 478 IQ	Adit	2 Ruins	Inaccessible. Wall closed with water pipe for irrigation and fire fighting.				23	No	Difficult. Private ground away from road and not visible from road.	Willie Nel	056 8181515	
29 KF3	27.3814900	-26.8092800	Koedoesfontein 478 IQ	Winze		5m deep				No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
30 KF4	27.3836500	-26.8091800	Koedoesfontein 478 IQ	Trench		3m deep, 6m long	Channelised Gritbands			No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
31 KF5	27.3808200	-26.8099400	Koedoesfontein 478 IQ	Vent hole		10m deep Water filled				No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
32 KF6	27.3808300	-26.8097900	Koedoesfontein 478 IQ	Winze		20m deep Water filled				No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
33 KF7	27.3807000	-26.8097400	Koedoesfontein 478 IQ	Winze		5m deep Water filled				No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
34 KF8	27.3831640	-26.8107520	Koedoesfontein 478 IQ	Ventilation hole						No	Difficult. Private ground away from road and not visible from road.		Willie Nel	056 8181515	
62 T1	27.2258647	-26.8985833	Tygerfontein 488 IQ	Trensch							Resort access controlled		Schalk Theron	018 2911156	
63 T2	27.2257786	-26.8976947	Tygerfontein 488 IQ	Trensch							Resort access controlled		Schalk Theron	018 2911156	
64 T3	27.2223672	-26.9033994	Tygerfontein 488 IQ	Trensch							Resort access controlled		Schalk Theron	018 2911156	
65 T4	27.2193569	-26.9068683	Tygerfontein 488 IQ	Trensch							Resort access controlled		Schalk Theron	018 2911156	
38 B8	27.2860000	-26.8430000	Buffelskloof										Adel Eugene	084 568 0668	083 662 9770
96 B9	27.2860000	-26.8430000	Buffelskloof									Tourism Potential	Adel Eugene	084 568 0668	083 662 9770
39 QBH4	27.4220000	-26.8130000	Buffelshoek												
41 QE3	27.1836164	-26.9979808	Elandslaagte 28												
40 QE4	27.1839969	-26.9801278	Elandslaagte 28												
42 OK10	27.1882217	-26.9628642	Kromdraai 509 IQ										Deon Kriek	082 466 0486	
35 QR21	27.2632447	-26.8685939	Rooderand										Hannes Haggard	082 829 4238	
36 QR22	27.2655089	-26.8640111	Rooderand										Hannes Haggard	082 829 4238	
37 QR23	27.2370000	-26.8900000	Rooderand										Piet Erasmus	082 335 9851	056 9310952
43 QT5	27.2045169	-26.9266394	Tygerfontein										Piet Goosen	084 624 0694	018 290 5165

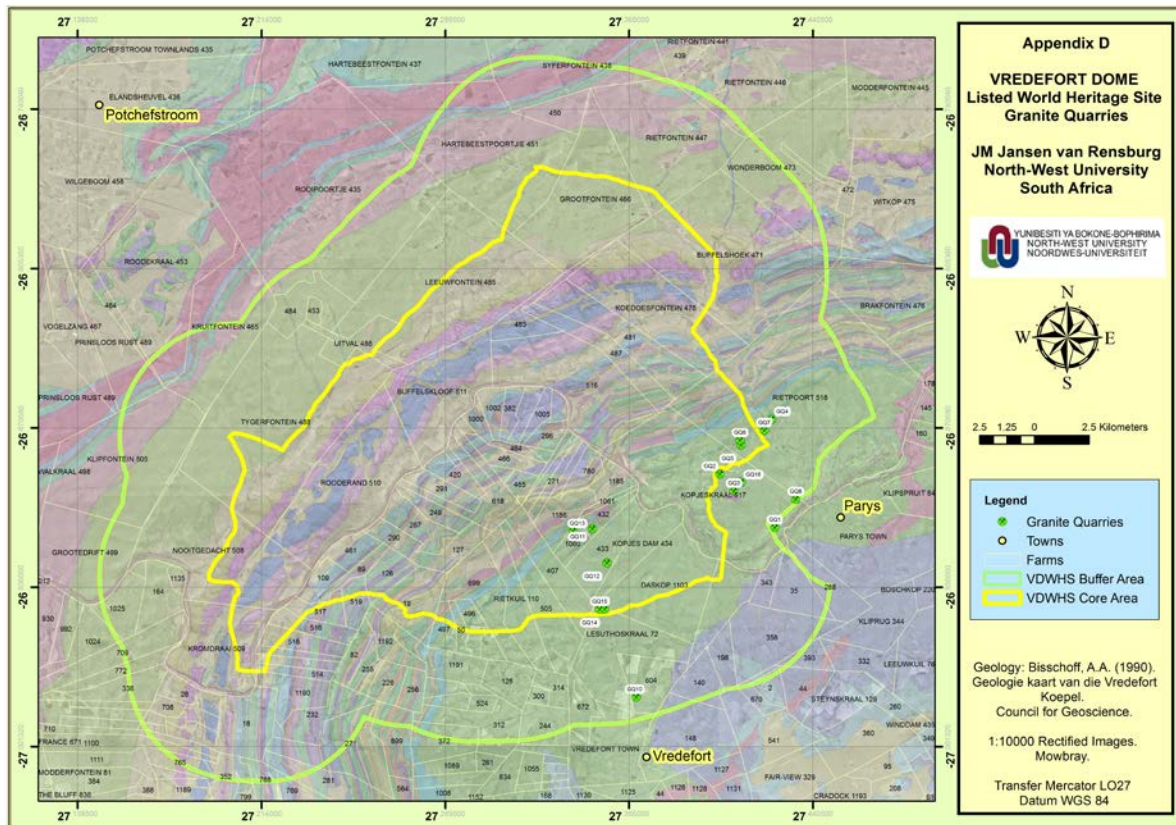
Veldschoen Mine Details

	Mine	Long	Lat	Farm Name	Development	Infrastructure	Condition	Geology	Strike	Dip	Visibility	Access	General	Contact		
5	BE1	27.2686333	-26.9159333	Rebok Kop 290	Adit		Signposted. Door unlocked. Intersection with shaft water filled below level. Dead end otherside.	Faulted Veldschoen reef.			Yes	Close to road and visible.	Tourism potensial	Booyesen	082 051 5239	
7	M1	27.2344000	-26.9500900	Mizpha 516	Shaft		Vertical shaft				No	Difficult. Private ground away from road and not visible from road.	Tourism potensial	Herman van Wyk	082 770 9444	
8	N1	27.2650333	-26.9216167	Nootgedacht 89	Adit, shaft and open stope.	Crushing and extraction infrastructure. Cyanide leaching pads. Rock dump and slimes dam.	Unbarricaded, two levels visible, first level caved in. Porcupine and warthog shelter. Adit hangingwall unstable and rock dump failure evident.	50cm thick medium to large pebble matrix supported conglomerate..			Yes	Close to road, unbarricaded but cattiefenced.	Tourism potensial	Johan Bronkhorst	082 651 1951	
1	A1	27.2833333	-26.9005000	Aasvogelrand 249	Trench		Shallow 1.5 metre trench	Shale prospecting			No	Difficult to locate and not visible from road. Development planned!		Marius Erasmus		
2	A2	27.2819833	-26.8989000	Aasvogelrand 249	Trench		Shallow 1.5 metre trench	Shale prospecting			No	Difficult to locate and not visible from road. Development planned!		Marius Erasmus		
3	A3	27.2890333	-26.9091833	Aasvogelrand 249	Pit						No	Difficult to locate and not visible from road. Development planned!		Marius Erasmus		
4	A4	27.3104833	-26.9003333	Aasvogelrand 249	Pit						No	Difficult to locate and not visible from road. Development planned!		Marius Erasmus		
6	BE2	27.2687333	-26.9157667	Rebok Kop 290	Shaft		Dangerous vertical shaft water below first level. Barricaded.				Yes	Close to road and visible.		Booyesen	082 051 5239	
9	N2	27.2602925	-26.9213400	Nootgedacht 89										Johan Bronkhorst	082 651 1951	
10	N3	27.2605811	-26.9232450	Nootgedacht 89										Johan Bronkhorst	082 651 1951	
11	QA5	27.2895075	-26.8981711	Aasvogelrand										Lardus Erasmus	084 800 2874	018 2992305
12	QA6	27.2864494	-26.8947742	Aasvogelrand										Lardus Erasmus	085 800 2874	019 2992305
13	QBA1	27.3180556	-26.8732106	Barnardsrust												
14	QBE3	27.2636964	-26.9181042	Bet El												
15	QBH1	27.4350000	-26.8070000	Buffelshoek												
16	QBH2	27.4300000	-26.8090000	Buffelshoek												
17	QBH3	27.4090000	-26.8100000	Buffelshoek												
18	QBH5	27.4270000	-26.8130000	Buffelshoek												
19	QBP0	27.2932211	-26.8866528	Bergplaats												
20	QEV1	27.2254081	-26.9953700	Eensgevonden												
21	QH0	27.3072422	-26.86756806	Hoenderland												
22	QHR0	27.3172186	-26.8871919	Hydochs Rust												
23	QKL0	27.3551558	-26.8544511	Koedoeslaagte												
24	QN4	27.2677925	-26.9221133	Nootgedacht 89										Johan Bronkhorst	082 651 1951	
25	QN5	27.2641064	-26.9241356	Nootgedacht 89										Johan Bronkhorst	082 651 1951	
26	QN6	27.2560347	-26.9290697	Nootgedacht 89										Johan Bronkhorst	082 651 1951	
27	QN7	27.2468428	-26.9362825	Nootgedacht 89										Herman van Wyk	082 770 9444	
28	QSO	27.3134272	-26.8680233	Skurwedraai												
29	QV1	27.2423119	-26.9441578	Virginia										Herman van Wyk	082 770 9444	
30	QW1	27.2240000	-27.0100000	Waterpoortje										Jaco vd Merwe/Marx		

Red Reef Mine Details

	Mine	Long	Lat	Farm	Development	Reef	Infrastructure	Condition	Geology	Strike	Dip	Visibility	Access	General	Contact		
1	KL1	27.3476	-26.8374	Koedoeslaagte 516	Adit	Red		Large rock dump.				Yes	Visible from road. Difficult to locate once close due to dense bush.	Not recommended for tourism	Dewaal Nigrini	082 853 5388	
2	RO1	27.24748	-26.91089	Rooderand 510	Decline	Red	Water pipes indicate earlier extraction form mine water. Dillapidated fence around mine.	30 Degrees decline, water at 60 metres.	No conglomerate visible before water level.Quartzite footwall.			Yes	Visible from road. Difficult to locate once close due to dense bush.	Tourism potensial	Flip Burger	0825731322	0182907518
3	RO2	27.24696	-26.91063	Rooderand 510	Adit	Red	Dillapidated fence around mine.	More than 100m deep. Vent holed.				Yes	Visible from road. Difficult to locate once close due to dense bush.	Tourism potensial	Flip Burger	0825731322	0182907518
4	RO3	27.24655	-26.91044	Rooderand 510	Winze	Red	Dillapidated fence around mine.	On reef winze, rock dump	S-MPMSC observed on rock dump.			Yes	Visible from road. Difficult to locate once close due to dense bush.	Not recommended for tourism	Flip Burger	0825731322	0182907518
5	RO4	27.2462	-26.91065	Rooderand 510	Winze	Red	Dillapidated fence around mine.	On reef winze, rock dump				Yes	Visible from road. Difficult to locate once close due to dense bush.	Not recommended for tourism	Flip Burger	0825731322	0182907518

Appendix D



Appendix E

Amazon Reef Mine Excavations Risk Ranking

No.	POTENTIAL HAZARDS	CONSEQUENCE	RISK RANKING				RISK RANKING				RISK RANKING				RISK RANKING				RISK RANKING			
			B2-Bufferkloof 511 IQ				B6-Bufferkloof 511 IQ				BK2-Bufferkloof 483 IQ				BK4-Bufferkloof 483 IQ				K3-Nooitgedacht 508 IQ			
			C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)
1	Slip and fall into mine workings	Possible fatalities, serious injuries	3	6	2	36	3	6	2	36	4	3	2	24	4	3	2	24	7	5	4	140
2	Fall into overburden/Dump	Possible fatalities, serious injuries	3	3	2	18	3	3	2	18	3	2	2	12	3	2	4	24	3	1	1	3
3	Hanging wall collapsing	Possible fatalities, serious injuries	7	6	6	252	7	6	7	294	7	6	7	294	7	6	7	294	7	5	6	210
4	Getting lost underground	Possible fatalities, serious injuries	2	6	2	24	2	6	7	84	2	3	1	6	2	3	1	6	2	5	4	40
5	Presence of gasses in closed ends	Possible fatalities, serious injuries	7	6	4	168	7	1	2	14	7	5	2	70	7	5	2	70	7	1	2	14
6	Wild animals and insects (bees, leopard, warthog, etc)	Possible fatalities, serious injuries	2	6	6	72	2	6	6	72	2	6	6	72	2	6	6	72	2	3	6	36
7	Diseases	Possible fatalities, serious injuries	7	6	6	252	7	6	6	252				0				0	7	5	4	140
	Total					822				770				478				490				583
	Risk Rating					HIGH				HIGH				HIGH				HIGH				HIGH

No.	POTENTIAL HAZARDS	CONSEQUENCE	RISK RANKING				RISK RANKING				RISK RANKING				RISK RANKING				RISK RANKING			
			R1-Rooderand 510 IQ				R19-Rooderand 510 IQ				R24-Rooderand 510 IQ				E1-Elandslaagte 28				E2-Elandslaagte 28			
			C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)
1	Slip and fall into mine workings	Possible fatalities, serious injuries	7	5	4	140	7	5	4	140	7	5	4	140	7	4	4	112	7	4	4	112
2	Fall into overburden/Dump	Possible fatalities, serious injuries	3	5	5	75	3	5	5	75	3	5	5	75	1	1	2	2	1	1	2	2
3	Hanging wall collapsing	Possible fatalities, serious injuries	7	5	6	210	7	5	6	210	7	5	6	210	1	1	2	2	7	5	6	210
4	Getting lost underground	Possible fatalities, serious injuries	2	5	7	70	2	5	7	70	2	5	7	70	1	1	1	1	3	5	7	105
5	Presence of gasses in closed ends	Possible fatalities, serious injuries	7	1	2	14	7	1	2	14	7	1	2	14	1	1	1	1	7	1	2	14
6	Wild animals and insects (bees, leopard, warthog, etc)	Possible fatalities, serious injuries	2	3	6	36	2	3	6	36	2	3	6	36	2	4	5	40	2	3	6	36
7	Diseases	Possible fatalities, serious injuries	7	5	4	140	7	5	4	140	7	5	4	140	1	1	1	1	7	5	4	140
	Total					685				685				685				159				619
	Risk Rating					HIGH				HIGH				HIGH				MEDIUM				HIGH

Veldschoen Reef Mine Excavations Risk Ranking

			RISK RANKING				RISK RANKING				RISK RANKING			
			BE1-Rebok Kop 290				M1-Mizpha 516				N1-Nooitgedacht			
No.	POTENTIAL HAZARDS	CONSEQUENCE	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)	C	E	P	RR = (C*E*P)
1	Slip and fall into mine workings	Possible fatalities, serious injuries	7	3	4	84	7	3	4	84	7	5	4	140
2	Fall into overburden/Dump	Possible fatalities, serious injuries	3	1	1	3	3	1	1	3	3	3	5	45
3	Hanging wall collapsing	Possible fatalities, serious injuries	7	3	4	84	7	1	1	7	7	3	5	105
4	Getting lost underground	Possible fatalities, serious injuries	2	1	1	2	2	1	1	2	2	4	1	8
5	Presence of gasses in closed ends	Possible fatalities, serious injuries	7	3	6	126	7	1	2	14	7	1	2	14
6	Wild animals and insects (bees, leopard, warthog, etc)	Possible fatalities, serious injuries	2	3	6	36	2	3	6	36	2	3	6	36
7	Diseases	Possible fatalities, serious injuries	7	5	4	140	7	5	4	140	7	5	4	140
		Total				475				286				488
		Risk Rating				HIGH				HIGH				HIGH

Red Reef Mine Excavations Risk Ranking

			RISK RANKING			
			KL1-Koedoeslaagte 516			
No.	POTENTIAL HAZARDS	CONSEQUENCE	C	E	P	RR = (C*E*P)
1	Slip and fall into mine workings	Possible fatalities, serious injuries	7	4	4	112
2	Fall into overburden/Dump	Possible fatalities, serious injuries	3	2	3	18
3	Hanging wall collapsing	Possible fatalities, serious injuries	7	5	6	210
4	Getting lost underground	Possible fatalities, serious injuries	2	5	7	70
5	Presence of gasses in closed ends	Possible fatalities, serious injuries	7	4	6	168
6	Wild animals and insects (bees, leopard, warthog, etc)	Possible fatalities, serious injuries	2	3	6	36
7	Diseases	Possible fatalities, serious injuries	7	5	4	140
		Total				754
		Risk Rating				HIGH

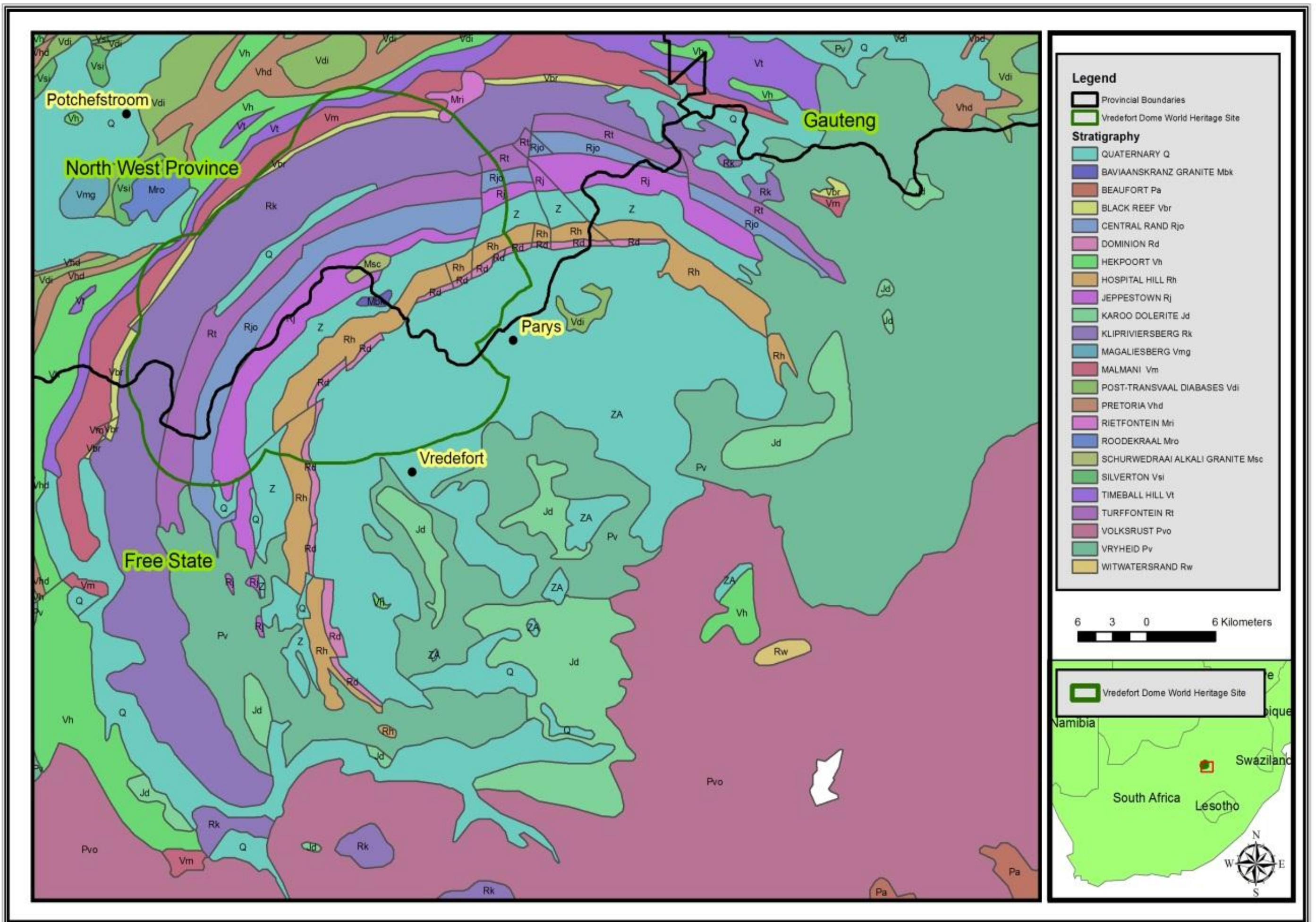


Figure 4. Regional geological map indicating the boundaries of the proposed VDWHS. The VDWHS is taken as the study area. (Modified from Bisschoff, 1999a, and compiled by A Hattingh and JM Jansen van Rensburg).

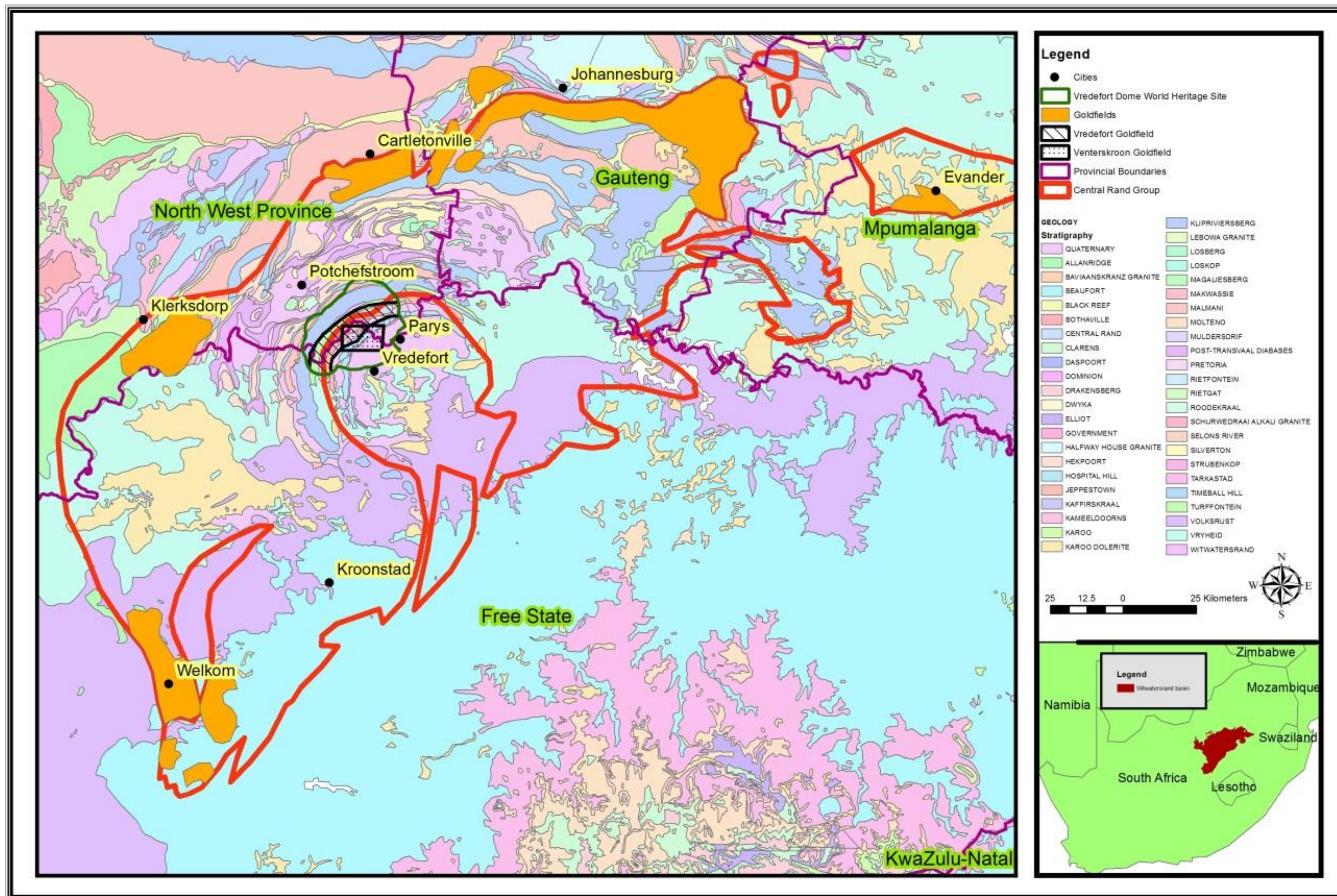


Figure 7. The Witwatersrand Goldfields in relation to the proposed Vredefort Goldfield. Also indicated is the Venterskroon Goldfield as outlined by Robb and Robb (1998) (Compiled by A Hattingh and JM Jansen van Rensburg based on West-Rand map, 1:100000, and Robb and Robb, 1998, figure 1).

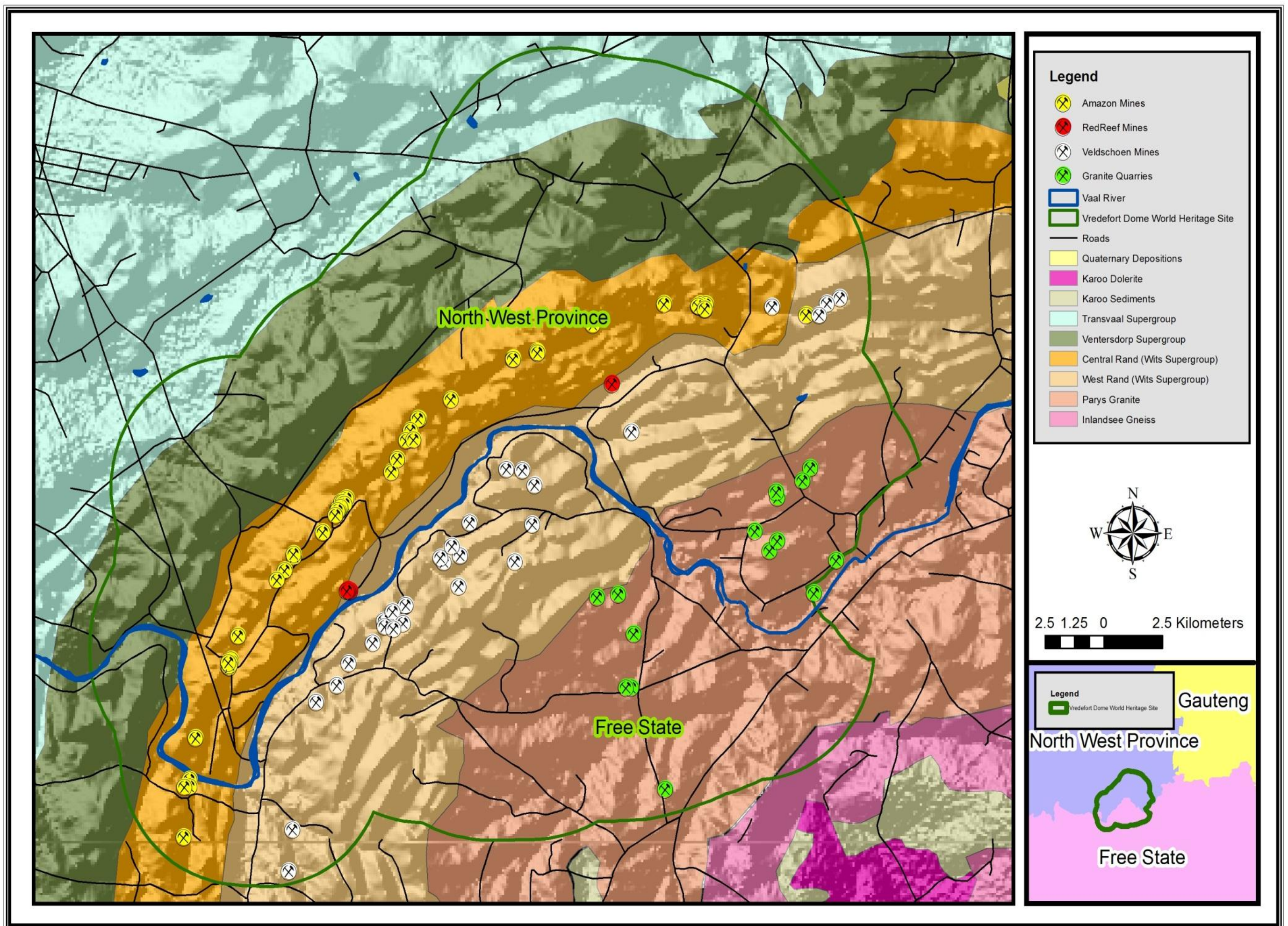


Figure 10. The regional locality of the major gold- and granite mining activities in the Vredefort Dome superimposed on a simplified geological map. (Compiled by A Hattingh and JM Jansen van Rensburg).