

Coober Pedy Opal Exploration Drilling Program 2005

Brian J. Morris

Report Book 2008/12



Government of South Australia
Primary Industries and Resources SA

Coober Pedy Opal Exploration Drilling Program 2005

Brian J. Morris

PIRSA Geological Survey

October 2008

Report Book 2008/12



Government of South Australia
Primary Industries and Resources SA

Division of Minerals and Energy Resources

Primary Industries and Resources South Australia

7th floor, 101 Grenfell Street, Adelaide

GPO Box 1671, Adelaide SA 5001

Phone National (08) 8463 3204

 International +61 8 8463 3204

Fax National (08) 8463 3229

 International +61 8 8463 3229

Email pirs.minerals@sa.gov.au

Website www.minerals.pir.sa.gov.au

© Primary Industries and Resources South Australia, 2008

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968* (Cwlth), no part may be reproduced by any process without prior written permission from Primary Industries and Resources South Australia. Requests and inquiries concerning reproduction and rights should be addressed to the Editor, Publishing Services, PIRSA, GPO Box 1671, Adelaide SA 5001.

Disclaimer

Primary Industries and Resources South Australia has tried to make the information in this publication as accurate as possible, however, it is intended as a guide only. The agency will not accept any liability in any way arising from information or advice that is contained in this publication.

Preferred way to cite this publication

Morris, B.J., 2008. Coober Pedy Opal Exploration Drilling Program 2005. *South Australia. Department of Primary Industries and Resources. Report Book 2008/12.*

CONTENTS

ABSTRACT	1
INTRODUCTION	1
PREVIOUS SUBSIDISED INVESTIGATIONS	1
PRODUCTION.....	2
GEOLOGY	2
THE DRILLING PROGRAM	2
RESULTS	4
CONCLUSIONS	7
APPENDIXES.....	8
1. Summary of South Australian Opal Production, 1978 to 2007	8
2. Drill hole data.....	10
3. Coober Pedy summary drill logs of selected holes from the AO series	30
4. Coober Pedy summary drill logs of selected holes from the CO series.....	46
REFERENCES	92

PLATES

Plate 1.	Weathered Bulldog Shale ('sandstone') with tubules, showing a fault ('slide') displaced iron oxide rich 'level', Mars field. (Photo No. 407215).....	3
Plate 2.	Coober Pedy Miners Association MK 10A auger drilling rig. (Photo No. 404950).....	3
Plate 3.	Logging of drill cuttings from completed auger hole. (Photo No. 407216).....	4

FIGURES

Figure 1.	Coober Pedy Precious Stones Field and drill hole locations.....	6
Figure 2.	Coober Pedy opal field and drill hole locations.....	93

Coober Pedy Opal Exploration Drilling Program 2005

Brian J. Morris

ABSTRACT

Two South Australian Government grants totalling \$100 000 have been used by the Coober Pedy Miners Association Incorporated to fund an auger drilling rig and a drilling program to explore for opal away from the known opalfields. 714 auger holes were completed within the Coober Pedy Precious Stones Field and located more than 500m from established productive areas. Approximately 20% of drill holes intersected prospective 'good sandstone', while 12% were observed to contain traces of potch or precious opal. The program has led to increased mining activity in several areas and demonstrated the opal prospectivity of areas away from the known fields. The now productive Opal Ridge field was a new discovery resulting from the drilling program targeting a previously unexplored area.

INTRODUCTION

Due to concerns over falling opal production and the lack of new finds, the Coober Pedy Miners Association Incorporated (CPMAI) sought South Australian Government assistance for opal exploration in areas away from the known Coober Pedy opalfields. Following the signing of a Deed of Conditions of Grant, the Minister for Mineral Resources Development agreed to provide \$50 000 funding, which was sourced from the Office of Regional Affairs and transferred to the CPMAI in June, 2004.

The CPMAI subsequently requested a further \$50 000 funding, to be used with the original grant, to purchase an auger drilling rig for a proposed long-term opal exploration program. A Deed of Conditions of Grant was formulated by the Crown Solicitor and PIRSA in consultation with the CPMAI and the Northern Regional Development Board. The deed was approved and signed by the Minister for Mineral Resources Development in March 2005, and the money sourced from PIRSA's PACE Initiative Theme 2, *Drilling collaboration between PIRSA and Industry*.

PREVIOUS SUBSIDISED INVESTIGATIONS

In July 1981, approval was granted for expenditure of \$30 000 on a subsidised Calweld drilling exploration program on the Coober Pedy Precious Stones Field. The program began on 31 August 1981 and was completed on 27 October 1981 with the expenditure of \$30 280.20 in subsidies for 221 shafts completed, at a rate of \$8.00/m. Areas within 1 km of existing fields were excluded to ensure that any finds were in completely new areas. Eleven shafts in six localities encountered opal, including four with colour trace. One of these later became a new field called Southern Cross. Details of the program are documented in Robertson and Scott (1990) and Scott and Robertson (1983).

In the year 2000 a \$50 000 opal exploration program was carried out by the CPMAI under a government funded Targeted Exploration Initiative of South Australia (TEISA). A total of 451 auger and vacuum drill holes were completed in nine target areas, all located west of the existing intensely worked fields.

Opal trace was located in nine drill holes, from four of the target areas, varying in quality from bone to potch and shell fragments. No colour opal was found and it was concluded that seven of the nine target areas are prospective and show good thick 'sandstone' (Simpson and Townsend, 2000; Simpson, 2000).

PRODUCTION

A summary of South Australian opal production is shown in Appendix A. Since 1978, a formula has been used based on the number of miners and capital and operating costs of mining equipment counted in annual field surveys. The true value of production is impossible to determine but these figures are considered to be of the right order and show trends in levels of activity.

The production figures support the concern over the fall in opal production at Coober Pedy. Since 2000 the estimated value of Coober Pedy opal production has fallen from \$18.3 million to \$12 million, the number of Precious Stone Claims has fallen from 775 to 502 and the number of miners has fallen from 620 to 402.

GEOLOGY

The geology of the Coober Pedy Precious Stones Field has been described in detail by Robertson and Scott (1990). Opal is found in early Cretaceous marine Bulldog Shale which, when fresh, is a dark, silty and sandy, smectite-rich claystone with disseminated pyrite. Intense weathering has produced a well developed weathering profile comprising up to 50 m of white to mauve, bleached, leached, porous, kaolinitic claystone, locally referred to as 'sandstone' (Plate 1). This weathered claystone can be variably silicified to hard 'blue ground'.

Opal is found as veins in horizontal 'levels' or in steeply dipping 'verticals', infilling fractures and joints in the bleached claystone down to 25 m below the surface and, generally, from 5 m above to 1–2 m below the transition to fresher, denser, darker and damper claystone. Small faults or 'slides' also provide localised control over opal formation. Gypsum, alunite, iron oxides and tubules are commonly associated with the levels, verticals and slides.

The Bulldog Shale is commonly overlain by 4–8 m of Tertiary to Quaternary Russo Beds of variable composition, but usually comprising:

- A lower gypsum unit of red-brown, gypsiferous clay-silt with angular to rounded claystone and silcrete rock fragments and gypcrete.
- A middle conglomerate unit of predominantly rounded silcrete cobbles in red-brown, sandy silt-clay matrix. Hard massive silcrete may be present.
- An upper carbonate unit of red-brown, calcareous, sandy clay-silt with rounded silcrete pebbles and friable platy calcrete development.

THE DRILLING PROGRAM

Significant operational aspects of the Deed for the conduct of the program included:

- The drilling program is to be managed by the CPMAI.
- Drilling will be conducted in accordance with normal requirements under the *Opal Mining Act 1995*.
- A minimum of 700 drill holes will be drilled by the 30th June, 2006 within the Coober Pedy Precious Stones Field but located more than 500 m from established productive areas.
- Drill holes may be drilled at sites nominated by participating miners or by a PIRSA representative.
- PIRSA Geological Survey Branch and Coober Pedy Area Officers will monitor the program.
- All drill holes will be identified, their location recorded by PIRSA and drill hole samples, at a maximum of 2 m intervals, made available for inspection and logging by PIRSA.
- All results from individual drill holes will be publicly available soon after hole completion.

The combined Grants were used by CPMAI to purchase an Investigator MK-10A auger drilling rig (Plate 2) and for an ongoing, self-sustaining drilling program with the opportunity for participation by as many miners as possible.



Plate 1. Weathered Bulldog Shale ('sandstone') with tubules, showing a fault ('slide') displaced iron oxide rich 'level', Mars field. (Photo No. 407215).

After modifications to the purchased drill rig, to ensure occupational health safety and welfare compliance, the drilling program commenced on 19th May, 2005, with 714 drill holes completed by December, 2005.



Plate 2. Coober Pedy Miners Association MK 10A auger drilling rig. (Photo No. 404950)

RESULTS

In addition to this report information on drill holes is included on *PIRSA Minerals and Energy, Coober Pedy CD 2007, Version 5*. At the time of preparation of this report only selected drill holes, representative of the locality being tested, had been geologically logged (Plate 3).

Drill hole locations are summarised on Figure 1 and detailed on Figure 2. A complete list of drill holes is shown in Appendix B and summary logs of selected drill holes are shown in Appendixes C and D. Drill hole numbers designated AO were drilled by the CPMAI while those designated CO were drilled for participating opal miners.



Plate 3. Logging of drill cuttings from completed auger hole. (Photo No. 407216)

Up to December, 2005 the drilling program had successfully completed 714 drill holes (average depth 15.8 m) with 10 miners participating. Encouragingly 20% of drill holes intersected 'good sandstone', the favoured opal bearing horizon, while 12% of drill holes were observed to contain opal trace at the following areas:

East of Dead Horse Gully field

- 3 holes with colour opal — CO435, 458 and 459.
- 8 with potch — CO421–424, 442, 461–463.

West of Dead Horse Gully field

- 20 holes with colour opal — CO529–531, 534, 536, 537, 549, 574, 575, 577, 693–695, 698–701, 709, 713 and 720.
- 33 with potch — CO538, 540, 544, 546–548, 550, 551, 563–566, 569, 570, 578, 579, 697, 702, 703, 705–708, 710, 712, 714–719, 721 and 722.

Southeast of Dead Horse Gully field

- 1 hole with colour opal — CO588.

South of Dead Man's Gully field

- 1 hole with colour opal — CO630.
- 1 with potch — CO631.

East of Helenic Hill field

- 1 hole with colour opal — CO650.

Near Frank's Folly field

- 3 holes with potch — CO674, 676 and 677.

South of Brown's Folly field

- 1 hole with colour opal (shell) — CO590.
- 3 with potch (shell) — CO591, 598 and 599.

Near Tee Valley

- 1 hole with potch — CO486.

Reynold's Ridge

- 3 holes with colour opal — CO494, 495 and 497.
- 2 with potch — CO496, 498.

Near Benitos Folly

- 3 holes with potch — CO508–510.

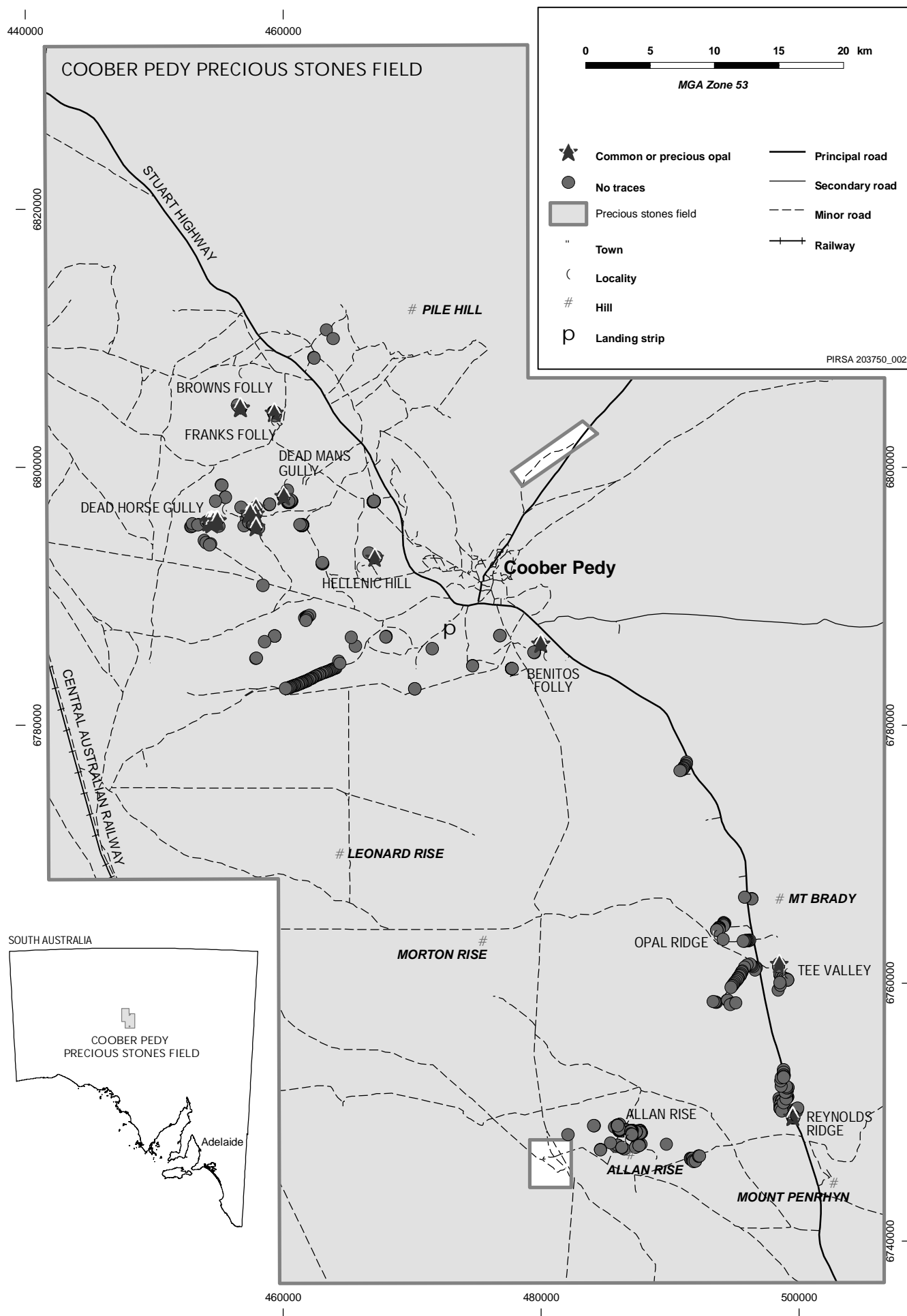


Figure 1. Coober Pedy Precious Stones Field and drill hole locations.

CONCLUSIONS

The drilling program has shown that opal can be found in previously unexplored areas, as demonstrated by the discovery of the newly opened Opal Ridge field that resulted from the CPMAI auger drilling in the area.

The program has also led to an increase in opal exploration and mining near Dead Horse Gully and Frank's Folly fields as well as a general increase in opal exploration away from the traditional mining areas.

The data gathered from the logging of drill hole samples will significantly add to the geological knowledge of the factors affecting opal formation and occurrence.

The initial drilling program has been successfully completed and the drill rig is now being used for on-going exploration by the CPMAI and the chances of discovering additional opalfields at Coober Pedy is considered to be high.

APPENDIXES

1. Summary of South Australian Opal Production, 1978 to 2007

Year	Field	Number of Miners.	Registered Precious Stones Claims	Capital Investment (\$ Million)	Annual Production (\$ Million) (per field)	Annual Production (\$ Million) (combined all fields)
1978	Coober Pedy	1 000	897	17.83	32.00	
	Andamooka	50	254	3.17	2.50	
	Stuart Creek	20	14	0.08	0.75	
	Mintabie	150	52	7.83	6.50	41.75
1979	Coober Pedy	1 000	1 006	18.46	32.67	
	Andamooka	125	279	3.71	4.52	
	Stuart Creek	—	12	—	—	
	Mintabie	150	164	6.11	6.10	43.29
1980	Coober Pedy	1 000	886	19.31	30.93	
	Andamooka	125	231	3.60	4.12	
	Stuart Creek	—	—	—	—	
	Mintabie	150	140	6.10	5.57	40.62
1981	Coober Pedy	900	667	18.05	27.97	
	Andamooka	100	214	2.62	3.25	
	Stuart Creek	—	—	—	—	
	Mintabie	75	120	3.57	2.99	34.21
1982	Coober Pedy	625	621	14.53	20.18	
	Andamooka	60	200	3.14	2.46	
	Stuart Creek	—	—	—	—	
	Mintabie	110	128	4.43	6.12	28.76
1983	Coober Pedy	650	669	16.24	21.24	
	Andamooka	60	206	3.82	2.66	
	Stuart Creek	—	—	—	—	
	Mintabie	135	135	4.61	7.25	31.15
1984	Coober Pedy	475	547	16.15	16.38	
	Andamooka	105	195	4.59	3.96	
	Stuart Creek	—	—	0.18	0.08	
	Mintabie	163	172	7.21	9.17	29.59
1985	Coober Pedy	455	536	13.71	15.07	
	Andamooka	65	152	3.60	2.80	
	Mintabie	295	294	9.35	15.56	33.43
1986	Coober Pedy	455	576	14.12	15.97	
	Andamooka	75	170	4.53	2.97	
	Mintabie	370	484	13.03	19.87	38.81
1987	Coober Pedy	535	744	15.72	18.34	
	Andamooka	83	236	4.72	3.46	
	Mintabie	520	906	19.57	28.22	50.02
1988	Coober Pedy	625	1 032	18.0	21.3	
	Andamooka	8	266	3.6	3.2	
	Mintabie	775	1 063	18.6	39.0	63.5
1989	Coober Pedy	600	936	16.0	19.9	
	Andamooka	100	277	5.9	4.2	
	Mintabie	600	916	18.7	31.5	55.6
1990	Coober Pedy	680	851	12.3	20.7	
	Andamooka	96	240	5.2	3.8	
	Mintabie	454	568	11.6	22.6	47.1
1991	Coober Pedy	564	706	8.0	16.1	
	Andamooka	76	191	4.7	3.2	
	Mintabie	403	482	11.1	19.8	39.3
1992	Coober Pedy	554	680	11.7	16.8	
	Andamooka	85	214	3.9	3.2	
	Mintabie	376	471	10.0	18.7	38.8

Year	Field	Number of Miners.	Registered Precious Stones Claims	Capital Investment (\$ Million)	Annual Production (\$ Million) (per field)	Annual Production (\$ Million) (combined all fields)
1993	Coober Pedy	543	679	11.0	16.7	38.8
	Andamooka	99	247	4.0	3.9	
	Mintabie	370	477	11.9	18.2	
1994	Coober Pedy	650	812	11.0	19.5	39.7
	Andamooka	112	280	5.2	4.3	
	Mintabie	330	404	10.2	15.9	
1995	Coober Pedy	654	818	10.3	18.9	38.3
	Andamooka	110	276	6.7	4.6	
	Mintabie	293	370	9.3	14.8	
1996	Coober Pedy	663	829	11.8	20.0	40.0
	Andamooka	132	330	6.2	5.0	
	Mintabie	286	362	11.4	15.0	
1997	Coober Pedy	627	784	9.1	18.1	40.6
	Andamooka	116	292	2.8	3.6	
	Mintabie/Lam	374	470	11.3	18.9	
1998	Coober Pedy	582	728	6.4	16.1	38.6
	Andamooka	114	286	2.6	3.5	
	Mintabie/Lam	410	538	13.1	19.0	
1999	Coober Pedy	544	680	8.2	15.7	37.6
	Andamooka	117	294	5.3	4.4	
	Mintabie	196	246	5.2	10.0	
	Lambina	243	325	4.7	7.5	
2000	Coober Pedy	620	775	10.2	18.3	38.8
	Andamooka	113	282	5.8	4.5	
	Mintabie	150	188	4.1	7.75	
	Lambina	228	304	8.9	8.25	
2001	Coober Pedy	546	683	6.76	15.3	35.6
	Andamooka	107	268	4.17	3.84	
	Mintabie	127	159	2.61	6.28	
	Lambina	248	309	13.70	10.21	
2002	Coober Pedy	645	806	9.38	18.78	36.07
	Andamooka	114	284	6.18	4.59	
	Mintabie	118	148	0.85	5.38	
	Lambina	221	277	6.28	7.33	
2003	Coober Pedy	630	783	9.46	18.26	34.78
	Andamooka	112	280	6.60	4.69	
	Mintabie	107	134	3.43	5.63	
	Lambina	193	242	6.28	6.20	
2004	Coober Pedy	458	573	8.93	13.90	28.50
	Andamooka	104	260	6.25	4.40	
	Mintabie	109	136	3.20	5.65	
	Lambina	130	163	4.42	4.55	
2005	Coober Pedy	524	655	11.68	16.40	27.70
	Andamooka	89	222	5.57	3.80	
	Mintabie	86	107	5.40	4.50	
	Lambina	79	99	3.45	3.00	
2006	Coober Pedy	487	559	9.65	13.71	21.97
	Andamooka	66	169	5.80	3.30	
	Mintabie	61	76	2.49	3.40	
	Lambina	39	48	2.08	1.56	
2007	Coober Pedy	402	502.5	7.91	12.0	19.07
	Andamooka	71.2	153	5.91	3.24	
	Mintabie	51.6	64.5	1.55	2.69	
	Lambina	23.6	29.5	1.93	1.14	

2. Drill hole data

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
19/05/2005	AO 1	53J	464100.000	6784410.725	201.756	SW of S.Cross TBM	Yes	Yes		27
19/05/2005	AO 2	53J	463993.411	6784369.879	200.593	SW of S.Cross	Yes	Yes		26
20/05/2005	AO 3	53J	463894.039	6784329.096	199.141	SW of S.Cross	Yes	Yes		23
20/05/2005	AO 4	53J	463795.788	6784290.545	199.139	SW of S.Cross	Yes	Yes		26
20/05/2005	AO 5	53J	463699.189	6784247.261	199.409	SW of S.Cross	Yes	Yes		27
21/05/2005	AO 6	53J	463615.718	6784211.800	199.349	SW of S.Cross	Yes	Yes		25
21/05/2005	AO 7	53J	463516.385	6784171.107	199.595	SW of S.Cross	Yes	Yes		26
21/05/2005	AO 8	53J	463431.353	6784136.003	200.191	SW of S.Cross	Yes	Yes		25
21/05/2005	AO 9	53J	463332.809	6784093.056	200.439	SW of S.Cross	Yes	Yes		26
21/05/2005	AO 10	53J	463243.146	6784062.820	200.725	SW of S.Cross	Yes	Yes		25
23/05/2005	AO 11	53J	463107.625	6784014.989	200.895	SW of S.Cross	Yes	Yes		26
23/05/2005	AO 12	53J	463010.353	6783982.917	200.843	SW of S.Cross	Yes	Yes		26
23/05/2005	AO 13	53J	462875.264	6783936.387	201.996	SW of S.Cross	Yes	Yes		24
24/05/2005	AO 14	53J	462800.398	6783897.774	201.147	SW of S.Cross	Yes	Yes		26
24/05/2005	AO 15	53J	462703.294	6783855.377	201.417	SW of S.Cross	Yes	Yes		26
24/05/2005	AO 16	53J	462583.556	6783800.959	201.755	SW of S.Cross	Yes	Yes		25
24/05/2005	AO 17	53J	462490.767	6783762.471	202.954	SW of S.Cross	Yes	Yes		25
04/07/2005	AO 18	53J	462375.880	6783701.695	203.262	SW of S.Cross	Yes	Yes		27
04/07/2005	AO 19	53J	462277.803	6783639.708	202.181	SW of S.Cross	Yes	Yes		27
05/07/2005	AO 20	53J	462197.350	6783593.820	201.242	SW of S.Cross	Yes	Yes		27
05/07/2005	AO 21	53J	462094.314	6783543.301	199.630	SW of S.Cross	Yes	Yes		27
05/07/2005	AO 22	53J	462019.726	6783508.611	199.253	SW of S.Cross	Yes	Yes		27
05/07/2005	AO 23	53J	461920.467	6783463.365	198.765	SW of S.Cross	Yes	Yes		27
05/07/2005	AO 24	53J	461823.422	6783420.550	197.679	SW of S.Cross	Yes	Yes		27
06/07/2005	AO 25	53J	461742.012	6783384.079	197.483	SW of S.Cross	Yes	Yes		23
06/07/2005	AO 26	53J	461658.522	6783348.365	197.530	SW of S.Cross	Yes	Yes		21
06/07/2005	AO 27	53J	461569.823	6783315.572	197.003	SW of S.Cross TBM	Yes	Yes		21
06/07/2005	AO 28	53J	461479.731	6783278.681	196.251	SW of S.Cross	Yes	Yes		22
06/07/2005	AO 29	53J	461409.739	6783246.583	196.070	SW of S.Cross	Yes	Yes		22
14/07/2005	AO 30	53J	461329.165	6783213.723	196.500	SW of S.Cross	Yes	Yes		17
14/07/2005	AO 31	53J	461225.721	6783172.693	197.147	SW of S.Cross	Yes	Yes		21
15/07/2005	AO 32	53J	461135.302	6783136.194	197.013	SW of S.Cross	Yes	Yes		25
15/07/2005	AO 33	53J	461044.240	6783094.230	197.004	SW of S.Cross	Yes	Yes		26
15/07/2005	AO 34	53J	460957.378	6783067.816	197.251	SW of S.Cross	Yes	Yes		25
15/07/2005	AO 35	53J	460861.959	6783038.075	197.149	SW of S.Cross	Yes			25

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
16/07/2005	AO 36	53J	460767.101	6783000.721	197.063	SW of S.Cross	Yes	Yes		27
16/07/2005	AO 37	53J	460687.974	6782968.231	196.914	SW of S.Cross	Yes			26
16/07/2005	AO 38	53J	460618.946	6782943.862	196.701	SW of S.Cross	Yes	Yes		25
16/07/2005	AO 39	53J	460515.143	6782903.102	196.352	SW of S.Cross	Yes			26
16/07/2005	AO 40	53J	460416.107	6782871.725	195.804	SW of S.Cross	Yes	Yes		16
16/07/2005	AO 41	53J	460306.007	6782854.892	195.450	SW of S.Cross	Yes	Yes		25
16/07/2005	AO 42	53J	460199.638	6782836.921	195.398	SW of S.Cross	Yes	Yes		19
19/07/2005	CO 43	53J	477722.418	6784376.549	204.048	Emu	Yes	Yes		20
19/07/2005	CO 44	53J	477726.121	6784375.613	204.044	Emu	Yes			15
19/07/2005	CO 45	53J	477729.540	6784375.605	204.009	Emu	Yes			17
19/07/2005	CO 46	53J	477731.253	6784380.197	203.997	Emu	Yes			14
19/07/2005	CO 47	53J	477734.606	6784379.997	204.006	Emu	Yes			13
19/07/2005	CO 48	53J	477738.172	6784378.829	203.967	Emu	Yes			14
19/07/2005	CO 49	53J	477743.181	6784381.050	203.835	Emu	Yes	Yes		13
19/07/2005	CO 50	53J	477753.834	6784372.924	203.728	Emu	Yes			12
19/07/2005	CO 51	53J	476809.762	6786938.992	221.427	S of Black Flag	Yes	Yes		19
19/07/2005	CO 52	53J	476808.919	6786933.966	211.368	S of Black Flag	Yes			15
19/07/2005	CO 53	53J	468029.418	6786864.541	205.721	SE of South Pacific	Yes	Yes		12
19/07/2005	CO 54	53J	468007.119	6786849.725	205.984	SE of South Pacific	Yes			15
19/07/2005	CO 55	53J	467997.675	6786848.521	205.485	SE of South Pacific	Yes	Yes		12
20/07/2005	CO 56	53J	498559.000	6760654.000		Tee Valley		Yes		15
20/07/2005	CO 57	53J	498558.000	6760653.000		Tee Valley				9
20/07/2005	CO 58	53J	498559.000	6760652.000		Tee Valley				9
20/07/2005	CO 59	53J	498667.000	6760508.000		Tee Valley		Yes		9
20/07/2005	CO 60	53J	498792.266	6760371.377	188.230	Tee Valley	Yes			10
20/07/2005	CO 61	53J	498803.787	6760376.675	188.261	Tee Valley	Yes	Yes		14
20/07/2005	CO 62	53J	498804.206	6760383.451	188.320	Tee Valley	Yes			9
20/07/2005	CO 63	53J	498782.522	6760370.523	188.186	Tee Valley	Yes			10
20/07/2005	CO 64	53J	498770.695	6760368.763	188.157	Tee Valley	Yes			10
20/07/2005	CO 65	53J	498752.372	6760364.824	188.185	Tee Valley	Yes			10
20/07/2005	CO 66	53J	498761.467	6760350.714	187.918	Tee Valley	Yes			9
20/07/2005	CO 67	53J	498780.570	6760351.522	199.935	Tee Valley	Yes			9
20/07/2005	CO 68	53J	498777.266	6760391.397	188.456	Tee Valley	Yes			9
20/07/2005	CO 69	53J	498885.631	6760304.268	188.178	Tee Valley	Yes	Yes		10
20/07/2005	CO 70	53J	499054.578	6760296.492	185.463	Tee Valley	Yes	Yes		14
20/07/2005	CO 71	53J	499163.401	6760242.221	183.507	Tee Valley	Yes			14
20/07/2005	CO 72	53J	499164.928	6760237.309	183.587	Tee Valley	Yes			14

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
20/07/2005	CO 73	53J	499168.897	6760228.215	183.626	Tee Valley	Yes	Yes		10
21/07/2005	CO 77	53J	486049.447	6747314.909	174.693	Allan Rise	Yes	Yes		15
21/07/2005	CO 78	53J	486032.045	6747333.545	174.443	Allan Rise	Yes			9
21/07/2005	CO 79	53J	485997.937	6747366.021	173.771	Allan Rise	Yes	Yes		9
21/07/2005	CO 80	53J	485977.589	6747382.676	173.363	Allan Rise	Yes	Yes		9
21/07/2005	CO 81	53J	485937.000	6747358.000		Allan Rise				6
21/07/2005	CO 82	53J	485824.785	6747322.624	172.495	Allan Rise	Yes	Yes		5
21/07/2005	CO 83	53J	485939.969	6747405.028	172.964	Allan Rise	Yes	Yes		9
21/07/2005	CO 84	53J	485907.728	6747419.298	172.739	Allan Rise	Yes	Yes		9
22/07/2005	CO 85	53J	485726.000	6748831.000		Allan Rise				8
22/07/2005	CO 86	53J	486131.000	6748988.000		Allan Rise				11
22/07/2005	CO 87	53J	486122.000	6748985.000		Allan Rise				15
22/07/2005	CO 88	53J	486109.000	6748985.000		Allan Rise				13
22/07/2005	CO 89	53J	486125.000	6749010.000		Allan Rise				13
22/07/2005	CO 90	53J	486118.000	6749002.000		Allan Rise				15
22/07/2005	CO 91	53J	486115.000	6749014.000		Allan Rise				16
25/07/2005	CO 92	53J	498662.866	6751013.982	201.844	Reynolds Ridge	Yes	Yes		8
25/07/2005	CO 93	53J	498594.815	6751017.931	201.662	Reynolds Ridge	Yes	Yes		8
25/07/2005	CO 94	53J	498481.816	6751019.861	200.881	Reynolds Ridge	Yes	Yes		10
25/07/2005	CO 95	53J	498532.142	6750834.943	202.231	Reynolds Ridge	Yes	Yes		20
25/07/2005	CO 96	53J	498655.525	6750828.449	203.478	Reynolds Ridge	Yes			14
26/07/2005	CO 97	53J	498717.585	6750848.091	203.879	Reynolds Ridge	Yes	Yes		8
26/07/2005	CO 98	53J	498560.000	6750501.000		Reynolds Ridge				8
26/07/2005	CO 99	53J	498542.000	6750279.000		Reynolds Ridge				20
26/07/2005	CO 100	53J	498554.000	6750263.000		Reynolds Ridge				20
26/07/2005	CO 101	53J	498583.000	6750226.000		Reynolds Ridge				14
26/07/2005	CO 102	53J	498682.000	6750090.000		Reynolds Ridge				14
26/07/2005	CO 103	53J	499088.688	6751113.333	201.179	Reynolds Ridge	Yes			14
27/07/2005	CO 104	53J	498811.000	6750679.000		Reynolds Ridge	N/A	Yes		13
27/07/2005	CO 105	53J	499041.000	6751111.000		Reynolds Ridge				14
27/07/2005	CO 106	53J	499062.823	6751180.657	200.238	Reynolds Ridge	Yes	Yes		14
27/07/2005	CO 107	53J	499068.573	6751159.541	200.238	Reynolds Ridge	Yes			14
27/07/2005	CO 108	53J	499078.487	6751139.929	201.179	Reynolds Ridge	Yes			14
27/07/2005	CO 109	53J	499107.154	6751070.472	202.625	Reynolds Ridge	Yes	Yes		14
27/07/2005	CO 110	53J	499142.078	6751158.381	198.692	Reynolds Ridge	Yes			10
27/07/2005	CO 111	53J	499143.476	6751144.907	198.990	Reynolds Ridge	Yes			10
27/07/2005	CO 112	53J	499065.613	6751116.329	201.395	Reynolds Ridge	Yes			14

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
27/07/2005	CO 113	53J	499060.748	6751088.920	201.918	Reynolds Ridge	Yes			14
27/07/2005	CO 114	53J	499077.486	6751084.933	202.299	Reynolds Ridge	Yes			14
27/07/2005	CO 115	53J	499043.704	6751143.210	200.688	Reynolds Ridge	Yes			14
27/07/2005	CO 116	53J	499022.825	6751041.721	201.321	Reynolds Ridge	Yes			14
27/07/2005	CO 117	53J	499023.047	6751007.768	201.891	Reynolds Ridge	Yes	Yes		14
27/07/2005	CO 118	53J	499136.227	6751638.850	200.143	N of Reynolds Ridge	Yes			10
27/07/2005	CO 119	53J	499062.302	6751645.331	201.765	N of Reynolds Ridge	Yes			14
27/07/2005	CO 120	53J	499028.557	6751672.736	202.807	N of Reynolds Ridge	Yes			14
27/07/2005	CO 121	53J	499000.839	6751638.584	202.263	N of Reynolds Ridge	Yes	Yes		14
27/07/2005	CO 122	53J	498956.767	6751679.005	203.243	N of Reynolds Ridge	Yes			20
27/07/2005	CO 123	53J	499082.568	6751721.456	201.986	N of Reynolds Ridge	Yes	Yes		14
27/07/2005	CO 124	53J	499081.406	6751642.290	201.495	N of Reynolds Ridge	Yes			14
27/07/2005	CO 125	53J	499050.000	6751492.000		N of Reynolds Ridge				14
27/07/2005	CO 126	53J	498963.818	6751506.499	200.027	N of Reynolds Ridge	Yes	Yes		14
29/07/2005	CO 127	53J	499144.391	6751825.786	204.808	N of Reynolds Ridge	Yes	Yes		20
29/07/2005	CO 128	53J	499177.901	6751871.820	207.329	N of Reynolds Ridge	Yes	Yes		12
29/07/2005	CO 129	53J	499061.055	6751854.029	205.438	N of Reynolds Ridge	Yes			14
29/07/2005	CO 130	53J	499009.514	6751961.442	207.660	N of Reynolds Ridge	Yes	Yes		20
29/07/2005	CO 131	53J	498648.000	6752025.000		N of Reynolds Ridge				10
29/07/2005	CO 132	53J	498628.000	6752415.000		N of Reynolds Ridge				10
29/07/2005	CO 133	53J	498642.000	6752639.000		N of Reynolds Ridge				10
29/07/2005	CO 134	53J	498835.000	6753252.000		N of Reynolds Ridge				10
29/07/2005	CO 135	53J	498824.446	6753046.663	207.660	N of Reynolds Ridge	Yes	Yes		11
30/07/2005	CO 136	53J	498862.672	6752835.735	209.992	N of Reynolds Ridge	Yes			13
30/07/2005	CO 137	53J	498868.933	6752833.840	210.059	N of Reynolds Ridge	Yes	Yes		20
30/07/2005	CO 138	53J	498816.421	6752845.353	209.354	N of Reynolds Ridge	Yes	Yes		20
30/07/2005	CO 139	53J	498816.695	6752752.900	209.725	N of Reynolds Ridge	Yes	Yes		20
30/07/2005	CO 140	53J	498831.761	6752678.205	209.581	N of Reynolds Ridge	Yes	Yes		20
01/08/2005	AO 141	53J	496717.317	6761177.562	213.262	W of Tee Valley	Yes	Yes		15
01/08/2005	AO 142	53J	496679.914	6761105.840	213.479	W of Tee Valley	Yes	Yes		20
01/08/2005	AO 143	53J	496614.269	6761006.988	213.413	W of Tee Valley	Yes	Yes		20
01/08/2005	AO 144	53J	496444.921	6761257.660	212.079	W of Tee Valley	Yes	Yes		20
01/08/2005	AO 145	53J	496362.785	6761332.486	212.165	W of Tee Valley	Yes	Yes		20
01/08/2005	AO 146	53J	496291.486	6761387.108	211.854	W of Tee Valley	Yes	Yes		20
01/08/2005	AO 147	53J	496203.330	6761462.469	211.526	W of Tee Valley	Yes	Yes		20
02/08/2005	AO 148	53J	496007.733	6761402.047	210.775	W of Tee Valley	Yes	Yes		20
02/08/2005	AO 149	53J	495822.531	6761231.851	210.484	W of Tee Valley	Yes	Yes		20

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
02/08/2005	AO 150	53J	495649.754	6760919.802	210.757	W of Tee Valley	Yes	Yes		20
02/08/2005	AO 151	53J	495577.150	6760843.568	210.137	W of Tee Valley	Yes	Yes		20
02/08/2005	AO 152	53J	495511.767	6760699.564	210.037	W of Tee Valley	Yes	Yes		20
02/08/2005	AO 153	53J	495459.844	6760597.960	209.770	W of Tee Valley	Yes	Yes		12
02/08/2005	AO 154	53J	495387.375	6760529.984	209.918	W of Tee Valley	Yes	Yes		20
03/08/2005	AO 155	53J	495315.395	6760388.684	209.788	W of Tee Valley	Yes	Yes		20
03/08/2005	AO 156	53J	495270.104	6760328.680	209.759	W of Tee Valley	Yes	Yes		11
03/08/2005	AO 157	53J	495204.306	6760235.582	209.643	W of Tee Valley	Yes	Yes		20
03/08/2005	AO 158	53J	495125.134	6760136.443	209.227	W of Tee Valley	Yes	Yes		20
03/08/2005	AO 159	53J	495036.922	6760016.893	208.865	W of Tee Valley	Yes	Yes		24
03/08/2005	AO 160	53J	494955.570	6759919.187	208.991	W of Tee Valley	Yes	Yes		20
04/08/2005	AO 161	53J	494878.429	6759836.427	209.368	W of Tee Valley	Yes	Yes		20
04/08/2005	AO 162	53J	494821.241	6759765.558	209.666	W of Tee Valley	Yes	Yes		20
04/08/2005	AO 163	53J	494774.196	6759645.659	209.776	W of Tee Valley	Yes	Yes		17
04/08/2005	AO 164	53J	496165.502	6763309.195	211.281	W of Tee Valley	Yes	Yes		20
04/08/2005	AO 165	53J	496073.561	6763289.816	211.068	W of Tee Valley	Yes	Yes		20
04/08/2005	AO 166	53J	496008.122	6763281.654	210.619	W of Tee Valley	Yes	Yes		20
05/08/2005	AO 167	53J	495937.972	6763273.110	210.490	W of Tee Valley	Yes	Yes		13
05/08/2005	AO 168	53J	495859.755	6763268.784	210.428	W of Tee Valley	Yes	Yes		20
05/08/2005	AO 169	53J	495805.364	6763263.576	210.163	W of Tee Valley	Yes	Yes		19
05/08/2005	AO 170	53J	495718.531	6763255.247	209.885	W of Tee Valley	Yes	Yes		20
09/08/2005	CO 171	53J	499690.000	6749974.000		Reynolds Ridge		Yes		21
09/08/2005	CO 172	53J	499757.516	6750083.665	212.929	Reynolds Ridge	Yes			6
09/08/2005	CO 173	53J	499765.687	6750097.225	213.025	Reynolds Ridge	Yes			7
09/08/2005	CO 174	53J	499771.262	6750121.113	213.261	Reynolds Ridge	Yes			19
09/08/2005	CO 175	53J	499763.237	6750117.041	213.230	Reynolds Ridge	Yes	Yes		20
09/08/2005	CO 176	53J	499758.147	6750111.864	213.162	Reynolds Ridge	Yes			20
09/08/2005	CO 177	53J	499745.963	6750109.324	213.124	Reynolds Ridge	Yes			20
09/08/2005	CO 178	53J	499756.460	6750133.858	213.283	Reynolds Ridge	Yes			20
09/08/2005	CO 179	53J	499748.322	6750154.318	213.225	Reynolds Ridge	Yes			13
10/08/2005	CO 180	53J	499672.581	6750081.629	212.390	Reynolds Ridge	Yes			20
10/08/2005	CO 181	53J	499643.638	6750131.533	212.223	Reynolds Ridge	Yes	Yes		21
10/08/2005	CO 182	53J	499709.282	6750095.426	212.820	Reynolds Ridge	Yes			6
10/08/2005	CO 183	53J	499812.622	6750141.783	211.888	Reynolds Ridge	Yes			21
10/08/2005	CO 184	53J	499830.755	6750146.662	210.362	Reynolds Ridge	Yes			14
10/08/2005	CO 185	53J	499859.092	6750152.786	207.371	Reynolds Ridge	Yes	Yes		12
10/08/2005	CO 186	53J	499850.282	6750100.677	209.191	Reynolds Ridge	Yes			21

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
10/08/2005	CO 187	53J	499903.877	6750296.033	208.344	Reynolds Ridge	Yes	Yes		18
10/08/2005	CO 188	53J	498403.000	6759460.000		S of Tee Valley				8
10/08/2005	CO 189	53J	498599.000	6759817.000		S of Tee Valley				12
10/08/2005	CO 190	53J	498566.000	6760034.000		S of Tee Valley				17
11/08/2005	CO 191	53J	485432.000	6747580.000		Allan Rise				12
11/08/2005	CO 192	53J	484648.000	6747058.000		Allan Rise				13
11/08/2005	CO 193	53J	484639.000	6747064.000		Allan Rise				15
11/08/2005	CO 194	53J	484641.000	6747025.000		Allan Rise				15
11/08/2005	CO 195	53J	486298.000	6747224.000		Allan Rise				15
11/08/2005	CO 196	53J	486465.000	6747103.000		Allan Rise				12
11/08/2005	CO 197	53J	486310.000	6747212.000		Allan Rise				9
11/08/2005	CO 198	53J	486307.000	6747217.000		Allan Rise				9
11/08/2005	CO 199	53J	486300.000	6747221.000		Allan Rise				9
11/08/2005	CO 200	53J	487599.023	6747475.185	190.088	Allan Rise	Yes	Yes		17
11/08/2005	CO 201	53J	487604.000	6747474.000		Allan Rise				15
11/08/2005	CO 202	53J	487604.000	6747475.000		Allan Rise				15
12/08/2005	CO 203	53J	487621.746	6747469.989	190.340	Allan Rise	Yes	Yes		13
12/08/2005	CO 204	53J	487613.935	6747529.249	189.317	Allan Rise	Yes	Yes		15
12/08/2005	CO 205	53J	487606.589	6747566.537	188.917	Allan Rise	Yes	Yes		13
12/08/2005	CO 206	53J	487583.637	6747493.189	189.825	Allan Rise	Yes	Yes		19
12/08/2005	CO 207	53J	487786.000	6747479.000		Allan Rise				17
12/08/2005	CO 208	53J	487587.000	6747478.000		Allan Rise				18
12/08/2005	CO 209	53J	487584.000	6747475.000		Allan Rise				18
12/08/2005	CO 210	53J	487592.000	6747478.000		Allan Rise				14
12/08/2005	CO 211	53J	487578.000	6747407.000		Allan Rise				14
12/08/2005	CO 212	53J	487572.248	6747411.176	190.578	Allan Rise	Yes	Yes		13
15/08/2005	CO 213	53J	487570.017	6747407.194	190.585	Allan Rise	Yes	Yes		20
15/08/2005	CO 214	53J	487575.000	6747414.000		Allan Rise				12
15/08/2005	CO 215	53J	487576.000	6747418.000		Allan Rise				12
15/08/2005	CO 216	53J	487565.000	6747376.000		Allan Rise				13
15/08/2005	CO 217	53J	487564.188	6747375.533	190.724	Allan Rise	Yes	Yes		14
15/08/2005	CO 218	53J	487558.809	6747356.635	190.965	Allan Rise	Yes	Yes		12
15/08/2005	CO 219	53J	487457.000	6747356.000		Allan Rise				12
15/08/2005	CO 220	53J	487450.120	6747342.580	190.171	Allan Rise	Yes	Yes		12
15/08/2005	CO 221	53J	487364.956	6747293.623	190.556	Allan Rise	Yes	Yes		13
15/08/2005	CO 222	53J	487337.496	6747238.131	191.737	Allan Rise	Yes	Yes		13
15/08/2005	CO 223	53J	487614.000	6747363.000		Allan Rise				12

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
15/08/2005	CO 224	53J	487614.886	6747360.807	191.076	Allan Rise	Yes	Yes		14
16/08/2005	CO 225	53J	486073.000	6748558.000		Allan Rise				11
16/08/2005	CO 226	53J	486073.000	6748564.000		Allan Rise				11
16/08/2005	CO 227	53J	486072.000	6748563.000		Allan Rise				11
16/08/2005	CO 228	53J	486072.000	6748567.000		Allan Rise				13
16/08/2005	CO 229	53J	486129.000	6748550.000		Allan Rise				11
16/08/2005	CO 230	53J	486132.000	6748551.000		Allan Rise				12
16/08/2005	CO 231	53J	486136.000	6748557.000		Allan Rise				12
16/08/2005	CO 232	53J	486347.000	6748522.000		Allan Rise				12
16/08/2005	CO 233	53J	486559.540	6748626.606	180.427	Allan Rise	Yes	Yes		11
16/08/2005	CO 234	53J	486593.214	6748547.556	179.662	Allan Rise	Yes	Yes		12
16/08/2005	CO 235	53J	486834.000	6748446.000		Allan Rise				11
16/08/2005	CO 236	53J	486832.000	6748446.000		Allan Rise				11
16/08/2005	CO 237	53J	486825.768	6748457.324	180.089	Allan Rise	Yes	Yes		11
16/08/2005	CO 238	53J	486815.006	6748474.662	179.956	Allan Rise	Yes	Yes		12
17/08/2005	CO 239	53J	486103.000	6748571.000		Allan Rise				12
17/08/2005	CO 240	53J	486101.000	6748575.000		Allan Rise				12
17/08/2005	CO 241	53J	486099.000	6748578.000		Allan Rise				12
17/08/2005	CO 242	53J	486076.000	6748608.000		Allan Rise				14
17/08/2005	CO 243	53J	486067.000	6748618.000		Allan Rise				13
17/08/2005	CO 244	53J	486113.000	6748599.000		Allan Rise				13
17/08/2005	CO 245	53J	486114.000	6748622.000		Allan Rise				12
17/08/2005	CO 246	53J	486121.000	6748666.000		Allan Rise				14
18/08/2005	CO 247	53J	487350.510	6748444.000	179.369	Allan Rise	Yes			11
18/08/2005	CO 248	53J	487359.000	6748444.000	179.369	Allan Rise	Yes	Yes		12
18/08/2005	CO 249	53J	487366.064	6748441.000	179.173	Allan Rise	Yes			10
18/08/2005	CO 250	53J	487377.731	6748430.000	179.050	Allan Rise	Yes			11
18/08/2005	CO 251	53J	487386.697	6748429.000	179.111	Allan Rise	Yes	Yes		10
18/08/2005	CO 252	53J	487395.737	6748423.000	179.062	Allan Rise	Yes			9
18/08/2005	CO 253	53J	487410.161	6748419.937	179.013	Allan Rise	Yes			9
18/08/2005	CO 254	53J	487416.000	6748418.000	179.013	Allan Rise	Yes			10
18/08/2005	CO 255	53J	487410.290	6748407.392	179.178	Allan Rise	Yes			10
18/08/2005	CO 256	53J	487381.043	6748419.727	179.170	Allan Rise	Yes			9
18/08/2005	CO 257	53J	487364.157	6748427.751	179.201	Allan Rise	Yes			11
18/08/2005	CO 258	53J	487358.177	6748429.551	179.344	Allan Rise	Yes			10
18/08/2005	CO 259	53J	487361.390	6748452.400	179.200	Allan Rise	Yes			12
18/08/2005	CO 260	53J	487373.111	6748445.948	178.963	Allan Rise	Yes			9

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
18/08/2005	CO 261	53J	487383.682	6748434.343	178.991	Allan Rise	Yes			9
18/08/2005	CO 262	53J	487395.086	6748430.689	178.947	Allan Rise	Yes			9
18/08/2005	CO 263	53J	487406.406	6748427.229	178.947	Allan Rise	Yes			9
18/08/2005	CO 264	53J	487387.000	6748469.000	178.809	Allan Rise	Yes			10
18/08/2005	CO 265	53J	487391.000	6748471.000	178.809	Allan Rise	Yes			9
18/08/2005	CO 266	53J	487390.000	6748466.000	178.809	Allan Rise	Yes			9
19/08/2005	CO 267	53J	487402.690	6748467.742	178.773	Allan Rise	Yes	Yes		10
19/08/2005	CO 268	53J	487403.000	6748469.000	178.773	Allan Rise	Yes			10
19/08/2005	CO 269	53J	487412.840	6748475.331	178.763	Allan Rise	Yes			9
19/08/2005	CO 270	53J	487440.029	6748477.220	178.541	Allan Rise	Yes	Yes		9
19/08/2005	CO 271	53J	487463.705	6748477.566	178.499	Allan Rise	Yes	Yes		8
19/08/2005	CO 272	53J	487480.350	6748484.685	178.390	Allan Rise	Yes	Yes		7
19/08/2005	CO 273	53J	487505.241	6748493.977	178.350	Allan Rise	Yes	Yes		7
19/08/2005	CO 274	53J	487543.045	6748524.643	178.350	Allan Rise	Yes	Yes		9
19/08/2005	CO 275	53J	484118.000	6748940.000		Allan Rise				11
19/08/2005	CO 276	53J	484086.000	6748927.000		Allan Rise				4
19/08/2005	CO 277	53J	485936.000	6748949.000		Allan Rise				10
19/08/2005	CO 278	53J	485936.000	6748950.000		Allan Rise				9
19/08/2005	CO 279	53J	485950.000	6748965.000		Allan Rise				10
19/08/2005	CO 280	53J	485964.000	6748939.000		Allan Rise				10
19/08/2005	CO 281	53J	489753.000	6747469.000		Allan Rise				15
22/08/2005	CO 282	53J	487714.724	6748451.659	179.783	Allan Rise	Yes	Yes		11
22/08/2005	CO 283	53J	487714.958	6748491.419	179.325	Allan Rise	Yes			13
22/08/2005	CO 284	53J	487725.140	6748495.505	179.193	Allan Rise	Yes	Yes		11
22/08/2005	CO 285	53J	487725.884	6748519.918	179.047	Allan Rise	Yes			10
22/08/2005	CO 286	53J	487727.423	6748524.900	178.889	Allan Rise	Yes			10
22/08/2005	CO 287	53J	487730.726	6748556.408	178.749	Allan Rise	Yes	Yes		9
22/08/2005	CO 288	53J	487748.570	6748490.271	179.513	Allan Rise	Yes	Yes		8
22/08/2005	CO 289	53J	487732.061	6748490.191	179.422	Allan Rise	Yes			9
22/08/2005	CO 290	53J	487836.152	6748376.160	181.112	Allan Rise	Yes	Yes		9
22/08/2005	CO 291	53J	487801.811	6748376.530	181.014	Allan Rise	Yes	Yes		9
22/08/2005	CO 292	53J	487779.018	6748382.981	180.927	Allan Rise	Yes	Yes		9
22/08/2005	CO 293	53J	487733.992	6748387.121	180.682	Allan Rise	Yes	Yes		9
22/08/2005	CO 294	53J	487150.010	6748523.206	179.794	Allan Rise	Yes	Yes		9
23/08/2005	CO 295	53J	487200.998	6748516.989	179.729	Allan Rise	Yes	Yes		12
23/08/2005	CO 296	53J	487244.788	6748493.860	179.587	Allan Rise	Yes	Yes		13
23/08/2005	CO 297	53J	487286.122	6748478.875	179.414	Allan Rise	Yes	Yes		14

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
23/08/2005	CO 298	53J	487319.213	6748460.196	179.444	Allan Rise	Yes	Yes		12
23/08/2005	CO 299	53J	487350.466	6748463.196	179.305	Allan Rise	Yes	Yes		9
23/08/2005	CO 300	53J	487364.495	6748463.497	179.020	Allan Rise	Yes			10
23/08/2005	CO 301	53J	487376.103	6748465.357	178.951	Allan Rise	Yes			11
23/08/2005	CO 302	53J	487391.352	6748468.570	178.809	Allan Rise	Yes			9
23/08/2005	CO 303	53J	487389.853	6748462.632	178.812	Allan Rise	Yes			10
23/08/2005	CO 304	53J	487383.163	6748456.249	178.946	Allan Rise	Yes			10
23/08/2005	CO 305	53J	487379.000	6748448.000	178.946	Allan Rise	Yes			10
24/08/2005	CO 306	53J	487121.109	6748547.375	179.986	Allan Rise	Yes	Yes		15
24/08/2005	CO 307	53J	487045.012	6748541.000	180.018	Allan Rise	Yes			13
24/08/2005	CO 308	53J	487047.730	6748531.913	179.997	Allan Rise	Yes	Yes		14
24/08/2005	CO 309	53J	487044.336	6748503.178	180.124	Allan Rise	Yes			14
24/08/2005	CO 310	53J	487045.194	6748497.205	180.151	Allan Rise	Yes			14
24/08/2005	CO 311	53J	487042.000	6748487.000	180.222	Allan Rise	Yes			14
24/08/2005	CO 312	53J	487042.483	6748477.620	180.222	Allan Rise	Yes	Yes		14
24/08/2005	CO 313	53J	487041.472	6748467.560	180.272	Allan Rise	Yes			14
24/08/2005	CO 314	53J	487041.051	6748457.913	180.327	Allan Rise	Yes			14
24/08/2005	CO 315	53J	487039.710	6748439.865	180.420	Allan Rise	Yes			14
24/08/2005	CO 316	53J	487037.000	6748429.000	180.554	Allan Rise	Yes	Yes		14
28/08/2005	CO 317	53J	487038.439	6748428.745	180.554	Allan Rise	Yes			16
28/08/2005	CO 318	53J	487038.027	6748424.553	180.556	Allan Rise	Yes			14
28/08/2005	CO 319	53J	487037.899	6748413.589	180.565	Allan Rise	Yes	Yes		15
28/08/2005	CO 320	53J	487068.093	6748528.830	180.640	Allan Rise	Yes			15
28/08/2005	CO 321	53J	487062.406	6748518.285	184.074	Allan Rise	Yes	Yes		14
28/08/2005	CO 322	53J	487058.251	6748510.313	180.125	Allan Rise	Yes			14
28/08/2005	CO 323	53J	487052.721	6748494.169	180.173	Allan Rise	Yes			14
28/08/2005	CO 324	53J	487040.020	6748487.462	180.222	Allan Rise	Yes			14
29/08/2005	CO 325	53J	486996.000	6748498.000	180.263	Allan Rise	Yes	Yes		14
29/08/2005	CO 326	53J	486993.000	6748500.000	180.263	Allan Rise	Yes			12
29/08/2005	CO 327	53J	486990.819	6748501.036	180.263	Allan Rise	Yes			13
29/08/2005	CO 328	53J	486978.493	6748490.153	180.339	Allan Rise	Yes			8
29/08/2005	CO 329	53J	486982.877	6748476.196	180.327	Allan Rise	Yes			11
29/08/2005	CO 330	53J	486979.888	6748294.994	180.667	Allan Rise	Yes	Yes		13
29/08/2005	CO 331	53J	487031.692	6748269.594	180.747	Allan Rise	Yes	Yes		12
29/08/2005	CO 332	53J	487084.000	6748241.000		Allan Rise				14
29/08/2005	CO 333	53J	487077.727	6748239.151	181.135	Allan Rise	Yes	Yes		14
29/08/2005	CO 334	53J	487081.000	6748227.000		Allan Rise				13

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
29/08/2005	CO 335	53J	487081.000	6748229.000		Allan Rise				14
29/08/2005	CO 336	53J	487082.000	6748235.000		Allan Rise				14
29/08/2005	CO 337	53J	487091.512	6748237.794	181.175	Allan Rise	Yes	Yes		14
29/08/2005	CO 338	53J	487090.000	6748239.000		Allan Rise				14
30/08/2005	CO 339	53J	482088.000	6748222.000		Allan Rise				14
30/08/2005	CO 340	53J	491634.623	6746486.208	187.612	E of Allan Rise	Yes			12
30/08/2005	CO 341	53J	491631.862	6746373.824	186.975	E of Allan Rise	Yes	Yes		13
30/08/2005	CO 342	53J	491639.769	67463416.441	187.088	E of Allan Rise	Yes			11
30/08/2005	CO 343	53J	491647.718	6746432.706	187.089	E of Allan Rise	Yes			12
30/08/2005	CO 344	53J	491736.586	6746467.134	187.505	E of Allan Rise	Yes			10
31/08/2005	CO 345	53J	491784.239	6746473.513	188.083	E of Allan Rise	Yes	Yes		13
31/08/2005	CO 346	53J	491802.509	6746320.784	186.987	E of Allan Rise	Yes			14
31/08/2005	CO 347	53J	491833.126	6746250.601	186.446	E of Allan Rise	Yes	Yes		13
31/08/2005	CO 348	53J	491968.203	6746264.414	186.556	E of Allan Rise	Yes			11
31/08/2005	CO 349	53J	492268.263	6746624.601	187.345	E of Allan Rise	Yes			13
31/08/2005	CO 350	53J	492241.116	6746631.983	187.585	E of Allan Rise	Yes	Yes		14
31/08/2005	CO 351	53J	492263.531	6746651.938	187.340	E of Allan Rise	Yes			14
31/08/2005	CO 352	53J	492263.531	6746649.938	187.340	E of Allan Rise	Yes			13
31/08/2005	CO 353	53J	492263.531	6746649.938	187.340	E of Allan Rise	Yes			14
31/08/2005	CO 354	53J	492322.868	6746655.662	187.441	E of Allan Rise	Yes	Yes		11
05/09/2005	CO 355	53J	461487.925	6795481.229	215.677	SW of Halleys Comet	Yes	Yes		23
05/09/2005	CO 356	53J	461489.558	6795475.810	215.656	SW of Halleys Comet	Yes			21
05/09/2005	CO 357	53J	461488.595	6795470.126	215.632	SW of Halleys Comet	Yes			21
05/09/2005	CO 358	53J	461488.510	6795430.373	215.524	SW of Halleys Comet	Yes	Yes		21
05/09/2005	CO 359	53J	461487.031	6795426.069	215.530	SW of Halleys Comet	Yes			17
05/09/2005	CO 360	53J	461471.666	6795435.201	215.569	SW of Halleys Comet	Yes			24
05/09/2005	CO 361	53J	461473.946	6795454.452	215.652	SW of Halleys Comet	Yes			20
05/09/2005	CO 362	53J	461438.432	6795468.482	215.641	SW of Halleys Comet	Yes	Yes		22
05/09/2005	CO 363	53J	461432.564	6795440.408	215.553	SW of Halleys Comet	Yes			20
06/09/2005	CO 364	53J	463040.493	6792483.506	196.332	N of Russos Folly	Yes	Yes		14
06/09/2005	CO 365	53J	463075.044	6792496.135	196.040	N of Russos Folly	Yes			13
06/09/2005	CO 366	53J	463054.830	6792519.673	196.640	N of Russos Folly	Yes	Yes		18
06/09/2005	CO 367	53J	463033.602	6792578.290	196.573	N of Russos Folly	Yes	Yes		17
06/09/2005	CO 368	53J	461558.672	6795538.907	215.882	SW of Halleys Comet	Yes	Yes		24
06/09/2005	CO 369	53J	461564.341	6795513.984	215.786	SW of Halleys Comet	Yes			22
06/09/2005	CO 370	53J	461541.027	6795467.053	215.653	SW of Halleys Comet	Yes	Yes		22
06/09/2005	CO 371	53J	461516.420	6795472.013	215.726	SW of Halleys Comet	Yes			21

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
06/09/2005	CO 372	53J	461500.842	6795479.149	215.720	SW of Halleys Comet	Yes			23
06/09/2005	CO 373	53J	461503.518	6795498.528	215.776	SW of Halleys Comet	Yes	Yes		23
06/09/2005	CO 374	53J	461500.660	6795513.197	215.751	SW of Halleys Comet	Yes			20
06/09/2005	CO 375	53J	461313.177	6795541.403	215.299	SW of Halleys Comet	Yes	Yes		23
07/09/2005	CO 376	53J	460543.762	6797264.830	216.815	NW of Halleys Comet	Yes	Yes		22
07/09/2005	CO 377	53J	460702.878	6797358.380	217.078	NW of Halleys Comet	Yes	Yes		23
07/09/2005	CO 378	53J	460665.666	6797394.210	216.907	NW of Halleys Comet	Yes	Yes		19
07/09/2005	CO 379	53J	460624.753	6797423.811	216.725	NW of Halleys Comet	Yes	Yes		18
07/09/2005	CO 380	53J	460434.184	6797332.996	216.485	NW of Halleys Comet	Yes			18
08/09/2005	CO 381	53J	494271.253	6764593.718	208.245	Opal Ridge	Yes	Yes		13
08/09/2005	CO 382	53J	494184.417	6764676.443	207.946	Opal Ridge	Yes	Yes		14
08/09/2005	CO 383	53J	494189.136	6764587.268	207.760	Opal Ridge	Yes	Yes		9
08/09/2005	CO 384	53J	494218.092	6764543.530	208.562	Opal Ridge	Yes	Yes		14
08/09/2005	CO 385	53J	494198.340	6764543.763	208.511	Opal Ridge	Yes			16
08/09/2005	CO 386	53J	494182.689	6764535.060	208.600	Opal Ridge	Yes			8
08/09/2005	CO 387	53J	494169.163	6764534.016	208.540	Opal Ridge	Yes	Yes		10
08/09/2005	CO 388	53J	494192.945	6764431.381	211.121	Opal Ridge	Yes	Yes		12
08/09/2005	CO 389	53J	493837.230	6764268.149	210.446	Opal Ridge	Yes	Yes		24
08/09/2005	CO 390	53J	493832.861	6764287.178	210.209	Opal Ridge	Yes			18
08/09/2005	CO 391	53J	493803.387	6764283.225	210.042	Opal Ridge	Yes			22
08/09/2005	CO 392	53J	493796.002	6764274.822	210.031	Opal Ridge	Yes	Yes		22
08/09/2005	CO 393	53J	493810.778	6764251.169	210.249	Opal Ridge	Yes	Yes		22
08/09/2005	CO 394	53J	493831.663	6764221.391	210.779	Opal Ridge	Yes	Yes		23
08/09/2005	CO 395	53J	493845.674	6764173.582	211.341	Opal Ridge	Yes	Yes		19
08/09/2005	CO 396	53J	493814.524	6764117.216	211.456	Opal Ridge	Yes	Yes		14
08/09/2005	CO 397	53J	493637.242	6764105.571	211.673	Opal Ridge	Yes	Yes		18
08/09/2005	CO 398	53J	493636.111	6764094.677	211.915	Opal Ridge	Yes			14
10/09/2005	CO 399	53J	494157.904	6763357.986	205.779	Opal Ridge	Yes	Yes		14
10/09/2005	CO 400	53J	496348.000	6766511.000		W of Mt Brady		Yes		22
10/09/2005	CO 401	53J	496336.000	6766496.000		W of Mt Brady				17
10/09/2005	CO 402	53J	495841.000	6766638.000		W of Mt Brady		Yes		12
10/09/2005	CO 403	53J	495801.000	6766627.000		W of Mt Brady		Yes		14
12/09/2005	CO 404	53J	467003.079	6797347.732	218.335	Piping Lane	Yes	Yes		23
12/09/2005	CO 405	53J	467005.599	6797338.688	218.331	Piping Lane	Yes			18
12/09/2005	CO 406	53J	467009.987	6797327.880	218.431	Piping Lane	Yes			18
12/09/2005	CO 407	53J	467015.575	6797318.221	218.312	Piping Lane	Yes	Yes		18
12/09/2005	CO 408	53J	467032.903	6797329.310	217.990	Piping Lane	Yes			18

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
12/09/2005	CO 409	53J	467079.276	6797332.178	217.484	Piping Lane	Yes			18
12/09/2005	CO 410	53J	467086.570	6797331.473	217.337	Piping Lane	Yes	Yes		18
12/09/2005	CO 411	53J	467091.285	6797333.941	217.328	Piping Lane	Yes			18
12/09/2005	CO 412	53J	467099.108	6797355.864	217.267	Piping Lane	Yes			18
13/09/2005	CO 413	53J	467092.522	6797365.494	217.371	Piping Lane	Yes	Yes		18
13/09/2005	CO 414	53J	467079.386	6797368.974	217.334	Piping Lane	Yes			18
13/09/2005	CO 415	53J	460391.000	6797247.000		NW of Halleys Comet		Yes		18
13/09/2005	CO 416	53J	460380.000	6797276.000		NW of Halleys Comet				18
13/09/2005	CO 417	53J	460390.490	6797281.625	217.125	NW of Halleys Comet	Yes	Yes		18
13/09/2005	CO 418	53J	460406.418	6797307.989	217.064	NW of Halleys Comet	Yes			18
13/09/2005	CO 419	53J	460418.670	6797322.444	216.871	NW of Halleys Comet	Yes	Yes		18
13/09/2005	CO 420	53J	460452.675	6797349.660	216.035	NW of Halleys Comet	Yes			18
14/09/2005	CO 421	53J	457525.424	6796444.903	220.230	E of Dead Horse Gully	Yes		potch	22
14/09/2005	CO 422	53J	457898.598	6796351.782	219.060	E of Dead Horse Gully	Yes			22
14/09/2005	CO 423	53J	457892.927	6796895.716	219.390	E of Dead Horse Gully	Yes	Yes	potch	22
14/09/2005	CO 424	53J	457863.367	6796401.527	219.523	E of Dead Horse Gully	Yes		potch	22
14/09/2005	CO 425	53J	457841.000	6796400.000	219.556	E of Dead Horse Gully	Yes			23
14/09/2005	CO 426	53J	457832.015	6796379.314	219.521	E of Dead Horse Gully	Yes			22
14/09/2005	CO 427	53J	457822.567	6796446.287	219.751	E of Dead Horse Gully	Yes			23
14/09/2005	CO 428	53J	457829.303	6796468.880	219.781	E of Dead Horse Gully	Yes	Yes		21
14/09/2005	CO 429	53J	457806.134	6796496.976	219.940	E of Dead Horse Gully	Yes			20
15/09/2005	CO 430	53J	457774.720	6796441.914	219.768	E of Dead Horse Gully	Yes			22
15/09/2005	CO 431	53J	457732.979	6796464.313	219.982	E of Dead Horse Gully	Yes	Yes		22
15/09/2005	CO 432	53J	457544.075	6796458.373	220.230	E of Dead Horse Gully	Yes	Yes		23
15/09/2005	CO 433	53J	457525.462	6796465.907	220.296	E of Dead Horse Gully	Yes			22
15/09/2005	CO 434	53J	457455.736	6796439.329	220.166	E of Dead Horse Gully	Yes	Yes		21
15/09/2005	CO 435	53J	457405.386	6796441.521	220.199	E of Dead Horse Gully	Yes	Yes	colour	18
16/09/2005	CO 436	53J	457282.855	6795931.518	217.181	E of Dead Horse Gully	Yes			21
16/09/2005	CO 437	53J	457225.678	6795952.669	217.301	E of Dead Horse Gully	Yes	Yes		23
16/09/2005	CO 438	53J	457189.096	6795918.642	217.570	E of Dead Horse Gully 1	Yes			22
16/09/2005	CO 439	53J	456988.000	6795445.000		E of Dead Horse Gully				15
16/09/2005	CO 440	53J	457670.162	6795605.455	217.331	E of Dead Horse Gully	Yes			23
16/09/2005	CO 441	53J	457679.404	6795543.429	217.278	E of Dead Horse Gully	Yes	Yes		22
16/09/2005	CO 442	53J	457887.729	6795386.942	217.740	E of Dead Horse Gully	Yes	Yes	potch	22
16/09/2005	CO 443	53J	458134.970	6795281.065	217.157	E of Dead Horse Gully	Yes	Yes		22
17/09/2005	CO 444	53J	457798.799	6795464.871	217.236	E of Dead Horse Gully	Yes	Yes		18
17/09/2005	CO 445	53J	457819.224	6795449.083	217.330	E of Dead Horse Gully	Yes			22

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
17/09/2005	CO 446	53J	457876.683	6795402.537	217.638	E of Dead Horse Gully	Yes			22
17/09/2005	CO 447	53J	457897.075	6795396.501	217.681	E of Dead Horse Gully	Yes			22
17/09/2005	CO 448	53J	457889.947	6795375.055	217.758	E of Dead Horse Gully	Yes			19
17/09/2005	CO 449	53J	457878.000	6795383.000		E of Dead Horse Gully				22
19/09/2005	CO 450	53J	457874.942	6796449.099	219.602	E of Dead Horse Gully	Yes			22
19/09/2005	CO 451	53J	457783.586	6796468.477	219.871	E of Dead Horse Gully	Yes			22
19/09/2005	CO 452	53J	457595.139	6796452.365	220.042	E of Dead Horse Gully	Yes			22
19/09/2005	CO 453	53J	457406.225	6796458.631	220.261	E of Dead Horse Gully	Yes			14
19/09/2005	CO 454	53J	458964.000	6797110.000		E of Dead Horse Gully				22
19/09/2005	CO 455	53J	458971.000	6797123.000		E of Dead Horse Gully				22
19/09/2005	CO 456	53J	458992.000	6797134.000		E of Dead Horse Gully				23
20/09/2005	CO 457	53J	457369.319	6796439.290	220.231	E of Dead Horse Gully	Yes	Yes		22
20/09/2005	CO 458	53J	457381.371	6796437.362	220.196	E of Dead Horse Gully	Yes	Yes	colour	21
20/09/2005	CO 459	53J	457392.812	6796439.266	220.513	E of Dead Horse Gully	Yes	Yes	colour	18
20/09/2005	CO 460	53J	457409.473	6796426.161	220.096	E of Dead Horse Gully	Yes		potch	22
20/09/2005	CO 461	53J	457407.826	6796435.375	220.154	E of Dead Horse Gully	Yes		potch	22
20/09/2005	CO 462	53J	457422.146	6796447.873	220.168	E of Dead Horse Gully	Yes	Yes	potch	22
20/09/2005	CO 463	53J	457450.355	6796468.277	220.290	E of Dead Horse Gully	Yes		potch	22
20/09/2005	CO 464	53J	457411.225	6796554.967	220.648	E of Dead Horse Gully	Yes			22
20/09/2005	CO 465	53J	457403.000	6796619.000		E of Dead Horse Gully				18
21/09/2005	CO 466	53J	457844.014	6795367.823	217.706	E of Dead Horse Gully	Yes			22
21/09/2005	CO 467	53J	457381.977	6796394.513	220.015	E of Dead Horse Gully	Yes			22
21/09/2005	CO 467a	53J	457884.185	6795371.167	217.770	E of Dead Horse Gully	Yes			
21/09/2005	CO 468	53J	457895.337	6795373.612	217.770	E of Dead Horse Gully	Yes			21
21/09/2005	CO 468a	53J	457381.925	6796410.406	220.146	E of Dead Horse Gully	Yes			
22/09/2005	CO 469	53J	457380.549	6796426.329	220.163	E of Dead Horse Gully	Yes			22
22/09/2005	CO 470	53J	457385.928	6796445.843	220.174	E of Dead Horse Gully	Yes			21
22/09/2005	CO 471	53J	457372.879	6796436.893	220.221	E of Dead Horse Gully	Yes			22
22/09/2005	CO 472	53J	457308.756	6796424.451	220.318	E of Dead Horse Gully	Yes			22
22/09/2005	CO 473	53J	457245.016	6796426.642	220.453	E of Dead Horse Gully	Yes	Yes		20
22/09/2005	CO 474	53J	457328.000	6796431.000		E of Dead Horse Gully				22
22/09/2005	CO 475	53J	457258.000	6796423.000		E of Dead Horse Gully				22
22/09/2005	CO 476	53J	464337.000	6784946.000		SW of Southern Cross		Yes		26
22/09/2005	CO 477	53J	464444.000	6784764.000		SW of Southern Cross		Yes		27
23/09/2005	CO 478	53J	493610.748	6758472.211	205.054	W of Tee Valley	Yes	Yes		14
23/09/2005	CO 479	53J	493544.500	6758495.055	206.495	W of Tee Valley	Yes	Yes		18
23/09/2005	CO 480	53J	493474.663	6758521.482	208.310	W of Tee Valley	Yes	Yes		18

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
23/09/2005	CO 481	53J	493376.523	6758555.102	209.185	W of Tee Valley	Yes	Yes		15
24/09/2005	CO 482	53J	494449.204	6758657.837	210.464	W of Tee Valley	Yes			18
24/09/2005	CO 483	53J	494478.812	6758650.667	210.790	W of Tee Valley	Yes	Yes		22
24/09/2005	CO 484	53J	494917.157	6758421.617	212.384	W of Tee Valley	Yes	Yes		11
24/09/2005	CO 484a	53J	494701.281	6758319.474	211.863	W of Tee Valley	Yes	Yes		18
24/09/2005	CO 485	53J	495138.000	6758433.000		W of Tee Valley		Yes		14
25/09/2005	CO 486	53J	498475.124	6761475.584	222.537	Tee Valley	Yes	Yes	potch	19
25/09/2005	CO 487	53J	498451.879	6761283.981	221.823	Tee Valley	Yes	Yes		16
25/09/2005	CO 488	53J	498447.804	6761260.360	221.038	Tee Valley	Yes			16
25/09/2005	CO 489	53J	499548.196	6749682.422	207.103	Reynolds Ridge	Yes			22
26/09/2005	CO 490	53J	499570.816	6749648.435	206.679	Reynolds Ridge	Yes			10
27/09/2005	CO 491	53J	499548.182	6749644.266	206.724	Reynolds Ridge	Yes			20
27/09/2005	CO 492	53J	499544.288	6749641.725	206.680	Reynolds Ridge	Yes			13
27/09/2005	CO 493	53J	499538.233	6749638.707	206.691	Reynolds Ridge	Yes	Yes		20
27/09/2005	CO 494	53J	499535.679	6749637.915	206.680	Reynolds Ridge	Yes		colour	22
27/09/2005	CO 495	53J	499533.495	6749637.186	206.694	Reynolds Ridge	Yes		colour	22
27/09/2005	CO 496	53J	499529.935	6749636.057	206.685	Reynolds Ridge	Yes		potch	18
27/09/2005	CO 497	53J	499527.213	6749635.342	206.652	Reynolds Ridge	Yes		colour	22
27/09/2005	CO 498	53J	499516.519	6749631.510	206.561	Reynolds Ridge	Yes		potch	22
27/09/2005	CO 499	53J	499530.169	6749633.052	206.645	Reynolds Ridge	Yes			18
27/09/2005	CO 500	53J	499536.063	6749629.867	206.642	Reynolds Ridge	Yes	Yes		22
27/09/2005	CO 501	53J	499531.117	6749614.867	206.473	Reynolds Ridge	Yes			18
28/09/2005	CO 502	53J	499549.152	6749607.923	206.392	Reynolds Ridge	Yes			18
28/09/2005	CO 503	53J	499557.124	6749622.171	206.407	Reynolds Ridge	Yes			18
28/09/2005	CO 504	53J	499564.393	6749547.464	206.189	Reynolds Ridge	Yes			18
28/09/2005	CO 505	53J	499600.035	6749571.317	205.918	Reynolds Ridge	Yes			18
28/09/2005	CO 506	53J	499560.000	6749549.000		Reynolds Ridge		Yes		17
28/09/2005	CO 507	53J	499597.000	6749574.000		Reynolds Ridge				17
29/09/2005	CO 508	53J	479993.432	6786342.467	220.140	Benitos Folly	Yes	Yes	potch	13
29/09/2005	CO 509	53J	479984.645	6786330.268	219.800	Benitos Folly	Yes		potch	13
29/09/2005	CO 510	53J	479983.609	6786320.375	219.547	Benitos Folly	Yes	Yes	potch	16
29/09/2005	CO 511	53J	479970.418	6786320.600	219.419	Benitos Folly	Yes			13
29/09/2005	CO 512	53J	479956.924	6786309.581	219.071	Benitos Folly	Yes			16
29/09/2005	CO 513	53J	479985.850	6786298.722	219.087	Benitos Folly	Yes			16
29/09/2005	CO 514	53J	479996.694	6786316.781	219.567	Benitos Folly	Yes			15
29/09/2005	CO 515	53J	480000.115	6786311.611	219.460	Benitos Folly	Yes			13
29/09/2005	CO 516	53J	480002.000	6786324.000		Benitos Folly				17

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
29/09/2005	CO 517	53J	480004.000	6786316.000		Benitos Folly				14
29/09/2005	CO 518	53J	479482.000	6785621.000		Benitos Folly		Yes		14
29/09/2005	CO 519	53J	479476.000	6785645.000		Benitos Folly				15
30/09/2005	CO 520	53J	452871.091	6795361.894	216.537	W of Dead Horse Gully	Yes	Yes		21
30/09/2005	CO 521	53J	452914.508	6795367.815	216.744	W of Dead Horse Gully	Yes			21
30/09/2005	CO 522	53J	453035.626	6795415.200	217.040	W of Dead Horse Gully	Yes	Yes		20
30/09/2005	CO 523	53J	452981.547	6795584.580	214.955	W of Dead Horse Gully	Yes	Yes		22
30/09/2005	CO 524	53J	453455.817	6795530.490	216.809	W of Dead Horse Gully	Yes	Yes		19
30/09/2005	CO 525	53J	453402.159	6795500.737	216.801	W of Dead Horse Gully	Yes	Yes		22
30/09/2005	CO 526	53J	454061.231	6795739.082	219.437	W of Dead Horse Gully	Yes	Yes		18
01/10/2005	CO 527	53J	454250.275	6795837.359	219.395	W of Dead Horse Gully	Yes	Yes		22
01/10/2005	CO 528	53J	454236.538	6795775.042	220.219	W of Dead Horse Gully	Yes			23
01/10/2005	CO 529	53J	454257.452	6795797.970	220.190	W of Dead Horse Gully	Yes		colour	17
01/10/2005	CO 530	53J	454259.062	6795781.781	220.236	W of Dead Horse Gully	Yes		colour	19
01/10/2005	CO 531	53J	454267.333	6795771.260	220.328	W of Dead Horse Gully	Yes		colour	23
01/10/2005	CO 532	53J	454273.629	6795760.544	220.313	W of Dead Horse Gully	Yes			27
02/10/2005	CO 533	53J	454274.098	6795717.421	219.891	W of Dead Horse Gully	Yes			22
02/10/2005	CO 534	53J	454510.833	6795822.901	220.620	W of Dead Horse Gully	Yes		colour	22
02/10/2005	CO 535	53J	454485.919	6795814.024	220.659	W of Dead Horse Gully	Yes		colour	21
02/10/2005	CO 536	53J	454479.064	6795808.672	220.650	W of Dead Horse Gully	Yes		colour	18
03/10/2005	CO 537	53J	454475.935	6795815.453	220.644	W of Dead Horse Gully	Yes		colour	27
03/10/2005	CO 538	53J	454471.178	6795827.771	220.630	W of Dead Horse Gully	Yes		potch	20
03/10/2005	CO 539	53J	454745.291	6795858.074	218.526	W of Dead Horse Gully	Yes			19
03/10/2005	CO 540	53J	454737.323	6795846.732	218.701	W of Dead Horse Gully	Yes	Yes	potch	19
24/10/2005	CO 541	53J	474716.000	6784617.000		Emu		Yes		18
24/10/2005	CO 542	53J	474718.000	6784587.000		Emu				17
24/10/2005	CO 543	53J	471573.000	6785920.000		N of Olympic		Yes		19
24/10/2005	CO 544	53J	454277.000	6795778.000		W of Dead Horse Gully			potch	22
24/10/2005	CO 545	53J	454312.000	6795783.000		W of Dead Horse Gully				24
24/10/2005	CO 546	53J	454395.042	6795794.795	220.601	W of Dead Horse Gully	Yes		potch	18
24/10/2005	CO 547	53J	454434.451	6795801.478	220.657	W of Dead Horse Gully	Yes		potch	19
25/10/2005	CO 548	53J	454456.312	6795808.116	220.480	W of Dead Horse Gully	Yes		potch	19
25/10/2005	CO 549	53J	454475.819	6795810.056	220.568	W of Dead Horse Gully	Yes		colour	22
25/10/2005	CO 550	53J	454851.941	6795915.809	216.682	W of Dead Horse Gully	Yes	Yes	potch	20
25/10/2005	CO 551	53J	454860.881	6795920.630	216.551	W of Dead Horse Gully	Yes		potch	19
25/10/2005	CO 552	53J	454860.917	6795893.060	217.058	W of Dead Horse Gully	Yes			18
01/11/2005	AO 553	53J	491297.061	6777112.413	212.485	W of Jasper Gully	Yes	Yes		18

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
01/11/2005	AO 554	53J	491293.497	6776995.036	210.412	W of Jasper Gully	Yes	Yes		14
01/11/2005	AO 555	53J	491190.599	6776858.711	210.293	W of Jasper Gully	Yes	Yes		22
01/11/2005	AO 556	53J	491121.170	6776788.285	207.233	W of Jasper Gully	Yes	Yes		14
01/11/2005	AO 557	53J	491072.871	6776693.574	208.681	W of Jasper Gully	Yes	Yes		18
01/11/2005	AO 558	53J	491022.398	6776627.488	210.022	W of Jasper Gully	Yes	Yes		19
01/11/2005	AO 559	53J	490958.297	6776529.262	211.554	W of Jasper Gully	Yes	Yes		18
01/11/2005	AO 560	53J	490867.226	6776475.388	212.710	W of Jasper Gully	Yes	Yes		24
01/11/2005	AO 561	53J	490782.733	6776434.669	213.543	W of Jasper Gully	Yes	Yes		22
07/11/2005	CO 562	53J	454877.287	6795908.830	216.630	W of Dead Horse Gully	Yes			19
07/11/2005	CO 563	53J	454873.040	6795885.030	217.210	W of Dead Horse Gully	Yes		potch	19
07/11/2005	CO 564	53J	454871.347	6795878.175	217.207	W of Dead Horse Gully	Yes	Yes	potch	19
07/11/2005	CO 565	53J	454861.332	6795870.234	217.482	W of Dead Horse Gully	Yes		potch	16
07/11/2005	CO 566	53J	454865.724	6795857.064	217.669	W of Dead Horse Gully	Yes		potch	19
07/11/2005	CO 567	53J	454874.873	6795859.548	217.455	W of Dead Horse Gully	Yes		potch	18
08/11/2005	CO 568	53J	454872.864	6795867.270	217.251	W of Dead Horse Gully	Yes			18
08/11/2005	CO 569	53J	454873.454	6795869.443	217.200	W of Dead Horse Gully	Yes		potch	19
08/11/2005	CO 570	53J	454860.110	6795866.919	217.334	W of Dead Horse Gully	Yes		potch	18
08/11/2005	CO 571	53J	454889.814	6795874.209	217.150	W of Dead Horse Gully	Yes			17
08/11/2005	CO 572	53J	454889.814	6795874.209	217.150	W of Dead Horse Gully	Yes			19
08/11/2005	CO 573	53J	454897.404	6795877.929	217.101	W of Dead Horse Gully	Yes			17
09/11/2005	CO 574	53J	454473.000	6795797.000		W of Dead Horse Gully		Yes	colour	20
09/11/2005	CO 575	53J	454475.000	6795805.000		W of Dead Horse Gully			colour	24
09/11/2005	CO 576	53J	454408.451	6795791.567	220.649	W of Dead Horse Gully	Yes	Yes		20
09/11/2005	CO 577	53J	454412.000	6795795.000		W of Dead Horse Gully		Yes	colour	20
09/11/2005	CO 578	53J	454491.000	6795607.000		W of Dead Horse Gully			potch	24
09/11/2005	CO 579	53J	454491.000	6795603.000		W of Dead Horse Gully		Yes	potch	24
09/11/2005	CO 580	53J	455008.300	6795413.007	219.018	W of Dead Horse Gully	Yes	Yes		23
10/11/2005	CO 581	53J	457367.000	6795727.000		E of Dead Horse Gully		Yes		22
10/11/2005	CO 582	53J	457352.000	6795735.000		E of Dead Horse Gully				20
10/11/2005	CO 583	53J	457344.000	6795723.000		E of Dead Horse Gully				20
10/11/2005	CO 584	53J	457700.000	6795562.000		E of Dead Horse Gully				22
10/11/2005	CO 585	53J	457636.000	6795547.000		E of Dead Horse Gully				21
10/11/2005	CO 586	53J	457712.000	6795515.000		E of Dead Horse Gully				22
11/11/2005	CO 587	53J	457876.000	6795375.000		E of Dead Horse Gully				18
11/11/2005	CO 588	53J	457884.000	6795381.000		E of Dead Horse Gully			potch	21
11/11/2005	CO 589	53J	457894.000	6795387.000		E of Dead Horse Gully				21
12/11/2005	CO 590	53J	456714.960	6804606.439	221.042	S of Browns Folly	Yes		colour shell	9

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
12/11/2005	CO 591	53J	456714.960	6804606.439	221.042	S of Browns Folly	Yes		potch shell	9
12/11/2005	CO 592	53J	456714.960	6804606.439	221.042	S of Browns Folly	Yes			9
12/11/2005	CO 593	53J	456714.960	6804606.439	221.042	S of Browns Folly	Yes	Yes		14
12/11/2005	CO 594	53J	456669.274	6804655.383	221.270	S of Browns Folly	Yes			9
12/11/2005	CO 595	53J	456674.686	6804653.329	221.422	S of Browns Folly	Yes	Yes		10
12/11/2005	CO 596	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes			9
12/11/2005	CO 597	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes			9
12/11/2005	CO 598	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes		potch shell	9
12/11/2005	CO 599	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes		potch shell	9
12/11/2005	CO 600	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes			9
12/11/2005	CO 601	53J	456670.784	6804648.075	221.261	S of Browns Folly	Yes			9
12/11/2005	CO 602	53J	456666.448	6804630.865	220.900	S of Browns Folly	Yes	Yes		9
12/11/2005	CO 603	53J	456633.285	6804659.381	221.148	S of Browns Folly	Yes			9
12/11/2005	CO 604	53J	456633.529	6804668.159	221.474	S of Browns Folly	Yes	Yes		9
12/11/2005	CO 605	53J	456625.841	6804673.876	221.635	S of Browns Folly	Yes			9
12/11/2005	CO 606	53J	456465.000	6804826.000		S of Browns Folly				18
13/11/2005	CO 607	53J	461680.865	6788296.265	206.334	W of Eight Mile	Yes	Yes		24
13/11/2005	CO 608	53J	461840.000	6788380.000		W of Eight Mile				16
13/11/2005	CO 609	53J	461860.000	6788380.000		W of Eight Mile				17
13/11/2005	CO 610	53J	461856.520	6788374.178	202.297	W of Eight Mile	Yes	Yes		22
13/11/2005	CO 611	53J	461810.000	6788344.000		W of Eight Mile				20
13/11/2005	CO 612	53J	461817.000	6788292.000		W of Eight Mile				21
13/11/2005	CO 613	53J	461822.000	6788285.000		W of Eight Mile				19
13/11/2005	CO 614	53J	461809.922	6788276.116	204.139	W of Eight Mile	Yes	Yes		24
13/11/2005	CO 615	53J	461810.000	6788270.000		W of Eight Mile				26
14/11/2005	CO 616	53J	462050.396	6788487.534	202.515	W of Eight Mile	Yes	Yes		22
14/11/2005	CO 617	53J	461925.693	6788329.809	201.653	W of Eight Mile	Yes	Yes		18
14/11/2005	CO 618	53J	461832.233	6788192.257	204.770	W of Eight Mile	Yes	Yes		14
14/11/2005	CO 619	53J	461800.381	6788095.447	206.800	W of Eight Mile	Yes	Yes		17
14/11/2005	CO 620	53J	459348.000	6786894.000		SW of Eight Mile				14
14/11/2005	CO 621	53J	459337.000	6786899.000		SW of Eight Mile				20
14/11/2005	CO 622	53J	459340.000	6786908.000		SW of Eight Mile				9
14/11/2005	CO 623	53J	458586.000	6786470.000		SW of Eight Mile				7
14/11/2005	CO 624	53J	457910.000	6785154.000		SW of Eight Mile				18
14/11/2005	CO 625	53J	457923.000	6785181.000		SW of Eight Mile				18
14/11/2005	CO 627	53J	458432.000	6790845.000		W of Eight Mile		Yes		27
15/11/2005	CO 628	53J	460046.000	6797754.000		SW of Dead Mans Gully				18

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
15/11/2005	CO 629	53J	460056.000	6797761.000		SW of Dead Mans Gully				19
15/11/2005	CO 630	53J	460066.000	6797768.000		SW of Dead Mans Gully			colour	22
15/11/2005	CO 631	53J	460071.000	6797770.000		SW of Dead Mans Gully			potch	23
15/11/2005	CO 632	53J	460083.000	6797743.000		SW of Dead Mans Gully				21
15/11/2005	CO 633	53J	460348.000	6798220.000		SW of Dead Mans Gully		Yes		11
15/11/2005	CO 634	53J	456753.000	6796901.000		W of Dead Horse Gully				24
16/11/2005	CO 635	53J	455545.000	6797654.000		W of Dead Horse Gully				10
16/11/2005	CO 636	53J	455549.000	6797675.000		W of Dead Horse Gully				18
16/11/2005	CO 637	53J	455221.000	6798612.000		W of Dead Horse Gully				15
16/11/2005	CO 638	53J	455246.000	6798584.000		W of Dead Horse Gully				18
16/11/2005	CO 639	53J	454787.000	6797377.000		W of Dead Horse Gully				20
16/11/2005	CO 640	53J	453917.399	6794310.235	202.655	Mars	Yes	Yes		13
16/11/2005	CO 641	53J	454041.260	6794162.378	198.492	Mars	Yes	Yes		15
16/11/2005	CO 642	53J	454366.283	6794038.511	204.013	Mars	Yes	Yes		16
16/11/2005	CO 643	53J	454296.902	6793981.268	204.423	Mars	Yes	Yes		20
17/11/2005	CO 644	53J	470207.000	6782826.000		S of Olympic				16
17/11/2005	CO 645	53J	470222.000	6782811.000		S of Olympic		Yes		20
17/11/2005	CO 646	53J	465615.617	6786119.052	215.622	Southern Cross	Yes	Yes		18
17/11/2005	CO 647	53J	465325.643	6786815.995	212.563	Southern Cross	Yes	Yes		22
17/11/2005	CO 648	53J	467075.000	6793007.000		East of Hellenic Hill		Yes		15
17/11/2005	CO 649	53J	467092.000	6793017.000		East of Hellenic Hill				17
17/11/2005	CO 650	53J	467107.000	6793008.000		East of Hellenic Hill		Yes	colour	18
17/11/2005	CO 651	53J	467116.000	6793007.000		East of Hellenic Hill				18
17/11/2005	CO 652	53J	467113.000	6793018.000		East of Hellenic Hill				22
17/11/2005	CO 653	53J	467216.000	6793001.000		East of Hellenic Hill		Yes		18
17/11/2005	CO 654	53J	467217.000	6793024.000		East of Hellenic Hill		Yes		22
17/11/2005	CO 655	53J	466661.000	6793341.000		East of Hellenic Hill		Yes		16
18/11/2005	CO 656	53J	462403.137	6808491.944	241.559	West of Fourteen Mile	Yes	Yes		20
18/11/2005	CO 657	53J	462444.236	6808476.333	241.310	West of Fourteen Mile	Yes	Yes		20
18/11/2005	CO 658	53J	463374.051	6810620.839	222.822	East of Seventeen Mile	Yes	Yes		18
18/11/2005	CO 659	53J	463878.648	6809948.423	225.053	East of Seventeen Mile	Yes	Yes		18
21/11/2005	CO 670	53J	459265.874	6804266.963	229.092	Franks Folly North	Yes	Yes		15
21/11/2005	CO 671	53J	459324.069	6804266.129	226.727	Franks Folly North	Yes	Yes		11
21/11/2005	CO 672	53J	459322.791	6804246.097	227.164	Franks Folly North	Yes	Yes		11
21/11/2005	CO 673	53J	459323.093	6804238.555	227.257	Franks Folly North	Yes			12
21/11/2005	CO 674	53J	459308.857	6804241.946	227.730	Franks Folly North	Yes		potch	12
21/11/2005	CO 675	53J	459326.841	6804237.738	227.266	Franks Folly North	Yes			11

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
21/11/2005	CO 676	53J	459324.707	6804232.983	227.410	Franks Folly North	Yes		potch	13
21/11/2005	CO 677	53J	459325.033	6804229.336	227.466	Franks Folly North	Yes		potch	13
21/11/2005	CO 678	53J	459316.248	6804234.530	227.627	Franks Folly North	Yes	Yes		11
21/11/2005	CO 679	53J	459293.502	6804222.997	228.636	Franks Folly North	Yes	Yes		10
21/11/2005	CO 680	53J	459305.195	6804137.851	228.669	Franks Folly North	Yes	Yes		10
21/11/2005	CO 681	53J	459333.662	6804159.407	227.745	Franks Folly North	Yes			15
21/11/2005	CO 682	53J	459328.847	6804185.000	227.843	Franks Folly North	Yes	Yes		19
21/11/2005	CO 683	53J	459325.000	6804228.000		Franks Folly North				13
21/11/2005	CO 684	53J	459387.087	6804242.116	225.614	Franks Folly North	Yes	Yes		12
21/11/2005	CO 685	53J	459380.865	6804033.432	227.038	Franks Folly North	Yes	Yes		13
21/11/2005	CO 686	53J	459401.530	6804004.008	226.478	Franks Folly North	Yes	Yes		13
22/11/2005	CO 687	53J	454510.000	6795589.000		W of Dead Horse Gully				19
22/11/2005	CO 688	53J	454492.000	6795589.000		W of Dead Horse Gully				20
22/11/2005	CO 689	53J	454487.000	6795633.000		W of Dead Horse Gully				16
22/11/2005	CO 690	53J	454427.000	6795689.000		W of Dead Horse Gully				18
22/11/2005	CO 691	53J	454399.633	6795725.274	220.268	W of Dead Horse Gully	Yes	Yes		17
22/11/2005	CO 692	53J	454488.000	6795707.000		W of Dead Horse Gully				17
22/11/2005	CO 693	53J	454493.000	6795702.000		W of Dead Horse Gully			colour	18
22/11/2005	CO 694	53J	454489.011	6795700.564	220.462	W of Dead Horse Gully	Yes	Yes	colour	19
22/11/2005	CO 695	53J	454494.000	6795695.000		W of Dead Horse Gully			colour	17
22/11/2005	CO 696	53J	454484.000	6795699.000		W of Dead Horse Gully				18
23/11/2005	CO 697	53J	454199.688	6795782.107	220.077	W of Dead Horse Gully	Yes	Yes	potch	18
23/11/2005	CO 698	53J	454264.000	6795810.000		W of Dead Horse Gully			colour	20
23/11/2005	CO 699	53J	454285.000	6795777.000		W of Dead Horse Gully			colour	20
23/11/2005	CO 700	53J	454266.039	6795764.596	220.251	W of Dead Horse Gully	Yes	Yes	colour	20
23/11/2005	CO 701	53J	454372.927	6795781.700	220.523	W of Dead Horse Gully	Yes		colour	21
23/11/2005	CO 702	53J	454423.993	6795785.663	220.705	W of Dead Horse Gully	Yes		potch	20
23/11/2005	CO 703	53J	454419.648	6795799.850	220.612	W of Dead Horse Gully	Yes		potch	21
23/11/2005	CO 704	53J	454449.000	6795848.000		W of Dead Horse Gully				19
24/11/2005	CO 705	53J	454443.389	6795895.725	220.335	W of Dead Horse Gully	Yes		potch	18
24/11/2005	CO 706	53J	454457.241	6795899.819	220.283	W of Dead Horse Gully	Yes	Yes	potch	22
24/11/2005	CO 707	53J	454474.814	6795899.629		W of Dead Horse Gully	Yes		potch	22
24/11/2005	CO 708	53J	454472.852	6795841.497	220.538	W of Dead Horse Gully	Yes		potch	19
24/11/2005	CO 709	53J	454485.000	6795803.000		W of Dead Horse Gully			colour	17
24/11/2005	CO 710	53J	454485.000	6795789.000		W of Dead Horse Gully			potch	21
24/11/2005	CO 711	53J	454489.000	6795776.000		W of Dead Horse Gully				16
24/11/2005	CO 712	53J	454472.000	6795782.000		W of Dead Horse Gully			potch	16

Date	Hole No.	Zone	Easting	Northing	Elevation	Comments	Surveyed	Logged	Opal	Depth (m)
24/11/2005	CO 713	53J	454473.000	6795796.000		W of Dead Horse Gully			colour	21
24/11/2005	CO 714	53J	454492.859	6795603.168	220.546	W of Dead Horse Gully	Yes		potch	16
24/11/2005	CO 715	53J	454522.000	6795801.000		W of Dead Horse Gully			potch	21
25/11/2005	CO 716	53J	454543.000	6795803.000		W of Dead Horse Gully			potch	19
25/11/2005	CO 717	53J	454573.682	6795809.054	220.306	W of Dead Horse Gully	Yes		potch	16
25/11/2005	CO 718	53J	454553.550	6795846.511	220.320	W of Dead Horse Gully	Yes		potch	18
25/11/2005	CO 719	53J	454597.180	6795825.575	220.165	W of Dead Horse Gully	Yes	Yes	potch	21
25/11/2005	CO 720	53J	454619.077	6795823.575	219.958	W of Dead Horse Gully	Yes		colour	18
25/11/2005	CO 721	53J	454847.662	6795861.427	217.804	W of Dead Horse Gully	Yes		potch	18
25/11/2005	CO 722	53J	454908.735	6795881.492	217.095	W of Dead Horse Gully	Yes		potch	18
25/11/2005	CO 723	53J	454884.408	6795798.000	218.346	W of Dead Horse Gully	Yes	Yes		19
25/11/2005	CO 724	53J	459313.000	6804246.000		W of Dead Horse Gully				12

3. Coober Pedy summary drill logs of selected holes from the AO series

AO-1 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0464100 Northing: 6784411 Elevation (m): 201.76

0–1 m	Alluvium with silcrete pebbles.
1–4 m	Red-brown calcareous, gypsiferous silt-clay with silcrete pebs.
4–9 m	Mainly silcrete with calcareous silt-clay, minor gypsum.
9–22 m	Weathered off-white good sandstone , purple ferruginous patches with gypsum clay-silt stringers (tubules?). Sparry gypsum veins (2 cm) common from 13 m to 18 m.
22–27 m	Mauve, yellow-brown and grey mudstone with minor gypsum veinlets.

AO-2 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463993 Northing: 6784370 Elevation (m): 200.60

0–1 m	Alluvium with silcrete pebbles.
1–4 m	Red-brown, calcareous silt-clay with silcrete.
4–6 m	Mainly silcrete in calcareous silt-clay to 5 m, then gypsiferous clay and white sandstone fragments.
6–15 m	Weathered white good sandstone , minor gypsum-clay-silt stringers (tubules?) to 10 m. Chert chips and purple ferruginous patches at 11 m.
15–20 m	Weathered grey off-white sandstone with ferruginous-gypsum stringers and minor alunite.
20–26 m	Mauve and yellow-brown silicified mudstone with trace of gypsum.

AO-3 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463894 Northing: 6784329 Elevation (m): 199.14

0–2 m	Alluvium with silcrete pebbles.
2–4 m	Red-brown, calcareous, gypsiferous silt-clay with silcrete.
4–10 m	Mainly silcrete with massive sparry gypsum to 9 m then gypsiferous clay with white sandstone fragments.
10–17 m	Weathered white good sandstone with gypsum and mauve ferruginous stringers. Trace of alunite.
17–25 m	Mauve and grey sandstone with traces of alunite, gypsum and ferruginous patches.

AO-4 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463796 Northing: 6784291 Elevation (m): 199.14

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous silt-clay with silcrete.
3–6 m	Mainly silcrete, massive sparry gypsum to 5 m.
6–14 m	Weathered off-white good sandstone with purple ferruginous patches and stringers. Cream chert chips and alunite.
14–18 m	Mauve and yellow sandstone with gypsum stringers.
18–26 m	Grey-mauve silicified mudstone with minor gypsum stringers.

AO-5 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463699 Northing: 6784247 Elevation (m): 199.41

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous silt-clay with calcrete.
3–6 m	Mainly silcrete in gypsiferous clay.
6–7 m	Weathered white sandstone .
7–12 m	Mainly grey chert, some tubules and weathered white sandstone .
12–20 m	Weathered white sandstone with minor gypsum, ferruginous and chert stringers, trace of alunite at 20 m.
20–27 m	Grey-yellow-brown partly silicified mudstone.

AO-6 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463616 Northing: 6784212 Elevation (m): 199.35

0–1 m	Alluvium with silcrete pebbles.
1–2 m	Red-brown gypsiferous silt-clay with silcrete.
2–10 m	Mainly silcrete and red-brown jasper in red-yellow gypsum silt.
10–15 m	Weathered off-white and grey moderate sandstone with minor gypsiferous clay-silt stringers and trace of alunite.
15–25 m	Mauve-grey and yellow-brown partly silicified mudstone.

AO-7 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463516 Northing: 6784171 Elevation (m): 199.60

0–1 m	Alluvium with silcrete pebbles.
1–6 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
6–8 m	Mainly silcrete and red-brown jasper.
8–16 m	Weathered white good sandstone , minor gypsum, ferruginous specks, clear chert vein (2 mm) at 11 m.
16–26 m	Mauve-grey and yellow-brown mudstone, trace of alunite.

AO-8 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463431 Northing: 6784136 Elevation (m): 200.19

0–1 m	Alluvium silcrete pebbles.
1–4 m	Red-brown, calcareous, gypsiferous silt-clay.
4–7 m	Mainly silcrete.
7–13 m	Cream silicified sandstone , minor coarse sparry gypsum veins and ferruginous stringers.
13–25 m	Partly weathered off-white-yellow mudstone with sparry gypsum and ferruginous stringers common after 20 m.

AO-9 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463333 Northing: 6784093 Elevation (m): 200.44

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
3–9 m	Silcrete and red-brown jasper.
9–14 m	Partly weathered off-white, purple poor sandstone with gypsum.
14–26 m	Pale brown-mauve mudstone with trace of alunite and gypsum.

AO-10 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463243 Northing: 6784063 Elevation (m): 200.73

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
3–7 m	Mainly silcrete with gypsiferous clay-silt at 7 m.
7–22 m	Partly weathered off-white-grey-yellow-brown poor sandstone with minor ferruginous stringers and specks, trace of alunite.
22–25 m	Blue-grey partly silicified mudstone.

AO-11 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463108 Northing: 6784015 Elevation (m): 200.90

0–1 m	Alluvium with silcrete pebbles.
1–2 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
2–11 m	Silcrete, red-brown jasper and silicified sandstone at 11 m.
11–15 m	Partly weathered pale yellow-brown-mauve poor sandstone .
15–26 m	Partly silicified grey-mauve mudstone, trace alunite at 17 m, sparry gypsum at 21 m.

AO-12 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0463010 Northing: 6783993 Elevation (m): 200.84

0–1 m	Alluvium with silcrete pebbles.
1–4 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
4–11 m	Silcrete, red-brown jasper.
11–16 m	Partly weathered cream-yellow moderate sandstone , red gypsum clay-silt tubules?
16–26 m	Off-white-grey moderate sandstone , minor sparry gypsum stringers, trace of alunite.

AO-13 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462875 Northing: 6783936 Elevation (m): 202.00

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
3–7 m	Silcrete and gypsiferous clay-silt.
7–14 m	Weathered white moderate sandstone with ferruginous fractures.
14–24 m	Multi-coloured partly silicified mudstone with trace of alunite, gypsum and ferruginous patches.

AO-14 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462800 Northing: 6783899 Elevation (m): 201.15

0–1 m	Alluvium with silcrete pebbles.
1–2 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
2–7 m	Red-brown jasper and silcrete with gypsiferous clay from 6.5 to 7 m.
7–18 m	Weathered multi-coloured moderate sandstone with minor gypsum and ferruginous stringers. Mainly white moderate sandstone from 14 to 18 m.
18–26 m	Partly silicified mauve-yellow-grey-green mudstone, trace gypsum stringers.

AO-15 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462703 Northing: 6783855 Elevation (m): 201.42

0–1 m	Alluvium with silcrete pebbles.
1–2 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
2–7 m	Silcrete and gypsiferous clay-silt, abundant gypsum.
7–11 m	Weathered off-white and pink moderate sandstone with gypsum and gypsiferous silt stringers (tubules?).
11–26 m	Partly silicified mauve-grey-yellow mudstone with gypsum and black ferruginous stringers.

AO-16 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462584 Northing: 6783801 Elevation (m): 201.76

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
3–7 m	Silcrete and red-brown jasper.
7–8 m	Gypsiferous clay-silt, white silicified sandstone and abundant grey chert .
8–17 m	Weathered yellow-grey-mauve poor sandstone , minor gypsum stringers, massive gypsum at 16 m.
17–25 m	Partly silicified mauve-yellow mudstone, trace of gypsum and brown ironstone veinlets.

AO-17 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462491 Northing: 6783762 Elevation (m): 202.95

0–1 m	Alluvium with silcrete pebbles.
1–2 m	Red-brown calcareous, gypsiferous silt-clay with silcrete.
2–6 m	Silcrete with red-brown gypsiferous clay-silt.
6–16 m	Weathered off-white, mauve moderate sandstone with minor gypsum stringers and trace of alunite, abundant alunite at 16 m.
16–25 m	Pale grey partly silicified mudstone with minor gypsum stringers.

AO-18 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462376 Northing: 6783702 Elevation(m): 203.26

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous silt-clay with silcrete.
3–8 m	Pale brown gypsiferous silt with silicified claystone chips 7–8 m.
8–12 m	Silicified white claystone, red-black iron oxide along fractures in gypsiferous brown silt.
12–14 m	Weathered white moderate sandstone with red iron oxide specks.
14–17 m	Pale yellow partly silicified claystone, minor gypsum stringers.
17–27 m	Partly weathered off-white, pale grey and yellow partly silicified claystone, kaolinitic with trace of gypsum and alunite.

AO-19 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462278 Northing: 6783640 Elevation (m): 202.18

0–2 m	Alluvium with silcrete pebbles.
2–4 m	Silcrete in pale brown gypsiferous silt.
4–6 m	Gypsiferous silt with fragments of white silicified claystone.
6–12 m	Weathered off-white moderate sandstone partly silicified, minor gypsum.
12–27 m	Partly weathered off-white, pale grey and yellow partly silicified claystone with trace gypsum and iron oxide on fractures.

AO-20 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462197 Northing: 6783594 Elevation (m): 201.24

0–1 m	Alluvium with silcrete pebbles.
1–6 m	Brown calcareous silt-clay with silcrete pebbles. Gypsum and white silicified claystone fragments near base.
6–10 m	Weathered good sandstone partly silicified with red iron oxide specks.
10–13 m	Silicified partly weathered white and mauve claystone.
13–27 m	Partly weathered white and pale yellow moderate sandstone with black iron oxide specks and minor gypsum veinlets.

AO-21 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462094 Northing: 6783543 Elevation (m): 199.63

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Calcareous red-brown silt-clay with minor silcrete pebbles.
3–6 m	Silcrete grey-green and brown.
6–10 m	Brown gypsiferous silt with silicified white claystone and brown mottled jasper.
10–27 m	Partly weathered and silicified white and pale yellow claystone with gypsum veinlets. Poor sandstone.

AO-22 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0462020 Northing: 6783509 Elevation (m): 199.25

0–1 m	Silcrete pebbles on red-brown clay-silt.
1–10 m	Grey gypcrete to 6 m then brown and green-grey silcrete both with claystone chips.
10–13 m	Weathered kaolinitic claystone, minor tubules, yellow ferruginous patches. Good sandstone.
13–27 m	Weakly weathered and silicified off-white claystone with trace of tubules and gypsum. Moderate to poor sandstone.

AO-23 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461920 Northing: 6783463 Elevation (m): 198.77

0–6 m	Silcrete pebbles on red-brown calcareous clay-silt with silcrete chips, some weathered white claystone chips from 4 m.
6–14 m	Grey-green silcrete in silt-clay, some brown breccia silcrete, gypcrete and gypsum veins, white claystone chips dominant from 7 m.
14–18 m	White claystone, minor gypsum veins and stringers. Good sandstone.
18–27 m	Pale grey partly silicified claystone, trace gypsum and alunite, minor patches of yellow ferruginisation. Blue ground.

AO-24 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461823 Northing: 6783421 Elevation (m): 197.68

- 0–4 m Silcrete pebbles on red-brown clay-silt.
- 4–11 m Course grey-green silcrete and gypcrete. Chips of white claystone and concretionary jasper at 11 m.
- 11–14 m White and mauve weathered claystone, minor gypsum stringers, trace tubules. **Good sandstone.**
- 14–27 m Off-white and pale grey claystone, partly silicified, minor gypsum, trace alunite, minor yellow and mauve ferruginous patches. **Poor sandstone.**

AO-25 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461742 Northing: 6783384 Elevation (m): 197.48

- 0–7 m Silcrete pebbles on red-brown clay-silt with frags of grey-green and brown silcrete with gypcrete from 4 m.
- 7–12 m Mauve gypsum silt and weathered claystone chips plus reddish jasper.
- 12–23 m Pale grey partly silicified claystone, minor gypsum stringers, yellow ferruginous patches after 16 m. **Poor sandstone.**

AO-26 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461659 Northing: 6783348 Elevation (m): 197.53

- 0–6 m Silcrete pebbles on red-brown clay-silt with brown silcrete breccia, frags of weathered claystone.
- 6–21 m Red-brown silicified claystone with traces of gypsum stringers to 10 m then white and pale yellow silicified claystone with gypsum stringers to 12 m then mauve as above. **Blue ground.**

AO-27 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461570 Northing: 6783316 Elevation (m): 197.00

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–6 m Brown and grey-green silcrete in red-brown silt-clay.
- 6–8 m Silcrete and weathered pink claystone in gypsum silt.
- 8–21 m Weathered partly silicified mauve and grey claystone, gypsum and ferruginous stringers on fractures. Minor tubules to 10 m. Grey claystone strongly silicified from 17 m.

AO-28 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461480 Northing: 6783279 Elevation (m): 196.25

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt.
- 4–12 m Brown and grey-green silcrete in red-brown silt-clay, some frags of weathered claystone. Some purple jasper from 11 m.
- 12–17 m White kaolinitic claystone with reddish ferruginous stringers. **Moderate sandstone.**
- 17–22 m Pale grey silicified claystone. **Blue ground.**

AO-29 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461410 **Northing:** 6783247 **Elevation (m):** 196.07

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–12 m Cream and red-brown jasper in gypsum silt, frags of silicified claystone with micro-tubules.
- 12–17 m Weathered white claystone partly leached, featureless. **Moderate sandstone.**
- 17–22 m Pale grey partly silicified claystone, minor gypsum stringers. **Blue ground.**

AO-30 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461329 **Northing:** 6783214 **Elevation (m):** 196.50

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–8 m Brown breccia and grey-green silcrete plus white claystone frags and grey green silcrete from 4 m in red-brown gypsum clay.
- 8–17 m Weathered partly silicified claystone, minor micro-tubules and gypsum stringers. **Poor sandstone.**

AO-31 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461226 **Northing:** 6783173 **Elevation (m):** 197.15

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–7 m Grey-green silcrete, calc.clay, weathered claystone and gypsum from 6 m.
- 7–12 m Grey jasper in top 1 m with white weathered claystone, minor tubules partly silicified, gypsum veinlets common from 9 m and trace alunite. **Good sandstone.**
- 12–21 m White kaolinitic partly silicified claystone, gypsum-FeO stringers. Grey silicified claystone, trace of alunite from 14 m. **Blue ground.**

AO-32 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461135 **Northing:** 6783136 **Elevation (m):** 197.01

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–8 m Grey-green silcrete, calc.clay, weathered claystone and gypsum from 6 m.
- 8–25 m Reddish jasper and gypsum on weathered pink claystone grading to grey silicified claystone with gypsum stringers. Abundant dark grey jasper 9–11 m. **Blue ground.**

AO-33 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0461044 **Northing:** 6783094 **Elevation (m):** 197.00

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–7 m Pinkish gypcrete with red-brown silicified claystone frags with red-brown jasper from 5 m.
- 7–10 m Weathered white claystone with gypsum stringers and tubules. **Good sandstone.**
- 10–26m Pale grey partly silicified claystone, minor gypsum-FeO stringers to 15 m then pale yellow with yellow-brown ferruginous patches. **Poor sandstone.**

AO-34 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460957 Northing: 6783068 Elevation (m): 197.25

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–9 m Grey-green silcrete in calc clay-silt grading to gypcrete and silcrete with frags of yellow silicified claystone.
- 9–13 m White weathered claystone with tubules, minor gypsum veinlets and stringers. **Moderate sandstone.**
- 13–25 m Grey and yellow silicified claystone, gypsum-FeO stringers and ferruginous patches. **Blue ground.**

AO-36 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460767 Northing: 6783001 Elevation (m): 197.06

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–5 m Calcareous silt, brown silcrete and gypcrete with claystone frags.
- 5–10 m Weathered grey claystone silicified to 7 m, gypsum veins and veinlets plus tubules. **Moderate to good sandstone.**
- 10–13 m Pale grey claystone, minor gypsum veinlets. **Moderate sandstone.**
- 13–27 m Pale grey and yellow partly silicified claystone. **Blue ground.**

AO-38 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460619 Northing: 6782944 Elevation (m): 196.70

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–5 m Pale brown gypcrete, grey-green silcrete, gypsum silt and white claystone frags with tubules.
- 5–7 m Weathered white claystone with tubules common. **Moderate sandstone.**
- 7–25 m Pale grey-mauve partly silicified claystone, minor tubules to 10 m, minor gypsum stringers and FeO on fractures. **Blue ground.**

AO-40 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460416 Northing: 6782872 Elevation (m): 195.80

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–8 m Pale brown gypcrete, minor brown silcrete. Grey-green silcrete with silicified claystone frags from 5 m.
- 8–13 m White-mauve weathered claystone with tubules common to 10 m, minor gypsum veins. **Moderate sandstone.**
- 13–16 m Grey partly silicified claystone, ferruginous patches, minor gypsum veinlets. **Blue ground.**

AO-41 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460306 Northing: 6782855 Elevation (m): 195.45

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt, gypsiferous at 4 m.
- 4–8 m White silicified claystone, clay-silt and gypsiferous silt breccia (from tubules or breccia zone).
- 8–17 m White and grey weathered, partly silicified claystone, gypsum veins common, minor tubules. Minor ferruginisation. **Moderate sandstone.**
- 17–25 m Mauve silicified claystone with minor gypsum-FeO stringers. **Blue ground.**

AO-42 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0460200 **Northing:** 6782837 **Elevation (m):** 195.40

- 0–6 m** Silcrete pebbles on red-brown calcareous clay-silt, brown silcrete breccia from 2 m then grey-green silcrete from 4 m.
- 6–9 m** Mixed zone of silcrete, calcareous clay, partly silicified claystone and tubule gypsum silt.
- 9–11 m** Silicified purple claystone and minor gypsum veins.
- 11–19 m** Weathered white claystone, minor tubules and gypsum stringers. From 16 m grey partly silicified claystone, trace alunite. **Moderate sandstone.**

AO-141 (WEST OF TEE VALLEY)

Easting: 0496717 **Northing:** 6761178 **Elevation (m):** 213.26

- 0–2 m** Alluvium with silcrete pebbles on calcareous red-brown silt-clay, brecciated white silicified claystone from 1.5 m.
- 2–15 m** Weathered, silicified white claystone, iron oxide along fractures and minor gypsum stringers, mauve after 12 m. **Blue ground.**

AO-142 (WEST OF TEE VALLEY)

Easting: 0496680 **Northing:** 6761106 **Elevation (m):** 213.48

- 0–4 m** Alluvium with silcrete pebbles on red-brown calcareous silt-clay
- 4–6 m** Pale brown gypsiferous silt with brecciated white silicified claystone.
- 6–20 m** Weathered, off-white, mauve and grey silicified claystone with minor gypsum stringers, alunite common around 12 m. **Blue ground.**

AO-143 (WEST OF TEE VALLEY)

Easting: 0496614 **Northing:** 6761007 **Elevation (m):** 213.41

- 0–4 m** Alluvium with silcrete on red-brown calcareous silt-clay.
- 4–5 m** Weathered brecciated silicified claystone, abundant massive gypsum, minor alunite at 5 m. Some red jasper.
- 5–12 m** Weathered, silicified claystone, **blue ground.**
- 12–20 m** Weathered, grey and mauve claystone with gypsum-iron oxide stringers and trace of alunite. **Moderate sandstone.**

AO-144 (WEST OF TEE VALLEY)

Easting: 0496445 **Northing:** 6761258 **Elevation (m):** 212.08

- 0–3 m** Alluvium with silcrete pebbles on red-brown calcareous silt-clay.
- 3–6 m** Grey-green silcrete in red-brown gypsiferous silt-clay.
- 6–15 m** Weathered off-white and mauve claystone with gypsum stringers and sparry veins, specks of iron oxide and trace of alunite. **Good sandstone.**
- 15–20 m** Partly weathered grey claystone, minor iron oxide on fractures. **Poor sandstone.**

AO-145 (WEST OF TEE VALLEY)

Easting: 0496363 **Northing:** 6761332 **Elevation (m):** 212.17

- 0–5 m** Alluvium with silcrete pebbles on red-brown calcareous silt-clay.
- 5–10 m** Grey-green silcrete.
- 10–16 m** Weathered partly silicified white claystone, gypsum common 10–12 m also red gypsiferous silt filling fractures, iron oxide specks. **Good sandstone.**
- 16–20 m** Partly weathered grey and mauve claystone with minor gypsum stringers. **Poor sandstone.**

AO-146 (WEST OF TEE VALLEY)

Easting: 496291 **Northing:** 6761387 **Elevation (m):** 211.85

- 0–4 m** Alluvium with silcrete pebbles on red-brown gypsiferous clay-silt.
- 4–8 m** Grey-green silcrete with gypsiferous clay-silt to 6 m then massive gypsum.
- 8–11 m** Weathered silicified white claystone, iron oxide on fractures and brown gypsiferous silt.
- 11–17 m** Weathered white claystone with iron oxide specks, gypsum stringers common, minor alunite and iron oxide along fractures. **Good sandstone.**
- 17–20 m** Partly weathered grey claystone with minor gypsum stringers. **Poor sandstone.**

AO-147 (WEST OF TEE VALLEY)

Easting: 0496203 **Northing:** 6761462 **Elevation (m):** 211.53

- 0–2 m** Alluvium with silcrete pebbles on red-brown gypsiferous clay-silt.
- 2–11 m** Grey-green silcrete to 7 m then massive gypsum with some chips of white silicified claystone.
- 11–20 m** Weathered partly silicified off-white and mauve claystone, minor gypsum and iron oxide stringers. **Poor sandstone and blue ground.**

AO-148 (WEST OF TEE VALLEY)

Easting: 0496008 **Northing:** 6761402 **Elevation (m):** 210.78

- 0–10 m** Red-brown gypsiferous clay-silt on grey-green silcrete with massive gypsum from 8 m, chips of silicified claystone from 9 m.
- 10–20 m** Weathered partly silicified off-white and grey claystone, minor gypsum stringers. **Poor sandstone and blue ground.**

AO-149 (WEST OF TEE VALLEY)

Easting: 0495823 **Northing:** 6761232 **Elevation (m):** 210.48

- 0–4 m** Alluvium with silcrete pebbles on red-brown gypsiferous clay-silt.
- 4–12 m** Grey-green silcrete in gypsiferous silt.
- 12–20 m** Weathered partly silicified grey and mauve claystone, minor gypsum and iron oxide stringers, trace of alunite, some iron oxide specks. **Blue ground.**

AO-150 (WEST OF TEE VALLEY)

Easting: 0495650 **Northing:** 6760920 **Elevation (m):** 210.76

- 0–5 m** Alluvium with silcrete pebbles on red-brown gypsiferous and calcareous silt-clay.
- 5–12 m** Grey-green silcrete in gypsiferous silt. Massive gypsum and silicified claystone chips from 11.5 m.
- 12–20 m** Weathered, partly silicified blue-grey claystone, white alunite common, minor gypsum stringers. **Blue ground.**

AO-151 (WEST OF TEE VALLEY)

Easting: 0495577 **Northing:** 6760844 **Elevation (m):** 210.14

- 0–4 m** Silcrete pebbles on red-brown calcareous and gypsiferous silt-clay.
- 4–10 m** Grey-green silcrete.
- 10–16 m** Weathered, silicified off-white claystone, patches of purple iron oxide and traces of gypsum stringers and sparry gypsum veins from 15 m.
- 16–20 m** Weathered grey-mauve partly silicified claystone, gypsum stringers and veins common to 17 m then minor. **Poor sandstone.**

AO-152 (WEST OF TEE VALLEY)

Easting: 0495512 **Northing:** 6760700 **Elevation (m):** 210.04

- 0–2 m** Silcrete pebbles on gypsiferous red-brown silt-clay.
- 2–6 m** Grey-green silcrete with gypsiferous clay-silt.
- 6–14 m** Weathered off-white and mauve partly silicified claystone with gypsum stringers and sparry veins.
- 14–20 m** Weathered off-white and mauve claystone minor gypsum stringers, iron oxide specks and along fractures. **Good sandstone.**

AO-153 (WEST OF TEE VALLEY)

Easting: 0495460 **Northing:** 6760598 **Elevation (m):** 209.77

- 0–3 m** Silcrete pebbles on red-brown calcareous silt-clay.
- 4–12 m** Grey-green silcrete with massive gypsum and red silt-clay.

AO-154 (WEST OF TEE VALLEY)

Easting: 0495387 **Northing:** 6760530 **Elevation (m):** 209.92

- 0–4 m** Silcrete pebbles on red-brown calcareous and gypsiferous silt-clay.
- 4–10 m** Grey-green silcrete in pale brown calcareous silt with gypsum.
- 10–20 m** Off-white and mauve claystone, gypsum common to 13 m, iron oxide along fractures. **Poor sandstone.**

AO-155 (WEST OF TEE VALLEY)

Easting: 0495315 Northing: 6760389 Elevation (m): 209.79

0–6 m	Silcrete pebbles on red-brown silt-clay with black ferruginous patches.
6–10 m	Grey-green silcrete in pale brown gypsum silt. Massive gypsum from 9 m.
10–14 m	Weathered zone of silicified claystone chips, gypsum and gypsiferous silt.
14–20 m	Weathered off-white and pink claystone with yellow-brown iron oxide patches, minor gypsum stringers. Good sandstone .

AO-156 (WEST OF TEE VALLEY)

Easting: 0495270 Northing: 6760329 Elevation (m): 209.76

0–4 m	Silcrete pebbles on red-brown gypsiferous clay-silt.
4–9 m	Grey-green silcrete.
9–11 m	Silcrete and hard silicified claystone.

AO-157 (WEST OF TEE VALLEY)

Easting: 0495204 Northing: 6760236 Elevation (m): 209.64

0–2 m	Silcrete pebbles on red-brown gypsiferous clay-silt.
2–6 m	Grey-green silcrete with pale brown gypsiferous silt.
6–10 m	Weathered white good sandstone micro-tubules and alunite common and gypsum stringers.
10–20 m	Weathered kaolinitic moderate sandstone , white and mauve with iron oxide specks, minor micro-tubules, alunite and gypsum stringers.

AO-158 (WEST OF TEE VALLEY)

Easting: 0495125 Northing: 6760136 Elevation (m): 209.23

0–4 m	Silcrete pebbles on red-brown gypsiferous clay-silt and massive gypsum from 2 m.
4–10 m	Grey-green silcrete with pale brown gypsiferous silt.
10–20 m	Weathered kaolinitic powdery poor sandstone , off-white and mauve with minor micro-tubules, gypsum stringers and trace of alunite.

AO-159 (WEST OF TEE VALLEY)

Easting: 0495037 Northing: 6760017 Elevation (m): 208.87

0–2 m	Silcrete pebbles on red-brown gypsiferous clay-silt.
2–10 m	Grey-green silcrete with pale brown gypsiferous silt.
10–24 m	Weathered, partly silicified off-white, mauve and red brown multi- coloured poor sandstone with minor sparry gypsum veinlets. Iron oxide along fractures.

AO-160 (WEST OF TEE VALLEY)

Easting: 0494956 Northing: 6759919 Elevation (m): 208.99

0–1 m	Silcrete pebbles on red-brown gypsiferous clay-silt.
1–10 m	Grey-green silcrete with brown gypsiferous clay-silt.
10–20 m	Weathered, silicified, off-white, mauve and blue-grey blue ground with minor gypsum stringers.

AO-161 (WEST OF TEE VALLEY)

Easting: 0494878 Northing: 6759836 Elevation (m): 209.37

- 0–3 m Silcrete pebbles on brown clay-silt.
- 3–5 m Green-yellow coarse silcrete with red-brown gypcrete.
- 5–10 m Weathered partly silicified white **poor sandstone** with tubules and gypsum stringers, top is brecciated with gypsiferous silt.
- 10–20 m Weathered partly silicified white and mauve **poor sandstone** with gypsum stringers.

AO-162 (WEST OF TEE VALLEY)

Easting: 0494821 Northing: 6759766 Elevation (m): 209.67

- 0–3 m Silcrete pebbles on brown calcareous clay-silt.
- 3–10 m Brown and grey-green silcrete breccia and minor gypcrete.
- 10–20 m Pale grey and mauve silicified **blue ground** gypsum and FeO stringers common.

AO-163 (WEST OF TEE VALLEY)

Easting: 0494774 Northing: 6759646 Elevation (m): 209.78

- 0–3 m Silcrete pebbles on brown calcareous clay-silt with silcrete and frags of white claystone.
- 3–10 m Grey-green silcrete cobbles to 7 m then with gypcrete and brecciated, silicified claystone.
- 10–14 m Pale brown gypsiferous silt and partly silicified brecciated claystone with tubules.
- 14–17 m Off-white-pink partly silicified claystone with FeO in fractures and minor gypsum stringers. **Blue ground**.

AO-164 (WEST OF OPAL VALLEY)

Easting: 0496166 Northing: 6763309 Elevation (m): 211.28

- 0–3 m Silcrete pebbles on brown calcareous clay-silt.
- 3–9 m Red-brown gypsum clay-silt with grey-green and minor brown silcrete frags.
- 9–11 m Gypcrete, gypsum veins and white claystone frags.
- 11–17 m White and mauve **good sandstone**, gypsum veins and stringers common, FeO along fractures, haematite specks in claystone.
- 17–20 m Mauve and grey partly silicified **blue ground**.

AO-165 (WEST OF OPAL VALLEY)

Easting: 0496074 Northing: 6763290 Elevation (m): 211.07

- 0–3 m Silcrete pebbles on brown calcareous clay-silt.
- 3–8 m Grey-green silcrete in brown silt.
- 8–17 m Gypcrete with silcrete to 9 m then with brecciated white claystone frags, gypsum veins and red FeO on fractures.
- 17–20 m Off-white and mauve weathered claystone, gypsum veins common. FeO along fractures. Haematite specks in claystone. **Moderate sandstone**.

AO-166 (WEST OF OPAL VALLEY)

Easting: 0496008 Northing: 6763282 Elevation (m): 210.62

- 0–3 m Silcrete pebbles on brown calcareous clay-silt with silcrete frags.
- 3–9 m Grey-green silcrete plus gypcrete from 7 m.
- 9–11 m Gypcrete with brecciated white claystone, gypsum veins and FeO.
- 11–15 m Off-white, pale grey weathered **moderate sandstone**, gypsum veins and FeO common.
- 15–20 m Grey partly silicified **blue ground**, minor gypsum stringers.

AO-167 (WEST OF OPAL VALLEY)

Easting: 0495938 Northing: 6763273 Elevation (m): 210.49

- 0–3 m Silcrete pebbles on brown calcareous clay-silt with silcrete frags.
- 3–10 m Grey-green silcrete to 5 m then with gypcrete and gypsum veins in reddish silt with silicified white claystone frags.
- 10–13 m Pale grey silicified **blue ground** with abundant gypsum.

AO-168 (WEST OF OPAL VALLEY)

Easting: 0495860 Northing: 6763269 Elevation (m): 210.43

- 0–5 m Silcrete pebbles on brown calcareous clay-silt with white silicified claystone from 4.5 m.
- 5–13 m Weathered partly silicified claystone with gypcrete and reddish FeO.
- 13–20 m Weathered white and purple partly silicified claystone, minor gypsum, patches of orange FeO. Weakly leached **moderate sandstone**.

AO-169 (WEST OF OPAL VALLEY)

Easting: 0495805 Northing: 6763264 Elevation (m): 210.16

- 0–3 m Silcrete pebbles on red-brown silt-clay with black FeO on partings.
- 3–12 m Grey-green silcrete cobbles, gypcrete and white silicified claystone frags.
- 12–17 m Brown silcrete breccia, silcreted white claystone and minor gypcrete.
- 17–19 m Silicified white claystone, trace of tubules, minor gypsum stringers. **Blue ground**.

AO-170 (WEST OF OPAL VALLEY)

Easting: 0495719 Northing: 6763255 Elevation (m): 209.89

- 0–4 m Silcrete pebbles on red-brown calcareous silt-clay with black FeO.
- 4–10 m Grey-green silcrete cobbles, gypcrete and white silicified claystone frags.
- 10–20 m Pale grey partly silicified claystone with gypsum stringers. **Blue ground**.

AO-553 (WEST OF JASPER GULLY)

Easting: 0491297 Northing: 6777112 Elevation (m): 212.49

- 0–2 m Silcrete pebbles on red-brown silt-clay with minor silcrete pebbles.
- 2–8 m Pale yellow to pale grey claystone, weakly silicified to 3 m, disseminated 2 mm specks of alunite? Rare gypsum veinlets. **Moderate sandstone**.
- 8–18 m Off-white, pale yellow and grey weathered claystone, rare gypsum.

AO-554 (WEST OF JASPER GULLY)

Easting: 0491293 Northing: 6776995 Elevation (m): 210.41

- 0–3 m Silcrete pebbles on red-brown silt-clay with silcrete cobbles from 2 m.
- 3–6 m Weathered, weakly silicified pale grey and yellow claystone. **Poor sandstone.**
- 6–14 m Weathered, white to pale yellow bleached **moderate sandstone**, rare gypsum.

AO-555 (WEST OF JASPER GULLY)

Easting: 0491191 Northing: 6776859 Elevation (m): 210.29

- 0–1 m Silcrete pebbles on red-brown silt-clay with silcrete rubble.
- 0–11 m Weathered, weakly silicified pale yellow claystone, minor gypsum.
- 11–22 m Weathered, off-white claystone, trace gypsum veinlets. **Moderate sandstone.**

AO-556 (WEST OF JASPER GULLY)

Easting: 0491121 Northing: 6776788 Elevation (m): 207.23

- 0–1 m Silcrete pebbles on red-brown silt-clay.
- 1–6 m Weathered off-white and pale yellow claystone with minor gypsum veinlets.
Moderate sandstone.
- 6–14 m Pale grey and yellow weathered, weakly silicified claystone, trace gypsum. **Blue ground.**

AO-557 (WEST OF JASPER GULLY)

Easting: 0491073 Northing: 6776694 Elevation (m): 208.68

- 0–2 m Silcrete pebbles on red-brown silt-clay.
- 2–9 m Weathered, partly silicified mauve claystone. **Poor sandstone.**
- 9–18 m Weathered, off-white kaolinitic claystone with yellow FeO patches from 14 m.
Moderate sandstone.

AO-558 (WEST OF JASPER GULLY)

Easting: 0491022 Northing: 6776627 Elevation (m): 210.02

- 0–2 m Silcrete pebbles on red-brown clacareous silt-clay with silcrete rubble.
- 2–8 m Weathered yellow partly silicified claystone. **Poor sandstone.**
- 8–19 m Weathered mauve and pale yellow claystone, minor gypsum veinlets. **Moderate sandstone.**

AO-559 (WEST OF JASPER GULLY)

Easting: 0490958 Northing: 6776529 Elevation (m): 211.55

- 0–2 m Silcrete pebbles on red-brown clacareous silt-clay with silcrete rubble.
- 2–8 m Weathered partly silicified off-white to mauve claystone, **Poor sandstone.**
- 8–18 m Weathered, mauve and yellow claystone specks of kaolin?, trace gypsum veinlets.
Moderate sandstone.

AO-560 (WEST OF JASPER GULLY)

Easting: 0490867 **Northing:** 6776475 **Elevation (m):** 212.71

- 0–4 m** Silcrete pebbles on red-brown clacareous silt-clay, silcrete rubble and white silicified claystone frags from 1 m.
- 4–20 m** Weathered off-white and mauve claystone, minor gypsum and FeO along fractures. ***Moderate sandstone.***
- 20–24 m** Weathered, pale grey, partly silicified ***blue ground.***

AO-561 (WEST OF JASPER GULLY)

Easting: 0490783 **Northing:** 6776435 **Elevation (m):** 213.54

- 0–2 m** Silcrete pebbles on red-brown clacareous silt-clay.
- 2–11 m** Weathered, off-white partly silicified claystone, FeO along partings. ***Poor sandstone.***
- 11–22 m** Weathered off-white and mauve claystone with white kaolin? Specks to 13 m. FeO along partings and minor gypsum. ***Moderate sandstone.***

4. Coober Pedy summary drill logs of selected holes from the CO series

CO-43 (Emu)

Easting: 0477722 Northing: 6784377 Elevation (m): 204.05

0–7 m	Grey and ferruginous silcrete pebs on brown clay silt to 1 m then red-brown silt-clay with silicified white and purple claystone, platy calcrete to 2 m.
7–12 m	Grey and minor purple silcreted claystone with silicified tubules, minor gypsum and carbonate.
12–14 m	Weathered, silicified white and mauve claystone with silcreted patches, yellow-brown FeO common.
14–20 m	Partly silicified white and mauve claystone, minor gypsum and FeO, trace alunite. Blue ground.

CO-49 (Emu)

Easting: 0477743 Northing: 6784381 Elevation (m): 203.84

0–3 m	Brown clay-silt with grey and ferruginous silcrete on red-brown silt-clay with platy calcrete.
3–13 m	White and mauve silicified claystone, minor gypsum and purple FeO stringers. Blue ground.

CO-51 (SOUTH OF BLACK FLAG)

Easting: 0476810 Northing: 6786939 Elevation (m): 221.43

0–6 m	Brown clay-silt with grey silcrete and ironston gibber on red-brown silt-clay with platy calcrete. Weathered claystone frags from 4 m.
6–12 m	Weathered white claystone, minor tubules and gypsum. <i>Good sandstone.</i>
12–19 m	Partly weathered mauve and white moderate sandstone , minor gypsum veins and FeO along fractures, trace alunite and tubules.

CO-53 (SOUTHEAST OF SOUTH PACIFIC)

Easting: 0468029 Northing: 6786865 Elevation (m): 205.72

1–4 m	Brown calcareous clay-silt with grey silcrete pebbles on grey silcrete pebbles and cobbles. Carbonate coatings to 2 m.
4–7 m	White, weathered, partly silicified poor sandstone , trace gypsum veins.
7–12 m	White, weathered <i>good sandstone</i> with purple ferruginous patches, gypsum abundant to 9 m then common.

CO-55 (SOUTHEAST OF SOUTH PACIFIC)

Easting: 0467998 Northing: 6786849 Elevation (m): 205.49

1–3 m	Brown calcareous clay-silt with grey silcrete pebbles on grey silcrete pebbles and cobbles. Carbonate coatings to 2 m.
3–10 m	White, weathered, silicified poor sandstone , FeO along fractures, minor gypsum.
10–17 m	White, purple-mauve, weathered, partly silicified <i>moderate sandstone</i> , dark red FeO along fractures, minor gypsum veins.

CO-56 (TEE VALLEY)

Easting: 0498559 Northing: 6760654 Elevation (m): ~188

- 0–2 m Silcrete pebbles on brown clay-silt to 1 m then red-brown calcareous clay-silt with silcrete pebbles and minor silicified white claystone frags.
- 2–4 m Off-white weathered, leached **good sandstone**, minor FeO and gypsum on partings.
- 4–7 m Mauve **moderate sandstone** as above.
- 7–15 m Pale grey and yellow partly silicified **blue ground**, trace gypsum stringers.

CO-59 (TEE VALLEY)

Easting: 0498667 Northing: 6760508 Elevation (m): ~188

- 0–2 m Silcrete pebbles on brown calcareous clay-silt.
- 2–4 m Off-white, mauve and yellow partly silicified **blue ground**.
- 4–9 m Mauve to pale grey weathered **moderate sandstone** with gypsum stringers, minor alunite and yellow-brown FeO patches.

CO-61 (TEE VALLEY)

Easting: 0498804 Northing: 6760377 Elevation (m): 188.26

- 0–1 m Silcrete pebbles on red-brown calcareous clay-silt.
- 1–3 m Mauve and purple weathered, silicified claystone and gypcrete.
- 3–11 m Mauve and off-white partly weathered claystone, FeO and gypsum stringers common. Black-brown FeO partings with minor gypsum from 8 m. **Poor sandstone**.
- 11–14 m Grey unweathered claystone (mud).

CO-69 (TEE VALLEY)

Easting: 0498886 Northing: 6760304 Elevation (m): 188.18

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebbles and weathered claystone frags from 2 m.
- 3–9 m Weathered claystone, minor gypsum and FeO stringers. **Moderate sandstone**.
- 9–10 m Grey unweathered claystone (mud).

CO-70 (TEE VALLEY)

Easting: 0499056 Northing: 6760296 Elevation (m): 185.46

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebbles and weathered claystone frags from 2 m.
- 4–9 m Weathered claystone, minor gypsum and FeO stringers. **Moderate sandstone**.
- 9–14 m Grey unweathered claystone (mud).

CO-73 (TEE VALLEY)

Easting: 0499169 Northing: 6760228 Elevation (m): 183.63

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete and claystone frags.
- 2–10 m Weathered claystone minor FeO and gypsum stringers, minor alunite. Disseminated specks of haematite. **Moderate sandstone**.

CO-77 (ALLAN RISE)

Easting: 0486049 Northing: 6747315 Elevation (m): 174.69

- 0–2 m Silcrete, ironstone, claystone, black and white jasper gibber on red-brown silt-clay, platy calcrete.
- 2–10 m Off-white and pale grey weathered, unleached claystone with gypsum stringers and yellow-brown FeO on fractures common. **Poor sandstone.**
- 10–15 m Pale grey and mauve **poor sandstone** with minor gypsum and FeO.

CO-79 (ALLAN RISE)

Easting: 0485998 Northing: 6747366 Elevation (m): 173.77

- 0–2 m Silcrete, ironstone, claystone, black and white jasper gibber on red-brown silt-clay, platy calcrete.
- 2–7 m White and yellow weathered partly silicified **poor sandstone**, gypsum stringers common, minor FeO staining.
- 7–10 m Mauve-white as above but less silicified.

CO-80 (ALLAN RISE)

Easting: 0485978 Northing: 6747383 Elevation (m): 172.36

- 0–1 m Quartzite, ironstone and claystone gibber on red-brown calcareous clay-silt.
- 1–4 m Off-white, yellow, weathered, unleached, silicified **poor sandstone**, minor gypsum, brown gypsum silt infills.
- 4–9 m Pale grey as above with minor yellow-brown FeO patches, trace gypsum. **Blue ground.**

CO-82 (ALLAN RISE)

Easting: 0485825 Northing: 6747323 Elevation (m): 172.50

- 0–6 m Claystone, quartzite and ironstone scree on brown calcareous silt to 0.2 m. Then pale brown weathered silicified claystone, minor gypsum and FeO stringers. Grey and yellow-brown ferruginous claystone from 4 m. **Blue ground.**

CO-83 (ALLAN RISE)

Easting: 0485940 Northing: 6747405 Elevation (m): 172.96

- 0–1 m Claystone, quartzite and ironstone scree on brown calcareous silt.
- 1–10 m White, yellow weathered, partly silicified claystone, minor gypsum and FeO stringers. **Blue ground.**

CO-84 (ALLAN RISE)

Easting: 0485908 Northing: 6747419 Elevation (m): 172.74

- 0–1 m Claystone, quartzite and ironstone scree on brown calcareous silt.
- 1–6 m Off-white, weathered partly silicified, unleached claystone, yellow-brown ferruginisation common, with gypsum.
- 6–9 m Pale grey as above. **Poor sandstone.**

CO-92 (REYNOLDS RIDGE)

Easting: 0498663 Northing: 6751014 Elevation (m): 201.84

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt with minor silcrete and silicified claystone frags.
- 3–5 m Gypsiferous red-brown clay.
- 5–8 m Grey-green silcrete rubble with minor off-white silicified claystone at 8 m.

CO-93 (REYNOLDS RIDGE)

Easting: 0498595 Northing: 6751018 Elevation (m): 201.66

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with minor silcrete and silicified claystone frags.
- 4–8 m Grey-green silcrete rubble with minor off-white claystone and gypcrete from 6 m.

CO-94 (REYNOLDS RIDGE)

Easting: 0498482 Northing: 6751020 Elevation (m): 200.88

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt.
- 4–6 m Silicified claystone in red-brown gypsiferous clay.
- 6–10 m Grey-green silcrete in gypsiferous silt.

CO-95 (REYNOLDS RIDGE)

Easting: 0498532 Northing: 6750835 Elevation (m): 202.23

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with minor silcrete pebbles with abundant gypsum from 3 m.
- 4–12 m Mottled grey and mauve silicified **blue ground**, trace gypsum.
- 12–18 m Weathered off-white-mauve-grey **moderate claystone** with minor FeO staining, trace gypsum.

CO-97 (REYNOLDS RIDGE)

Easting: 0498718 Northing: 6750848 Elevation (m): 203.88

- 0–4 m Grey-green coarse silcrete in red-brown clay-silt.
- 4–8 m Red-brown silt-clay.

CO-104 (REYNOLDS RIDGE)

Easting: 0498811 Northing: 6750679 Elevation (m): ~200

- 0–4 m Silcrete pebbles on calcareous red-brown silt-clay.
- 4–7 m Grey-green coarse silcrete in red-brown silt-clay, white claystone frags at 7 m.
- 7–18 m Off-white and mauve silicified claystone with FeO staining common. **Blue ground**.

CO-106 (REYNOLDS RIDGE)

Easting: 0499063 Northing: 6751181 Elevation (m): 200.24

- 0–2 m Silcrete pebbles on calcareous red-brown silt-clay.
- 2–3 m Grey-green silcrete with brown breccia silcrete.
- 4–5 m Weathered off-white to red-brown partly silicified claystone frags and tubules in ferruginous, gypsum matrix.
- 5–9 m Weathered off-white **good sandstone**, FeO and gypsum along fractures. Quartzite cobble at ~6 m.
- 9–14 m Pale grey **moderate sandstone** with minor FeO and gypsum along fractures.

CO-109 (REYNOLDS RIDGE)

Easting: 0499107 Northing: 6751070 Elevation (m): 202.63

- 0–2 m Calcareous red-brown silt-clay with grey silcrete pebbles.
- 2–4 m Reddish gypcrete with frags of silicified claystone and tubules.
- 4–7 m Weathered off-white silicified claystone, rare gypsum.
- 7–14 m Weathered white and mauve **moderate sandstone** disseminated specks of FeO, minor FeO and gypsum along fractures.

CO-117 (REYNOLDS RIDGE)

Easting: 0499023 Northing: 6751008 Elevation (m): 201.89

- 0–1 m Calcareous red-brown silt-clay with grey silcrete pebbles.
- 1–5 m Weathered, partly silicified whitish claystone with FeO and gypsum veinlets.
- 5–10 m Weathered, white **moderate sandstone** reddish gypsum silt.
- 10–14 m Pale grey partly silicified claystone, minor gypsum stringers.

CO-121 (NORTH OF REYNOLDS RIDGE)

Easting: 0499001 Northing: 6751639 Elevation (m): 202.26

- 0–2 m Silcrete pebbles in red-brown clay-silt.
- 2–4 m Off-white claystone with abundant tubules.
- 4–6 m Pale grey, weathered, partly silicified **blue ground** with FeO and gypsum stringers.
- 6–14 m Weathered off-white and pale grey **moderate sandstone** with gypsum veinlets and FeO stained fractures. Quartzite cobble at ~8 m.

CO-123 (NORTH OF REYNOLDS RIDGE)

Easting: 0499083 Northing: 6751721 Elevation (m): 201.99

- 0–1 m Silcrete pebbles in red-brown calcareous clay-silt with frags of white silicified claystone.
- 1–5 m Off-white partly silicified claystone with silcreted patches, minor gypsum stringers and tubules, abundant around 3 m.
- 5–9 m Weathered grey and off-white **good sandstone**, minor gypsum stringers and alunite.
- 9–14 m Partly silicified, grey **blue ground** with minor gypsum stringers.

CO-126 (NORTH OF REYNOLDS RIDGE)

Easting: 0498964 Northing: 6751506 Elevation (m): 200.03

- 0–2 m Silcrete pebbles in red-brown clay-silt.
- 2–4 m Grey-green coarse silcrete rubble in red-brown clay-silt.
- 4–12 m Weathered off-white **moderate sandstone** with tubules and minor gypsum. Trace of tubules after 6 m.
- 12–14 m Pale grey partly silicified **blue ground** with minor gypsum and FeO staining.

CO-127 (NORTH OF REYNOLDS RIDGE)

Easting: 0499144 Northing: 6751826 Elevation (m): 204.81

- 0–2 m Silcrete pebbles on calcareous clay-silt.
- 2–4 m Red-brown gypsiferous clay-silt with silicified claystone, partly silcreted.
- 4–10 m Weathered off-white and mauve **good sandstone** with minor gypsum and FeO stringers.
- 10–20 m Pale grey partly silicified **blue ground**, minor gypsum and FeO stringers, minor alunite from 17 m.

CO-128 (NORTH OF REYNOLDS RIDGE)

Easting: 0499178 Northing: 6751872 Elevation (m): 207.33

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–5 m Grey-green silcrete in red-brown silt-clay, gypsiferous from 4 m.
- 5–9 m Weathered white **moderate sandstone**, minor tubules, trace of gypsum.
- 9–12 m Weathered, partly silicified white and mauve **blue ground**, trace FeO staining along fractures.

CO-130 (NORTH OF REYNOLDS RIDGE)

Easting: 0499010 Northing: 6751961 Elevation (m): 207.66

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–4 m Red-brown gypsiferous clay-silt with silcrete and silicified white claystone frags.
- 4–8 m Off-white and mauve silicified claystone, partly silcreted.
- 8–15 m Weathered off-white **good sandstone**, FeO along partings, minor gypsum.
- 15–20 m Partly silicified pale grey **blue ground**, minor FeO and gypsum, trace of alunite.

CO-135 (NORTH OF REYNOLDS RIDGE)

Easting: 0498824 Northing: 6753047 Elevation (m): 207.66

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebbles to 1 m then with gypsum and white silicified claystone frags.
- 3–5 m Weathered white and mauve partly silicified claystone with gypsum veinlets and FeO staining.
- 5–11 m Weathered white and mauve **good sandstone**, minor tubules and gypsum stringers.

CO-137 (NORTH OF REYNOLDS RIDGE)

Easting: 0498869 Northing: 6752834 Elevation (m): 210.06

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebbles.
- 4–6 m Gypcrete and red-brown silicified claystone frags.
- 6–10 m Weathered white and red-brown partly silicified claystone, minor tubules.
- 10–15 m Weathered pale grey and white **good sandstone** with FeO specks, trace tubules, gypsum stringers and alunite.
- 15–20 m Weathered partly silicified **moderate sandstone**, trace gypsum stringers and FeO on fractures, trace alunite at 19 m.

CO-138 (NORTH OF REYNOLDS RIDGE)

Easting: 0498816 Northing: 6752845 Elevation (m): 209.35

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebbles.
- 4–8 m Gypsiferous red-brown clay-silt, silicified claystone frags, minor silcrete pebbles.
- 8–15 m Weathered white and Fe stained partly silicified claystone. **Good sandstone** from 10 m, minor tubules and gypsum stringers. FeO along partings.
- 15–20 m Partly weathered pale grey **moderate sandstone**, minor tubules and gypsum veinlets.

CO-139 (NORTH OF REYNOLDS RIDGE)

Easting: 0498817 Northing: 6752753 Elevation (m): 209.73

- 0–1 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete rubble.
- 1–7 m Silcrete rubble, brown and grey-green in red-brown clay-silt, gypcrete with silicified claystone and minor silcrete from 4 m.
- 7–20 m Weathered off-white **moderate claystone** with gypsum veinlets, FeO along fractures.

CO-140 (NORTH OF REYNOLDS RIDGE)

Easting: 0498832 Northing: 6752678 Elevation (m): 209.58

- 0–2 m Silcrete pebbles on red-brown calcareous clay-silt.
- 2–7 m Weathered, partly silicified off-white and purple claystone, gypsum stringers.
- 7–14 m Weathered, off-white, bleached **good sandstone**, trace of tubules and gypsum.
- 14–20 m Pale grey, weakly silicified **blue ground**.

CO-171 (REYNOLDS RIDGE)

Easting: 0499690 Northing: 6749974 Elevation (m): ~213.00

- 0–3 m Silcrete pebbles on red-brown calcareous clay-silt.
- 3–11 m Grey-green silcrete in clay-silt, partly gypsiferous, minor claystone frags.
- 11–17 m Weathered off-white **moderate sandstone**, trace tubules, rare alunite.
- 17–21 m Weathered pale brown **poor sandstone**.

CO-175 (REYNOLDS RIDGE)

Easting: 0499763 Northing: 6750117 Elevation (m): 213.23

0–3 m	Silcrete pebbles on red-brown calcareous clay-silt.
3–8 m	Grey-green silcrete rubble in red-brown clay-silt, partly gypsiferous.
8–12 m	Weathered, silicified, off-white claystone, minor tubules.
12–20 m	Weathered off-white and pale grey moderate sandstone , trace tubules, minor gypsum veins.

CO-181 (REYNOLDS RIDGE)

Easting: 0499644 Northing: 6750132 Elevation (m): 212.22

0–2 m	Silcrete pebbles on red-brown calcareous clay-silt.
2–7 m	Silcrete in red-brown gypsiferous clay-silt, minor claystone frags.
7–13 m	Weathered off-white and pale red silicified poor sandstone , minor tubules.
13–21 m	Weathered off-white good sandstone with minor tubules, minor alunite and gypsum.

CO-185 (REYNOLDS RIDGE)

Easting: 0499859 Northing: 6750153 Elevation (m): 207.37

0–2 m	Silcrete pebbles on red-brown calcareous clay-silt with grey silcrete rubble.
2–7 m	Weathered off-white good sandstone trace tubules.
7–12 m	Weathered off-white and mauve moderate sandstone with trace gypsum and alunite.

CO-187 (REYNOLDS RIDGE)

Easting: 0499904 Northing: 6750296 Elevation (m): 208.34

0–2 m	Silcrete pebbles on red-brown calcareous clay-silt with grey silcrete rubble.
2–10 m	Weathered off-white and mauve moderate sandstone with trace tubules and gypsum. Silicified claystone to 3 m.
10–18 m	Weathered pale pink, off-white and pale yellow moderate sandstone , minor alunite and FeO staining.

CO-200 (ALLAN RISE)

Easting: 0487599 Northing: 6747475 Elevation (m): 190.09

0–3 m	Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay, platy calcrete from 2 m.
3–7 m	Grey and pinkish silcrete with recemented concretions.
7–12 m	Pale brown, weathered, partly silicified poor sandstone with pink ferruginisation, trace gypsum veins.
12–17 m	As above, gypsum and yellow-brown FeO more common.

CO-203 (ALLAN RISE)

Easting: 0487622 Northing: 6747470 Elevation (m): 190.34

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay, platy calcrete from 2 m, silcrete cobbles at 3 m.
- 3–8 m Off-white, weathered partly silicified claystone, tubules common, minor gypsum stringers. **Poor sandstone.**
- 8–13 m White, mauve weathered **moderate sandstone**, minor gypsum and FeO stringers.

CO-204 (ALLAN RISE)

Easting: 0487614 Northing: 6747529 Elevation (m): 189.32

- 0–4 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay, platy calcrete from 1 m, silcreted claystone from 3 m.
- 4–6 m Grey recemented concretionary silcrete plus silicified claystone, gypsiferous matrix.
- 6–9 m White and pink-red ferruginous silicified claystone, minor gypsum veins and red-brown clay in fractures.
- 9–15 m White and pink-grey partly silicified **moderate sandstone**. FeO spotting gives pink colouring, minor gypsum, yellow-brown FeO patches at 13 m.

CO-205 (ALLAN RISE)

Easting: 0487607 Northing: 6747566 Elevation (m): 188.92

- 0–1 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay.
- 1–7 m Grey recemented concretionary silcrete plus silicified claystone, gypsiferous matrix.
- 7–13 m Mauve and white, weathered **moderate sandstone**, tubules, yellow FeO patches after 9 m.

CO-206 (ALLAN RISE)

Easting: 0487584 Northing: 6747493 Elevation (m): 189.83

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay.
- 3–6 m Grey recemented concretionary silcrete plus silicified claystone.
- 6–19 m Mauve and white weathered **moderate sandstone**, silicified to 8 m, minor gypsum veinlets and yellow FeO staining.

CO-212 (ALLAN RISE)

Easting: 0487572 Northing: 6747411 Elevation (m): 190.58

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 3–4 m Grey recemented concretionary silcrete.
- 4–10 m Off-white and pink, weathered, partly silicified **moderate sandstone**, red FeO on fractures.
- 10–13 m Off-white **good sandstone**, gypsum veins common, maroon ferruginisation from 11 m.

CO-213 (ALLAN RISE)

Easting: 0487570 Northing: 6747407 Elevation (m): 190.59

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 3–5 m Grey-green silcrete frags. and pebs in red-brown silt-clay.
- 5–8 m Brecciated, weathered, partly silicified claystone, red-purple FeO and gypsum matrix.
- 8–20 m White and purple ferruginous, weathered **moderate sandstone**, weakly leached, becoming grey from 10 m, minor gypsum veins.

CO-217 (ALLAN RISE)

Easting: 0487564 Northing: 6747376 Elevation (m): 190.72

- 0–1 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 1–7 m Grey silcrete and silicified claystone in red-brown gypsiferous silt.
- 7–14 m Weathered white and grey weakly leached **moderate sandstone**, minor gypsum veinlets and red-brown gypsiferous silt fracture fillings to 10 m.

CO-218 (ALLAN RISE)

Easting: 0487559 Northing: 6747357 Elevation (m): 190.97

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 3–5 m Grey silcrete and silicified claystone in red-brown gypsiferous silt.
- 5–12 m Grey silicified claystone with gypsum silt fillings to 7 m then mauve and white, weathered **moderate sandstone** with gypsum silt infillings, minor gypsum and FeO stringers.

CO-220 (ALLAN RISE)

Easting: 0487450 Northing: 6747343 Elevation (m): 190.17

- 0–1 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 1–5 m Grey silcrete cobbles in red-brown silt clay, minor white claystone frags. Gypsiferous from 3 m.
- 5–12 m Grey silicified claystone with gypsum silt fracture filling to 9 m then mauve and white, weathered **moderate sandstone** with gypsum silt fracture infills, minor gypsum and FeO stringers.

CO-221 (ALLAN RISE)

Easting: 0487365 Northing: 6747294 Elevation (m): 190.56

- 0–2 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 2–5 m White silicified claystone, minor FeO staining.
- 5–6 m Grey recemented silcrete, minor silicified claystone frags.
- 6–13 m White and mauve weathered, **moderate sandstone**, partly silicified to 11 m, minor gypsum veinlets.

CO-222 (ALLAN RISE)

Easting: 0487337 Northing: 6747238 Elevation (m): 191.74

- 0–3 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 3–6 m Grey recemented silcrete with minor red-brown silicified claystone frags.
- 6–13 m Yellow-brown and off-white silicified claystone, minor maroon ferruginisation and gypsum stringers.

CO-224 (ALLAN RISE)

Easting: 0487615 Northing: 6747361 Elevation (m): 191.08

- 0–4 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete.
- 4–7 m Mauve silicified claystone, gypsiferous clay-silt fracture infills, minor gypsum stringers.
- 7–14 m White and mauve weakly silicified **moderate sandstone**, minor gypsum veinlets.

CO-233 (ALLAN RISE)

Easting: 0486560 Northing: 6748627 Elevation (m): 180.43

- 0–5 m Red-brown clay-silt with silcrete, quartzite gibber on red-brown silt-clay with platy calcrete to 2 m then red-brown silcreted clay with claystone frags, grey silcrete frags. Gypsiferous from 4 m.
- 5–7 m White, weathered, partly silicified **moderate sandstone**, minor gypsum veins and FeO stringers.
- 7–11 m Mauve and white, weathered **good sandstone**, minor gypsum veinlets and yellow ferruginisation.

CO-234 (ALLAN RISE)

Easting: 0486593 Northing: 6748548 Elevation (m): 179.66

- 0–1 m Brown clay-silt with silcrete gibber on red-brown silt-clay with platy calcrete.
- 1–6 m White, weathered, partly silicified **moderate sandstone**, minor gypsum and FeO on fractures. Minor red ferruginous patches, minor gypsum silt infills.
- 6–12 m White and mauve silicified **blue ground**, minor gypsum and FeO stringers from 9 m.

CO-237 (ALLAN RISE)

Easting: 0486826 Northing: 6748457 Elevation (m): 180.09

- 0–2 m Brown calcareous clay-silt with silcrete gibber on red-brown silt-clay with platy calcrete to 1 m then red-brown coarse silcrete after ferruginous claystone.
- 1–6 m White, weathered, partly silicified, brecciated claystone, gypsum silt fracture infills. Ferruginised from 5 m.
- 6–11 m White and mauve **moderate sandstone**, minor yellow-brown FeO, gypsum veinlets common. Grey silicified **blue ground** from 10 m.

CO-238 (ALLAN RISE)

Easting: 0486815 Northing: 6748475 Elevation (m): 179.96

- 0–4 m Brown clay-silt with silcrete gibber, minor platy calcrete to 1.5 m, then gypsiferous red-brown silt-clay with claystone fragments.
- 4–8 m White and mauve, weathered **moderate sandstone**, minor gypsum veinlets, partly silicified.
- 8–12 m White and mauve silicified **blue ground**, minor gypsum and FeO stringers.

CO-248 (ALLAN RISE)

Easting: 0487359 Northing: 6748444 Elevation (m): 179.37

- 0–6 m Red-Brown clay-silt with silcrete and ironstone gibber on red-brown silt-clay with platy calcrete and weathered claystone fragments.
- 6–12 m White and mauve, weathered **good sandstone**, minor gypsum and FeO stringers and mottling.

CO-251 (ALLAN RISE)

Easting: 0487387 Northing: 6748429 Elevation (m): 179.11

- 0–3 m Red-Brown clay-silt with silcrete gibber on red-brown silt-clay with platy calcrete and weathered claystone fragments.
- 3–7 m Purple and yellow-brown, ferruginous, weathered **good sandstone**, minor gypsum. White and mauve after 4 m.
- 7–10 m Yellow-brown and off-white partly silicified **moderate sandstone**, gypsum common.

CO-255 (ALLAN RISE)

Easting: 0487410 Northing: 6748407 Elevation (m): 179.18

- 0–3 m Red-Brown clay-silt with silcrete gibber on red-brown silt-clay with platy calcrete and weathered claystone fragments.
- 3–10 m White and mauve, weathered **good sandstone**, minor gypsum veinlets. Yellow-brown ferruginous patches.

CO-267 (ALLAN RISE)

Easting: 0487403 Northing: 6748468 Elevation (m): 178.77

- 0–1 m Brown clay-silt with ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete and weathered claystone fragments.
- 1–4 m Dark brown and grey silcrete chips, carbonate coatings to 2 m.
- 4–8 m White and mauve, weathered **good sandstone**, gypsum is disseminated and as veins. Yellow and purple ferruginous patches.
- 8–10 m As above partly silicified and weakly weathered **poor sandstone**.

CO-270 (ALLAN RISE)

Easting: 0487440 Northing: 6748477 Elevation (m): 178.54

- 0–2 m Brown clay-silt with ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete.
- 2–4 m White and mauve, weathered **good sandstone**.
- 4–9 m As above, weakly weathered **moderate sandstone**, abundant gypsum and yellow-brown ferruginous patches common from 7 m.

CO-271 (ALLAN RISE)

Easting: 0487464 Northing: 6748478 Elevation (m): 178.50

- 0–2 m Brown clay-silt with ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete. Black and white jasper also in gibber.
- 2–8 m White and mauve, weathered **good sandstone**, minor gypsum and yellow-brown ferruginous patches. Gypsum abundant after 4 m.

CO-272 (ALLAN RISE)

Easting: 0487480 Northing: 6748485 Elevation (m): 178.39

- 0–1 m Brown clay-silt with ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete. Black and white jasper also in gibber.
- 1–7 m White, weathered **good sandstone**, ferruginous patches and gypsum veinlets.

CO-273 (ALLAN RISE)

Easting: 0487505 Northing: 6748494 Elevation (m): 178.35

- 0–7 m Brown clay-silt with claystone fragments for 0.3 m then white, partly silicified, weakly weathered **moderate sandstone**, abundant gypsum from 3 m.

CO-274 (ALLAN RISE)

Easting: 0487543 Northing: 6748525 Elevation (m): 178.35

- 0–1 m Brown clay-silt with claystone and ironstone surface fragments.
- 1–9 m White, weathered **good sandstone**, gypsum common, minor FeO veinlets. Grey coating on fractures.

CO-282 (ALLAN RISE)

Easting: 0487715 Northing: 6748452 Elevation (m): 179.78

- 0–11 m Brown calcareous clay-silt with claystone, ironstone and black and white jasper surface fragments to 0.3 m then white, weathered, partly silicified **moderate sandstone**, gypsum common to 7 m, maroon ferruginous patches.

CO-284 (ALLAN RISE)

Easting: 0487725 Northing: 6748496 Elevation (m): 179.19

- 0–5 m Brown calcareous clay-silt with claystone, ironstone and black and white jasper surface fragments to 0.2 m then white and grey partly silicified and brecciated claystone, minor ferruginous patches, gypsum common from 3 m.
- 5–11 m White, partly silicified and weathered **moderate sandstone**, minor gypsum stringers, pink and yellow-brown ferruginisation from 9 m.

CO-287 (ALLAN RISE)

Easting: 0487731 Northing: 6748556 Elevation (m): 178.75

- 0–1 m Pale red-brown clay-silt, silcrete surface lag on weathered claystone.
- 1–9 m Off-white, weathered, partly silicified **moderate sandstone**, minor gypsum veinlets common after 4 m.

CO-288 (ALLAN RISE)

Easting: 0487749 Northing: 6748490 Elevation (m): 179.51

- 0–1 m Pale red-brown clay-silt, silcrete and silicified claystone surface lag on weathered claystone.
- 1–8 m White and mauve, weathered **moderate sandstone**, gypsum veinlets, yellow-brown ferruginous patches.

CO-290 (ALLAN RISE)

Easting: 0487836 Northing: 6748376 Elevation (m): 181.11

- 0–1 m Red-brown clay-silt with silcrete gibber on red-brown silt-clay.
- 1–5 m White claystone, silicified, carbonate at top, claystone brecciated with gypsum matrix, minor FeO stringers.
- 5–9 m Grey-mauve silicified **poor sandstone**, yellow-brown and maroon FeO stringers common.

CO-291 (ALLAN RISE)

Easting: 0487802 Northing: 6748377 Elevation (m): 181.01

- 0–2 m Pale brown calcareous silt with silcrete gibber on red-brown silt-clay with claystone fragments.
- 2–9 m White and mauve, weathered **good sandstone**, gypsum infilling fractures, purple ferruginous patches.

CO-292 (ALLAN RISE)

Easting: 0487779 Northing: 6748383 Elevation (m): 180.93

- 0–2 m Pale brown calcareous silt with silcrete gibber on red-brown silt-clay with claystone fragments. Black and white jasper on surface.
- 2–6 m White, weathered, partly silicified **moderate-good sandstone**, gypsum common, gypsum silt filling fractures.
- 6–9 m White and mauve **good sandstone**, minor gypsum veinlets.

CO-293 (ALLAN RISE)

Easting: 0487734 Northing: 6748387 Elevation (m): 180.68

- 0–1 m Pale brown silt and clay with silcrete lag.
1–9 m White and mauve, weathered **moderate-good sandstone**, minor gypsum veinlets and yellow FeO stringers.

CO-294 (ALLAN RISE)

Easting: 0487150 Northing: 6748523 Elevation (m): 179.79

- 0–2 m Brown calcareous silt with silcrete gibber on off-white claystone, fragmented quartzite cobble.
2–9 m White, weathered, silicified claystone with brown gypsiferous silt filling fractures. **Poor sandstone.**

CO-295 (ALLAN RISE)

Easting: 0487201 Northing: 6748517 Elevation (m): 179.73

- 0–2 m Brown clay-silt, ferruginous silcrete gibber on red-brown silt-clay with platy calcrete.
2–12 m White, weathered partly silicified **poor sandstone**, minor purple and yellow-brown ferruginous patches, gypsum silt infills common after 6 m.

CO-296 (ALLAN RISE)

Easting: 0487245 Northing: 6748494 Elevation (m): 179.59

- 0–1 m Brown clay-silt, ferruginous silcrete, ironstone and quartzite gibber on red-brown calcareous silt-clay. Platy calcrete at 1 m.
1–6 m White, weathered, partly silicified **moderate sandstone**, red-brown clay on fractures, trace gypsum veins.
6–13 m As above, less silicified, minor purple FeO patches, gypsum common from 9 m. Yellow-brown FeO patches common from 11 m.

CO-297 (ALLAN RISE)

Easting: 0487286 Northing: 6748479 Elevation (m): 179.41

- 0–3 m Brown clay-silt, ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay. Platy calcrete and grey silcrete from 2 m.
3–10 m White, weathered, partly silicified **moderate sandstone**, gypsum veinlets, minor Fe staining.
10–14 m White and mauve as above with gypsum veinlets and yellow-brown Fe staining.

CO-298 (ALLAN RISE)

Easting: 0487319 Northing: 6748460 Elevation (m): 179.44

- 0–3 m Brown clay-silt, ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete. Silicified claystone and calcrete from 2 m.
- 3–6 m White, weathered, partly silicified **moderate-good sandstone**, minor purple Fe staining, trace gypsum.
- 6–9 m Purple and yellow-brown Fe stained claystone to 7 m then white-mauve, weathered **good sandstone**, Fe staining and gypsum common.
- 9–12 m As above, partly silicified.

CO-299 (ALLAN RISE)

Easting: 0487350 Northing: 6748463 Elevation (m): 179.31

- 0–3 m Brown clay-silt, ferruginous silcrete, ironstone and quartzite gibber on red-brown silt-clay with platy calcrete. Silicified claystone and calcrete from 2 m.
- 3–9 m White and mauve, weathered **good sandstone**, minor yellow-brown Fe staining, gypsum veinlets common from 7 m.

CO-306 (ALLAN RISE)

Easting: 0487121 Northing: 6748547 Elevation (m): 179.99

- 0–6 m Brown clay-silt, silcrete gibber on red-brown silt-clay with platy calcrete and white claystone frags.
- 6–9 m Brecciated weathered, partly silicified claystone, gypsum matrix.
- 9–15 m White, weathered **good sandstone**, gypsum veinlets common. Yellow-brown iron staining from 13 m.

CO-308 (ALLAN RISE)

Easting: 0487048 Northing: 6748532 Elevation (m): 180.00

- 0–1 m Brown clay-silt, silcrete gibber on red-brown silt-clay with platy calcrete.
- 1–9 m Off-white silicified claystone, **poor sandstone**, purple ferruginous patches, grey silcreted patches, minor gypsum veins.
- 9–13 m Off-white and mauve, silicified **poor sandstone**, gypsum veinlets common, yellow-brown ferruginisation from 11 m.

CO-312 (ALLAN RISE)

Easting: 0487042 Northing: 6748478 Elevation (m): 180.22

- 0–4 m Brown clay-silt, ferruginous silcrete and quartzite gibber on red-brown silt-clay with platy calcrete and claystone frags.
- 4–8 m White and purple partly silicified **poor sandstone**, gypsum common from 4 m.
- 8–14 m White, weathered, weakly silicified **moderate sandstone**, gypsum common, yellow-brown ferruginisation from 11 m.

CO-316 (ALLAN RISE)

Easting: 0487037 Northing: 6748429 Elevation (m): 180.55

- 0–4 m Brown clay-silt, ferruginous silcrete gibber on red-brown silt-clay with platy calcrete and claystone frags.
- 4–9 m Purple and white partly silicified **poor sandstone**, minor gypcrete filling fractures, yellow iron staining from 8 m.
- 9–14 m White, weathered, weakly silicified **moderate sandstone**, minor gypsum. Yellow-ferruginisation from 11 m.

CO-319 (ALLAN RISE)

Easting: 0487039 Northing: 6748414 Elevation (m): 180.57

- 0–1 m Brown clay-silt, ferruginous silcrete gibber on red-brown silt-clay with platy calcrete.
- 1–5 m Silicified white claystone frags in silicified red-brown silt.
- 5–8 m White weakly silicified **moderate sandstone** with minor red-brown silicified claystone, minor gypsum.
- 8–15 m White, silicified **poor sandstone** with red-brown iron staining, coarse gypsum veins common. Weakly weathered grey claystone from 11 m.

CO-321 (ALLAN RISE)

Easting: 0487062 Northing: 6748518 Elevation (m): 184.07

- 0–1 m Brown clay-silt, ferruginous silcrete gibber on red-brown silt-clay with platy calcrete.
- 1–6 m White silicified, **poor sandstone** with purple ferruginous and grey silcreted patches.
- 6–14 m Mauve and white weathered **moderate sandstone**, gypsum veinlets common, minor yellow ferruginisation.

CO-325 (ALLAN RISE)

Easting: 0486996 Northing: 6748498 Elevation (m): 180.26

- 0–7 m Brown clay-silt, ferruginous silcrete and quartzite gibber on red-brown silt-clay with platy calcrete and white, silicified claystone frags. Strongly gypsiferous from 5 m.
- 7–9 m Purple and white, partly silicified **moderate sandstone**, gypsum veinlets common.
- 9–14 m White, partly silicified **moderate sandstone**, minor gypsum.

CO-330 (ALLAN RISE)

Easting: 0486980 Northing: 6748295 Elevation (m): 180.67

- 0–1 m White claystone frags in yellow-brown silt with calcrete and silcrete.
- 1–9 m White silicified claystone frags in silicified red-brown clay-silt matrix.
- 9–13 m White, weathered, silicified **poor sandstone**, minor gypsum and yellow-brown ferruginous patches.

CO-331 (ALLAN RISE)

Easting: 0487032 Northing: 6748270 Elevation (m): 180.75

- 0–2 m Brown clay-silt, ferruginous silcrete and quartzite gibber on red-brown silt-clay with platy calcrete and white claystone frags.
- 2–5 m Grey and red-brown silcrete frags in red-brown silt-clay with gypcrete matrix.
- 5–12 m Off-white weathered, partly silicified **moderate sandstone**, minor gypsum veins. Brown-yellow ferruginisation and gypsum common from 10 m.

CO-333 (ALLAN RISE)

Easting: 0487078 Northing: 6748239 Elevation (m): 181.14

- 0–5 m Brown clay-silt with silcrete cobbles on red-brown clay-silt with platy calcrete. Massive grey and red-brown silcrete from 2 m.
- 5–9 m White, weathered, partly silicified **good sandstone**, minor gypsum and red-brown ferruginous patches.
- 9–14 m White and mauve partly silicified **good sandstone**, minor yellow ferruginous patches.

CO-337 (ALLAN RISE)

Easting: 0487092 Northing: 6748238 Elevation (m): 181.18

- 0–4 m Brown clay-silt, ferruginous silcrete and quartzite gibber on red-brown silt-clay with platy calcrete.
- 4–14 m White and pink, weathered, partly silicified **poor sandstone**, minor yellow-brown ferruginisation.

CO-341 (EAST OF ALLAN RISE)

Easting: 0491631 Northing: 6746373 Elevation (m): 186.98

- 0–1 m Red-brown silt-clay with silcrete gibber.
- 1–9 m Weathered mauve and white **good sandstone**, minor gypsum stringers, tubules and minor alunite between 6 and 8 m.
- 9–13 m Blue-grey partly silicified **blue ground**.

CO-345 (EAST OF ALLAN RISE)

Easting: 0491784 Northing: 6746473 Elevation (m): 188.08

- 0–3 m Brown clay-silt with silcrete gibber on red-brown silt-clay.
- 3–13 m Weathered, white and mauve **good sandstone**, tubules, minor gypsum and yellow ferruginisation. Traces of alunite from 8 m.

CO-347 (EAST OF ALLAN RISE)

Easting: 0491833 Northing: 6746250 Elevation (m): 186.45

- 0–3 m Brown clay-silt with silcrete gibber on red-brown silt-clay with minor claystone frags.
- 3–8 m Mauve and white, weathered **moderate sandstone**, minor tubules.
- 8–13 m Mauve and white, weathered **good sandstone**.

CO-349 (EAST OF ALLAN RISE)

Easting: 0492268 Northing: 6746624 Elevation (m): 187.35

- 0–3 m Brown clay-silt with silcrete gibber on red-brown silt-clay, strata calcrete and minor claystone frags.
- 3–10 m Weathered, white **moderate-good sandstone**, gypsum stringers common, minor purple and yellow-brown ferruginisation patches and stringers.
- 10–13 m Weathered grey **poor sandstone**.

CO-350 (EAST OF ALLAN RISE)

Easting: 0492241 Northing: 6746631 Elevation (m): 187.59

- 0–4 m Brown clay-silt with silcrete gibber on red-brown silt-clay, strata calcrete and minor claystone frags. Gypsiferous from 3 m.
- 4–14 m Weathered, white and mauve **moderate sandstone**, minor tubules, gypsum stringers and yellow iron staining.

CO-354 (EAST OF ALLAN RISE)

Easting: 0492323 Northing: 6746655 Elevation (m): 187.44

- 0–2 m Brown clay-silt with silcrete and quartzite gibber on red-brown silt-clay, and minor claystone frags.
- 2–4 m Grey silcreted claystone in red-brown silt-clay.
- 4–6 m Pink-mauve gypcrete with frags of white silicified claystone.
- 6–11 m Partly silicified **moderate sandstone**, minor gypsum stringers, red-brown ferruginous clay on fractures, trace of tubules. Fragments of quartzite cobble. Yellow-brown ferruginisation from 9 m.

CO-355 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461488 Northing: 6795481 Elevation(m): 215.68

- 0–5 m Brown clay-silt with silcrete gibber on red-brown silt-clay, strata calcrete and minor claystone frags.
- 5–8 m Grey rubbly silcrete in red-brown silt-clay.
- 8–14 m Weathered, white **moderate sandstone**, minor gypsum stringers, red-brown silt along fractures.
- 14–23 m Weathered, white-mauve **moderate sandstone**, minor gypsum stringers, minor tubules, red-brown silt fracture fillings.

CO-358 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461489 Northing: 6795430 Elevation (m): 215.52

- 0–5 m Brown clay-silt with silcrete gibber on red-brown silt-clay, strata calcrete and silcreted red-brown clay with white claystone frags. Minor grey silcrete.
- 5–11 m Off-white weathered silicified **blue ground**, abundant partings filled with red-brown clay and carbonate.
- 11–17 m Pale grey partly silicified **poor sandstone**, tubules common.
- 17–21 m Pale mauve partly silicified **moderate sandstone**, tubules and minor gypsum stringers.

CO-362 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461438 Northing: 6795468 Elevation (m): 215.64

- 0–5 m Brown clay-silt with silcrete gibber on red-brown silt-clay, strata calcrete and silcreted red-brown clay with white claystone frags. Minor grey silcrete.
- 7–10 m Grey rubbly quartzite in red-brown silt-clay, gypsum common.
- 10–17 m Weathered white-mauve **good sandstone**, tubules and gypsum stringers.
- 17–22 m As above with yellow iron staining.

CO-364 (NORTH OF RUSSOS FOLLY)

Easting: 0463040 Northing: 6792484 Elevation(m): 196.33

- 0–3 m Brown clay-silt with silcrete and ironstone gibber on red-brown silt-clay, minor strata calcrete.
- 3–14 m Weathered, silicified **blue ground**, minor gypsum veinlets, mauve and yellow iron staining. Minor tubules from 8 m.

CO-366 (NORTH OF RUSSOS FOLLY)

Easting: 0463055 Northing: 6792520 Elevation (m): 196.64

- 0–4 m Brown clay-silt, silcrete gibber on red-brown silt-clay with silcrete pebs, abundant gypsum from 3 m.
- 4–7 m Weathered silicified claystone in reddish gypcrete.
- 7–10 m Silicified claystone/grey silcrete, minor gypsum.
- 10–18 m Weathered, partly silicified **moderate sandstone**, yellow iron mottling/staining.

CO-367 (NORTH OF RUSSOS FOLLY)

Easting: 0463034 Northing: 6792578 Elevation (m): 196.57

- 0–4 m Brown clay-silt, silcrete gibber on red-brown silt-clay with silcrete pebs.
- 4–9 m Weathered, silicified claystone, gypsum common to 5 m then grey silcrete, minor black iron mottles.
- 9–17 m Weathered, partly silicified **moderate sandstone**, yellow iron mottling/staining.

CO-368 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461559 Northing: 6795539 Elevation (m): 215.88

- 0–5 m Brown clay-silt, silcrete gibber on red-brown silt-clay with silcrete pebs.
- 5–9 m Red-brown silt-clay, grey rubbly silcrete, carbonate cement to 7 m, white silicified claystone frags.
- 9–15 m Weathered, partly silicified **poor sandstone**, gypsum indurated to 10 m, minor tubules.
- 15–24 m Weathered, mauve **good sandstone**, minor tubules, gypsum stringers yellow iron staining.

CO-370 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461541 Northing: 6795467 Elevation (m): 215.65

- 0–3 m Brown clay-silt, silcrete and minor ironstone gibber on red-brown silt-clay with strata calcrete.
- 3–8 m Carbonate breccia and red-brown clay with grey silcrete, minor red-brown silcrete breccia. Gypcrete and gypsum breccia from 6 m.
- 8–15 m Weathered, mauve **good sandstone**, gypsum silt filled tubules and fractures, trace alunite.
- 15–22 m Blue-grey partly weathered **blue ground**, trace gypsum stringers.

CO-373 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461504 Northing: 6795499 Elevation (m): 215.78

- 0–4 m Brown clay-silt, silcrete and minor ironstone gibber on red-brown silt-clay with minor calcrete.
- 4–8 m Grey silcrete rubble in red-brown silt-clay with claystone frags.
- 8–11 m Silicified claystone and grey silcrete.
- 11–23 m White and mauve, weathered **good sandstone**, minor gypsum stringers and yellow iron staining.

CO-375 (SOUTHWEST OF HALLEYS COMET)

Easting: 0461313 Northing: 6795541 Elevation (m): 215.30

- 0–4 m Brown clay-silt, grey silcrete gibber on red-brown silt-clay with minor calcrete. Grey-green silcrete rubble, minor carbonate in red-brown silt-clay from 2 m.
- 4–6 m Red-brown silcrete breccia with white silicified claystone chips, minor grey-green silcrete.
- 6–13 m Weathered, white **good sandstone**, minor tubules, yellow-brown iron along fractures.
- 13–23 m Weathered pale grey **moderate sandstone**, minor tubules to 17 m, minor yellow-brown iron staining.

CO-376 (NORTHWEST OF HALLEYS COMET)

Easting: 0460544 Northing: 6797265 Elevation (m): 216.82

- 0–2 m Red-brown clay-silt, grey-green silcrete gibber on red-brown silt-clay with strata calcrete.
- 2–7 m Coarse grey-green silcrete, red-brown silt-clay matrix with gypsum.
- 7–10 m Grey-green silcreted claystone with silcreted tubules.
- 10–12 m Weathered, white **good sandstone**, iron oxide and gypsum stringers.
- 12–22 m White and mauve **moderate-good sandstone**, trace alunite, yellow-brown iron staining common. Iron oxide specks.

CO-377 (NORTHWEST OF HALLEYS COMET)

Easting: 0460703 Northing: 6797358 Elevation (m): 217.08

- 0–6 m Red-brown clay-silt, grey-green silcrete gibber on red-brown silt-clay with strata calcrete to 3 m. Grey-green silcrete chips common from 3 m plus silicified claystone chips.
- 6–13 m Pale brown gypsiferous clay-silt, silicified claystone chips with silicified tubules.
- 13–19 m Weathered, white to mauve **good sandstone**, gypsum silt filled tubules particularly from 18 m.
- 19–23 m Grey-mauve partly silicified **moderate claystone**, yellow-brown iron staining common.

CO-378 (NORTHWEST OF HALLEYS COMET)

Easting: 0460666 Northing: 6797394 Elevation (m): 216.91

- 0–4 m Red-brown clay-silt, grey-green silcrete gibber on red-brown silt-clay with strata calcrete.
- 4–8 m Coarse grey-green silcrete in brown gypsum silt with silicified claystone frags.
- 8–13 m Silcreted brown gypsum silt with claystone frags. Tubules and maroon iron veinlets also silcreted.
- 13–16 m White, weathered **good sandstone**, minor tubules. Mauve with yellow-brown iron staining from 16 m.

CO-379 (NORTHWEST OF HALLEYS COMET)

Easting: 0460625 Northing: 6797424 Elevation (m): 216.73

- 0–3 m Red-brown clay-silt, grey-green silcrete gibber on red-brown silt-clay with strata calcrete.
- 3–6 m Grey-green coarse silcrete with minor red-brown breccia silcrete.
- 6–14 m Off-white, weathered partly silicified **poor sandstone**, minor tubules, trace gypsum veins.
- 14–18 m Weathered, off-white, grey **good sandstone**, minor disseminated alunite, trace gypsum veins, tubules particularly common from 15–16m.

CO-381 (OPAL RIDGE)

Easting: 0494271 Northing: 67645974 Elevation (m): 208.25

- 0–3 m Red-brown clay-silt, calcareous, silcrete gibber, white silicified claystone frags common from 2 m.
- 3–9 m Partly silicified, weathered grey **moderate sandstone**, gypsum common, minor tubules, purple ferruginisation common from 7–9 m.
- 9–13 m Mauve, pale brown partly silicified **poor sandstone**, ferruginous patches, trace of gypsum stringers.

CO-382 (OPAL RIDGE)

Easting: 0494184 Northing: 6764676 Elevation (m): 207.95

- 0–4 m Red-brown clay-silt, calcareous, silcrete gibber, white silicified claystone frags common from 3 m.
- 4–7 m Grey and red-brown gypcrete, silicified claystone frags with tubules.
- 7–9 m White and mauve, weathered, partly silicified **moderate sandstone**, abundant tubules.
- 9–14 m Blue-grey, mauve **blue ground**, trace gypsum stringers.

CO-383 (OPAL RIDGE)

Easting: 0494189 Northing: 6764587 Elevation (m): 207.76

- 0–3 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay with white claystone chips.
- 3–9 m Grey-pale maroon gypcrete with silicified claystone chips to 4 m, then weathered, white partly silicified **moderate sandstone**, tubules and purple ferruginous patches.

CO-384 (OPAL RIDGE)

Easting: 0494218 Northing: 6764544 Elevation (m): 208.56

- 0–3 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay with white claystone chips.
- 3–6 m White partly silicified claystone with purple-red-black ferruginisation of claystone and along fractures, minor gypsum stringers.
- 6–8 m Grey-maroon gypcrete with claystone chips.
- 8–14 m Weathered, mauve-white, partly silicified **poor sandstone**, gypsum stringers common to 10 m, minor yellow-brown iron staining.

CO-387 (OPAL RIDGE)

Easting: 0494169 Northing: 6764534 Elevation (m): 208.54

- 0–6 m Silcrete gibber on pale brown gypsiferous clay-silt to 1 m then grey and reddish gypcrete with chips of white claystone, chips more abundant from 4 m.
- 6–10 m Weathered, white **good sandstone**, abundant tubules, minor yellow iron staining.

CO-388 (OPAL RIDGE)

Easting: 0494193 Northing: 6764431 Elevation (m): 211.12

- 0–5 m Silcrete pebs on pale brown calcareous clay-silt with chips white silicified claystone to 1 m, then white silicified claystone, red-brown-black iron along fractures.
- 5–8 m Grey-maroon gypcrete.
- 8–12 m Weathered, partly silicified **poor sandstone**, tubules common.

CO-389 (OPAL RIDGE)

Easting: 0493837 Northing: 6764268 Elevation (m): 210.45

0–4 m	Silcrete pebs on red-brown calcareous clay-silt with chips white silicified claystone.
4–8 m	Grey-green and red-brown silcrete frags and gypcrete.
8–15 m	Weathered, white good sandstone , tubules common, trace sparry gypsum.
15–19 m	Weathered, white-mauve moderate sandstone , gypsum common, minor tubules.
19–24 m	Partly weathered and silicified, grey and mauve poor sandstone , minor gypsum stringers, yellow-brown ferruginisation.

CO-392 (OPAL RIDGE)

Easting: 0493796 Northing: 6764275 Elevation (m): 210.03

0–3 m	Red-brown calcareous clay-silt, silcrete gibber on red-brown silt-clay with grey-green silcrete pebs.
3–7 m	Grey-green silcrete rubble in red-brown silt-clay.
7–10 m	Weathered, white, silicified poor sandstone , red-brown ferruginisation, tubules and gypsum.
10–23 m	Weathered, white and mauve partly silicified moderate sandstone , minor gypsum stringers, reddish iron oxide along fractures. Claystone has purple FeO specks.

CO-393 (OPAL RIDGE)

Easting: 0493812 Northing: 6764251 Elevation (m): 210.25

0–5 m	Red-brown clay-silt, silcrete gibber on red-brown silt-clay, calcrete strata, chips of white silicified claystone from 4 m.
5–10 m	Weathered, partly silicified, brecciated claystone with gypcrete.
10–18 m	Weathered, off-white, to pale grey after 14 m, good sandstone , tubules, minor gypsum veins.
18–23 m	Weathered, partly silicified, mauve moderate sandstone , gypsum veins common.

CO-394 (OPAL RIDGE)

Easting: 0493832 Northing: 6764221 Elevation (m): 210.78

0–4 m	Red-brown clay-silt, silcrete gibber on red-brown silt-clay, calcrete strata.
4–7 m	Reddish gypcrete, maroon silicified claystone chips, grey and red-brown silcrete.
7–11 m	Weathered, white, partly silicified claystone, red FeO and gypsum stringers on fractures. Minor tubules, minor alunite in tubules.
11–23 m	Mauve-grey, weathered good sandstone , yellow iron staining and gypsum stringers common, trace alunite.

CO-395 (OPAL RIDGE)

Easting: 0493846 Northing: 6764174 Elevation (m): 211.34

0–4 m	Red-brown clay-silt, silcrete gibber on red-brown silt-clay, calcrete strata.
4–9 m	Grey, red-brown gypcrete with purple, silicified claystone chips.
9–19 m	White and mauve, weathered, partly silicified blue ground minor gypsum stringers and veins.

CO-396 (OPAL RIDGE)

Easting: 0493815 Northing: 6764117 Elevation (m): 211.46

- 0–4 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay, calcrete strata.
- 4–8 m Brown silcrete and grey gypcrete with silicified, white claystone chips.
- 8–14 m Weathered, white **good sandstone**, tubules, minor gypsum stringers.

CO-397 (OPAL RIDGE)

Easting: 0493637 Northing: 6764106 Elevation (m): 211.67

- 0–4 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay.
- 4–10 m Grey-green silcrete and gypcrete to 5 m then grey-maroon gypcrete with white, silicified claystone chips. Brown gypsum silt and claystone frags from 8 m.
- 10–18 m White and mauve **good sandstone**, minor tubules and gypsum stringers. Yellow-brown ferruginisation from 17 m.

CO-399 (OPAL RIDGE)

Easting: 0494158 Northing: 6763358 Elevation (m): 205.78

- 0–1 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay with white claystone chips.
- 1–5 m Grey gypcrete, minor red-brown silt-clay.
- 5–14 m White, silicified **blue ground**, minor tubules, red-brown ferruginisation from 12 m.

CO-400 (WEST OF MOUNT BRADY)

Easting: 0496348 Northing: 6766511 Elevation (m): ~220

- 0–1 m Red-brown clay-silt, abundant grey silcrete pebbles and cobbles plus calcrete strata.
- 1–5 m Mixed zone, gypcrete and silcreted claystone plus silicified claystone breccia in gypsiferous red-brown silt.
- 5–9 m White, red-brown, weakly silicified claystone, minor tubules and gypsum breccia.
- 9–14 m Pale grey and mauve hard **blue ground**, minor FeO and gypsum veinlets.
- 14–22 m White and yellow-brown limonitic **blue ground**, less limonitic after 17 m.

CO-402 (WEST OF MOUNT BRADY)

Easting: 0495841 Northing: 6766638 Elevation (m): ~210

- 0–2 m Red-brown clay-silt, jaspery silcrete rubble, calcrete strata, some gypcrete at 2 m.
- 2–6 m White and red-brown silicified claystone with gypsum, trace tubules.
- 6–12 m Mainly mauve partly silicified **blue ground**, FeO common, minor gypsum veinlets.

CO-403 (WEST OF MOUNT BRADY)

Easting: 0495801 Northing: 6766627 Elevation (m): ~210

- 0–2 m Red-brown clay-silt, jaspery silcrete rubble, weak calcrete strata.
- 2–3 m Top of claystone, silicified claystone in gypcrete.
- 3–6 m White, pink and red-brown weakly silicified claystone, gypsum veinlets and brecciation common, minor tubules.
- 6–10 m White **good sandstone**, FeO and gypsum veinlets common.
- 10–14 m White, mauve **blue ground**, minor FeO and gypsum veinlets.

CO-404 (PIPING LANE)

Easting: 0467003 Northing: 6797348 Elevation (m): 218.34

- 0–2 m Silcrete gibber on red-brown silt-clay, calcrete strata.
- 2–5 m Grey-green silcrete, frags silicified claystone, red-brown clay matrix, minor gypcrete from 4 m.
- 5–16 m Weathered, white and mauve **good sandstone**, FeO and gypsum along fractures. Tubules with gypcrete and gypsum silt infills. Less tubules from 12 m. Minor gypsum veins. Sandstone has FeO specks.
- 16–23 m Mauve partly silicified **blue ground**, yellow-brown ferruginous patches, particularly after 21 m.

CO-407 (PIPING LANE)

Easting: 0467016 Northing: 6797318 Elevation (m): 218.31

- 0–3 m Silcrete gibber on red-brown silt-clay.
- 2–6 m Grey-green silcrete, frags silicified claystone, red-brown clay matrix, minor gypcrete from 5 m.
- 6–16 m Weathered, white **good sandstone**, tubules mainly gypsum filled to 12 m then with brown gypsum silt. Purple ferruginous patches to 10 m.
- 16–18 m Pale grey **moderate sandstone**, minor yellow iron staining, trace alunite.

CO-410 (PIPING LANE)

Easting: 0467087 Northing: 6797331 Elevation (m): 217.34

- 0–2 m Silcrete gibber on red-brown silt-clay, strata calcrete.
- 2–7 m Coarse, grey-green silcrete rubble in red-brown silt-clay.
- 7–14 m Silicified claystone to 8 m, then weathered, white **good sandstone**, tubules minor gypsum veinlets, iron staining along fractures.
- 14–18 m Pale grey, partly silicified and weathered **moderate sandstone**, trace gypsum stringers.

CO-413 (PIPING LANE)

Easting: 0467093 Northing: 6797365 Elevation (m): 217.37

- 0–2 m Silcrete gibber on red-brown silt-clay, strata calcrete.
- 2–6 m Coarse, grey-green silcrete rubble in red-brown silt-clay with minor silicification.
- 6–8 m White, partly silicified claystone breccia, gypcrete matrix, FeO along fractures.
- 8–18 m Weathered, white **good sandstone**, minor tubules and gypsum stringers, some FeO specks, trace alunite 10–13 m. After 14 m no tubules, yellow iron staining common, trace gypsum.

CO-415 (NORTHWEST OF HALLEYS COMET)

Easting: 0460391 Northing: 6797247 Elevation (m): ~217

- 0–5 m Red-brown clay-silt with grey-green silcrete gibber on red-brown silt-clay, strata calcrete. Red-brown silcrete breccia from 2 m, minor gypsum.
- 5–10 m Grey-green silcrete rubble, abundant gypsum from 9 m.
- 10–13 m Gypsum and silicified claystone with tubules.
- 13–15 m Weathered off-white **good sandstone**, tubules common.
- 15–18 m Partly silicified **poor sandstone**, trace tubules.

CO-417 (NORTHWEST OF HALLEYS COMET)

Easting: 0460390 Northing: 6797282 Elevation (m): 217.13

- 0–6 m Red-brown clay-silt with grey-green silcrete gibber on red-brown silt-clay. Strata calcrete to 3 m. Red-brown silcrete breccia from 2 m, minor gypsum.
- 6–11 m Grey-green silcrete rubble.
- 11–15 m Strongly silicified claystone, gypsum silt and gypcrete. Tubules in claystone not silicified.
- 15–18 m Weathered, pale grey **moderate sandstone**, FeO specks and tubules.

CO-419 (NORTHWEST OF HALLEYS COMET)

Easting: 0460419 Northing: 6797322 Elevation (m): 216.87

- 0–4 m Red-brown clay-silt with grey-green silcrete gibber on red-brown silt-clay with claystone frags. Strata calcrete to 2 m.
- 4–10 m Grey-green silcrete rubble in red-brown silt-clay.
- 10–15 m Weathered, white and mauve **good sandstone**, tubules, FeO specks, minor FeO and gypsum stringers.
- 15–18 m Off-white, partly silicified **poor sandstone**, yellow ferruginous patches and veinlets common, trace gypsum stringers.

CO-420 (NORTHWEST OF HALLEYS COMET)

Easting: 0460453 Northing: 6797350 Elevation (m): 216.04

- 0–5 m Red-brown clay-silt with grey-green silcrete gibber on red-brown silt-clay with claystone frags. Strata calcrete to 2 m.
- 5–11 m Grey-green silcrete rubble in red-brown silt-clay.
- 11–13 m Strongly silicified white and maroon claystone, minor tubules, gypsum common.
- 13–16 m Weathered, white and mauve **good sandstone**, minor gypsum veinlets, red ferruginisation and as stringers.
- 16–18 m Partly weathered, white-mauve **moderate sandstone**, disseminated gypsum, minor yellow iron staining.

CO-423 (EAST OF DEAD HORSE GULLY)

Easting: 0457893 Northing: 6796896 Elevation (m): 219.39

- 0–3 m Red-brown silt-clay with strata calcrete.
- 3–10 m Coarse, rubbly grey silcrete in red-brown silt-clay with silicified claystone frags from 9 m.
- 10–22 m Weathered, off-white **good sandstone**, tubules common 17–19 m. **Trace potch opal**.

CO-428 (EAST OF DEAD HORSE GULLY)

Easting: 0457829 Northing: 6796469 Elevation (m): 219.78

- 0–2 m Red-brown silt-clay with strata calcrete.
- 2–8 m Coarse, rubbly grey silcrete in red-brown silt-clay with silicified claystone frags and gypcrete from 7 m.
- 8–21 m Weathered, off-white **good sandstone**, minor gypsum, tubules common 13–17 m. FeO specks in claystone after 17 m.

CO-431 (EAST OF DEAD HORSE GULLY)

Easting: 0457733 Northing: 6796464 Elevation (m): 219.98

0–6 m	Red-brown silt-clay with strata calcrete.
6–10 m	Grey silcrete in red-brown silt-clay, gypsiferous with silicified claystone frags.
10–17 m	Weathered, off-white good sandstone , trace tubules.
17–22 m	Weathered, off-white and mauve moderate sandstone , minor tubules, trace gypsum, yellow iron staining.

CO-432 (EAST OF DEAD HORSE GULLY)

Easting: 0457544 Northing: 6796458 Elevation (m): 220.23

0–3 m	Red-brown silt-clay, minor silcrete pebbles with strata calcrete.
3–9 m	Grey silcrete in red-brown gypsiferous clay-silt.
9–12 m	Mottled red and off-white weathered, silicified poor sandstone .
12–17 m	Weathered, off-white good sandstone , minor tubules and gypsum.
17–23 m	Weathered, pink and yellow partly silicified blue ground , rare gypsum.

CO-434 (EAST OF DEAD HORSE GULLY)

Easting: 0457456 Northing: 6796439 Elevation (m): 220.17

0–1 m	Alluvium with silcrete pebbles.
1–4 m	Red-brown calcareous silt-clay with silcrete pebbles.
4–6 m	Silcrete and gypsiferous silt.
6–10 m	Gypsiferous silt-clay with silicified white claystone and minor silcrete.
10–16 m	Weathered good sandstone white with iron oxide specks, tubules gypsum and trace alunite.
16–21 m	Partly weathered and silicified white, pale yellow and mauve claystone with gypsum veinlets.

CO-435 (EAST OF DEAD HORSE GULLY)

Easting: 0457405 Northing: 6796442 Elevation (m): 220.20

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Red-brown calcareous silt-clay with silcrete pebbles.
3–7 m	Brown gypsiferous silt with silcrete. Some silicified white claystone 6–7 m.
7–12 m	Partly silicified white moderate sandstone with gypsum stringers.
12–18 m	White good sandstone with gypsiferous silt filled tubules. Trace of colour opal.

CO-437 (EAST OF DEAD HORSE GULLY)

Easting: 0457226 Northing: 6795953 Elevation (m): 217.30

0–3 m	Red-brown silt-clay, minor silcrete pebbles with strata calcrete.
3–7 m	Grey-green silcrete rubble in red-brown silt-clay, silicified claystone frags from 5 m.
7–12 m	Off-white, weathered, partly silicified moderate sandstone , minor FeO staining.
12–23 m	Off-white, weathered good sandstone , trace alunite, minor FeO staining.

CO-441 (EAST OF DEAD HORSE GULLY)

Easting: 0457679 Northing: 6795543 Elevation (m): 217.28

- 0–5 m Red-brown silt-clay, minor silcrete pebbles with strata calcrete, minor grey silcrete from 3 m.
- 5–7 m Off-white and reddish silicified claystone.
- 7–9 m Silcrete breccia, silicified claystone frags, red-brown clay matrix.
- 9–22 m Off-white, weathered **moderate sandstone**, minor tubules.

CO-442 (EAST OF DEAD HORSE GULLY)

Easting: 0457888 Northing: 6795387 Elevation (m): 217.74

- 0–3 m Red-brown silt-clay, minor silcrete pebbles with strata calcrete.
- 3–10 m Grey-green silcrete rubble in red-brown silt-clay.
- 10–18 m Weathered, off-white **good sandstone**, silicified to 11 m, some yellow FeO staining, minor tubules, minor pink FeO specks. **Trace of potch opal**.
- 18–22 m Partly weathered, pale purple **moderate sandstone**, rare tubules.

CO-443 (EAST OF DEAD HORSE GULLY)

Easting: 0458135 Northing: 6795281 Elevation (m): 217.16

- 0–3 m Red-brown silt-clay, minor silcrete pebbles with strata calcrete.
- 3–9 m Grey coarse silcrete rubble.
- 9–12 m Weathered, off-white, silicified **blue ground**.
- 12–19 m Weathered, off-white **good sandstone**, FeO specks, rare tubules.
- 19–22 m Partly weathered, pale purple **poor sandstone**.

CO-444 (EAST OF DEAD HORSE GULLY)

Easting: 0457799 Northing: 6795465 Elevation (m): 217.24

- 0–1 m Red-brown silt-clay, minor silcrete pebbles with strata calcrete.
- 1–7 m Coarse grey-green silcrete rubble.
- 7–13 m Mauve and off-white, silicified **blue ground**, rare tubules.
- 13–18 m Weathered, off-white and pale grey **good sandstone**, minor alunite, trace tubules.

CO-457 (EAST OF DEAD HORSE GULLY)

Easting: 0457369 Northing: 6796439 Elevation (m): 220.23

- 0–1 m Alluvium with silcrete pebbles.
- 1–3 m Calcareous red-brown silt-clay, minor silcrete.
- 3–6 m Gypsiferous clay-silt and silcrete.
- 6–12 m Weathered partly silicified white claystone with gypsum veinlets, thin chert band at 7.5 m.
- 12–22 m Weathered white **good sandstone**, gypsum veinlets, iron oxide specks, tubules common and minor alunite.

CO-458 (EAST OF DEAD HORSE GULLY)

Easting: 0457381 Northing: 6796437 Elevation (m): 220.20

0–1 m	Alluvium with silcrete pebbles.
1–7 m	Calcareous red-brown silt-clay minor silcrete with gypsum from 6 m.
7–14 m	Weathered partly silicified white claystone, gypsum veinlets.
14–18 m	Weathered good sandstone with tubules common. Trace of colour opal.
18–21 m	Weathered good sandstone , off-white, pale grey, tubules gypsum stringers and red iron oxide specks.

CO-459 (EAST OF DEAD HORSE GULLY)

Easting: 0457393 Northing: 6796439 Elevation (m): 220.51

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Calcareous red-brown silt-clay.
3–6 m	As above with abundant silcrete, gypsum from 5 m.
6–11 m	Weathered silicified white claystone with gypsum.
11–18 m	Weathered good sandstone with tubules and minor gypsum veinlets. Trace of colour opal.

CO-462 (EAST OF DEAD HORSE GULLY)

Easting: 0457422 Northing: 6796448 Elevation (m): 220.17

0–1 m	Alluvium with silcrete pebbles.
1–3 m	Calcareous red-brown silt-clay.
3–6 m	As above with abundant silcrete, gypsum from 5 m.
6–10 m	Weathered partly silicified white claystone, red iron oxide specks, minor tubules and gypsum stringers.
10–16 m	Weathered good sandstone with tubules common and iron oxide specks. Trace of potch opal.
16–22 m	Weathered partly silicified off-white, mauve and pale yellow claystone, minor tubules and gypsum stringers.

CO-473 (EAST OF DEAD HORSE GULLY)

Easting: 0457245 Northing: 6796427 Elevation (m): 220.45

0–2 m	Red-brown silt-clay, minor strata calcrete.
2–4 m	Grey-green silcrete rubble in red-brown clay with gypcrete and silicified claystone frags from 3 m.
4–12 m	Pale grey and mauve silicified blue ground , mauve gypsum silt in fractures.
12–22 m	Off-white and mauve, weathered good sandstone , minor tubules and gypsum veinlets.

CO-476 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0464337 Northing: 6784946 Elevation (m): ~220

- 0–4 m Grey silcrete pebs on red-brown silt-clay, strata calcrete.
- 4–11 m Grey-green silcrete in red-brown clay-silt, gypsum veins grading to gypcrete from 7 m, minor pale brown silcreted gypsum silt.
- 11–18 m Weathered, white **good sandstone**, tubules, some with silicified gypsum silt infillings. Minor gypsum stringers from 16 m.
- 18–26 m Partly weathered and silicified, grey **blue ground**, minor alunite more common from 24 m.

CO-477 (SOUTHWEST OF SOUTHERN CROSS)

Easting: 0464444 Northing: 6784764 Elevation (m): ~220

- 0–2 m Grey silcrete pebs on red-brown silt-clay, strata calcrete.
- 2–9 m Coarse grey-green silcrete to 7 m, then gypcrete and brown breccia silcrete.
- 9–16 m Weathered, white **good sandstone**, with pink FeO specks, minor tubules.
- 16–27 m Partly weathered and silicified **blue ground** minor tubules, minor alunite.

CO-478 (WEST OF TEE VALLEY)

Easting: 0493611 Northing: 6758472 Elevation (m): 205.05

- 0–1 m Grey silcrete pebs on red-brown clay-silt.
- 1–8 m Weathered, partly silicified blue-grey **blue ground**, black FeO along fractures, minor tubules.
- 8–14 m Pale mauve and grey **blue ground**, alunite common to 10 m, minor gypsum stringers.

CO-479 (WEST OF TEE VALLEY)

Easting: 0493545 Northing: 6758495 Elevation (m): 206.50

- 0–5 m Grey silcrete pebs on red-brown clay-silt to 1 m then red-brown and grey silcrete in calcareous silt, plus some gypcrete with white claystone frags.
- 5–8 m Gypcrete with white, silicified claystone frags.
- 8–18 m Blue-grey and white **blue ground**, black and red-brown FeO on fractures, trace gypsum stringers. Pale grey blue ground with trace alunite from 10 m.

CO-480 (WEST OF TEE VALLEY)

Easting: 0493475 Northing: 6758521 Elevation (m): 208.31

- 0–3 m Grey silcrete pebs on red-brown, calcareous clay-silt with silcrete pebs.
- 3–8 m Gypcrete with red-brown gypsum silt with white claystone chips and grey-green silcrete.
- 8–11 m White and red-brown silicified claystone chips in grey-mauve gypcrete.
- 11–18 m Partly weathered, white and pale grey **blue ground**, trace gypsum stringers and yellow-brown iron staining.

CO-481 (WEST OF TEE VALLEY)

Easting: 0493377 Northing: 6758555 Elevation (m): 209.19

- 0–2 m Grey silcrete pebs on red-brown, calcareous clay-silt with silcrete pebs.
- 3–7 m Gypcrete with red-brown gypsum silt with white claystone chips and grey-green silcrete.
- 8–11 m White and red-brown silicified claystone chips in grey-mauve gypcrete.
- 13–15 m Partly weathered **blue ground**, tubules common.

CO-483 (WEST OF TEE VALLEY)

Easting: 0494479 Northing: 6758651 Elevation (m): 210.79

- 0–2 m Grey silcrete pebs on platy red-brown, calcareous clay-silt.
- 2–4 m Gypcrete with red-brown gypsum silt with white silicified claystone chips.
- 4–10 m White and mauve silicified claystone chips in grey-mauve gypcrete.
- 10–18 m Weathered, white and mauve **good sandstone**, minor tubules, minor gypsum stringers from 13 m. Yellow-brown iron staining and minor alunite from 15 m.
- 18–22 m Pale mauve and grey, partly silicified unleached **poor sandstone**.

CO-484 (WEST OF TEE VALLEY)

Easting: 0494917 Northing: 6758422 Elevation (m): 212.38

- 0–9 m Grey-green silcrete pebbles on red-brown clay-silt to 1 m then silcrete cobbles in clay-silt, partly gypsiferous.
- 9–10 m Weathered, white, silicified **blue ground**, with tubules.
- 10–11 m Weathered, white **good sandstone**, with tubules.

CO-484A (WEST OF TEE VALLEY)

Easting: 0494701 Northing: 6758319 Elevation (m): 211.86

- 0–7 m Grey-green silcrete pebbles on red-brown clay-silt to 2 m then silcrete cobbles in brown gypsiferous silt.
- 7–11 m Weathered, white, silicified **blue ground**, with tubules, minor gypsum stringers.
- 11–18 m Weathered, white and maroon, partly silicified **moderate sandstone**, minor tubules, trace gypsum stringers. Iron staining along fractures.

CO-485 (WEST OF TEE VALLEY)

Easting: 0495138 Northing: 6758433 Elevation (m): ~211

- 0–4 m Silcrete pebbles on red-brown calcareous clay-silt with silcrete pebs, minor gypcrete from 3 m.
- 4–6 m Silcrete cobbles in calcareous silt.
- 6–9 m Red-brown silcreted ferruginous claystone.
- 9–12 m Red-brown gypsum silt with white claystone chips.
- 12–14 m Weathered, white, weakly silicified **moderate sandstone**, minor tubules and gypsum stringers.

CO-486 (TEE VALLEY)

Easting: 0498475 Northing: 6761476 Elevation (m): 222.54

- 0–4 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay with calcrete strata.
- 4–15 m Red-brown silt-clay, silcrete cobbles and minor silicified white claystone frags.
- 15–19 m Weathered, white **good sandstone**, minor gypsum stringers and yellow iron staining. *Trace of potch opal.*

CO-487 (TEE VALLEY)

Easting: 0498452 Northing: 6761384 Elevation (m): 221.82

- 0–5 m Red-brown clay-silt, silcrete gibber on red-brown silt-clay with calcrete strata.
- 5–7 m Silcrete cobbles in calcareous silt.
- 7–13 m Weathered, silicified, grey **blue ground**, minor tubules and sparry gypsum.
- 13–17 m Weathered, white and pink **good sandstone**, minor gypsum stringers and yellow iron staining.
- 17–22 m Weathered, mauve and yellow **moderate sandstone**, yellow iron staining.

CO-493 (REYNOLDS RIDGE)

Easting: 0499538 Northing: 6749639 Elevation (m): 206.69

- 0–3 m Silcrete pebbles on red-brown silt-clay with strata calcrete.
- 3–7 m Silicified and silcreted white claystone, minor gypsum silt.
- 7–10 m Gypcrete breccia with white silicified frags with tubules.
- 10–15 m Weathered, partly silicified, leached **good sandstone**, minor gypsum stringers and tubules. *Trace of colour opal in adjacent holes.*
- 15–20 m Mauve **moderate sandstone** as above.

CO-500 (REYNOLDS RIDGE)

Easting: 0499536 Northing: 6749630 Elevation (m): 206.64

- 0–2 m Silcrete pebbles on red-brown silt-clay with strata calcrete.
- 2–8 m Silicified and silcreted white claystone, minor gypsum stringers red iron along fractures.
- 8–18 m Weathered, white, leached **good sandstone**, trace gypsum, some mauve claystone, haematite specks from 15 m.
- 18–22 m Maroon, partly silicified **blue ground**, trace gypsum stringers, sparry gypsum veins common from 20 m.

CO-506 (REYNOLDS RIDGE)

Easting: 0499560 Northing: 6749549 Elevation (m): ~206.50

- 0–3 m Silcrete pebbles on red-brown silt-clay with strata calcrete from 1 m.
- 3–5 m Gypsiferous pale brown silt with white claystone frags.
- 5–11 m Weathered, white, leached **good sandstone**, tubules abundant.
- 11–17 m Weathered, mauve and white **moderate sandstone**, minor gypsum stringers.

CO-508 (BENITOS FOLLY)

Easting: 0479993 Northing: 6786342 Elevation (m): 220.14

- 0–2 m Silcrete pebbles on red-brown silt-clay, laminar calcrete and minor claystone frags from 1 m.
- 2–12 m Weathered, white to mauve **good sandstone**, minor tubules, gypsum veinlets common, minor alunite, some yellow-brown iron staining. **Trace of potch opal.**
- 12–13 m Pale mauve **blue ground**, with gypsum veinlets.

CO-510 (BENITOS FOLLY)

Easting: 0479984 Northing: 6786320 Elevation (m): 219.55

- 0–2 m Silcrete pebbles on red-brown silt-clay, minor claystone frags from 1 m.
- 2–9 m Weathered white, **good sandstone**, abundant gypsum, minor yellow red iron staining.
- 9–16 m Weathered, mauve **good sandstone**, gypsum veinlets and iron staining. **Trace of potch opal.**

CO-518 (BENITOS FOLLY)

Easting: 0479482 Northing: 6785621 Elevation (m): ~212

- 0–1 m Silcrete pebbles on red-brown silt-clay, minor claystone frags from 1 m.
- 1–3 m Grey rubbly silcrete in red-brown silt-clay, minor silicified claystone frags.
- 3–8 m Weakly silicified **blue ground**, gypsum stringers and yellow iron staining.
- 8–14 m Weathered, white and mauve **moderate sandstone**, gypsum stringers and yellow-red-black iron staining.

CO-520 (WEST OF DEAD HORSE GULLY)

Easting: 0452871 Northing: 6795362 Elevation (m): 216.54

- 0–3 m Silcrete pebbles on red-brown silt-clay some laminar calcrete and silcrete pebbles.
- 3–12 m Grey silcrete with gysiferous red-brown clay-silt, minor silicified claystone frags to 9 m then red-brown silcrete, minor gypsum and claystone frags.
- 12–16 m Weathered, white **good sandstone**, tubules, minor gypsum and iron staining.
- 16–21 m Weathered, mauve **moderate sandstone**, minor tubules, gypsum and iron staining. Minor alunite from 19 m.

CO-522 (WEST OF DEAD HORSE GULLY)

Easting: 0453036 Northing: 6795415 Elevation (m): 217.04

- 0–3 m Silcrete pebbles on red-brown silt-clay with laminar calcrete.
- 3–6 m Red-brown silt-clay with grey silcrete frags.
- 6–10 m Gypsiferous silt-clay with silcrete and silicified claystone frags.
- 10–17 m Weathered, white **good sandstone**, minor gypsum stringers and yellow iron staining. Minor alunite 15–16 m.
- 17–20 m Mauve **moderate sandstone**, gypsum stringers and alunite common.

CO-523 (WEST OF DEAD HORSE GULLY)

Easting: 0452982 Northing: 6795585 Elevation (m): 214.96

- 0–3 m Silcrete pebbles on red-brown silt-clay with laminar calcrete from 1 m.
- 3–5 m Red-brown silt-clay with grey silcrete frags, minor gypsum.
- 5–10 m Grey silcrete in red-brown silt-clay to 1 m then gypsiferous with silicified claystone frags.
- 10–22 m Weathered, white and mauve **moderate sandstone**, tubules, minor gypsum veinlets. Minor yellow iron staining. Minor alunite from 17 m.

CO-524 (WEST OF DEAD HORSE GULLY)

Easting: 0453456 Northing: 6795530 Elevation (m): 216.81

- 0–1 m Silcrete pebbles on red-brown silt-clay with minor laminar calcrete.
- 1–8 m Grey silcrete in red-brown clay-silt, minor gypcrete.
- 8–10 m Gypcrete with red-brown silt and white claystone frags.
- 10–15 m Weathered, off-white **moderate sandstone**, minor tubules, minor yellow-red silicified claystone.
- 15–19 m Weathered purple **blue ground**, iron specks and minor alunite.

CO-525 (WEST OF DEAD HORSE GULLY)

Easting: 0453402 Northing: 6795501 Elevation (m): 216.80

- 0–2 m Silcrete pebbles on red-brown silt-clay with minor laminar calcrete.
- 2–6 m Grey silcrete in red-brown clay-silt, minor gypcrete.
- 6–9 m Gypcrete with red-brown silt and white claystone frags.
- 9–14 m Weathered, off-white and yellow **moderate sandstone**, tubules common from 11–13 m. Minor gypsum stringers.
- 14–21 m Weathered purple **blue ground**, alunite common to 15 m, trace gypsum.

CO-526 (WEST OF DEAD HORSE GULLY)

Easting: 0454061 Northing: 6795739 Elevation (m): 219.44

- 0–4 m Silcrete pebbles on red-brown silt-clay with minor laminar calcrete.
- 4–11 m Grey silcrete rubble in red-brown clay-silt matrix.
- 11–18 m Weathered, white **good sandstone**, minor tubules.

CO-527 (WEST OF DEAD HORSE GULLY)

Easting: 0454250 Northing: 6795837 Elevation (m): 219.40

- 0–1 m Silcrete pebbles on red-brown silt-clay with minor laminar calcrete.
- 1–4 m Grey silcrete rubble in red-brown clay-silt matrix.
- 4–8 m Grey-pink gypcrete, minor silcrete and red clay-silt.
- 8–17 m Off-white, weathered **good sandstone** with abundant to rare tubules. **Trace of colour opal in adjacent holes.**
- 17–22 m Weathered, purple **blue ground**, FeO specks, trace tubules and abundant alunite to 21 m.

CO-540 (WEST OF DEAD HORSE GULLY)

Easting: 0454737 Northing: 6795847 Elevation (m): 218.70

- 0–2 m Silcrete pebbles on brown calcareous clay-silt, laminar calcrete from 1 m.
- 2–6 m Coarse grey-green silcrete rubble in red-brown clay-silt.
- 6–12 m Red-brown clay-silt with white silicified claystone frags, with gypsiferous silt from 10 m.
- 12–16 m Weathered, white **good sandstone**, minor tubules and gypsum stringers. **Trace of potch opal.**
- 16–19 m Pale grey-mauve **blue ground**, minor tubules and yellow-brown iron patches.

CO-541 (EMU)

Easting: 0474716 Northing: 6784617 Elevation (m): ~220

- 0–4 m Silcrete pebbles on red-brown silt-clay with laminar calcrete.
- 4–10 m Silcrete pebbles in red-brown gypsum clay-silt to 7 m, then grey-pink gypcrete with claystone breccia.
- 10–15 m Weathered, off-white **moderate sandstone**, tubules common, minor gypsum veinlets, iron patches and minor silicification.
- 15–18 m Grey **blue ground**, minor tubules and gypsum veinlets.

CO-543 (NORTH OF OLYMPIC)

Easting: 0471573 Northing: 6785920 Elevation (m): ~218

- 0–4 m Silcrete pebbles red-brown silt-clay with laminar calcrete.
- 4–10 m Grey-green bouldery silcrete in red-brown silt-clay.
- 10–14 m Silcrete and partly silicified claystone frags to 13 m then mauve gypsum rich silt and brecciated claystone.
- 14–19 m Weathered, pale grey **blue ground**, minor gypsum stringers.

CO-550 (WEST OF DEAD HORSE GULLY)

Easting: 0454852 Northing: 6795916 Elevation (m): 216.68

- 0–3 m Silcrete pebbles on red-brown clay-silt with laminar calcrete.
- 3–4 m Coarse grey-green silcrete.
- 4–7 m Mauve ferruginous silcreted claystone.
- 7–12 m Mauve and white partly silicified **blue ground**, minor gypsum stringers and tubules.
- 12–17 m Weathered, white **good sandstone**, tubules common. **Trace of potch opal.**
- 17–20 m Weathered mauve **blue ground**, minor gypsum stringers.

CO-564 (WEST OF DEAD HORSE GULLY)

Easting: 0454871 Northing: 6795878 Elevation (m): 217.21

- 0–5 m Silcrete pebbles on red-brown clay-silt with laminar calcrete.
- 5–7 m Red-brown gypsiferous clay-silt with claystone frags.
- 7–9 m Red-brown and white **poor sandstone**, partly brecciated with gypsum.
- 9–13 m Weathered, off-white **good sandstone**, abundant tubules and gypsum.
- 13–19 m Off-white and mauve as above, minor tubules and sparry gypsum. **Trace of potch opal.**

CO-574 (WEST OF DEAD HORSE GULLY)

Easting: 0454473 Northing: 6795797 Elevation (m): ~220.50

- 0–3 m Silcrete pebbles on brown calcareous silt to 1 m then coarse grey silcrete in red-brown clay-silt.
- 3–10 m Silcrete and gypcrete to 6 m then grey gypcrete.
- 10–14 m Weathered, white **good sandstone** with tubules and gypsum. *Trace of colour opal.*
- 14–20 m Pale grey and mauve **moderate sandstone**, minor tubules and gypsum stringers, alunite at 16 m. Yellow-brown iron patches from 19 m.

CO-577 (WEST OF DEAD HORSE GULLY)

Easting: 0454412 Northing: 6795795 Elevation (m): ~220.50

- 0–3 m Silcrete pebbles on red-brown clay-silt, minor carbonate.
- 3–5 m Grey silcrete in red-brown clay-silt.
- 5–8 m Grey silcrete, silicified claystone frags and breccia with tubules plus gypcrete and red-brown clay matrix.
- 8–17 m Weathered, off-white **good sandstone**, tubules and gypsum. *Trace of colour opal.*
- 17–20 m Weathered pale purple and yellow **blue ground**.

CO-579 (WEST OF DEAD HORSE GULLY)

Easting: 0454491 Northing: 6795603 Elevation (m): ~220.50

- 0–1 m Silcrete pebbles on red-brown clay-silt, minor carbonate.
- 1–7 m Grey silcrete in red-brown clay-silt minor gypcrete from 4 m.
- 7–10 m Gypcrete and red-brown clay, claystone frags from 9 m.
- 10–16 m Weathered, off-white **good sandstone**, minor tubules and gypsum. *Trace of potch opal.*
- 16–24 m Weathered pale purple with FeO specks and yellow brown **poor sandstone** minor alunite.

CO-580 (WEST OF DEAD HORSE GULLY)

Easting: 0455008 Northing: 6795413 Elevation (m): 219.02

- 0–3 m Silcrete pebbles on red-brown clay-silt, minor carbonate.
- 3–8 m Grey silcrete in red-brown clay-silt minor gypcrete from 4 m.
- 8–13 m Weathered, silicified off-white and pale red claystone.
- 13–18 m Weathered off-white **moderate sandstone**, trace tubules.
- 18–22 m Weathered pale grey **moderate-poor sandstone**.

CO-581 (EAST OF DEAD HORSE GULLY)

Easting: 0457367 Northing: 6795727 Elevation (m): ~219.00

- 0–4 m Silcrete pebbles on red-brown clay-silt, minor carbonate.
- 4–9 m Grey silcrete rubble and brecciated red-brown clay-silt minor gypcrete from 4 m.
- 9–20 m Weathered off-white, weakly silicified **moderate sandstone** brecciated at top, trace alunite, minor iron staining.
- 20–22 m Mauve and off-white as above.

CO-593 (SOUTH OF BROWNS FOLLY)

Easting: 0456715 Northing: 6804606 Elevation (m): 221.04

- 0–1 m Brown clay-silt with grey silcrete pebbles.
- 1–7 m Weathered off-white porous **good sandstone** minor gypcrete at top, gypsum silt filled tubules, trace alunite. Iron staining from 6 m.
- 7–10 m Weathered, purple **blue ground**, iron specks, tubules to 8 m.
- 10–14 m Partly weathered, grey **blue ground**, iron staining 12–13 m. **Trace of colour and potch opal shells in adjacent holes.**

CO-595 (SOUTH OF BROWNS FOLLY)

Easting: 0456675 Northing: 6804653 Elevation (m): 221.42

- 0–2 m Brown clay-silt with grey silcrete pebbles, boulder silcrete from 1 m.
- 2–8 m Weathered, off-white, mauve **good sandstone**, iron specks, iron along fractures, minor tubules to 5 m then common along with gypsum veins. Alunite from 7 m.
- 8–10 m Partly weathered purple claystone, disseminated alunite, trace tubules. **Trace of potch opal shells in adjacent holes.**

CO-602 (SOUTH OF BROWNS FOLLY)

Easting: 0456666 Northing: 6804631 Elevation (m): 220.90

- 0–4 m Brown clay-silt with grey silcrete pebbles, boulder silcrete from 1 m, minor silcreted Russo Beds.
- 4–8 m Weathered, mauve **good-moderate sandstone**, gypsum filled tubules common, iron along fractures, minor alunite.
- 8–9 m Hard mauve-purple **blue ground**.

CO-604 (SOUTH OF BROWNS FOLLY)

Easting: 0456634 Northing: 6804668 Elevation (m): 221.47

- 0–2 m Pale brown calcareous clay-silt with grey and reddish silcrete frags.
- 2–8 m Weathered white **good sandstone**, tubules common, iron along fractures. Gypcrete and brecciated claystone in top metre.
- 8–9 m Weakly weathered purple **blue ground**, minor tubules, iron specks.

CO-606 (SOUTH OF BROWNS FOLLY)

Easting: 0456465 Northing: 6804826 Elevation (m): ~231.00

- 0–1 m Brown calcareous clay-silt with silcrete pebbles.
- 1–9 m Grey-green massive silcrete in red-brown silt-clay, silicified Russo Beds plus claystone chips from 8 m.
- 9–14 m Weathered, white **moderate sandstone**, iron specks, tubules common, minor alunite in mauve claystone from 13 m.
- 14–18 m Partly weathered and silicified, pale grey, **blue ground**, minor tubules and gypsum veins.

CO-607 (WEST OF EIGHT MILE)

Easting: 0461681 Northing: 6788296 Elevation (m): 206.33

- 0–3 m Silcrete lag on red-brown silt-clay with strata calcrete, then gypsum and silicified silt-clay.
- 3–8 m Weathered **moderate sandstone**, tubules and minor gypsum stringers.
- 8–11 m Weathered **moderate sandstone**, minor alunite, iron staining and gypsum stringers.
- 11–24 m Weathered, weakly silicified, grey **blue ground**, minor iron staining.

CO-610 (WEST OF EIGHT MILE)

Easting: 0461857 Northing: 6788374 Elevation (m): 202.30

- 0–3 m Silcrete lag on red-brown silt-clay with strata calcrete, then gypsum and silicified silt-clay.
- 3–12 m Weathered **good sandstone**, tubules and minor gypsum stringers. Gypcrete to 4 m.
- 12–22 m Weathered, weakly silicified grey/mauve **blue ground** minor alunite, gypsum stringers and iron staining.

CO-614 (WEST OF EIGHT MILE)

Easting: 0461810 Northing: 6788276 Elevation (m): 204.14

- 0–3 m Silcrete lag on red-brown silt-clay with strata calcrete, then gypsum and silicified silt-clay.
- 3–13 m Weathered, weakly silicified mauve **moderate sandstone**, iron staining common, minor sparry gypsum. Gypsum indurated to 4 m.
- 13–18 m Weathered, white **good sandstone**, iron staining and gypsum stringers.

CO-616 (WEST OF EIGHT MILE)

Easting: 0462050 Northing: 6788489 Elevation (m): 202.52

- 0–4 m Silcrete lag on red-brown silt-clay with gypsum and silicified silt-clay.
- 4–10 m Grey silcrete in silicified red-brown clay-silt, some silicified purple claystone frags from 8 m.
- 10–16 m Weathered, grey-white, silicified blueground.
- 16–22 m Weathered, grey, kaolinitic **moderate sandstone**.

CO-617 (WEST OF EIGHT MILE)

Easting: 0461926 Northing: 6788330 Elevation (m): 201.65

- 0–1 m Silcrete lag on red-brown silt-clay.
- 2–16 m Weathered, white and mauve **good-moderate sandstone**, minor tubules to 10 m. Minor iron staining and gypsum stringers.
- 16–18 m Weathered **blue ground**, minor sparry gypsum and stringers.

CO-618 (WEST OF EIGHT MILE)

Easting: 0461832 Northing: 6788192 Elevation (m): 204.77

- 0–5 m Silcrete lag on red-brown silt-clay, minor carbonate. Gypsum induration and silicified silt-clay from 2 m. Claystone frags from 4 m.
- 5–9 m Weathered, white **moderate sandstone**, minor tubules, iron staining and gypsum stringers.
- 9–14 m Partly weathered **blue ground**, minor gypsum stringers and iron staining.

CO-619 (WEST OF EIGHT MILE)

Easting: 0461800 Northing: 6788095 Elevation (m): 206.80

- 0–6 m Silcrete lag on red-brown silt-clay, minor carbonate. Gypsum induration and silicified silt-clay from 2 m. Claystone frags from 4 m.
- 6–8 m Grey-green silcrete and weakly silicified silt-clay.
- 8–12 m Weathered, white **good-moderate sandstone**, minor tubules and gypsum stringers. Trace iron staining.
- 12–17 m Partly weathered, silicified, grey **blue ground**, minor gypsum stringers.

CO-627 (MABLE CREEK RD. WEST OF EIGHT MILE)

Easting: 0458432 Northing: 6790845 Elevation (m): ~195.00

- 0–3 m Silcrete lag on red-brown silt-clay, laminar calcrete.
- 3–12 m Grey rubbly silcrete, minor silicified silt-clay, gypsum and claystone frags.
- 12–20 m Weathered, white-mauve **good-moderate sandstone**, minor gypsum veinlets and iron staining.
- 20–27 m Partly weathered, weakly silicified grey-white **blue ground**.

CO-633 (SOUTHWEST OF DEAD MANS GULLY)

Easting: 0460348 Northing: 6798220 Elevation (m): ~210.00

- 0–3 m Silcrete gibber and red-brown clay-silt on red-brown silt-clay with laminar calcrete.
- 3–6 m Brown gypsum silt and gypcrete with claystone chips and silcrete frags.
- 6–8 m Weathered silicified white claystone and gypsum to 7 m, then white **good sandstone** with tubules.
- 8–11 m Weathered partly silicified **moderate sandstone**, red iron patches.

CO-640 (MARS)

Easting: 0453917 Northing: 6794310 Elevation (m): 202.66

- 0–2 m Silcrete lag on calcareous red-brown silt-clay.
- 2–8 m Grey and red-brown silcrete in red-brown silt-clay, minor gypsum.
- 8–13 m Weathered **poor sandstone**.

CO-641 (MARS)

Easting: 0454041 Northing: 6794162 Elevation (m): 198.49

- 0–3 m Silcrete lag on calcareous red-brown silt-clay.
- 3–15 m Partly weathered and silicified **poor sandstone**, minor gypsum stringers and iron staining. Top metre silicified.

CO-642 (MARS)

Easting: 0454366 Northing: 6794039 Elevation (m): 204.01

- 0–3 m Silcrete lag on red-brown silt-clay with gypsum.
- 3–7 m Grey silcrete, gypcrete and silicified claystone frags.
- 7–16 m Partly weathered and silicified **moderate sandstone** with gypsum stringers.

CO-643 (MARS)

Easting: 0454297 Northing: 6793981 Elevation (m): 204.42

- 0–2 m Silcrete and minor ferricrete lag on red-brown silt-clay with gypsum.
- 2–6 m Gypcrete and silicified claystone frags.
- 6–8 m Weathered, grey-mauve silicified **blue ground**, gypsum common.
- 8–10 m Weathered, white **good sandstone**, gypsum stringers and veinlets.
- 10–20 m Partly weathered, silicified **moderate sandstone**, minor gypsum veinlets.

CO-645 (SOUTH OF OLYMPIC)

Easting: 0450222 Northing: 6782811 Elevation (m): ~225.00

- 0–3 m Silcrete on red-brown silt-clay with platy calcrete.
- 3–9 m Gypcrete with minor claystone frags.
- 9–12 m Weathered, white **good sandstone**.
- 12–16 m Weathered, off-white **good sandstone**, large tubules (2–3 cm) with reddish gypsum silt, sparry gypsum veins and minor alunite.
- 16–20 m Partly weathered, silicified mauve **blue ground**.

CO-646 (SOUTHERN CROSS)

Easting: 0465616 Northing: 6786119 Elevation (m): 215.62

- 0–3 m Silcrete on red-brown silt-clay with platy calcrete.
- 3–9 m Grey-green massive rubbly silcrete.
- 9–12 m Weathered, partly silicified, white **blue ground**, gypsum common.
- 12–18 m Weathered, white **moderate sandstone**, minor gypsum veins.

CO-647 (SOUTHERN CROSS)

Easting: 0465326 Northing: 6786816 Elevation (m): 212.56

- 0–2 m Silcrete on red-brown silt-clay with platy calcrete.
- 2–8 m Grey-green massive rubbly silcrete with brown gypsum silt and claystone frags.
- 8–13 m Silicified purple claystone with abundant gypsum to 9 m, then white-mauve **good sandstone**, trace of gypsum veins, minor tubules.
- 13–22 m Weathered, partly silicified off-white and mauve **blue ground**, minor tubules to 16 m, minor gypsum veins.

CO-648 (EAST OF HELLENIC HILL)

Easting: 0467075 Northing: 6793007 Elevation (m): ~205

0–2 m	Grey silcrete gibber on red-brown silt-clay, weak strata calcrete.
2–5 m	Red-brown, yellow silcrete with white silcreted bulldog frags in red-brown silt-clay.
5–10 m	Hard white and yellow weathered, bleached sandstone, abundant gypsum 5–6 m and at 10 m.
10–13 m	White good sandstone , abundant tubules.
13–15 m	Mauve hard blue ground , minor gypsum and FeO stringers.

CO-650 (EAST OF HELLENIC HILL)

Easting: 0467107 Northing: 6793008 Elevation (m): ~205

0–6 m	Grey silcrete gibber on red-brown silt-clay with silcrete frags and minor strata calcrete.
6–13 m	1 m of gypsiferous ferruginous yellow silt with claystone chips, then cream silicified claystone, some gypsum veins.
13–15 m	White good sandstone , tubules common, gypsum veins 2 cm. FeO level at about 15 m. Trace of colour opal about 15 m from FeO level?
15–18 m	Mauve moderate sandstone with gypsum and FeO veins.

CO-653 (EAST OF HELLENIC HILL)

Easting: 0467216 Northing: 6793001 Elevation (m): ~205

0–6 m	Grey silcrete gibber on pale red-brown silt-clay, weak strata calcrete.
6–10 m	Red-yellow hard silcrete and gypsum, silicified bulldog with gypsum veins from 9 m.
10–14 m	Cream-purple hard silicified claystone.
14–17 m	White good sandstone with tubules common.
17–18 m	Yellow-brown hard poor sandstone with FeO staining.

CO-654 (EAST OF HELLENIC HILL)

Easting: 0467217 Northing: 6793024 Elevation (m): ~205

0–4 m	Grey silcrete gibber on pale red-brown silt-clay, weak strata calcrete.
4–8 m	White-yellow gypcrete with silicified claystone frags to 6 m then pinkish silcrete with white frags plus gypsum.
8–10 m	White hard weakly silicified sandstone, gypsum veinlets and FeO patches.
10–16 m	White and mauve sandstone, tubules common, good sandstone 14–16 m.
16–21 m	Mauve and yellow-brown hard sandstone, minor gypsum.

CO-655 (EAST OF HELLENIC HILL)

Easting: 0466661 Northing: 6793341 Elevation (m): ~205

0–5 m	Grey silcrete gibber on pale red-brown silt-clay, weak strata calcrete.
5–9 m	Grey massive silcrete plus gypsum.
9–13 m	Hard, white silicified claystone, minor gypsum.
13–16 m	White-mauve hard poor sandstone , minor tubules and FeO patches.

CO-656 (WEST OF FOURTEEN MILE)

Easting: 0462403 Northing: 6808492 Elevation (m): 241.56

- 0–3 m Silcrete gibber on red-brown silt-clay, strata calcrete.
- 3–9 m Grey silcrete rubble in silicified red-brown silt-clay.
- 9–15 m Weathered white **good sandstone**, tubules, gypsum veinlets and iron staining.
- 15–20 m Weathered white-mauve **moderate sandstone**, minor gypsum stringers and iron staining.

CO-657 (WEST OF FOURTEEN MILE)

Easting: 0462444 Northing: 6808476 Elevation (m): 241.31

- 0–3 m Silcrete gibber on red-brown silt-clay, strata calcrete and silcrete frags.
- 3–9 m Silicified red-brown silt-clay with grey silcrete frags, some claystone frags from 8 m.
- 9–15 m Weathered, white **good sandstone**, tubules, minor alunite and iron staining.
- 15–20 m Weathered, mauve **moderate sandstone**, minor iron staining, tubules and gypsum stringers.

CO-658 (WEST OF FOURTEEN MILE)

Easting: 0463374 Northing: 6810621 Elevation (m): 222.82

- 0–6 m Silcrete and ironstone gibber on silicified red-brown silt-clay, strata calcrete and white claystone frags.
- 6–8 m Grey silcrete, gypsum veins and claystone frags.
- 8–16 m Weathered, white **good sandstone**, minor alunite and gypsum.
- 16–18 m Weathered, mauve and grey **blue ground**.

CO-659 (WEST OF FOURTEEN MILE)

Easting: 0463877 Northing: 6809948 Elevation (m): 225.05

- 0–3 m Silcrete gibber on red-brown silt-clay, strata calcrete and silcrete frags.
- 3–9 m Silicified red-brown silt-clay with grey silcrete frags, some claystone frags from 7 m.
- 9–18 m Weathered, white and mauve **moderate sandstone**, minor tubules, gypsum.

CO-670 (FRANKS FOLLY NORTH)

Easting: 0459266 Northing: 6804267 Elevation (m): 229.09

- 0–3 m Silcrete gibber on red-brown silt-clay, strata calcrete.
- 3–7 m Red-brown silt-clay, gypsum silt and claystone frags from 5 m.
- 7–15 m Weathered white and mauve **good-moderate sandstone**, tubules to 10 m, iron staining and gypsum, alunite balls from 10 m.

CO-671 (FRANKS FOLLY NORTH)

Easting: 0459324 Northing: 6804266 Elevation (m): 226.73

- 0–5 m Silcrete gibber on red-brown silt-clay, strata calcrete. Claystone frags from 4 m.
- 5–11 m Weathered white and mauve **good sandstone**, tubules, gypsum and iron staining.

CO-672 (FRANKS FOLLY NORTH)

Easting: 0459323 Northing: 6804246 Elevation (m): 227.16

- 0–6 m Silcrete gibber on red-brown silt-clay, strata calcrete. Gypcrete and claystone frags from 5 m.
- 6–11 m Weathered white and mauve **good sandstone**, tubules, gypsum and iron staining. Minor alunite and kaolin balls. **Traces of potch opal in adjacent holes.**

CO-678 (FRANKS FOLLY NORTH)

Easting: 0459316 Northing: 6804235 Elevation (m): 227.63

- 0–5 m Silcrete gibber on red-brown silt-clay, strata calcrete. Claystone frags with tubules from 4 m.
- 5–11 m Weathered white and mauve **good sandstone**, tubules, gypsum and iron staining. Minor alunite and kaolin balls. **Traces of potch opal in adjacent holes.**

CO-679 (FRANKS FOLLY NORTH)

Easting: 0459294 Northing: 6804223 Elevation (m): 228.64

- 0–4 m Silcrete gibber on red-brown silt-clay, strata calcrete. Silcrete cobbles from 1 m.
- 4–10 m Weathered white and mauve **moderate sandstone**, tubules, gypsum, alunite and kaolin patches.

CO-680 (FRANKS FOLLY NORTH)

Easting: 0459305 Northing: 6804138 Elevation (m): 228.67

- 0–4 m Silcrete and ironstone gibber on red-brown silt-clay with silcrete frags, minor claystone frags from 2 m.
- 4–10 m Weathered white and mauve **good sandstone**, tubules and gypsum, alunite/kaolin patches from 8 m.

CO-682 (FRANKS FOLLY NORTH)

Easting: 0459329 Northing: 6804185 Elevation (m): 227.84

- 0–4 m Silcrete gibber on red-brown silt-clay, minor claystone frags from 2 m.
- 4–12 m Weathered white and mauve **good sandstone**, tubules and gypsum stringers, alunite/kaolin patches from 8 m.
- 12–19 m Weathered, mauve-red **moderate sandstone** with iron staining.

CO-684 (FRANKS FOLLY NORTH)

Easting: 0459387 Northing: 6804242 Elevation (m): 225.61

- 0–3 m Silcrete and ironstone gibber on red-brown silt-clay, minor claystone frags from 2 m.
- 3–12 m Weathered, white and mauve **good sandstone**, tubules and alunite to 8 m, minor iron staining.

CO-685 (FRANKS FOLLY NORTH)

Easting: 0459381 Northing: 6804033 Elevation (m): 227.04

- 0–5 m Silcrete and ironstone gibber on red-brown silt-clay to 1 m, then gypcrete silt-clay and brecciated claystone, minor tubules.
- 5–8 m Weathered **moderate sandstone**, tubules and gypsum.
- 8–12 m Weathered, white **good sandstone**, tubules and gypsum.
- 12–13 m Weathered, mauve **moderate sandstone** with alunite/kaolin patches.

CO-686 (FRANKS FOLLY NORTH)

Easting: 0459402 Northing: 6804004 Elevation (m): 226.48

- 0–5 m Silcrete gibber on red-brown silt-clay to 1 m, then gypcrete silt-clay and brecciated claystone, minor tubules.
- 5–7 m Weathered, partly silicified **moderate sandstone**, tubules, gypsum common.
- 7–11 m Weathered, white **good sandstone**, tubules and gypsum.
- 11–13 m Weathered, mauve **moderate sandstone**, minor alunite and iron specks.

CO-691 (WEST OF DEAD HORSE GULLY)

Easting: 0454400 Northing: 6795725 Elevation (m): 220.27

- 0–4 m Silcrete lag on red-brown silt-clay.
- 4–7 m Grey silcrete in red-brown silt-clay, silicified claystone frags.
- 7–17 m Weathered, white **poor sandstone**, minor tubules, silicified to 8 m.

CO-694 (WEST OF DEAD HORSE GULLY)

Easting: 0454489 Northing: 6795701 Elevation (m): 220.46

- 0–4 m Silcrete lag on red-brown silt-clay, laminar calcrete, trace gypsum.
- 4–6 m Grey silcrete rubble in silt-clay.
- 6–8 m Gypcrete and brecciated claystone.
- 8–16 m Weathered, white **good sandstone**, minor tubules and gypsum. **Trace of colour opal around 13 m.**
- 16–19 m Weathered, mauve **moderate sandstone**, iron staining and sparry gypsum. **Traces of colour opal in adjacent holes.**

CO-697 (WEST OF DEAD HORSE GULLY)

Easting: 0454200 Northing: 6795782 Elevation (m): 220.08

- 0–1 m Silcrete lag on red-brown silt-clay, laminar calcrete, trace gypsum.
- 1–4 m Grey silcrete rubble in red-brown silt-clay.
- 4–11 m Weathered, white, silicified **blue ground**, rare tubules.
- 11–18 m Weathered, white **good sandstone**, tubules common. Iron staining and alunite from 17 m. **Traces of patch opal.**

CO-700 (WEST OF DEAD HORSE GULLY)

Easting: 0454266 Northing: 6795765 Elevation (m): 220.25

- 0–1 m Silcrete lag on red-brown silt-clay, laminar calcrete, trace gypsum.
- 1–9 m Grey silcrete rubble in red-brown silt-clay with silicified claystone frags from 5 m.
- 9–14 m Weathered, white claystone, silicified to 10 m then **good sandstone**, tubules common, traces of alunite. **Traces of colour opal.**
- 14–20 m Weathered, mauve **moderate sandstone**, iron staining, trace alunite.

CO-706 (WEST OF DEAD HORSE GULLY)

Easting: 0454457 Northing: 6795900 Elevation (m): 220.28

- 0–1 m Silcrete lag on red-brown silt-clay, laminar calcrete.
- 1–6 m Grey silcrete rubble in red-brown silt-clay.
- 6–8 m Red- brown silcrete breccia plus gypcrete and red-brown silt.
- 8–13 m Weathered, white claystone, weakly silicified to 11 m then **good sandstone** minor tubules, trace alunite. **Trace of potch opal.**
- 13–22 m Weathered, mauve **moderate sandstone**, iron specks and staining, rare alunite. **Trace of potch opal in adjacent holes.**

CO-719 (WEST OF DEAD HORSE GULLY)

Easting: 0454597 Northing: 6795826 Elevation (m): 220.17

- 0–3 m Silcrete lag on red-brown silt-clay, laminar calcrete.
- 3–5 m Grey silcrete rubble in red-brown silt-clay.
- 5–9 m Gypcrete in brown silt, minor white claystone frags.
- 9–13 m Weathered, white **good sandstone**, minor tubules and sparry gypsum. **Trace of potch opal.**
- 13–21 m Weathered, mauve partly silicified **blue ground**, minor gypsum veins and stringers, yellow iron staining, trace tubules, trace alunite from 20 m. **Trace of colour opal in adjacent hole.**

CO-723 (WEST OF DEAD HORSE GULLY)

Easting: 0454884 Northing: 6795798 Elevation (m): 218.35

- 0–2 m Silcrete lag on red-brown silt-clay, laminar calcrete.
- 3–5 m Grey silcrete rubble in red-brown silt-clay.
- 5–10 m Gypsiferous red-brown silt, minor silcrete frags. White silicified claystone frags from 8 m.
- 10–13 m Weathered, white **good sandstone** with tubules.
- 13–19 m Weathered, mauve **moderate sandstone**, alunite spotting, traces of gypsum stringers, minor yellow iron patches.

REFERENCES

- Morris, B.J., 2006. Coober Pedy Opal Exploration Drilling Program. *MESA Journal* 41:45.
- Robertson, R.S. and Scott, D.C., 1990. Geology of the Coober Pedy Precious Stones Field. Results of Investigations, 1981-86. *South Australia. Geological Survey. Report of Investigations*, 56.
- Scott, D.C. and Robertson, R.S., 1983. Coober Pedy Opal Fields – results of the subsidised exploration program, 1981. *South Australia. Department of Mines and Energy. Report Book*, 83/7.
- Simpson, C.A., 2000. Coober Pedy Drilling Program 2000. In *PIRSA Minerals and Energy, Coober Pedy Database CD 2007, Version 5*.
- Simpson, C.A. and Townsend, I.J., 2000. Coober Pedy opal exploration program 2000. *MESA Journal* 19:18-19.

