

# **Open File Envelope**

## **No. 9327**

**EL 2272, EL 2273, EL 2274 AND EL 2275**

**CURNAMONA, FROME DOWNS, BILLEROO CREEK  
AND MULYUNGERANIE AREAS**

**ANNUAL AND FINAL REPORTS FOR THE PERIOD  
20/2/97 TO 19/2/2002**

Submitted by

Paladin Resources NL  
2002

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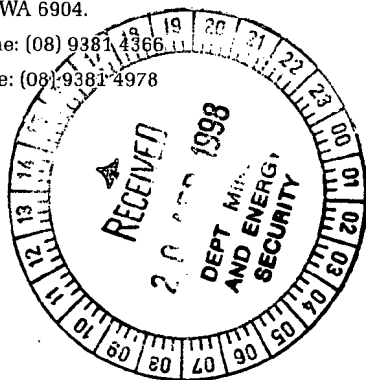


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**FIRST ANNUAL REPORT**  
**on**  
**EXPLORATION LICENCES 2272 - 2275**

**CURNAMONA, SOUTH AUSTRALIA**

Prepared By  
**PALADIN RESOURCES NL**  
On behalf of  
**THE CURNAMONA URANIUM JOINT VENTURE**

Covering The Period  
20 February 1997 to 19 February 1998

Compiled By: P J Hogarth

**PERTH WA**

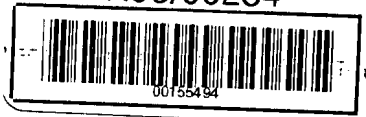
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## SUMMARY

Exploration Licences 2272-2275 were granted on 20 February 1997. The Paladin Brightstar Joint Venture (PBJV), with Paladin as manager, farmed into part of the tenement area on 22 May 1997, with Goldminco retaining rights to the Proterozoic basement.

### Work carried out by the PBJV included

- Negotiations with Native Title Parties to allow access to the land for exploration and drilling activities.
- Research and compilation of previous drilling data including gamma logs, lithology logs and redox maps.
- Examination and logging of representative drill core.
- Field visits to the Lake Frome area.
- Compilation of isopach and structural contour maps of the Eyre Formation.
- Drilling of 39 drill holes (3,924m) in EL2275. (Programme continuing at period end).

### Work carried out by Goldminco included

- Compilation and interpretation of geophysical data (aeromagnetic, gravity, radiometric).

The exploration target for the PBJV is uranium and for Goldminco is base metals.

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## **1.0 INTRODUCTION**

Exploration Licences 2272 – 2275, covering areas of 1225km<sup>2</sup>, 1262km<sup>2</sup>, 870km<sup>2</sup> and 1176km<sup>2</sup> respectively, were granted to Malanti Pty Ltd on 20 February 1997 and were transferred to an associated company, Goldminco NL (Goldminco), after the float of that company, on 24 April 1997. A heads of agreement was signed on 22 May 1997 by Goldminco and the Paladin Energy Minerals NL / Brightstar Power Corporation Pty Ltd Joint Venture (PBJV) forming the Curnamona Uranium Joint Venture. With Paladin as manager, the PBJV is earning an interest in the sedimentary rocks overlying basement with Goldminco retaining rights to the Proterozoic basement.

This report covers all work carried out by Goldminco and the PBJV during the first year of tenure.

## **2.0 LOCATION**

EL's 2272 – 2275 form a near contiguous block extending south and east of Lake Frome, from Frome Downs Homestead to the NSW border, on the Frome SH54-10 and Curnamona SH54-14 1:250,000 map sheets. (*Figure 1*).

## **3.0 NATIVE TITLE NEGOTIATIONS**

The ground covered by EL's 2272-2275 is subject to the following Native Title Claims:

Kuyani Claim SC95/4, lodged 19 September 1995; affects EL2272, 2273, 2274 and 2275.

Adnyamathanka Claim SC97/2, lodged 25 July 1997; affects EL's 2272, 2273 and 2274.

Negotiations with Native Title parties were initiated in September 1997 with a view to obtaining heritage clearance allowing access to the land for exploration.

After protracted negotiations on the ground subject to only one Native Title Claim, the Joint Venture was able to secure a limited heritage clearance in early December 1997 covering part of EL2275. This allowed field work to commence in

early 1998, but further clearances will be required if work is to cover more of the tenement area.

Negotiations are continuing on the three tenements subject to dual Native Title Claim, but a satisfactory outcome is still some way off. More than 12 months after the grant of the tenement it is, still not possible to carry out any exploration on the ground.

#### **4.0 BASEMENT EXPLORATION – GOLDMINCO NL**

Interpretation of geophysical data covering the four exploration licences was undertaken on behalf of Goldminco by G.O. Dickson and Associates. Their report is presented in *Appendix 2*.

#### **5.0 URANIUM EXPLORATION – PALADIN BRIGHTSTAR JV**

##### **5.1 REGIONAL GEOLOGY AND MINERALISATION**

The tenements are located in the the Frome Embayment of the Great Artesian Basin.

Palaeochannel uranium mineralisation occurs within Tertiary units of the Frome Basin, a low land embayment bounded to the west, east and south by the Flinders, Barrier and Olary Ranges.

All significant uranium mineralisation is hosted by valley fill fluvial sands in Eocene (Eyre Formation) and Miocene (Namba Formation) palaeochannels.

The following parameters are found to be associated with the Frome Basin uranium mineralisation:

- The host sandstones were laid down as sand sheets in broad braided channels with abundant preserved overbank and carbonaceous material.
- The channels run east south east from the Mt Painter area on the western edge of the basin, eg at Beverley, and approximately northward from the Barrier Ranges on the southern edge of the basin, eg. Goulds Dam and Honeymoon. They are modified locally by a buried palaeo high, the Benagerie Ridge.

- The uranium is derived from the surrounding crystalline basement outcrop.
- It is carried by oxidising waters along broad palaeochannels incised into the Pre-Tertiary basement.
- The uranium is precipitated at redox fronts developed either along the margins of the channels where the oxidised solutions interfinger with the original reduced sediments, eg. Honeymoon, within the channel along clay / silt / sand interfaces or where faulting has truncated porous sand bodies, eg. Beverley.
- In plan, the mineralisation forms elongate bodies of the order 1,000m x 400 m.

The style of mineralisation should be eminently suitable for mining by the in-situ leach (ISL) technique.

## 5.2 TENEMENT GEOLOGY

### EL2272

This tenement occurs within the SW corner of the Frome Embayment. Within the Cainozoic (the target horizons) a generalized sequence of 0-40m of channel facies Eyre Formation, followed by 40-80m of Namba Formation and topped by approximately 0-10m of Willawortina Formation exists. Basement to the Cainozoic is usually Cambrian redbeds and carbonates.

The Eyre Formation occurs within the broad, ill-defined Curnamona Channel that diagonally crosses the tenement from WSW to ENE where it eventually merges with the north trending Billeroo Channel (host of the Goulds Dam uranium mineralisation). Previous work to the west of the EL boundary by Esso and others has indicated the presence of minor uranium anomalies and oxidized facies with a series of coalescing shoestring sands that apparently form an initiating facies to the Curnamona Channel. Work by Mine Administration within the area where the two channels join (outside of EL 2272) suggests the presence of reduced facies. Hence the potential for a mineralized redox front within that part of the Curnamona Channel covered by EL2272 must exist.

### **EL2273**

The tenement is situated along the south edge of Lake Frome within the SW portion of the Frome Embayment. The target horizons are the Cainozoic cover rocks above Mesozoic and Palaeozoic sedimentary basement.

Generally, within the tenement the Cainozoic consists of, at the base 20-35m of Eyre Formation sheet (blanket) sands. Along the south eastern boundary of the EL the channel sands within the north trending Billeroo Channel merge with the sheet sands. Approximately 60-90m of Namba Formation mudstones cover the Eyre thickening to the east. The Póontana Fault system passes through the western edge of the tenement.

### **EL2274**

The tenement is situated off the south-east edge of Lake Frome within the central portion of the Frome Embayment at the northern edge of the Benagerie Ridge. The target horizons are the Cainozoic cover rocks above Mesozoic and Palaeozoic sedimentary basement. Pre-Cambrian basement is also known from the general area.

Generally within the tenement the Cainozoic consists of at the base 20-30m of Eyre Formation sheet (blanket) sands. Entering the tenement from the south are the channel sands of the Namba and Lake Tinko Channels which merge with the sheet sands. Sparse uranium mineralisation is known from historical drilling within the two channels. Approximately 40-60m of Namba Formation mudstones cover the Eyre thickening to the north.

### **EL2275**

The tenement is situated off the east edge of the Benagerie Ridge within the central-east portion of the Frome Embayment close to the SA-NSW border. The target horizons are the Cainozoic cover rocks above Mesozoic basement.

Generally within the tenement the Cainozoic consists of at the base 25-35m of Eyre Formation sheet (blanket) sands. Entering the tenement from the north west is the broad shallow Lake Charles Channel which however contains a similar

sequence to the sheet sand areas. The Eyre Formation thins towards the channel margins but does drape over the palaeotopography rather than wedging out. Approximately 60-70m of Namba Formation mudstones cover the Eyre thickening slightly to the east.

The general picture as shown on the tenement-wide map is of a broad shelf or basin margin that runs north-south through the tenement. There are two embayments within the general east sloping palaeo-slope. One forms the mouth of the Lake Charles Channel which has been reasonably defined by drilling. The other may also form the mouth of a second channel but the present level of drilling is too wide spaced to allow an accurate interpretation.

A broad oxidized front exists that has apparently migrated from the basin margins in an east to west direction. The front contains numerous lobes and splits into 2-3 different levels that are separate in plan projection; i.e. the separate fronts have penetrated at different rates. The lowest front occurs at the 100-110m level but is based on limited drilling information. The middle and best mineralized front is the best defined and occurs between the 82-95m levels. The upper front, which to date is only weakly mineralized, occurs just below the top of the Eyre Formation at about 75m depth.

Previous drilling has identified uranium prospects at three locations; Oban (middle front), Oban North (upper front) and Lake Charles (probably middle front). At Oban uranium mineralisation showing ore grades and near economic thicknesses has been located on several 150-250m spaced drilling profiles.

### 5.3 WORK COMPLETED

#### EL2272

All relevant open file reports have been examined. For EL2272 this involved 6 reports and resulted in the discovery of 48 drillholes. The gamma logs and lithological logs have been examined and the results compiled in to two computer databases. *Table 1* lists the collar information and a basic compilation of the radiometrics (best cps and times background anomalies). Elevations were either compiled from original data on the log sheets or estimated from 2m contoured DEM (AUSLIG) data. *Figure 2* shows the collar locations. The redox, lithological and

stratigraphical information has been extracted but has not been compiled into plottable or listed formats. This will be undertaken during the coming months. Data held within the MESA Curnamona Dataset has been used as an initial basis for compilation, however only 15 of the 48 holes are noted within the published dataset. Regional isopach and isobath maps for the Eyre Formation were compiled from the published stratigraphic logs (13 of 48 holes, *Map 1*).

Present data shows the existence of partly oxidized Eyre Formation sands at the west edge of the tenement. Nine holes show better than 3xbg radiometric anomalies which indicated that uranium has been introduced to the system.

Field visits were made on July 10 1997 (briefly) and again on October 18-19 1997 to assess access and to locate previous drillholes on the ground. A differential GPS unit was used to accurately locate the holes. Numerous discrepancies with the published locations were found. Representative drillhole samples from previous drilling held in the MESA core and sample storage facility were logged during 16-17 September.

### **EL2273**

All relevant open file reports have been examined. For EL2273 this involved 7 reports and resulted in the discovery of 21 drillholes. The gamma logs and lithological logs have been examined and the results compiled in to two computer databases. *Table 2* lists the collar information and a basic compilation of the radiometrics (best cps and times background anomalies). *Figure 3* shows the locations of the drillholes. Elevations were either compiled from original data on the log sheets or estimated from 2m contoured DEM (AUSLIG) data. The redox, lithological and stratigraphical information has been extracted but has not been compiled into plottable or listed formats. This will be undertaken during the coming months. Data held within the MESA Curnamona Dataset has been used as an initial basis for compilation and proved to be fairly complete (20 of 21 holes). Regional isopach and isobath maps for the Eyre Formation were compiled from the published stratigraphic logs (18 of 21 holes, *Map 1*).

Present data shows that the sheet sands of the Eyre Formation are generally reduced though not all descriptions are sufficiently detailed to allow an exact evaluation of the redox state. An examination of the available literature covering

the Billeroo Channel (Ellis 1980, Distribution and Genesis of Sedimentary Uranium near Curnamona, Lake Frome Region, SA; AAPGB) suggests that the mineralized oxidized facies of the Gould Dam mineralisation wedges out before south edge of the tenement. Only one hole shows a better than 3xbg radiometric anomaly (EAR6, 6xbg). This suggests that only limited amounts of uranium has been introduced to the system. However the relatively sparse drilling density does leave room for undiscovered channels to occur either originating from the basin margins from the west or being derived from the Benagerie Ridge in the east.

Field visits were made on July 10 1997 (briefly) and again on October 18-19 1997 to assess access and to locate previous drillholes on the ground. A differential GPS unit was used to accurately locate the holes. Numerous discrepancies with the published locations were found. Representative drillhole samples were from the MESA corestore were logged during a visit 18-19 September.

#### **EL2274**

All relevant open file reports have been examined. For EL2274 this involved 8 reports and resulted in the discovery of 21 drillholes. The gamma logs and lithological logs have been examined and the results compiled in to two computer databases. *Table 3* lists the collar information and a basic compilation of the radiometrics (best cps and times background anomalies). Elevations were either compiled from original data on the log sheets or estimated from 2m contoured DEM (AUSLIG) data. *Figure 4* shows the locations of the drillholes. The redox, lithological and stratigraphical information has been extracted but has not been compiled into plottable or listed formats. This will be undertaken during the coming months. Data held within the MESA Curnamona Dataset has been used as an initial basis for compilation and proved to be reasonably complete (25 of 21 holes, i.e. 5 holes were misplotted as being within the EL and 1 was missed entirely). Regional isopach and isobath maps for the Eyre Formation were compiled from the published stratigraphic logs (23 of 25 holes, including unfortunately the 5 misplotted holes). This had the effect of distorting the maps somewhat. *See Map 1.*

Present data shows that the sheet sands of the Eyre Formation are generally reduced though not all descriptions are sufficiently detailed to allow an exact evaluation of the redox state. An examination of the available literature covering the exploration of the Namba and Lake Tinko Channels to the south suggests that

the mineralized oxidized facies of the channels do, at least in part, continue into south part of the tenement. Two holes shows a better than 10xbg radiometric anomalies and a further two are better than 3xbg. This forms a radiometric halo at what maybe the confluence of the Namba and Lake Tinko Channels and suggests that substantial amounts of uranium has been introduced to the system. The relatively sparse drilling density does not resolve the palaeodrainage or the redox potential within the area and further drilling is required

Field visits were made on July 10 1997 (briefly) and again on October 18-19 1997 to assess access and to locate previous drillholes on the ground. During September 16-19 representative samples from the Eyre and Namba Formations were re-logged at the MESA core and sample storage area in Adelaide. A differential GPS unit was used to accurately locate the holes. Numerous discrepancies with the published locations were found.

## EL2275

### Preliminary Investigations

All relevant open file reports have been examined. For EL2275 this involved 7 reports including one mammoth three volume report from Marathon and resulted in the discovery of 233 drillholes. The gamma logs and lithological logs have been examined and the results compiled in to two computer databases. *Table 4* lists the collar information and a basic compilation of the radiometrics (best cps and times background anomalies). Elevations were either compiled from original data on the log sheets or estimated from 2m contoured DEM (AUSLIG) data. The redox, lithological and stratigraphical information has been extracted and has been used to compile the redox and isobath maps included with the report (see *Maps 2-5*). The remainder of the stratigraphic data is still being compiled into standardized downhole logs suitable for plotting via Micromine into sections. This will be undertaken during the coming months. Data held within the MESA Curnamona Dataset has been used as an initial basis for compilation and proved to be reasonably complete (156 holes). Regional isopach and isobath maps for the Eyre Formation were compiled from the published stratigraphic logs (156 holes, See *Map 1*).

A total of 98 holes shows a better than 3xbg radiometric anomalies (i.e. 40%) and of these 73 also pass the 5xbg threshold. Naturally the majority occur within the three known prospect areas Oban, Oban North and Lake Charles. However 8 holes occur outside these known anomalies.

Initial field visits were made on July 11 1997 (briefly) and again between October 10-18 1997 to assess access and to locate previous drillholes on the ground. A differential GPS unit was used to accurately locate 189 of the holes. Numerous discrepancies of the order of 100-500m (occasionally up to 1,000m) with the published locations were found.

Between September 16-19 the MESA core and sample storage facility was visited and sample material from representative holes was logged. Visits were made to the MESA library on July 7-8 and again September 15 and 19 to research open file reports.

An additional field visit was made during December 1-6 for the purpose of carrying out an Aboriginal sites survey.

From January 21 to February 19 a field work programme was commenced. The main components were:

- to calibrate the Mt Sopis Series 2 downhole gamma and electric (R & SP) logger at the MESA test pits.
- to establish a base grid at Oban.
- and between February 9-19 to start a rotary mud drilling programme.

The drill programme had the following objectives:

- to test the nature, grade and thickness of known mineralisation at the Oban prospect.
- to locate and confirm the interpretation that the Oban mineralisation is controlled by a step (z) shaped roll front at the 84-92m level.

- to test the hypothesis that closer spaced drilling aimed at the roll front could identify a narrow but thicker, sinuous higher grade ore zone along the previously identified front.
- to test the postulated extensions of the Oban front 1-2km away from known mineralisation to verify its worth as a regional target.
- to locate a second upper step (z-front) at the 72-82m level, which controls sub-economic mineralisation at Oban North, at two locations near Oban to assess its regional importance.
- to test on a regional level the redox pattern within the eastern portion of the Lake Charles Channel, in particular, to test whether the 84-92m front has penetrated along the channel.
- to test for the existence of a terminal front at the north end of the Lake Charles prospect.

Field investigations to the end of the reporting period (19 February) included:

- An area of 2.5sq/km with a 2km baseline was gridded at 100m spacings at the Oban Prospect using a DGPS for control.
- A total of 39 rotary mud holes were drilled between February 9-19 to depths between 90-104m. Total meterage was 6450m.
- All holes were gamma logged using the Series 2 logger immediately after completion. Only one hole (CUM039) collapsed and had to be washed out and logged through the rods. Electric logs (SP & R) were also run on all holes except the collapsed hole.

Because the reporting period was closed off mid-way through the drilling program full assessment of the results has not been made. These results will be presented in the 1998-99 report. Initial results are as follows:

## Oban

At Oban, the drilling (35 of 39 holes) was mainly aimed at closing down to 25m or less the drill spacing on the previous Marathon drill fences that straddle the lower 84-92m redox step (front). The results show that the redox step is a well defined feature down to 15m spacings but that the associated mineralisation is narrow and of low grade. Composite grades over anomalous zones were calculated and consecutive intersections totalling 1.0-2.5m were achieved in several holes however grades are only in the order of 250-650 ppm eU3O8 (See *Table 5 below*).

## Berber

The 4 holes drilled at the Berber prospect 2.5-3km south of Oban were targeted at a postulated embayment in the regional redox front similar to that in which Oban occurs.

One hole (CUM38) intersected a narrow (0.5 m) zone of ore grade material (1050 ppm eU3O8) within a complex(?) redox situation along a WNW-ESE trending front.

The locations of the drillholes listed in *Table 5* are plotted on *Maps 3, 4 & 5*. Preliminary drillhole logs are attached in *Appendix 1*.

**TABLE 5     COMPILATION OF DOWNHOLE GAMMA DATA**  
**EL2275**

AREA	HOLE No	FROM (m)	TO (m)	THICKNESS (m)	U <sub>3</sub> O <sub>8</sub> (ppm)	LOGGER VALUE (cps) max
OBAN	2	87.4	89.1	1.7	285	1294
OBAN	7	85.2	86.7	1.5	287	1186
OBAN		89.3	90.7	1.4	307	1488
OBAN	6	84.1	86.2	2.1	402	4021
OBAN	8	83.9	86.3	2.4	309	1269
OBAN	13	85.0	87.5	2.5	563	3968
OBAN	16	87.1	88.1	1.0	676	3400
OBAN	17	88.3	90.8	2.5	671	4278
OBAN	18	87.9	89.4	1.5	513	3171
OBAN	22	88.6	91.9	2.5	604	4005
OBAN	30	86.0	88.0	2.0	250	919
BERBER	38	91.5	92.0	0.5	1050	4311

Summary of Drill Results February 1998 EL2275

## **TABLES**

TABLE 1

Project FROME File TR-2272.DAT Wed Apr 08 10:23 1998

Page 1

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
1	151688	EAR 7A	384606.68	6512468.34	72.50	143.26	350	2	ENV 1109
2		EAR 8	391333.69	6514782.47	75.00	126.80	390	<2	ENV 1109
3		EAR 14	392905.97	6508779.35	89.00	106.98	160	2	ENV 1109
4		EAR 16	393455.66	6502719.59	99.00	92.66	130	<2	ENV 1109
5		EAR 17	387434.43	6496349.99	103.00	115.52	110	<2	ENV 1109
6		EAR 18	380780.39	6496166.91	102.50	81.08	110	<2	ENV 1109
7		EAR 19	380670.66	6502524.34	89.50	111.86	600	8	ENV 1109
8		EAR 21	387208.31	6502574.62	92.50	81.99	110	<2	ENV 1109
9		EAR 26	374704	6495421	102.00	30.48	250	5	ENV 1109
10		EAR 27	375844	6501858	84.00	134.11	245	4	ENV 1109
11		EAR 28	376080.07	6509091.63	74.50	138.68	430	10	ENV 1109
12	144425	FD 1	390700	6493157	112.00	143.26			ENV 1853
13	144426	FD 3	382941	6492694	108.50	109.73			ENV 1853
14	144427	FD 4	378185	649291	107.00	134.11			ENV 1853
15	144428	FD 5	375758	6496316	100.00	121.92			ENV 1853
16	144429	FD 6	375936	6505102	82.00	135.64		7	ENV 1853
17	144430	FD 7	377300.00	6512200.00	73.00	153.01		3.8	ENV 1853
18	144435	FD 12	373900.00	6510600.00	74.50	138.07			ENV 1853
19	144443	FD 20	373600.00	6505800.00	84.50	140.21			ENV 1853
20	144456	FD 33	374200.00	6513900.00	68.00	132.59			ENV 1853
21	144457	FD 34	375300.00	6509800.00	72.00	144.78			ENV 1853
22	144458	FD 35	376000.00	6507400.00	78.00	138.07			ENV 1853
23		PMX 3	385626.18	6528508.75	54.00	128.4	260	4	ENV 1853
24		PMX 4	391391.68	6527816.98	57.50	114.0	100	<2	ENV 1853
25		PMX 18	393692.97	6526616.87	60.00	107.6	130	2	ENV 1853
26		PMX 49	384909.23	6501478.24	85.50	122.0		<2	ENV 1853
27		PMX 51	388001.54	6513272.13	77.50	153.0		<2	ENV 1853
28		BW 30 (W)	392500.61	6515348.37	74.00				ENV 2361
29		BW 31 (W)	392576.67	6516333.58	73.00				ENV 2361
30		BW 32 (W)	392648.30	6517330.38	73.00				ENV 2361
31		BW 33 (W)	388927.21	6512921.43	78.00				ENV 2361
32		BW 167 (W)	373822.17	6495926.42	101.00				ENV 2713
33		BW 172	376209.07	6508832.64	76.00	144	40	<2	ENV 2713
34		BW 173	377621.95	6508639.60	76.50	147	40	<2	ENV 2713
35		BW 174	376560.09	6504958.40	82.50	139.5	100	5	ENV 2713
36		BW 178	377294.49	6504942.45	81.50	108	20	<2	ENV 2713
37		BW 178A	377150.14	6504961.02	82.00	142	40	<2	ENV 2713
38		BW 179	378498.75	6513363.51	70.00	130.5	35	<2	ENV 2713
39		BW 180	382156.51	6512700.53	70.50	141.0	70	3	ENV 2713
40		BW 181	380386.28	6512965.41	67.00	134	50	2	ENV 2713
41		BW 182	378475.33	6514161.38	69.00	121.5	250	12	ENV 2713
42		BW 183	378406.23	6515310.23	67.50	129	50	2	ENV 2713
43		BW 184	377890.50	6512449.79	72.00	133.5	40	<2	ENV 2713
44		BW 185	376452.18	6513801.93	70.50	152.5	40	<2	ENV 2713
45		BW 186	374296.70	6516250.86	66.50	140	40	<2	ENV 2713
46	145268	T 5	394000.00	6495700.00	109.00	80.00	22	<2	ENV 2995
47	145269	T 6	393120	6493441	113.00	85	38	2	ENV 2995
48	137052	E.A. RUDD B	393772.00	6513229.00	80.50	0.00			ENV ????

TABLE 2

Project FROME File TR-2273.DAT Wed Apr 08 10:08 1998

Page 1

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
1	87731	LAKE FROME	384869.00	6564407.00	6.00	771.80			ENV 0968
2	87730	LAKE FROME	391439.00	6563537.00	33.00	781.80			ENV 0968
3	146017	244 32	373200.00	6561800.00	29.00	140.21	95	<2	ENV 1041
4	146018	244 33	374900.00	6562200.00	18.00	103.63	110	<2	ENV 1041
5	146019	244 34	376500.00	6562500.00	14.00	97.54	110	2	ENV 1041
6	146020	244 35	378100.00	6562900.00	8.00	96.01	100	2.5	ENV 1041
7	146021	244 36	379800.00	6563300.00	10.00	92.96	120	2	ENV 1041
8	146022	244 37	381500.00	6563600.00	8.50	92.96	110	2	ENV 1041
9	146023	244 38	382800.00	6562500.00	8.00	161.54	125	3	ENV 1041
10	151686	EAR 4	389375.55	6546191.02	41.50	162.46	180	3	ENV 1109
11		EAR 5	392746.07	6545947.73	36.50	124.05	170	3	ENV 1109
12	151687	EAR 6	385712.18	6544374.21	40.50	152.40	280	6	ENV 1109
13	144132	589 32	404900.00	6560100.00	28.00	152.40	100	<2	ENV 1627
14	144133	589 33	407100.00	6568200.00	20.00	152.40	80	<2	ENV 1627
15	144134	589 34	405400.00	6565000.00	26.00	140.82	170	2	ENV 1627
16	144135	589 35	399100.00	6563000.00	23.50	141.43	80	<2	ENV 1627
17	144141	589 41	411400.00	6561100.00	30.00	129.54	120	<2	ENV 1627
18	144300	CF 1	374100.00	6563000.00	17.00	60.00	116	<2	ENV 3405
19	141555	FR6-1	396300.00	6564000.00	15.00	2.00			ENV 8013
20	141556	FR7-1	389700.00	6560000.00	8.00	2.00			ENV 8013
21	137053	E.A.RUDD B	393201.00	6546061.00	39.00	0.00			ENV ????

TABLE 3

Project FROME File TR-2274.DAT Wed Apr 08 10:10 1998

Page 1

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
1	145790	514 4	447700.00	6553000.00	46.00	37.49	5000	2	ENV 1543
2	144136	589 36	403800.00	6576900.00	39.00	184.40	100	2	ENV 1627
3	144796	LY 20	449180.99	6555197.44	38.00	36.00	20	<2	ENV 2291
4	144799	LY 23	451718.27	6559495.92	46.00	39.00	20	<2	ENV 2291
5	144733	LT 11	424462	6561736	22.00	91.50	560	14	ENV 2308
6	144734	LT 12	426034	6562231	18.00	82.10	800	20	ENV 2308
7	144735	LT 13	426600.00	6563800.00	22.00	82.10	189	5	ENV 2308
8	144736	LT 14	425823	6565459	28.00	85.50	136	3	ENV 2308
9	144737	LT 15	425700.00	6566900.00	28.50	94.90		<2	ENV 2308
10	144738	LT 16	424845	6568509	24.00	94.90	60	<2	ENV 2308
11	144766	LT 44	428044	6563162	43.00	96.40	132	3	ENV 2308
12	144767	LT 45	429737	6563135	42.00	86.00	87	2	ENV 2308
13	144768	LT 46	431200	6563551	40.00	91.90	185	4	ENV 2308
14	144769	LT 47	433184	6563752	37.50	94.90	87	2	ENV 2308
15	144770	LT 48	434814	6564290	45.00	97.90	95	2	ENV 2308
16	150266	LE 48	420700.00	6577800.00	14.00	106.50			ENV 2392
17	150267	LE 49	418500.00	6577000.00	33.00	120.00			ENV 2392
18	150268	LE 50	416300.00	6575900.00	42.00	126.00	108	3	ENV 2392
19	145296	TAL LC 20	435200.00	6561100.00	41.50	93.50	110	2	ENV 2432
20	145297	TAL LC 21	435900.00	6561000.00	41.00	110.00	230	6	ENV 2432
21	145298	TAL LC 22	434500.00	6561200.00	39.50	79.50	85	2	ENV 2432
22	141554	FR5-2	398500.00	6571600.00	8.00	2.00			ENV 8013
23	104352	BLACK OAK	424882	6569674	26.00	138.40			ENV ????
24	137063	GETTY LT 4	430471.00	6563891.00	40.50	0.00			ENV ????

TABLE 4

Project FROME File TR-2275.DAT Wed Apr 08 10:11 1998

Page 1

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
1	144036	513 6	476352	6531595	70.00	88.39	2000	2	ENV 1546
2	144037	513 7	478200.00	6532900.00	69.50	80.77	1930	2	ENV 1546
3	144038	513 8	480301	6534564	71.00	115.82	1350	2	ENV 1546
4	144039	513 9	480900.00	6537400.00	73.00	115.82	1380	<2	ENV 1546
5	144040	513 10	483075	6538421	73.00	182.88	170	<2	ENV 1546
6	144041	513 11	485236	6539294	77.00	134.11	3200	2	ENV 1546
7	144042	513 12	487421	6540191	81.50	102.11	2500	<2	ENV 1546
8	144043	513 13	489134	6540879	79.00	121.01	2000	<2	ENV 1546
9	144044	513 14	491382	6541862	81.00	92.96	2000	<2	ENV 1546
10	144045	513 15	491400.00	6544600.00	85.00	102.11	2300	<2	ENV 1546
11	144046	513 16	490700.00	6547000.00	83.00	134.11	3850	4.5	ENV 1546
12	144047	513 17	490546	6549621	81.00	159.11	1300	<2	ENV 1546
13	144048	513 18	481687	6539965	72.00	111.25	3050	3	ENV 1546
14	144049	513 19	480486	6541665	70.00	102.11	2300	2	ENV 1546
15	144050	513 20	481200.00	6544800.00	70.00	106.68	4500	3	ENV 1546
16	144052	513 22	472200.00	6554700.00	52.00	120.40	3700	3	ENV 1546
17	144053	513 23	473600.00	6556100.00	55.00	124.97	5000	4	ENV 1546
18	144054	513 24	474800.00	6557800.00	59.00	102.11	2900	2	ENV 1546
19	144055	513 25	476800.00	6559200.00	61.50	92.96	4100	4	ENV 1546
20	144056	513 26	479300.00	6560800.00	66.00	111.25	3400	3	ENV 1546
21	144057	513 27	472800.00	6557200.00	54.50	106.68	3000	2	ENV 1546
22	144059	513 29	474100.00	6554200.00	56.00	120.40	3650	3	ENV 1546
23	144060	513 30	475306	6554866	58.00	97.54	4000	2.5	ENV 1546
24	144062	513 32	470700.00	6562100.00	51.00	115.82	4900	8	ENV 1546
25	144063	513 33	474900.00	6563600.00	61.00	92.96	1700	2.5	ENV 1546
26	144064	513 34	477800.00	6562500.00	61.00	97.54	700	<2	ENV 1546
27	144065	513 35	482100.00	6561600.00	60.00	102.11	900	<2	ENV 1546
28	144066	513 36	486641	6562232	66.00	120.40	1500	2	ENV 1546
29	144067	513 37	489258	6562332	68.00	129.54	2200	4	ENV 1546
30	144068	513 38	491726	6562586	72.00	134.11	2800	5.5	ENV 1546
31	144069	513 39A	497922	6565533	77.50	48.77			ENV 1546
32	144070	513 39B	498600.00	6566100.00	80.00	138.68	1900	2	ENV 1546
33	144071	513 40	499500.00	6561600.00	83.00	138.68	1550	2	ENV 1546
34	144072	513 41	493900.00	6556400.00	80.00	144.78	2100	2	ENV 1546
35	144073	513 42	496000.00	6558800.00	76.50	150.57	1350	<2	ENV 1546
36	144074	513 43	492200.00	6554100.00	82.50	138.68	1350	<2	ENV 1546
37	144075	513 44	485440	6558988	62.00	116.43	2600	3	ENV 1546
38	144076	513 45	485591	6555509	69.00	109.73	1700	2	ENV 1546
39	144077	513 46	485710	6552112	74.00	121.62	2350	2.5	ENV 1546
40	144078	513 47	477740	6549618	62.00	121.62	3150	3	ENV 1546
41	144080	513 48	481219	6549607	69.00	90.53	13500	18	ENV 1546
42	144081	513 49	487867	6548782	80.00	127.10	16500	<2	ENV 1546
43	144082	513 50	486987	6546984	78.00	121.01	27500	4.5	ENV 1546
44	144083	513 51	484300.00	6545200.00	78.00	108.20	1700	2	ENV 1546
45	144084	513 52	482647	6547103	78.00	109.12	1500	2	ENV 1546
46	144085	513 53	488300.00	6546200.00	79.00	121.62	2100	2	ENV 1546
47	144086	513 54	486629	6542512	75.50	116.43	3500	6	ENV 1546
48	144087	513 55	483900.00	6540600.00	71.50	108.51	1650	2	ENV 1546
49	144088	513 56	489911	6539043	82.00	138.68	3350	6	ENV 1546
50	144089	513 57	488628	6536399	82.00	121.01	2700	5	ENV 1546
51	144090	513 58	489038	6532880	84.50	121.01	2700	5	ENV 1546
52	144091	513 59	491787	6533986	85.50	121.92	1600	3	ENV 1546
53	144092	513 60	494634	6535116	88.00	106.68	6200	12	ENV 1546
54	144093	513 61	492985	6537875	87.00	121.01	2050	2	ENV 1546
55	144406	MD-FD 1	491200.00	6547600.00	84.00	133.00	20	<2	ENV 2532
56	144407	MD-FD 2	492500.00	6547700.00	85.00	138.50	20	<2	ENV 2532
57	144408	MD-FD 3	489949	6542498	80.50	129.50	20	<2	ENV 2532
58	144412	MD-FD 7	481375	6535060	72.00	102.00	20	<2	ENV 2532
59	144413	MD-FD 8	479048	6543825	64.00	97.00	35	2	ENV 2532
60	144414	MD-FD 9	476100.00	6542900.00	62.00	88.50	30	2	ENV 2532
61	144415	MD-FD 10	474000.00	6542900.00	59.00	82.00	30	2	ENV 2532
62	144416	MD-FD 11	473449	6554692	56.00	118.50	40	4	ENV 2532
63	144417	MD-FD 12A	474642	6554614	57.50	81.50	20	<2	ENV 2532
64	144423	MD-FD 18	499800.00	6531900.00	94.00	152.00	38	2	ENV 2532
65	144424	MD-FD 19	499800.00	6540000.00	94.50	152.00	25	2	ENV 2532
66	144497	FE 27	472220.51	6567990.59	63.00	102.50	50	5	ENV 2584
67	144635	LC 35	471952.65	6562355.20	53.50	75.30	20	2	ENV 3421
68	144636	LC 36	472359.22	6562549.96	56.00	137.00	16	<2	ENV 3421
69	144637	LC 37	470073.10	6562336.66	52.00	128.00	96	10	ENV 3421
70	144645	LC 45	472406.43	6555286.97	52.00	128.00	68	2.5	ENV 3421
71	144646	LC 46	474206	6554448	57.00	126.00	16	2	ENV 3421

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
72	144647	LC 47	474753	6554670	57.50	79.00	14	<2	ENV 3421
73	144648	LC 48	473987	6553308	56.00	102.00	16	2	ENV 3421
74	144649	LC 49	474321	6552397	59.00	68.00	20	2	ENV 3421
75	144650	LC 50	478489	6551893	61.50	95.00	36	3.5	ENV 3421
76	144651	LC 51	478647	6552856	66.00	96.00	36	3.5	ENV 3421
77	144652	LC 52	478789	6553839	58.00	95.00	42	4	ENV 3421
78	144653	LC 53	478714	6553328	61.00	95.00	34	3.5	ENV 3421
79	144654	LC 54	478570	6552376	66.00	95.00	14	<2	ENV 3421
80	144655	LC 55	478678	6553065	64.00	96.00	20	2	ENV 3421
81	144656	LC 56	478692	6553210	63.00	96.00	102	10	ENV 3421
82	144657	LC 57	485695	6553623	70.00	110.00	12	<2	ENV 3421
83	144658	LC 58	478691	6553266	62.00	96.00	76	8	ENV 3421
84	144659	LC 59	478592	6552544	64.50	94.00	28	2.5	ENV 3421
85	144660	LC 60	474518	6553243	58.00	112.00	30	3	ENV 3421
86	144661	LC 61	475449	6553230	64.00	88.00	30	3	ENV 3421
87	144662	LC 62	476431	6553209	64.00	96.00	16	<2	ENV 3421
88	144663	LC 63	477451	6553223	60.00	96.00	12	<2	ENV 3421
89	144664	LC 64	478373	6553350	61.00	134.00	28	2.5	ENV 3421
90	144665	LC 65	479551	6553003	62.00	114.00	28	2.5	ENV 3421
91	144666	LC 66	480560	6552973	59.50	96.00	22	2	ENV 3421
92	144667	LC 67	478848	6553040	64.00	96.00	192	19	ENV 3421
93	144668	LC 68	478739	6552851	65.00	96.00	52	5	ENV 3421
94	144669	LC 69	478788	6552846	65.00	90.00	30	3	ENV 3421
95	144670	LC 70	478792	6552650	66.00	102.00	64	6	ENV 3421
96	144671	LC 71	483380.73	6554071.74	71.00	111.00	24	2	ENV 3421
97	144672	LC 72	487793.68	6556325.66	72.50	106.00	20	2	ENV 3421
98	144673	LC 73	482826.71	6556223.54	65.00	97.50	20	2	ENV 3421
99	144674	LC 74	479799.26	6556205.60	58.00	103.50	80	8	ENV 3421
100	144675	LC 75	477792.07	6556196.69	53.50	88.50	18	<2	ENV 3421
101		BE 40	481206	6549625	69.00	91	200	10	ENV 3713
102		BE 41	480232	6549438	66.00	104	170	9	ENV 3713
103		BE 42	480685	6549550	67.00	96.5	230	23	ENV 3713
104		BE 43	481188	6549507	69.50	96	328	16	ENV 3713
105	145831	BE 44	481246	6549985	68.00	108.20	50	3	ENV 3713
106		BE 45	479200	6549525	63.00	96			ENV 3713
107	145832	BE 46	478220	6550028	62.00	96.00	24	2	ENV 3713
108	145833	BE 47	478365	6550960	60.00	96.00	20	<2	ENV 3713
109	145834	BE 48	478943	6548826	63.00	96.00	20	<2	ENV 3713
110	145835	BE 49	481164	6549405	69.50	96.00	80	4	ENV 3713
111	145836	BE 50	480667	6549434	67.50	96.00	54	5	ENV 3713
112	145837	BE 51	481675	6549670	70.00	88.00	60	4	ENV 3713
113		BE 52	480695	6549596	67.00	96	300	20	ENV 3713
114		BE 53	480707	6549649	67.00	96			ENV 3713
115		BE 54	481218	6549677	69.00	96	164	12	ENV 3713
116		BE 55	480708	6549694	67.00	96			ENV 3713
117		BE 56	480695	6549625	67.00	96	765	76	ENV 3713
118		BE 57	480723	6549745	66.50	104.2	140	14	ENV 3713
119	145840	BE 64	474242	6551481	59.00	70.00	12	<2	ENV 3713
120	145841	BE 65	479683	6549437	63.50	96.00	160	16	ENV 3713
121		BE 66	480970	6549565	68.00	95	48	5	ENV 3713
122		BE 67	480748	6549838	66.50	95	40	4	ENV 3713
123		BE 68	479715	6549539	63.50	96			ENV 3713
124		BE 69	480740	6549611	67.50	96			ENV 3713
125		BE 70	480601	6549642	66.50	95			ENV 3713
126		BE 71	480259	6549519	65.50	95	620	62	ENV 3713
127		BE 72	480793	6549605	68.00	95			ENV 3713
128		BE 73	480757	6549686	67.00	95			ENV 3713
129		BE 74	480287	6549610	65.00	95			ENV 3713
130		BE 75	480850	6549599	68.00	95			ENV 3713
131		BE 76	480658	6549701	66.50	95			ENV 3713
132		BE 77	480295	6549703	65.00	95	154	15	ENV 3713
133	145842	BE 78	480766	6549916	66.00	95.00	80	8	ENV 3713
134		BE 79	481228	6549765	69.00	95			ENV 3713
135		BE 80	480510	6549650	66.00	96	64	6	ENV 3713
136	145843	BE 81	480299	6549790	65.00	76.00	12	<2	ENV 3713
137		BE 82	479743	6549630	63.50	95	16	<2	ENV 3713
138	145844	BE 83	479208	6549625	63.00	96.00	12	<2	ENV 3713
139		BE 84	482626	6549628	72.00	110	12	<2	ENV 3713
140	145845	BE 85	483876	6549405	74.50	110.00	40	4	ENV 3713
141	145846	BE 86	485000.00	6549500.00	75.00	110.00	12	<2	ENV 3713
142		BE 87	483458	6548245	77.00	112	12	<2	ENV 3713

REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
143	145847	BE 88	481897	6545946	77.00	104.00			ENV 3713
144	145848	BE 89	482143	6549664	72.00	103.00	32	3	ENV 3713
145		BE 90	479171	6549452	63.00	95	54	10	ENV 3713
146	145849	BE 91	478720	6549227	62.00	95.00	22	2	ENV 3713
147		BE 92	480269	6549560	65.50	100			ENV 3713
148		BE 93	480290	6549653	65.00	95			ENV 3713
149		BE 94	480764	6549608	67.50	95	200	20	ENV 3713
150		BE 95	480701	6549676	67.00	96			ENV 3713
151	145850	BE 96	480855	6550341	64.00	96.00	34	3	ENV 3713
152		BE 97	480713	6549719	66.50	95			ENV 3713
153		BE 98	480687	6549575	67.00	95			ENV 3713
154	145851	BE 99	480936	6550771	64.00	98.00	28	2	ENV 3713
155	145852	BE 100	480253	6549482	66.00	97.00	22	2	ENV 3713
156		BE 101	476722	6549678	61.00	78	8	<2	ENV 3713
157	145853	BE 102	475695	6549803	61.00	120.00	20	<2	ENV 3713
158		BE 103	474791	6550193	60.50	80	80	20	ENV 3713
159	145854	BE 104	473942	6550192	57.50	80.00	20	2	ENV 3713
160	145855	BE 105	475770	6547421	60.50	88.00	36	<2	ENV 3713
161	145856	BE 106	476498	6546758	63.00	88.00	20	2	ENV 3713
162	145857	BE 107	477188	6546112	63.00	88.00	48	4	ENV 3713
163	145858	BE 108	477950	6545433	63.00	88.00	48	4	ENV 3713
164	145859	BE 109	478500	6544565	63.00	112.00	10	3	ENV 3713
165	145860	BE 110	480008	6548775	66.00	104.00	1000	100	ENV 3713
166		BE 111	480935	6548498	70.00	96	28	3	ENV 3713
167	145861	BE 112	481779	6548369	73.00	104.00	15	<2	ENV 3713
168		BE 113	482745	6548482	76.00	112	12	<2	ENV 3713
169	145862	BE 114	480385	6548535	68.00	96.00	20	2	ENV 3713
170	145863	BE 115	479966	6548135	66.50	96.00	100	10	ENV 3713
171		BE 116	480277	6548779	67.00	100	95	9	ENV 3713
172		BE 117	479716	6548147	65.00	100	140	9	ENV 3713
173	145864	BE 118	479971	6548405	66.00	96.00	24	2	ENV 3713
174		BE 119	479473	6548148	64.00	96	320	20	ENV 3713
175	145865	BE 120	479984	6547455	66.50	96.00	80	5.5	ENV 3713
176	145866	BE 121	479439	6547438	64.00	88.00	32	2	ENV 3713
177		BE 122	480023	6549056	65.50	96	80	7	ENV 3713
178	145867	BE 123	480132	6549039	66.00	96.00	1120	75	ENV 3713
179		BE 124	480139	6549158	66.00	96	80	7	ENV 3713
180	145868	BE 125	480059	6548773	66.00	100.00	1350	90	ENV 3713
181		BE 126	480004	6548883	66.00	96	370	37	ENV 3713
182		BE 127	479902	6548875	65.00	96	125	12	ENV 3713
183		BE 128	479612	6548140	64.00	96	88	4	ENV 3713
184		BE 129	480184	6549041	66.50	96	40	3	ENV 3713
185		BE 130	480056	6548837	66.00	100	160	10	ENV 3713
186		BE 131	480061	6548720	66.00	100	60	6	ENV 3713
187	145869	BE 132	480102	6548833	66.00	96.00	560	47	ENV 3713
188		BE 133	480000	6548725	66.00	100	370	37	ENV 3713
189		BE 134	479769	6548417	65.00	120	170	12	ENV 3713
190	145870	BE 135	479558	6548146	64.00	96.00	1170	58	ENV 3713
191		BE 136	479934	6547892	66.00	96	80	4	ENV 3713
192		BE 137	479662	6548423	64.50	96	160	16	ENV 3713
193		BE 138	479606	6548428	64.00	96	140	14	ENV 3713
194		BE 139	479509	6548146	64.00	96	160	11	ENV 3713
195		BE 140	479555	6548036	64.00	96	40	2	ENV 3713
196		BE 141	479729	6547899	65.00	96	95	6	ENV 3713
197		BE 142	479929	6547786	66.00	96	50	2.5	ENV 3713
198	145871	BE 143	480517	6547475	69.50	100.00	50	2.5	ENV 3713
199	145872	BE 144	480482	6546932	72.00	128.00	30	2	ENV 3713
200	145873	BE 145	480986	6546971	74.00	100.00	30	2	ENV 3713
201		BE 146	479839	6547902	66.00	96	205	14	ENV 3713
202		BE 147	479506	6548433	64.00	100	350	23	ENV 3713
203		BE 148	479787	6548618	65.00	100	280	28	ENV 3713
204		BE 149	479944	6548726	65.50	96	320	26	ENV 3713
205		BE 150	480111	6548775	66.00	100	125	10	ENV 3713
206		BE 151	479698	6547616	64.50	100	130	13	ENV 3713
207		BE 152	479411	6548434	64.00	96	480	48	ENV 3713
208		BE 153	479499	6548633	64.00	96	208	20	ENV 3713
209	145874	BE 154	479703	6548785	64.50	96.00	80	8	ENV 3713
210		BE 155	479508	6548735	64.00	96	76	7.5	ENV 3713
211		BE 156	479708	6548937	64.50	96	88	9	ENV 3713
212	145875	BE 157	479541	6548544	64.00	96.00	48	5	ENV 3713
213		BE 158	479608	6548812	64.00	96	880	88	ENV 3713

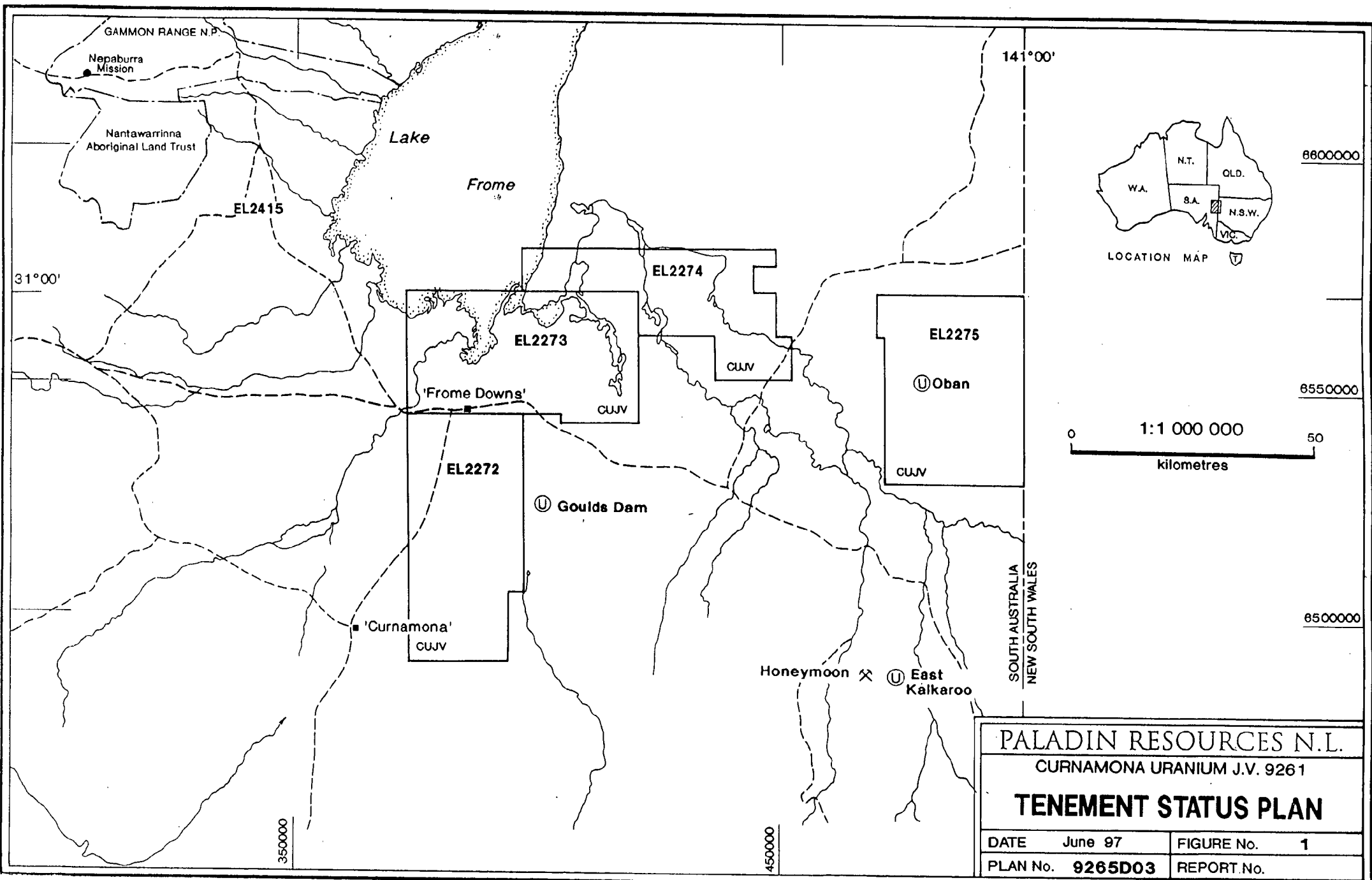
REC	MESA NO	HOLE	E-AMG	N-AMG	ELEV est	T.D. m	MAX CPS	X bg	ENV NO
214		BE 159	479711	6548890	64.50	96	1200	120	ENV 3713
215		BE 160	479794	6548881	65.00	96	124	12	ENV 3713
216		BE 161	479457	6548435	64.00	96	570	57	ENV 3713
217	129507	BE 165C	479647	6548137	64.50	92.73	160	16	ENV 3713
218	129508	BE 166C	479554	6548145	64.00	91.00	280	28	ENV 3713
219	129509	BE 167C	479491	6548143	64.00	89.10	196	20	ENV 3713
220		BE 169	481733	6547183	76.00	108	22	2	ENV 3713
221	145876	BE 170	481315	6548405	72.00	96.00	194	20	ENV 3713
222		BE 171	481115	6548437	70.50	90	22	2	ENV 3713
223		BE 172	481013	6548450	70.50	93	20	2	ENV 3713
224	145877	BE 173	483150	6545220	77.00	108.00	18	<2	ENV 3713
225	145878	BE 174	485722	6540945	75.00	114.00	36	3	ENV 3713
226	145879	BE 175	484986	6535069	79.50	110.00	108	11	ENV 3713
227	145880	BE 177	494588	6531655	88.50	156.00	20	2	ENV 3713
228	145881	BE 178	483000.00	6543200.00	70.00	105.00	20	2	ENV 3713
229	145882	BE 179	480337	6545602	71.00	102.00	56	5.5	ENV 3713
230	145883	BE 180	483400.00	6552000.00	71.50	102.00	20	2	ENV 3713
231		BE 181	479421	6548148	64.00	91.5	70	7	ENV 3713
232	145884	BE 182	479371	6548148	64.00	100.50	121	12	ENV 3713
233	-212	BU07	500150.00	6535900.00	XXX	152.00			GS1978/179
234	-219	BU14	500000.00	6543800.00	92.00	120.00			GS1978/179
235	-227	BU22	500000.00	6551800.00	89.00	120.00			GS1978/179

**TABLE 5     COMPILATION OF DOWNHOLE GAMMA DATA**  
**EL2275**

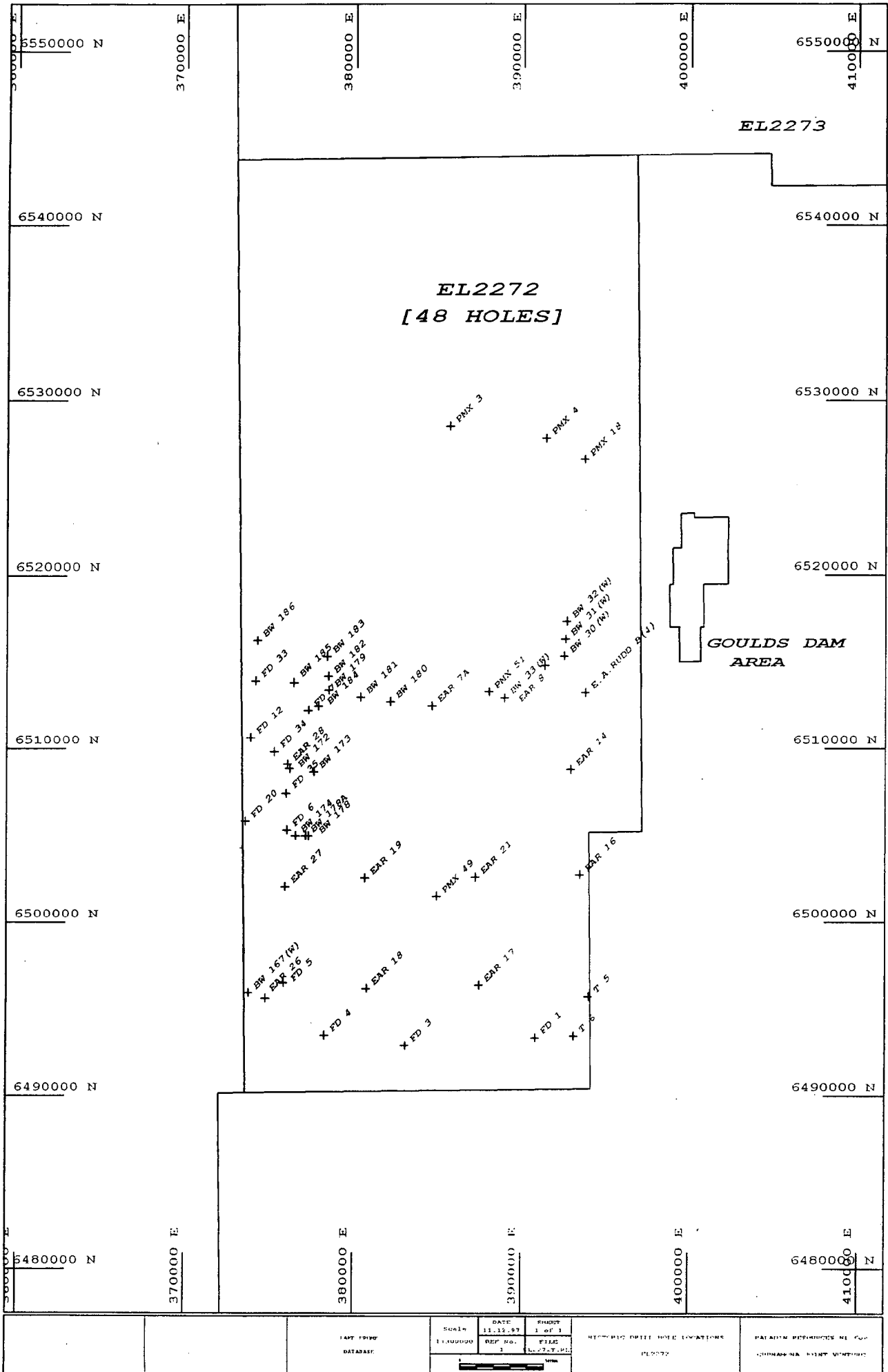
AREA	HOLE No	FROM (m)	TO (m)	THICKNESS (m)	U <sub>3</sub> O <sub>8</sub> (ppm)	LOGGER VALUE (cps) max
OBAN	2	87.4	89.1	1.7	285	1294
OBAN	7	85.2	86.7	1.5	287	1186
OBAN		89.3	90.7	1.4	307	1488
OBAN	6	84.1	86.2	2.1	402	4021
OBAN	8	83.9	86.3	2.4	309	1269
OBAN	13	85.0	87.5	2.5	563	3968
OBAN	16	87.1	88.1	1.0	676	3400
OBAN	17	88.3	90.8	2.5	671	4278
OBAN	18	87.9	89.4	1.5	513	3171
OBAN	22	88.6	91.9	2.5	604	4005
OBAN	30	86.0	88.0	2.0	250	919
BERBER	38	91.5	92.0	0.5	1050	4311

Summary of Drill Results February 1998 EL2275

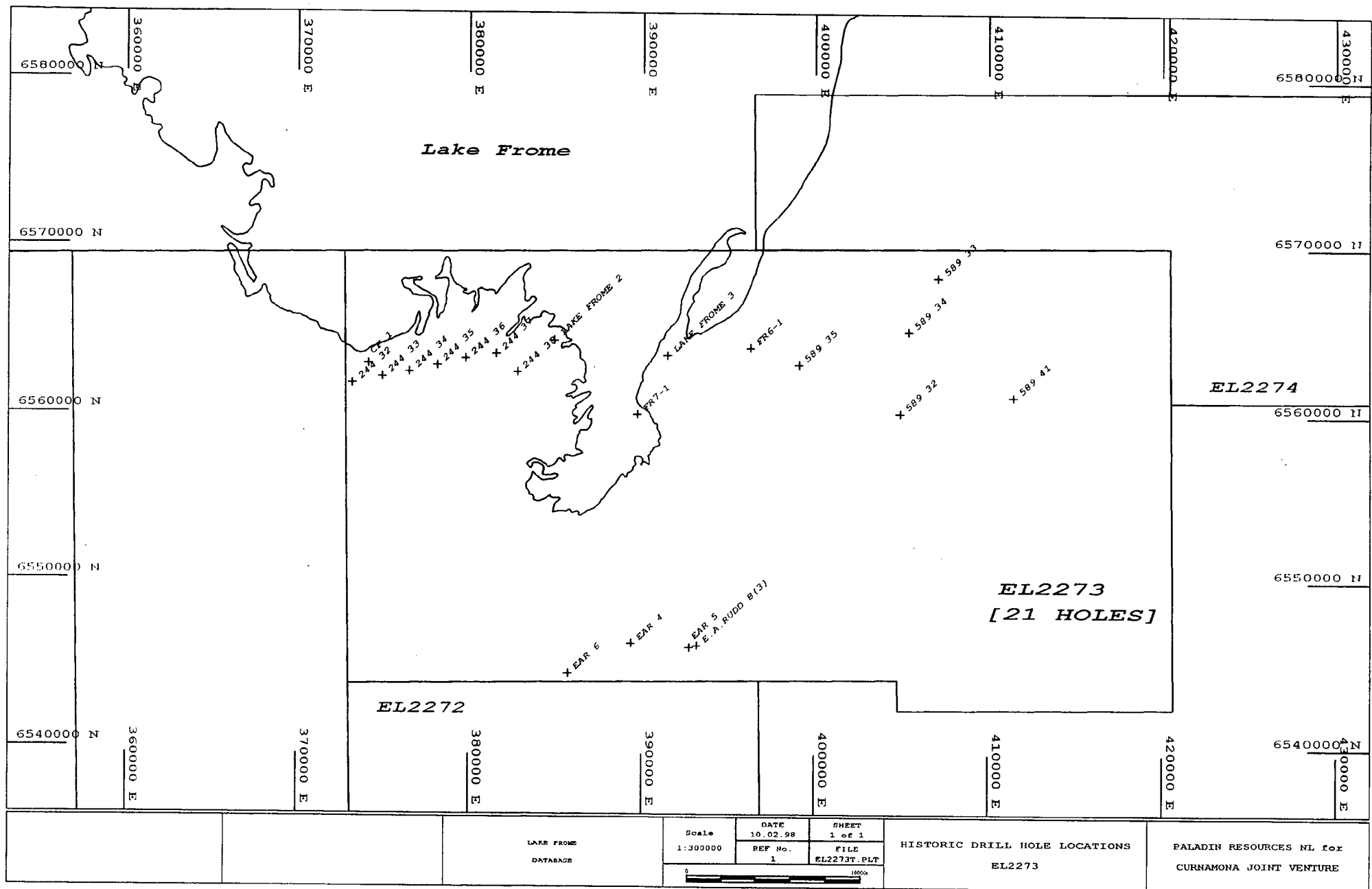
**FIGURES**



PALADIN RESOURCES N.L.			
CURNAMONA URANIUM J.V. 9261			
TENEMENT STATUS PLAN			
DATE	June 97	FIGURE No.	1
PLAN No.	9265D03	REPORT No.	



**Figure 2**



**Figure 3**

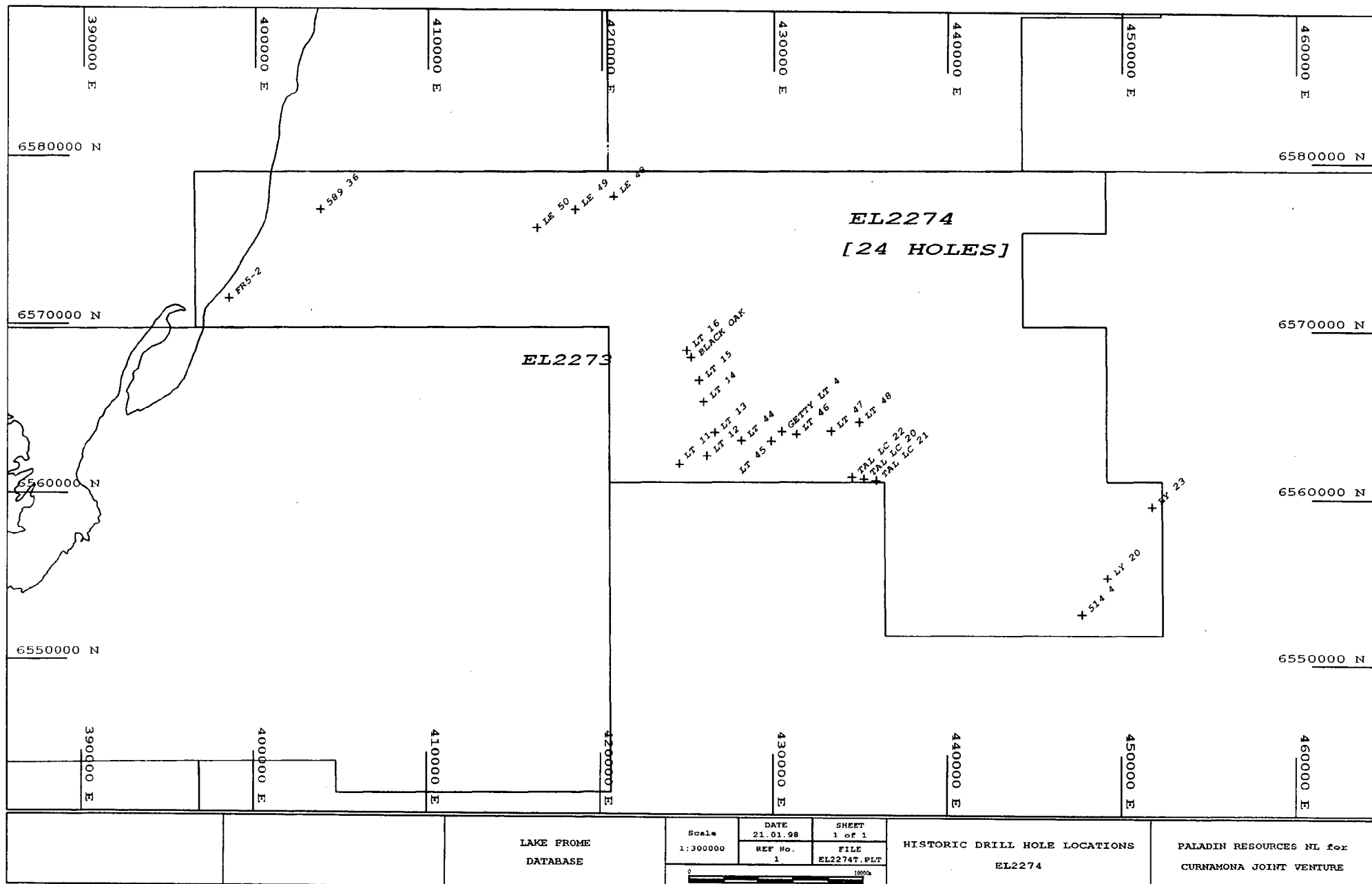


Figure 4

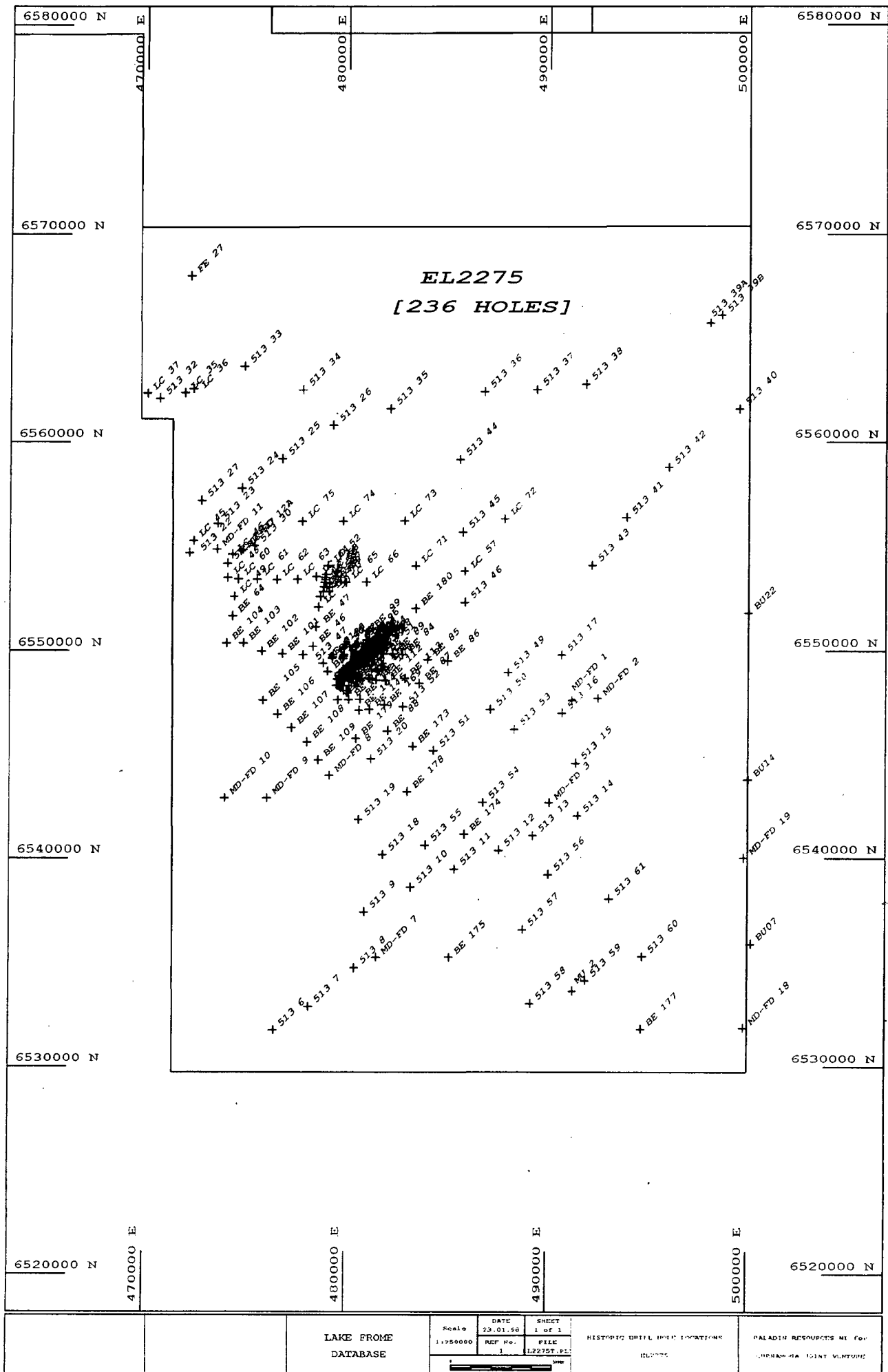
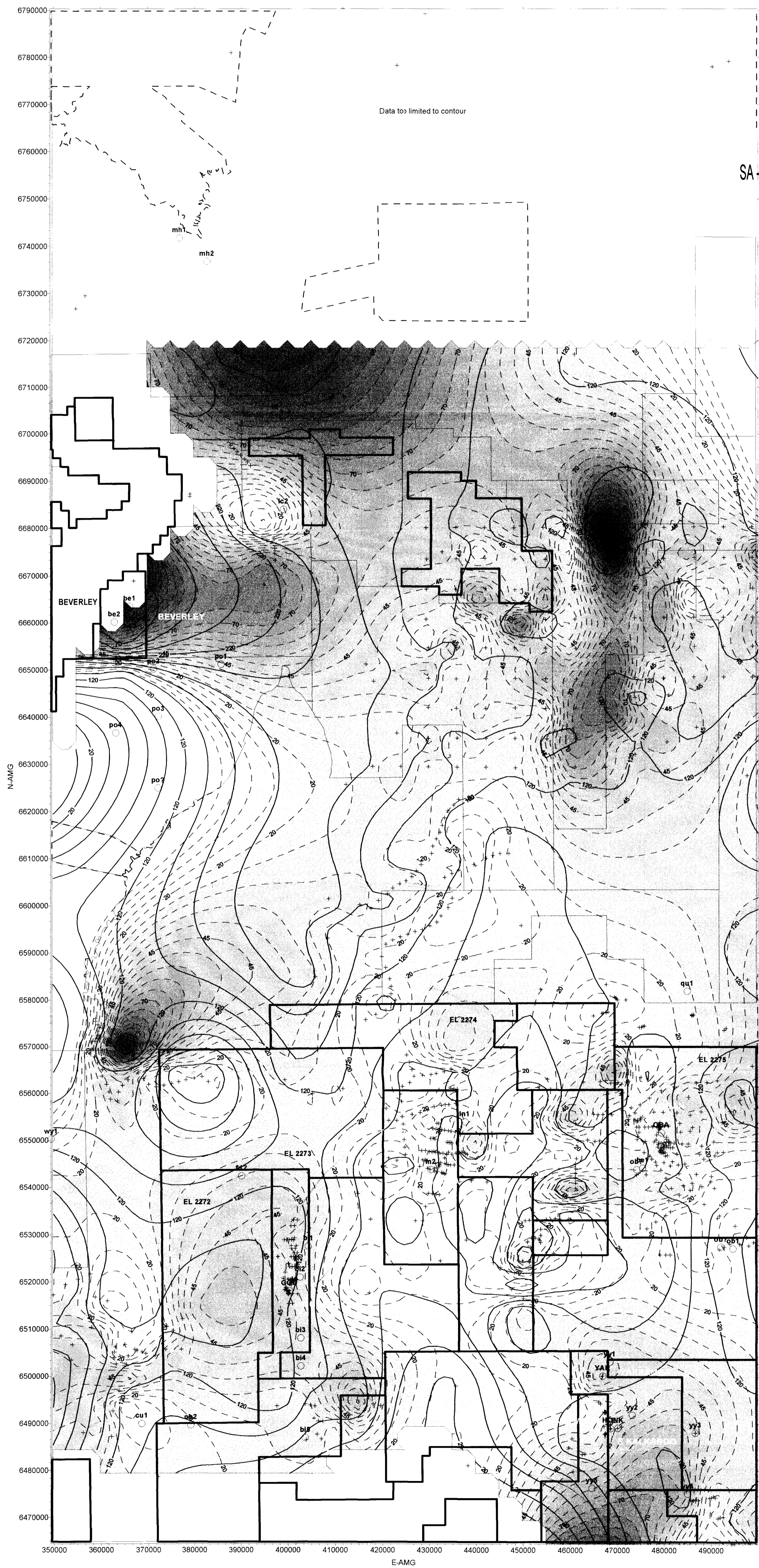
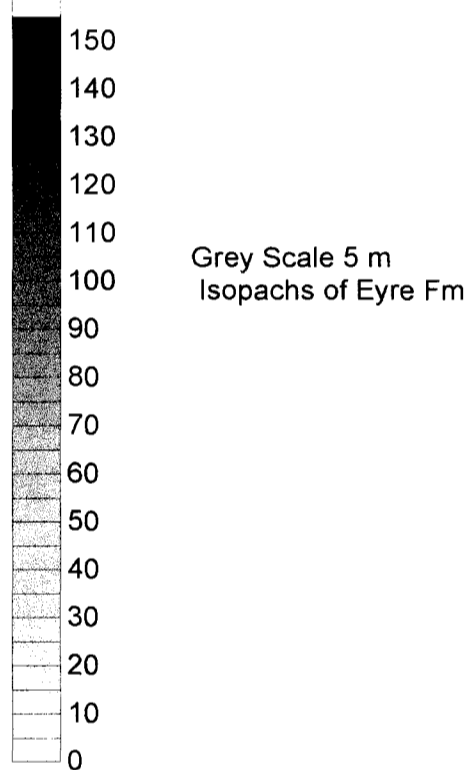


Figure 5



SA - NSW border

## EYRE FM ISOPACHS & STRUCTURAL CONTOURS



- URANIUM DEPOSITS & uranium showings
- Drillholes from MESA Curnamona Dataset that intersect the EYRE FM
- Park Boundaries
- ELA's
- EL's
- OBAN: U deposit

Black solid contour lines are 20 m structural contours.

Black dashed lines are 5 m isopachs

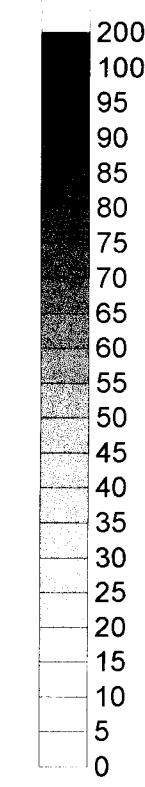
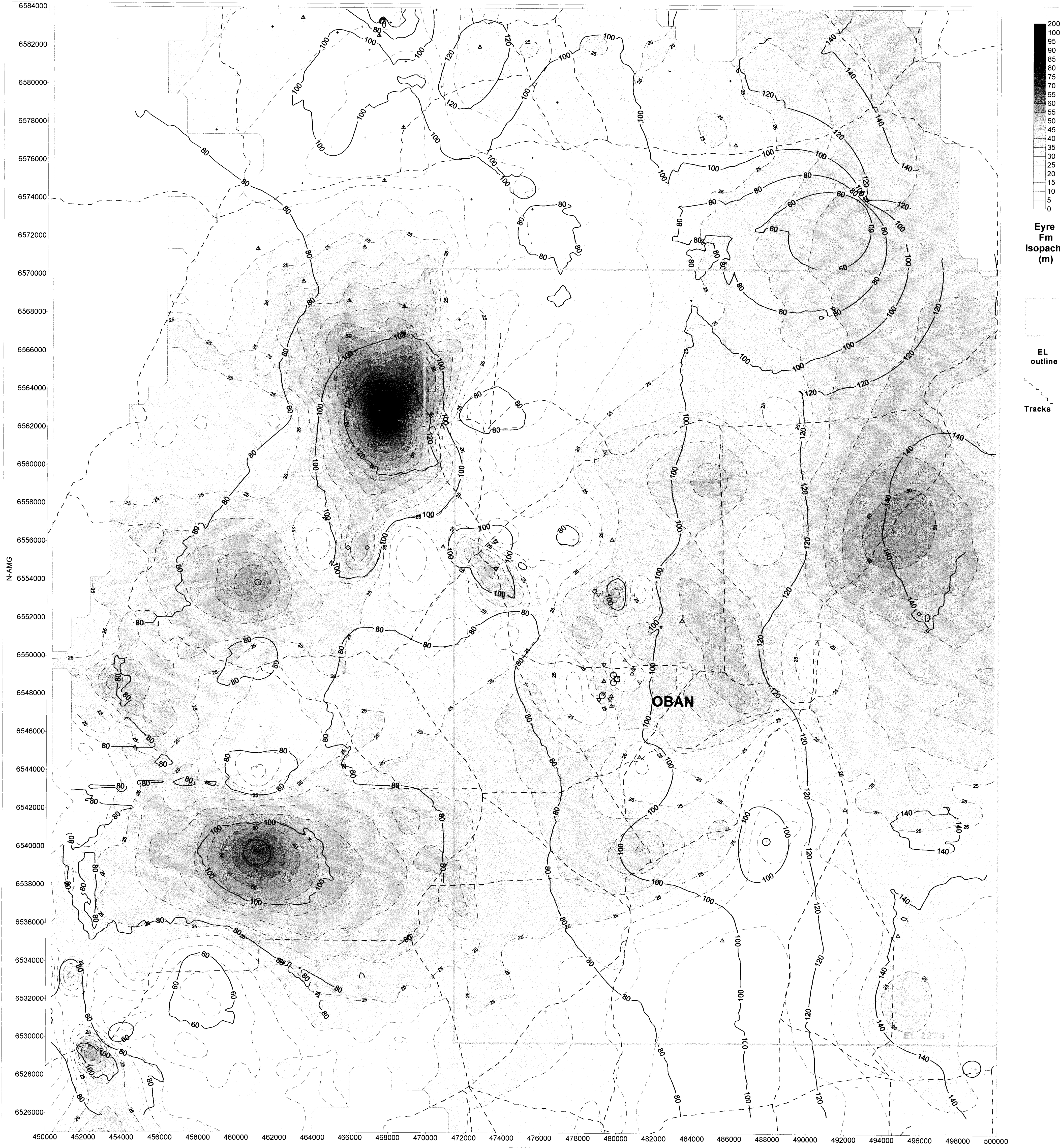
Based on drillhole depths not surveyed RL's; i.e. surface assumed to be level

Grid Method: Minimum Curvature, average duplicates, no anisotropy, blanking file approx boundary of Frome Embayment inside SA.

# 9327-1

**PALADIN/BRIGHTSTAR JV  
Frome Embayment  
Eyre Fm Isopachs &  
Structural Contours**

By: JDB  
Date: July 1997  
Prog: Surfer  
File: EYRE\_DLSRF  
On: GIS D:GISDATA, FROME, SDATA

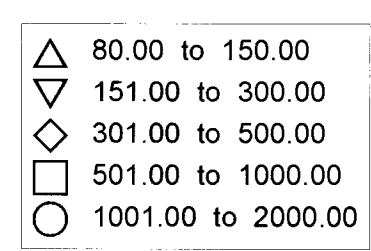


Eyre Fm Isopach (m)

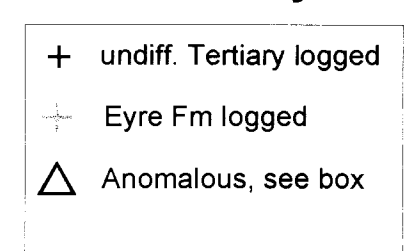
EL outline

Tracks

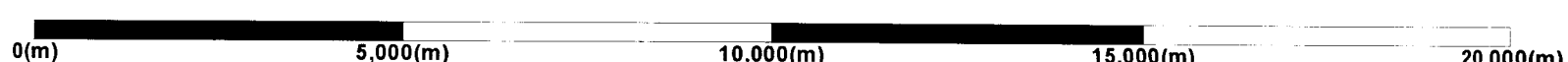
Max CPS downhole



Drillhole Key



1:100,000



Structural Contours:  
GRID: kriging, scale 191, length 38900, linear model,  
250 m cell, average duplicates.  
Search: octant, 10,000 m search radius.  
Std smoothing

Based on drillhole depths  
not surveyed RL's: i.e.  
surface assumed to be level.

Eyre Fm Isopach:  
GRID: kriging, scale 191, length 38900, spherical model,  
1,000 m cell, average duplicates.  
Search: octant, 12,000 m search radius.  
Smoothing: recalc grid using spline on 200 x 200 grid

Parameter Map:

Black contour lines: Base of Tertiary Structural Contours  
Rainbow Image: Eyre Fm Isopach  
Drillhole Locations  
Anomalous Drillholes

PALADIN/BRIGHTSTAR/GOLDMINCO

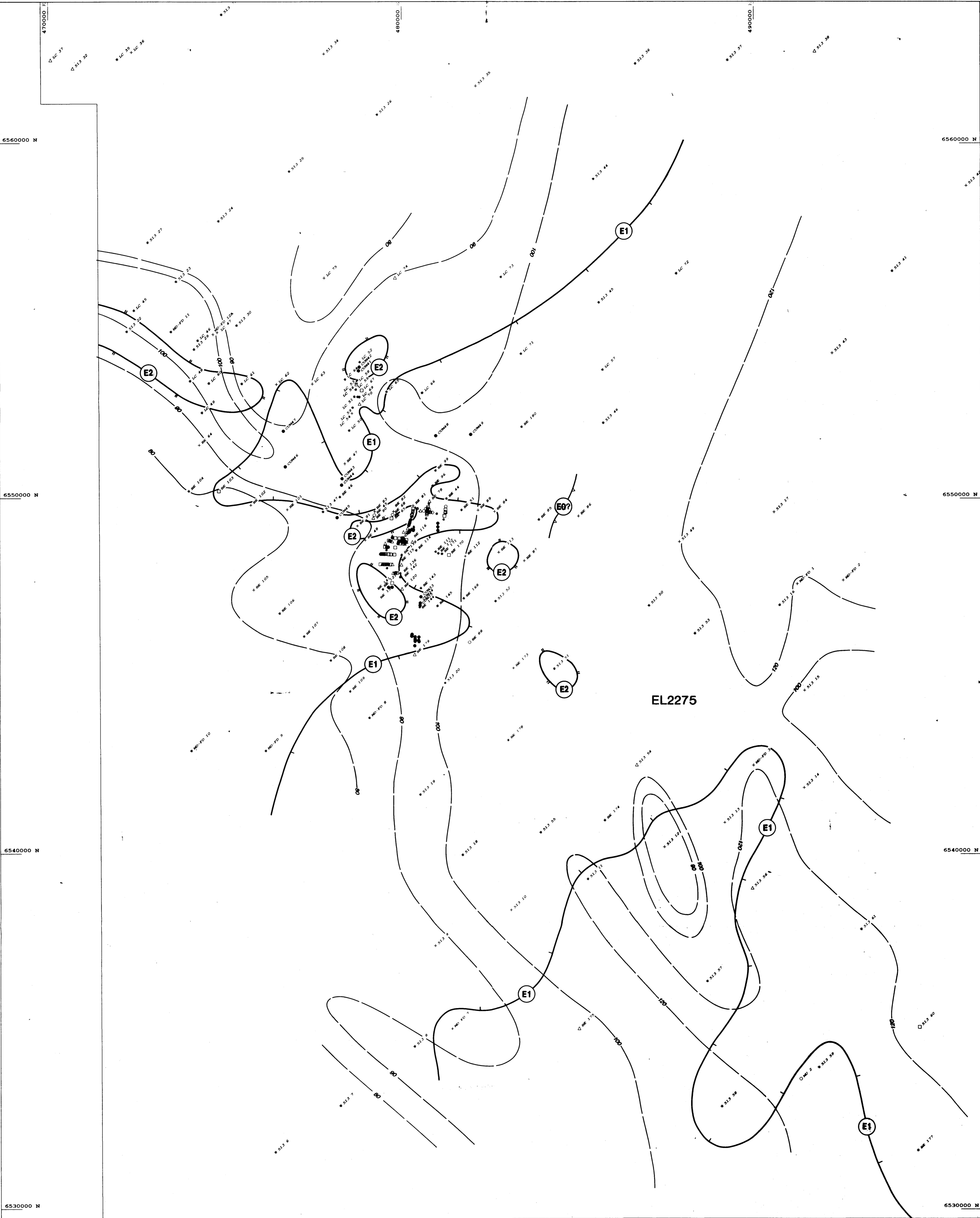
CURNAMONA JV

Eyre Fm Parameters

EL 2275 - CUJV

By: JDB  
Date: September 1997  
Prog: Surfer  
File: Tert\_2275\_D\_ISO\_A\_BW.srf  
On: GIS:gisdata,frome,sdata,el2275

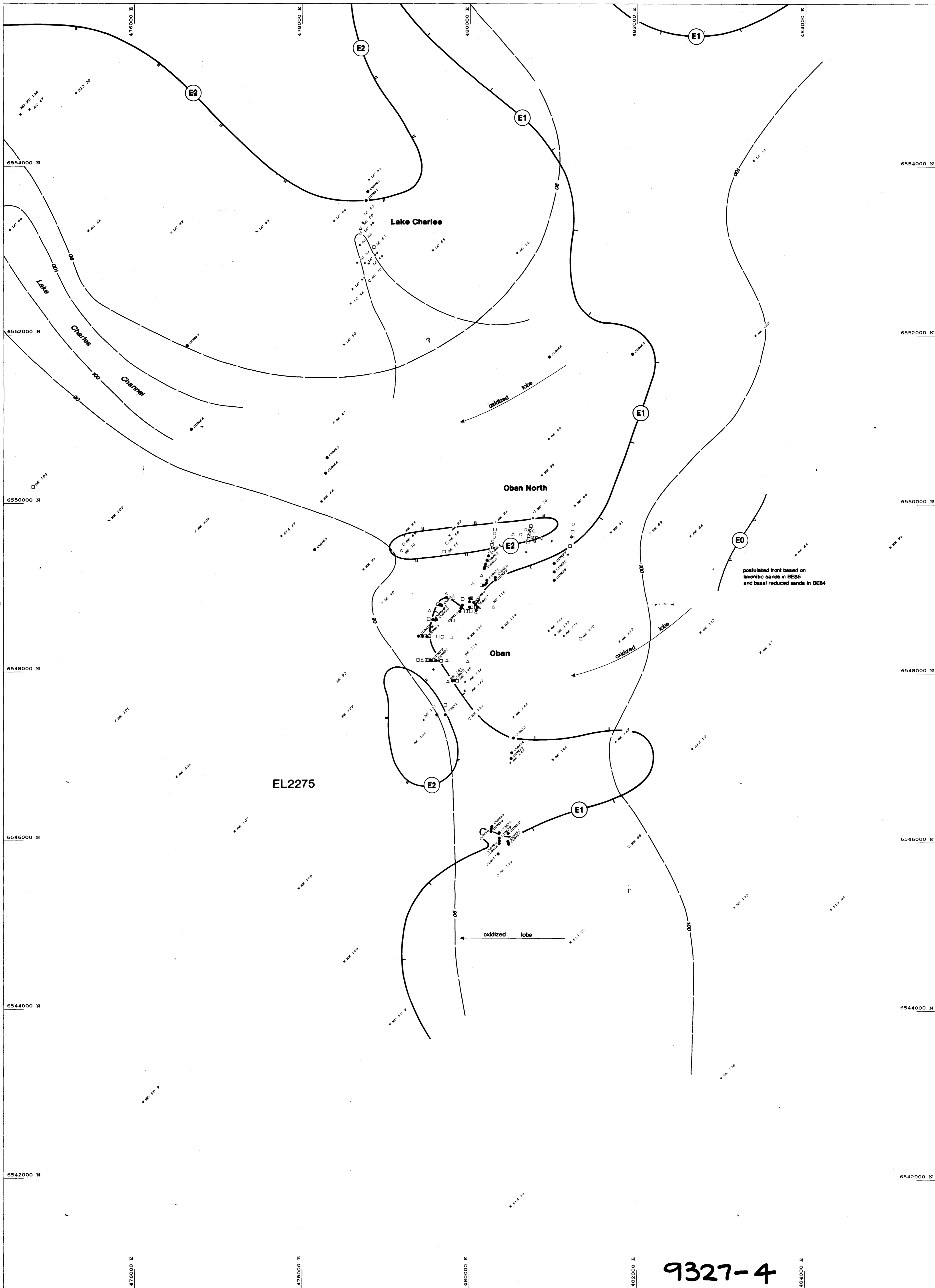
9327-2



9327-3

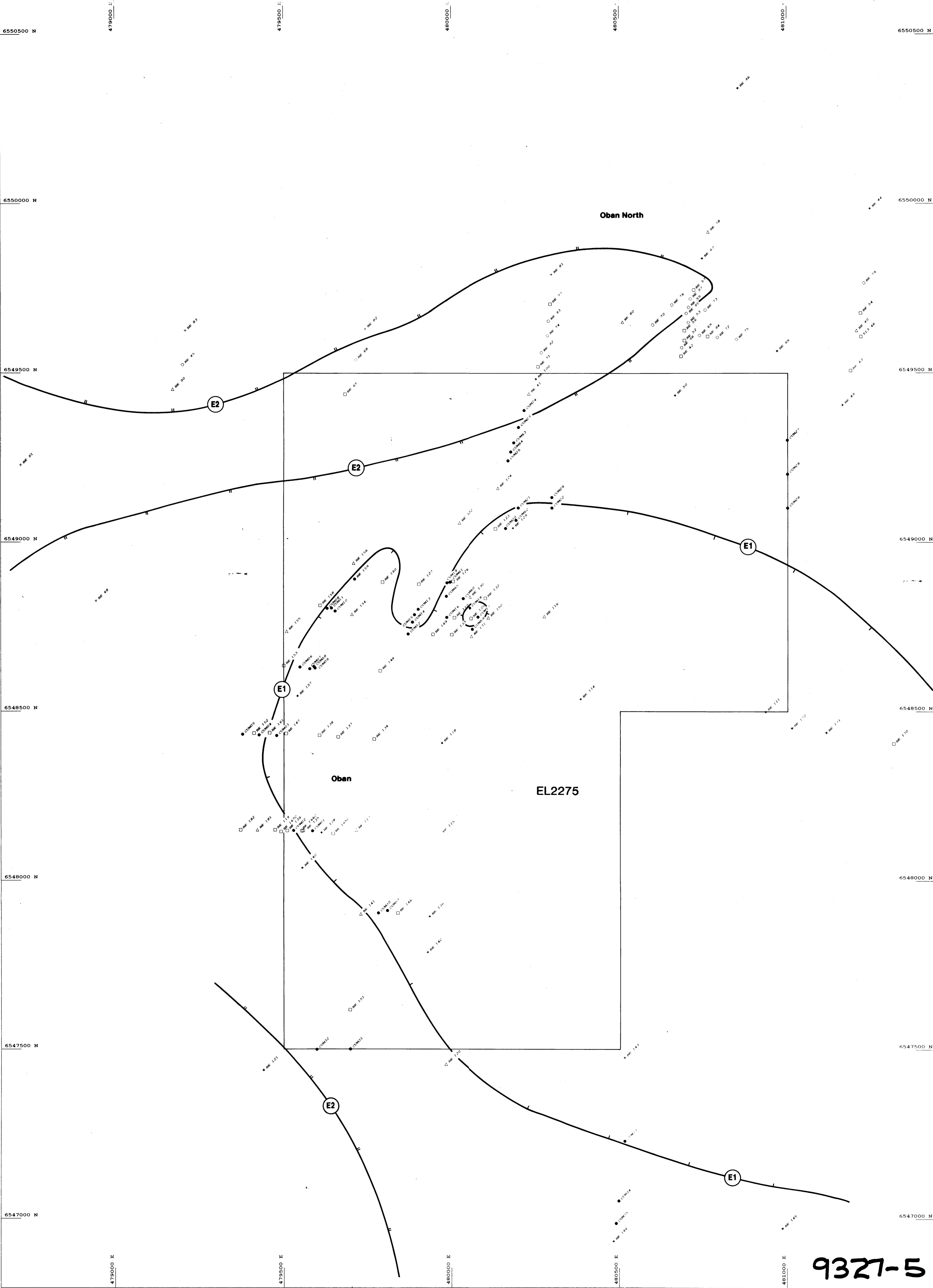
Previous Drilling	x BG ● >100 □ 10-100 △ 5-10 + 2-5 + <2 ○ No reading available	 Structural contours, base of Eyre Formation  Postulated deeper redox front  Lower redox front  Upper redox front	1998 ● Drill hole location (Paladin)	Scale 1:500000	DATE 10.03.98	SHEET 1 of 1	PALADIN RESOURCES NL for CURNAMONA JOINT VENTURE	REGIONAL MAP EL2275 DRILL HOLE LOCATIONS xbg AND INTERPRETED REDOX BOUNDARIES
				REF No. 1	FILE FRM0049.PLT			

PLAN No. 9327-3 MAP 3

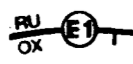

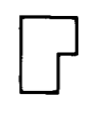


9327-4

X BG		— 90 — Structural contours, base of Eyre Formation		1998 ● Drill hole location (Paladin)	Scale 1:20000	DATE 10.03.98	SHEET 1 of 1	PALADIN RESOURCES NL for  CURNAMONA JOINT VENTURE	PROSPECT MAP EL2275 DRILL HOLE LOCATIONS xbg AND INTERPRETED REDOX BOUNDARIES
Previous Drilling	● >100 ⊙ 10-100 △ 5-10 * 2-5 + <2 ○ No reading available	— Postulated deeper redox front — Lower redox front — Upper redox front	REF No. 1			FILE FRM0050.PLT			



9327-5

Previous Drilling	XBG ● >100 □ 10-100 △ 5-10 * 2-5 + <2 ○ No reading available	 Lower redox front  Upper redox front 1998 ● Drill hole location (Paladin)	 Outline of grid	Scale 1:5000	DATE 10.03.98	SHEET 1 of 1	PALADIN RESOURCES NL for CURNAMONA JOINT VENTURE	EL2275 OBAN PROSPECT DRILL HOLE LOCATIONS AND INTERPRETED REDOX BOUNDARIES
					REF No. 1	FILE FRM0051.PLT		

## **APPENDIX 1**

### **Drill Hole Logs**

**Note:** Drill Hole Logs presented here are preliminary logs covering that part of the drill programme completed during the reporting period. Final logs covering the full drilling programme will be presented in the next annual technical report.

## **Notes on Sedlog codes and Sedlog print outs**

**NAME.** Holenum is the name and/or number of the drill hole.

**DEPTHS.** Dfrom and Dto refer to top and bottom of an interval respectively.

**GEOLUNIT** (Geolunit) refers to a coded geological unit in standard map format (i.e. age as capital rest as lower case, numbers to count cycles from base). In the Frome area the following guidelines are current:

### ***Namba Formation***

Tnm: undifferentiated Tertiary Namba Fm mudstone.

Tnk: carbonate rich mudstone, local marker horizon, Namba Fm.

Tns: undifferentiated Namba Fm sand unit.

Tn1-4: successive (from base) silt/sand units.

Tn3p: local marker unit of a pyrite rich carbonaceous fine sand

### ***Eyre Formation***

Te1: main Eyre Fm, divided into basal (generally gritty to conglomeratic) (Te1a) and sand dominant Te1b parts. With a good SP log the basal unit can be divided into a base Te1a1 which is marked by a distinct dip in the SP log and an upper Te1a2 unit which can be marked by a clay break at the top. The Teb unit can frequently be divided on the cuttings and occasionally on the SP log (clay breaks) into three sub-units.

Te2: top of Eyre Fm, generally fining-up with mudstone interbeds but quite distinct on SP log.

Tel: a lignite unit.

Tem: undifferentiated mudstone.

### ***Basement***

Cretaceous Marree Fm (Km).

## **MODIFIER AMOUNT (MA), RELATOR (Rel) and MODIFIER (Mod)**

The sedlog table works on the basis of first deciding the dominant sediment (eg medium sand, mudstone etc). This is then coded under ROCKTYPE. Rock type (RK) is a listing of the basic sedimentary rock-types.

Then deciding the amount of a second component or characteristic such as;

- common interbeds of siltstone,
- rare intermixed mudstone,
- irregular grains of very coarse sand,
- abundant pebbles of quartz,
- minor blebs of gypsum,
- common interbeds of very coarse sandstone,
- fining up to mudstone (can be seen in some electrical logs),
- etc etc.

The above is then coded as;

- **AMOUNT (MA)** ----- one letter code indicating amount; eg A=abundant,
- **RELATOR (Rel)** ----- 2 letter code indicating relationship; eg MX=mixture/matrix,
- **MODIFIER (Mod)** ----- 2 letter code indicating rock type and/or common mineral code; e.g. CO=conglomerate, LI=limonite, GY=gypsum, LG=lignite etc

The following columns are 1 or 2 letters wide and are used to indicate the amounts of the following materials.

The **ORGANIC** column (**Org**) is reserved to indicate an amount of macroscopic organic material such as lignite, woody fragments, plant fossils etc. The same codes are used as for the AMOUNT column (1 letter code).

The **PYRITE (Py)**, **HUMIC (Hu)**, **LIMONITE (Lim)** columns are reserved to indicate a visual estimate of the amount of granular, disseminated or nodular pyrite, the amount of humic stained grains and the amount of limonite stained quartz grains; ie the codes from the AMOUNT column are used. If not assessed leave blank. Carbonate (Cb) is similarly assessed.

**REDOX.** The redox column (**RX**) is self explanatory and a list of the codes to describe the redox state is attached along with some guidelines to differentiate the different categories.

**COLOUR.** A three letter code is used for colour (**Colo**).

From **SORTING (S)**, **ROUNDNESS (R)** through to **BEDDING (B)** the codes are self explanatory. The same style of coding for each of sorting, bedding and roundness has been used to cut down on the number of codes and to try and enhance the readability of the data (all 1 letter codes).

**HARDNESS (H)** is aimed at recording more strongly cemented layers or layers with hard nodules; e.g. silcrete patches etc. Sometimes it can play a role identifying certain layers as well; eg, Cretaceous basement is usually harder than Tertiary mudstone.

The **UMIN (U)** column records the type of radiometric signal as per the code listing.

The **SAMQ (S)** column is used to record the quality of the sample. Naturally on the historic logs this won't be known but should be entered for our own drill holes ( 2 letter code).

# SEDLOG CODES FOR FROME



ROCKTYPE	AMOUNTS	ORGANICS (as amount) PYRITE (as amount) HUMIC STAIN (as amount) LIMONITE STAIN (as amount) CARBONATE acid reaction (as amount)	SORTING, BEDDING, ROUNDNESS	DESC : Textural Description
Superficial & Recent	Blank None/Unknown		Blank Unknown	1. use all lower case letters, so that Rock Unit codes can be distinguished by plotting program
SU Surface Sand	R Rare		P Poor	2. use readable and fairly standard abbreviations if possible as long words waste space by wrapping
LA Laterite	M Minor		M Medium	3. remember 2 lines of text equals about 1m of log at 1:200 scale; hence keep descriptions short especially when describing narrow units
KO Kopai	C Common		W Well	4. wordy text makes the log confusing
SI Silcrete	A Abundant		I Irregular	5. DDH logs (scale 1:100) can be more detailed
CA Calcrete	I Irregular			6. suggested abbreviations are:
Basin & Channel Sediments	MAIN RELATOR	REDOX	HARDNESS	
MU mudstone	Blank none	OX oxidised	Blank Unknown	abund abundant
ZI siltstone	MX mixture/matrix	>5% limonite stained grains, colors: off whites, tans	S Soft	& and
SZ sandy siltstone	CU coarsening up	reduced	M Medium	bg background
ZS silty sandstone	FU fining up	mid to dark greys tending to black, also greens, dark	H Hard	c coarse
FS fine sandstone	IN interbed	browns – humic material, pyrite, clay matrix.	I Irregular	carb carbonate
MS medium sandstone	ST stain	transitional		chl chlorite
CS coarse sandstone	DS disseminated	shows some characteristics of both states, in muds	URANIUM MINERALISATION	dissem disseminate
VS very coarse sandstone & grit	LM laminae	limonite mottling, in sands remnant humic st,	Blank None/Unknown	dolo dolomite
CO conglomerate	ND nodules	between obviously ox and reduc samples	U Visible pitchblende	f fine
LM limestone/dolomite	BL blebs	green transitional persistant green coloring	D Disseminated uranium	fel feldspar
GY gypsum layer	GO grains of	staining clay matrix, fel and qtz.	mineralisation	ferrug ferruginous
LG lignite & peat, dark brown	PO pebbles of	brown transitional partial ox of humic sst	R radiometric anomaly	freq frequent
powder with plant fragments,	CO cobbles of	leaving persistent lt brown stain	B high background	hem hematite
earthy, dull, soft	IC in cavities	occasional obvious interfingering with str limonite	W wing	limon limonite
SP sapropelic coal, fine grade,	IF in fractures	stained grains in overall humic st sst, however watch	S seep	lmst limestone
massive, black, conchoidal,	IJ in joints	for contamination?		med medium
ductile	IV in veinlets	mottled	SAMPLE QUALITY	mott mottled
BA basement	?? unknown	patches of both, rarely described	Blank unknown	mudst mudstone
		neutral	N no sample	muscovite muscovite
		doesn't show any characteristic features of	P poor sample	py pyrite
		either state, light greys, no pyrite, no ox grains	C contaminated sample	qtz quartz
		surface oxidation hematite - limonite flecks, stains	G good sample	r/a radioactive
		in mudstone etc, brown surface sands etc.		rk rock
		uncertain		sch schist
	COMMON MINERALS	COLOURS	HYDROLOGY	sst sandstone
	BI biotite	Blank unknown	Blank unknown	sequ sequence
	CA calcite	RED red	WT static, water table intersected	zst siltstone
	CB carbonate	ORA orange	NW no water, dry	silic silicified
	CH chert	YEL yellow	LW low water flow	st stained
	CL chlorite	GRE green	AW average water flow	str strong
	CY clay	BLU blue	HW high water flow	tr trace
	DO dolomite	PUR purple	VW very high water flow	vc very coarse
	EP epidote	BRO brown		vf very fine
	FD feldspar	TAN tan, beige, pale brown		wk weak
	GY gypsum	LGR light grey		wth weathered
	HE hematite	DGR mid-dark grey		
	LI limonite	YGR Yellow grey, ie. yellow mottles/ blebs in grey		
	MI mica	BLA Black		
	MU muscovite	WHI White		
	OP opal	OWH off-white, brownish greys		
	OX oxides	GRY grey in general		
	PY pyrite	MOT red-yellow mottled surface weathered		
	QZ quartz			
	SR sericite			
	ZE zeolite			

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
<b>Hole Number: CUM001</b>																				
0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brownish sandy clay
2.0	8.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	MOT	-	-	-	S	-	G	with lt grey, hem st, mudst
8.0	20.0	Tnm	MU	-	-	-	R	-	-	-	-	TR	LGR	-	-	-	S	-	G	fresher lt grey mudst, prob minor organic streaks, minor lim sl & mottles
20.0	22.0	Tn4	FS	-	-	-	M	-	-	-	-	OX	YGR	-	-	-	S	-	G	f sst
22.0	24.0	Tnm	MU	-	-	-	R	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey mudst, minor yellow mottles, rare organic streaks
24.0	30.4	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey to blk organic rich mudst, some yellow mm knots after py?
30.4	34.6	Tn3	MU	C	IN	SZ	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey mudst, some yellow mottl, v f sandy zst (elog)
34.6	35.8	Tn3p	MS	-	-	-	A	A	-	-	-	RU	BLA	-	-	-	S	-	G	organic rich, prob py rich med sst
35.8	44.0	Tnm	MU	R	IN	FS	M	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey-yellow mottl mudst, minor organic streaks, rare irregular bands? f sst
44.0	48.0	Tn2	MS	C	IN	MU	-	-	-	R	-	OX	LGR	-	-	-	S	-	G	f-med sst, sst prob wk ox, tr lim st on qtz grains
48.0	52.8	Tnm	MU	-	-	-	R	-	-	-	M	TR	LGR	-	-	-	S	-	G	lt grey-yellow mottl mudst, rare organic streaks, minor carb @ base
52.8	56.8	Tn1	MS	M	IN	MU	C	-	-	-	-	RU	BLA	-	-	-	S	-	G	dk grey-blk mudst, mm frag lignite, in f-med reduc sst
56.8	60.4	Tnm	MU	-	-	-	-	-	-	-	C	TR	LGR	-	-	-	S	-	G	off white-lt grey carb mudst, yellow mottl
60.4	61.2	Tns	MS	-	-	-	-	-	-	C	-	OX	LGR	-	-	-	S	-	G	band f-med bleached lim st ox sst
61.2	66.0	Tnk	LM	-	-	-	-	-	-	R	A	OX	LGR	-	-	-	S	-	G	off white-lt grey mudst, yellow mottl, carb rich, str acid test
66.0	72.0	Te2	MS	M	IN	MU	-	-	-	R	-	OX	OWH	-	-	-	S	-	G	off white-lt grey med sst, minor interbeds mudst (2 beds elog), tr lim st on qtz & ithic grains
72.0	74.0	Te1b3	CS	-	-	-	-	-	-	M	-	OX	OWH	M	M	-	S	-	G	mainly c qtz sst, tr fel, some med sst, a few vc grains
74.0	78.0	Te1b2	MS	-	-	-	-	-	-	M	-	OX	OWH	W	W	-	S	-	G	mainly med qtz sst, tr fel, some c sst, minor orange st qtz grains, tr white bleached clay dots
78.0	80.0	Te1b2	CS	-	-	-	M	-	-	R	-	OX	OWH	M	M	-	S	-	G	mainly c gd sst, some vc
80.0	82.0	Te1b1	CS	-	-	-	M	-	-	R	-	OX	OWH	P	M	-	S	-	G	c sst, freq fel grains, thin reduced mudst seam
82.0	84.0	Te1b1	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	c sst, minor mudst seam, white bleached?
84.0	86.0	Te1b1	VS	M	PO	QZ	-	-	-	C	-	OX	OWH	P	M	-	S	-	G	vc sst, common orange lim st of qtz grains, limonitic mudst seams, close to front?, lim cemented qtz grains, mm fel pebs, obvious ox
86.0	88.0	Te1a	CS	-	-	-	-	-	-	C	-	OX	OWH	M	M	-	S	R	G	c sst, common orange lim st of qtz grains, minor mudst seams, ox less intense
88.0	93.8	Te1a	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	W	G	c sst, rare orange lim st of qtz grains, v minor mudst seams, ox less intense, more bleached & poorly sorted @ base
93.8	104.0	Km	BA	-	-	-	-	-	-	-	-	RU	-	-	-	-	S	-	G	blk mudst, eoh 104m

## Hole Number: CUM002

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown sand @ surface
2.0	10.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	MOT	-	-	-	S	-	G	with grey brownish st mudst
10.0	12.0	Tnm	MU	-	-	-	A	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk organic mudst, common hem st due to surface ox
12.0	18.0	Tnm	MU	-	-	-	A	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk organic mudst
18.0	26.0	Tnm	MU	R	MX	ZI	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey str yellow mottl mudst, irregular tr zst, prob ox to transitional
26.0	30.0	Tnm	MU	M	IN	FS	-	-	-	-	-	RU	GRY	-	-	-	S	-	G	mid grey mudst, uniform, tr f sst (elog)
30.0	35.2	Tnm	MU	M	IN	FS	-	-	-	-	-	OX	LGR	-	-	-	S	-	G	str lim sl/mottl lt grey mudst, prob ox along thin f sst seams, looks bleached in part
35.2	35.8	Tn3p	MS	-	-	-	A	A	-	-	-	RU	BLA	-	-	-	S	-	G	organic rich py? f sst
35.8	44.4	Tnm	MU	R	IN	ZI	R	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey, minor yellow mottl mudst, tr irreg zst in patches, minor to rare organic streaks
44.4	46.8	Tn2	MS	M	IN	MU	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	interbedded sst & mudst, elog
46.8	53.2	Tnm	MU	C	IN	FS	-	-	-	-	R	TR	LGR	-	-	-	S	-	G	interbedded sst/mudst, elog, poss some carb?
53.2	56.0	Tn1	FS	M	IN	MU	R	-	-	-	M	TR	LGR	-	-	-	S	-	G	lt-mid grey, minor yellow mottl mudst bed in lt grey f sst, occas organic streaks

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
56.0	58.0	Tnm	MU	-	-	-	C	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey-blk organic mudst
58.0	60.4	Tnm	MU	-	-	-	-	-	-	-	M	TR	LGR	-	-	-	S	-	G	lt grey-yellow mottl mudst
60.4	61.6	Tns	MS	-	-	-	-	-	-	-	-	OX	OWH	-	-	-	S	-	G	med sst elog
61.6	64.0	Tnk	LM	-	-	-	-	-	-	-	A	TR	OWH	-	-	-	S	-	G	off white bleached mudst, carb rich
64.0	65.6	Tnm	MU	-	-	-	-	-	-	-	M	RU	GRY	-	-	-	S	-	G	mid grey mudst
65.6	73.0	Te2	MS	M	IN	MU	-	-	-	-	-	??	OWH	-	-	-	S	-	C	seems to be mainly med sst, str contam from mudst, poor sample, washed, 4 mudst interbeds (elog)
73.0	74.0	Te1b3	FS	M	FU	MU	-	-	-	R	-	OX	OWH	-	-	-	S	-	P	f sst, prob some ox bleached mudst, some orange lim st
74.0	76.0	Te1b3	CS	-	FU	-	-	-	-	R	-	OX	OWH	-	-	-	S	-	P	c wk ox sst, tr orange lim st in clay, tr ox st on qtz grains
76.0	80.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	-	-	-	S	-	G	vc wk ox sst
80.0	85.2	Te1b1	CO	A	PO	QZ	-	-	-	R	-	OX	OWH	M	W	-	S	-	P	gritty cong, abund fel grains/pebs, mm pebs, wk ox, tr lim st only, bleached
85.2	93.2	Te1a	CO	A	PO	QZ	R	A	R	-	-	RU	DGR	M	W	-	S	-	P	gritty cong, abund fel grains/pebs, mm pebs, reduc, abund f py crusts/cement, tr blk mudst, tr humic st on qtz, rare lim after py, humic st on fel pebs, f/u to mudst top? elog
93.2	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	-	-	-	-	S	-	P	dk grey-blk mudst, last 4m beddy washed, eoh 102m

Hole Number: CUM003

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand at surface
2.0	10.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	lt grey brown clays with minor silt, some lim & hem st
10.0	12.0	Tnm	MU	C	IN	ZI	-	-	-	C	-	TR	LGR	-	-	-	S	-	G	lgr clays with minor lim st, thin zst interbeds (elog)
12.0	20.2	Tnm	MU	C	IN	ZI	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	str lim st in clays, freq thin interbeds zst (elog)
20.2	21.4	Tn4	MS	-	-	-	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	ox? med sst, elog
21.4	30.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	v minor lim st in clays, some organic material in blk mudst
30.0	32.0	Tnm	MU	-	-	-	-	-	-	M	-	TR	YGR	-	-	-	S	-	G	minor lim st in yellow mott grey days
32.0	33.8	Tnm	MU	-	-	-	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	str lim st in yellow mott grey days
33.8	36.2	Tn3p	FS	M	IN	MU	C	C	-	-	-	RU	BLA	-	-	-	S	-	G	seams of blk f sst with py? & abund organic matter
36.2	43.8	Tnm	MU	-	-	-	-	-	-	M	-	TR	YGR	-	-	-	S	-	G	yellow & bleached clays
43.8	47.0	Tn2	MS	M	IN	MU	-	-	-	-	-	??	-	-	-	-	S	-	G	elog sst layer
47.0	53.4	Tnm	MU	-	-	-	M	M	-	-	-	RU	DGR	-	-	-	S	-	G	mainly dk clays, lt grey clays @ 48m, organics & py 42-46m
53.4	56.6	Tn1	MS	M	IN	MU	-	R	-	-	C	RU	DGR	-	-	-	S	-	G	v sandy unit in namba, minor carb rich off white? days
56.6	60.2	Tnm	MU	-	-	-	-	-	-	R	-	TR	DGR	-	-	-	S	-	G	some lim st on dk grey days
60.2	62.6	Tns	CS	-	-	-	-	-	-	-	-	??	-	-	-	-	S	-	G	elog sand layer
62.6	65.4	Tnk	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	S	-	G	white clay, bleached?, carb rich
65.4	67.0	Te2	CS	-	FU	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	minor lim day
67.0	73.0	Te2	VS	C	IN	MU	-	-	-	R	-	OX	OWH	W	P	-	S	-	G	4 day bands (elog) in vc sst
73.0	80.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	WHI	W	P	-	S	-	G	v minor lim clay in vc sst
80.0	83.0	Te1b1	VS	M	IN	MU	-	-	-	R	-	OX	WHI	W	P	-	S	-	G	v minor lim clay & bleachd day
83.0	87.9	Te1a	CO	-	-	-	-	-	-	A	-	OX	YGR	W	P	-	S	-	G	abund lim clay & bleachd day
87.9	90.0	Te1a	CO	-	-	-	-	C	-	A	-	TR	LGR	W	P	-	S	-	G	lim & py in transitional zone to reduc
90.0	91.4	Te1a	CO	-	-	-	-	C	-	-	-	RU	DGR	W	M	-	S	-	G	dk grey to blk sand, abund py
91.4	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

Hole Number: CUM004

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand & clay
2.0	9.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth, hem flecked mudst, tr f sst
9.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	YGR	-	-	-	S	-	G	wth, lt grey yellow mottl mudst
12.0	20.0	Tnm	MU	-	-	-	R	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey yellow flecked mudst, a few streaks of organic mud, bleached? @ base

Dfom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
20.0	33.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey mudst, a few lt grey mottles
46.2	53.4	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey mudst, a few yellow mottles
53.4	56.0	Tnl	MU	C	IN	ZS	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey mudst & f silty sand, yellow mottles
56.0	60.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey mudst, str yellow mottles
61.4	64.8	Trk	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	S	-	G	white-pale grey ox? bleached? mudst, minor mid grey unaltered patches, carb rock
64.8	68.0	Te2	MS	M	IN	MU	-	-	-	R	-	OX	LGR	M	W	-	S	-	P	lt grey med-c sst, tr lim crusts in f sst, thin beds off white bleached mudst with mid grey mottles
68.0	71.0	Te2	CS	M	IN	MU	-	-	-	R	-	OX	LGR	M	W	-	S	-	G	lt grey c sst, tr lim crusts, thin beds off white bleached mudst with mid grey mottles
71.0	74.0	Te1b3	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	lt grey bleached c sst, fel<<qtz, tr lim st, some white clay dots, some dk grey mudst (rip up dasts?), tending vc @ base
74.0	77.4	Te1b3	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	bleached c-vc sst, fel<<qtz, tr lim st & crusts, some bleached pinkish clay dots after organic mudst, some mm grains
77.4	81.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	bleached vc sst, fel<<qtz, tr lim st & crusts, some bleached pinkish clay dots, freq mm grains, base of sst unit? clay break @ top elog
81.0	83.4	Te1b1	MS	-	-	-	-	-	-	R	-	OX	OWH	W	W	-	S	-	G	med sst, top of unit?, rare lim st, rare clay dots
83.4	90.2	Teta	VS	-	-	-	-	M	R	-	-	RU	DGR	M	M	-	S	-	G	vc reduc sst, dk grey lithic grains (gn?), rare red chert, f gd py cement, a few <mm chips humic material, rare mm pebs
90.2	96.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 96m

### Hole Number: CUM005

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown/tan surface sand
4.0	10.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	YGR	-	-	-	S	-	G	lim & hem st from surface
10.0	18.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G	lim yellow, lt grey mudst, occas organic streaks
18.0	24.0	Tnm	MU	-	-	-	M	-	-	M	-	RU	DGR	-	-	-	S	-	G	dk grey-blk seams in mudst, some surficial lim st
24.0	26.0	Tnm	MU	M	IN	FS	-	-	-	M	-	TR	YGR	-	-	-	S	-	G	lim st in lt grey days, minor sst (elog)
26.0	30.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	blk seams in dk days some lim st
30.0	35.0	Tnm	MU	M	IN	FS	R	-	-	-	-	RU	LGR	-	-	-	S	-	G	blk seams in lt grey days some lim st minor sand (elog)
36.3	41.0	Tnm	MU	M	IN	ZI	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	blk seams in dgr days some lim st, some sst
42.5	44.1	Tnm	MU	M	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey days
47.0	55.0	Tnm	MU	M	IN	SZ	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	interbeds of blk silty sand in dk grey days, very minor lim coating on some day
56.9	61.0	Tnm	MU	-	-	-	-	-	-	-	M	RU	LGR	-	-	-	S	-	G	lt grey day, v minor lim coating on some day, carb?
63.0	65.0	Tns	LM	-	-	-	-	-	-	M	A	OX	OWH	-	-	-	S	-	G	rare organic seams in lim & bleached days, carb rich
65.0	71.0	Te2	MS	M	IN	ZI	-	-	-	M	-	OX	OWH	W	M	-	S	-	G	some lim days & lim coating on qtz grains, med sst, some c sst, zst bands (elog)
76.0	79.0	1E1B2	CS	M	FU	ZI	-	-	-	M	-	OX	OWH	M	M	-	S	-	G	some minor lim days in cs to vs, minor lim coating on qtz grains
86.0	90.0	Te1A1	CS	-	FU	-	M	R	-	-	-	RU	DGR	W	M	-	S	-	G	finer than sand above, less organics & py but still dk grey qtz
90.0	96.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue/dk grey mudst, eoh 96m

### Hole Number: CUM006

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand/day
2.0	8.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth hem st lt grey mudst
8.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	YGR	-	-	-	S	-	G	str yellow st on lt grey mudst
22.0	32.8	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey organic mudst
35.0	42.8	Tnm	MU	M	IN	SZ	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	part ox yellow mott lt-mid grey mudst & thin seams of ox fine sandy sit
45.2	54.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt-mid grey mudst, minor yellow mott, some reduc dk grey mudst, patch nontronite day @ 40m, bleached @ base
54.8	56.0	Tn1	FS	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	minor f sand

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	Z	B	H	U	S	Description
56.0	59.8	Tnm	MU	-	-	-	-	-	-	-	C	RU	LGR	-	-	-	S	-	G		yellow mott lt-mid grey mudst, in parts off white bleached, carb rich
62.2	64.0	Tnk	LM	M	??	SI	-	-	-	-	A	TR	LGR	-	-	-	M	-	G		mainly grey to bleached white mudst, a few harder silcrete? bands, harder drilling, carb rich
64.0	65.8	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G		dk greenish grey mudst, base of namba
65.8	70.0	Te2	MS	C	IN	MU	-	-	-	R	-	OX	OWH	M	M	-	S	-	P		bleached med sst, minor c, fel<<qtz, rare lim crusts, some bands bleached mudst
70.0	76.0	Te1b3	CS	-	-	-	-	-	-	M	-	OX	OWH	M	M	-	S	-	G		c sst, minor vc, lithic<fel<<qtz, some white bleached clay, tr greenish clay, tr lim crusts & lim st on mudst seams/gulls?
76.0	80.0	Te1b2	VS	-	-	-	-	-	-	M	-	OX	OWH	P	M	-	S	-	G		vc sst, abund grit, lithic<fel<<qtz, some white bleached clay, tr greenish clay, tr lim crusts & lim st on mud dots
84.0	95.0	Te1a	VS	-	-	-	C	R	R	-	-	RU	DGR	P	M	-	S	-	G		vc sst, abund grit, lithic<fel<<qtz, abund dk brown humic matter, tr py, dk humic st on qtz grains, dk lithic grains, a few mm pebs, brown clay
95.0	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G		blk mudst, eoh 102m

### Hole Number: CUM007

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G		surface sand & soil, no good elogs
4.0	10.0	Tnm	MU	-	-	-	-	-	-	M	-	SO	YGR	-	-	-	S	-	G		yellow-grey surface ox day & minor lim & hem st & crusts
10.0	20.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G		yellow grey day minor lim st & rare organic streaks in thin interbeds of dk day
20.0	24.0	Tnm	MU	-	-	-	R	-	-	-	-	RU	DGR	-	-	-	S	-	G		v dk day with some organic streaks & v minor lim coating on 5% day
24.0	26.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G		trans day, minor lim coating on 15% of lt grey days
26.0	32.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G		dk days with some organic days, minor py?
32.0	36.0	Tn3p	MU	M	IN	ZI	C	-	-	R	-	RU	DGR	-	-	-	S	-	G		mainly dk grey days with common organic seams of silty sand, minor lim st on lt grey days
36.0	52.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G		yellow grey mudst with some bleached white days, minor organic streaks in non bleached days
52.0	54.0	Tnm	MU	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	S	-	G		white bleached days, carb rich
54.0	58.0	Tn1	MU	C	IN	FS	C	R	-	-	-	RU	DGR	-	-	-	S	-	G		v dk grey day with common blk organic material in silty f sst
58.0	60.0	Tnm	MU	-	-	-	-	-	-	R	-	TR	YGR	-	-	-	S	-	G		dominated by lim coated lt grey days
60.0	66.0	Tnk	LM	-	-	-	-	-	-	R	A	OX	OWH	-	-	-	S	-	G		lt grey days & bleached days very minor lim st day, close to top of eyre?, carb rich
66.0	76.0	Te2	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G		dean white to off white med to mainly c sst, fels<<qtz, v minor lim coating
76.0	78.0	Teb3	CS	C	IN	MU	-	-	-	M	-	OX	OWH	M	M	-	S	-	G		common bleached white day in med-c sst, fel<qtz
78.0	82.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	M	P	-	S	-	G		vc sand to grit, minor lim st on qtz grains
82.0	84.0	Te1b1	CS	-	-	-	R	R	-	M	-	TR	LGR	M	P	-	S	-	G		vc sand to grit, common organics & py, lim coating on qtz grains
84.0	88.0	Te1a2	VS	-	-	-	M	C	C	-	-	RU	DGR	M	P	-	S	-	G		common humic st on qtz, py, some organic matter, brown days, vc sand
88.0	93.0	Te1a1	CO	-	-	-	C	C	M	-	-	RU	DGR	M	W	-	S	-	G		common humic st on qtz, py, some organic matter, brown day, vc-grit, some larger pebs
93.0	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G		blue gray mudst, eoh 102m

### Hole Number: CUM008

0.0	8.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	M	-	G		with hem st mudst, slightly harder silic? in patches, thin veneer of soil, no good elogs
8.0	22.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G		lt-mid grey, yellow mottles, transitional mudst
22.0	30.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G		mid grey reduc mudst, in part organic, minor yellow lim st only
30.0	34.0	Tn3p	MU	-	-	-	R	-	-	-	-	TR	LGR	-	-	-	S	-	G		lt grey mudst, minor organic streaks, somewhat bleached, lim alt of py? rich organic streaks
34.0	38.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G		lt-mid grey mudst, perhaps tr zst @ base
38.0	52.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G		lt grey yellow mott mudst, tr zst

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
52.0	54.0	Tn1	MU	C	IN	FS	-	-	-	-	A	OX	LGR	-	-	-	S	-	G	lt grey bleached carb mudst, bands f-med sst
54.0	56.0	Tnm	MU	-	-	-	M	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, moderate amount organic mudst
56.0	58.0	Trk	LM	C	MX	SI	M	-	-	-	A	OX	OWH	-	-	-	M	-	G	off white, wk silic, bleached mudst, some remnant yellow grey mudst, carb rich
58.0	63.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey mudst, in part green-grey
63.0	69.0	Te2	CS	C	IN	MU	-	-	-	R	-	TR	LGR	-	-	-	S	-	G	lt grey med-c sst, abund green-grey mudst, a few lim crusts, tr organic clay
69.0	72.0	Te2	CS	-	-	-	-	-	-	-	-	OX	OWH	M	W	-	S	-	G	white bleached c-vc sst, few % grit
72.0	73.0	Te2	MS	A	MX	SI	-	-	-	-	-	TR	WHI	W	W	-	H	-	G	changed to rk bit, hard white silic cemented med sst, above mud break, patches blk organic rich silic sst at top
73.0	74.0	Tem	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey vc organic mudst break beneath silcrete
74.0	82.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	DGR	M	W	-	S	-	G	lt-mid grey vc sst, tr lim crusts, more lim st @ base, few % grit, fel<<qtz, some pinkish clay dots, minor dk grey clay
82.0	86.0	Te1b1	VS	C	MX	MU	A	R	A	-	-	RU	DGR	M	W	-	S	-	G	dk grey-dk brown vc sst, abund dk brown humic mud, green-grey mudst, few % grit to mm pebs, fel<<qtz
86.0	93.0	Te1a	VS	-	-	-	M	R	C	-	-	RU	DGR	M	W	-	S	-	G	dk grey-dk brown vc sst, green-grey mudst, 10% grit to mm pebs, chert<fel<<qtz grains, few mm frag py cement, mm py nodules, less grit @ base
93.0	96.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 96m

### Hole Number: CUM009

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, no good elogs
4.0	10.0	Tnm	MU	-	-	-	-	-	-	M	-	SO	LGR	-	-	-	S	-	G	lt grey with yellow & reddish brown lim & hem stained clays from surface ox
10.0	20.0	Tnm	MU	-	-	-	R	-	-	C	-	TR	YGR	-	-	-	S	-	G	grey clays with some lim st & coating, rare organic streaks in lt grey clays
20.0	24.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt grey clays with dk organic seams
24.0	30.0	Tnm	MU	M	IN	ZI	M	-	M	-	-	RU	DGR	-	-	-	S	-	G	much darker grey with silty interbeds of organic rich material & some brown humic clay
32.0	56.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G	both lim & organic streaks in lt grey to yellow grey clay, some minor silty seams of blk py? rich clay
56.0	60.0	Tn1	MU	R	IN	FS	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	blk organic seams in dk grey silt in dk grey clay
60.0	64.0	Trk	LM	-	-	-	-	-	-	R	A	OX	OWH	-	-	-	S	-	G	bleached off white to white clay, ox? from top of eyre, some minor limonitic clay, carb rich
64.0	66.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	LGR	-	-	-	S	-	G	lt grey clay, v minor organic material & some limonitic clay, lim coating on clay
66.0	70.0	Te2	MS	-	-	-	-	-	-	M	-	OX	OWH	-	-	-	S	-	G	off white to lt grey ox med-c sst, some yellow lim-bleached white & lgr clay, v minor lithic grains
70.0	76.0	Te1b3	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	flu? sand from 76-68m, bleached white clays, fel<qtz
76.0	84.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	M	P	-	S	-	G	vc off white sands, some minor lim clay & lim coating on qtz grains, fel<<qtz
84.0	86.0	Te1b1	VS	-	-	-	R	-	R	M	-	TR	OWH	M	P	-	S	-	G	lim clays & minor organic humic st on qtz grains, lithics<fel<qtz
86.0	90.0	Te1a	VS	-	-	-	M	M	-	A	-	TR	DGR	P	P	-	S	-	G	abund lim clay & lim coating on qtz grains, common humic clay, rare pyritic pebbles (>2mm) from silic basement mudst
90.0	94.0	Te1a	VS	-	-	-	C	C	-	-	-	RU	DGR	M	P	-	S	-	G	common py and some organics & humic staining on qtz, lithics=fel<qtz
94.0	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

### Hole Number: CUM010

0.0	3.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & clay, no good elogs
3.0	8.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	@ 6m poor sample, with red flecked grey mudst
8.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey mudst, somewhat surface wth/ox
12.0	32.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, some parts dk grey

Dfcm	Dio	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
32.0	34.0	Tn3	MU	M	IN	FS	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	str yellow mott lt grey mudst, wk bleached, thin? bands of white ox? f-med sst
34.0	40.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey reduc mudst
40.0	52.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow mott lt grey mudst varying to mid grey, poss tr zst
52.0	54.0	Tnm	MU	-	-	-	-	-	-	-	A	TR	OWH	-	-	-	S	-	G	off white bleached, lim st mudst after? blk organic rich mudst
54.0	58.0	Tn1	MU	M	IN	FS	-	-	-	-	-	TR	DGR	-	-	-	S	-	G	yellow flecked dk grey mudst & thin? ox f sst bands
58.0	61.0	Tnk	LM	-	-	-	-	-	-	-	A	OX	WHI	-	-	-	M	-	G	white bleached carb mudst, tr yellow mott, somewhat harder drilling, wk silic?
61.0	66.0	Tnm	MU	R	MX	ZI	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey mudst, tr silty material, some bleached, minor carb
66.0	70.0	Te2	CS	C	IN	MU	-	-	-	M	-	OX	OWH	W	W	-	S	-	G	white ox c sst, fel<<qtz, minor crusts lim, some green-grey mudst
70.0	74.0	Te1b3	CS	-	-	-	-	-	-	M	-	OX	OWH	W	W	-	S	-	G	white ox c sst, fel<<qtz, minor crusts lim
74.0	80.0	Te1b2	VS	-	-	-	-	-	-	M	-	OX	OWH	M	W	-	S	-	G	white ox c-vc sst, fel<<qtz, minor crusts lim, minor pinkish clay after bleached organic mud
80.0	86.0	Te1b1	MS	M	IN	VS	-	-	-	C	-	OX	OWH	P	W	-	S	-	G	white ox med sst, minor c-vc grains, fel<<qtz, freq crusts lim & dots lim st clay, abund lim st qtz grains
86.0	90.0	Te1a	MS	M	IN	VS	-	-	-	A	-	OX	YEL	P	W	-	S	-	G	yellowish med sst, minor c-vc grains, fel<<qtz, abund lim st qtz grains
90.0	95.0	Te1a	VS	-	-	-	M	C	C	-	-	RU	DGR	P	W	-	S	-	P	vc reduc sst, py cemented frags, common organic st grains, some dk brown organic mud, prob transitional @ top
95.0	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	P	blk mudst, eoh 102m

### Hole Number: CUM011

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	surface wind blown sand, no good elogs
2.0	8.0	Tnm	MU	-	-	-	-	-	-	M	-	SO	LGR	-	-	-	S	-	G	lim & hem st from surface ox, mainly lt grey to pink hem days
8.0	20.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G	yellow grey mudst, some blk organic seams, slightly silty in part throughout the day, lim st on day
20.0	28.0	Tnm	MU	-	-	-	R	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt grey clay, some minor dk grey seams & organic streaks
28.0	34.0	Tn3p	MU	M	IN	ZI	M	-	-	R	-	TR	YGR	-	-	-	S	-	G	yellow grey clay, rare organic streaks in silty seams, py? sil
34.0	40.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	minor darker blk clay/silt in dk grey clays, py silt unit absent
40.0	58.0	Tnm	MU	M	IN	ZI	M	-	-	R	M	TR	YGR	-	-	-	S	-	G	minor darker organics brown/blk mud, generally yellow grey clays with lim coating on clays, minor carb
58.0	62.0	Tnk	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	H	-	G	white bleached clays & some silcrete, very hard band approx 25cm thick, some lt grey clays, carb rich
62.0	66.0	Tnm	MU	C	IN	MS	R	-	-	-	-	RU	DGR	-	-	-	S	-	G	base namba, mainly clays with interbeds of med sst, clays are reduc dk grey
66.0	74.0	Te2	CS	-	-	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	minor lim clays, str yellow coated qtz, mainly dean white to off white fel<qtz sand
74.0	76.0	Te1b3	VS	-	-	-	-	-	-	R	-	OX	OWH	M	P	-	S	-	G	vc sands minor lim clay & staining on qtz grains very minor lithics, fel<qtz
76.0	80.0	Te1b2	CS	-	-	-	-	-	-	M	-	OX	OWH	M	M	-	S	-	G	some lim coating on qtz grains increasing with depth, close to front?, very yellow qtz towards 80m
80.0	86.0	Te1b1	VS	-	-	-	-	-	-	C	-	OX	YEL	M	P	-	S	-	G	yellow lim coated qtz grains, adj to front, off white fel & qtz
86.0	90.0	Te1	VS	-	-	-	M	A	-	-	-	RU	DGR	M	P	-	S	-	G	abund py cemented qtz grains, up to 1cm pebs, large blk/dk grey qtz pebbles, minor lithics & fel
90.0	92.0	Te1a	CS	-	-	-	M	M	-	-	-	RU	DGR	M	M	-	S	-	G	much less py & finer grained sand, lithic frags<fel<qtz, minor organic material
92.0	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

### Hole Number: CUM012

0.0	3.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown dune sand & clay, no good elogs
3.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	red hem mott grey mudst, slightly silic @ top, less mott @ base
12.0	16.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	YGR	-	-	-	S	-	G	yellow mott lt grey mudst, surface ox?
16.0	24.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow mott lt grey mudst

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
24.0	32.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey reduc mudst, patches yellow lim mott, tr streaks of organic mud
32.0	36.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow mott lt grey mudst
36.0	42.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	grey reduc mudst, minor streaks organic matter
42.0	44.0	Tn2	ZS	M	IN	MU	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	bands silty f sst with str lim st on qtz grains and some mudst
54.0	58.0	Tn1	MU	M	IN	ZS	-	-	-	M	A	OX	LGR	-	-	-	S	-	G	bleached mudst, tr remnant py-organic zst, minor thin? bands silty f sst with str lim st on qtz grains, some lt-mid grey wk organic unbleached mudst
58.0	60.0	Tnm	MU	-	-	-	-	-	-	-	A	TR	YGR	-	-	-	S	-	G	str yellow lim st on mid grey organic mudst
60.0	64.0	Trk	LM	-	-	-	-	-	-	-	-	OX	WHI	-	-	-	S	-	G	bleached carb mudst, minor yellow st, @ base lt-mid grey remnants
64.0	72.0	Te2	MS	C	IN	MU	-	-	-	M	-	OX	OWH	W	W	-	S	-	G	interbeds med-c sst & green-grey mudst, poss fining up sequ's, minor lim crusts, fel<<qtz, coarser & less mudst @ base, some pinkish bleached day
72.0	85.0	Te1b	CS	-	-	-	-	-	-	M	-	OX	OWH	M	W	-	S	-	G	c ox sst, some mid grey & bleached mudst, minor lim crusts, vc @ base, fel<<qtz
85.0	88.0	Tem	MU	-	-	-	-	-	-	-	-	RU	DGR	M	W	-	S	-	G	mid grey mudst break
88.0	90.0	Te1a	VS	-	-	-	-	-	-	C	-	OX	OWH	M	W	-	S	-	G	vc ox sst, lim st qtz grains, lim crusts, frags bleached day, few % grit, fel<<qtz
90.0	93.0	Te1a	CS	-	-	-	-	-	-	A	-	OX	YEL	P	W	-	M	-	G	c ox yellowish sst, abund yellow lim st on qtz & fel grains, tending to med
93.0	94.0	Te1a	CS	-	-	-	-	-	-	C	-	OX	YGR	P	W	-	S	-	G	c ox sst, few % vc & grit, mid grey clay break @ base?, some lim st on grains
94.0	96.0	Te1a	CS	M	PO	OZ	M	C	C	-	-	RU	DGR	P	W	-	S	-	G	c reduc sst, m-m-cm pebs, both qtz & lithic, str humic st, py cement frags, some dk brown organic mud
96.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, eoh 102m

Hole Number: CUM013

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, no good elogs
2.0	12.0	Tnm	MU	-	-	-	-	-	-	R	-	SO	LGR	-	-	-	S	-	G	pinky grey hem st surface ox
12.0	38.0	Tnm	MU	-	-	-	M	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey days with variable amounts yellow mottles & organic streaks
38.0	40.0	Tn3	MU	-	-	-	M	-	-	R	-	RU	DGR	-	-	-	S	-	G	much less lim in dk grey day, blk seams of py? silt
40.0	48.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	strong lim st on lt grey day, also organic seams
48.0	50.0	Tn2	MU	M	IN	CS	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	some c sst bands? in lt grey days with yellow mottles
50.0	56.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	lt grey days with yellow mott & minor organic streaks
56.0	58.0	Tn1	MU	C	IN	FS	-	-	-	M	-	OX	OWH	-	-	-	S	-	G	ox f-med sst, some st lim yellow, rare soft lim day
58.0	60.0	Tnm	MU	-	-	-	C	-	-	M	-	TR	YGR	-	-	-	S	-	G	yellow grey days, increased organic content within mottled days
60.0	64.0	Trk	LM	-	-	-	R	-	-	M	C	TR	YGR	-	-	-	S	-	G	some white bleached carb day in mainly lim yellow to lt grey mott day
64.0	68.0	Tnm	MU	-	-	-	R	-	-	-	-	RU	DGR	-	-	-	S	-	G	thin 2m band of dk grey reduc day, some blk organic seams
68.0	72.0	Te2	MS	-	-	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	mix white ox day & soft lim day, also lt grey day remnant?, off white qtz grains
72.0	76.0	Te1b3	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	c sst, off white, fel<qtz, very minor lim st
76.0	84.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	M	P	-	S	-	G	vc fel/qtz sands, minor yellow lim day
84.0	88.0	Te1b1	VS	-	-	-	C	C	C	-	-	RU	DGR	M	P	-	S	-	G	vc sst, reduc, abund humic silt and py cemented qtz grains, mm size qtz pebbles
88.0	92.0	Te1a	CS	-	-	-	C	M	M	-	-	RU	DGR	M	M	-	S	-	G	basal eyre sequ, c sst, humic, py & organics all present, abund grey qtz
92.0	96.0	Te1a	VS	-	-	-	M	M	M	-	-	RU	DGR	P	W	-	S	-	G	vc basal sand, mm size pebs milky & grey qtz, minor py cemented qtz grains
96.0	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

Hole Number: CUM014

0.0	3.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand/day, moderate SP log
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From	To	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
3.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem flecked mudst
12.0	22.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow mott lt grey mudst, at top poss tr zst, minor organic streaks
22.0	30.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt grey mudst, minor organic streaks
30.0	34.0	Tn3p	MU	M	IN	ZI	M	-	-	-	-	TR	LGR	-	-	-	S	-	G	interbeds?, lt grey mudst & minor blk organic zst, minor yellow st
34.0	53.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow mott lt grey mudst, poss tr zst towards base, 36-40 poss reduc
53.0	56.4	Tn1	ZS	C	FU	LM	-	-	-	M	-	OX	OWH	-	-	-	S	-	G	interbeds?, bleached white carb mudst & silty f sst, tr lim st, ox
56.4	60.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk organic mudst
62.0	64.0	Tnk	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	S	-	G	lt grey to white bleached @ base mudst, tr remnant organic mud, some mm chips of wk silic grey mudst, carb rich @ base
64.0	66.0	Tnk	LM	-	-	-	-	-	-	-	A	TR	LGR	-	-	-	S	-	G	lt grey to white bleached mudst, carb rich
66.0	72.0	Te2	MS	C	IN	MU	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	bleached med sst & greenish grey mudst, some bleached white-pink clay, coarser @ base, tr lim crusts
72.0	82.0	Te1b	CS	-	-	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	bleached c sst, tr bleached white-pink clay dots, rare lim st qtz grains, fel<<qtz
82.0	92.0	Te1a	VS	-	FU	-	-	-	-	A	-	OX	YGR	M	W	-	S	-	G	c-vc sst, fining up sequ, abund lim st on qtz/fel grains, 10% grit, few mm pebs
92.0	94.0	Te1a	VS	M	FU	MU	-	-	-	A	-	OX	YEL	M	W	-	S	-	G	at top thin mid grey mudst?, followed by vc sst, lim cemented, v str yellow st, @ base dk grey reduc
94.0	96.0	Te1a	VS	-	-	-	M	M	A	-	-	RU	DGR	M	W	-	S	-	G	vc reduc sst, abund humic st on qtz grains, last 1/2 sample contaminated
96.0	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 102m

Hole Number: CUM015

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand, moderate SP log
2.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem flecked grey mudst
12.0	21.6	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	yellow mott @ top lt grey mudst
21.6	25.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey, blk organic streaked mudst and sand elog
25.0	30.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt-mid grey, partly yellow lim mott
30.0	33.6	Tnm	MU	-	-	-	C	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey, partly blk organic mudst, wk yellow st
33.6	34.0	Tn3	ZS	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	elog, poss pyritic unit(?)
54.0	58.4	Tn1	ZS	M	IN	MU	-	-	-	M	-	OX	LGR	-	-	-	S	-	G	lt-mid grey mudst, partly yellow mot in ox silty f sst, lim st qtz, lim crusts
58.4	60.0	Tnm	MU	-	-	-	-	-	-	-	M	TR	DGR	-	-	-	S	-	G	yellow mott dk grey mudst, tr carb nodules
60.0	62.0	Tnk	LM	R	IN	ZS	-	-	-	-	C	OX	OWH	-	-	-	S	-	G	bleached mudst, carb rich
64.0	66.0	Tns	LM	M	IN	ZS	-	-	-	-	A	TR	LGR	-	-	-	S	-	G	lt grey to part bleached carb rich mudst, bands?
66.0	71.2	Te2	MS	C	IN	MU	-	-	-	M	-	OX	LGR	P	W	-	S	-	P	bleached ox med sst, some c, interbeds partly white-pinksh bleached lt grey mudst, lim st on clay dots, lim crusts, 5 mudst bands elog
71.2	78.0	Te1b3	MS	-	-	-	-	-	-	M	-	OX	OWH	M	W	-	S	-	G	ox med sst, some c, tr pinkish clay mx, lim crusts
78.0	84.0	Te1b2	CS	-	-	-	-	-	-	M	-	OX	OWH	M	W	-	S	-	G	ox c sst, some vc, tr grit, tr pinkish clay mx, 7% lim crusts
84.0	86.0	Te1b1	VS	-	-	-	-	-	C	C	-	TR	YGR	M	W	-	S	W	G	upper limb of wing, mix str ox and reduc vc-grit sst, lithic<fel<<qtz
86.0	88.0	Te1b1	VS	-	-	-	R	-	M	A	-	TR	YEL	M	W	-	S	W	G	base of l/u sequ, mix v str ox & lesser amount reduc vc-grit sst, lim crusts, minor dk brown reduc mud
88.0	92.0	Te1a	VS	-	-	-	-	-	-	A	-	OX	YEL	M	W	-	S	-	G	med-vc sst, med @ top?, some well rounded grit, minor cherty grains, lim crusts
92.0	94.2	Te1a	VS	-	-	-	A	A	-	-	-	RU	DGR	M	W	-	S	-	G	vc-grit sst, v str reduc, abund humic st on qtz grains, abund py cement
94.2	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 102m

Hole Number: CUM016

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, surface ox, poor SP log
4.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	pinky grey hem stained surface ox day, very minor lim day
12.0	32.0	Tnm	MU	-	-	-	R	-	-	M	-	TR	YGR	-	-	-	S	-	G	lim mottles in lt grey days, minor organic seams & streaks
32.0	38.0	Tnm	MU	M	IN	ZI	C	R	-	M	-	TR	YGR	-	-	-	S	-	G	organic material & py? in silt layers within yellow grey lim mottled day
38.0	45.2	Tnm	MU	M	IN	ZI	R	-	-	M	-	TR	YGR	-	-	-	S	-	G	mainly yellow grey mottled lim day with some minor seams of dk grey-blk day, occasionally silty blk days
48.2	54.4	Tnm	MU	M	IN	ZI	C	-	-	M	-	TR	YGR	-	-	-	S	-	G	organic seams and streaks silty and mainly in lt grey-dk grey days, some lim mottles, minor silicified days, slightly harder
54.4	58.0	Tn1	ZI	M	IN	MU	M	-	-	M	M	TR	YGR	-	-	-	S	-	G	minor yellow mottles in lt grey days
58.0	60.0	Tnm	MU	-	-	-	C	M	R	R	M	RU	DGR	-	-	-	S	-	G	much more organic material, humic day & minor py nodules, common silty layers in day
60.0	64.0	Tnk	LM	-	-	-	-	-	-	M	A	OX	OWH	-	-	-	S	-	G	bleached off white carb rich day, very minor f sst
64.0	68.0	Te2	FS	C	IN	MU	-	-	-	M	-	OX	OWH	-	-	-	S	-	G	mainly f sands with some bleached off white day
72.4	78.0	Te1bb	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	dean white to off white qtz sand, minor pale pink days & ox py nodules
78.0	86.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	some rare lim day & grey day in fel<<qtz sand
86.0	88.0	Te1b1	VS	-	-	-	R	M	-	-	-	RU	DGR	M	P	-	S	-	G	some py & humic days in grey to dk grey reduc sands, mm size qtz pebs, very rare lim day
88.0	97.4	Te1a	VS	-	-	-	R	R	-	-	-	RU	DGR	W	M	-	S	-	G	grey to dk grey qtz, very minor py & humic day, mm size qtz pebs, c @ top-vc @ base, occas lim day
97.4	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

### Hole Number: CUM017

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand/day, v poor elog
4.0	12.0	Tnm	MU	M	MX	SI	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth red hem st mudst, wk silic in patches
12.0	22.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, more yellow st @ top, minor organic streaks
22.0	32.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey occasionally organic rich mudst, 22-24m str organic mud
32.0	34.4	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow lim mott lt grey mudst
34.4	40.0	Tn3	ZS	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow lim mott lt grey mudst & silty f ox sst
40.4	42.2	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	yellow st, lt grey mudsst
58.0	62.0	Tnm	MU	-	-	-	-	-	-	-	C	OX	LGR	-	-	-	S	-	G	white bleached & lt grey unbleached mudst, minor blk organic mud remnant @ 60m
65.0	72.0	Te2	FS	C	IN	MU	-	-	-	M	-	OX	OWH	-	-	-	S	-	G	white f-med sst, bleached white carb rich & grey-green mudst, tr pink day, minor lim crusts, more freq @ base
72.0	74.0	Te1b	MS	-	-	-	-	-	-	R	-	OX	OWH	W	W	-	S	-	G	med ox sst, minor bleached days, tr lim st on day dots, fel<<qtz
74.0	86.0	Te1b	CS	-	-	-	-	-	-	M	-	OX	OWH	W	W	-	S	-	G	c ox sst, minor bleached days, tr lim st on day dots, fel<<qtz, few % grit
86.0	90.0	Te1a	VS	-	-	-	-	-	-	C	-	OX	YGR	M	W	-	S	-	G	vc yellow st ox sst, few % grit to mm pebs, common yellow st qtz grains
90.0	95.0	Te1a	CS	-	-	-	-	-	A	-	-	RU	DGR	M	W	-	S	-	G	dk grey humic st reduc c sst, vc-grit @ base
95.0	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM018

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, mod sp log
4.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	lt grey pink hem-lim surface ox
12.0	24.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	lim mottles in lt grey-yellow grey day, some thin silt bands of blk py? & organic mater
24.0	32.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey-blk day
32.0	35.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	lim mottles in lt grey day, minor silt bands, blk organics
37.5	46.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	some harder silic bands of day, mainly lt grey-yellow grey day

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
48.0	54.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	some blk silty days in mainly yellow grey mottled day, minor carb rich bleaching
62.0	64.0	Tnk	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	S	-	G	bleached white carb rich days & lt grey day, bottom of namba
64.0	66.0	Te2	FS	M	IN	ZI	-	-	-	R	-	OX	OWH	W	W	-	S	-	G	top of sand sequ, some silt (top of f/u sequ), dean qtz rich
66.0	74.0	Te2	MS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	med sands, very minor lim, off white dean qtz, minor fel, some ox py nodules
74.0	82.0	Te1b3	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	dean off white sands, mainly qtz & fel, rare lim day
82.0	86.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	M	P	-	S	-	G	rare lim day in dean qtz-fel vc sand
86.0	88.0	Te1b1	VS	-	-	-	-	-	-	A	-	OX	OWH	M	P	-	S	-	G	very limonitic qtz sand
88.0	92.0	Te1a	VS	C	IN	MU	-	-	A	-	-	RU	DGR	M	M	-	S	-	G	vc sand to grit, qtz grains up to several mm, abund humic day, brown-blk
92.0	96.4	Te1a	VS	-	-	-	M	M	M	-	-	RU	DGR	P	W	-	S	-	G	vc sand with py & organic day, mainly grey qtz, also very rounded lithic frags
96.4	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

### Hole Number: CUM019

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	brown sand, day @ base, mod sp log
4.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem mott grey mudst, days disaggregate in water & flow into hole
12.0	22.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
22.0	32.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey party organic rich mudst, yellow st @ top
32.0	35.6	Tn3	MU	C	IN	FS	R	-	-	C	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & thin? bands off white ox f sst, lim st qtz grains
35.6	42.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-dk grey mudst, yellow mott @ top, blk organic @ base
43.0	46.0	Tn2	MU	C	MX	ZI	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, some zst
48.4	53.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey organic mudst
58.0	61.2	Tnm	MU	-	-	-	M	-	-	-	M	TR	YGR	-	-	-	S	-	G	lt-mid grey, yellow mott, slightly bleached mudst, organic rich @ base
61.2	63.6	Tns	FS	-	-	-	-	-	-	-	-	OX	OWH	-	-	-	S	-	G	elog, sand seam
63.6	66.4	Tnk	LM	-	-	-	M	-	-	-	A	TR	LGR	-	-	-	S	-	G	bleached white carb rich mudst and lt grey to greenish grey mudst
66.4	72.0	Te2	MS	C	IN	MU	-	-	-	M	-	OX	LGR	W	W	-	S	-	G	c-f f/u sequ, mostly med sst, bands grey-green & bleached white day, lim crusts, lim st on day dots
72.0	77.0	Te1b3	CS	-	FU	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	vc-c f/u sequ, bleached ox sst, tr lim crusts, minor bleached day dots, fel<<qtz, 10% grit @ base
77.0	79.2	Te1b2	CS	-	FU	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	elog cycle(?)
79.2	84.8	Te1b1	CS	-	FU	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	elog cycle(?)
84.8	88.0	Te1a	VS	-	-	-	M	-	-	C	-	TR	DGR	M	W	-	S	-	G	vc-grit dk grey transional st, freq lim st qtz grains, fel<<qtz, minor organic mud
88.0	95.6	Te1a	VS	-	-	-	M	C	A	-	-	RU	DGR	M	W	-	S	-	G	vc-grit dk grey reduc sst, v str humic st, fel<<qtz, minor organic mud
95.6	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	M	W	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM020

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, good sp log
4.0	14.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	lt grey pink day, hem-minor lim st from surface ox
14.0	24.0	Tnm	MU	R	IN	ZI	R	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst with thin seams of organic silt @ base
24.0	32.0	Tnm	MU	-	-	-	M	-	R	-	-	RU	DGR	-	-	-	S	-	G	lt-dk grey reduc day, rare lim st/coats, some blk streaks of organics & humic mud
32.0	42.6	Tnm	MU	-	-	-	M	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst minor organic streaks
42.6	43.6	Tn2	MS	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, sand seam
43.6	46.4	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, mudst
46.4	48.8	Tn2	MS	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, sand seam

Dfrom	Dto	Geounit	RK	MA	Rel	Mod	Org	Py	Hum	Lm	Cb	RX	Color	S	R	B	H	U	S	Description
48.8	52.0	Tnm	MU	-	-	-	M	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
52.0	53.0	Tnm	LM	-	-	-	-	-	-	-	C	OX	OWH	-	-	-	S	-	G	off white-lt grey carb rich bleached day
53.0	58.8	Tn1	SZ	M	IN	MU	M	-	-	R	-	TR	YGR	-	-	-	S	-	G	darker reduc clay, sandyr silt beds, very black streaks after py? organics
58.8	62.0	Tnk	LM	-	-	-	-	-	-	-	C	OX	OWH	-	-	-	S	-	G	bleached days, prob carb rich
62.0	66.0	Te2	ZS	M	IN	MU	-	-	-	-	-	OX	OWH	-	-	-	S	-	G	top? of the eyre, silt to vf sst with mudst layers, top? of flu sequ
66.0	71.2	Tem	MU	M	IN	ZI	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	blk day, minor zst (elog)
71.2	78.0	Te1b3	FS	-	-	-	-	-	-	-	-	OX	OWH	W	W	-	S	-	G	vf sst, minor white bleached day
78.0	84.0	Te1b2	CS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	minor lim & pinky day in dean qtz fel sand, some lithics & rare lim coated qtz grains
84.0	86.0	Te1b1	CS	-	-	-	-	-	-	R	-	ox	OWH	m	M	-	s	-	G	base of unit(?) elog
86.0	90.0	Te1a2	CS	-	-	-	A	C	-	-	-	RU	DGR	M	M	-	S	-	G	elog, 2nd cycle(?)
90.0	94.6	Te1a1	CS	-	-	-	A	C	-	-	-	RU	DGR	M	M	-	S	-	G	c-vc dk brown-blk sand, abund humic mud & py nodules
94.6	102.0	Km	MU	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blue grey mudst, eoh 102m

Hole Number: CUM021

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & clay, good sp log
4.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red mott grey mudst, slightly silty, poss tr silic
12.0	22.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, few organic streaks
22.0	24.0	Tnm	ZI	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, zst?
24.0	28.0	Tnm	MU	-	-	-	M	-	-	-	-	TR	LGR	-	-	-	S	-	G	mid grey mudst, organic rich @ top, yellow st top & bottom
28.0	32.0	Tnm	MU	M	IN	ZS	R	-	-	-	-	TR	LGR	-	-	-	S	-	G	mid grey yellow mott mudst, some organic streaks, tr lim st silty sand
32.0	34.0	Tnm	MU	M	IN	ZS	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	lt grey str yellow mott mudst, freq bands? lim st silty sst
34.0	36.4	Tnm	MU	R	MX	ZI	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt-mid grey mudst, minor yellow mott
36.4	37.4	Tn3	SZ	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt-mid grey zst
37.4	42.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	mid grey mudst
42.0	43.6	Tn2	FS	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	elog, sand seam
43.6	54.0	Tnm	MU	M	MX	ZI	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-mid grey yellow mott mudst, tending to silty towards base
54.6	58.2	Tn1	FS	M	IN	MU	-	-	-	-	C	TR	LGR	-	-	-	S	-	G	lt grey to wk bleached carb mudst & f sst, minor yellow mott
58.2	61.6	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	dk grey-blk, yellow mott organic mudst, part ox, leached @ base
61.6	63.0	Tns	FS	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, sand seam
63.0	64.4	Tnm	LM	C	MX	SI	-	-	-	-	A	OX	WHI	-	-	-	H	-	G	hard silic v str bleached ox mudst, carb rich
64.4	69.6	Tnm	MU	C	IN	FS	-	-	-	R	M	TR	LGR	W	W	-	S	-	G	bleached f ox sst & bleached white-lt grey mudst tending to greenish grey @ base, carb rich
69.6	73.0	Te2	MS	C	IN	MU	-	-	-	R	-	TR	LGR	P	W	-	S	-	G	med ox sst & lt grey mudst, minor c grains, some lim st day dots
73.0	78.0	Te1b3	CS	-	FU	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	c ox sst, minor vc grains, coarser to base, some lim st day dots, some pinkish clay, fel<<qtz
78.0	84.0	Te1b2	VS	-	-	-	-	-	-	R	-	OX	OWH	P	W	-	S	-	G	vc-grit ox sst, minor lim crusts
84.0	86.0	Te1b1	VS	-	-	-	M	-	M	M	-	TR	YGR	M	W	-	S	-	G	vc-grit ox sst, mm frag lim crusts, some brown-blk organic mud, lim st on qtz grains, humic st as well, transitional
86.0	90.0	Te1a2	VS	-	-	-	R	C	A	-	-	RU	DGR	M	W	-	S	-	G	elog, 2nd cycle
90.0	94.4	Te1a1	VS	-	-	-	R	C	A	-	-	RU	DGR	M	W	-	S	-	G	vc-grit sst, mm frag py cement, abund humic, a few mm rounded pebs
94.4	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 102m

Hole Number: CUM022

0.0	4.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand, mod sp log
4.0	14.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	lt grey-pink hem st mudst-zst, some minor lim st
14.0	28.0	Tnm	MU	-	-	-	R	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, streaks organic matter

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
28.0	32.0	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	much darker blk-grey mudst, some organic rich seams
32.0	36.6	Tnm	MU	-	-	-	R	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, some organic streaks
36.6	38.0	Tn3	FS	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	elog, sand seam
38.0	42.8	Tnm	MU	-	-	-	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey mudst, partly organic rich
42.8	48.4	Tn2	MU	C	IN	FS	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	prob ox yellow sands and grey mudst
48.4	52.0	Tnm	MU	-	-	-	M	-	-	M	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, minor organic streaks
52.0	54.0	Tnm	LM	-	-	-	-	-	-	-	A	OX	OWH	-	-	-	M	-	G	bleached white days, minor siltrete
54.0	59.2	Tn1	ZS	M	IN	MU	M	-	-	-	-	RU	DGR	-	-	-	S	-	G	grey-bk organic mudst and silty sand(?) elog
59.2	62.0	Tnk	LM	M	MX	SI	-	-	-	-	A	OX	OWH	-	-	-	S	-	G	white bleached carb rich day, silic in parts
62.0	64.0	Tns	FS	-	-	-	-	-	-	-	-	OX	OWH	-	-	-	S	-	G	elog, sst band
64.0	68.0	Tnm	MU	M	IN	FS	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	yellow lim st mudst and f sst bands
68.0	71.0	Te2	MS	-	-	-	-	-	-	R	-	OX	OWH	W	W	-	S	-	G	med sand with minor silt layers, some rare yellow lim day & pinkish day, sand coarser at bottom
71.0	84.0	Te1b	CS	-	FU	-	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	c-vc ox sand, rare lim coating on qtz, lim day, also rare pinkish day
83.0	89.2	Te1a2	VS	-	-	-	-	-	-	A	-	OX	OWH	M	P	-	S	-	G	orange and yellow lim coating on 50% qtz grains, close? to front, v minor ox py nodules
89.2	95.2	Te1a1	VS	-	-	-	C	C	-	-	-	RU	DGR	P	M	-	S	-	G	dk grey sands, some mm size qtz & lithic frags, common humic mud & py, basal sand
95.2	102.0	Km	BA	-	-	-	-	-	-	-	-	RU	BLA	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM023

0.0	3.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sandy soi
3.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
12.0	22.0	Tnm	MU	-	-	-	R	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, @ 20m organic streaks & str yellow st
22.0	30.0	Tnm	MU	-	-	-	C	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey partly organic mudst
30.0	34.0	Tnm	MU	-	-	-	M	-	-	-	-	TR	DGR	-	-	-	S	-	G	mid grey partly organic mudst, minor yellow st
34.0	36.0	Tnm	MU	M	MX	ZS	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & traces silty f sst, wk bleached
36.0	50.0	Tnm	MU	-	-	-	M	-	-	-	-	TR	DGR	-	-	-	S	-	G	lt-mid grey partly organic mudst, tr-minor yellow st only, 42-46m dk grey organic rich
50.0	52.0	Tnm	MU	M	MX	ZS	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey wk yellow mott mudst & traces silty f sst
52.0	62.0	Tnm	MU	J	MX	ZS	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey wk yellow mott mudst & irregular traces silty f sst
62.0	66.0	Tnm	MU	-	-	-	-	-	-	-	-	OX	LGR	-	-	-	S	-	G	lt grey-white partly str bleached grey mudst, wk yellow st
66.0	70.0	Tnm	MU	-	-	-	C	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey organic mudst
70.0	72.0	Te2	MU	M	IN	FS	M	-	-	R	-	TR	DGR	-	-	-	S	-	G	grey-brown ox f sst in dk grey organic mudst, tr lim st on days & tr lim crusts
72.0	79.0	Te1b	VS	M	FU	MU	-	-	-	R	-	OX	OWH	M	W	-	S	-	G	f/u sequ, off white, med-vc bleached sst, much ox pinkish day dots after organic mud, tr lim crusts, minor grey interbedded mudst, fel<<qtz
79.0	86.0	Te1b	VS	-	-	-	A	-	A	-	-	RU	BLK	M	W	-	S	-	G	vc-grit sst, mm lignite frag, humic st, day frag, abund dk-brown organic mud-zst-f sst, blk oily water
86.0	88.0	Te1a	MS	-	-	-	-	-	A	-	-	RU	BLK	W	W	-	S	-	G	med humic sst
88.0	91.0	Te1a	CO	-	FU	-	M	-	C	-	-	RU	DGR	M	W	-	S	-	G	gnity cong, minor mm frags lignite, rare mm qtz pebs, cleaner @ base
91.0	102.0	KM	BA	-	-	-	-	-	-	-	-	--	--	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM024

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wind blown surface sand
2.0	12.0	Tnm	MU	-	-	-	-	-	-	R	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
12.0	24.0	Tnm	MU	-	-	-	R	-	-	R	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, some blk seams of organic clay, minor bleaching 18 - 22m

Dfrom	Dto	Geotunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
24.0	32.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst
32.0	60.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst with minor organic seams
60.0	66.0	Tnm	MU	M	MX	SI	-	-	-	R		OX	LGR	-	-	-	M	-	G	bleached off white-lt grey day, minor lim streaks & some silcrete
66.0	70.0	Tnm	MU	-	-	-	R	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst
70.0	76.0	Tnm	MU	C	MX	FS	M	-	-	R		RU	LGR	-	-	-	S	-	G	l-dk grey day, f-med sst mix in minor lim day, lim coating on 5% grains, dose? to top of eyre
76.0	78.0	Te2	CS	-	-	-	-	-	-	R		OX	LGR	W	W	-	S	-	G	pink oxidised humic mud & minor lim coating on qtz grains, some grey days
78.0	86.0	Te2	MU	C	MX	CS	A		A	-		RU	DGR	-	-	-	S	-	G	dark brown humic mud, lignite & brown sands
86.0	88.0	Te2	CS	-	-	-	C	M	C	-		RU	DGR	M	M	-	S	-	G	brown c sst, still minor humic days, some lithic frags up to mm in diameter
88.0	90.0	Te1	VS	-	-	-	R	M	R	-		RU	DGR	P	W	-	S	-	G	vc up to cm size pebs, py cemented sands, well rounded, still minor humic and organic days, basal vc sand
90.0	96.0	Km	MU	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blue grey mudst, eoh 96m

### Hole Number: CUM025

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	sand & soil
2.0	12.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	wth red hem st grey mudst
12.0	22.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, rare streaks mudst
22.0	32.0	Tnm	MU	-	-	-	-	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey partly organic mudst, bleached @ base
32.0	38.0	Tnm	MU	M	MX	SZ	-	-	-	C		OX	YGR	-	-	-	S	-	G	lt grey str yellow mott mudst & freq traces ox f sandy zst, tan color qtz grains
38.0	42.0	Tnm	MU	-	-	-	-	-	-	-		RU	LGR	-	-	-	S	-	G	mid grey mudst, yellow mott @ top
42.0	48.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
48.0	54.0	Tnm	MU	M	MX	SZ	-	-	-	C		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, sandy silt, tan col qtz grains
54.0	58.0	Tnm	MU	C	MX	SZ	R	-	-	C		OX	OWH	-	-	-	S	-	G	white bleached lt grey yellow mott mudst, sandy silt, poss tr f ox sst
58.0	62.0	Tnm	MU	-	-	-	R	-	-	-		TR	LGR	-	-	-	S	-	G	lt-mid grey mudst, tr organic material
62.0	64.0	Tnm	MU	-	-	-	-	-	-	-		OX	WHI	-	-	-	M	-	G	str bleached wk silic mudst & pale green clay remnants
64.0	71.0	Tnm	MU	-	-	-	-	-	-	-		RU	DGR	-	-	-	S	-	G	mid-dk grey mudst
71.0	78.0	Te2	CS	M	FU	MU	-	-	-	M		OX	OWH	P	W	-	S	-	G	med-c poorly sorted sst, vc grains @ base, minor lim st on clay dots, poss few mudst beds, poss several thin f/u sequ
78.0	80.0	Te1	VS	-	-	-	-	-	-	C		OX	YGR	M	W	-	S	-	G	vc-grit sst, distinct yellow tinge
80.0	84.0	Te1	VS	-	-	-	-	-	-	M		OX	OWH	M	W	-	S	-	G	vc-grit sst, tr pinkish clay dots, tr pinkish cement, some lim crusts
84.0	86.0	Te1	VS	-	-	-	-	-	A	-		RU	DGR	P	W	-	S	-	G	vc-grit sst, some med grains, abund humic st
86.0	93.0	Te1	VS	-	-	-	R	C	C	-		RU	LGR	M	W	-	S	-	G	vc-grit sst, some dk brown organic mudst
93.0	102.0	Km	BA	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM026

0.0	4.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	wind blown surface sands
4.0	12.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	wth red hem st grey mudst
12.0	18.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
18.0	34.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	blk dk grey days, some organic seams in blk day
34.0	56.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
56.0	60.0	Tnm	MU	M	MX	SI	-	-	-	R		OX	LGR	-	-	-	S	-	G	light grey & bleached whtei days, minor silcrete, some firmer silic days
60.0	63.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst minor blk organic streaks
63.0	68.0	Tnm	MU	M	MX	SI	-	-	-	R		OX	OWH	-	-	-	S	-	G	off white minor lim st on clay, minor silcrete
68.0	74.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	dk grey day with minor organic seams
74.0	78.0	Te2	MS	-	-	-	-	-	-	R		OX	OWH	-	-	-	S	-	G	rare lim in off white ox m-c sst
78.0	82.0	Te2	CS	-	-	-	-	-	-	R		OX	OWH	-	-	-	S	-	G	rare lim and ox humic days, c-vc-grit, minor ox tarnished py

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
82.0	86.0	Te1	MS	-	-	-	-	-	-	C		OX	OWH	-	-	-	S	-	G	rare lim and ox humic clays in med-c sst, minor ox tarnished py
86.0	88.0	Te1	CS	-	-	-	-	-	M	M		TR	YGR	-	-	-	S	-	G	common lim on qtz grains & minor humic clay
88.0	90.0	Te1	CS	-	-	-	-	R	M	-		RU	DGR	-	-	-	S	-	G	darker c sst & humic mudst, grey st qtz
90.0	96.0	Km	MU	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blue grey mudst, eoh 96m

Hole Number: CUM027

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	sand & soil
2.0	12.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, minor silty layers
12.0	24.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
24.0	34.0	Tnm	MU	-	-	-	M	-	-	-		RU	LGR	-	-	-	S	-	G	lt-mid grey partly organic mudst
34.0	38.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
38.0	46.0	Tnm	MU	-	-	-	R	-	-	-		RU	LGR	-	-	-	S	-	G	lt-mid grey weakly organic mudst, rare organic streaks
46.0	54.0	Tnm	MU	-	-	-	R	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
54.0	62.0	Tnm	MU	M	MX	SZ	R	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, traces f sandt slt, @ 60m wk bleached, @ base organic rich
62.0	64.0	Tnm	MU	C	IN	VS	C	-	-	-		TR	YGR	-	-	-	S	-	G	str yellow st organic mudst & thin? seams vc qtz sst (poss ox?)
64.0	66.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
66.0	72.0	Tnm	MU	-	-	-	-	-	-	-		TR	LGR	-	-	-	S	-	G	wk bleached lt grey to green-grey mudst, more bleached @ top
72.0	77.0	Tnm	MU	-	-	-	-	-	-	-		RU	LGR	-	-	-	S	-	G	lt-mid grey mudst
77.0	84.0	Te2	CS	-	FU	FS	M	-	R	C		OX	OWH	M	W	-	S	-	G	c-f flu sst sequ, str ox @ base, rest transitional, abund pinkish clay after partial ox of organic matter, lim crust & lim st on qtz, rare humic st remnants, unox organic frag, fel<<qtz
84.0	90.0	Tem	LG	-	-	-	A	-	-	-		RU	BLK	-	-	-	S	-	G	blk foul smelling f soft lignite
90.0	92.0	Te1	CS	-	-	-	-	-	A	-		RU	DGR	P	W	-	S	-	G	med-c-vc sst, abund humic sl, few % grit, rare mm pebs, fel<<qtz
92.0	96.0	Km	BA	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blk mudst, eoh 96m

Hole Number: CUM028

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	sand & soil
2.0	12.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, some f sand @ base
12.0	16.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
16.0	32.0	Tnm	MU	-	-	-	R	-	-	-		RU	LGR	-	-	-	S	-	G	lt-mid grey weakly organic mudst, occas organic streaks
32.0	36.0	Tnm	MU	M	MX	ZI	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, traces zst
36.0	42.0	Tnm	MU	-	-	-	-	-	-	-		TR	LGR	-	-	-	S	-	G	lt-mid grey occas organic streaked mudst, rare yellow st
42.0	44.0	Tnm	MU	C	IN	ZS	C	-	-	-		RU	DGR	-	-	-	S	-	G	lt-mid grey organic mudst & grey silty f sst
44.0	56.0	Tnm	MU	M	MX	ZI	R	-	-	-		TR	YGR	-	-	-	S	-	G	str yellow (ox?) @ top, lt grey yellow mott mudst, partly silty, rare organic streaks
56.0	60.0	Tnm	MU	C	IN	ZS	-	-	-	M		OX	LGR	-	-	-	S	-	G	lt grey partly bleached mudst & silty f ox sst, minor lim st on qtz grains
60.0	66.0	Tnm	MU	C	IN	ZS	-	-	-	C		OX	YGR	-	-	-	S	-	G	lt grey yellow mott partly bleached mudst & silty f ox sst, str lim st on qtz grains
66.0	72.0	Te2	ZS	C	IN	MU	-	-	-	M		OX	OWH	P	M	-	S	-	G	interbeds?, bleached med gd silty sand & off-white-lt grey silty mudst, minor lim st on clay
72.0	78.0	Te2	MS	-	-	-	-	-	-	M		OX	OWH	M	W	-	S	-	G	mostly med sst, some c grains, abund ox pinkish silty f sst frags (partly silic), tr lim crusts, fel<<qtz
78.0	83.0	Te1b	VS	-	-	-	-	-	-	R		OX	OWH	M	W	-	S	-	G	vc-grit sst, rare mm pebs @ base, fel<<qtz, tr tarnished py nodule
83.0	86.0	Te1a	VS	-	FU	MU	-	-	-	R		OX	OWH	P	W	-	S	-	G	@ top pinkish bleached mud, vc-grit sst, occas mm pebs
86.0	88.0	Te1a	VS	-	-	-	-	-	-	C		OX	YEL	M	W	-	S	-	G	partly str yellow st vc sst, fel<<qtz, few % grit
88.0	90.0	Te1a	VS	-	-	-	-	-	A	-		RU	DGR	P	W	-	S	-	G	humic st med-vc sst, fel<<qtz, few % grit
90.0	96.0	KM	BA	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blk mudst, eoh 96m

Hole Number: CUM029

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
0.0	3.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	wind blown surface sand
3.0	14.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
14.0	22.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst with minor organic seams & streaks
22.0	32.0	Tnm	MU	-	-	-	R	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst with some blk seams & darker layers of clay
32.0	36.0	Tnm	MU	-	-	-	R	-	-	-		RU	DGR	-	-	-	S	-	G	lt grey yellow mott mudst with minor organic seams and streaks
36.0	46.0	Tnm	MU	-	-	-	R	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst
46.0	60.0	Tnm	MU	-	-	-	M	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst some very blk seams and streaks
60.0	64.0	Tnm	MU	-	-	-	-	-	-	R		OX	OWH	-	-	-	S	-	G	bleached white to lt grey clays with minor silcrete, slightly harder clays
64.0	68.0	Tnm	MU	-	-	-	-	-	-	R		OX	LGR	-	-	-	S	-	G	less clay ?top of Te2 some rip off clasts rare lim clay and coating on qtz grains
68.0	72.0	Te2	MS	-	-	-	-	-	-	R		OX	OWH	W	M	-	S	-	G	med-c sst, some clay off white-white, very rare lim coating on qtz grains & lim st
72.0	78.0	Te2	CS	-	-	-	-	-	-	R		OX	OWH	M	M	-	S	-	G	c-vc sand, minor humic clays that have been ox to pink clay, some minor lim coating on qtz grains, minor fel
78.0	84.0	Te2	VS	-	-	-	-	-	-	R		OX	OWH	M	M	-	S	-	G	mainly vc sand, still some minor humic clays that have been ox to pink clay some minor lim coating on qtz grains, minor fel
84.0	88.0	Te1	VS	-	-	-	-	R	-	C		OX	OWH	M	M	-	S	-	G	common lim coating on qtz grains, some large mm size pebbles, very rounded
88.0	90.0	Te1	VS	-	-	-	M	R	-	-		RU	DGR	P	M	-	S	-	G	v reduced vc sands, some py, some humic clays, qtz pebs up to mm size
90.0	96.0	Km	MU	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	blue grey mudst, eoh 96m

Hole Number: CUM030

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	sand & soil
2.0	6.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, somewhat silty in patches
6.0	18.0	Tnm	MU	I	MX	ZI	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, irreg traces of silt
18.0	24.0	Tnm	ZI	M	MX	CY	-	-	-	-		TR	LGR	-	-	-	S	-	G	lt grey clayey zst, minor yellow mott, esp @ base, few % f ox lim st qtz grains @ base
24.0	30.0	Tnm	MU	I	MX	ZI	-	-	-	-		TR	LGR	-	-	-	S	-	G	lt grey wk yellow mott mudst, traces of silt
30.0	32.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	dk grey organic mudst
32.0	42.0	Tnm	MU	M	MX	ZI	-	-	-	-		RU	LGR	-	-	-	S	-	G	lt grey wk yellow mott mudst, tr irreg silt
42.0	52.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
52.0	54.0	Tnm	MU	C	IN	MS	-	-	-	C		OX	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & ox str lim st med qtz sst, tending to c gd
54.0	60.0	Tnm	MU	C	IN	SZ	-	-	-	M		OX	YGR	-	-	-	S	-	G	lt-mid grey partly organic yellow mott mudst & f sandy ox? zst
60.0	72.0	Te2	ZI	A	MX	CY	R	-	-	R		OX	LGR	-	-	-	S	-	G	lt grey-off white clayey zst, tr f sst, partly bleached ox, rare bk organic remnants?, 62-64m str bleached white, poor sample 70-72m
72.0	80.0	Te2	CS	M	IN	MU	-	-	-	R		OX	OWH	P	W	-	S	-	G	med-c sst, tr vc grains, flu sequ, lt grey to pink bleached mudst
80.0	85.0	Te1b	VS	-	-	-	-	-	-	M		OX	OWH	M	M	-	S	-	G	vc-grit sst, poss pink bleached @ top?, fel<<qtz, lim qtz st increases to base
85.0	92.0	Te1a	VS	-	-	-	M	A	M	-		RU	DGR	?	M	-	S	-	P	poor washed contam samples, vc reduc sst, some dk brown organic mud, mm-cm frag py cement
92.0	96.0	KM	BA	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blue blk mudst, eoh 96m

Hole Number: CUM031

0.0	3.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	sand & soil
3.0	10.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with wk red hem st grey mudst
10.0	18.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
18.0	22.0	Tnm	SZ	A	MX	CY	-	-	-	-		RU	LGR	-	-	-	S	-	G	lt grey clayey f sandy zst
22.0	30.0	Tnm	MU	-	-	-	-	-	-	-		RU	LGR	-	-	-	S	-	G	mid grey organic mudst, freq organic streaks
30.0	36.0	Tnm	MU	C	IN	ZS	-	-	-	C		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & freq beds? silty f lim st ox sst, max amount sand 32-34m

Dfrom	Dto	Geolunit	RK	MA	Rcl	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
36.0	52.0	Tnm	MU	-	-	-	-	-	-	-		TR	YGR	-	-	-	S	-	G	lt grey variable yellow mott mudst. @ 42.58m mid grey organic mudst
62.0	64.0	Tnm	MU	C	MX	SI	-	-	-	M		OX	WHI	-	-	-	M	-	G	bleached white partly silic mudst, minor lim st days
64.0	72.0	Tnm	MU	-	-	-	-	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey party organic mudst
72.0	74.0	Te	CS	C	MX	MS	R	-	-	-		OX	LGR	-	-	-	S	-	G	med-c lt grey wk ox sst, few organic frags, traces pink part ox organic mud/silt, wk ox to transitional redox
74.0	80.0	Te	CS	M	IN	MU	R	-	M	R		OX	LGR	P	W	-	S	-	G	c sst, brownish tinge from part ox humic stain, abund pinkish part ox organic mud/silt, tr only lim st on days
80.0	82.0	Te	VS	-	-	-	-	M	A	R		TR	DGR	P	W	-	S	-	G	med-vc qtz sand, common tarnished py, tr pinksh day, transibonal?
82.0	90.0	Te	VS	-	-	-	-	C	A	-		RU	DGR	P	W	-	S	-	G	c-vc qtz sand, common mm frag py cement, fel<<qtz, few % grit, rare mm qtz pebs
90.0	96.0	Km	BA	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blk mudst, eoh 96m

### Hole Number: CUM032

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	wind blown surface sand
2.0	8.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
8.0	16.0	Tnm	MU	C	MX	ZI	-	-	-	R		SO	LGR	-	-	-	S	-	G	silty vf sst & mudst, pink to light grey hem staining, still in surface ox
16.0	20.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, minor organic streaks/seams in the clay, rare silty layer
20.0	24.0	Tnm	FS	M	MX	MU	-	-	-	C		OX	OWH	W	W	-	S	-	G	f-med sst, common mudst, abundant lim st in both the clay & as coating on the sand grains
24.0	34.0	Tnm	MU	-	-	-	M	-	-	M		TR	YGR	-	-	-	S	-	G	some darker samples, generally lt grey yellow mott mudst
34.0	38.0	Tnm	MS	M	IN	MU	-	-	-	R		OX	OWH	W	W	-	S	-	G	3-4m sand unit, f-med clean qtz-fel sand, some minor lithics and rare lim coating on 10% grains
38.0	42.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst
42.0	60.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst with some more organic rich intervals & minor silty beds throughout
60.0	64.0	Tnm	MU	-	-	-	-	-	-	-		OX	LGR	-	-	-	S	-	G	lt grey-off white bleached days, some hard patches of silcrete
64.0	73.0	Tnm	MU	-	-	-	M	-	-	-		RU	DGR	-	-	-	S	-	G	mid grey organic mudst
73.0	78.0	Te2	MS	-	-	-	R	M	-	M		TR	LGR	M	M	-	S	-	G	med-c transitional sands, some py, some lim qtz grains, pink ox humic days
78.0	80.0	Te2	MS	-	-	-	R	M	-	-		RU	DGR	M	M	-	S	-	G	thin bed of reduced sands, py, organics & humic days all present, abundant grey qtz
80.0	90.0	Te1	MU	-	-	-	A	R	A	-		RU	BRO	-	-	-	S	-	G	brown-dk grey-bk foul smelling hs gas from humic days, very minor sand, poss contamination?
90.0	96.0	Km	MU	-	-	-	-	-	-	-		-	-	-	-	-	S	-	G	blue grey mudst, 96m

### Hole Number: CUM033

0.0	2.0	Q	SU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	wind blown surface sand
2.0	6.0	Tnm	MU	-	-	-	-	-	-	-		SO	BRO	-	-	-	S	-	G	red-brown clay with abund gypsum xsts
6.0	12.0	Tnm	MU	-	-	-	-	-	-	-		SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
12.0	22.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst with some blk organic seams
22.0	24.0	Tnm	MU	C	MX	FS	R	-	-	R		TR	YGR	-	-	-	S	-	G	beds of f sst in mudst, with some lim & organic material
24.0	64.0	Tnm	MU	-	-	-	R	-	-	R		TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, some intervals slightly silty & some mid grey organic mudst
64.0	72.0	?Te2	MU	C	MX	MS	-	-	-	R		OX	OWH	-	-	-	S	-	G	off white-lt grey bleached days, minor lim day & coating on qtz grains
72.0	80.0	Te2	MS	-	-	-	-	-	-	R		OX	OWH	M	M	-	S	-	G	finer clean qtz-fel sand, very minor mudst, ripup chunks of clay?
80.0	90.0	Te2	CS	-	-	-	-	-	-	R		OX	OWH	P	M	-	S	-	G	very lim rich sand @ 90m, with tarnished py, qtz grains to mm in size, rest clean off white sand
90.0	92.0	Te1	VS	-	-	-	-	-	-	A		OX	OWH	P	W	-	S	-	G	very yellow lim qtz, minor tarnished py
92.0	96.0	Te1	CS	-	-	-	-	M	R	-		RU	DGR	W	M	-	S	-	G	clean grey qtz, v minor py, minor lim (contamination?)

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	‘S	Description
96.0	102.0	Km	MU	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blue grey mudst, eoh 102m
<b>Hole Number: CUM034</b>																				
0.0	4.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	wth brown-grey mott mm-cm gypsum xst bearing mudst, thin veneer sol
4.0	10.0	Tnm	MU	M	DS	GY	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth red hem st grey mudst, diss mm-cm gypsum xsts
10.0	16.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
16.0	18.0	Tn3	MU	C	IN	SZ	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & ox str yellow lim st f sandy zst
18.0	30.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey wk yellow mott mudst, @ 22m minor mid grey organic mudst
30.0	36.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	mid grey mudst, occas yellow flecks
36.0	41.0	Tn2b	MU	C	IN	SZ	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & ox str yellow lim st f sandy zst
41.0	44.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	mid grey mudst
44.0	48.0	Tn2a	ZS	C	MX	CY	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott dayey ox str yellow lim st sily f sst
48.0	54.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
54.0	59.0	Tn1a	ZS	C	MX	CY	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott to wk bleached off white dayey to sily f sst
59.0	60.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey mudst
60.0	66.0	Tn1b	ZS	C	MX	CY	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott to wk bleached off white dayey to sily f sst, few % med qtz grains
66.0	68.0	Te2b	FS	M	IN	MU	R	-	-	C	-	OX	OWH	M	M	-	S	-	G	bleached f-med sst & partly bleached mudst, rare remnants? organic mud
68.0	74.0	Te2b	MS	M	FU	MU	-	-	-	M	-	OX	OWH	M	M	-	S	-	G	bleached med sst & partly bleached mudst, freq lim st clay dot, c @ base
74.0	78.0	Te2a	MS	M	FU	MU	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	bleached med sst & partly bleached mudst, freq lim st clay dots, c @ base
78.0	84.0	Te2a	CS	M	FU	MU	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	f/u sequ 84-74m, bsal section, c-vc sst, a few % grit, lim st clay dots, fel<<qtz
84.0	86.0	Te1	VS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	c-vc sst, 10% grit, tr lim st on qtz, fel<<qtz
86.0	90.0	Te1	VS	-	-	-	-	-	C	R	-	TR	LGR	M	M	-	S	-	G	c-vc sst, 10% grit, slightly bleached but still visible humic st, tarnished py, fel<<qtz
90.0	95.0	Te1	VS	-	-	-	-	-	A	-	-	RU	DGR	M	M	-	S	-	G	vc-grit sst, mm frag py cement
95.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	M	-	G	blk mudst, eoh 102m

<b>Hole Number: CUM035</b>																				
0.0	2.0	Q	SU	C	DS	GY	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & soil, gysum xsts below sand dune layer
2.0	6.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth red hem st grey mudst, diss gypsum xsts
6.0	10.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	wth red hem st grey mudst
10.0	12.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
12.0	34.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey partly organic mudst, few patches of wk lim st esp @ top & @ 30m
34.0	38.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
38.0	40.0	Tn2	MS	C	MX	CY	-	-	-	R	-	TR	LGR	P	M	-	S	-	G	yellow mott lt grey dayey f-med qtz sst, rare lim st qtz grains
40.0	46.0	Tnm	MU	M	IN	SZ	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	wk patchy yellow st lt-mid grey mudst & traces f sandy silt
46.0	50.0	Tn1	ZS	C	IN	MU	-	-	-	M	-	OX	YGR	-	-	-	S	-	G	yellow st lt grey sily f qtz sand & mudst
50.0	54.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-mid grey yellow mott mudst, rare mm manganese nodules, partly organic rich
54.0	58.0	Tnm	MU	C	IN	SZ	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst & f sandy silt
58.0	60.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey organic mudst
60.0	66.0	Te2	FS	C	IN	MU	-	-	-	C	-	OX	YGR	P	M	-	S	-	G	lt grey yellow mott f-med sst and mudst, dayey mx in part?, partly bleached, str yellow st qtz grains, fel<<qtz, minor c grains
66.0	74.0	Te2	MS	C	IN	MU	-	-	-	R	-	OX	OWH	P	M	-	S	-	G	bleached med-c sst & mudst, tr yellow st on clay dots, few % vc grains, fel<<qtz

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
74.0	78.0	Te2	MS	-	-	-	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	better sorted med sst, few lim st day dots
78.0	84.0	Te1	CS	-	-	-	-	-	-	R	-	OX	OWH	P	M	-	S	-	G	med-c-vc poorly sorted sst, few lim st day dots, tr lim st on qtz grains
84.0	90.0	Te1	CS	-	-	-	-	-	M	R	-	TR	LGR	P	M	-	S	-	G	less bleached, med-c-vc poorly sorted sst, few lim st day dots, tr lim st on qtz grains
90.0	95.0	Te1	VS	-	-	-	-	C	C	-	-	RU	DGR	M	M	-	S	-	G	c-vc sst, some grit, lithic=fel<qtz, common f gd dk colored py cement, poss finer @ base - poss due to washing
95.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, eoh 102m

Hole Number: CUM036

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & soil
2.0	4.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	v with brown st mudst & diss mm-cm gypsum xsts
4.0	13.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGY	-	-	-	S	-	G	with red hem st grey mudst
13.0	28.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
28.0	30.0	Tn3	SZ	-	-	-	-	-	-	C	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott l sandy zst
30.0	55.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, tr irreg silt, @ 32, 54m mid grey organic mudst
55.0	62.0	Tnm	ZI	A	MX	CY	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey organic zst
62.0	66.0	Tnm	SZ	A	MX	CY	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	wk bleached, yellow lim st, dayey zst to ox f sst
66.0	70.0	Tnm	MU	C	IN	FS	-	-	-	-	-	OX	LGR	-	-	-	S	-	G	lt greenish grey mudst, wk bleached? & off white ox f sst
70.0	72.0	Te2	SI	-	-	-	-	-	-	-	-	OX	WHI	-	-	-	H	-	N	a few chips of silic white clay-sicrete & str silic lt grey f qtz sst, 2 hr drilling
72.0	76.0	Te2	MS	-	-	-	-	-	-	-	-	OX	OFW	?	W	-	S	-	C	contaminated washed samples, mix sand, clay & rare organic clay, prob eyre sands
76.0	88.0	Te1	CS	-	-	-	-	-	-	-	-	OX	OFW	?	W	-	S	-	C	contaminated washed samples, mix sand, clay, prob eyre sands, better sample quality lowards base
88.0	94.0	Te1	VS	-	-	-	C	R	A	-	-	RU	BLK	W	W	-	S	-	G	c-vc organic rich sst, mm flecks lignite, traces brown-blk organic mud, wk r/a seep?, x18 peak @ base
94.0	98.0	Te1	CO	A	PO	OZ	-	-	M	-	-	RU	LGR	M	W	-	S	-	G	clean lithic=fel<qtz cong, mx c-vc sand
98.0	102.0	Km	-	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, 102m

Hole Number: CUM037

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & soil
2.0	6.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, diss gypsum xsts
6.0	9.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
9.0	12.0	Tn3b	MS	-	-	-	-	-	-	C	-	OX	TAN	W	W	-	S	-	G	med-c sst, str ox yellow lim st qtz grains
12.0	19.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	lt grey yellow mott mudst
19.0	24.0	Tn3a	FS	M	IN	MU	-	-	-	C	-	OX	TAN	W	W	-	S	-	G	f-med sst, ox lim st qtz grains, esp @ 24 m & str yellow mottled lt grey mudst
24.0	30.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
30.0	34.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey organic mudst
34.0	50.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
50.0	59.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey organic mudst
59.0	65.0	Te2	MS	M	IN	MU	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	med-c ox sst, rare lim crust, lt grey yellow mott mudst
65.0	71.0	Tem	MU	-	-	-	-	-	-	-	-	OX	WHI	-	-	-	M	-	G	bleached while mudst, poss partly wk silic
71.0	78.0	Te1c	FS	-	-	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	f-med ox sst, rare lim crusts, some bleached clay, fel<qtz
78.0	80.0	Te1c	MS	-	-	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	80-71m f/u sequ, bleached med ox sst, some vc esp @ base, tr lim crusts, tr pinkish clay
80.0	84.0	Te1b	CS	-	-	-	-	-	-	R	-	OX	OWH	W	M	-	S	-	G	f/u sequ c-med, bleached ox sst, fel<qtz
84.0	86.0	Te1a	CS	-	-	-	-	-	M	R	-	TR	LGR	W	M	-	S	-	G	med-c sst, top of f/u sequ, wk bleached with still visible humic st, top of rol?

Dfrom	Dto	Geolunit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
86.0	90.0	Te1a	VS	-	-	-	-	-	M	C	-	OX	YGR	W	M	-	S	-	G	yellowish gray c-vc sst, str yellow lim st of qtz grains esp @ base, some grit grains @ base, ox tongue?
90.0	94.0	Te1a	VS	-	-	-	-	R	C	-	-	RU	DGR	W	W	-	S	-	G	reduc vc-grit sst, rare mm qtz pebs, tr larnished py, lithic=fel<qtz
94.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM038

0.0	2.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & soil
2.0	6.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red & brown mott grey mudst, diss gypsum
6.0	14.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, minor yellow st @ 12m
14.0	18.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, somewhat silty @ base
18.0	28.0	Tn3	FS	M	IN	MU	-	-	-	C	-	OX	YGR	W	W	-	S	-	G	lt grey yellow mott f ox sst, tr med, str lim st on qtz grains, frags pinkish ox clay after organic mud, white bleached clay
28.0	30.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	LGR	-	-	-	S	-	G	wk bleached mudst @ base of sand
30.0	34.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey mudst
34.0	36.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
36.0	44.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid-dk grey partly organic mudst, esp @ base
44.0	46.0	Tn2	CS	C	MX	CY	-	-	-	-	-	RU	DGR	P	M	-	S	-	P	mox? grey clay, organic mud, med-c-vc qtz grains
46.0	54.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-mid grey wk yellow mott mudst, organic rich top & bottom
54.0	59.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	dk grey organic mudst
59.0	60.0	Te2	MS	C	MX	CY	-	-	-	M	-	OX	LGR	?	M	-	S	-	G	lt grey wk ox f-med sst
60.0	62.0	Te2	VS	-	-	-	-	-	-	M	-	OX	LGR	M	M	-	S	-	G	c-vc qtz sst, tr yellow lim st on qtz
62.0	66.0	Tem	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst, beached @ base
66.0	68.0	Te2	VS	-	-	-	-	-	-	M	-	OX	YGR	M	M	-	S	-	G	c-vc qtz sst, some yellow lim st on qtz
68.0	72.0	Tem	MU	-	-	-	-	-	-	-	-	RU	LGR	-	-	-	S	-	G	lt-mid grey mudst
72.0	78.0	Te2	CS	-	FU	MS	-	-	-	R	-	OX	OWH	M	M	-	S	-	G	flu c-med sst, traces pinkish & bleached clay, some lim st dots
78.0	82.0	Tem	LG	C	IN	FS	A	-	-	-	-	TR	BRO	-	-	-	S	-	G	partly ox dk brown soft lignite, some pinkish mottling & f white beached sst
82.0	88.0	Te1	VS	-	FU	-	-	-	-	R	-	OX	OWH	P	M	-	S	-	G	poss flu vc-c-med sst, lithic=fel<<qtz, tr lim st on qtz grains
88.0	94.0	Te1	VS	M	PO	QZ	-	-	M	R	-	TR	LGR	M	W	-	S	-	G	transitional wk ox partially humic st vc pebbly sst, coarser @ base
94.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, eoh 102m

### Hole Number: CUM039

0.0	3.0	Q	SU	-	-	-	-	-	-	-	-	SO	BRO	-	-	-	S	-	G	sand & soil
3.0	6.0	Tnm	MU	C	DS	GY	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst, diss gypsum xsts
6.0	14.0	Tnm	MU	-	-	-	-	-	-	-	-	SO	LGR	-	-	-	S	-	G	with red hem st grey mudst
14.0	18.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
18.0	30.0	Tn3	ZI	C	IN	MU	-	-	-	-	-	OX	YGR	-	-	-	S	-	G	lt grey yellow mott zst & mudst, tending to f sst @ base
30.0	42.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-mid grey variable yellow mott mudst
42.0	46.0	Tnm	MU	-	-	-	-	-	-	-	-	RU	DGR	-	-	-	S	-	G	mid grey mudst
46.0	50.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt grey yellow mott mudst
50.0	52.0	Tn1	FS	C	IN	MU	-	-	-	R	-	TR	LGR	W	M	-	S	-	G	lt grey interbedded f qtz sst & mudst, wk yellow lim st
52.0	60.0	Tnm	MU	-	-	-	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-dk grey wk variable yellow mott mudst, organic rich @ 56m
60.0	62.0	Te1	VC	M	IN	MU	-	-	-	R	-	OX	LGR	M	M	-	S	-	G	c-vc wk ox sst, tr lim st on qtz grains
62.0	67.0	Tem	MU	C	IN	ZS	-	-	-	-	-	TR	YGR	-	-	-	S	-	G	lt-dk grey, partly organic rich, str yellow mott mudst & bands silty f sst
67.0	70.0	Tem	ZS	C	IN	MU	-	-	-	-	-	OX	OWH	P	?	-	S	-	G	interbeds, bleached off white silty f sst & pale green clay remnants, some yellow lim st
70.0	72.0	Tem	MU	-	-	-	-	-	-	-	-	RU	DR	-	-	-	S	-	G	mid grey organic mudst
72.0	78.0	Te2	SI	-	-	-	-	-	-	-	-	OX	WHI	-	-	-	H	-	G	very hard, slow drilling, 2.5 hrs, a few chips of white silcrete, prob bands of lt grey str silic sst & white bleached clay

Dfrom	Dto	Geounit	RK	MA	Rel	Mod	Org	Py	Hum	Lim	Cb	RX	Color	S	R	B	H	U	S	Description
78.0	86.0	Te2	??	-	-	-	-	-	-	-	-	??	???	-	-	-	S	-	C	very much contaminated by mudst frag from above, prob eyre sands
86.0	94.0	Te1	VC	-	-	-	-	-	-	-	-	OX	LGR	-	-	-	S	-	C	washed contaminated c-vc sst, redox? prob ox
94.0	98.0	Te1	VC	-	-	-	M	-	C	-	-	RU	DGR	?	M	-	S	-	M	vc-grit humic sst, better sample but still washed, minor woody fragments
98.0	102.0	Km	BA	-	-	-	-	-	-	-	-	-	-	-	-	-	S	-	G	blk mudst, eoh 102m

## **APPENDIX 2**

### **Curnamona Project**

### **Geophysical Interpretation**

*Prepared By*

**G.O. Dickson & Associates**

*For*

**GOLDMINCO NL**

**November 1997**

**GOLDMINCO**

**CURNAMONA PROJECT**

**GEOPHYSICAL INTERPRETATION**

**PREPARED BY:-  
G O DICKSON & ASSOCIATES**

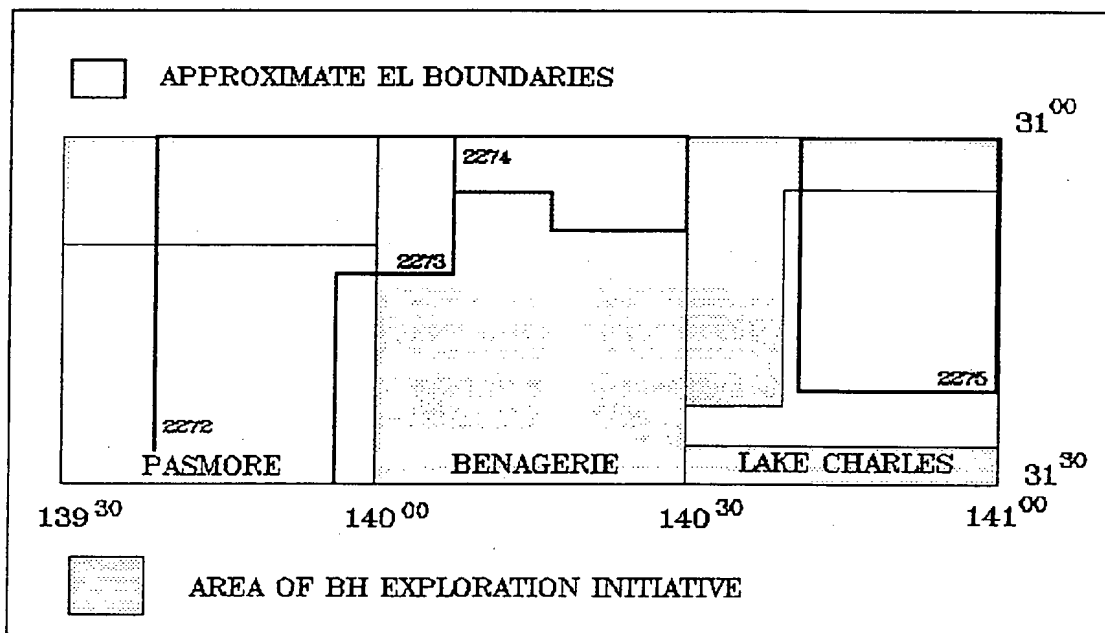
A handwritten signature in black ink, appearing to read 'G O Dickson', with a long horizontal flourish extending to the right.

**NOV 1997**

## 1.0 INTRODUCTION

GOLDMINCO's area of interest lies in the northern part of the Curnamona 1:250,000 sheet. The EL's (2272 through 2275) partly cover the Pasmore 1:100,000 sheet, the northern part of the Benagerie sheet and the Lake Charles sheet.

Digital airborne magnetic data was acquired from the South Australian Department of Mines and Energy (MESA) and AGSO. Gravity for the area was acquired from AGSO. The quality of the data vary considerably and that acquired mainly over the Benagerie sheet, as part of the Broken Hill Exploration Initiative (BHEI), are of higher quality than the earlier data, see figure below. Data levels vary between the data sets and these were adjusted and the data combined in to a single data set. The cartoon figure below shows the 1:100,000 sheet boundaries, the area of the BHEI flying and the approximate boundaries of Goldminco's EL's. The figure is not to scale.



In this report we offer an interpretation of the airborne magnetic and gravity data.

## 2.0 ITEMS ACCOMPANYING THIS REPORT

All images and plans have been produced at a scale of 1:250,000 for this report. 1:100,000 scale plans were produced earlier.

- Contour plan of the Bouguer Gravity for a density of 2.67 grm/cm<sup>3</sup>.
- Images of the pole reduced magnetic response, the first vertical derivative (1VD) of that response and a gain controlled image of the magnetic response.
- Red, green, blue (RGB) image of the Benagerie radiometric data and an image of the potassium by thorium ratio.
- Interpretative plan.

Selected magnetic profiles at A4 size scale are included in the appendix.

## 3.0 SUMMARY and RECOMMENDATIONS

- Deep cover is to be expected in the Pasmore area. There is at least one magnetic anomaly that could be of interest.
- The calc-silicate suite rocks occur in the south eastern corner of EL2273 to the south of an interpreted fault. The area could be prospective.
- Calc-silicate units of the Benagerie sheet continue into the north western part of EL2275. A nose position is interpreted and the area could be prospective.

## 4.0 DATA PROCESSING

Goldminco's EL's generally lie in areas of low magnetic relief. We have computed the 1VD of the pole reduced data and tried a method known as gain control, on the pole reduced data, in an attempt to increase the resolution in areas of lower magnetic relief. The method of gain control is essentially a non-linear compression of the amplitude of the response about a selected value. The processing has been partially successful in emphasising the subtler features but it remains to be seen whether this will have a significant impact on the exploration effort. One of the side effects of this processing is that the joins between the data sets becomes noticeable in these images.

The radiometric data for the Benagerie and Pasmore areas have also been processed and hard copy images produced. The Benagerie data are of some use and some unusual responses are noted in the Uranium channel. Recent cover has affected the response in both areas and the Pasmore data are of little use.

## 5.0 INTERPRETATION

A good deal of exploration has been carried out in the southern and central part of the Benagerie sheet. This is an area of complex folding where folds are re-folded in synclinal and anticlinal structures. The strong magnetic responses are due to magnetite in calc-silicates and one of the targets is stratigraphically equivalent of the Broken Hill lode horizon. However, we are also aware of exploration on the flanks of these structures where there is little or no magnetic response. In at least one case, magnetically responsive units are used as marker horizons.

One area of current exploration interest is labelled A on the interpretation plan. It is clear from the gravity data that a granitoid intrusion of considerable size underlies the area. Detailed interpretation of the magnetic data indicates numerous faults which might be expected in such a structurally complex area. A major north-south fault or shear zone has also been interpreted and this could be of importance to this exploration effort.

We have interpreted two major faults which may be important. Fault **F1** is clearly defined in the southern part of the Benagerie area but there are discontinuities in the magnetic response along a north west path into the Pasmore area. We note that the uranium channel response also tends to be anomalous along this path. Fault **F2** is also clearly defined in the eastern part of the Benagerie area and it strikes into the Lake Charles area where it can no longer be traced because of the lack of magnetic contrast between rock units.

### **5.1 PASMORE, EL'S 2272 & 2273**

Pasmore is the area of lowest gravity response and the form of the response suggests the source is formational rather than intrusive. The source could be a sedimentary basin. The east west variation in gravity across the southern part of Pasmore is approximately  $250 \mu\text{m/sec}^2$ . This suggests fairly deep cover. Simple solutions to the depth of magnetic anomalies 1 and 2 yield depths of around 2000 metres and a similar depth is indicated for magnetic anomaly 3. These estimates have been checked after re-gridding small sections of the map to a very fine grid. Magnetic anomalies 1 and 3 lie near gradients in the gravity field and may be of exploration importance.

**F1** passes into the south east part of EL2273. There is a local depression in the gravity field in this area which may reflect the presence of a granitoid or simply be an extension of sedimentary cover. In any case, the gravity field is changing which signifies a structural change. There may be some exploration potential around the nose of the magnetic anomaly near map reference **B**. The uranium response also tends to increase near reference positions **B** and **C**. We do not understand why this should be but it may be important.

### **5.2 BENAGERIE, EL's 2273 & 2274**

Magnetic anomaly 4 lies on the eastern border of EL2273 just to the south EL2274. The anomaly occurs on a north south dyke and may simply represent a thickening of the dyke but follow up is probably required. A depth of about 400 metres is suggested to the magnetic source.

The very obvious pattern of criss-cross magnetic linears in the northern part of the Benagerie sheet is often indicative of fractures and veining in acid intrusives. The gravity field is slightly depressed here. We may be looking at laccolith type structure with the main feeder in the south eastern corner of EL2273.

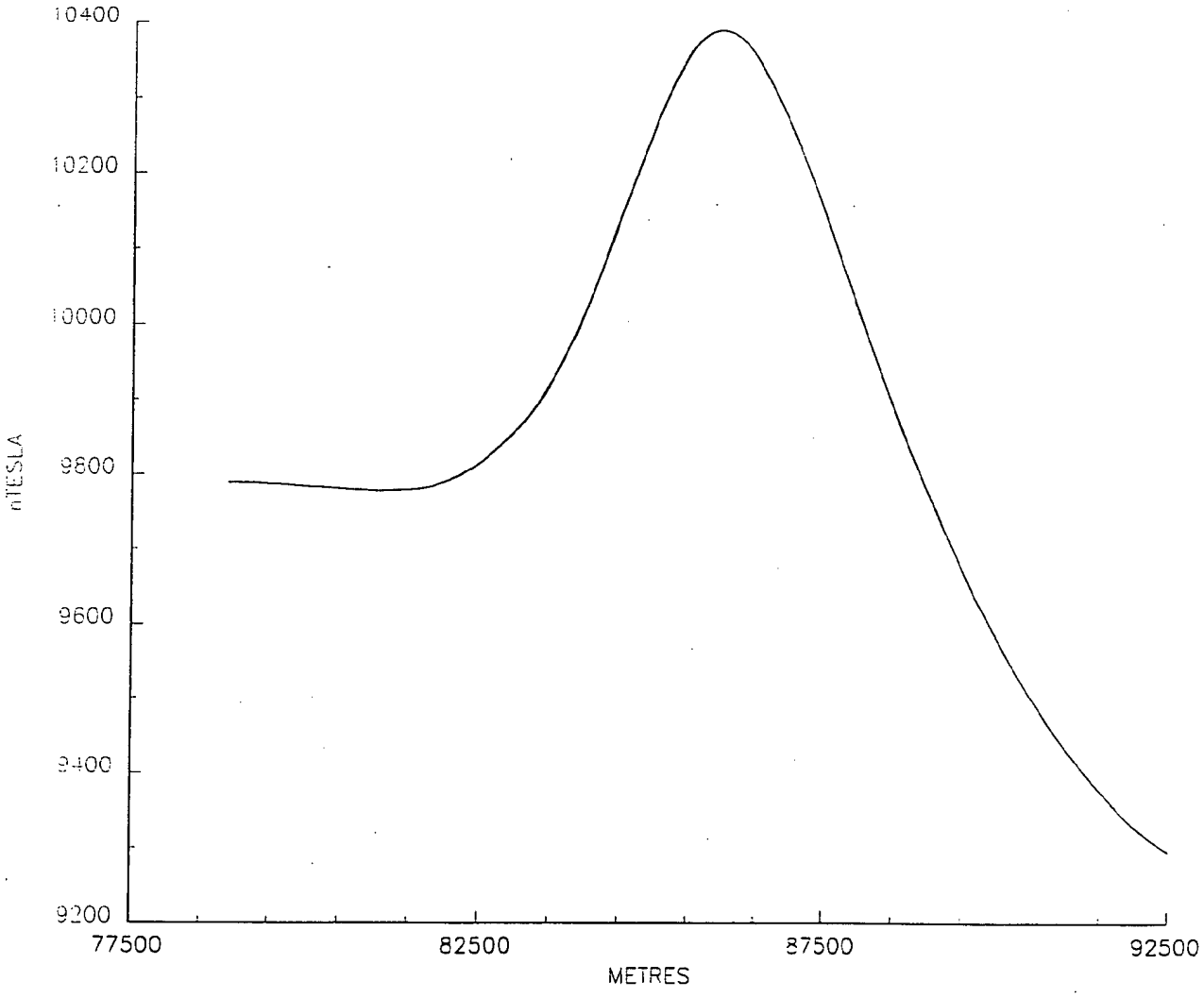
### **5.3 LAKE CHARLES, EL2275**

With the exception of the north western and south eastern parts of EL2275 the area is magnetically very quiet with an elevated gravity response. The gained controlled and 1VD images suggest that the calc-silicates of the Benagerie area continue into the north western part of Lake Charles. The magnetic data suggests that this is a nose position and given that previous exploration in the Benagerie has been around the calc-silicates it could be a prospective area. A calc-silicate suite is also present in the south eastern part of the EL, but perhaps at greater depth.

SELECTED MAGNETIC PROFILES

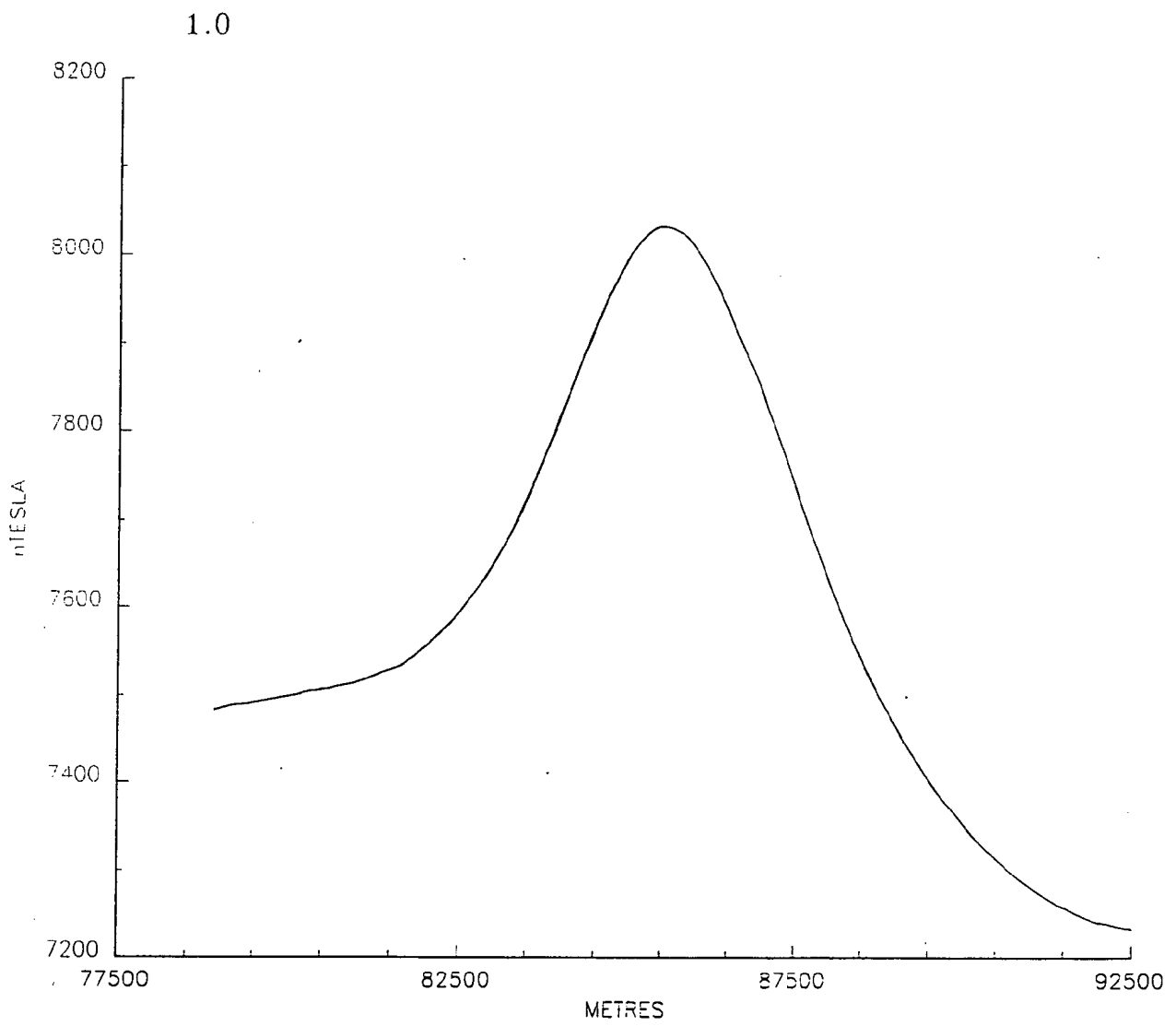
GOLDMINCO  
CURNAMONA PROJECT

1.0



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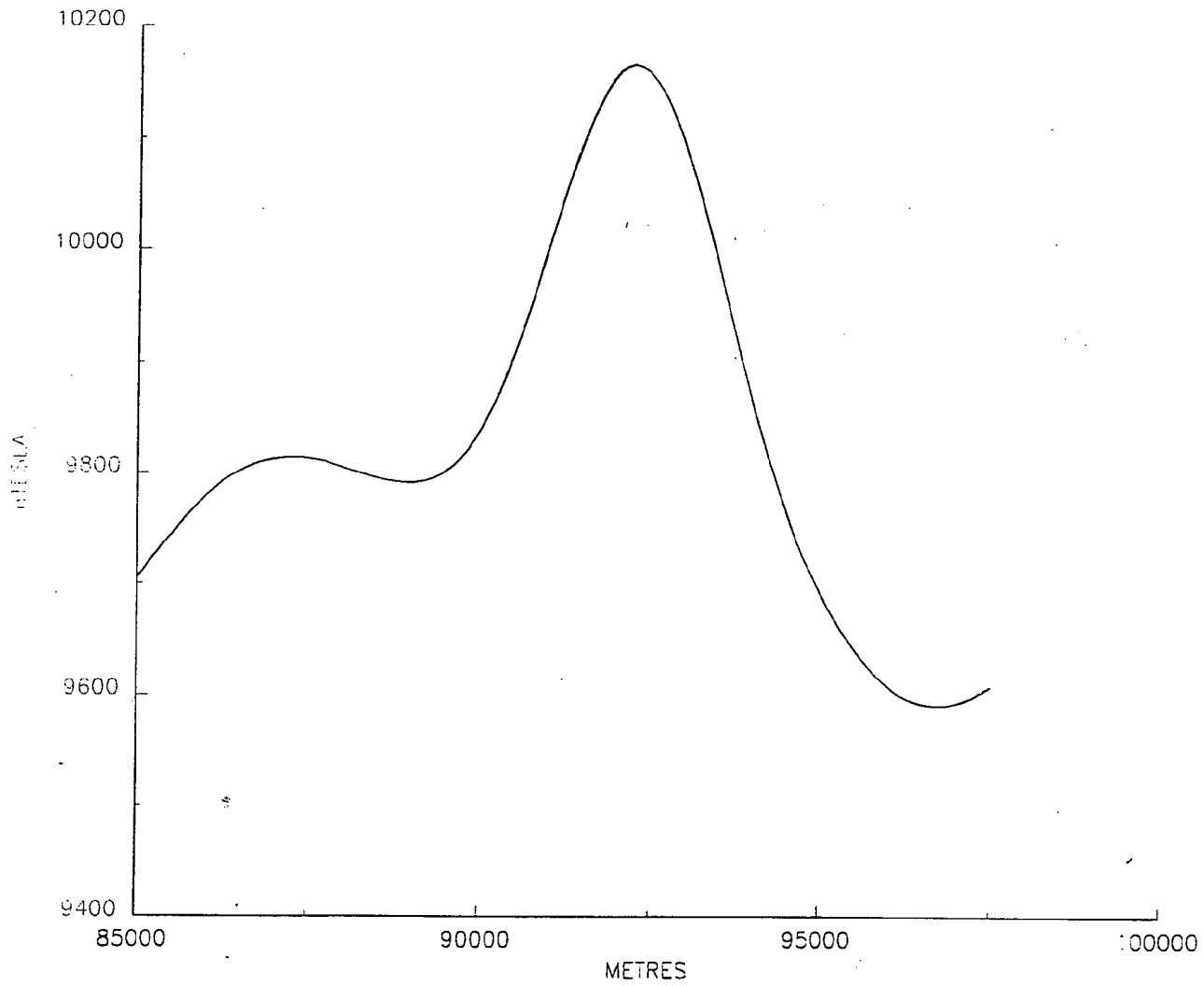
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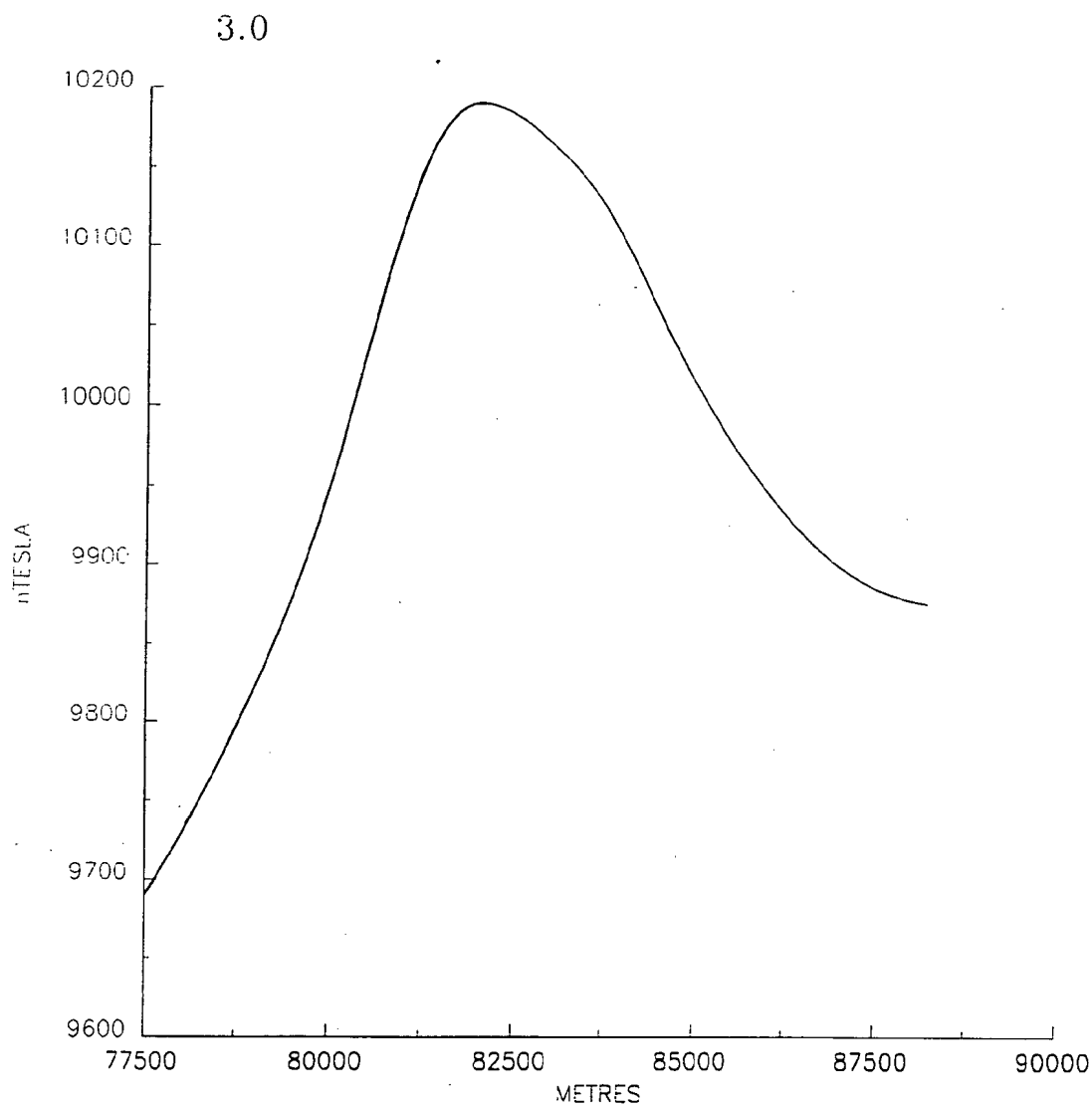
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2.0



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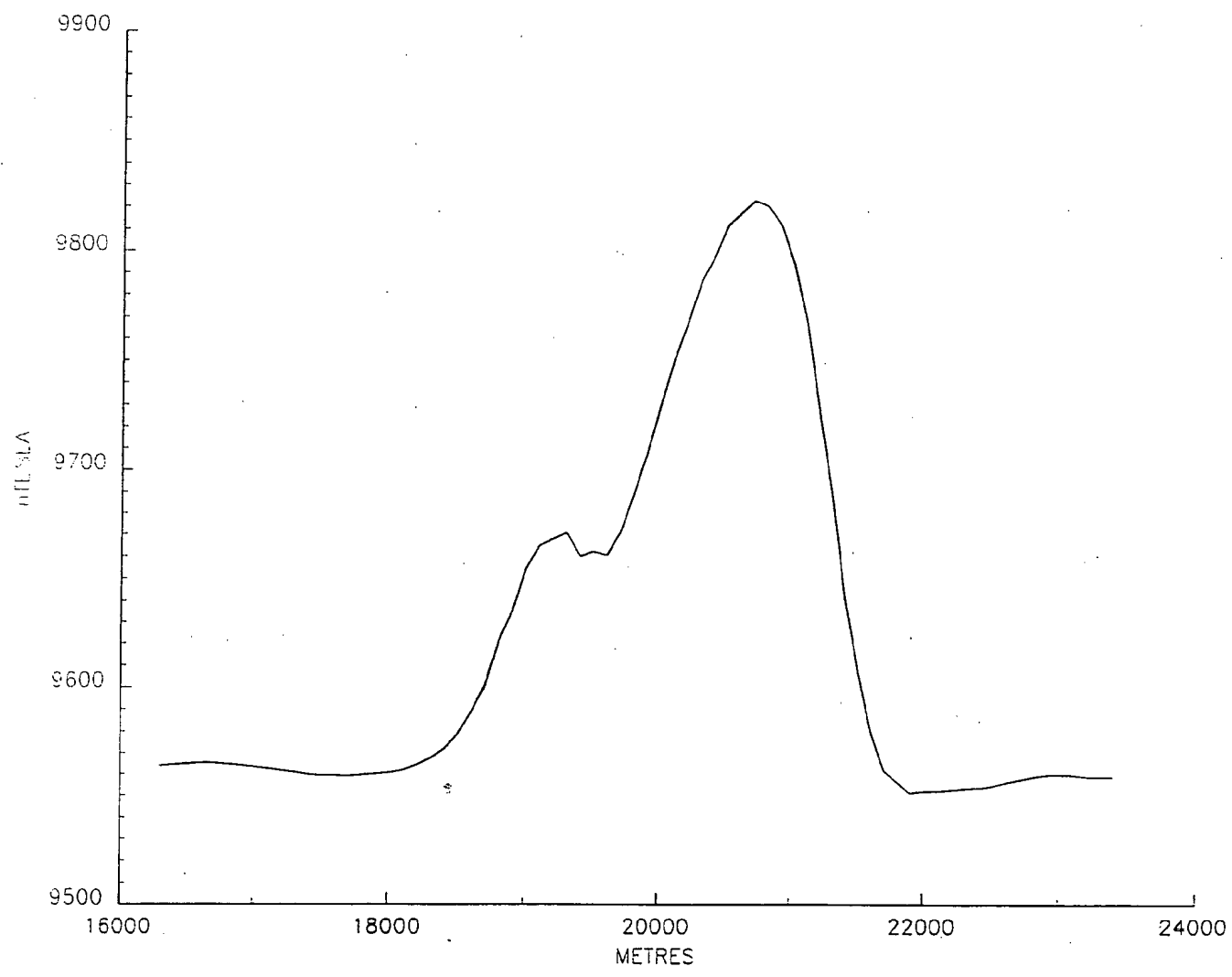
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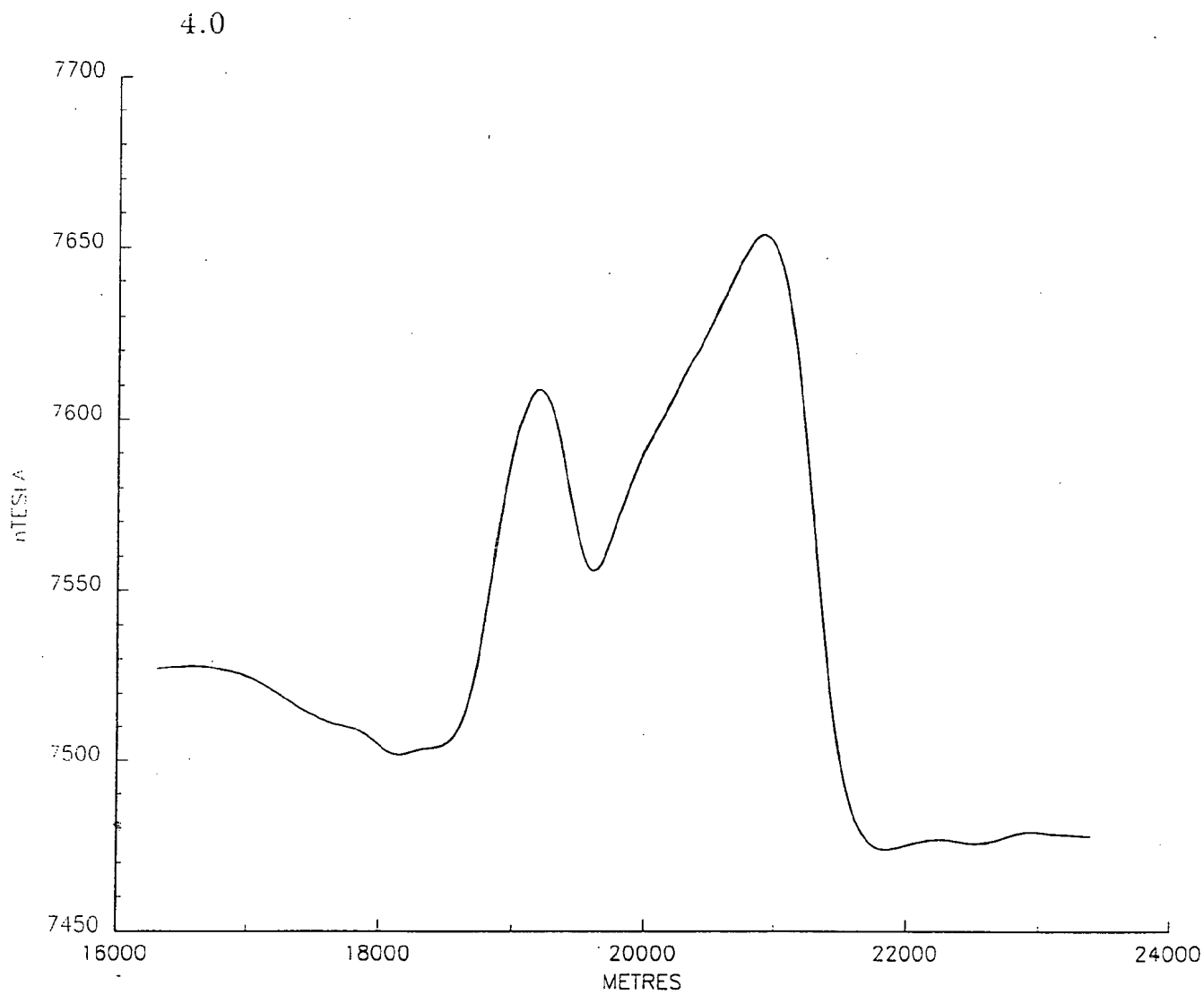
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CURNAMONA PROJECT

4.0



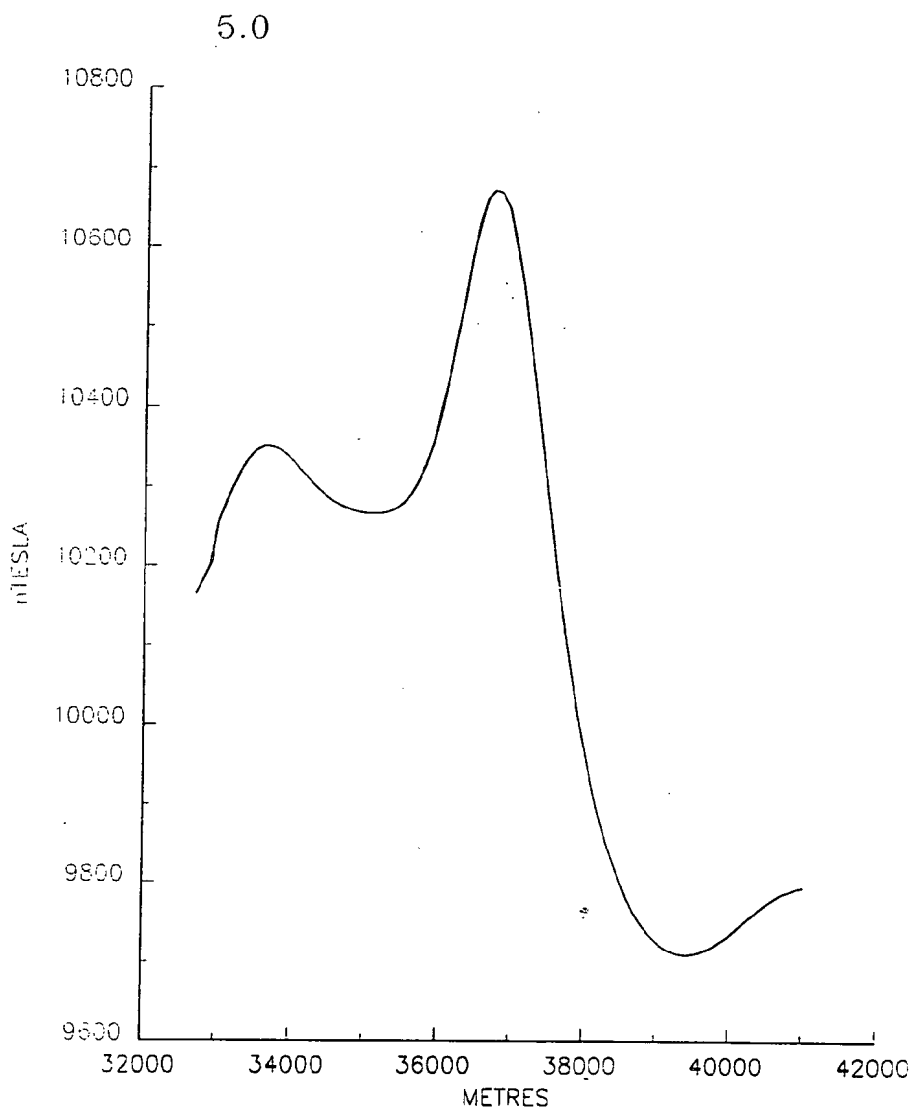
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GOLDMINCO  
CURNAMONA PROJECT



$E = \text{METRES} + 400,000$

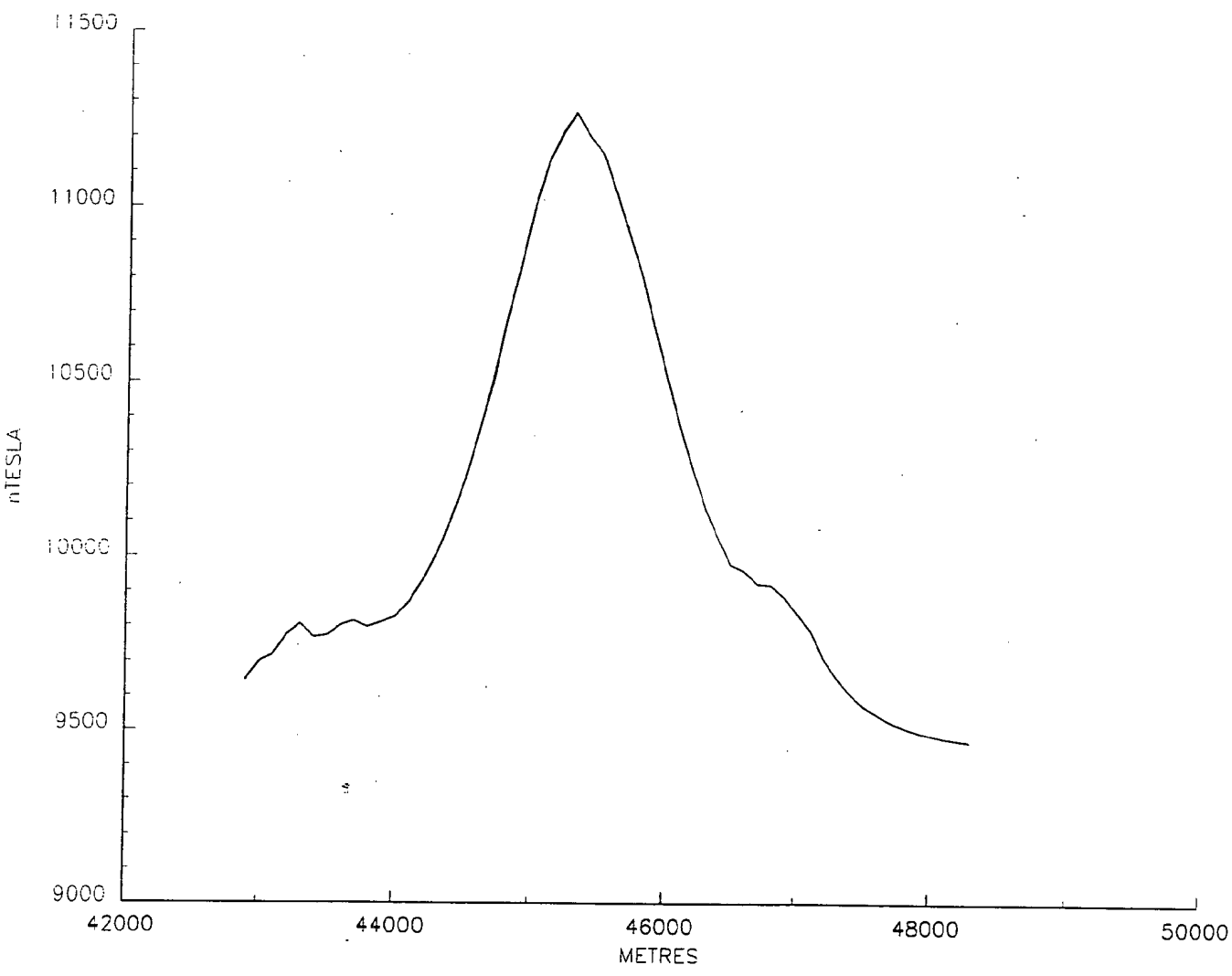
GOLDMINCO  
CURNAMONA PROJECT



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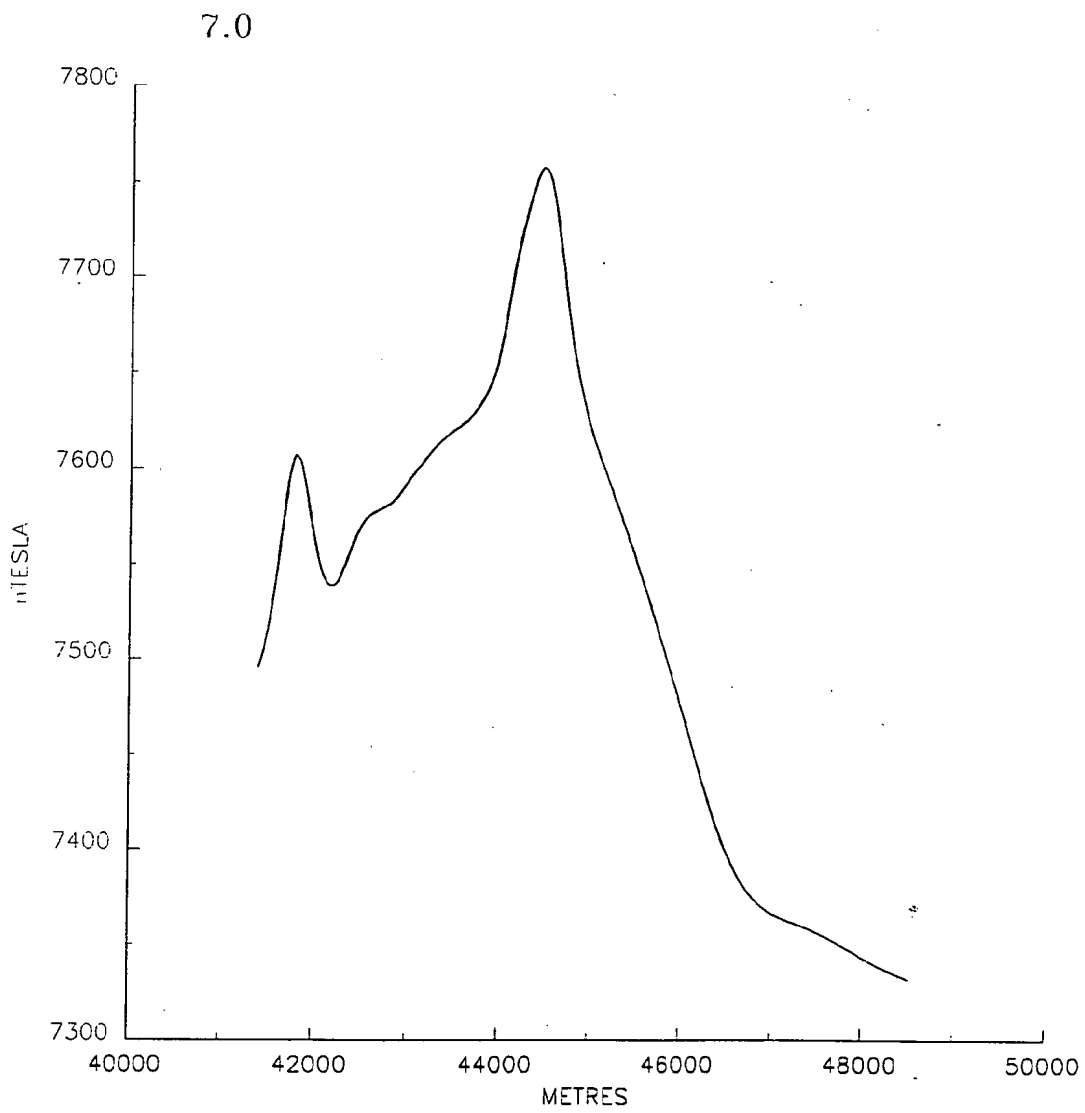
GOLDMINCO  
CURNAMONA PROJECT

6.0



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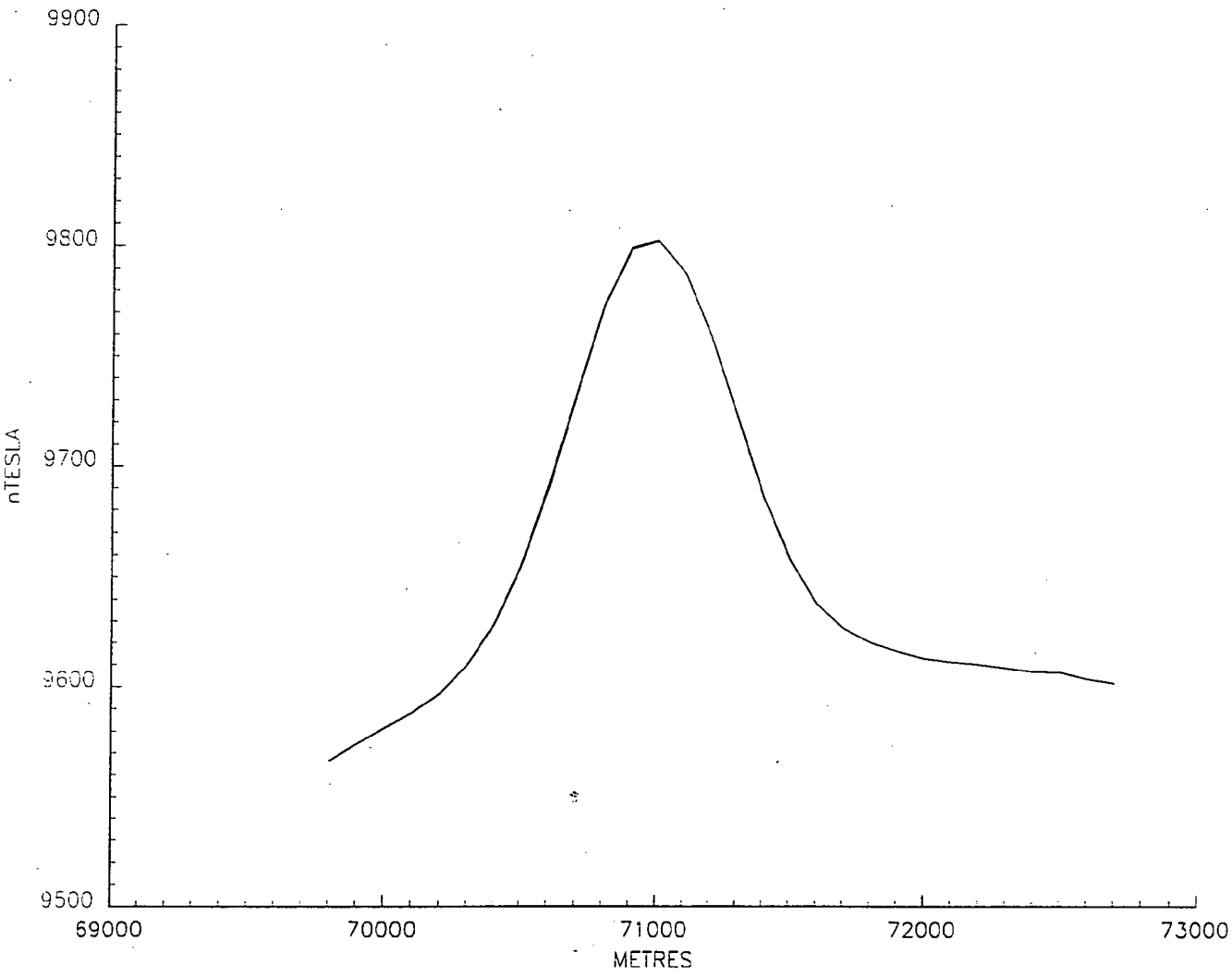
GOLDMINCO  
CURNAMONA PROJECT



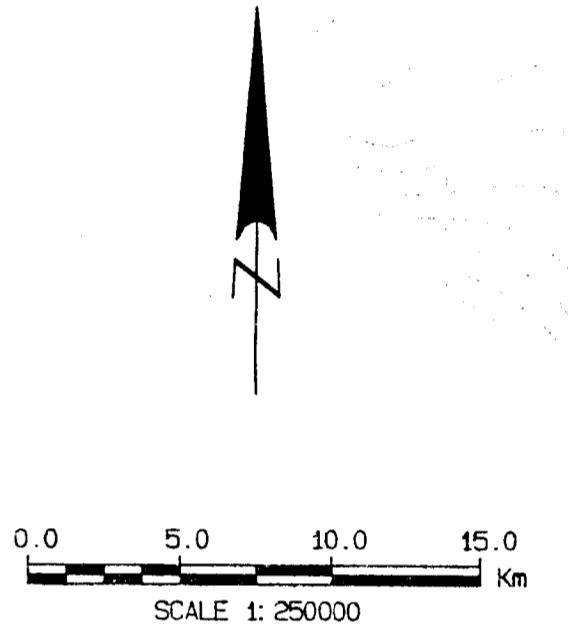
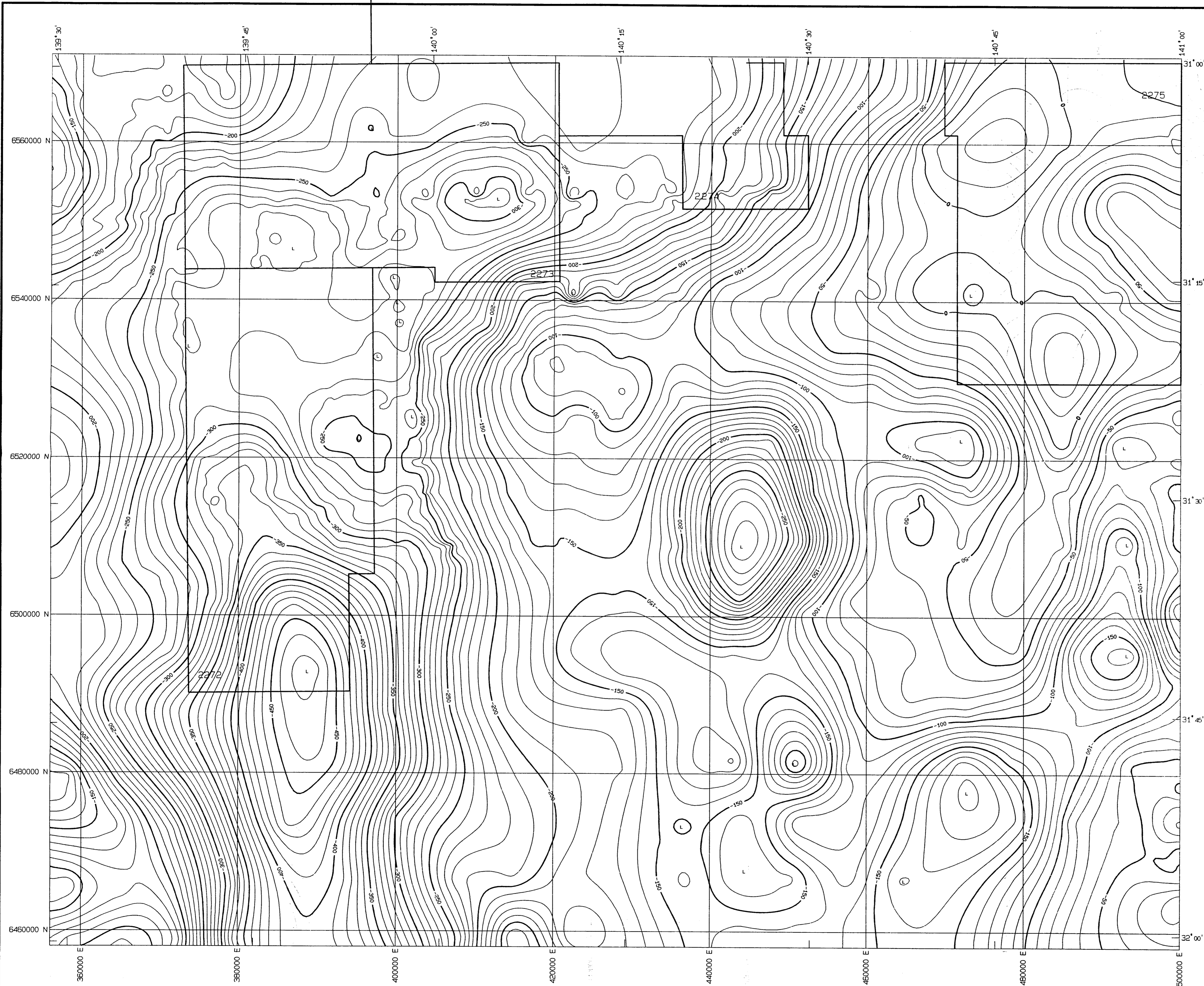
E= METRES+400,000

GOLDMINCO  
CURNAMONA PROJECT

8.0

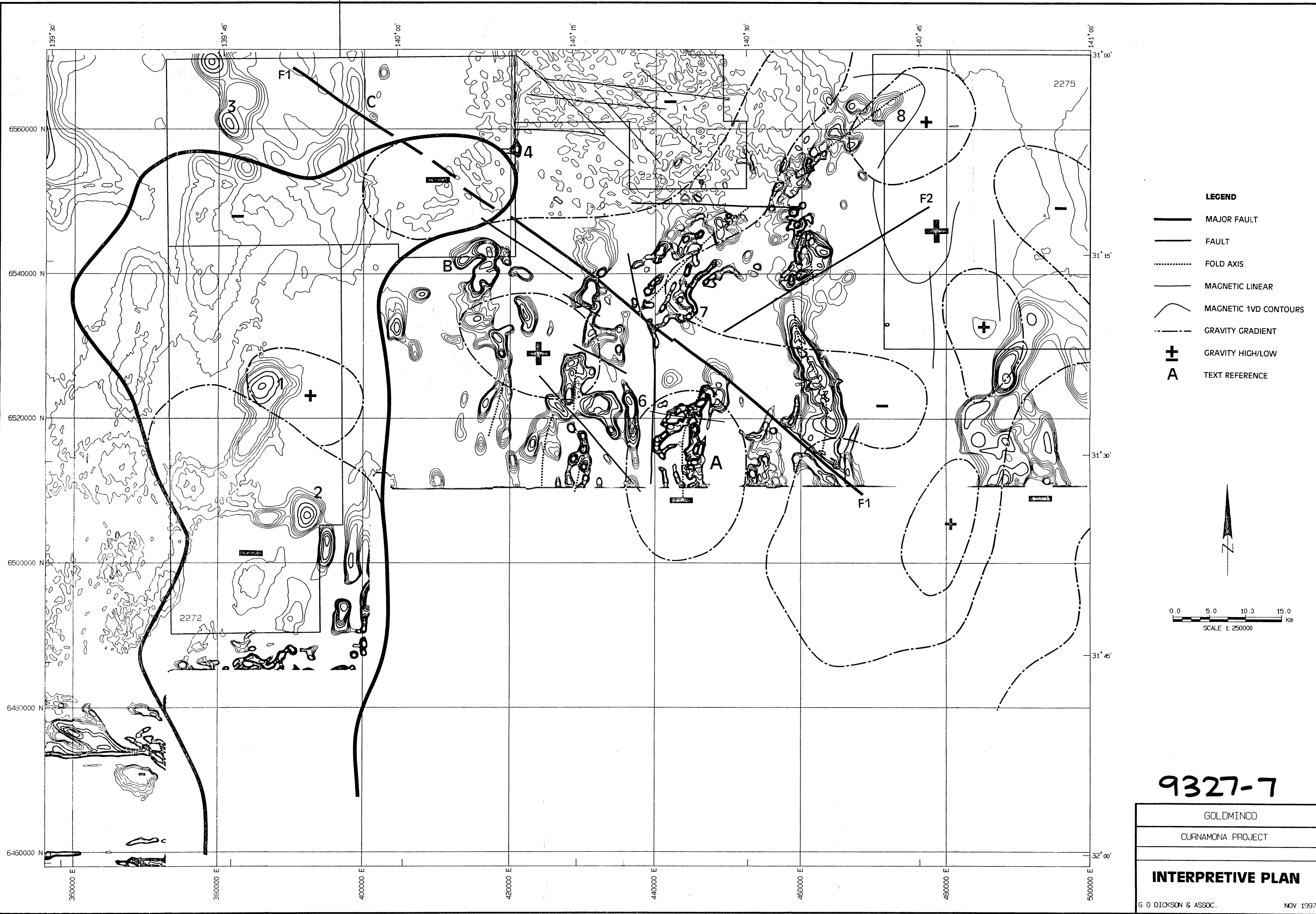


$E = \text{METRES} + 400,000$



9327-6

GOLDMINCO
CURNAMONA PROJECT
CURNAMONA BOUGUER GRAVITY DEN=2.67



139°45'

140°00'

140°15'

140°30'

140°45'

31°  
00'

31°  
15'

31°  
30'

31°  
45'

32°  
00'

560  
000

540  
000

520  
000

500  
000

480  
000

460  
000

360000

380000

400000

420000

440000

460000

480000

CURNAMONA- MAGNETIC DATA REDUCED TO THE POLE

SCALE 1:250,000 IMA 1

9327-8



**PALADIN RESOURCES NL**

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Report No GR9261-4

# PALADIN BRIGHTSTAR JOINT VENTURE

## SECOND ANNUAL REPORT

### EXPLORATION LICENCES 2272-2275

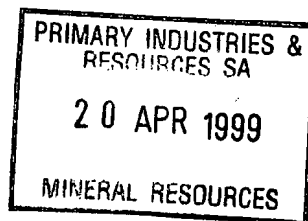
### CURNAMONA URANIUM JOINT VENTURE

### SOUTH AUSTRALIA

20 February 1998  
to  
19 February 1999

Compiled by P.J.Hogarth

April 1999



**Distribution:**

- ☐ Primary Industry and Resources SA (2)
- ☐ Paladin Resources NL (2)
- ☐ Black Range Minerals NL
- ☐ Goldminco NL

Accession No: 1800

PIRSA

R99/00214





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PH:FE  
Ref: F09262:9261/O/9

14 April 1999

Mr George Kwitco  
Company Exploration  
Primary Industry and Resources SA  
GPO Box 1671  
ADELAIDE SA 5001

Dear Sir

**RE: Exploration Licences 2272-2275, Curnamona Uranium Joint Venture**

Please find enclosed two copies of the second annual report on EL's 2272-2275 covering the period 20 February 1998 to 19 February 1999 covering work carried out by Goldminco NL and Paladin Resources NL.

Yours sincerely  
Paladin Resources NL

**PADDY HOGARTH**  
**Tenement Manager**

Encl.

CC: *Keith Weston, Goldminco*  
*John Thevissen, Brightstar Power Corporation*

## SUMMARY

Exploration Licences 2272-2275 were granted on 20 February 1997. The Paladin Brightstar Joint Venture (PBJV), with Paladin as manager, farmed into the tenement area on 22 May 1997, with Goldminco NL retaining rights to the Proterozoic basement.

### Work carried out by the PBJV in the year ended 19 February 1999

- Further negotiations with Native Title Parties to allow access to the land for exploration and drilling activities.
- Continuing research and compilation of previous drilling data including gamma logs, lithology logs and redox maps.
- Drilling of 57 drill holes (5,588 metres) in EL2275.

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1. Curnamona Project, Summary of Open-File Drill Hole Data	April 1999
2. Curnamona Project EL 2275, 1998 Drill Hole Summary Drill Hole Logs, CUM001-CUM096	April 1999

## 1 INTRODUCTION

Exploration Licences 2272-2275, covering areas of 1225km<sup>2</sup>, 1262km<sup>2</sup>, 870km<sup>2</sup> and 1176km<sup>2</sup> respectively, were granted to Malanti Pty Ltd on 20 February 1997 and were transferred to an associated company, Goldminco NL (Goldminco), after the float of that company, on 24 April 1997. A heads of agreement was signed on 22 May 1997 by Goldminco and the Paladin Energy Minerals NL / Brightstar Power Corporation Pty Ltd Joint Venture (PBJV) forming the Curnamona Uranium Joint Venture. With Paladin as manager, the PBJV is earning an interest in the sedimentary rocks overlying basement with Goldminco retaining rights to the Proterozoic basement.

This report covers all work carried out by Goldminco and the PBJV during the second year of tenure to 19 February 1999.

## 2. LOCATION AND ACCESS

EL's 2272-2275 lie about 400 kilometres north of Adelaide, South Australia. They form a near contiguous block extending south and east of Lake Frome, from Frome Downs Homestead to the NSW border, on the Frome SH54-10 and Curnamona SH54-14 1:250,000 map sheets. (*Figure 1*).

Access is gained over graded gravel roads, from Yunta on the Adelaide-Broken Hill Highway, or from Hawker on the Porter Augusta-Marree road. The area is traversed by numerous station tracks.

## 3. MINING TENEMENTS

Tenement details are tabulated below and shown in *Figure 2*:

### SOUTH AUSTRALIA

Licence	Name	Holder	Date Granted	Expiry Date	Area Blocks/km <sup>2</sup>	Expenditure Commitment \$
PROJECT 9261 - CURNAMONA URANIUM JV (PALADIN & BRIGHTSTAR earning 37.5% each)						
EL2272	Curnamona	GOLDMINCO	20 Feb 97	19 Feb 00	419/1225	150,000
EL2273	Frome Downs	GOLDMINCO	20 Feb 97	19 Feb 00	430/1262	150,000
EL2274	Billeroo Creek	GOLDMINCO	20 Feb 97	19 Feb 00	296/870	115,000
EL2275	Mulyungarie	GOLDMINCO	20 Feb 97	19 Feb 00	401/1176	145,000

EL's 2272-2275 have been renewed for a further twelve month period following their second anniversary on 20 February 1999.

4. NATIVE TITLE

The exploration licences are affected by three native title claims as follows:

Claim	Name	Date Lodged	Affecting Licences	Mining Native Title Agreement
SC 95/4	Kuyani	19 Sep 95	EL 2272 (all) EL 2273 (all) EL 2274 (all) EL 2275 (all)	YES
SC 97/1	Adnyamathanha	7 Feb 97	EL 2272 (all) EL 2273 (all) EL 2274 (part)	YES
SC97/2	Adnyamathanha	25 Jul 97	EL 2272 (all) EL 2273 (all) EL 2274 (part)	NO

The boundaries of the claims in the Lake Frome region and relevant exploration licences are shown in *Figure 2*.

Agreements as prescribed under Part 9B of the Mining Act 1971 have been made with the SC 95/4 claimants and the SC 97/1 claimants. Both agreements have been lodged with PIRSA for registration. The PBJV has been unable to reach agreement with the SC 97/2 claimants.

Advice has recently been received that the SC 97/1 and SC 97/2 claimants have taken steps to amalgamate their respective claims with the SC 94/1 claim which lies to the north of the Lake Elder licences and has not previously affected them. The amalgamated claim is now in the process of undergoing the re-registration test under the amended Commonwealth Native Title Act. The effect of the amalgamation on the exploration licences and the existing SC 97/1 agreement remains to be seen.

5. REGIONAL GEOLOGY AND URANIUM MINERALISATION

Palaeochannel uranium mineralisation occurs within Tertiary units of the Frome Basin a low land embayment bound to the west, east and south by the Flinders, Barrier and Olary Ranges.

Roll front type uranium mineralisation occurs in favourable fluvial systems adjacent to basement highs acting as source areas for the uranium. Uranium leached from these source areas is transported in the oxidised groundwater systems which predominately flow within palaeochannels. Deposition of uranium occurs where the transporting waters meet reduced sediments. A number of palaeochannel systems have been identified (*Figure 3*). Economic uranium mineralisation within the channels can occur as both lateral and terminal roll fronts.

The sediments (and uranium deposits contained within them) are fully saturated thereby rendering them amenable to in-situ leach (ISL) extraction techniques.

Palaeochannels within the Frome Basin are typically located at 50 to 120m depth and are up to several kilometres wide with local variations. They are incised into the Proterozoic, Cambrian or Cretaceous basement. The lower portions of the principal palaeochannels consist of Eocene sediments, predominantly sands with subordinate clays. These are overlain by Pliocene and Miocene sediments where silt and clay predominate over sand. Uranium mineralisation occurs preferentially in the Eocene (Eyre Formation) sediments although the largest single deposit (at Beverley) is hosted by Miocene (Namba Formation) sediments. In many areas the channels contain a number of distinct aquifers, separated by clay layers (aquitards). Uranium mineralisation occurs in close association with redox interfaces. In unoxidised sediments, sand and clay show abundant evidence of primary organic content. Low temperature pyrite is common. The influx of oxidising water from uraniferous basement source rocks has resulted in numerous geochemical oxidation (redox) cells, moving down the hydrological gradient. These have leached, transported and deposited uranium.

## 6. TENEMENT GEOLOGY

The geological environment in each of the four exploration licences was described in the first annual report for the Curnamona Uranium Joint Venture (*Hogarth, 1998*) and is not repeated here.

## 7. PREVIOUS INVESTIGATIONS

Extensive sedimentary uranium exploration in the Frome Basin commenced in 1969 and continued until 1982. Potential for uranium within Tertiary palaeochannel sediments of the Eyre Formation was first recognised by Professor Eric Rudd, whose early exploration work intersected radioactive sediments in what is now known as the Billeroo Palaeochannel. Rudd's work led ultimately to the discovery of the Gould's Dam deposit by Minad-Teton in 1974. Sedimentary Uranium commenced exploration in 1970 and discovered the small Yarramba and East Kalkaroo deposits. At the same time MIM intersected anomalous radioactivity south of Yarramba at the South Eagle Prospect while Minad-Teton operating on adjacent ground discovered the Honeymoon deposit in 1972. Also in the same period, the Beverley deposit was being defined by a Petromin/Oilmin/Transoil JV which had discovered an anomalous radioactive cell within sediments of the younger Namba Formation close to the uranium rich rocks of the Mount Painter Province.

When the PBJV started the Frome Project it was estimated that sedimentary uranium exploration in the area resulted something in excess of 4000 rotary holes being drilled in an area of 50,000km<sup>2</sup>.

Accordingly a comprehensive database was compiled to include all previous drilling with relevance to uranium mineralisation. A total of 4060 holes were identified and incorporated in the Paladin computer system including 340 holes drilled in the four Curnamona licences as tabulated below:

LICENCE	DRILL HOLES
EL 2272	51
EL 2273	29
EL 2274	24
EL 2275	236

Data compiled includes basic geology, radiometric and redox information as well as detailed locations and RL's.

The location of the drill holes in each of the licences is shown in *Figures 4, 5, 6, 7 and 8* and drill hole data for the four licences is summarised in Appendix 1.

## 8. INVESTIGATIONS 1998-99

### 8.1 Database Compilation

The database compiled in 1997-98 was further added to and refined during the year. Historical drilling records were checked and cross-referenced to eliminate duplication and errors with attention being paid to drill hole location, collar elevations and logging inconsistencies. Gamma logs were digitised for all available holes in the Curnamona licences.

### 8.2 Mud Drilling

A mud-drilling programme was in progress in EL2275 at the start of the 1998-99 licence year in February 1998. 39 holes had been drilled to 19 February 1998 and preliminary results for those holes were presented in the First Annual Report for the Curnamona Uranium Joint Venture. A further 26 holes were drilled in February – March 1998 to complete the programme.

A further 31 holes were drilled in EL2275 in April – May 1998. The location of all holes drilled is shown in *Figure 9*.

Lithology logs were compiled for all drill holes using Paladin's Sedlog logging codes. The logging was done at two-metre sample intervals for the superficial and Namba Formation units and at one-metre sample intervals for the Eyre

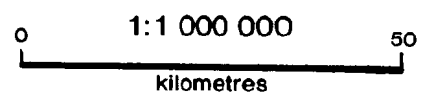
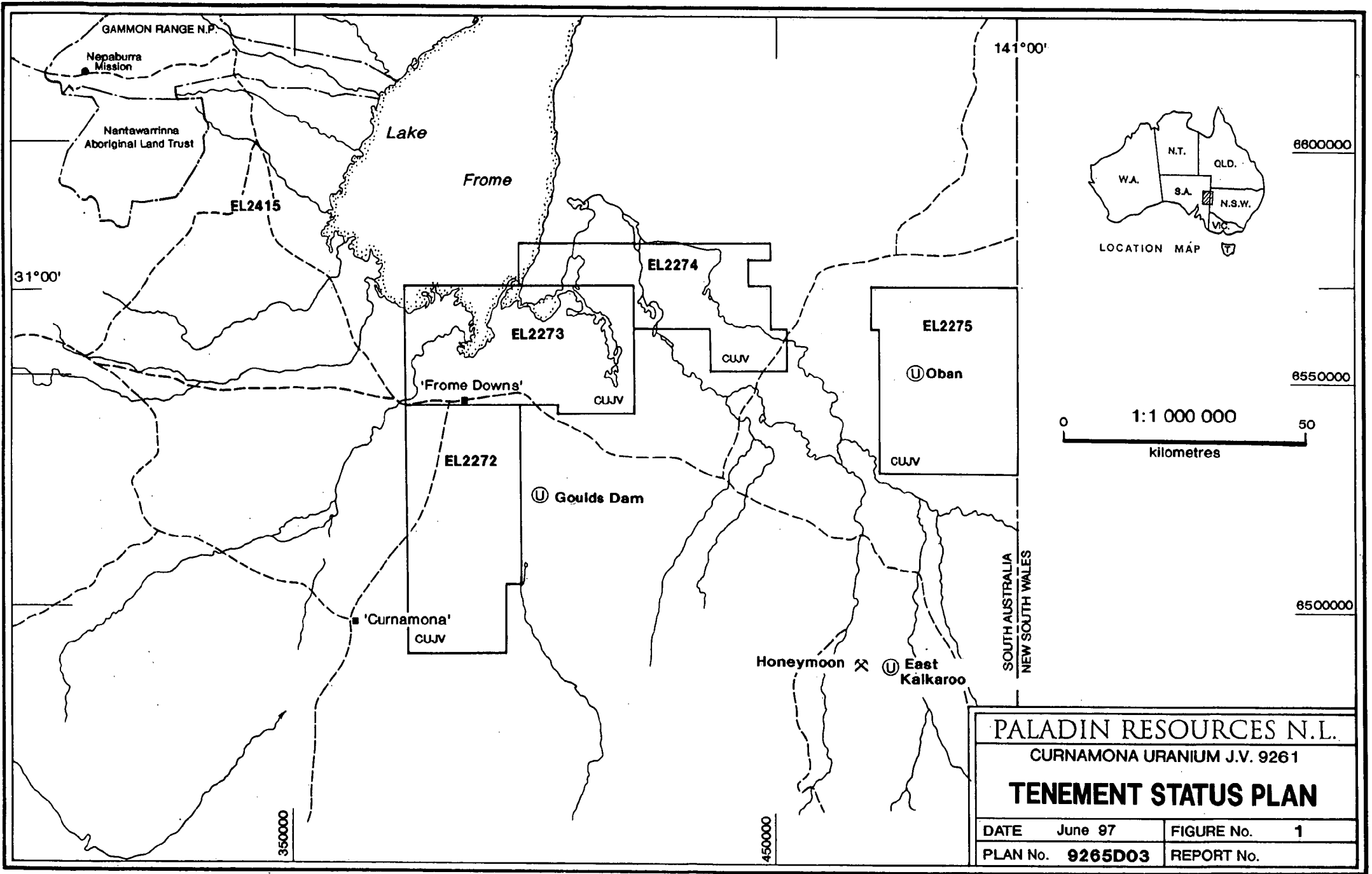
Formation and basement units. Appendix 2 contains a table of drill holes and drill hole logs for all 96 holes drilled since drilling commenced in EL2275.

All holes were gamma logged using the Paladin Mt Sopris Series 2 logger immediately after completion. Electric logs (SP and R) were run on all holes.

Holes were backfilled with drill cuttings until they blocked and then tamped down. Suregel (or equivalent) was not used.

## **9. REFERENCES**

Hogarth P,J, 1998; First Annual Report on Exploration Licences 2272-2275, Curnamona, South Australia; Paladin Resources NL unpublished company report.



PALADIN RESOURCES N.L.	
CURNAMONA URANIUM J.V. 9261	
<b>TENEMENT STATUS PLAN</b>	
DATE	June 97
FIGURE No.	1
PLAN No.	9265D03
REPORT No.	

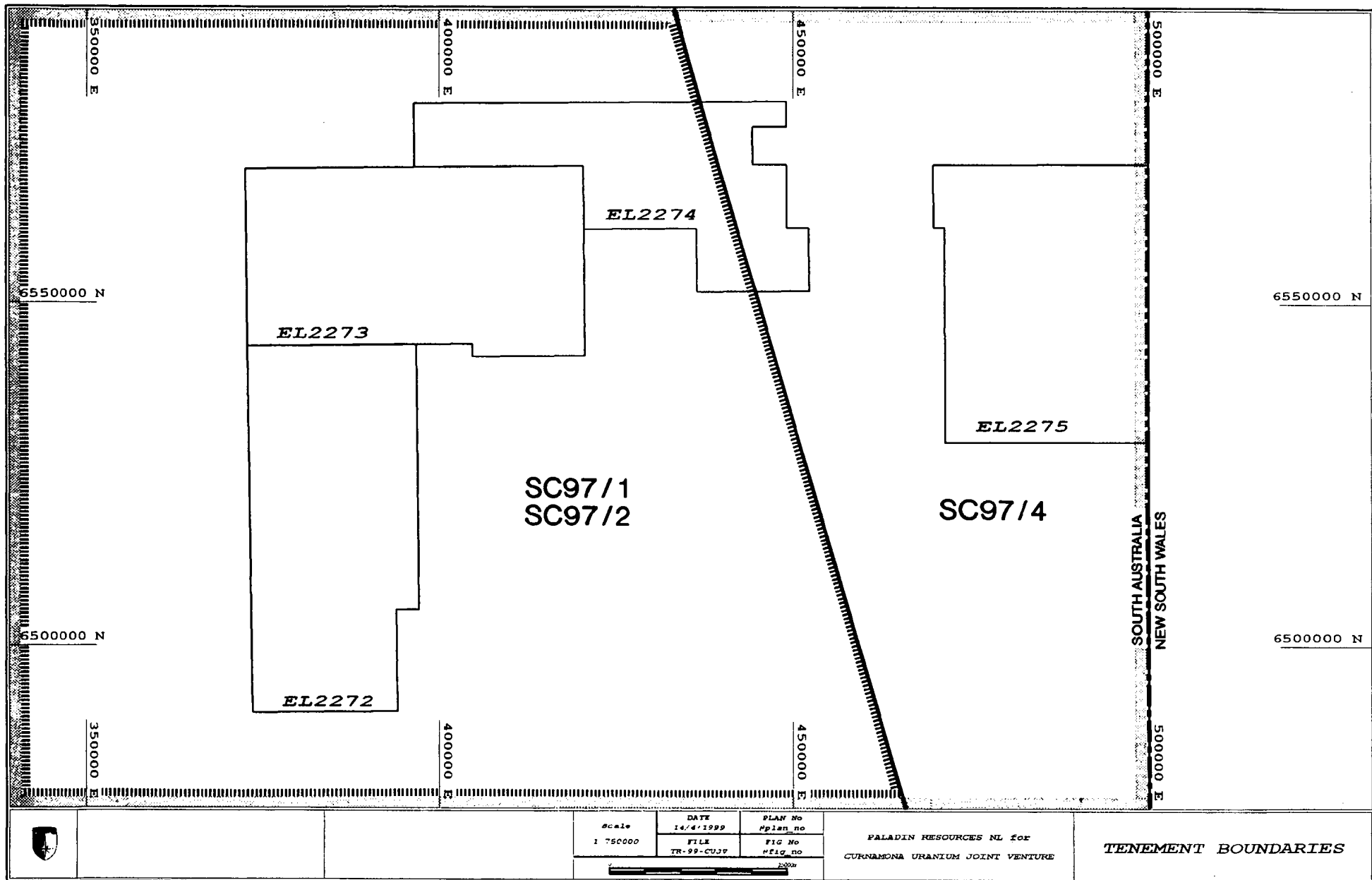
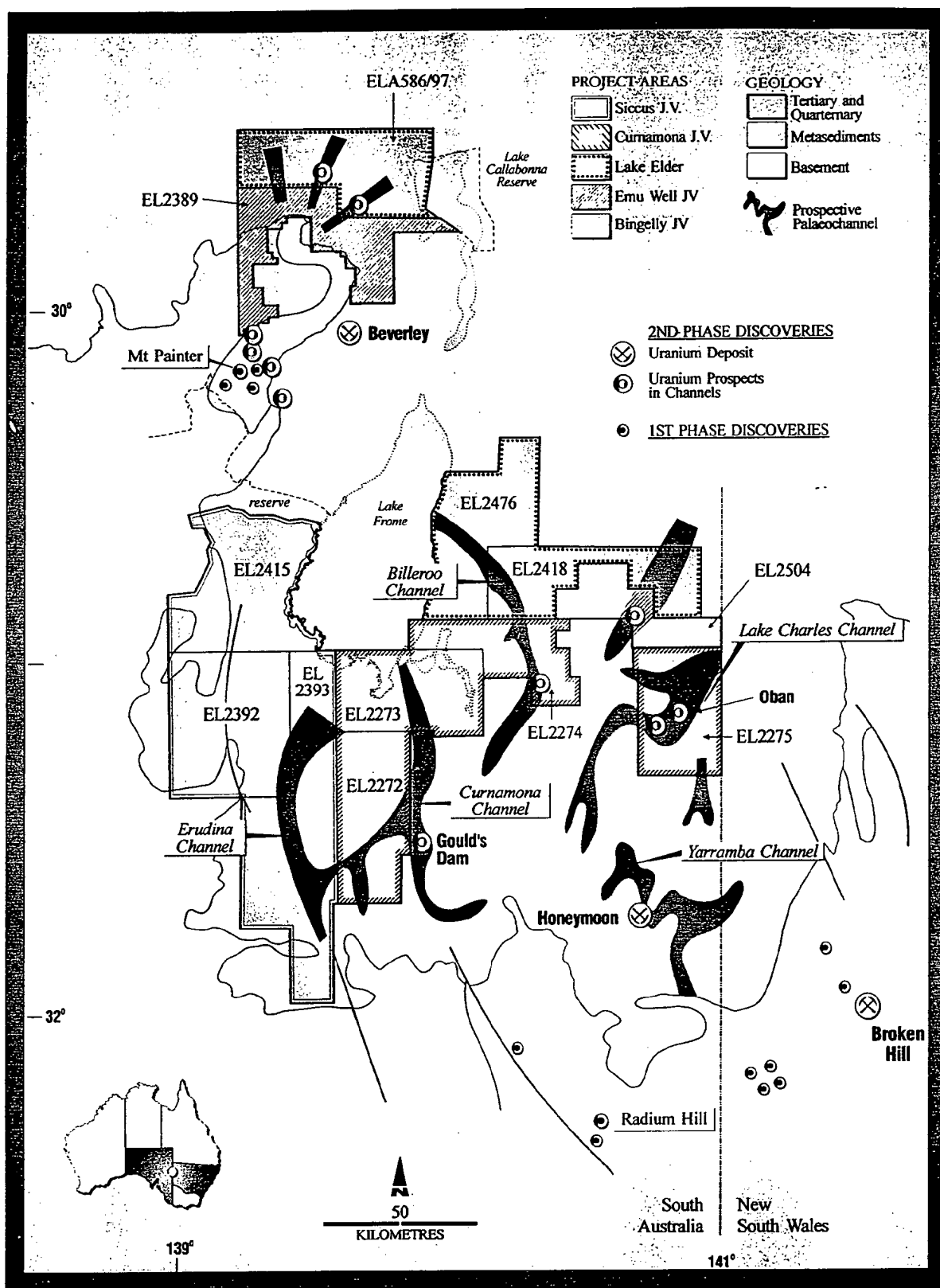


FIGURE No. 2



FROME BASIN  
**INTERPRETED PALAEOCHANNELS**

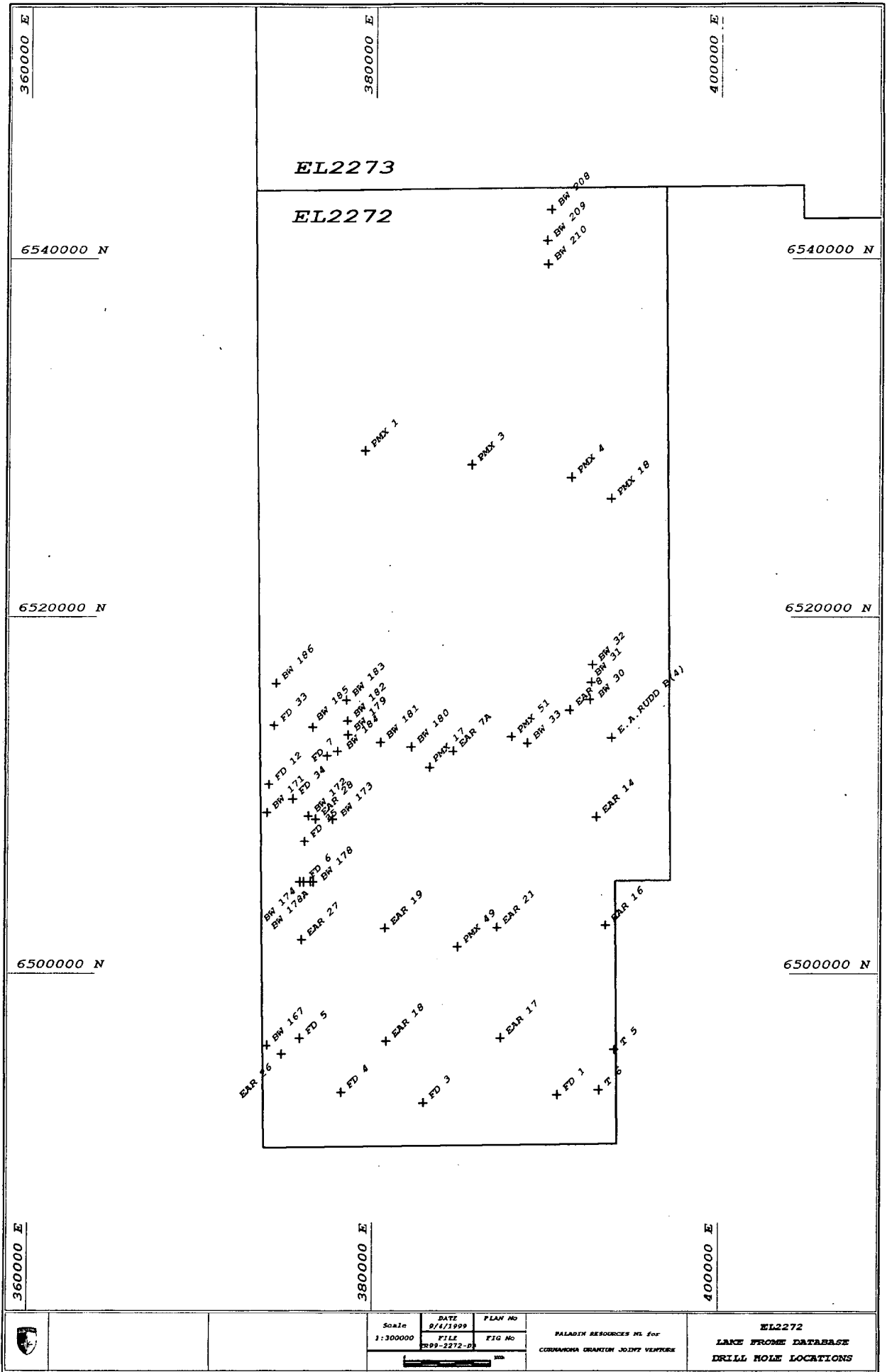


FIGURE No. 4

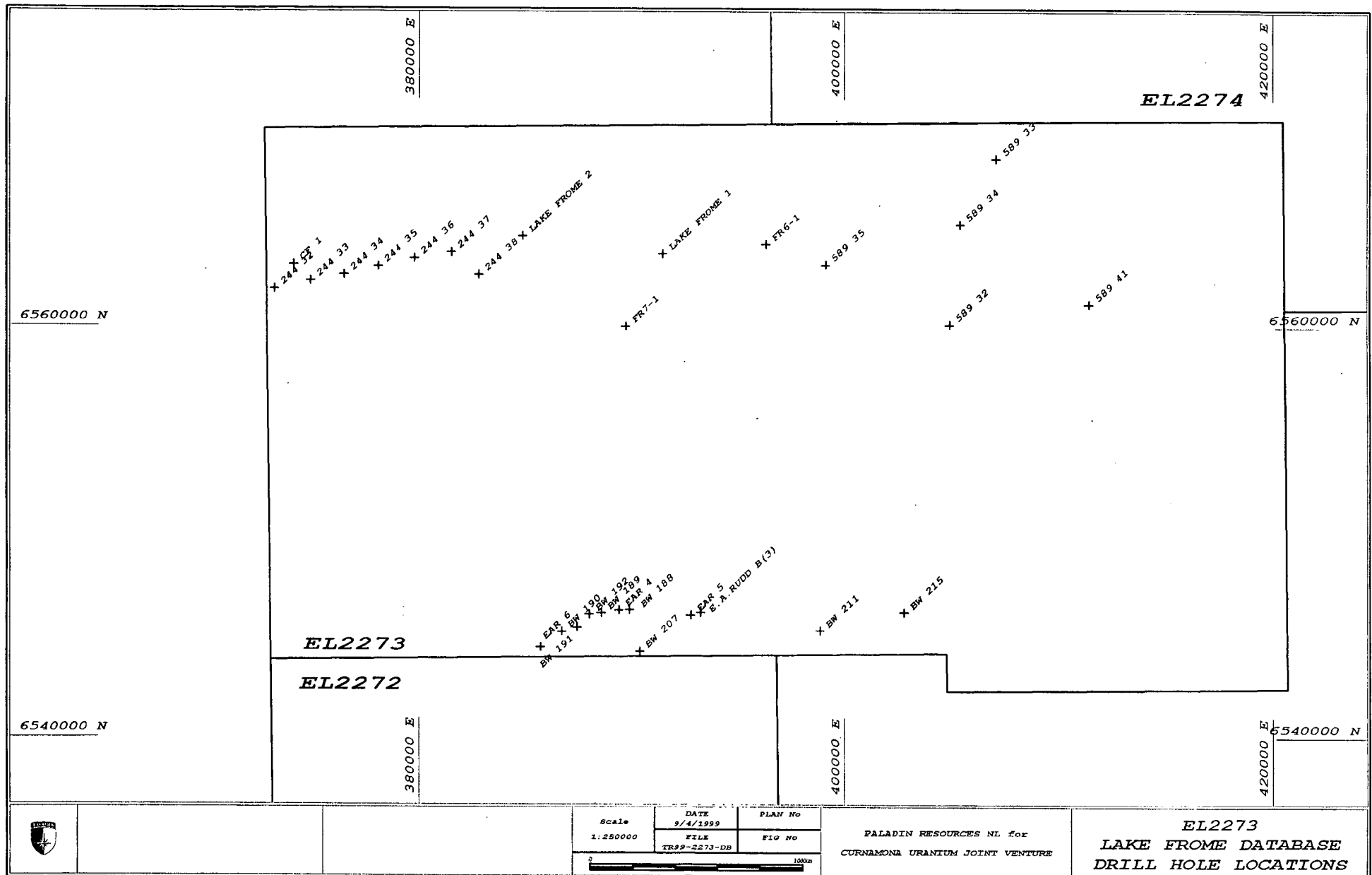


FIGURE No. 5

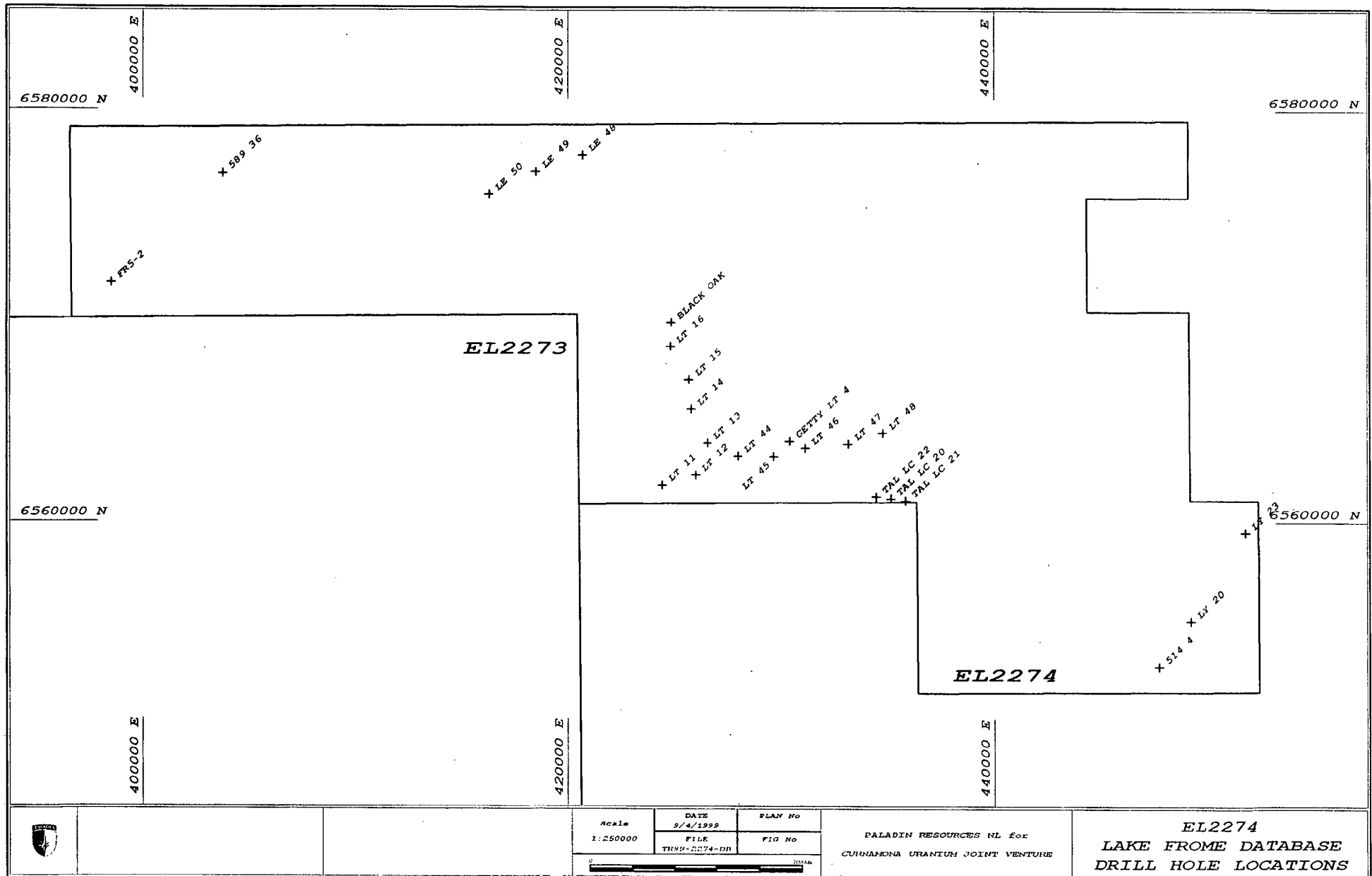
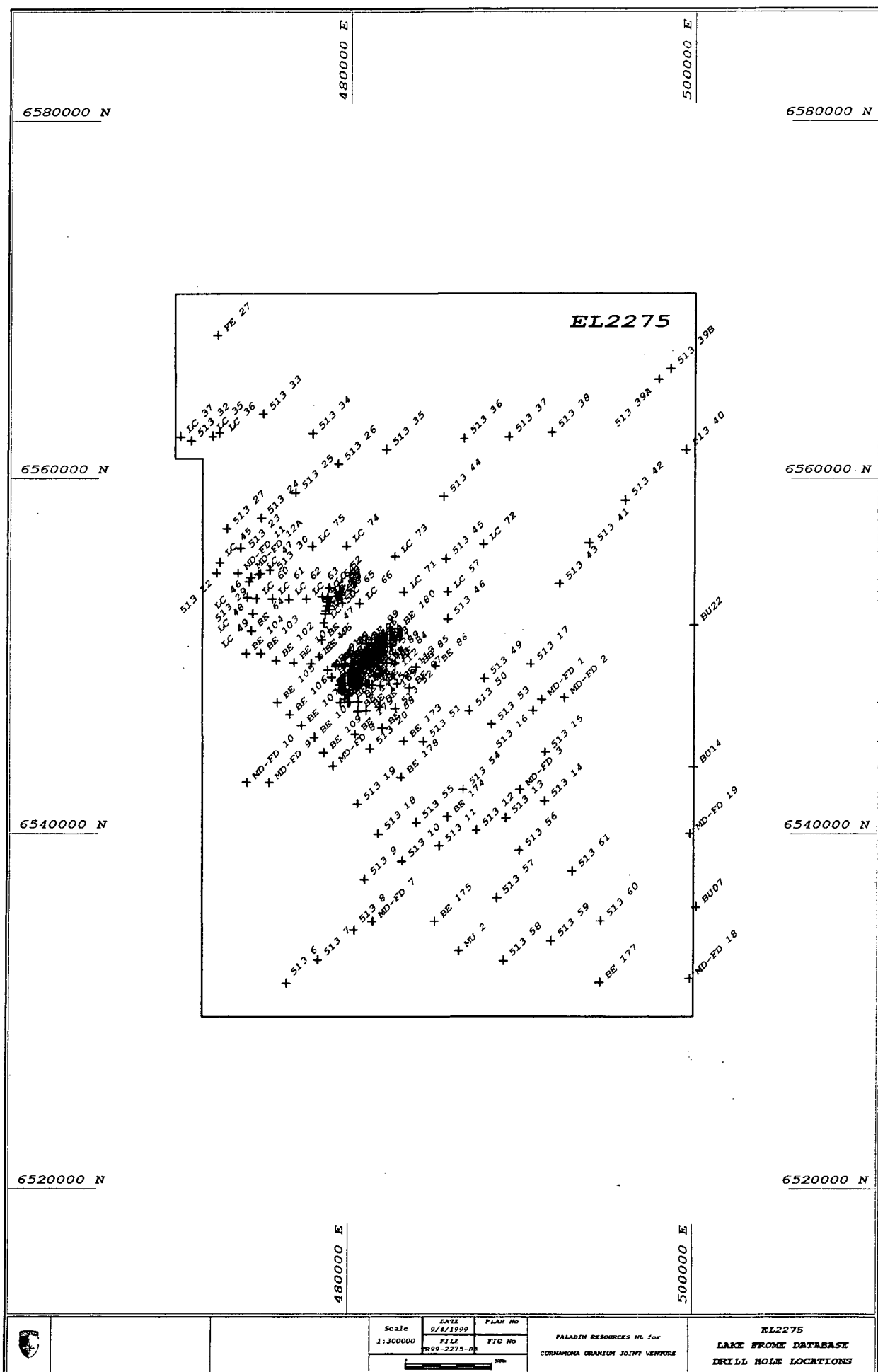


FIGURE No. 6



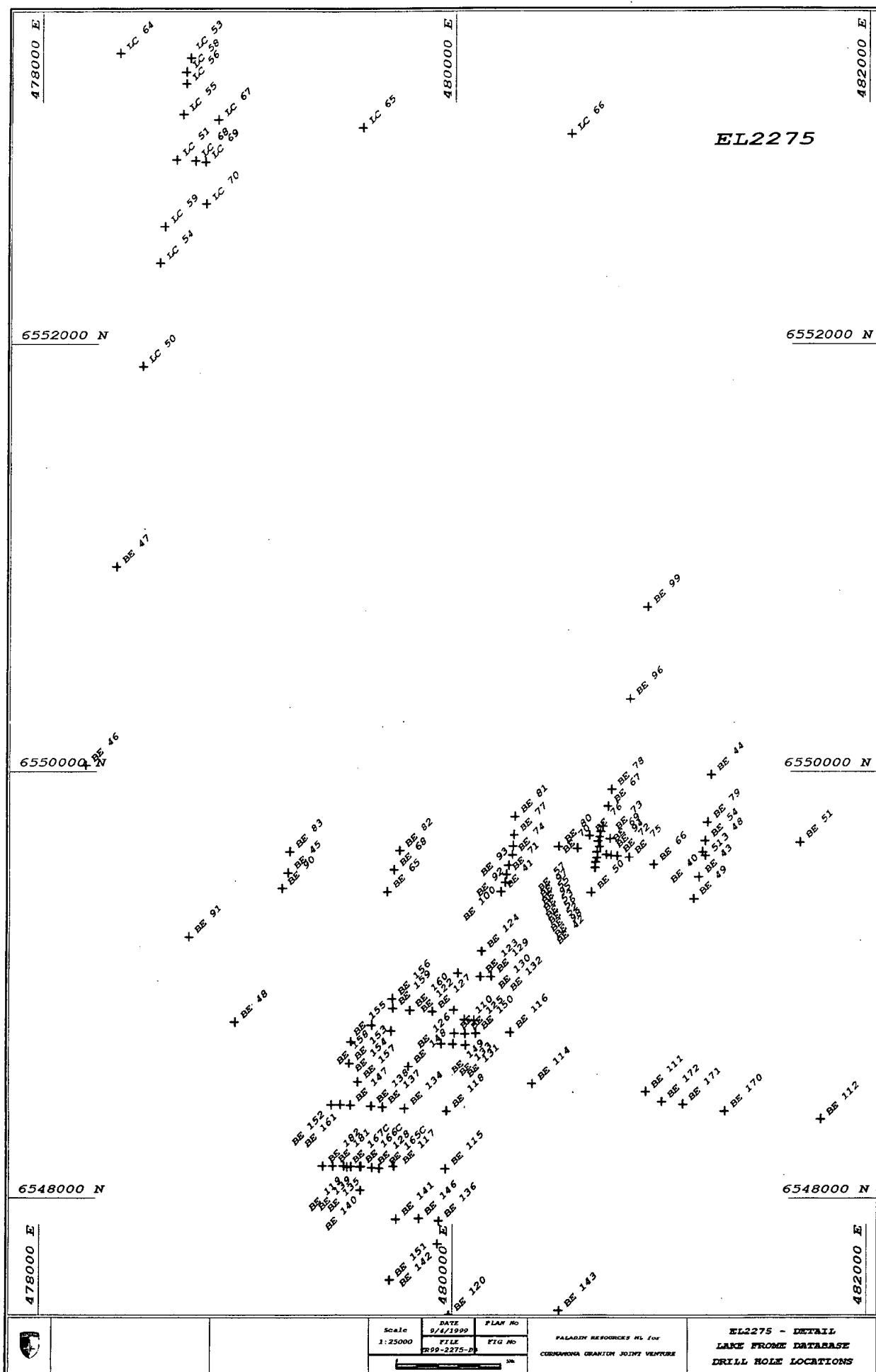


FIGURE No. 8

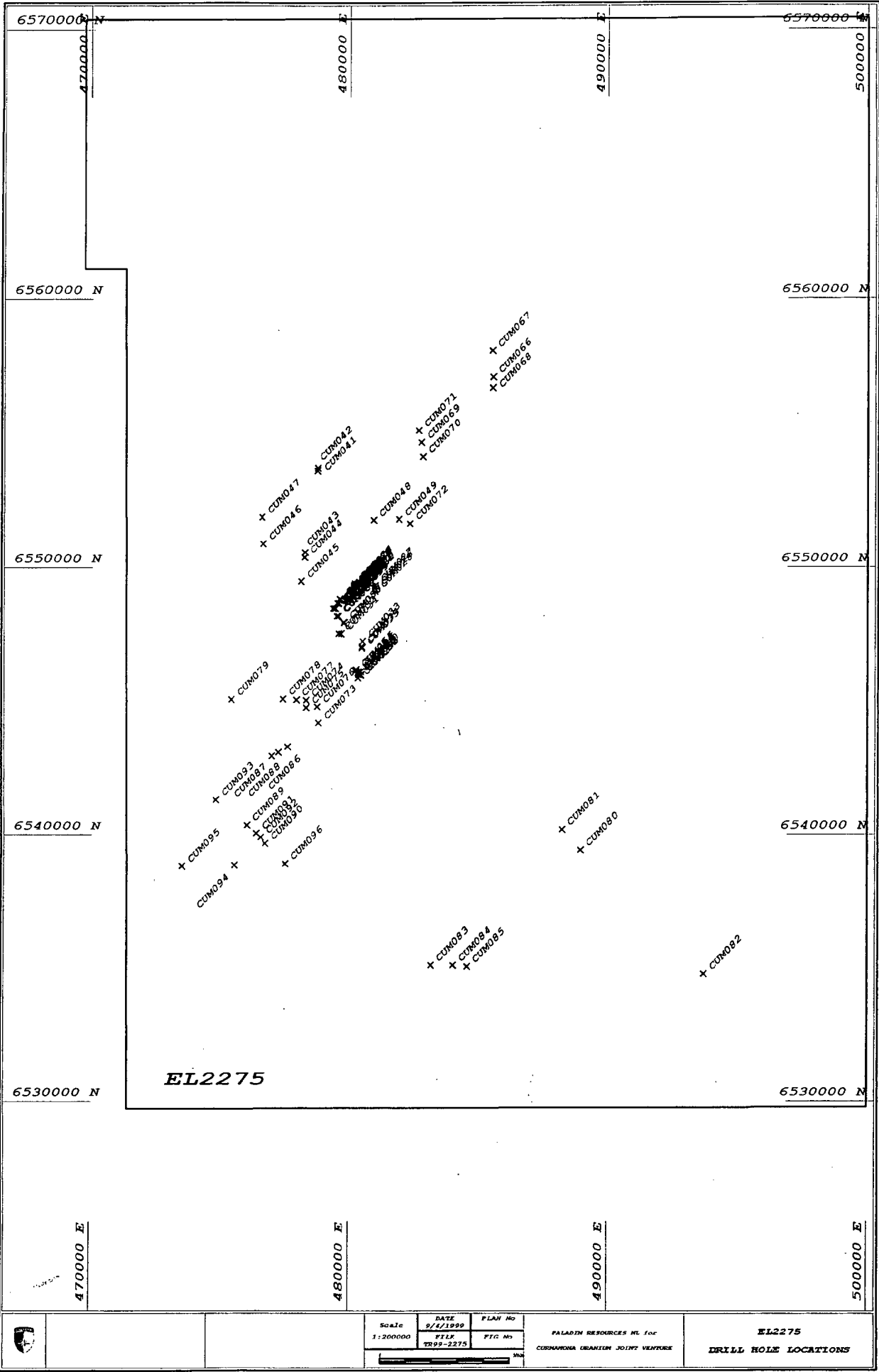


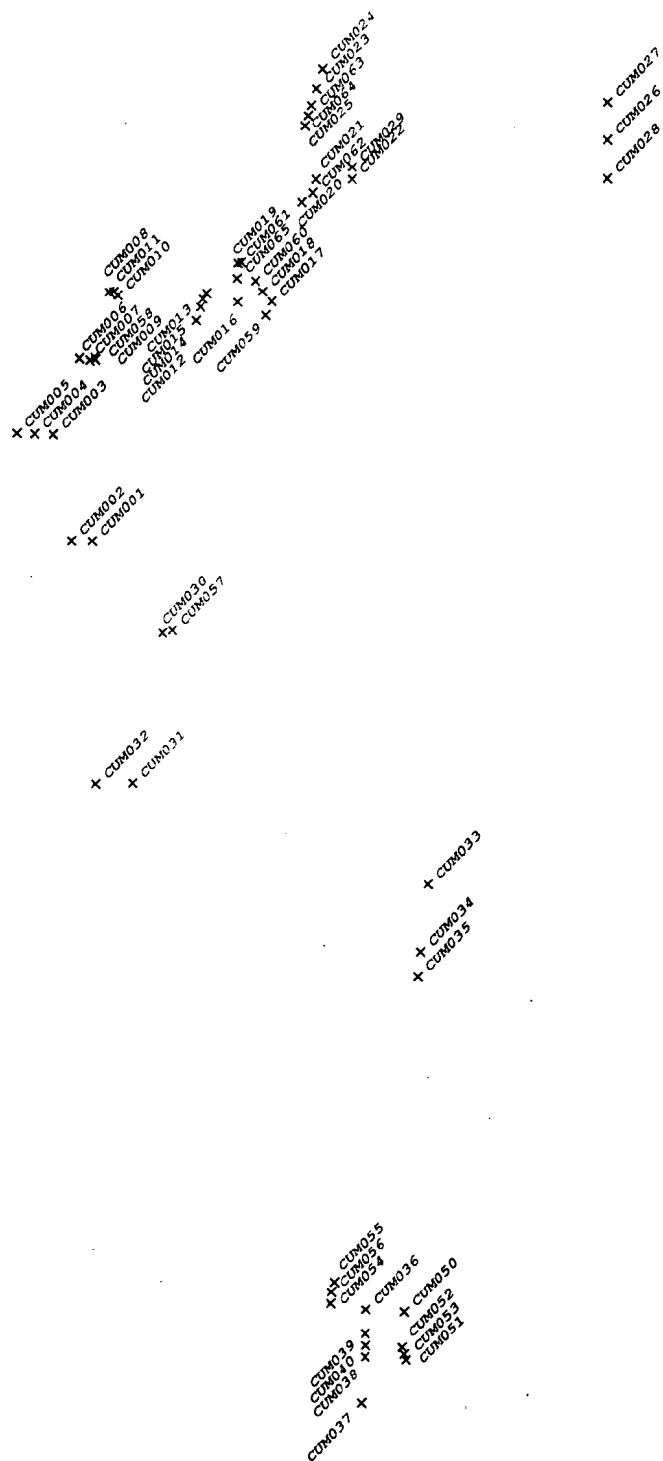
FIGURE No. 9

6550000 N

**EL2275**

480000 E

480000 E



Scale  
1 : 20000

DATE  
9/4/1999  
FILE

PLAN No

---

FIG No

PALADIN RESOURCES NL for  
CORNWALLIA CRANTON JOINT VENTURE

EL2275 - DETAIL  
DRILL HOLE LOCATIONS

**FIGURE No. 10**

## **APPENDIX 1**

**EL 2272 - 2275**

# **CURNAMONA URANIUM JOINT VENTURE SUMMARY OF OPEN FILE DRILL HOLE DATA**

**April 1999**

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
201	151888	G	DG			EAR 7A	EL2272	SML267	RUDD	384806.68	6512468.34	72.50	75.50	470.00	143.28	1969	ENV 1109	MAP 1110	api/ & 1110	
202		G	DG	P		EAR 8	EL2272	SML267	RUDD	391333.69	6514782.47	75.00	70.50	416.00	126.80	1969	ENV 1109	MAP 1110	api/ & 1110	
208		G	DG	P		EAR 14	EL2272	SML267	RUDD	392905.97	6508779.35	89.00	85.37	351.00	108.98	1970	ENV 1109	MAP 1110	api/ & 1110	
210		G	DG	P		EAR 16	EL2272	SML267	RUDD	393455.68	6502719.59	99.00	97.20	304.00	92.68	1970	ENV 1109	MAP 1110	api/ & 1110	
211		G	DG	P		EAR 17	EL2272	SML267	RUDD	387434.43	6496349.89	103.00	100.30	379.00	115.52	1970	ENV 1109	MAP 1110	api/ & 1110	
212		G	DG	P		EAR 18	EL2272	SML267	RUDD	380780.39	6496168.91	102.50	101.80	266.00	81.08	1970	ENV 1109	MAP 1110	api/ & 1110	
213		G	DG	P		EAR 19	EL2272	SML267	RUDD	380670.68	6502524.34	89.50	90.20	387.00	111.88	1970	ENV 1109	MAP 1110	api/ & 1110	
215		G	DG	P		EAR 21	EL2272	SML267	RUDD	387208.31	6502574.62	92.50	92.10	269.00	81.99	1970	ENV 1109	MAP 1110	api/ & 1110	
220		G	OK	P		EAR 26	EL2272	SML267	RUDD	374704.00	6485421.00	102.00	100.00	316.00	30.48	1970	ENV 1109	MAP 1110	api/ & 1110	
221		N	OK	P		EAR 27	EL2272	SML267	RUDD	375844.00	6501858.00	84.00	85.40	440.00	134.11	1970	ENV 1109	MAP 1110	api/ & 1110	
222		G	DG	P		EAR 28	EL2272	SML267	RUDD	376080.07	6509091.63	74.50	76.00	455.00	138.68	1970	ENV 1109	MAP 1110	api/ & 1110	
1181	144425	N	OK			FD 1	EL2272	SML544	PACMINX	390700.00	6493157.00	112.00	0.00		143.26	1972	ENV 1853	GPS		
1182	144426	N	OK			FD 3	EL2272	SML544	PACMINX	382941.00	6492694.00	108.50	0.00		109.73	1972	ENV 1853	GPS		
1183	144427	N	OK			FD 4	EL2272	SML544	PACMINX	378185.00	6493291.00	107.00	0.00		134.11	1972	ENV 1853	GPS		
1184	144428	N	OK			FD 5	EL2272	SML544	PACMINX	375758.00	6496318.00	100.00	0.00		121.92	1972	ENV 1853	GPS		
1185	144429	N	OK			FD 6	EL2272	SML544	PACMINX	375936.00	6505102.00	82.00	0.00	445.00	135.64	1972	ENV 1853	GPS		
1186	144430	N				FD 7	EL2272	SML544	PACMINX	377300.00	6512200.00	73.00	0.00	502.00	153.01	1972	ENV 1853	DMESA		
1171	144435	N				FD 12	EL2272	SML544	PACMINX	373900.00	6510600.00	74.50	0.00		138.07	1972	ENV 1853	DMESA		
1179	144443	N				FD 20	EL2272	SML544	PACMINX	373600.00	6505800.00	84.50	0.00		140.21	1972	ENV 1853	DMESA		
1182	144456	N				FD 33	EL2272	SML544	PACMINX	374200.00	6513900.00	88.00	0.00		132.59	1972	ENV 1853	DMESA		
1193	144457	N				FD 34	EL2272	SML544	PACMINX	375300.00	6509800.00	72.00	0.00		144.78	1972	ENV 1853	DMESA		
1194	144458	N				FD 35	EL2272	SML544	PACMINX	376000.00	6507400.00	78.00	0.00		138.07	1972	ENV 1853	DMESA		
1213		G	DG	P		PMX 3	EL2272	SML544	PACMINX	385626.18	6528508.75	54.00	57.60	421.00	128.40		ENV 1853	MAP 1853		
1214		G	DG	P		PMX 4	EL2272	SML544	PACMINX	391391.68	6527818.98	57.50	56.40	374.00	114.00		ENV 1853	MAP 1853		
1231		G	DG	P		PMX 18	EL2272	SML544	PACMINX	393692.97	6526616.87	60.00	77.30	353.00	107.60		ENV 1853	MAP 1853		
1285		N	DG	P		PMX 49	EL2272	SML544	PACMINX	384909.23	6501478.24	85.50	51.40		122.00		ENV 1853	MAP 1853		
1267		N	DG	P		PMX 51	EL2272	SML544	PACMINX	388001.54	6513272.13	77.50	77.50		153.00		ENV 1853	MAP 1853		
2023		G	DG	P		BW 30(W)	EL2272	EL109	PACMINX	392500.61	6515348.37	74.00				1974	ENV 2361	MAP 2713		
2025		G	DG	P		BW 31(W)	EL2272	EL109	PACMINX	392576.67	6516333.58	73.00				1974	ENV 2361	MAP 2713		
2027		G	DG	P		BW 32(W)	EL2272	EL109	PACMINX	392648.30	6517330.38	73.00				1974	ENV 2361	MAP 2713		
2029		G		P		BW 33(W)	EL2272	EL109	PACMINX	388927.21	6512921.43	78.00				1974	ENV 2361	MAP 2713		
2653		G	DG			BW 167(W)	EL2272	EL227	CSR	373822.17	6495928.42	101.00					ENV 2713	MAP 2713		
2658		G	DG	P		BW 172	EL2272	EL227	CSR	376209.07	6508832.64	76.00	72.70		144.00		ENV 2713	MAP 2713		
2659		G	DG	P		BW 173	EL2272	EL227	CSR	377621.95	6508639.60	76.50	75.50		147.00		ENV 2713	MAP 2713		
2660		G	DG	P		BW 174	EL2272	EL227	CSR	376560.09	6504958.40	82.50	75.10		139.50		ENV 2713	MAP 2713		
2664		G	DG	P		BW 178	EL2272	EL227	CSR	377294.49	6504942.45	81.50			108.00		ENV 2713	MAP 2713		
2665		G	DG	P		BW 178A	EL2272	EL227	CSR	377150.14	6504961.02	82.00	79.60		142.00		ENV 2713	MAP 2713		
2666		G	DG	P		BW 179	EL2272	EL227	CSR	378498.75	6513363.51	70.00	71.80		130.50		ENV 2713	MAP 2713		
2667		G	DG	P		BW 180	EL2272	EL227	CSR	382156.51	6512700.53	70.50	70.80		141.00		ENV 2713	MAP 2713		
2668		G	DG	P		BW 181	EL2272	EL227	CSR	380386.28	6512965.41	67.00	72.10		134.00		ENV 2713	MAP 2713		
2669		G	DG	P		BW 182	EL2272	EL227	CSR	378475.33	6514161.38	69.00	71.80		121.50		ENV 2713	MAP 2713		
2670		G	DG	P		BW 183	EL2272	EL227	CSR	378406.23	6515310.23	67.50	70.90		129.00		ENV 2713	MAP 2713		
2671		G	DG	P		BW 184	EL2272	EL227	CSR	377890.50	6512449.79	72.00	73.60		133.50		ENV 2713	MAP 2713		
2672		G	DG	P		BW 185	EL2272	EL227	CSR	376452.18	6513801.83	70.50	73.10		152.50		ENV 2713	MAP 2713		
2673		G	DG	P		BW 186	EL2272	EL227	CSR	374296.70	6516250.86	66.50	68.70		140.00		ENV 2713	MAP 2713		
2705	145268	G				T 5	EL2272	EL297	MINAD	394000.00	6495700.00	109.00	0.00		80.00	1979	ENV 2995	DMESA		
2708	145269	G	OK			T 6	EL2272	EL297	MINAD	393120.00	6493441.00	113.00			85.00	1979	ENV 2995	GPS	& 3684	
2893		A	DG	P		BW 208	EL2272	EL411	CSR	390167.47	6542699.72	36.50	32.25		136.80	1980	ENV 3329	MAP 3329		
2894		A		P		BW 209	EL2272	EL411	CSR	389947.58	6540998.83	35.50	35.46		133.00	1980	ENV 3329	MAP 3329		
2895		A		P		BW 210	EL2272	EL411	CSR	389996.78	6539684.87	41.00	36.66		119.00	1980	ENV 3329	MAP 3329		
3960	137052	X		X		E.A RUDD B(4)	EL2272			393772.00	6513229.00	80.50	0.00		0.00		ENV 7777	DMESA		

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
24	87731	X		X		LAKE FROME 2	EL2273	OEL20		384889 00	6564407 00	6 00		1 83		771 80		ENV 0968		
25	87730	X		X		LAKE FROME 1	EL2273	OEL20		391439 00	6563537 00	33 00		7 92		781 80		ENV 0968		
167	146017	G				244 32	EL2273	SML244	EXOIL	373200 00	6561800 00	29 00		0 00	455 00	140 21	1970	ENV 1041	DMESA	api
168	146018	G				244 33	EL2273	SML244	EXOIL	374900 00	6562200 00	18 00		0 00	322 00	103 63	1970	ENV 1041	DMESA	api
169	146019	G				244 34	EL2273	SML244	EXOIL	376500 00	6562500 00	14 00		0 00	320 00	97 54	1970	ENV 1041	DMESA	api
170	146020	G				244 35	EL2273	SML244	EXOIL	378100 00	6562900 00	8 00		0 00	315 00	96 01	1970	ENV 1041	DMESA	api
171	146021	G				244 36	EL2273	SML244	EXOIL	379800 00	6563300 00	10 00		0 00	305 00	82 86	1970	ENV 1041	DMESA	api
172	146022	G				244 37	EL2273	SML244	EXOIL	381500 00	6563600 00	8 50		0 00	305 00	92 96	1970	ENV 1041	DMESA	api
173	146023	G				244 38	EL2273	SML244	EXOIL	382800 00	6562500 00	8 00		0 00	530 00	181 54	1970	ENV 1041	DMESA	api
198	151686	G	DG			EAR 4	EL2273	SML267	RUDD	389375 55	6546191 02	41 50		34 50	533 00	162 46	1969	ENV 1109	MAP 1110	api/ & 1110
199		G	DG	P		EAR 5	EL2273	SML267	RUDD	392746 07	6545947 73	36 50		32 90	407 00	124 05	1969	ENV 1109	MAP 1110	api/ & 1110
200	151687	G	DG			EAR 6	EL2273	SML267	RUDD	385712 18	6544374 21	40 50		39 00	500 00	152 40	1969	ENV 1109	MAP 1110	api/ & 1110
842	144132	G				589 32	EL2273	SML589	PETROMN	404800 00	6560100 00	28 00		0 00	500 00	152 40	1971	ENV 1627	DMESA	
843	144133	G				589 33	EL2273	SML589	PETROMN	407100 00	6568200 00	20 00		0 00	500 00	152 40	1971	ENV 1627	DMESA	
844	144134	G				589 34	EL2273	SML589	PETROMN	405400 00	6565000 00	28 00		0 00	462 00	140 82	1971	ENV 1627	DMESA	
845	144135	G				589 35	EL2273	SML589	PETROMN	399100 00	6563000 00	23 50		0 00	464 00	141 43	1971	ENV 1627	DMESA	
851	144141	G				589 41	EL2273	SML589	PETROMN	411400 00	6561100 00	30 00		0 00	423 00	129 54	1971	ENV 1627	DMESA	
2873		A	DG	P		BW 188	EL2273	EL411	CSR	389874 40	6546209 08	36 50		37 53		140 00	1980	ENV 3329	MAP 3329	
2874		A	DG	P		BW 189	EL2273	EL411	CSR	388556 70	6546040 03	43 50		39 48		140 00	1980	ENV 3329	MAP 3329	
2875		A	DG	P		BW 190	EL2273	EL411	CSR	386700 29	6545145 55	43 00		41 37		149 00	1980	ENV 3329	MAP 3329	
2876		A	DG	P		BW 191	EL2273	EL411	CSR	387422 65	6545356 13	44 50		39 83		155 00	1980	ENV 3329	MAP 3329	
2877		A	DG	P		BW 192	EL2273	EL411	CSR	388003 58	6545978 73	44 00		41 10		165 00	1980	ENV 3329	MAP 3329	
2892		A	DG	P		BW 207	EL2273	EL411	CSR	390382 62	6544171 83	36 00		30 65		135 50	1980	ENV 3329	MAP 3329	
2896		A	DG	P		BW 211	EL2273	EL411	CSR	396843 01	6545199 26	30 50		27 58		110 30	1980	ENV 3329	MAP 3329	
2900		A	DG	P		BW 215	EL2273	EL411	CSR	402791 76	6546086 99	33 50		34 97		107 00	1980	ENV 3329	MAP 3329	
3222	144300	Ax				CF 1	EL2273	EL430	COMALCO	374100 00	6563000 00	17 00		0 00		60 00	1979	ENV 3405	MAP 3405	
3692	141555	X				FR6-1	EL2273	EL1471		398300 00	6564000 00	15 00		0 00		2 00		ENV 8013	DMESA	
3693	141556	X				FR7-1	EL2273	EL1471		389700 00	6560000 00	8 00		0 00		2 00		ENV 8013	DMESA	
3959	137053	X		X		E.A. RUDD B(3)	EL2273			393201 00	6546061 00	39 00		0 00		0 00		ENV 7777	DMESA	

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
508	145790	G				514 4	EL2274	SML514	SED U	447700.00	6553000.00	46 00		0 00	123.00	37.49	1971	ENV 1543	DMESA	cpm
848	144136	G				589 38	EL2274	SML589	PETROMN	403600.00	6576900.00	39 00		0 00	605.00	184.40	1971	ENV 1627	DMESA	
1717	144786	A	DG			LY 20	EL2274	EL66	MINAD	449180.99	6555197.44	38 00		0 00		38 00		ENV 2291	MAP 2291	
1720	144799		DG			LY 23	EL2274	EL66	MINAD	451718.27	6559495.92	46 00		0 00		39.00		ENV 2291	MAP 2291	
1757	144733	N	OK			LT 11	EL2274	EL69	TRICENT	424462.00	6561738.00	22 00	102.00	31.09		91.50	1973	ENV 2308	GPS	
1758	144734	N	OK			LT 12	EL2274	EL69	TRICENT	426034.00	6562231.00	18 00	94.00	28.65		82.10	1973	ENV 2308	GPS	
1759	144735	N				LT 13	EL2274	EL69	TRICENT	426600.00	6563800.00	22 00	94.00	28.65		82.10	1973	ENV 2308	DMESA	
1760	144736	N	OK			LT 14	EL2274	EL69	TRICENT	425823.00	6565459.00	28 00	95.00	28.98		85.50	1973	ENV 2308	GPS	
1761	144737	N				LT 15	EL2274	EL69	TRICENT	425700.00	6566900.00	28 50	100.00	30.48		94.90	1973	ENV 2308	DMESA	
1762	144738	N	OK			LT 16	EL2274	EL69	TRICENT	424845.00	6568509.00	24 00	100.00	30.48		94.90	1973	ENV 2308	GPS	
1780	144766	N	OK			LT 44	EL2274	EL69	TRICENT	428044.00	6563162.00	43 00	104.00	31.70		96.40	1973	ENV 2308	GPS	
1791	144767	N	OK			LT 45	EL2274	EL69	TRICENT	429737.00	6563135.00	42 00	104.00	31.70		86.00	1973	ENV 2308	GPS	
1792	144768	N	OK			LT 46	EL2274	EL69	TRICENT	431200.00	6563551.00	40 00	104.00	31.70		91.90	1973	ENV 2308	GPS	
1793	144769	N	OK			LT 47	EL2274	EL69	TRICENT	433184.00	6563752.00	37 50	107.00	32.61		94.90	1973	ENV 2308	GPS	
1794	144770	N	OK			LT 48	EL2274	EL69	TRICENT	434814.00	6564290.00	45 00	114.00	34.75		97.90	1973	ENV 2308	GPS	
2223	150266	N				LE 48	EL2274	EL34	TRICENT	420700.00	6577800.00	14 00		0 00		106.50	1973	ENV 2392	DMESA	
2224	150287	N				LE 49	EL2274	EL34	TRICENT	418500.00	6577000.00	33 00		0 00		120.00	1973	ENV 2392	DMESA	
2225	150268	N				LE 50	EL2274	EL34	TRICENT	416300.00	6575900.00	42 00		0 00		128.00	1973	ENV 2392	DMESA	
2291	145296	N				TAL LC 20	EL2274	EL127	TRICENT	435200.00	6561100.00	41 50	103.00	31.39		93.50	1974	ENV 2432	DMESA	
2292	145297	N				TAL LC 21	EL2274	EL127	TRICENT	435900.00	6561000.00	41 00	100.00	30.48		110.00	1974	ENV 2432	DMESA	
2293	145298	N				TAL LC 22	EL2274	EL127	TRICENT	434500.00	6561200.00	39 50	100.00	30.48		79.50	1974	ENV 2432	DMESA	
3691	141554	X				FR5-2	EL2274	EL1471		398500.00	6571600.00	8 00		0 00		2.00		ENV 8013	DMESA	
3946	104352	X	OK	X		BLACK OAK	EL2274			424882.00	6569674.00	26 00		0 00		138.40		ENV 7777	DMESA	
3968	137063	X		X		GETTY LT 4	EL2274			430471.00	6563891.00	40.50		0 00		0.00		ENV 7777	DMESA	

LAKE FROME EMBAYMENT  
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Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
526	144036	G	OK			513 6	EL2275	SML513	SED U	476352 00	6531595 00	69 50		0 00	290 00	88 39	1971	ENV 1546	GPS	cpm
527	144037	G				513 7	EL2275	SML513	SED U	478200 00	6532900 00	69 00		0 00	265 00	80 77	1971	ENV 1546	DMESA	cpm
528	144038	G	OK			513 8	EL2275	SML513	SED U	480301 00	6534584 00	70 50		0 00	360 00	115 82	1971	ENV 1546	GPS	cpm
529	144039	G				513 9	EL2275	SML513	SED U	480900 00	6537400 00	74 00		0 00	380 00	115 82	1971	ENV 1546	DMESA	cpm
530	144040	G	OK			513 10	EL2275	SML513	SED U	483075 00	6538421 00	73 00		0 00	600 00	182 88	1971	ENV 1546	GPS	cpm
531	144041	G	OK			513 11	EL2275	SML513	SED U	485236 00	6539294 00	76 50		0 00	440 00	134 11	1971	ENV 1546	GPS	cpm
532	144042	G	OK			513 12	EL2275	SML513	SED U	487421 00	6540191 00	81 00		0 00	335 00	102 11	1971	ENV 1546	GPS	cpm
533	144043	G	OK			513 13	EL2275	SML513	SED U	489134 00	6540879 00	79 00		0 00	335 00	121 01	1971	ENV 1546	GPS	cpm
534	144044	G	OK			513 14	EL2275	SML513	SED U	491382 00	6541862 00	81 00		0 00	305 00	92 96	1971	ENV 1546	GPS	cpm
535	144045	G				513 15	EL2275	SML513	SED U	491400 00	6544600 00	85 00		0 00	335 00	102 11	1971	ENV 1546	DMESA	cpm
536	144046	G				513 16	EL2275	SML513	SED U	490700 00	6547000 00	83 00		0 00	440 00	134 11	1971	ENV 1546	DMESA	cpm
537	144047	G	OK			513 17	EL2275	SML513	SED U	490546 00	6549821 00	80 50		0 00	522 00	159 11	1971	ENV 1546	GPS	cpm
538	144048	G	OK			513 18	EL2275	SML513	SED U	481687 00	6539965 00	71 50		0 00	365 00	111 25	1971	ENV 1546	GPS	cpm
539	144049	G	OK			513 19	EL2275	SML513	SED U	480486 00	6541665 00	70 00		0 00	335 00	102 11	1971	ENV 1546	GPS	cpm
540	144050	G				513 20	EL2275	SML513	SED U	481200 00	6544800 00	72 00		0 00	350 00	106 68	1971	ENV 1546	DMESA	cpm
542	144052	G				513 22	EL2275	SML513	SED U	472200 00	6554700 00	51 50		0 00	395 00	120 40	1971	ENV 1546	DMESA	cpm
543	144053	G				513 23	EL2275	SML513	SED U	473600 00	6556100 00	55 00		0 00	410 00	124 97	1971	ENV 1546	DMESA	cpm
544	144054	G				513 24	EL2275	SML513	SED U	474800 00	6557800 00	59 00		0 00	335 00	102 11	1971	ENV 1546	DMESA	cpm
545	144055	G				513 25	EL2275	SML513	SED U	476800 00	6559200 00	62 00		0 00	305 00	92 96	1971	ENV 1546	DMESA	cpm
546	144056	G				513 26	EL2275	SML513	SED U	479300 00	6560800 00	67 00		0 00	365 00	111 25	1971	ENV 1546	DMESA	cpm
547	144057	G				513 27	EL2275	SML513	SED U	472800 00	6557200 00	55 00		0 00	350 00	106 68	1971	ENV 1546	DMESA	cpm
549	144059	G				513 28	EL2275	SML513	SED U	474100 00	6554200 00	56 00		0 00	395 00	120 40	1971	ENV 1546	DMESA	cpm
550	144060	G	OK			513 30	EL2275	SML513	SED U	475306 00	6554866 00	56 50		0 00	320 00	97 54	1971	ENV 1546	GPS	cpm
552	144062	G				513 32	EL2275	SML513	SED U	470700 00	6562100 00	51 50		0 00	380 00	115 82	1971	ENV 1546	DMESA	cpm
553	144063	G				513 33	EL2275	SML513	SED U	474900 00	6563600 00	61 00		0 00	305 00	92 96	1971	ENV 1546	DMESA	cpm
554	144064	G				513 34	EL2275	SML513	SED U	477800 00	6562500 00	60 00		0 00	320 00	97 54	1971	ENV 1546	DMESA	cpm
555	144065	G				513 35	EL2275	SML513	SED U	482100 00	6561600 00	60 00		0 00	335 00	102 11	1971	ENV 1546	DMESA	cpm
556	144066	G	OK			513 36	EL2275	SML513	SED U	486641 00	6562232 00	65 50		0 00	395 00	120 40	1971	ENV 1546	GPS	cpm
557	144067	G	OK			513 37	EL2275	SML513	SED U	489256 00	6562332 00	67 50		0 00	425 00	129 54	1971	ENV 1546	GPS	cpm
558	144068	G	OK			513 38	EL2275	SML513	SED U	491726 00	6562586 00	72 00		0 00	440 00	134 11	1971	ENV 1546	GPS	cpm
559	144069	G	OK			513 39A	EL2275	SML513	SED U	497922 00	6565533 00	77 00		0 00	160 00	48 77	1971	ENV 1546	GPS	cpm
560	144070	N				513 39B	EL2275	SML513	SED U	498600 00	6566100 00	80 00		0 00	455 00	138 68	1971	ENV 1546	DMESA	cpm
561	144071	G				513 40	EL2275	SML513	SED U	499500 00	6561600 00	82 50		0 00	455 00	138 68	1971	ENV 1546	DMESA	cpm
562	144072	G				513 41	EL2275	SML513	SED U	493900 00	6556400 00	81 00		0 00	475 00	144 78	1971	ENV 1546	DMESA	cpm
563	144073	G				513 42	EL2275	SML513	SED U	498000 00	6558800 00	76 50		0 00	494 00	150 57	1971	ENV 1546	DMESA	cpm
564	144074	G				513 43	EL2275	SML513	SED U	492200 00	6554100 00	80 50		0 00	455 00	138 68	1971	ENV 1546	DMESA	cpm
565	144075	G	OK			513 44	EL2275	SML513	SED U	485440 00	6558988 00	61 00		0 00	382 00	116 43	1971	ENV 1546	GPS	cpm
566	144076	G	OK			513 45	EL2275	SML513	SED U	485591 00	6555509 00	69 00		0 00	360 00	109 73	1971	ENV 1546	GPS	cpm
567	144077	G	OK			513 46	EL2275	SML513	SED U	485710 00	6552112 00	73 50		0 00	399 00	121 62	1971	ENV 1546	GPS	cpm
568	144078	G	OK			513 47	EL2275	SML513	SED U	477740 00	6549618 00	61 00		0 00	399 00	121 62	1971	ENV 1546	GPS	cpm
569	144080	G	OK			513 48	EL2275	SML513	SED U	481219 00	6549607 00	67 50		0 00	297 00	90 53	1971	ENV 1546	GPS	cpm
570	144081	G	OK			513 49	EL2275	SML513	SED U	487867 00	6548782 00	79 50		0 00	417 00	127 10	1971	ENV 1546	GPS	cpm
571	144082	G	OK			513 50	EL2275	SML513	SED U	486987 00	6546984 00	77 00		0 00	397 00	121 01	1971	ENV 1546	GPS	cpm
572	144083	G				513 51	EL2275	SML513	SED U	484300 00	6545200 00	78 00		0 00	355 00	108 20	1971	ENV 1546	DMESA	cpm
573	144084	G	OK			513 52	EL2275	SML513	SED U	482647 00	6547103 00	78 00		0 00	358 00	109 12	1971	ENV 1546	GPS	cpm
574	144085	G				513 53	EL2275	SML513	SED U	488300 00	6546200 00	78 50		0 00	399 00	121 62	1971	ENV 1546	DMESA	cpm
575	144086	G	OK			513 54	EL2275	SML513	SED U	486629 00	6542512 00	75 00		0 00	382 00	116 43	1971	ENV 1546	GPS	cpm
576	144087	G				513 55	EL2275	SML513	SED U	483900 00	6540600 00	71 50		0 00	358 00	108 51	1971	ENV 1546	DMESA	cpm
577	144088	G	OK			513 56	EL2275	SML513	SED U	489911 00	6539043 00	82 00		0 00	455 00	138 68	1971	ENV 1546	GPS	cpm
578	144089	G	OK			513 57	EL2275	SML513	SED U	488628 00	6536399 00	82 00		0 00	397 00	121 01	1971	ENV 1546	GPS	cpm
579	144090	G	OK			513 58	EL2275	SML513	SED U	489038 00	6532880 00	84 50		0 00	397 00	121 01	1971	ENV 1546	GPS	cpm
580	144091	G	OK			513 59	EL2275	SML513	SED U	491787 00	6533986 00	85 00		0 00	400 00	121 92	1971	ENV 1546	GPS	cpm
581	144092	G	OK			513 60	EL2275	SML513	SED U	494634 00	6535116 00	88 00		0 00	350 00	106 68	1971	ENV 1546	GPS	cpm
582	144093	G	OK			513 61	EL2275	SML513	SED U	492985 00	6537875 00	87 00		0 00	397 00	121 01	1971	ENV 1546	GPS	cpm
2356	144406	G				MD-FD 1	EL2275	EL174	MINAD	491200 00	6547600 00	83 50		0 00						
2357	144407	G				MD-FD 2	EL2275	EL174	MINAD	492500 00	6547700 00	84 50		0 00						
2358	144408	G	OK			MD-FD 3	EL2275	EL174	MINAD	489949 00	6542498 00	80 50		0 00						
2362	144412	G	OK			MD-FD 7	EL2275	EL174	MINAD	481375 00	6535060 00	71 50		0 00						
2363	144413	G	OK			MD-FD 8	EL2275	EL174	MINAD	479048 00	6543825 00	63 50		0 00						
2364	144414	G				MD-FD 9	EL2275	EL174	MINAD	478100 00	6542900 00	62 00		0 00						

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
2365	144415	G				MD-FD 10	EL2275	EL174	MINAD	474000.00	6542900.00	59 00		0 00		82.00	1975	ENV 2532	DMESA	
2366	144418	G	OK			MD-FD 11	EL2275	EL174	MINAD	473449 00	6554692 00	55 50		0 00		118 50	1975	ENV 2532	GPS	
2367	144417	G	OK			MD-FD 12A	EL2275	EL174	MINAD	474642 00	6554614 00	59 00		0 00		81 50	1975	ENV 2532	GPS	
2373	144423	G				MD-FD 18	EL2275	EL174	MINAD	499800 00	6531900 00	94 00		0 00		152 00	1975	ENV 2532	DMESA	
2374	144424	G				MD-FD 19	EL2275	EL174	MINAD	499800 00	6540000 00	94 00		0 00		152 00	1975	ENV 2532	DMESA	
2413	144497	G	MC			FE 27	EL2275	EL178	S VENT	472220 51	6587990 59	64 00		0 00		102 50	1975	ENV 2584	DMESA	2327 etc
3266	144635	G	DG			LC 35	EL2275	EL802	MARATHN	471952 65	6562355 20	55 00		50 20		75 30	1979	ENV 3421	MAP 3713/7	
3267	144636	G	DG			LC 36	EL2275	EL802	MARATHN	472359 22	6562549 96	57 00		47 40		137 00	1979	ENV 3421	MAP 3713/7	
3268	144637	G	DG			LC 37	EL2275	EL802	MARATHN	470073 10	6562336 66	53 00		45 10		128 00	1979	ENV 3421	MAP 3713/7	
3276	144645	G	DG			LC 45	EL2275	EL802	MARATHN	472406 43	6555286 97	51 50		49 80		128 00	1979	ENV 3421	MAP 3713/7	
3277	144646	G	OK			LC 46	EL2275	EL802	MARATHN	474206 00	6554448 00	57 00		54 90		126 00	1979	ENV 3421	GPS	
3278	144647	G	OK			LC 47	EL2275	EL802	MARATHN	474753 00	6554670 00	57 00		57 20		79 00	1979	ENV 3421	GPS	
3279	144648	G	OK			LC 48	EL2275	EL802	MARATHN	473987 00	6553308 00	56 00		55 50		102 00	1979	ENV 3421	GPS	
3280	144649	G	OK			LC 49	EL2275	EL802	MARATHN	474321 00	6552397 00	58 00		53 50		88 00	1979	ENV 3421	GPS	
3281	144650	G	OK			LC 50	EL2275	EL802	MARATHN	478489 00	6551893 00	62 00		59 70		95 00	1979	ENV 3421	GPS	
3282	144651	G	OK			LC 51	EL2275	EL802	MARATHN	478647 00	6552856 00	66 00		60 90		96 00	1979	ENV 3421	MAP 3713/7	
3283	144652	G	OK			LC 52	EL2275	EL802	MARATHN	478789 00	6553839 00	58 00		57 80		95 00	1979	ENV 3421	MAP 3713/7	
3284	144653	G	OK			LC 53	EL2275	EL802	MARATHN	478714 00	6553328 00	62 00		61 00		95 00	1979	ENV 3421	MAP 3713/7	
3285	144654	G	OK			LC 54	EL2275	EL802	MARATHN	478570 00	6552376 00	66 00		58 70		95 00	1979	ENV 3421	GPS	
3286	144655	G	OK			LC 55	EL2275	EL802	MARATHN	478678 00	6553065 00	64 50		62 30		96 00	1979	ENV 3421	MAP 3713/7	
3287	144656	G	OK			LC 56	EL2275	EL802	MARATHN	478692 00	6553210 00	63 00		62 60		96 00	1979	ENV 3421	MAP 3713/7	
3288	144657	G	OK			LC 57	EL2275	EL802	MARATHN	485695 00	6553623 00	70 00		67 90		110 00	1979	ENV 3421	GPS	
3289	144658	G	OK			LC 58	EL2275	EL802	MARATHN	478691 00	6553266 00	62 00		62 20		96 00	1979	ENV 3421	MAP 3713/7	
3290	144659	G	OK			LC 59	EL2275	EL802	MARATHN	478592 00	6552544 00	66 00		60 30		94 00	1979	ENV 3421	MAP 3713/7	
3291	144660	G	OK			LC 60	EL2275	EL802	MARATHN	474518 00	6553243 00	58 00		53 10		112 00	1979	ENV 3421	GPS	
3292	144661	G	OK			LC 61	EL2275	EL802	MARATHN	475449 00	6553230 00	63 00		57 20		88 00	1979	ENV 3421	GPS	
3293	144662	G	OK			LC 62	EL2275	EL802	MARATHN	476431 00	6553209 00	65 50		59 70		96 00	1979	ENV 3421	GPS	
3294	144663	G	OK			LC 63	EL2275	EL802	MARATHN	477451 00	6553223 00	63 00		56 10		96 00	1979	ENV 3421	GPS	
3295	144664	G	OK			LC 64	EL2275	EL802	MARATHN	478373 00	6553350 00	58 00		58 00		134 00	1979	ENV 3421	GPS	
3296	144665	G	OK			LC 65	EL2275	EL802	MARATHN	479551 00	6553003 00	63 00		0 00		114 00	1979	ENV 3421	MAP 3713/7	
3297	144666	G	OK			LC 66	EL2275	EL802	MARATHN	480580 00	6552973 00	60 00		0 00		96 00	1979	ENV 3421	MAP 3713/7	
3298	144667	G	OK			LC 67	EL2275	EL802	MARATHN	478848 00	6553040 00	65 00		0 00		96 00	1979	ENV 3421	MAP 3713/7	
3299	144668	G	OK			LC 68	EL2275	EL802	MARATHN	478739 00	6552851 00	66 00		0 00		96 00	1979	ENV 3421	MAP 3713/7	
3300	144669	G	OK			LC 69	EL2275	EL802	MARATHN	478788 00	6552846 00	66 00		0 00		90 00	1979	ENV 3421	MAP 3713/7	
3301	144670	G	OK			LC 70	EL2275	EL802	MARATHN	478792 00	6552650 00	66 50		0 00		102 00	1979	ENV 3421	MAP 3713/7	
3302	144671	G	DG			LC 71	EL2275	EL802	MARATHN	483380 73	6554071.74	72 50		0 00		111 00	1979	ENV 3421	MAP 3713/7	
3303	144672	G	DG			LC 72	EL2275	EL802	MARATHN	487793 68	6556325 68	73 00		0 00		106 00	1979	ENV 3421	MAP 3713/7	
3304	144673	G	DG			LC 73	EL2275	EL802	MARATHN	482826 71	6556223 54	64 00		0 00		97 50	1979	ENV 3421	MAP 3713/7	
3305	144674	G	DG			LC 74	EL2275	EL802	MARATHN	479799 26	6556205 60	58 00		0 00		103 50	1979	ENV 3421	MAP 3713/7	
3306	144675	G	DG			LC 75	EL2275	EL802	MARATHN	477792 07	6556196 69	54 00		0 00		88 50	1979	ENV 3421	MAP 3713/7	
3352		G	OK	P		BE 40	EL2275	EL549	MARATHN	481206 00	6549825 00	67 50		62 40		91 00	1981	ENV 3713	MAP 3713	
3353		G	OK	P		BE 41	EL2275	EL549	MARATHN	480232 00	6549438 00	65 25		61 40		104 00	1981	ENV 3713	MAP 3713	
3354		G	OK	P		BE 42	EL2275	EL549	MARATHN	480685 00	6549550 00	66 25		61 40		96 50	1981	ENV 3713	MAP 3713	
3355		G	OK	P		BE 43	EL2275	EL549	MARATHN	481188 00	6549507 00	67 75		62 70		96 00	1981	ENV 3713	MAP 3713	
3356	145831	G	OK			BE 44	EL2275	EL549	MARATHN	481246 00	6549985 00	66 50		62 70		108 20	1981	ENV 3713	MAP 3713	
3357		G	OK	P		BE 45	EL2275	EL549	MARATHN	479200 00	6549525 00	62 50		60 20		96 00	1981	ENV 3713	MAP 3713	
3358	145832	G	OK			BE 46	EL2275	EL549	MARATHN	478220 00	6550028 00	61 00		59 00		96 00	1981	ENV 3713	MAP 3713	
3359	145833	G	OK			BE 47	EL2275	EL549	MARATHN	478365 00	6550960 00	61 00		59 10		96 00	1981	ENV 3713	MAP 3713	
3360	145834	G	OK			BE 48	EL2275	EL549	MARATHN	478943 00	6548826 00	62 50		58 70		96 00	1981	ENV 3713	MAP 3713	
3361	145835	G	OK			BE 49	EL2275	EL549	MARATHN	481164 00	6549405 00	68 00		62 90		96 00	1981	ENV 3713	MAP 3713	
3362	145836	G	OK			BE 50	EL2275	EL549	MARATHN	480667 00	6549434 00	66 50		61 50		96 00	1981	ENV 3713	MAP 3713	
3363	145837	G	OK			BE 51	EL2275	EL549	MARATHN	481675 00	6549870 00	69 00		64 30		88 00	1981	ENV 3713	MAP 3713	
3364		G	OK	P		BE 52	EL2275	EL549	MARATHN	480695 00	6549596 00	66 25		61 40		96 00	1981	ENV 3713	MAP 3713	
3365		G	OK	P		BE 53	EL2275	EL549	MARATHN	480707 00	6549649 00	66 00		61 50		96 00	1981	ENV 3713	MAP 3713	
3366		G	OK	P		BE 54	EL2275	EL549	MARATHN	481218 00	6549877 00	67 50		62 30		96 00	1981	ENV 3713	MAP 3713	
3367		G	OK	P		BE 55	EL2275	EL549	MARATHN	480708 00	6549694 00	66 00		61 70		96 00	1981	ENV 3713	MAP 3713	
3368		G	OK	P		BE 56	EL2275	EL549	MARATHN	480695 00	6549825 00	66 25		61 40		96 00	1981	ENV 3713	MAP 3713	
3369		G	OK	P		BE 57	EL2275	EL549	MARATHN	480723 00	6549745 00	66 00		61 90		104 20	1981	ENV 3713	MAP 3713	
3376	145840	G	OK			BE 64	EL2275	EL549	MARATHN	474242 00	6551481 00	58 00		55 30		70 00	1981	ENV 3713	GPS	
3377	145841	G	OK			BE 65	EL2275	EL549	MARATHN	479683 00	6549437 00	63 50		62 20		96 00	1981	ENV 3713	GPS	

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
3378		G	OK	P		BE 66	EL2275	EL549	MARATHN	480970 00	6549565 00	67 00		61 90		95 00	1981	ENV 3713	GPS	
3379		G	OK	P		BE 67	EL2275	EL549	MARATHN	480748 00	6548838 00	65 75		62 20		95 00	1981	ENV 3713	GPS	
3380		G	OK	P		BE 68	EL2275	EL549	MARATHN	479715 00	6548539 00	63 50		61 40		96 00	1981	ENV 3713	GPS	
3381		G	OK	P		BE 69	EL2275	EL549	MARATHN	480740 00	6549611 00	66 25		61 60		96 00	1981	ENV 3713	GPS	
3382		G	OK	P		BE 70	EL2275	EL549	MARATHN	480601 00	6549642 00	65 75		61 60		95 00	1981	ENV 3713	GPS	
3383		G	OK	P		BE 71	EL2275	EL549	MARATHN	480259 00	6549519 00	66 25		62 00		95 00	1981	ENV 3713	GPS	
3384		G	OK	P		BE 72	EL2275	EL549	MARATHN	480793 00	6549605 00	66 50		61 70		95 00	1981	ENV 3713	GPS	
3385		G	OK	P		BE 73	EL2275	EL549	MARATHN	480757 00	6549686 00	66 25		61 70		95 00	1981	ENV 3713	GPS	
3386		G	OK	P		BE 74	EL2275	EL549	MARATHN	480287 00	6549610 00	65 25		61 80		95 00	1981	ENV 3713	GPS	
3387		G	OK	P		BE 75	EL2275	EL549	MARATHN	480850 00	6549599 00	66 50		61 70		95 00	1981	ENV 3713	GPS	
3388		G	OK	P		BE 76	EL2275	EL549	MARATHN	480658 00	6549701 00	65 75		61 60		95 00	1981	ENV 3713	GPS	
3389		G	OK	P		BE 77	EL2275	EL549	MARATHN	480295 00	6549703 00	65 00		61 20		95 00	1981	ENV 3713	GPS	
3390	145842	G	OK			BE 78	EL2275	EL549	MARATHN	480766 00	6549916 00	65 75		61 90		95 00	1981	ENV 3713	GPS	
3391		G	OK	P		BE 79	EL2275	EL549	MARATHN	481228 00	6548765 00	67 25		62 30		95 00	1981	ENV 3713	GPS	
3392		G	OK	P		BE 80	EL2275	EL549	MARATHN	480510 00	6549650 00	65 50		61 20		96 00	1981	ENV 3713	GPS	
3393	145843	G	OK			BE 81	EL2275	EL549	MARATHN	480299 00	6549790 00	64 75		62 10		78 00	1981	ENV 3713	GPS	
3394		G	OK	P		BE 82	EL2275	EL549	MARATHN	479743 00	6549630 00	63 50		61 10		95 00	1981	ENV 3713	GPS	
3395	145844	G	OK			BE 83	EL2275	EL549	MARATHN	479208 00	6549625 00	62 50		59 90		96 00	1981	ENV 3713	GPS	
3396		G	OK	P		BE 84	EL2275	EL549	MARATHN	482628 00	6549628 00	71 00		65 60		110 00	1981	ENV 3713	GPS	
3397	145845	G	OK			BE 85	EL2275	EL549	MARATHN	483878 00	6549405 00	75 00		66 30		110 00	1981	ENV 3713	GPS	
3398	145846	G	OK			BE 86	EL2275	EL549	MARATHN	485000 00	6549500 00	75 50		68 30		110 00	1981	ENV 3713	GPS	
3399		G	OK	P		BE 87	EL2275	EL549	MARATHN	483458 00	6548245 00	77 00		71 60		112 00	1981	ENV 3713	GPS	
3400	145847	G	OK			BE 88	EL2275	EL549	MARATHN	481897 00	6545946 00	77 00		65 50		104 00	1981	ENV 3713	GPS	
3401	145848	G	OK			BE 89	EL2275	EL549	MARATHN	482143 00	6549664 00	69 00		65 00		103 00	1981	ENV 3713	GPS	
3402		G	OK	P		BE 90	EL2275	EL549	MARATHN	479171 00	6549452 00	62 50		60 40		95 00	1981	ENV 3713	GPS	
3403	145849	G	OK			BE 91	EL2275	EL549	MARATHN	478720 00	6549227 00	62 00		59 00		95 00	1981	ENV 3713	GPS	
3404		G	OK	P		BE 92	EL2275	EL549	MARATHN	480289 00	6549560 00	65 25		62 70		100 00	1981	ENV 3713	GPS	
3405		G	OK	P		BE 93	EL2275	EL549	MARATHN	480290 00	6549653 00	65 00		61 20		95 00	1981	ENV 3713	GPS	
3406		G	OK	P		BE 94	EL2275	EL549	MARATHN	480764 00	6549608 00	66 50		61 80		95 00	1981	ENV 3713	GPS	
3407		G	OK	P		BE 95	EL2275	EL549	MARATHN	480701 00	6549676 00	66 50		61 70		96 00	1981	ENV 3713	GPS	
3408	145850	G	OK			BE 96	EL2275	EL549	MARATHN	480855 00	6550341 00	64 50		62 10		96 00	1981	ENV 3713	GPS	
3409		G	OK	P		BE 97	EL2275	EL549	MARATHN	480713 00	6549719 00	66 00		61 70		95 00	1981	ENV 3713	GPS	
3410		G	OK	P		BE 98	EL2275	EL549	MARATHN	480687 00	6549575 00	66 25		61 40		95 00	1981	ENV 3713	GPS	
3411	145851	G	OK			BE 99	EL2275	EL549	MARATHN	480938 00	6550771 00	63 00		60 90		98 00	1981	ENV 3713	GPS	
3412	145852	G	OK			BE 100	EL2275	EL549	MARATHN	480253 00	6549482 00	65 25		61 90		97 00	1981	ENV 3713	GPS	
3413		G	OK	P		BE 101	EL2275	EL549	MARATHN	478722 00	6549678 00	61 00		56 90		78 00	1981	ENV 3713	GPS	
3414	145853	G	OK			BE 102	EL2275	EL549	MARATHN	475695 00	6549803 00	61 00		57 40		120 00	1981	ENV 3713	GPS	
3415		G	OK	P		BE 103	EL2275	EL549	MARATHN	474791 00	6550193 00	60 00		58 70		88 00	1981	ENV 3713	GPS	
3416	145854	G	OK			BE 104	EL2275	EL549	MARATHN	473942 00	6550192 00	56 50		55 50		80 00	1981	ENV 3713	GPS	
3417	145855	G	OK			BE 105	EL2275	EL549	MARATHN	475770 00	6547421 00	60 00		57 70		88 00	1981	ENV 3713	GPS	
3418	145856	G	OK			BE 106	EL2275	EL549	MARATHN	476496 00	6546758 00	63 00		61 30		88 00	1981	ENV 3713	GPS	
3419	145857	G	OK			BE 107	EL2275	EL549	MARATHN	477188 00	6546112 00	64 00		59 30		88 00	1981	ENV 3713	GPS	
3420	145858	G	OK			BE 108	EL2275	EL549	MARATHN	477950 00	6545433 00	63 00		61 20		88 00	1981	ENV 3713	GPS	
3421	145859	G	OK			BE 109	EL2275	EL549	MARATHN	478500 00	6544565 00	63 00		61 50		112 00	1981	ENV 3713	GPS	
3422	145860	G	OK			BE 110	EL2275	EL549	MARATHN	480008 00	6548775 00	65 50		62 90		104 00	1981	ENV 3713	GPS	
3423		G	OK	P		BE 111	EL2275	EL549	MARATHN	480935 00	6548498 00	69 50		62 70		96 00	1981	ENV 3713	GPS	
3424	145861	G	OK			BE 112	EL2275	EL549	MARATHN	481779 00	6548369 00	72 00		66 80		104 00	1981	ENV 3713	GPS	
3425		G	OK	P		BE 113	EL2275	EL549	MARATHN	482745 00	6548482 00	75 50		66 80		112 00	1981	ENV 3713	GPS	
3426	145862	G	OK			BE 114	EL2275	EL549	MARATHN	480385 00	6548535 00	67 50		63 60		96 00	1981	ENV 3713	GPS	
3427	145863	G	OK			BE 115	EL2275	EL549	MARATHN	479968 00	6548135 00	66 00		62 60		98 00	1981	ENV 3713	GPS	
3428		G	OK	P		BE 116	EL2275	EL549	MARATHN	480277 00	6548779 00	66 50		63 20		100 00	1981	ENV 3713	GPS	
3429		G	OK	P		BE 117	EL2275	EL549	MARATHN	479716 00	6548147 00	64 75		62 50		100 00	1981	ENV 3713	GPS	
3430	145864	G	OK			BE 118	EL2275	EL549	MARATHN	479971 00	6548405 00	65 75		62 30		96 00	1981	ENV 3713	GPS	
3431		G	OK	P		BE 119	EL2275	EL549	MARATHN	479473 00	6548148 00	63 75		61 50		96 00	1981	ENV 3713	GPS	
3432	145865	G	OK			BE 120	EL2275	EL549	MARATHN	479984 00	6547455 00	67 00		62 40		96 00	1981	ENV 3713	GPS	
3433	145866	G	OK			BE 121	EL2275	EL549	MARATHN	479439 00	6547438 00	64 25		58 70		88 00	1981	ENV 3713	GPS	
3434		G	OK	P		BE 122	EL2275	EL549	MARATHN	480023 00	6549056 00	65 25		61 60		96 00	1981	ENV 3713	GPS	
3435	145867	G	OK			BE 123	EL2275	EL549	MARATHN	480132 00	6549039 00	65 50		62 70		96 00	1981	ENV 3713	GPS	
3436		G	OK	P		BE 124	EL2275	EL549	MARATHN	480139 00	6549158 00	65 50		67 80		96 00	1981	ENV 3713	GPS	
3437	145868	G	OK			BE 125	EL2275	EL549	MARATHN	480059 00	6548773 00	65 75		63 00		100 00	1981	ENV 3713	GPS	

LAKE FROME EMBAYMENT  
HOLE LOCATIONS AND DETAILS FROM OPEN FILE REPORTS

Record N°	DMESA N°	GL	GPS	C1	C2	Hole Name	Current Tenement	Original Lease	Original Operator	E-AMG	N-AMG	Estimated Elevation	Elevation (ft)	Elevation (m)	Total Depth (ft)	Total Depth (m)	Date	Fiche N°	Map N°	Notes
3438		G	OK	P		BE 128	EL2275	EL549	MARATHN	480004 00	6548883 00	65.25		67.60		98.00	1981	ENV 3713	GPS	
3439		G	OK	P		BE 127	EL2275	EL549	MARATHN	479902 00	6548875 00	65.00		67.00		96.00	1981	ENV 3713	GPS	
3440		G	OK	P		BE 128	EL2275	EL549	MARATHN	479612 00	6548140 00	64.00		62.10		96.00	1981	ENV 3713	GPS	
3441		G	OK	P		BE 129	EL2275	EL549	MARATHN	480184 00	6549041 00	65.75		61.90		96.00	1981	ENV 3713	GPS	
3442		G	OK	P		BE 130	EL2275	EL549	MARATHN	480056 00	6548837 00	65.50		63.00		100.00	1981	ENV 3713	GPS	
3443		G	OK	P		BE 131	EL2275	EL549	MARATHN	480061 00	6548720 00	65.75		62.70		100.00	1981	ENV 3713	GPS	
3444	145869	G	OK	P		BE 132	EL2275	EL549	MARATHN	480102 00	6548833 00	65.75		63.30		96.00	1981	ENV 3713	GPS	
3445		G	OK	P		BE 133	EL2275	EL549	MARATHN	480000 00	6548725 00	65.50		63.10		100.00	1981	ENV 3713	GPS	
3446		G	OK	P		BE 134	EL2275	EL549	MARATHN	479769 00	6548417 00	64.75		62.60		120.00	1981	ENV 3713	GPS	
3447	145870	G	OK	P		BE 135	EL2275	EL549	MARATHN	479558 00	6548148 00	64.00		61.90		96.00	1981	ENV 3713	GPS	
3448		G	OK	P		BE 136	EL2275	EL549	MARATHN	479934 00	6547892 00	66.00		61.90		96.00	1981	ENV 3713	GPS	
3449		G	OK	P		BE 137	EL2275	EL549	MARATHN	479662 00	6548423 00	64.25		63.40		96.00	1981	ENV 3713	GPS	
3450		G	OK	P		BE 138	EL2275	EL549	MARATHN	479608 00	6548428 00	64.00		67.60		96.00	1981	ENV 3713	GPS	
3451		G	OK	P		BE 139	EL2275	EL549	MARATHN	479509 00	6548146 00	63.75		61.70		96.00	1981	ENV 3713	GPS	
3452		G	OK	P		BE 140	EL2275	EL549	MARATHN	479555 00	6548038 00	64.00		61.60		96.00	1981	ENV 3713	GPS	
3453		G	OK	P		BE 141	EL2275	EL549	MARATHN	479729 00	6547899 00	64.50		61.60		96.00	1981	ENV 3713	GPS	
3454		G	OK	P		BE 142	EL2275	EL549	MARATHN	479929 00	6547786 00	66.25		61.90		96.00	1981	ENV 3713	GPS	
3455	145871	G	OK			BE 143	EL2275	EL549	MARATHN	480517 00	6547475 00	70.00		64.60		100.00	1981	ENV 3713	GPS	
3456	145872	G	OK			BE 144	EL2275	EL549	MARATHN	480482 00	6546932 00	71.50		64.90		128.00	1981	ENV 3713	GPS	
3457	145873	G	OK			BE 145	EL2275	EL549	MARATHN	480986 00	6546971 00	73.00		66.80		100.00	1981	ENV 3713	GPS	
3458		G	OK	P		BE 146	EL2275	EL549	MARATHN	479839 00	6547902 00	65.50		61.70		96.00	1981	ENV 3713	GPS	
3459		G	OK	P		BE 147	EL2275	EL549	MARATHN	479506 00	6548433 00	63.75		67.10		100.00	1981	ENV 3713	GPS	
3460		G	OK	P		BE 148	EL2275	EL549	MARATHN	479787 00	6548618 00	65.00		62.80		100.00	1981	ENV 3713	GPS	
3461		G	OK	P		BE 149	EL2275	EL549	MARATHN	479944 00	6548726 00	65.25		63.10		96.00	1981	ENV 3713	GPS	
3462		G	OK	P		BE 150	EL2275	EL549	MARATHN	480111 00	6548775 00	65.75		63.20		100.00	1981	ENV 3713	GPS	
3463		G	OK	P		BE 151	EL2275	EL549	MARATHN	479698 00	6547616 00	65.00		67.50		100.00	1981	ENV 3713	GPS	
3464		G	OK	P		BE 152	EL2275	EL549	MARATHN	479411 00	6548434 00	63.75		61.60		96.00	1981	ENV 3713	GPS	
3465		G	OK	P		BE 153	EL2275	EL549	MARATHN	479499 00	6548633 00	63.75		60.60		96.00	1981	ENV 3713	GPS	
3466	145874	G	OK			BE 154	EL2275	EL549	MARATHN	479703 00	6548785 00	64.50		60.70		96.00	1981	ENV 3713	GPS	
3467		G	OK	P		BE 155	EL2275	EL549	MARATHN	479508 00	6548735 00	63.75		60.30		96.00	1981	ENV 3713	GPS	
3468		G	OK	P		BE 156	EL2275	EL549	MARATHN	479708 00	6548937 00	64.50		60.40		96.00	1981	ENV 3713	GPS	
3469	145875	G	OK			BE 157	EL2275	EL549	MARATHN	479541 00	6548544 00	64.00		61.80		96.00	1981	ENV 3713	GPS	
3470		G	OK	P		BE 158	EL2275	EL549	MARATHN	479608 00	6548812 00	64.00		60.40		96.00	1981	ENV 3713	GPS	
3471		G	OK	P		BE 159	EL2275	EL549	MARATHN	479711 00	6548890 00	64.50		60.50		96.00	1981	ENV 3713	GPS	
3472		G	OK	P		BE 160	EL2275	EL549	MARATHN	479794 00	6548881 00	64.75		61.50		96.00	1981	ENV 3713	GPS	
3473		G	OK	P		BE 161	EL2275	EL549	MARATHN	479457 00	6548435 00	63.75		61.70		96.00	1981	ENV 3713	GPS	
3475	129507	G	OK			BE 165C	EL2275	EL957	MARATHN	479647 00	6548137 00	64.25		0.00		92.73		ENV 3713	GPS	
3476	129508	G	OK			BE 166C	EL2275	EL957	MARATHN	479554 00	6548145 00	64.00		0.00		91.00		ENV 3713	GPS	
3477	129509	G	OK			BE 167C	EL2275	EL957	MARATHN	479491 00	6548143 00	63.75		0.00		89.10		ENV 3713	GPS	
3478		G	OK	P		BE 169	EL2275	EL957	MARATHN	481733 00	6547183 00	75.00				108.00	1981	ENV 3713	GPS	
3479	145876	G	OK			BE 170	EL2275	EL957	MARATHN	481315 00	6548405 00	70.00		0.00		96.00	1981	ENV 3713	GPS	
3480		G	OK	P		BE 171	EL2275	EL957	MARATHN	481115 00	6548437 00	69.50				90.00	1981	ENV 3713	GPS	
3481		G	OK	P		BE 172	EL2275	EL957	MARATHN	481013 00	6548450 00	70.00				93.00	1981	ENV 3713	GPS	
3482	145877	G	OK			BE 173	EL2275	EL957	MARATHN	483150 00	6545220 00	77.00		0.00		108.00	1981	ENV 3713	GPS	
3483	145878	G	OK			BE 174	EL2275	EL957	MARATHN	485722 00	6540945 00	74.00		0.00		114.00	1981	ENV 3713	GPS	
3484	145879	G	OK			BE 175	EL2275	EL957	MARATHN	484986 00	6535069 00	79.00		0.00		110.00	1981	ENV 3713	GPS	
3486	145880	G	OK			BE 177	EL2275	EL957	MARATHN	494588 00	6531655 00	88.00		0.00		156.00	1981	ENV 3713	GPS	
3487	145881	G				BE 178	EL2275	EL957	MARATHN	483000 00	6543200 00	71.00		0.00		105.00	1981	ENV 3713	DMESA	
3488	145882	G	OK			BE 179	EL2275	EL957	MARATHN	480337 00	6545602 00	69.50		0.00		102.00	1981	ENV 3713	GPS	
3489	145883	G				BE 180	EL2275	EL957	MARATHN	483400 00	6552000 00	71.00		0.00		102.00	1981	ENV 3713	DMESA	
3490		G	OK	P		BE 181	EL2275	EL957	MARATHN	479421 00	6548148 00	63.75				91.50	1981	ENV 3713	GPS	
3491	145884	G	OK			BE 182	EL2275	EL957	MARATHN	479371 00	6548148 00	63.50		0.00		100.50	1981	ENV 3713	GPS	
3572	129501	G	DG			MU 2	EL2275	EL679	MARATHN	486418 84	6533418 52	81.00		0.00		614.70		ENV 4011	DMESA	
4068	-212	X		X		BU07	EL2275	EL0839		500150 00	6535900 00	XXX		100.00		152.00		GS1978/179	DMESA	
4069	-219	X		X		BU14	EL2275	EL0841		500000 00	6543800 00	91.00		100.00		120.00		GS1978/179	DMESA	
4070	-227	X		X		BU22	EL2275	EL0843		500000 00	6551800 00	89.00		100.00		120.00		GS1978/179	DMESA	

## **APPENDIX 2**

**EL 2272- 2275**

**CURNAMONA URANIUM JOINT VENTURE**

**1998 DRILL HOLE SUMMARY  
DRILL HOLE LOGS CUM001 - CUM096**

**April 1999**

DRILL HOLE DATA  
EL2275

Record	Hole	EL	N-AMG	E-AMG	AHD	Azim	Dip	T.DEPTH
1	CUM001	EL2275	6548145	479585	61.50	0	-90	104
2	CUM002	EL2275	6548146	479529	61.50	0	-90	102
3	CUM003	EL2275	6548427	479478	62.25	0	-90	103
4	CUM004	EL2275	6548429	479426	62.25	0	-90	97
5	CUM005	EL2275	6548431	479377	62.25	0	-90	96
6	CUM006	EL2275	6548629	479548	61.50	0	-90	102
7	CUM007	EL2275	6548624	479577	61.50	0	-90	102
8	CUM008	EL2275	6548803	479629	60.50	0	-90	96
9	CUM009	EL2275	6548626	479593	61.50	0	-90	102
10	CUM010	EL2275	6548795	479653	60.50	0	-90	102
11	CUM011	EL2275	6548804	479642	60.50	0	-90	102
12	CUM012	EL2275	6548727	479870	61.80	0	-90	102
13	CUM013	EL2275	6548800	479900	61.80	0	-90	102
14	CUM014	EL2275	6548762	479883	61.80	0	-90	102
15	CUM015	EL2275	6548784	479889	61.80	0	-90	102
16	CUM016	EL2275	6548776	479985	63.25	0	-90	102
17	CUM017	EL2275	6548777	480080	63.25	0	-90	102
18	CUM018	EL2275	6548804	480055	63.25	0	-90	102
19	CUM019	EL2275	6548879	479986	64.60	0	-90	102
20	CUM020	EL2275	6549040	480162	64.00	0	-90	102
21	CUM021	EL2275	6549100	480200	64.00	0	-90	102
22	CUM022	EL2275	6549100	480300	66.50	0	-90	102
23	CUM023	EL2275	6549338	480201	61.00	0	-90	102
24	CUM024	EL2275	6549389	480218	61.00	0	-90	96
25	CUM025	EL2275	6549239	480170	61.00	0	-90	102
26	CUM026	EL2275	6549200	481000	63.25	0	-90	96
27	CUM027	EL2275	6549300	481000	63.25	0	-90	96
28	CUM028	EL2275	6549100	481000	63.25	0	-90	96
29	CUM029	EL2275	6549131	480300	66.50	0	-90	102
30	CUM030	EL2275	6547902	479781	61.50	0	-90	96
31	CUM031	EL2275	6547500	479699	63.75	0	-90	96
32	CUM032	EL2275	6547499	479598	63.75	0	-90	96
33	CUM033	EL2275	6547229	480517	64.80	0	-90	102
34	CUM034	EL2275	6547052	480498	64.80	0	-90	102
35	CUM035	EL2275	6546985	480490	64.80	0	-90	102
36	CUM036	EL2275	6546100	480350	64.00	0	-90	102
37	CUM037	EL2275	6545850	480339	64.00	0	-90	102
38	CUM038	EL2275	6545974	480349	64.00	0	-90	102
39	CUM039	EL2275	6546037	480349	64.00	0	-90	102
40	CUM040	EL2275	6546004	480350	64.00	0	-90	102
41	CUM041	EL2275	6553594	478755	58.50	0	-90	90
42	CUM042	EL2275	6553698	478775	58.50	0	-90	90
43	CUM043	EL2275	6550543	478285	59.10	0	-90	90
44	CUM044	EL2275	6550361	478270	59.10	0	-90	90
45	CUM045	EL2275	6549460	478138	59.00	0	-90	96
46	CUM046	EL2275	6550879	476670	61.00	0	-90	92
47	CUM047	EL2275	6551876	476620	61.00	0	-90	90
48	CUM048	EL2275	6551747	480945	59.50	0	-90	102
49	CUM049	EL2275	6551782	481938	59.50	0	-90	96
50	CUM050	EL2275	6546094	480457	64.00	0	-90	102

DRILL HOLE DATA  
EL2275

Record	Hole	EL	N-AMG	E-AMG	AHD	Azim	Dip	T.DEPTH
51	CUM051	EL2275	6545966	480462	64.00	0	-90	102
52	CUM052	EL2275	6545999	480452	64.00	0	-90	102
53	CUM053	EL2275	6545980	480457	64.00	0	-90	102
54	CUM054	EL2275	6546116	480254	64.00	0	-90	102
55	CUM055	EL2275	6546172	480263	64.00	0	-90	96
56	CUM056	EL2275	6546146	480255	64.00	0	-90	102
57	CUM057	EL2275	6547909	479808	61.60	0	-90	96
58	CUM058	EL2275	6548630	479590	61.50	0	-90	96
59	CUM059	EL2275	6548741	480063	63.00	0	-90	102
60	CUM060	EL2275	6548832	480034	63.50	0	-90	102
61	CUM061	EL2275	6548881	479995	64.60	0	-90	102
62	CUM062	EL2275	6549064	480193	64.00	0	-90	96
63	CUM063	EL2275	6549292	480187	61.00	0	-90	96
64	CUM064	EL2275	6549265	480178	61.00	0	-90	96
65	CUM065	EL2275	6548839	479984	64.60	0	-90	96
66	CUM066	EL2275	6557075	485549	68.00	0	-90	120
67	CUM067	EL2275	6558049	485517	66.00	0	-90	126
68	CUM068	EL2275	6556688	485539	69.00	0	-90	114
69	CUM069	EL2275	6554646	482796	69.50	0	-90	108
70	CUM070	EL2275	6554109	482859	69.00	0	-90	108
71	CUM071	EL2275	6555100	482692	67.00	0	-90	102
72	CUM072	EL2275	6551627	482355	67.50	0	-90	102
73	CUM073	EL2275	6544179	478815	63.50	0	-90	96
74	CUM074	EL2275	6545025	478338	63.00	0	-90	96
75	CUM075	EL2275	6544759	478344	63.00	0	-90	90
76	CUM076	EL2275	6544785	478763	63.00	0	-90	96
77	CUM077	EL2275	6545044	477966	62.50	0	-90	90
78	CUM078	EL2275	6545073	477444	63.00	0	-90	94
79	CUM079	EL2275	6545068	475443	58.00	0	-90	85.2
80	CUM080	EL2275	6539398	488978	81.00	0	-90	126
81	CUM081	EL2275	6540177	488262	81.50	0	-90	126
82	CUM082	EL2275	6534807	493727	87.00	0	-90	135
83	CUM083	EL2275	6535137	483199	74.50	0	-90	96
84	CUM084	EL2275	6535140	484051	73.00	0	-90	102
85	CUM085	EL2275	6535082	484588	76.00	0	-90	108
86	CUM086	EL2275	6543290	477624	61.00	0	-90	90
87	CUM087	EL2275	6542945	477025	60.50	0	-90	90
88	CUM088	EL2275	6543076	477266	61.50	0	-90	90
89	CUM089	EL2275	6540349	476068	62.00	0	-90	92
90	CUM090	EL2275	6539663	476769	62.50	0	-90	78
91	CUM091	EL2275	6540049	476425	62.00	0	-90	95
92	CUM092	EL2275	6539901	476591	62.50	0	-90	83
93	CUM093	EL2275	6541298	474849	60.00	0	-90	78
94	CUM094	EL2275	6538839	475584	63.50	0	-90	90
95	CUM095	EL2275	6538804	473547	61.50	0	-90	90
96	CUM096	EL2275	6538892	477535	63.50	0	-90	71

TABLE 1

## STRATIGRAPHY FOR LAKE FROME EMBAYMENT

Geol. Unit	Description
--	Unknown
Q	Quaternary undifferentiated
Qc	Quaternary conglomerate
T	Tertiary undifferentiated
Tn	Namba Formation
Tnm	Namba Fm – mudstone
Tnmb	Namba Fm – Beverley mudstone
Tnma	Namba Fm – alpha mudstone
Tn0a	Namba Fm – alpha mudstone sand
Tnoa3	Namba Fm – alpha mudstone upper sand
Tn0a2	Namba Fm – alpha mudstone middle sand
Tn0a1	Namba Fm – alpha mudstone lowest sand
Tnk2	Namba Fm – upper calcareous mudstone
Tnk1	Namba Fm – main calcareous mudstone
Tnk	Namba Fm – calcareous mudstone
Tng	Namba Fm – lignite
Tn4	Namba Fm – shallow upper sand
Tn3	Namba Fm – upper sand
Tn3p	Namba Fm – upper pyritic sand
Tn2	Namba Fm – middle sand
Tn1	Namba Fm – normal lowest sand
Tn0b	Namba Fm – Beverley sand
Tn0	Namba Fm – deep lowest sands
Tns	Namba Fm – undifferentiated sand
Tnmo	Namba Fm – organic mudstone
Te	Eyre Formation
Te2	Eyre Fm – upper fine-medium grained sands
Te1c3	Eyre Fm – upper coarse grained sands third cycle
Te1c2	Eyre Fm – upper coarse grained sands second cycle
Te1c1	Eyre Fm – upper coarse grained sands first cycle
Te1c	Eyre Fm – upper coarse grained sands
Te1b3	Eyre Fm – basal coarse grained sands third cycle
Te1b2	Eyre Fm – basal coarse grained sands second cycle
Te1b1	Eyre Fm – basal coarse grained sands first cycle
Te1b	Eyre Fm – basal coarse grained sands
Te1a2	Eyre Fm – basal grit/conglomerate second cycle
Te1a1	Eyre Fm – basal grit/conglomerate first cycle
Te1a	Eyre Fm – basal grit/conglomerate
Te1	Eyre Fm – coarse grained basal sand/conglomerate
Te0	Eyre Fm – deep basil sand/conglomerate
Tes	Eyre Fm – sands undifferentiated
Tem	Eyre Fm – mudstone
Teg	Eyre Fm – lignite
Temk	Eyre Fm – calcareous mudstone
BA	Basement undifferentiated sediments
Km	Cretaceous basement sediments
Cbn	Cambrian basement sediments
Pa	Proterozoic amphibolite
Pg	Proterozoic granite
Pn	Proterozoic gneiss
Prot	Proterozoic undifferentiated schist, metaseds, gneiss, granite

# PALADIN RESOURCES N'

Co-ord local (m) — E — N  
 Co-ord AMG 479585 F 6548145 N  
 Collar Elev (m) — m) 81.50 ADH  
 Depth (m) 104.00 Azimuth — 80 deg  
 Date commenced 09/02/1998 Date completed 09/02/1998  
 Geologist JD-B Logged date 09/02/1998  
 Drilling Co. Thompson Method rotary mud  
 Casing from (m) — To —  
 Water Table (m) — Date measured —  
 Hole Diam. (cm) 12 Plugged (Y/N) N  
 Date plotted 09/06/1998

## CUM001

### Geophysical Logging

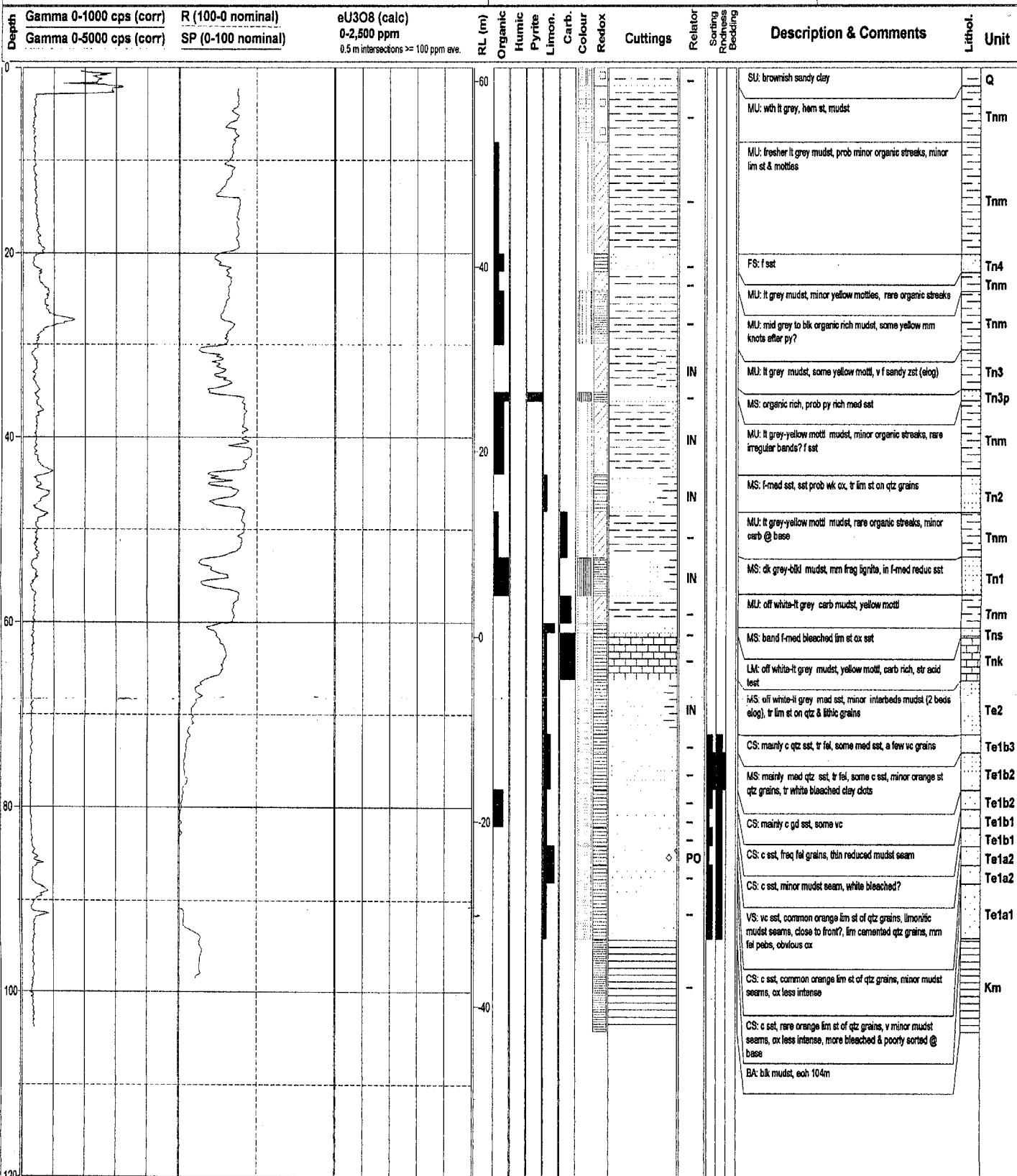
		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	—
Probe No.	gamma 689	gamma to (m)	104.0	—
Date Logged	09/02/1998	gamma speed (m/min)	3	—
Operator	GJ	electric from (m)	0.0	—
Open/Closed Hole	open	electric to (m)	104.0	—
Notes	good SP, bad R	electric speed (m/min)	8	—

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave.

**CUM002**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0				-60												SU: wind blown sand @ surface	Q	
																MU: wth grey brownish st mudst	Tnm	
																MU: blk organic mudst, common hem st due to surface ox	Tnm	
																MU: blk organic mudst	Tnm	
20				40												MU: lt grey str yellow mottl mudst, irregular tr zst	Tnm	
																MU: mid grey mudst, uniform, tr f sst (elag)	Tnm	
																MU: str lim st/mottl lt grey mudst, prob ox along thin f sst seams, looks bleached in part	Tnm	
																MS: organic rich py? f sst	Tn3p	
40				20												MU: lt-mid grey, minor yellow mottl mudst, tr irreg zst in patches, minor to rare organic streaks	Tnm	
																MS: interbedded sst & mudst, elag	Tn2	
																MU: interbedded sstmudst, elag, poss some carb?	Tnm	
																FS: lt-mid grey, minor yellow mottl mudst bed in lt grey f sst, occas organic streaks	Tn1	
60				0												MU: dk grey-blk organic mudst	Tnm	
																MU: lt grey-yellow mottl mudst	Tns	
																MS: med sst elag	Tnk	
																LM: off white bleached mudst, carb rich	Tnm	
																MU: mid grey mudst	Te2	
																MS: seems to be mainly med sst, str contam from mudst, poor sample, washed, 4 mudst interbeds (elag)	Te1b3	
80				20												FS: f sst, prob some ox bleached mudst, some orange lim st	Te1b3	
																CS: c wk ox sst, tr orange lim st in clay, tr ox st on qtz grains	Te1b2	
																VS: vc wk ox sst	Te1a2	
																CO: gritty congl, abund fel grains/pebs, mm pebs, wk ox, tr lim st only, bleached	Te1a2	
																CO: gritty congl, rare lim after py flu to mudst top? elag	Te1a1	
100				40												CO: gritty congl, abund fel, mm pebs, f py cement, tr blk mudst, humic st on qtz & fels pebs	Km	
																BA: dk grey-blk mudst, last 4m badly washed, eoh 102m		

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

organic	lumic	pyrite	mon.	Carb.	colour	edox	Cuttings	relator	Sorting	ndness	edding	Descript
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**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic Humic Pyrite Limon.	Carb. Colour Redox	Cuttings	Relator	Sorting Ripples Bedding	Description & Comments	Lithol.	Unit
0				-60						SU: brown sand at surface		Q
										MU: lt gray brown clays with minor silt, some lim & hem st		Tnm
										MU: lgr clays with minor lim st, zst (elug)		Tnm
										MU: str lim st in clays, zst (elug)		Tnm
20				-40						MS: ox? med sst, elug		Tn4
										MU: v minor lim st in clays, some organic material in blk mudst		Tnm
										MU: minor lim st in yellow mot grey clays		Tnm
										MU: str lim st in yellow mot grey clays		Tnm
										FS: seams of blk f sst with py? & abund organic matter		Tn3p
40				-20						MU: yellow & bleached clays		Tnm
										MS: interbedded sst and mudst (elug)		Tn2
										MU: mainly dk clays, lt grey clays @ 49m, organics & py 42-46m		Tnm
										MS: v sandy unit in namba, minor carb clay		Tn1
										MU: some lim st on dk grey clays		Tnm
60				0						CS: elug, sand layer		Tns
										LM: white clay, bleached? carb rich		Tnk
										CS: minor lim clay		Tn2
										VS: 4 clay bands elug in vc sst		Te2
										VS: 4 clay bands (elug) in vc sst		Te2
80				-20						VS: v minor lim clay & bleachd clay		Te1b1
										CO: abund lim clay & bleachd clay		Te1a2
										CO: lim & py in transitional zone to reduc		Te1a1
										CO: dk grey to blk sand, abund py		Te1a1
100				-40						BA: blue grey mudst, eoh 102m		Km

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-3 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave.

120-

Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Roundness	Bedding	Des
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**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

### Description & Comments

Unit

## Geophysical Logging

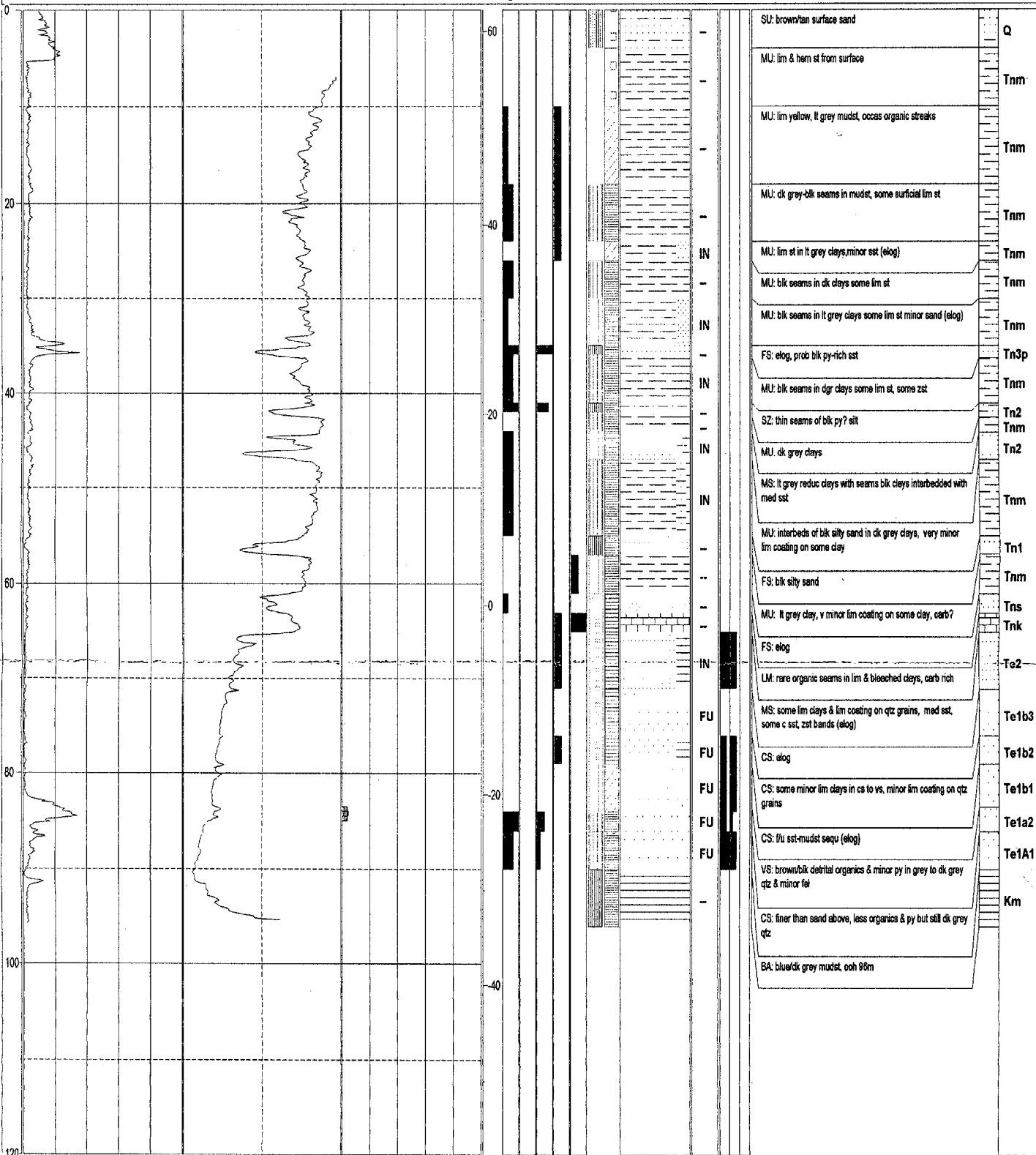
Co-ord local (m)	--	E	--
Co-ord AMG	479377	E	6548431
Collar Elev (m)		m)	62.25
Depth (m)	96.0	Azimuth	-- 90 deg
Date commenced	10/02/1998	Date completed	10/02/1998
Geologist	WVD	Logged date	10/02/1998
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	0.0	To	6.0
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12.0	Plugged (Y/N)	N
Date plotted	08/06/1998		

**CUM005**

**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Cuttings	Relator	Description & Comments	Lithol.	Unit
Organic Humic Pyrite Limon. Carb. Colour Redox	Sorting Richness Bedding			

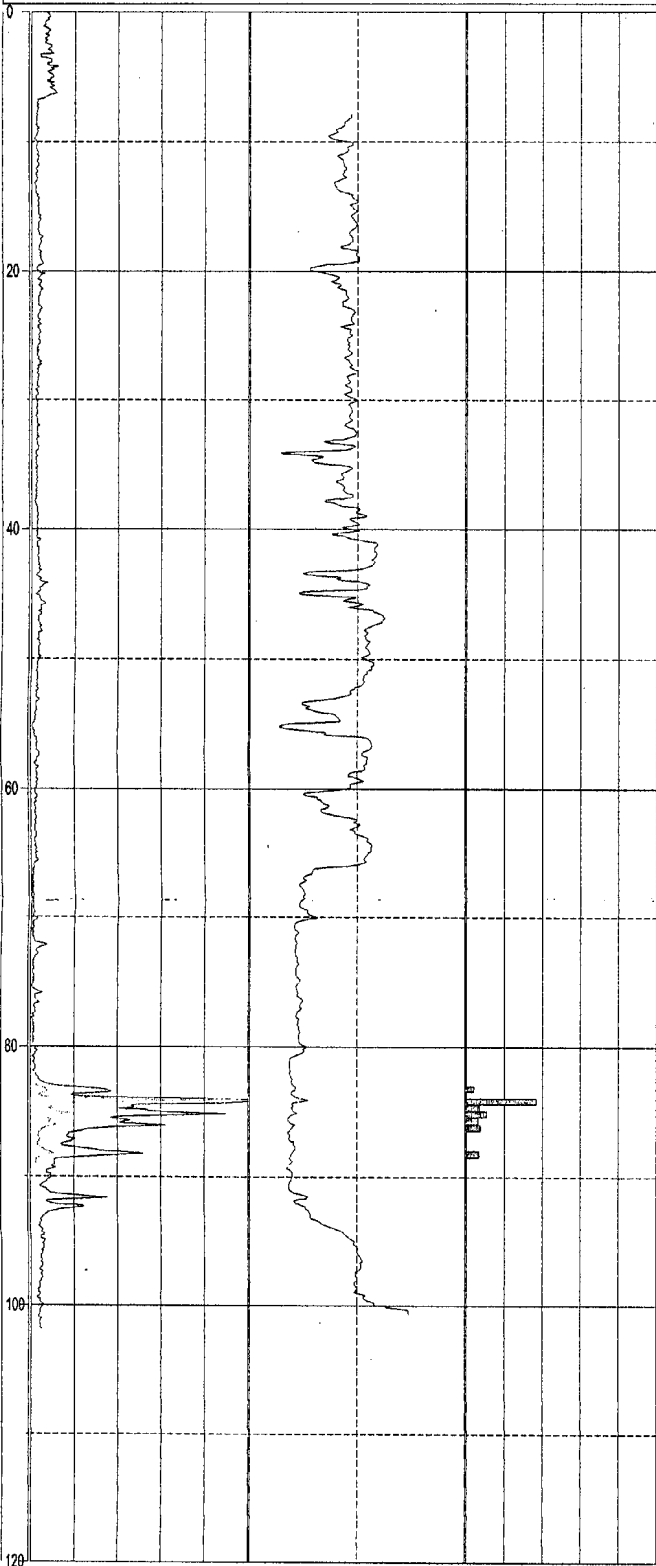


# PALADIN RESOURCES NI

## Geophysical Logging

		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris 62 - No 266			
Probe No.	gamma 688			
Date Logged	10/02/1998			
Operator	GJ			
Open/Closed Hole	open			
Notes	good SP, bad R			

Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
		0.5 m intersections >= 100 ppm ave.



Co-ord local (m)	-	E	-	N
Co-ord AMG	479548	E	6548629	N
Collar Elev (m)	-	m)	61.50	ADH
Depth (m)	102	Azimuth	-	90 deg
Date commenced	10/02/1998	Date completed	10/02/1998	
Geologist	JD-B	Logged date	10/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM006**

**Prospect: Oban**

**Project: 9261**  
**Name: CUJV**  
**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyritic	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0																SU: brown sand/clay	Q	
																MU: with hem st lt grey mudst	Tnm	
																MU: str yellow st on lt grey mudst	Tnm	
																MU: lt-mid grey mudst, some yellow lim st, rare streaks organic mud, @ 20 m minor lignite, 19.5 thin sand lens	Tnm	
																MU: dk grey organic mudst	Tnm	
																FS: elog, poss py fine sst	Tn3	
																MU: part ox yellow mott lt-mid grey mudst & thin seams of ox fine sandy silt	Tnm	
																FS: elog	Tn2	
																MU: lt-mid grey mudst, minor yellow mott, some reduce dk grey mudst, patch nontronite clay @ 40m, bleached @ base	Tnm	
																MU: dk grey-bk organic mudst, mm nodules of lim? after py?	Inn	
																FS: minor f sand	Tnm	
																MU: yellow mott lt-mid grey mudst, in parts off white bleached, carb rich	Tns	
																FS: elog	Tnk	
																LM: mainly grey to bleached white mudst, a few harder siltstone? bands, harder drilling, carb rich	Te2	
																MU: dk greenish grey mudst, base of namba	Te1b3	
																MS: bleached med sst, minor c, fel<<qtz, rare lim crusts, some bands bleached mudst	Te1b2	
																CS: c sst, minor vc, lithic<fel<<qtz, some white bleached clay, tr greenish clay, tr lim crusts & lim st on mudst seems/gulls?	Te1b1	
																VS: vc sst, abund grit, lithic<fel<<qtz, some white bleached clay, tr greenish clay, tr lim crusts & lim st on mud clots	Te1a	
																VS: vc sst		
																VS: vc sst, abund grit, lithic<fel<<qtz, abund dk brown humic matter, tr py, dk humic st on qtz grains, dk lithic grains, a few mm pebs, brown clay	Km	
																BA: blk mudst, eoh 102m		

## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	479577	E	6548624	N
Collar Elev (m)	—	m)	61.50	ADH
Depth (m)	102.0	Azimuth	—	90 deg
Date commenced	10/02/1998	Date completed	10/02/1998	
Geologist	WD	Logged date	10/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM007**

**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Recesses	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm																
			0.5 m intersections >= 100 ppm ave.																
0				60													SU: surface sand & soil, no good logs	Q	
																	MU: yellow-grey surface ox clay & minor lim & hem st & crusts	Tnm	
																	MU: yellow grey clay minor lim st & rare organic streaks in thin interbeds of dk clay	Tnm	
20				40													MU: v dk clay with some organic streaks & v minor lim coating on 5% clay	Tnm	
																	MU: trans clay, minor lim coating on 15% of lt grey clays	Tnm	
																	MU: dk clays with some organic clays, minor py?	Tnm	
																	MU: mainly dk grey clays with common organic seams of silty sand, minor lim st on lt grey clays	TnSp	
40				20													MU: yellow grey mudst with some bleached white clays, minor organic streaks in non bleached clays	Tnm	
																	MU: white bleached clays, carb rich	Tnm	
																	MU: v dk grey clay with common blk organic material in silty f est	Tn1	
60				0													MU: dominated by lim coated lt grey clays	Tnm	
																	LM: lt grey clays & bleached clays very minor lim st. clay, close to top of eyre7, carb rich	Tnk	
																	CS: clean white to off white med to mainly c sst, fels<qtz, v minor lim coating	Te2	
																	CS: common bleached white clay in med-c sst, fels<qtz	Te1b3	
80				20													VS: vc sand to grit, minor lim st on qtz grains	Te1b2	
																	CS: vc sand to grit, common organics & py, lim coating on qtz grains	Te1b1	
																	VS: common humic st on qtz, py, some organic matter, brown clays, vc sand	Te1a2	
																	CO: common humic st on qtz, py, some organic matter, brown clay, vc-grit, some larger pebs	Te1a1	
100				40													BA: blue grey mudst, eoh 102m	Km	

# PALADIN RESOURCES N<sup>1</sup>

Co-ord local (m) -- E -- N  
 Co-ord AMG 479629 E 6548803 N  
 Collar Elev (m) -- 60.50 ADH  
 Depth (m) 96.0 Azimuth -- 90 deg  
 Date commenced 11/02/1998 Date completed 11/02/1998  
 Geologist JD-B Logged date 11/02/1998  
 Drilling Co. Thompson Method rotary mud  
 Casing from (m) 0.0 To 6.0  
 Water Table (m) -- Date measured --  
 Hole Diam. (cm) 12 Plugged (Y/N) N  
 Date plotted 08/06/1998

**CUM008**

## Geophysical Logging

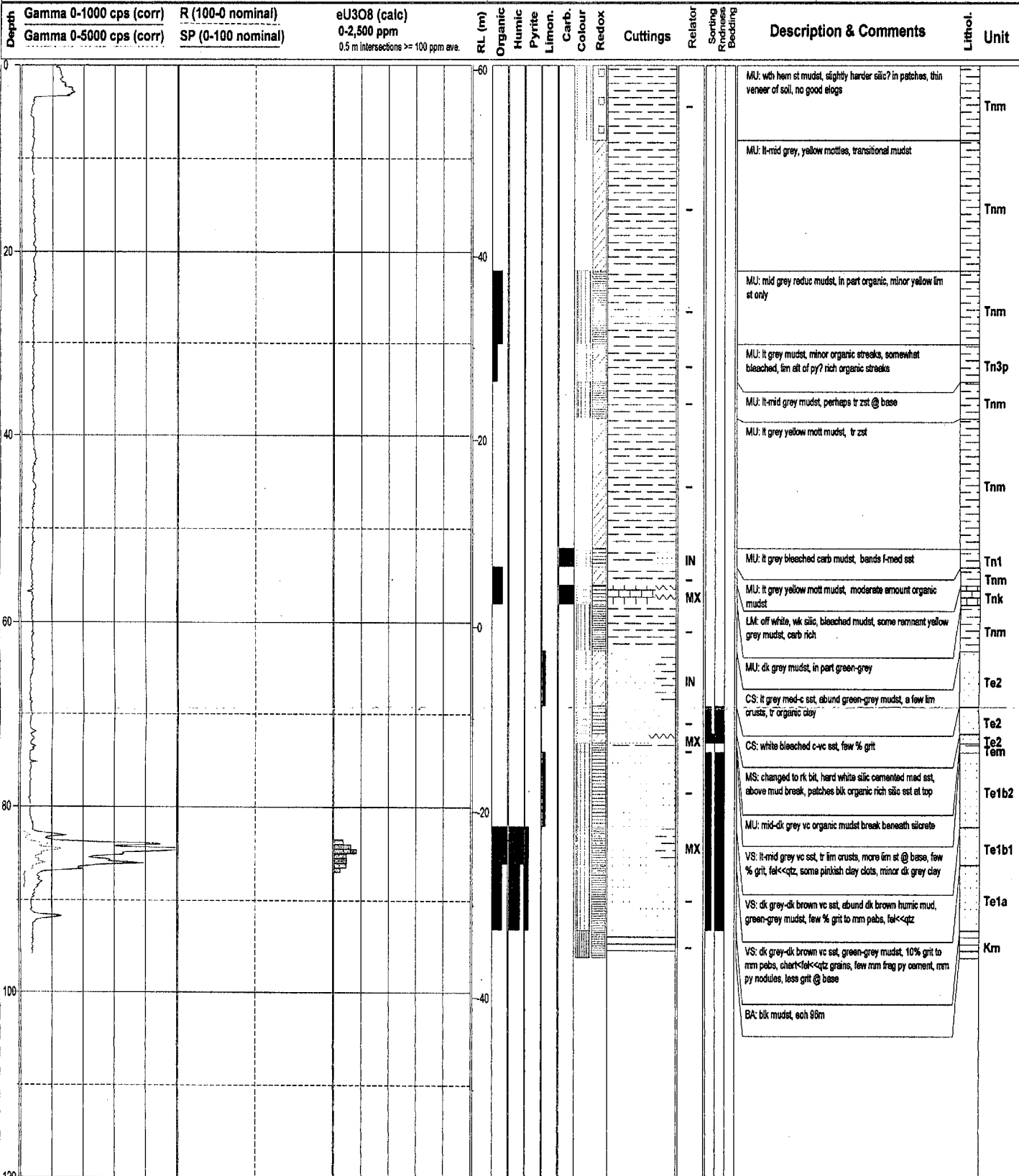
Instrument Mt Sopris S2 - No 266 gamma from (m) 0.0 RUN 1 RUN 2 RUN 3  
 Probe No. gamma 689 gamma to (m) 96.0 90.0 --  
 Date Logged 11/02/1998 gamma speed (m/min) 3 2 --  
 Operator GJ electric from (m) 0.0 --  
 Open/Closed Hole open electric to (m) 94.0 --  
 Notes bad SP, R electric speed (m/min) 8 --

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N°

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 288	gamma from (m)	0.0	84.0	-
Probe No.	gamma 689	gamma to (m)	102.0	96.0	-
Date Logged	11/02/1998	gamma speed (m/min)	3	2	-
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	100.0	-	-
Notes	bad SP, R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479593	E	6548826	N
Collar Elev (m)	-	m)	61.50	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	11/02/1998	Date completed	11/02/1998	
Geologist	WD	Logged date	11/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM009**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
0			0.5 m intersections >= 100 ppm ave.													SU: wind blown surface sand, no good logs	Q	
																MU: lt grey with yellow & reddish brown lim & hum stained days from surface ox	Tnm	
																MU: grey clays with some lim st & coating, rare organic streaks in lt grey clays	Tnm	
																MU: lt grey clays with dk organic seams	Tnm	
																MU: much darker grey with silty interbeds of organic rich material & some brown humic clay	Tnm	
																ZS: silty organic rich bands, approx	Tn3p	
																MU: both lim & organic streaks in lt grey to yellow grey clay, some minor silty seams of blk. py? rich clay	Tnm	
																MU: blk organic seams in dk grey silt in dk grey clay	Tn1	
																LM: bleached off white to white clay, ox? from top of eye, some minor limonitic clay, carb rich	Tnk	
																MU: lt grey clay, v minor organic material & some limonitic clay, lim coating on clay	Tnm	
																MS: off white to lt grey ox med-c sst, some yellow lim-bleached white & lgr clay, v minor lithic grains	Te1b3	
																CS: Du? sand from 76-88m, bleached white clays, fel<qtz		
																VS: vc off white sands, some minor lim clay & lim coating on qtz grains, fel<qtz	Te1b2	
																VS: lim clays & minor organic humic st on qtz grains, lithics=fel<qtz	Te1b1	
																VS: abund lim clay & lim coating on qtz grains, common humic clay, rare pyritic pebbles (>2mm) from silic basement mudst	Te1a	
																VS: common py and some organics & humic staining on qtz, lithics=fel<qtz	Te1a	
																	Km	
																BA: blue grey mudst, eoh 102m		

## PALADIN RESOURCES N'

## Geophysical Logging

Instrument	Mt Sopris S2 - No 286	gamma from (m)	0.0	0.0	--
Probe No.	gamma 689	gamma to (m)	102.0	12.0	--
Date Logged	11/02/1998	gamma speed (m/min)	3	3	--
Operator	GJ	electric from (m)	50.0	0.0	--
Open/Closed Hole	open	electric to (m)	102.0	102.0	--
Notes	bad SP, R	electric speed (m/min)	8	8	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	479653	E	6548795	N
Collar Elev (m)	--	(m)	60.50	ADH
Depth (m)	102.0	Azimuth	--	90 deg
Date commenced	11/02/1998	Date completed	11/02/1998	
Geologist	JD-B	Logged date	11/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM010**

**Prospect: Oban**

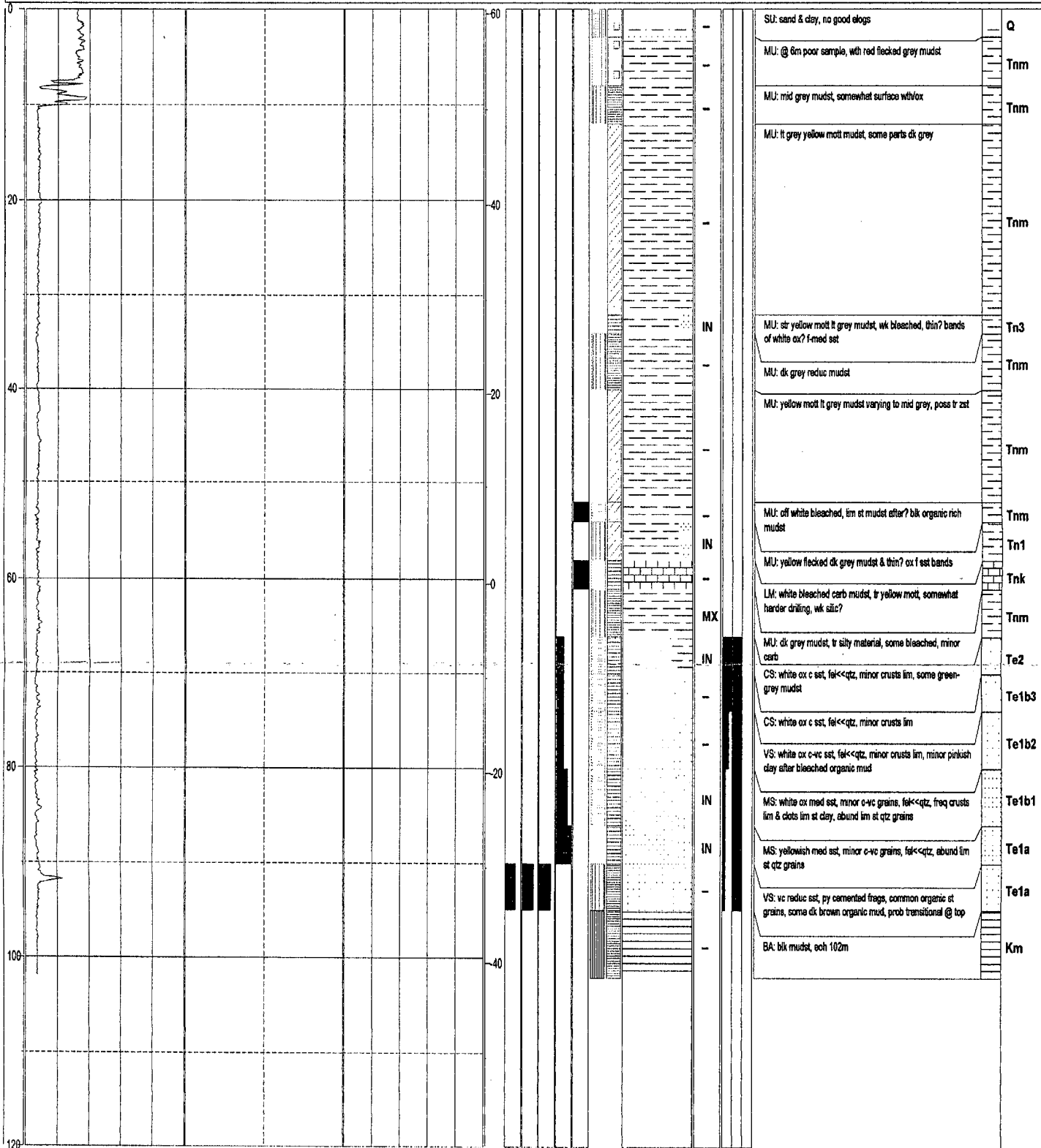
Project: 9261  
Name: CUJV  
Tenement: EL2275

<b>Depth</b>	<b>Gamma 0-1000 cps (corr)</b>	<b>R (100-0 nominal)</b>	<b>eU308 (calc)</b>
	<b>Gamma 0-5000 cps (corr)</b>	<b>SP (0-100 nominal)</b>	<b>0-2,500 ppm</b>
			0.5 m intersections >= 100 ppm ave.

Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Rindness	Bedding
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### Description & Comments

Unit



## Geophysical Logging

Instrument	Mt Sopris G2 - No 266	gamma from (m)	0.0	86.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	94.0	6.0
Open/Closed	12/02/1998	gamma speed (m/min)	3	2	3
Operator	G.J.	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	102.0	--	--
Notes	bad SP, R	electric speed (m/min)	8	--	--

Co-ord focal (m)	—	E	—	N
Co-ord AMG	479642	E	6548804	N
Collar Elev (m)	—	m)	60.50	ADH
Depth (m)	102.0	Azimuth	—	80 deg
Date commenced	12/02/1998	Date completed	12/02/1998	
Geologist	WD	Logged date	12/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM011**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,600 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0				-60												SU: surface wind blown sand, no good logs		Q
																MU: lim & hem st from surface ox, mainly lt grey to pink hem clays		Tnm
																MU: yellow grey mudst, some blk organic seams, slightly silty in part throughout the clay, lim st on clay		Tnm
20				-40												MU: lt grey clay, some minor dk grey seams & organic streaks		Tnm
																MU: yellow grey clay, rare organic streaks in silty seams, py? silt		Tn3p
																MU: minor darker blk clay/silt in dk grey clays, py silt unit absent		Tnm
40				-20												MU: minor darker organics brown/blk mud, generally yellow grey clays with lim coating on clays, minor carb		Tnm
																		Tnm
60				0												LM: white bleached clays & some siccata, very hard band approx 25cm thick, some lt grey clays, carb rich		Tnk
																MU: base namba, mainly clays with interbeds of med est. clays are reduc dk grey		Tnm
																CS: minor lim clays, str yellow coated qtz, mainly clean white to off white fel<qtz sand		Te2
																VS: vc sands minor lim clay & staining on qtz grains very minor lithics, fel<qtz		Te1b3
																CS: some lim coating on qtz grains increasing with depth, close to front?, very yellow qtz towards 80m		Te1b2
80				-20												VS: yellow lim coated qtz grains, adj to front, off white fel & qtz		Te1b1
																VS: abund py cemented qtz grains, up to 1cm pebs, large blk/dk grey qtz pebbles, minor lithics & fel		Te1a
																CS: much less py & finer grained sand, lithic frags=fel<qtz, minor organic material		Te1a
100				-40												BA: blue grey mudst, ooh 102m		Km

# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	90.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	98.0	8.0
Date Logged	12/02/1998	gamma speed (m/min)	3	2	3
Operator	GJ	electric from (m)	0.0	0.0	--
Open/Closed Hole	open	electric to (m)	102.0	102.0	--
Notes	bad SP, R	electric speed (m/min)	8	8	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	479670	E	6548727	N
Collar Elev (m)	--	m)	61.80	ADH
Depth (m)	102.0	Azimuth	--	90 deg
Date commenced	12/02/1998	Date completed	12/02/1998	
Geologist	JD-B	Logged date	12/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

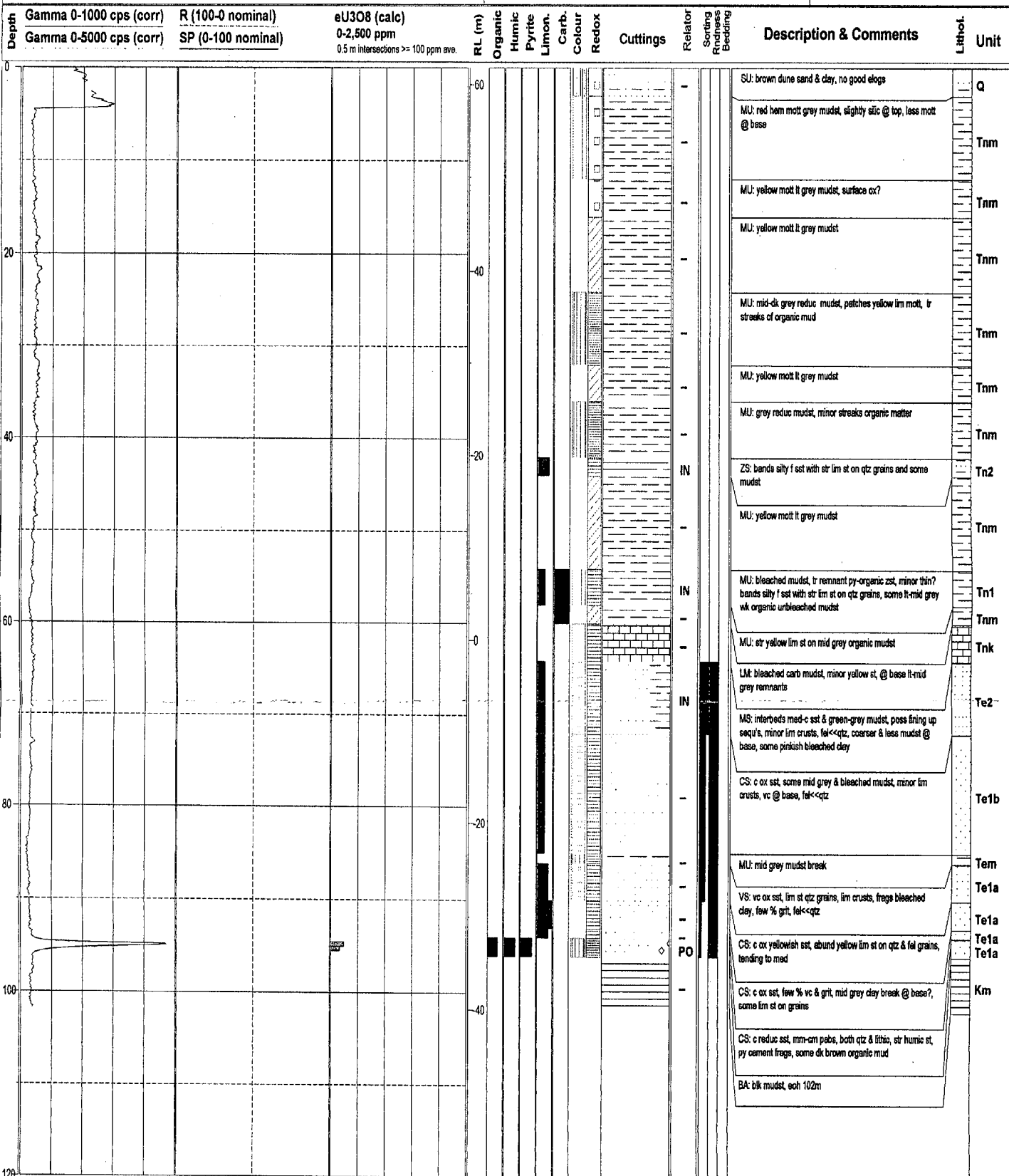
**CUM012**

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	82.0	82.0
Probe No.	gamma 689	gamma to (m)	102.0	96.0	90.0
Date Logged	12/02/1998	gamma speed (m/min)	3	2	2
Operator	WD	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	bad SP, R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479900	E	6548800	N
Collar Elev (m)	-	m)	61.80	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	12/02/1998	Date completed	12/02/1998	
Geologist	WD	Logged date	12/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

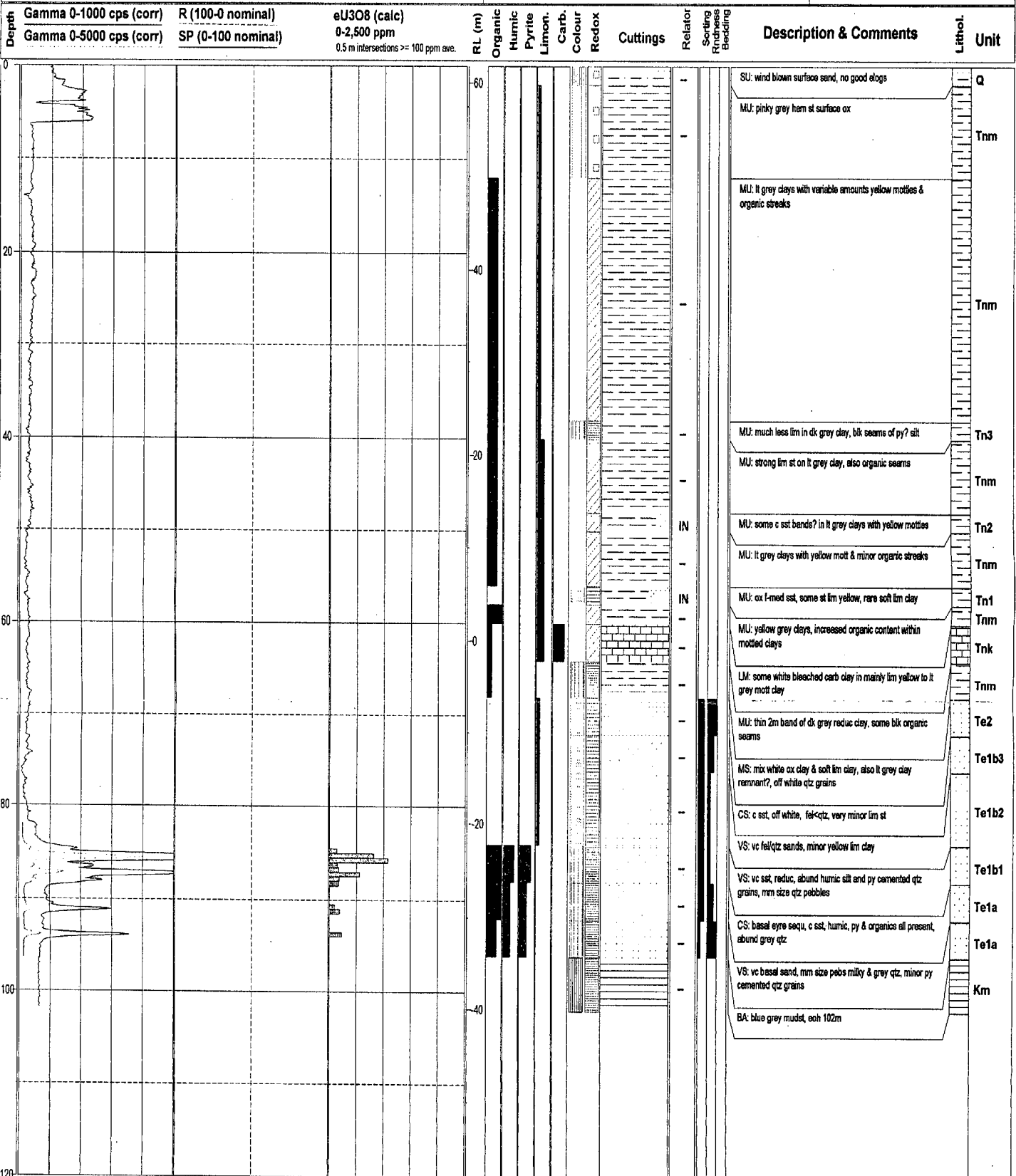
**CUM013**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



# PALADIN RESOURCES N'

Co-ord local (m) -  
Co-ord AMG 479883 E 6548762 N  
Collar Elev (m) - 61.80 ADH  
Depth (m) 102.0 Azimuth - 90 deg  
Date commenced 12/02/1998 Date completed 12/02/1998  
Geologist JD-B Logged date 12/02/1998  
Drilling Co. Thompson Method rotary mud  
Casing from (m) 0.0 To 6.0  
Water Table (m) - Date measured -  
Hole Diam. (cm) 12 Plugged (Y/N) N  
Date plotted 08/06/1998

## CUM014

### Geophysical Logging

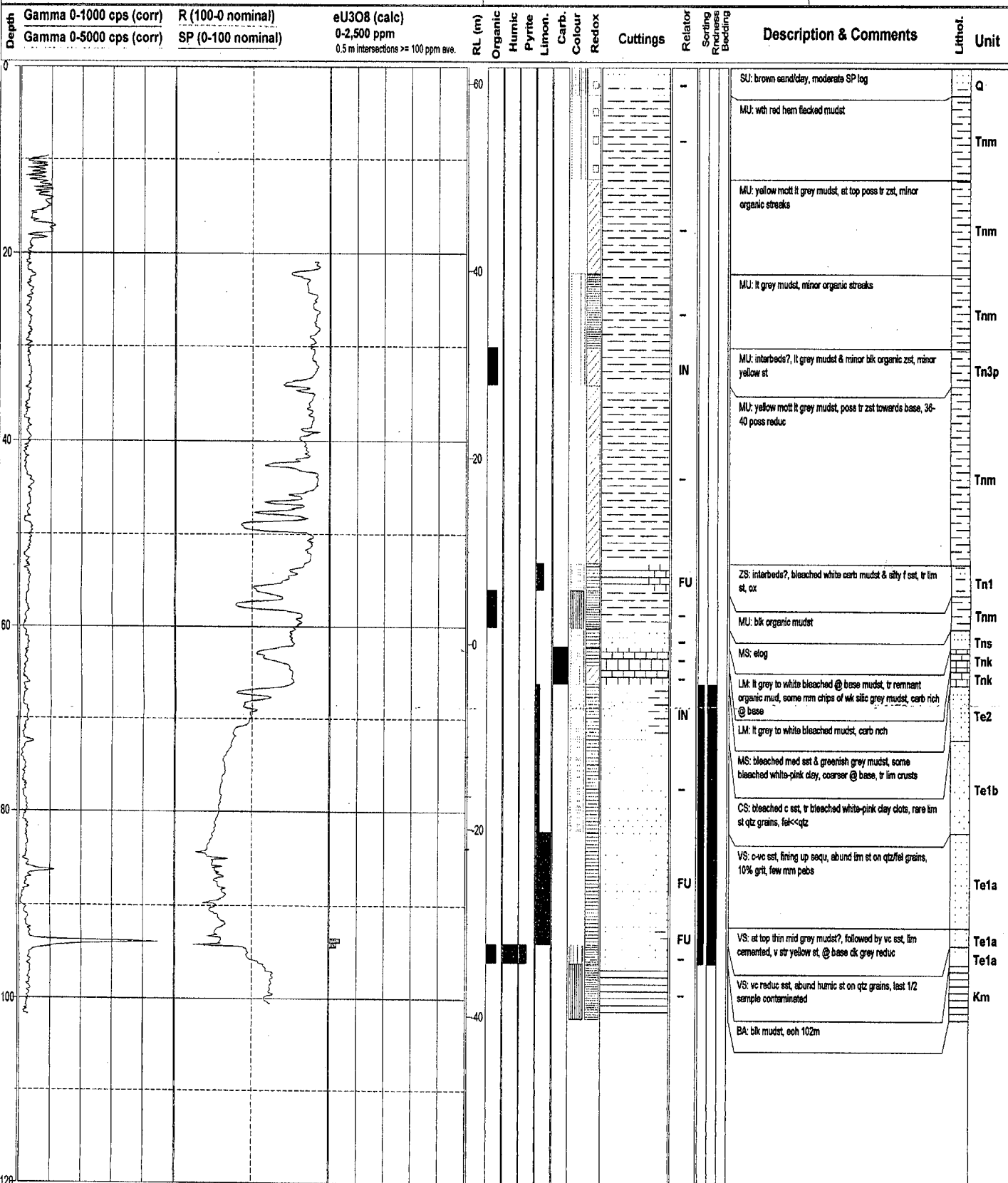
		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	0.0	92.0	0.0
Probe No.	gamma 689	102.0	102.0	102.0
Date Logged	12/02/1998	3	2	4
Operator	GJ	0.0	-	-
Open/Closed Hole	open	100.0	-	-
Notes	OK SP, bad R	8	-	-

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



## Geophysical Logging

Instrument	Mt Sopris S2 - No 268	gamma from (m)	0.0	84.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	96.0	8.0
Date Logged	13/02/1998	gamma speed (m/min)	3	2	3
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	—	E	—	N
Co-ord AMG	479889	E	6548784	N
Collar Elev (m)	—	(m)	61.80	ADH
Depth (m)	102.0	Azimuth	—	90 deg
Date commenced	13/02/1998	Date completed	13/02/1998	
Geologist	JD-B	Logged date	13/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM015**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0																SU: brown sand, moderate SP log		Q
																MU: with red ham flecked grey mudst		Tnm
																MU: yellow mott @ top of grey mudst		Tnm
20																MU: lt-mid grey, blk organic streaked mudst and sand elog		Tnm
																MU: lt-mid grey, partly yellow lim mott		Tnm
																MU: mid-dk grey, partly blk organic mudst, wk yellow st		Tnm
																ZS: elog, poss pyritic unit(?)		Tn3
40																MU: lt-mid grey mudst, blk organic mud streaks in patches, partly yellow mott		Tnm
																MS: elog, sst		Tn2
																MU: elog, mudst		Tnm
																ZS: elog, banded zst and f sst		Tn2
																MU: lt-mid grey mudst, partly yellow mott		Tnm
60																ZS: thin bands lt-mid grey mudst, partly yellow mott in ox silty f sst, lim st qtz, lim crusts		Tn1
																MU: yellow mott dk grey mudst, tr carb nodules		Tnm
																LM: bleached mudst, carb rich		Tnk
																ZS: silty f sst, tending to med gd		Tns
																LM: lt grey to part bleached carb rich mudst, bands?		Tns
80																MS: bleached ox med sst, some c, interbeds partly white-pinkish bleached lt grey mudst, lim st on clay clots, lim crusts, 5 mudst bands elog		Te2
																MS: ox med sst, some c, tr pinkish clay mx, lim crusts		Te1b3
																CS: ox c sst, some vc, tr grit, tr pinkish clay mx, 7% lim crusts		Te1b2
																VS: upper limb of wing, mix str ox and reduc vc-grit sst, lithic<fel<<qtz		Te1b1
																VS: base of l/w sequ, mix v str ox & lesser amount reduc vc-grit sst, lim crusts, minor dk brown reduc mud		Te1a
100																VS: med-vc sst, med @ top?, some well rounded grit, minor cherty grains, lim crusts		Te1a
																VS: vc-grit sst, v str reduc, abund humic st on qtz grains, abund py cement		Km
																BA: blk mudst, eoh 102m		

# PALADIN RESOURCES N°

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 268	gamma from (m)	0.0	84.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	96.0	6.0
Date Logged	13/02/1998	gamma speed (m/min)	3	2	3
Operator	WD	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	poor SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479685	E	6548776	N
Collar Elev (m)	-	n)	63.25	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	13/02/1998	Date completed	13/02/1998	
Geologist	WD	Logged date	13/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

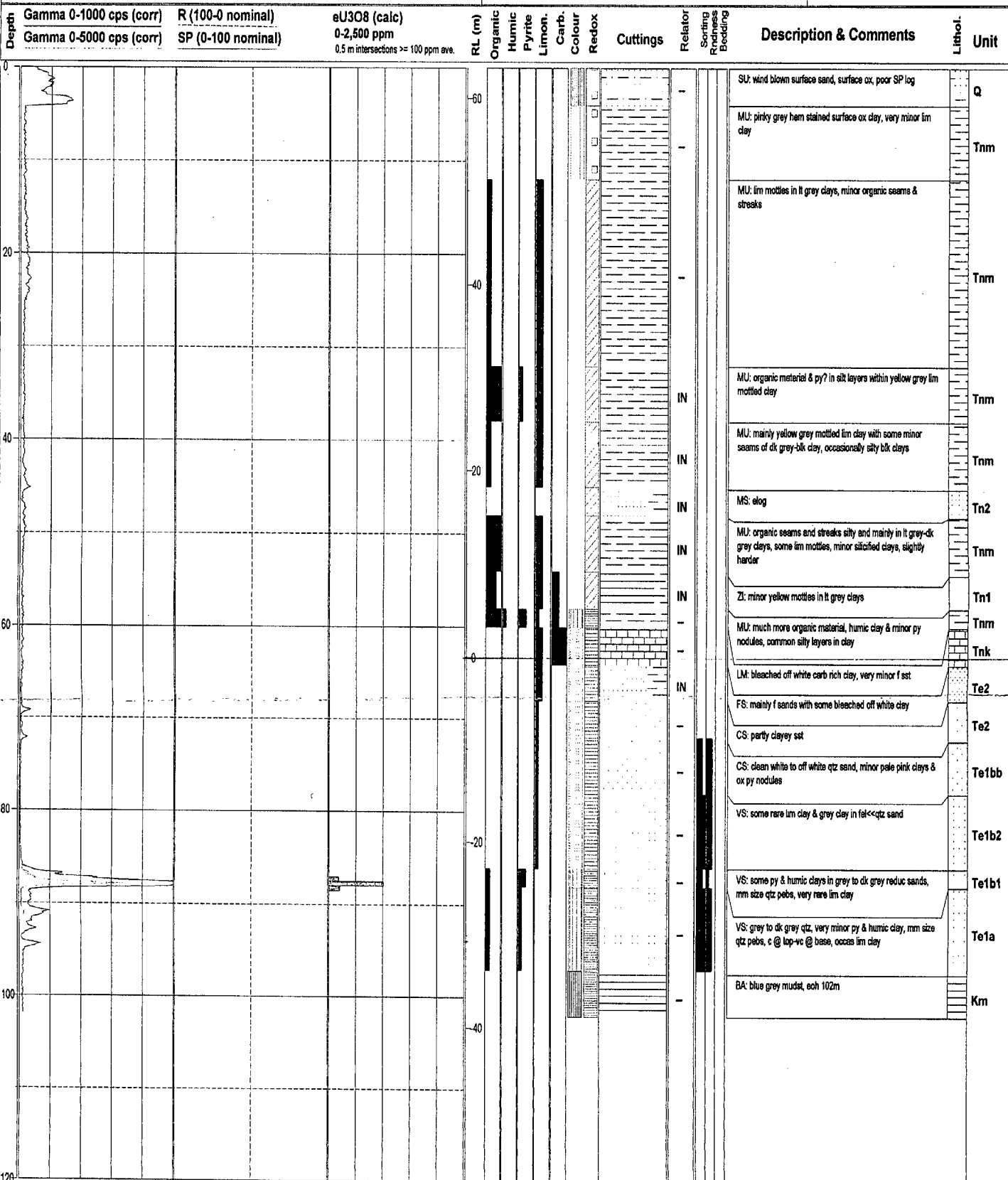
**CUM016**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



# PALADIN RESOURCES N'

Co-ord local (m) -- E -- N  
 Co-ord AMG 480080 E 6548777 N  
 Collar Elev (m) -- m) 63.25 ADH  
 Depth (m) 102.0 Azimuth -- 90 deg  
 Date commenced 13/02/1998 Date completed 13/02/1998  
 Geologist JD-B Logged date 13/02/1998  
 Drilling Co. Thompson Method rotary mud  
 Casing from (m) -- To --  
 Water Table (m) -- Date measured --  
 Hole Diam. (cm) 12 Plugged (Y/N) N  
 Date plotted 08/06/1998

**CUM017**

## Geophysical Logging

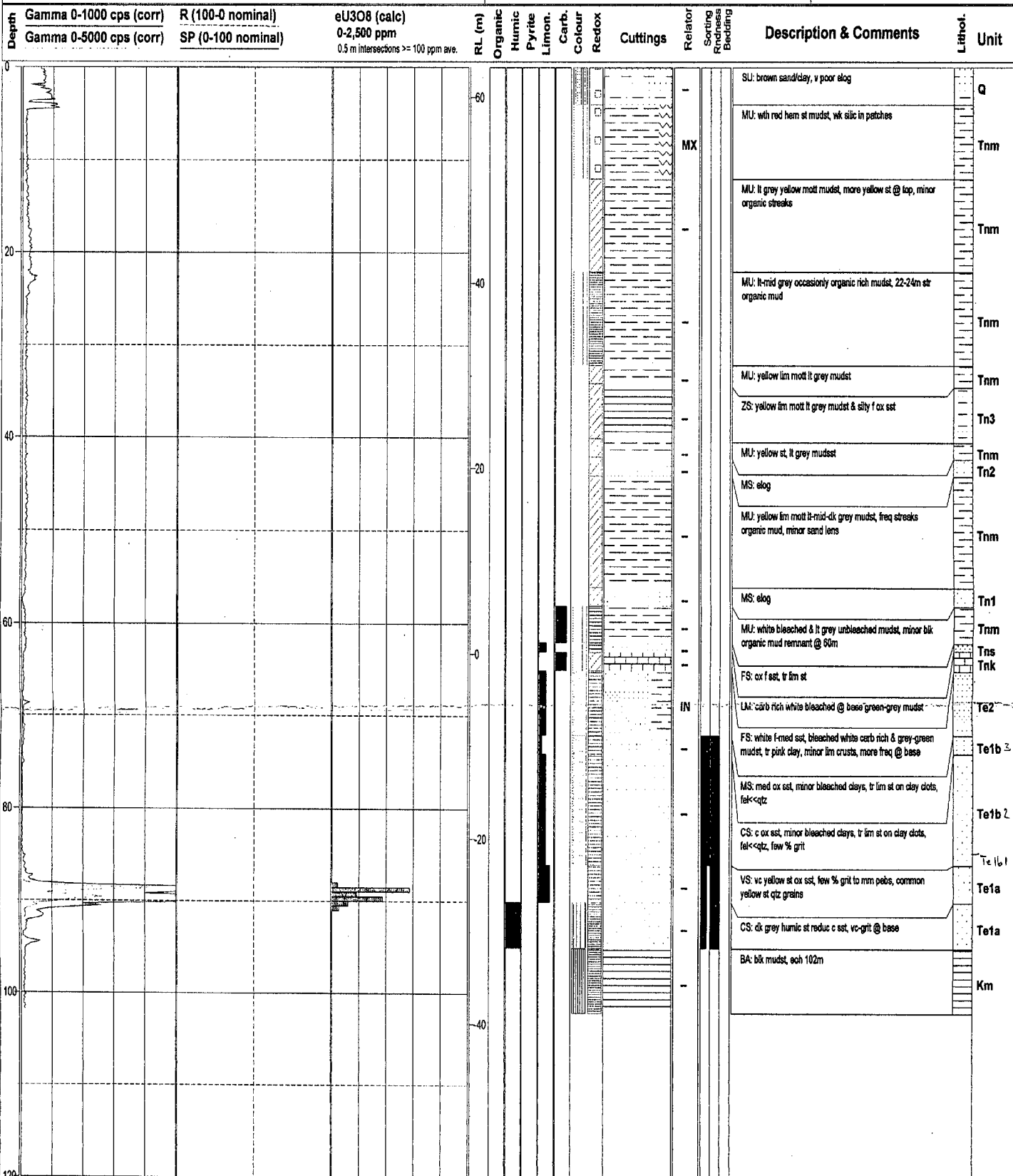
Instrument Mt Sopris S2 - No 266 gamma from (m) RUN 1 RUN 2 RUN 3  
 Probe No. gamma 689 gamma to (m) 0.0 84.0 --  
 Date Logged 13/02/1998 gamma speed (m/min) 102.0 96.0 --  
 Operator GJ electric from (m) 0.0 -- --  
 Open/Closed Hole open electric to (m) 102.0 -- --  
 Notes bad SP, R electric speed (m/min) 8 -- --

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris 52 - No 266	gamma from (m)	0.0	86.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	94.0	2.0
Date Logged	13/02/1998	gamma speed (m/min)	3	2	3
Operator	WD	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480055	F	6548804	N
Collar Elev (m)	-	m)	63.25	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	13/02/1998	Date completed	13/02/1998	
Geologist	WD	Logged date	13/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	0.0	To	6.0	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

**CUM018**

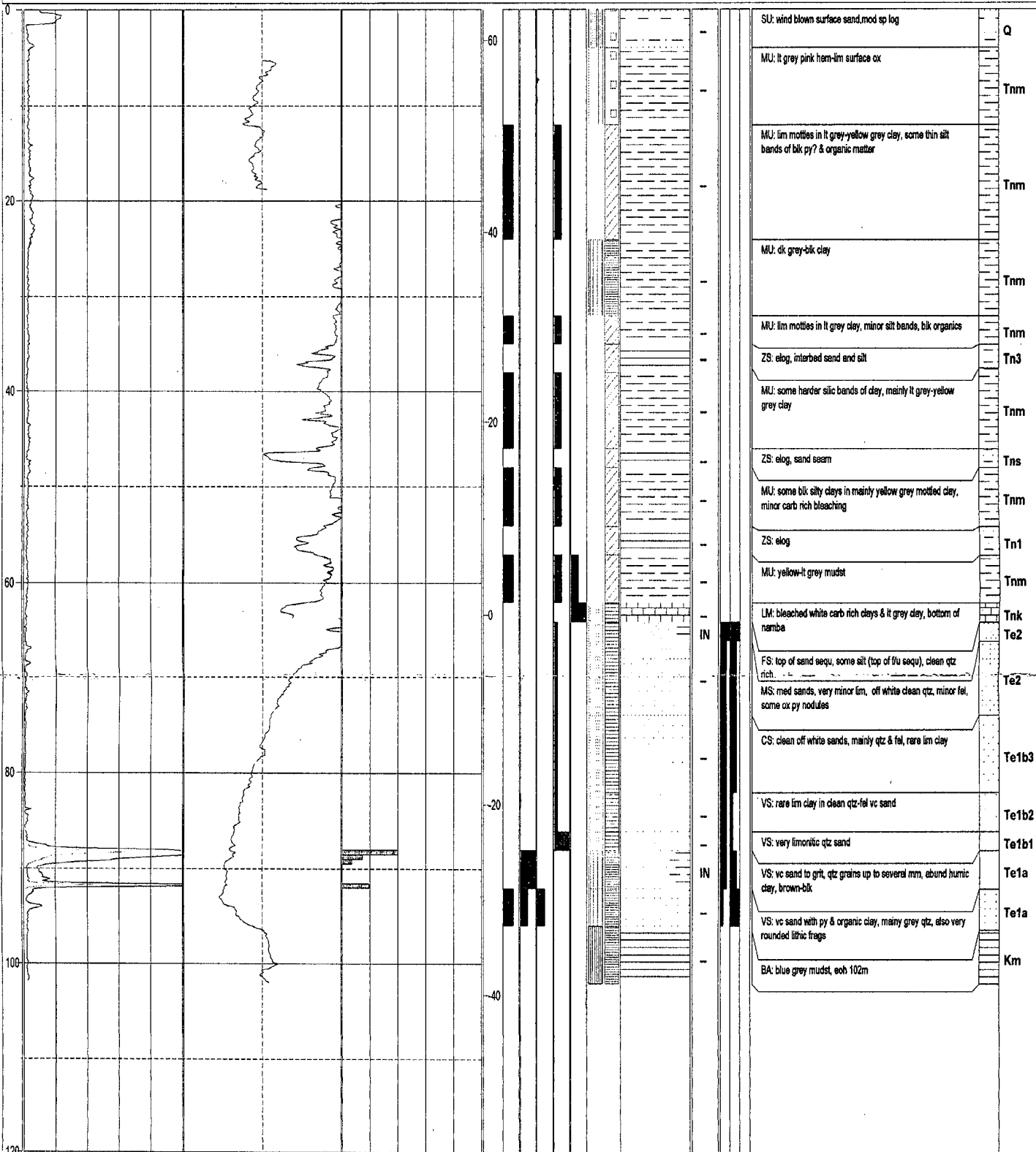
**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	82.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	96.0	8.0
Date Logged	14/02/1998	gamma speed (m/min)	3	2	3
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479986	E	6548879	N
Collar Elev (m)	-	m)	64.60	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	14/02/1998	Date completed	14/02/1998	
Geologist	JD-B	Logged date	14/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

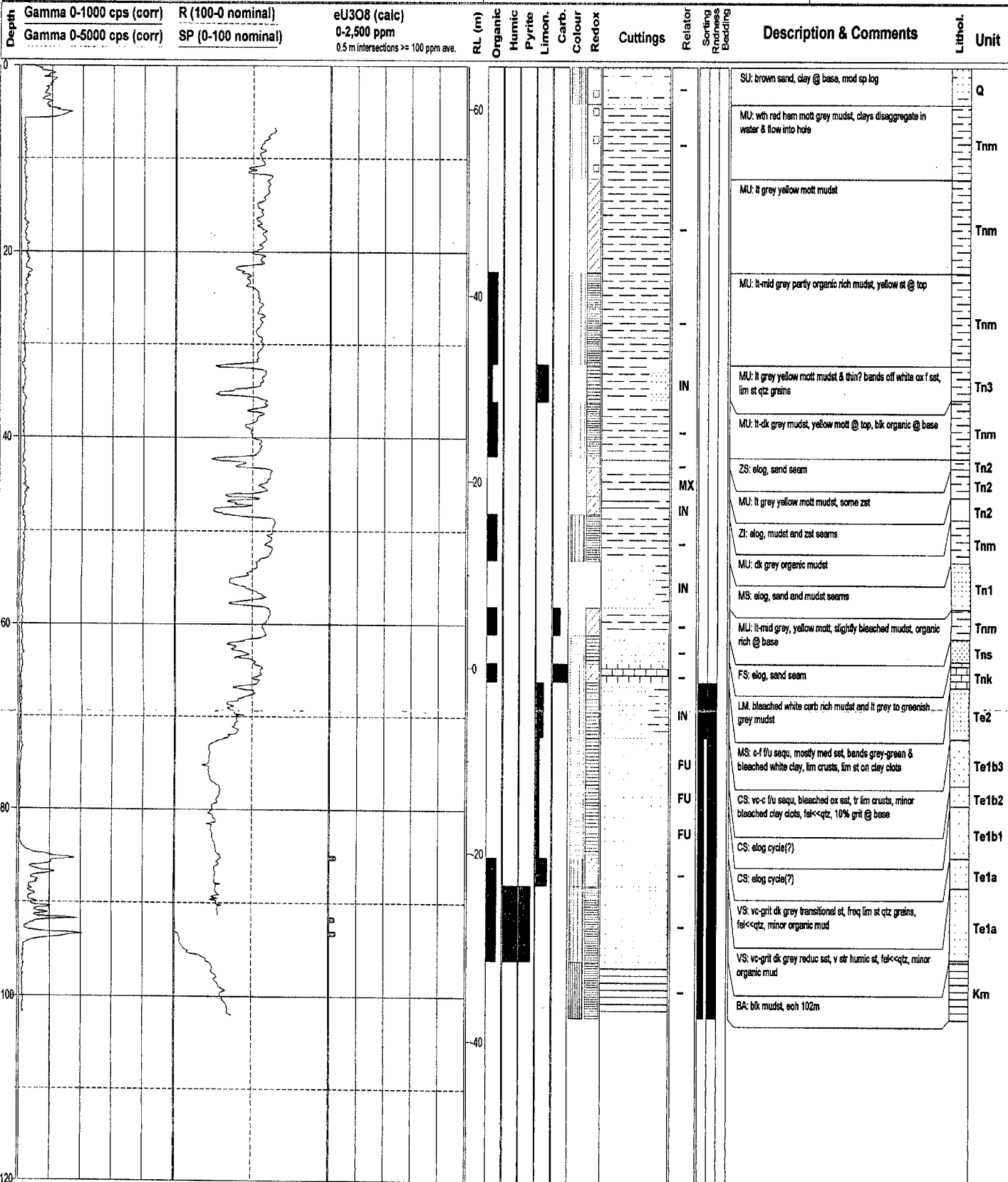
**CUM019**

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Soprie S2 - No 266	gamma from (m)	0.0	82.0	0.0
Probe No.	gamma 689	gamma to (m)	102.0	94.0	4.0
Date Logged	14/02/1998	gamma speed (m/min)	3	2	3
Operator	WD	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	good SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480162	E	6549040	N
Collar Elev (m)	-	m)	64.00	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	14/02/1998	Date completed	14/02/1998	
Geologist	WD	Logged date	14/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

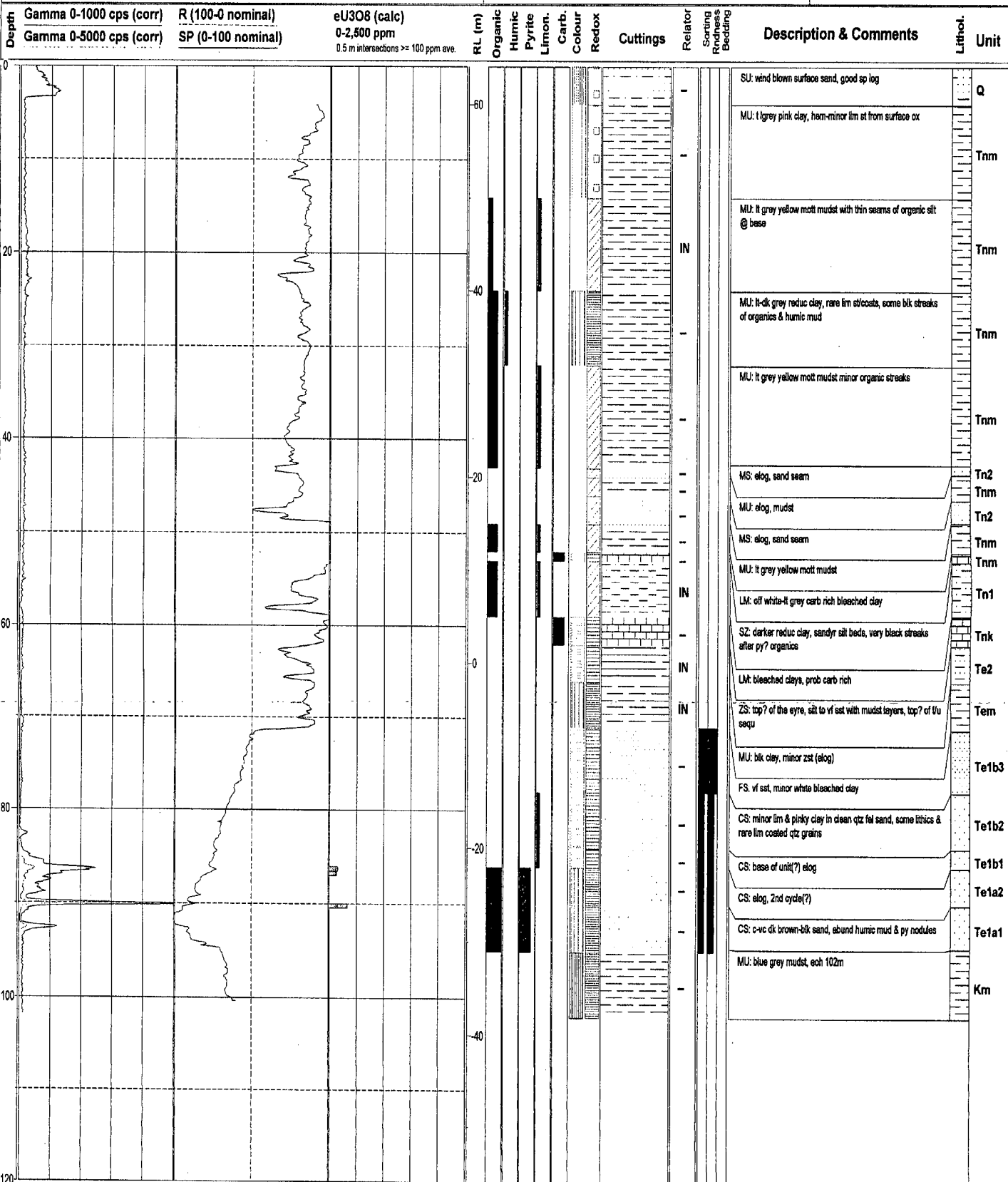
**CUM020**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

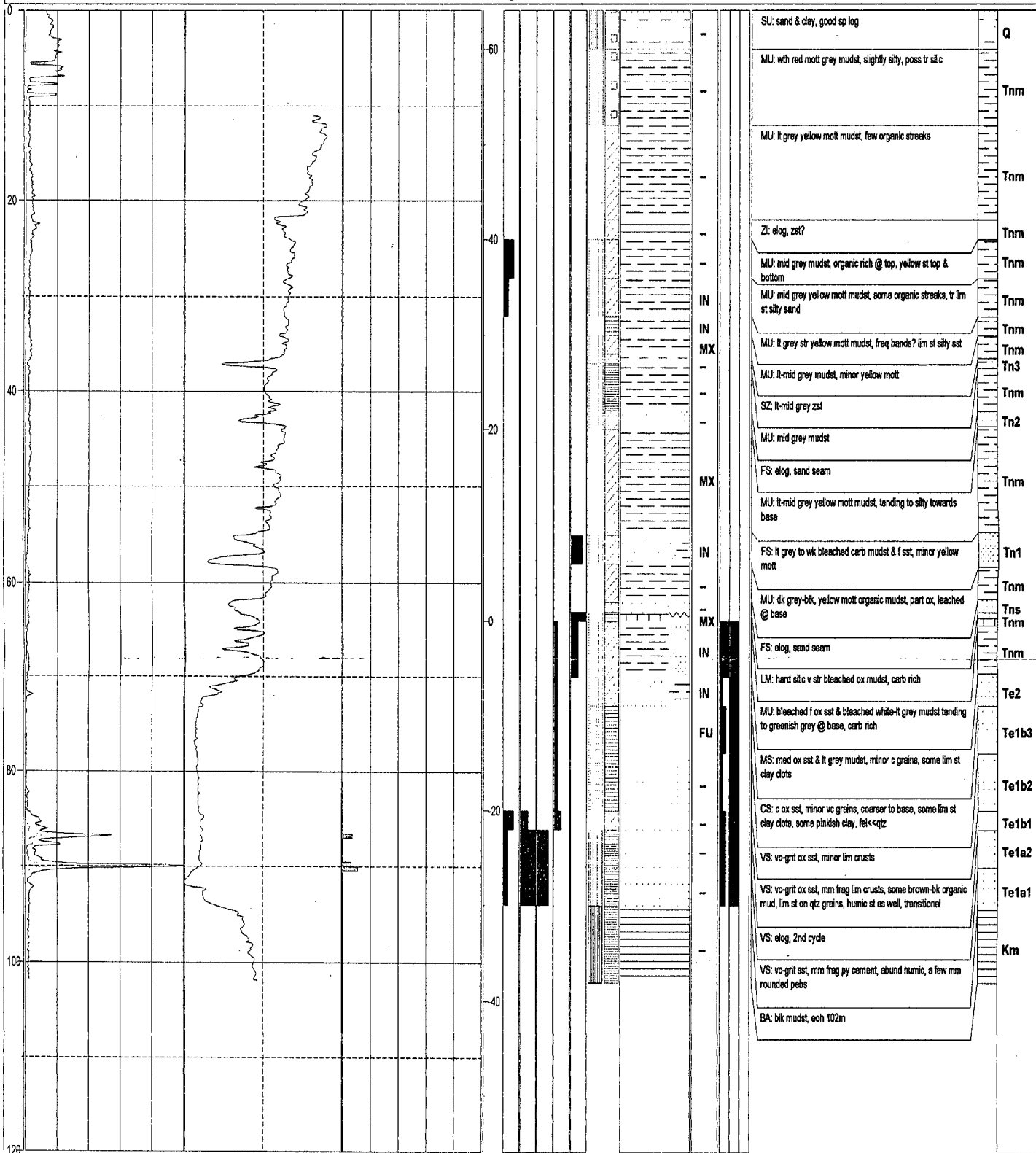


## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,600 ppm
			0.5 m intersections >= 100 ppm ave.

Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Roundness	Bedding	Des
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**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275



## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

Organic Humic Pyrite Limon. Carb. Colour Redox	Cuttings	Relator	Sorting Rindness Bedding	Descri
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**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

	Gamma 0-1000 cps (corr)	R (100-0 nominal) SP (0-100 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0													-			SU: wind blown surface sand, mod sp log		a
													-			MU: lt grey-pink hem st mudst-zst, some minor lim st		Tnm
													-			MU: lt grey yellow mott mudst, streaks organic matter		Tnm
20													-			MU: much darker blk-grey mudst, some organic rich seams, r/a silt layers		Tnm
													-			MU: lt grey yellow mott mudst, some organic streaks		Tnm
													-			FS: elog, sand seam		Tn3
													-			MU: mid-dk grey mudst, partly organic rich		Tnm
													-			MU: prob ox yellow sands and grey mudst		Tn2
40													-			MU: lt grey yellow mott mudst, minor organic streaks		Tnm
													-			LM: bleached white clays, minor silcrete		Tnm
													-			ZS: grey-blk organic mudst and silty sand(?) elog		Tn1
													-			LM: white bleached carb rich clay, silc in parts		Tnk
													-			FS: elog, set bend		Tns
													-			MU: yellow lim st mudst and f set bands		Tnm
													-			MS: med sand with minor silt layers, some rare yellow lim clay & pinkish clay, sand coarser at bottom		Te2
60													-			CS: c-wc ox sand, rare lim coating on qtz, lim clay, also rare pinkish clay		Te1b
													-			VS: orange and yellow lim coating on 50% qtz grains, close? to front, v minor ox py nodules		Te1a2
													-			VS: dk grey sands, some mm size qtz & lithic frags, common humic mud & py, basal sand		Te1a1
80													-			BA: blk mudst, oeh 102m		Km
100													-					
120													-					

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)

**Cuttings**

**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	Gamma 0-1000 cps (corr)		R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm	0.5 m intersections >= 100 ppm ave.															
0					60												SU: sandy soil		Q
																	MU: wth red ham st grey mudst		Tnm
																	MU: lt grey yellow mott mudst, @ 20m organic streaks & str yellow st		Tnm
20					40												FS: elong, 6 sst band		Tn3
																	MU: mid grey partly organic mudst		Tnm
																	MU: mid grey partly organic mudst, minor yellow st		Tnm
																	MU: lt grey yellow mott mudst & traces silty f sst, wk bleached		Tn3
40					20												MU: lt-mid grey partly organic mudst, tr-minor yellow at only, organic rich		Tnm
																	FS: elong, flu sand bands		Tn2
																	MU: mid-dk grey mudst, tr yellow limst		Tnm
																	ZS: lt grey wk yellow mott carb mudst & traces silty f sst		Tn1
																	MU: lt grey wk yellow mott mudst & irregular traces silty f sst		Tnm
60					0												ZS: elong, sand		Tn3
																	LM: lt grey-white partly str carb bleached grey mudst, wk yellow st		Tnk
																	MU: dk grey organic mudst		Tnm
																	MU: gray-brown ox f est in dk grey organic mudst, tr lim st on clays & tr lim crusts		Te1b3
80					20												VS: flu sequ, off white, med-vc bleached sst, much ox pinkish clay clots after organic mud, tr lim crusts, minor grey interbedded mudst, fak<<qtz		Te1
																	LG: mudst break, elong, dk-brown organic mud-zst-f est, blk oily water		Te1a2
																	VS: vc-grit sst, mm lignite frag, humic st, clay frag		Te1a1
																	MS: med humic sst		
100					40												CO: gritty cong, minor mm frags lignite, rare mm qtz pebs, cleaner @ base		KM
																	BA: blk mudst, eoh 102m		

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

<b>Des</b>	<b>Cuttings</b>	<b>Relator</b>
ganic		Sorting
umic		ndness
yrite		edding
mon.		
Carb.		
colour		
edox		

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0				-60												SU: wind blown surface sand		Q
																MU: wh red hem st grey mudst		Tnm
																MU: lt grey yellow mott mudst, some blk seams of organic clay, minor bleaching 18-22m, some zst @ base		Tnm
20				-40												MU: mid grey organic mudst		Tnm
																MU: lt grey yellow mott mudst end zst		Tnm
40				-20												FS: elog, sand seam		Tn2
																MU: lt grey yellow mott mudst with minor organic seams, base carb rich		Tnm
60				0												FS: elog, sst and mudst		Tn1
																LM: bleached off white-lt grey carb rich clay, minor lim streaks		Tnk
																MS: elog, sand band		Tn3
																MU: mid grey organic mudst		Tnm
																MU: t-dk grey clay		Tnm
80				-20												FS: f-med est mix in minor lim clay, lim coating on 5% grains		Te1b2
																CS: pink oxidised humic mud & minor lim coating on qtz grains, some grey clays		Te1b1
																LG: dark brown humic mud, lignite		Te1a2
																CS: brown c est, some lithic frags up to mm in diameter		Te1a1
																VS: vc up to cm size pebs, py cemented sands, well rounded, still minor humic end organic clays, basal vc sand		Km
100				-40												MU: blue grey mudst, eoh 98m		

# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	-	-
Probe No.	gamma 689	gamma to (m)	102.00	-	-
Date Logged	15/02/1998	gamma speed (m/min)	3	-	-
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480170	F	6549239	N
Collar Elev (m)	-	(m)	61.00	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	15/02/1998	Date completed	15/02/1998	
Geologist	JD-B	Logged date	15/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM025**

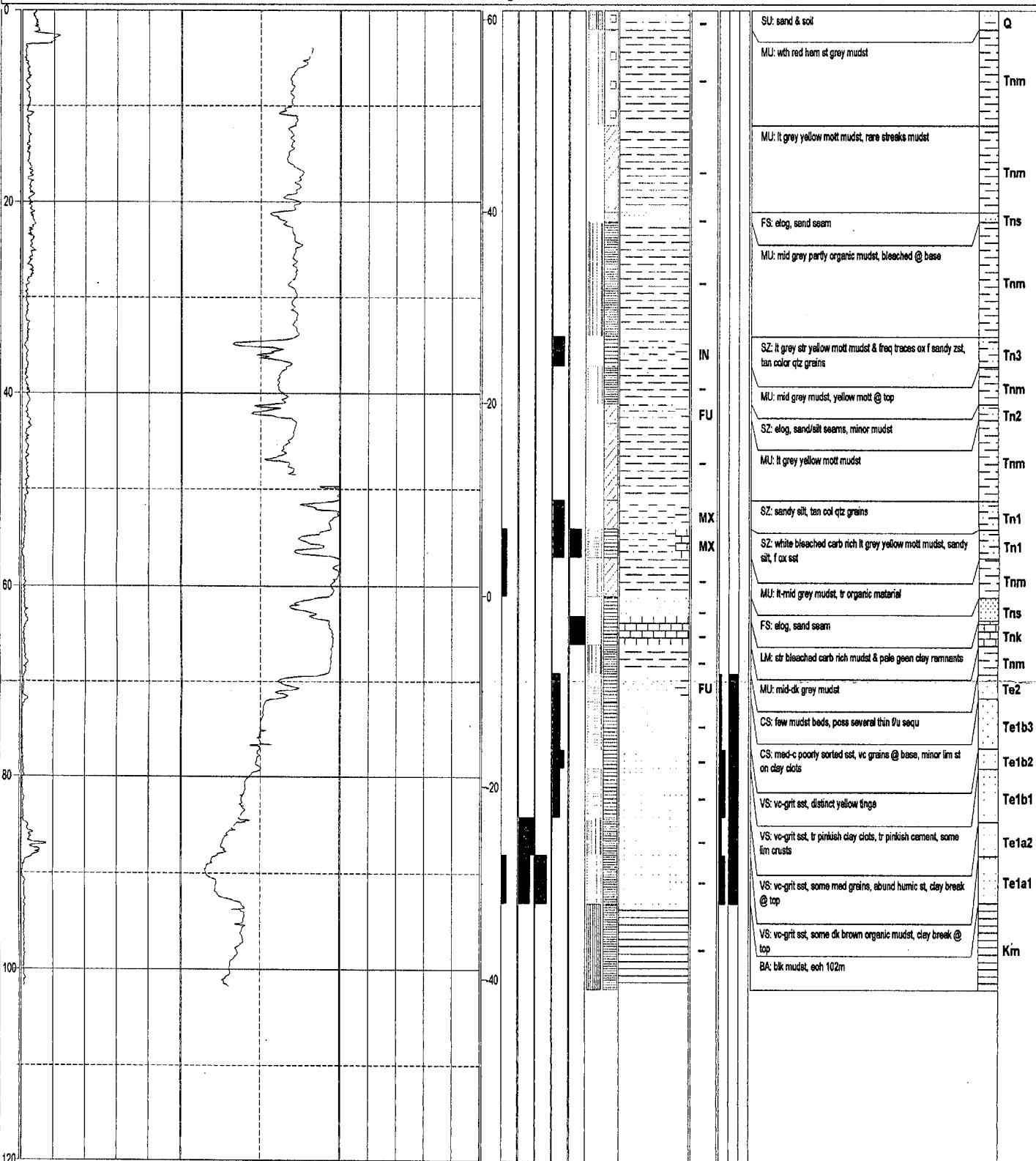
**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															



## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave

Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Rndness	Bedding
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**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3Q8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sanding	Finesness	Bedding	Description & Comments	Lithol.	Unit
0				-60													SU: wind blown surface sands		Q
																	MU: wth red hem st grey mudst		Tnm
																	MU: lt grey yellow mott mudst		Tnm
20				40													MU: blk dk grey clays, some organic seams		Tnm
																	MU: interbedded mudst & zst, sharp rta peak top of seam		Tnm
																	MU: blk dk grey clays, some organic seams in blk clay		Tnm
40				20													MU: lt grey yellow mott mudst, minor zst seams (elag)		Tnm
																	MS: interbedded sst and mudst (elag)		Tn2
																	MU: lt grey yellow mott mudst		Tnm
																	LM: light grey & bleached white carb rich clays		Tnk
60				0													MU: lt grey yellow mott mudst minor blk organic streaks, sandy zst (elag)		Tn1
																	FS: elag, sand seam		Tns
																	LA: off white minor lim st on clay,carb rich		Tnk
																	MU: dk grey clay with minor organic seams		Tnm
																	MS: rare lim in off white ox m-c sst		Te1b3
80				20													CS: rare lim and ox humic clays, c-vc-grit, minor ox tarnished py		Te1b2
																	MS: rare lim and ox humic clays in med-c sst, minor ox tarnished py		Te1b1
																	CS: common lim on qtz grains & minor humic clay		Te1a2
																	CS: darker c sst & humic mudst, grey st qtz		Te1a1
100				40													MU: blue grey mudst, eoh 96m		Km

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

Organic Humic Pyrite Ironmon. Carb. Colour Redox	Cuttings	Relator	Sorting Hardness Bedding	Descri
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**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

# PALADIN RESOURCES N'

## Geophysical Logging

Instrument	Mt Sopris S2 - No 265	gamma from (m)	0.0	RUN 1	RUN 2	RUN 3
Probe No.	gamma 689	gamma to (m)	96.0	96.0	90.0	-
Date Logged	16/02/1998	gamma speed (m/min)	3	2	-	-
Operator	GJ	electric from (m)	0.0	-	-	-
Open/Closed Hole	open	electric to (m)	96.0	-	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	481000	F	6549100	N
Collar Elev (m)	-	(m)	63.25	ADH
Depth (m)	96.0	Azimuth	-	90 deg
Date commenced	16/02/1998	Date completed	16/02/1998	
Geologist	JD-B	Logged date	16/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

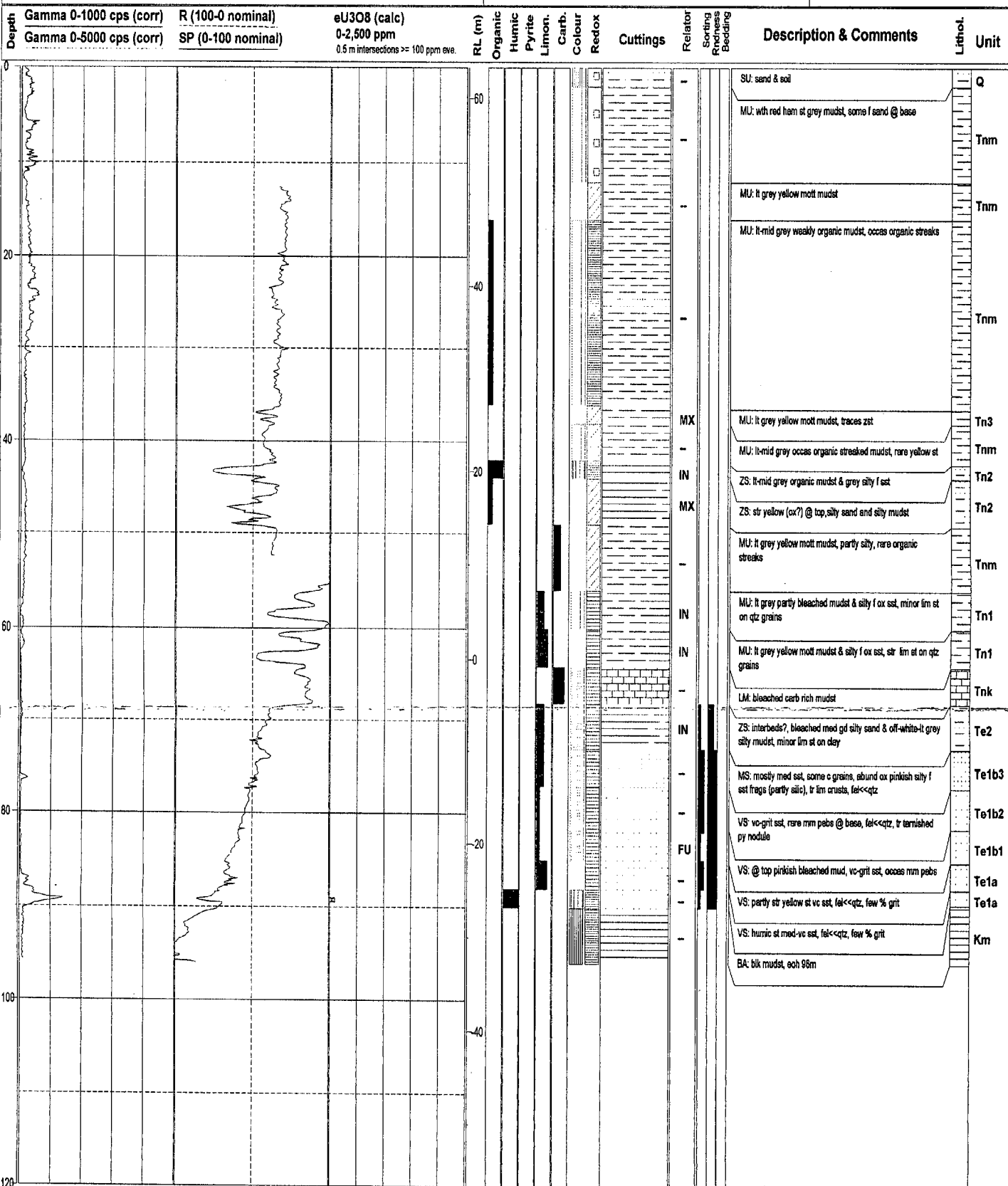
**CUM028**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



## Geophysical Logging

Co-ord local (m)	-	E	-	N
Co-ord AMG	480300	E	8549131	N
Collar Elev (m)	-	'm)	66.50	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	16/02/1998	Date completed	16/02/1998	
Geologist	WVD	Logged date	16/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

**CUM029**

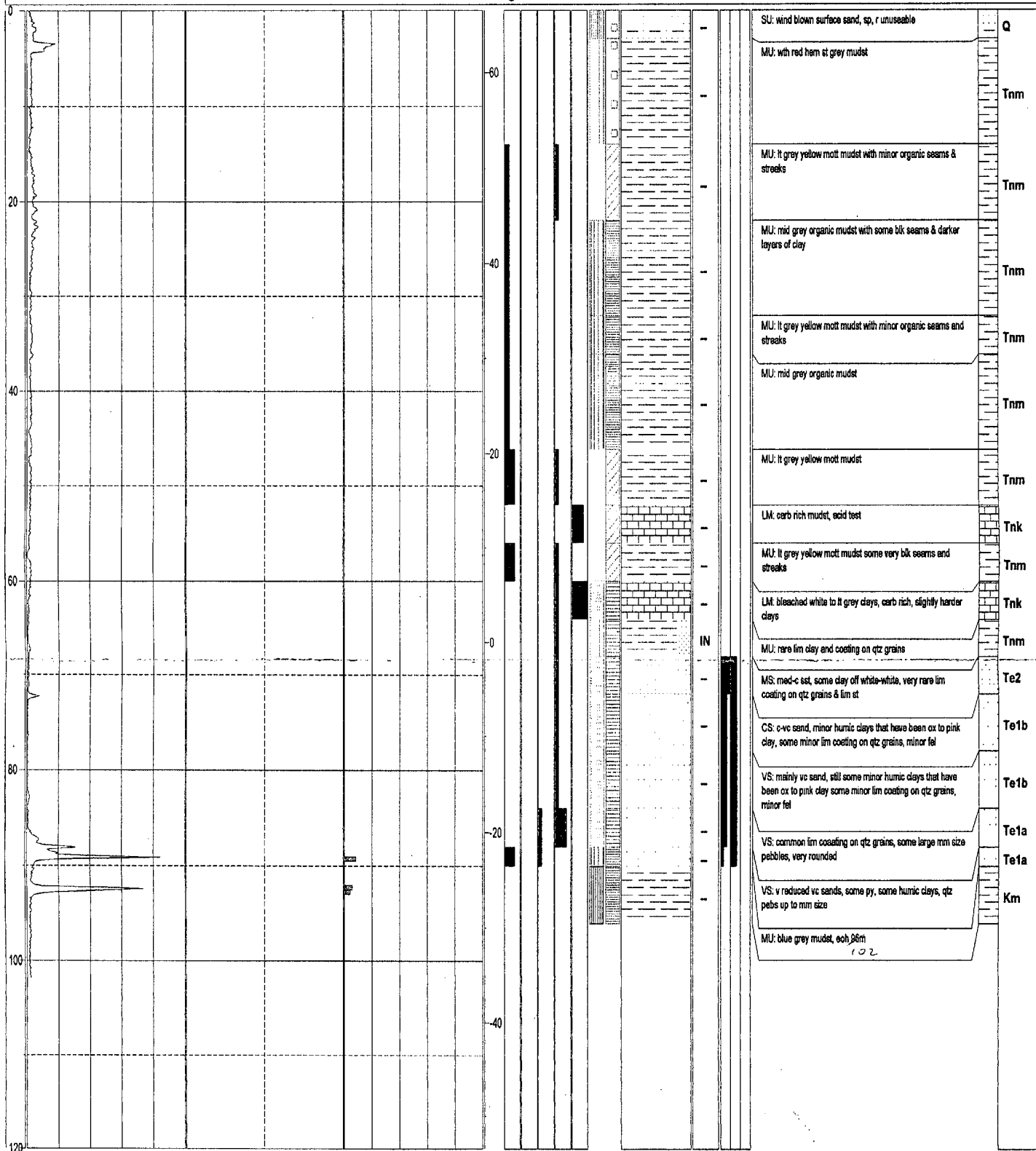
**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

PRL (m)  
 Organic  
 Humic  
 Pyrite  
 Limon.  
 Carb.  
 Colour  
 Redox  
 Cuttings  
 Relator  
 Sorting  
 Bedding  
 Bedding

### Description & Comments

Unit





## PALADIN RESOURCES N'

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	96.0	--	--
Date Logged	17/02/1998	gamma speed (m/min)	3	--	--
Operator	G.J	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	96.0	--	--
Notes	bad logs	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	479699	F	6547500	N
Collar Elev (m)	--	m)	63.75	ADH
Depth (m)	96.0	Azimuth	--	90 deg
Date commenced	17/02/1998	Date completed	17/02/1998	
Geologist	JD-B	Logged date	17/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM031**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	0.0	--
Probe No.	gamma 689	gamma to (m)	96.0	4.0	--
Date Logged	17/02/1998	gamma speed (m/min)	3	2	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	96.0	--	--
Notes	ok SP, bad R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--	N	--
Co-ord AMG	479598	E	6547498	N	63.75
Collar Elev (m)	--			ADH	
Depth (m)	96.0	Azimuth	--	cup	90 deg
Date commenced	17/02/1998	Date completed	17/02/1998		
Geologist	WD	Logged date	17/02/1998		
Drilling Co.	Thompson	Method	rotary mud		
Casing from (m)	--	To	--		
Water Table (m)	--	Date measured	--		
Hole Diam. (cm)	12	Plugged (Y/N)	N		
Date plotted	09/06/1998				

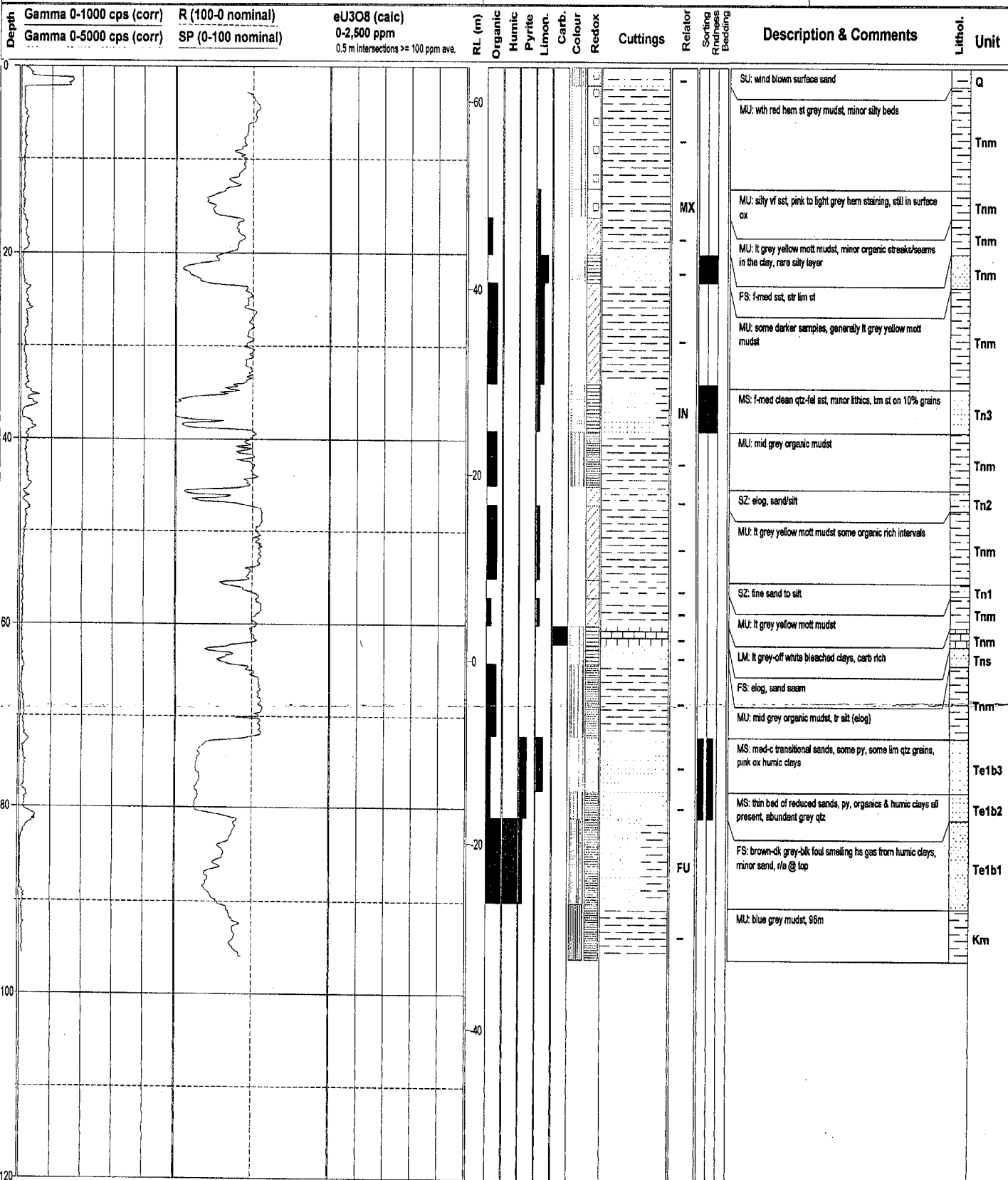
**CUM032**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	480517	E	6547229	N
Collar Elev (m)	--	m)	64.80	ADH
Depth (m)	102.0	Azimuth	--	90 deg
Date commenced	17/02/1998	Date completed	17/02/1998	
Geologist	WD	Logged data	17/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM033**

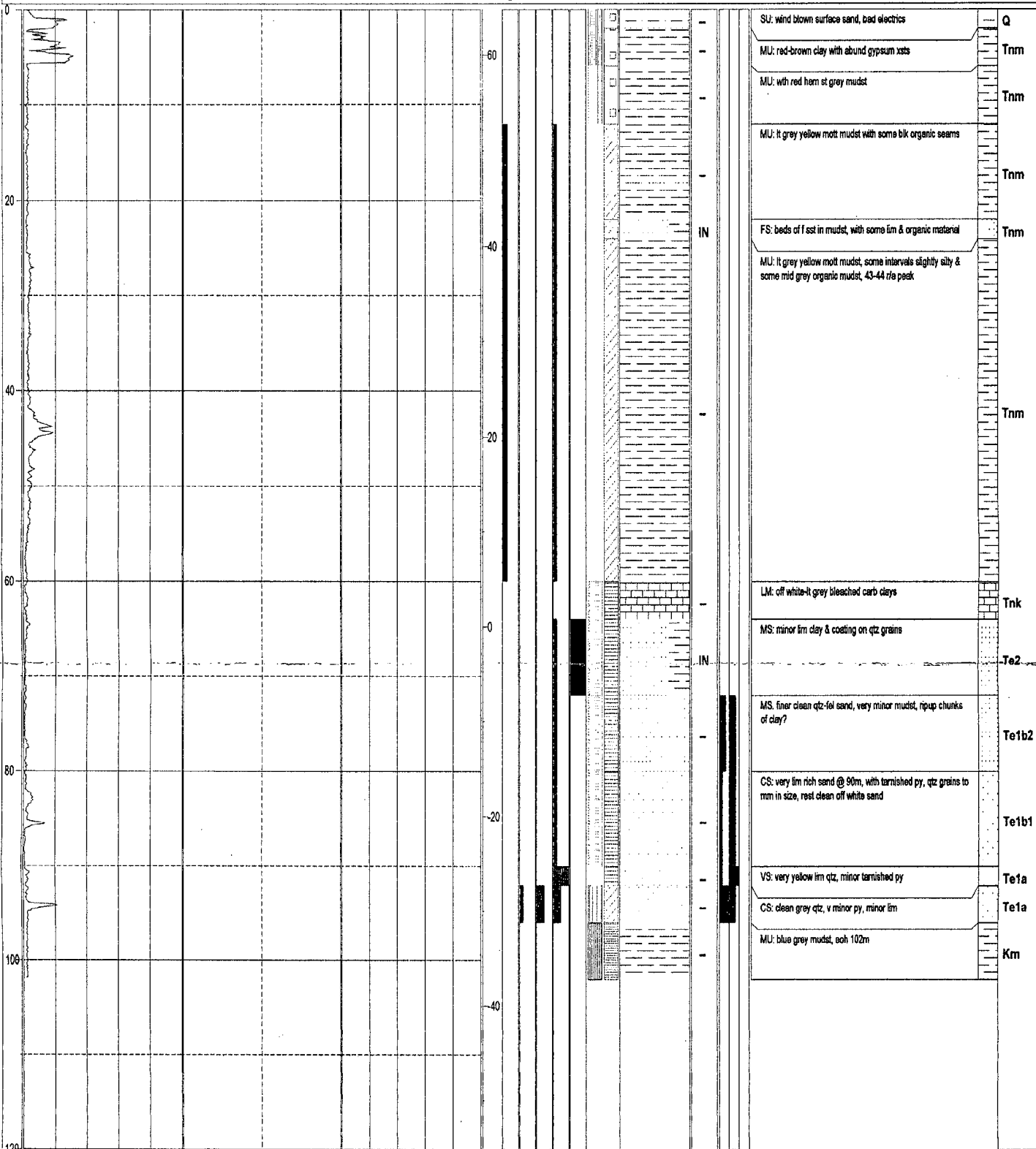
**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

PRL (m)  
 Organic  
 Humic  
 Pyrite  
 Limon.  
 Carb.  
 Colour  
 Redox  
 Cuttings  
 Relator  
 Sorting  
 Rindness  
 Bedding

### Description & Comments

Unit



**CUM034**

**Prospect: Oban**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0				-60									DS			MU: wth brown-grey mott mm-on gypsum xst bearing mudst, thin veneer soil	Tnm	
													DS			MU: wth red ham st grey mudst, disc mm-on gypsum xsts	Tnm	
													-			MU: lt grey yellow mott mudst	Tnm	
20													IN			MU: lt grey yellow mott mudst & ox str yellow lim st f sandy zst	Tn3	
													-			MU: lt grey wk yellow mott mudst, @ 22m minor mid grey organic mudst	Tnm	
				-40									-			MU: mid grey mudst, occas yellow flecks	Tnm	
													IN			MU: lt grey yellow mott mudst & ox str yellow lim st f sandy zst	Tn3	
40													-			MU: mid grey mudst	Tnm	
				-20									MX			ZS: lt grey yellow mott clayey ox str yellow lim st silty f sst	Tn2	
													-			MU: lt grey yellow mott mudst	Tnm	
													MX			ZS: lt grey yellow mott to wk bleached off white clayey to silty f sst	Tn1	
60													-			MU: mid-dk grey mudst	Tnm	
				-0									MX			ZS: lt grey yellow mott to wk bleached off white clayey to silty f sst, few % med qtz grains	Te2	
													IN			FS: bleached f-med sst & partly bleached carb rich mudst, rare remnants? organic mud	Te2	
													FU			MS: bleached med sst & partly bleached mudst, freq lim st clay clots, c @ base	Te1b	
80													FU			MS: bleached med sst & partly bleached mudst, freq lim st clay clots, c @ base	Te1b	
				-20									-			CS: f/u sequ 84-74m, basal section, c-vc sst, a few % grit, lim st clay clots, fel<<qtz	Te1a	
													-			VS: c-vc sst, 10% grit, tr lim st on qtz, fel<<qtz	Te1a	
													-			VS: c-vc sst, 10% grit, slightly bleached but still visible humic st, tarnished py, fel<<qtz	Te1	
100													-			VS: vc-grit sst, num frag py cement	Km	
				-40									-			BA: blk mudst, eoh 102m		

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	102.0	--	--
Date Logged	18/02/1998	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	102.0	--	--
Notes	poor SP, bad R	electric speed (m/min)	8	--	--

Co-ord (local (m)	--	E	--	N
Co-ord AMG	480490	E	6546985	N
Collar Elev (m)	--	m)	64.80	ADH
Depth (m)	102.0	Azimuth	90 deg	
Date commenced	18/02/1998	Date completed	18/02/1998	
Geologist	JD-B	Logged date	18/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM035**

### Prospect: Berber

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator Sorting Rindness Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm												
0				-60								DS	SU: sand & soil, gypsum xsts below sand dune layer	Q	
												DS	MU: wth red hem st grey mudst, diss gypsum xsts	Tnm	
												-	MU: wth red hem st grey mudst	Tnm	
												-	MU: lt grey yellow mott mudst	Tnm	
												-	MU: lt-mid gray partly organic mudst, few patches of wk lim st esp @ top & @ 30m		
20				-40								-	Zl: elog, silt? band	Tn3	
												-	MU: lt grey yellow mott mudst	Tnm	
												MX	MS: yellow mott lt grey clayey f-med qtz sst, rare lim st qtz grains	Tn3	
				-20								IN	MU: wk patchy yellow st lt-mid grey mudst & traces f sandy silt	Tnm	
												IN	ZS: yellow st lt grey silty f qtz sand & mudst, (hi rie bg)	Tn2	
												IN	MU: lt-mid grey yellow mott mudst, rare mm manganese nodules, partly organic rich, rare silty sst seams	Tnm	
40				-20								IN	MU: lt grey yellow mott mudst & f sandy silt	Tn1	
				-40								IN	MU: dk grey organic mudst	Tnm	
				-60								IN	FS: lt grey yellow mott f-med sst and mudst, clayey mx in part?, partly bleached (carb?), str yellow st qtz grains, fek<qtz minor c grains	Te2	
				-80								IN	MS: bleached med-c sst & carb rich mudst, b yellow st on clay clots, few % vc grains, fek<qtz	Te2	
				-100								-	MS: better sorted med sst, few lim st clay clots	Te1b3	
				-120								-	CS: med-c-vc poorly sorted sst, few lim st clay clots, tr lim st on qtz grains	Te1b2	
				-140								-	ZS: elog, finer grained unit, silty sand?	Te1b1	
				-160								-	CS: less bleached, med-c-vc poorly sorted sst, few lim st clay clots, tr lim st on qtz grains	Te1a2	
				-180								-	VS: c-vc sst, some grit, litho>fek<qtz, common f gd dk colored py cement, poss finer @ base - poss due to washing	Te1a1	
				-200								-	BA: blk mudst, eoh 102m	Km	

## Geophysical Logging

Co-ord local (m)	--
Co-ord AMG	480350
Collar Elev (m)	--
Depth (m)	102.0
Azimuth	--
Date commenced	18/02/1998
Geologist	JD-B
Drilling Co.	Thompson
Casing from (m)	--
Water Table (m)	--
Hole Diam. (cm)	12
Date plotted	09/06/1998

E	--
F	6546100
(m)	84.00
dip	90 deg
Date completed	18/02/1998
Logged date	18/02/1998
Method	rotary mud
To	--
Date measured	--
Plugged (Y/N)	N

**CUM036**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Rocking	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)																	
0				-60									-				SU: sand & soil	Q	Tnm
													-				MU: v with brown st mudst & diss mm-cm gypsum xsts		Tnm
													-				MU: with red hem st grey mudst		Tnm
20				-40									-				MU: lt grey yellow mott mudst		Tnm
													-				SZ: lt grey yellow mott f sandy zst		Tn3
													-				MU: lt grey yellow mott mudst, tr irreg silt, @ 32, 54m mid grey organic mudst		Tnm
40				-20									-						Tnm
													-				ZI: mid grey organic zst		Tnm
60				0									MX				SZ: wk bleached, yellow lim st, clayey zst to ox f sst, carb rich clay		Tnk
													IN				FS: lt greenish grey mudst, wk bleached? & off white ox f sst		Te2
													-				SI: a few chips of silic white clay-silcrete & str silic lt grey f qtz sst, 2 hr drilling		Te2
													-				MS: contaminated washed samples, mix sand, clay & rare organic clay, prob eyre sands		Te1b
80				-20									-				CS: contaminated washed samples, mix sand, clay, prob eyre sands, better sample quality towards base		Te1b
													-				VS: c-vc organic rich sst, mm flecks lignite, traces brown-blk organic mud, wk r/s seep?, x18 peak @ base		Te1a
													-				CO: clean lithic=fel<qtz cong, mx c-vc sand		Te1a
100				-40									PO				BA: blk mudst, 102m		Km

## Geophysical Logging

Instrument Mt Sopris S2 - No 266  
Probe No. gamma 689  
Date Logged 18/02/1998  
Operator GJ  
Open/Closed Hole open  
Notes bad SP. R

gamma from (m)  
gamma to (m)  
gamma speed (m/min)  
electric from (m)  
electric to (m)  
electric speed (m/min)

```

RUN 1
0.0
102.0
3
0.0
102.0
8

```

```

RUN 2
0.0
6.0
2
-
-
-

```

**RUN 3**

Co-ord local (m)	--
Co-ord AMG	480339
Collar Elev (m)	--
Depth (m)	102.0
Date commenced	18/02/1998
Geologist	JD-B
Drilling Co.	Thompson
Casing from (m)	--
Water Table (m)	--
Hole Diam. (cm)	12
Date plotted	09/06/1998

E	-
E	8545850
m)	64.00
W	90 deg
Date completed	18/02/1998
Logged date	18/02/1998
Method	rotary mud
To	-
Date measured	-
Plugged (Y/N)	N

**CUM037**

### Prospect: Berber

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)

eU308 (calc)  
0-2,500 ppm  
0.5 m intersections  $\geq 100$  ppm ave

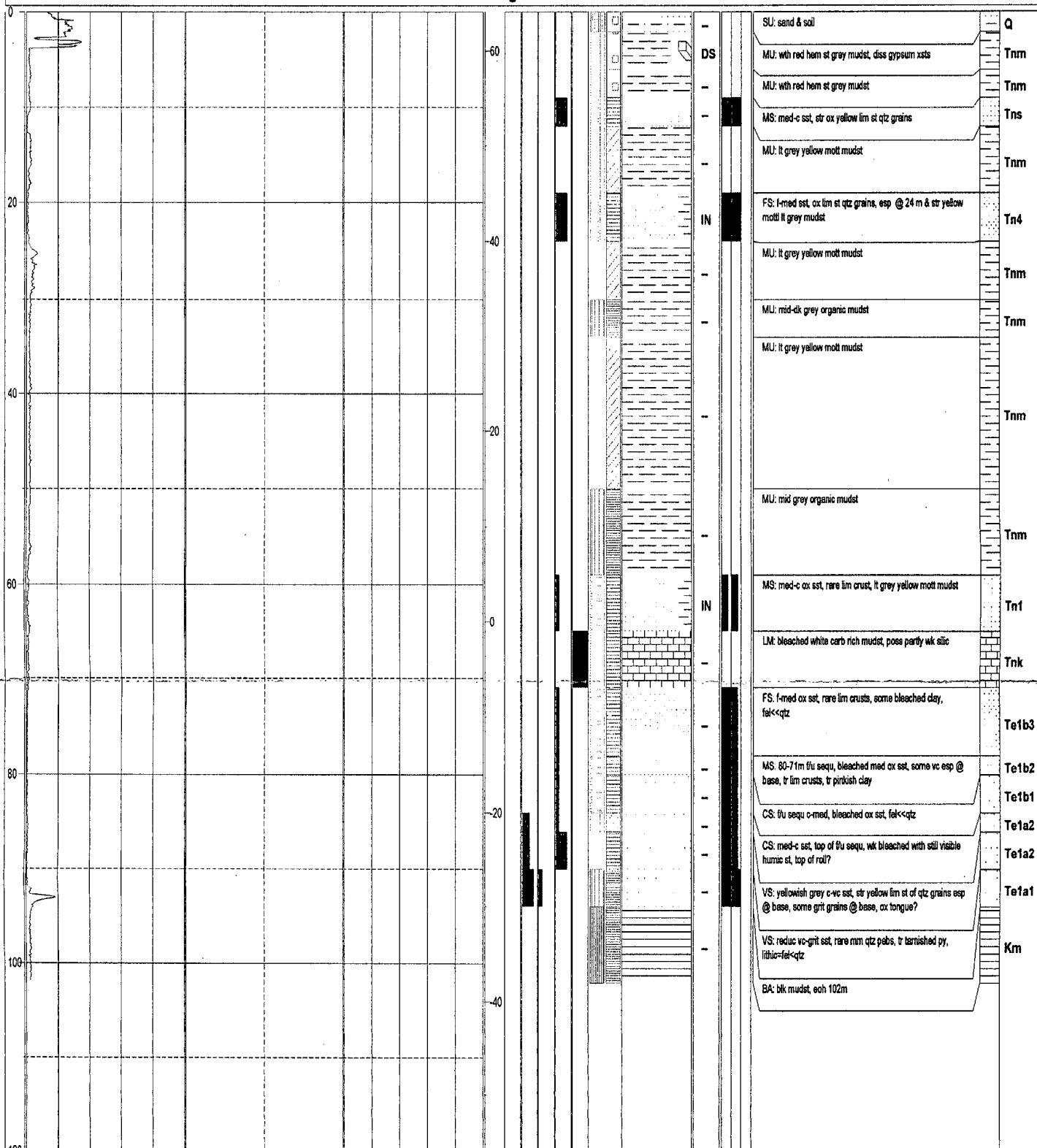
RL (m)	Organic	Humic	Pyrite	imon.	Carb.
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## Cuttings

Relator  
Sorting  
Rindness  
Bedding

### Description & Comments

Unit



## Geophysical Logging

Depth	<u>Gamma 0-1000 cps (corr)</u>	<u>R (100-0 nominal)</u>	<u>eU3O8 (calc)</u>
	<u>Gamma 0-5000 cps (corr)</u>	<u>SP (0-100 nominal)</u>	<u>0-2,500 ppm</u>
			0.5 m intersections >= 100 ppm ave.

**CUM038**

### Prospect: Berber

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0				-60												SU: sand & soil		Q
																MU: w/ red & brown mott grey mudst, diss gypsum		Tnm
																MU: w/ red hem st grey mudst, minor yellow st @ 12m		Tnm
																MU: lt grey yellow mott mudst, somewhat silty @ base		Tnm
20				-40												FS: lt grey yellow mott f ox sst, tr med, str lim st on qtz grains, frags pinkish ox clay after organic mud, white bleached clay		Tn4
																MU: wk bleached mudst @ base of sand		Tnm
																MU: mid grey mudst		Tnm
																MU: lt grey yellow mott mudst		Tnm
																FS: elogs, sand seam		Tn3
40				-20												MU: mid-dk grey partly organic mudst, esp @ base		Tnm
																CS: mix? grey clay, organic mud, med-c-vc qtz grains		Tn2
																MU: lt-mid grey wk yellow mott mudst, organic rich top & bottom		Tnm
																MU: dk grey organic mudst		Tnm
60				-0												MS: lt grey wk ox l-med sst		Tn1
																VS: c-vc qtz sst, tr yellow lim st on qtz		Tn1
																MU: lt grey yellow mott mudst, beached @ base		Tnm
																VS: c-vc qtz sst, some yellow lim st on qtz		Te2
																MU: lt-mid grey mudst		Tem
80				-20												CS: flu c-med sst, traces pinkish & bleached clay, some lim st clots		Te1b
																LG: partly ox dk brown soft lignite, some pinkish mottling & 1 white beached sst		Te1
																VS: poss flu vc-c-med sst, litho-cler<<qtz, tr lim st on qtz grains		Te1a
																VS: transitional wk ox partially humic st vc pebbly sst, coarser @ base		Te1a
100				-40												BA: blk mudst, eoh 102m		Km

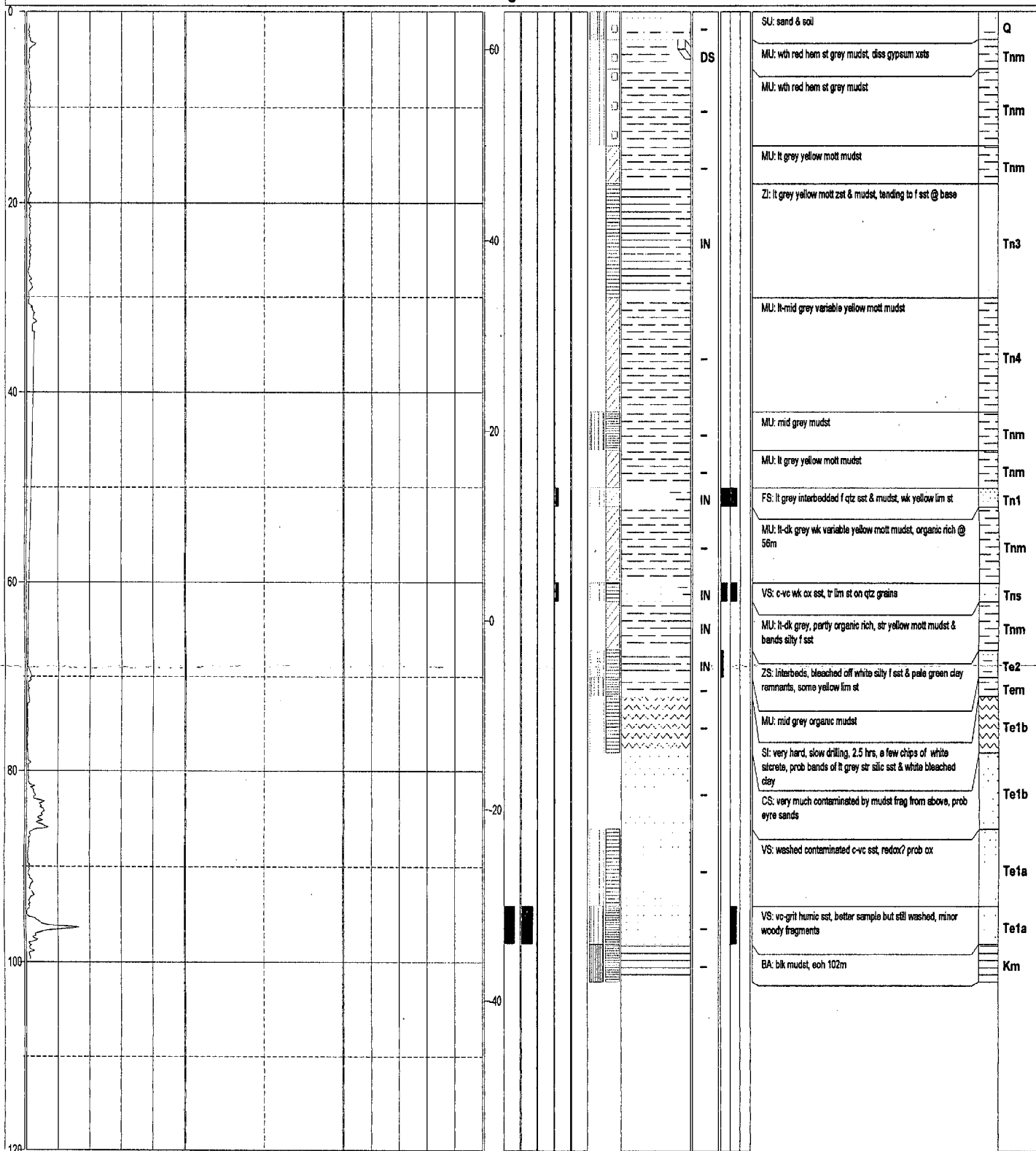
## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	480349	F	6546037	N
Collar Elev (m)	—	m)	64.00	ADH
Depth (m)	102.0	Azimuth	—	90 deg
Date commenced	19/02/1998	Date completed	19/02/1998	
Geologist	JD-B	Logged date	19/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM039**

**Prospect: Berber**

Project:	9261
Name:	CUJV
Tenement:	EL2275

[illegible]

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	480350	F	6548004	N
Collar Elev (m)	--	m)	64.00	ADH
Depth (m)	102.0	Azimuth	--	
		Up	90 deg	
Date commenced	20/02/1998	Date completed	20/02/1998	
Geologist	JD-B	Logged date	20/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM040**

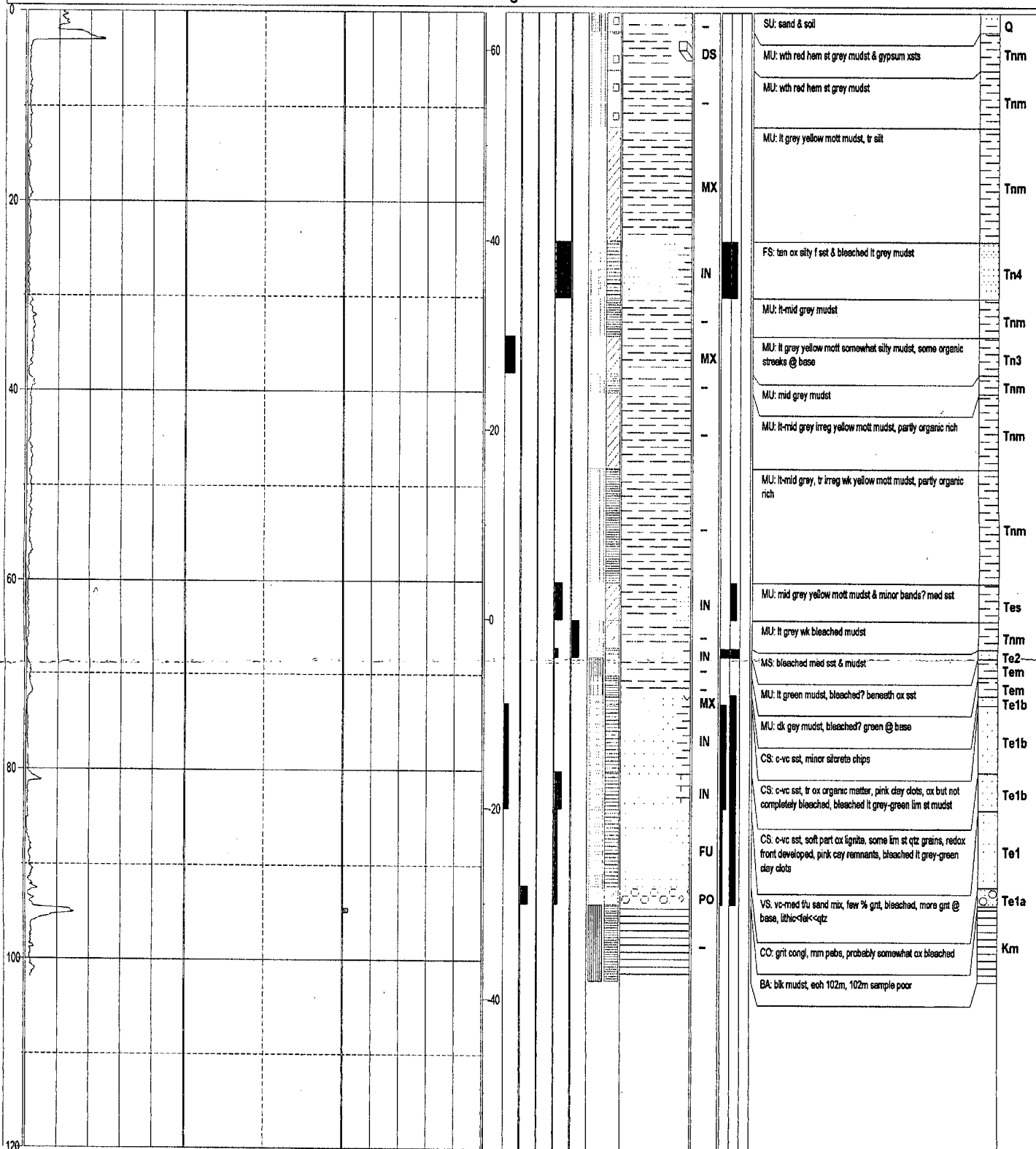
**Prospect: Berber**

**Project: 9261**

Name: CUJV

**Tenement: EL2275**

Lithol.	Unit	Description & Comments	Relator	Cuttings	Organic Humic Pyrite Limon. Carb. Colour Redox	Lithol.	Unit
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## Geophysical Logging

		Run 1	Run 2	Run 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--
Probe No.	gamma 689	gamma to (m)	90.0	--
Date Logged	20/02/1998	gamma speed (m/min)	3	--
Operator	GJ	electric from (m)	0.0	--
Open/Closed Hole	open	electric to (m)	90.0	--
Notes	ok SP, bad R	electric speed (m/min)	8	--

Co-ord local (m)	—	E	—
Co-ord AMG	478755	F	8553594
Collar Elev (m)	—	m)	58.50
Depth (m)	90.0	Azimuth	—
Date commenced	20/02/1998	Date completed	20/02/1998
Geologist	JD-B	Logged date	20/02/1998
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	—	To	—
Water Table (m)	—	Date measured	—
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	09/06/1998		

**Prospect: Lake Charles**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

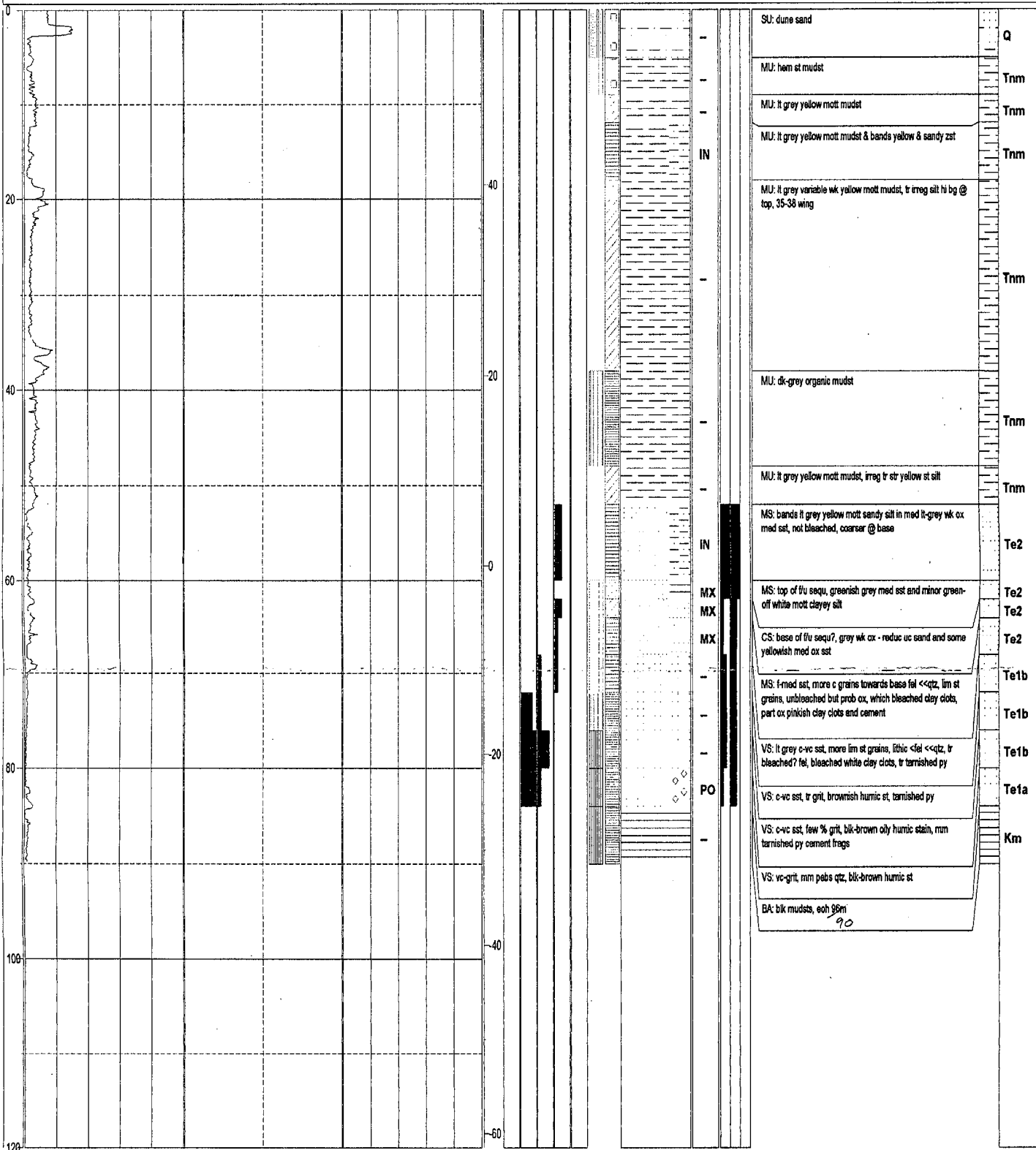
## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)

Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Rindness	Bedding
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**Prospect: Lake Charles**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

Organic Humic Pyrite mon. Carb. colour redox	Cuttings	Relator	Sorting andness bedding	Descript
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Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,500 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Soring	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)																
0													-			SU: wind blown surface sand		Q
													-			MU: wth red hem st grey mudst		Tnm
													-			MU: mid grey organic mudst		Tnm
20													-			MU: lt grey yellow mott mudst very rare organic seams & streaks		Tnm
													-			MU: mid grey organic mudst, weak ria		Tnm
40													IN			MU: freq silty layers in generally grey mudst, some lim mottles, weak ria		Tn3
													-			MU: grey-yellow mott mudst		Tnm
													IN			MU: very dark to blk clays with minor lim streaks, minor silty clay		Tn1
60													-			FS: green transitional sand, clay (nontronite?) in sandy zst, minor lim & ox humic clays, tarnished? py		Te2
													IN			SZ: bleached white carb clays, minor lim in qtz sand, v silty, harder grey clays		Te2
													MX			MS: med sst with some lim staining & white bleached clays		Te2
													-			CS: clean neutral qtz-fel sand with minor lim		Te1b
80													-			VS: vc gd sand to grit up to mm size pebbles some dark humic clays minor py cement		Te1a
													-			MU: blue grey mudst, eoh 90m		Km
100													-					
120													-					

<b>PALADIN RESOURCES N'</b>				Co-ord local (m)	--	E	--	N	<b>CUM044</b>  <b>Prospect: Lake Charles</b>  <b>Project: 9261</b> <b>Name: CUJV</b> <b>Tenement: EL2275</b>	
<b>Geophysical Logging</b>				Co-ord AMG	478270	E	6550361	N		
				Collar Elev (m)	--		m)	59.10		ADH
				Depth (m)	90.0	Azimuth	--			90 deg
				Date commenced	21/02/1998	Date completed	21/02/1998			
				Geologist	JD-B	Logged date	21/02/1998			
				Drilling Co.	Thompson	Method	rotary mud			
				Casing from (m)	--	To	--			
				Water Table (m)	--	Date measured	--			
				Hole Diam. (cm)	12	Plugged (Y/N)	N			
				Date plotted	09/06/1998					

[illegible]

## Geophysical Logging

	REV1	REV2	REV3
Instrument	MI Sopris S2 - No 266	gamma from (m)	0.0
Probe No.	gamma 689	gamma to (m)	90.0
Date Logged	21/02/1998	gamma speed (m/min)	3
Operator	GJ	electric from (m)	0.0
Open/Closed Hole	open	electric to (m)	90.0
Notes	bad logs	electric speed (m/min)	8

Co-ord local (m)	--	E	--	N
Co-ord AMG	478138	E	6594460	N
Collar Elev (m)	--	m)	58.00	ADH
Depth (m)	90.0	Azimuth	--	90 deg
Date commenced	21/02/1998	Date completed	21/02/1998	
Geologist	WD	Logged date	21/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM045**

**Prospect: Lake Charles**

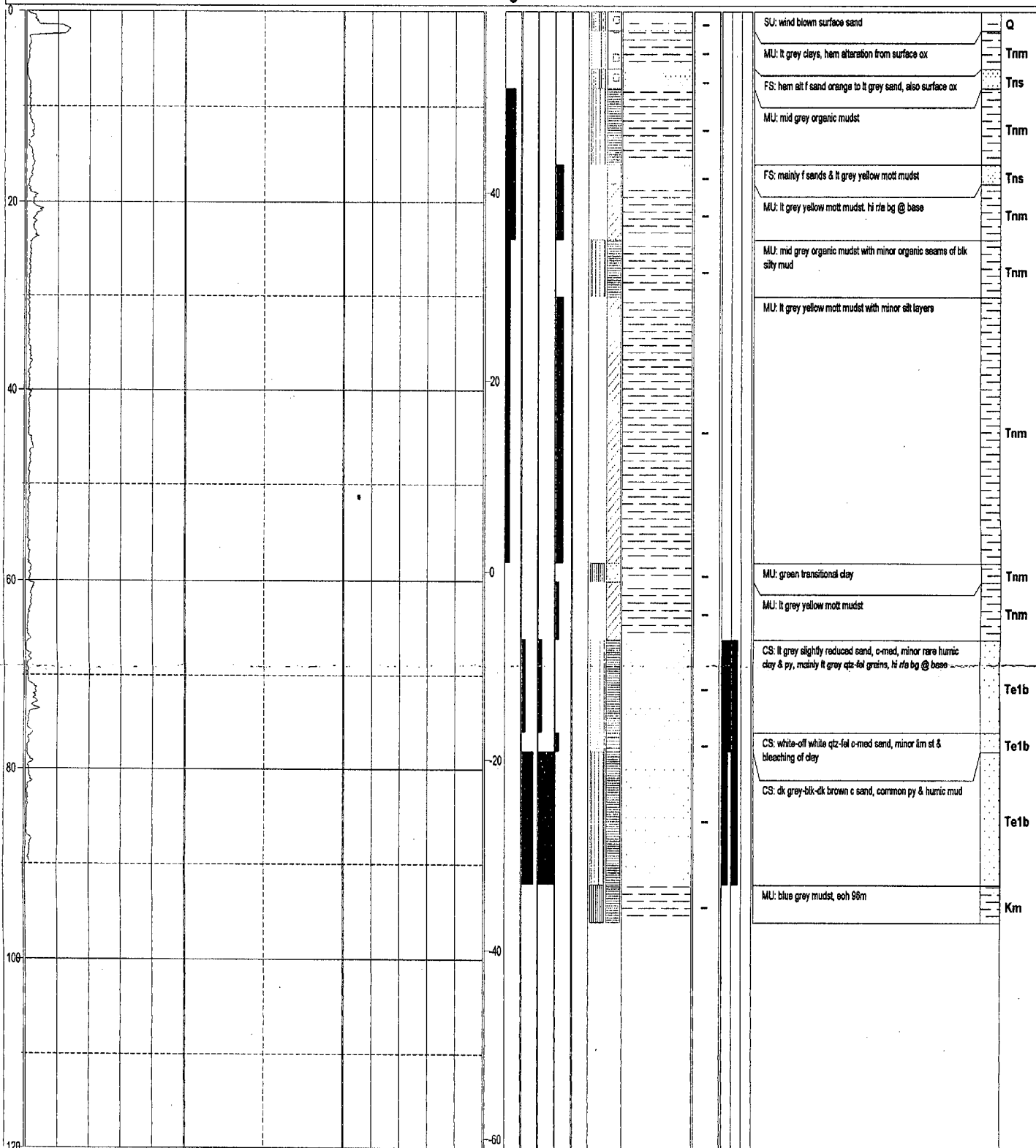
**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave

RL (m)  
 Organic  
 Humic  
 Pyrite  
 Limon.  
 Carb.  
 Colour  
 Redox  
 Cuttings  
 Relator  
 Sorting  
 Richness  
 Bleeding

### Description & Comments

Unit



## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	60.0	0.0	--
Probe No.	gamma 689	gamma to (m)	89.0	92.0	--
Date Logged	21/02/1998	gamma speed (m/min)	3	3	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	92.0	--	--
Notes	bad logs	electric speed (m/min)	8	--	--

Co-ord local (m)	-	E	-	N
Co-ord AMG	476870	E	6550879	N
Collar Elev (m)	-	m)	61.00	ADH
Depth (m)	92.0	Azimuth	90 deg	
Date commenced	21/02/1998	Date completed	21/02/1998	
Geologist	JD-B	Logged date	21/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM046**

**Prospect: Lake Charles**

Project: 9261

**Name:** CUJV

**Tenement:** EL2275

[illegible]

# PALADIN RESOURCES NI

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	-	-
Probe No.	gamma 689	gamma to (m)	90.0	-	-
Date Logged	22/02/1998	gamma speed (m/min)	3	-	-
Operator	GJ	electric from (m)	60.0	0.0	-
Open/Closed Hole	open	electric to (m)	90.0	90.0	-
Notes	bad SP, R	electric speed (m/min)	8	8	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	476620	F	6551876	N
Collar Elev (m)	-	m	61.00	ADH
Depth (m)	90.0	Azimuth	-	90 deg
Date commenced	22/02/1998	Date completed	22/02/1998	
Geologist	WD	Logged date	22/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/05/1998			

**CUM047**

**Prospect: Lake Charles**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0				60												SU: windblown surface same with surface ox		Tnm
																MU: yellow mott lim clays in lt gr clay, v rare organics		Tnm
20				40												MU: dk grey organic mudst		Tnm
																MU: yellow mott clays in lt gr clays, v minor blk silt		Tnm
40				20												MU: darker organic mudst		Tnm
																MU: yellow mottles in lt gr clays		Tnm
60				0												MU: darker organic mudst, blk seams & sands		Tnm
																MU: yellow mottles in lt gr clay, some bleaching - white to off white minor harder silcrete clays		Tnm
80				-20												CS: sst with common green & brown clays, some dull py, grey fel + qtz		Te2
																CS: less mudst, still grey qtz + fel, less reduced		Te1b
100				-40												MS: med sst, flu sequ, cemented py + grey fcl+ qtz		Te1b
																VS: still some py - more humic mud & grey qtz + fel pebbles up to cm size		Te1a
120																BA: blue grey mudst, eoh 90m		Km

## Geophysical Logging

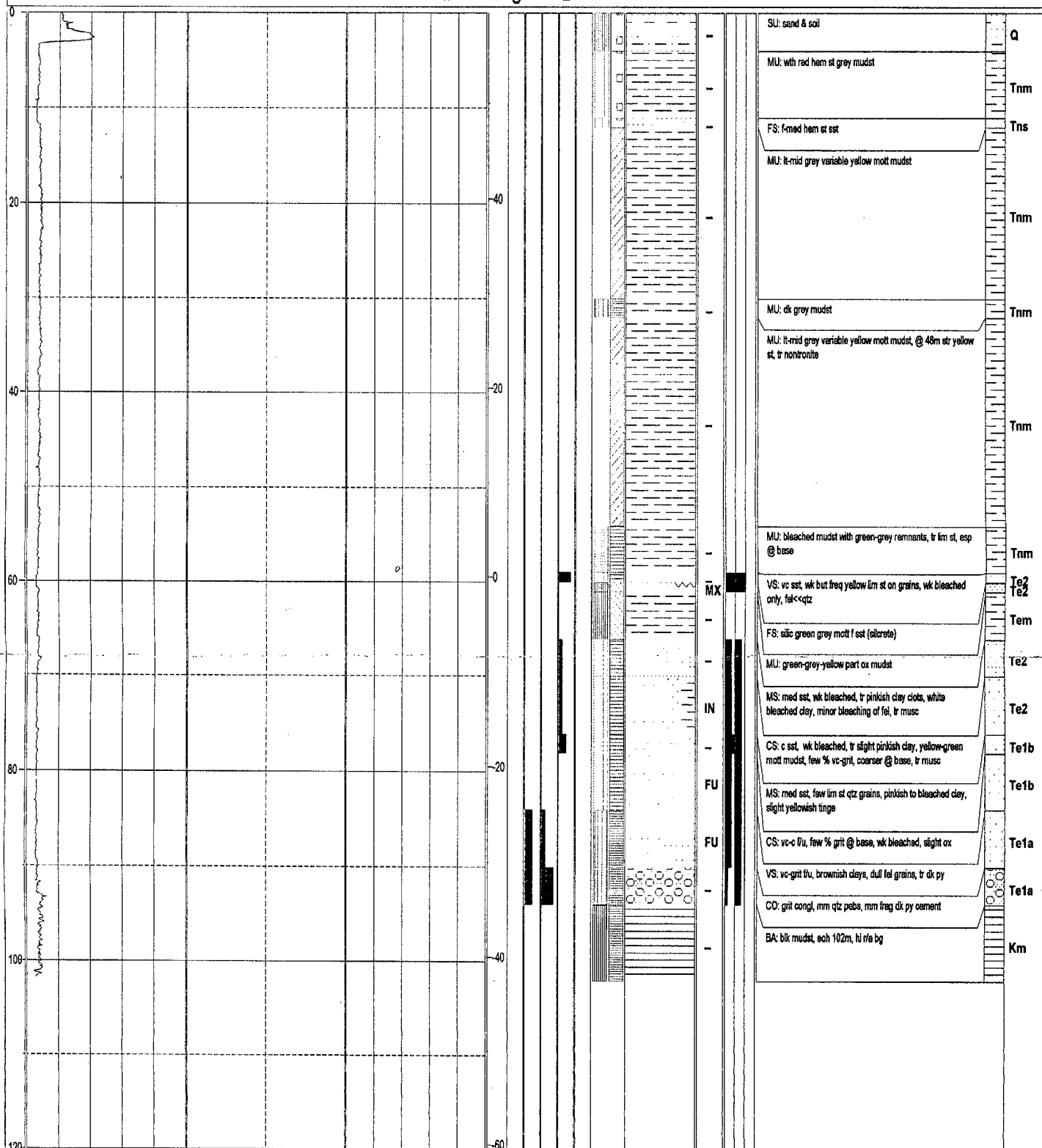
Co-ord local (m)	—	E	—	N
Co-ord AMG	480945	F	6561747	N
Collar Elev (m)	—	m)	59.50	ADH
Depth (m)	102.0	Azimuth	90 deg	
Date commenced	22/02/1998	Date completed	22/02/1998	
Geologist	JD-B	Logged data	22/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM048**

**Prospect: Lake Charles**

Project: 9261  
Name: CUJV  
Tenement: EL2275

Unit	lithol.	Description & Comments	Relator	Cuttings	Redox	Colour	Carb.	imon.	Pyrite	Humic	organic	LL (m)
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# PALADIN RESOURCES N'

## Geophysical Logging

		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris 52 - No 266	gamma from (m)	0.0	-
Probe No.	gamma 689	gamma to (m)	96.0	-
Date Logged	22/02/1998	gamma speed (m/min)	3	-
Operator	GJ	electric from (m)	0.0	-
Open/Closed Hole	open	electric to (m)	96.0	-
Notes	bad SP, R	electric speed (m/min)	8	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	481938	F	6551782	N
Collar Elev (m)	-	m)	59.50	ADH
Depth (m)	96.0	Azimuth	-	Up
Date commenced	22/02/1998	Date completed	22/02/1998	
Geologist	JD-B	Logged date	22/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	09/06/1998			

**CUM049**

**Prospect: Lake Charles**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
0																SU: sand & soil		Q
																MU: with red hem st grey mudst, red col bands silty f sand		Tnm
																MU: lt grey yellow mott mudst, somewhat bleached @ base		Tnm
																MU: lt-mid grey partly organic mudst, yellow st @ top, 34m, @ 30m some zst		Tnm
																		Tnm
																MU: bk organic mudst		Tnm
																MU: mid grey yellow mott mudst, carb? @ base		Tnm
																MU: off white bleached lt grey mudst		Tnm
																FS: off white f qtz sst, wk bleached, some bleached white mudst		Te2
																CS: med-c sst, fcl<<qtz, clean, tr lim st on qtz		Te2
																CS: yellow c-vc sst		Te2
																VS: lt green st (nontronite?), leached vc sst, fcl<<qtz, grit @ base		Te2
																VS: lt grey grit-vc flu sequ, tr bleached white-pinkish clay, rare lim st qtz		Te1
																VS: med-vc-grit sst, fcl< qtz, rare lim crusts & qtz st, tr bleached white-pinkish clay, white fcl grains		Te1a
																VS: lt grey tending to reduced sst		Te1a
																VS: vc sst, humic st, less grit, tr <mm organic frag		Te1a
																BA: blk mudst, ech 96m		Km

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	480457	F	6546084	N
Collar Elev (m)	--	m)	64.00	ADH
Depth (m)	102.0	Azimuth	--	
			90 deg	
Date commenced	23/02/1998	Date completed	23/02/1998	
Geologist	JD-B	Logged date	23/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	08/06/1998			

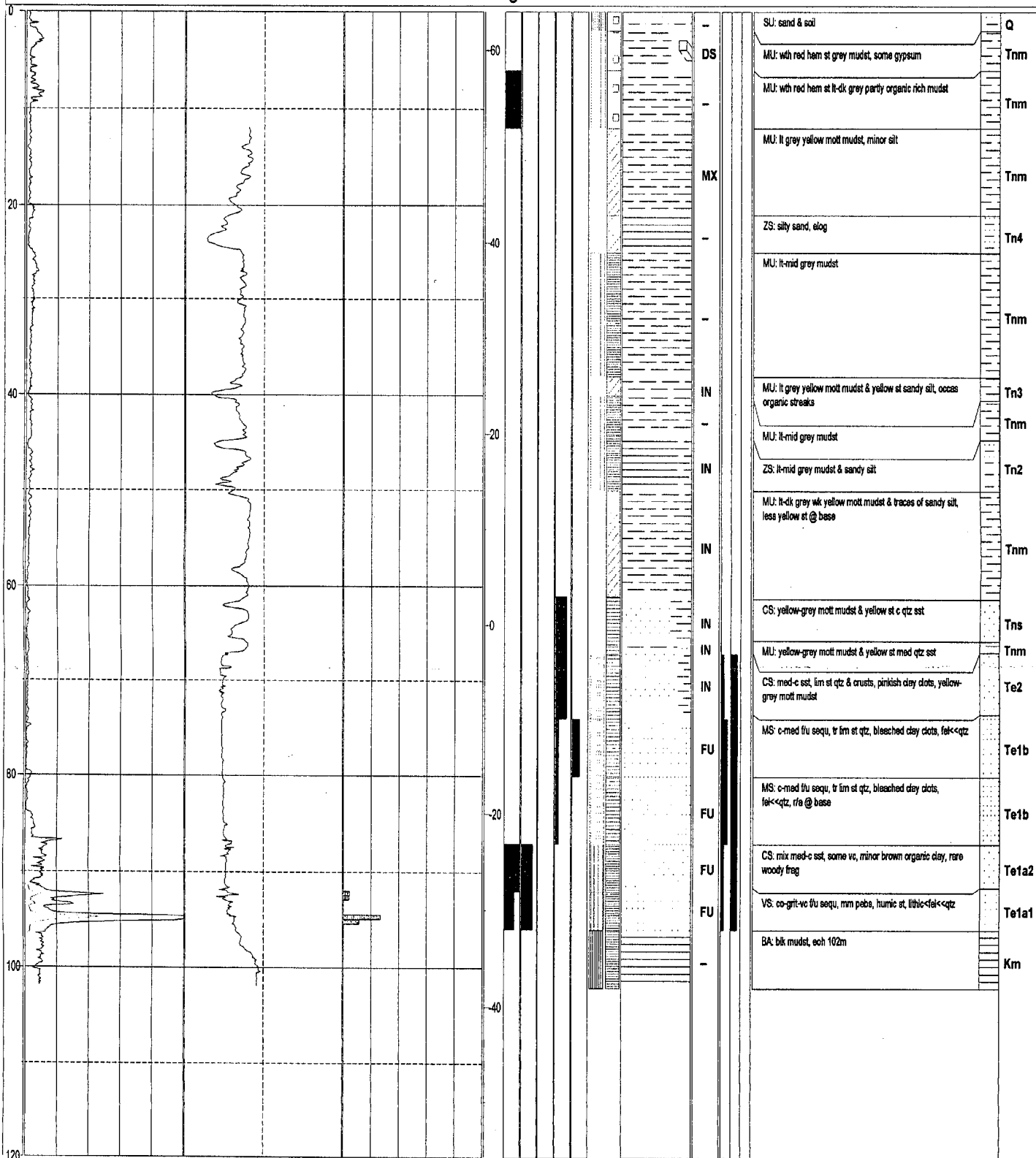
**CUM050**

**Prospect: Berber**

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

[illegible]

# PALADIN RESOURCES NI

Co-ord local (m) - E - N  
 Co-ord AMG 480482 F 8545968 N  
 Collar Elev (m) - n) 64.00 ADH  
 Depth (m) 102.0 Azimuth - 90 deg  
 Date commenced 23/02/1998 Date completed 23/02/1998  
 Geologist JD-B Logged date 23/02/1998  
 Drilling Co. Thompson Method rotary mud  
 Casing from (m) - To -  
 Water Table (m) - Date measured -  
 Hole Diam. (cm) 12 Plugged (Y/N) N  
 Date plotted 09/06/1998

**CUM051**

## Geophysical Logging

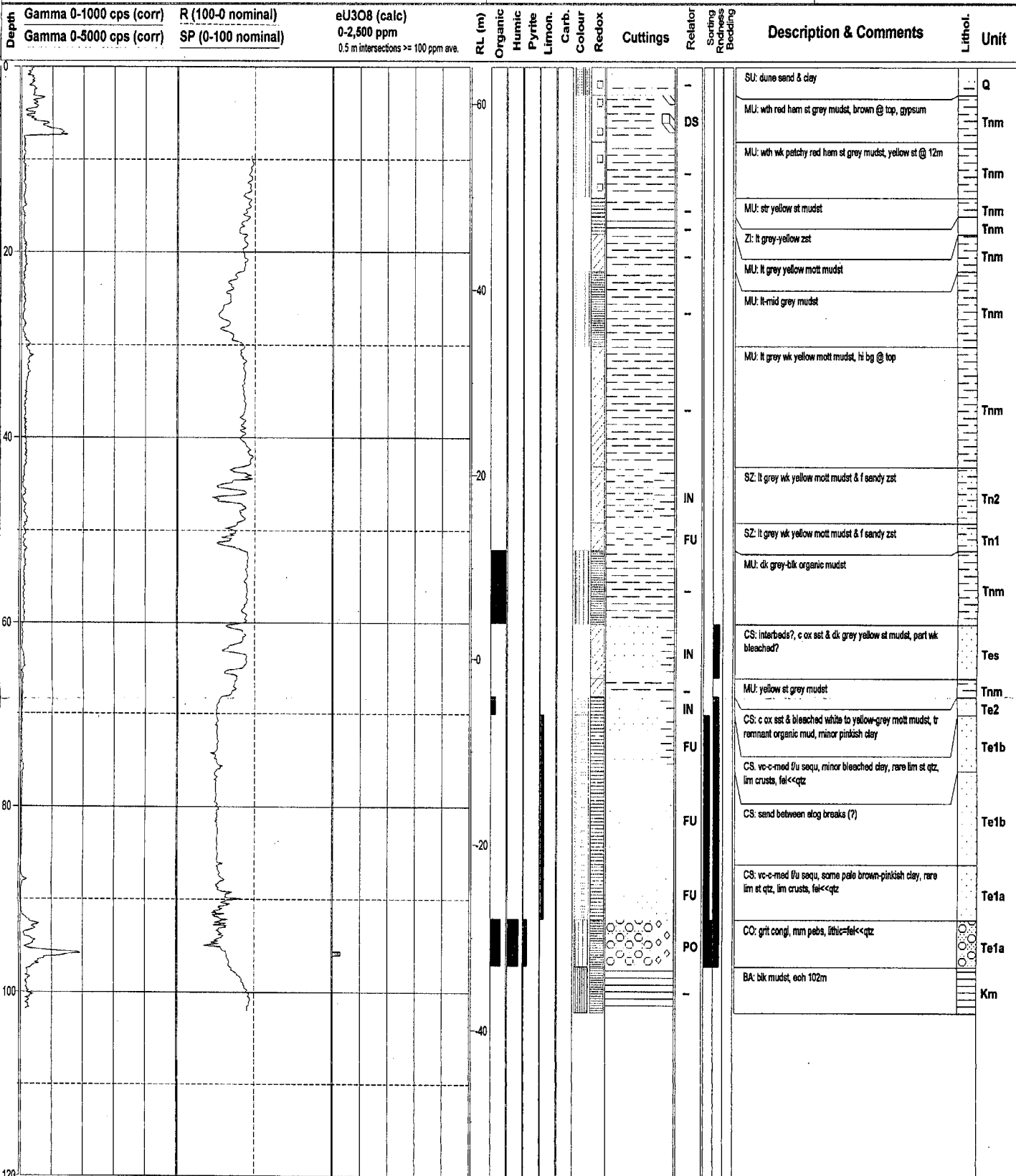
		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	90.0
Probe No.	gamma 688	gamma to (m)	102.0	100.0
Date Logged	23/02/1998	gamma speed (m/min)	3	2
Operator	GJ	electric from (m)	0.0	0.0
Open/Closed Hole	open	electric to (m)	102.0	102.0
Notes	ok SP, bad R	electric speed (m/min)	8	8

Prospect: Berber

Project: 9261

Name: CUJV

Tenement: EL2275



## Geophysical Logging

	RUN 1	RUN 2	RUN 3
gamma from (m)	0.0	--	--
gamma to (m)	102.0	--	--
gamma speed (m/min)	3	--	--
electric from (m)	0.0	--	--
electric to (m)	102.0	--	--
electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--
Co-ord AMG	480452	E	8545999
Collar Elev (m)	--	E	64.00
Depth (m)	102.0	Depth	90 deg
Date commenced	23/02/1998	Date completed	23/02/1998
Geologist	JD-B	Logged date	23/02/1998
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	10/06/1998		

**CUM052**

**Prospect: Berber**

Project: 9261

**Name:** CUJV

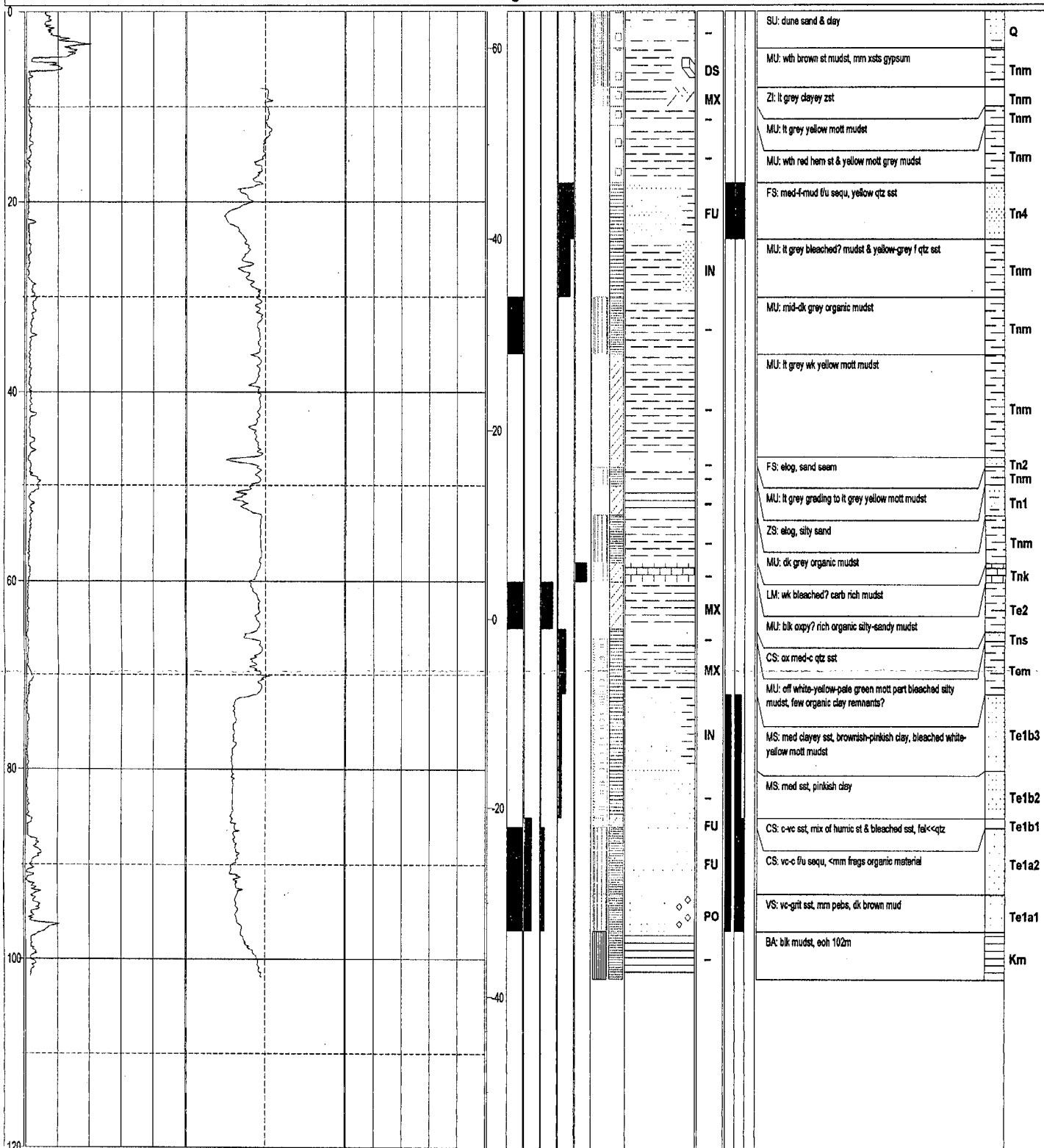
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

PRL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Roundness	Bedding
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### Description & Comments

Unit



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	88.0	-
Probe No.	gamma 689	gamma to (m)	102.0	100.0	-
Date Logged	24/02/1998	gamma speed (m/min)	3	2	-
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	good SP, poor R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480457	F	6545980	N
Collar Elev (m)	-	m)	64.00	ADH
Depth (m)	102.0	Up	90 deg	
Date commenced	24/02/1998	Date completed	24/02/1998	
Geologist	JD-B	Logged date	24/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

**CUM053**

**Prospect: Berber**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0																SU: sand & soil	Q	
																MU: with red hem st grey mudst & mm gypsum xst	Tnm	
																MU: with red hem st grey mudst	Tnm	
																MU: with wk red hem st grey mudst	Tnm	
																MU: str yellow st zst & lt grey yellow mott mudst	Tnm	
																MU: lt grey wk patchy yellow mott mudst	Tnm	
20																MS: str yellow st-off white mott med sst	Tn4	
																MU: lt mid grey partly organic mudst, hi bg @ top	Tnm	
40																		
																MU: lt grey yellow mott mudst & traces of silt	Tnm	
																MS: lt grey yellow mott clayey med sst	Tn2	
																MU: lt grey yellow mott mudst	Tn1	
																ZI: lt grey yellow mott mudst and zst		
60																MU: dk grey organic mudst, lim at top & bottom	Tnm	
																VS: vc qtz sst with yellow lim at qtz	Tes	
																MU: str yellow st organic mudst	Te2	
																FS: interbeds?, f-med ox qtz sst & lt-grey bleached? mudst, mm woody frags	Tem	
																MU: lt grey mudst	Te1b3	
																SI: white siltstone, silic sst, 1 hr drilling, rk bit	Te1b2	
80																CS: contaminated, prob c ox eyre sand	Te1b2	
																CS: contaminated, prob c ox eyre sand, tr ox-ignite	Te1b1	
																CS: yellowish gray c ox sst, tr ox-ignite	Te1b1	
																MS: med sst, some pinkish clay, top of flu sequ	Te1a	
																CS: c sst, some vc-grit grains, minor lim st qtz, part-ox pink-brownish clay, fel<<qtz	Te1a	
100																VS: v lt grey-brown vc sst, part-ox humic st	Km	
																CO: 94-84 flu sequ, base, grit congl, few mm sized rk-qtz pebs, tr py cement		
																VS: vc-grit pebbly sst, mm frags of both tarnished & bright py cement, some brown organic clay		
120																BA: blk mudst, eoh 102m		

# PALADIN RESOURCES NI

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	88.0	0.0
Probe No.	gamma 889	gamma to (m)	102.0	96.0	18.0
Date Logged	24/02/1998	gamma speed (m/min)	3	2	2
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	good SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480254	F	6548118	N
Collar Elev (m)	-		64.00	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	24/02/1998	Date completed	24/02/1998	
Geologist	JD-B	Logged date	24/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

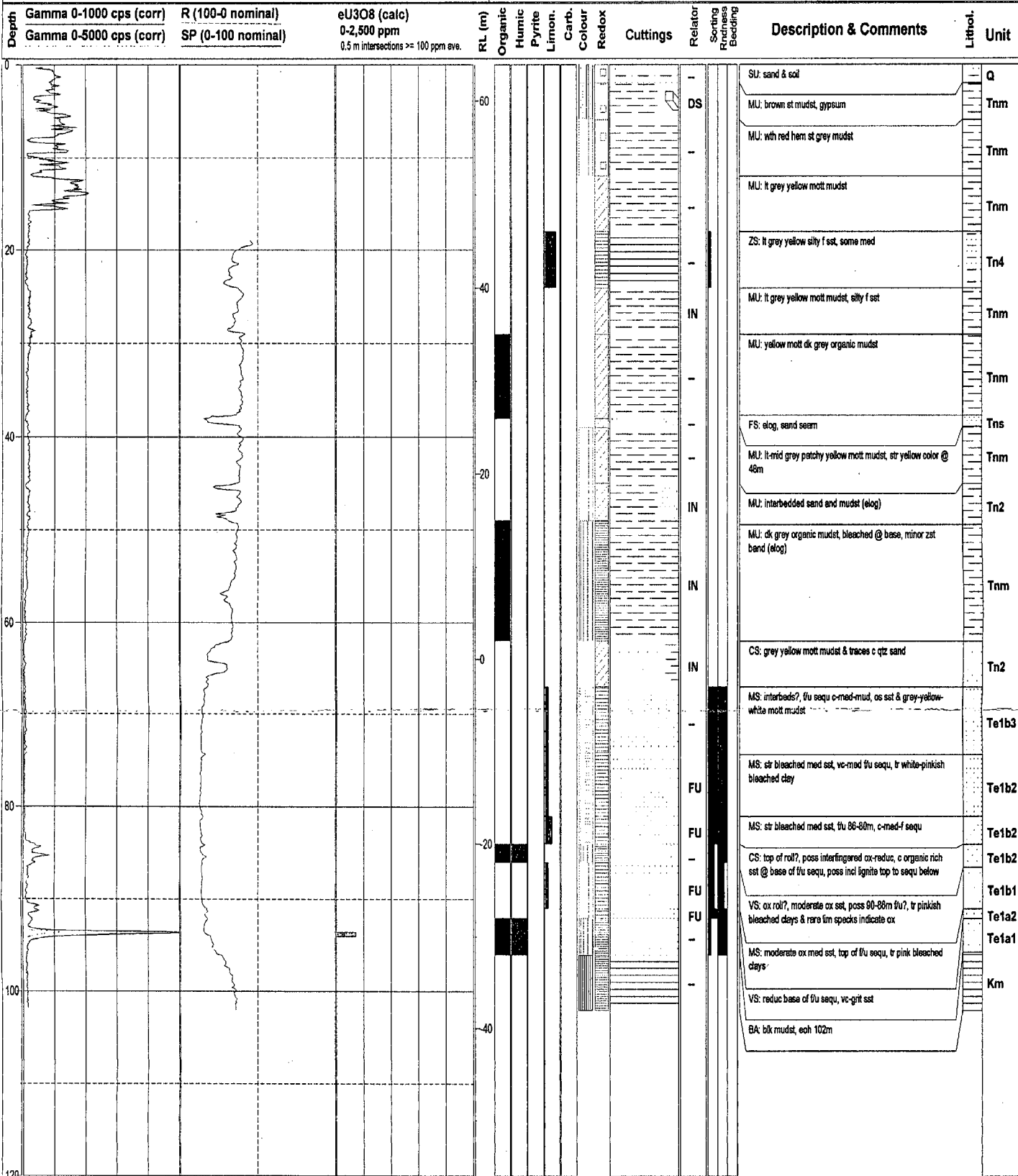
**CUM054**

**Prospect: Berber**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	480263	F	6548172	N
Collar Elev (m)	--	m)	64.00	ADH
Depth (m)	96.0	Azimuth	--	
Date commenced	24/02/1998		80 deg	
Geologist	JD-B	Date completed	24/02/1998	
Drilling Co.	Thompson	Logged date	24/02/1998	
Casing from (m)	--	Method	rotary mud	
Water Table (m)	--	To	--	
Hole Diam. (cm)	12	Date measured	--	
Date plotted	10/08/1998	Plugged (Y/N)	N	

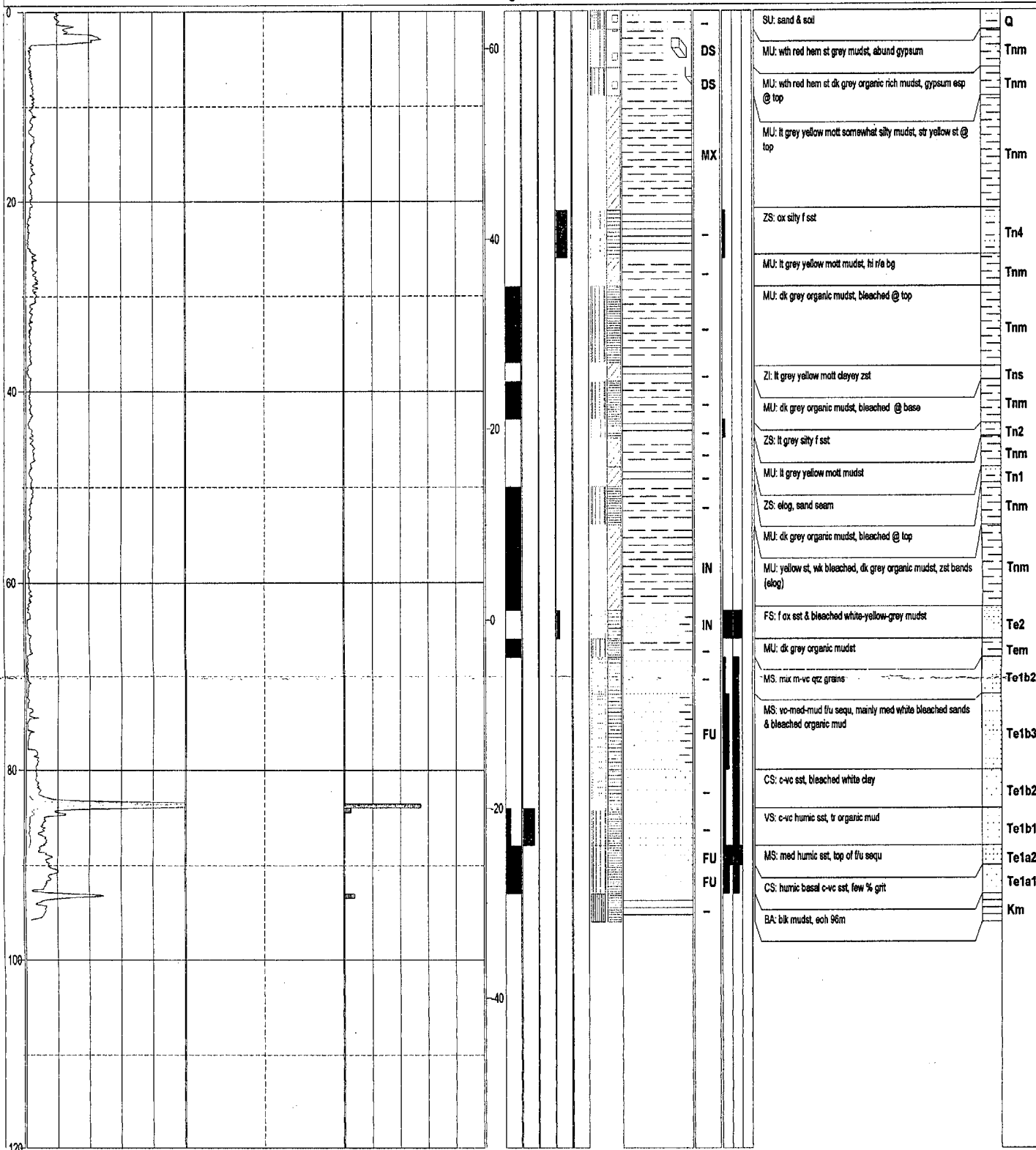
**CUM055**

**Prospect: Berber**

Project: 9261

**Name:** CUJV

**Tenement:** EL2275

[illegible]

## Geophysical Logging

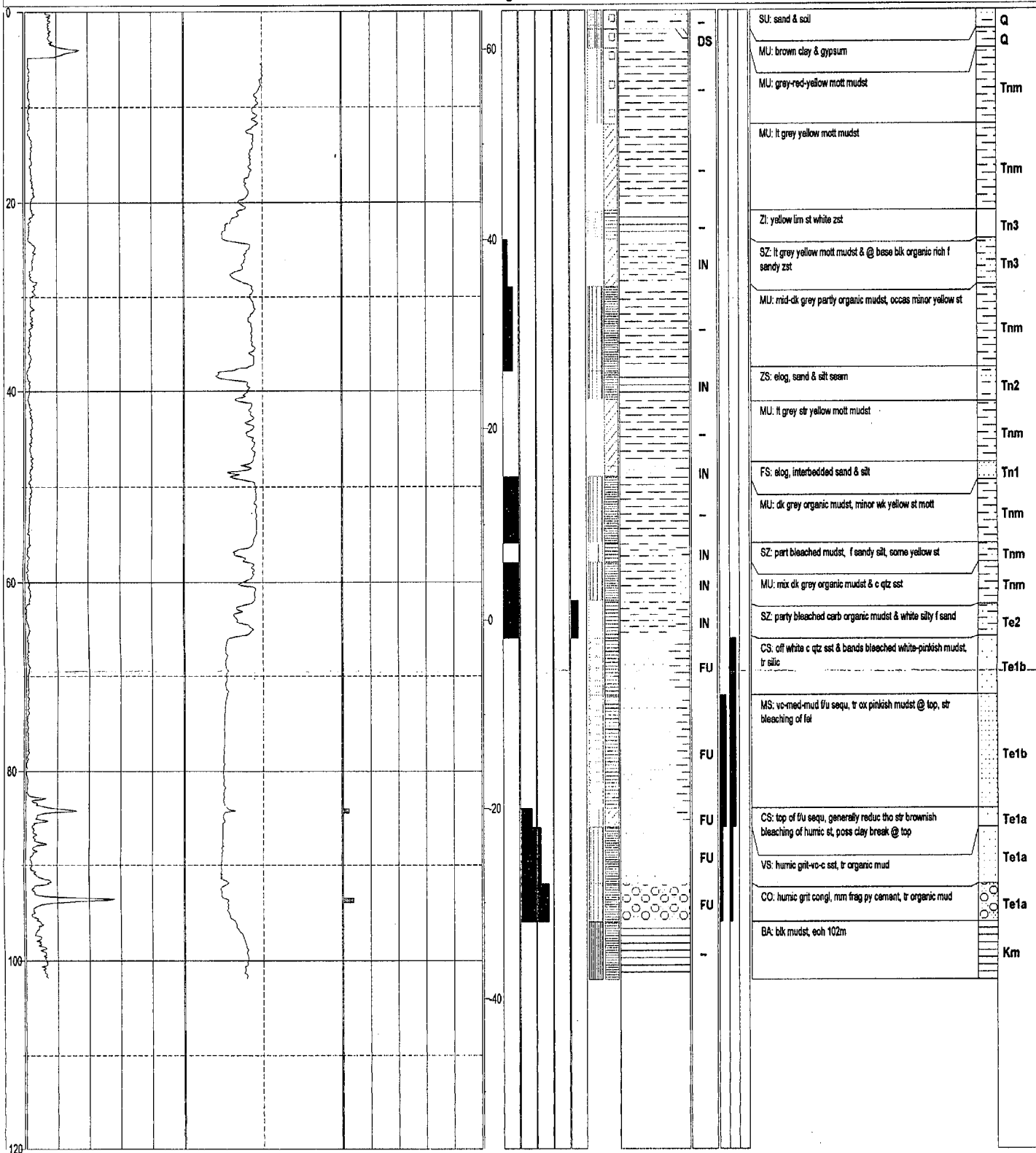
Co-ord local (m)	—	E	—	N
Co-ord AMG	480255	F	6548146	N
Co-ord Elev (m)	—	m)	64.00	ADH
Depth (m)	102.0	Azimuth	—	90 deg
Date commenced	25/02/1998	Date completed	25/02/1998	
Geologist	JD-B	Logged data	25/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/08/1998			

**CUM056**

**Prospect: Berber**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Core ID	Depth (m)	Core Description	Remarks
1	0.0 - 0.5	Organic	
1	0.5 - 1.0	Humic	
1	1.0 - 1.5	Pyrite	
1	1.5 - 2.0	Limon.	
1	2.0 - 2.5	Carb.	
1	2.5 - 3.0	Colour	
1	3.0 - 3.5	Redox	
1	3.5 - 4.0	Cuttings	
1	4.0 - 4.5	Relator	
1	4.5 - 5.0	Sorting	
1	5.0 - 5.5	Bedding	
1	5.5 - 6.0	Bedding	
1	6.0 - 6.5	Bedding	
1	6.5 - 7.0	Bedding	
1	7.0 - 7.5	Bedding	
1	7.5 - 8.0	Bedding	
1	8.0 - 8.5	Bedding	
1	8.5 - 9.0	Bedding	
1	9.0 - 9.5	Bedding	
1	9.5 - 10.0	Bedding	
1	10.0 - 10.5	Bedding	
1	10.5 - 11.0	Bedding	
1	11.0 - 11.5	Bedding	
1	11.5 - 12.0	Bedding	
1	12.0 - 12.5	Bedding	
1	12.5 - 13.0	Bedding	
1	13.0 - 13.5	Bedding	
1	13.5 - 14.0	Bedding	
1	14.0 - 14.5	Bedding	
1	14.5 - 15.0	Bedding	
1	15.0 - 15.5	Bedding	
1	15.5 - 16.0	Bedding	
1	16.0 - 16.5	Bedding	
1	16.5 - 17.0	Bedding	
1	17.0 - 17.5	Bedding	
1	17.5 - 18.0	Bedding	
1	18.0 - 18.5	Bedding	
1	18.5 - 19.0	Bedding	
1	19.0 - 19.5	Bedding	
1	19.5 - 20.0	Bedding	
1	20.0 - 20.5	Bedding	
1	20.5 - 21.0	Bedding	
1	21.0 - 21.5	Bedding	
1	21.5 - 22.0	Bedding	
1	22.0 - 22.5	Bedding	
1	22.5 - 23.0	Bedding	
1	23.0 - 23.5	Bedding	
1	23.5 - 24.0	Bedding	
1	24.0 - 24.5	Bedding	
1	24.5 - 25.0	Bedding	
1	25.0 - 25.5	Bedding	
1	25.5 - 26.0	Bedding	
1	26.0 - 26.5	Bedding	
1	26.5 - 27.0	Bedding	
1	27.0 - 27.5	Bedding	
1	27.5 - 28.0	Bedding	
1	28.0 - 28.5	Bedding	
1	28.5 - 29.0	Bedding	
1	29.0 - 29.5	Bedding	
1	29.5 - 30.0	Bedding	
1	30.0 - 30.5	Bedding	
1	30.5 - 31.0	Bedding	
1	31.0 - 31.5	Bedding	
1	31.5 - 32.0	Bedding	
1	32.0 - 32.5	Bedding	
1	32.5 - 33.0	Bedding	
1	33.0 - 33.5	Bedding	
1	33.5 - 34.0	Bedding	
1	34.0 - 34.5	Bedding	
1	34.5 - 35.0	Bedding	
1	35.0 - 35.5	Bedding	
1	35.5 - 36.0	Bedding	
1	36.0 - 36.5	Bedding	
1	36.5 - 37.0	Bedding	
1	37.0 - 37.5	Bedding	
1	37.5 - 38.0	Bedding	
1	38.0 - 38.5	Bedding	
1	38.5 - 39.0	Bedding	
1	39.0 - 39.5	Bedding	
1	39.5 - 40.0	Bedding	
1	40.0 - 40.5	Bedding	
1	40.5 - 41.0	Bedding	
1	41.0 - 41.5	Bedding	
1	41.5 - 42.0	Bedding	
1	42.0 - 42.5	Bedding	
1	42.5 - 43.0	Bedding	
1	43.0 - 43.5	Bedding	
1	43.5 - 44.0	Bedding	
1	44.0 - 44.5	Bedding	
1	44.5 - 45.0	Bedding	
1	45.0 - 45.5	Bedding	
1	45.5 - 46.0	Bedding	
1	46.0 - 46.5	Bedding	
1	46.5 - 47.0	Bedding	
1	47.0 - 47.5	Bedding	



## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	479808	F	8547809	N
Collar Elev (m)	—	m)	61.60	ADH
Depth (m)	98.0	Azimuth	—	
Date commenced	25/02/1998	—	90 deg	
Geologist	JO-B	Date completed	25/02/1998	
Drilling Co.	Thompson	Logged date	25/02/1998	
Casing from (m)	—	Method	rotary mud	
Water Table (m)	—	To	—	
Hole Diam. (cm)	12	Date measured	—	
Date plotted	10/06/1998	Plugged (Y/N)	N	

**CUM057**

**Prospect: Oban**

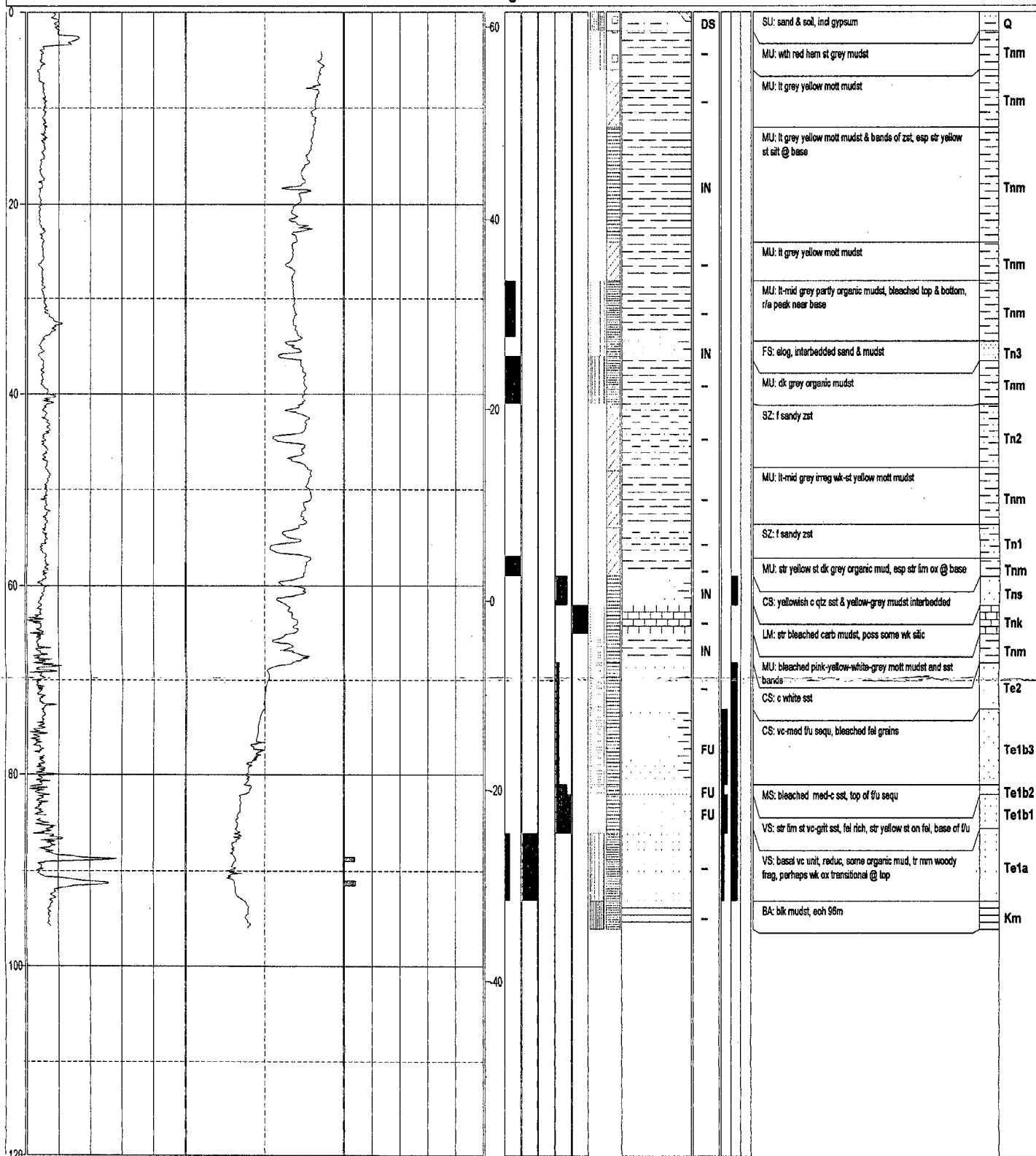
**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

PRL (m)	Cuttings	Relator
Organic		Sorting
Humic		Rindness
Pyrite		Bedding
Limon.		
Carb.		
Colour		
Redox		

### Description & Comments

Lithol.

Unit



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	80.0	--
Probe No.	gamma 689	gamma to (m)	96.0	94.0	--
Date Logged	25/02/1998	gamma speed (m/min)	2	2	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	96.0	--	--
Notes	ok SP, poor R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	479590	F	6548630	N
Collar Elev (m)	--		61.50	ADH
Depth (m)	96.0	W/p	90 deg	
Date commenced	25/02/1998	Date completed	25/02/1998	
Geologist	JD-B	Logged date	25/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

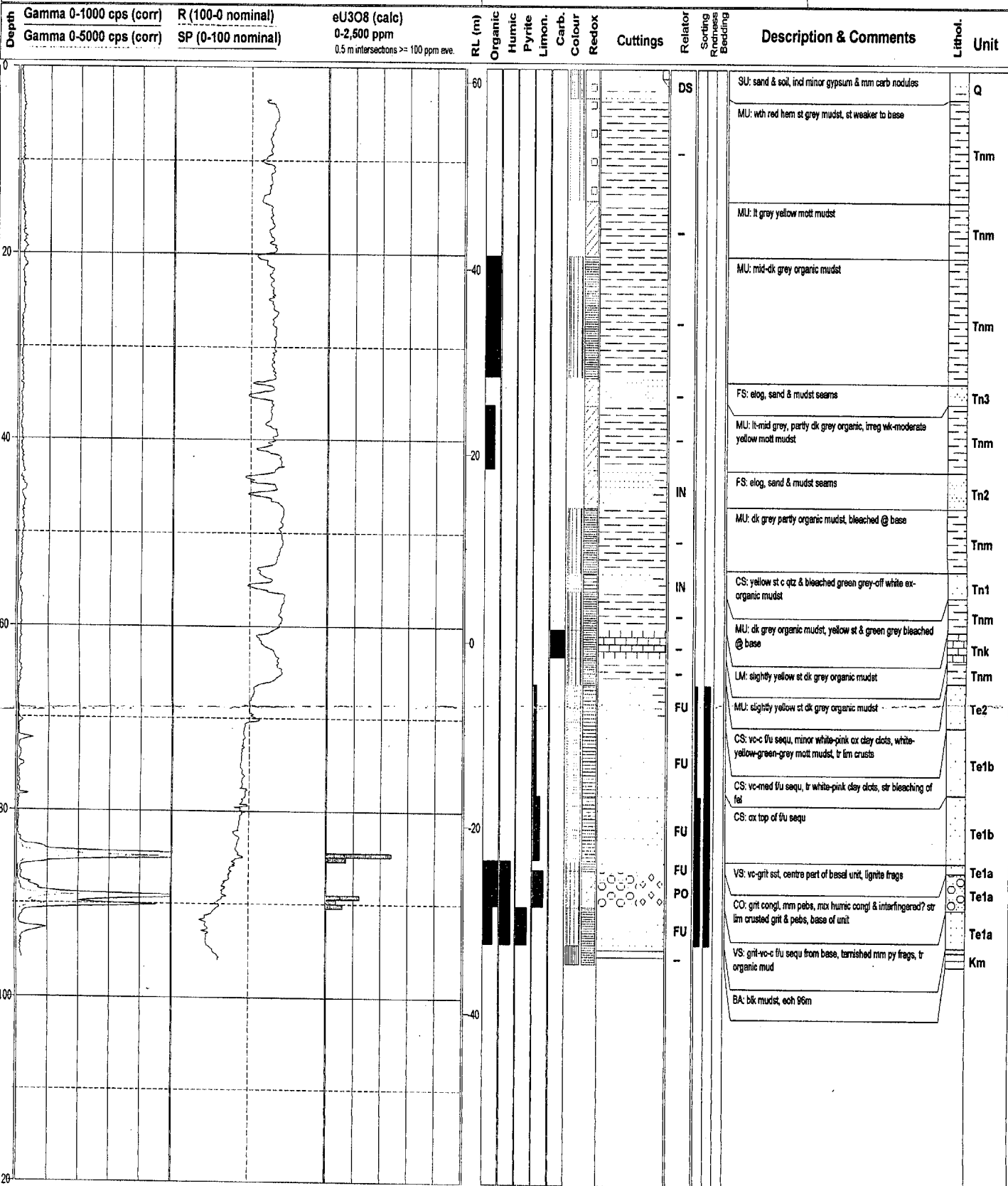
**CUM058**

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	84.0	88.0
Probe No.	gamma 689	gamma to (m)	102.0	98.0	92.0
Date Logged	25/02/1998	gamma speed (m/min)	3	2	2
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	100.0	-	-
Notes	ok SP, poor R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480063	F	6548741	N
Collar Elev (m)	-	(m)	63.00	ADH
Depth (m)	102.0	Azimuth	-	Up
Date commenced	25/02/1998	Date completed	25/02/1998	90 deg
Geologist	JD-B	Logged date	25/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

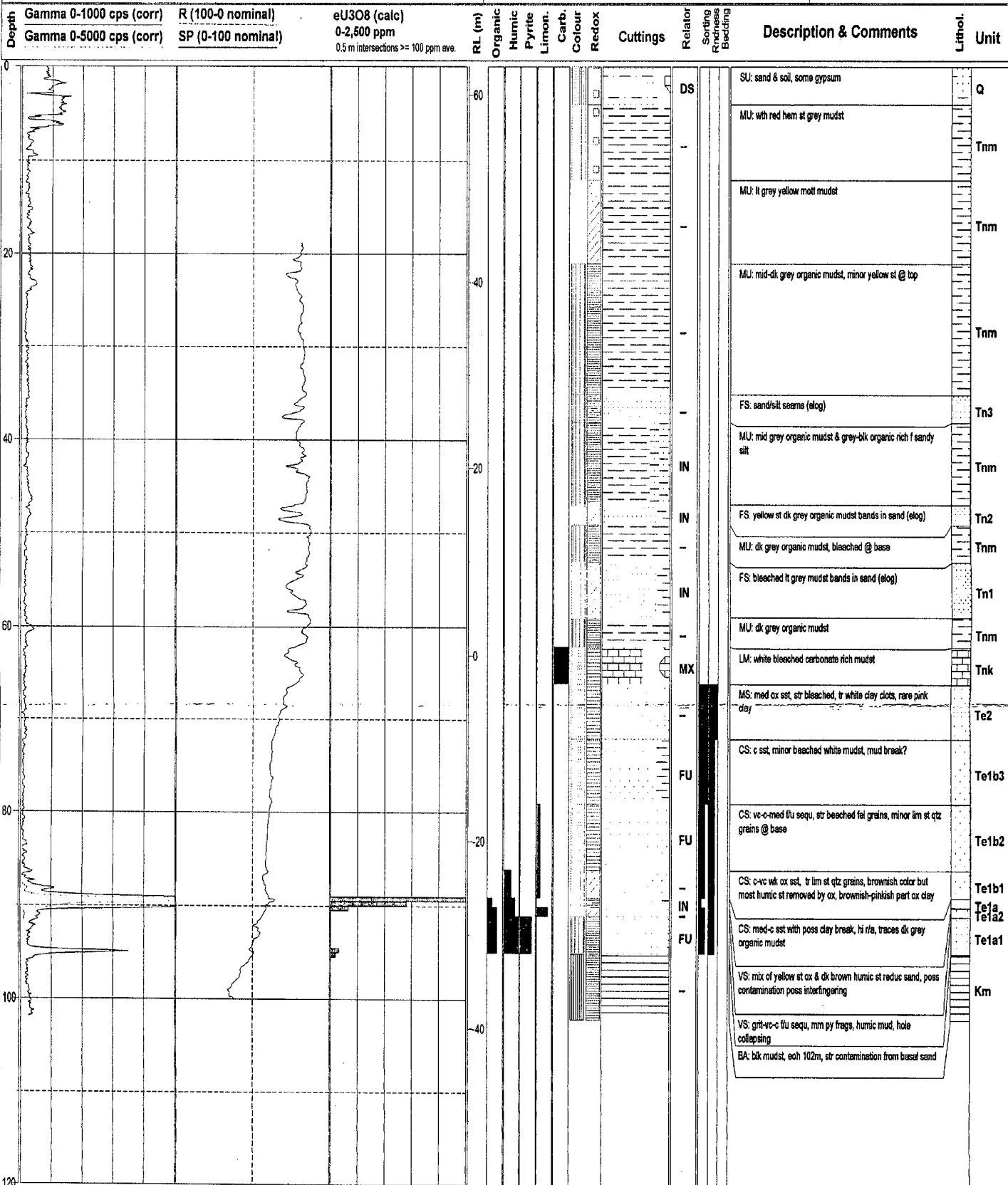
**CUM059**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



# PALADIN RESOURCES N°

## Geophysical Logging

		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	82.0
Probe No.	gamma 689	gamma to (m)	102.0	96.0
Date Logged	26/02/1998	gamma speed (m/min)	3	2
Operator	GJ	electric from (m)	0.0	-
Open/Closed Hole	open	electric to (m)	102.0	-
Notes	ok SP, bad R	electric speed (m/min)	8	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	480034	F	6548832	N
Collar Elev (m)	-		63.50	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	26/02/1998	Date completed	26/02/1998	
Geologist	WD	Logged date	26/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

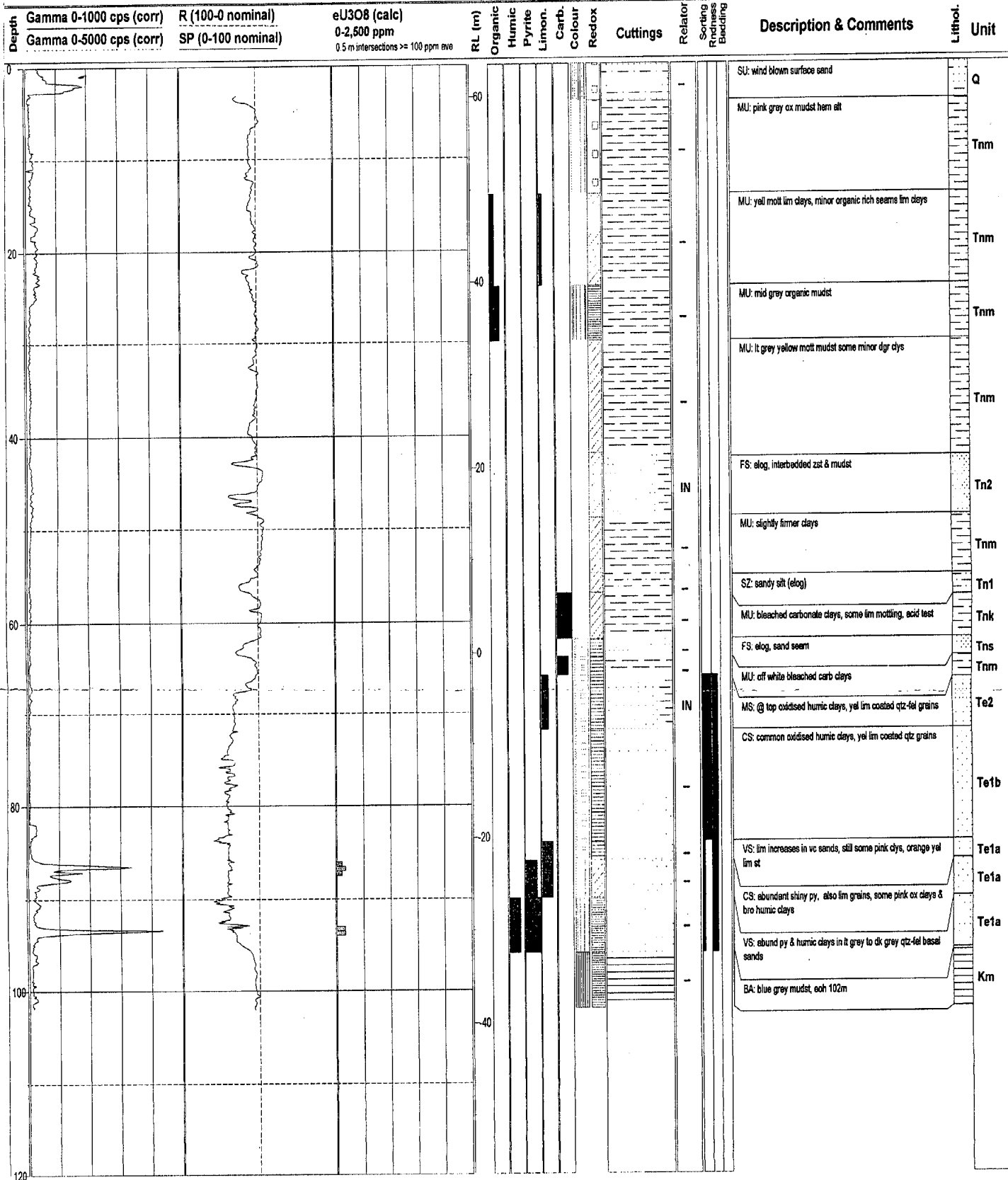
**CUM060**

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	82.0	-
Probe No.	gamma 689	gamma to (m)	102.0	96.0	-
Date Logged	26/02/1998	gamma speed (m/min)	3	2	-
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	102.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479995		6548881	N
Collar Elev (m)	-	m)	64.60	ADH
Depth (m)	102.0	Azimuth	-	90 deg
Date commenced	26/02/1998	Date completed	26/02/1998	
Geologist	WD	Logged date	26/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

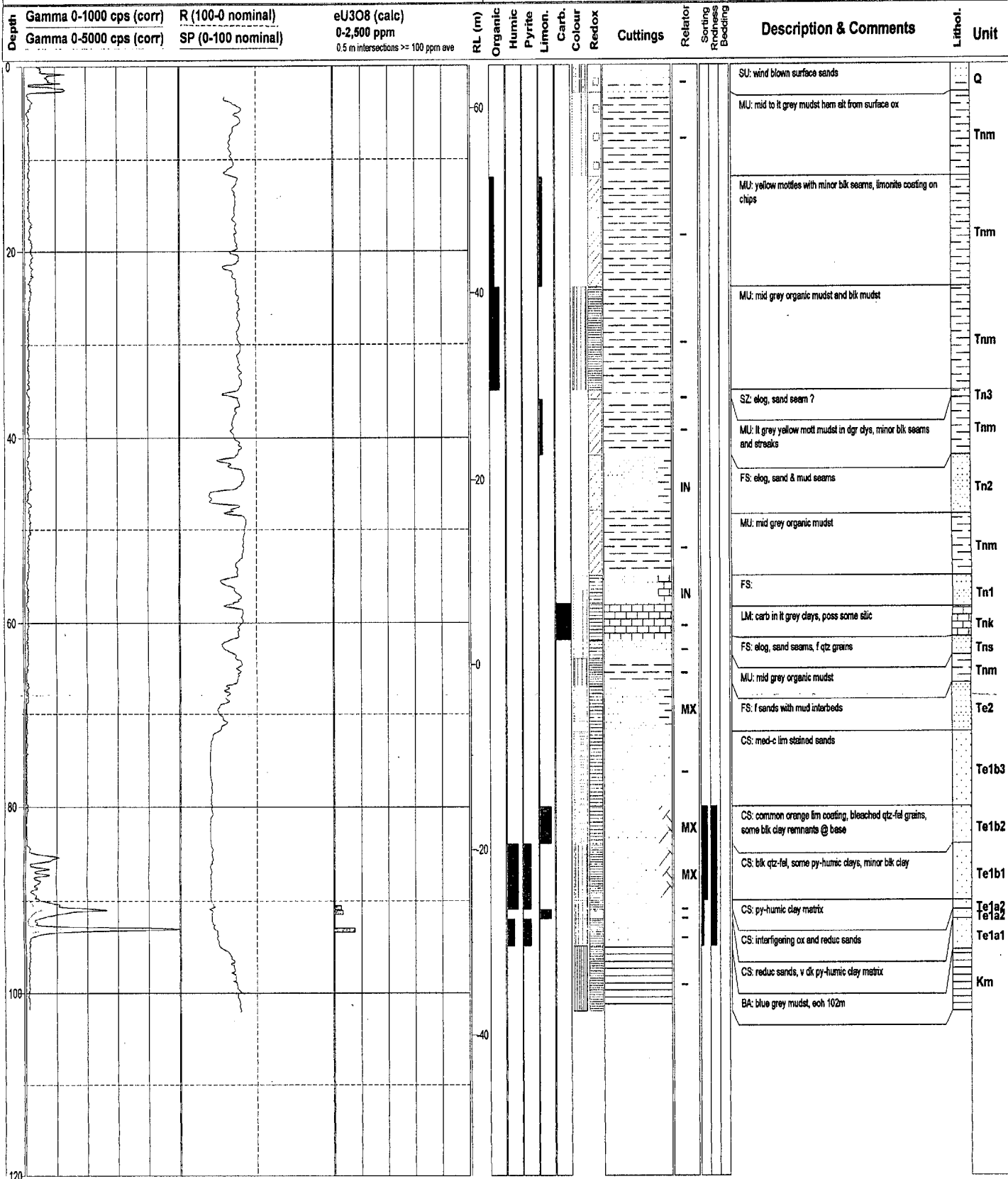
**CUM061**

**Prospect: Oban**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**



# PALADIN RESOURCES Nl

Co-ord local (m) -- E -- N  
 Co-ord AMG 480193 E 6549064 N  
 Collar Elev (m) -- m) 64.00 ADH  
 Depth (m) 96.0 Azimuth -- 90 deg  
 Date commenced 26/02/1998 Date completed 26/02/1998  
 Geologist WD Logged date 26/02/1998  
 Drilling Co. Thompson Method rotary mud  
 Casing from (m) -- To --  
 Water Table (m) -- Date measured --  
 Hole Diam. (cm) 12 Plugged (Y/N) N  
 Date plotted 10/06/1998

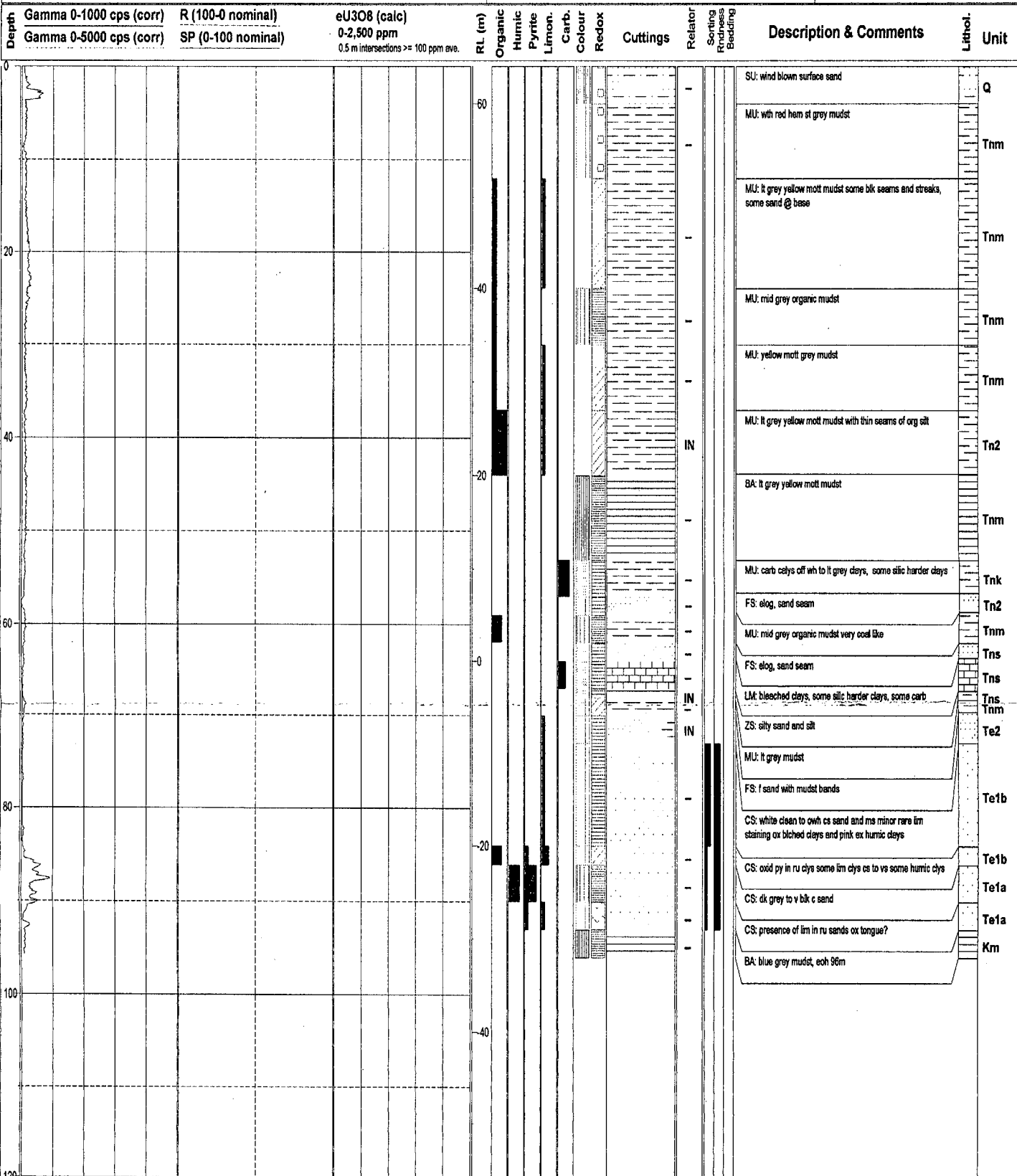
## CUM062

### Geophysical Logging

Instrument Mt Sopris S2 - No 266 gamma from (m) 0.0 RUN 1 RUN 2 RUN 3  
 Probe No. gamma 689 gamma to (m) 96.0 -- --  
 Date Logged 26/02/1998 gamma speed (m/min) 3 -- --  
 Operator GJ electric from (m) 0.0 -- --  
 Open/Closed Hole open electric to (m) 96.0 -- --  
 Notes poor SP, bad R electric speed (m/min) 8 -- --

Prospect: Oban

Project: 9261  
 Name: CUJV  
 Tenement: EL2275



## PALADIN RESOURCES N'

## Geophysical Logging

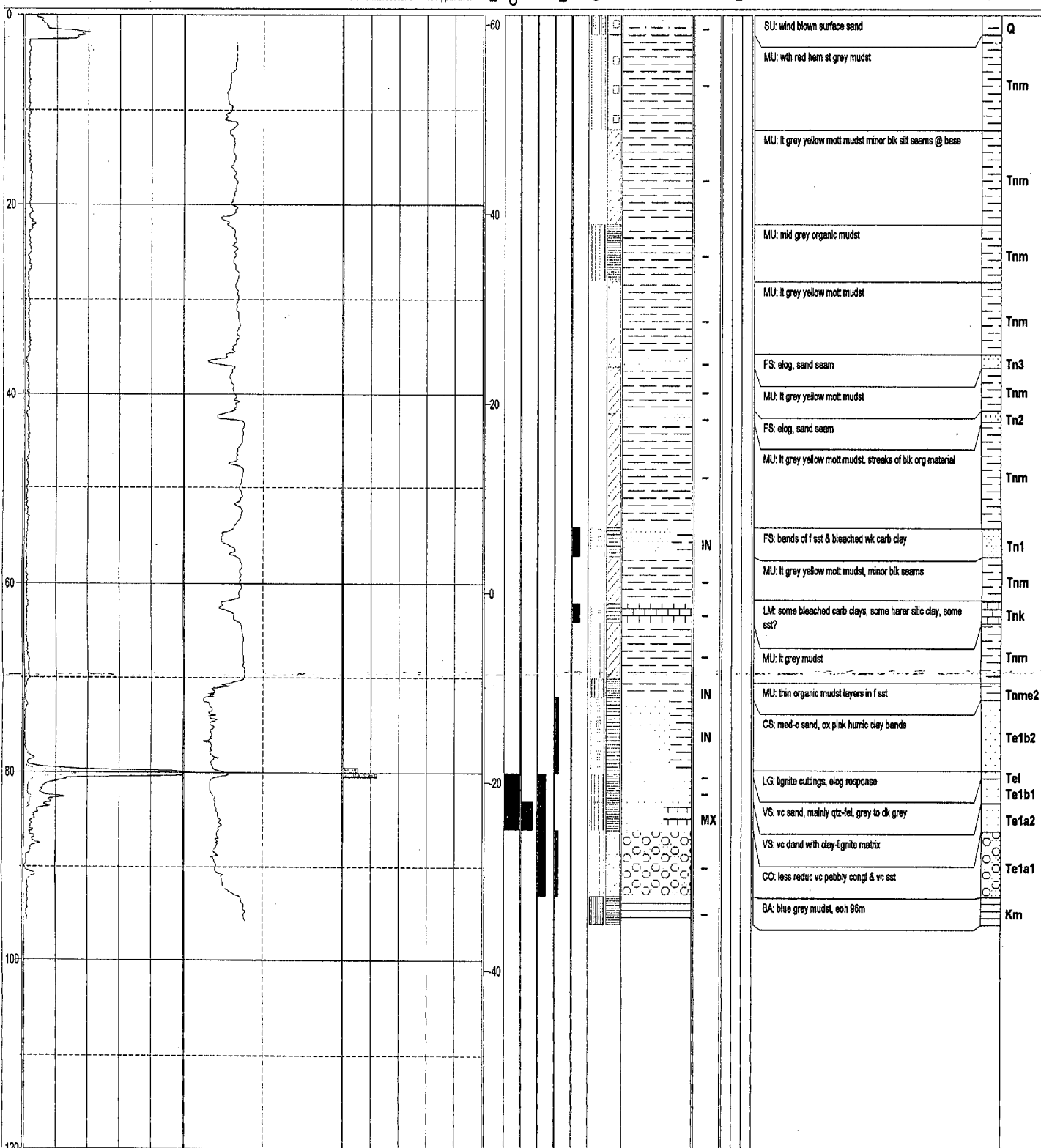
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	76.0	--
Probe No.	gamma 689	gamma to (m)	96.0	86.0	--
Date Logged	26/02/1998	gamma speed (m/min)	3	2	--
Operator	G.J	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	96.0	--	--
Notes	ok SP, bad R	electric speed (m/min)	8	--	--

Co-ord local (m)	—	E	—	N
Co-ord AMG	480187	E	6549292	N
Collar Elev (m)	—	(m)	61.00	ADH
Depth (m)	96.0	Azimuth	—	90 deg
Date commenced	26/02/1998	Date completed	26/02/1998	
Geologist	WD	Logged date	26/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

**CUM063**

**Prospect: Oban**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	480178	F	6549265	N
Collar ELEV (m)	--	m)	61.00	ADH
Depth (m)	98.0	Azimuth	--	90 deg
Date commenced	27/02/1998	Date completed	27/02/1998	
Geologist	EB	Logged date	27/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

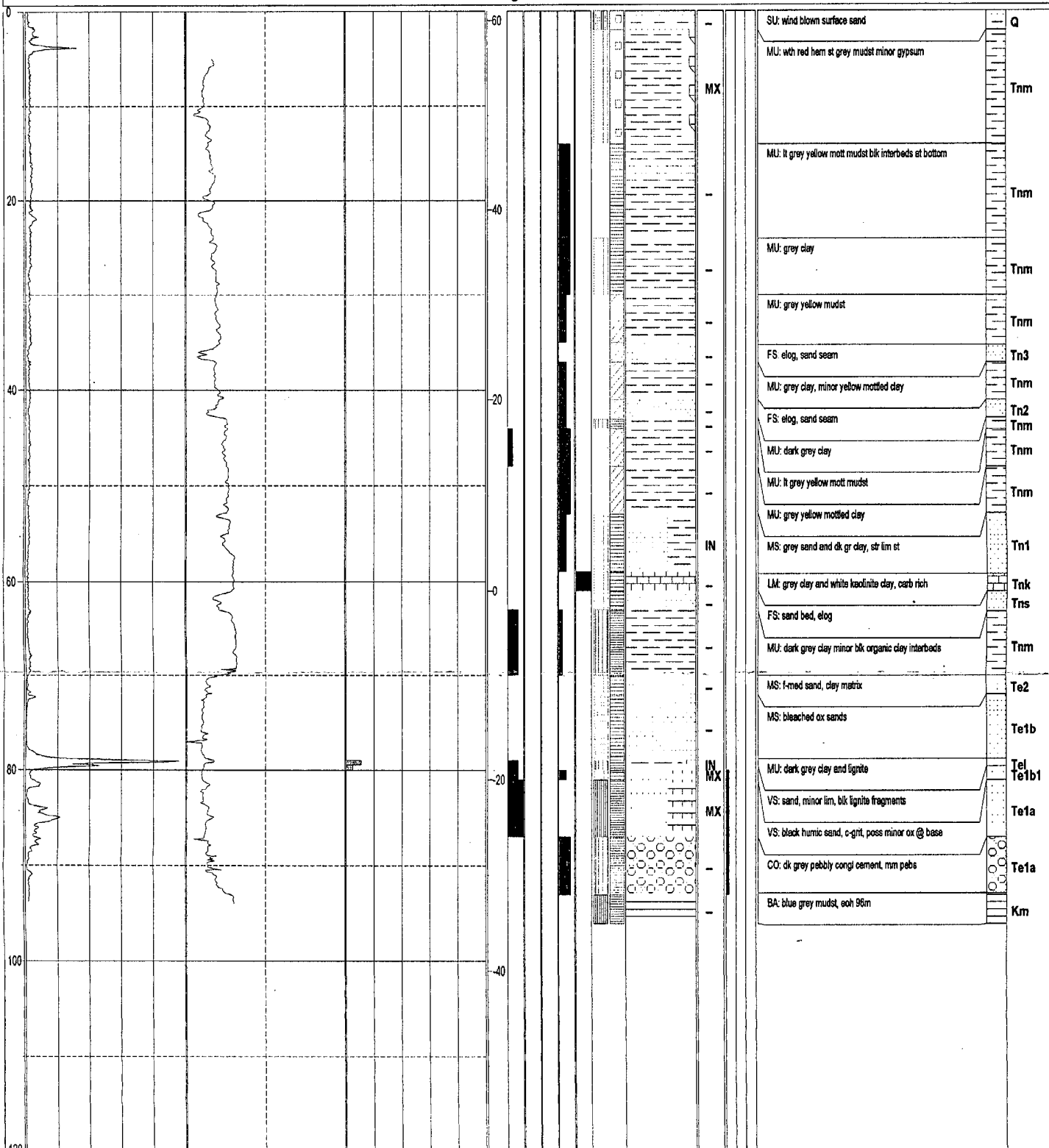
**CUM064**

**Prospect: Oban**

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

[illegible]

# PALADIN RESOURCES N'

## Geophysical Logging

			RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	82.0	90.0
Probe No.	gamma 689	gamma to (m)	96.0	96.0	96.0
Date Logged	27/02/1998	gamma speed (m/min)	3	2	2
Operator	WVD	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	96.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	479984	E	6548839	N
Collar Elev (m)	-	m)	64.60	ADH
Depth (m)	96.0	Azimuth	-	90 deg
Date commenced	27/02/1998	Date completed	27/02/1998	
Geologist	EB	Logged date	27/02/1998	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	10/06/1998			

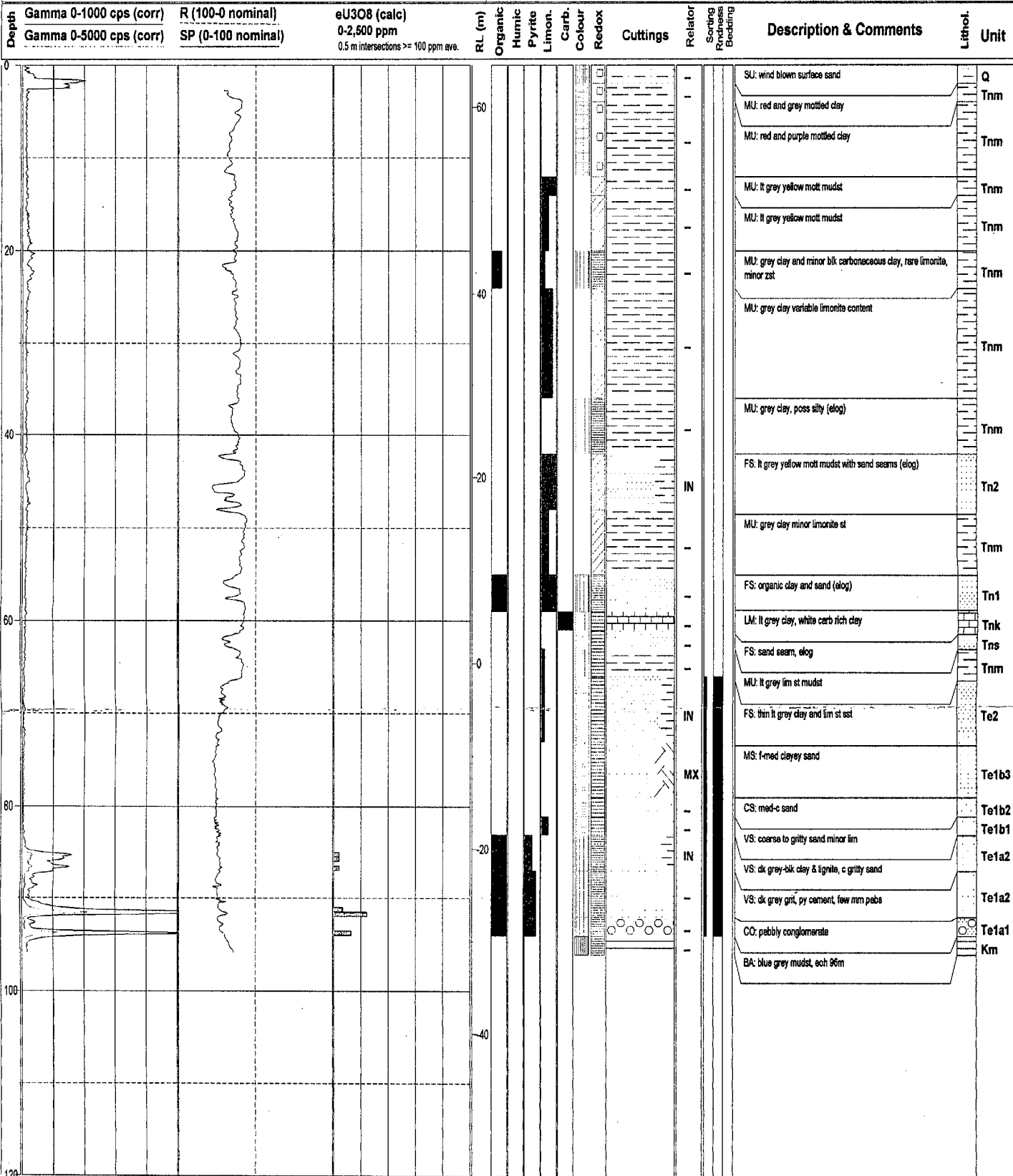
**CUM065**

Prospect: Oban

Project: 9261

Name: CUJV

Tenement: EL2275



**PALADIN RESOURCES NL**

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	120.0	--	--
Date Logged	09.05.98	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	120.0	--	--
Notes	bad SP, R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--
Co-ord AMG	485549	E	6557075
Collar Elev (m)	--	RL (m)	68.0
Depth (m)	120.0	Azimuth	-- 90 deg
Date commenced	09.05.98	ite completed	09.05.98
Geologist	JD-B	Logged date	--
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM066**

## Prospect: Recon

**Project: 9261**

Name: CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0																SU: sand & clay + mm carb nodules		Q
																MU: red hem st, wth mudst		Tnm
																SZ: dk red hem sandy zst		Tnm
																MU: red hem/grey mott mudst		Tnm
																MU: yellow/mott mudst		Tnm
																MU: wk yellow specks @ top, dk grey mudst		
20																		Tnm
																FS: str yellow st lt grey bleached f sst		Tn3
40																MU: dk grey mudst		Tnm
																MU: lt grey mudst + tr f sandy silt		Tnm
																MU: organic mudst		Tnm
																MU: lt grey silty mudst		Tnm
																MU: str yellow st lt grey mudst		Tn1
60																FS: off white f qtz sand		Tnm
																MU: yellow/grey mott mudst		Tnk
																MU: yellow/white/grey carb rich clay		
																FS: f-med ox sst, bleached		
80																		Te2
																CS: vc-v ox sst, fresh white fel		Te1b3
																VS: gritty ox sst, str bleached, fresh white fel		Te1b3
																CS: vc-c ox sst, white bleached mud break @ top		Te1b2
																CS: lt grey wk ox sst, tr humic st, bleached clay clots		Te1b1
100																MU: dk grey-brown humic mudst break		Tnm
																VS: mm pebs @ base, darker grey to base, few lim st grains, few % white bleached grains		Te1a2
																VS: blk humic st on qtz, mm-cm frag fresh py cement		Te1a1
120																BA: blue-grey sandy mudst, x2 thin tan hard bands (shale)		Km
																BA: dk blue-grey mudst		Km

**PALADIN RESOURCES NL**

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	0.0	--
Probe No.	gamma 689	gamma to (m)	120.0	30.0	--
Date Logged	10.05.98	gamma speed (m/min)	3	3	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	120.0	--	--
Notes	ok SP, R	electric speed (m/min)	8	--	--

Co-ord local (m)	—	E	—	N
Co-ord AMG	485517	E	6558049	N
Collar Elev (m)	—	RL (m)	66.0	ADH
Depth (m)	120.0	Azimuth	—	90 deg
Date commenced	10.05.98	Date completed	10.05.98	
Geologist	JD-B	Logged date	—	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM067**

## Prospect: Recon

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0																SU: clay & sand, mm carb nodules	Km	
																MU: red hem flecked grey mudst, thin silicate bands	Tnm	
																Zi: lt grey zst	Tnm	
																MU: variable yellow mott lt grey mudst, esp @ base	Tnm	
20																		
																ZS: blk organic rich silty f-med qtz sst	Tns	
																MU: variable lt-dk grey, partly organic mudst	Tnm	
40																		
																ZS: thin ox sst seams	Tns	
																MU: str yellow/gray mott mudst	Tnm	
																MU: lt grey mudst	Tn2	
																ZS: str yellow mott grey silty f sst	Tnm	
																MU: lt-dk (organic) grey mudst	Tn1	
60																MU: str yellow mott lt grey silty mudst + thin f sandy zst seams	Tn1	
																MU: variable yellow ox of grey mudst, tr f qtz sst	Tn1	
80																		
																FS: thin qtz sst	Tns	
																MU: greenish grey/yellow/white mott mudst, carb	Tnk	
																FS: ox f qtz sst + yellow/white mott mudst	Te2	
100																		
																VS: ox grit, abundant white fat, bleached	Te1b3	
																MS: ox med qtz sst, white mudst break @ top	Te1b2	
																MS: wk ox med qtz sst, brown (part ox) humic mudst break @ top	Te1b2	
																VS: vc-med flu, brown humic mudst break @ top	Te1b1	
120																		
																CS: med-c qtz sst, wk humic stain - overall gray tinge	Te1b2	
																VS: vc mm-cm rounded pebbly grit @ base, rare mm nodules angular grit	Te1b1	
																BA: dk grey mudst, eoh 120m	Km	

## Geophysical Logging

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm

0.5 m intersections >= 100 ppm ave

**CUM068**

**Prospect: Recon**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	482796	E	6554648	N
Collar Elev (m)	--	RL (m)	68.5	ADR
Depth (m) 108.0	Azimuth --		90 deg	
Date commenced	10.05.98	ate completed	10.05.98	
Geologist	JD-B	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**Prospect: Recon**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

### Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	---	---
Probe No.	gamma 689	gamma to (m)	108	---	---
Date Logged	11.05.98	gamma speed (m/min)	3	---	---
Operator	GJ	electric from (m)	0.0	---	---
Open/Closed Hole	open	electric to (m)	108.0	---	---
Notes	bad SP, R	electric speed (m/min)	8	---	---

Co-ord local (m)	--	E	--
Co-ord AMG	482859	E	6554109
Collar Elev (m)	--	RL (m)	69.0
Depth (m)	108.0	Azimuth	-- 90 deg
Date commenced	11.05.98	ite completed	11.05.98
Geologist	JD-B	Logged date	--
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	--	Plugged (Y/N)	N
Date plotted	28 07 98		

**CUM070**

**Prospect: Recon**

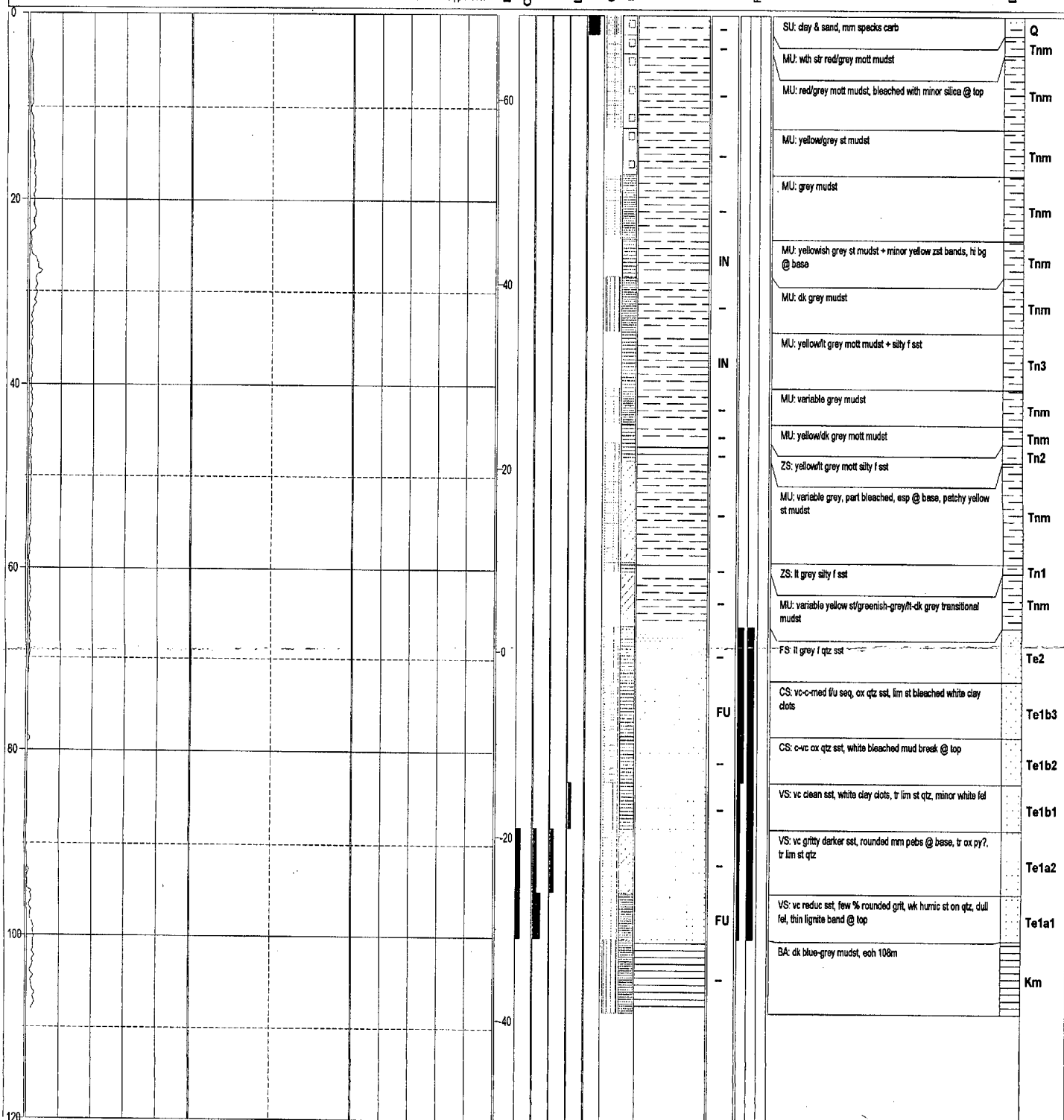
**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave.

**Organic  
Humic  
Pyrite  
Limon.  
Carb.  
Colour  
Redox**

### Description & Comments

Unit



PALADIN RESOURCES NL					Co-ord local (m)			E			N			CUM071
					Co-ord AMG			E			N			
					Collar Elev (m)			RL (m)			ADH			
Geophysical Logging					Depth (m)			Azimuth			90 deg			
					Date commenced			11.05.98			ate completed 11.05.98			
					Geologist			JD-B			Logged date			
					Drilling Co.			Thompson			Method			
					Casing from (m)			--			To			
					Water Table (m)			--			Date measured			
					Hole Diam. (cm)			12			Plugged (Y/N)			
					Date plotted			28.07.98						
					Prospect:			Recon						
					Project:			9261						
					Name:			CUJV						
					Tenement:			EL2275						

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0																SU: dune sand, minor mm carb specks	Q	Tnm
																MU: leached mudst, minor gypsum		
																MU: str red ham mott lt grey mudst + f sandy zst		Tnm
																MU: dk grey mudst		Tnm
																MU: yellow/grey mott mudst, r/a peak @ top		Tnm
																MU: dk grey mudst		Tnm
																SZ: str yellow mott lt grey bleached f sandy zst mudst		Tn3
																MU: variable grey mudst		Tnm
																ZS: yellow/grey silty f sst		Tn2
																MU: lt grey/yellow-grey mott/green-grey mott mudst		Tnm
																MU: dk grey mudst		Tnm
																MU: str greenish grey mudst, yellow st @ top, bleached white @ base		Tnm
																CS: bleached mix med-c qtz sand, white clay clots, a few mm pebs @ base		Te2
																CS: c ox qtz sst, flu bleached white mud break @ top, clean fal		Te1b3
																VS: vc-c ox qtz sst, bleached mud break @ top, clean fal		Te1b2
																VS: darker vc-v sst, traces humic st		Te1b1
																VS: vc-v sst, common but wk humic st, bleached grey clay clots		Te1a2
																VS: grey vc sst, moderate grey humic st, minor mm frags soft tarnished py		Te1a1
																BA: blue-grey mudst, eoh 102m		Km

**PALADIN RESOURCES NL**

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	102.0	--	--
Date Logged	11.05.98	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	102.0	--	--
Notes	u/s SP, R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--
Co-ord AMG	482355	E	6551627
Collar Elev (m)	--	RL (m)	67.5
Depth (m)	102.0	Azimuth	-- 90 deg
Date commenced	11.05.98	Log completed	11.05.98
Geologist	JD-B	Logged date	--
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM072**

## Prospect: Recon

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

**PALADIN RESOURCES NL**

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	96.0	--	--
Date Logged	12.05.98	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	86.0	--	--
Notes	bad SP, R	electric speed (m/min)	8	--	--

Co-ord local (m)	—	E	—	N
Co-ord AMG	478815	E	6544179	N
Collar Elev (m)	--	RL (m)	63.5	ADH
Depth (m)	96.0	Azimuth	--	90 deg
Date commenced	12.05.98	Site completed	12.05.98	
Geologist	JD-B	Logged data	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM073**

## Prospect: Recon

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

[illegible]

Co-ord local (m)	--	E	--	N	<div style="text-align: center;"> <b>CUM074</b> </div>
Co-ord AMG	478338	E	6545025	N	
Collar Elev (m)	--	RL (m)	63.0	ADH	
Depth (m) 96.0	Azimuth --		90 deg		
Date commenced	12.05.98	Site completed	12.05.98		
Geologist	JD-B	Logged date	--		<div> <b>Prospect: Recon</b> </div> <hr/> <div> <b>Project: 9261</b>  <b>Name: CUJV</b>  <b>Tenement: EL2275</b> </div>
Drilling Co.	Thompson	Method	rotary mud		
Casing from (m)	--	To	--		
Water Table (m)	--	Date measured	--		
Hole Diam. (cm)	12	Plugged (Y/N)	N		
Date plotted	28.07.98				

Geophysical Logging				Depth (m)	96.0	Azimuth	—	90 deg	Prospect: Recon  Project: 9261 Name: CUJV Tenement: EL2275
		RUN 1	RUN 2	RUN 3	Date commenced	12.05.98	Date completed	12.05.98	
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	—	Geologist	JD-B	Logged date	—	
Probe No.	gamma 689	gamma to (m)	96.0	—	Drilling Co.	Thompson	Method	rotary mud	
Date Logged	12.05.98	gamma speed (m/min)	3	—	Casing from (m)	—	To	—	
Operator	GJ	electric from (m)	0.0	—	Water Table (m)	—	Date measured	—	
Open/Closed Hole	open	electric to (m)	96.0	—	Hole Diam. (cm)	12	Plugged (Y/N)	N	
Notes	poor SP, bad R	electric speed (m/min)	8	—	Date plotted	28.07.98			

[illegible]

# PALADIN RESOURCES NL

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	RUN 1	RUN	RUN 3
Probe No.	gamma 689	gamma to (m)	0.0	-	-
Date Logged	12.05.98	gamma speed (m/min)	90.0	-	-
Operator	GJ	electric from (m)	0.0	-	-
Open/Closed Hole	open	electric to (m)	90.0	-	-
Notes	ok SP, bad R	electric speed (m/min)	8	-	-

Co-ord local (m)	-	E	-	N
Co-ord AMG	478344	E	6544759	N
Collar Elev (m)	-	RL (m)	63.0	ADH
Depth (m)	90.0	Azimuth	-	90 deg
Date commenced	12.05.98	Site completed	12.05.98	
Geologist	JD-B	Logged date	-	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	-	To	-	
Water Table (m)	-	Date measured	-	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM075**

**Prospect: Recon**

**Project: 9261**

**Name: CUJV**

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
0																SU: sand & clay	Q	Tnm
																MU: wth str red st mudst, dissem gypsum xsts		Tns
																ZS: wth red mott mudst, harder ox cemented silty f sst, grey sst		Tnm
																MU: yellow/grey mott mudst		Tns
																FS: off white f sst		Tnm
																MU: yellow/grey mott mudst, ox @ top		Tnm
																MU: grey mudst, organic streaks		Tnm
																MU: yellow/grey mott mudst, organic streaks, tr carb cement		Tnm
																Zl: yellow/grey mott zst		Tn3
																MU: grey mudst		Tnm
																FS: elong, sand seam?		Tns
																MU: str yellow ox variable bleached mudst		Tn2
																FS: prob interfingered off white ox sst + blk organic rich sst		Tnm
																MU: wk yellow st variable grey mudst		Tnm
																MU: white/yellow mott grey clays + tr white carb nodules		Te2
																MS: white med qtz sst, trace only		Te2
																ZS: green/white mott silty f-med qtz sand		Te1b3
																VS: vc-med mix qtz sst, white/green/yellow mott clay clots		Te1b2
																VS: dk grey vc sst, mm-on py xst masses (f greenish blk) minor blk oily clay clots		Te1b1
																VS: darker vc sst, minor black oily clay clots		Tem
																MU: thin? bed blk oily mudst		Te1a2
																VS: vc sst, humic sst		Te1a1
																VS: prob interfingered str yellow ox + brownish grey reduc grt, bright yellow lim coats on mm qtz grains, mm frag limonite after ox py, few rounded mm pebs		Km
																BA: blk mudst, r/s kick @ contact, eoh 90m		

## Geophysical Logging

Co-ord local (m)	--	E	--
Co-ord AMG	478763	E	6544785
Collar Elev (m)	--	RL (m)	63.0
Depth (m)	96.0	Azimuth	--
Date commenced	13.05.98	ite completed	13.05.98
Geologist	JD-B	Logged date	--
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM076**

## Prospect: Recon

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

[illegible]

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	477966	E	6545044	N
Collar Elev (m)	--	RL (m)	62.5	ADH
Depth (m)	90.0	Azimuth	--	90 deg
Date commenced	13.05.98	Site completed	13.05.98	
Geologist	JD-B	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM077**

## Prospect: Recon

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc) 0-2,600 ppm 0.5 m intersections >= 100 ppm ave.	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Sediment	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)																	
0				-60									-				SU: dune sand & clay + carb specks		Q
													IN				MU: red/grey mott mudst + silty f sst		Tnm
													-				MU: red/yellow mott dk grey organic mudst		Tnm
													-				Zl: lt grey zst		Tnm
													-				MU: variable grey partly organic mudst		Tnm
20				-40									-						Tnm
													IN				MU: wk yellow/tt grey mott mudst + zst		Tn3
													-				MU: tt grey mudst		Tnm
40				-20									IN				ZS: wk yellow st silty f sst + interbed grey + blk organic mudst		Tn2
													-				MU: str yellow st, partly bleached dk grey mudst		Tnm
													-				MU: yellow/off white/grey bleached mudst, tr carb cement		Tnm
													-				MS: bleached f-med sst, white-pinkish clay dots		Tn2
60				0									FU						
													-				ZS: silty f-med sst, off white-pinkish-brownish colours		Te2
													FU				CS: vo-c-med l/u sequ, yellowish st off white, str lim st @ 74m		Te1b3
													-				MU: bleached white-pinkish mudst, remnant bleached lignite frags		Tem
													FU				VS: yellowish st off white vo-c qtz est, gritty @ base		Te1b1
													-				VS: interfingered str ox lim st + humic st gnt, rounded mm pebs, abund lim cement after py		Te1a
													-				CS: mm pebbly c qtz sst, washed sample, mm frag limonite after py, mm frag organic material		Te1a
													-				BA: wk sericitic blk mudst, eoh 90m		Km
80				-20									-						
													-						
100				40									-						
													-						
120													-						

## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	477444	E	6545073	N
Collar Elev (m)	—	RL (m)	63.0	ADH
Depth (m)	90.0	Azimuth	—	90 deg
Date commenced	14.05.98	Site completed	14.05.98	
Geologist	JD-B	Logged data	—	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM078**

**Prospect: Recon**

Project: 9261

**Name:** CUJV

**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal) SP (0-100 nominal)	eU3O8 (calc) 0-2,500 ppm <small>0.5 m intersections &gt;= 100 ppm ave.</small>	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Recesses	Bedding	Description & Comments	Lithol.	Unit
0				-60													SU: sand & clay + abund carb nodules	Q	
																	MU: wh red/grey mott mudst + dissam gypsum xsts	Tnm	
																	ZS: str yellow/grey mott silty f sst + mudst	Tns	
																	MU: variable dk grey mudst, wk yellow st @ top & base	Tnm	
20				-40													ZI: wk yellow sl lt grey zst	Tn3	
																	MU: lt grey mudst	Tnm	
																	MU: ox stained organic mudst	Tnm	
				-20													ZI: thin seam ox zst	Tnm	
																	MU: lt-mid grey mudst	Tnm	
																	MU: str yellow sl dk grey mudst, becoming bleached @ base	Tnm	
																	MU: bleached grey/off white/yellow mott mudst	Tnm	
40				-20													FS: f or qtzsst	Te2	
																	MS: f-med ox qtzsst	Te2	
				0													VS: vc-c-med flu, wk lim st on some fet, others bleached white	Te1b3	
																	VS: vc-gritty oxsst, pinkish bleached mud break @ top	Te1b3	
																	VS: yellow-grey grit	Te1b3	
																	ZS: lt pinkish-brown silty f-med sst	Te1b2	
																	CS: lt greyish-off white c sst	Te1b1	
				-20													CS: lt brownish gray med-c sst, tr remnant humic st, abund pinkish clay clots, top of flu cycle	Te1a1	
																	CS: yellow-grey c sst	Km	
																	VS: brownish gray to dk grey grit, mm frag lim after py, mm frag lignite		
100				-40													BA: blk mudst, eoh 94m		

## Geophysical Logging

	RUN 1	RUN 2	RUN 3
gamma from (m)	70.0	70.0	0.0
gamma to (m)	85.2	85.2	85.2
gamma speed (m/min)	3	3	3
electric from (m)	--	--	--
electric to (m)	--	--	--
electric speed (m/min)	8	--	--

E	--	N
E	6545068	N
RL (m)	58.0	ADH
	90 deg	
...e completed	13.05.98	
Logged date	--	
Method	rotary mud	
To	--	
Date measured	--	
Plugged (Y/N)	N	

**CUM079**

## Prospect: Recon

Project: 9261  
Name: CUJV  
Tenement: EL2275

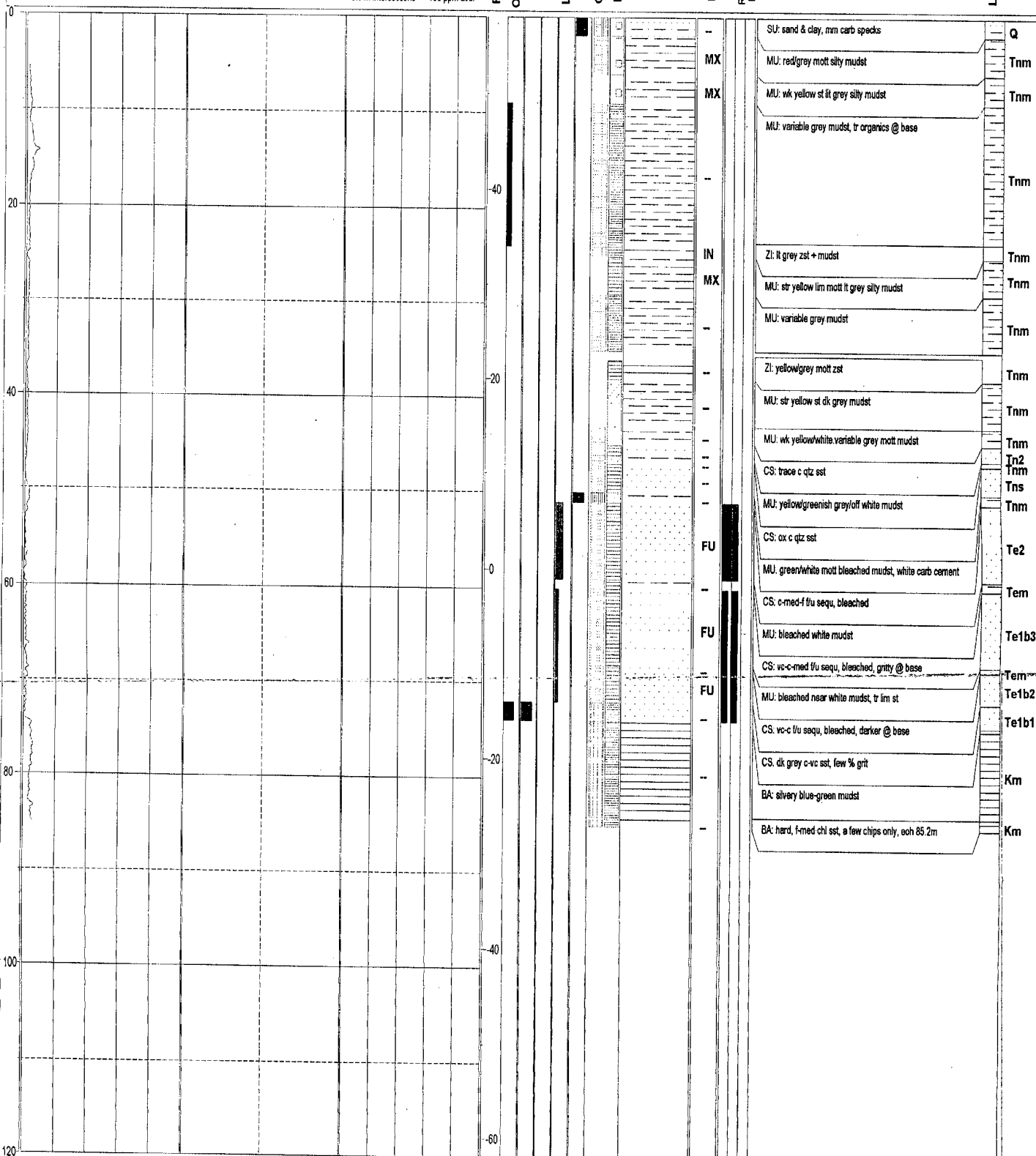
Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave.

L (m)  
organic  
humic  
pyrite  
limon.  
carb.  
colour  
redox

## Cuttings

### Description & Comments

Unit



## Geophysical Logging

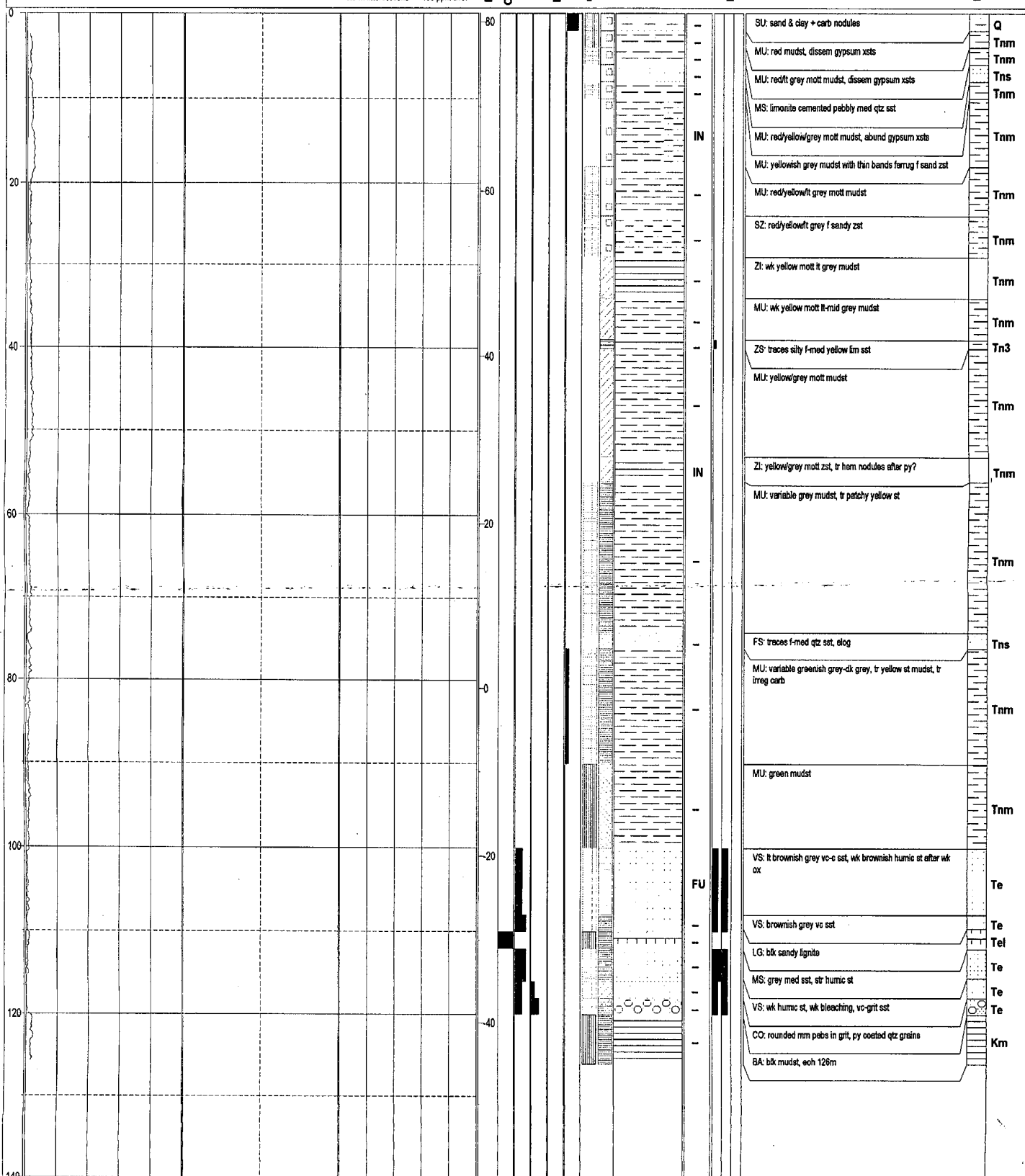
Co-ord local (m)	—	E	—
Co-ord AMG	488978	E	6539398
Collar Elev (m)	—	RL (m)	81.0
Depth (m)	126.0	Azimuth	— 90 deg
Date commenced	14.05.98	ate completed	14.05.98
Geologist	JD-B	Logged date	—
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	—	To	—
Water Table (m)	—	Date measured	—
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM080**

**Prospect: Recon**

Project:	9261
Name:	CUJV
Tenement:	EL2275

Unit	lithol.	Description & Comments	Relator	Cuttings	Redox	Colour	Carb.	imon.	Pyrite	Humic	organic	IL (m)
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## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	488262	E	6540177	N
Collar Elev (m)	--	RL (m)	81.5	ADH
Depth (m)	126.0	Azimuth	--	
Date commenced	15.05.98		90 deg	
Geologist	JD-B	Site completed	15.05.98	
Drilling Co.	Thompson	Logged date	--	
Casing from (m)	--	Method	rotary mud	
Water Table (m)	--	To	--	
Hole Diam. (cm)	12	Date measured	--	
Date plotted	28.07.98	Plugged (Y/N)	N	

**CUM081**

## Prospect: Recon

Project: 9261

Name: CUJV

**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
0																SU: clay pan		Q
																MU: red/yellow/grey mott mudst, disse gypsum xsts		Tnm
																MU: yellow/brown/grey mott mudst, minor gypsum @ top		Tnm
																MU: str yellowish grey mudst		Tnm
20																MU: red-grey mott mudst		Tnm
																ZS: red-grey mott silty f sst		Tns
																MU: yellow/t grey mott mudst		Tnm
40																		
																ZI: yellow lim zst, tr med qtz sst		Tn2
																MU: blk organic mudst		Tnm
																MU: lt grey mudst		Tnm
																MU: yellow/grey/mott mudst + some silty f sst		Tn1
60																		
																MU: wk yellow/grey mott mudst + zst		Tnm
																SZ: yellow/grey mott f sandy zst		Tnm
																SI: yellow silcrete		Tnm
80																MU: grey mudst		Tnm
																MU: grey mudst + f-med sandy zst, small patches white clay with tr carb		Tnm
																MU: wk bleached silty mudst, tr yellow st		Tnm
																MU: grey mudst		Tnm
																MU: lt grey mott in green mudst		Tnm
100																		
																MU: mid-dk brown humic mudst		Tem
																LG: soft blk lignite		Tel
120																		
																CO: grit congl, rounded mm grains		Te1a
																BA: dk blue grey mudst, sericitic in patches, eoh 128m		Km

# PALADIN RESOURCES NL

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	RUN 1	RUN	RUN 3
Probe No.	gamma 689	gamma to (m)	0.0	--	--
Date Logged	15.05.98	gamma speed (m/min)	135.0	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	135.0	--	--
Notes	poor SP, bad R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	493727	E	6534807	N
Collar Elev (m)	--	RL (m)	87.0	ADH
Depth (m)	135.0	Azimuth	--	90 deg
Date commenced	15.05.98	Site completed	15.05.98	
Geologist	WD	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM082**

**Prospect: Recon**

**Project: 9261**  
**Name: CUJV**  
**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm															
			0.5 m intersections >= 100 ppm ave.															
0																SU: surface sand & clays		Q
																MU: yellow/brown/grey mott mudst, 12-18m tr sand, less mottling to base		Tnm
20																MU: lt grey silty mudst, minor hem pink mottling		Tnm
													MX			MU: lim streaks on grey silty mudst		Tnm
40													MX			ZS: clay rich silty f sst, lim st qtz grains, bleached fel		Tn2
													MX			MU: yellow/grey mott mudst, poss tr silt		Tnm
60																MU: lim streaked grey mudst, v minor organic seams		Tnm
																MU: tr patchy lim st on dk grey-blk mudst, silty to base, some organic streaks		Tnm
80																		Tnm
100																		Tnm
120																MU: green-grey clay		Tnm
																FS: dk grey mudst with f sst seams		Te2
																CS: c ox sst, lim st on 10% qtz, bleached white fel, occas pink f sandy clay clots		Te1
																CS: some bleaching, some remnant humic st on qtz grains, some part ox pink humic clay clots, fel bleached white		Te1
																CS: reduc c-vc sst, humic st on 50% qtz grains		Te1
																LG: soft dk brown lignite		Km
140																MU: sericitic tan mudst, eoh 135m		

## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	0.0	---
Probe No.	gamma 689	gamma to (m)	96.0	10.0	---
Date Logged	15.05.98	gamma speed (m/min)	3	3	---
Operator	GJ	electric from (m)	0.0	---	---
Open/Closed Hole	open	electric to (m)	96.0	---	---
Notes	bad SP, R	electric speed (m/min)	8	---	---

Co-ord (local (m)	--	E	--	N
Co-ord AMG	483199	E	8535137	N
Collar Elev (m)	--	RL (m)	74.5	ADH
Depth (m)	96.0	Azimuth	--	
Date commenced	15.05.98		90 deg	
Geologist	JD-B	Site completed	15.05.98	
Drilling Co.	Thompson	Logged date	--	
Casing from (m)	--	Method	rotary mud	
Water Table (m)	--	To	--	
Hole Diam. (cm)	12	Date measured	--	
Date plotted	28.07.98	Plugged (Y/N)	N	

**CUM083**

**Prospect: Recon**

Project: 9261

Name: CUJV

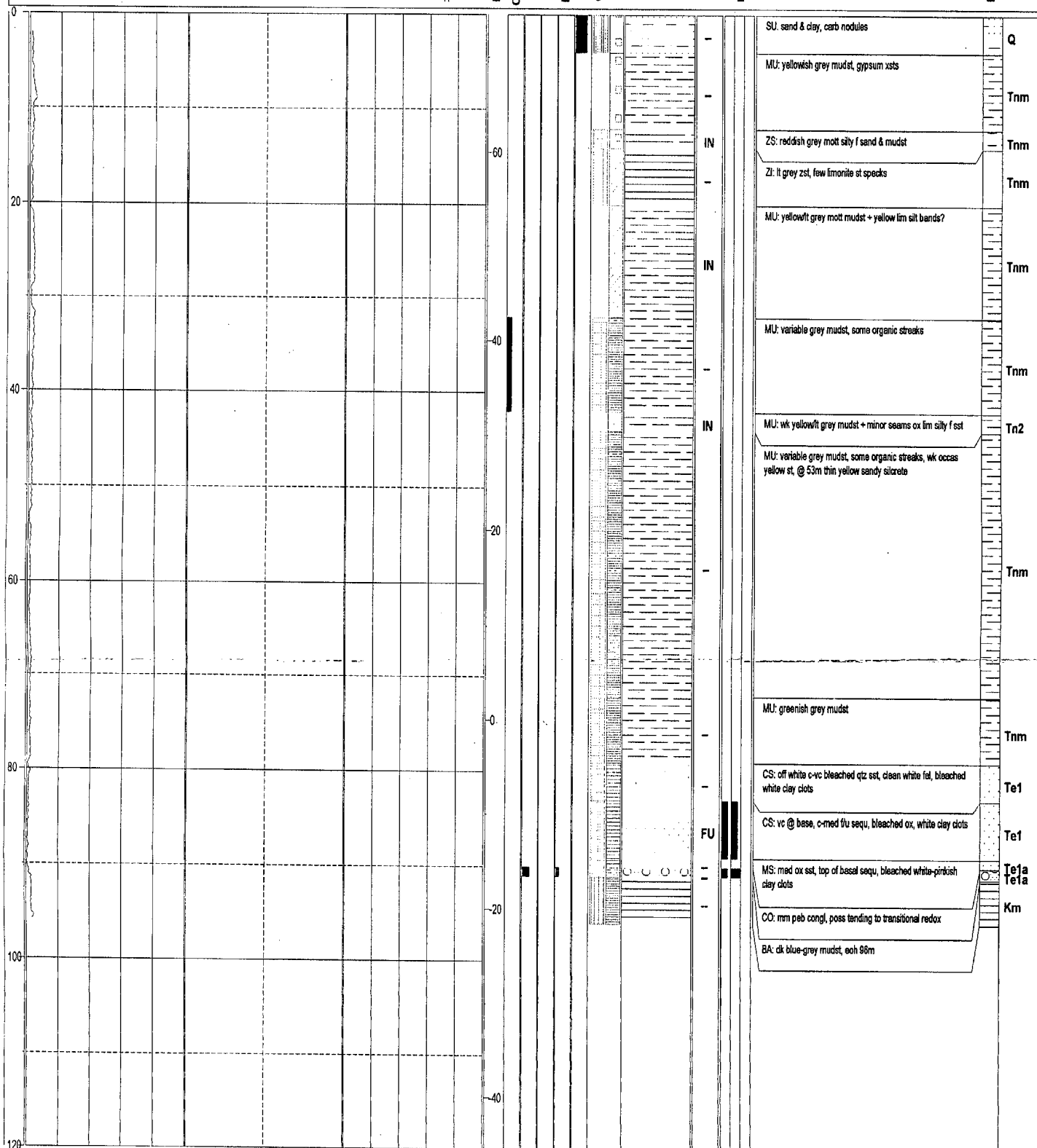
**Tenement: EL2275**

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections $\geq$ 100 ppm ave

RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Redness	Bedding
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### Description & Comments

Unit



Co-ord local (m)	—	E	—	N
Co-ord AMG	484051	E	6535140	N
Collar Elev (m)	—	RL (m)	73.0	ADH
Depth (m)	102.0	Azimuth	—	90 deg
Date commenced	16.05.98	Site completed	16.05.98	
Geologist	JD-B	Logged date	—	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

			RUN 1	RUN	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	76.0	--
Probe No.	gamma 689	gamma to (m)	102.0	82.0	--
Date Logged	18.05.98	gamma speed (m/min)	3	2	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	102.0	--	--
Notes	poor SP, bad R	electric speed (m/min)	8	--	--

[illegible]

## Geophysical Logging

Co-ord (local (m)	—	E	—	N
Co-ord AMG	484588	E	6635082	N
Collar Elev (m)	—	RL (m)	75.0	ADH
Depth (m)	108.0	Azimuth	—	90 deg
Date commenced	16.05.98	as completed	16.05.98	
Geologist	JD-B	Logged data	—	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM085**

## Prospect: Recon

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0			0-2,500 ppm													SU: sand & clay + minor carb	Q	
			0.5 m intersections >= 100 ppm ave.													MU: wth red/grey mott mudst, dissem gypsum	Tnm	
																MU: yellow grey mudst, dissem gypsum	Tnm	
																CS: yellow-brown limonite st c qtz sst	Tns	
																MU: yellow/grey mott mudst, dissem gypsum	Tnm	
																ZS: yellow/grey mott silty f sst	Tns	
																MU: grey mudst	Tnm	
																ZI: variable yellow st lt grey zst		
																MU: variable grey mudst, some organic streaks		
																	Tnm	
																MU: wk yellow st silty grey mudst		
																	Tnm	
																MU: variable grey mudst, some organic bands		
																	Tnm	
																MU: greyish-green mudst		
																	Tnm	
																MS: bleached f-med qtz seam	Te2	
																VS: base of flu sequ, bleached fel, bleached white clay clots	Te1b	
																VS: vc-med flu sequ	Te1b	
																MU: part bleached mudst break, tr humic material preserved	Tem	
																VS: bleached ox vc sst, tending to transitional at base of mud break	Te1a	
																VS: thin mm rounded pebbly congl @ base, flu to vc-c @ top (96.5m)	Te1a	
																BA: lt brownish grey mudst fragments, brown harder shale, rare grey silt frag	Km	

**CUM086**

## Prospect: Recon

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

Co-ord local (m)	-	E	-	N	<b>CUM087</b> <b>Prospect: Recon</b> <b>Project: 9261</b> <b>Name: CUJV</b> <b>Tenement: EL2275</b>
Co-ord AMG	477025	E	6542945	N	
Collar Elev (m) 20?	-	RL (m)	60.5	ADH	
Depth (m)	60.5		90 deg		
Date commenced	17.05.98		Completed	17.05.98	
Geologist	WD		Logged date	-	
Drilling Co.	Thompson		Method	rotary mud	
Casing from (m)	-		To	-	
Water Table (m)	-		Date measured	-	
Hole Diam. (cm)	12		Plugged (Y/N)	N	
Date plotted	28.07.98				

Geophysical Logging				Depth (m)	60.5	Azimuth	90 deg	Prospect: Recon
		RUN 1	RUN	RUN 3	Date commenced	17.05.98	Completed	17.05.98
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	Geologist	WD	Logged date	--
Probe No.	gamma 689	gamma to (m)	90.0	--	Drilling Co.	Thompson	Method	rotary mud
Date Logged	17.05.98	gamma speed (m/min)	3	--	Casing from (m)	--	To	--
Operator	GJ	electric from (m)	0.0	--	Water Table (m)	--	Date measured	--
Open/Closed Hole	open	electric to (m)	90.0	--	Hole Diam. (cm)	12	Plugged (Y/N)	N
Notes	poor SP, bad R	electric speed (m/min)	8	--	Date plotted	28.07.98		
								Project: 9261
								Name: CUJV
								Tenement: EL2275

[illegible]

## Geophysical Logging

Co-ord local (m)	--	E	--	N
Co-ord AMG	477266	E	6543076	N
Collar Elev (m)	--	RL (m)	61.5	ADH
Depth (m)	90.0	Azimuth	--	90 deg
Date commenced	17.05.98	... completed	17.05.98	
Geologist	WD	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

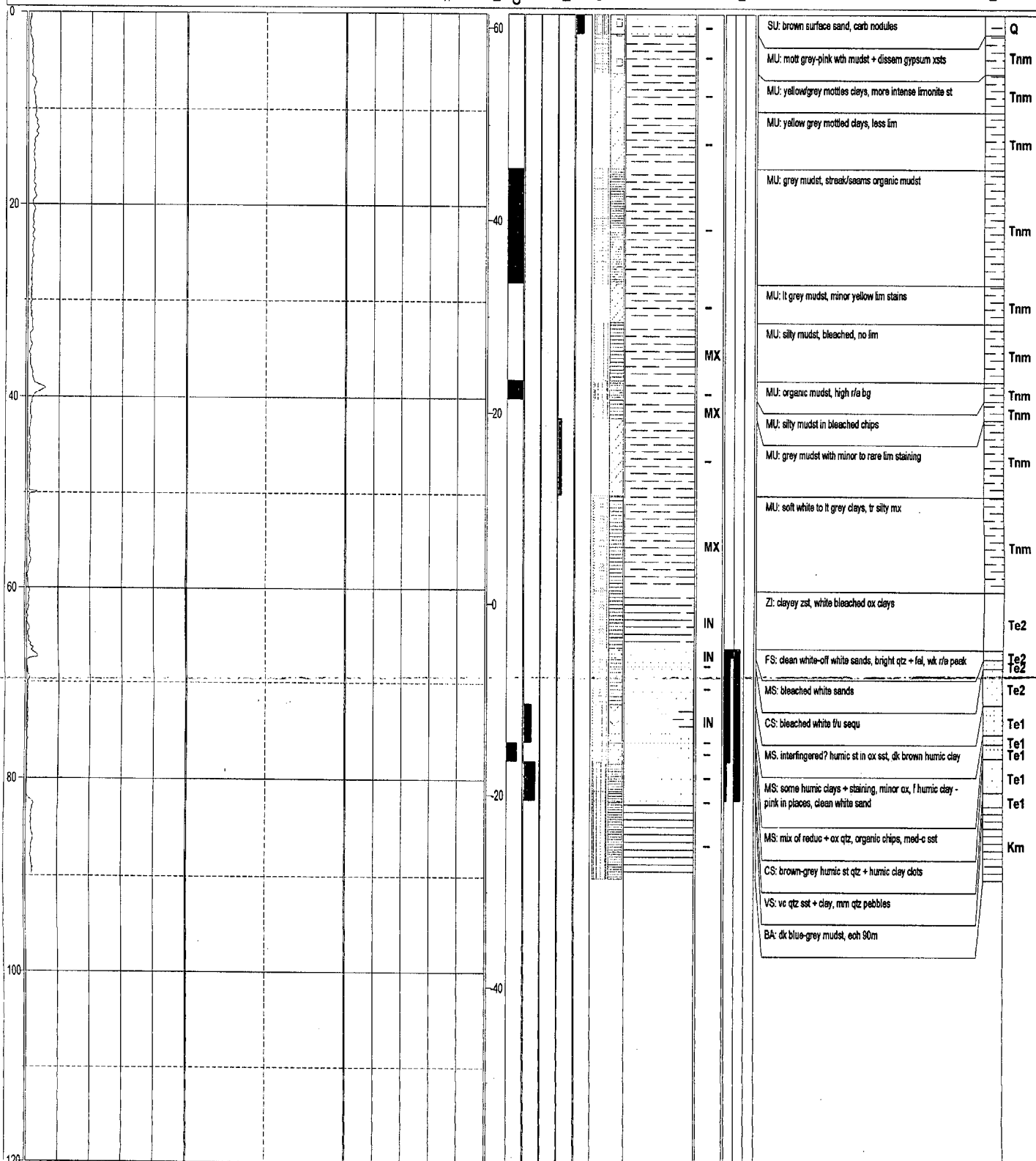
**CUM088**

## Prospect: Recon

Project: 9261  
Name: CUJV  
Tenement: EL2275

Depth	<u>Gamma 0-1000 cps (corr)</u>	<u>R (100-0 nominal)</u>	<u>aU308 (calc)</u>
	<u>Gamma 0-5000 cps (corr)</u>	<u>SP (0-100 nominal)</u>	<u>0-2,500 ppm</u> 0.5 m intersections >= 100 ppm ave.

RL (m)	Organic Humic Pyrite Limon. Carb. Colour Redox	Cuttings	Relator Sorting Rindness Bedding	Description & Comments	Unit	Lithol.
--------	--	----------	---	------------------------	------	---------



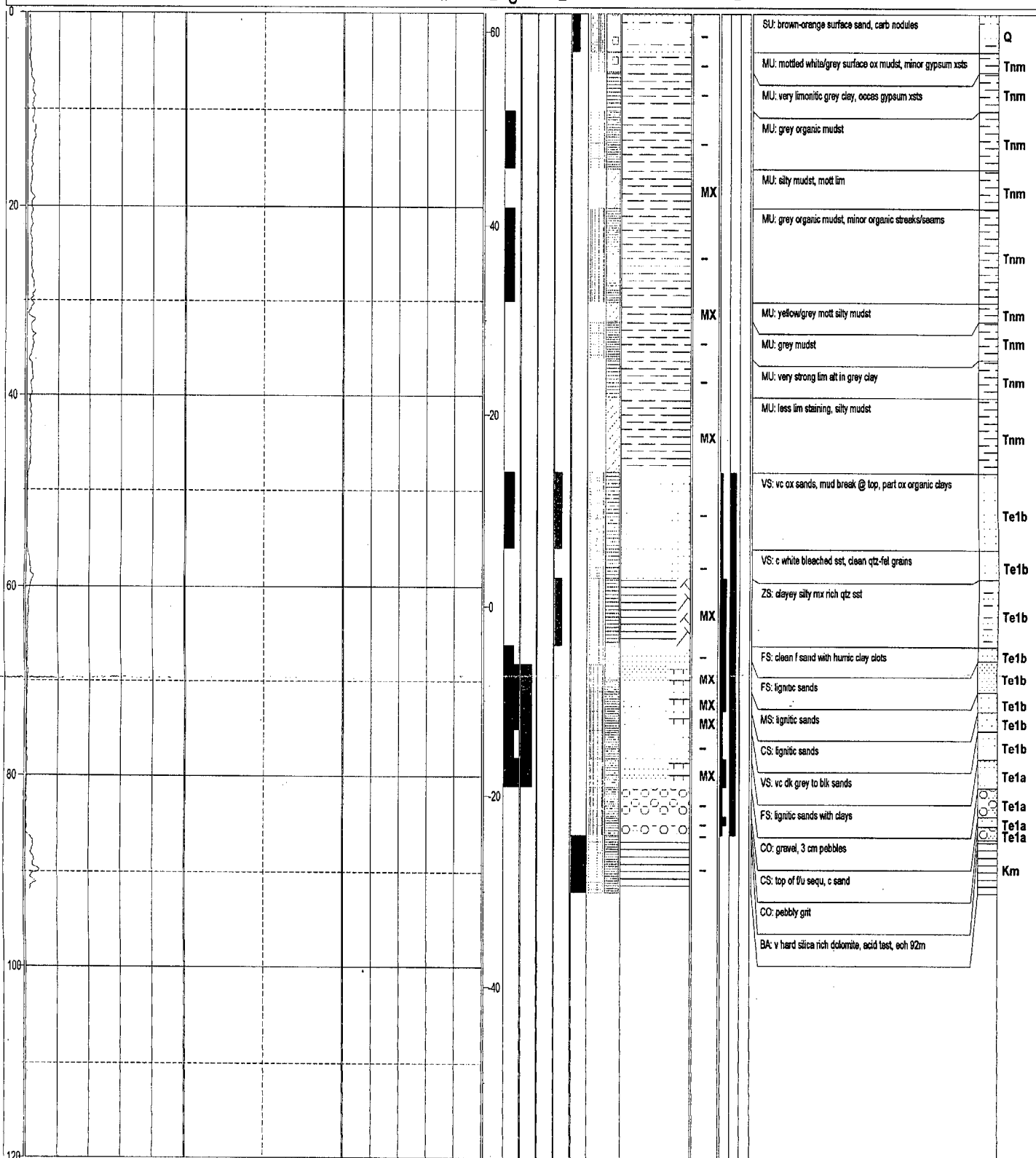
## Geophysical Logging

Co-ord local (m)	--	E	--
Co-ord AMG	476068	E	6540349
Collar Elev (m)	--	RL (m)	62.0
Depth (m)	92.0	Azimuth	-- 90 deg
Date commenced	17.05.98	Log completed	17.05.98
Geologist	WD	Logged data	--
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	--	To	--
Water Table (m)	--	Date measured	--
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM089**

**Prospect: Recon**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

[illegible]

*PALADIN RESOURCES NL*

Co-ord local (m)	--	E	--	N
Co-ord AMG	476769	E	6539663	N
Collar Elev (m)	--	RL (m)	62.5	ADH
Depth (m)	78.0	Azimuth	--	
			30 deg	
Date commenced	18.05.98		se completed	18.05.98
Geologist	JD-B	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM090**

## Geophysical Logging

		RUN 1	RUN 2	RUN 3
Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--
Probe No.	gamma 689	gamma to (m)	78.0	--
Date Logged	18.05.98	gamma speed (m/min)	3	--
Operator	GJ	electric from (m)	0.0	--
Open/Closed Hole	open	electric to (m)	78.0	--
Notes	good SP, bad R	electric speed (m/min)	8	--

**Prospect: Recon**

**Project:** 9261  
**Name:** CUJV  
**Tenement:** EL2275

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU3O8 (calc)	RL (m)	Organic	Humic	Pyrite	Limon.	Carb.	Colour	Redox	Cuttings	Relator	Sorting	Bedding	Description & Comments	Lithol.	Unit
0	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm	0.5 m intersections >= 100 ppm ave.												SU: surface sand & clay, mm specks carb		Q
																ZS: mott silty f sst		Tns
																GY: gypsum layer		Tnm
																MU: str yellow/clay mott mudst		Tnm
																ZS: yellow/grey mott silty f qtz sst + bands zst + mudst		Tn4
																MU: yellow/grey mott mudst		Tnm
																ZS: silty f-med qtz sst		Tn4
																MU: yellow/grey mott mudst, organic streaks thin lim rich silt bands		Tnm
																MU: variable grey mudst		Tnm
																Zi: yellow/grey mott zst		Tnm
																MU: yellow/grey/blk mott mudst, some organics, more yellow st @ base		Tnm
																Zi: lt grey bleached zst, patches carb cement		Te2
																MS: med ox sst + white bleached clay clots		Te2
																MU: str yellow/grey mott mudst		Tem
																CS: c/fu sst unit, bleached clay clots		Te1b
																CS: yellow st c ox sst, str yellow st on qtz + fel		Te1b
																VS: c-wc ox sst, lim coat on clay clots		Te1a
																CO: rounded mm grit congl, white clay mix, mm nodules lim after py		Km
																BA: dk blue-grey mudst, harder carb rich slaty bands to base, each 78m		

## Geophysical Logging

Instrument Mt Sopris S2 - No 266  
Probe No. gamma 689  
Date Logged 18.05.98  
Operator GJ  
Open/Closed Hole open  
Notes ok SP, bad R

gamma from (m)  
gamma to (m)  
gamma speed (m)  
electric from (m)  
electric to (m)  
electric speed (m)

RUN 1	RUN 2	RUN 3
0.0	--	--
95.0	--	--
3	--	--
0.0	--	--
95.0	--	--
8	--	--

Co-ord local (m)	
Co-ord AMG	
Collar Elev (m)	
Depth (m)	95.0
Date commenced	
Geologist	
Drilling Co.	
Casing from (m)	
Water Table (m)	
Hole Diam. (cm)	
Date plotted	

```
--
476425
--
Azimuth  -
18.05.98
JD-B
Thompso
--
--
12
28.07.98
```

E	--	N
E	6540049	N
RL (m)	62.0	ADH
	90 deg	
.s completed	18.05.98	
Logged date	--	
Method	rotary mud	
To	--	
Date measured	--	
Plugged (Y/N)	N	

**CUM091**

## Prospect: Recon

**Project: 9261**

**Name:** CUJV

**Tenement: EL2275**

[illegible]

## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	476592	E	6539901	N
Collar Elev (m)	—	RL (m)	62.5	ADH
Depth (m)	63.0	Azimuth	—	90 deg
Date commenced	18.05.98	Log completed	18.05.98	
Geologist	JD-B	Logged data	—	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	—	To	—	
Water Table (m)	—	Date measured	—	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM092**

## Prospect: Recon

Project: 9261  
Name: CUJV  
Tenement: EL2275

[illegible]

## Geophysical Logging

Co-ord local (m)	—	E	—	N
Co-ord AMG	474849	E	6541298	N
Collar Elev (m)	—	RL (m)	60.0	ADH
Depth (m)	78.0	Azimuth	90 deg	
Date commenced	18.05.98		Completed	18.05.98
Geologist	JD-B		Logged date	—
Drilling Co.	Thompson		Method	rotary mud
Casing from (m)	—		To	—
Water Table (m)	—		Date measured	—
Hole Diam. (cm)	12		Plugged (Y/N)	N
Date plotted	28.07.98			

**CUM093**

## Prospect: Recon

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

[illegible]

## Geophysical Logging

gamma from (m)  
gamma to (m)  
gamma speed (m/min)  
electric from (m)  
electric to (m)  
electric speed (m/min)

**RUN 1**

**RUN.**

**RUN 3**

Co-ord local (m)	
Co-ord AMG	
Collar Elev (m)	
Depth (m)	90.0
Date commenced	
Geologist	
Drilling Co.	
Casing from (m)	
Water Table (m)	
Hole Diam. (cm)	
Date plotted	

Azimuth —  
19.05.98  
WD  
Thompson  
—  
—  
12  
28.07.98

E	—
E	6538839
RL (m)	63.5
	90 deg
Core completed	19.05.98
Logged date	—
Method	rotary mud
To	—
Date measured	—
Plugged (Y/N)	N

**CUM094**

## Prospect: Recon

Project: 9261

**Name:** CUJV

**Tenement: EL2275**

**Depth**      **Gamma 0-1000 cps (corr)**  
                  **Gamma 0-5000 cps (corr)**

R (100-0 nominal)

SP (0-100 nominal)

eU308 (calc)  
0-2,500 ppm  
0.5 m intersections  $\geq 100$  ppm ave

 $L \text{ (m)}$ 

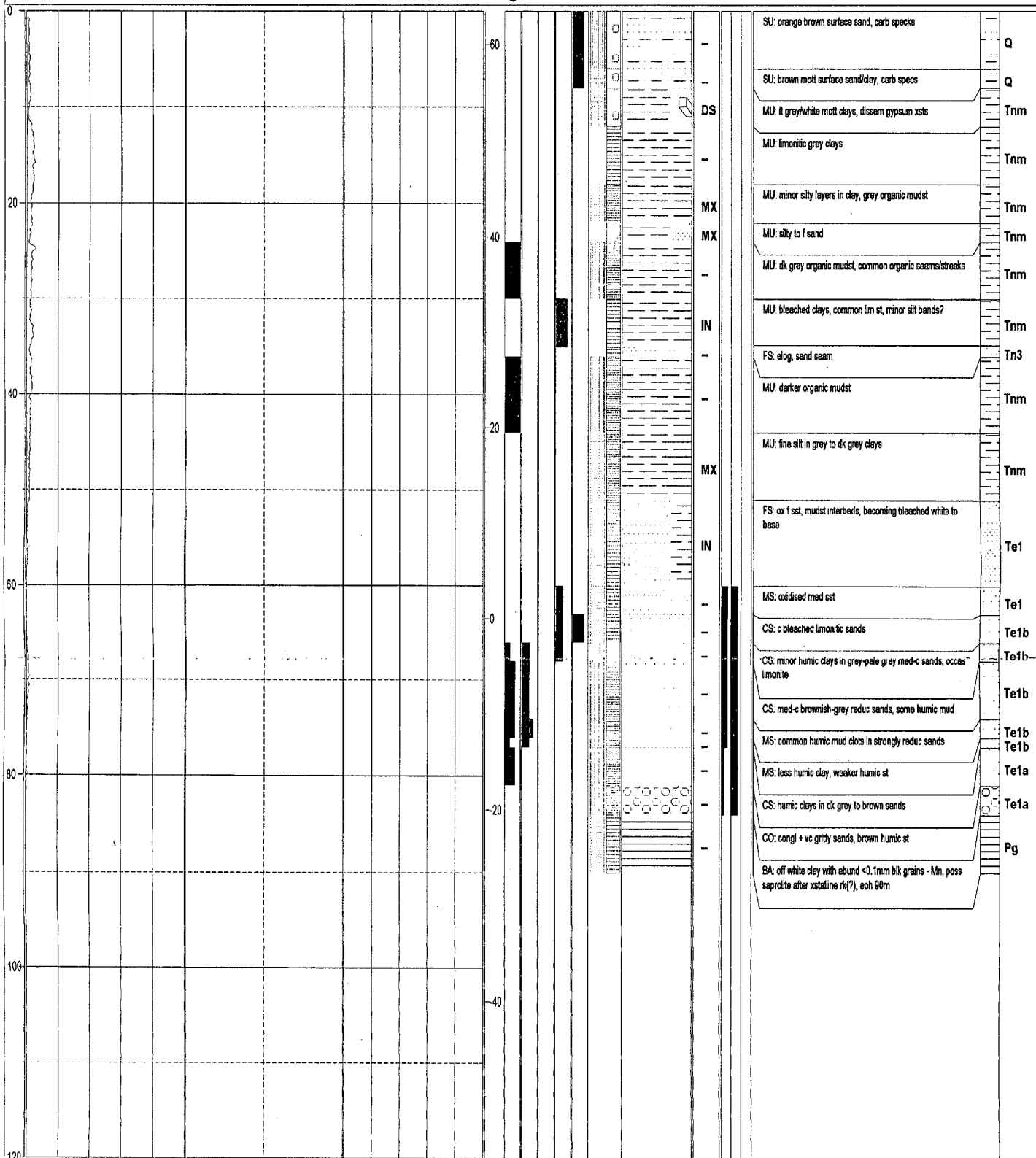
organic  
humic  
pyrite  
limon.  
carb.  
colour  
redox

## Cuttings

Relator

### Description & Comments

Unit



## Geophysical Logging

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	90.0	--	--
Date Logged	19.05.98	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	0.0	--	--
Open/Closed Hole	open	electric to (m)	90.0	--	--
Notes	bad SP, R	electric speed (m/min)	8	--	--

Co-ord local (m)	--	E	--	N
Co-ord AMG	473547	EL	6538804	N
Collar Elev (m)	--	RL (m)	61.5	ADH
Depth (m)	90.0	Azimuth	--	90 deg
Date commenced	19.05.98		..e completed	19.05.98
Geologist	JD-B	Logged date	--	
Drilling Co.	Thompson	Method	rotary mud	
Casing from (m)	--	To	--	
Water Table (m)	--	Date measured	--	
Hole Diam. (cm)	12	Plugged (Y/N)	N	
Date plotted	28.07.98			

**CUM095**

**Prospect: Recon**

Project: 9261  
Name: CUJV  
Tenement: EL2275

[illegible]

## Geophysical Logging

Instrument Mt Sopris S2 - No 266

Instrument	Mt Sopris S2 - No 266	gamma from (m)	0.0	--	--
Probe No.	gamma 689	gamma to (m)	70.0	--	--
Date Logged	20.05.98	gamma speed (m/min)	3	--	--
Operator	GJ	electric from (m)	28.0	--	--
Open/Closed Hole	open	electric to (m)	70.0	--	--
Notes	bad SP, R	electric speed (m/min)	8	--	--

Depth	Gamma 0-1000 cps (corr)	R (100-0 nominal)	eU308 (calc)
	Gamma 0-5000 cps (corr)	SP (0-100 nominal)	0-2,500 ppm
			0.5 m intersections >= 100 ppm ave.

Co-ord local (m)	—	E	—
Co-ord AMG	477535	E	6538892
Collar Elev (m)	—	RL (m)	63.5
Depth (m)	71.5	Azimuth	— 90 deg
Date commenced	20.05.98	Log completed	20.05.98
Geologist	JD-B	Logged date	—
Drilling Co.	Thompson	Method	rotary mud
Casing from (m)	—	To	—
Water Table (m)	—	Date measured	—
Hole Diam. (cm)	12	Plugged (Y/N)	N
Date plotted	28.07.98		

**CUM096**

**Prospect: Recon**

Project: 9261  
Name: CUJV  
Tenement: EL2275

[illegible]



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Ref: 9261/O/9

20 April, 2001

The Mining Registrar  
Primary Industry and Resources SA  
GPO Box 1671  
ADELAIDE SA 5001



Dear Sir,

## CURNAMONA PROJECT EXPLORATION LICENCES 2272 to 2275 ANNUAL TECHNICAL REPORT

An annual technical report for the above four exploration licences for the year ended 19 February 2001 is due for submission by 19 April 2001.

However during the year ended 19 February 2001 there was no exploration field activity in any of the four licences and no data generated that warrants inclusion in a report. Office studies were confined to further review and interpretation of existing data and preparation of material for presentation to potential joint venture participants.

In these circumstances PIRSA has previously advised that in lieu of a technical report a letter should be submitted advising that because no field or other reportable activity took place an annual technical report has not been prepared. This letter is submitted to confirm that an annual technical report for EL's 2272-75 for the year ended 19 February 2001 has not been prepared for the reasons explained above.

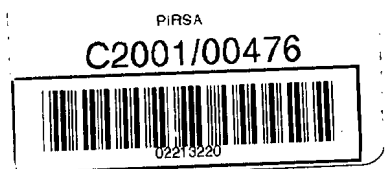
Significant areas were relinquished from each of the four licences when they were renewed in February this year and a report covering work done on the relinquished ground is in preparation and will be submitted shortly.

If you have any questions or comments regarding this letter please contact the undersigned, telephone (08) 9381 4366 or facsimile (08) 9381 4978.

Yours faithfully,  
Paladin Resources Ltd

**Paddy Hogarth**  
Tenement Manager

9261-T55; P01063



# EXPLORATION LICENCES 2272 - 2275

## CURNAMONA PROJECT

### SOUTH AUSTRALIA

## FINAL TECHNICAL REPORT

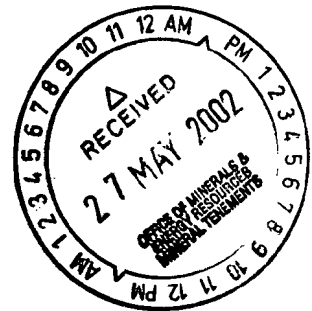
20 February 1997 to 19 February 2002

Volume 1 of 1

Tenement Holders	Paladin Energy Minerals NL Brightstar Power Corporation Pty Ltd
Operator:	Paladin Resources Ltd

*Compiled By P J Hogarth*

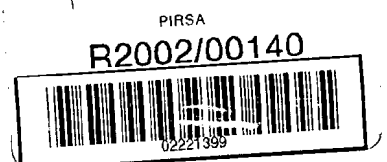
*April 2002*



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Accession No: 1884



**SUMMARY**

Exploration Licences 2272-2275 were explored for sedimentary uranium by the Paladin Brightstar Joint Venture (PBJV), with Paladin Resources Ltd as manager of the joint venture.

Because of unresolved native title and other issues surface exploration and drilling were confined to the easternmost Exploration Licence 2275. Work carried out during the term of the licences included:

- Research and compilation of previous drilling data including gamma logs, lithology logs and redox maps. 340 drill holes were identified within the four exploration licences.
- Field reconnaissance to locate and identify drill hole collars.
- Drilling of 96 mud drill holes for 9,512 metres in EL 2275
- Compilation of isopach and structural contour maps.
- Compilation and interpretation of open-file gravity data.

**KEYWORDS**

Map	Frome SH54-10, Curnamona SH54-14, 1:250,000
Location	Lake Frome, Erudina, Frome Downs, Billeroo Creek, Mulyungarie
Tenements	EL's 2272 to 2275
Commodity	Uranium
Geological province	Curnamona Province
Geological units	Eyre Formation, Namba Formation
Geological age	Eocene, Miocene
Geological structures	Frome Embayment, Palaeochannels

Horizontal grid references and elevations in this report are based on Datum AGD66

## **CONTENTS**

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## **TABLES**

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## **FIGURES**

1	Curnamona Uranium JV, Tenement Status Plan	1:1,000,000
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## 1.0 INTRODUCTION

Exploration Licences 2272-2275, covering areas of 1225km<sup>2</sup>, 1262km<sup>2</sup>, 870km<sup>2</sup> and 1176km<sup>2</sup> respectively, were granted to Malanti Pty Ltd on 20 February 1997 and were transferred to an associated company, Goldminco NL (Goldminco) after the float of that company, on 24 April 1997. A heads of agreement was signed on 22 May 1997 by Goldminco and the Paladin Energy Minerals NL / Brightstar Power Corporation Pty Ltd Joint Venture (PBJV) forming the Curnamona Uranium Joint Venture. Under the terms of the Curnamona Uranium Joint Venture Goldminco retained the right to explore the Proterozoic basement for base metals while the PBJV was farming in to the licence through expenditure on exploration of the overlying Tertiary sediments for uranium. The intent that Goldminco would explore the Proterozoic basement for base metals never came to fruition. By mid 1999 Goldminco had ceased to operate as a mineral exploration company and subsequently changed its name to Datafast Communications Ltd. The Exploration Licences were transferred from Datafast to Paladin and Brightstar in February 2000.

The Paladin Brightstar Joint Venture was formed in June 1997 between Paladin Energy Minerals NL, a wholly owned subsidiary of Paladin Resources NL, and Brightstar Power Corporation Pty Ltd, a wholly owned subsidiary of Uranium Australia NL (now Black Range Minerals Ltd). The primary exploration targets sought by the PBJV were sedimentary uranium deposits amenable to extraction by in-situ leaching (ISL) rather than conventional open-pit mining operations. Initially Paladin and Brightstar each contributed equally to exploration expenditure. In June 2000 Brightstar announced its withdrawal from the PBJV effectively ending that joint venture. Paladin continued as sole operator although there was minimal exploration activity following the dissolution of the PBJV until the exploration licences expired in February 2002.

## 2. LOCATION AND ACCESS

EL's 2272-2275 lay about 400 kilometres north of Adelaide, South Australia. When granted they formed a near contiguous block extending south and east of Lake Frome,

from Frome Downs Homestead to the NSW border, on the Frome SH54-10 and Curnamona SH54-14 1:250,000 map sheets. (*Figure 1*).

Access is gained to the area over graded gravel roads, from Yunta on the Adelaide-Broken Hill Highway, or from Hawker on the Porter Augusta-Marree road. The area is traversed by numerous station tracks.

### 3.0 PREVIOUS INVESTIGATIONS

Extensive sedimentary uranium exploration in the Frome Basin commenced in 1969 and continued until 1982. Potential for uranium within Tertiary palaeochannel sediments of the Eyre Formation was first recognised by Professor Eric Rudd, whose early exploration work intersected radioactive sediments in what is now known as the Billeroo Palaeochannel. Rudd's work led ultimately to the discovery of the Gould's Dam deposit by Minad-Teton in 1974. Sedimentary Uranium commenced exploration in 1970 and discovered the small Yarramba and East Kalkaroo deposits. At the same time MIM intersected anomalous radioactivity south of Yarramba at the South Eagle Prospect while Minad-Teton operating on adjacent ground discovered the Honeymoon deposit in 1972. Also in the same period, the Beverley deposit was being defined by a Petromin/Oilmin/Transoil JV which had discovered an anomalous radioactive cell within sediments of the younger Namba Formation close to the uranium rich rocks of the Mount Painter Province.

When the PBJV started the Frome Project it was estimated that sedimentary uranium exploration in the area resulted something in excess of 4000 rotary holes being drilled in an area of 50,000km<sup>2</sup>.

Accordingly a comprehensive database was compiled to include all previous drilling with relevance to uranium mineralisation. A total of 4,060 holes were identified and incorporated in the Paladin computer system including 340 holes drilled in the four Curnamona licences as listed on the next page:

Licence	Drill Holes
EL 2272	51
EL 2273	29
EL 2274	24
EL 2275	236

Data compiled includes basic geology, radiometric and redox information as well as AMG co-ordinates for drill hole locations and collar elevations.

Tabulated data for the historical drill holes was included in the First Annual Report for the Curnamona Project prepared by Paladin in April 1998 (1), and again with further refinement in the Second Annual Report prepared by Paladin in April 1999 (2).

## 4.0 INVESTIGATIONS, 1997-2002

### 4.1 Compilation of Database

Paladin undertook methodical analysis of open-file data as described below. This was used to identify prospective areas and palaeochannels within the four licences that could host sedimentary uranium deposits amenable to ISL extraction.

Paladin used the MESA Curnamona Dataset as an initial database from which the company compiled and recorded a comprehensive record of open-file drill hole data for the entire Frome Embayment. Extensive and painstaking research added to this and resulted in:

- Identification of recorded drill holes
- Calculation of accurate collar co-ordinates based on the best available base maps using best-fit techniques, computer digitisation and control by digital GPS location of holes located in the field.
- Calculation of collar RL's using available elevation data and AGSO DEM data contoured in-house.

- Compilation of base geological parameters such as depth to base for principal geological units.
- Use of the above data to identify potential channels and/or sand systems.
- Compilation of redox indicators such as the presence of pyrite and carbonaceous material and appearance of sandstone.
- Evaluation of electric logs to identify unrecorded sand layers.
- Evaluation of gamma logs to identify anomalies and compile maximum and times background (xbg) values.
- Compilation of regional AGSO 5km spaced gravity data.

## **4.2 Geophysical Interpretation**

Interpretation of geophysical data covering the four exploration licences was undertaken in 1997 by G.O.Dickson and Associates on behalf of Goldminco NL. Dickson's report was included as an appendix in the First Annual Report for the Curnamona Project prepared by Paladin in April 1998 (1).

## **4.3 Mud Drilling**

A two-stage mud drilling programme was undertaken in EL 2275 between January and May 1998. A total of 96 holes were drilled for 9,512 metres.

Lithology logs were compiled for each drill hole using Paladin's sedlog logging codes. Logging was manually recorded for each two-metre sample interval for the superficial cover and Namba Formation and one-metre sample intervals for the Eyre Formation and basement units. All holes were gamma logged immediately after completion using the Paladin Mt Sopris Series 2 logger. Electric logs (SP and R) were also run on all drill holes.

Plans showing drill hole locations, tabulated drill hole summary data and detailed drill hole logs for the 96 drill holes were included in the Second Annual Report for the Curnamona Project prepared by Paladin in April 1999 (2).

## 5.0 RESULTS

In his field report prepared at the conclusion of the 1998 drilling programme the geologist who supervised the programme reported as follows:

"The Oban front with signs of mineralisation was successfully extended 2-2.5km SW of Berber to the Roundyard area. The lack of ore grade intersections and a complex redox pattern make the significance of the Berber-Roundyard trend difficult to judge but it is felt that a modicum (say 20-25 holes on 0.8km spaced lines) should be drilled to test for mineralisation.

The Oban front does appear to continue further to the SE from Roundyard into the Mudros Channel but it is apparently unmineralised.

The importance of the Mudros Channel is also unknown at this stage but a further two traverses towards the EL boundary (totalling 6-10 holes) is needed to fully resolve its potential.

The drilling failed to extend the Oban front to the north. The style of redox variation intersected being a non mineralised gradual upward trend, with a 5-10m thick transitional zone and lack of limonite stain. A quick re-interpretation of the area based on the following assumptions; east of the Oban front (step) the sequence is oxidized to within 1-3m of basement, west of the front at least 12m of reduced material is preserved above basement and transitional material can be regarded as oxidized suggest a more convoluted path for the front. This idea needs further work but may indicate a few areas worthy of additional reconnaissance drilling.

The drilling in the SE part of EL 2275 (New Chum Bore) failed to delineate any targets. In general the Eyre Fm thins to less than 20m, sometimes to less than 5m, and there is little evidence of a Oban-like redox front. There is a reduced zone approximately centered on New Chum Bore with oxidized sands to the west which may build a step but the results to date suggest it is un-mineralized. The reduced zone itself contains some scattered weak anomalies in previous holes but the six holes drilled by the PBJV aimed at the contacts failed to locate any anomalies in sandstone.

Overall, attempts to trace the Oban front/mineralization away from the discovery area have met with only limited success.

In conclusion the drilling was generally disappointing with predominantly equivocal to negative results."

## 6.0 ENVIRONMENT

The only ground-disturbing activity undertaken in the four exploration licences was the drilling of 96 mud holes in EL 2275 in January-February and May 1998. No access tracks or grid lines were cleared or constructed in the course of exploration. The locality is extremely flat and sparsely vegetated and no site preparation was required at the drill sites. Drill holes were back filled with drill cuttings as soon as down-hole logging had been completed and the remaining drill cuttings left in a shallow conical pile beside the drill collar. At the request of the manager of Mulyungarie Station final rehabilitation of the drill sites was delayed until June 2000 when weather conditions were more favourable to the re-establishment of vegetation. Drill cuttings were buried and compacted ground around the drill collar was ripped with a front end loader. Full details of rehabilitation were reported to PIRSA on completion of the work (3).

## 7.0 EXPENDITURE

Aggregate expenditure by the Paladin Brightstar Joint Venture and later by Paladin Energy Minerals NL on the Curnamona exploration licences is listed in *Table 1* on the next page.

**TABLE 1**  
**EXPLORATION LICENCES 2272 to 2275**  
**Expenditure 20 February 1997 to 19 February 2002**

	<b>EL 2272</b>	<b>EL 2273</b>	<b>EL 2274</b>	<b>EL 2275</b>	<b>TOTAL</b>
Salaries and wages	37,086	33,592	31,688	117,683	20,049
Consultants and contractors	11,364	10,080	9,191	25,579	56,214
Materials and utilities	5,224	5,071	4,578	11,945	26,818
Transport and communications	6,610	5,135	5,194	18,145	35,084
Outside Services	629	582	404	150,339	151,954
Use of equipment	5,237	4,187	3,673	25,966	39,063
Legal and accounting	1,373	1,072	1,176	1,564	5,185
Insurance	842	858	685	3,083	5,468
Camp expenses	1,169	923	1,204	4,380	7,676
Tenement costs	15,750	14,643	13,295	18,650	62,338
Other costs	8,525	8,871	7,739	18,307	43,442
<b>Sub Total</b>	<b>93,809</b>	<b>85,014</b>	<b>78,827</b>	<b>395,641</b>	<b>653,291</b>
Overheads	9,383	8,837	7,320	28,300	53,840
<b>Total</b>	<b>103,192</b>	<b>93,851</b>	<b>86,147</b>	<b>423,941</b>	<b>707,131</b>

## 8.0 CONCLUSIONS

As noted earlier the drilling in EL 2275 was generally disappointing with equivocal to negative results.

Due to access difficulties arising from native title issues in the years following grant of the exploration licences Paladin did not have the opportunity to drill identified targets in the other three exploration licences. Following the withdrawal of Brightstar from the Joint Venture in 2000 Paladin was unsuccessful in securing further joint venture funding to explore the tenements and this led to the decision not apply for replacement tenements to hold the ground beyond the fifth anniversary of the four exploration licences. Paladin's interpretation of palaeochannels and uranium mineralisation within many of the interpreted channels therefor remains untested.

## **9.0 REFERENCES (Reports previously submitted to PIRSA)**

1. Hogarth P, April 1998; First Annual Report, Exploration Licences 2272-2275, Curnamona South Australia; Paladin Resources NL unpublished company report.
2. Hogarth P, April 1999; Second Annual Report, Exploration Licences 2272-2275, Curnamona South Australia; Paladin Resources NL unpublished company report.
3. Becker E, June 2000; Frome basin Projects, Drill Hole Rehabilitation on EL's 2275, 2418 and 2504; Paladin Resources NL unpublished company report.
4. Hogarth P, April 2001; Exploration Licence 2272, Curnamona Project, South Australia, Partial Relinquishment Report, 20 February 1997 to 19 February 2001; Paladin Resources Ltd unpublished company report.
5. Hogarth P, April 2001; Exploration Licence 2273, Curnamona Project, South Australia, Partial Relinquishment Report, 20 February 1997 to 19 February 2001; Paladin Resources Ltd unpublished company report.
6. Hogarth P, April 2001; Exploration Licence 2274, Curnamona Project, South Australia, Partial Relinquishment Report, 20 February 1997 to 19 February 2001; Paladin Resources Ltd unpublished company report.
7. Hogarth P, April 2001; Exploration Licence 2275, Curnamona Project, South Australia, Partial Relinquishment Report, 20 February 1997 to 19 February 2001; Paladin Resources Ltd unpublished company report.

Because there was no drilling or reportable field activities during the respective periods annual technical reports were not prepared in 2000 and 2001.

