

RED PINE EXPLORATION INC.

RESISTIVITY / INDUCED POLARIZATION SURVEY

CHARLIE MORTIMER PROJECT

TIMMINS AREA ONTARIO, CANADA

LOGISTICS AND INTERPRETATION REPORT

10N043A

JULY 2010

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ABSTRACT

On behalf of Red Pine Exploration Inc., a geophysical campaign was carried out over the Charlie Mortimer grid, located southwest of Timmins, Ontario. The objectives of this campaign were to help identify gold-bearing, quartz vein type prospects and to suggest a follow-up exploration program.

During May and June 2010, a total of **61.3 km** of IP (dipole-dipole; a = 25 m, n = 1 to 6) surveying was carried out over parts of the property. Survey specifications, instrumentation control, data acquisition, processing and interpretation were all successfully performed within our Quality System framework.

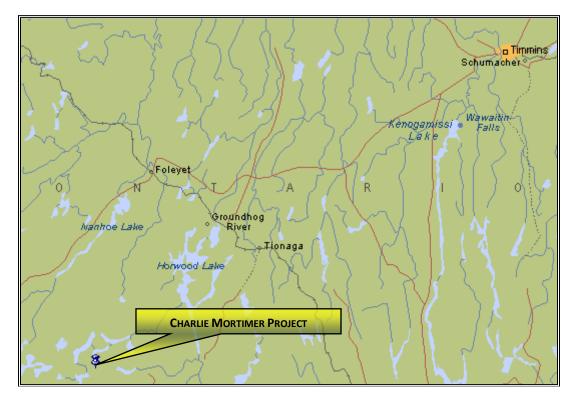
Following interpretation of pseudosections and image2D[®] true-depth sections, a total of **59 chargeability anomalies** were interpreted over the Charlie Mortimer grid. Follow-up recommendations include immediate prospection and DDH on **13** anomalies. Additionally, prospecting could be carried out over selected areas of the grid. All targets are fully described in the appendix found at the end of this report and follow-up recommendations are summarized in section 7.



1. THE MANDATE

Project ID	Charlie Mortimer Project (Our reference: 10N043)
GENERAL LOCATION	120 km west of Timmins, ON
CUSTOMER	Red Pine Exploration Inc. 250-141 Adelaide St. W Toronto, ON, M5H 3L5 Telephone: 416-364-4986
Representatives	Quentin Yarie, P. Geo, Director 416-364-4986 <u>qyarie@redpineexp.com</u>
SURVEY TYPE	Time domain resistivity / IP

- GEOPHYSICAL OBJECTIVES
- Help identify gold-bearing quartz veins.
- Aid in the identification of a follow-up program.



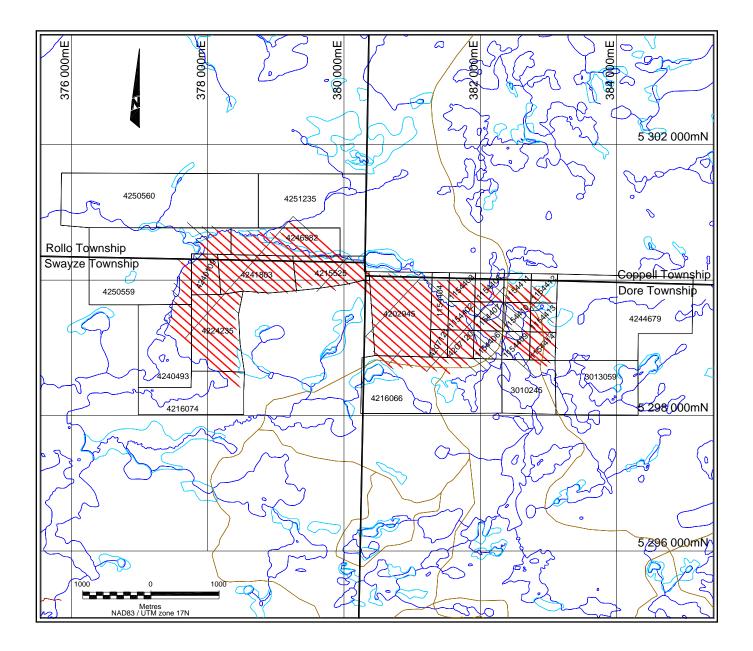
GENERAL LOCATION OF THE CHARLIE MORTIMER PROJECT.



2. THE CHARLIE MORTIMER PROJECT

LOCATION	Charlie Mortimer Grid Timmins area, Ontario, Canada Centred on 47° 51' N and 83° 37' W UTM zone 17N, NAD 83, 5 300 000 mN, 379 000 mE NTS sheet: 410/15
NEAREST SETTLEMENTS	Timmins: 120 km to the NE of the survey grid. Foleyet: 48 km NNE of the survey grid.
Access	To access the Charlie Mortimer Property the crew drove on Hwy 101 West until they reached the Foleyet Timber Road. After 26 km on this road they turned west for 1 km to the camp which is located less than one km from the survey grid south.
GEOMORPHOLOGY	The Charlie Mortimer property is characterized by rivers, lakes and marshes. A southeast portion of the grid wasn't surveyed due to the presence of large lakes in the area.
CULTURAL FEATURES	There are two old mine shafts located on the survey area, not along survey lines though. A logging road cuts through the east side block of the grid, causing some difficulty in surveying.
MINING LAND TENURE	The claims encompassed in the present survey are illustrated on the following page. They are wholly owned by Red Pine Exploration Inc.
SURVEY GRID	The Charlie Mortimer grid consists of 40 lines ranging in length from 0.45 km to 2.8 km . The lines are oriented $130^0/310^0$ and are spaced at 100m. Due to the presence of lakes and a busy roadway (Dore Rd.) in the survey area, some of the lines weren't surveyed in their entirety.
COORDINATE SYSTEM	Projection: Universal Transverse Mercator, zone 17N Datum: NAD83

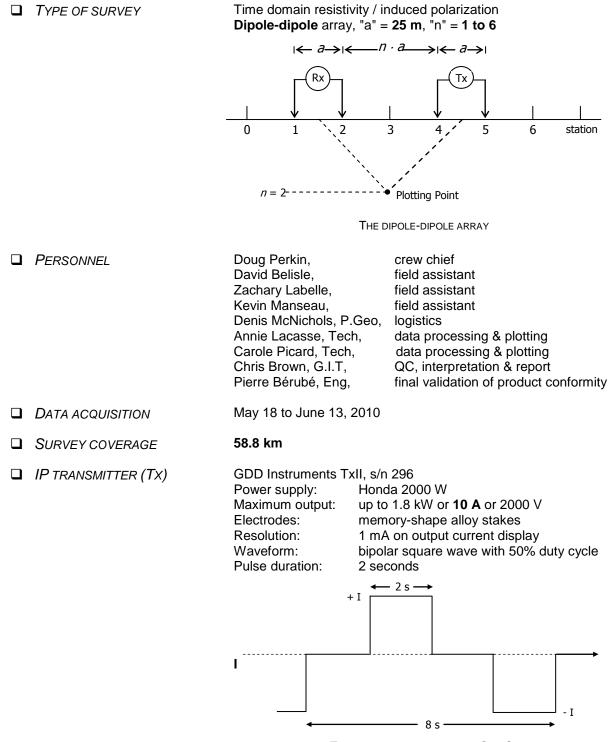




INDEX OF CLAIMS AND AREA COVERED BY THE CHARLIE MORTIMER GRID.



3. RESISTIVITY / INDUCED POLARIZATION SURVEY



TRANSMITTED SIGNAL ACROSS $C_1 - C_2$



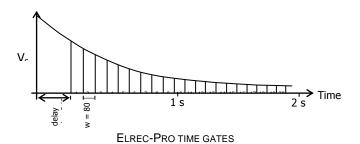
\square IP RECEIVER (Rx)

IRIS Elrec-PRO, s/n 123 (10 input channels) Electrodes: memory-shape alloy stakes

V_P Primary voltage measurement:

- ♦ Input impedance: $100 \text{ M}\Omega$
- ♦ Resolution:
- 1 µV \diamond Typical accuracy: 0.2%
- **M**_a Apparent chargeability measurement:
- ♦ Resolution:
- \diamond Typical accuracy: 0.4%
- \diamond Arithmetic sampling mode, 20 time slices (M₁ to M₂₀)

0.01 mV/V



♦ All gates are normalized with respect to a standard decay curve for QC in the field.

$$\rho_a = \pi \cdot n \cdot (n+1) \cdot (n+2) \cdot a \cdot \frac{V_p}{I} \quad (in \,\Omega \cdot m)$$

Cumulative error:

5% max, mainly due to chaining accuracy.

Before the survey:

- ✓ Transmitter & motor generator were checked for maximum output using calibrated loads.
- ✓ Receiver was checked using the Abitibi Geophysics SIMP™ certified and calibrated V_P & M_a signal simulator.

During data acquisition:

- ✓ Rx & Tx cable insulation was verified every morning.
- ✓ Proprietary Software Refusilo[®] allowed a daily thorough monitoring of data quality and survey efficiency.
- ✓ Enough pulses were stacked: 6 pulses for every reading.

At the Base of Operations:

- ✓ Field QCs were inspected & validated.
- ✓ Each IP decay curve was analyzed with Refusilo[®]. The few gates that were rejected were not included in the calculation of the plotted M_a.

□ APPARENT RESISTIVITY CALCULATION

QUALITY CONTROL (Records available UPON REQUEST)



QUALITY STATISTICS

CHARLIE MORTIMER GRID Dipole-dipole: a = 25 m, n = 1 to 6				
Average contact resistance at the R_{x}	10.8 kΩ			
Average output current across C1-C2	424 mA			
Average measured voltage Vp across	n = 1	3875 mV		
P ₁ -P ₂	n = 6	138 mV		
Observed windows found to fit a pure elect polarization relaxation curve	95 %			
Average deviation of the validated normalized windows with respect to the	n = 1	0.08 mV/V		
plotted mean chargeabilities	n = 6	0.28 mV/V		



4. DATA PROCESSING AND DELIVERABLES

□ *TRUE-DEPTH IP SECTIONS* Apparent resistivity and chargeability pseudosections were inverted using our proprietary *image2D*[®] package. The process is fully automated as there is no need to guess a starting model or to filter the pseudosection to generate one. The ground is divided in cells of a_{4} side and a back-projection of the raw data is performed.

The result is a smooth earth model showing all conductive, resistive and polarizable sources. The resulting true-depth sections integrate all possible solutions, highlighting the most probable ones.

A synthetic example showing the ability of *image2D*[®] to resolve sources and to facilitate the location of DDH is presented on page 10.

PRECISIONS CONCERNING image2D[®]
Imaging cannot create information that is not in the raw data set (pseudosections), i.e., the limitations of the technique and array that was used will still prevail. With pole-dipole, for instance, resolution is asymmetrical and vertical sources may show a false dip. However, noise is efficiently rejected, near-surface effects are easily identified and complex responses, such as two adjoining sources, a wide body or a dipping geological contact, are well resolved.

> This imaging process will not recover intrinsic resistivities unless the source is very wide. However, as opposed to pseudosections, geological data from drill-holes may be superimposed on *image2D*[®] true-depth sections.

□ *RESISTIVE SOURCES* The depth extent of a resistive and polarisable source will always appear limited (the image will fade at depth). This limitation is common to all galvanic methods including IP, it is not a limitation of the inversion process. The current paths will avoid resistive bodies thereby creating a deficiency in the investigation at depth and in the contribution of the bottom half of the polarizable body. In fact, we usually presume that these resistive and polarizable sources do extend at depth despite their inversion image.



MAPS PRODUCED

The following pseudosection plates and colour maps are bound or inserted in pouches at the end of this report. Our Quality System requires every final map to be inspected by at least two qualified persons before being approved and included within a final report

Map Number	Description		
L0+00 to L40+00 (41 plates)	Colour Apparent Resistivity & Chargeability Pseudosections and <i>image2D</i> [®] True-depth Sections with Interpretation	1:5 000	
8.2	IP Survey – <i>image2D[®]</i> Resistivity at a depth of 40 m	1:10 000	
8.3	IP Survey – <i>image2D</i> [®] Chargeability at a depth of 40 m	1:10 000	
10.0	Geophysical Interpretation	1:10 000	

DIGITAL DATA

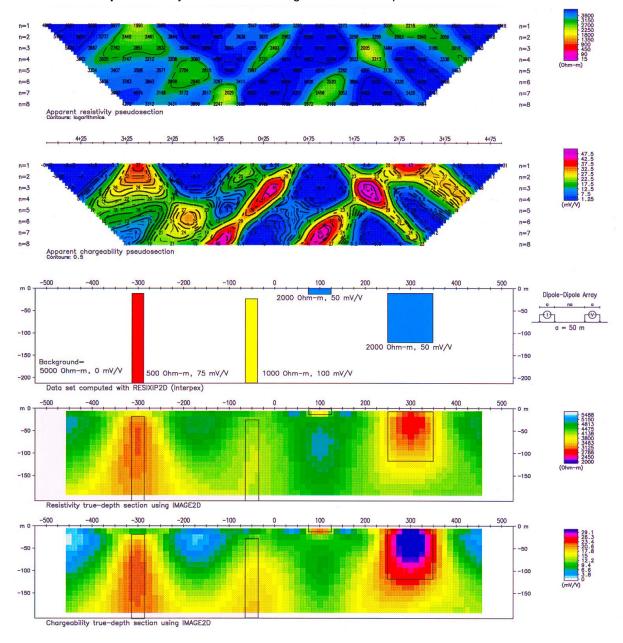
The above-described maps are delivered in the Oasis Montaj map file format on DVD-Rom.

A copy of all survey acquisition data (ASCII text format) and processed data (Geosoft Montaj databases) area also delivered on DVD-Rom.



IMAGE2D[®] DEMO ON SYNTHETIC DATASETS

Top half of figure: classic apparent resistivity and chargeability pseudosections. **Centre of plate**: the synthetic model that generates these pseudosections.



Bottom half of figure: the reconstructed resistivity and chargeability true-depth sections after inversion of the pseudosections using *image2D*[®]. The model is superimposed on these sections.



5. RESULTS AND RECOMMENDATIONS

□ RESISTIVITY

Resistivity anomalies have been interpreted by studying the apparent resistivity pseudosections, the true-depth sections and the resistivity map plotted at a depth of 40 m. The surface projections on the interpretation map are inferred based on correlation with resistivity, chargeability and magnetic anomalies and line to line resistivity patterns (see appendix A for more information regarding the presence and importance of the various resistivity anomalies).

The *image2D*[®] *Resistivity map* (8.2) shows four distinct zones in the Charlie Mortimer grid. There are two conductive zones and two resistive zones. As the zones appear to be trending roughly NW-SE, we will describe them in order from the southern most zone to the northern most zone. **Conductive zone #1** is a WNW trending zone on the southern part of the grid. Due to the geometry of the survey grid, **conductive zone #1** isn't mapped continuously so we see this zone as two separate trends; the first spanning L0+00N to L5+00N on the southwest end of the block and the second spanning L17+00N to L23+00N on the southeast end of the block where it is open ended to the south. The continuity of the trend is inferred. **Conductive zone #1** is very conductive, by studying the pseudosections and depth sections we see that its dynamic range is 40-500 Ω m; the contour used to represent this zone on the *Interpretation map (10.0)* is 500 Ω m. There are some very chargeable trends, described below, that are associated with this zone. A geologic contact is apparent on the northern boundary of **conductive zone #1**; this apparent geologic contact is between **conductive zone #1** and **resistive zone #1**.

Resistive zone #1 spans the majority of the survey area and its values range from 1000 Ω m to 55,000 Ω m with some small conductive features intertwined. For the purposes of contouring this zone on the interpretation map we believe it is best to select a contour at a relatively high resistivity (20,000 Ω m) to highlight areas where there is likely more outcropping as opposed to just highlighting the zone itself. We feel this is better suited to aid in the detection of potential outcropping, gold-bearing quartz veins. **Resistive zone #1** contains a plethora of chargeable trends. The most important trends are discussed in the chargeability section below (please also see appendix A for complete descriptions of all the interpreted anomalies). On the northern extent of **resistive zone #1** there is an apparent geologic contact with **conductive zone #2**.

Conductive zone #2 appears to be quite similar to **conductive zone #1** in that they share a very similar geophysical response; very conductive, near surface rock combined with a very high chargeability. Based on these characteristics we are able to speculate that these zones may be graphitic in nature and therefore not of much interest to your exploration targets. The two conductive zones appear to be moving away from each other as you follow them to the west. There is a possibility that they may actually connect to one another further to the east, so it is possible that we may be looking at a fold axis of this potential graphitic trend. However, this is just speculation at this time due to insufficient evidence. It is worth noting that just to the west of the alleged fold axis we see some interesting targets like **CM-35** and **CM-32** which are further discussed below.

The final zone is **resistive zone #2** and it is located in the eastern most area of the block. It is possible that this zone is just another part of **resistive zone #1** but because of the lack of data observed in this zone due to lakes in the area, it is best to designate this area as its own zone. Compared to **resistive zone #1**, **resistive zone #2** is much smaller and slightly less resistive; it doesn't contain many interesting chargeable targets either.



□ CHARGEABILITY

Chargeability anomalies have been interpreted by studying the apparent chargeability pseudosections, the true-depth sections and the chargeability map plotted at a depth of 40m. Overall there are **59** IP anomalies (**CM-01** to **CM-59**), some of which correspond to resistivity anomalies. All the IP anomalies are categorized and ranked in the appendix to this report.

The inferred surface projection of their resistivity / IP sources is shown along the survey lines on the Geophysical Interpretation map (10.0) and the pseudosection plates. The anomalies have been correlated from line-to-line as per selected features and are fully described in the appendix A found at the end of this report.

Relating the chargeable trends to the resistive/conductive zones is fairly simple in this case due to the geologic environment and the target mineralization of gold-bearing quartz veins. The two conductive zones are host to a multitude of chargeable trends that generally trend 90° to 110°; however none of these trends are of relevant in the characterization of gold-bearing quartz veins, for this reason the anomalies contained in the conductive zones won't be discussed in this interpretation but they are fully described in appendix A. We are now left with the two resistive zones, the most important of which is resistive zone #1.

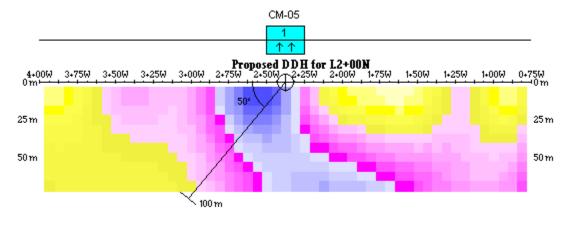
Resistive zone #1 is host to **33** chargeable anomalies; we recommend immediate prospecting on at least **12** of these anomalies, we also recommend drilling these anomalies pending positive results from prospecting. The majority (23) of these anomalies trend roughly 110°, however, there are several (10) anomalies in this zone that trend NE-SW which is perpendicular to the line path. Potential mineral targets are seen in both anomaly orientations, there doesn't seem to be a preference to where the potential gold mineralization may occur. One of the most interesting anomalies is **CM-35** which is located in the south eastern region of **resistive zone #1**. This anomaly is oriented NE-SW and is characterized by a weak to moderate chargeability and a direct association with resistive features in the ground, it is recommended that this area should be prospected thoroughly and drilled pending positive results. Anomaly **CM-32** is another interesting target that has a similar orientation to **CM-35** and has a similar geophysical signature; it is worth prospecting this anomaly on L22+00N and L26+00N.

An example of a priority target oriented 110° is **CM-07**. This anomaly is located in the western region of **resistive zone #1** and is characterized by weak to moderate chargeability with a direct association with resistive features on L7+00N and L11+00N; these are the two likely areas where mineralization may occur.

Resistive zone #2 is a much smaller zone and much less interesting regarding potential mineral targets. The most interesting anomaly seen in this zone is **CM-44** which corresponds directly to a resistive feature on L32+00N, prospecting is recommended in this area.

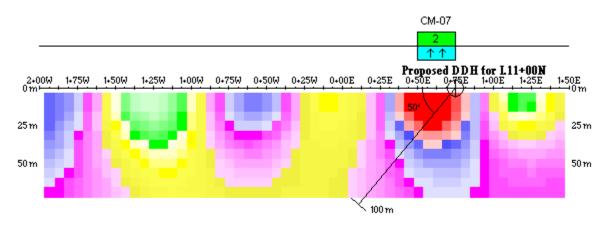


FIRST-PRIORITY TARGETS:

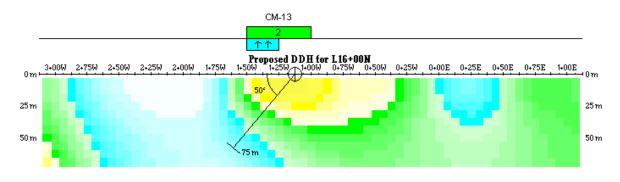


FIRST-PRIORITY PROPOSED DDH CM-05 ON L2+00N OF THE CHARLIE MORTIMER GRID:

FIRST-PRIORITY PROPOSED DDH CM-07 ON L11+00N OF THE CHARLIE MORTIMER GRID:

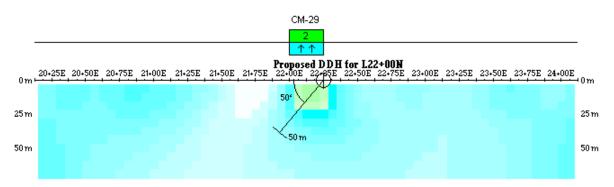


FIRST-PRIORITY PROPOSED DDH CM-13 ON L16+00N OF THE CHARLIE MORTIMER GRID:

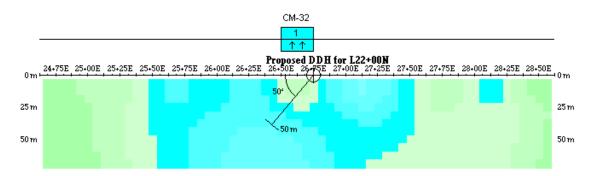




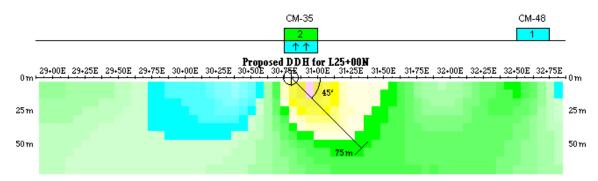
FIRST-PRIORITY PROPOSED DDH CM-29 ON L22+00N OF THE CHARLIE MORTIMER GRID:



FIRST-PRIORITY PROPOSED DDH CM-32 ON L22+00N OF THE CHARLIE MORTIMER GRID:

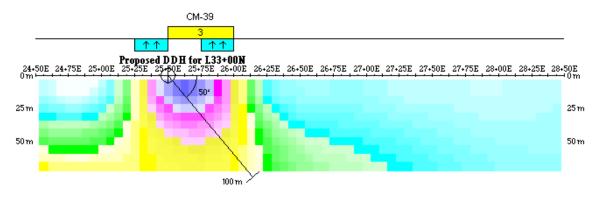


FIRST-PRIORITY PROPOSED DDH CM-35 ON L25+00N OF THE CHARLIE MORTIMER GRID:

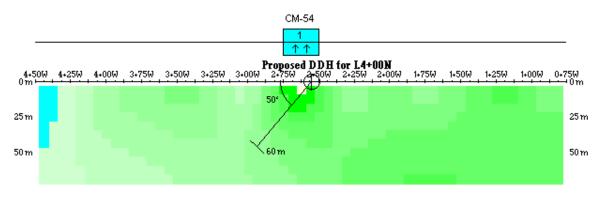


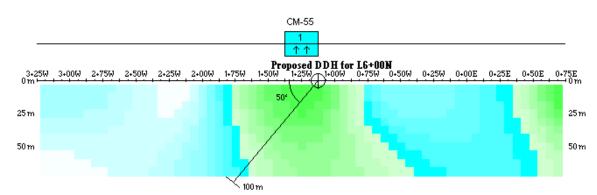


FIRST-PRIORITY PROPOSED DDH CM-39 ON L33+00N OF THE CHARLIE MORTIMER GRID:



FIRST-PRIORITY PROPOSED DDH CM-54 ON L4+00N OF THE CHARLIE MORTIMER GRID:

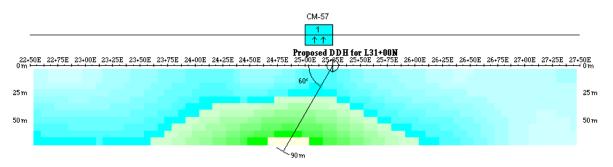




FIRST-PRIORITY PROPOSED DDH CM-55 ON L6+00N OF THE CHARLIE MORTIMER GRID:

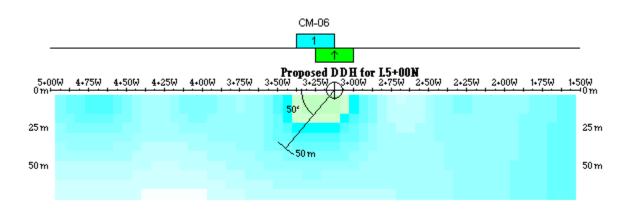


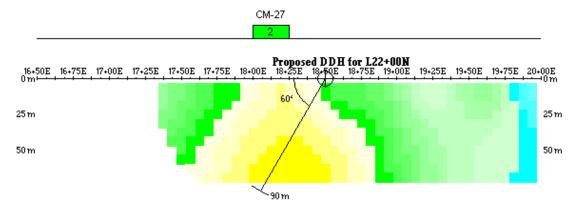
FIRST-PRIORITY PROPOSED DDH CM-57 ON L6+00N OF THE CHARLIE MORTIMER GRID:



SECOND-PRIORITY TARGETS:

SECOND-PRIORITY PROPOSED DDH CM-06 ON L5+00N OF THE CHARLIE MORTIMER GRID:

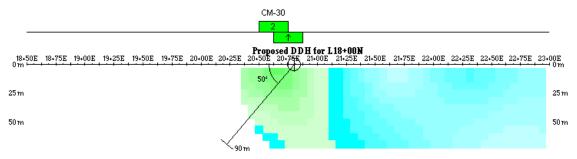




SECOND-PRIORITY PROPOSED DDH CM-27 ON L22+00N OF THE CHARLIE MORTIMER GRID:



SECOND-PRIORITY PROPOSED DDH CM-30 ON L18+00N OF THE CHARLIE MORTIMER GRID:





6. FOLLOW-UP SUMMARY

Prospecting					
Duiouitu	Anomoly	Location			
Priority	Anomaly	Line	Station		
1	CM-04*	6+00N	2+13E		
1	CM-05*	2+00N	2+38W		
1	CM-07*	11+00N	0+63E		
1	CM-11*	11+00N	4+63W		
1	CM-12*	12+00N	6+38W		
1	CM-13*	16+00N	1+25W		
1	CM-14*	14+00N	0+38E		
1	CM-21*	18+00N	4+13E		
1	CM-24*	20+00N	10+00E		
1	CM-29*	22+00N	22+13E		
1	CM-32*	22+00N	26+63E		
1	CM-35*	25+00N	30+88E		
1	CM-39*	33+00N	25+75E		
1	CM-44*	32+00N	40+63E		
1	CM-49*	26+00N	23+13E		
1	CM-54*	4+00N	2+63W		
1	CM-55*	6+00N	1+25W		
1	CM-57*	31+00N	24+63E		
1	CM-58*	27+00N	22+13E		
1	CM-59*	8+00N	5+13W		
2	CM-06*	5+00N	3+25W		
2	CM-25*	26+00N	21+63E		
2	CM-26*	23+00N	13+63E		
2	CM-27*	22+00N	18+13E		
2	CM-30*	18+00N	20+63E		

Development of the Charlie Mortimer Grid

* Drilling could be carried out pending prospecting results.



DRILLING RECOMMENDATION SUMMARY OVER THE CHARLIE MORTIMER G

Drilling					
Drienity	Anomaly	Lo	cation		
Priority	Anomaly	Line	Station		
1	CM-05*	2+00N	2+38W		
1	CM-07*	11+00N	0+63E		
1	CM-13*	16+00N	1+25W		
1	CM-29*	22+00N	22+13E		
1	CM-32*	22+00N	26+63E		
1	CM-35*	25+00N	30+88E		
1	CM-39*	33+00N	25+75E		
1	CM-54*	4+00N	2+63W		
1	CM-55*	6+00N	1+25W		
1	CM-57*	31+00N	24+63E		
2	CM-06*	5+00N	3+25W		
2	CM-27*	22+00N	18+13E		
2 CM-30*		18+00N	20+63E		

* Pending prospecting results.

The interpretation of the geophysical data embodied in this report is essentially a geophysical appraisal of the Charlie Mortimer survey grid. As such, it incorporates only as much geoscientific information as the author has on hand at the time. Red Pine's geologists thoroughly familiar with the area are in a better position to evaluate the geological significance of the various geophysical signatures. Moreover, as time passes and information provided by follow-up programs are compiled, exploration targets recognized in this study might be down-graded or up-graded.

Respectfully submitted, Abitibi Geophysics Inc.

Chris Brown, G.I.T. Project Geophysicist Pierre Bérubé, Eng. Senior Geophysicist

CB/da



Anomaly	Location Contra		trast	Comments	Priority	
Anomary	Line	Station	Charg.	Res.	Comments	Flority
	0+00N	1+88W	3	-	- Strong chargeable trand located in conductive zone #1	
CM-01	1+00N	0+63W	4	$\downarrow\downarrow$	 Strong chargeable trend located in conductive zone #1. Not relevant to target mineralization. 	4
	2+00N	0+38E	3	$\downarrow\downarrow$	Not relevant to target milleralization.	
	2+00N	0+88E	2	$\downarrow \downarrow$	Churne channelle trand le seted in sou dustine room #1	
CM-02	3+00N	1+63E	2	$\downarrow\downarrow$	 Strong chargeable trend located in conductive zone #1. Not relevant to target mineralization. 	4
	4+00N	2+63E	3	$\downarrow\downarrow$	Not relevant to target milleralization.	
CM 02	4+00N	3+50E	3	$\downarrow\downarrow$	Strong chargeable trend located in conductive zone #1.	1
CM-03	5+00N	4+44E	2	$\downarrow\downarrow$	Not relevant to target mineralization.	4
	3+00N	0+63W	1	-	Martha draws all a based in a sisting and the	
СМ-04	4+00N	0+38E	1	-	Weakly chargeable trend located in resistive zone #1. Direct correlation with resistive feature on L6+00N.	
CM-04	5+00N	1+13E	1	-	Prospecting recommended.	1
	6+00N	2+13E	1	$\uparrow\uparrow$	Prospecting recommended.	
CM-05	2+00N	2+38W	1	$\uparrow \uparrow$	Weakly chargeable trend located in resistive zone #1 that has a direct correlation with a resistive feature on L2+00N.	1
CH-05	3+00N	2+13W	1	-	Prospecting recommended, DDH pending positive prospecting results.	1
	5+00N	3+25W	1	$\downarrow\downarrow$	Weak chargeable trend in resistive zone #1, the existence	
СМ-06	7+00N	3+13W	1	-	of this trend is inferred on L6+00N due to the presence of the chargeable anomalies on L5+00N and L7+00N. Approximate correlation with resistive feature on L5+00N. Prospecting recommended on L5+00N, DDH pending positive results.	2
	7+00N	4+63W	1	$\uparrow \uparrow$	Weak to moderately chargeable trend in resistive zone #1. This anomaly is inferred to cross L10+00N. Direct	
CM-07	9+00N	2+38W	1	$\uparrow \uparrow$	correlation with resistive features on L7+00N and L11+00N.	1
	11+00N	0+63E	2	$\uparrow \uparrow$	Prospecting recommended, DDH pending positive results.	
	7+00N	1+88W	2	-	West to mederately charges ble trend in resisting and	
CM-08	8+00N	1+13W	1	-	Weak to moderately chargeable trend in resistive zone #1. No direct correlation with resistive features.	
	9+00N	1+13W	1	-		



Anomaly	Location		Contrast		Comments	Priority
Anomary	Line	Station	Charg.	Res.	Comments	Phoney
	8+00N	5+88W	1	-	Weak chargeable trend legated in registive zone #1. No.	
CM-09	9+00N	5+75W	1	-	Weak chargeable trend located in resistive zone #1. No	2
	11+00N	5+63W	1	-	direct correlation with resistive reactires.	
	9+00N	5+13W	2	-		
	10+00N	4+13W	1	-		
	11+00N	2+38W	2	-	A lengthy, weak to moderate chargeable trend located in	
CM-10	12+00N	1+13W	1	-	resistive zone #1. No direct correlation with resistive	2
	13+00N	0+88E	1	-	features.	
	14+00N	2+63E	1	-		
	15+00N	4+38E	1	-		
	11+00N	4+63W 1 ^↑				
CM-11	12+00N	2+88W	2	↓	Weak to moderate chargeable trend located in resistive zone #1. Strong correlation with highly resistive anomalies on L11+00N and L13+00N. Prospecting recommended.	1
	13+00N	1+63W	1	$\uparrow \uparrow$		
CM-12	12+00N	6+38W	1	$\uparrow\uparrow$	Weakly chargeable trend located in conductive zone #2 that is directly associated with resistive features.	1
	13+00N	6+13W	1	$\uparrow \uparrow$	Prospecting recommended.	Ŧ
	14+00N	4+88W	1	-	Weak to moderate chargeable trend located in resistive	
	15+00N	3+13W	2	-	zone #1. Direct correlation with a resistive feature on	
CM-13	16+00N	1+25W	2	$\uparrow\uparrow$	L16+00N.	1
	17+00N	1+38E	2	-	Prospecting recommended, DDH pending positive	
	18+00N	2+63E	1	-	results.	
CM-14	14+00N	0+38E	1	$\uparrow\uparrow$	Weak chargeable trend located in resistive zone #1. Direct correlation with a resistive feature on L14+00N.	1
CM-14	15+00N	3+38E	3+38E 1 -		Prospecting recommended.	



Anomaly	Location		Contrast		Comments	Priority	
Anomaly	Line	Station	Charg.	Res.	Comments	Phoney	
	14+00N	6+50W	3	-			
	15+00N	4+88W	3	-			
	16+00N	4+06W	3	-			
	17+00N	1+75W	3	-			
CM 15	18+00N	0+13E	4	-	Very strong chargeable trend located in conductive zone	4	
CM-15	19+00N	2+00E	4	-	#2. Not relevant to target mineralization.	4	
	20+00N	3+88E	4	-			
	21+00N	5+88E	3	-			
	22+00N	7+38E	3	-			
	23+00N	9+13E	4	-			
	19+00N	1+00E	4	-			
014.46	20+00N	2+88E	2	$\downarrow\downarrow$	Very strong chargeable trend located in conductive zone		
CM-16	21+00N	4+38E	3	-	#2. Not relevant to target mineralization.	4	
	22+00N	6+63E	3	-			
	16+00N	West End	3	-			
014.47	18+00N	1+88W	2	-	Very strong chargeable trend located in conductive zone		
CM-17	19+00N	0+88W	3	-	#2. Not relevant to target mineralization.	4	
	20+00N	0+88E	2	-			
CM 10	22+00N	4+88E	3	-	Very strong chargeable trend located in conductive zone	4	
CM-18	23+00N	6+00E	3	-	#2. Not relevant to target mineralization.	4	
	21+00N	7+25E	4	-			
	22+00N	8+88E	3	-			
CM-19	23+00N	10+38E	4	-	Very strong chargeable trend located in conductive zone	4	
	24+00N	11+63E	3	-	 #2. Not relevant to target mineralization. 		
	25+00N	12+63E	4	-			
CM 20	23+00N	11+50E	4	$\downarrow\downarrow$	Very strong chargeable trend located in conductive zone	4	
CM-20	25+00N	13+63E	4	-	#2. Not relevant to target mineralization.	4	
CM-21	18+00N	4+13E	1	$\uparrow \uparrow$	Solitary weak chargeable feature located in resistive zone #1 with a direct association with a resistive feature. Prospecting recommended.	1	
	18+00N	6+13E	1	-	Work to strong shows she successive stated in we define		
CM-22	20+00N	8+88E	3	-	Weak to strong chargeable anomaly located in resistive	2	
	21+00N	10+63E	1	-	zone #1. No direct association to resistive features.		



Anomaly	Location		Contrast		Comments	Priority
Anomaly	Line	Station	Charg.	Res.	Comments	Priority
	20+00N	8+00E	3	-	Weak to strong chargeable anomaly located in resistive	
CM-23	22+00N	11+13E	2	-	zone #1. No direct association to resistive features.	2
	23+00N	13+13E	2	-		
CM-24	19+00N	8+63E	4	↓	Strong to moderate chargeable trend located in resistive zone #1. Correlation with resistive feature on L20+00N.	1
CM-24	20+00N	10+00E	2	$\uparrow \uparrow$	Prospecting recommended.	-
	23+00N	15+13E	1	-		
CM-25	24+00N	17+38E	1	-	Weak to moderate chargeable feature located in resistive zone #1. No direct association with resistive features.	2
CM-25	25+00N	19+63E	2	-	Prospecting recommended.	2
	26+00N	21+63E	2	-	r rospecting recommended.	
	23+00N	13+63E	2	-	Week to moderate chargesple anomaly located in	
CM-26	24+00N	15+00E	1	-	Weak to moderate chargeable anomaly located in resistive zone #1. No direct association with any resistive	2
	25+00N	17+63E	1	-	features. Prospecting recommended.	
	22+00N	18+13E	2	-	Weak to moderate chargeable anomaly located in	
	23+00N	20+13E	1	-	resistive zone #1. No direct association with any resistive	_
CM-27	25+00N	22+38E	1	-	features. Prospecting recommended, DDH pending	2
	26+00N	24+63E	1	-	positive results.	
	23+00N	21+38E	1	-	Weak to moderate chargeable anomaly located in	
CM-28	25+00N	24+88E	1	-	resistive zone #1. No direct association with any resistive features. Prospecting recommended.	2
CM 20	21+00N	20+88E	1	-	Weak to moderate chargeable trend in resistive zone #1. Direct association with resistive feature on L29+00N.	
СМ-29	22+00N	22+13E	2	$\uparrow \uparrow$	Prospecting recommended, DDH pending positive results.	1
CM-30	18+00N	20+63E	2	↑ (Moderate to strong chargeable trend in resistive zone #1. Association with resistive feature on L18+00N.	2
CM-30	19+00N	22+50E	3	-	Prospecting recommended, DDH pending positive results.	2



Anomoly	Location		Contrast		Comments	D : ! .	
Anomaly	Line	Station	Charg.	Res.	Comments	Priority	
	19+00N	24+88E	2	-	Moderately chargeable trend located in resistive zone #1.		
CM-31	21+00N	27+63E	2	-	No direct association with resistive features	3	
	23+00N	30+13E	2	-			
	22+00N	26+63E	1	$\uparrow\uparrow$	Weak to moderate chargeable trend located in resistive		
CM 22	23+00N	27+38E	2	-	zone #1. Directly associated with resistive features on		
CM-32	24+00N	27+88E	1	-	L22+00N and 26+00N.	1	
	25+00N	27+88E	1	- ↑↑	Prospecting recommended, DDH pending positive results.		
	26+00N	28+38E	1				
CM-33	27+00N 28+00N	28+88E 28+88E	3	↓ -	Moderate to strong chargeable trend located in resistive zone #1. Associated with conductive features.	3	
	28+00N	26+88E	2		Moderately chargeable anomaly located in resistive zone		
CM-34	29+00N	26+38E	2	-	#1. No direct correlation with resistive features.	2	
24+00N		30+63E	1	$\uparrow \uparrow$	Weak to moderate chargeability anomaly located in resistive zone #1. Directly associated with resistive features.	1	
	25+00N	30+88E	2	$\uparrow \uparrow$	Prospecting recommended, DDH pending positive results.		
	23+00N	26+13E	2	-	Weak to moderate chargeable feature located in resistive	_	
CM-36	24+00N	26+13E	1	-	zone #1. No association with resistive features.	2	
014.07	17+00N	23+88E	3	-	Very strong chargeable trend located in conductive zone		
CM-37	18+00N	24+75E	3	-	#1. Not relevant to target mineralization.	4	
	18+00N	25+25E	2	-			
	19+00N	26+25E	3	-			
CM-38	20+00N	27+50E	3	-	Very strong chargeable trend located in conductive zone	4	
	21+00N	29+19E	4	-	#1. Not relevant to target mineralization.	-	
	22+00N	30+38E	4	$\downarrow\downarrow$	-		
	32+00N	24+63E	1	$\uparrow \uparrow$	Weak to strong chargeability anomaly located in		
	33+00N	25+75E	3	$\uparrow \uparrow$	conductive zone #2. Direct association with resistive features on L32+00N and 33+00N.	_	
CM-39	34+00N	West End	2	-	Prospecting recommended, DDH pending positive	2	
	35+00N	West End	2	-	results.		



Anomoly	Location		Contrast		Comments	Deieviter	
Anomaly	Line	Station	Charg.	Res.	Comments	Priority	
	30+00N	30+38E	2	-	Mederately chargeable anomaly located in conductive		
CM-40	31+00N	31+75E	2	-	Moderately chargeable anomaly located in conductive zone #2.	4	
	32+00N	33+13E	2	-	2011 #2.		
	26+00N	17+38E	2	-			
CM-41	27+00N	18+13E	3	-	Moderate to strong chargeability anomaly located in	4	
CM-41	28+00N	21+13E	3	-	conductive zone #2.	7	
	29+00N	22+25E	3	-			
CM-42	28+00N	22+63E	3	-	Strong chargeability anomaly located in conductive zone	3	
CM-42	29+00N	24+50E	3	-	#2.	3	
	30+00N	31+88E	2	-			
CN 42	31+00N	35+63E	2	-	Weak to moderate chargeability anomaly located in	2	
CM-43	32+00N	37+38E	1	-	resistive zone #2. No direct association with resistive features.	2	
	33+00N	39+38E	1	-	Teatures.		
	31+00N	37+38E	2	-	Weak to moderate chargeability anomaly located in		
CM-44	32+00N	40+63E	1	$\uparrow \uparrow$	resistive zone #2. Direct association with a resistive feature on L32+00N.	1	
	33+00N	41+13E	1	-	Prospecting recommended.		
CM-45	0+00N	9+25E	2	-	Moderate to strong chargeability anomaly located in	2	
CM-45	1+00N	East End	3	-	resistive zone #1. No association with resistive features.	2	
CM 46	17+00N	25+13E	2	-	Moderate to strong chargeable trend located in	4	
CM-46	18+00N	East End	3	-	conductive zone #1. Not relevant to target mineralization.	4	
	21+00N	1+13E	2	-	Many shows shows all showed to sate dia sound with a same		
CM-47	22+00N	1+13E	2	-	 Very strong chargeable trend located in conductive zone #2. Not relevant to target mineralization. 	4	
	23+00N	1+38E	2	-			
CM-48	24+00N	32+63E	1	-	Weak chargeability anomaly located in resistive zone #1.	2	
CM-48	25+00N	32+63E	1	-	No association with resistive features.	۷	
	23+00N	18+00E	2	-	Weak to moderately chargeable anomaly located in		
CN 40	24+00N	19+13E	1	-	resistive zone #1. Directly associated with a resistive		
CM-49	25+00N	21+38E	1	-	feature on L26+00N.	1	
	26+00N	23+13E	1	$\uparrow\uparrow$	Prospecting recommended.		
CM-50	35+00N	36+88E	1	-	Weakly chargeable feature located in resistive zone #2.	1	
CM-20	36+00N	37+63E	1	$\uparrow\uparrow$	Directly associated with a resistive feature on L36+00N.	T	



Anomaly	Loca	Location		trast	Comments	Priority	
Anomaly	Line	Station	Charg.	Res.	Comments	Phoney	
CM-51	37+00N 38+00N	31+88E 32+38E	1 1	-	Weakly chargeable feature located in resistive zone #2.	2	
	39+00N	33+63E	1	$\uparrow \uparrow$	No association with resistive features.		
CM-52	24+00N	5+63E	4	-	Strong chargeable anomaly at the northern boundary of conductive zone #2.	4	
CM-53	26+00N	30+13E	2	-	Moderate to strong chargeable trend located in resistive zone #1. No direct association with resistive features.	2	
СМ-55	27+00N	29+63E	3	-	Near perfect chargeability response on L26+00N.	2	
	4+00N	2+63W	1	$\uparrow \uparrow$	Weakly chargeable anomaly located in resistive zone #1. Direct association with resistive features on L4+00N and		
CM-54	5+00N	1+13W	1	\uparrow	L5+00N.	1	
	6+00N	0+88E	1	-	Prospecting recommended, DDH pending positive results.		
	6+00N	1+25W	1	$\uparrow \uparrow$	Weak to moderately chargeable anomaly located in resistive zone #1. Direct association with a resistive		
CM-55	7+00N	0+63W	2	-	feature on L55+00N.	1	
	8+00N	0+38E	1	-	Prospecting recommended, DDH pending positive results.		
CM-56	25+00N	15+13E	1	-	Weak to moderate trend located in resistive zone #1. No	2	
CM-50	26+00N	16+75E	2	-	association with resistive features.	L	
CM-57	31+00N	24+63E	1	$\uparrow \uparrow$	Solitary, weak chargeability anomaly located in conductive zone #1. Prospecting recommended, DDH pending positive results.	1	
<u> </u>	26+00N	22+13E	2	_	Weak to moderately chargeable feature located in		
CM-58	27+00N	resistive zone #1. Directly associated with a resistive feature on L27+00N		1			
СМ-59	L8+00N	5+13W	1	$\uparrow\uparrow$	Solitary, weak chargeability feature located in resistive zone #1. Directly associated with a resistive feature. Prospecting recommended, DDH pending positive prospecting results.	1	



Legend						
Chargeability	Increase:	? = Marginal 1 = Weak 2 = Moderate 3 = High 4 = Very High				
Decistivity	Increase:	 ↑ = Resistive ↑↑ = Very Resistive (R) = Wide Resistive Zone 				
Resistivity	Decrease:	↓ = Conductive ↓↓ = Very Conductive (C) = Wide Conductive zone				

Appendix B



DAILY LOG OF THE GEOPHYSICAL SURVEYS PERFORMED ON THE CHARLIE MORTIMER GRID

_		10N043, CHARLIE MORTIMER GRID, DIPOLE DIPOLE SURVEY	Ιννοιςινα					
Date (2010-05-17)	Αςτινιτγ	Сомменть	Мов/демов	Stand-by	ATV	PRODUCTION (KM)		
Project Geop	hysicist: Chris Brown	י ו						
Crew chiefs :	Doug Perkin							
Assistants :	David Belisle, Zachar	y Labelle, Kevin Manseau						
		IP Survey (Dipole-dipole)						
2010-05-17	Mob	Crew leaves Val-d'Or, QC and arrives at Foleyet Timber Camp	1		2	0		
2010-05-18	Field work	L9+00N (from 8+50W to 3+00E)				0.975		
2010-05-19	Field work	L8+00N (from 8+00W to 3+50E), L7+00N (from 7+50W to 4+00E)			2	1.525		
2010-05-20	Field work	L5+00N (from 6+50W to 6+00E), L6+00N (from 7+00W to 5+00E)			2	2.225		
2010-05-21	Field work	L4+00N (from 6+00W to 7+00E), L3+00N (from 5+50W to 8+00E)			2	2.475		
2010-05-22	Field work	L2+00N (from 5+00W to9+50E)			2	2.225		
2010-03-23	Field work	L1+00N (from 4+50W to 10+00E), L0+00N (from 4+00W to 11+00E)			2	2.675		
2010-05-24	Field work	L10+00N (from 8+50W to 2+50E), L11+00N (from 9+00W to 2+00E)			2	1.9		
2010-05-25	Field work	L12+00N (from 9+50W to 4+00E), L13+00N (from 10+00W to 5+00E)			2	2.375		
2010-05-26	Field work	L14+00N (from 9+00W to 6+00E), L15+00N (from 8+00W to 7+00E)			2	2.825		
2010-05-27	Field work	L17+00N (from 5+00W to 9+00E), L16+00N (from 6+50W + 8+00E)			2	2.575		
2010-05-28	Field work	L18+00N (from 4+00W to 10+00E), L19+00N (from 3+00W to 11+00E			2	2.95		
2010-05-29	Field work	L20+00N (from 1+50W to 12+00E), L21+00N (from 0+00E to 12+50E)			2	2.4		

Appendix B



DAILY LOG OF THE GEOPHYSICAL SURVEYS PERFORMED ON THE CHARLIE MORTIMER GRID

_		10N043, SWAYZE PROSPECT, DIPOLE-DIPOLE AND MAG SURVEYS	Invoicing					
Date (2010-07-27)	Αςτινιτγ	Сомментя	Мов/демов	Stand-by	ATV	PRODUCTION (KM)		
Project Geopl	nysicist: Chris Brown							
Crew chiefs :	Doug Perkin							
Assistants :	David Belisle, Zachary	Labelle, Kevin Manseau						
		IP Survey (Dipole-dipole)						
2010-05-30	Field work	L22+00N (from 1+00E to 13+00E), L23+00N (from 2+00E to 14+00E)			2	2.4		
2010-05-31	Stand by	Bad weather.		1		0		
2010-06-01	Field work	(from 16+00E to 34+00E)			2	2.95		
2010-06-02	Field work	L24+00N (from 3+00E to 35+00E)			2	2.25		
2010-06-03	Field work	(from 18+50E to 30+00E; 21+50E to 26+50E; 21+00E to 28+00E; 20+00E to 29+00E)			2	2.8		
2010-06-04	Field work	(from 17+00E to 33+00E; 18+00E to 31+50E)			2	3.1		
2010-06-05	Field work	L25+00N (from 8+00E to 36+50E)			2	2.2		
2010-06-06	Field work	L26+00N (from 14+00E to 37+50E)			2	3.250		
2010-06-07	Field work	L27+00N (from 16+00E to 39+00E), L28+00N (from 17+50E to 40+00E)			2	3.4		
2010-06-08	Field work	L29+00N (from 19+00E to 41+50E), L30+00N (from 20+00E to 42+50E)			2	2.0		
2010-06-09	Field work	L31+00N (from 22+00E to 44+00E)			2	2.9		
2010-06-10	Field work	L32+00N (from 23+00E to 44+00E), L33+00N (from 24+00E to 43+00E), L34+00N (from 25+50E to 42+00E)			2	1.425		
2010-06-11	Field work	L35+00N (from 27+00E to 41+50E), L36+00N (from 28+00E to 41+00E)			2	2.9		
2010-06-12	Field work	L37+00N (from 29+00E to 40+00E), L38+00N (from 30+50E to 39+00E) L39+00N (from 31+50E to 38+50E), L40+00N (from33+00E to 37+50E)			2	2.275		
2010-06-13	Field work/demob	L36+00E	1		2	0.325		
		Total:	2		25	61.3		

