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PART B

ASSESSMENT REPORT

on a

2008 FIXED LOOP TIME DOMAIN EM SURVEY

over

Rea Uranium Project, Alberta

Mineral Permits: 9304020427 to 9304020446

NTS: 74L, 74E

prepared for

Brazilian Gold

prepared by

AREVA Resources Canada Inc.

Report #: 08-CND-415-01

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March 2010

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SUMMARY AND EXPENDITURES

Aurora Geosciences Ltd. of Yellowknife, Northwest Territories carried out a fixed loop time domain electromagnetic (FLTEM) survey on the Rea Project between June 16th and July 10th, 2008.

A total of 41.7 line kilometres of line cutting was performed on three grids: ***05, 12*** and ***15.*** The grid lines were surveyed with two opposing transmitter loops located at the ends of the survey lines resulting in 46 line kilometres covered with the FLTEM survey

The main objective of the 2008 geophysical program was to locate and characterize interpreted basement conductors outlined in 2005 airborne EM survey (VTEM).

In general, the results of the 2008 fixed loop EM survey correlate with the results of the 2005 VTEM survey.

The use of opposing fixed loop surveys and model derived interpretations should improve the accuracy of the interpreted conductors. However, in complex geological situations, the fixed loop geometries and subsequent interpretations retain some ambiguity.

The best results from the 2008 Fixed Loop Survey were obtained on Grid 12; though additional information is required for drill targeting.

Additional and future work on the Rea project area should be undertaken in consideration of the following recommendations:

- Carry out a detail structural - geological interpretation based upon the magnetic and gravity airborne data.
- Review the results of the VTEM survey incorporating the new geological - structural interpretation of the magnetic and gravity data, and other available information such basement lithologies from drilling, to identify priority exploration areas.
- IP/DC resistivity survey should be conducted on *Grid 12* to determine the presence of alteration zones and to improve the location of the basement conductors prior to define drill targets.
- For future ground exploration work, it is recommended to carry out Moving Loop TEM surveys combined with IP/DC resistivity surveys in the previously outlined priority exploration areas to generate drill targets.

EXPENDITURE STATEMENT OF WORK

AMOUNT SPENT

1. Prospecting		
2. Geological Mapping & Petrography		
3. Geophysical Surveys		
a. Airborne		
b. Ground		$654,807.34
4. Geochemical Surveys		
5. Trenching & Stripping		
6. Drilling		
7. Assaying & Whole Rock Analysis		
8. Other Work		
	SUBTOTAL	**$654,807.34**
9. Administration (10% of subtotal)		$65,480.73
	TOTAL	$720,288.07

1 INTRODUCTION

1.1 Property Location and Access

The Rea project area is located about 45 km west-southwest of Cluff Lake in the western portion of the Athabasca Basin in northern Alberta; and approximately 185km north-northwest of Fort McMurray. It is found between 57° 51' 59"and 58° 26' 29"N latitude and 110° 50' 38" and 110° 00' 00"W longitude (**Figure 1**). National Topographic System (NTS) 1:250,000 scale map sheets 74L and 74E cover the permit area.

No roads transverse the project area. The project area is accessible year-round by helicopter. Fixed-wing aircraft can access the property using floats during the summer and skis during the winter. A winter road to Fort Chipewyan is usually opened in January and may be used until late March. An all season road services AREVA's Cluff Lake Mine Site, about 50 km east-northeast in Saskatchewan.

1.2 Land Status

Red Dragon Resources Corp. entered into an option agreement in June 2005 with Stout Investments Ltd. (Stout), to acquire a 100% undivided interest in all mineral rights (except diamonds) for the Rea project mineral permits, in exchange for cash and shares. Valley Gold and Earl Dodson have a reducible 3% royalty on mineral production. Red Dragon is required to spend a minimum of CND $500,000 for each two year period plus all required expenditures.

In March 2006, Red Dragon entered into an option agreement with Uramin Inc. In August 2007 Uramin became a wholly owned subsidiary of AREVA group. Uramin will have the right to earn up to a 50% working interest in the Rea project by spending US$5.5 million and making option payments of US$1.1 million over a three year period ending March 31, 2009. By March of 2009 Uramin had earned a fully vested 25% interest in the Rea project. Uramin shall earn a further 25% interest resulting in it holding a 50% interest by spending an additional CND $2,836,616 in exploration costs by December 31, 2011.

Areva Resources Canada Inc. assumes operator ship of the Rea Project on behalf of Uramin from January 1, 2009 to December 31, 2011.

The Rea project comprises 20 contiguous mineral permits (**Table 1, Figure 2**) covering approximately 446,330 acres (180,624 ha).

Table 1: Rea Project Mineral Permit summary table

Permit Number	Recorded Date	Current Expiry Date	Legal Description	Claim Holder	Area (ha)
9304020427	02/11/2004	02/11/2018	4-01-103: 01-18, 4-02-103:19-36	0859953 BC Ltd.	9,216
9304020428	02/11/2004	02/11/2018	4-03-103: 19-36, 4-03-104: 01-18	0859953 BC Ltd.	9,216
9304020429	02/11/2004	02/11/2018	4-01-104: 01-18, 4-02-104: 01-18	0859953 BC Ltd.	9,216
9304020430	02/11/2004	02/11/2018	4-01-104: 19-21;28-33, 4-01-105: 04-09;16-18, 4-02-105: 01-03;10-15;22-27;34-36	0859953 BC Ltd.	9,216
9304020431	02/11/2004	02/11/2018	4-01-104: 22-27;34-36, 4-01-105: 01-03;10-15;19-36	0859953 BC Ltd.	9,216
9304020432	02/11/2004	02/11/2018	4-02-104: 19-36, 4-03-104: 19-36	0859953 BC Ltd.	9,216
9304020433	02/11/2004	02/11/2018	4-04-104: 01-24;25S,L11-L13;26-34;35S,NW,L9,L10,L15;36L4,L9,L15,L16	0859953 BC Ltd.	8,928
9304020434	02/11/2004	02/11/2018	4-05-104: 01-03;10-15;22-27;34-36, 4-05-105: 01-18	0859953 BC Ltd.	9,216
9304020435	02/11/2004	02/11/2018	4-02-105: 04-09;16-21;28-33, 4-02-106: 04-09;16-21;28-33	0859953 BC Ltd.	9,216
9304020436	02/11/2004	02/11/2018	4-03-105: 01-36	0859953 BC Ltd.	9,216
9304020437	02/11/2004	02/11/2018	4-04-105:01N,SE,L3,L6;02L3-L5,L16;03S,NW,L9,L10,L15;04-08;09S,NW,L9,L10,L15;10SW,L2,L16;11N,SE,L5,L6;12-14;15E,L6,L11,L13,L14;16SW,L2,L12;17-19; 20S, NW,L10;21NE,L1,L7,L8,L14;22-28;29SW;30S, NW,L10,L15;31W,L2,L7,L10,L15;32L8,L9,L15,L16;33-36	0859953 BC Ltd.	7,888
9304020438	02/11/2004	02/11/2018	4-05-105: 19-30;32-36, 4-05-106: 01-03;10-12;13S,L12,L13;14-15;22-23;26-27;34-35	0859953 BC Ltd.	8,096
9304020439	02/11/2004	02/11/2018	4-02-106: 01-03;10-15;22-27;34-36,	0859953	9,216

			4-02-107: 04-09;16-21;28-33	BC Ltd.	
9304020440	02/11/2004	02/11/2018	4-03-106: 01-36	0859953 BC Ltd.	9,216
9304020441	02/11/2004	02/11/2018	4-04-106: 01-04;05N,SE,L3,L6;06SW,L11-L13;07L4,L5,L12,L13,L16;08-16;17L1,L8,L9,L16;20-29;31NE;32-36, 4-04-107: 01-05;06L1, L8,L9,L14-L16	0859953 BC Ltd.	9,088
9304020442	02/11/2004	02/11/2018	4-03-107: 01-36	0859953 BC Ltd.	9,216
9304020443	02/11/2004	02/11/2018	4-05-107: 07E,L3,L6,L11,L14;08-36, 4-04-108: 01-08	0859953 BC Ltd.	9,152
9304020444	02/11/2004	02/11/2018	4-05-107: 02W; 11W; 13-14; 23-36, 4-05-108: 01-03; 10-15; 22-27; 36	0859953 BC Ltd.	8,448)
9304020445	02/11/2004	02/11/2018	4-03-108: 01-36	0859953 BC Ltd.	9,216
9304020446	02/11/2004	02/11/2018	4-04-108: 07-36, 4-04-109: 01-06	0859953 BC Ltd.	9,216
20 Permits					180,624

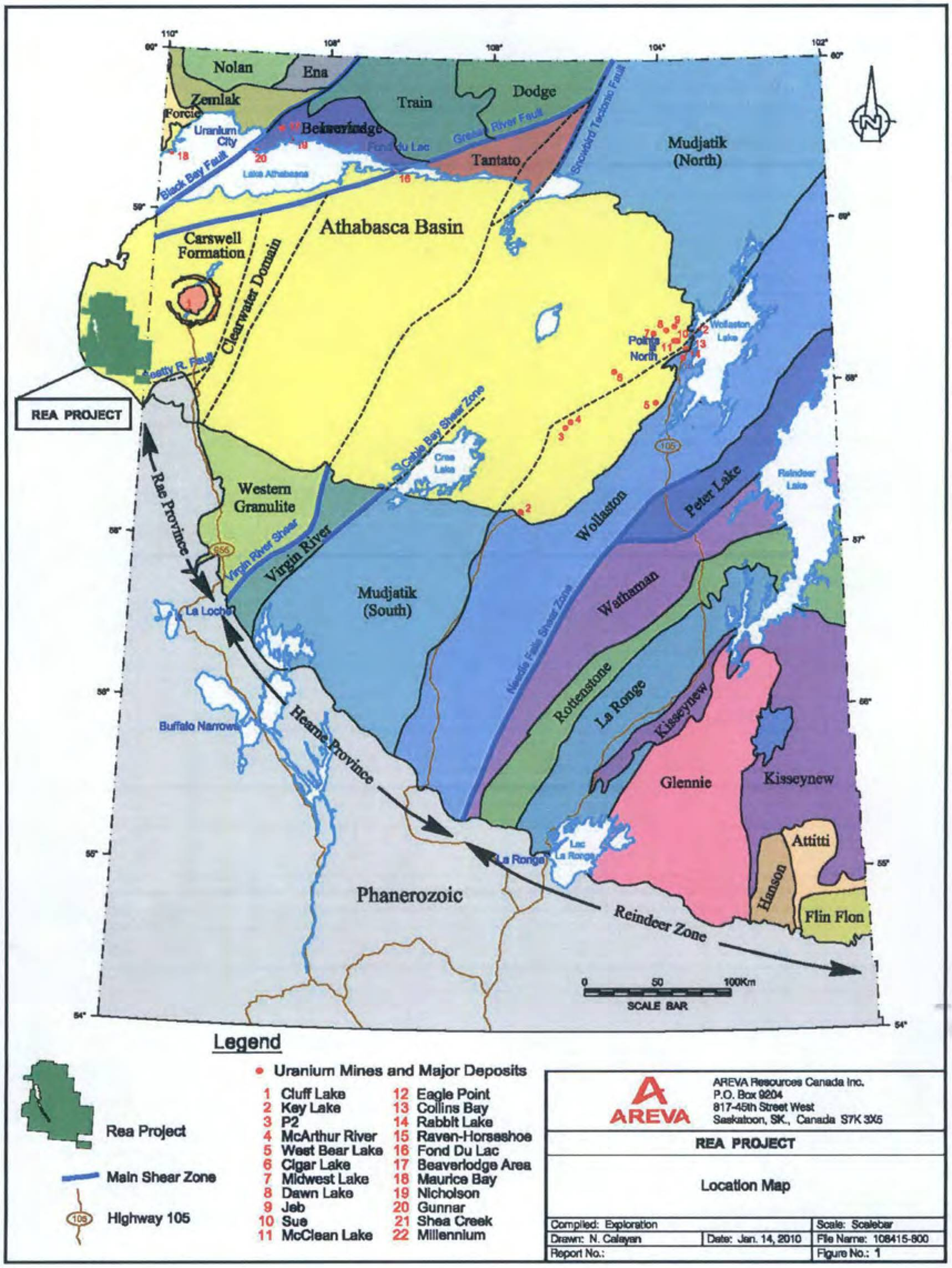


FIGURE 1: LOCATION MAP, REA PROJECT

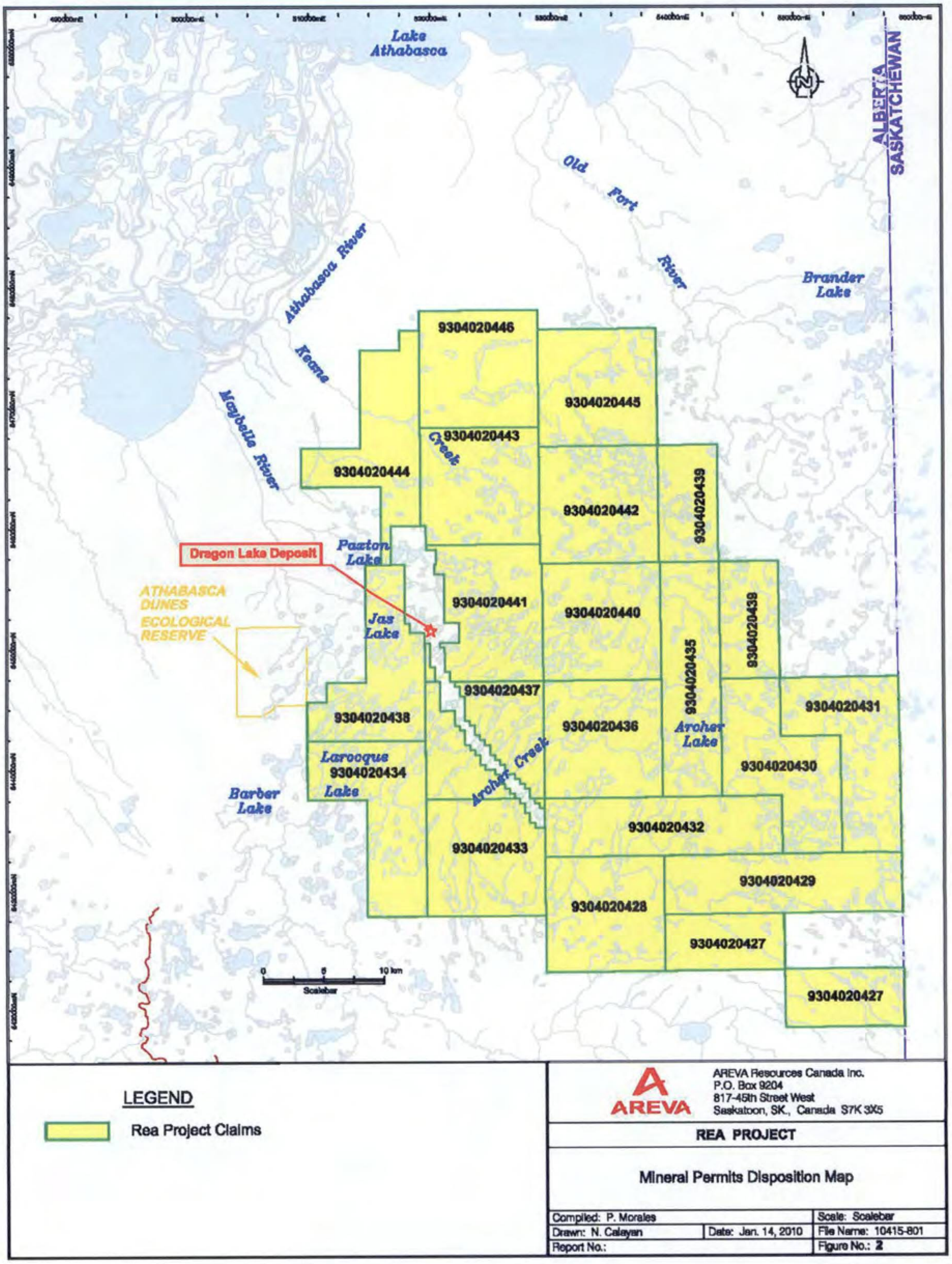
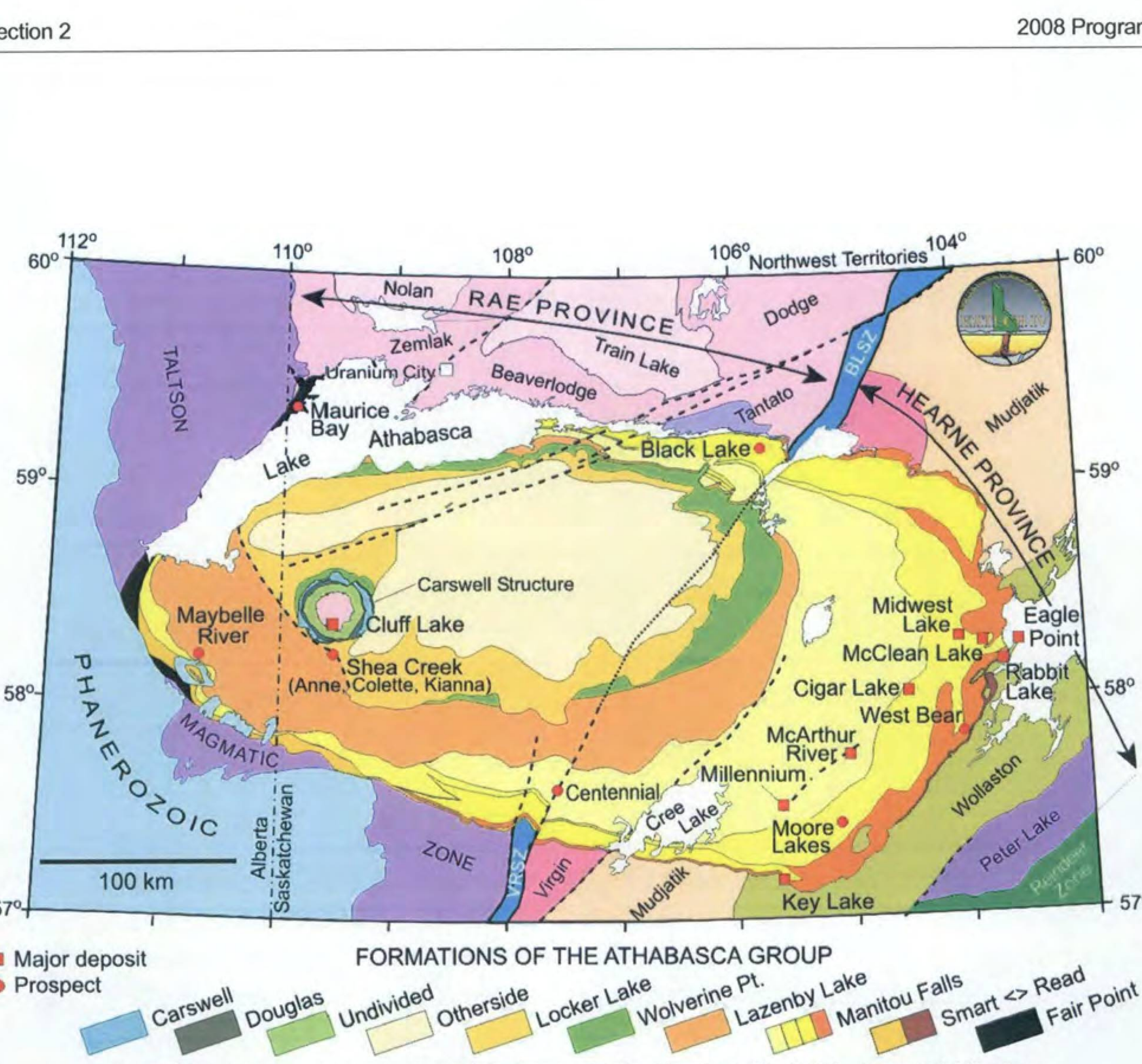


FIGURE 2: PROPERTY MINERAL PERMIT MAP, REA PROJECT



Some Uranium Occurrences in the Athabasca Basin, Northern Saskatchewan and Alberta.

From the EXTECH IV Athabasca Uranium Multidisciplinary Study by Cameco Corp., AREVA, Saskatchewan Industry and Resources, Geological Survey of Canada, the Alberta Geological Survey, and the universities of Saskatchewan, Regina, Alberta and Sudbury.

FIGURE 3: GEOLOGY OF THE ATHABASCA BASIN
Simplified from Jefferson et al., 2003

1.3 Geological Framework of the Western Athabasca Region

The Rea project area is located on the western edge of the Precambrian Churchill Structural Province of the Canadian Shield (Figures 1 and 3) and it is situated in the west portion of the Athabasca Basin. The sub-Athabasca basement of the area is situated within the Lloyd Domain and west of the Clearwater Domain, two major subdivisions of the Rae Province (Lewry and Sibbald, 1977; Card, 2001, 2002).

The rocks underlying the western part of the Athabasca Basin comprise a complexly deformed and strongly metamorphosed crystalline basement of Archean to Paleoproterozoic age that is unconformably overlain by relatively unmetamorphosed quartz-arenite sandstone of late Paleoproterozoic to Mesoproterozoic age (Table 1). The crystalline basement in this region is considered to be mostly part of the Lloyd Domain (Careen Lake Group) of the Rae Province, whilst the overlying sandstone, the Athabasca Group, fills a successor basin that spans parts of both the Rae and Hearne provinces (Figure 1). The Rae and Hearne provinces form parts of the Churchill Structural Province of the Canadian Shield (Hoffman, 1990).

The **Lloyd Domain** forms the majority of the crystalline basement in northwestern Saskatchewan, south of Lake Athabasca. It is bounded in the east and south by the Snowbird tectonic zone (Virgin River shear zone) and in the west by the Taltson-Thelon magmatic zone. The northern boundary is problematic (see Card, 2001) due to the overlying Athabasca Group cover that attenuates the geophysical signature of the basement. The domain is informally subdivided, along the Clearwater magnetic high, into the "east" and "west" Lloyd domains (Figure 1) that were formerly termed the Western Granulite and Firebag domains, respectively (Card, 2002). Exposure of the Lloyd Domain is limited to its eastern edge (Figure 1) south of the Athabasca Basin, with the remainder mostly overlain by Mesoproterozoic and Phanerozoic sedimentary cover of the Athabasca Basin and the Western Canada Sedimentary Basin, respectively.

The rocks of the crystalline metamorphic basement comprise a dominantly supracrustal package of psammo-pelitic gneiss, psammitic gneiss, pelitic gneiss, and garnet diatexite with subordinate metaquartzite, amphibolite, and ultramafic rock that are currently assigned to the Careen Lake Group (see Scott, 1985; Card et al., 2007). The supracrustal rocks were later intruded by significant/dominant amounts of granodiorite, quartz diorite, monzodiorite, and minor gabbro that, collectively, are termed the 'quartz diorite suite' (Card, 2002). The Lloyd Domain had previously generally been considered to be of Archean age (e.g. Lewry and Sibbald, 1977; Hoffman, 1990). However, recent work by Stern et al. (2003) has dated granodiorite from the 'quartz diorite suite' at 1.98 Ga, an age that is similar to granitic intrusions within the Taltson magmatic zone in northeastern Alberta, implying that the influence of Taltson magmatic activity (Paleoproterozoic) was much more widespread within the Lloyd Domain than previously thought. (Card et al., 2007).

Additionally, many of the supracrustal rocks in the Lloyd Domain closely resemble early Paleoproterozoic equivalents within the Taltson magmatic zone and further support a significant amount of Paleoproterozoic aged rocks in the Lloyd Domain, although Archean age supracrustal rocks are probable in the Careen Lake area (Card et al., 2007).

The dominant metamorphic event observed in the Lloyd Domain is a 1.94-1.93 Ga upper-amphibolite to granulite grade event overprinted by a later 1.9 Ga upper-greenschist to amphibolite grade event (Card et al., 2007 and Stern et al., 2003). The age of the former event approximates the age of peak metamorphism in the Taltson-Thelon magmatic zone while the latter event may be related to a 1.9 Ga event that is recorded in the Beaverlodge and Tantato domains to the north and northeast, possibly related to late granite emplacement along the Taltson-Thelon magmatic zone (Card et al., 2007). These earlier metamorphic assemblages apparently predate the first deformation events along the Virgin River shear zone and in the Mudjatik Domain. Later retrograge metamorphism (approximately 1.8 Ga) may by related to the onset of the Trans-Hudson orogen to the east (Lewry and Sibbald, 1977; Card et al., 2007).

There are four phases of ductile deformation currently recognized within the Lloyd Domain (Card et al., 2007). Late Archean D0 deformation related to M1 metamorphism produced recumbent folding. Early Taltson-Thelon D1 deformation (~1985 Ma) produced shallowly NNE- to NE-dipping regional gneissosity that steepens with proximity to the Virgin River shear zone and is complexly reoriented due to later events (Card, 2002). The second regional deformation (D2; ~1900 Ma), also likely related to Taltson-Thelon events, is characterized by NNW to NNE plunging folds with moderately dipping NW-dipping axial surfaces and probably related to the onset of movement along the Virgin River shear zone. The third deformation event (D3; ~1820 Ma) is interpreted be related to major Hudsonian-age movements along the Virgin River shear zone characterized by a NE trending mylonite zone with a gently NE plunging lineation (Card, 2002). This lineation has been overprinted by later subvertically plunging lineations that record later dip-slip movement(s). The fourth deformation event (D4; post-1800 Ma) comprises poorly developed WNW to NW-trending folds that may be related to a sinistral component of movement along the Virgin River shear zone; although, kinematic evidence suggests a dominantly dextral movement history for the shear zone (Card, 2002).

Brittle deformation has undoubtedly affected a large number of the earlier ductile shear zones. One of the dominant brittle-ductile sets is a north to NNW-trending series of structural breaks with apparent sinistral movement that may be related to the Tabbernor Fault system that affects much of northern Saskatchewan (Card et al., 2003).

The **Clearwater Domain** is exposed along the Clearwater River south of the Athabasca Basin margin. This domain is expressed by a conspicuous regional positive magnetic trend that bisects the entire Lloyd Domain in a NNE alignment (Figure 1). Three lithologic groups are recognized;

granitic gneiss, K-feldspar porphyritic gneiss, and equigranular granite (Lewry and Sibbald, 1977 and Card, 2002). Lewry and Sibbald (1977) considered the granitic gneiss to be more similar to gneisses found in the Mudjatik Domain, east of the Snowbird tectonic zone. The granitic gneiss is considered to be the oldest unit as is suggested by the presence of granitic gneiss xenoliths within the equigranular granite phase. Data by Stern et al. (2003) support this observation with a 2.53 Ga age on the granitic gneiss inclusions and a 1.84 Ga age on the K-feldspar porphyritic granite. The source of the magnetic signature is thought to be caused by magnetite entrained within the granitic gneiss with a further contribution from magnetite concentrated near the contact zones of xenoliths and small late aplite dykes (Card, 2002).

The rocks of the Clearwater Domain possibly record the earliest metamorphic event in the southern Rae Province as well as one of the latest events. The granitic gneiss (2.5 Ga) is similar in age to a 2.6 Ga event (overprinting an earlier 3.2 Ga event) that is recorded within the highly deformed Tantato Domain, north of the Lloyd Domain (Hanmer, 1997). The K-feldspar porphyritic granite (1.84 Ga) is similar in age to the Trans-Hudson orogen, although this age would imply emplacement of the porphyry in the waning stages of the orogen (Card et al., 2007).

Post-Hudsonian crustal instability resulted in the development of three northeast trending sub-basins within the greater Athabasca Basin. Multiple series of transgressive sedimentary deposits were lain down as a result of tectonic activity and fault reactivation along Hudsonian northeast-trending zones (Ramaekers, 1990).

The **Athabasca Group** comprises the Proterozoic cover sequence over the crystalline basement described above. Its thickness ranges from zero at the basin edge to in excess of 1200 metres in the east-central part of the western Athabasca Basin. Maximum thickness of the sediments in the central part of the Basin is in excess of 1500 metres.

This cover sequence is made up of four major sedimentary sequences, separated by unconformities (Ramaekers et al., 2007). Sequence 1 is the Fair Point Formation; Sequence 2 comprises the Read, Smart, and Manitou Falls formations; Sequence 3 is the Lazenby Lake and Wolverine Point formations, and Sequence 4 is the Locker Lake and Otherside formations plus the overlying former Points Lake Subgroup (Douglas, and Carswell formations).

Table 2 presents a summary of the sandstone formations identified within the western part of the Athabasca Basin, as presently understood (e.g. Ramaekers et al., 2007). The basement lithologies described in Table 2 are those that underlie the sandstone in the western Athabasca region only. The following brief descriptions pertain to the various sandstone formations and members that underlie the western Athabasca Basin, according to the most recent work by Ramaekers et al. (2007). The reader should refer to the Geological Survey of Canada, Bulletin 588 (EXTECH IV volume) for several comprehensive papers on the geology of the Athabasca Basin, the underlying crystalline basement, and Athabasca uranium metallogenesis.

The sandstone in this part of the Basin comprises two formations, the 'upper' Manitou Falls Formation and the underlying Smart Formation that form part of the Karras deposystem of the Cree Sub-basin (Ramaekers et al., 2007). The Manitou Falls Formation (MF), constituting most of the fill in the Cree Sub-basin and about half the total volume of the Athabasca Basin, is composed of three members in the western part of the Athabasca Basin: 'uppermost' Dunlop member (MFd), 'middle' Collins member (MFc), and 'lower' Warnes member (MFw), formerly termed the MFa/MFb member. The Smart Formation (S), formerly termed the MFa member, conformably underlies the MFw and rests directly on crystalline basement.

The MFc and MFw represent the mid to distal parts of a regional alluvial braid plain, laterally intermediate between MFb and MFd (Ramaekers et al, 2007). The large quantity of clay intraclasts in the MFd indicates deposition of the sediments by muddy waters, widespread short-lived ponding as water levels dropped after floods, and relatively low-energy floods, with current energy just strong enough to erode the clay drapes, and deposition rapid enough to bury the intraclasts before they disintegrated (Ramaekers et al, 2007).

The MFd, now termed the 'Dunlop' member, is defined by the presence of >1% mudstone, usually presented as aggregate thickness of clay intraclasts (claystone and mudstone, rarely siltstone or very fine sandstone). These items are generally referred to as 'clay intraclasts', less commonly as 'clay pebbles'.

The MFd thins to the west and is not mappable from just east of the Carswell Structure to the Maybelle River area in Alberta (Ramaekers et al., 2007). In this region, the MF completely lacks pebbles, contains an elevated abundance of clay intraclasts (but <1%), and it (MFc/d) is unconformably overlain by the Lazenby Lake Formation. This unit appears to be the lateral equivalent of the MFd.

The name 'Collins' member replaces the traditionally-known 'MFc' name for the middle sandy member of the Manitou Falls formation. This member is sandstone containing <2% conglomerate and <1% intraclasts, located between the underlying MFw and the overlying intraclast-rich MFd. The lower part of the MFc in many areas toward the eastern side of the western Athabasca region contains common to abundant pebbles and thin conglomerate beds, and is termed MFc-p.

Along the southern margin of the Basin, a tongue of MFw sandstone, intraclast-rich sandstone, and pebbly sandstone overlies the basement. It is distinguished from the MFc and MFd by northerly paleocurrents and an upper pebbly subunit (MFw-up). MFw interfingers from the south (Karras deposystem) with the MFc (Ramaekers et al., 2007). The MFw comprises a fine- to medium-grained quartz arenite sequence that may be subdivided into four (4) informal subunits as follows:

1) MFw-up: An upper quartz-pebbly unit that is characterized by isolated quartz pebbles with maximum-transported-grainsize (MTG) of >2 mm. Quartz granule beds occur but generally <2%. Minor thin clay laminae present.
2) MFw-cr: A middle quartz arenite unit comprising a medium- to fine-grained sandstone with >1% clay intraclasts. The measure of clay intraclasts in drill-core is commonly measured as a total thickness of intraclasts per one linear metre of core (see Bosman and Korness, 2007).
3) MFw-s: A lower quartz arenite unit characterized by uniform fine- to medium-grained sandstone with local granules and containing <1% clay intraclasts.
4) MFw-lp: A lower quartz-pebbly quartz arenite unit with local isolated pebbles and minor quartz granule beds.

The MFw is sourced from south to north forming a tongue-shaped fan into the southern Athabasca Basin. Its maximum thickness is reported as 315 metres (Ramaekers et al., 2007) near the Virgin River shear zone, although it may exceed that thickness in the Mirror River area.

The Smart Formation (S) is a relatively thin but widespread formation, formerly termed the MFa member, in the basal part of the western Athabasca Basin. It unconformably rests on crystalline basement in the Karras and Robert deposystems and unconformably overlies the Fair Point Formation in the Fidler deposystem of the Jackfish Subbasin (Ramaekers et al., 2007). The S comprises coarse- to medium-grained quartz arenite with a significant component of quartz-pebble conglomerate near its base. Mudstone occurs locally. The Smart Fm. is characterized by a general coarsening towards the unconformity, but is generally not subdivided.

Quaternary-aged glacial deposits form the most recent topographic features and range in thickness from six metres to at least 60 metres, based on current and historical drilling in the western Athabasca Basin. Surficial deposits also include impressive drumlin fields and local sand dune fields. Organic-rich clays are also locally encountered adjacent to sandstone bedrock.

Table 2: Generalized stratigraphy of the Western Athabasca Basin .

STRATIGRAPHY OF HELIKIAN ATHABASCA BASIN (Mirror and Jackfish Sub-basins) *NOTE: Nomenclature after Ramaekers (1990, 2004); Ramaekers et al. (2007)*		
	Environment	Brief Formation Descriptions
SEQUENCE 4	Marine platform-	**CARSWELL Fm:** Dolomitic, basal Sst., Mudst., dolarenites with x-beds &

(includes the former POINTS LAKE SUBGROUP [Carswell & Douglas Fms] that occurs only in the annular ring of the Carswell Structure)	intertidal	ripple marks. Stromatolites common. Oolites up to 3mm diameter in beds up to 15 cm thick. - lower contact at lowest prominent carbonate bed.
	Fluviatile-marine	**DOUGLAS Fm:** Thinly bedded & laminated v.f.g. Sst., Siltst., Mudst. - very friable. Variously calcareous and carbonaceous. - graded Sst. beds (0.25-5cm thick). - lower contact at first pebbly sandstone beds.
	Fluviatile-Possible marine component at top	**OTHERSIDE Fm:** Sst., Siltst. (minor 5cm to 3m thick). - bedding-parallel granules. - clay intraclasts common. - qtz. pebbles at base of formation. - lower contact gradational.
	Fluviatile	**LOCKER LAKE Fm:** Sst with Pebbly to conglomeratic Sst. (>16mm diameter) and minor Siltst. (1-20cm thick). - no clay intraclasts. - minor mudstone near base. - lower contact disconformable; presence of pebbly Sst.
SEQUENCE 3	Fluviatile and Playa lake	**WOLVERINE POINT Fm:** Sst., Siltst (1 to >50cm thick). - clay-rich, mudstone beds common, local hard red & green clay intraclasts - very friable locally. - clay intraclasts common. - local vitric tuff beds. - abrupt lower contact where common mudstone beds disappear.
	Fluviatile	**LAZENBY LAKE Fm:** Pebbly Sst., f.g. qtz arenite (isolated qtz. pebbles 4-30mm diameter). Mostly qtz arenite with low clay content. - low angle x-bedding, local slumped bedding lower in section. - base of the Mirror Subbasin in SW Athabasca Basin. - lower contact disconformable (or correlative unconformity; Sequence 2-Sequence 3 boundary).
SEQUENCE 2	Fluviatile	**MANITOU FALLS Fm:** Qtz-pebble conglom, f.g. to c.g. qtz arenite., Siltst and lesser Mudst. - clay intraclasts common in uppermost member. - contains bulk of sedimentation in the Cree Sub-basin. - 5 mbrs; from top: Dunlop, Collins, Warnes & Raibl (southern & northern Cree Subbasin, respectively) and Bird. - lower contact unconformable on Smart Fm., where not directly lying on crystalline basement.

STRATIGRAPHY OF HELIKIAN ATHABASCA BASIN

(Mirror and Jackfish Sub-basins)

NOTE: *Nomenclature after Ramaekers (1990, 2004); Ramaekers et al. (2007)*

	Environment	Brief Formation Descriptions
SEQUENCE 2 (continued)	Fluviatile	**SMART Fm:** F.g. to c.g. qtz arenite and lesser pebbly Mudst. - upper part at least two fining-up qtz arenite units.

		- fine to coarse grained. - lower part discontinuous pebbly mudstone. - distributed in the western Athabasca Basin. - lower contact unconformable on crystalline basement and/or Fair Point Fm. of the Jackfish Subbasin.
SEQUENCE 1	Fluviatile	**FAIR POINT Fm:** Pebbly Sst. with polymictic pebble congl. and qtz arenite. Minor Mudst. - distribution within the Jackfish Subbasin (western Athabasca Basin) and along west side of the Carswell Structure at Cluff Lake. - lower contact unconformable on crystalline basement.

METAMORPHOSED BASEMENT - RAE PROVINCE **WESTERN ATHABASCA BASIN** ***Note:*** *Nomenclature and ages after Card (2001); Card et al. (2003, 2007) and Stern et al. (2003)*	
LLOYD DOMAIN (including the Careen Lake Group supracrustal rocks)	Distribution: Underlies the bulk of the western Athabasca Basin, south of Lake Athabasca. Bounded in the west (NE Alberta) by the Taltson aero-magnetic high; in the east by the Virgin River shear zone. Lithologic Units: psammitic gneiss, psammo-pelitic gneiss, pelitic gneiss, and impure metaquartzite of the Careen Lake Group; most of the domain consists of later (Taltson-Thelon age) monotonous orthogneiss, dominated by granodiorite, with peraluminous granite and mafic assemblages. Metamorphism: Granulite-grade (~1940-1930 Ma) overprinted by amphibolite-grade (1900 Ma) to upper greenschist-grade. These retrograde events may also, in part, represent effects of the Trans-Hudson orogen (ca. 1800 Ma).
CLEARWATER DOMAIN	Distribution: Generally defined by a NNE-trending aeromagnetic high with a corresponding gravity-low lying along the eastern edge of the Carswell Structure. Bisects the Lloyd Domain that underlies most of the western Athabasca Basin. Lithologic Units: Equigranular granites, porphyritic granites, and Archean granitoid gneiss. Metamorphism: Generally less metamorphosed than the surrounding rocks of the Lloyd Domain. Ages vary from 2.53 Ga (Archean granitoid gneiss) to 1.84 Ga (youngest Hudsonian-age intrusions).

1.3.1 Local Geological Setting

Outcrops of the Taltson-Thelon rocks in Alberta comprise a retrogressed granulite facies terrain, which is interpreted by Lewry and Sibbald (1977) as being similar in geological characteristics to the western Lloyd Domain. Both domains are of Archean age.

The basement rocks (corresponding to the western Lloyd Domain) have been mapped by Alberta provincial government geologists, both north and south of the Maybelle project area as:

1) Banded granite gneisses that show evidence of both an earlier granulite facies metamorphism and a later amphibolite facies overprinting, which are likely to be of pre-Kenoran age;

2) High-grade, layered to banded metasediments of probable Archean age, found principally within the granite gneisses;

3) A series of Aphebian-aged intrusive, massive to foliated amphibolite facies anatectic granitoids, which formed mantled gneiss domes, and which now show several phases of related (Hudsonian?) deformation and;

4) Isolated outliers of low-grade metasedimentary and metavolcanic rocks which lie in apparent unconformity upon the Archean granite gneisses, but which are in an uncertain position relative to Aphebian granitoids. There is no evidence for Aphebian supracrustal rocks in outcrop, but Burwash (1978), in a study of the subsurface extension of the basement rocks beneath the Phanerozoic cover rocks, did recognize metasedimentary rocks and suggested that they are only the keels of infolded Aphebian sediments.

Drilling within the project area intersected aluminous metasedimentary rocks which are in part graphite-bearing. These are tentatively correlated with Aphebian-aged metasedimentary units of the Peter River gneisses of the Cluff Lake area and/or the Wollaston Domain present in eastern Saskatchewan. Other basement lithologies intersected include charnockitic gneisses and anatexites, both being similar to the Earl River complex at Cluff Lake. Petrographic work by Shi and Annesley (1996) identified orthogneisses, pelitic gneisses, and granitoids and microgranites. These rocks were subject to lower to middle granulite-facies metamorphism, with retrograde metamorphism of an amphibolite to greenschist facies. The pelitic gneisses examined were strongly anatectized with intense development of quartzofeldspathic leucosomes.

The Athabasca Group has been subdivided into three main sequences bounded by unconformities (Ramaekers, 2002): the Fair Point sequence (fluvial), the Manitou Falls – Wolverine Point sequence (fluvial) and the Locker Lake – Carswell sequence (fluvial to marine).

The Rea project area is underlain by the Fair Point Formation with a thickness ranging from 0 to 100 m. These are interpreted to be fluviatile sheet flood deposits (Ramaekers, 2002). Above this are diagenetically-altered quartz arenites and conglomerates of the Manitou Falls Formation with a total thickness ranging from 0 to 300 m. The Manitou Falls Formation is overlain by the Lazenby Lake Formation that locally reaches a thickness of 30 metres.

Lazenby Lake Fm. – The Lazenby Lake Fm. varies from 0 to 30 m thick in the area. The formation is typically a fine- to medium- to coarse-grained sandstone with disseminated pebbles and pebbly sandstone beds. The unit fines upward from a coarse- to a fine-grained sandstone. Mudstones and clay intraclasts are rare. This formation is dominated by ripple cross-bedding with minor massive bedding. Pebble beds one layer thick or thin conglomerates are sparse. The pebbles are rounded and quartz dominated. The amount and size of the pebbles increases towards the base of the unit.

The clay content is low at 2-3%. It exhibits variable primary hematization and bleaching. Fractures with sooty pyrite were noted, as were fractures with hydrocarbon staining.

Manitou Falls Fm. – The Manitou Falls Fm. consists of fine to medium grained sandstones, variably bleached and hematized, and ranges from 0 to 300 m thick on the project. It is probably the MFc formation or distal equivalent. It is a moderately-sorted, fine- to medium-grained sandstone, containing <1% clay intraclasts and minor mudstone and siltstone interbeds. The basal few metres of this unit are coarse-grained sandstone with disseminated granules and small pebbles. This formation is dominated by ripple cross-bedding with minor massive bedding and some low angle cross beds at the base. Intraclasts increase toward the top of the unit. The upper boundary with the Lazenby Lake Fm. is sharply gradational and interpreted to be conformable, defined at the loss of intraclasts and the gain of pebbles (in the Lazenby). Locally the contact is scoured.

This formation is competent and hard when unaltered, similar to the rest of the basin. However, in the area above the Dragon Lake mineralization, it has been locally affected by hydrothermal alteration. A network of strongly developed brittle fractures surrounds a zone of sandy collapse-breccias. This has been cross-cut by a later series of subvertical quartz (± pyrite) breccias. This breccia appears to have developed at the intersection of an east-west fault with a series of north-south subvertical faults and north-west faults. Druzy quartz is common along steep fractures in this area.

An erosional contact between the Manitou Falls and Fair Point formations has been noted, in the Dragon Lake area, suggesting a paleo-channel existed over the graphite shear zone. Clasts of the Fair Point Fm. have been seen at the base of the Manitou Falls Fm.

Fair Point Fm. – The Fair Point Fm. is a coarse-grained to conglomeratic, clay rich (up to 15%) unit that is 30 to 40 metres thick in the Dragon Lake area, but ranges from 0 to 100 m thick on the project. This unit has been divided into two sub-members (Kupsch and Catuneanu, 2002) as the basal FPb2 and the upper FPc members. This division has been noted in the 2003 drill holes. The basal unit (FPb2) contains coarse-grained sandstones with disseminated pebbles, interbedded pebbly sandstones, thin conglomerate beds and local siltstone beds and/or clay intraclasts. This member is poorly-sorted and has abundant interstitial clay. Fining upward trends are recorded in some diamond drill holes. The sandstones appear massive in most sections, with minor horizontal laminae and low-angle cross-beds. The conglomerates also appear massive and are matrix supported. The pebbles are subangular to subrounded and are dominantly quartz with minor rock fragments and platy limonitic gneiss pebbles (reworked regolith). The upper boundary with the FPc member is gradational and marked by the loss of conglomerate beds and pebbles over 5 centimetres in diameter.

The upper unit (FPc) is a coarse-grained sandstone with minor interbedded pebbly sandstones and disseminated pebbles. Minor siltstone beds and clay intraclasts are local. It is moderately to poorly sorted and has abundant interstitial clay. Fining upward units from very coarse to medium-grained sandstones are common. The sandstones appear massive in most sections. Some horizontal and low angle cross beds are present. The contact between this unit and the overlying Manitou Falls formation is regionally unconformable, and easily recognized in core as a sharp contact. This contact was typically very clay rich in the Dragon Lake area. The contact can also be detected using the down-hole gamma radiometrics. In the area over the shear zone, this contact has elevated radiometrics and slightly anomalous geochemistry. The Dragon Lake mineralization occurs in both of these units, not being limited by either.

The Athabasca Group has been intruded by Mackenzie Swarm diabase dykes along north- to northwest-striking structural zones. These dykes have been dated at 1267 to 1084 Ma (Rb-Sr; Armstrong and Ramaekers, 1985; Worden et al, 1985). Only one has been intersected in the project area (MR-85), but several are present to the east in the Cluff and Shea Creek areas. These rocks are in turn overlain by outliers and/or embayments of Phanerozoic sediments of probable Devonian age. Fractures filled with bitumens in both the Devonian sediments and the Athabasca Group are common.

The bedrock is overlain by extensive unconsolidated Quaternary glacial and periglacial deposits (consisting of ground moraine, esker, outwash, aeolian, lacustrine and related deposits) that effectively mask the bedrock, resulting in a complete lack of outcrop. The Dragon Lake area is covered by a large esker complex, approximately 50 metres thick.

1.4 Previous Work

From 1976 to 1985, the Athabasca Basin was subject to a uranium exploration boom. The bulk of the significant uranium discoveries to date are located in the Saskatchewan portion of the basin with the exception of the Maybelle River deposit in Alberta, which was discovered by a Uranerz Exploration and Mining Limited drilling program in 1986 (Orr, 1989) and is surrounded by the Rea Uranium Project Area. Areva Resources Canada Inc. continues to explore the Maybelle River deposit and drilling in 2002 confirmed relatively shallow mineralization with grades of up 40% U^3O^8.

1.4.1 Norcen Energy Resources Limited

Norcen acquired two blocks of mineral permits in 1976, The Archer permits covering an area of 72,439 ha include former permits 208,209, 210 and 211 most of this ground is covered by the Rea mineral permits. The five Richardson Permits totalling 92, 916 ha include permits 6876120002 to 6876120006 were situated to the west of the Rea mineral permits. During the summer of 1976 Norcen conducted a combined prospecting, surficial and lake bottom geochemical study over the Archer permits. A single radioactive pebble conglomerate boulder was found approximately seven miles east of Archer Lake in a crevasse filling, assays from this boulder ranged from 5.2 to 6.2 ppm U^3O^8 and 0.031 % to 0.042% ThO^2. Radioactive granite boulders were found in clusters in the end moraine ridges and hills east of the Keane fire tower and in crevasse fillings complexes south of Helen Lake (McWilliams and Sawyer, 1976).

Norcen concluded from this study that the margin of the Athabasca Formation was located much further to the west than indicated on the on the geological maps published by the Research Council of Alberta. In light of this information large sections of the permits should be surrendered to the crown and that additional permits south of Richardson Lake be acquired as soon as possible.

In 1977 Norcen conducted a stratigraphic drilling program over its permits, eight BQ holes were drilled for a total of 1 245 metres (McWilliams and Sawyer, 1977). Three holes were drilled on the Acher permits, hole R5 (FC-014) was drilled on Rea mineral permit 9304020444 (permit 211), the hole was stopped in Athabasca sandstone at a depth of 252.2 metres. Hole R7 (FC-016) was drilled on Rea mineral permit 93040220435 (permit 210) the hole was stopped in Athabasca sandstone at a depth of 184.2 metres. Hole R8 (FC-017) was drilled on Rea mineral permit 9304020429 (permit 208) the hole was stopped in Athabasca sandstone at a depth of 227.8 metres.

Norcen recommended that no further work be conducted over the Archer permits because the depth to the unconformity exceeds 150 metres. Norcen concluded that state of the art geochemical and geophysical tools are unable to detect uranium mineralization at this depth. The Archer permits were surrendered to the crown on their anniversary date.

1.4.2 Mattagami Lake Mines

The Agar Lake permit area (#224) was obtained as an option for one year from C. and E. Exploration of Calgary. Rea mineral permit 93040220439 covers the Agar Lake permit. The Application of density slicing of LANDSAT satellite images had suggested a concentration of zones possessing similar reflectance to the Cluff Lake area (Mercer, 1976). During the summer of 1976, 100 Track Etch cups were placed in the permit area a radon emanometer survey was carried out, geochemical surveys and a hammer seismic survey. The hammer seismic survey indicated in general, the Athabasca-basement contact was identified at depths of 40.0 to 91.0 metres. The geochemical surveys conclude that the low content of uranium in the waters of the Agar Lake permit area is emphasized by the fact that uranium was below the detection limit of 0.1 ppb in every sample, the uranium content of the 103 sediment samples is uniformly low with a mean of 0.41 ppm. Owing to the absence of any further possible exploration techniques short of blind drilling, Mattagami Mines did not retain the option.

1.4.3 BP Minerals Limited

BP Minerals Limited were granted permits 229, 230 and 231 in January 1976 and conducted extensive Track Etch and thoron filtered Track Etch surveys in the summers of 1976 and 1977.

In 1978 BP Minerals Limited completed diamond drilling on three permits areas (229 to 231) to the of west Rea mineral permit 9304020444 in the Keane Creek area (Bradley, 1978). Three BQ holes were drilled for a total of 805.0 metres the holes were sited one pre permit, on Track Etch anomalies having nearby water supplies. Only one drill hole (kDH 78-3) intersected the unconformity at a depth of 259.0 metres. The basement is composed of garnet bearing granitic gneiss augen gneiss which is intruded by narrow coarse-grained granite to pegmatite dykes. Drill holes kDH 78-1 and kDH 78-2 were stopped in the Athabasca sandstone at depths of 307.0 and 206.0 metres respectively. Gamma ray probe logging of the three holes did not detect anomalous radioactive minerals

1.4.4 Eldorado Nuclear

The description of work performed by Eldorado Nuclear Ltd. is taken from Dufresne and Maynes, 2006 as follows:

Eldorado Nuclear Ltd. (Eldorado) began exploring the area now covered by the Rea Uranium Project in 1974 (Figures 3 to 7). They conducted exploration including prospecting in 1974 and 1975 on their property between the Maybelle and Richardson Rivers (Red Dragon's permit numbers 9304020441, 930420440, 9304020438, 9304020437, 9304020436, 9304020435, 9304020433, and 9304020432). During 1975, various surveys including regional lake (and stream sediment), water geochemistry and soil sampling were conducted to test the areas of lake-geochemical anomalies. Radiometric prospecting and boulder mapping were also performed (Laanela, 1977a, b). During summer 1975, a total of 778 lake and sediment and 1,010 soil samples were collected (Moreau and Laanela, 1976) on and around the Red Dragon's Rea property. In addition, helicopter-borne adiometric prospecting with scintillometers, and a VLF-EM 16 as well as boulder mapping were conducted (Laanela, 1977a). Additional in-fill lake sampling was completed during 1976 and sixteen diamond drillholes (Figure 5) were drilled during winter of 1976-1977 (Laanela, 1977a).

Six of the sixteen Eldorado drillholes were drilled directly on Red Dragon's Rea property with disappointing results although a number of the drillholes did not intersect the contact between Athabasca basin sediments and the underlying basement rocks. The historic drillhole locations were compiled by Olson et al. (1994). Drillhole 508-4 was drilled to 167 feet on the southern portion of permit 9304020426 (Twp103, R3 in section 21NE) on November 22, 1976 and was abandoned due to unstable ground. Drillhole 508-8, totaling 187 feet, was drilled in the southeast corner of permit 9304020437 (Twp105, R4, section 2SW) on November 30, 1976 and was abandoned due to poor drilling conditions. On December 4, 1976, drillhole 508-9 was drilled to 597 feet on the northwestern portion of permit 9304020437 (Twp105, R4 in section 29NE). Drillhole 508-9 was partially probed radiometrically and yielded no anomalous radioactivity results. On December 7, drillhole 508-10 was drilled to 375 feet on the northern portion of permit 9304020434 (Twp105, R5, section 4NE-SE) was also abandoned due to sand cave-in, leaving behind lost rods and a core-barrel in the hole. Drillhole 508-11 was drilled to 224 feet on December 11, 1976 (Twp104, R5, section 15SE) in the southwestern portion of permit 9304020434 and was abandoned due to a shortage of casing. Drillhole 508-16, located in the northeast corner of permit 9304020428 (Twp103, R3, section 26SE) was drilled to 568 feet and intersected partlybituminous sandstone of the Athabasca Formation (Laanela, 1977b).

Eldorado acquired new permits south of their existing property in early 1976, calling it Project 508, largely due to poor results from geochemical surveys and drilling, a lack of uraniferous *boulders and outcrops, the large thicknesses of overburden and the number and complexity of glacial deposits (Laanela, 1977b, 1978). During the winter of 1976 to 1977 and early 1978, Eldorado successfully carried out two drilling programs to find the edge of the Athabasca Formation (marking the unconformity between the Athabasca Sandstone and Precambrian basement), showing that it lies between Maybelle and Richardson rivers (Laanela, 1978). In 1976, Eldorado's fieldwork consisted of various regional surveys (Figures 3 and 4), including regional lake and stream sediment and water geochemistry, semi-detailed soil sampling, radiometric prospecting and boulder mapping (Laanela, 1977a, b). In April of 1977, an airborne magnetic and EM survey was flown over identified lake geochemical anomalies and highlighted a number of EM conductors (Laanela, 1977c). The 1977 summer program's groundwork was comprised of geochemical and geophysical surveys including VLF-EM, magnetics and resistivity as well as a semi-regional muskeg-geochemical survey, detailed prospecting, mineralized boulder hunting and a soil gas survey (Laanela, 1978b). Eldorado's 1978 summer geophysical program to test EM conductors was comprised of gridding and ground geophysical surveying, with horizontal loop EM and magnetometer, delineating a number of zones relating to the basement structures and Devonian sediments (Mitchell and Fortuna, 1978). After winter drilling in 1979, Eldorado ceased exploration activities in Project 508, having concluded that only very expensive exploration methods could be applied to evaluate the area, given the added complexity as a result of Devonian sediment cover (Fortuna, 1979).*

1.4.5 Uranerz Exploration and Mining Ltd.

The description of work performed by Uranerz Exploration and Mining Ltd. is taken from Dufresne and Maynes, 2006 as follows:

During 1985 and 1986, exploration programs included lake sediment geochemistry (U and As), resistivity profiling, depth sounding, time domain EM (TDEM), diamond drilling, petrography, age dating and thermoluminescence surveying. In 1987, EM surveys identified a number a series of prominent EM conductors striking north-northwest along the Maybelle River trend and Net Lake trend. The EM targets are spatially associated with northwest trending mylonitic belts.

During 1988 to 1990, Uranerz conducted three diamond drilling programs on the west southwest portion of Red's Dragon Rea Property. Drillholes MR68, MR69, MR72 and MR84, totaling 1 822.7 m, were drilled on the eastern portion of permit 9304020444 along the northern extension of the Maybelle River Trend. MR68 yielded few positive lithogeochemical indications within the Manitou Falls formation with up to 1.4 ppm bismuth and 3.1 ppm uranium (Appendix 5). However, beneath the unconformity, a 1 m sample of basement yielded 35 ppm and 25 ppm total and partial U as well as 160 ppm Ni, 9.6 ppm bismuth and 23 ppm. The downhole log yielded a minor radiometric peak of 100 counts per second (cps). Drillhole MR69 yielded several minor radiometric anomalies ranging from 100 to 400 cps with values of up to 87 ppm total U and 92 ppm partial U over 1 m as well as up to 184 ppm Ni. Drillhole MR72 yielded no significant geochemical anomalies, however, it did yield a radiometric peak of 120 cps within the Upper Manitou Falls sandstone. Drillhole MR84 yielded no significant radiometric or geochemical anomalies (Orr and Lacey, 1990).

Other significant geochemical anomalies were identified in several of the Uranerz drillholes away from the Maybelle River Trend but on land that is now under option to Red Dragon. These include up to 54 and 82 ppm U across 1 m in drillholes MR65 and MR66 east of the Maybelle River Trend within Township 105 and Range 3. Prior drilling by Uranerz along the Net Lake Trend has also yielded a number of significant geochemical anomalies including up to 43 ppm U in hole MR01, up to27 ppm U in hole MR06 and up to 48 ppm U in hole MR08. In a number of cases, the Net Lake Trend drillholes have also yielded other significant geochemical anomalies (usually associated with anomalous levels of U) including up to 766 ppm Ni, 328 ppm Zn and 689 ppm V in hole MR08, and up to 672 ppm Ni and 601 ppm V in hole MR13, which also yielded up to 17 ppm U. The Net Lake trend drilling to date is quite wide spaced and certainly warrants further exploration including further drilling.

Uranerz also conducted a surface exploration program during the summer of 1988 (Orr and Lacey, 1991) collecting lake sediment, lake water and stream sediment samples in the Brander Lake-Old Fort River area (northeast portion of Rea Property) to follow up on the anomalous values that were uncovered during a 1987 sampling program. The Uranerz survey yielded a maximum bottom sediment value of 55.5 ppm U, with at least one anomalous lake sediment sample with 22 ppm U collected from Rea Project lands in Township 108, Range 3. Only a small portion of the survey samples are located on Red Dragon's permits.

In June of 1989, Uranerz placed 51 cups from the track etch survey across the Dragon Lake area to further test the area that was commenced in 1988. Results from the first survey in 1988 returned values of 60 pCi/L which appears to be associated with the mineralization around drillholes MR34, MR39 and MR42 (Orr and Lacey, 1991). It also returned background values of 20 pCi/L associated with the mineralization around drillhole MR53 (Orr and Lacey, 1991). Repeat values results from the second survey Uranerz conducted in 1989 matches the values from the first survey and background values remained equal to or less than 20 pCi/L (Orr and Lacey, 1991).

Uranerz conducted other exploration activities during 1989 which consisted of TDEM surveys, lithogeochemistry, and X-ray diffraction (XRD) clay analysis in order to assist in the identification of alteration halos (Orr and Robertshaw, 1989). The following year, in 1990, Uranerz conducted more follow-up programs consisting of lithogeochemistry (562samples) and XRD clay determinations (198 samples) from the diamond drill core obtained during prior drilling campaigns. The 1990 exploration program also included helicopter-borne EM and magnetic surveys and 4 100 km2 of air photo coverage over the property (Orr and Lacey, 1991). In 1998, Cameco acquired a 100% interest in Uranerz, as a result acquiring a 100% interest in the Maybelle River properties owned by Uranerz. In 1999 Cameco subsequently sold a 50% interest in the properties to Areva Resources Canada Inc. which resulted in AREVA becoming the operator of the Project.

1.4.6 Red Dragon

In late 2005, Red Dragon commissioned a helicopter borne electromagnetic and magnetometer Versatile Time Domain Electromagnetic (VTEM) survey covering 5,542 line kilometers. This survey is estimated to have penetrated depths of 400 m or more, and included the COGEMA claims and the Maybelle River Deposit which are enclosed by the Rea Uranium Project. The survey was flown to target bedrock conductors (graphitic horizons) and fault zones which may be associated with unconformity related U mineralization. The survey resulted in the identification of a number of basement related magnetic anomalies and EM conductors.

A total of 1,319 electromagnetic (EM) anomalies were identified within the Rea Project area from the airborne geophysical data and interpreted for EM responses similar to those of the Maybelle River Deposit. The fifteen highest priority target areas are dominantly sub-parallel structures surrounding the Maybelle River Shear, and these should be targeted for further exploration.

A geochemical soil sampling program was carried out in May of 2006; the survey returned 346 samples from GPS located sites; poor sampling medium and difficulty in locating good representative samples directed this program to be cut short. There were only 4 samples gathered that were around 1ppm U or above, the maximum value obtained was 3.3ppm U.

A total of 54.8 km of IP surveying and line slashing were completed within the Rea Permits during the 2006 geophysical program. A diamond drill program of 1,908m in 8 holes (2007) tested six airborne EM anomalies the anomalies drilled in this program extend over a distance of 35km and tested several conductors along and parallel to the North-northwest trending Maybelle River conductor that is known to host high grade U mineralization. None of the drill holes intersected graphitic units or graphitic faults and no significant U mineralization, the highest U vale obtained was in drill hole R130107, 54ppm U in the Fair Point Formation some 6.0 m above the unconformity.

2 2008 PROGRAM

2.1 Introduction and Objectives

Aurora Geosciences Ltd. of Yellowknife, Northwest Territories carried out a fixed loop time domain electromagnetic (FLTEM) survey on the Rea Project between June 16th and July 10th, 2008. Aurora Geosciences Ltd. logistics report which summarizes the logistics of the survey and the production is attached in Appendix A, Part C.

A total of 41.7 line kilometres of line cutting was performed on three grids: ***05, 12*** and ***15.*** The grid lines were surveyed with two opposing transmitter loops located at the ends of the survey lines resulting in 46 line kilometres covered with the FLTEM survey. The distribution of 2008 work is shown on **Figure 4**.

The main objective of the 2008 geophysical program was to locate and characterize interpreted basement conductors outlined in 2005 airborne EM survey (VTEM).

2.2 Distribution of Work

The distribution of work for each mineral permit is presented in **Table 4** below.

Table 3: Distribution of Work

Mineral permit	*Grid*	*Line Cutting/Refurbishing*	*FLTEM survey*
9304020444	*05*	*12.7*	*14.0*
9304020437	*12*	*22.0*	*24.4*
9304020438	*15*	*7.0*	*7.6*
	TOTAL (km)	***41.7***	***46.0***

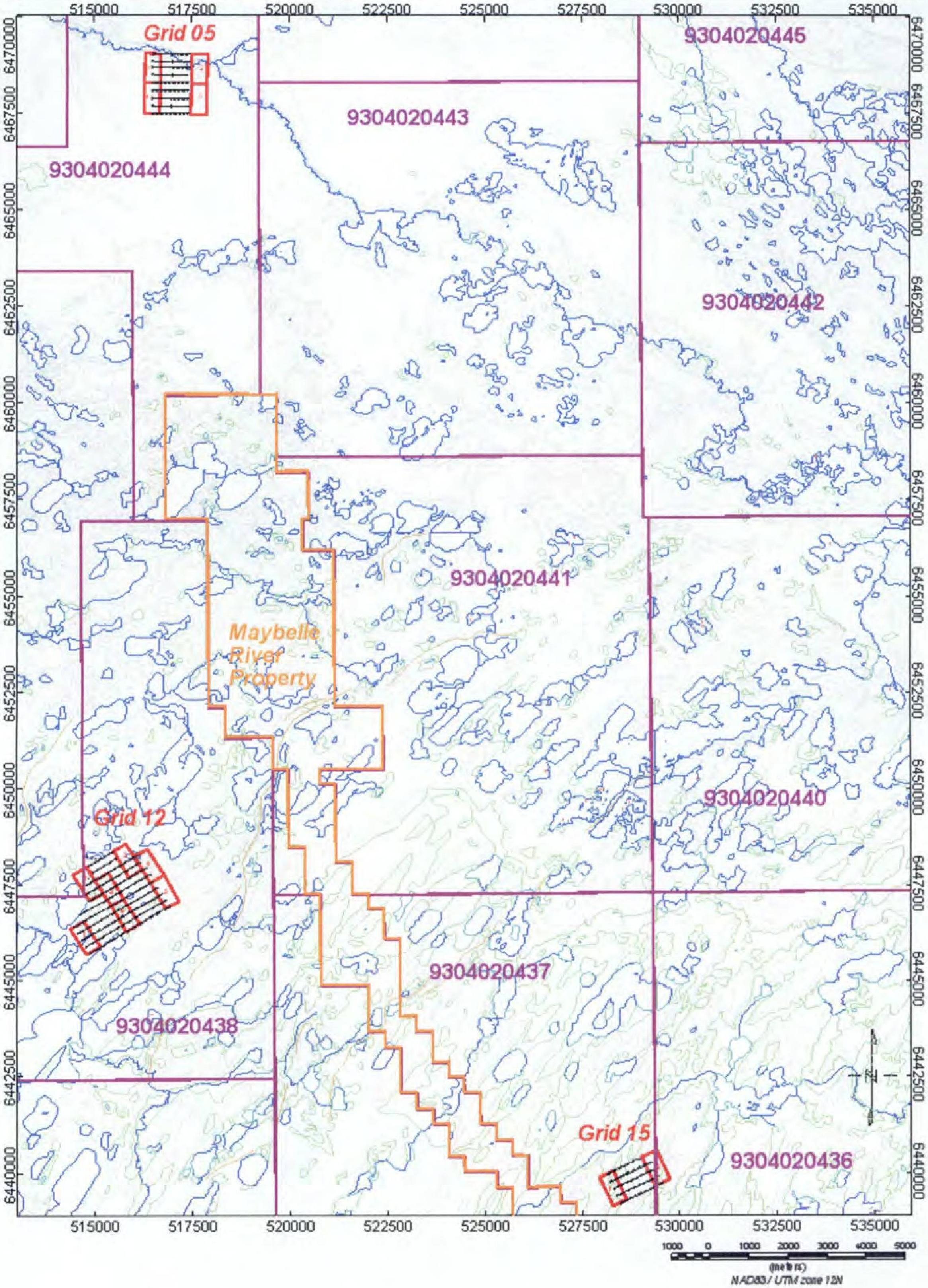


FIGURE 4: 2008 DISTRIBUTION OF WORK VERSUS DISPOSITION

2.3 Fixed Loop Time Domain Electromagnetic Survey

2.3.1 Basic Principles and Methodology

Any time-varying transmitted (primary) field induces current flow in the conductive regions of the ground below and around the transmitter loop. This current flow produces a measurable EM field, the secondary field, which has an inherent "inertia" that resists the change in primary field direction. This "inertial" effect is called self-inductance; it limits the rate at which current can change and is only dependent on the shape and size of a conductive path.

It takes a certain amount of time for the transmitted current flow to be redirected (reversed) and re-established to full amplitude after the rate of change of the primary field reverses direction. This measurable reversal time is characteristic for a given conductor. In general, for a good conductor this time is greater than that of a poor conductor. This is because in a good conductor the terminal current level is greater, whereas its rate of change is limited by the inductance of the current path. The time-varying causes an electromotive force (emf) in the sensor proportional to the time derivative of the current. This emf decays with time – it vanishes when the reversal is complete – and the characteristic time of the emf decay as measured by the sensor is referred to as the decay time of the conductor.

Time-domain EM systems employ a primary EM field which is discontinuous in time so that the secondary field is measured after the primary field terminates. A rapid termination of the primary field or an EM "transient" will cause induction in the conductive earth similar to a more regularly varying EM field. The advantage of this technique is that the secondary field is measured while the primary field is off. In a transient EM system, the amplitude of the secondary EM field decays with time after the primary field shuts off. The form and rate of decay of this secondary transient EM field can be used to deduce characteristics of the form, size and conductivity of the conductive body in the earth.

Transient EM systems can be operated in a wide variety of configurations of transmitter and receiver, one of the most popular modes is the **"Fixed Loop"** where a larger transmitter loop is laid out on the surface and measurements are made along profile lines outside or inside the Tx loop. In the large fixed-loop mode, measurements are normally made of both the vertical and the horizontal components of the secondary response.

2.3.2 2008 Fixed loop TEM survey, Instrumentation and Specifications

The 2008 Fixed Loop TEM survey was carried out over three grids: 05, 12 and 15. The *05 Grid* lines were oriented EW, this grid consisted of 9 lines of 1.2 km length (**Figure 5**). The *12 Grid* lines were oriented N60 degrees; the grid was made up of 11 lines of variable length from 0.8 km up to 2.4km (**Figure 6**). The *15 Grid* consisted of 5 lines of 1.2 km length and azimuth N65 degrees (**Figure 7**)

The loop size was **400m x 800m** and the profiling station spacing **50m**, the stations were located from 50m up to 1400m away from loop front.

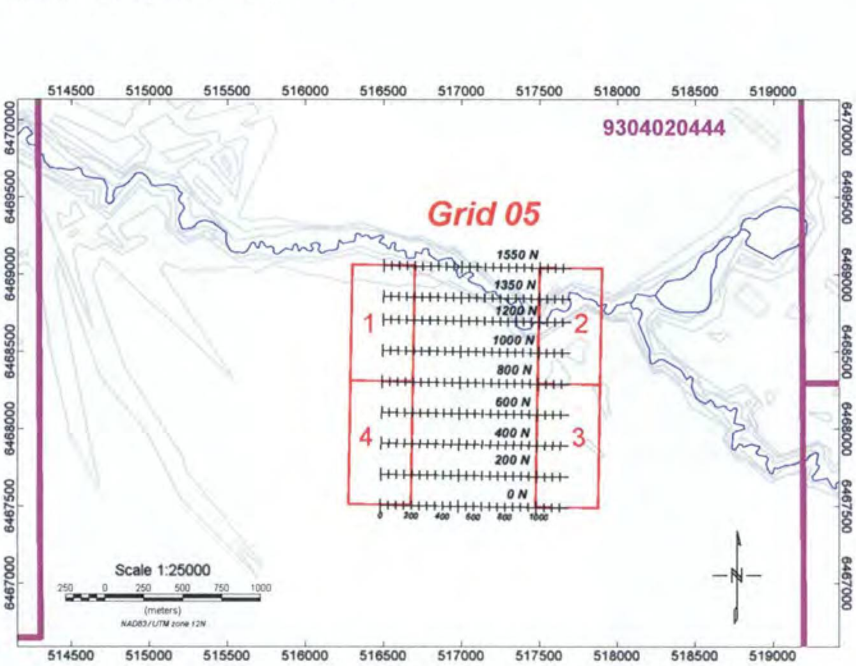


FIGURE 5: 2008 FLTEM SURVEY, GRID 05

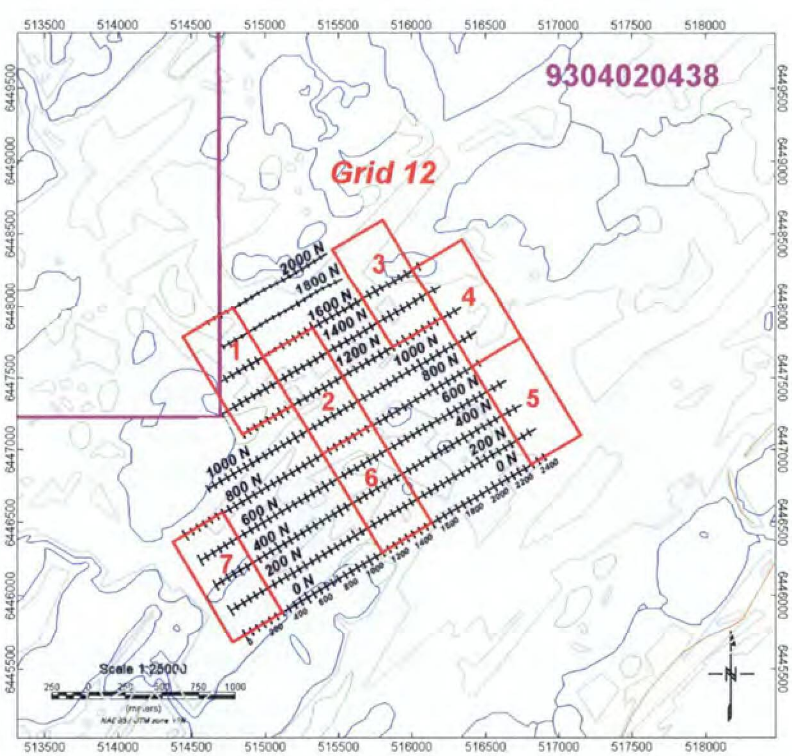


FIGURE 6: 2008 FLTEM SURVEY, GRID 12

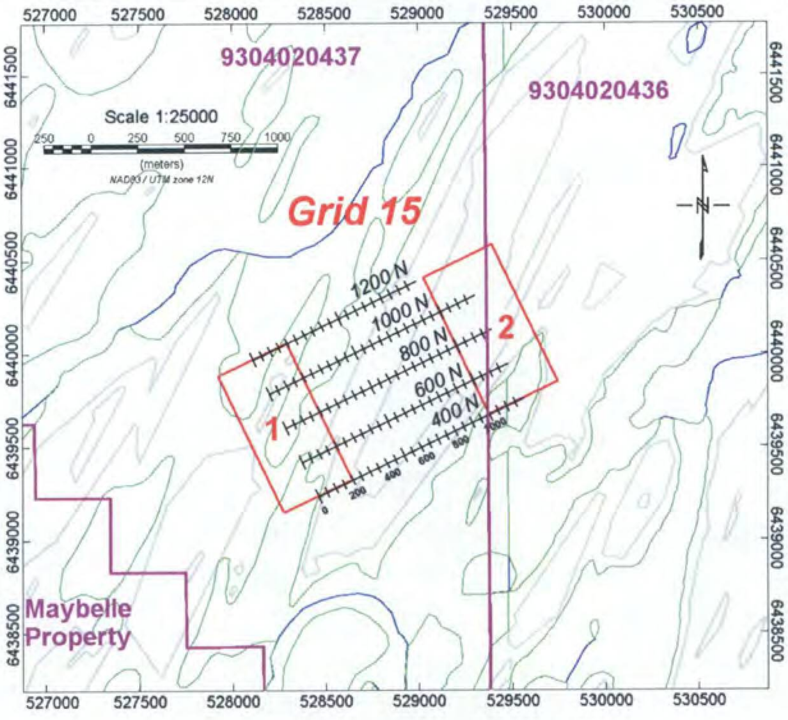


FIGURE 7: **2008 FLTEM SURVEY, GRID 15**

The Fixed Loop TEM survey was carried out using the **Geonics PROTEM** system. The system comprises a Geonics EM-57/67 transmitter and a Geonics PROTEM digital 20-channel receiver with an air-core receiver coil. The transmitter signal is a bi-polar square wave with 50% duty cycle (**Figure 8**); the base frequency was set at 30Hz. Three components (*Hz, Hx and Hy*) were recorded; the transient responses of each component were sampled at 20 logarithmically spaced time channels that span an interval from 0.0881 milliseconds to 6.9 milliseconds.

All the TEM data were reduced to normalized units of nano Volts per Ampere-meter^2 (nV/Am^2), taking in account the effective area of the receiver coil and the size of the transmitter loop and the transmitter current.

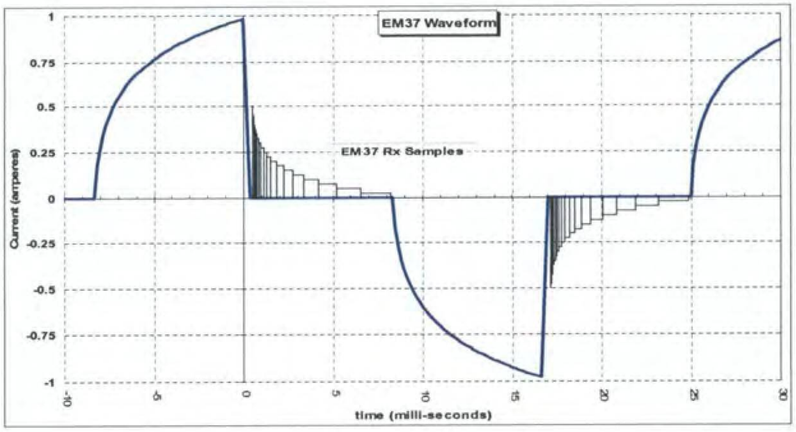


FIGURE 8: TEM WAVEFORME

The TEM waveform consists of 50% duty cycle square wave with 'on' and 'off' times. The turnoff is a controlled ramp, with the EM-37 channels sampled in the 'off' time.

EM time constants are calculated by relating the late time decay of the response to measurements from simple physical models such as the finite thin dyke, finite thick dyke, infinite thin dyke, finite thin horizontal layer, and finite thick horizontal layer and block conductors. The response parameter τ (Tau) obtained from the filtered data is then used in simple approximation formulas (Lamontagne, 1975) for interpreting target conductance. The most accurate estimation of Tau is obtained from the latest time channels, usually from channels 14 to 18.

2.3.3 Forward Modelling

The 2008 Fixed Loop TEM data were interpreted using **MAXWELL 5** software form Electro-Magnetic Imaging Technology (EMIT) in Australia.

MAXWELL 5 provides tools for the visualisation, processing and modelling of electromagnetic geophysical data including forward modelling of conductive plate-like targets together with conductive background responses.

The interpretation of the fixed loop data was accomplished by fitting simple plate models to the late time responses of the X and Z components of the receiver data. For each profile, opposing loops were simultaneously fitted to the data.

The layered (overburden) responses for each loop were simulated with a large single horizontal plate normally centered directly under the transmitter loop. This plate may be shifted to one side in order to adjust for large horizontal variations in the background response.

Another relevant feature supplied in MAXWELL is the option to account for the possible presence of conductors under or behind the transmitter loop which may affect the profiles in front of the transmitter loop.

A common characteristic of opposing fixed loop EM profiles are apparent differences in conductor location, seen as peak offsets in the X component. Generally, a single thin plate model does not fit properly both opposing transmitter loop profiles, better results can be achieved by using either a thick plate model or multiple plate models.

2.4 Survey Results

The following figures show the results of forward modelling for every survey line of each grid. The model responses were fitted to the late time Geonics channels 15-20. The used model parameters are listed with each interpretation model in grid coordinates. Dip measurements are defined as follows: a vertical dip is 90 degrees, a dip of > 90 is a dip to grid NE or east and a dip of < 90 is a dip to grid SW or west.

2.4.1 Grid 05

The length of the survey lines was not enough to completely cover the EM anomalies and recover their entire shape. The models that fit better the data acquired on ***Grid 05*** comprise of two plates: **05-A** and **05-B**. Plate 05-A is moderately dipping to the E and plate 05-B is shallow dipping to the W; these plates together could be interpreted as approximate boundaries of a more conductive lithological unit.

Figures 9 to 17 show the results of modeling for each survey line, the model parameters are listed with each model in grid coordinates.

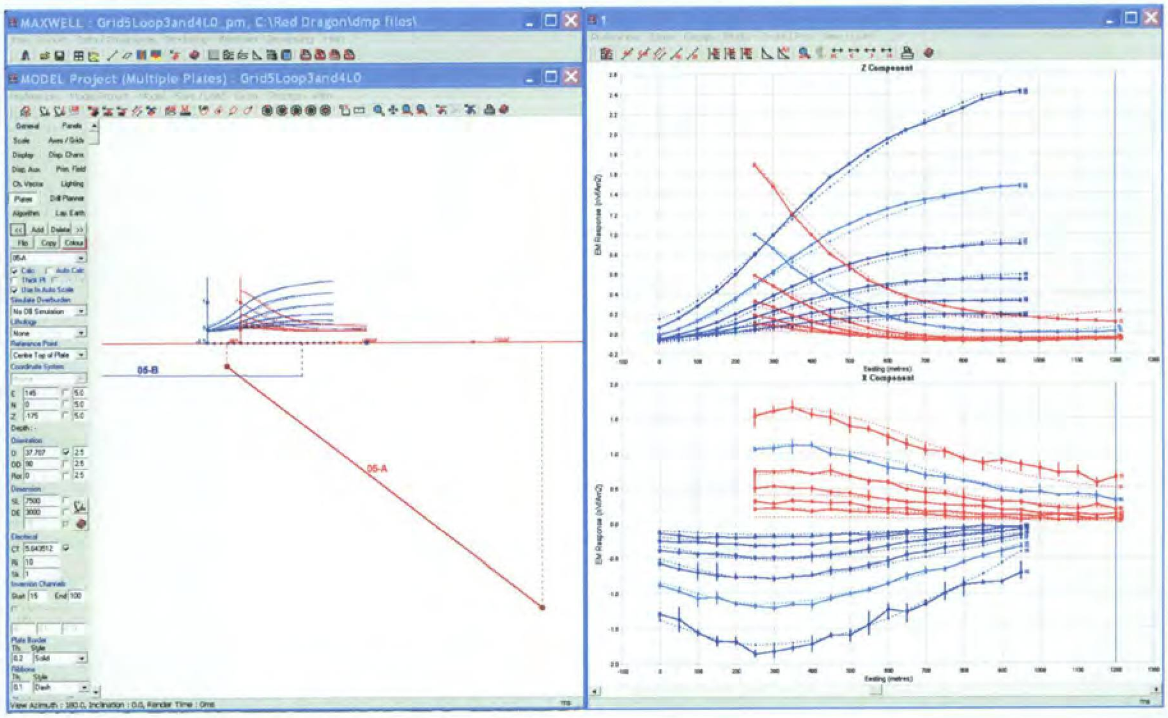


FIGURE 9: GRID 05 – FIXED LOOP INTERPRETATION LINE 00N

Plate Name	OB-LP3	OB-LP4	Conductor 05-A	Conductor 05-B
x	1200	0	145	715
y	400	400	0	0
Depth	-50	-50	-175	-250
Dip	0	0	37.7	180
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.2	0.76	5.64	2.1

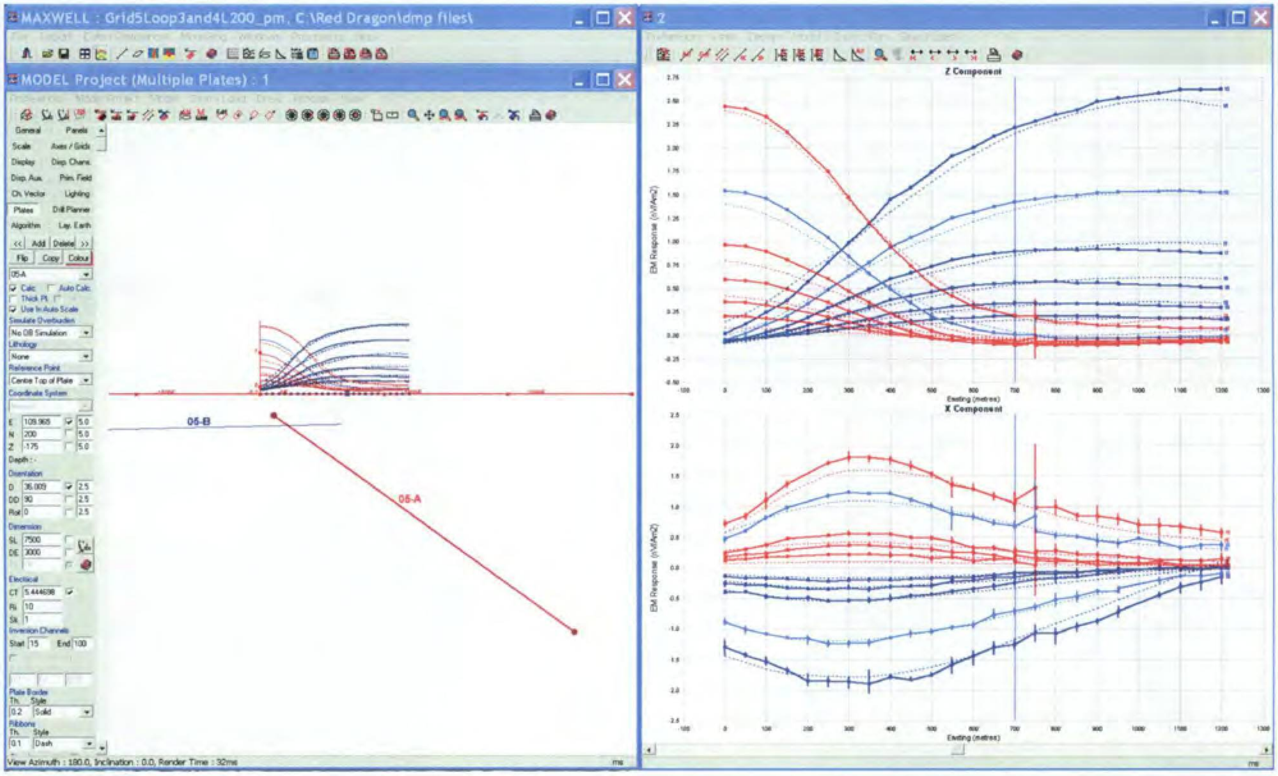


FIGURE 10: GRID 05 – FIXED LOOP INTERPRETATION LINE 200N

Plate Name	OB-LP3	OB-LP4	Conductor 05-A	Conductor 05-B
x	1200	0	110	650
y	400	400	200	200
Depth	-50	-50	-175	-250
Dip	0	0	36	178
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.2	0.76	5.44	0.75

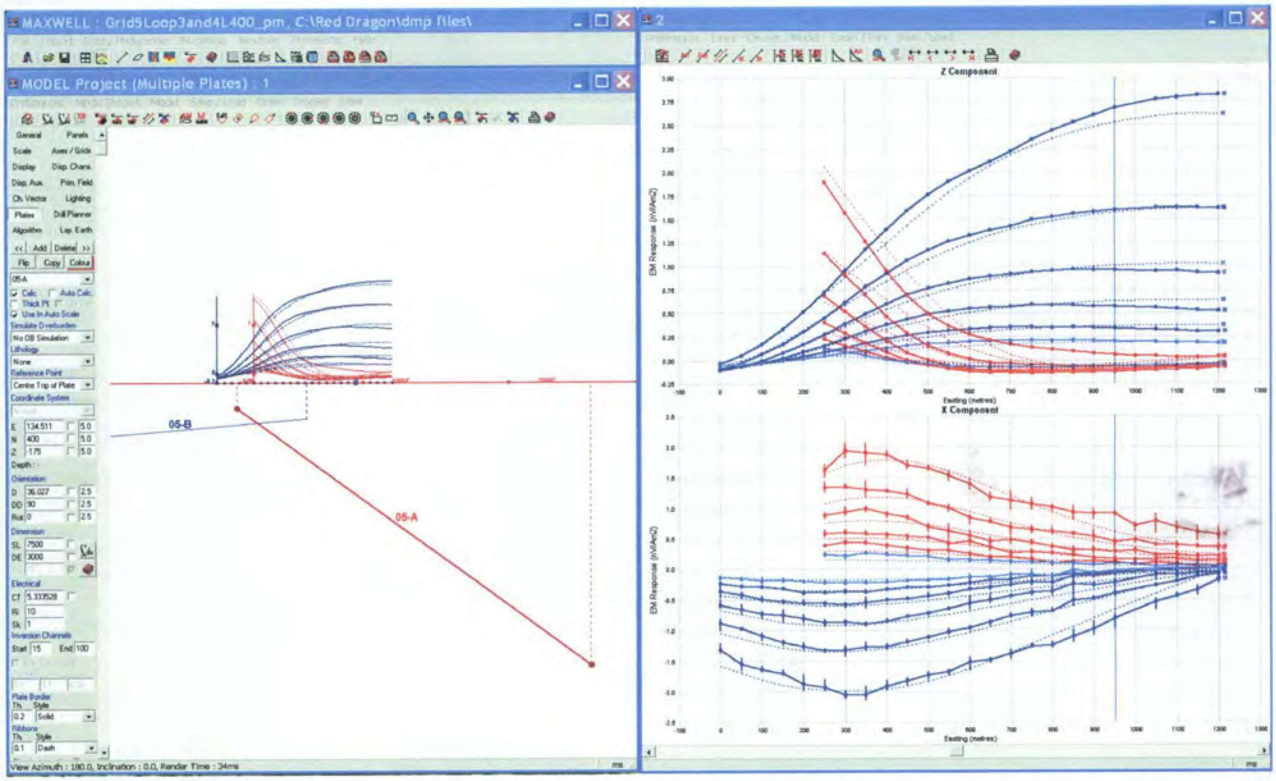


FIGURE 11: GRID 05 – FIXED LOOP INTERPRETATION LINE 400N

Plate Name	OB-LP3	OB-LP4	Conductor 05-A	Conductor 05-B
x	1200	0	134	612
y	400	400	400	400
Depth	-50	-50	-175	-250
Dip	0	0	36	175
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.62	0.53	5.33	4.0

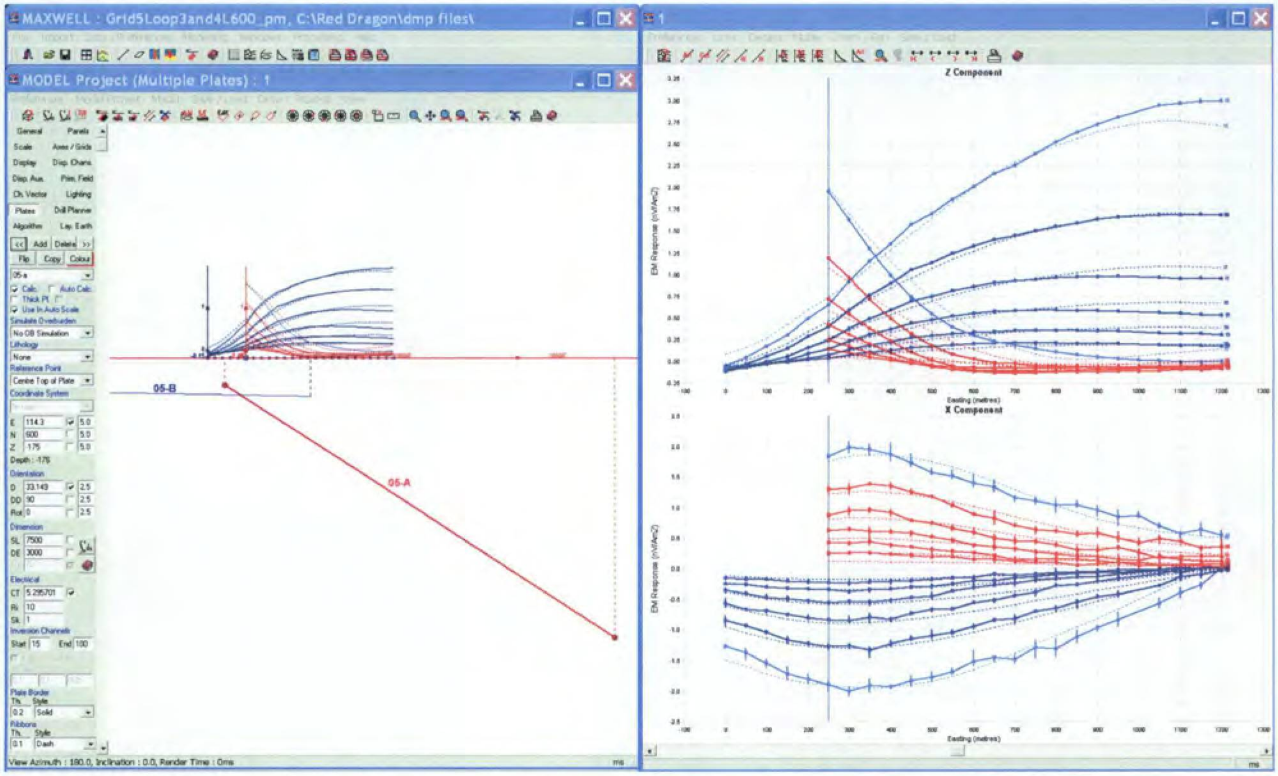


FIGURE 12: GRID 05 – FIXED LOOP INTERPRETATION LINE 600N

Plate Name	OB-LP3	OB-LP4	Conductor 05-A	Conductor 05-B
x	1200	0	114	669
y	400	400	600	600
Depth	-50	-50	-175	-250
Dip	0	0	33	180
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.22	0.86	5.30	2.75

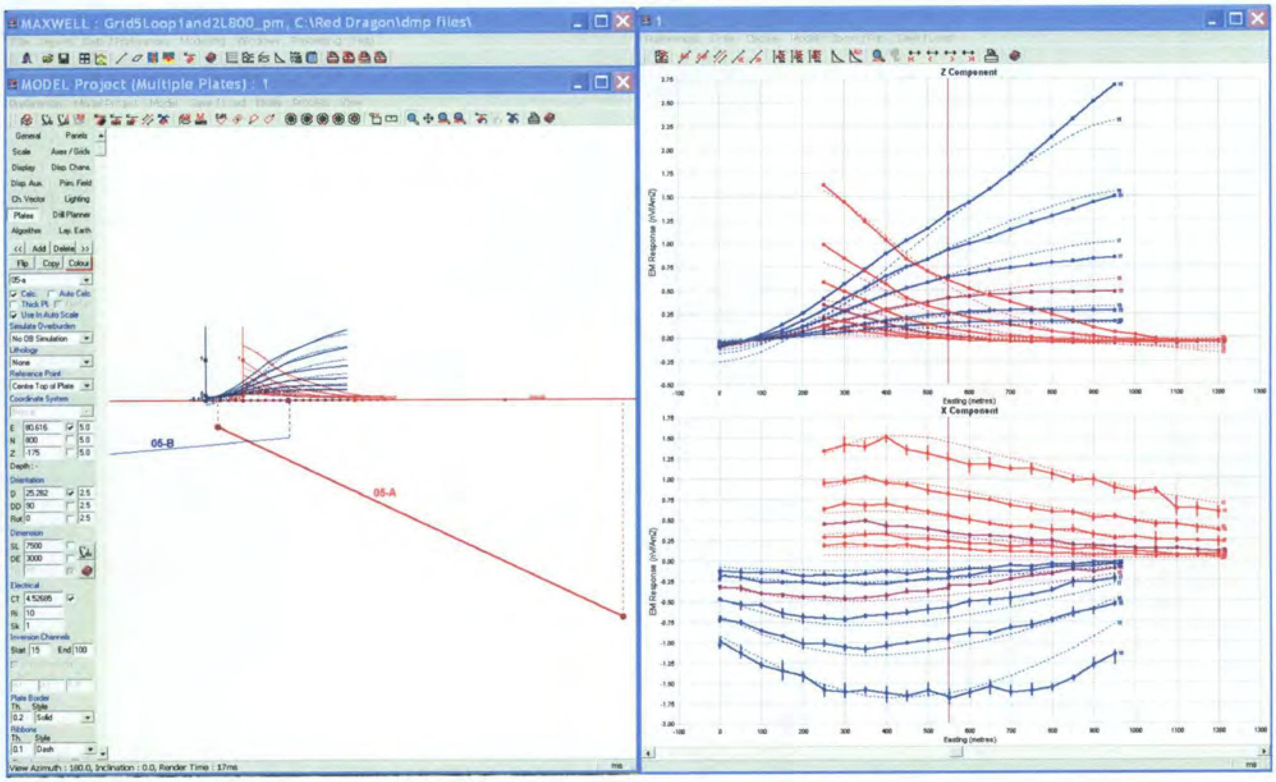


FIGURE 13: GRID 05 – FIXED LOOP INTERPRETATION LINE 800N

Plate Name	OB-LP1	OB-LP2	Conductor 05-A	Conductor 05-B
x	0	1200	81	560
y	1200	1200	800	800
Depth	-50	-50	-175	-250
Dip	0	0	25	175
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.33	0.67	4.5	2.65

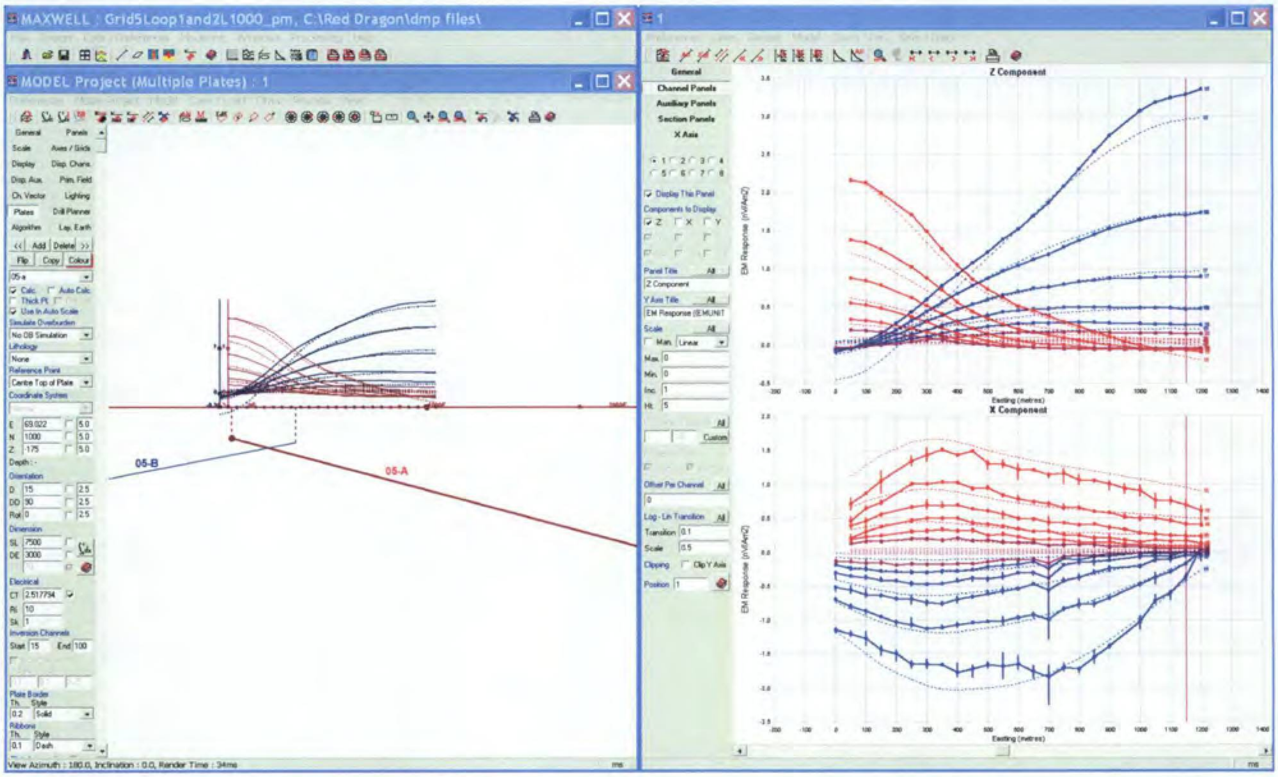


FIGURE 14: GRID 05 – FIXED LOOP INTERPRETATION LINE 1000N

Plate Name	OB-LP1	OB-LP2	Conductor 05-A	Conductor 05-B
x	0	1200	69	423
y	1200	1200	1000	1000
Depth	-50	-50	-175	-200
Dip	0	0	15	175
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	2050
Conductivity-Thickness	1.35	0.67	2.52	2.65

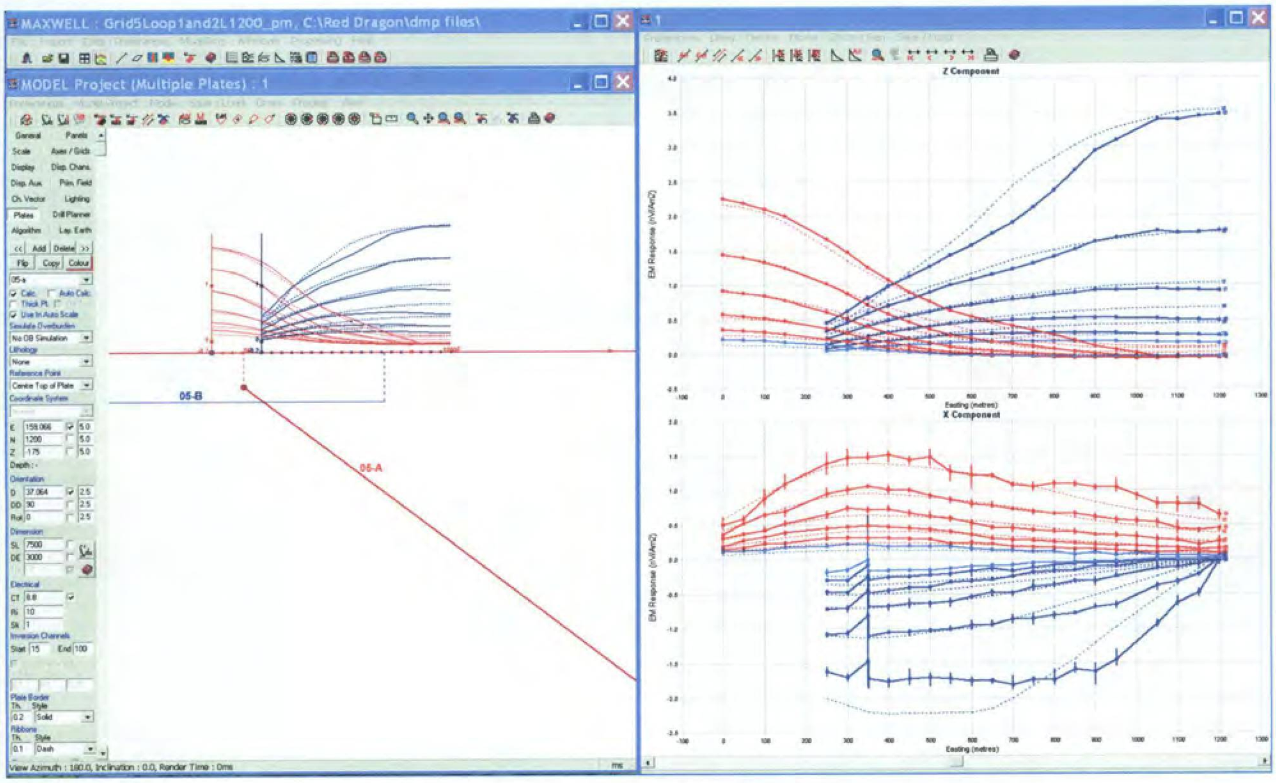


FIGURE 15: GRID 05 – FIXED LOOP INTERPRETATION LINE 1200N

Plate Name	OB-LP1	OB-LP2	Conductor 05-A	Conductor 05-B
x	0	1200	159	865
y	1200	1200	1200	1200
Depth	-50	-50	-175	-200
Dip	0	0	37	180
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.16	1.48	8.8	1.88

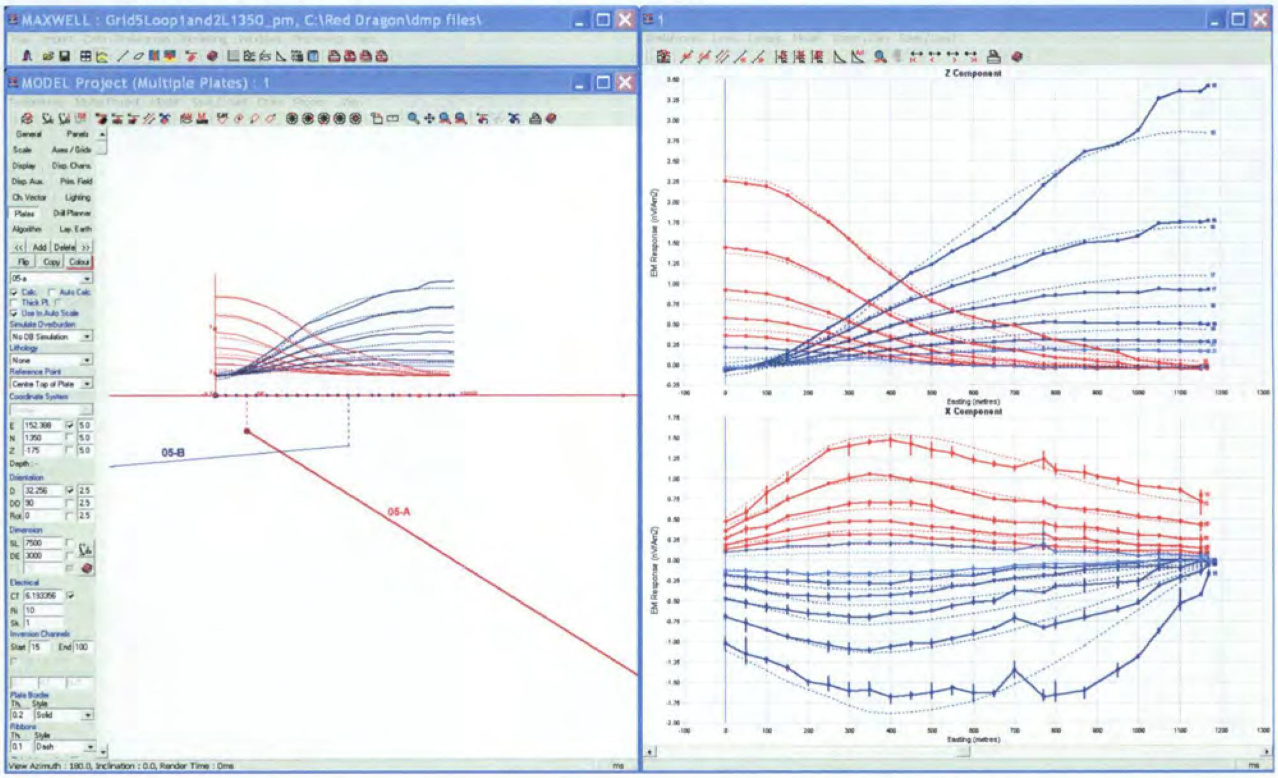


FIGURE 16: GRID 05 – FIXED LOOP INTERPRETATION LINE 1350N

Plate Name	OB-LP1	OB-LP2	Conductor 05-A	Conductor 05-B
x	0	1200	152	653
y	1200	1200	1350	1350
Depth	-50	-50	-175	-250
Dip	0	0	32	175
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	3000
Conductivity-Thickness	1.2	1.20	6.2	1.96

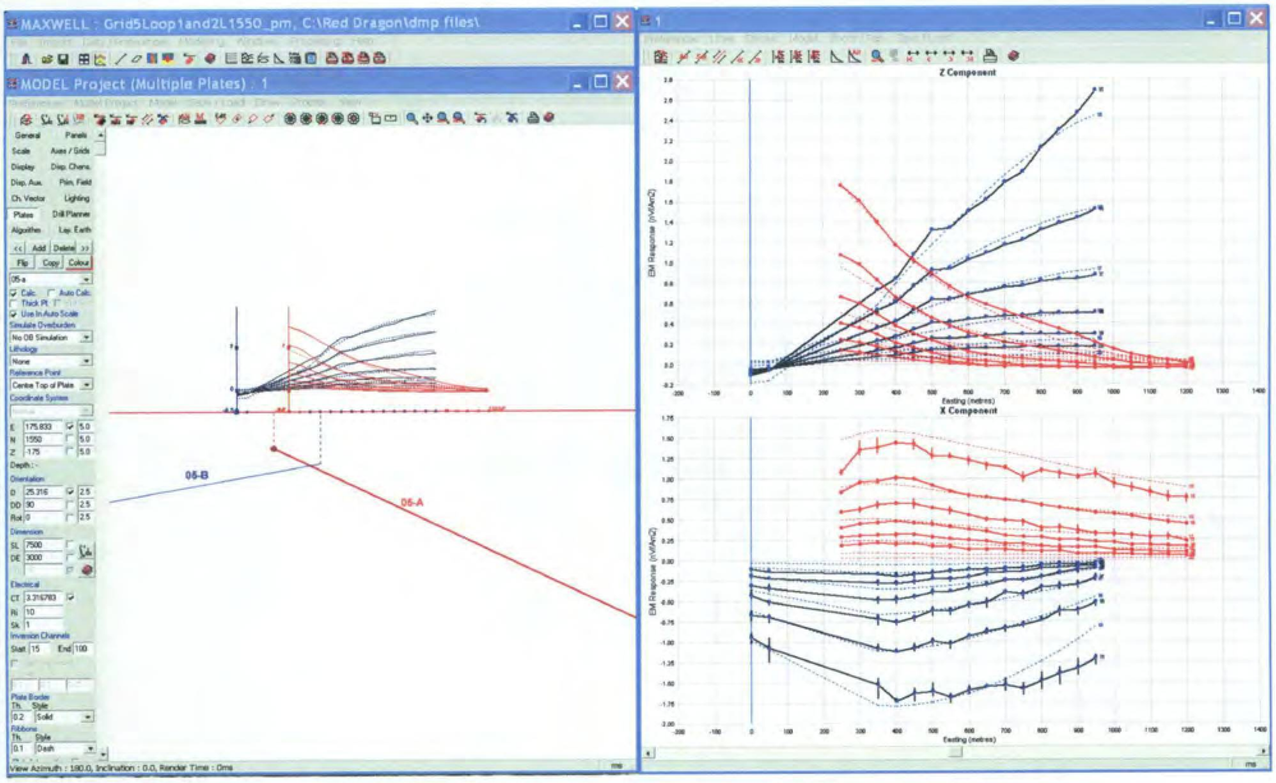


FIGURE 17: GRID 05 – FIXED LOOP INTERPRETATION LINE 1550N

Plate Name	OB-LP1	OB-LP2	Conductor 05-A	Conductor 05-B
x	0	1200	176	400
y	1200	1200	1550	1550
Depth	-50	-50	-175	-250
Dip	0	0	25	170
Dip Direction	270	270	90	90
Plunge	0	0	0	0
Length	8000	8000	7500	7500
Depth Extent	6000	6000	3000	2050
Conductivity-Thickness	1.37	0.79	3.3	3.0

2.4.2 Grid 12

On ***Grid 12,*** the length of the survey lines varies from 1km to 2.4km (Figure 6); as a result six lines were surveyed with two loops and five lines with three loops.

From the five lines surveyed with three loops, only one line (L200N) has data along its entire length; the remaining four lines have useful data from two loops, which is roughly a half of their length, due to very noisy or missing readings.

Four conductive plates (*A, B, C* and *D*) were interpreted on Grid 12.

Considering the shape of the EM anomalies and the interpreted conductivity thickness, the results obtained on this grid are the most prospective from the 2008 Fixed Loop Survey.

Figures 18 to 28 show the results of modeling for each survey line, the model parameters are listed with each model in grid coordinates.

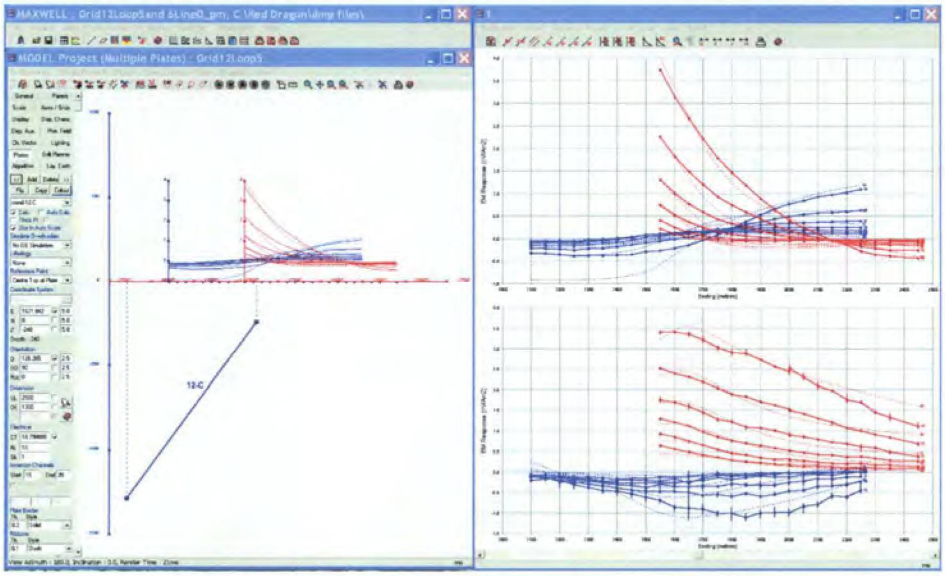


FIGURE 18: GRID 12 – FIXED LOOP INTERPRETATION LINE 00N

Plate Name	OB-LP5	OB-LP6	Conductor 12-C
x	2500	1300	1622
y	400	400	0
Depth	-50	-50	-240
Dip	0	0	126
Dip Direction	0	0	90
Plunge	0	0	0
Length	4000	4000	2500
Depth Extent	8000	8000	1300
Conductivity-Thickness	0.11	2.16	18.8

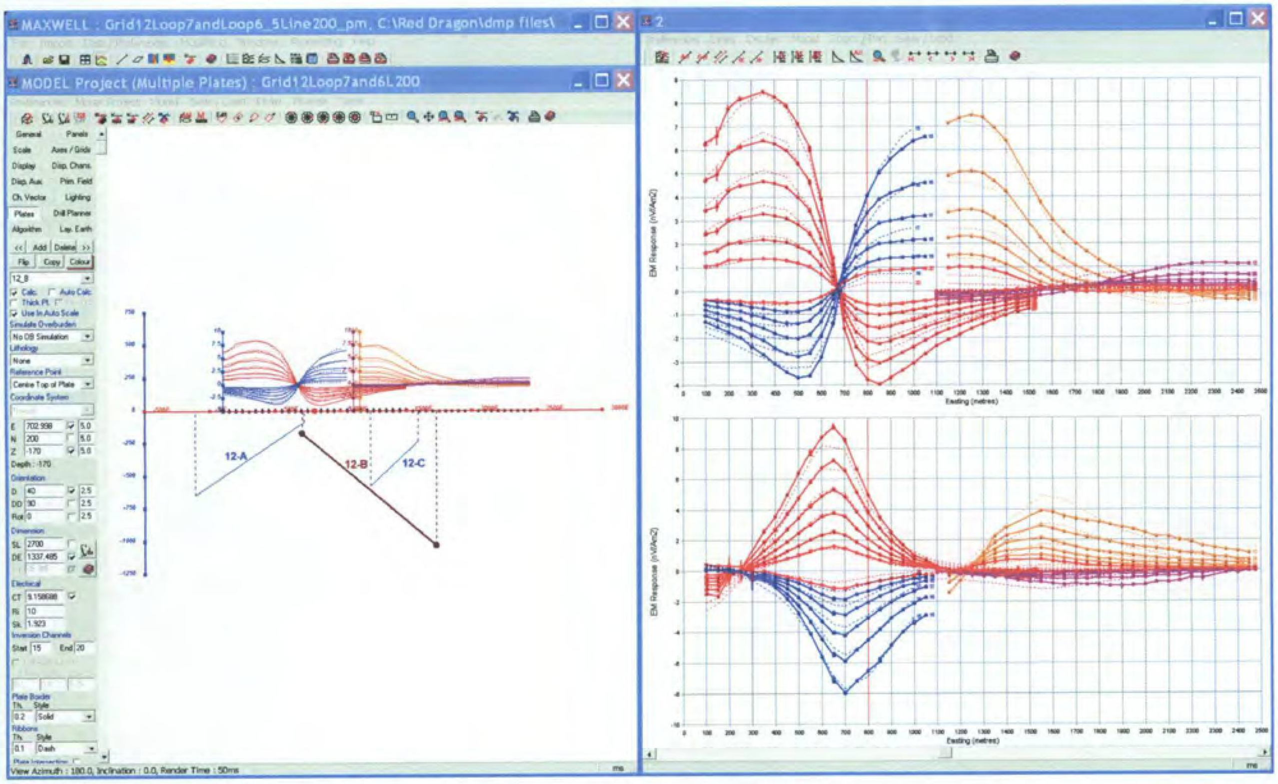


FIGURE 19: GRID 12 – FIXED LOOP INTERPRETATION LINE 200N

Plate Name	OB-LP5	OB-LP6	OB-LP7	Conductor 12-A	Conductor 12-B	Conductor 12-C
x	2500	1300	100	718	703	1590
y	400	400	400	200	200	200
Depth	-50	-50	-50	-90	-170	-238
Dip	0	0	0	146	40	136
Dip Direction	0	0	270	90	90	90
Plunge	0	0	0	0	0	0
Length	8000	8000	8000	2300	2700	2700
Depth Extent	4000	4000	4000	1100	1340	500
Conductivity-Thickness	0.93	0.03	1.89	21.25	9.16	20

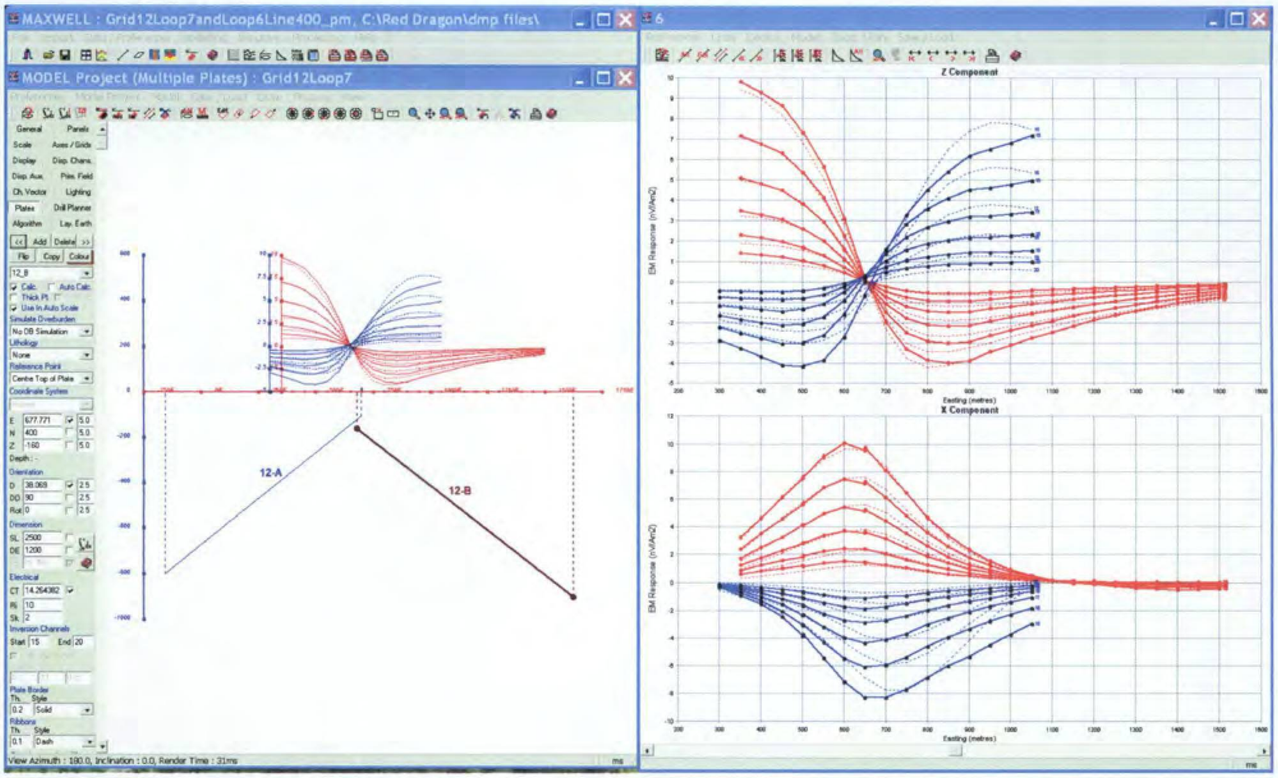


FIGURE 20: GRID 12 – FIXED LOOP INTERPRETATION LINE 400N

Plate Name	OB-LP6	OB-LP7	Conductor 12-A	Conductor 12-B
x	1300	100	697	678
y	400	400	400	400
Depth	-50	-50	-106	-160
Dip	0	0	140	38
Dip Direction	0	270	90	90
Plunge	0	0	0	0
Length	4000	4000	2500	2500
Depth Extent	8000	8000	1100	1200
Conductivity-Thickness	0.71	0.01	14.97	14.26

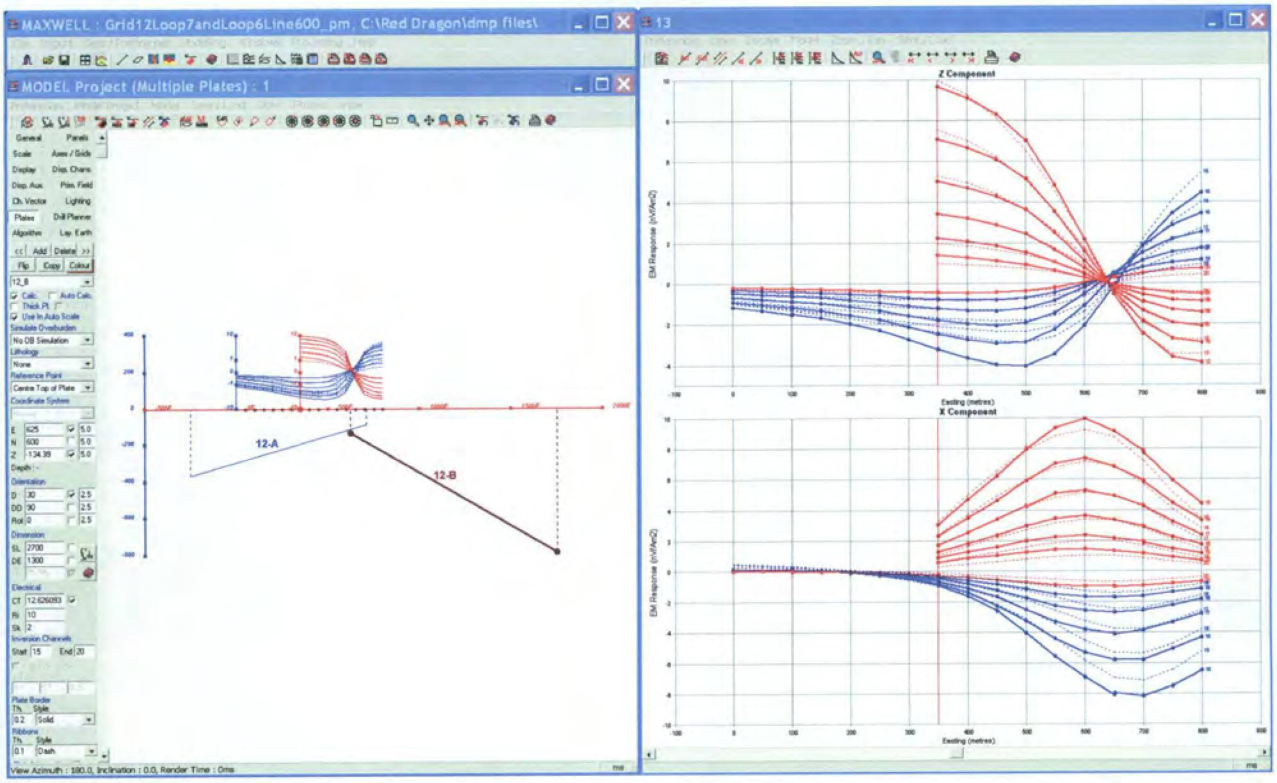


FIGURE 21: GRID 12 – FIXED LOOP INTERPRETATION LINE 600N

Plate Name	OB-LP6	OB-LP7	Conductor 12-A	Conductor 12-B
x	1300	100	710	625
y	400	400	600	600
Depth	-50	-50	-90	-134
Dip	0	0	164	30
Dip Direction	0	270	90	90
Plunge	0	0	0	0
Length	4000	4000	2300	2700
Depth Extent	8000	8000	1000	1300
Conductivity-Thickness	0.01	1.23	16.14	12.63

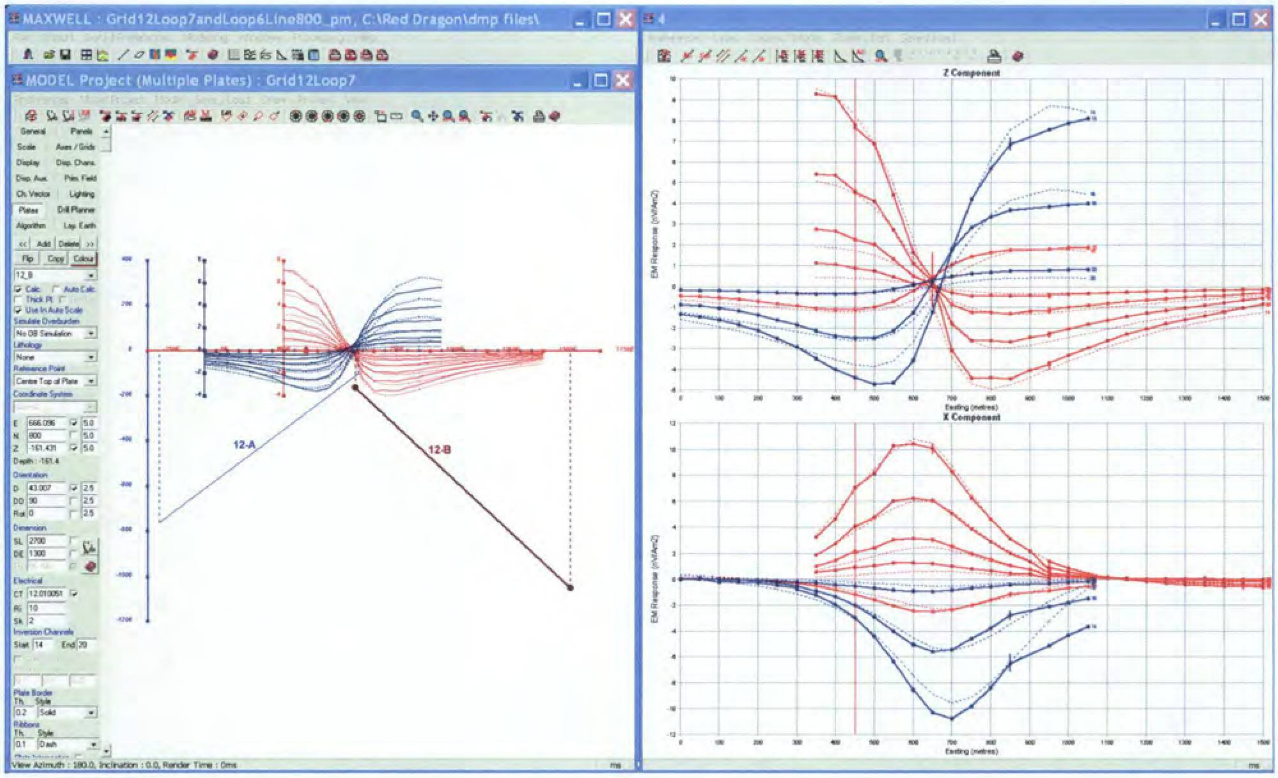


FIGURE 22: GRID 12 – FIXED LOOP INTERPRETATION LINE 800N

Plate Name	OB-LP6	OB-LP7	Conductor 12-A	Conductor 12-B
x	1300	100	681	666
y	400	400	800	800
Depth	-50	-50	-102	-161
Dip	0	0	143	43
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2500	2700
Depth Extent	8000	8000	1100	1300
Conductivity-Thickness	0.7	0.01	11.27	12.01

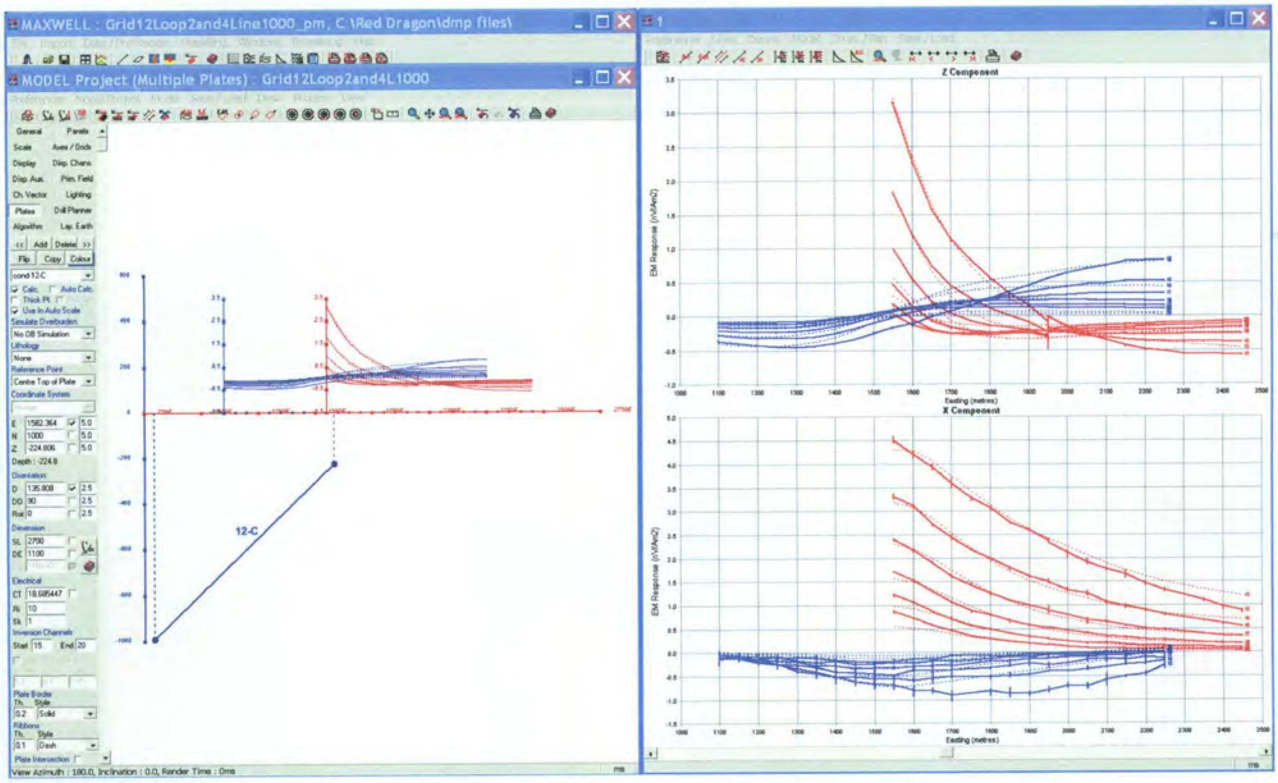


FIGURE 23: GRID 12 – FIXED LOOP INTERPRETATION LINE 1000N

Plate Name	OB-LP2	OB-LP4	Conductor 12-C
x	1300	2500	1582
y	1200	1200	1000
Depth	-50	-50	-225
Dip	0	0	136
Dip Direction	0	0	90
Plunge	0	0	0
Length	4000	4000	2700
Depth Extent	8000	8000	1100
Conductivity-Thickness	1.87	0.09	18.68

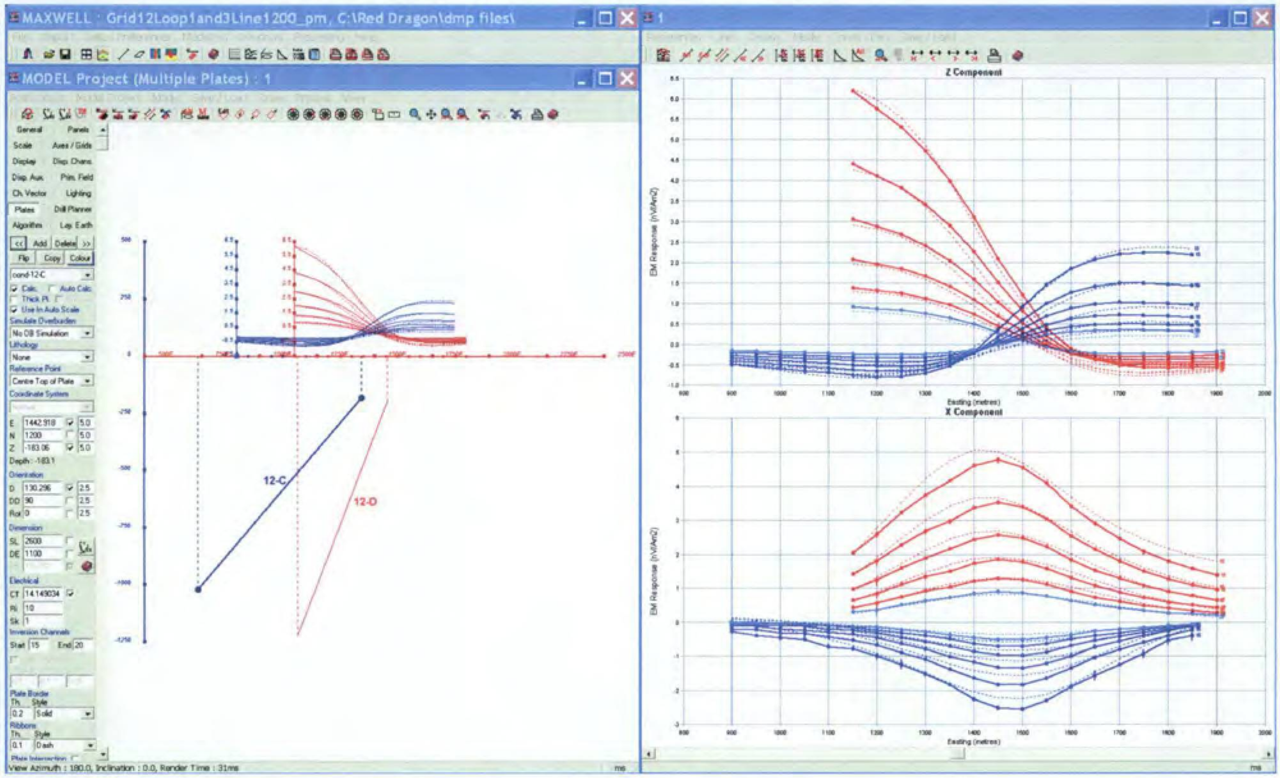


FIGURE 24: GRID 12 – FIXED LOOP INTERPRETATION LINE 1200N

Plate Name	OB-LP1	OB-LP3	Conductor 12-C	Conductor 12-D
x	900	2100	1443	1556
y	1600	1600	1200	1200
Depth	-50	-50	-183	-196
Dip	0	0	130	110
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2600	2500
Depth Extent	8000	8000	1100	1100
Conductivity-Thickness	1.73	0.9	14.15	21.78

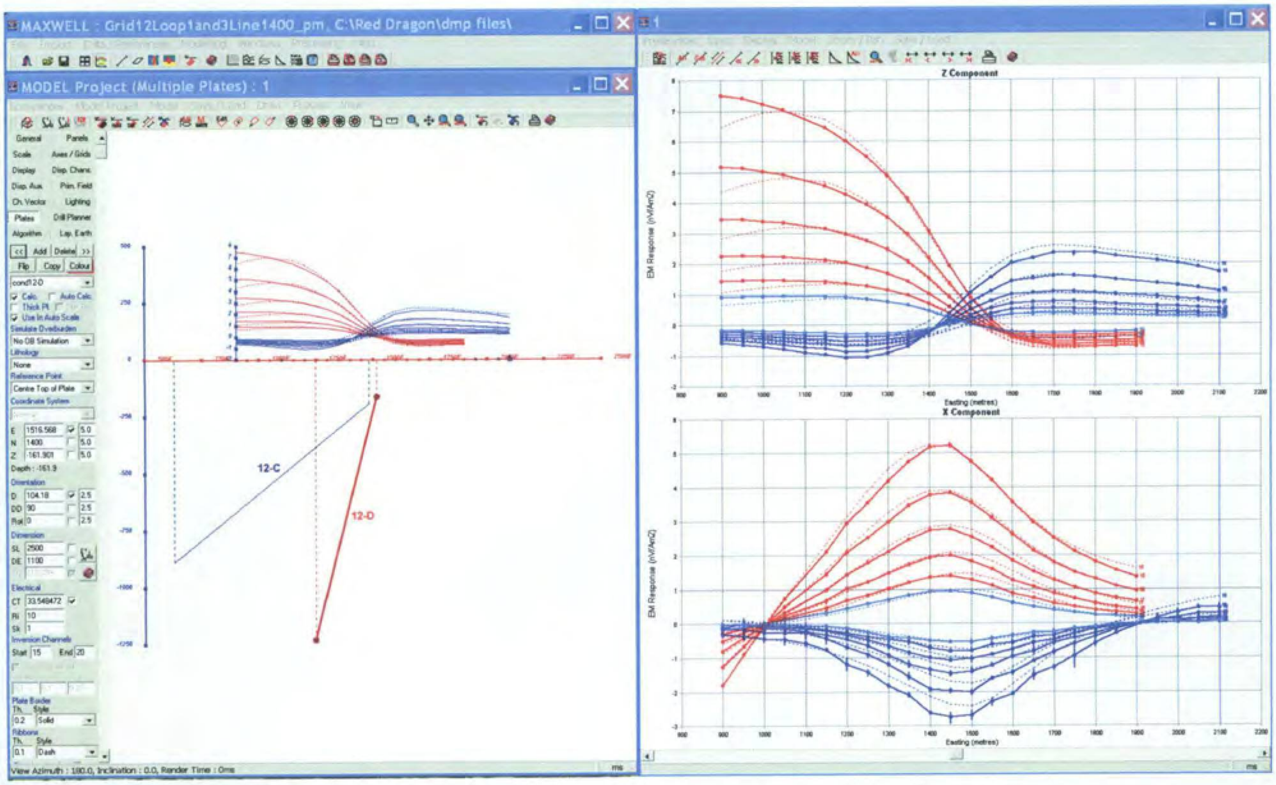


FIGURE 25: GRID 12 – FIXED LOOP INTERPRETATION LINE 1400N

Plate Name	OB-LP1	OB-LP3	Conductor 12-C	Conductor 12-D
x	900	2100	1483	1517
y	1600	1600	1400	1400
Depth	-50	-50	-194	-162
Dip	0	0	141	104
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2600	2500
Depth Extent	8000	8000	1100	1100
Conductivity-Thickness	1.54	1.08	12.65	33.55

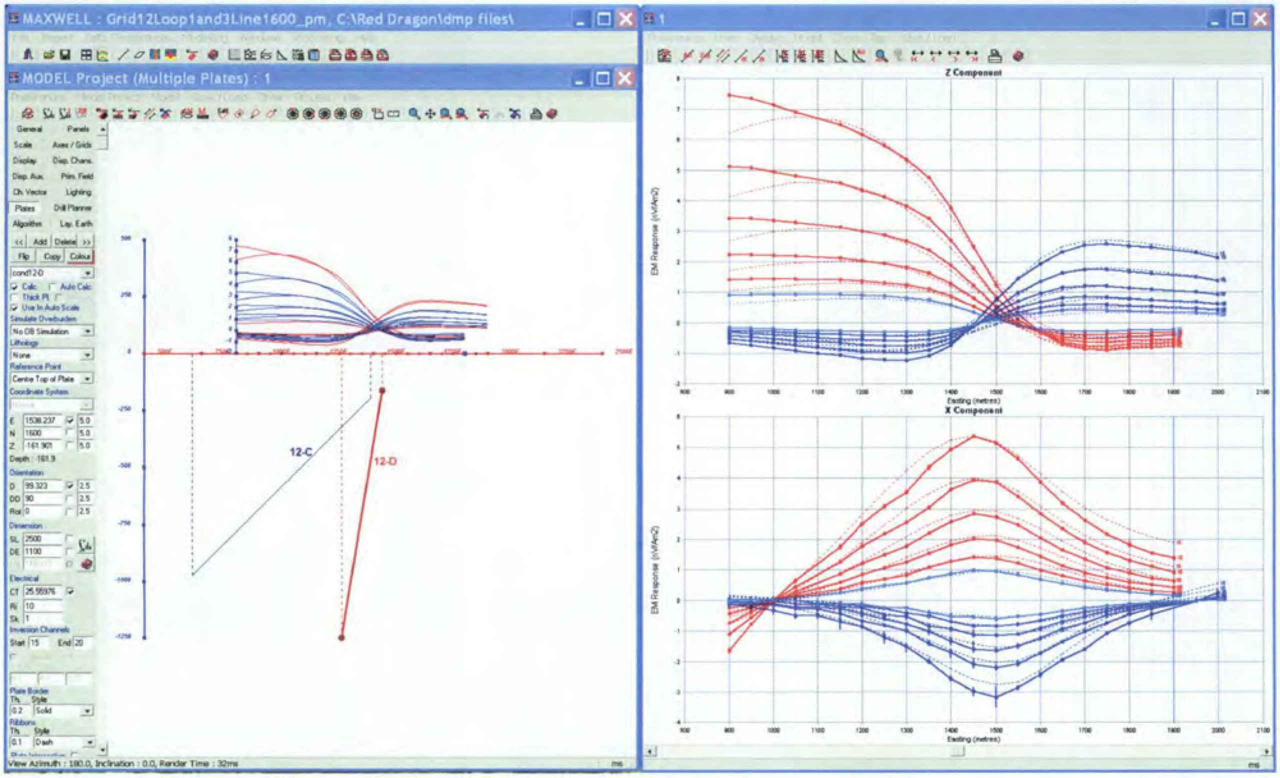


FIGURE 26: GRID 12 – FIXED LOOP INTERPRETATION LINE 1600N

Plate Name	OB-LP1	OB-LP3	Conductor 12-C	Conductor 12-D
x	900	2100	1488	1538
y	1600	1600	1600	1600
Depth	-50	-50	-194	-162
Dip	0	0	135	99
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2500	2500
Depth Extent	8000	8000	1100	1100
Conductivity-Thickness	1.70	0.9	12.90	25.56

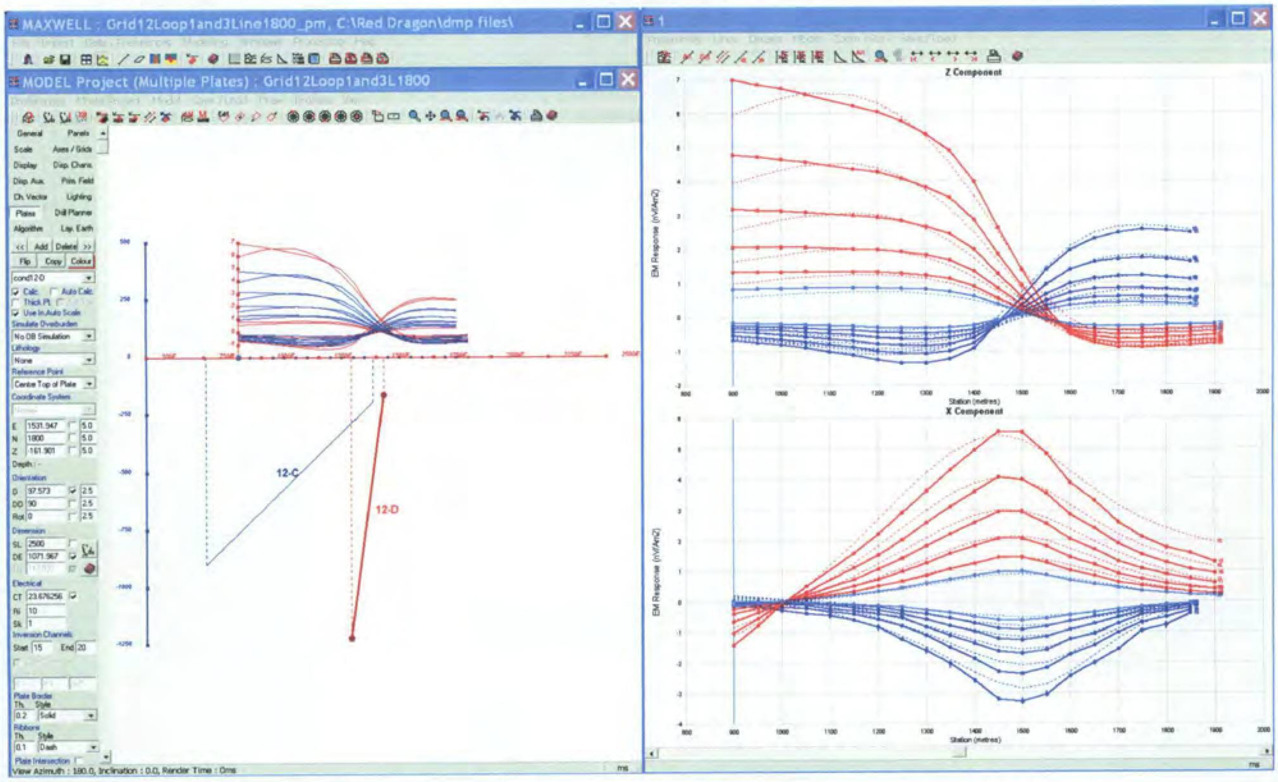


FIGURE 27: GRID 12 – FIXED LOOP INTERPRETATION LINE 1800N

Plate Name	OB-LP1	OB-LP3	Conductor 12-C	Conductor 12-D
x	900	2100	1486	1532
y	1600	1600	1800	1800
Depth	-50	-50	-194	-162
Dip	0	0	136	98
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2500	2500
Depth Extent	8000	8000	1015	1072
Conductivity-Thickness	1.72	0.82	13.24	23.68

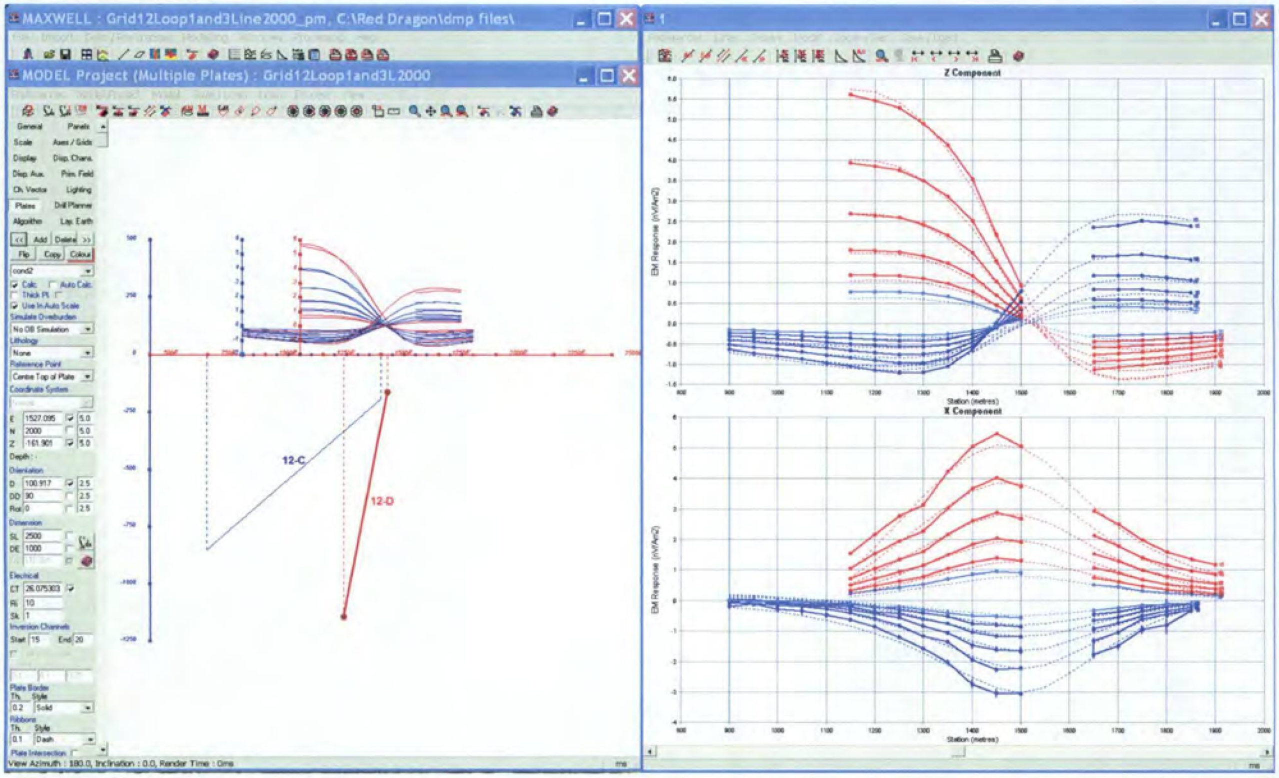


FIGURE 28: GRID 12 – FIXED LOOP INTERPRETATION LINE 2000N

Plate Name	OB-LP1	OB-LP3	Conductor 12-C	Conductor 12-D
x	900	2100	1500	1527
y	1600	1600	2000	2000
Depth	-50	-50	-194	-162
Dip	0	0	141	101
Dip Direction	0	0	90	90
Plunge	0	0	0	0
Length	4000	4000	2500	2500
Depth Extent	8000	8000	1000	1000
Conductivity-Thickness	1.07	1.12	11.6	26.07

2.4.3 Grid 15

One of the models that reproduce the EM data obtained on ***Grid 15*** corresponds to a single low conductive plate (15-A), moderately dipping to the NE.

Figures 29 to 33 show the results of modeling for each survey line, the model parameters are listed with each model in grid coordinates

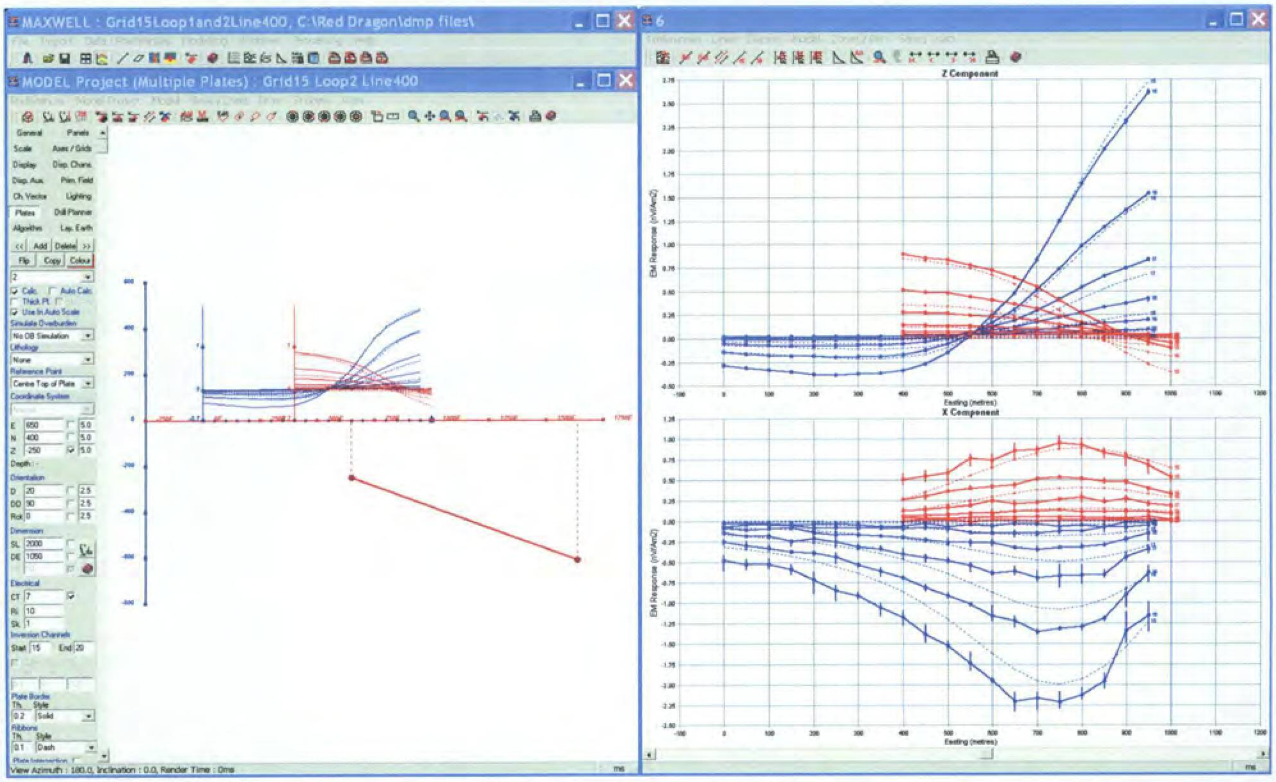


FIGURE 29: GRID 15 – FIXED LOOP INTERPRETATION LINE 400N

Plate Name	LP1	LP2	Conductor 15-A
x	00	1200	650
y	800	800	400
Depth	-50	-50	-250
Dip	0	0	20
Dip Direction	90	90	90
Plunge	0	0	0
Length	8000	8000	2000
Depth Extent	4000	4000	1050
Conductivity-Thickness	1.1	1	7

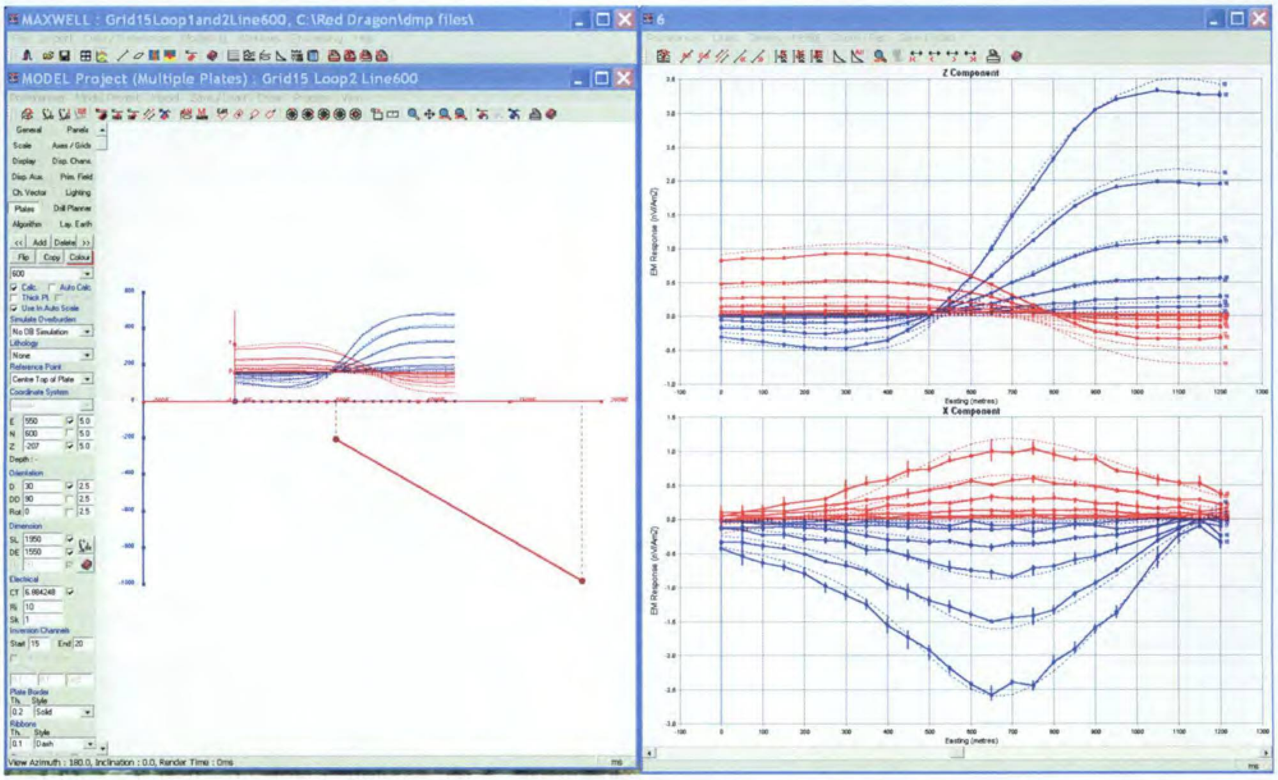


FIGURE 30: GRID 15 – FIXED LOOP INTERPRETATION LINE 600N

Plate Name	LP1	LP2	Conductor 15-A
x	00	1200	550
y	800	800	600
Depth	-50	-50	-207
Dip	0	0	30
Dip Direction	90	90	90
Plunge	0	0	0
Length	8000	8000	1950
Depth Extent	4000	4000	1550
Conductivity-Thickness	1.1	1.13	6.89

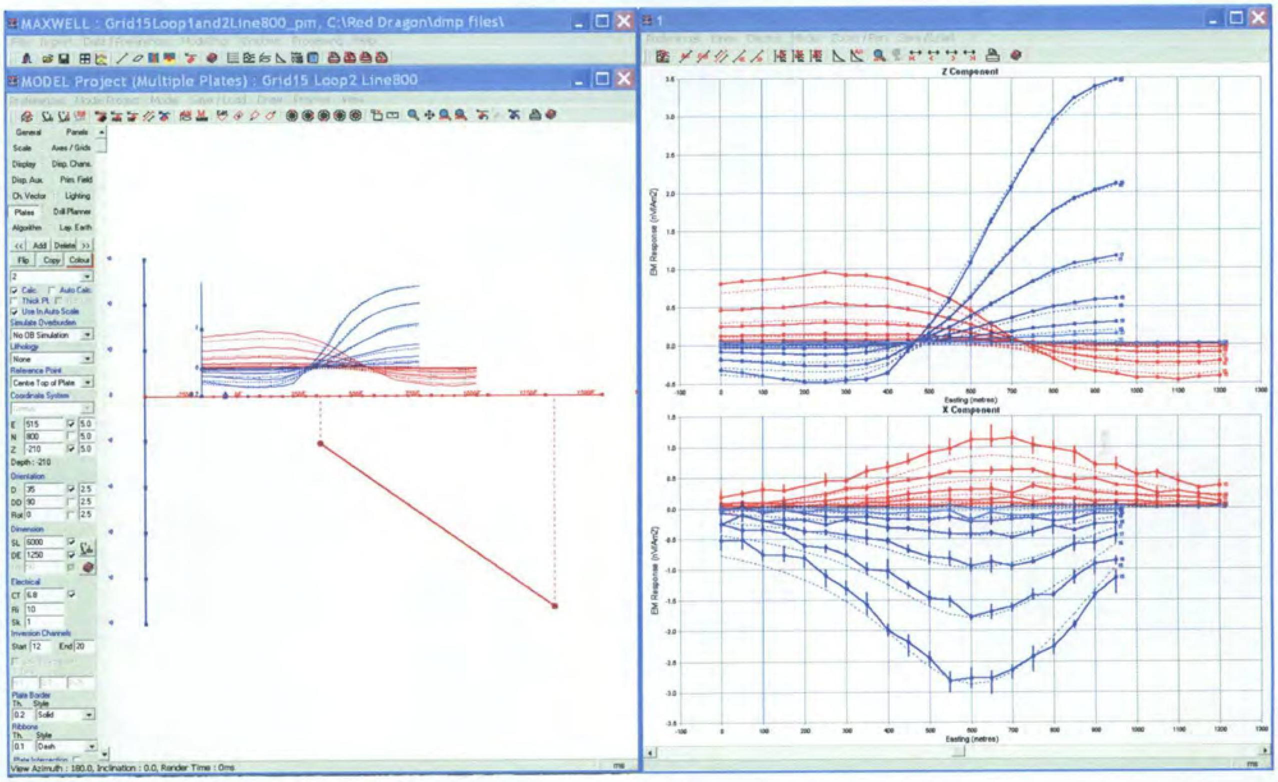


FIGURE 31: GRID 15 – FIXED LOOP INTERPRETATION LINE 800N

Plate Name	LP1	LP2	Conductor 15-A
x	2000	3200	515
y	800	800	800
Depth	-50	-50	-210
Dip	0	0	35
Dip Direction	270	270	90
Plunge	0	0	0
Length	8000	8000	6000
Depth Extent	4000	4000	1250
Conductivity-Thickness	1	1	6.8

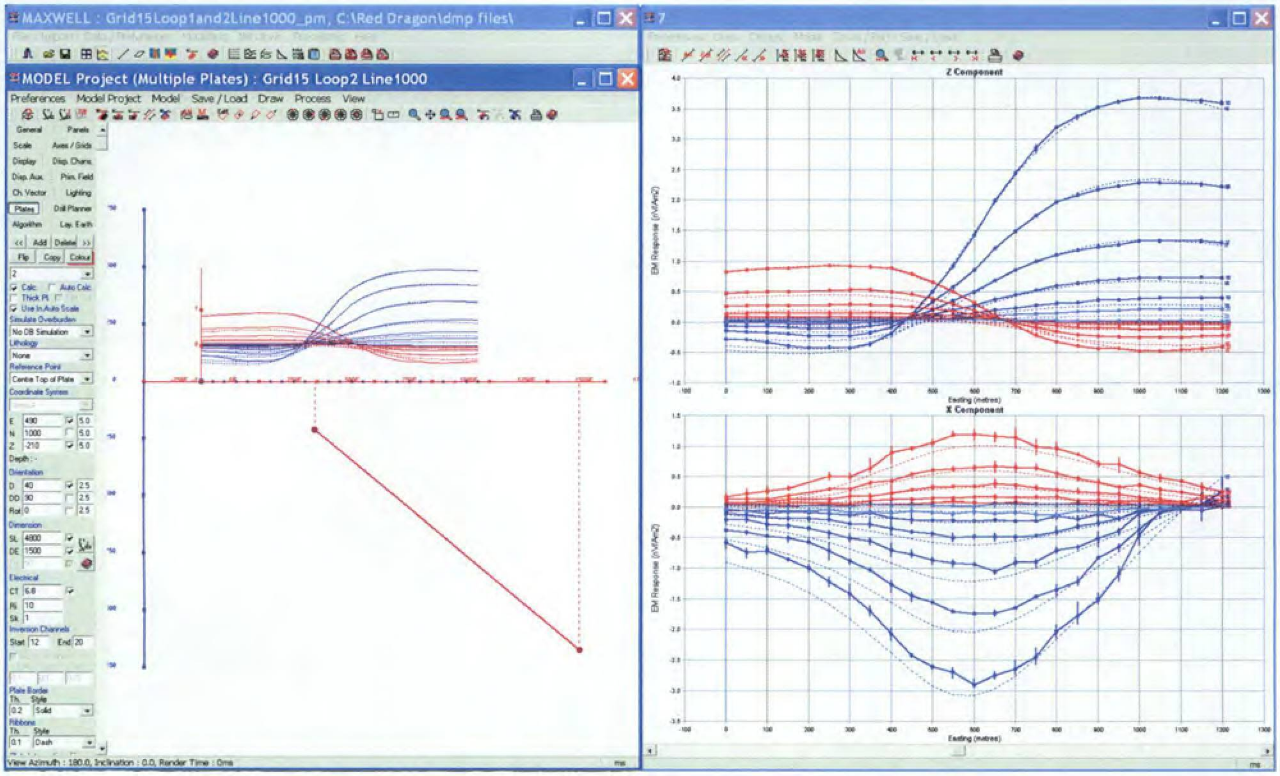


FIGURE 32: GRID 15 – FIXED LOOP INTERPRETATION LINE 1000N

Plate Name	LP1	LP2	Conductor 15-A
x	00	1200	490
y	800	800	1000
Depth	-50	-50	-210
Dip	0	0	40
Dip Direction	270	270	90
Plunge	0	0	0
Length	8000	8000	4800
Depth Extent	4000	4000	1500
Conductivity-Thickness	1	1.1	6.8

Line1200N

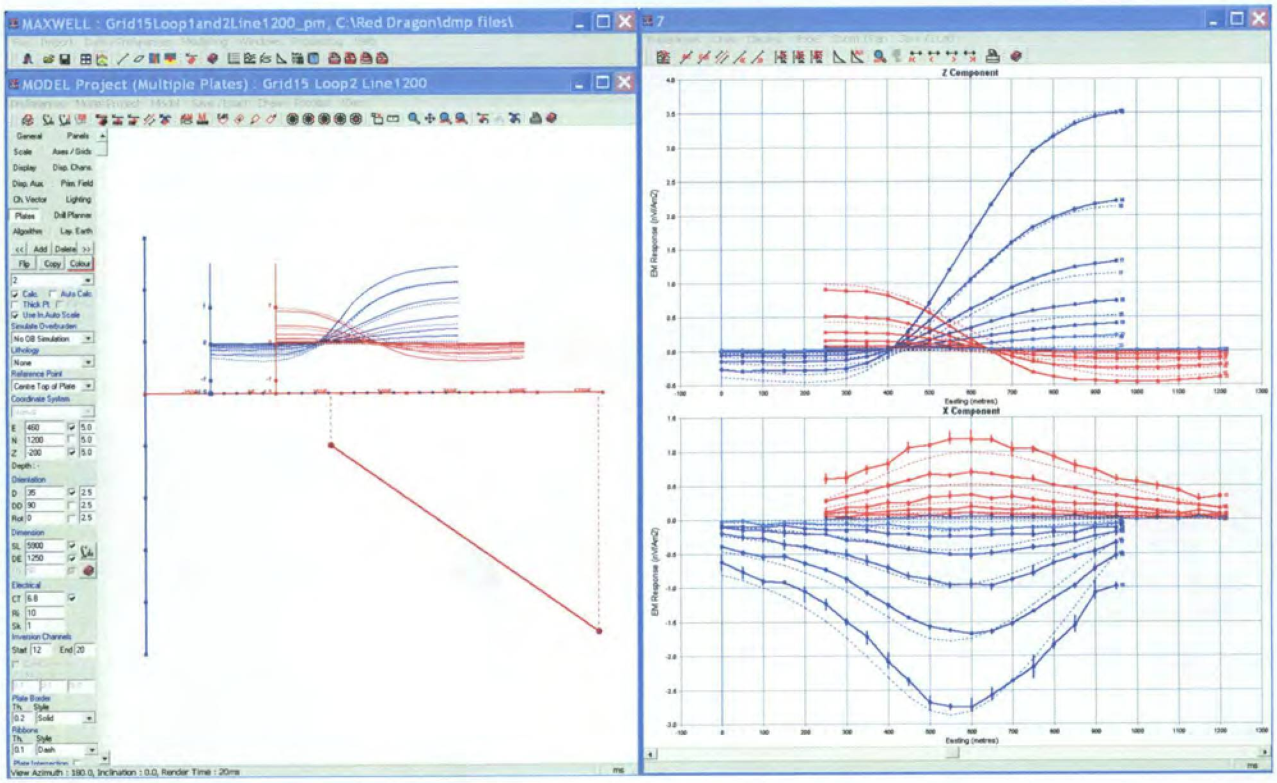


FIGURE 33: GRID 15 – FIXED LOOP INTERPRETATION LINE 1200N

Plate Name	LP1	LP2	Conductor 15-A
x	00	1200	460
y	800	800	1200
Depth	-50	-50	-200
Dip	0	0	35
Dip Direction	270	270	90
Plunge	0	0	0
Length	8000	8000	5900
Depth Extent	4000	4000	1250
Conductivity-Thickness	1.1	1	6.8

3 CONCLUSIONS AND RECOMMENDATIONS

- In general, the results of the 2008 fixed loop EM survey correlate with the results of the 2005 VTEM survey.
- The use of opposing fixed loop surveys and model derived interpretations should improve the accuracy of the interpreted conductors. However, in complex geological situations, the fixed loop geometries and subsequent interpretations retain some ambiguity.
- The best results from the 2008 Fixed Loop Survey were obtained on Grid 12; though additional information is required for drill targeting.

Based on the previous discussions and the conclusions above, recommendations for future work are as follow:

- Carry out a detail structural - geological interpretation based upon the magnetic and gravity airborne data.
- Review the results of the VTEM survey incorporating the new geological - structural interpretation of the magnetic and gravity data, and other available information such basement lithologies from drilling, to identify priority exploration areas.
- IP/DC resistivity survey should be conducted on *Grid 12* to determine the presence of alteration zones and to improve the location of the basement conductors prior to define drill targets.
- For future ground exploration work, it is recommended to carry out Moving Loop TEM surveys combined with IP/DC resistivity surveys in the previously outlined priority exploration areas to generate drill targets.

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CERTIFICATE OF AUTHOR

I, Paulina Morales Silva, declare that:

1. I am a Project Geophysicist with residence in Saskatoon, Saskatchewan and am presently employed in this capacity with **Areva Resources Canada Inc**.
2. I graduated with a B.Sc. in Geology - Geophysics from the State University of Saint Petersburg, Russia in 1992 and with a M. Sc. in Geophysics from the State University of Saint Petersburg, Russia in 1994.
3. I have practiced my profession since January, 1995.
4. I am a member of the Society of Exploration Geophysicists (SEG) and the Canadian Exploration Geophysics Society (KEGS).
5. I have applied to APEGS in Saskatchewan for P. Geo. status (foreign credentials) and my application is currently being reviewed by the board.
6. I am responsible for sections 2, 3 and 4 of this report.
7. To the best of my knowledge and belief, the report entitled ASSESSMENT REPORT on a 2008 FIXED LOOP TIME DOMAIN EM SURVEY over Rea Uranium Project, Alberta, contains all the technical information that is required and I accept responsibility for the veracity of technical data and results.

Dated this 5th of March, 2010

Saskatoon, Saskatchewan

[redacted]

Paulina Morales M.Sc.

CERTIFICATE OF AUTHOR

I, Erwin Koning, residing at 295 David Knight Crescent, Saskatoon, Saskatchewan, do hereby certify that:

1. I am a District Geologist (West Athabasca) of Areva Resources Canada Inc., PO Box 9204, Saskatoon Saskatchewan, S7K 3X5.
2. I am a graduate of the University of Saskatchewan; Saskatoon, Saskatchewan with B.Sc. (Adv.) in Geology obtained May, 1975.
3. I have practiced my profession as a geologist continuously from May, 1975 to present.
4. I am a registered professional geologist with the Association of Professional Engineers & Geoscientists of Saskatchewan, member number 10948.
5. I am responsible for preparation of Sections 1 + 4 of this report.
6. To the best of my knowledge and belief, the report entitled ASSESSMENT REPORT on a 2008 FIXED LOOP TIME DOMAIN EM SURVEY over Rea Uranium Project, Alberta, contains all the technical information that is required and I accept responsibility for the veracity of technical data and results.

Dated this 5th of March, 2010

Saskatoon, Saskatchewan

PROFESSIONAL GEOSCIENTIST
E. KONING
MEMBER 10948
10 03 5
YR. MN. DAY
SASKATCHEWAN

Erwin Koning P. Geo.

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APPENDIX A - PART C

Field Report - REA Property, PROTEM survey.

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AURORA GEOSCIENCES

MEMORANDUM

To:	Garnet Dawson Red Dragon Resources Corp.	**Date:**	17 July, 2008
From:	Leatina Wood, Franz Dziuba		
Re:	Field report - REA Property, PROTEM Survey		

This memorandum is a short form geophysical report describing the fixed loop time domain electromagnetic (PROTEM) survey conducted on the REA project in the Athabasca Basin, AB. The surveys were designed to ground test airborne time domain electromagnetic (VTEM) anomalies targeting graphitic basement conductors. A total of 41.7 line kilometres of grid was installed with a total of 919 PROTEM profile and sounding readings equalling 46 line kilometres.

a. Personnel The ground geophysics surveys were conducted by the following personnel:

Franz Dziuba	Geophysicist	Jun 16th - Jun 24th, 2008
Andre Lebel	Geophysicist-in-Training/ Crew Chief	Jun 24th - Jul 10th, 2008
Leatina Wood	Geophysicist-in-Training	Jun 16th - Jul 10th, 2008
Matthew Higgs	Technician	Jun 16th - Jul 10th, 2008
David Robinson	Helper	Jun 16th - Jul 10th, 2008
Hank Zurloff	Lead Line Cutter/ Technician	Jun 6th - Jul 10th, 2008
Edward Abel	Line Cutter	Jun 6th - Jun 28th, 2008
Tim Steward	Helper	Jun 21st - Jun 26th, 2008
Ernest Keighley	Line Cutter	Jun 21st - Jul 10th, 2008
Sean Crawford	Helper	Jun 21st - Jun 28th, 2008

Billy Sayazie	Brusher	Jun 6th - Jun 24th, 2008
Leonard Flett	Brusher	Jun 6th - Jun 18th, 2008
David Caster	Line Cutter	Jun 6th - Jun 18th, 2008
Tyronne Barry	Brusher	Jun 6th - Jun 18th, 2008
Pierre Masella	Cook	Jun 6th - Jul 10th, 2008

b. Instruments and equipment The crew was equipped with the following instruments and equipment.

PROTEM	2	Geonics Protem Digital Receivers # 72607,72604
	2	3D - 3 Receiver Coils # 703, 704
	1	Geonics TEM 57 MK2 Transmitter # 70901
	1	Geonics TEM 67 Power Module #71202,60807
Line Cutting	4	Husqvarna chainsaws
	4	Axes
	4	Machetes
	4	Garmin GPS 76
Safety	6	Bear deterrents and bangers
Other	10	VHF radios
	2	Iridium satellite phone
	1	Satellite system
	1	5kW gas generator
	8000 m	#10 wire
	3	Georeels
Data processing	2	Pentium 4 CPU 2.67 GHz laptop computer with Geosoft's Oasis Montaj

c. Survey location The REA Property is located approximately 200 kilometres north-northeast of Fort MacMurray, AB. The project area covers parts of NTS 1:250,000 map sheet 74L. Access to the grids was by helicopter from the Red Dragon campsite located at 110°29' W, 58°12' N. The survey grids had lines spaced 200 metres apart with stations every 50 metres. Stations were marked with flagged half length (2 feet) pickets. The pickets were installed with the use of tight chaining from the grid baseline. Each grid's coordinates were determined from position measurements taken along the baseline and recorded as UTM zone 12N coordinates in the NAD83 datum. Grid specifications are given below

Grid Name	Grid size	Grid Centre
Grid 12	7 Loops	515290E 6447140N
Grid 05	4 Loops	517090E 6468300N
Grid 15	2 Loops	528835E 6439865N

d. Survey specifications

Loop dimensions	400 m X 800m ;
Signal	Bi-polar square wave with 50% duty cycle and reversing polarity. Base frequency to be set at 30 Hz.
Recorded components	H_z, H_x, and H_y
Receiver sampling	20 geometrically spaced gates from 6 μs to 800 ms
Profiling station spacing	50 m from 50m up to 1400 m away from loop edge (to the end of cut lines) In loop sounding every 50m, but no closer than 100m from the loop edge

e. Data processing The PROTEM data was downloaded daily and formatted using proprietary software. Quality analysis consisted of examining each H_z, H_x, and H_y decay components. Outliers and irregular readings were discarded. Inside the loop readings were imported into an Interpex IX1D database such that the data could be inversely modelled. Outside the loop readings were imported into Geosoft databases such that the data could be profiled. All of the field produced maps were created in Geosoft's Oasis Montaj.

f. Data formats The unedited ASCII instrument dump files are named for the date (month/day) on which they were produced. The receiver dump file names include the letters 'PR', the operator's initials and end with a .raw extension. The final processed data are in Geosoft data base (.gdb) format. The profile databases are named as Grid##Loop#profiles.gdb.

g. Results The following products are appended to this report:

Files	Description
Grid##_component_channels.jpeg ie. Grid##_X_1-5.jpeg Grid##_Y_6-10.jpeg	Preliminary Field Plots of profiles, separated by grid, component (X, Y, or Z) and channels (1-5, 6-10, 11-15 or 16-20).

Grid##_Z_11-15.jpeg Grid##_Z_16-20_A.jpeg	Note: Further separation was required for Grid 12, profiles from Loops 2, 4, 5, 6, 7 are found on maps with a suffix _A.jpeg, while profiles from Loops 1 and 3 are labelled _B.jpeg
Grid##_Loop#_snd.jpeg	Central Loop sounding apparent resistivity curves with model.

Respectfully submitted,
AURORA GEOSCIENCES LTD.

Franz Dziuba, P. Geoph.

Leatina Wood, Geoph.I.T.