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RESOURCES LIMITED

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QUARTERLY ACTIVITIES REPORT December Quarter 2013

Newera Resources Limited (ASX: NRU) is pleased to provide the following report on its activities for the December quarter 2013:

HIGHLIGHTS – *Ulaan Tolgoi Project:*

- Newera reports that during the period it completed a Mini Sosie seismic survey along 6 lines, designated Lines A, B, C, D, E, and F, within the Ulaan Tolgoi project licence. The survey commenced with Line B.
- Consistent, thick, gently folded seismic reflectors interpreted to exist within the late Permian strata underlying seismic lines A, B, D, E and F.
- In the opinion of Logantek, the reflectors are considered to be consistent with seismic reflectors from previous coal discoveries in the South Gobi basin, indicating a very good potential for coal. The South Gobi basin is recognised worldwide for its potential to produce very large coking coal deposits such as the Tavan Tolgoi deposit.
- In preparation for drilling, Newera have now been granted all approvals required to commence drilling and a drill rig has been transported to within close proximity to the Ulaan Tolgoi licence.
- Newera has a right to earn a 51% interest in the Mongolian company holding the Ulaan Tolgoi project as its only asset. Newera anticipates that by the time drilling commences at Ulaan Tolgoi, Newera will have earned its 51% interest in the holding company.

FURTHER POINTS OF INTEREST – *Ulaan Tolgoi Seismic Survey:*

- Newera received a final Ulaan Tolgoi Seismic Survey report, inclusive of final interpretations from consulting seismic geophysicists, Logantek.
- Seismic lines A, B, D, E and F interpreted to be underlain by late Permian P2 sedimentary strata approximately 150 - 200 metres thick.
- Depth to the top of the late Permian P2 strata interpreted to range from 50 metres to 200 metres.
- Lines E, B and F are all 2.5 kilometres long in a south to north direction and indicate an east to west strike of at least 3 kilometres with the interpreted seismic reflectors being seen to be open to the east, west and north.
- Line A which is approximately 10 kilometres due west and interpreted to be along strike from line E, is interpreted to be underlain by 6 kilometres of Permian strata along the line from south to north and also contains consistent, thick, flat lying, gently folded reflectors very similar to lines E, B and F.

- Line D located in the North West sector of the Ulaan Tolgoi licence area also produced thick, flat lying gently folded reflectors within the interpreted late Permian P2 Strata.
- Logantek in association with Newera's consulting geologists, Nordic Geological Solutions, have outlined appropriate drill hole collar locations designed to test the interpreted coal reflectors in a drilling program to commence in the Mongolian spring of 2014.

ULAAN TOLGOI PROJECT

Background:

In early July 2013 Newera announced it had entered into a formal Joint Venture Agreement ("JVA") covering a single large exploration licence (12323X) in the South Gobi region of Mongolia. The project was designated the Ulaan Tolgoi Project.

The Ulaan Tolgoi Licence is located in the coking coal prolific South Gobi region of Mongolia, c. 100km north of the Chinese border, 115 km south of the +6Bn tonne Tavan Tolgoi coking coal mine and 150km west of the giant Oyu Tolgoi copper mine.

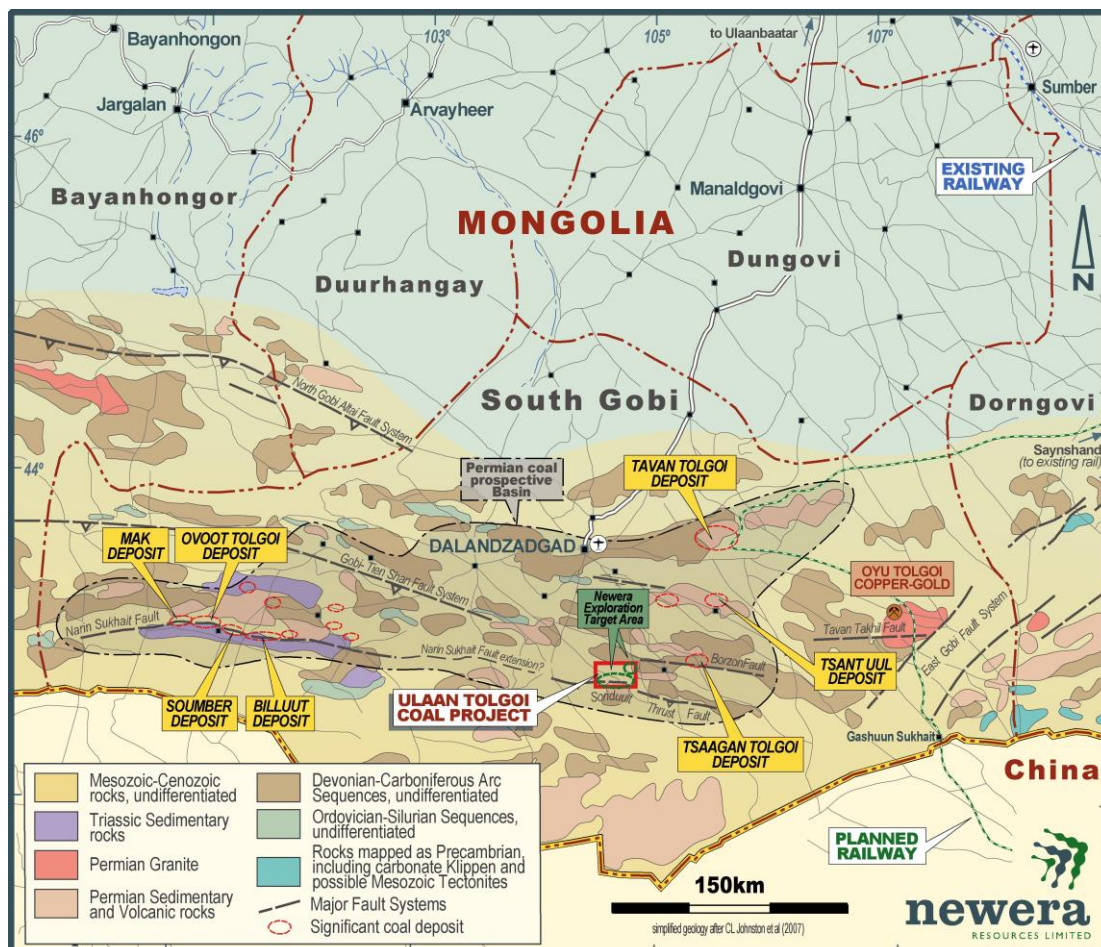


Figure 1: Ulaan Tolgoi licence area within South Gobi regional geology map – showing interpreted boundary of the Permian coal prospective South Gobi Basin – the Nariin Sukhait and Sonduult thrust faults indicated. Relevant major coal projects indicated.

Subsequent to announcing the signing of the JVA, Newera entered into a contract with Logantek, a reputable seismic survey operator to complete 15 line kilometres of seismic data collection within the Ulaan Tolgoi licence.

The intent was to use seismic in an attempt to locate potential coal bed markers under cover, within the Ulaan Tolgoi joint venture area and if successful, establish appropriate drill hole collar locations for future drilling.

Newera reports that during the period it completed the Mini Sosie seismic survey along 6 lines, designated Lines A, B, C, D, E, and F within the Ulaan Tolgoi licence area.

The survey commenced with Line B.

The Sonduult Tolgoi Thrust Fault:

From analysis, modelling and interpretation to-date, it appears that stratigraphic duplication occurs along the Sonduult Tolgoi Thrust Fault (STTF). This is considered significant due to the extensive 18 kilometre strike of the STTF, east to west through the Ulaan Tolgoi licence.

The over thrust zone of the interpreted P2 Permian coal measures above the fault appear to come within an open pitable depth from surface, and appear to have analogies to the Burton North mine in the Bowen Basin of Australia where along strike mining occurs adjacent to the Burton Range fault.

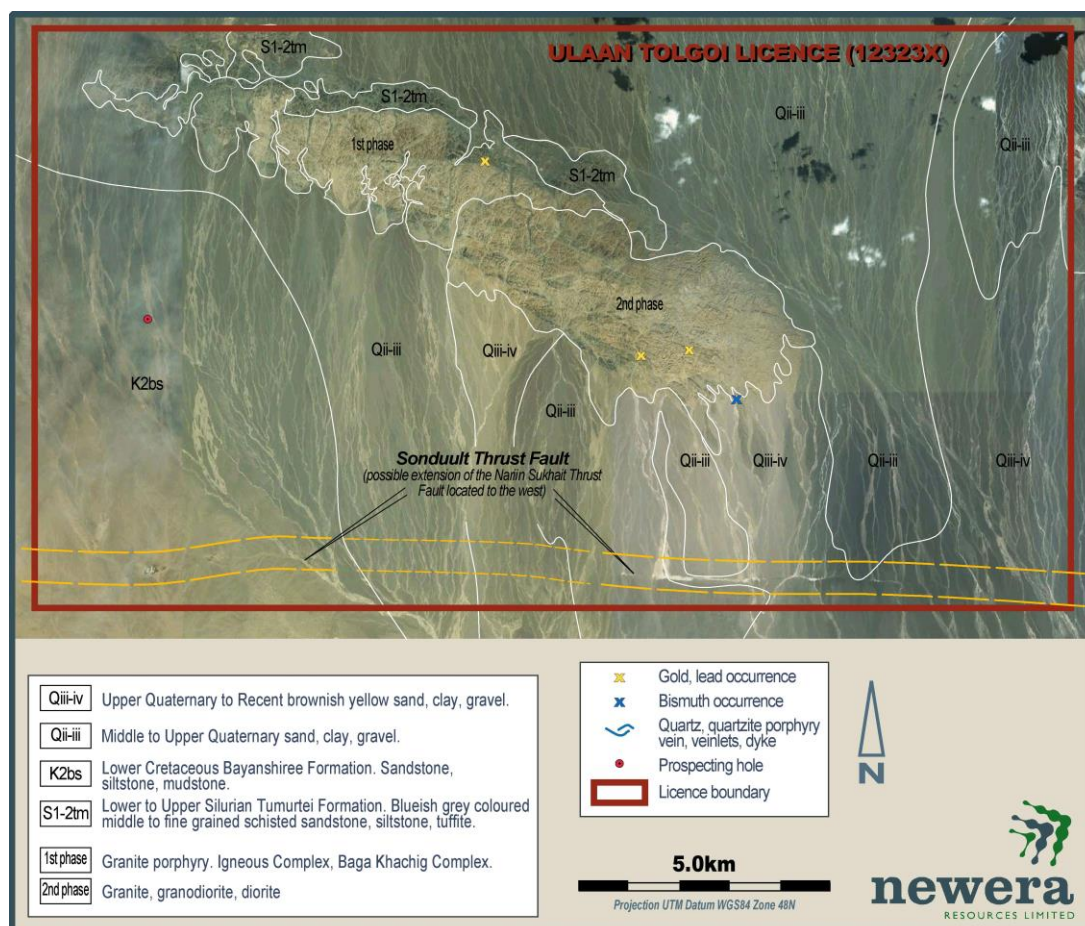


Figure 2: Ulaan Tolgoi Licence area including geology, over satellite image – the strike of the Sonduult thrust fault indicated.

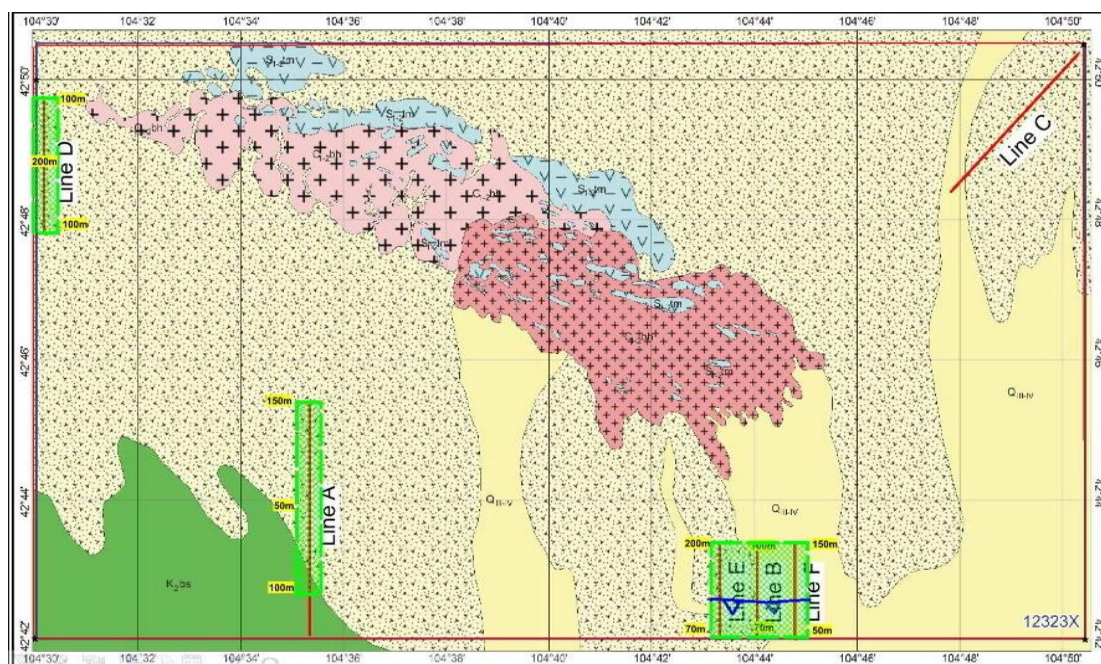


Figure 3: Ulaan Tolgoi licence, plan view, showing projected top of possible P2 units (Green shading along lines) underlying lines F, B, E, A and D and depths in metres. The Sonduult Thrust Fault indicated on Lines E, B and F.

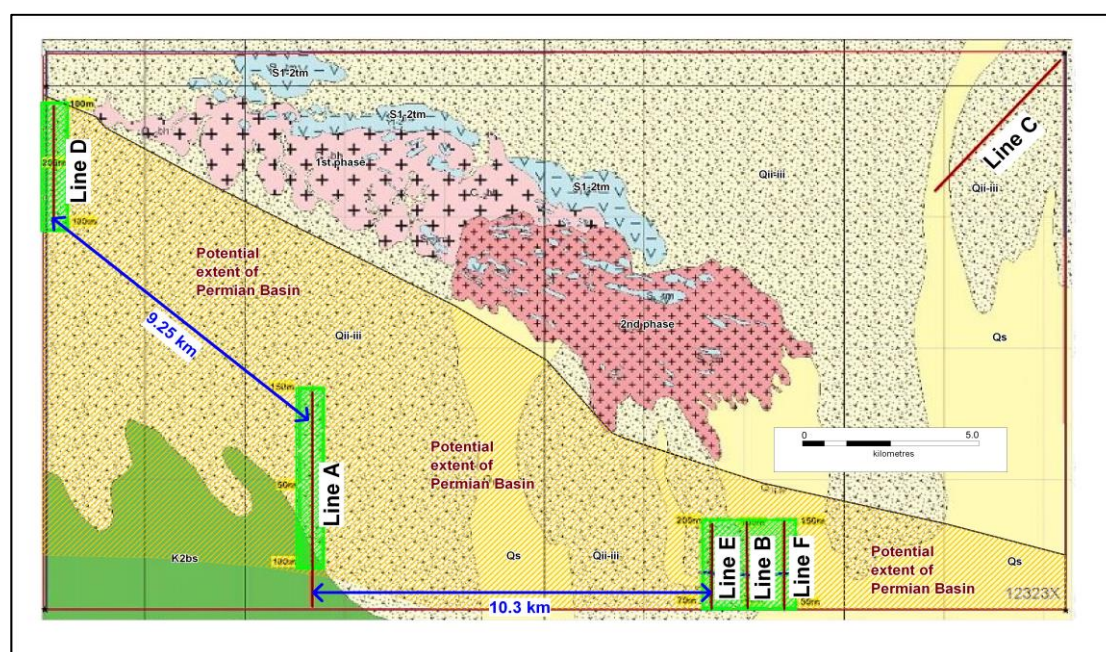


Figure 4: Showing the potential extent of the late Permian P2 basin strata that is interpreted to exist within the Ulaan Tolgoi licence area. The flat lying late Permian strata are overlain by quaternary cover.

Logantek Interpretation of Figure 4:

"Figure 4, shows the projected location of interpreted P2 (Permian P2) units from the recent Newera seismic survey. A significant length of basin is possible if these P2 units are intersected through future drilling under lines D, A, E, B and F."

Seismic Line Images:

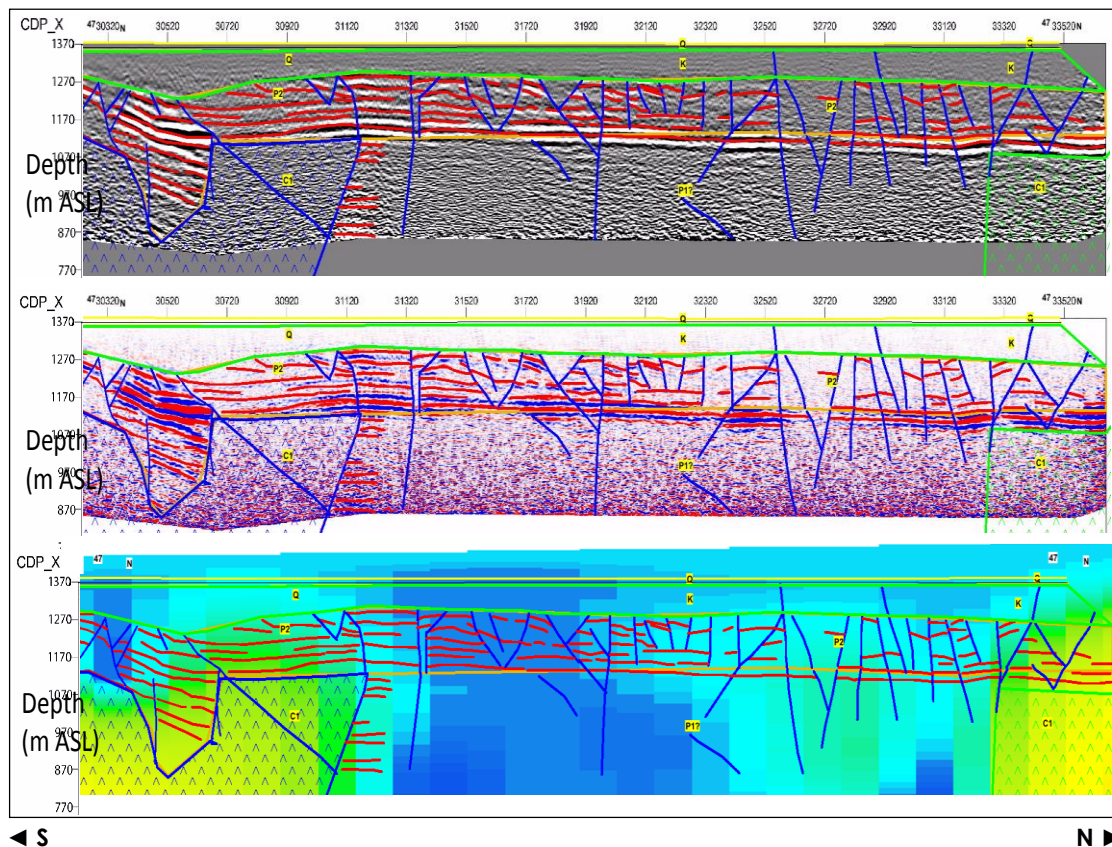
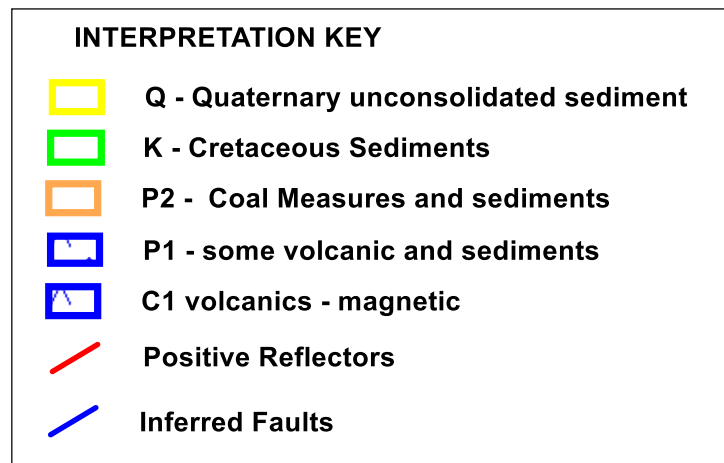


Figure 5: Line A North, showing flat lying to gently folded interpreted seismic reflectors within interpreted Permian strata. Bottom image shows interpreted seismic reflectors over ground magnetic image.



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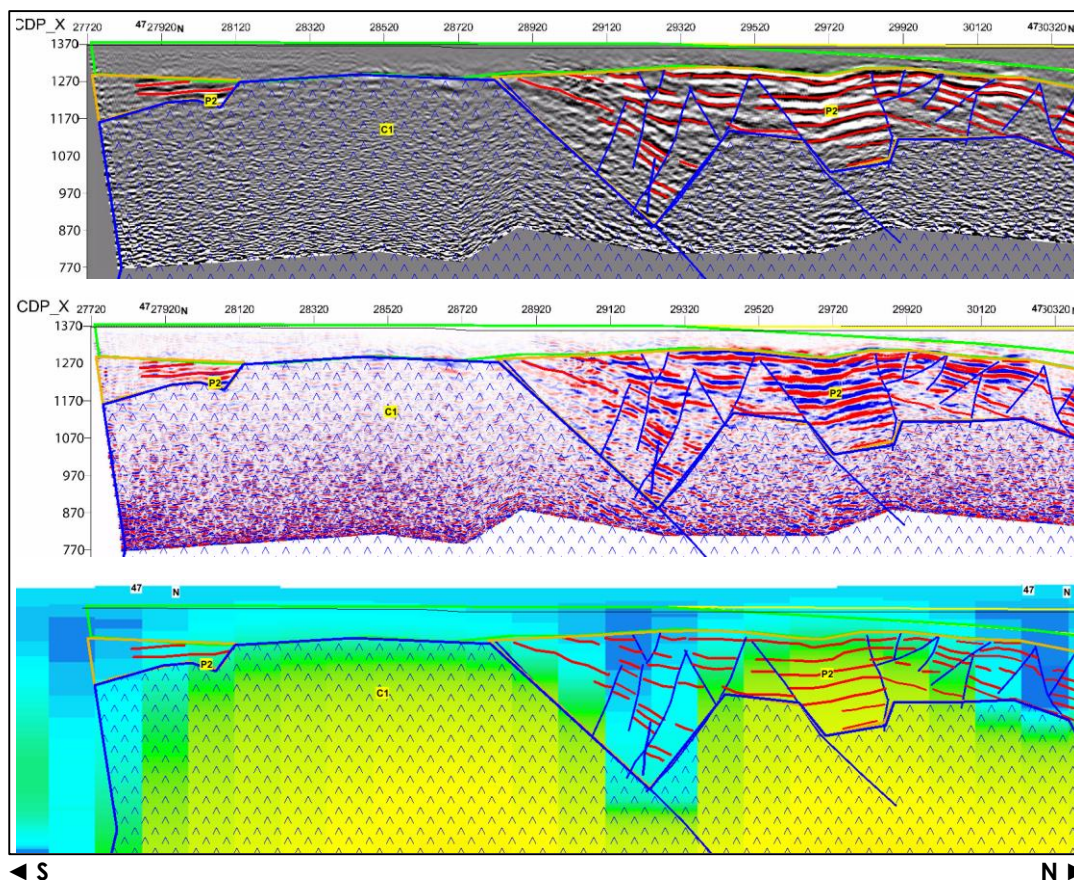


Figure 6: Line A South, showing gently folded, interpreted seismic reflectors within interpreted Permian strata in the north, interrupted from the mid-section to the southern end of the line. Bottom image shows interpreted seismic reflectors over ground magnetic image.

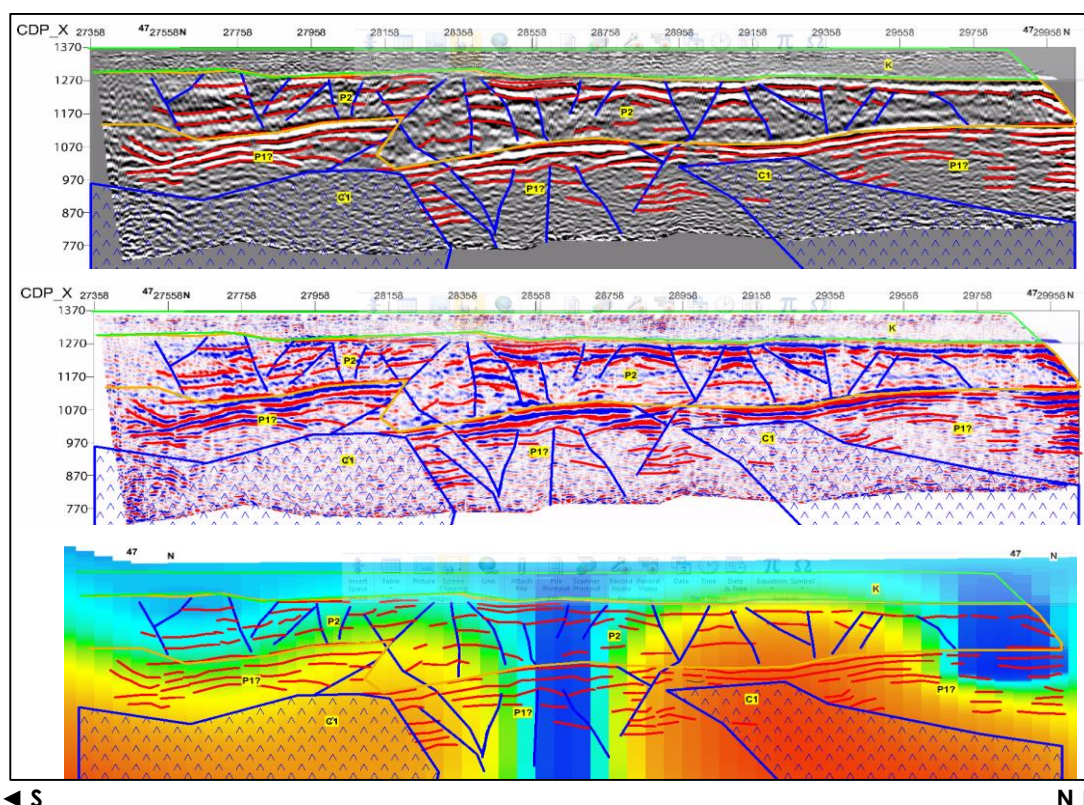


Figure 7: Line E, showing flat lying interpreted seismic reflectors within interpreted Permian strata. Sonduult Thrust fault visible dipping to the south. Line E is 8 Kilometres east of line A.



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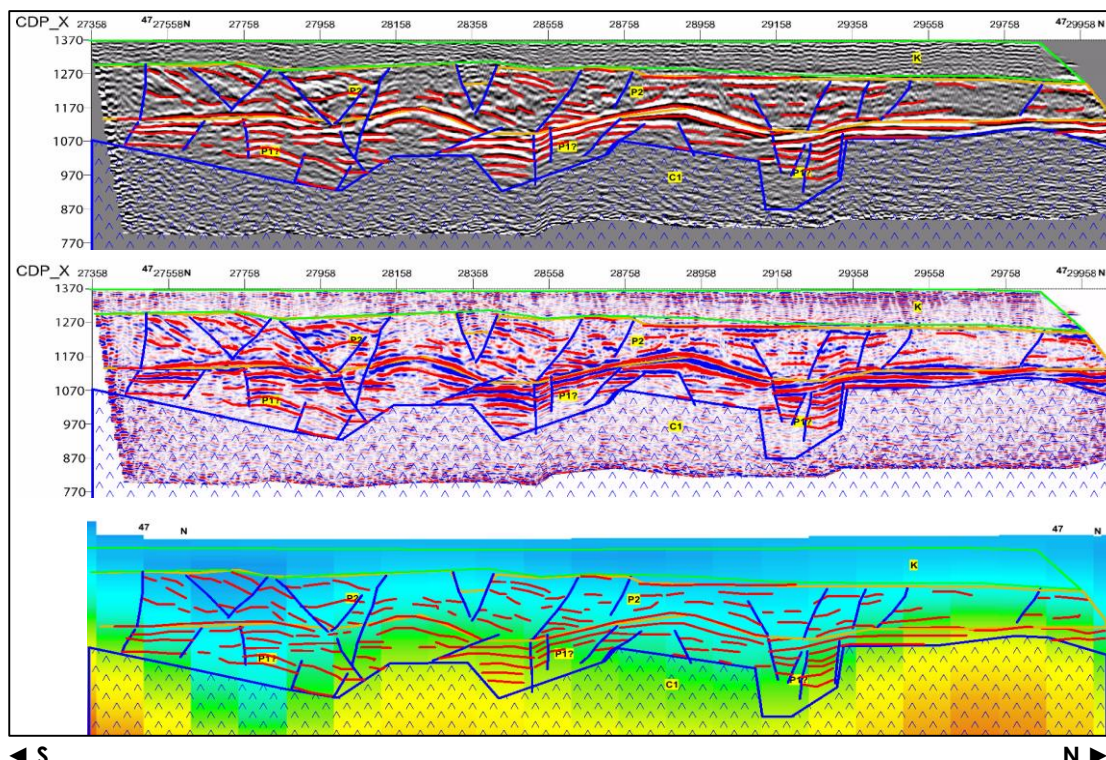


Figure 8: Line B, showing gently folded and faulted interpreted seismic reflectors within interpreted Permian strata with the Soudoult Thrust fault clearly visible as a heavy blue line dipping to the south. Line B is one kilometre east of line E.

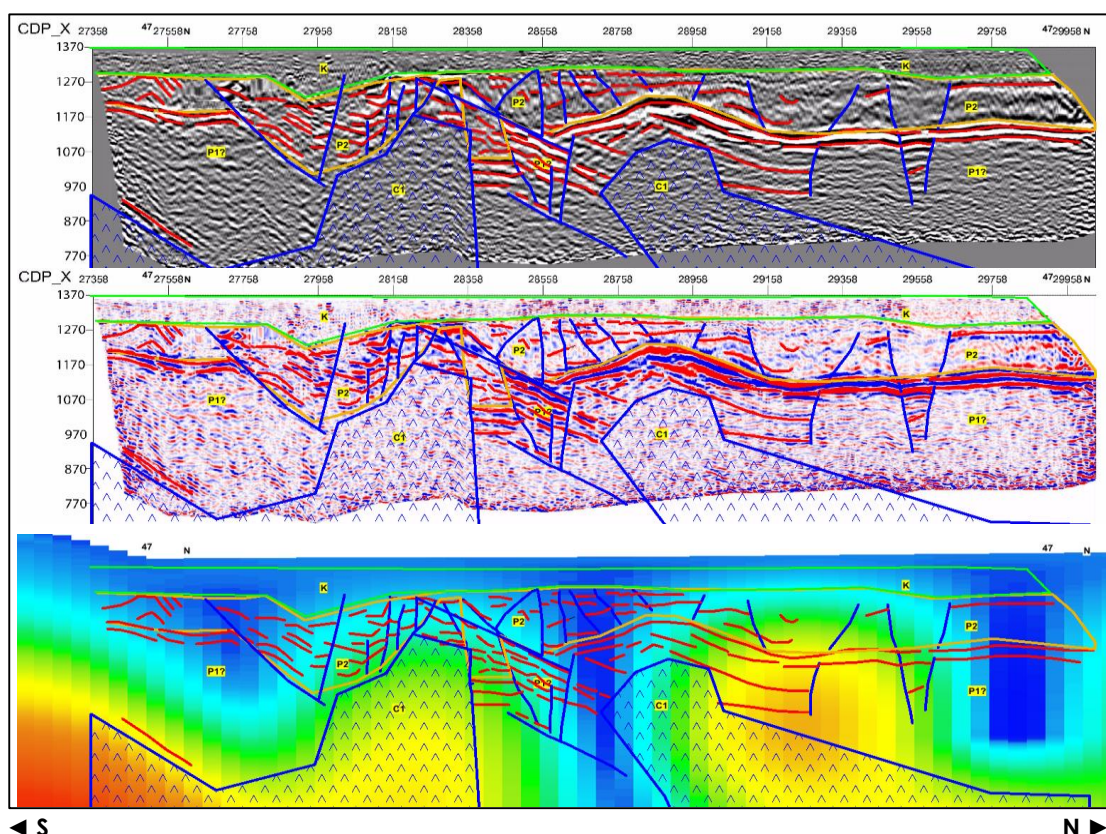


Figure 9: Line F, showing gently folded and faulted interpreted seismic reflectors within interpreted Permian strata with the Soudoult Thrust fault visible as a blue line dipping to the south. Line F is one kilometre east of line B.



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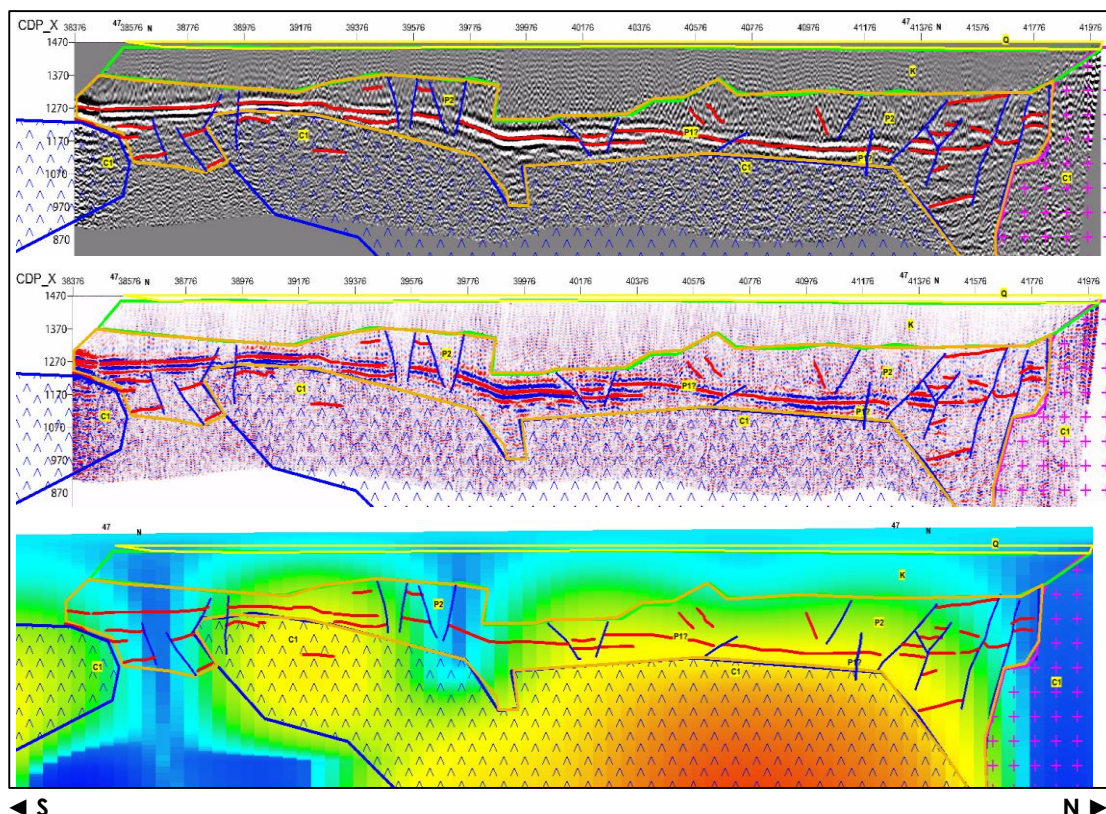


Figure 10: Line D, showing flat lying to gently folded and faulted interpreted seismic reflectors within interpreted Permian strata. Line D is in the far North West corner of the Ulaan Tolgoi licence area.

Exploration Upside:

The indication of a c.150 – 200m thick package of potential Late Permian coal-bearing strata preserved along the entire length of seismic lines E, B, F and D, and for at least 6 kilometres along line A is considered very significant by Newera for the following reasons:

1. Line A with its very extensive underlying late Permian (P2) and potentially coal bearing strata, which is open to the north, west and east, offers huge potential for a very large scale deposit. Planned drill testing in early 2014 will provide definitive answers.
2. The potential late Permian (P2) coal measures under lines E, B, F are considered to be associated with the Sonduult Tolgoi Thrust Fault (STTF) which can be traced extensively east-west along the southern sector of the tenement. The fact that the Interpreted P2 strata underlying lines E, B and F remains open to the north, west and east, also indicates high potential for scale.
3. The potential late Permian (P2) coal measures under line D in the north western sector of the licence give confidence that The Ulaan Tolgoi licence contains a significant area of a late Permian basin within its boundaries. The potential coal measures underlying line D remain open to the south and west.
4. The STTF is considered by Newera to represent an eastern extension of the Narin Sukhait Thrust Fault which is associated with a number of large coking coal mines and deposits (e.g. MAK, Ovoot Tolgoi, Soumber and Biluut).

5. The relatively shallow depth and piggyback architecture of the potential Late Permian Tavan Tolgoi Coal Measures along the STTF effectively pushes up the strata to within an along strike mineable depth.
6. As an example of the type of coal being mined in the South Gobi basin, the coking properties of the Late Permian Tavan Tolgoi Coal Measures are well documented.
7. The Ulaan Tolgoi tenement is situated only c. 100 km (i.e. direct line) from the Chinese border.
8. The Mongolian Government has well advanced plans to construct a Chinese gage rail line from the Tavan Tolgoi coking coal mine (110 kilometres north of Ulaan Tolgoi), east to Oyu Tolgoi and then south east to connect directly into the Chinese rail system.

Joint Venture:

Newera had previously announced that it and its joint venture partner, CNMN Co Ltd of Ulaanbaatar Mongolia had, on 18 June 2013 executed a formal Joint Venture Agreement ("JVA") covering Mongolian Exploration Licence 12323X – "The Ulaan Tolgoi Project".

The JVA involves a Stage 1, earn in whereby Newera could earn a 51% interest in CNMN Co Ltd (a single project company holding licence 12323X), by reimbursing the holder of CNMN Co Ltd US\$64,500 for past expenditure, paying US\$30,000 as a Licence roll over fee and spending US\$200,000 on exploration before 30 June 2014. The US\$64,500 re-imbursement figure is to be deducted from the US\$200,000 exploration expenditure.

Should Newera complete the Stage 1, earn in, Newera to have the option to commence a Stage 2, earn in to take Newera to a 70% holding in CMNM Co Ltd.

Next Steps:

Following a review of the Ulaan Tolgoi Seismic Survey data, the Logantek principal geophysicist and Newera's consultant geologists in Mongolia, Nordic Geological Solutions, have determined a series of "best fit" drill hole collars in preparation of a drilling program to commence in or around February 2014 – dependent upon climatic conditions in the south Gobi region of Mongolia. The drilling will comprise a planned program of up to 2,000m of diamond core drilling and should provide a definitive test of the current interpretations.



Photo 1: Mr Kieran Logan principal of Logantek Geophysical Services supervising Newera's Ulaan Tolgoi Seismic Survey October 2013.

SHANAGAN PROJECT

Option Agreement:

In May 2012 Newera entered into an Option Agreement with a Mongolian registered company, Geomaster LLC, covering the Mongolian Exploration Licence Designated the Shanagan Uul East ("Shanagan") project by Newera.

The Option Agreement gave Newera the option to acquire up to 80% of the Shanagan Project within eighteen months of the execution date of the Option Agreement by paying \$1 million to Geomaster on or before the expiry date of 28 November 2013.

On 21 October 2013 Newera entered into negotiations with Geomaster with the intent of reaching agreement on terms that would enable the parties to agree to roll over the Option Expiry date until 28 November 2014.

Newera management subsequently advised that it was unable to reach a reasonable agreement with Geomaster and mindful the growing prospectivity of the Ulaan Tolgoi project, the expected future difficulty in marketing a high ash coal and the current financial resources available to Newera to meet the Option Fee, it was determined that the Shanagan project option should be allowed to lapse. The Option lapsed on the 28 November 2013.

SWEDEN

During the period Newera received from Southern Geoscience geophysical consultants, a hand drafted structural interpretation of the geological structures and rock units existing within the two Varmland project licences – V100 and V101. The intent is to digitise the hand drawn draft and then attempt to correlate the results of the recent reconnaissance rock chip sampling exercise with known structures and rock units.

AUSTRALIA

During the period Newera continued to progress a Program of Work for the Jailor Bore project located north east of Carnarvon in Western Australia.

The Company notes that late in the period, Newera received copies of six Applications for Forfeiture – Form 35A (plaints), covering Newera's Jailor Bore project licences E09/1194, E09/1298, E09/1340, E09/1434, E09/1575 and E09/1788. The plaining party is listed as Robin Christopher Cooper. Newera is currently attending to these matters.

As Exploration Licence E80/4308 located within the locality of the Cummins Range in the southern Kimberley was approaching the end of its life and its prospectivity was seen as limited, a decision was made to voluntarily relinquish the licence.

CORPORATE

Funding:

During the quarter, the Company entered into a series of convertible loans with various parties with a total value of \$500,000 (Loans). In accordance with the various loan agreements, the Loans will be converted, subject to Shareholder approval, to Convertible Notes with a face value of \$1,000 each (Notes).

The Company intends to convene a general meeting of Shareholders on 6 March 2014 to seek approval for the issue of Notes.

The Board sees this as an attractive option to access sufficient capital to meet the ongoing programs of the Company in a way that limits the dilution to existing shareholders at this time.

If approved, the key terms of the Notes to be issued will be as follows:

- The Notes will mature 12 months from the date of issue and can be converted any time following the first subsequent capital raising to the issue of the Convertible Notes;
- The conversion price will be the lesser of 0.4 cents per ordinary share, or 80% of the subscription price per ordinary share under the Company's next capital raising (Conversion Price);
- For each share issued on conversion, the Note holder will be issued with 1 free option to subscribe for an additional ordinary share in the Company exercisable not less than 3 years from the date of issue at an exercise price no more than a 100% premium to the Conversion Price per share (Options). It is the intention of the Directors that the Options be listed however it is not guaranteed that this will ultimately be the case;
- The Notes will accrue interest at a rate of 12% per annum; and
- The Notes will be unsecured.

The Convertible Notes will be issued to sophisticated and institutional investors under sections 708(8), 708(10) and 708(11) of the Corporations Act 2001 (Cth) (the Act), without disclosure to investors under Part 6D.2 of the Act.

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The Board advises that related parties of the Company have participated in the issue. Full details will be set out in the Notice of General Meeting at which the Company will seek the necessary shareholder approval to approve the issue.

The capital raised will be applied to both the current working capital requirements of the Company and the development of its Ulaan Tolgoi project in Mongolia.

Corporate Strategy:

Newera continues its corporate strategy of growth by exploration of its existing projects and review of potential new acquisitions in Australia and overseas across a wide range of commodities.

Further Information;
Martin Blakeman
Executive Chairman
Ph (08) 9382 3100

Competent Person Statement:

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Per Michaelsen, Consultant Geologist to Newera Resources Ltd who is a member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Dr Michaelsen has sufficient experience, which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr Michaelsen consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

APPENDIX 1: Tenement Schedule

Tenement	Location	Interest (at beginning of the quarter)	Interest (at the end of the quarter)
Australia			
E09/1194	Jailor Bore WA	70%	70%
E09/1298	Jailor Bore WA	100%	100%
E09/1340	Jailor Bore WA	100%	100%
E09/1434	Jailor Bore WA	100%	100%
E09/1575	Jailor Bore WA	100%	100%
E09/1788	Jailor Bore WA	100%	100%
E80/4308	Cummins Range WA	100%	0%
E80/4632	Cummins Range WA	100%	100%
Mongolia			
12323X	South Gobi	Earning in - 0%	Earning in - 0%
Sweden			
V100	Varmland Sweden	100%	100%
V101	Varmland Sweden	100%	100%

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APPENDIX B: Ulaan Tolgoi – Mongolia - Seismic Survey – September 2013 – Processes and Procedures

Survey Area Location

The Ulaan Tolgoi property is located in ~700km from the Ulaanbaatar city and ~60 km from Nomgon city, Umnugobi province, Mongolia (Figure 1). The surveys centre is approximately as below.

Ulaan Tolgoi area: UTM Zone 48, Datum WGS84, 472000E, 4735000N.

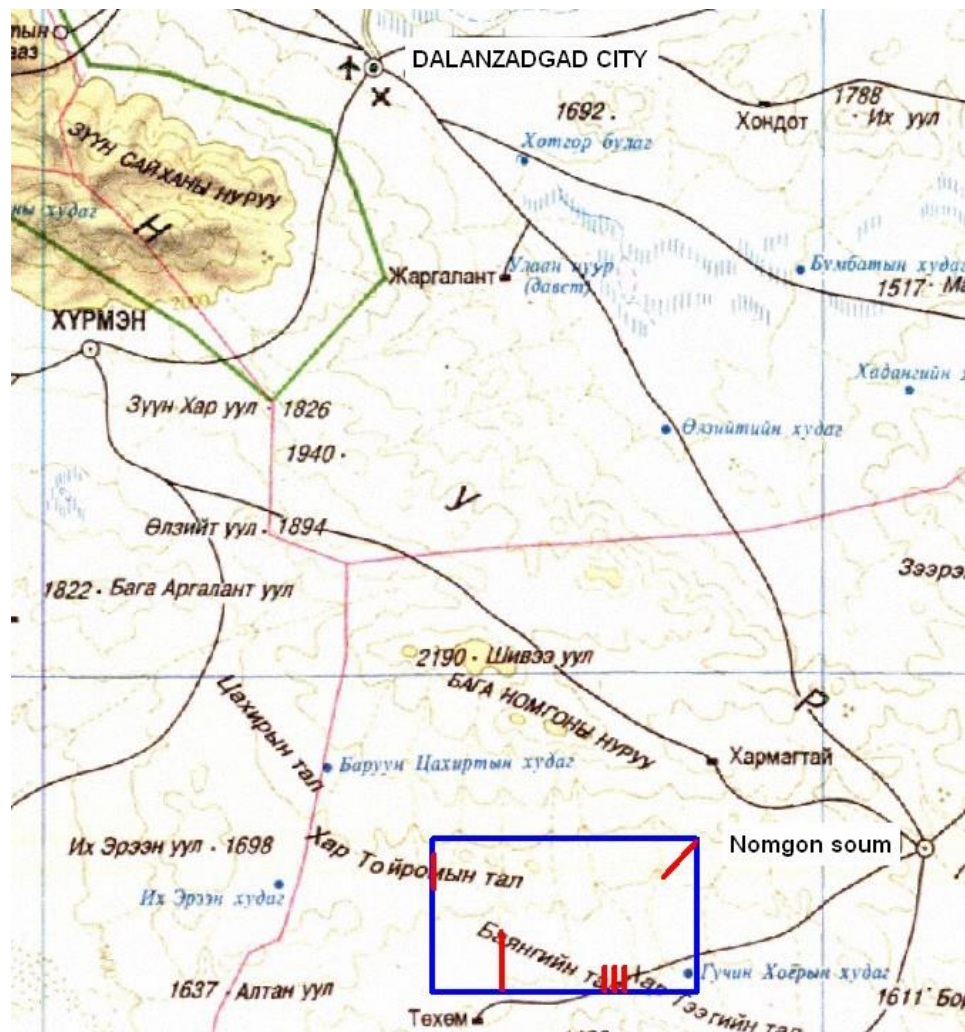


Figure 1: Survey Area location Map. Red lines survey lines.

Survey Production

The reflection seismic survey consisted of 6 lines, totalling 20 line km.

Table 1: Survey Parameter

Line	Start		End		Length (m)
	Easting	Northing	Easting	Northing	
Line B	478230	4727550	478230	4730050	2500
Line C	486820	4743000	483400	4739350	3000
Line A	466350	4727720	466350	4733720	6000
Line D	459335	4741820	459335	4738320	3500
Line E	477230	4727550	477230	4730050	2500
Line F	479230	4727550	479230	4730050	2500

Table 2: Survey Line Logistic

Line	Start Date	Finished Date	File ID number	
			Start	Finish
Line A 466350E	3-Oct-2013	7-Oct-2013	1349	1730
Line B 478230E	27-Sep-2013	29-Sep-2013	1000	1162
Line C 486820E	30-Sep-2013	2-Oct-2013	1163	1348
Line D 459335E	8-Oct-2013	11-Oct-2013	1731	1954
Line E 477230E	11-Oct-2013	13-Oct-2013	1955	2116
Line F 479230E	13-Oct-2013	15-Oct-2013	2117	2280
Line C (Repeat)	15-Oct-2013	17-Oct-2013	2281	2478

ACQUISITION

Seismic Survey

Survey Parameters

Survey array parameters showing in Table 3: Survey parameters.

Table 3: Survey parameters

Parameter	Value
Recording System	Geometrics Geode x 4
Survey type	Geometry Split Spread
Fold	30
Channels	96 live
Geophone type	Vertical 30-Hz land geophone
Geophone spacing	8m
Shot point spacing	16m
Shot source type	Mikasa 84kg wackers and Geometrics PRS1
Pseudo-random reference	100Hz geophones
Sweep Time	16.8
Listening time	0.5
Sample rate	0.25msec and 0.5sec

Pseudo Random Source and Correlation

The pseudo-random seismic source (PRS) method, also known as mini-sosie, was the shot source technique applied to the Ulaan Tolgoi seismic lines. The actual shot sources were two construction wackers. Details on this method and the operation of the Geometrics software are found in Geometrics manual- Random-Source Surveying Operations Manual (28164-01 Rev. B).

In summary the operation is as follows:

1. The wackers are placed either side of a 100Hz reference geophone.
2. The wackers are operated to give a random sequence of hits to the ground by varying their throttles. This is critical to make the subsequent correlation process work.
3. The Geometrics Seismodule Controller software performs an auto (cross) correlation of the reference geophone trace (also known as pilot channel) to determine the quality of the correlation (QC). The pilot trace can be spiked to improve the QC.
4. The Geometrics Geodes perform the correlation processing on the 16 or 32 sec sweeps and return the correlated 0.5 and 1sec of listening time.
5. If ghosting or multiples are seen in the shot record, then the process must be repeated to get a better QC without these effects. In some cases this was not possible and later processing is required to remove the multiples.

Noise Suppression

Geometrics manual- Random-Source Surveying Operations Manual (28164-01 Rev. B) also details the Noise Suppression used in the Seismodule Controller software. This was set before shots and could removal many sources of noise, including passing vehicles, people movement and wind cuts.

Ground Magnetic Survey

Geomagnetic Reference Field

The International Geomagnetic Reference Field (IGRF) at the areas is intensity 57006.0 nT, inclination 63.155 degree and declination -3.182 degree in September, 2013.

Magnetometers

Four GSM-19TW proton magnetometers were used on this project. The roving magnetometer sensors were mounted on an aluminium pole attached to a backpack with a sensor height of 2 meters above ground level. The origins for each station were determined by the DGPS system of the magnetometers in WGS84 datum UTM Zone 47N projection.

Technical specification:

- | | |
|----------------------------|---|
| • Performance sensitivity; | <0.15 nT @ 1Hz |
| • Resolution; | 0.01 nT |
| • Absolute accuracy; | ±0.2 nT |
| • Dynamic range; | 20,000 to 120,000 nT |
| • Gradient tolerance; | Over 7000 nT/m |
| • Sampling rate; | 1 reading per 3 to 60 sec |
| • Operating temperature; | -40C to +50C |
| • Base station; | Time, date and reading stored at 3 to 60 second intervals |

- Storage; 16Mb (# of readings), mobile: 838,860, base station: 2,796,202, walking mag: 1,677,721
- Coordinate; DGPS, 12 receiver channel antenna
- Data software; Gemlink3.0, Gemlink4.0 new version

Base Magnetometer

The base station was set in a quiet place (no magnetic noise) close to the survey area. Every morning it was set up to read data before the rovers (walking mode magnetometers) were deployed to record data. In the evening the base station was turned off after all the rovers had finished recording data.

A GSM-19TW magnetometer was used as the base station to record diurnal changes in the Earth's magnetic field and the base magnetometer sensor was secured to an aluminium pole set 2 meter above the ground. The unit was set up to automatically record a total field measurement every 2 seconds. A value of 57000nT was assigned to the base magnetometer. The base station was operational at all times the magnetic data was being acquired with the rover magnetometers.

PROCESSING

Seismic Data collection and QC procedure

This used the Geometrics Seismodule controller software. The QC process consisted of:

- Assessing noise levels in geophones before the seismic source was started. A noise record was collected as uncorrelated data. Noisy geophones were fixed.
- The quality of correlation pilot was assessed after the sweep and listen time of the shot. If significant side-lobes shown in the pilot then reading was redone.
- Lastly the final shot records was assessed. If significant ghosting or other noise was seen then the shot repeated.

Seismic Data Processing

Data Processing was undertaken with DECO Geophysical RADEXPRO software.

The survey lines and processing flows were created as below.

Data were received with different sample intervals and time records thus they were loaded separately with SEG-2 Input module.

On the next step data were resembled to 0.25 ms and split into one dataset.

Geometry Input

The SEG-2 files from the Geometrics software contain the receiver (REC_X) and source (shot point) (SOU_X) locations. Since the Receiver and Source spacing are 8m the Common Depth Point (CDP) bins are 4m. Also the OFFSET between receiver and source is calculated.

Also on this step, we used imported elevation data at the sea level of line stations.

Pre-processing

This flow consisted of Band pass filtering, Amplitude correction (AGC), and approaches to remove bad traces.

- Trace Length – reduce trace length to 500 ms for all data.
- Amplitude correction - Spherical divergence correction.

Two approaches to removal of multiples were attempted:

1. F-k filtering was used in some cases to remove multiples from the shot record.
2. Predictive Deconvolution on shot records (i.e., pre-stacking), to improve the reflectors and remove noise.

Data Predictive de-convolution was used on this survey and this was used to improve the continuity of reflectors.

Bandpass filtering does filter same frequency from wind, track or electrical power line i.e. on Amplitude correction, selected Spherical divergence correction.

Muting

Muting was done to remove ground roll and air blast from the wackers. On the picture below (OFFSET: FFID sorting) you can see data quality. Two mutes were performed:

- Top muting was done to remove noise above the first break, i.e. refractor.
- Bottom muting was done by stacking and picking the break above the ground roll.

Static Correction and elevation static

Static corrections with elevation were applied to the stacked data. Refraction statics were not applied due to software limitations.

Velocity analysis

Interactive velocity program: the left panel shows the velocity verses time analysis of the portion of the CDP stacked traces. The middle panel is shows the CDP stack and interactive hyperbolic curve to investigate what the curve will be for reflectors at different two-way-times times (i.e. depth) and velocities. A curve or point velocities can then be chosen. The NMO can also be applied to see how flat a reflector in the CDP stacked traces will transform.

To improve the quality of the velocity analysis it was made with several steps. After each step velocity function was tested applying as stack velocities. In some places reflectors did not occur so only interpolated velocities were used.

CDP Stacking

This flow consists of NMO, and Ensemble stack.

Depth section

A Time to Depth transform was applied to the final time section using the velocity analysis.

Magnetic Data Processing

The diurnally corrected ground magnetic data was taken into Scientific Computing's Windisp and MGINV3D magnetic inversion software (www.scicomap.com).

The public NASA Shuttle Radar Terrain Model data (SRTM, 90m resolution) merged with the magnetometer DGPS elevation formed the elevation model.

MGINV3D processing parameters and statistics

Parameter file: mgsen3d.inp
Program Version: 1.24

Mesh file: mesh
 Obs file : mag.obs
 Topo file: topo.dat
 Weight method : 1
 Number of Components : 1
 Inversion Style : Standard 3D
 Beta,znot: null
 Wavelet : daub2
 TolC : 1 0.01 0
 Data type, restart: : 1
 Data type: TMI
 Compression settings:
 Wavelet : daub2
 TolC used : 0.010000
 Number of observed data: 72
 Topo file read time (mins): 0.0
 Topo triangulation time (mins): 0.0
 Topo interpolation time (mins): 0.0
 Average terrain clearance: 1.02
 Depth weighting parameters:
 mode= simple
 beta= 3.00
 znot= 2.02
 Restart flag: 0
 Base Topo: 0.0
 Total cells in model: 147840 262144
 Number of x cells : 64 64
 Number of y cells : 42 64
 Number of z cells : 55 64
 MGINV3D version 1.24 started on: 15/11/2013 17:48:11
 Input parameter file: mginv3d.inp
 restart, num components: 0 1
 Mode: 2 (fixed multiplier)
 Background removal: Off
 Multiplier: 1.000
 Positivity flag: 1
 Data file: mag.obs
 Sensitivity file: mginv3d.mtx
 Initial Model: null
 Reference Model: null
 Bounds file: null
 Alpha values (s, e, n, z): 0.000100 1.000 1.000 1.000
 Weighting file: null
 Data offset (added to obs): 0
 MTX version: 2
 Data type 1: TMI
 Field values : 57006.0 63.16 -3.18
 Measurement values : 1 63.16 -3.18
 Inversion style: 0
 Number of data: 72
 Total model cells: 147840
 number of x cells: 64
 number of y cells: 42
 number of z cells: 55
 TX file accessed from memory
 memory allocated: 20MB
 conversion Style : Standard 3D
 Ginv3D Inversion progress

Iterations	RMS_Misfit	Model_Norm	Total_Norm	Time
0	196.60	0.00	196.60	
1	121.44	0.04	121.44	0.5
2	120.73	0.04	120.73	0.4
3	120.06	0.04	120.06	0.3
4	119.38	0.04	119.38	0.4
5	118.71	0.04	118.71	0.3
6	118.03	0.04	118.03	0.4
7	117.34	0.04	117.34	0.4
8	116.65	0.04	116.65	0.4
9	115.95	0.04	115.95	0.4
10	115.25	0.04	115.25	0.4
11	114.55	0.04	114.55	0.4 0*
12	44.52	0.18	44.52	0.7 0+
13	31.48	0.20	31.48	0.5 0*
14	30.80	0.20	30.80	0.4
15	30.17	0.20	30.17	0.4
16	29.58	0.20	29.58	0.3
17	29.02	0.20	29.02	0.4
18	28.50	0.20	28.51	0.4
19	28.02	0.20	28.02	0.4
20	27.57	0.20	27.57	0.5
21	27.14	0.20	27.14	0.4
22	26.74	0.20	26.75	0.4
23	26.37	0.20	26.37	0.4
24	26.02	0.20	26.02	0.4 0*
25	13.05	0.28	13.06	0.9 0+
26	10.83	0.28	10.84	0.5 0*
27	10.18	0.28	10.19	0.4
28	9.60	0.28	9.62	0.3
29	9.09	0.28	9.11	0.4
30	8.66	0.28	8.68	0.3
31	8.28	0.28	8.30	0.3
32	7.92	0.28	7.94	0.3
33	7.61	0.28	7.63	0.4
34	7.31	0.28	7.33	0.3
35	7.01	0.28	7.03	0.4
36	6.72	0.28	6.74	0.4
37	6.43	0.28	6.45	0.4 0*
38	4.95	0.30	4.98	0.8 0+
39	4.20	0.30	4.24	0.4 0*
40	3.62	0.30	3.66	0.3
41	3.24	0.30	3.29	0.3
42	2.96	0.30	3.01	0.4
43	2.72	0.30	2.78	0.4
44	2.51	0.30	2.57	0.4
45	2.31	0.30	2.38	0.4
46	2.15	0.30	2.22	0.5
47	2.08	0.30	2.15	0.3
48	1.92	0.30	2.00	0.3
49	1.87	0.30	1.95	0.4
50	1.77	0.31	1.86	0.4 0*
51	1.41	0.31	1.51	0.8 0+
52	1.29	0.31	1.40	0.4 0*
53	1.11	0.31	1.24	0.4
54	0.96	0.31	1.11	0.4
55	0.87	0.31	1.03	0.4
56	0.83	0.31	1.00	0.4
57	0.81	0.31	0.98	0.4
58	0.77	0.31	0.95	0.5
59	0.75	0.31	0.94	0.4
60	0.72	0.31	0.91	0.4
61	0.70	0.31	0.89	0.3

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62	0.63	0.31	0.84	0.4
63	0.60	0.31	0.82	0.5 0*
64	0.47	0.31	0.73	0.8 0+
65	0.42	0.31	0.69	0.5 0*
66	0.34	0.31	0.65	0.4
67	0.29	0.31	0.63	0.3
68	0.26	0.31	0.62	0.3
69	0.25	0.31	0.61	0.4
70	0.25	0.31	0.61	0.4
71	0.24	0.31	0.61	0.4
72	0.23	0.31	0.60	0.3
73	0.23	0.31	0.60	0.4
74	0.22	0.31	0.60	0.4
75	0.22	0.31	0.60	0.4
76	0.21	0.31	0.60	0.4 0*
77	0.20	0.31	0.59	0.8 0+
78	0.18	0.31	0.59	0.4 0*
79	0.17	0.31	0.58	0.3
80	0.16	0.31	0.58	0.4
81	0.15	0.31	0.58	0.4
82	0.14	0.31	0.58	0.4
83	0.14	0.31	0.57	0.4
84	0.13	0.31	0.57	0.4
85	0.13	0.31	0.57	0.4
86	0.13	0.31	0.57	0.4
87	0.12	0.31	0.57	0.5
88	0.12	0.31	0.57	0.4
89	0.11	0.31	0.57	0.4

MGINV3D ended on: 11/15/2013 17:48:50

cpu time taken (mins): 1.3

clock time taken (mins): 0.7

RESULTS

Filtered Seismic Results

The raw common depth point (CDP) sections show stacked geophone traces to 500msec two way time (TWT).

Depth Sections

The depth sections are transformed from the filtered CDP sections using the final velocity model. They are cut to the depth of maximum investigation which is determined by the reflectors and objective of the survey.

INTERPRETATION

The interpretation consists of:

- six sections of seismic reflection and model inverted ground magnetic data. All sections three panels; top - depth corrected reflectors in variable density in shades of grey, middle - depth corrected reflectors in variable density red-white-blue and bottom - magnetic susceptibility from the 3D magnetic inversion.
- Plan view of the top of inferred coal in P2.