Taseko Prosperity Gold-Copper Project

Appendix 3-6-Q

KNIGHT & PIESOLD LTD.

AND TASEKO MINES LIMITED

REPORT ON SEISMIC REFRACTION AND REFLECTION INVESTIGATION PROSPERITY PROJECT, FISH LAKE AREA WILLIAMS LAKE, BRITISH COLUMBIA

by

Cliff Candy, P.Geo.

July, 1997 **PROJECT FGI-313**

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CONTENTS

ILLUSTRATIONS

1.0 INTRODUCTION

Frontier Geosciences Inc. carried out a seismic refraction investigation for Knight and Piesold Limited at the Taseko Lake Mines Ltd. Prosperity Minesite near Williams Lake B.C. in west central B.C.

The purpose of the seismic refraction survey was to determine the thicknesses and compositions of overburden materials and the depths to bedrock for two proposed storage dams for mine tailings. The locations of the seismic lines at the two proposed locations, Site 2 and Site 5 are illustrated at 1:10000 scale on Figures 2a and 2b respectively. The two sites are located approximately 12 km apart on a broad plateau east of the Taseko River. The location is shown in the Survey Location Plan in Figure 1. This plan is a segment of the 1:50,000 scale NTS map sheets 92-O/5 entitled "Mount Tatlow" and 92-O/12 entitled "Elkin Creek".

The survey work was carried out in two phases, the first phase in the Fall of 1996, with the second phase of work completed during the spring of 1997. This latter phase of coverage included a reflection seismic test survey in a limited traverse at Site 2. As the seismic refraction method is not able to detect a lower velocity layer beneath a higher velocity layer, as is the case where a high velocity basalt flow overlies a horizon of glacial drift materials a reflection seismic survey test was undertaken to evaluate this method for exploration beneath the basalt flows. One possible application of the method was to detail the area of the proposed pit south wall, near the north end of Fish Lake. This location is ideal for deployment of the method due to the near surface water table, which provides good energy propagation conditions, and relatively flat topography, which minimizes the 'static' corrections required However, the immediate concern was the western area of Site 2, and thus the coverage was targeted on the SL-2G line where a larger thickness of overburden exists.

In total, approximately 10,000 metres of detailed seismic refraction work was carried out along seven separate seismic traverses, SL-5A, SL-5B, SL-2A, SL-2B, SL-2C, SL-2D and SL-2G. The seismic reflection test consisted of 750 metres of coverage coinciding with line SL-2G.

2.0 THE SEISMIC REFRACTION SURVEY METHOD

2.1 Equipment

The seismic refraction investigation was carried out using a Geometrics, Model S-24, 24 channel, signal enhancement seismograph and Mark Products Ltd. 14 Hz geophones. Geophone intervals along the multicored seismic cables were maintained at 5 metres. Small explosive charges used for energy input were detonated electrically with a Geometrics, HVB-1, high voltage, capacitor-type blaster.

2.2 Survey Procedure

For each spread, the seismic cables were stretched out in a straight line and the geophones implanted. Seven separate shotholes were then excavated: one at either end of the 24 geophone set-up, three at intermediate locations along the cables and one off each end of the line to ensure adequate coverage of the basal layer. Eighty percent Extra-gel was utilized as the energy source in the survey. Shots generally consisting of one to three 1" by 8" sticks of Extra-gel which were detonated individually and arrival times for each geophone were automatically recorded in the seismograph. Digital records of the seismic data were recorded on the seismograph hard drives. Data recorded during field surveying operations was generally of good to excellent quality.

Throughout the survey, notes were recorded regarding seismic line positions in relation to creeks and drillholes, as well as topographic and geological features of the area.

3.0 SEISMIC REFRACTION ANALYSIS

3.1 Interpretation

In general, the velocity contrast between refractive layers was more than adequate for interpretation. Interpreted boundaries with distinct velocities are indicated by continuous coloured lines in the sections. The basal line in all cases represents the interpreted competent bedrock surface.

3.2 Interpretive Method

The final interpretation of the seismic data was arrived at using the method of differences technique. This method utilizes the time taken to travel to a geophone from shotpoints located to either side of the geophone. Using the total time, a small vertical time is computed which represents the time taken to travel from the refractor up to the ground surface. This time is then multiplied by the velocity of each overburden layer to obtain the thickness of each layer at that point.

4.0 SEISMIC REFLECTION SURVEY METHOD

Energy from a seismic source is found to propagate as two modes of body waves. These are compressional, where particle motion is along the direction of the energy flow, and shear waves where energy is transverse to the direction of the energy flow. As well, surface waves from the source are created, known as Rayleigh waves or "ground roll", and energy is conveyed as compressional waves through air. The high resolution reflection seismic method is principally concerned with the propagation of compressional waves.

The body waves from the source can reach the geophone array via a number of possible paths. These may be either direct wave paths that have been critically refracted or reflected, governed by Snell's Law, from subsurface strata exhibiting contracts in seismic velocity. The reflected arrivals are distinguished by having the square of their arrival times linear with respect to the square of the distance between the source and geophone for layers of constant velocity.

The reflected arrivals must be recognized in the presence of energy arriving via other paths. Thus the reflection seismograph from a given shot will contain refracted energy and Raleigh Wave or "ground roll" energy. As well, compact (non-layered) bodies and discontinuities in layering will create diffracted arrivals which may tend to obscure reflected arrivals. Specific instrumentation, field methodology, and data processing steps have been utilized to mitigate the effect of these non reflected arrivals.

4.1 Equipment

The seismic investigation was carried out utilizing a Geometrics Smartseis, 24 channel signal enhancement seismograph and Bison Instruments Inc. 30 Hz geophones. This seismograph utilizes floating point amplifiers and 15 bit analogue to digital conversion to allow very weak signals to be recorded in the presence of higher amplitude low frequency ground roll. A pair of 69 metre cables with a geophone spacing of 3 metres was employed on the reflection test line. A combination 8 gauge seismic shotgun (of proprietary design) firing a blank black powder load and half stick charges of Extra-gel. These sources provide energy rich in high frequency content. These short wavelength waves are better able to resolve thin bedding as compared with lower frequency waves.

4.2 Survey Procedure

The reflection data was gathered using an offset shot array, according to the common depth point (CDP) method. For each spread, the seismic cable was laid out along the line and geophones implanted. The seismic source was implanted in the ground and detonated at a point 3 metres from the first active geophone. Twenty-four traces were obtained for each shot, providing 6 fold CDP coverage. The resulting seismogram was inspected to confirm data quality and reshot if necessary. The data were sampled at 125 microseconds per sample with a record length of 256 milliseconds and recorded as SEG-2 files in the seismograph. Upon completion, the cycle was repeated, advancing the source 6 metres and rolling the active channels along a two geophone interval. At all locations 24 channel refraction records were obtained to aid in statics corrections and to assess overburden velocities.

4.3 Data Processing

The interpretation of the seismic data utilized the KGS WinSeis reflection processing package. The field data is assigned shot sequence numbers and converted to the KGS SEG-Y format. A first arrival mute is then applied to eliminate the refracted arrivals, and a surgical mute is applied to attenuate the air wave arrivals. The data are sorted according to the shot pattern and offset in order to produce a CMP (common mid-point) gather. This results in a grouping of traces such that for each position, the twelve traces having the same mid-point are gathered together. The data are then static corrected for the source and geophone elevations and corrections applied for the near surface velocities. At each stage hard copy plots are produced to track the effect of processing. A stacking velocity is selected, based on the refraction information and on stacking trials with a range of velocities. The full CMP data set is then normal move out corrected, compensating for the square of time and square of distance characteristic of the reflectors mentioned above. The data are then stacked, a process which is intended to provide an increase in reflection signal to noise ratio by summing traces related to the same spatial point. In this way, coherent reflection events will tend to sum constructively over the background of other non-reflection signals.

The final stage of processing is to bandpass filter the data and apply an automatic gain control pass. This latter process effectively compensates for decreasing signal amplitude with depth.

5.0 LIMITATIONS

The depths to subsurface boundaries derived from seismic surveys are generally accepted as accurate to within fifteen percent of the true depths to the boundaries. In some cases, unusual geological conditions may produce false or misleading seismic arrivals with the result that computed depths to subsurface events may be less accurate. In seismic refraction surveys these conditions may be caused by a "hidden layer" situation or by a velocity inversion. The first condition is caused by the inability to detect the existence of layers because of insufficient velocity contrasts or layer thicknesses. A velocity inversion exists when an underlying layer has a lower velocity than the layer directly above it.

The results are interpretive in nature and are considered to be a reasonably accurate presentation of existing subsurface conditions within the limitations of the seismic method.

6.0 GEOPHYSICAL RESULTS

6.1 General

The results of the interpretations for the seismic lines of SL-5A through to SL-2G are shown at 1:500 natural scale in Figures 3 to 35 in the Appendix. Topographic information along the seismic lines was derived from inclinometer readings obtained during the survey which were tied to GPS survey information provided by Taseko Mines Limited. The GPS information was obtained during July, 1997 using a Trimble Scoutmaster. This information was provided in the NAD-27 datum and was converted to NAD-83 to coincide with the site plans illustrated in Figures 2a and 2b, and with the November, 1996 seismic line positions obtained by McElhanney Consulting Services Ltd. for the first phase of work. The test reflection seismic traverse was carried out along the refraction line SL-2G. The alignment of the two data sets is indicated by the common chainage distance plotted on both sections. The wiggle trace plot of the seismic reflection data is displayed at a scale of 1:1000 on Figure 36.

6.2 Discussion.

The results of the seismic interpretations at the tailings site area indicate the subsurface is composed of four distinct velocity layers. The surficial velocity layer is relatively thin throughout the survey area, varying in thickness up to approximately 5 metres. The observed velocities vary from 260 m/s to 730 m/s. This zone has been directly correlated with surface exposures of sands, gravels, cobbles and organics.

Underlying the surficial velocity zone is an intermediate layer with velocities falling in the range of 575 m/s to 1538 m/s. This layer which varies up to approximately 6.5 metres in thickness is correlated in drillholes with a lower velocity weathered till.

The principal intermediate layer (third layer) exhibits velocities of 1340 m/s to 2735 m/s. Lower velocities in this horizon may correlate with areas of less dense or more weathered till. This layer varies greatly in thickness from nearly zero metres, up to as much as 56 metres in thickness. Typically, the thickness of the principle intermediate layer remains fairly consistent within a range of 0 to 20 metres.

The basal layer ranging in velocity from 2200 m/s to 4545 m/s is the interpreted rock surface. In many locations this layer corresponds to basalt flow rocks. These velocities vary according to lithology and the degree of fracturing or jointing in the rock mass. Typically, the deepest interpreted overburden areas correspond to low velocity bedrock zones.

A trend consisting of deep basal layer depths appears to exist on lines SL-2C, SL-2B and SL-2A, which parallels the eastern edge of the valley. A section of deeper basal layer is found below spreads 5 and 6 of line 2C, below spreads 13 and 14 on line 2B and beneath spreads 1-7 on line 2A. Thicknesses of the third layer and thus the total depth to the basal layer tend to be lower to the west on these lines. Another area of a deep basal layer is found on line 2G below spreads 5 and 6.

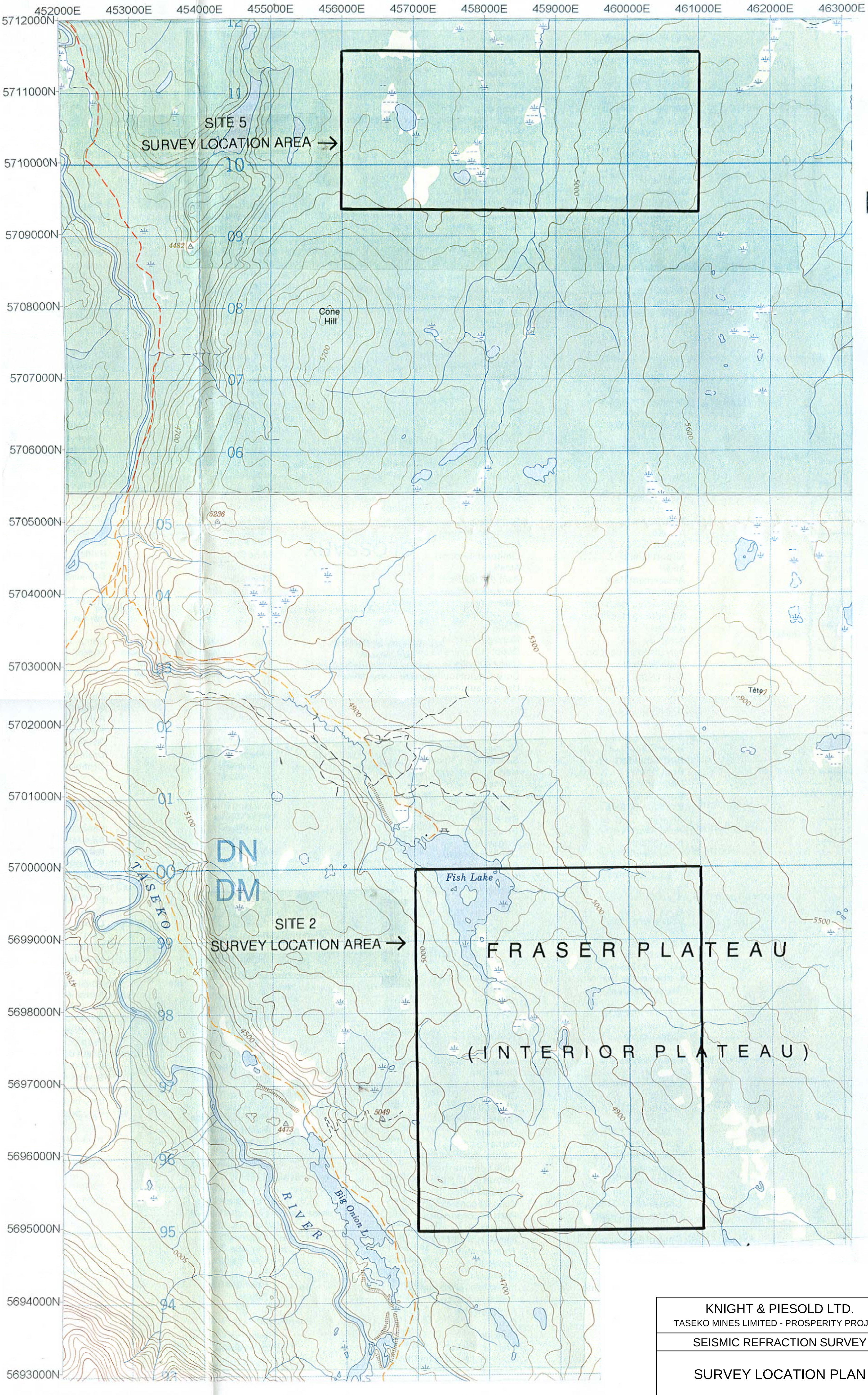
The reflection seismic test profile was carried out in the along the alignment of the SL-2G refraction survey, in an area of variable topography, with relatively poor ground coupling conditions. A representative profile of a series of stacking/filtering processing runs is shown for this data on Figure 36 at a scale of 1:1000. The basalt top is observed as a reflector with a number of weaker sub-basalt events present. One such event that is correlated with the top of a thin drift horizon in drillhole 96-195 is plotted on this figure.

7.0 SUMMARY AND CONCLUSIONS

A seismic program was undertaken as a part of the tailings dam investigation at the Prosperity Minesite on behalf of Knight and Piesold Ltd. and Taseko Lake Mines Ltd. The seismic refraction investigation profiled the overburden and bedrock, providing a classification of the key units. In particular, the survey indicated areas of sufficiently thick glacial till to provide an adequate basal layer for the tailings dam sites. The limited seismic reflection test showed the feasibility of deploying this sophisticated methodology in an elevated terrain area with relatively poor ground coupling conditions, showing sub-basalt events that would not be detectable with the seismic refraction data alone.

For: Frontier Geosciences Inc.

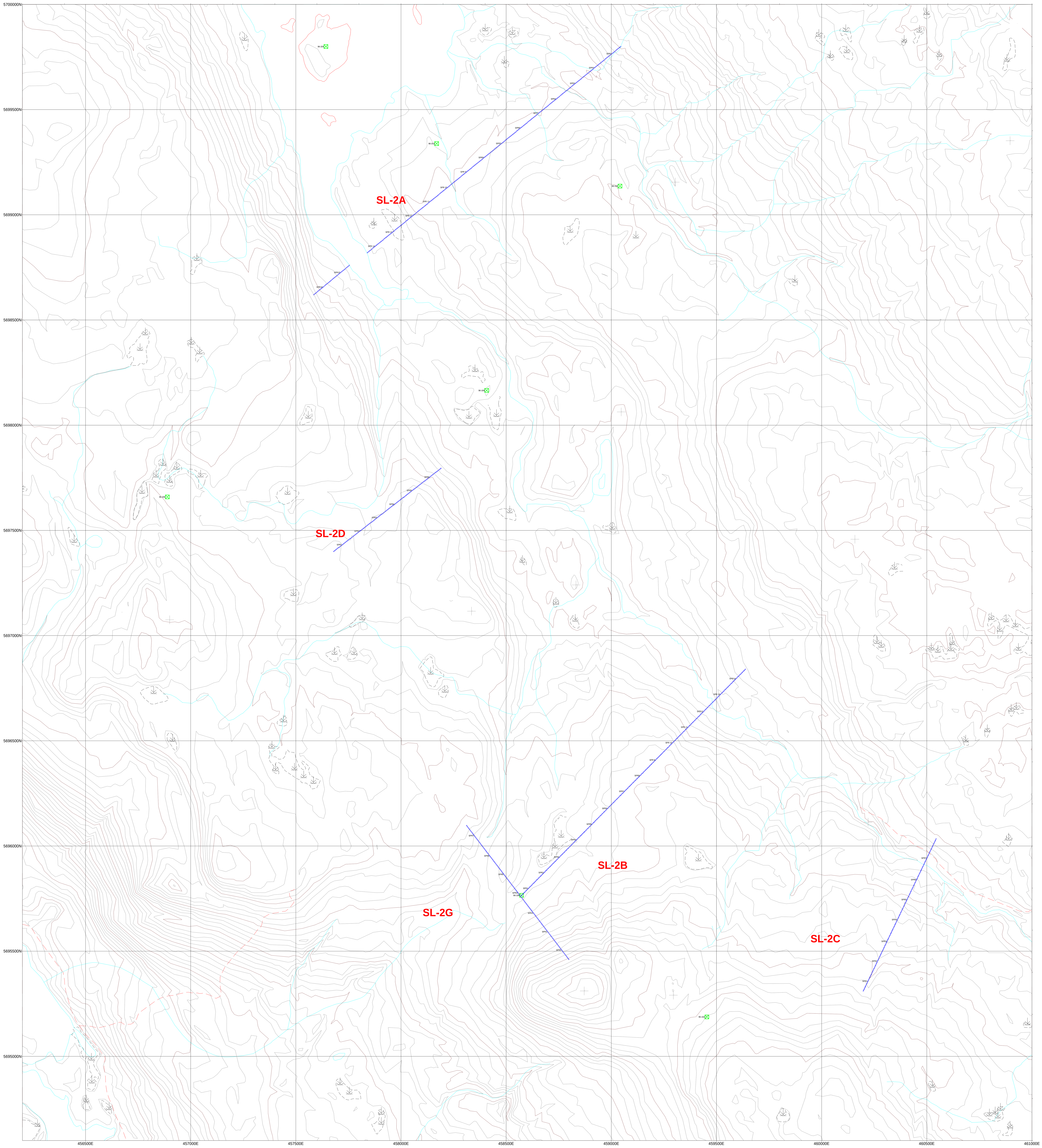
Cliff Candy, P. Geo.



NOTE: PLAN IS SEGMENT OF NTS MAP SHEETS 92-O/5, "MOUNT TATLOW" and 92-O/12, "ELKIN CREEK"

0 1000 2000 3000 4000 METRES

KNIGHT & PIESOLD LTD.		
TASEKO MINES LIMITED - PROSPERITY PROJECT		
SEISMIC REFRACTION SURVEY		
SURVEY LOCATION PLAN		
FRONTIER GEOSCIENCES INC.		
DATE: JULY. 1997	SCALE 1:50,000	FIG. 1



0 100 200 300 400 500

metres

DATUM NAD 83
UTM ZONE 10 U
5m CONTOURS

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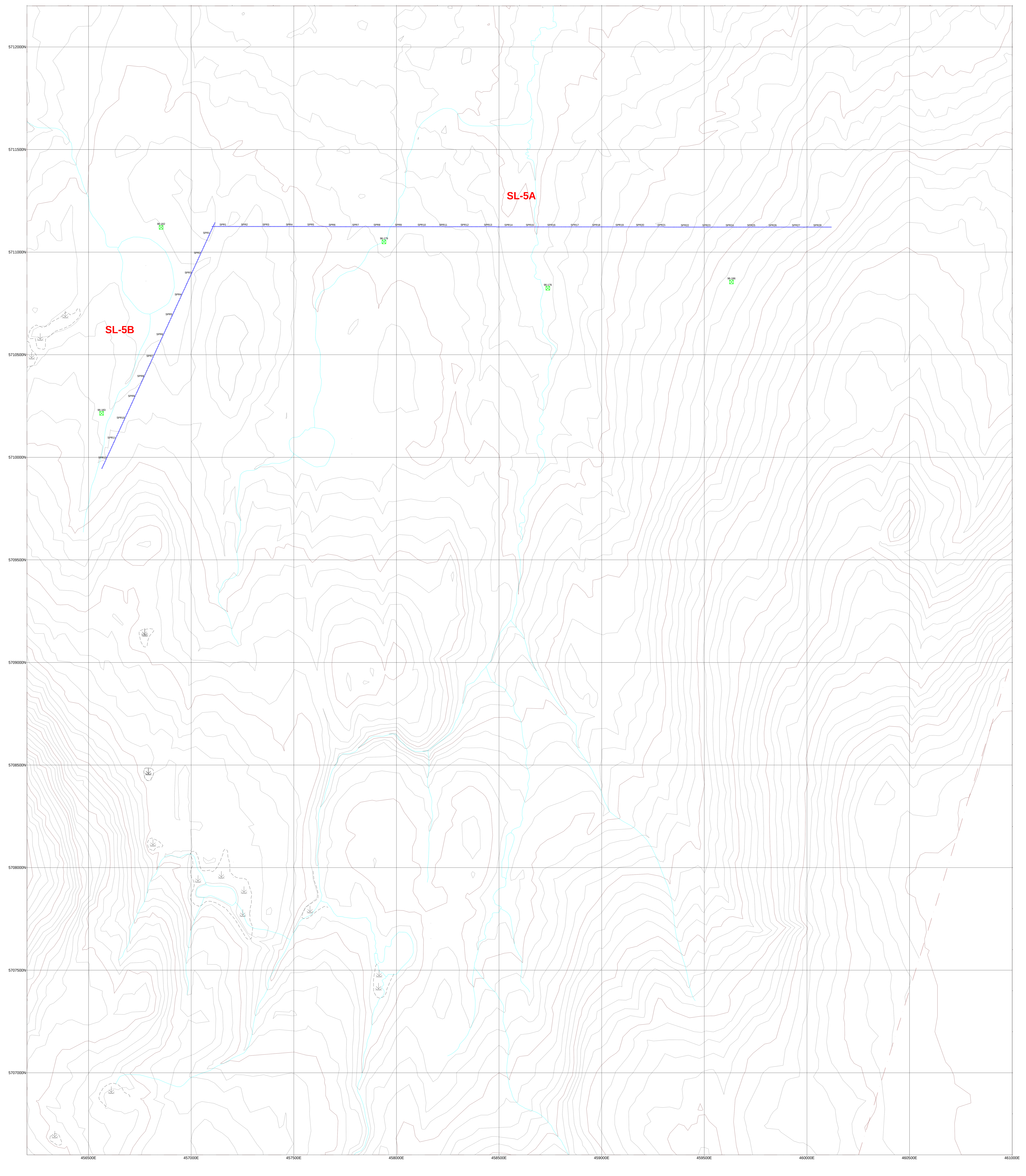
SEISMIC SURVEY

SITE 2 PLAN

FRONTIER GEOSCIENCES INC.

JULY 1997		FIG. 2A



0 100 200 300 400 500

metres

DATUM NAD 83
UTM ZONE 10 U
5m CONTOURS

KNIGHT & PIESOLD LTD. TASEKO MINES LIMITED. - PROSPERITY PROJECT		
SEISMIC SURVEY		
SITE 5 PLAN		
FRONTIER GEOSCIENCES INC.		
JULY 1997		FIG. 2B

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD. TASEKO MINES LIMITED - PROSPERITY PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5A
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997	Fig. 3

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | Fig. 4

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5A
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997 | Fig. 5

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-5A	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	Fig. 6

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD. TASEKO MINES LIMITED - PROSPERITY PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5A
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997		Fig. 7

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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TASEKO MINES LIMITED - PROSPERITY PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5A
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997 — Fig. 8

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | Fig. 9

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997

Fig. 10

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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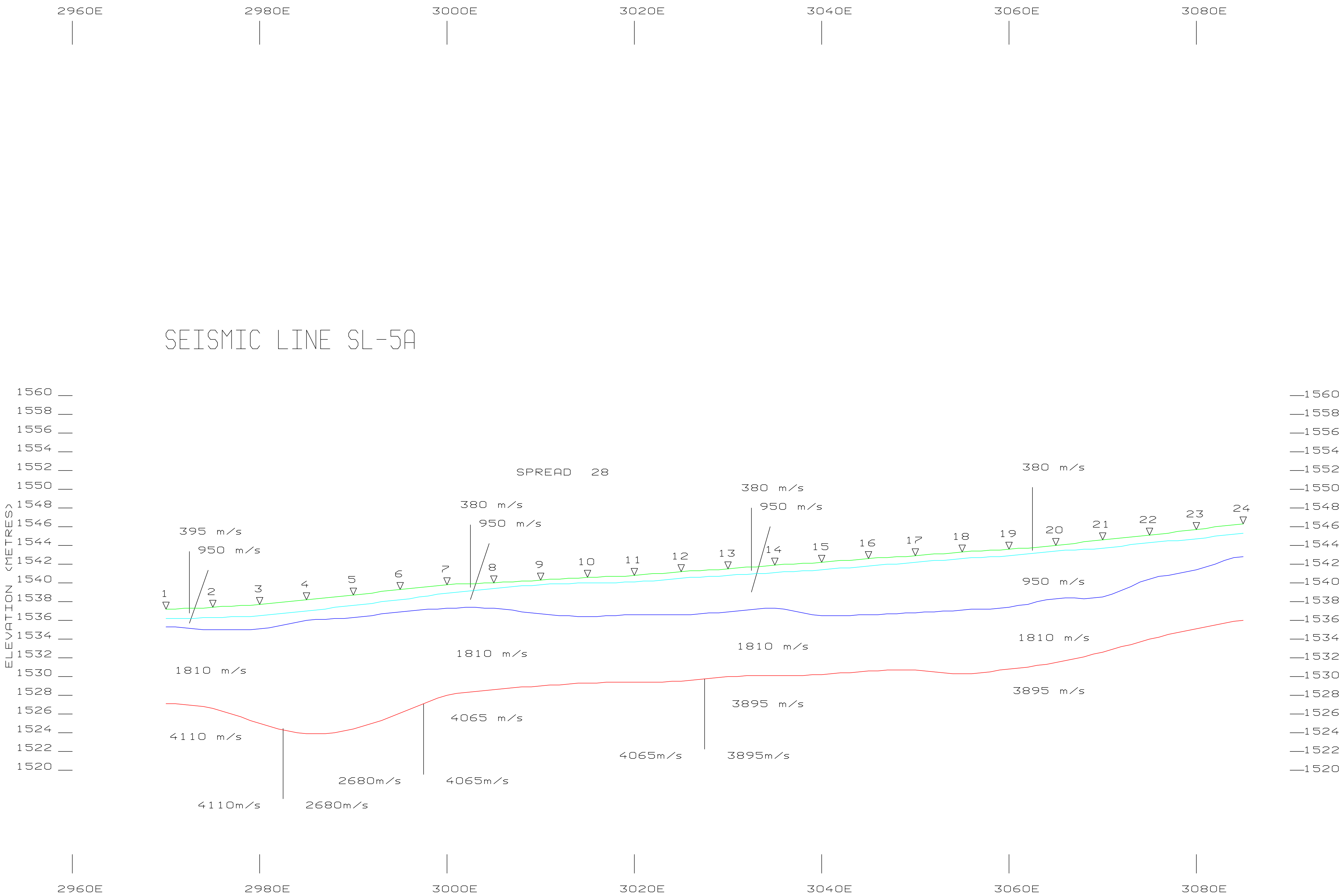
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5A
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997   Fig. 11



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | | Fig. 12

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-5B

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | Fig. 13

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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TASEKO MINES LIMITED - PROSPERITY PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-5B
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997   Fig. 14

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-5B	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	Fig. 15

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-5B	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	Fig. 16

SEISMIC LINE SL-2A

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997	FIG. 17

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997

FIG. 18

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

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FIG. 19

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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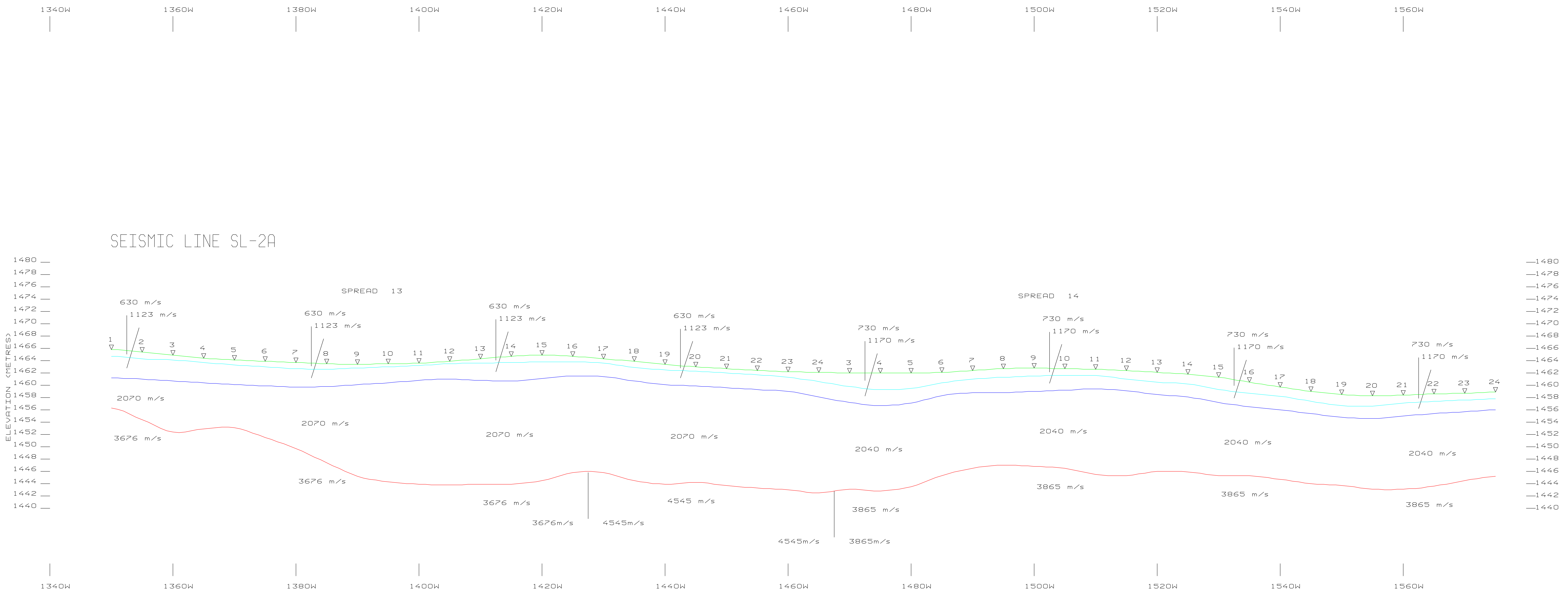
SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		FIG. 20



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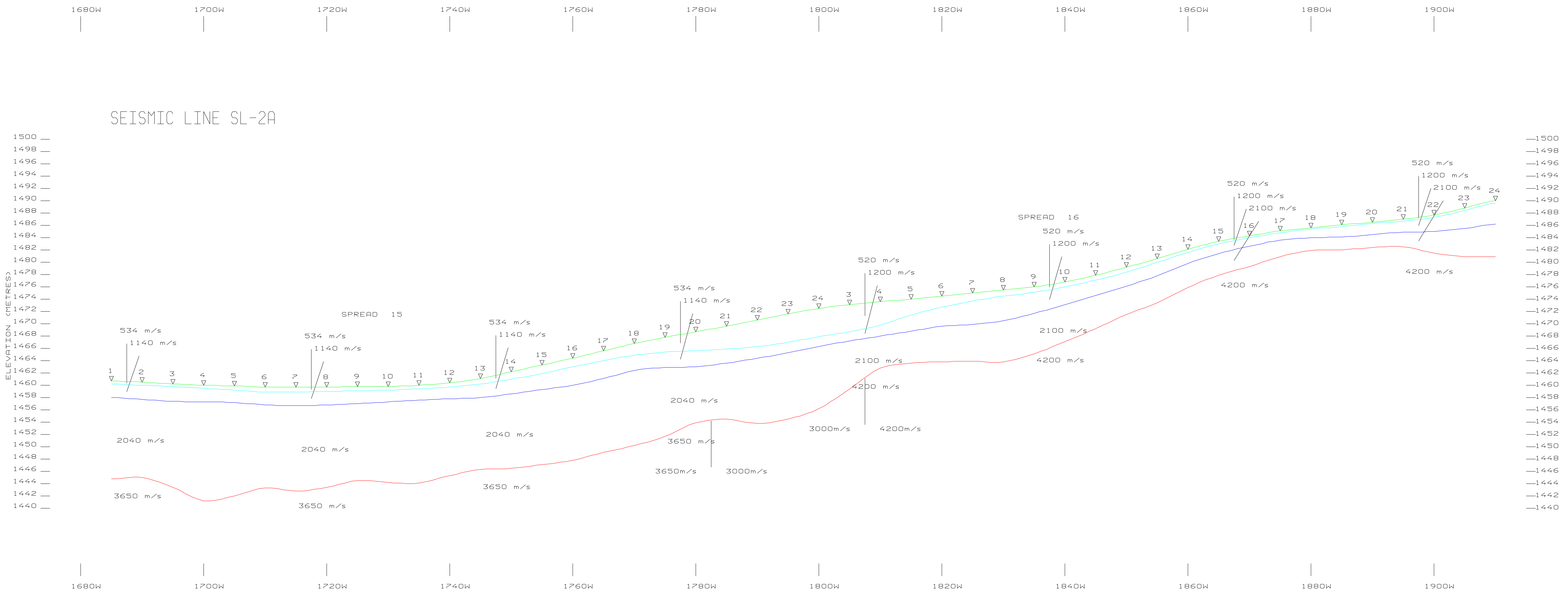
SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | FIG. 21



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2A

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		FIG. 22


SEISMIC LINE SL-2B
SPREAD 1
SPREAD 2
SPREAD 3
DH 96-195(OFFSET 3 M)
GLACIAL TILL
VESICULAR BASALT
ELEVATION (METRES)
NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24
KNIGHT & PIESOLD LTD.
TASEKO MINES LIMITED - PROSPERITY PROJECT
SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-2B
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997
Fig. 23

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY
INTERPRETED DEPTH SECTION SL-2B
FRONTIER GEOSCIENCES INC.
DATE: JULY 1997 | Fig. 24

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2B

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		Fig. 25

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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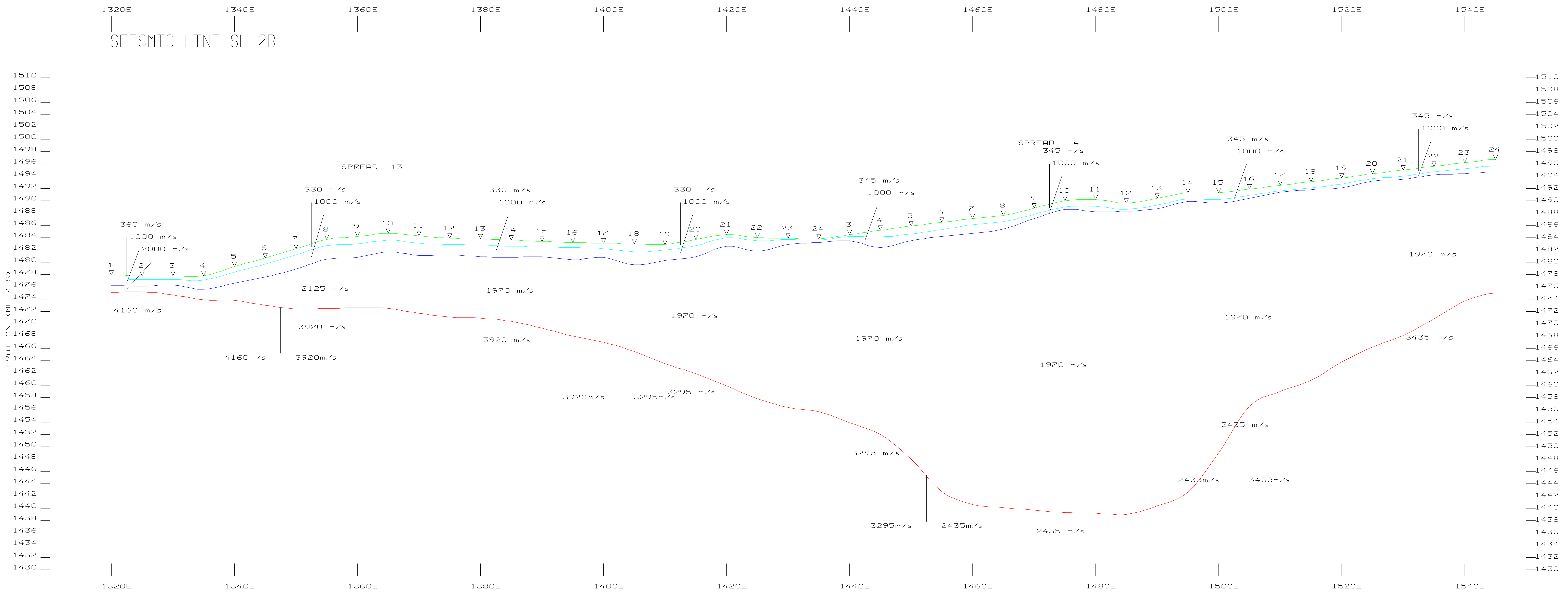
SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2B

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		Fig. 26



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2B

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | Fig. 27

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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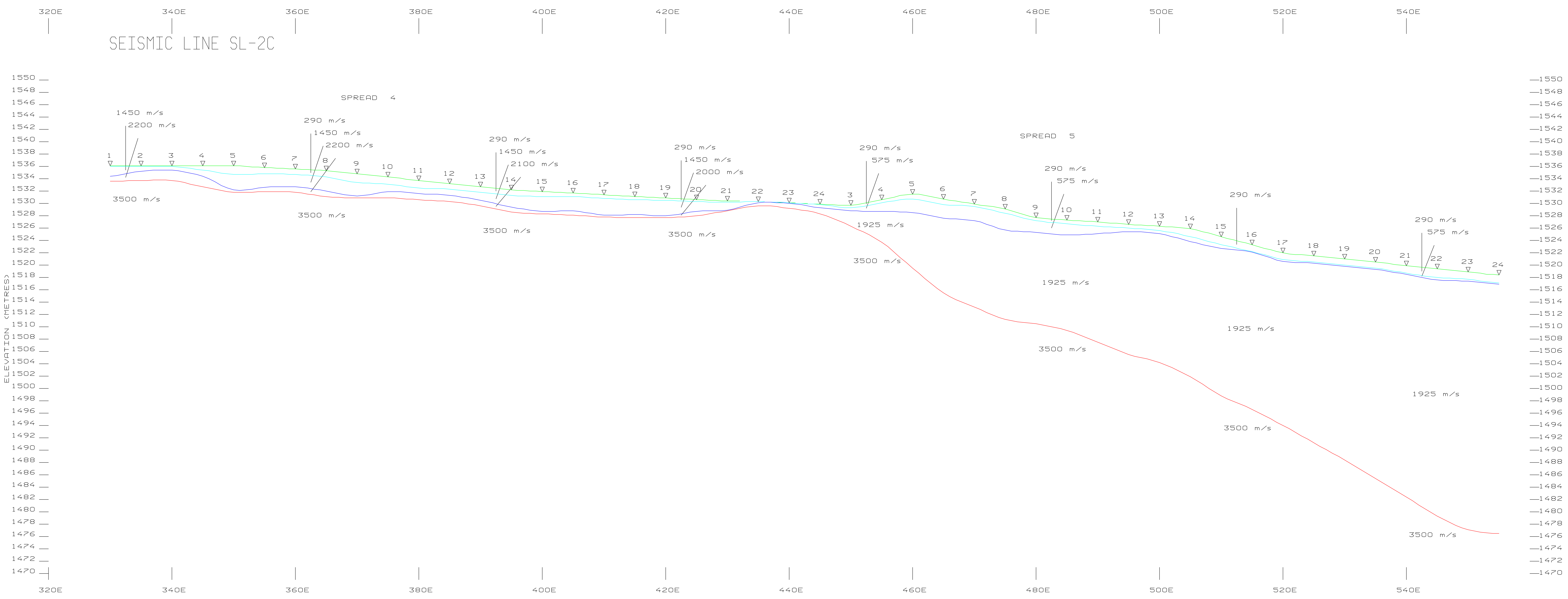
SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2C

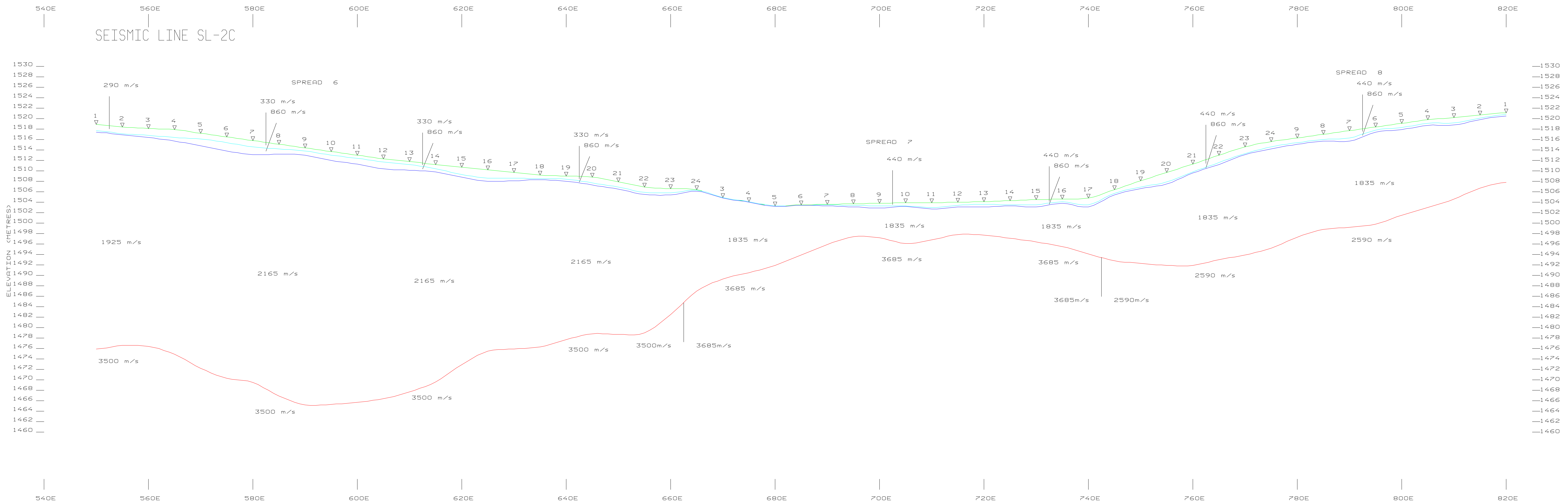
FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		Fig. 28



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD. TASEKO MINES LIMITED - PROSPERITY PROJECT	
SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-2C	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	Fig. 29



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2C

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		Fig. 30

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD.

TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2D

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997

FIG. 31

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

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TASEKO MINES LIMITED - PROSPERITY PROJECT	
SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-2D	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	FIG. 32

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD.

TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2G

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997		FIG. 33

NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

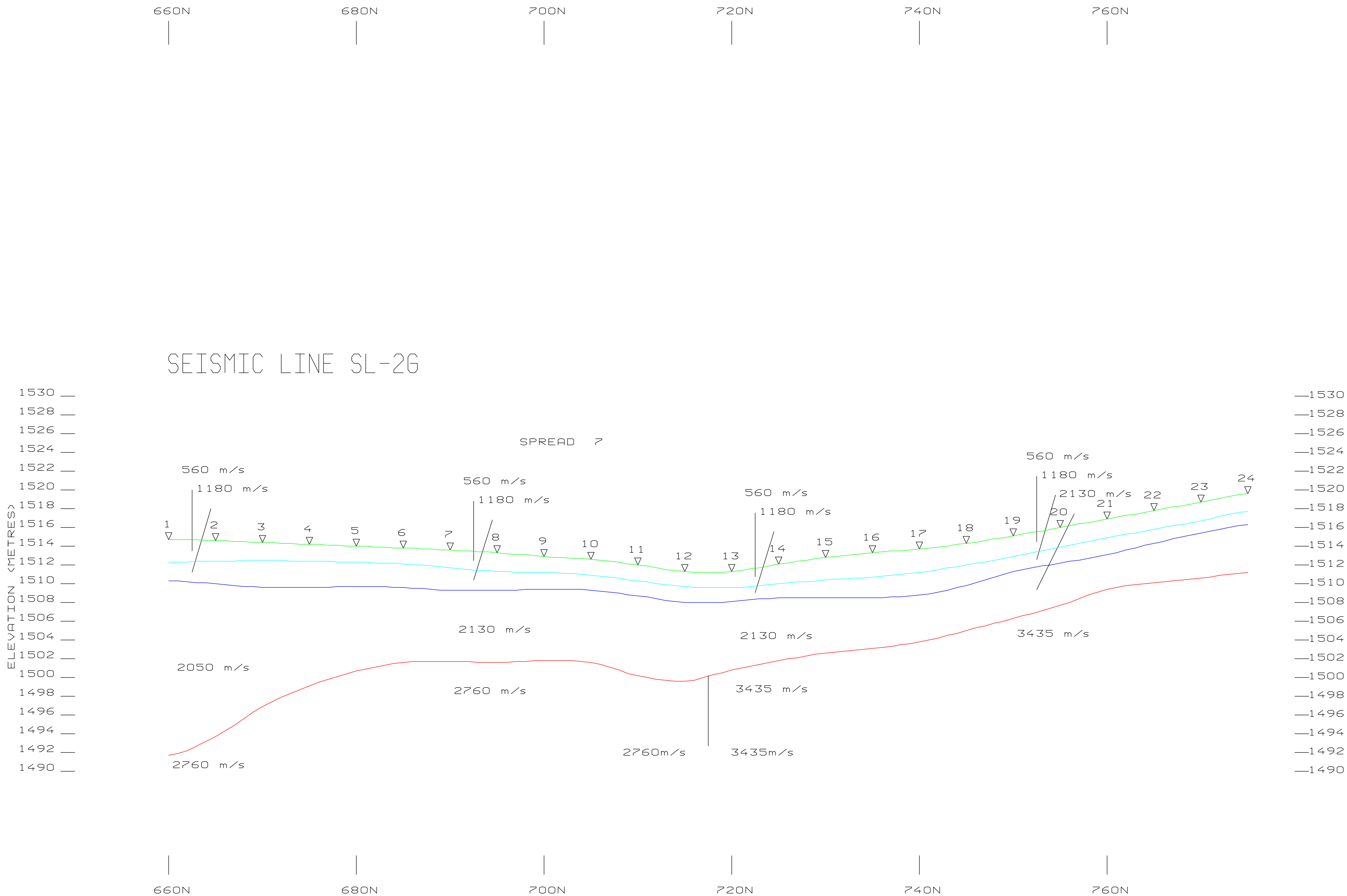
KNIGHT & PIESOLD LTD.
TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFRACTION SURVEY

INTERPRETED DEPTH SECTION SL-2G

FRONTIER GEOSCIENCES INC.

DATE: JULY 1997 | FIG. 34



NOTES:
VERTICAL SCALE: 1:500
HORIZONTAL SCALE: 1:500
INSTRUMENT: SMARTSEIS S24

KNIGHT & PIESOLD LTD. TASEKO MINES LIMITED - PROSPERITY PROJECT	
SEISMIC REFRACTION SURVEY	
INTERPRETED DEPTH SECTION SL-2G	
FRONTIER GEOSCIENCES INC.	
DATE: JULY 1997	FIG. 35

NOTES:
GROUND SURFACE
INTERPRETED BASALT SURFACE:
INTERPRETED SUB-BASALT REFLECTOR:

KNIGHT & PIESOLD LTD.

TASEKO MINES LIMITED - PROSPERITY PROJECT

SEISMIC REFLECTION SURVEY

INTERPRETED SECTION SL2-GR

FRONTIER GEOSCIENCES INC.

DATE: JULY, 1997	SCALE 1:1000	FIG. 36