GEOPHYSICAL REPORT

on the

Fourth of July Creek Property

Whitehorse Mining District

WORK PERFORMED
July 17 - July 25, 2021

DATE OF REPORT
October 7, 2021

REPORT PREPARED BY
Nicholas Gust

CENTER OF WORK
61°9'44.247"N, 138°2'55.87"W

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Introduction

From July 17 to July 25, 2021 a geophysical survey was conducted on the Fourth of July Creek property.

The purpose of the survey was to map bedrock and subsurface layers to aid in placer exploration. The main goal was to provide evidence for potential paleo-channels and map bedrock on and hardpan layers.

A passive seismic system was utilized in this survey. The instrument that we used records ambient seismic noise and does not require a source. In processing, we used the Horizontal-to-Vertical Spectral Ratio (HVSR) technique to identify bedrock depth over the survey area. The results of the survey provided clear evidence of the paleo-channel and provided new targets for future exploration and mining.

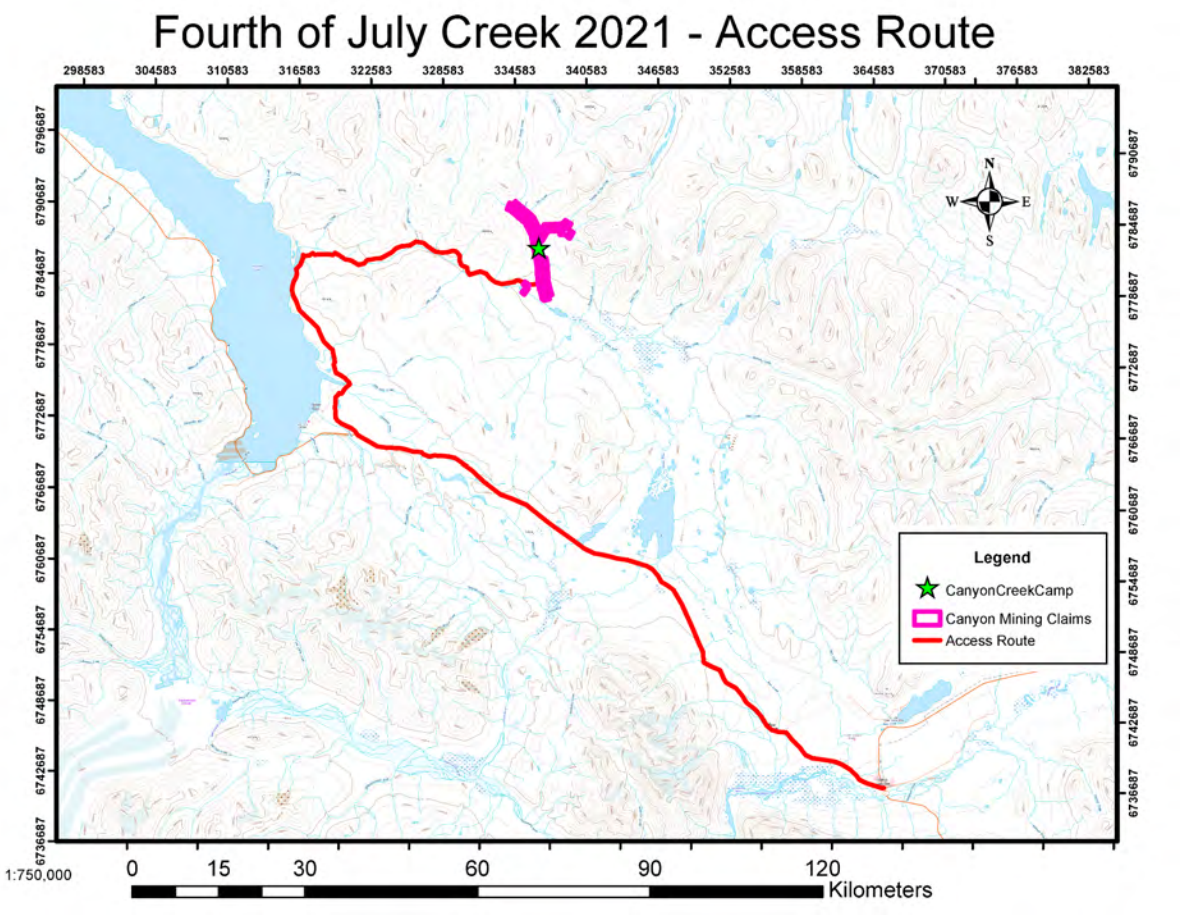
The survey was conducted by West Coast Placer with a three-man crew led by Nicholas Gust, who is trained in the application and interpretation of this technique. The HVSR seismic technique is new to placer exploration and part of this program was to assess the effectiveness and value of this technique.

Location and Access

The Fourth of July Property is located in the Ruby Range area between Kluane Lake and Aishihik Lake

The claim block is approximately 200 km west of the City of Whitehorse, and 50 km northwest of the community of Haines Junction. The claims are centered on the latitude of 61 °9' N and longitude of 137°58' Win NTS Map Sheets 115H 03 and 115H 04. The claims lie between the elevations of 1000 ft and 6000 ft from sea level.

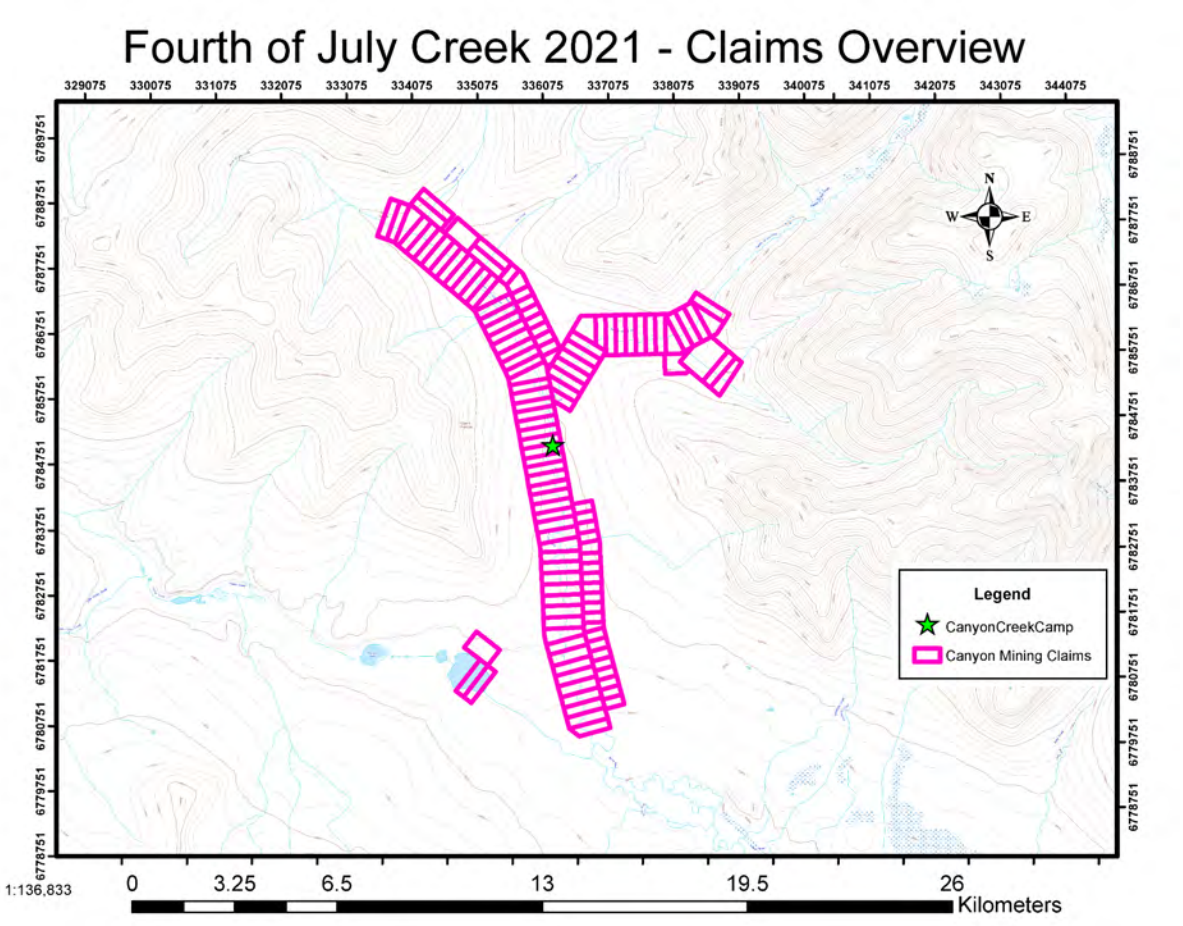
The property can be accessed by following the Alaska Highway for 56 km northwest of Haines Junction, and an additional 38 km by 4x4 along the Cultus Lake Road, east of Kluane Lake. Canyon Mining Ltd. has developed and maintained a road to access the claims.



Property Description

The property area is located in the Ruby mountain range area. Valleys in this area are broad and have moderate to gentle gradients. The mountains in this area exhibit rolling to undulating hills over 900 meters above sea level with the highest peak reaching 2,200 meters above sea level in the Ruby Range.

The Fourth of July claim block consists of 123 placer claims covering 46.2 sq km in total. The claims occupy the majority of Fourth of July Creek and the lower portions of Twelfth of July and Larose Creeks.



The survey took place on the following claims:

GRANT	CLAIM_NAME	OWNER	STAKE DATE	EXPIRY
P 26323	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 26319	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 26322	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 26317	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 23006	X 1 DISCOVERY	Canyon Mining Ltd - 100%	18-Aug-82	16-Dec-21
P 26324	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 511277	LAROSE BENCH	Canyon Mining Ltd - 100%	27-Jun-17	16-Dec-21
P 12724	L	Canyon Mining Ltd - 100%	5-Aug-81	16-Dec-21
P 26316	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 17254	G	Canyon Mining Ltd - 100%	28-Jan-82	16-Dec-21
P 17255	G	Canyon Mining Ltd - 100%	28-Jan-82	16-Dec-21
P 26590	S	Canyon Mining Ltd - 100%	25-Jul-85	16-Dec-22
P 26318	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 26321	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 26320	T	Canyon Mining Ltd - 100%	24-Aug-84	16-Dec-21
P 17256	G	Canyon Mining Ltd - 100%	28-Jan-82	16-Dec-21
P 12725	LAROSE	Canyon Mining Ltd - 100%	1-Aug-81	16-Dec-21
P 11633	LAROSE DISCOVER	Canyon Mining Ltd - 100%	12-Jul-80	16-Dec-21

Previous Work

Placer gold was first discovered on Fourth of July Creek on July 4th, 1903 by Tagish Chalie. That was the first payable placer gold found in the Kluane district and sparked a gold rush in the region. Tagish Charlie was an instrumental figure in the Yukon's gold mining history. He was part of the team, along with George Carmacks and Skookum Jim Mason, that discovered gold on Bonanza Creek in 1896. That discovery ignited the Klondike Gold Rush (Whitehorse Daily Star, 1904).

According to an article in the Daily Morning Alaskan from 1903:
"Twelfth of July Creek has been discovered to be very rich. On No. 3 above discovery of $1.50 per pan was being washed out, and on No. 33 above James Fox

was taking out two ounces per day with a rocker."

News of the discovery attracted some 500 to 600 prospectors into the area between 1903 and 1904. During this rush, claims were staked in the Ruby and Kluane Ranges, at the Fourth of July Creek, Twelfth of July Creek, Dixie, McKinley, Marshall and Granite Creek. Low productivity from placer mining discouraged many miners and by 1906 the mining population in the area had dropped from approximately 1200 to only 40 people. (Gotthardt 1989).

In 1914 several ounces of coarse gold were recovered from a small area near the mouth of Larose Creek, a tributary to Fourth of July Creek. During the period 1935 to 1953, intermittent testing and small-scale mining was done. Prospectors active included: M. Savtchouk, C. Emminger and D. Duensing.

In the late 1973 Tom Churchill staked the claims on Fourth of July and Twelfth of July Creeks. During the time that Churchill Placers Ltd. held the claims, he optioned the claims to other parties who mined stretches of Fourth of July and Twelfth of July Creeks.

Triple Gold Ltd mined the mouth of Twelfth of July Creek in 1989 under Churchill's water license. Triple Gold was running a derocker and 4x20' sluice. They ran 80-100 yards per hour (van Kalsbeek, L.P. et al, 1990).

The property was mined by Sota Computing form 1999 to 2002.

Regional Geology

The Fourth of July property lies within the Taku sub-terrane of the Yukon-Tanana Terrane. This sequence contains metamorphic rocks that were formerly called the Kluane Assemblage. These metamorphic rocks are bounded to the southwest by the Denali Fault and to the northeast by a batholith belonging to the Ruby Range Plutonic Suite. Northeast of the batholith are metamorphic rocks of the Aishihik Assemblage, which belong to the Yukon-Tanana Terrane. Southwest of the Denali Fault are Paleozoic sedimentary and volcanic rocks of the Alexander and Wrangellia Terranes

The area in which the lease is situated consists of Kluane Schist (appears as a light to dark grey, fine-grained, quartz-muscovite schist, variably carbonaceous, and as a

dark grey to black, fine-grained, quartz-biotite schist), and Eocene-aged Hayden Lake intrusive suite

The Fourth of July Creek drainage was glaciated during the most recent glacial episode (DukRodkin,1999) and late Pleistocene deposits of glacial till, glaciolacustrine and glaciofluvial deposits blanket the slopes in the area. The centre of the valley contains a complex of recent alluvial valley deposits.

Survey Method and Theory

The passive seismic HVSR method consists of recording ambient or natural seismic energy vibrations using a seismometer. The seismometer must be able to record ground motion in three axes (XYZ), over a broad range of frequencies (0-128 Hz), and over a long time period (1 min to 60 min, usually 20 min).

Traditional seismic surveys use an energy source such as dynamite, or a dropped weight. The HVSR method is very different in that it utilizes ambient vibrations in the surface of the earth. These are considered noise in traditional surveys but in this case, provides the source vibrations.

The ambient signal consists primarily of surface Rayleigh and Love waves, which are generated from natural sources. Sources of ambient vibration are ongoing crustal microtremors, rain, and wind. In more populated areas sources can come from human activities such as traffic movement, construction and factories.

The ambient seismic energy creates seismic resonance within the near-surface strata and regolith. This resonance is a function of the thickness and the shear-wave velocity of the subsurface layers, and is particularly amplified when layers have a strong and sharp acoustic impedance contrast boundary. Acoustic impedance is a function of the density multiplied by the shear wave velocity of a layer. That impedance is how we can identify different layers and their depth.

In processing with proprietary software the recorded time-series data (X, Y and Z) is converted to the frequency domain using a Fast Fourier Transform (FFT), and the two components are displayed as a power spectrum.

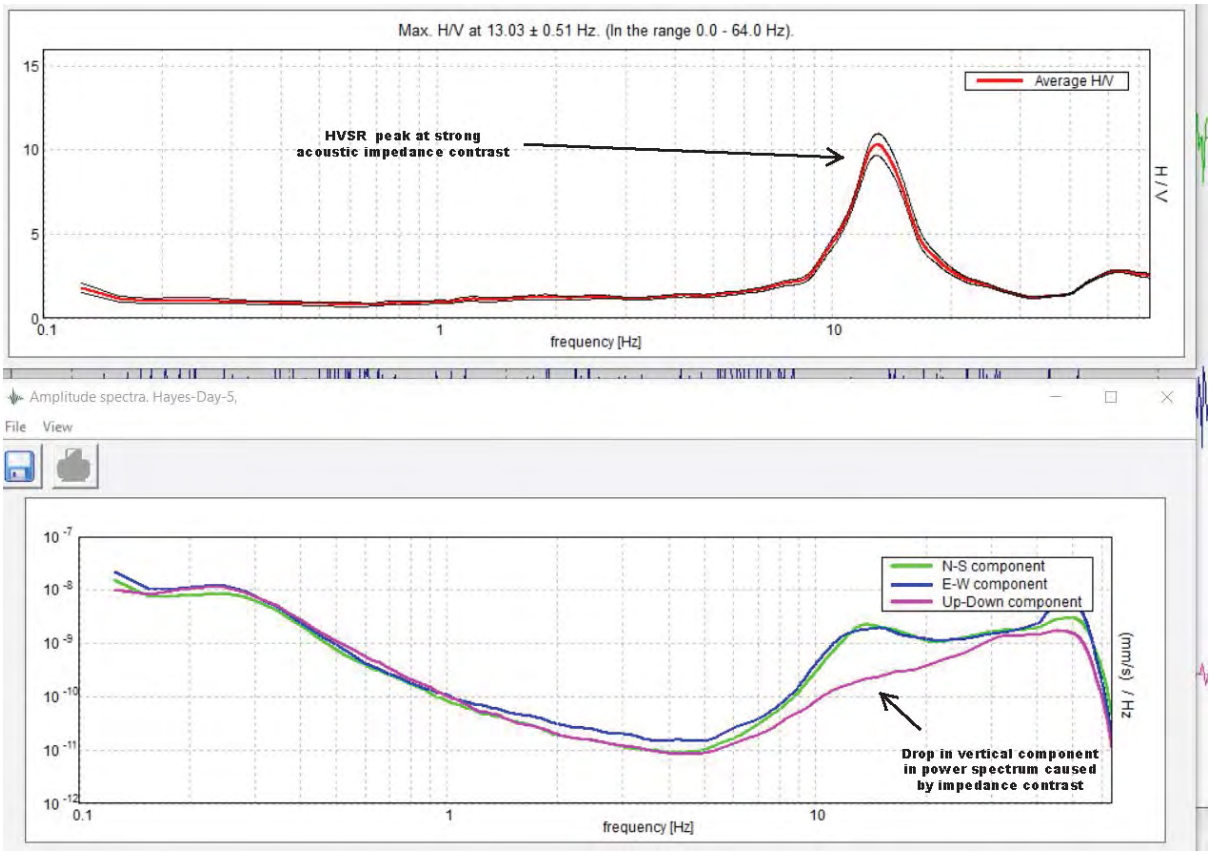
After the inversion, the horizontal components are usually very similar unless there is strong anisotropy in the near-surface. The Vertical component dips where resonance occurs from trapping by underlying layers. Where the vertical component

deviates from the two horizontal components a H/V peak is interpreted. The frequency at which the peak occurs can be used to calculate the depth from surface.

This resonant frequency is related to the thickness and shear wave velocity of the resonant layer by the following equation from Nakamura (2000):

$f_0 = Vs/4h$

where f_0 = peak resonant frequency (Hz), Vs = shear wave velocity (m/s), and h = layer thickness (m). In a two-layered earth model, resonance frequency (f_0) can be used in estimating the overburden thickness (h) using the equation



From processing the data we know the peak resonant frequency but there are still two unknowns. Vs and the thickness (h). In order to accurately calculate the thickness for each location, we need to know the shear wave velocity of the overburden layers. That can be acquired by running a test station at an area of known depth such as a drill hole. Once the velocity is known it is simple to calculate the thickness.

Equipment

The Tromino 3G BLU Seismograph, manufactured by MoHo Science & Technology from Italy was used on this survey. The Tromino works on the HVSR principle, is a very light and portable instrument that records seismic noise in the frequency range of 0.1 to 1024 Hz.

The Tromino is a small (1 dm3, < 1 kg) all-in-one instrument, equipped with:

- 3 velocimetric channels (adjustable dynamic range)
- 3 accelerometric channels
- 1 analog channel
- GPS receiver

The Tromino does not require cables or a source and acts as a standalone geophysical instrument.

An Reach RS2 multi-band RTK GNSS receiver, manufactured by Emlid was used to record spatial information for computer mapping. Some of the specs are here below:

- Dimensions: 126x126x142 mm
- Weight: 950 gram
- Ingress protection: IP67
- Corrections: NTRIP, VRS, RTCM3
- Position output: NMEA, LLH/XYZ
- Positioning kinematic horizontal: 7 mm + 1 ppm
- Positioning kinematic vertical: 14 mm + 1 ppm
- GNSS signals tracked: GPS/QZSS L1C/A, L2C, GLONASS L1OF, L2OF, BeiDou B1I, B2I, Galileo E1-B/C, E5b

Number of channels: 184

Survey Procedure

Station spacing was set at 30m, a chain was used to layout the survey lines using two people. Line locations were chosen in advance in GIS software and layed out in the field using a handheld GPS. Each station was marked with an orange pin flag and recorded on the GPS for processing.

Each reading takes 20 minutes, which allows for sufficient data collection to be modeled in the interpretation software. It is important for the seismometer to have good contact with the ground. At most stations, it was necessary to remove the vegetative mat and expose soil/subsoil that the instrument can be planted into.

The seismometer used in this survey is extremely sensitive since it's designed for picking up faint, ambient energy in the earth. The trade-off is that it is also sensitive to sources of noise. In locations near the camp, we had to shut off the diesel generator while taking readings to prevent noise on the instrument.

Station data is stored on the device and downloaded twice per day to check for data quality. Initial processing was completed in the evening each day.

Processing Technique

Each station is processed independently on-site using proprietary software that utilizes the HVSR method described above. Each trace is analyzed for quality and if necessary noisy sections can be removed using a windowing technique. There were two stations that had too much noise and had to be repeated but most were below the noise threshold or able to be cleaned up.

The coordinates and calculated bedrock depth are populated into a CSV file to be gridded. Surfer software was used for gridding the data and the resulting vector data can be used in GIS software such as ArcMap.

The final data is presented as a topographical map showing the difference between surface and bedrock elevations.

With this seismic technique, we don't get a lot of info about the layers that we see. There's not enough velocity information to discern as to what the makeup of each layer is. The bedrock is interpreted as the most prominent impedance contrast but the technique does not provide any information on the makeup of the upper layers.

In the cross-sections, we identified several distinct layers and they were labeled as layers 1 through 6.

Interpretation

Cross Sections

Line 1 showed relatively shallow bedrock near Larose Creek (tributary to Twelfth of July Creek) and much deeper bedrock to the North and South of the creek. Stations L1S5 and L1S6 show a deep bedrock area that is consistent with a paleochannel.

Line 2 shows deep bedrock near Larose Creek on stations L2S5 - L2S7 as well as a deep area on stations L2S11 - L2S14 to the South of the creek.

Line 3 started up the slope on the North side of Twelfth of July Creek, near the confluence with Larose Creek. Bedrock was near-surface in that part of the line. BEdrock depth was slightly deeper at the creek level and then dropped dramatically from stations L3S5 - L3S8. That abrupt drop is consistent with the interpreted channel on the South side of Twelfth of July Creek.

Line 4 was similar to Line 3, deep bedrock on the South side of the creek at stations L4S11 and L4S14 and much less deep near Twelfth of July Creek.

Line 5 also showed shallow bedrock near Twelfth of July Creek and an abrupt drop on the South side of the creek. The abrupt drop on stations L5S5 - L5S9 shows deep bedrock consistent with a paleochannel. There was also an anomalously high point at station L5S13.

Line 6 showed a very clear deep bedrock area that fits the description of a paleochannel. Stations L6S10 - L6S13 are 30-40 meters deeper than the rest of the line. Bedrock depths near the creek are much less deep.

Line 7 had a shallow bedrock section at the far South end of the line, stations L7S15 - L7S17. Near the creek, the bedrock drops relative to the rest of the line on stations L7S2 - L7S4. This is not as pronounced as some of the other lines.

Line 8 covers Twelfth of July Creek just upstream from the confluence with Larose Creek. The West side of the valley has shallow bedrock. There is clear evidence of a paleochannel showing deep bedrock with a rim on both sides from stations L8S8 to L9S11 making the channel at least 120m wide. Station L8S5 on the West side of the creek showed deep bedrock, possibly indicating a smaller paleochannel.

Line 9 lies further upstream on Twelfth of July Creek from Line 8 and showed similar results. Deep bedrock with a well-defined channel on stations L9S10 - L9S12. A possible smaller channel also shows on this line at station L9S6.

Line 10 is situated upstream on Twelfth of July from line 9 and shows similar results to Line 8 and 9. Deep bedrock at station L10S4 although not as defined as the other two lines. Again there appears to be a second, smaller channel at station L10S8.

Line 11 is on Larose Creek. Bedrock depth was much deeper on the South side of the creek compared to the North. Station L11S3 showed deeper bedrock and is consistent with a paleochannel on the South side of the creek.

Line 12 is on Larose Creek, upstream of LIne 11. The results are more defined on Line 12, much deeper bedrock on the South side and a well-defined channel on stations L12S9 - L12S11, part of which is under the existing creek.

Line 13 is upstream of Line 12. Results were similar, showing a paleochannel on the South side of the creek at stations L13S1-L13S3 with shallow bedrock on the North side.

Line 14 was the furthest upstream line on Larose Creek. Results were similar to Line 13 with deep bedrock on Stations L14S1 - L14S3 on the South side of the creek.

Line 15 was in a different location near Fourth of July Creek and its confluence with Snyder Creek. There was a section of deep bedrock with defined limits that is consistent with a paleochannel from stations L15S2 to L15S7. From a nearby excavator test pit we were able to confirm that the interface between Layer 5 and Layer 6 is the hardpan clay layer that has proven to carry gold in this area.

Line 16 sits to the South of LIne 15. The deep bedrock area on this line isn’t as well defined as on line 15. Station L16S0 showed to be much deeper than the rest of the line and may be part of a paleochannel.

Line 17 is further downstream on Fourth of July Creek from Line 16. Results were similar, the data shows a much thicker overburden inthe middle of the line (stations L14S4 and L17S5) which may be part of a paleochannel.

Bedrock Depth Maps

Contour maps were created showing the bedrock depth and calculated bedrock elevation for both sections of the survey (Fourth of July and Twelfth of July Creeks). The bedrock depth maps show the bedrock depth from surface and the bedrock elevation maps shows the bedrock elevation derived from subtracting the bedrock depth from the surface elevation measurements recorded during the survey.

Results were excellent in the Twelfth of July section showing 2 paleochannels and a possible smaller one. This is best displayed on the Bedrock Elevation map. The deep bedrock regions can clearly be seen on that map. The major channel on Twelfth of July Creek lies mostly to the South and East of the current creek but appears to cross the creek at line 7. The channel on Larose Creek also lies to the South of the existing creek.

On the Fourth of July section, the Bedrock Elevation map is harder to interpret. The relative channel depth compared to the bedrock elevation change is minimal. On the Bedrock Depth map, a channel can be observed that matches the information presented in the cross-sections. The potential channel appears to pass through Line 15 and exit on the Southern part of Line 16.

Conclusion

The seismic survey was successful in mapping several paleochannels. The Twelfth of July area had much more data than the smaller Fourth of July section and the maps show good detail of the bedrock depth and shape. Two paleochannels are clearly shown in the data for this area. The data suggests a possible smaller channel on Twelfth of July Creek above the confluence with Larose Creek.

Despite only surveying three lines on the Fourth of July section, there is some evidence for an ancient channel there which warrants future exploration.

It is recommended to conduct further seismic exploration to map more of the potential channels and test the deep areas for gold values with a sonic or RC drill.

Costs

Personnel	Days	Rate	Subtotal
Geophysical Technician	7.5	$900.00	$6,750.00
Survey Technician #1	7.5	$500.00	$3,750.00
Survey Technician #2	7.5	$500.00	$3,750.00
Seismic Equipment	8	$600.00	$4,800.00
Travel/Standby Geophysical Technician	2	$200.00	$400.00
Travel/Standby Survey Technician	2	$150.00	$300.00
Crew Travel Costs (flights, etc)	1	$352.09	$352.09
Accommodation	8	$300.00	$2,400.00
4x4 Truck (day rate)	8	$100.00	$800.00
4x4 Truck #2 (day rate)	8	$100.00	$800.00
Crew Subtotal			$24,102.09
Item	Units	Rate	Subtotal
Report Writing	1	$200.00	$200.00
Processing and Interpretation of Data	1	$600.00	$600.00
Additional Travel Costs (taxis, baggage, etc)	1	$185.12	$185.12
Total			$25,087.21

References

Nakamura, Y., 2000, Clear identification of fundamental idea of Nakamura’s technique and its applications, Proc. 12WCEE, No. 2656, 177–402.

van Kalsbeek, L.P. (compiler), Waroway, A.R. and Latoski, D.A. (ed.), Yukon Placer Mining Industry 1989-1990. , Yukon Geological Survey.

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Kern, P. E.,(November 29, 1903),"Very Rich - Great Wealth in the Alsek Diestric", Daily Morning Alaska

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Statement of Qualifications

I, Nicholas Gust, of the city of Mission, in the province of British Columbia do hereby certify that:

1. I am a graduate of the University of Calgary with a B.Sc.in Geophysics. I am also a graduate of the Southern Alberta Institute of Technology and hold a diploma in Exploration Technology.

2. I have received training from the manufacturer of the instrument used in this survey in the application of field techniques and interpretation.

3. I have worked in the exploration industry and have been conducting geophysical surveys since 2008.

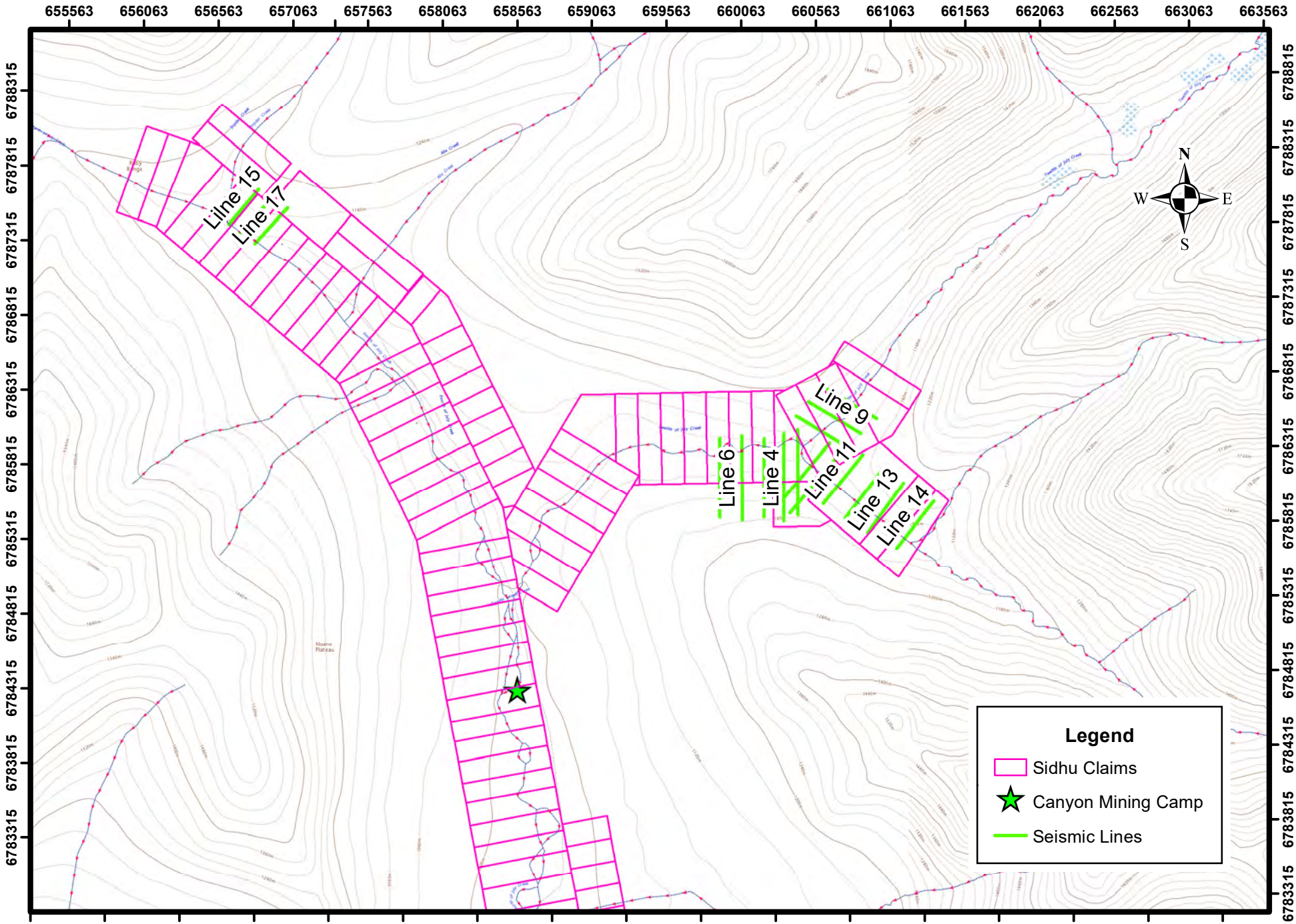
4. This report is compiled and interpreted from data obtained from a passive seismic survey carried out under my field supervision.

5. I have based conclusions and recommendations contained in this report on my knowledge of geophysics, my previous experience and the results of the field work conducted on the property.

6. This report has not been prepared for the purposes, nor in full compliance with, National Instrument 43-101.

Appendix I:
Maps and Data

Canyon Mining Bedrock Mapping 2021 - Overview



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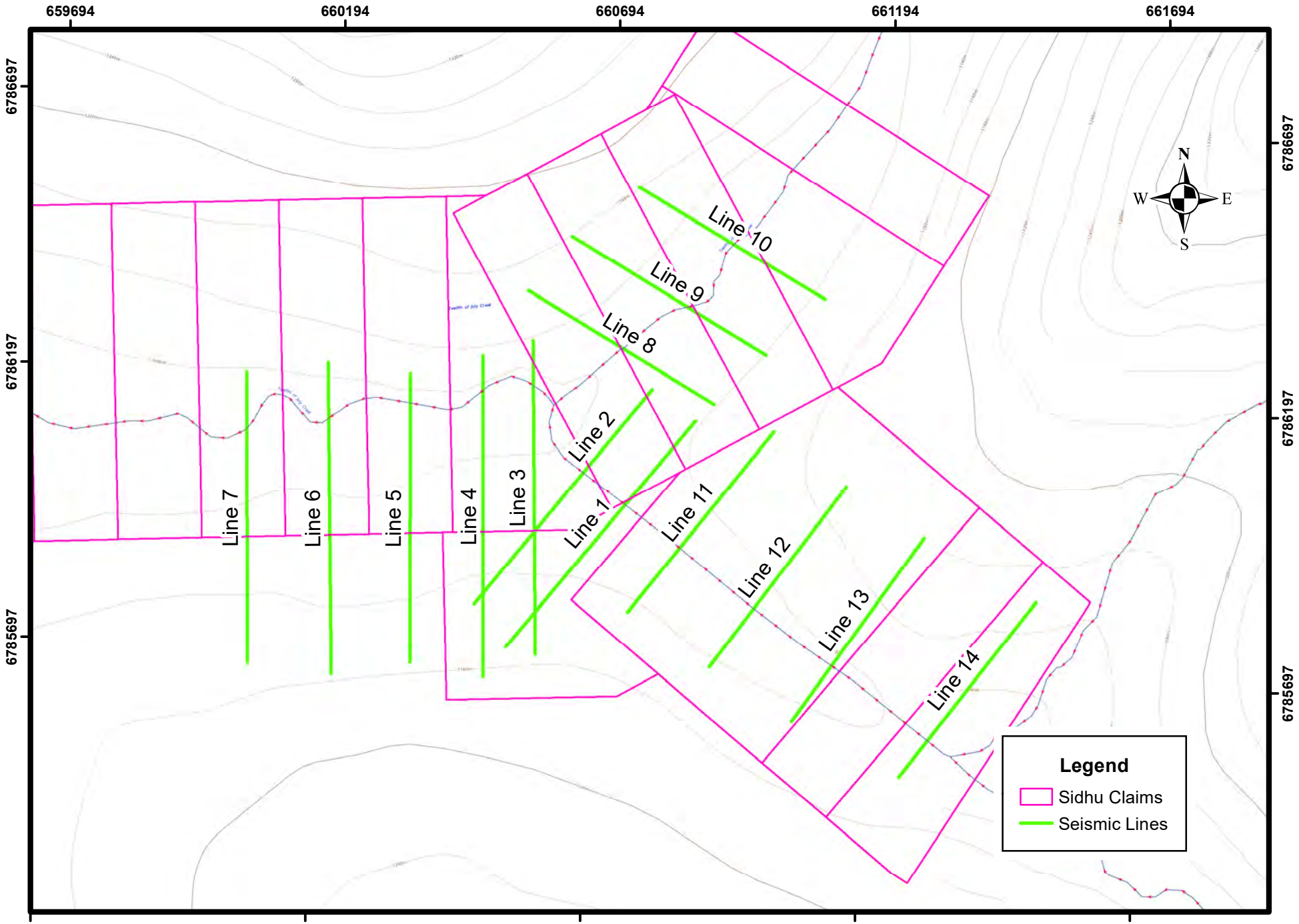
0 1.75 3.5 7 10.5 14 Kilometers

Twelfth of July Zone - Seismic Lines



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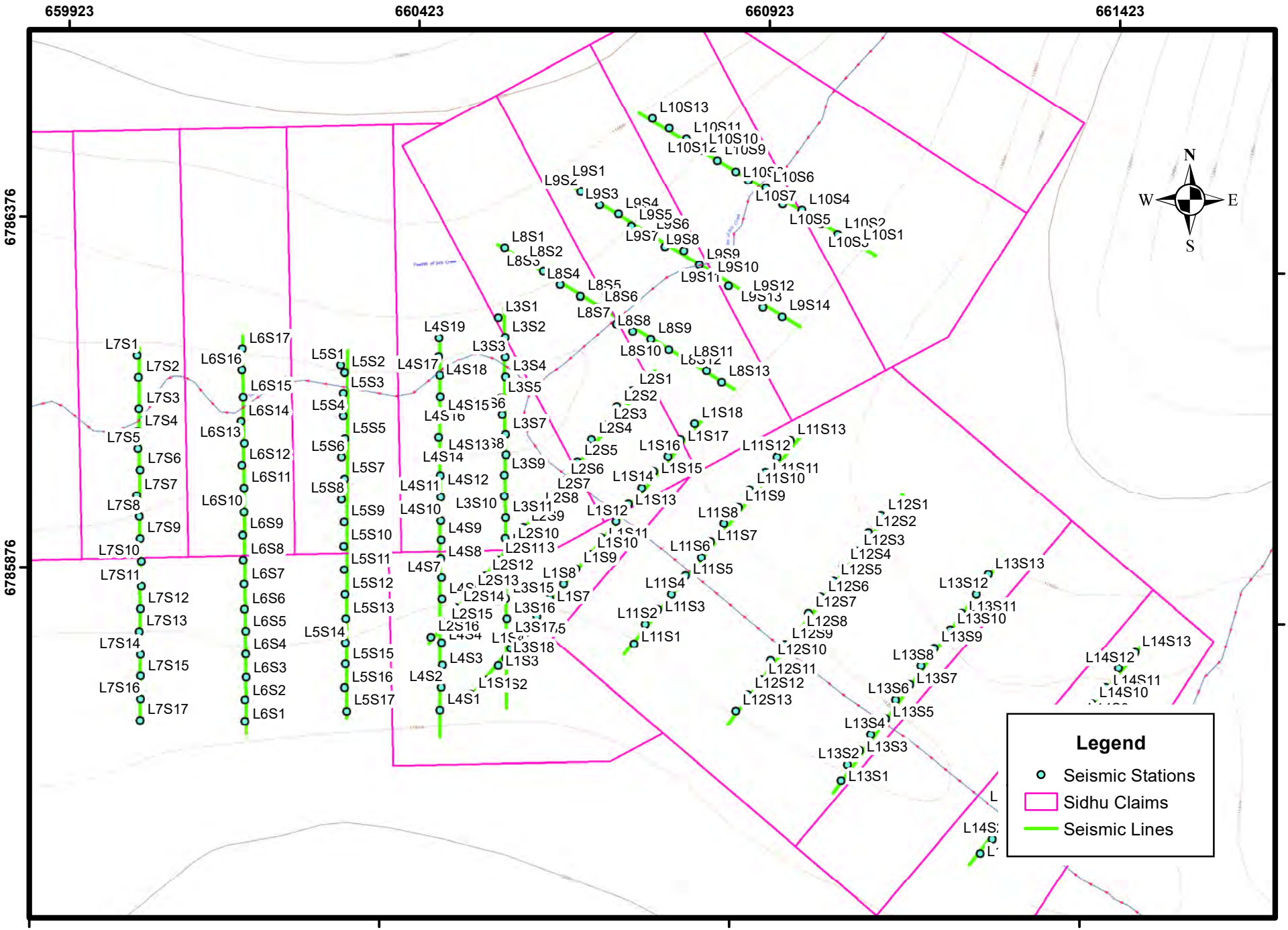
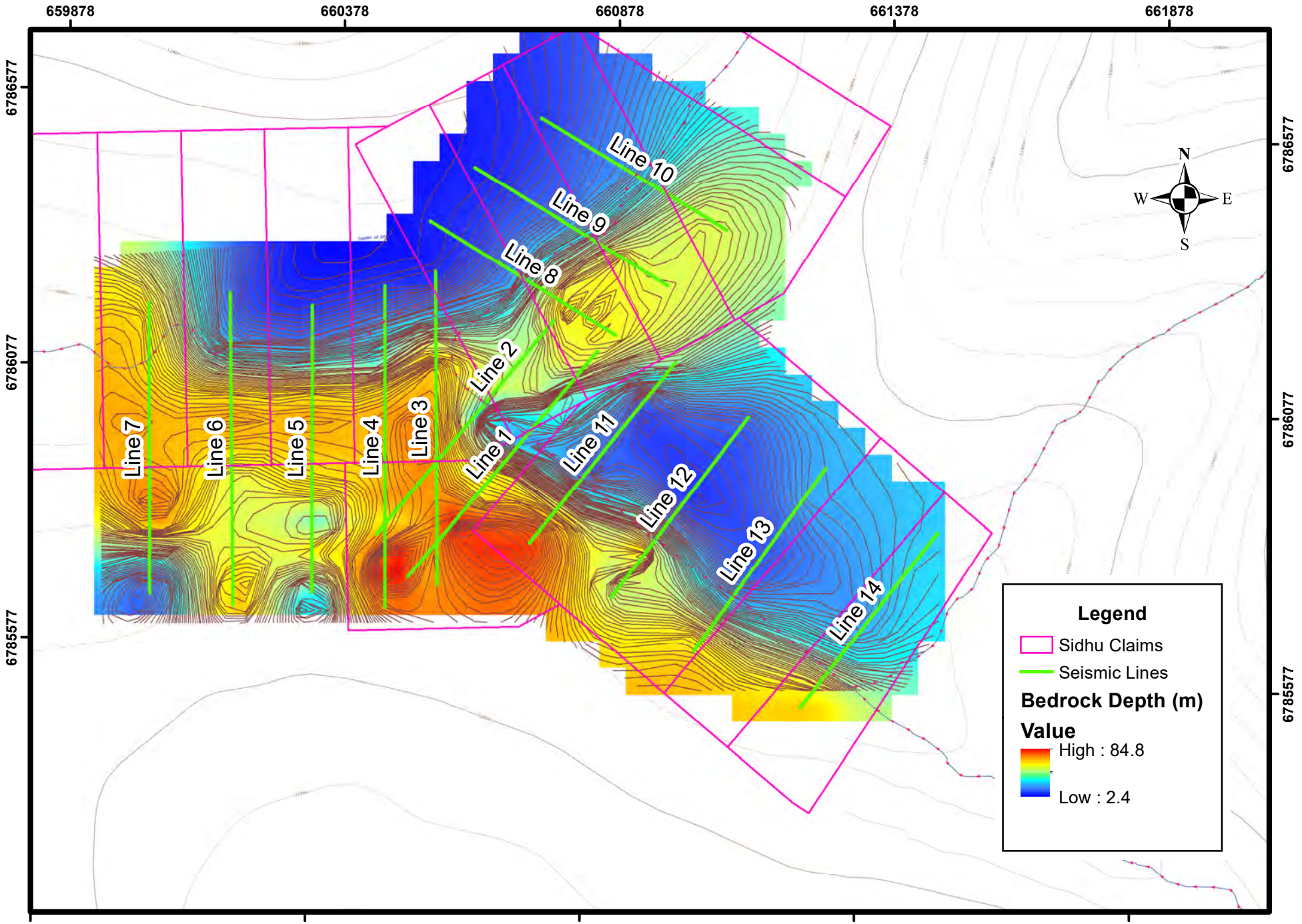
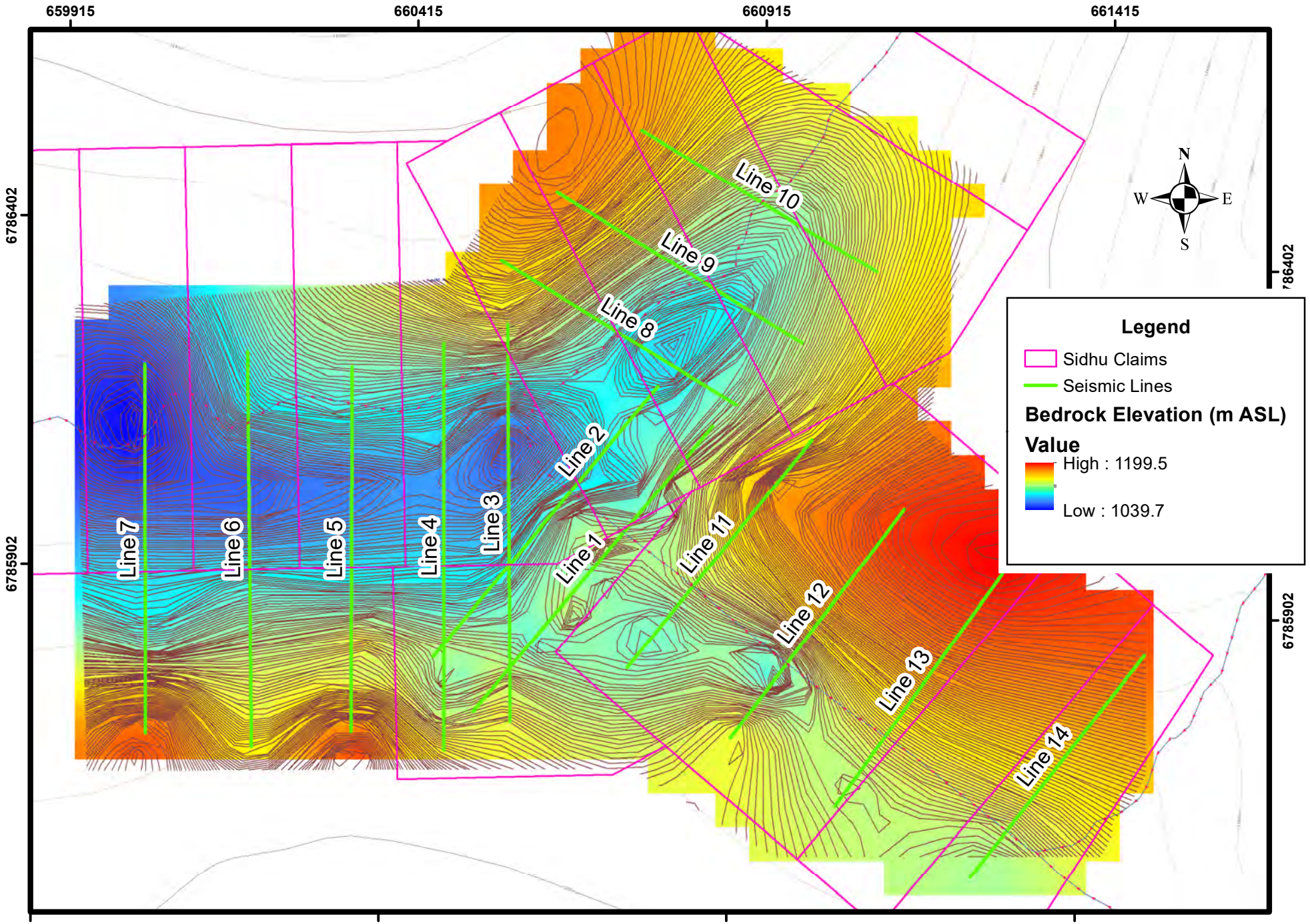
Twelfth of July Zone - Seismic Stations



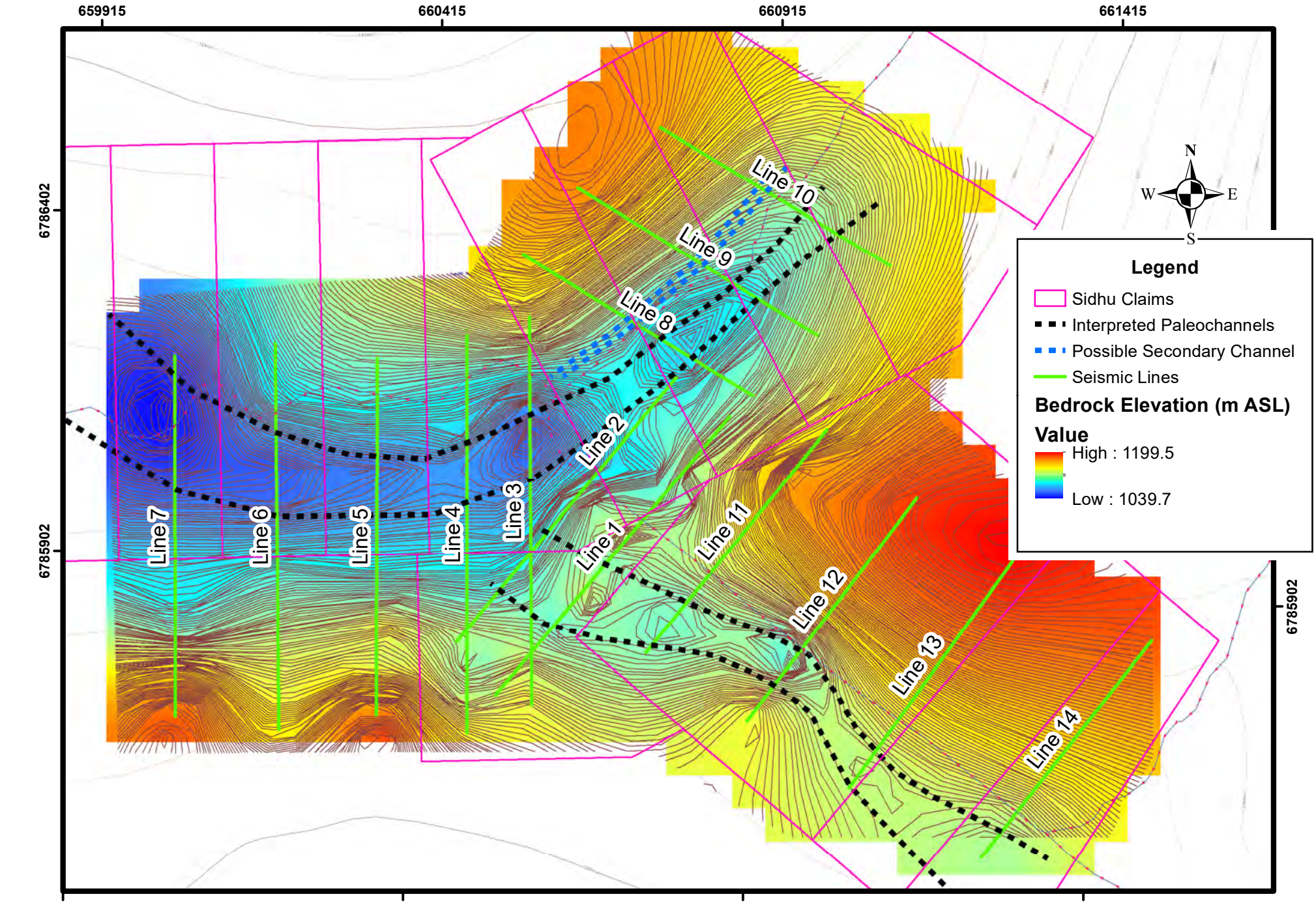
Twelfth of July Zone - Bedrock Depth



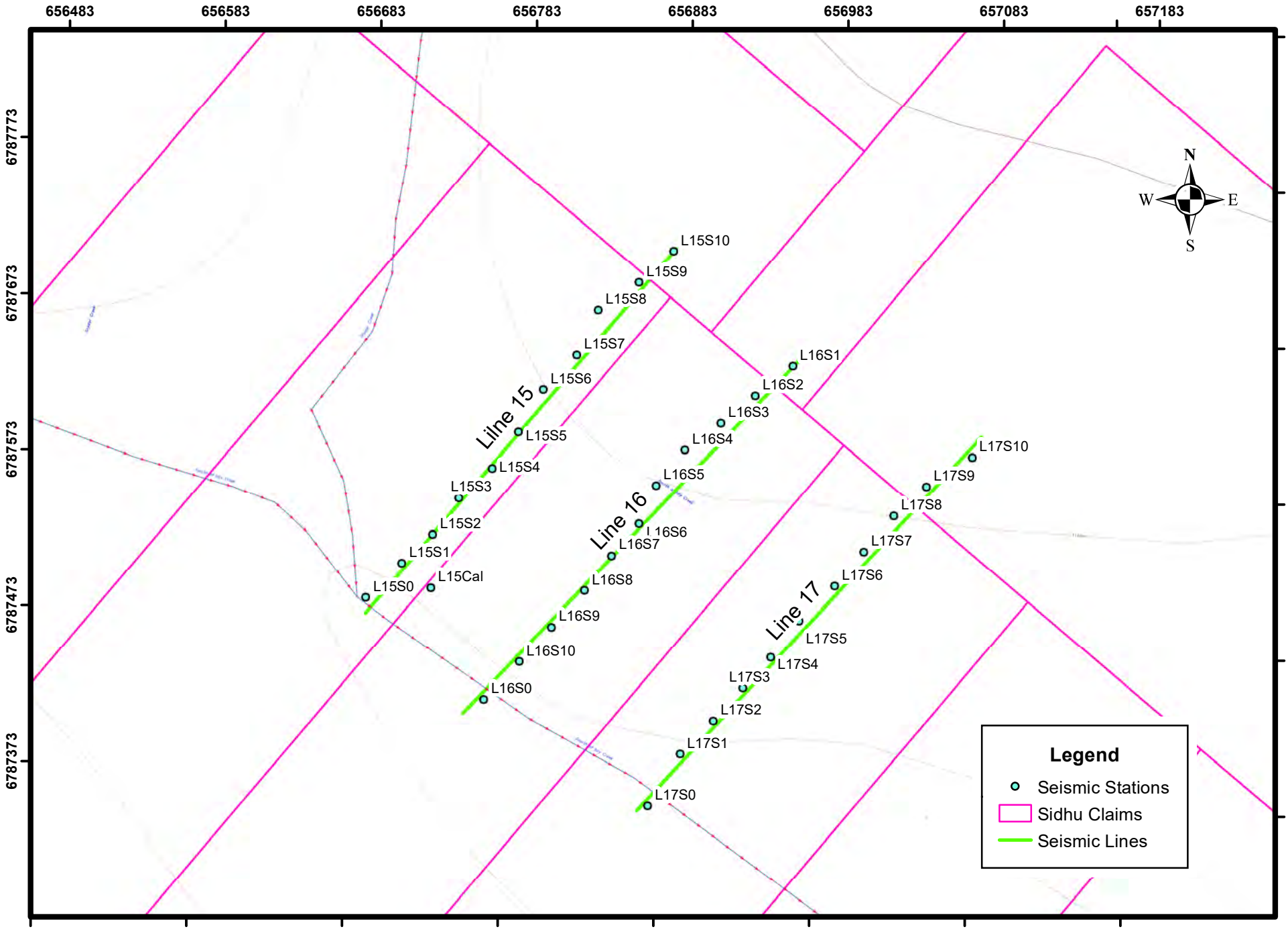
Twelfth of July Zone - Bedrock Elevation



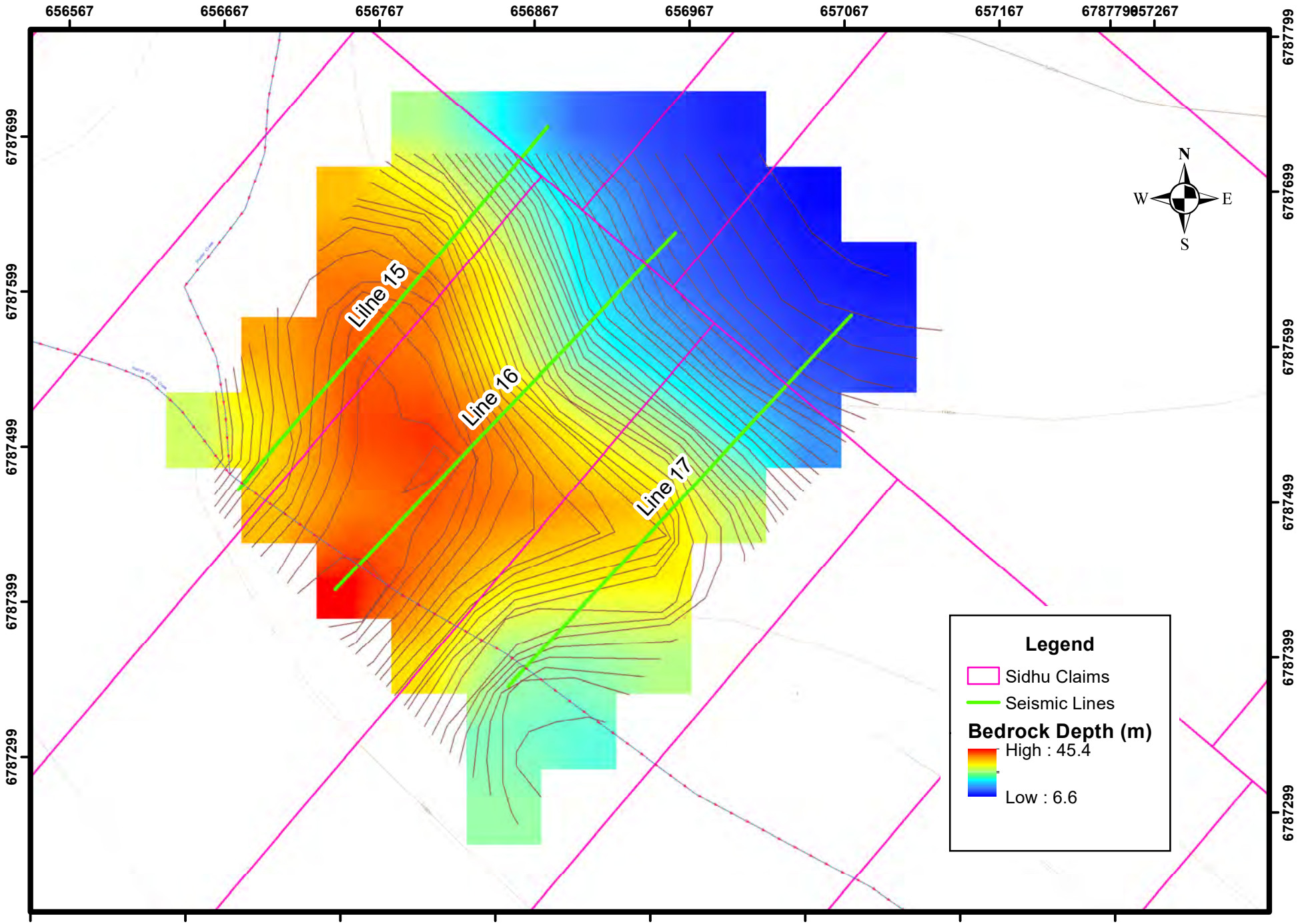
Twelfth of July Zone - Interpretation



Fourth of July Zone - Seismic Stations



Fourth of July Zone - Bedrock Depth



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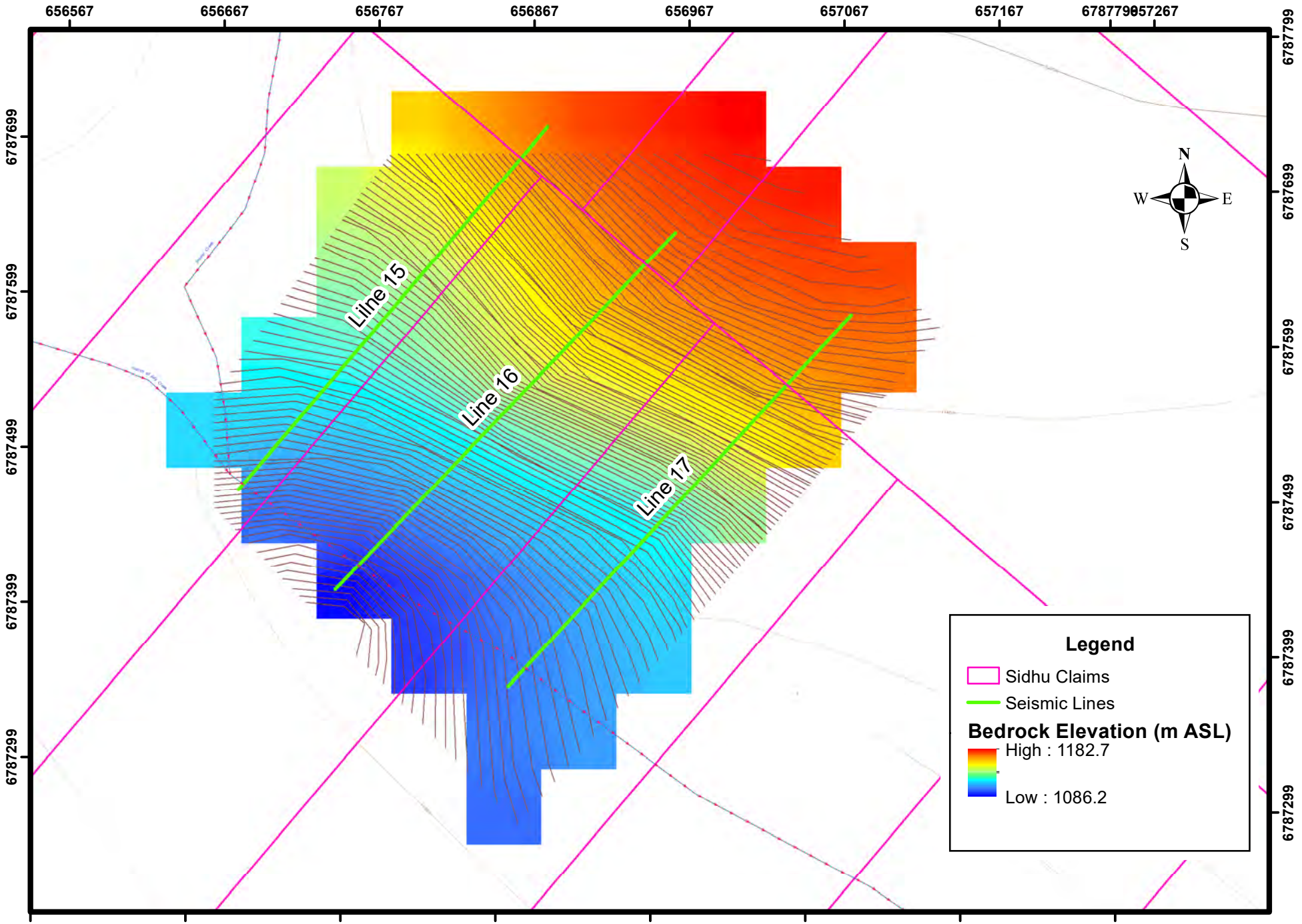
Fourth of July Zone - Bedrock Elevation



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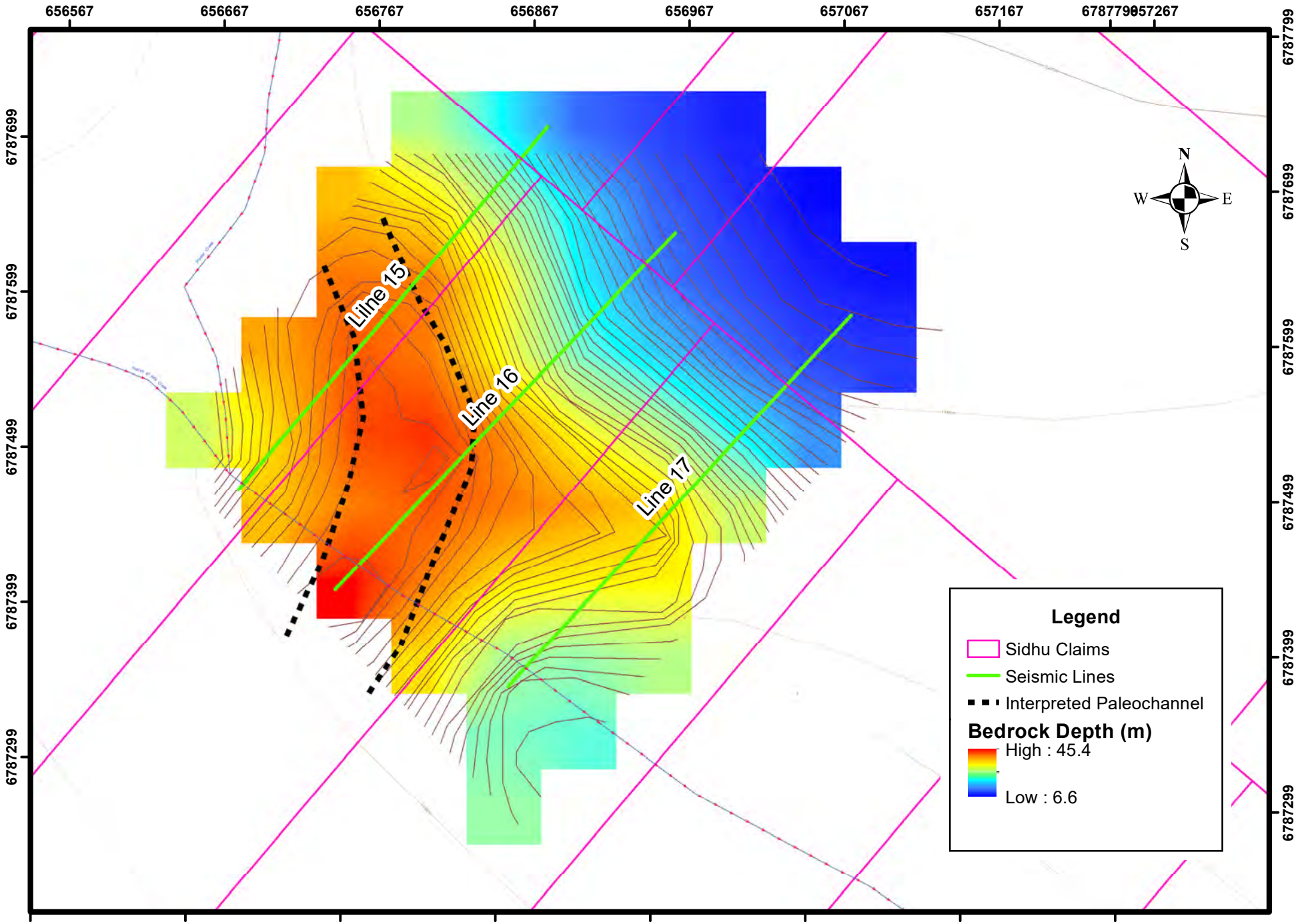
Fourth of July Zone - Interpretation



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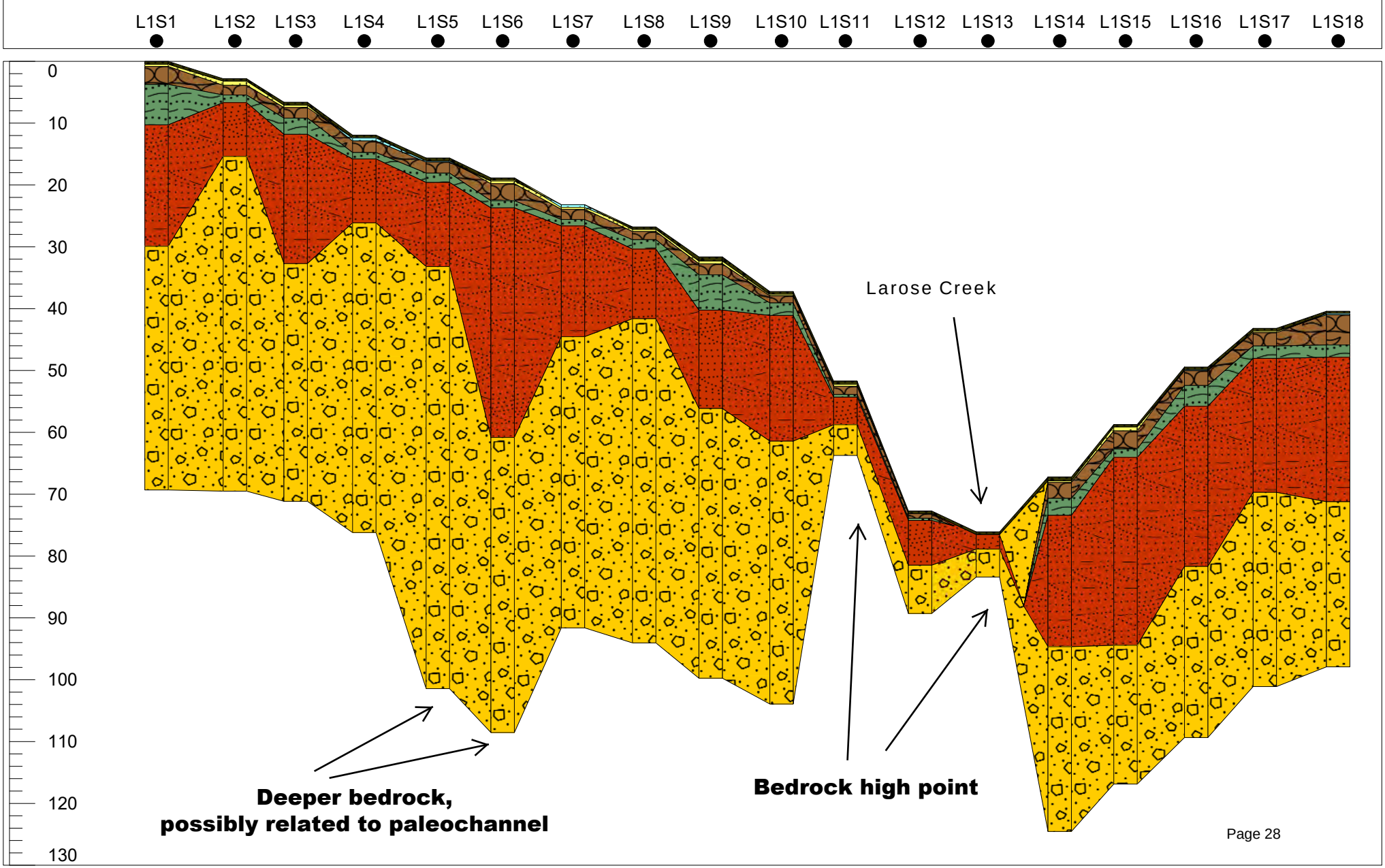
Appendix II:
Cross Sections

Twelfth of July Creek

Passive Seismic 2021

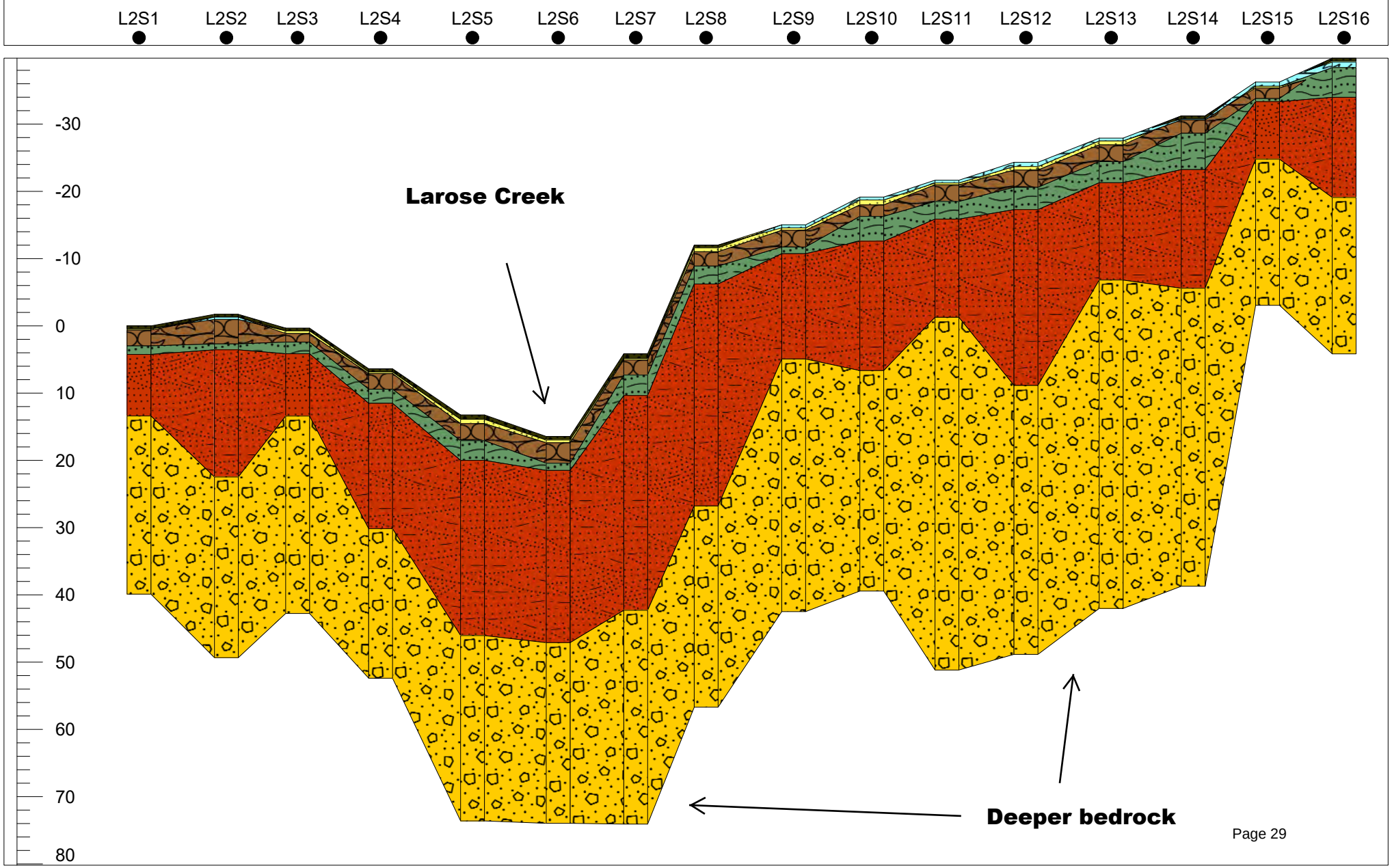
Line 1



Twelfth of July Creek

Passive Seismic 2021

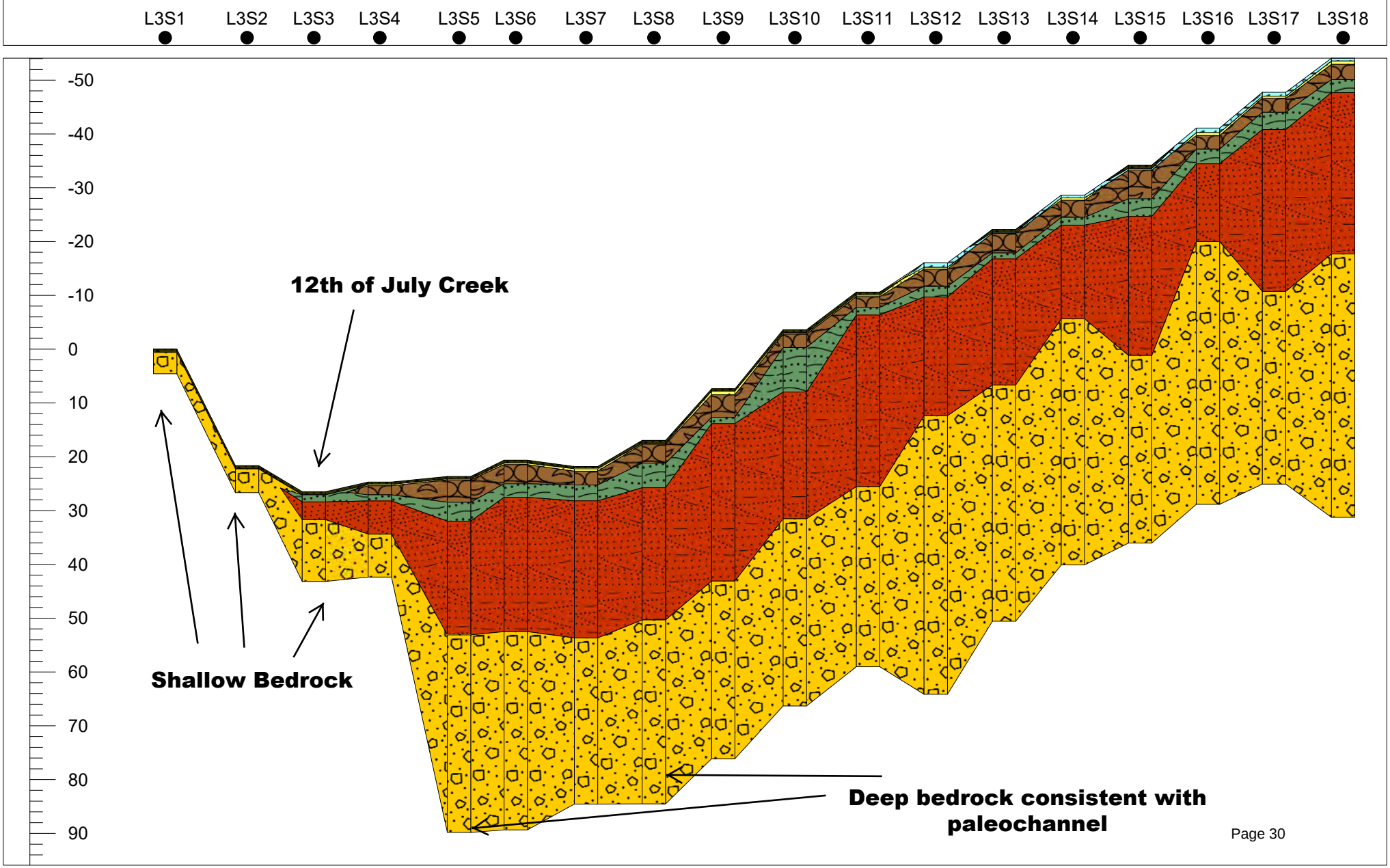
Line 2



Twelfth of July Creek

Passive Seismic 2021

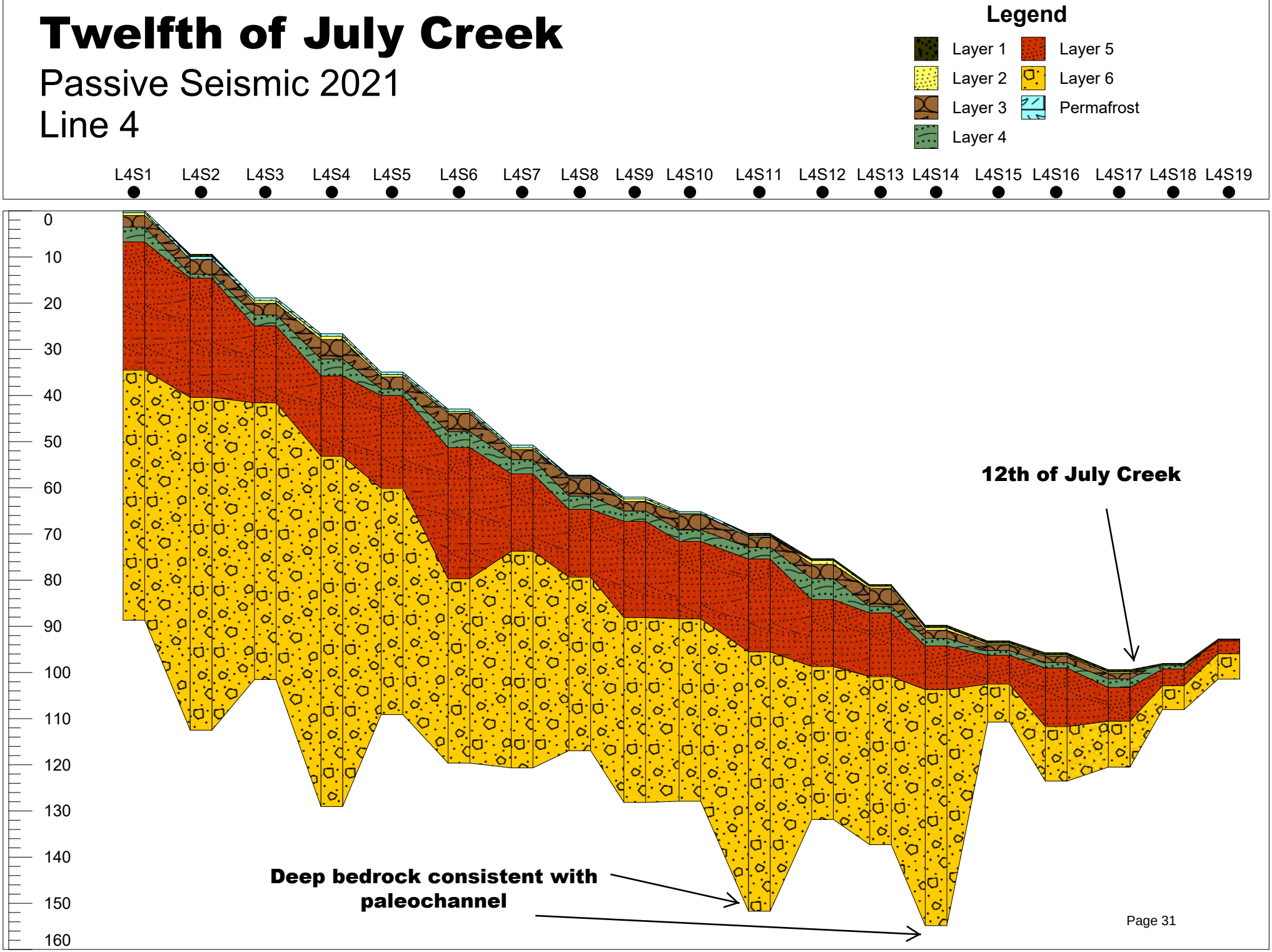
Line 3



Twelfth of July Creek

Passive Seismic 2021

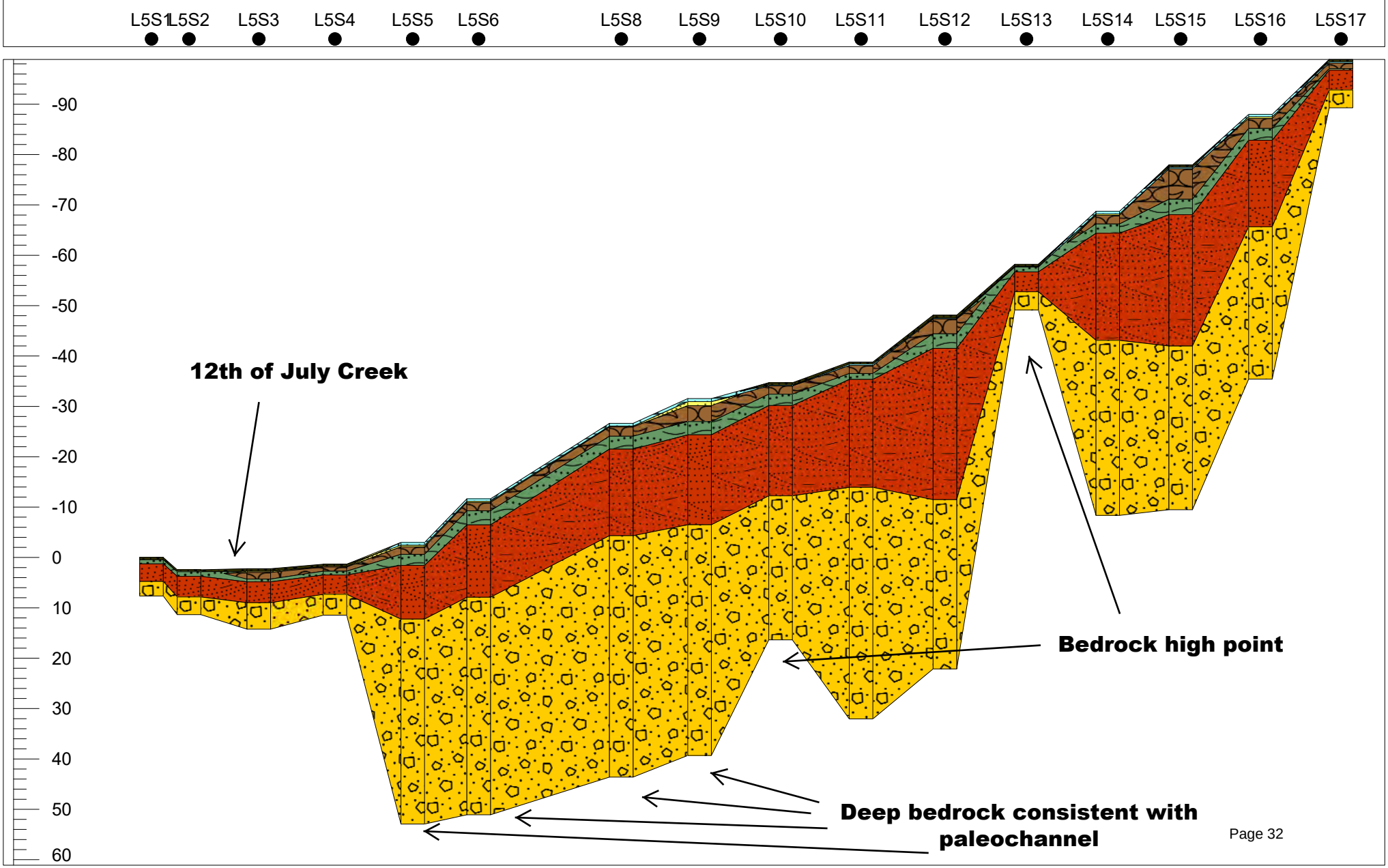
Line 4



Twelfth of July Creek

Passive Seismic 2021

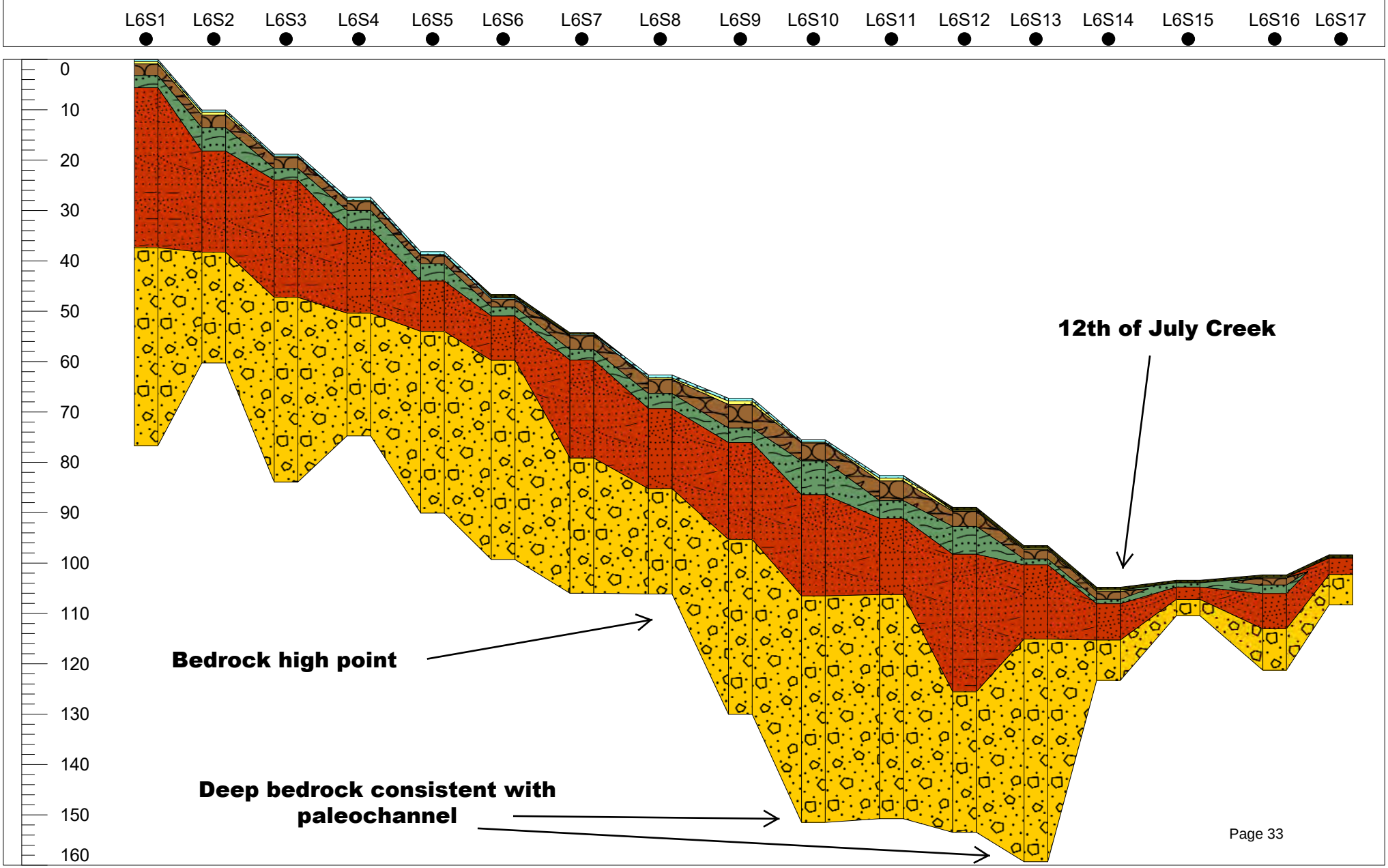
Line 5



Twelfth of July Creek

Passive Seismic 2021

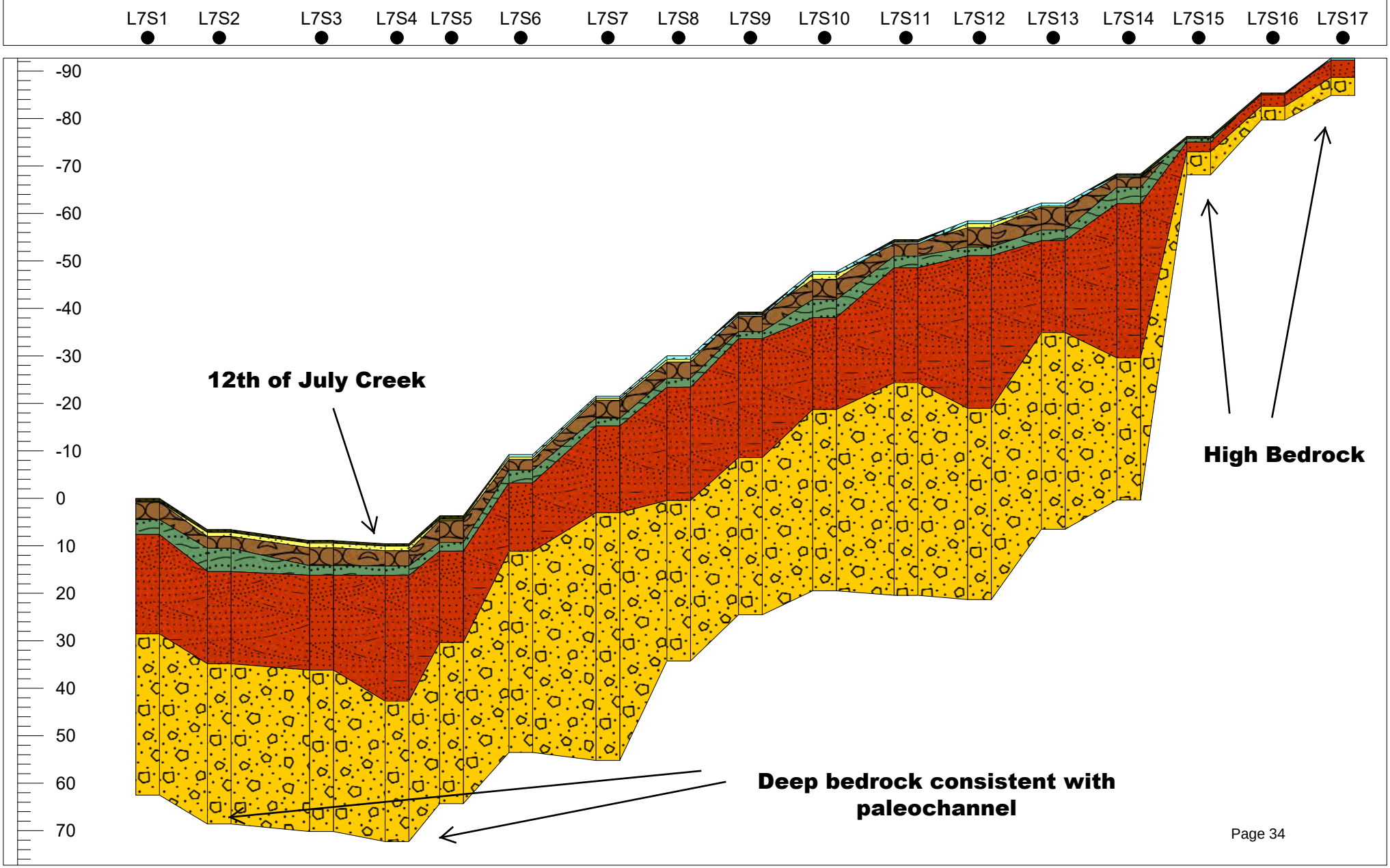
Line 6



Twelfth of July Creek

Passive Seismic 2021

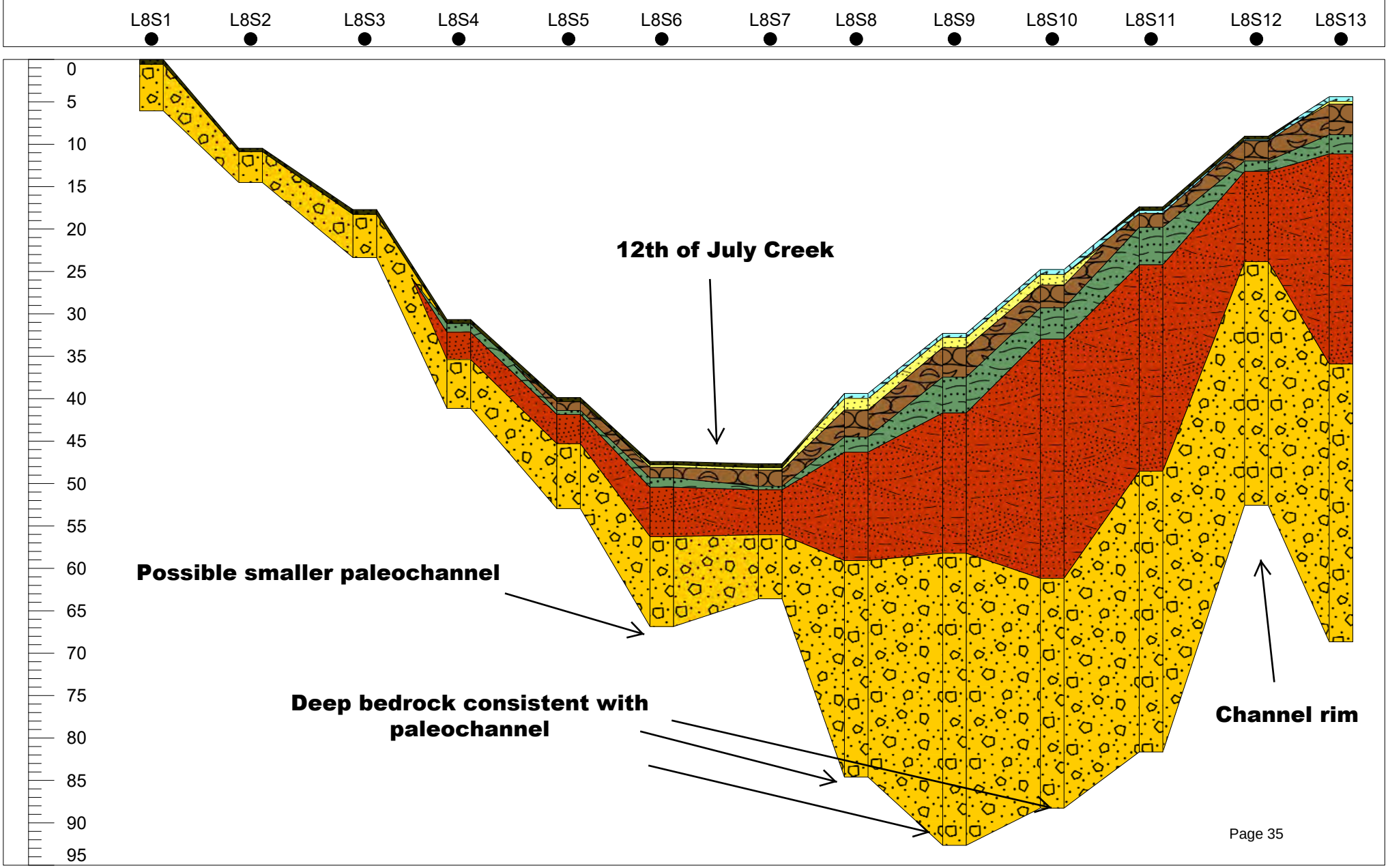
Line 7



Twelfth of July Creek

Passive Seismic 2021

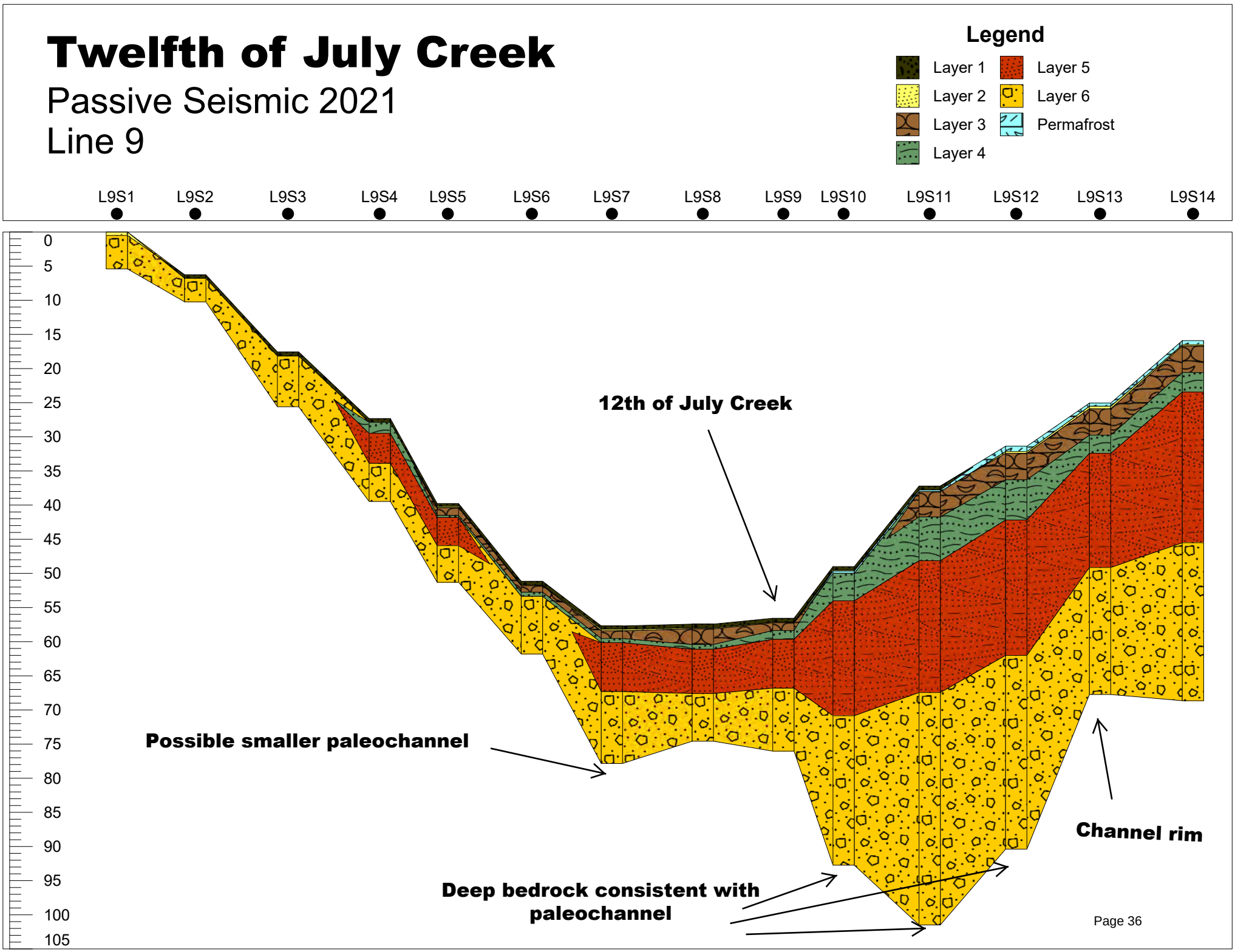
Line 8



Twelfth of July Creek

Passive Seismic 2021

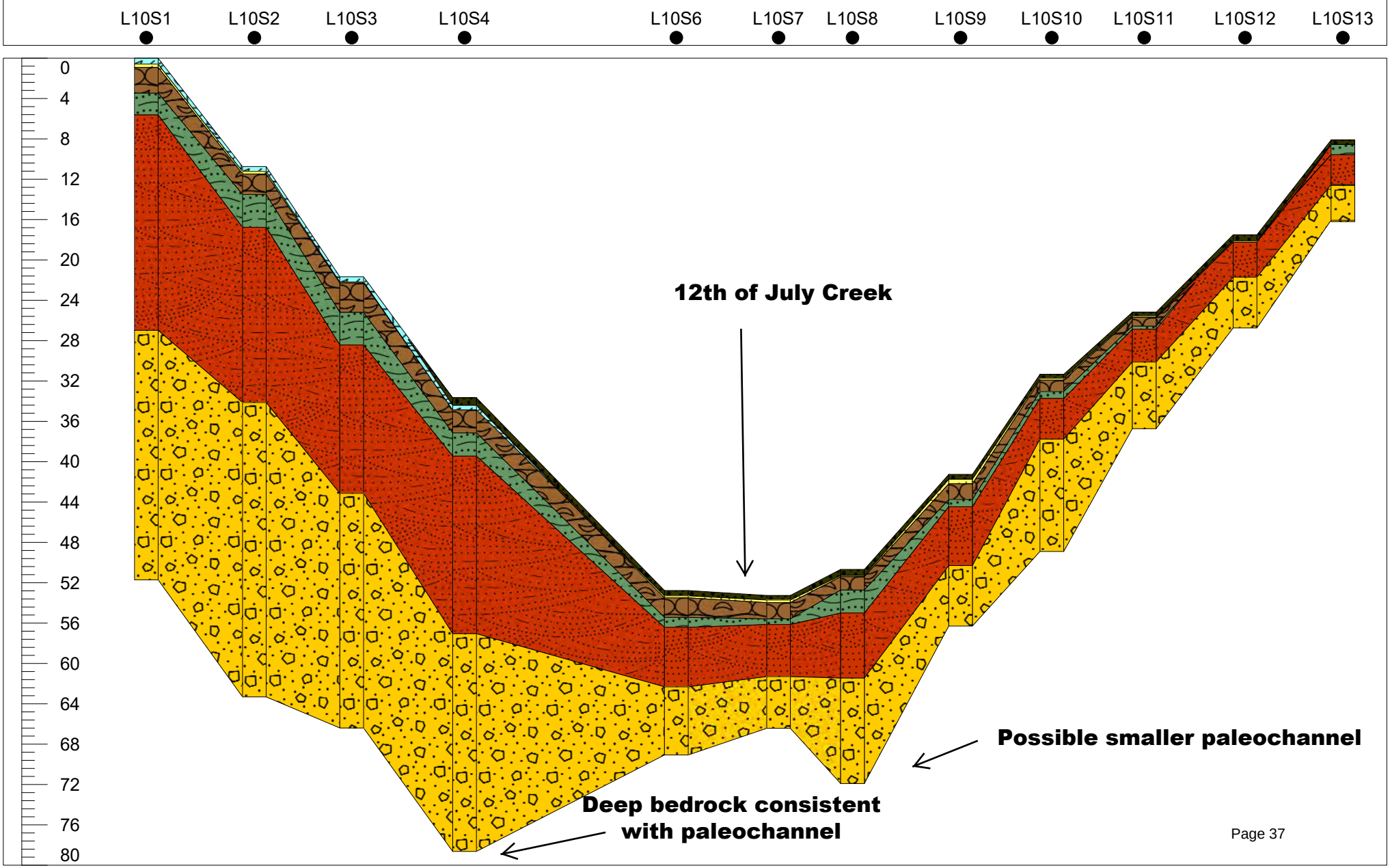
Line 9



Twelfth of July Creek

Passive Seismic 2021

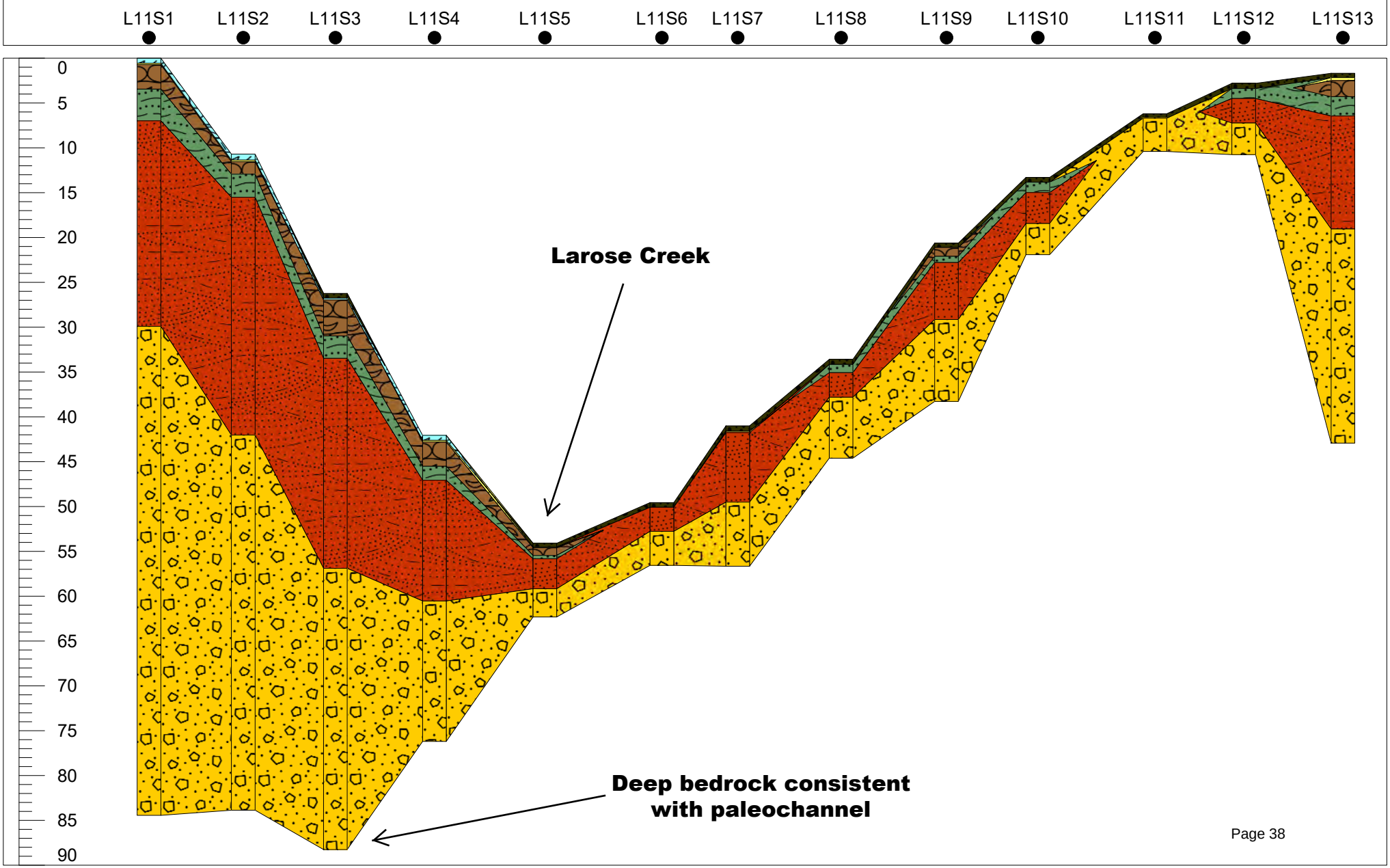
Line 10



Twelfth of July Creek

Passive Seismic 2021

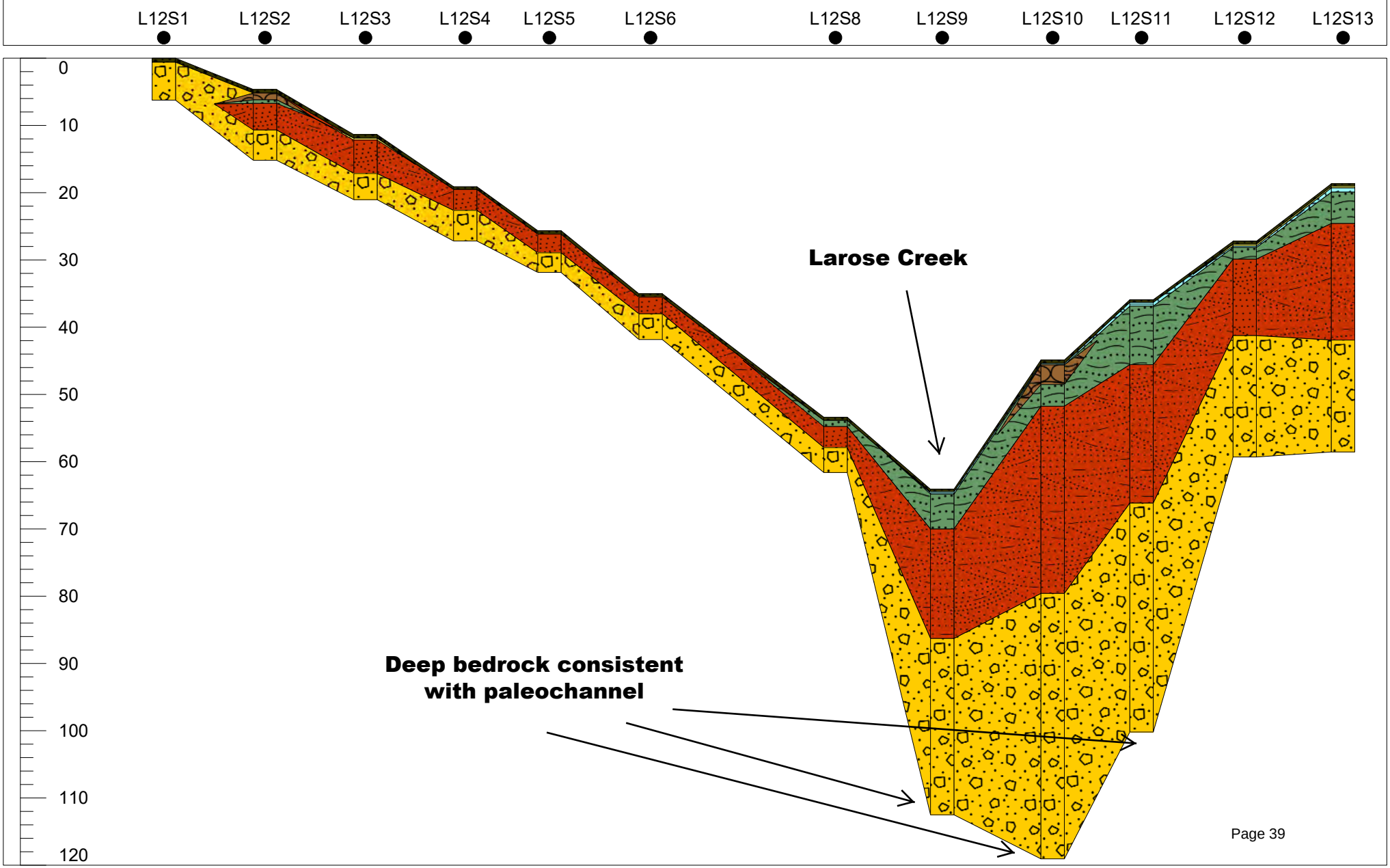
Line 11



Twelfth of July Creek

Passive Seismic 2021

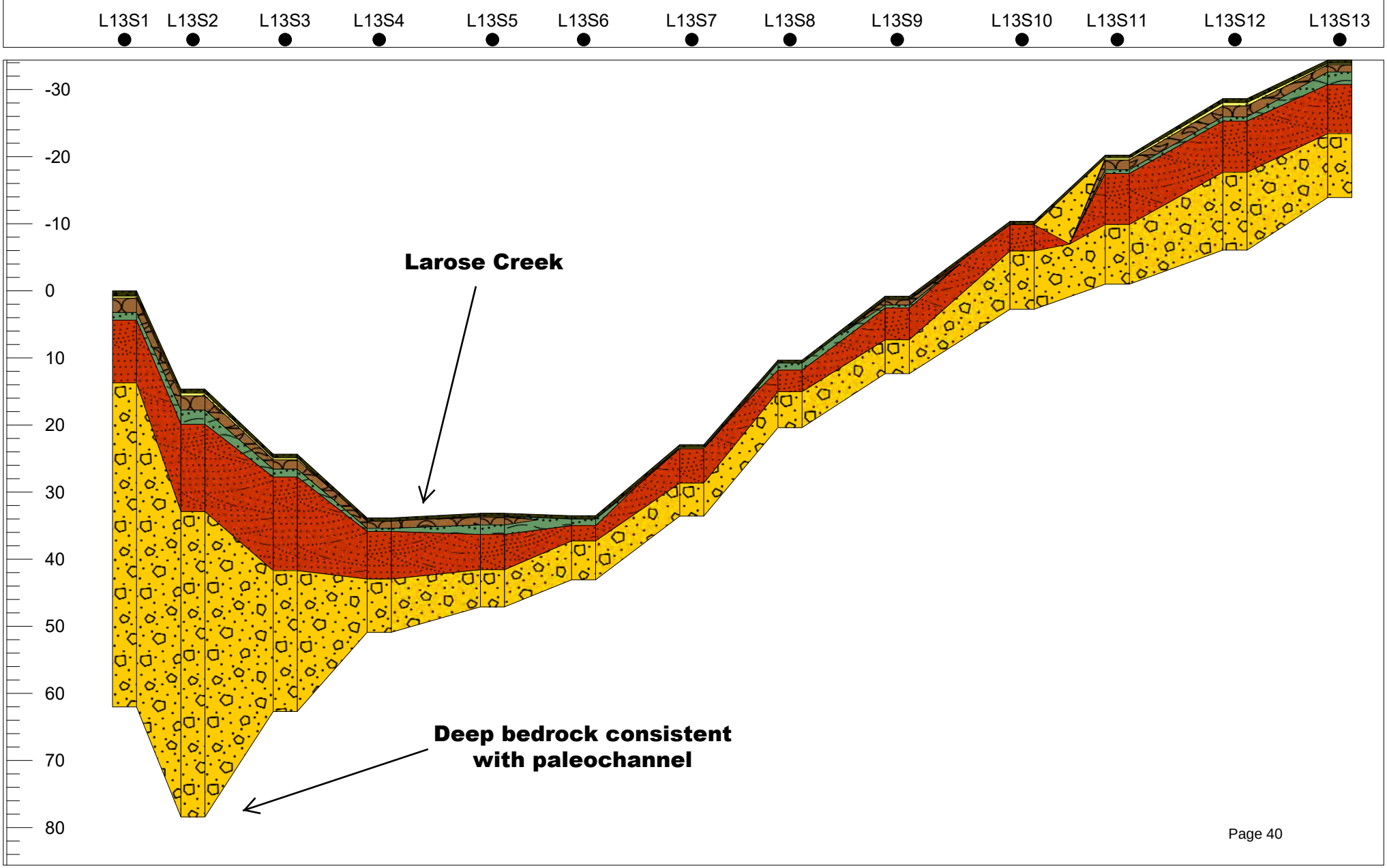
Line 12



Twelfth of July Creek

Passive Seismic 2021

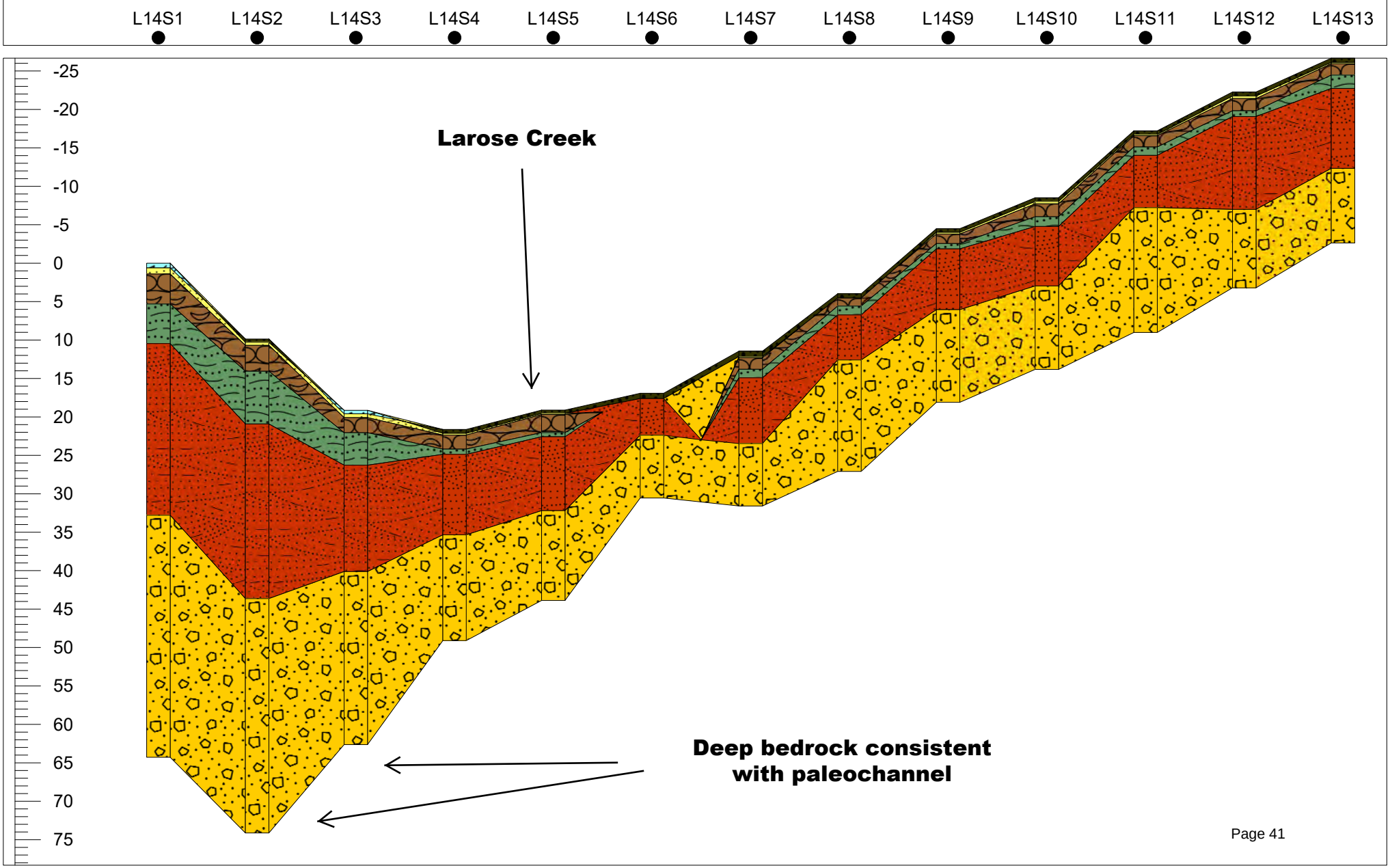
Line 13



Twelfth of July Creek

Passive Seismic 2021

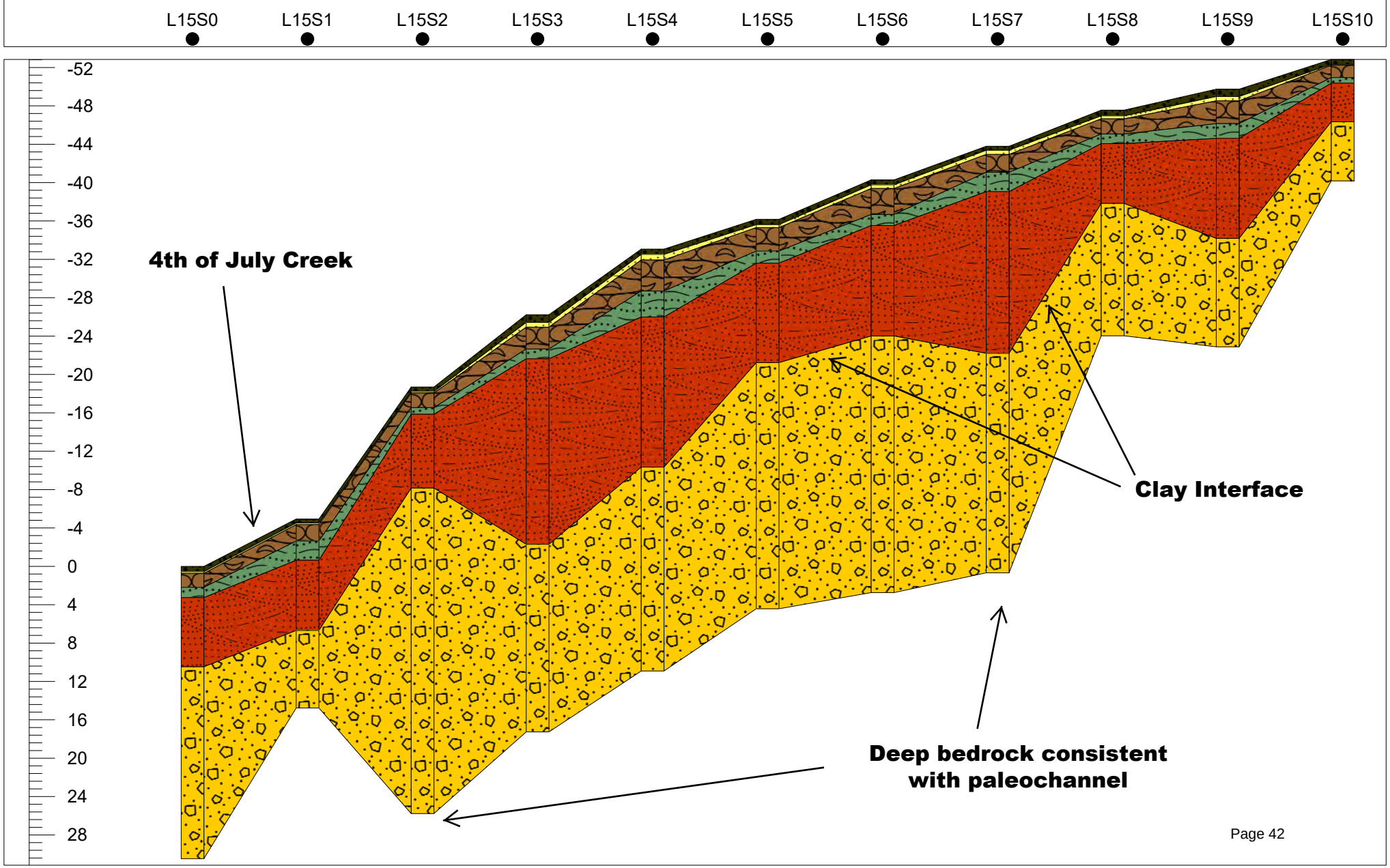
Line 14



Fourth of July Creek

Passive Seismic 2021

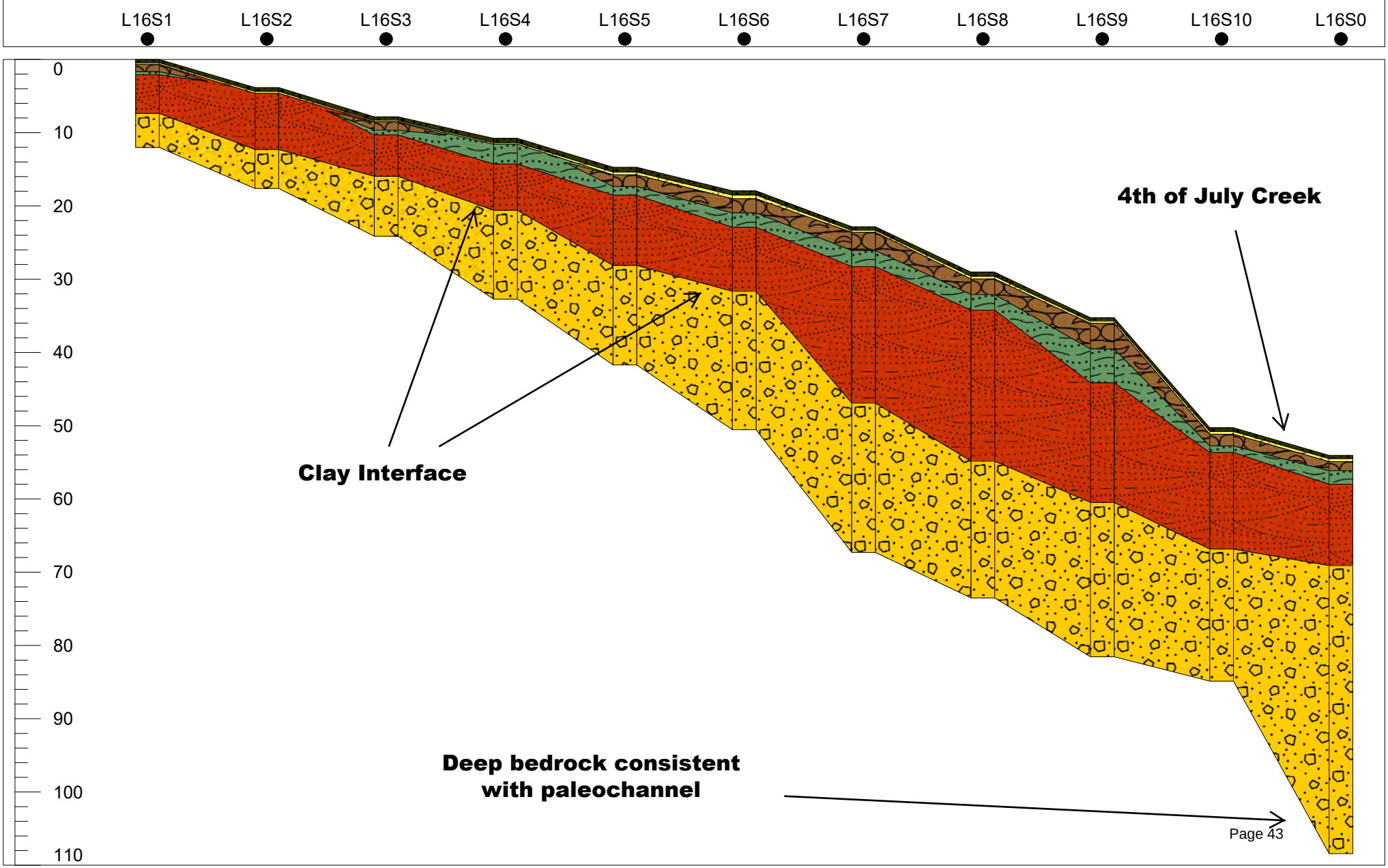
Line 15



Fourth of July Creek

Passive Seismic 2021

Line 16



Fourth of July Creek

Passive Seismic 2021

Line 17