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2009 Seismic Interpretation Report Over Permits 2009RS275 and 2009PG533 to 538 - St. Lawrence Lowlands Basin - Province of Quebec

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ALTAI RESOURCES INC.

2009 SEISMIC INTERPRETATION REPORT

OVER PERMITS
2009-RS-275 AND 2009-PG-533 TO 538

ST. LAWRENCE LOWLANDS BASIN PROVINCE OF QUEBEC

March 2010

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Report 0510

TABLE OF CONTENT

TABLE OF CONTENT.....	iii
LIST OF FIGURES.....	iv
LIST OF TABLES.....	iv
1. INTRODUCTION.....	1
2. PROPERTY LOCATION.....	2
3. GEOLOGY.....	5
3.1- REGIONAL GEOLOGY AND TECTONICS.....	5
3.2- STRATIGRAPHY.....	7
4. AVAILABLE DATA FOR INTERPRETATION.....	10
5. SEISMIC DATA INTERPRETATION.....	16
5.1- ST. OURS – SOREL AREA.....	16
5.2- TROIS-RIVIÈRES AREA.....	27
6. CONCLUSIONS.....	30
7. PROFESSIONAL CERTIFICATE.....	31

LIST OF FIGURES

Figure 1:	Property location, St.Lawrence Lowlands, ALTAI RESOURCES INC.....	2
Figure 2:	Tectonic features of the St. Lawrence Lowlands Basin.....	5
Figure 3:	Geological setup of the St. Lawrence Lowlands Sedimentary Basin.....	6
Figure 4:	Structural cross-section of the St. Lawrence Lowlands Basin	7
Figure 5:	Seismic data and wells over the ALTAI RESOURCES INC property.....	10
Figure 6:	Seismic lines location near St. Ours, ALTAI RESOURCES INC Property.....	11
Figure 7:	Seismic line location near Trois-Rivières, ALTAI RESOURCES INC Property.....	12
Figure 8:	ALTAI lines location and available public data, St. Ours-Sorel area.....	17
Figure 9:	Line ALT-2009-01, Final Stack and Pre Stack Migration data.....	18
Figure 10:	Line ALT-2009-02, Final Stack and Pre Stack Migration data.....	19
Figure 11:	Line ALT-2009-03, Final Stack and Pre Stack Migration data.....	20
Figure 12:	Jump correlation of geological tops on lines ALT-2009-02.....	21
Figure 13:	Interpretation of the combine profile of Lines ALT-2009-01 and ALT-2009-02.....	22
Figure 14:	Interpretation of Line ALT-2009-03.....	23
Figure 15:	New Top Trenton Isochrone Map.....	26
Figure 16:	Line ALT-2009-04, Final Stack and Pre Stack Migration Data.....	28
Figure 17:	Tentative interpretation of Line ALT-2009-04.....	29

LIST OF TABLES

Table 1:	St. Lawrence Lowlands Property, ALTAI RESOURCES INC.....	3
Table 2:	Stratigraphy of the St. Lawrence Lowlands Basin.....	9
Table 3:	Seismic profiles acquired in 2009 by ALTAI RESOURCES INC.....	13
Table 4:	Seismic parameters tests and equipment used in 2009 on ALTAI Property	14
Table 5:	Geological tops, SAREP-Laduboro St-Ours No.1.....	21

1. INTRODUCTION

This report presents an interpretation of the results obtained from the 2009 2D seismic data acquisition survey acquired by ALTAI RESOURCES INC (**ALTAI**) over its Sorel-Trois-Rivières Property located over the north-central part of the St. Lawrence Lowlands Basin. Four high resolution vibroseis 2D seismic profiles totalling 39.60 Km were recorded, three (3) in the St. Ours – Sorel area and one in Trois-Rivières.

The 100% interest ALTAI Property is located over and around Lake St-Pierre, west of Trois-Rivières, and consists of seven (7) new exploration permits: 2009RS275 and 2009PG533 to 538 that have replaced the previous permits 2006PG904, 2006RS175 to 177 and 2007RS216 to 218. These permits cover in large part the medium depth to shallow portion of the Ordovician carbonate Platform to the north of the Yamaska Fault but also extend south of the fault and east of the Richelieu River into the main zone of the Deep Utica Shale Play.

ALTAI retained Mr. Paul Laroche, Professional Engineer, Professional Geologist and Geophysicist, to provide an interpretation of the 2009 seismic profiles using previous data available and public documents and studies related to oil and gas exploration work performed over and in the vicinity of the company property.

Documents and data used in this report were supplied by ALTAI and information about the regional geology, wells information and the general tectonic framework were obtained mainly from the Quebec government (MRNF) but also from press releases and from various pertinent geoscientific publications.

The very large Sorel-Trois-Rivières Property is prospective over the northwestern part for shallower gas reservoirs within Ordovician Platform carbonates of the Beauharnois and Theresa Formations of the Beekmantown Group. Underlying Cambrian sands and conglomerates (Potsdam Group) which are in places very porous also become objectives. Overlying Utica and/or Lorraine shales covering the Platform are thickening towards the south and the east, acting as good seals for deeper strata. South of the Yamaska Fault and east of the Richelieu River where the 2009 seismic was recorded, the carbonate Platform which is broken in large fault blocks is deepening rapidly and the infilling shale section (Utica/Lorraine) becomes thicker. This portion of the property covers the main zone of the Utica Shale play.

2. PROPERTY LOCATION

The 100% interest ALTAI Property is located over and around Lake St-Pierre, west of Trois-Rivières, Province of Quebec (**Figure 1 and Table 1**). The permits acquired from the Quebec government lie over the north-central part of the St.Lawrence Lowlands sedimentary basin, partly over the shallower portion of a more or less undisturbed Ordovician Carbonate Platform and partly over the deeper Utica shale play zone.

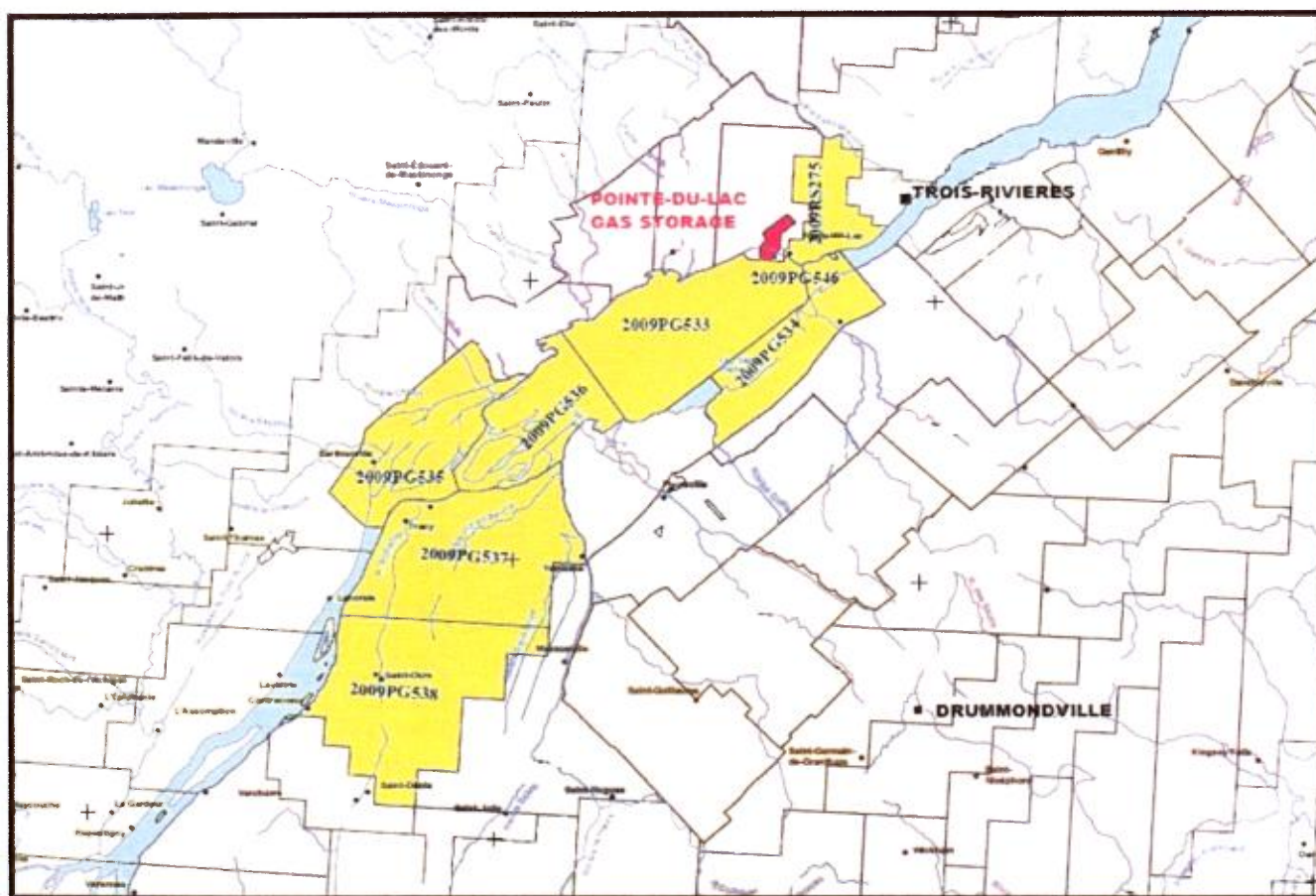


Figure 1: Property location, St.Lawrence Lowlands, ALTAI RESOURCES INC

In July 2009, ALTAI was granted new permits above the previous ones. In doing so, ALTAI has extended the life of the property until 2019. Only the new permits are now in force and are in good standing.

Table 1: St.Lawrence Lowlands Property, ALTAI RESOURCES INC

Permit number	Date Granted	Area (Hectares)
2006 PG 904	19 March 2006	6504
2009 RS 275	9 July 2009	6504
2006 RS 175	19 March 2006	20996
2009 PG 533	9 July 2009	21081
2006 RS 176	19 March 2006	14832
2009 PG 535	9 July 2009	14832
2006 RS 177	19 March 2006	11935
2009 PG 536	9 July 2009	11935
2007 RS 216	16 August 2007	11209
2009 PG 534	9 July 2009	11216
2007 RS 217	16 August 2007	24322
2009 PG 537	9 July 2009	24322
2007 RS 218	16 August 2007	24454
2009 PG 538	9 July 2009	24454
TOTAL New(2009)		<u>114 344</u>

A good portion of the property is located over the shallow water Lake St-Pierre, the rest being over rural areas with small towns and villages along main highways. Numerous asphalted and gravel roads exist throughout the permitted area. Main localities near and on the permits are Sorel, Contrecoeur, Berthierville and Nicolet. The main Gaz Metro gas pipeline located on the north shore of the St. Lawrence River (and Lake St-Pierre) runs across the property.

According to regulations on oil, gas, brine and underground storage of the Mining Law of the Province of Quebec, oil and gas permits are issued for an initial period of five years with the possibility of further annual renewals for another five years. These permits give to its holder the exclusive right to explore for oil and gas.

Current obligations for the permit holder are an annual permit rental fee of 0.10\$ per hectare and minimum statutory exploration expenditures that must be met each year. The minimum work program commitments required must be equivalent to 0.50\$ per hectare the first year and are increasing by 0.50\$ per hectare every subsequent years, to reach 2.50\$ per hectare the fifth year. For each additional renewal, the rental fee is fixed at 0.50\$ per hectare and the work obligations are equivalent to 2.50\$ per hectare. Permits will not be renewed beyond this ten-year period except for areas licensed for commercial discovery exploitation.

Relinquishments can be made on an annual basis on an entire permit or on specific acreage within the permit. Annually, reports must be filed with the Ministry of Natural Resources regarding details of activities and spending on the permits over the past year. Regulations in Quebec allow for permits to be grouped and work program expenditures to be allocated among a specific group of permits provided they are contiguous or located within a 40-kilometer radius. Any amount of the work program expenditure in excess of the requirements can be applied to subsequent years. The excess is also applicable, at half-value, to any permit renewed after the original five year term.

Quebec charges a royalty of 10% on daily gas production less than 3 MMcf/d and 12.5% on production thereafter. The provincial corporate tax rate is 9.04% and the federal tax rate is 22.12% for a combined tax rate of 31.16%. The Quebec government also offers a refundable tax credit of 35% (20% if the company is an operator or related to an operator of producing oil and gas properties) on qualifying expenditures related to oil and gas exploration in Quebec.

3. GEOLOGY

A summary of the regional geology of the St. Lawrence Lowlands sedimentary basin is presented in this section, describing the main stratigraphy and the major tectonic events that produced the actual platform sediments set up observed in the property area.

3.1- REGIONAL GEOLOGY AND TECTONICS

The St. Lawrence Lowlands Sedimentary Basin extends from the Ontario border to the West up to Quebec City to the East and from a few kilometres to the north of the St. Lawrence River down to the USA border to the South (Figures 2 and 3). This large Palaeozoic basin is mainly composed of platform type carbonate sediments lying over Cambrian sandstones and Precambrian Basement. These are generally covered by important thicknesses of marine and terrestrial clastic shale sequences.

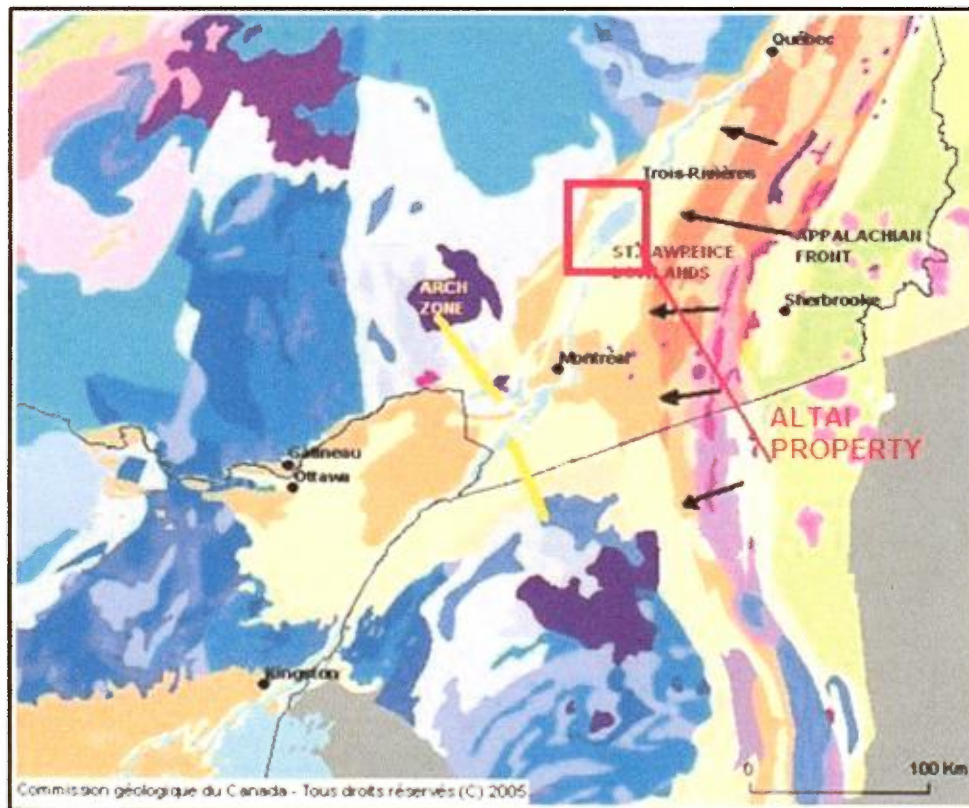


Figure 2: Tectonic features of the St. Lawrence Lowlands Basin

The platform rocks sequences going north to south are broken by normal faults forming various steps more or less parallel to the St. Lawrence River and dropping rapidly toward the southeast. This collapse was caused by the opening of the ocean in Mid-Ordovician time (Figures 3 and 4).

Later orogenies (Taconic Orogeny in Late Ordovician time and Acadian Orogeny in Mid-Devonian) brought important reversed deformations to the sequences (Appalachian Front), accompanied by numerous fractures and thrust faults forced through the original sequences by compression forces applied from southeast to northwest, therefore adding complexity to the structural aspect of sequences in the center of the basin.

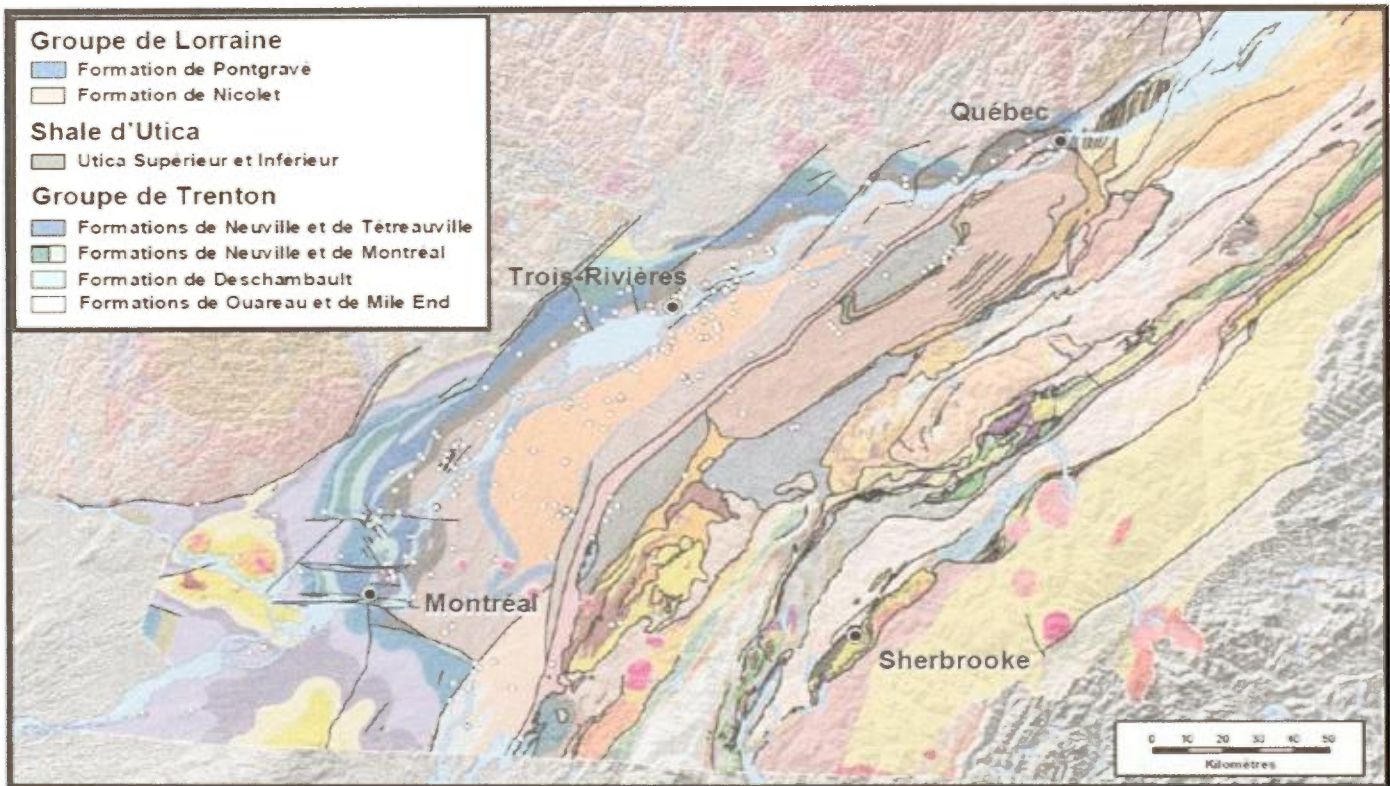


Figure 3: Geological set up of the St. Lawrence Lowlands Sedimentary Basin

ALTAI exploration permits cover in large part the medium depth to shallow portion of the autochthonous Ordovician carbonate Platform to the north of the Yamaska Fault (the principal normal fault that separates the shallower platform from the deeper basin **Figure 4**) but also extend south of the fault and east of the Richelieu River into the main zone of the Deep Utica Shale Play. To the north of the Yamaska Fault, outside a few secondary normal faults, very little

deformations are observed on the seismic data available and the sediments sequence is relatively thin and gently dipping towards the southeast. To the south of the fault, the Utica sequence known as a main source rock becomes thicker and an important infill by the Lorraine sequence is observed.

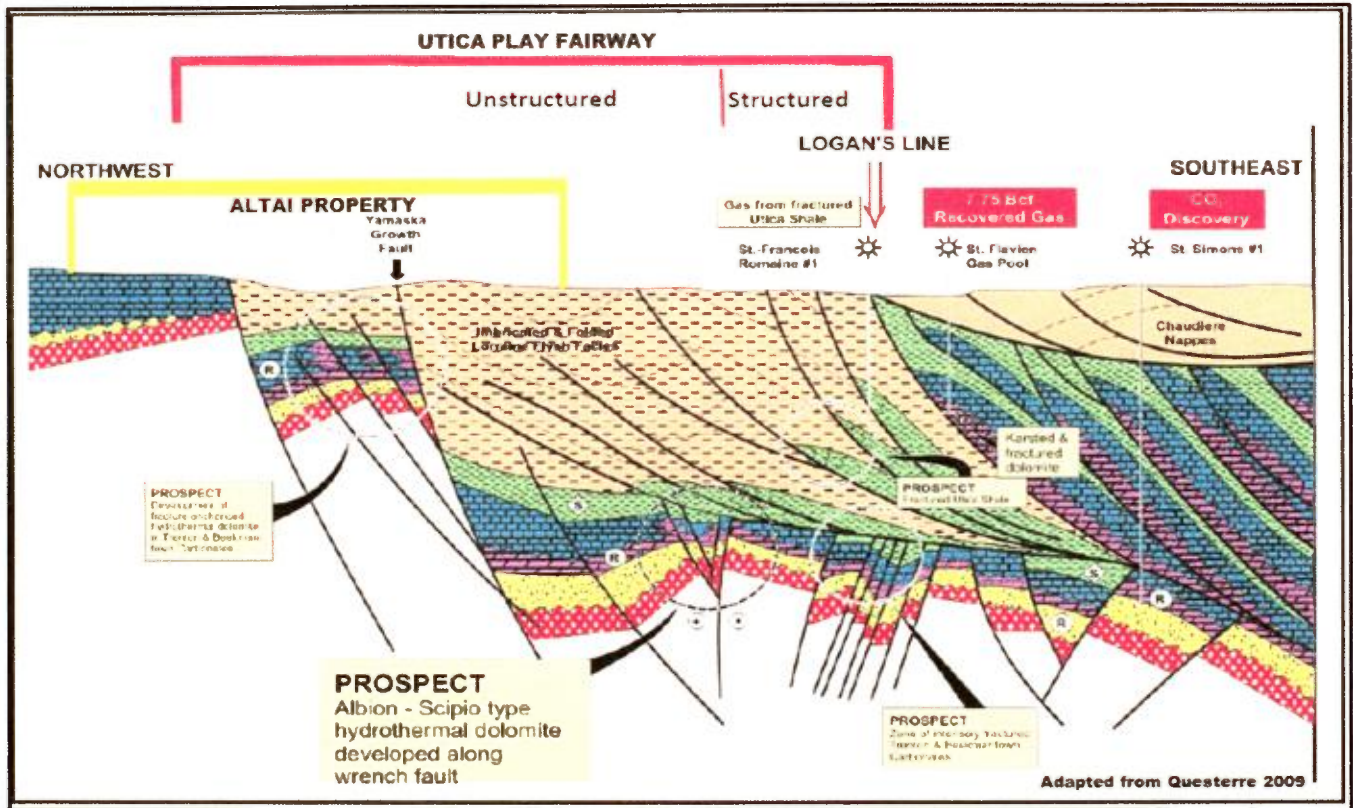


Figure 4: Structural cross-section of the St. Lawrence Lowlands Basin

3.2- STRATIGRAPHY

The regional stratigraphy of the St. Lawrence Lowlands Sedimentary Basin is well described in the literature and in government publications. Using these various documents, a general description of the local conditions of sediments deposition and of the different tectonic episodes that affected the basin in the property area can be defined (see Table 2). The stratigraphy of the St. Lawrence Lowlands can be presented as follows:

Near structural Precambrian basement highs along the north-western border of the basin of the Lowlands, Cambrian sands sequences of the Potsdam Group (Cairnside and Covey Hill Formations or their equivalents) that were produced from the erosion of the basement rocks,

started to fill depressions. Measured thicknesses of these sands which often show good porosities are therefore highly variable from place to place.

During the Lower and Middle Ordovician, flat lying shallow water platform carbonate sediments covered the previous deposition. These are the Beekmantown dolomites (Theresa and Beauharnois Formations) in which production was obtained in the St-Flavien area. These were followed by the Chazy and Black River carbonates and sandstones and later on, by the Trenton carbonates and shales (known production in these dolomitized carbonates (HTD) in the Albion-Scipio Field in USA).

With the major Upper Ordovician marine transgression, various thicknesses of a dark deep water shale sequence showing a high organic content are deposited (Utica Shale) which are now explored in the Lowlands for production through heavy fracturation methods. This deposition was followed by very thick monotonous sequences mainly composed of marine to non marine shales and mudstones with some carbonates and sands episodes (Lorraine, Pont-grave and Richmond). The Lorraine could also be a candidate for fracturation in areas where it includes high TOC values.

Above these various rocks, unconsolidated Quaternary sediments exist in variable thicknesses, mainly in the Lake St-Pierre area (center of the Champlain Sea) in which some gas accumulations are known and production was achieved in Pointe-du-Lac located at the northeast limit of the property.

Compiled kerogenes reflectance studies over the basin are showing that the degree of maturity of the organic matter present in rocks is relatively high and is dry gas to condensates prone. These studies also show that nearly 90% of the tested hydrocarbons in the wells drilled up to now in the St. Lawrence Lowlands Basin are C1. Locally towards the northeast, where the sequences become thinner or where they have been affected by lesser deformations, gas liquids and even oil shows have been observed in wells (Junex St. Augustin de Desmaures No.1).

Known reservoir sequences where acceptable porosities are observed are the Potsdam sandstones, the Chazy sandstones, the Beekmantown dolomites, the Trenton and Black River carbonates and the basal Quaternary sand lens. Locally, the Lorraine shale has provided good gas quantities in older wells. The fracked Utica Shale is also providing a new interesting target.

Table 2: Stratigraphy of the St. Lawrence Lowlands Basin

PERIOD	SERIES	AGE	GROUP	FORMATION	DESCRIPTION
Quaternary		0-2 M.A.		*	Glacial tills, clays Sands and gravels
Ordovician	Upper	440 M.A.	Richmond		Non marine, Red and green Shales and sandstones
			Pont-grave		Crystalline carbonates And shales
			Lorraine	*	Calcareous Shales, Crystalline carbonates, Fine sandstones
			Utica	*	Dark grey shales
	Middle	445 M.A.	Trenton		Carbonates and shales
			Black River	*	Carbonates, sandstones and dolomites
			Chazy	*	Crystalline carbonates, Sandstones at the base
Lower	500 M.A.	Beekmantown	* Beauharnois Fm * Theresa Fm	Crystalline Dolomites Sandstones at the base	
Cambrian		570 M.A.	Potsdam	Cairnside Fm Covey Hill Fm	Marine sandstones
Precambrian		945 M.A.			Igneous and Metamorphic Rocks

* Gas shows in wells drilled in the general area

4. AVAILABLE DATA FOR INTERPRETATION

A large part of the ALTAI property has known limited oil and gas exploration in the past (see previous interpretation reports). Only shallow offshore seismic profiles (over Lake St-Pierre) and a few random lower fold land seismic lines exist mostly to the south of the lake (**Figure 5**) and were used in our previous interpretation of the Top of Trenton map. Regional magnetic and gravity data maps are also available.

Numerous shallow wells, mainly in the Pointe-du-Lac area and near the St. Lawrence river, exist to give an insight on the Quaternary gas play. Just a few deep wells drilled in the seventies or more recently can be used to understand regional facies variations within geological Formations of the Paleozoic Platform. The results of some of these wells when public will be used and discussed in our interpretation.

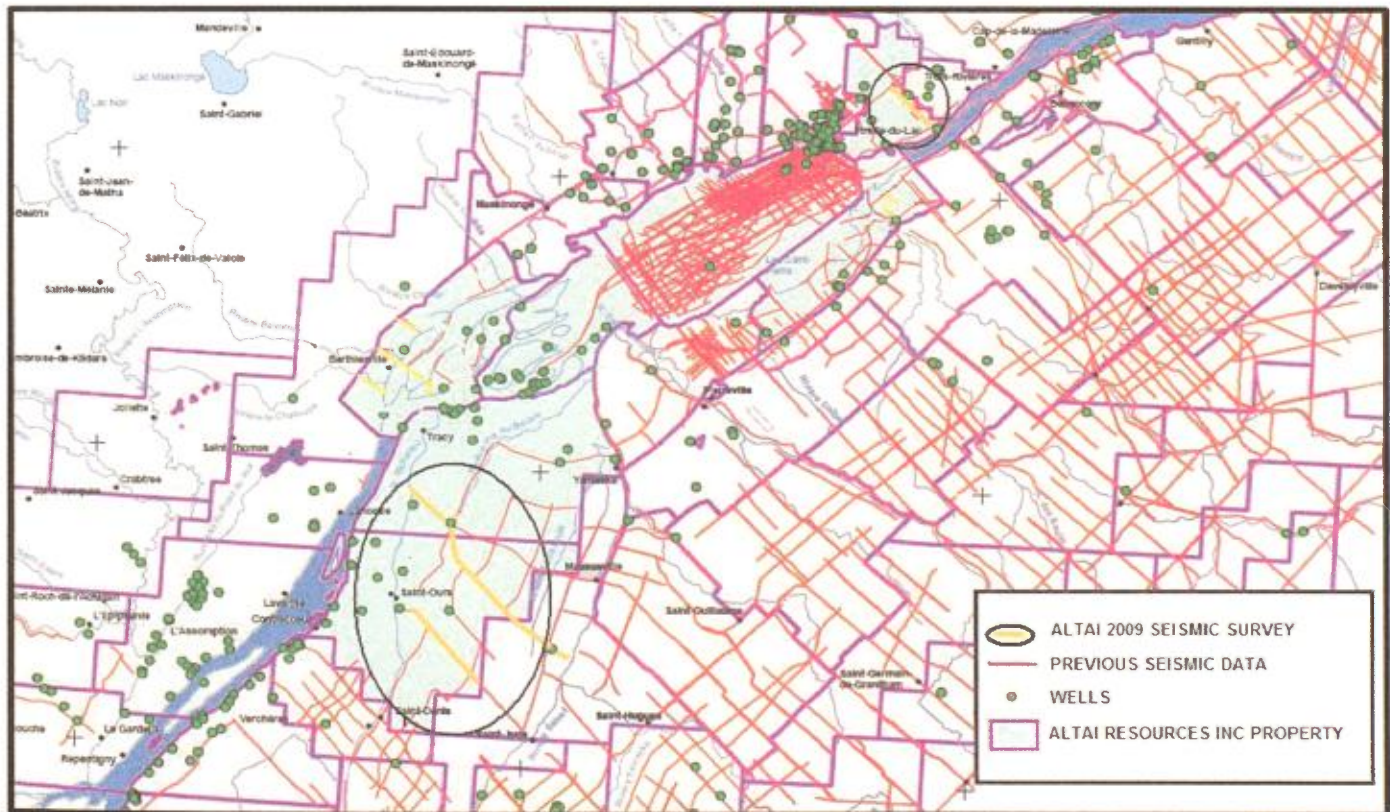


Figure 5: Seismic data and wells over the ALTAI Property

In November 2009, ALTAI RESOURCES INC proceeded with the acquisition of four (4) high fold 2D seismic profiles totalling 39.60 kilometres (**Table 3** and **Figure 5**). Three of the profiles totalling 31.48 kilometres in length, were recorded in the St-Ours - Sorel area (**Figure 6**) and another one was acquired over 8.12 kilometres in the City of Trois-Rivières (**Figure 7**).

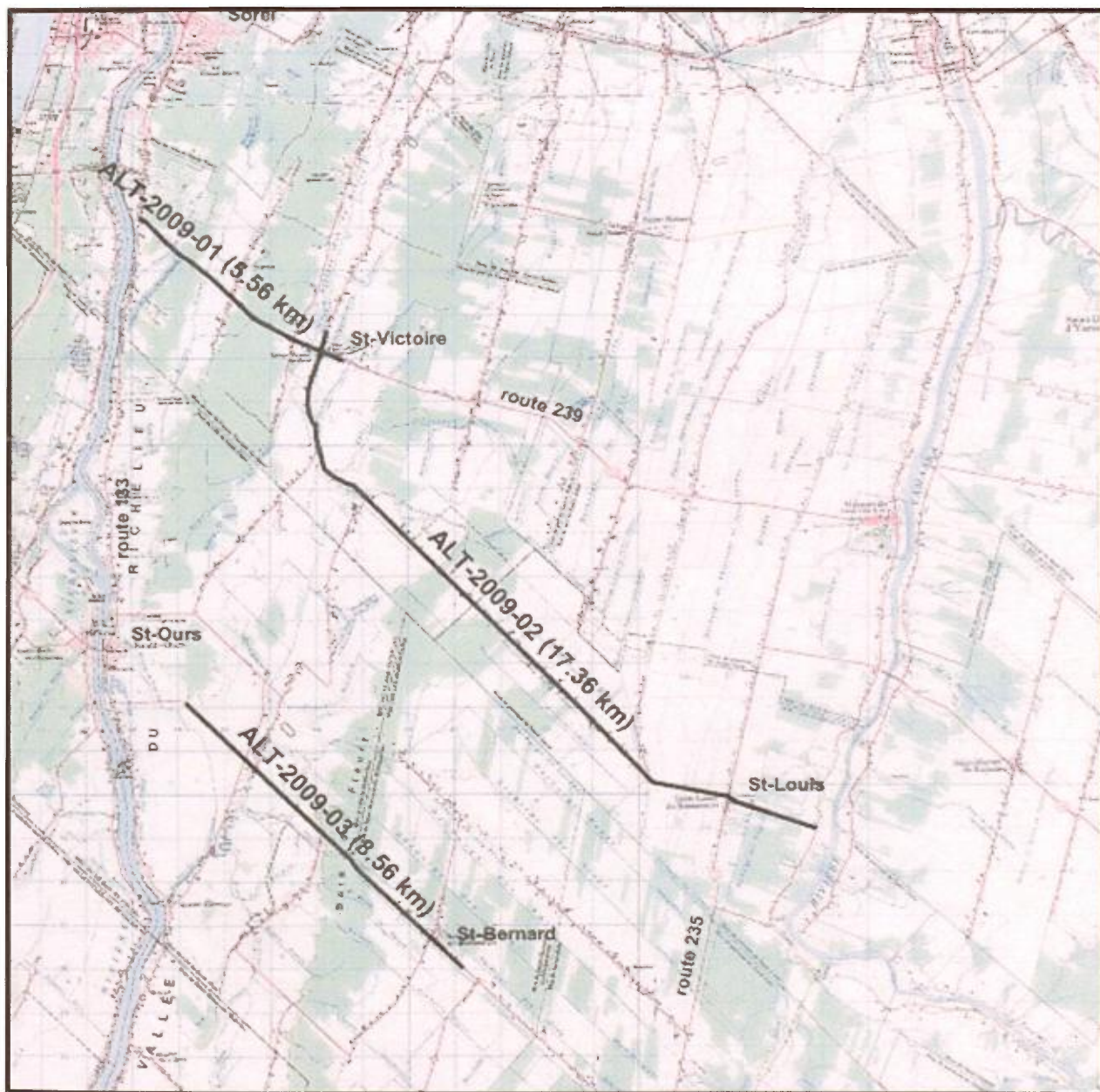


Figure 6: Seismic lines location over the St. Ours-Sorel area, ALTAI Property

Table 3: Seismic profiles acquired in 2009 by ALTAI RESOURCES INC

Line number	Length	Area
ALT-2009-01	5.56 Km	St. Ours - Sorel
ALT-2009-02	17.36 Km	St. Ours - Sorel
ALT-2009-03	8.56 Km	St. Ours - Sorel
ALT-2009-04	8.12 Km	Trois-Rivières
TOTAL	39.60 Km	

ALTAI mandated Geophysics GPR International Inc from Longueuil, Quebec using a field crew and equipment provided by Kinetex Inc. from Calgary, Alberta to record the seismic data over the property. Tests to determine the seismic parameters that were run at the beginning of the survey on Line ALT-2009-02 and the quality control during acquisition were carried out by Paul Laroche, P. Eng and P. Geo.

The following equipment and layout were used for recording: The energy source for the acquisition was composed of four buggy mounted vibrators, model Failings-IVI Y2-400, with a peak force of 47,700 pounds each and an Input-Output System Four seismograph was used to record a split-spread layout of 240 live channels with Vectorseis 3C digital sensors (component in X, Y, Z) connected to online recorder modules having 6 channels each. Recording traces intervals were placed 20 meters apart. Vibration stations were located at every 40 meters intervals in the St. Ours-Sorel area and at 60 metres intervals in Trois-Rivières.

The final acquisition parameters chosen after performing numerous source tests in the field on Line ALT-2009-02 were selected as the following (see **Table 4**):

Four 47,700 pound buggy vibrators producing 10 three dB/Octave linear sweeps during 10 seconds over a 64m drag and a 3.5m move with a peak force at 85 %, Input filter at 10-120 Hz, recording length of 5 seconds and 2 msec sampling interval.

Table 4: Seismic parameters tests and equipment used in 2009 on ALTAI Property

ALTAI RESOURCES							
Novembre 2009 SOREL/SAINT-LOUIS and TROIS-RIVIERES AREAS							
SEISMIC ACQUISITION PARAMETERS							
Number of Channels :	240 *(roll on/off with split spread)						
Record Length:	5 sec.						
Sample Interval:	2 ms.						
Receiver Interval:	20 m.						
Source Interval:	40m SOREL / 60m TROIS-RIVIERES						
Number of Vibrations:	4 at full drive level						
Sweep Type:	TBD Drag vs Stack						
Sweep Length:	TBD 8 to 12 sec						
Number of Sweeps / VP:	TBD 04 to 10						
RECORDING PARAMETERS DETERMINATION WITH 3 VIBES							
Tests to be done with a split-spread shot of 240 channels or more and a <u>64m drag</u> distance for 3 vibs							
Established Sweep Start							
1	6-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
2	8-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
3	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
4	12-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
Established Sweep End							
5	10-80	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
6	10-110	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
7	10-140	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
Established Linear vs. Non-Linear							
8	10-120	Linear	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
Established Sweep Effort							
9	10-120	3 dB/Oct	10 Sec.	6 Swps/VP	85 % P.F.	.3	Taper
10	10-120	3 dB/Oct	10 Sec.	8 Swps/VP	85 % P.F.	.3	Taper
11	10-120	3 dB/Oct	10 Sec.	12 Swps/VP	85 % P.F.	.3	Taper
12	10-120	3 dB/Oct	10 Sec.	16 Swps/VP	85 % P.F.	.3	Taper
Established Sweep Length							
13	10-120	3 dB/Oct	8 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
14	10-120	3 dB/Oct	12 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
15	10-120	3 dB/Oct	16 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
Drag vs. Stack							
Determine data quality if source point is stacked. Vibe array centred on the source point							
16	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
Force control							
Determine source quality when vibs are at 50% force							
17	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	50 % P.F.	.3	Taper
18	10-120	3 dB/Oct	12 Sec.	10 Swps/VP	50 % P.F.	.3	Taper
19	10-120	3 dB/Oct	10 Sec.	8 Swps/VP	50 % P.F.	.3	Taper
20	10-120	3 dB/Oct	10 Sec.	12 Swps/VP	50 % P.F.	.3	Taper
21	10-120	Linear	12 Sec.	8 Swps/VP	85 % P.F.	.3	Taper
22	10-120	Linear	12 Sec.	8 Swps/VP	50 % P.F.	.3	Taper
RECORDING PARAMETERS DETERMINATION WITH 4 VIBES							
Tests to be done with a split-spread shot of 240 channels or more and a <u>64m drag</u> distance for 4 vibs							
23	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
24	10-120	3 dB/Oct	10 Sec.	8 Swps/VP	85 % P.F.	.3	Taper
25	10-120	3 dB/Oct	10 Sec.	12 Swps/VP	85 % P.F.	.3	Taper
Tests to be done with a split-spread shot of 240 channels or more and a <u>84m drag</u> distance							
26 (3 vibs)	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
27 (4 vibs)	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
PARAMÈTRES CHOISIS :							
	10-120	3 dB/Oct	10 Sec.	10 Swps/VP	85 % P.F.	.3	Taper
	4 Vibes bumper to bumper	64 meters drag	3.5 meters move				
Paul Laroche / Renaud Robitaille ALTAI 4 Novembre 2009 Ref M09756							

The original recorded field data was sent to CGGVeritas Geoservices Ltd in Calgary for processing the recorded signal and prepare final profile displays for interpretation. Although the data recorded was including both the "P" and "S" components of the seismic waves (measured using the special Vectorseis 3C digital sensors) with XYZ components, only the "P" wave was processed for interpretation. Further in depth processing could eventually be done in the future if more elaborated details about the rock qualities and attitudes are needed to help select drilling locations.

The data processing was supervised by Paul Laroche, P. Eng and P. Geo and CGGVeritas Geoservices Ltd proceeded with the data summation through a series of interactive procedures with various decisions steps for optimal parameters to obtain the final **Time Migration** and the **Pre-Stack Time Migration** displays that are interpreted in this report. Unmigrated **Final Structure Stacks** were also produced and are used for local interpretation of seismic markers at ends of lines or where sharp turns in the profile direction are perturbing the migration process of seismic events.

5. SEISMIC DATA INTERPRETATION

This section presents and discusses the geological interpretation of each 2D seismic profile acquired in 2009 over the Property. As no direct tie was available, the identification of geological markers was made by jump correlation from nearby wells. Seismic markers are generally quite continuous, having very specific characters (amplitude and frequency) permitting following them from line to line and going more easily across faults. Main structural features observed on the lines were connected to regional trends known from previous public data interpretation (Trenton Map).

All the lines were recorded along existing roads in populated areas. Crooked line data processing was used to correct for some of the effects of sharp turns in the profiles. Data quality obtained on the Final Stack and on both Migrated profiles is generally good in the St. Ours-Sorel area eventhough the source peak force used during recording had to be lowered at 25% or 50% because of the numerous houses along the way.

Using the same acquisition parameters in the Trois-Rivières area, however, data quality obtained through extensive processing is very poor. It is believed that the very thick Quaternary sediments containing soft argillaceous materials have absorbed most of the source energy.

5.1- ST. OURS – SOREL AREA

The first three profiles totalling 31.48 kilometres were recorded in the St-Ours area to obtain good southeast-northwest cross-sections of the Ordovician carbonates platform and to measure thicknesses variations of each formation in the north-south direction.

No public seismic data is available over the property in this general area, except for a Shell-Soquip line to the east of the property tying the Gastem A254 well in a north-south direction (26Q-1038). Old Texaco lines exist on the property but are not available for interpretation but a Top Trenton map using this data was made by Soquip and is giving the general structure of the platform.

Two of the ALTAI lines: ALT-2009-01 and ALT-2009-02 are forming more or less continuous profile, the north-west end of line ALT-2009-02 tying with the southeast end of line

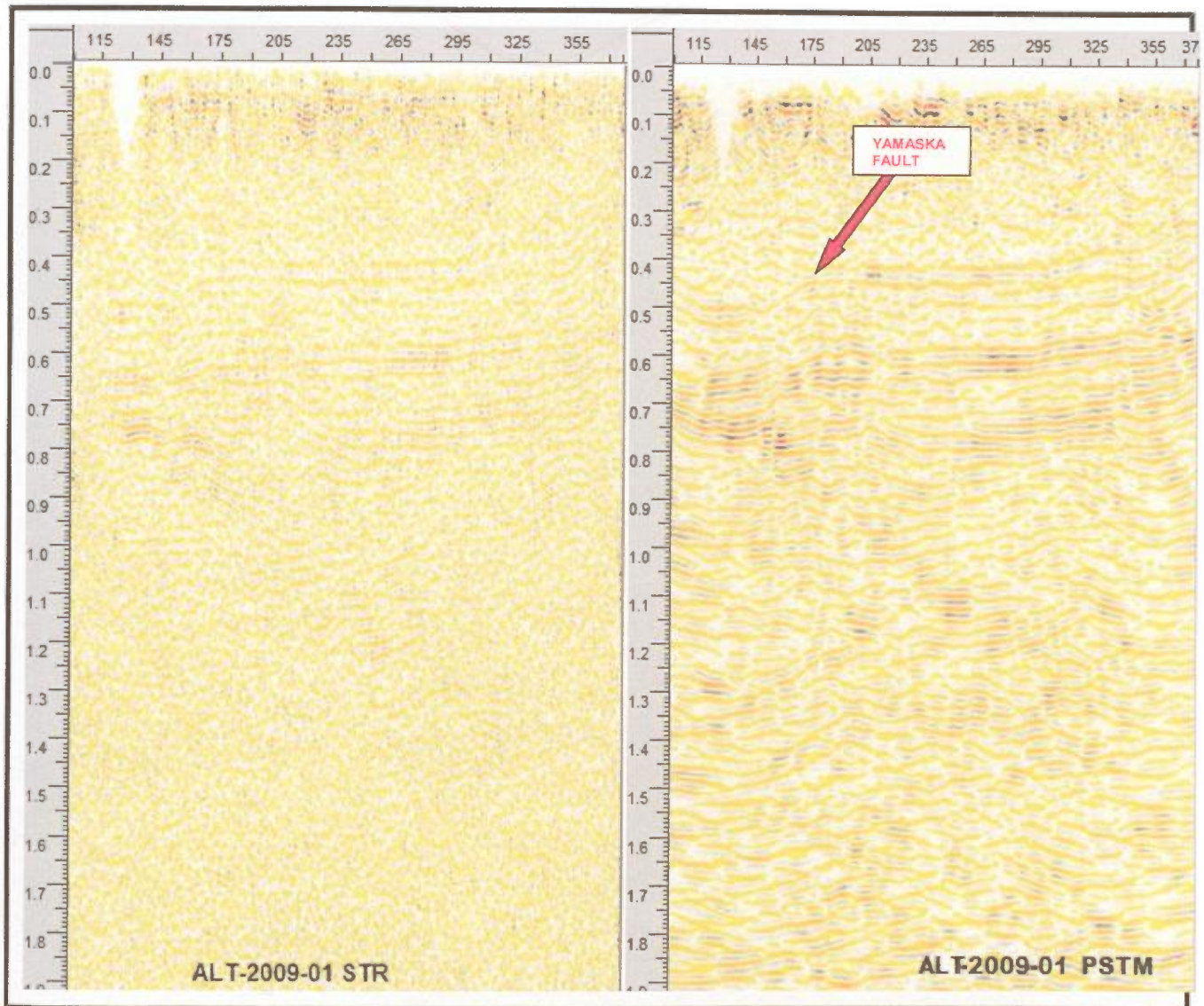


Figure 9: Line ALT-2009-01, Final Stack and Pre-Stack Migration data

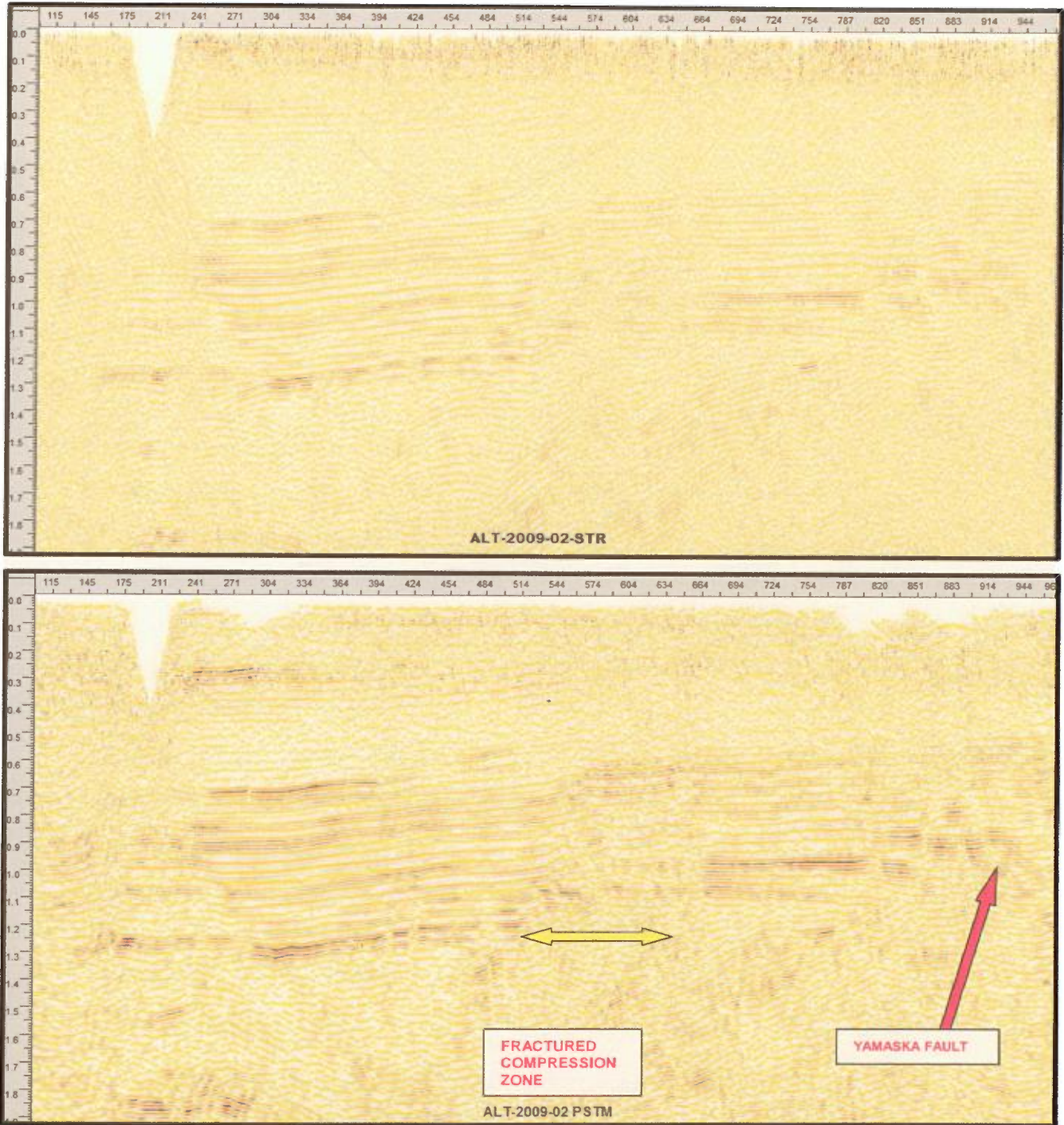


Figure 10: Line ALT-2009-02, Final Stack and Pre-Stack Migration data

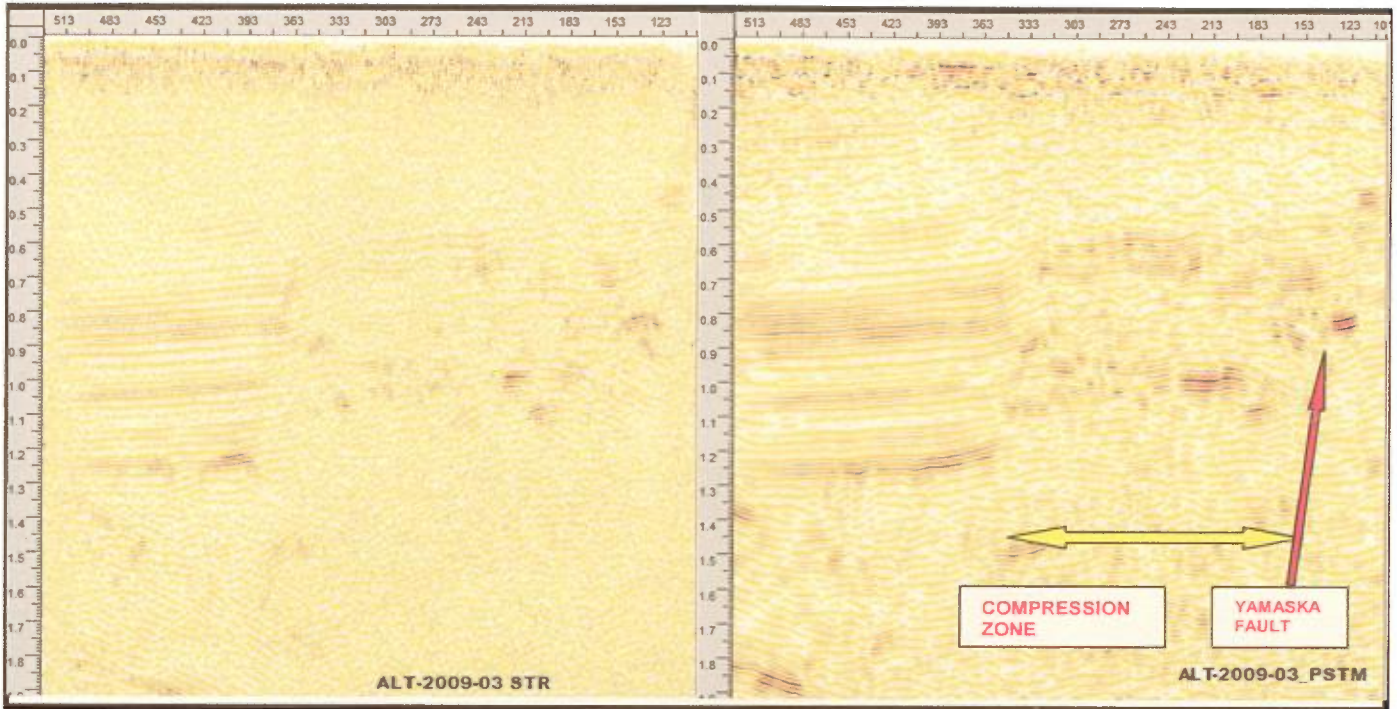


Figure 11: Line ALT-2009-03, Final Stack and Pre-Stack Migration data

The Sarep-Laduboro St-Ours No.1 (A-162) well is the only deep public well nearby the 2009 ALTAI profiles area that can be used for the jump correlation of the geological tops on the different seismic markers.

The tops in two-way time were compared and fit at station 740 of profile ALT-2009-02 (**Table 5 and Figure 12**) and were later compared and tied on line ALT-2009-03.

Using these ties, the seismic events on the profiles were then interpreted geologically using different colours and faults or fractures zones were defined in red. **Figure 13** presents our interpretation of the combine profile composed of lines ALT-2009-02 and ALT-2009-02 and **Figure 14** shows the geological interpretation of line ALT-2009-03.

On the profiles, correlated seismic markers are drawn across with the following colours:

- Brown for the base of the Richmond Formation or Top of the Lorraine Fm.,
- Light green for the Top of the Black Shale,
- Blue for the Top Trenton (Deschambeaut) and,
- Orange for the near Potsdam Formation.

Table 5: Geological Tops, SAREP-Laduboro St. Ours No.1

SAREP LADUBORO ST-OURS NO.1 (A162)								
DEPTHS	THICKNESS	ACOUSTIC	VELOCITY	DELTA T	CUMUL	TWT	FORMATIONS	
0	251	251	75	13333	0,062	0,06	0,12	RICHMOND
251	365	114	75	13333	0,028	0,09	0,18	LORRAINE
365	844	479	80	12500	0,126	0,22	0,43	BLACK SHALE
844	1030	186	80	12500	0,049	0,26	0,53	UTICA SUP
1030	1097	67	60	16667	0,013	0,28	0,56	UTICA INF TRENTON TÉTREAUVILLE
1097	1225	128	60	16667	0,025	0,30	0,61	TRENTON DESCHAMBEAUT
1225	1298	73	50	20000	0,012	0,31	0,63	BLACK RIVER
1298	1475	177	52	19231	0,030	0,34	0,69	BEEKMANTOWN BEAUHARNOIS
1475	1602	127	50	20000	0,021	0,37	0,73	BEEKMANTOWN THÉRESA
1602	1684	82	50	20000	0,013	0,38	0,76	POTSDAM CAIRNSIDE
1684	1838	154	55	18182	0,028	0,41	0,81	POTSDAM COVEY HILL
1838	1872	34	57	17544	0,006	0,41	0,83	POTSDAM COVEY HILL

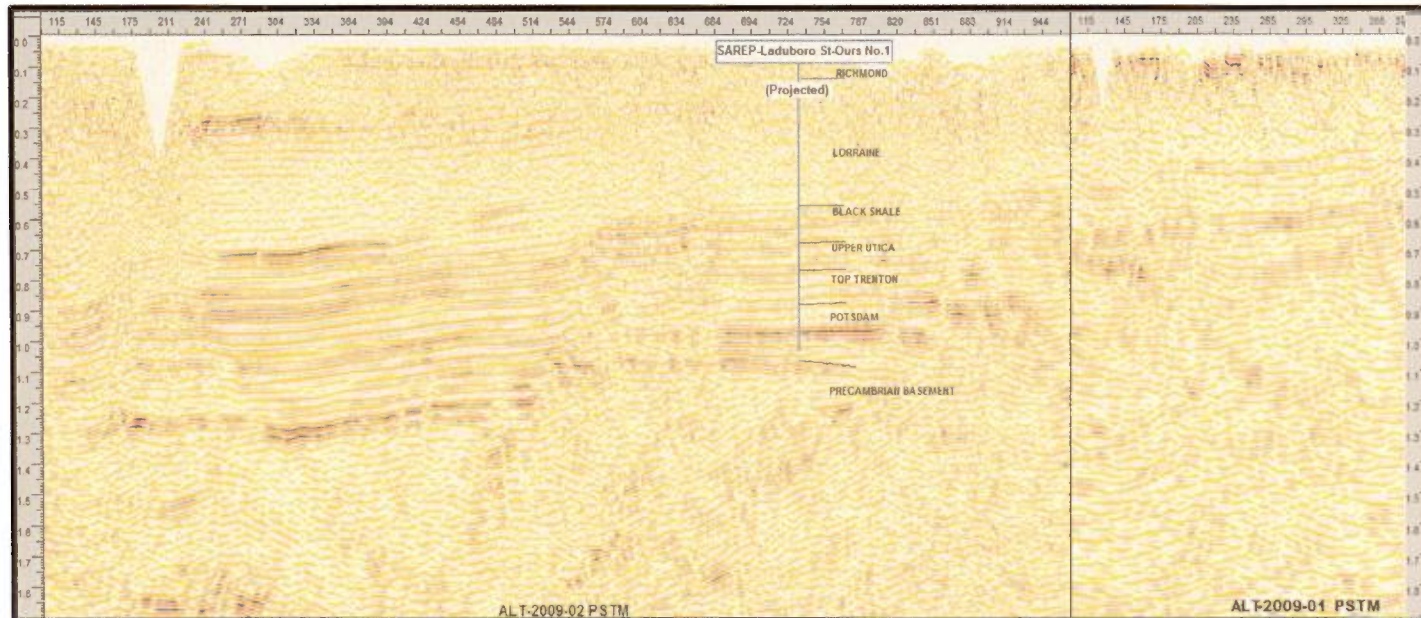


Figure 12: Jump Correlation of Geological Tops on Lines ALT-2009-02

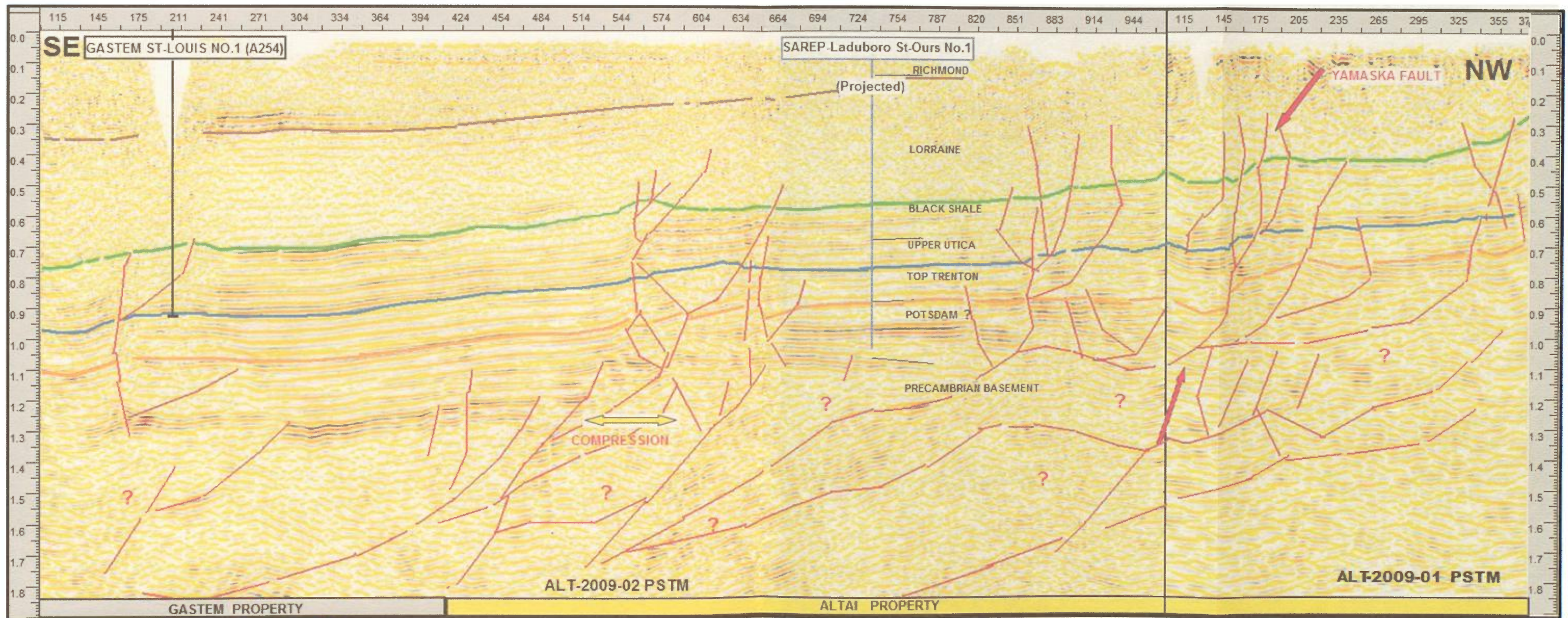


Figure 13: Interpretation of Lines ALT-2009-01 and 02

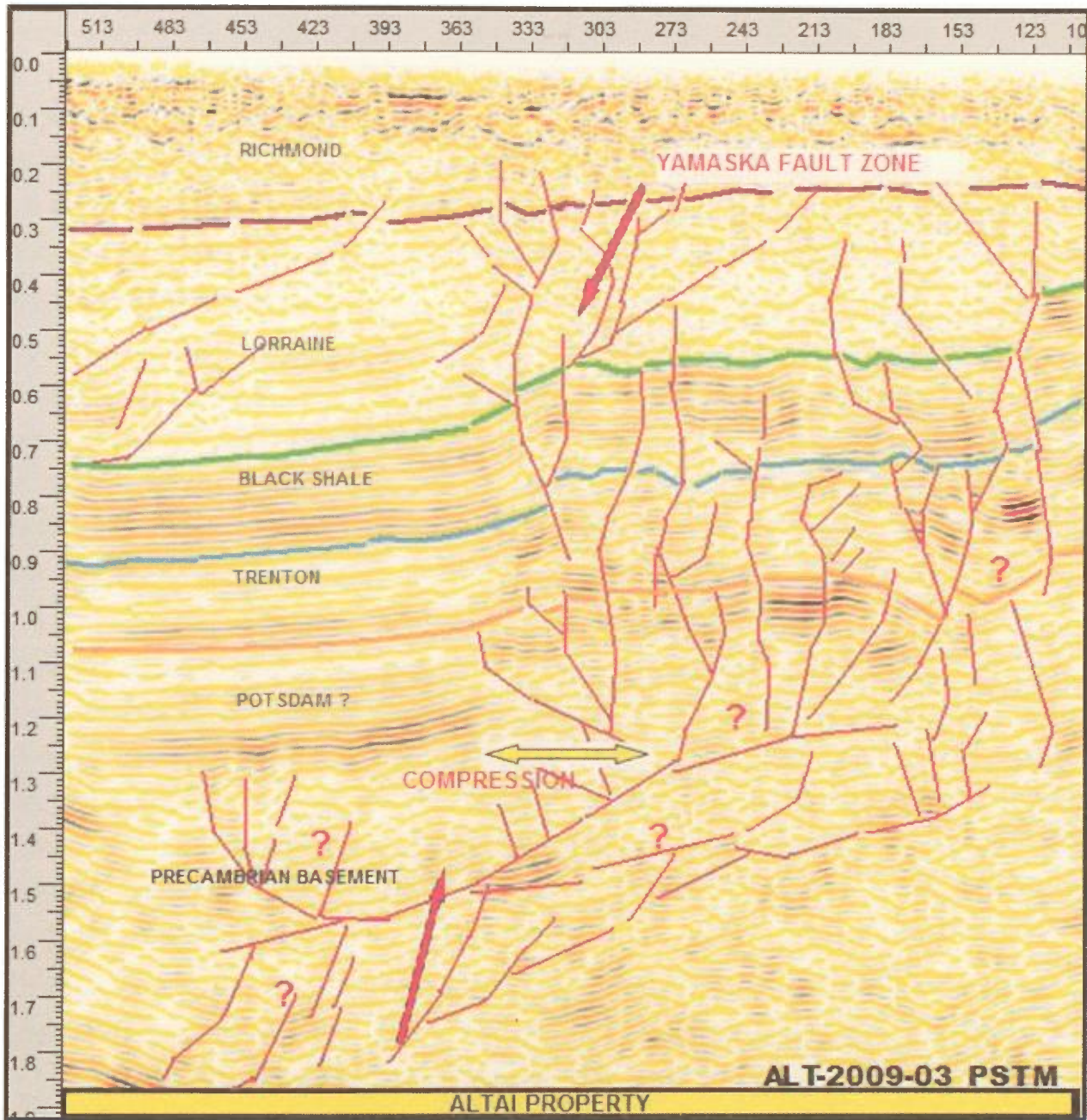


Figure 14: Interpretation of Lines ALT-2009-03

At first glance, our interpretation is mainly highlighting a complex Yamaska Fault zone which was an early extensional normal fault breaking the carbonates platform during the opening of the ocean. The fault that shows evidences of growth in the shale sequences was reactivated locally upward during later orogenies (Taconic and/or Acadian). The reactivation of the fault could also have produced a lateral movement (shear displacement) as in our region the fault is trending at an angle with the main direction of the compressive front. Some evidences of compression of the shale sequences with some rollovers are clearly seen on both lines ALT-2009-02 and ALT-2009-03.

On line ALT-2009-02, the majority of the compression effects (or shear displacement) on the sequences appear mainly to the southeast of the Yamaska Fault near a secondary stepfault zone between station 530 and 670. On line ALT-2009-03, the stepfault is converging closer to the main Yamaska Fault but similar compression effects are observed over a wide zone. These highly broken zones could have caused the hydrocarbons to migrate towards the surface or within reservoirs on the upside of the fault(s).

The most important and probable source for hydrocarbons in the St. Lawrence Lowlands is the black shales of the Utica Formation. The same shales and the Lorraine shales can also act as good seals to prevent hydrocarbons to reach surface. Known reservoir rocks in the St. Lawrence Lowlands basin are usually located below the Trenton Formation. The Utica source rock as observed on the lines is in close contact with possible reservoir rocks across the Yamaska Fault and also across the secondary stepfault to the southeast. The observed heavy fracturation could also have helped the migration of fluids in the platform reservoirs on the upside of the zone.

Concerning the **Utica shale play**, the entire area where the lines were recorded is considered highly prospective with good TOC and low reflectance (R^0) values. The thickness of the Black Shale unit making the transition between the Lorraine mudstones and the Upper Utica is relatively constant at approximately 185 meters all over the three seismic profiles. Below this unit, the Utica (Upper and Lower) varies between 195 meters to the west in the St. Ours well (according to known regional trends, the well is located on the intermediate platform step east of the Yamaska Fault) and, according to a Gastem Press Release and also according to our east end seismic, to a maximum of around 220 meters.

Depth to the Utica is around 1500 meters just east of the Property and is coming up gently to 1150 meters near Ste-Victoire at the tie between lines ALT-2009-02 and ALT-2009-01, just

east of the Yamaska Fault. Across the fault to the west, the Utica can be found at a depth varying between 800 and 900 meters and its thickness also seems to remain similar at around 180 meters. The same observations apply to profile ALT-2009-03.

As we only have three seismic lines in the area, it is impossible to try to map the observed seismic events. In a previous interpretation report, we had reproduced for the same part of the Property the Top Trenton map that had been originally done by Soquip in 1984 in using the old Texaco profiles. Therefore, we decided to take the previous map and make corrections to contours by integrating our new 2009 results. Since misties with the old data due to elevation corrections seem to remain more or less constant along our profiles and that similar structure on the Trenton marker are observed, we have corrected our interpreted time values to match the previous interpretation and recontoured the isochrones. We have reproduced the new Top Trenton Isochron Map on **Figure 15**, adding this way the regional trends view to our interpretation.

The Top Trenton map gives us a regional view of the two-way time structure of the base of the Utica shale. We observe that the deeper zone of the Utica shale fairway up to the Yamaska growth Fault extends over a portion of at least two ALTAI permits totalling about 24,300 Ha (60,000 acres). Three wells were drilled in the immediate area of this zone (A-162, A254 and A259) of which only the A-162 (Sarep-Laduboro St-Ours No.1) is located over the ALTAI Property. The other two were drilled recently by Gastem-Forest Oil (A-254) and by Talisman (A-259). West and north of the growth fault, the Utica is closer to surface but keeps its thickness and is partly covered by a relatively thick Lorraine that is eroded going further west. The St-Antoine sur Richelieu No.1 well drilled by JUNEX is located within this upper zone to the southwest of the Property. A zone of compression is indicated in light yellow on the map in which evidences of reverse faulting and fractures are observed on the seismic.

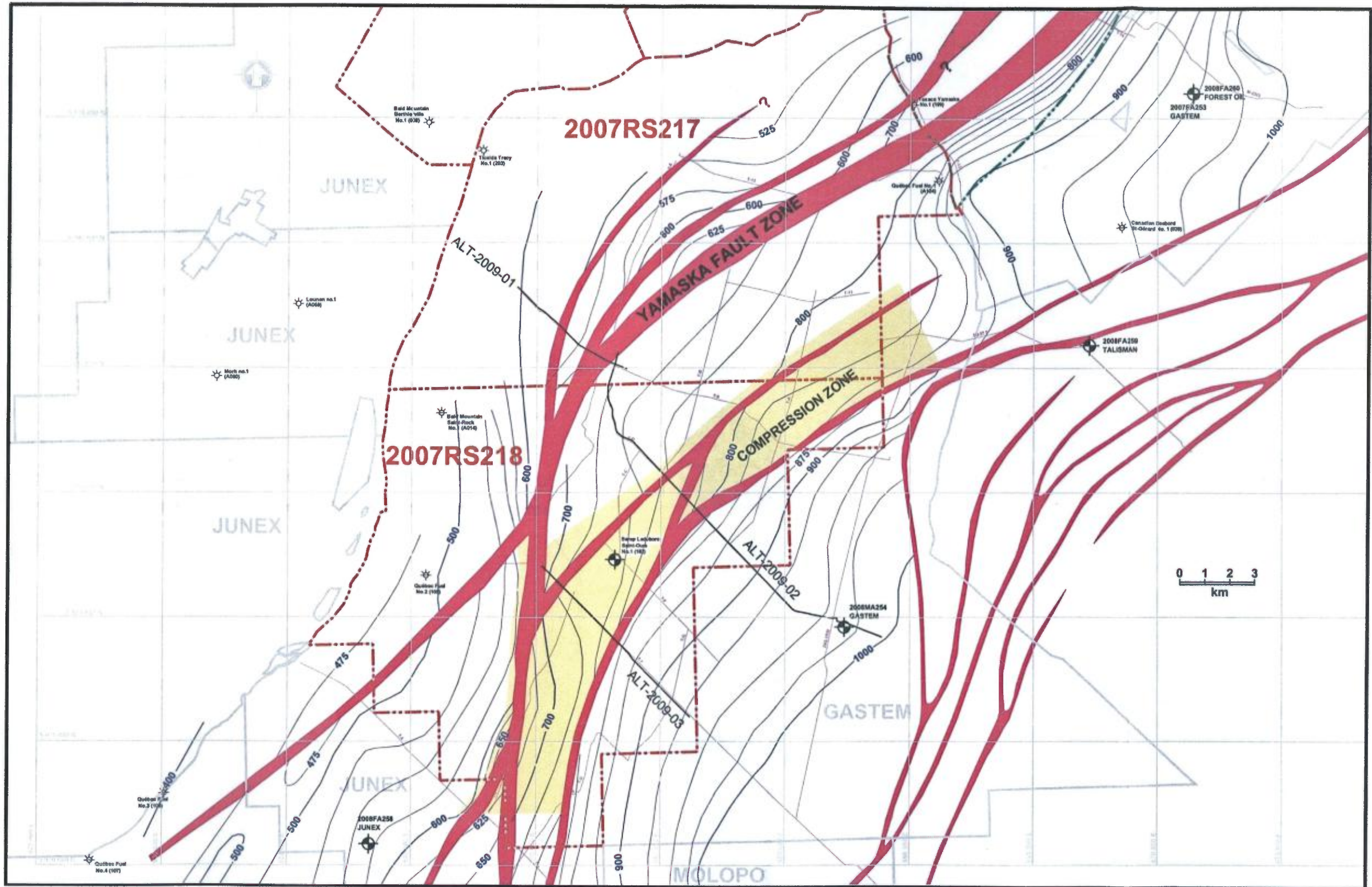


Figure 15: New Top Trenton Isochron Map

5.2- TROIS-RIVIÈRES AREA

A single profile, ALT-2009-04 was recorded over 8.12 kilometres in the Trois-Rivières area in a northwest direction over a main street to observe specific details of the Ordovician carbonate platform and the overlying Quaternary sediments.

Data quality obtained through extensive processing on both the Final Stack and the Migrated displays, remained very poor. The weathering effects and near surface conditions in the thick Quaternary clays seems to have affected the recording of the data in that area. Line ALT-2009-04 caused numerous processing problems because the shallow conditions were considered extreme by CGGVeritas, absorbing a good proportion of the seismic signal and also generating incoherent noise, rendering very difficult the recognition of deeper markers.

These poor results however still allow us to tentatively show some coherent seismic markers that could possibly correspond to platform sequence events (observation made with a low degree of confidence). A possible fault near the south end of the profile at station 210 could explain the abrupt end of the events.

The next figures present the raw seismic profile (Final Stack and Prestack Migration) of line ALT-2009-04 as processed and our tentative interpretation of the migrated profile (**Figures 16 and 17**).

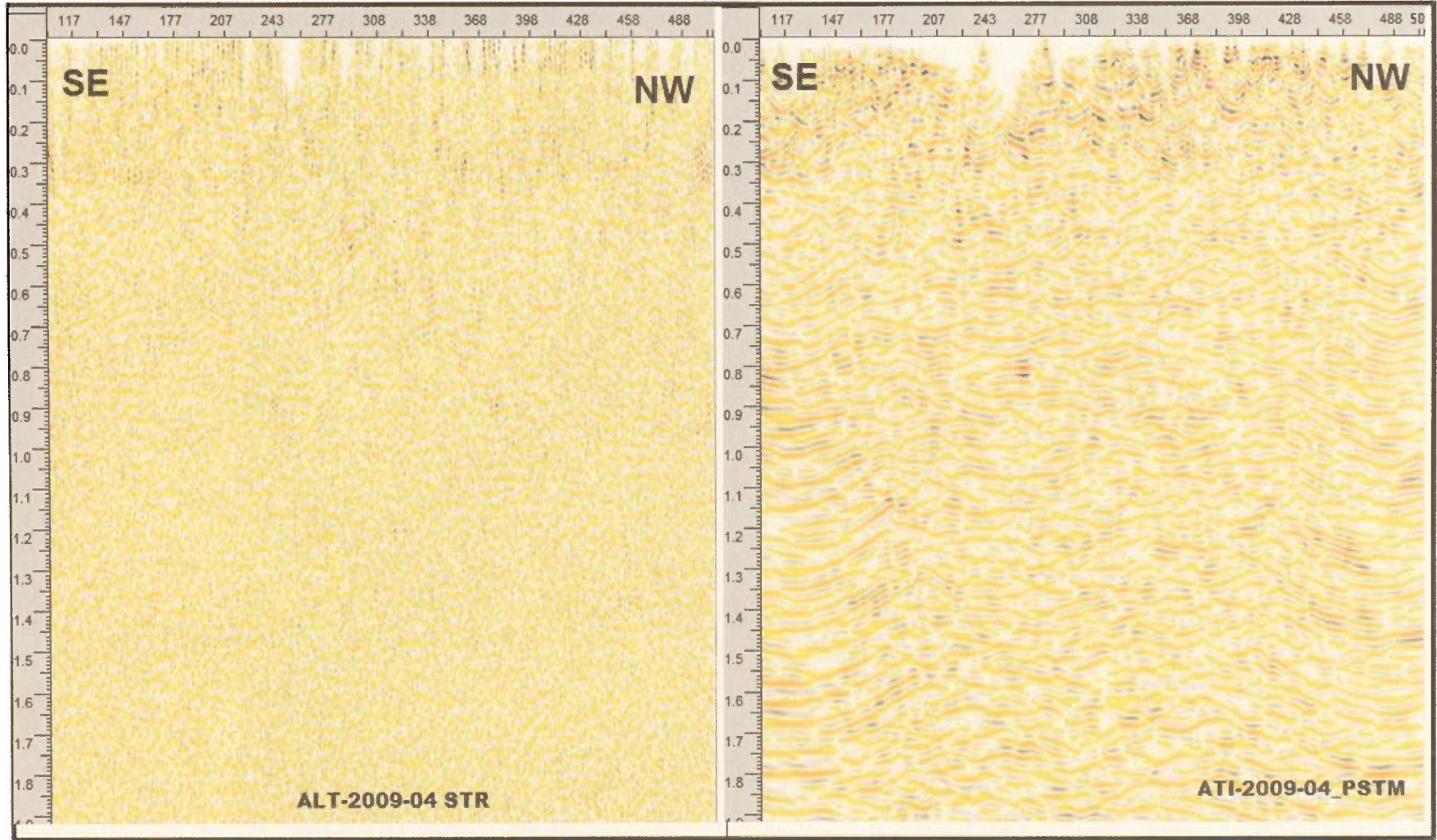


Figure 16: Line ALT-2009-04, Final Stack and Pre-Stack Migration data

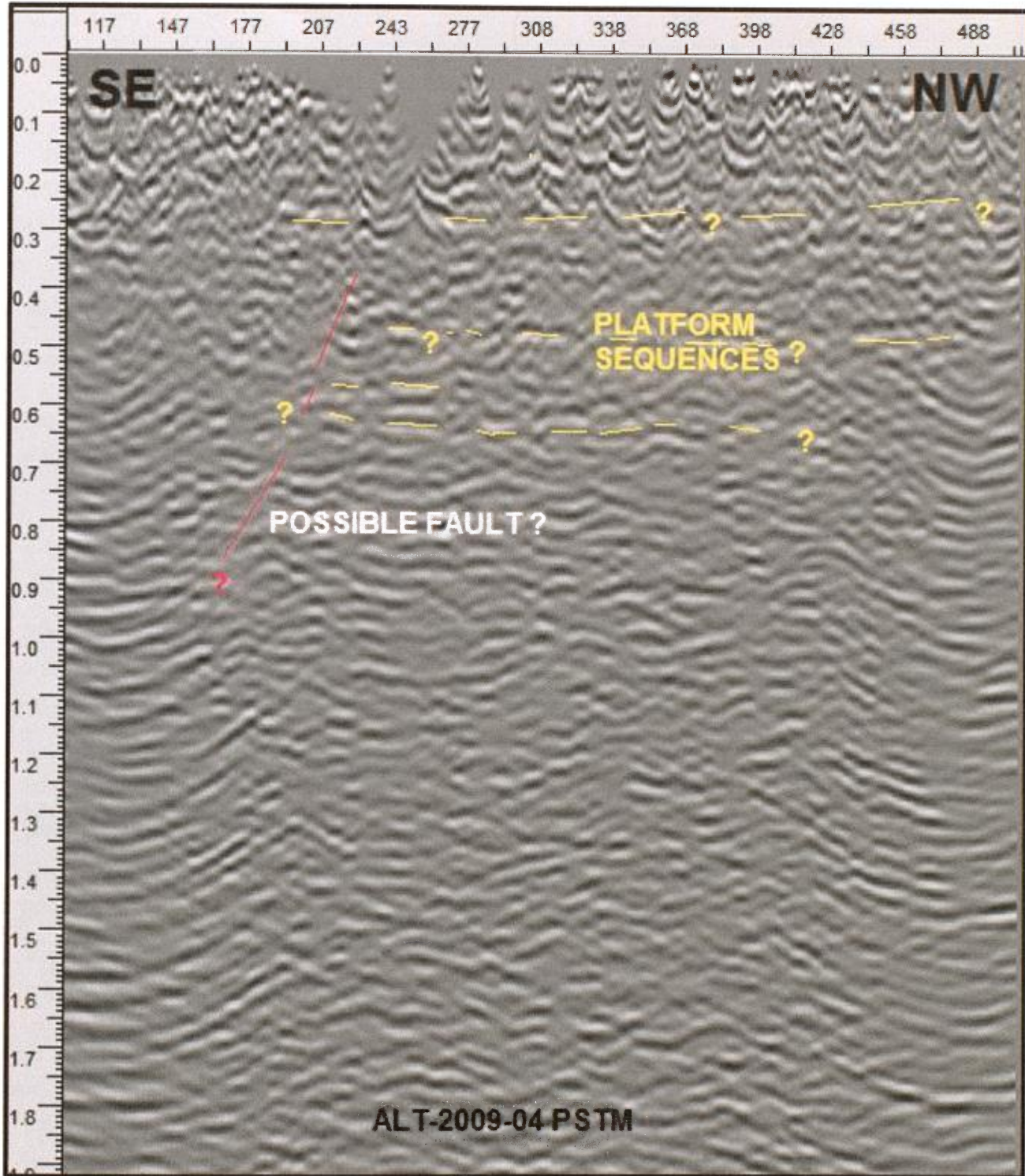


Figure 17: Tentative Interpretation of Line ALT-2009-04

6. CONCLUSIONS

This report has presented and discussed our independent interpretation of four seismic profiles acquired in November 2009 by ALTAI RESOURCES INC over its St. Lawrence Lowlands Property.

The Property is now consisting of seven Quebec exploration permits numbers 2009-RS-275 and 2009-PG-533 to 538 that have replaced permits 2006-PG-904, 2006-RS-175 to 177 and 2007-RS-216 to 218.

The 2009 seismic data quality is good over the three profiles in the St. Ours – Sorel area while very poor on the other one in the Trois-Rivières area.

Results obtained through our interpretation of the seismic profiles indicate that in the St-Ours-Sorel area, the deeper zone of the Utica shale fairway up to the Yamaska growth Fault extends over a portion of at least two ALTAI permits totalling about 24,300 Ha (60,000 acres) and is considered highly prospective with good TOC and low reflectance (R^0) values. Depth to the Utica is around 1500 meters just east of the Property and is coming up gently to 1150 meters near Ste-Victoire at the tie between lines ALT-2009-02 and ALT-2009-01, just east of the Yamaska Fault. Across the fault, the Utica can be found at a depth varying between 800 and 900 meters and its thickness also seems to remain similar at around 180 meters. The thickness of the Black Shale unit making the transition between the Lorraine mudstones and the Upper Utica is relatively constant at approximately 185 meters all over the three seismic profiles. The Utica (Upper and Lower) thickness varies from 195 meters to the west in the St. Ours well (A-162) located on the intermediate platform step east of the Yamaska Fault to about 220 meters, at the southeast end of line ALT-2009-02 where the Gastem A-254 well was drilled.

In the Trois-Rivières area, data quality obtained through extensive processing of line ALT-2009-04 remained very poor because of extreme weathering effects and near surface conditions. A tentative interpretation made with a low degree of confidence indicates some coherent seismic markers that could possibly correspond to platform sequence events that are cut by a normal fault near the south end of the line.

7. PROFESSIONAL CERTIFICATE

This is to certify that I am the author of the following Interpretation Report # 0510, completed in February and March 2010 for ALTAI RESOURCES INC:

“2009 Seismic Interpretation Report”

OVER PERMITS
2009-RS-275 and 2009-PG-533 to 538
St. Lawrence Lowlands Basin,
Province of Quebec

I confirm and attest the following:

1. My name, occupation and address are the following :
Paul Laroche,
P. Engineer, P. Geologist and Geophysicist Consultant
871, Avenue Painchaud,
Quebec, Qc, Canada, G1S 4L7
2. I have a Bachelors degree in Applied Sciences in Engineering Geology from Laval University (1969) and a Master's degree in Geology, with an option in Geophysics (1973) from the same university, as well as having acquired numerous certificates from oil and gas exploration and exploitation courses. I have worked in my field of interest in Canada and abroad since my graduation.
3. I am a registered member of the Order of Geologist of Quebec (Ordre des géologues du Québec, OGQ 582) and a registered member of the Order of Engineers of Quebec (Ordre des ingénieurs du Québec, OIQ 10160).
4. I do not have any interest, directly or indirectly, nor do I expect to receive an interest in any properties owned by ALTAI RESOURCES INC, their personnel, associates and/or any affiliates thereof, in accordance with National Instrument 51-101 requirements.
5. This report is based on data provided by ALTAI RESOURCES INC and on a review of the literature and public domain documents related to the St.Lawrence Lowlands sedimentary basin area obtained from the government of Quebec. I have read National Instrument 51-101 and this report was prepared in accordance with its requirements.
6. I hereby authorise the use of my name as the author and the publication of this report or sections of it by ALTAI RESOURCES INC.

Quebec, 11th March 2010



Paul Laroche, P. Eng, P. Geo.

2009 YA 009-02

**2009 SEISMIC INTERPRETATION REPORT -ST.
LAWRENCE LOWLANDS BASIN, QUEBEC PROVINCE**

Intervenant : ALTAI Ressources Inc

Remarques :

Rapport de levé géophysique - Basses-Terres séd. consol.

Rapport de levé géophysique (Y)

Général