

NTS 072E, 072L, 072M, 073D, 073D

**TECHNICAL REPORT ON THE POTASH POTENTIAL OF GRIZZLY
DISCOVERIES INC.'S ALBERTA POTASH PROJECT**

Prepared For:
Grizzly Discoveries Inc.
#100, 9797-45 Ave
Edmonton, AB, Canada
T6E 5V8

Prepared by:
APEX Geoscience Ltd.
#200, 9797-45 Ave
Edmonton, AB, Canada
T6E 5V8



Effective Date: June 30, 2012
Completion Date: July 31, 2012
Edmonton, Alberta, Canada
Michael Dufresne, M.Sc., P. Geol.
Kyle McMillan, M.Sc., P.Geol.



Contents

1.0 Summary	1
2.0 Introduction	5
3.0 Reliance on Other Experts	5
4.0 Property Description and Location	6
4.1 North (Lloydminster) Block	6
4.2 South (Medicine Hat) Block	10
4.3 Grizzly-Pacific 50-50 Provost Property	10
4.4 Property Rights and Maintenance	10
5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography	12
5.1 North (Lloydminster) Block and 50-50 Provost Property	12
5.2 South (Medicine Hat) Block	13
6.0 History	13
7.0 Geological Setting and Mineralization	16
7.1 Stratigraphy	16
7.2 Regional Structures	22
7.3 Diagenesis	22
7.4 Mineralization	23
8.0 Deposit Types	24
8.1 Depositional Model	24
9.0 Exploration	26
9.1 Data Compilation	26
9.2 Re-Sampling of Historical Core	31
9.3 X-Ray Fluorescence (XRF) Analyses	32
9.4 Water Chemistry Compilation	33
9.5 Seismic Data Interpretation	35
10.0 Drilling	36
10.1 PPC50 PROVOST 10-11-40-01W4	36
10.2 GZD100 MEDHAT 8-36-19-01W4	38
11.0 Sample Preparation, Analyses and Security	39
11.1 Sampling of Historic Core	39
11.2 XRF Analysis of Historic Core	39
11.3 Drill Core Sampling	40
12.0 Data Verification	41
12.1 Historical Core Analyses	41
12.2 XRF Analyses	42
12.3 Drill Core Analyses	42
13.0 Mineral Processing and Metallurgical Testing	43
14.0 Mineral Resource Estimates	43
15.0 Adjacent Properties	43
16.0 Other Relevant Data and Information	44
17.0 Interpretation and Conclusions	44
18.0 Recommendations	47
19.0 Certificate of Author	53

Tables

Table 1. Summary of Grizzly Potash Metallic and Industrial Mineral Permits.....	6
Table 2. Locations and potash grades from areas proximal to the Grizzly properties. ...	14
Table 3 Cores Examined at the ERCB, September, 2008.....	31
Table 4. Summary of 2011 Drill Core Sample Assay Results.	37

Figures

Figure 1. Potash Project Property Location.....	7
Figure 2. Potash Project North Block (Lloydminster) Permits.....	8
Figure 3. Potash Project South Block (Medicine Hat) Permits	9
Figure 4. Historical Well Data Compilation	15
Figure 5. Regional Bedrock Geology.....	17
Figure 6. Southeast Alberta Stratigraphic Chart.....	18
Figure 7. Formations of the Elk Point Group (after Grobe, 2000).....	21
Figure 8. Sample Wireline Log with Formation Top Picks.....	28
Figure 9. Current Exploration by Grizzly 2008-2012	29
Figure 10. Potassium in Formation Water	34

Appendices

Appendix 1. Metallic and Industrial Mineral Permits Descriptions	AT END
Appendix 2. Compilation Well Data Summary	AT END
Appendix 3. Compilation Potash Occurrences Summary	AT END
Appendix 4. Historic Core Sample Assay Results	AT END
Appendix 5. XRF Analyses on Historic Core	AT END
Appendix 6. Seismic Interpretation Reports	AT END

1.0 Summary

APEX Geoscience Ltd. (APEX) was retained during 2008 to 2012 by Grizzly Discoveries Inc. (Grizzly) to manage exploration for Grizzly's Alberta Potash Project (the Project) and evaluate the potential of the Project to host an economic potash deposit. Grizzly holds a 100% interest in a total of 116 Metallic and Industrial Mineral (MAIM) permits with land acquisition taking place from 2008 to late 2011. The 100% owned North (Lloydminster) and South (Medicine Hat) Blocks of the Alberta Potash Project comprise 1,930,408 acres (781,209 hectares). In December, 2010, Grizzly and Pacific Potash Corporation (Pacific), staked the Grizzly-Pacific Provost Property under a 50:50 ownership agreement. The 50:50 Provost Property includes a total of 24 MAIM permits totaling approximately 524,050 acres (212,076 hectares), adjacent to and south of the North (Lloydminster) Block. The total Grizzly land holding is 2,454,458 acres (993,792 hectares) in 140 MAIM Permits.

This Technical Report (the Report) summarizes the exploration performed by Grizzly over the last four years and all publicly available historical exploration work performed on and in the vicinity of Grizzly's Alberta Potash Project. Exploration during the period consisted of a compilation of all existing publically available data and assessment reports, a compilation and analysis of available historic drill core and down hole geophysical logs, the commission of a seismic geophysical study, drilling of two potash test holes and the subsequent preparation of this Technical Report, in order to evaluate the potential of Grizzly's Alberta Potash Project to host an economic potash deposit.

Mr. Michael B. Dufresne, M.Sc., P.Geol., the lead author, is a principal of APEX and is an independent and Qualified Person as defined in National Instrument 43-101. Mr. Dufresne has conducted fieldwork on and in the vicinity of the Property and surrounding area along with supervising a number of exploration programs for a variety of metallic and industrial commodities across Alberta. Mr. Dufresne visited the property during 2008.

Potash is a potassium-rich salt (potassium chloride [KCl]) mined from mostly evaporite horizons around the world. Approximately 95% of the world's potash is used in fertilizers. Canada is the world's largest producer of potash with the potash ore bodies in Saskatchewan being the world's largest, richest and most economical to mine. The Prairie Evaporite Formation is the host to most of Saskatchewan's potash, where the potash mineral sylvite has been found in substantial quantities throughout the first 20 to 30 m of the Prairie Evaporite Formation. A number of Grizzly's permits exist in close proximity to the historic Vermillion Consolidated Oils No. 15 well ("VCO #15"), the first recorded occurrence of potash in east-central Alberta. The potash minerals are of the same composition and depositional sequence and depth as the potash at Unity and at Saskatoon, Saskatchewan, currently the location of a number of potash mines. The Prairie Evaporite Formation in east-central Alberta underlies most of Grizzly's Alberta Potash Project permits.

The 2008 and 2009 compilation indicated that there was only limited historic data for previous potash exploration in Alberta. Much of the current information for the potash

potential was obtained from historic oil and gas well drill hole data and archived drill core found at the government core storage facility at Alberta's Energy Resources and Conservation Board (ERCB). The compilation area included a total of 14,651 wells available in GeoSCOUT™. The compilation determined that a total of 167 wells penetrated the Prairie Evaporite, with a total of 53 of the 167 wells on or within the boundaries of Grizzly's Potash Property. A total of 110 of the 167 wells have available down hole geophysical logs including a gamma log, however, a number of those wells were not drilled deep enough, or they did not completely test the Prairie Evaporite Formation or the gamma logs were of poor quality and unable to evaluate the Prairie Evaporite Formation for potash potential. As an example, out of the 53 wells that were drilled deep enough to intersect the Prairie Evaporite on Grizzly's Property, only 36 contain a gamma log or core that permits an evaluation of the Prairie Evaporite Formation for the presence of potash. A total of 15 wells within the compilation area with core from the Prairie Evaporite were available at the ERCB, with 5 of the wells on or within the confines of Grizzly's Potash Property.

Preliminary analysis determined that the Prairie Evaporite Formation, the host to the Saskatchewan potash deposits, underlies the vast majority of Grizzly's permits. At a number of locations appears to yield indications of potash with at least 16 wells yielding potash values (calculated as K₂O) of greater than 5% K₂O (7.9% KCl) based upon XRF geochemical analyses or calculated values from gamma logs. A total of 10 of the 16 wells are on or within the confines of Grizzly's Property with another 4 wells in very close proximity to Grizzly's Property (<7 km from the boundary). A total of 8 wells yield greater than 10% K₂O (15.8% KCl) based upon XRF geochemical analyses or calculated values from gamma logs, with 5 of the wells on or within the confines of Grizzly's North (Lloydminster) Block or the 50:50 Provost Property or in very close proximity to the North (Lloydminster) Block or 50:50 Provost Property. A total of 3 wells that yield greater than 10% K₂O (15.8% KCl) based upon XRF geochemical analyses or calculated values from gamma logs exist on the South (Medicine Hat) Block. The best measured or calculated grade obtained from the North (Lloydminster) Block was 7.0% K₂O (11.1%KCl), however, remaining core available from VCO#15 yielded up to 18.6% K₂O (29.4% KCl) and is less than 1.5 km from the property boundary. The best measured or calculated grade obtained from the 50:50 Provost Property is 20.7% K₂O (32.8% KCl) with an estimated potential thickness of about 1.9 m. The best measured or calculated grade obtained from the South (Medicine Hat) Block is 21.6% K₂O (34.2% KCl) over an estimated width of 1.25 m.

During late 2011, Grizzly drilled two wells on its Alberta Potash Project. Grizzly announced on February 21st, 2012 that it discovered Potash in a well on its 100% owned Southern (Medicine Hat) Block in Well GZD100 MEDHAT 8-36-19-01W4. Coring commenced at 1,642 m below surface. Visible potash minerals were observed in the drill core for the interval between 1,648.5 m and 1,670.85 m below surface. The well cored a thick zone of Prairie Evaporite Formation salt intersecting a wide, low grade potash zone (22.35 m) at a depth of 1,648.5 m. Within the wide low grade potash zone, the drilling intersected two zones of sylvite mineralization (Upper zone and Lower zone) within what is interpreted to be the Patience Lake Member. Analytical results include a weighted

average grade of 2.62% K₂O (4.15% KCl) over 22.35 m at a depth of 1,648.5 m for the low grade zone, with higher grade portions including 6.4% K₂O (10.14% KCl) over 4.55 m, which includes 8.77% K₂O (13.88% KCl) over 2.65 m and which also includes 13.0% K₂O (20.58% KCl) over 1.15 m for the Upper Zone and 2.45% K₂O (3.88% KCl) over 3.3 m for the Lower Zone. The highest assay from the zone was 31.1% K₂O (49.2% KCl) for a 0.3 m core sample. Low grades of MgO indicate that sylvite is likely the major potash mineral, rather than carnallite. In 1980, a historic oil well, located 800 m west of GZD100 MEDHAT 8-36-19-01W4, yielded a gamma log spike at a depth of approximately 1,662 m below surface for a calculated maximum potash grade of approximately 21.6% K₂O (34.2% KCl) over an estimated thickness of 1.25 m. The depth of these potash intersections is at a similar depth to the Belle Plaine Potash Solution Mine near Regina Saskatchewan and would likely be ideally suited to solution mining due to high formation temperatures. Further potash drilling is warranted on Grizzly's South (Medicine Hat) Block. Further potash drill hole tests should step out south from well GZD100 Medhat 8-36-19-1W4.

During September 2011, Grizzly signed a letter of intent with Pacific to commence a multiple potash drill hole exploration program on the Grizzly-Pacific 50:50 owned Provost Permits. The first and only potash test well to date was completed in mid-November, 2011. The well, PPC40 PROVOST 10-11-40-01W4, yielded a wide low grade potash zone with two narrow higher grade zones. The wide low grade zone was intersected at a depth of 1,258.5 m and yielded 1.84% K₂O (2.91% KCl) over 23.3 m with a higher grade upper zone of 6.58% K₂O (10.41% KCl) over 0.75 m. Visually, the zone yielded evidence of post-depositional remobilization or modification of the potash and with the high levels of MgO present in all likelihood indicating the presence of significant carnallite in the zone. The well was drilled only 50 km west from the historic Unity Potash Mine near Unity, Saskatchewan. Further drilling is warranted to the north of PPC40 PROVOST 10-11-040-01W4 towards the thick potash anomaly identified by the United States Geological Survey, which is centered in Townships 45 to 46, Ranges 1 to 2 about 60 km to the north. Further drilling is under consideration south of Pacific's 100% owned Provost Property on the Grizzly-Pacific 50-50 Provost Permits. Higher grades of potash are indicated by Pacific's drill results on its 100% owned property to date and by historic drill intersections just into Saskatchewan where some higher grades have been encountered.

In March 2009, a compilation of formation water chemistry data was completed for wells in the area of the Alberta Potash Project. A total of 2,426 wells were available with formation water data and were accessed from the Geofluids module of the GeoSCOUT™ software package. A number of wells were identified with >1% up to 8.6% K in formation waters within Devonian carbonate hosted aquifers immediately above the Prairie Evaporite Formation. Historic scientific work by the Alberta Geological Survey also identified high concentrations of K in Devonian carbonate hosted aquifers in the region of Grizzly's permits. The use of deep formation water geochemistry for potash exploration is a very promising technique, but one that needs more work before the data could be used to pick test holes for potash in the Prairie Evaporite Formation or as an

indicator of carbonate hosted formation waters that could be perhaps produced for their K content.

Based upon the results of the compilation and the results of drilling to date, further potash exploration, including drilling, is strongly recommended for Grizzly's Alberta Potash Project. Further drilling is warranted on the 100% owned South (Medicine Hat) Block around well GZD100 MEDHAT 8-36-19-01W4, in order to identify further potash with higher grades and greater thickness that could lead to a maiden resource. Drilling is warranted on Grizzly's 100% owned North (Lloydminster) Block at three locations, just northeast of the historic well VCO#15, just northwest of the historic well RENAISSANCE PROVOST 7-15-40-02W4 and the town of Provost, and south of the town of Lloydminster in the vicinity of the USGS mapped potash anomaly, which is centered near the historic well PECTAL DINA 10-32-45-01W4. In addition, consideration should be given to drilling one or two wells on Grizzly's 50% owned Provost Permits south of Pacific's 100% owned block and west of a Saskatchewan well, which intersected potash close to the Alberta border (PENGROWTH CACTUS LAKE 7-30-36-28W3).

Strong consideration should be given to finding an appropriate technique to conduct water sampling of Devonian carbonate hosted aquifers immediately above the Prairie Evaporite in order to compare concentrations of K in the aquifers versus the potash content of the Prairie Evaporite obtained from the well intersections. The tool that was employed during the 2011 drilling was not successful in obtaining any water samples. The goal would be to (a) see if the waters could be used as a future guide to targeting the specific areas of the Prairie Evaporite for potash, and (b) determine whether K exists in high enough concentrations that it could be economically produced from the existing formation waters.

Consideration should be given to conducting some preliminary scoping level type engineering studies in order to ascertain what grade and thickness of an Alberta potash deposit will be required to support a possible future solution mine based upon the infrastructure that is in place, availability of water and Alberta's favourable tax regime.

The authors propose a drilling focused program of up to \$5.0 million to conduct stage 1 of a two-stage exploration program on the Alberta Potash Project. Stage 1 should consist of drilling 4 to 5 wells in order to identify those areas that contain potentially economic potash grades over a mineable thickness potentially leading to a preliminary maiden resource estimate. The budget is comprised of drilling a total of approximately 7,000 m in 5 wells at an average all up per meter cost of \$650 per meter for a total cost of \$4.55 million along with \$250,000 for reclamation and \$200,000 for the collection and analysis of water samples and some baseline scoping studies, yielding a total cost for the Stage 1 program of \$5.0 million. If the Stage 1 results are positive, then further drilling will be required as part of Stage 2 to progress the project to a resource stage along with the appropriate metallurgical work and engineering studies.

2.0 Introduction

APEX Geoscience Ltd. (APEX) was retained in 2012 as consultants to complete an independent Technical Report (the Report) on behalf of Grizzly Discoveries Inc. (Grizzly), specific to the Alberta Potash Project. The Report is written to comply with standards set out in National Instrument (NI) 43-101, Companion Policy 43-101CP and Form 43-101F1 for the Canadian Securities Administration (CSA). The Report is a technical summary of available geological, geophysical and geochemical information for the Alberta Potash Project (the Project).

The Alberta Potash Project consists of the North (Lloydminster) and South (Medicine Hat) Blocks and the Grizzly-Pacific Provost Property. Grizzly holds a 100% interest in the North (Lloydminster) and South (Medicine Hat) Blocks which total 116 Metallic and Industrial Mineral (MAIM) permits. The Grizzly-Pacific Provost Property is owned 50% by Grizzly and 50% by Pacific Canada Potash Ltd., a wholly owned subsidiary of Pacific Potash Corporation (Pacific). The Grizzly-Pacific Provost Property (Provost Property) includes a total of 24 MAIM permits, adjacent to and south of the North (Lloydminster) Block.

Mr. Michael B. Dufresne, M.Sc., P.Geol., the author, is a principal of APEX and is an independent and Qualified Person as defined in National Instrument 43-101. Mr. Dufresne has conducted fieldwork on and in the vicinity of the Property and surrounding area along with supervising a number of exploration programs for a variety of commodities across Alberta.

Mr. Michael B. Dufresne, M.Sc., P.Geol., President of APEX and a Qualified Person, visited the Alberta Potash Project on June 5th and October 23rd and 24th, 2008.

3.0 Reliance on Other Experts

The Technical Report, written by Mr. Dufresne, is a compilation of proprietary and publicly available information. The author, in writing this Report, used sources of information from historical petroleum exploration as completed in a manner consistent with normal exploration practices and government reports and has no reason not to rely on such historic data and information as listed in the 'References' section based upon the property visit. Those reports, which were used as background information, are referenced in this report in the "History" and "Geological Setting" sections below.

The Alberta Potash Project is comprised of a 140 MAIM permits. The Properties are located along the Alberta Saskatchewan border and span the area between Medicine Hat and Lloydminster. The permits for the North and South Blocks were acquired by APEX Geoscience Ltd. on behalf of Grizzly. The permits for the Provost Property were acquired by APEX Geoscience Ltd. on behalf of Grizzly and Pacific. Alberta Energy Interactive maps (http://gis.energy.gov.ab.ca/redirect_imf_metallic/imf.jsp?site=Metallic)

shows that the permits are active and in good standing. The author has not attempted to verify the legal status of the Property.

4.0 Property Description and Location

The Alberta Potash Project, located in east central Alberta, consists of two 100% Grizzly-owned claim blocks, the North (Lloydminster) Block and the South (Medicine Hat) Block, as well as a 50-50 joint ownership Provost Property with Pacific Canada Potash Ltd., a wholly owned subsidiary of Pacific Potash Corp. (Pacific). The project consists of a total of 140 Metallic and Industrial Mineral (MAIM) permits and covers approximately 2,454,458 acres (993,284 hectares [ha]) along the Alberta-Saskatchewan border (Table 1; Figures 1, 2 and 3; Appendix 1).

Table 1. Summary of Grizzly Potash Metallic and Industrial Mineral Permits

Block	Number of Permits	Permit Numbers	Permit Holder (Designated Representative)	Area Hectares (Acres)
North (Lloydminster)	67	9308090583-9308090586; 9308090592-9308090601; 9308110331-9308110357; 9308110360-9308110368; 9310110389-9310110401; 9310120521-9310120524	GRIZZLY DISCOVERIES INC. (APEX GEOSCIENCE LTD.)	383,082 (946,616)
50-50 Provost	24	9311040519-9311040539; 9311080614-9311080616	GRIZZLY DISCOVERIES INC. 50% & PACIFIC CANADA POTASH LTD. (APEX GEOSCIENCE LTD. & DAHROUGE GEOLOGICAL CONSULTING LTD.)	212,076 (524,050)
South (Medicine Hat)	49	9308110369-9308110379; 9309010640-9309010668; 9309050296, 9310040520, 9310040521, 9310080623- 9310080625, 9311060855, 9311080617, 9312020265	GRIZZLY DISCOVERIES INC. (APEX GEOSCIENCE LTD.)	398,127 (983,792)
			TOTAL LANDS (Hectares) (Acres)	993,284 (2,454,458)

4.1 North (Lloydminster) Block

The North (Lloydminster) Block of the Property, is located approximately 140 kilometers (km) east of Edmonton, Alberta and overlaps the city of Lloydminster and the town of Vermillion (Figure 2). The Lloydminster Block is adjacent to the Grizzly – Pacific (Provost) Property. The approximate center of the North Block is within 15-10-45-02W4

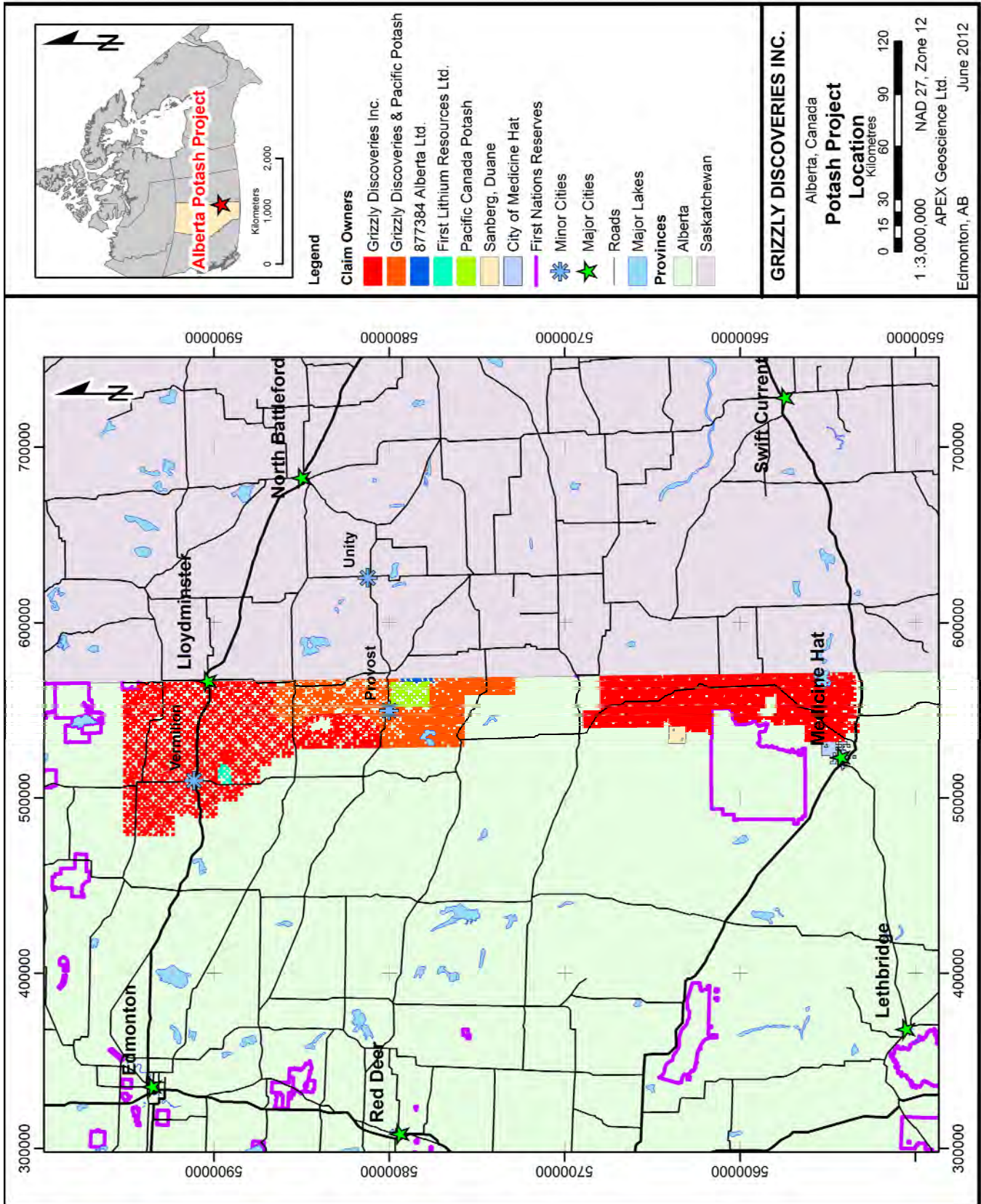


Figure 1. Potash Project Property Location

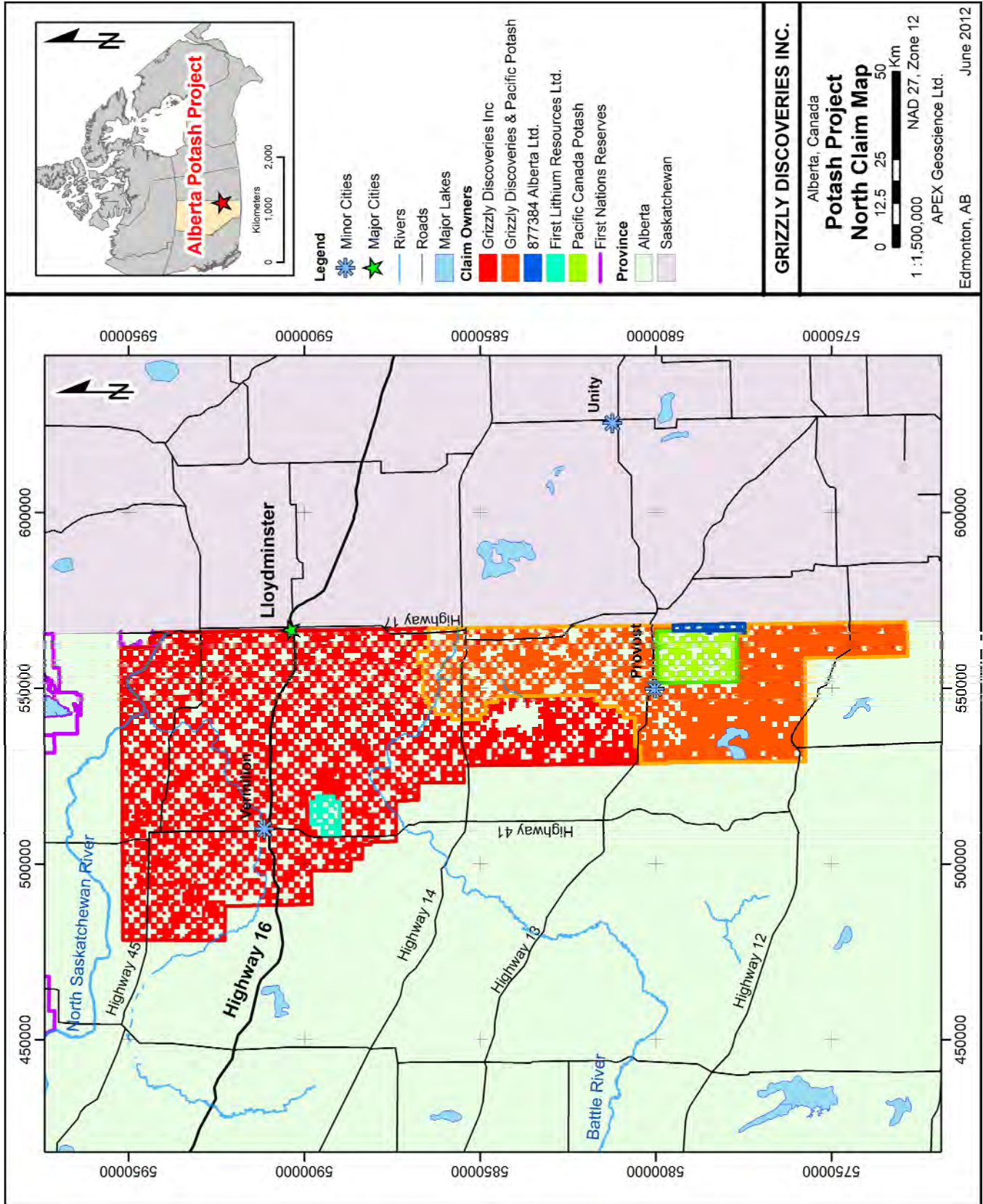


Figure 2. Potash Project North Block (Lloydminster) Permits

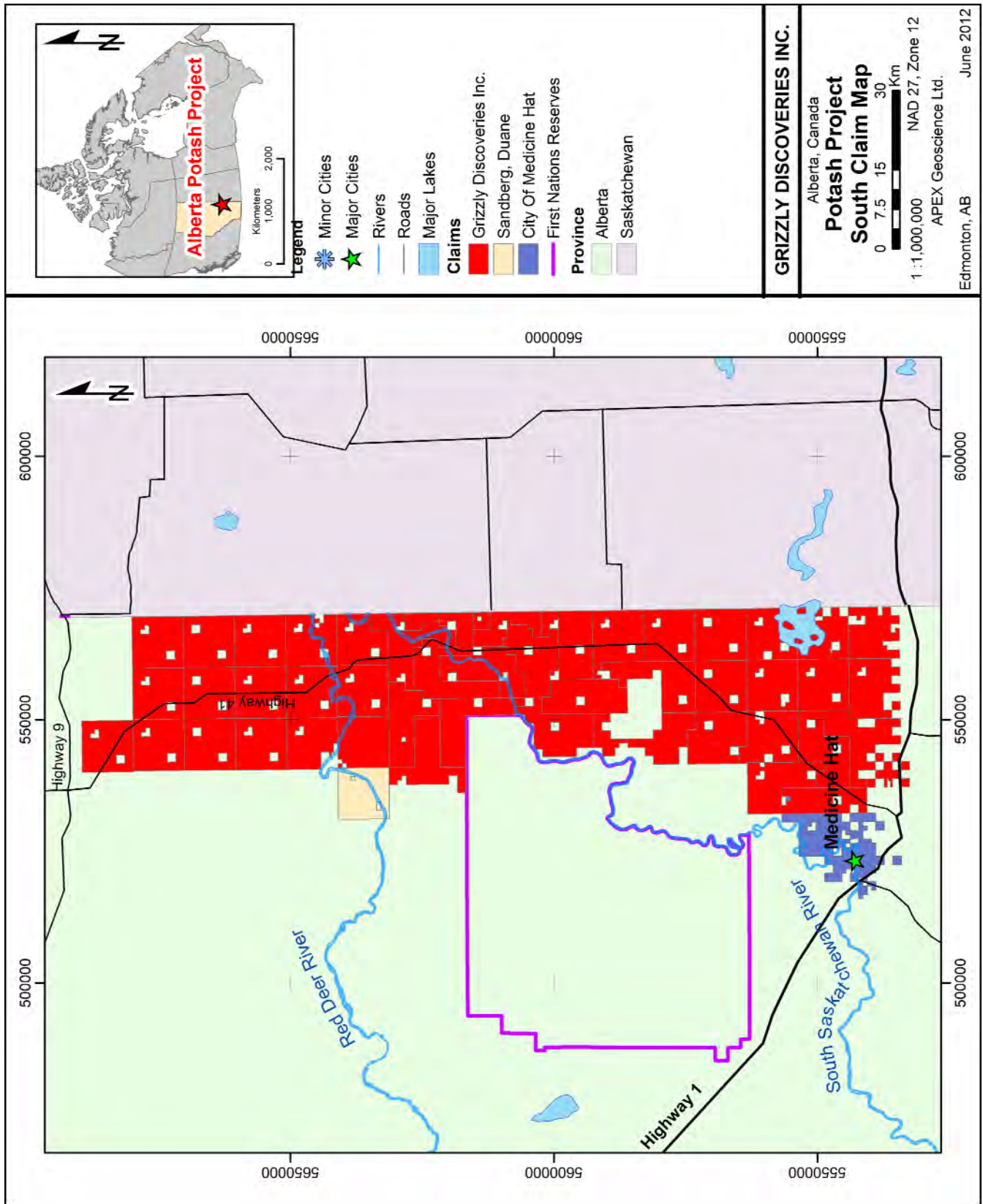


Figure 3. Potash Project South Block (Medicine Hat) Permits

using the Alberta Township System (ATS) or is at 553400 easting (E) and 5857900 northing (N) using the North American Datum 1927 (NAD 27) and Universal Transverse Mercator (UTM) Zone 12. The North Block consists of 67 MAIM permits. The permits are held in the name of Grizzly with APEX as the designated representative on behalf of Grizzly (Table 1, Figure 2; Appendix 1) and cover a total area of approximately 946,616 acres (383,082 ha).

4.2 South (Medicine Hat) Block

The South (Medicine Hat) Block is located approximately 250 km east of Calgary and overlaps the city of Medicine Hat (Figure 3). The approximate center of the South Block is within 7-12-20-02W4 using the ATS or is at 560019E and 5614230N NAD 27 Zone 12. The South Block consists of 49 MAIM permits. The Permits are all held in the name of Grizzly with APEX as the designated representative on behalf of Grizzly (Table 1, Figure 3; Appendix 1) and cover a total area of approximately 983,782 acres (398,127 ha).

4.3 Grizzly-Pacific 50-50 Provost Property

In September, 2011, Grizzly signed a Letter of Intent (LOI) with Pacific Potash Corporation (Pacific) to complete an exploration program on the Grizzly–Pacific Provost Property (Provost Property). The Provost Property permits were acquired in 2011 and consist of 24 MAIM permits totaling approximately 524,050 acres (212,076 ha; Table 1, Figure 2, Appendix 1). The permits are held in the name of Grizzly and Pacific on the basis of a 50:50 ownership with APEX as the designated representative on behalf of the 50:50 co-owners for 21 of the 24 permits. Three permits are held by Dahrouge Geological Consulting Ltd. (Dahrouge) on behalf of the 50:50 co-owners. The LOI indicates that a minimum of one well will be drilled and that the costs are shared equally by Grizzly and Pacific. Depending upon the results of the initial well, up to 3 wells may be drilled (Grizzly Press Release September, 19, 2011).

4.4 Property Rights and Maintenance

The MAIM Permits grant permittees the exclusive right to explore for metallic and industrial minerals for seven consecutive two-year terms (a total of fourteen years), subject to traditional assessment work performance and reporting biannually. At the end of each two-year period, a report on the assessment work done during that time must be submitted within 90 days. Work requirements for maintenance of the permits in good standing are \$5/ha for the first term, \$10/ha for each of the second and third terms, and \$15/ha for each the fourth, fifth, sixth and seventh terms.

The Alberta Metallic and Industrial Mineral Tenure Regulation allows a permit holder to pay to the Minister an amount equivalent to the assessment that would be required to continue holding the permit, once during the permit's term. MAIM Permits must be a minimum area of 16 ha up to a maximum area of 9,216 ha with lands that are contiguous.

The Alberta Mines and Minerals Act and the Alberta Metallic and Industrial Mineral Tenure Regulations provide for the accumulation of excess work in any term for filing toward subsequent terms, and also enable the reduction of permit areas during their currency. There are no statutory provisions for the renewal of permits beyond their 14 year term. The statutes also provide for conversion of Permits to Metallic Minerals Leases, after the initial two-year anniversary of the MIAM permit record date and once a mineral deposit has been identified. Leases are granted for a renewable term of 15 years, and require annual payments of \$3.50/ha for rent to maintain them in good standing. There are no work requirements for the maintenance of leases and they confer rights to minerals.

The MAIM Permits held by Grizzly and Grizzly–Pacific are subject to a traditional royalty retained by the Province of Alberta against production revenues. The Alberta Metallic Mineral Royalty consists of two parts: (i) upon commencement of Production, a 1% mine mouth royalty is levied on gross revenues, net of costs incurred between the mine mouth and the point of sale or the point at which fair value is determined, as prescribed by the Minister; and (ii) an additional 12% royalty levied on that portion of net operating revenues at the mine mouth which exceed costs incurred in the exploration, development, recovering, processing, transportation or disposition, and any other such cost allowances as specified by the Minister. In broad terms, the aggregate royalty is akin to a 1% traditional net smelter return royalty in addition to a 12% net profits royalty. The reader is referred to Alberta Mines and Minerals Act, Metallic and Industrial Minerals Royalty Regulation for details.

The Permits grant Grizzly a right to use of the surface for the purposes of conducting mineral exploration work, subject to obtaining the necessary land use permits (Exploration Approval) from the Land Administration Division of Alberta Sustainable Resource Development (SRD). Surface restrictions can consist of minor activity restrictions, which are usually identified in any land use permit granted.

There are no other surface encumbrances in the area, other than compensation, which may from time to time, be payable to compensate Forest Agreement Area (FMA) holders for timber rights over portions of the area, in the event timber is cleared during construction of drill roads and pads. In addition, compensation may be payable from time to time for access through trappers permit areas.

Complete terms and conditions for mineral exploration permitting and work can be found in the Mines and Minerals Act and Regulations contained within it (Metallic and Industrial Minerals Tenure Regulation 145/2005, Metallic and Industrial Minerals Exploration Regulation 213/98). This and additional Acts and Regulations, with respect to Mineral Exploration and Mining can be found in the Laws Online section of the Government of Alberta Queens Printer at www.qp.alberta.ca/Laws_Online.cfm or the Alberta Energy website at www.energy.gov.ab.ca/minerals/708.asp.

The author is not aware of any environmental liabilities that affect the Property.

Crown lands are accessible for drilling, although consultation with First Nations is necessary if drilling might disturb aboriginal traditional use sites or hunting and fishing rights. Several Indian reserves occur within 50 km to the north of the Grizzly exploration properties (Figures 1 to 3), and one reserve occurs within a township that Grizzly also holds exploration permits within (54-1W4); however, the properties proximal to these areas are not deemed to have any significant potash, and are not recommended for exploration. No traditional land use sites are known to occur where drill locations are proposed. Exploration on properties with privately held surface rights requires negotiating access with the surface landowner, which is usually not a problem.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The Alberta Potash Project is situated in the central-eastern region of Alberta, along the Alberta-Saskatchewan border. Elevation varies between approximately 300-900 metres above sea level (asl). The topography consists of gentle hills with pronounced valleys, particularly at large rivers. Scattered throughout the area are small streams and ephemeral ponds. Vegetation is characterized by poplars and varieties of marsh and meadow vegetation including short to mid-height grasses. The climate of the area is dry continental, with warm summers and cold winters. Average daily temperatures reach a maximum in July (16.6°C average, maximum 36.8°C) and a minimum in January (-14.5°C average, -39.6°C minimum). Precipitation in the area of the Property is between about 250-500 millimetres (mm) annually, with maximum precipitation occurring in summer, and minimum in winter. Climate data can be found at the Environment Canada website http://climate.weatheroffice.gc.ca/climate_normals/index_e.html

The Property lies primarily within farm and grazing lands and is hospitable and conducive to exploration work and travel year-round.

Several First Nations Reserves are located within 50 km to the north of the Alberta Potash Project (Figures 1 to 3). One First Nations Reserve does occur directly within a portion of the Alberta Potash Project (township 54, range 1 W4), however, no drilling is currently planned in this area.

5.1 North (Lloydminster) Block and 50-50 Provost Property

The North Block and Provost Property are approximately 140 km east and 230 km southeast of Edmonton respectively. The North Block overlaps the city of Lloydminster and the town of Vermillion; the Provost Property overlaps the town of Provost. The Properties can be accessed by Trans-Canada Highway 16 (Hwy 16) from Edmonton, which runs roughly east-west through the North Block. Other provincial highways that crosscut both Properties include Highways 17 and 41, which run north-south and Highways 12, 13, 14 and 45 which run east-west. Additionally, the Properties primarily cover farm and grazing lands and are accessible via numerous rural roads year round (Figure 2).

Numerous rivers and creeks cross the Properties including the North Saskatchewan river, which cuts through the northern corner of the North Block and the Battle river which crosses both Properties. Numerous lakes are also found on the Properties, the largest lake in the area is Sounding Lake which is located in the southern portion of the Provost Property. Ample water sources are readily available for drilling purposes.

5.2 South (Medicine Hat) Block

The northern part of the South Block is approximately 250 km east of Calgary and southern end of the Block is 10 km east of the city of Medicine Hat. The South Block can be accessed along Trans Canada Highway 1 (Hwy 1) from Calgary. Highway 1 runs east-west just south of the Property. Highway 41 runs roughly north-south through the length of the Property. Additionally numerous rural roads provide year round access. The Property covers mainly farm and grazing lands (Figure 3).

The Red Deer River and the South Saskatchewan River cross the South Block along with numerous creeks. Numerous small lakes are found on the Property, the largest of which is Many Island Lake in the southern part of the Property. The available water sources throughout the Property area provide ample access to water for drilling purposes.

6.0 History

Exploration for potash in Alberta has been limited compared to Saskatchewan. Historically, the only interest in potash exploration in Alberta took place in the 1960's in conjunction with petroleum exploration, however no new wells were drilled at that time (Golden, 1965, 1966; Bayfield Oil and Gas, Ltd., 1966; Brownless, 1966; Irwin, 1966).

Most wells drilled in the vicinity of the Project area were either for oil and gas or for water. More than 14,000 wells have been drilled in a compilation area that includes the Project permits. Potash is prospective within the Prairie Evaporite Formation within much of the compilation area, however, the majority of petroleum and water resources occur at shallower depths than the Prairie Evaporite Formation. Thus, in the vicinity of the Project area relatively few wells have been drilled to depths great enough to penetrate the Prairie Evaporite Formation. Historically, a total of 185 wells in Alberta and 91 wells in Saskatchewan were drilled in the vicinity of the Project that penetrate at least the top of the Elk Point Group (of which the Prairie Evaporite Formation is a part of). Of these, 167 wells penetrate the Prairie Evaporite Formation and potash occurrences have been observed in 34 of these wells. A total of 5 of the 34 wells fall on Grizzly's North (Lloydminster) Block, 4 of the 34 wells fall on the 50% owned Provost Property, and 7 of the 34 wells are on the South (Medicine Hat) Block. At least two wells are documented by historic reports to have encountered deposits of potash in east-central Alberta: Vermilion Consolidated Oils #15 (VCO #15) well in the Vermilion area, which was drilled in 1944 and is located within the boundaries of the North Block but not directly on Grizzly claims; and Canadian Seaboard Ernestina Lake well #10-13 which was drilled in 1951

and lies within the North Block on a Grizzly permit. Table 2 shows the locations and potash grades of selected wells from east central Alberta and the adjacent western part of Saskatchewan (Figure 4).

Table 2. Locations and potash grades from areas proximal to the Grizzly properties.

Well name	Location	Province	Total Potash Grade (% K ₂ O)	Maximum Potash Grade (%K ₂ O)	Reference
Vermillion #15	06-12-49-06W4	AB	not determined*	not determined*	Golden, 1965
Imperial Provost #2	01-33-37-03W4	AB	0.5% over 31.7 m	4.1% over 2.7 m	Cole, 1948
Ernestina Lake #10-13	10-13-60-04W4	AB	not given	not given	Brownless, 1966; Golden, 1966
Petcal Dina	10-32-45-01W4	AB	not given	not given	Meijer Drees, 1986
Ogema #1	04-24-07-23W2	SK	4.9% over 23.2 m	20.0% over 0.8 m	Cole, 1948
Radville #1	16-36-05-19W2	SK	8.0% over 10.3 m	16.4% over 3.2 m	Cole, 1948
Davidson #1	16-08-27-01W3	SK	10.8% over 3.0 m	10.8% over 3.0 m	Cole, 1948
Verbata #2	07-24-41-24W3	SK	4.7% over 15.5 m	21.6% over 3.4 m	Cole, 1948
Prairie Salt #1	13-04-40-22W3	SK	3.2% over 15.3 m	17.2% over 1.7 m	Cole, 1948
Prairie Salt #2	13-04-40-22W3	SK	3.4% over 15.2 m	17.4% over 1.5 m	Cole, 1948

*Potash grades were never published for the Vermillion #15 well because the cores were damaged before accurate measurements could be completed, however Cole (1948) lists this well as having “no potash over 10% K₂O”.

Well VCO #15 was drilled in 1944. Prior to analysis, the cores were left exposed to the open atmosphere for several weeks and were affected by dissolution preventing an accurate assessment of the potash grade. The well was revisited in 1965 and reported to contain 3.7 m (12 feet) of carnalite in the upper part of the Prairie Evaporite, underlain by 122 m (400 feet) of rock salt (halite). A 15.2 m (50 feet) section containing a pinkish-grey potash mineral (possibly sylvite) was also noted in the top part of the Prairie Evaporite Formation (Golden, 1965; 1966). The potash bearing section is reported to be underlain by 122 m (400 feet) of rock salt (halite).

No detailed discussion of the Imperial Provost #2 well is available in the literature (most likely because it does not contain economically significant potash beds). The Petcal Dina well is mentioned by Meijer Drees (1986) as containing some potash, although the grade is not given, and may not have been determined.

The Ernestina Lake well contains deflections in the natural gamma-ray and neutron-porosity wireline logs indicative of potash at 2,637 to 2,644 feet, 2,681 to 2,688 feet, 3,210 to 3,220 feet, and 3,490 to 3,500 feet (Brownless, 1966). Brownless (1966) also noted that carnallite was observed in the Lotsberg and Cold Lake Formations of the Elk Point Group in the same well, although the depths and thickness of the beds were not given. Both of these formations are known to consist of almost pure halite elsewhere in Alberta (Hamilton, 1971; Meijer Drees, 1986), thus it is not believed that any potentially economic potash deposits occur in these formations.

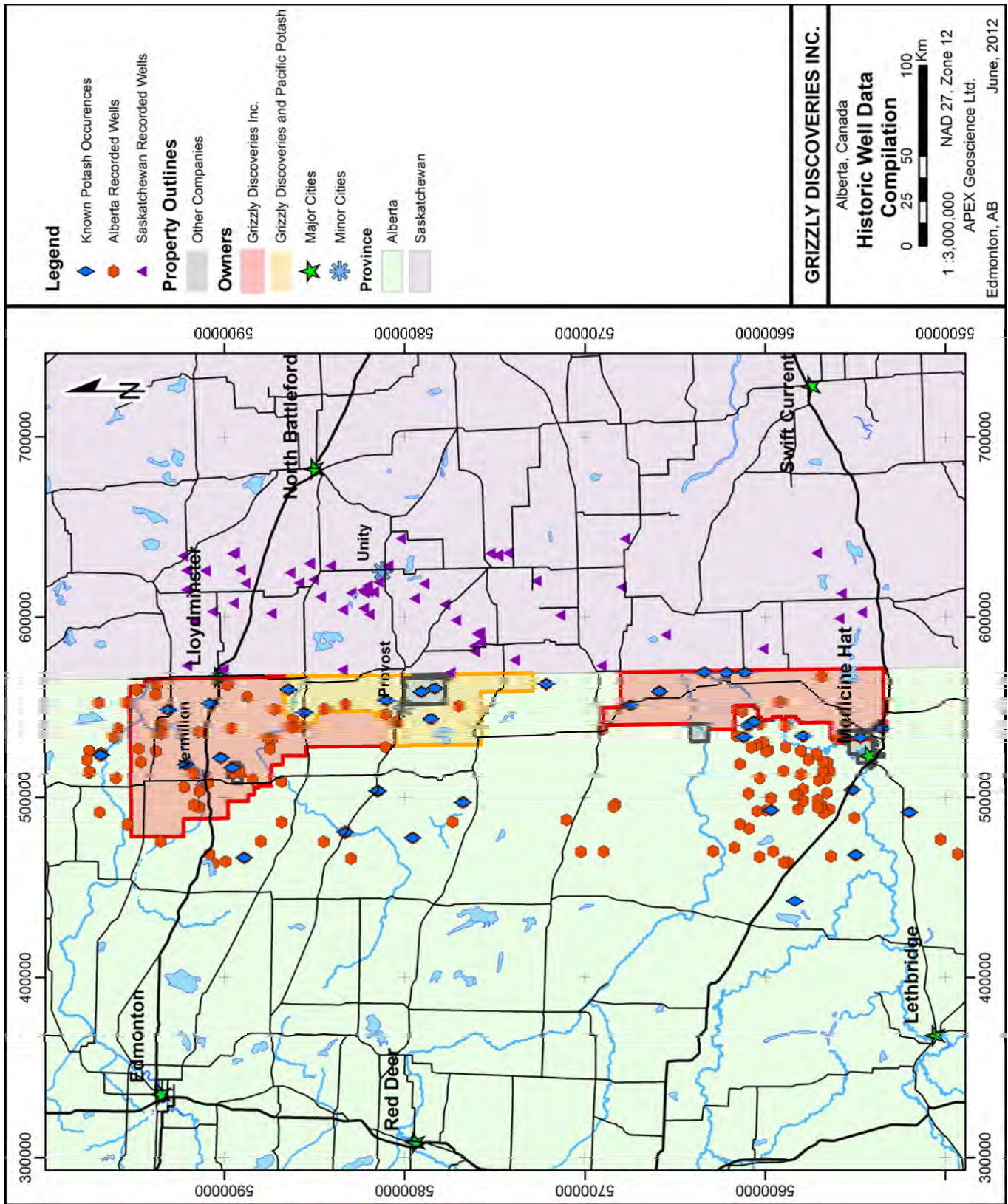


Figure 4. Historical Well Data Compilation

Brownless (1966) concluded that in both the VCO #15 and Ernestina Lake wells the potash mineral present is likely mostly carnallite, however he maintained that sylvite may be present in more significant quantities in that area. Due to the mineralogy, depth, and shale content it was concluded that exploration and development of these deposits would not be economical at the time (Brownless, 1966).

Additional information of interest to potash exploration, is the historic examination of formation waters of the Beaverhill Lake Group, which overlies the Elk Point Group. The Beaverhill Lake Group was found to contain up to 19,000 mg/L K (milligrams per litre potassium) and up to 2,786 mg/L Br (bromine) (Hitchon et al., 1993; Underschultz et al., 1994; Bachu et al., 1995). The high bromine compositions suggest that not all of the salt was dissolved and redeposited by fresh water (Braitsch, 1962; Wardlaw, 1968). Hitchon et al. (1995) first suggested that the potassium-bromine anomaly in the waters of Beaverhill Lake Group might correspond to potash mineralization in the underlying Prairie Evaporite salt (Eccles et al., 2009).

7.0 Geological Setting and Mineralization

7.1 Stratigraphy

The Project lies within the Western Canadian Sedimentary Basin (WCSB) which is comprised of a massive wedge of Phanerozoic sedimentary rocks extending from the Rocky Mountains in the west to the Canadian Shield in the east. This wedge is about 6 km thick in the western regions but thins to zero at its eastern margins. The sediments of the basin are covered by glacial deposits. Excellent summaries of the geology of the WCSB are presented in Glass (1990) and Mossop and Shetson (1994).

The geology and the stratigraphy in the Project area varies slightly from north to south, but generally there is little change. Bedrock beneath the glacial unconformity is generally mapped as the Upper Cretaceous Bearpaw Formation and Belly River Formation in the north and the Pakowki, Oldman (Belly River Group) and Bearpaw Formation in the south (Figures 5 and 6). Phanerozoic units below these units are known mostly from well log data accessible from government databases and are discussed in detail in a number of previous studies (Glass, 1990; Mossop and Shetson, 1994; Grobe, 2000). A summary of the units of interest is presented below.

The Bearpaw Formation consists of laminated shale and siltstone with minor sandstone beds and lenses of kaolinite claystone. This formation extends from the northwest region of Edmonton towards the foothills in the southwest (Dawson et al., 1994). The underlying Oldman unit is a subunit of the Belly River Group that is comprised of sandstones and noncalcareous mudstones (Hamblin, 1997). The underlying Belly River Group (late Campanian), including the Oldman Unit, is comprised of fluvial sandstones and siltstones along with minor mudstones and coal. The Pakowki Formation, underlies the Belly River Group and was deposited during late Campanian time. It consists of mudstone and siltstone. The base of the unit is abrupt which is shown by a pebble lag;

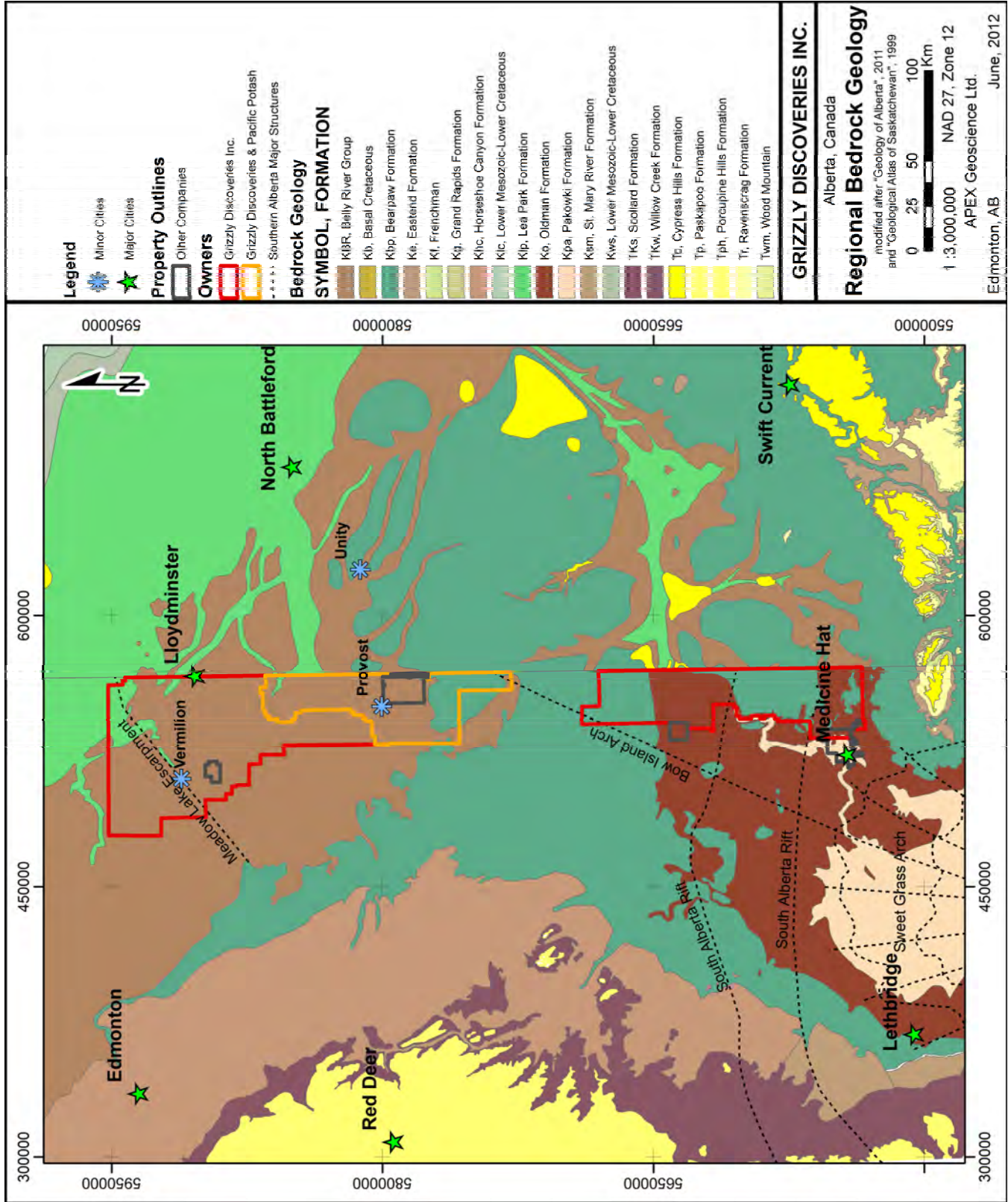


Figure 5. Regional Bedrock Geology

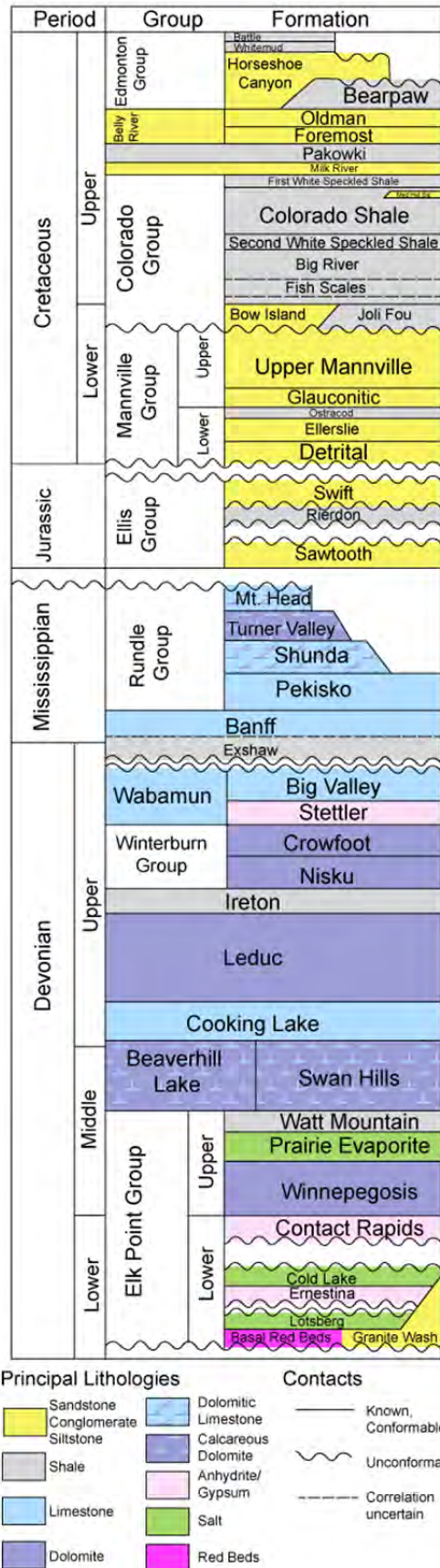


Figure 6. Southeast Alberta Stratigraphic Chart (after ERCB, 2010)

whereas the top of the unit is gradational, with overlying clastics from the Belly River Formation.

The Colorado Group is described as dominantly argillaceous with minor shaly conglomerate, sandstone and siltstone. Occurrences of minor shaly chalk, chalky limestone, bentonite, and accumulations of fish skeletal debris and pyrite have been noted. The Colorado Group has been divided into an upper calcareous and a lower non-calcareous part at the base of the Second White Speckled Shale (one of two widespread marker units). The First and Second White Speckled Shale markers are described as being abundant in white flakes of coccolithic debris. These shales, along with an intervening shale of noncalcareous composition make up the upper Colorado sequence. In the vicinity of the Medicine Hat Block, the First White Speckled Shale includes the Medicine Hat Sandstone. The lower Colorado succession is made up of the non-calcareous shales of the Big River and Joli Fou formations. These two formation are separated by a apparently poor developed wedge of Bow Island sandstone (Equivalent to the Viking Formation). The Big River Formation includes the Fish Scale Sandstones, a widespread, highly radioactive marker unit that is known to contain fish skeletal debris in shaly sandstone layers. The base of the Colorado Group in this area is found to be the Bow Island Sandstone (Leckie et al., 1994).

Beneath the Colorado Group, the Mannville Group is separated by an unconformity. In southern Alberta, the Mannville Group is described as interbedded nonmarine sands and shales overlain by a thin, non-marine member, which in turn is overlain by marine shales, glauconitic sands and non-marine salt and pepper sands. In central and southern Alberta, the Manville Group is divided into the upper Mannville and the lower Mannville. The upper Mannville contains the Glauconitic Sandstone which is described as very fine to medium grained quartz sandstone with abundant glauconite. The Glauconitic Sandstone is overlain by the non-marine deposits of the upper Mannville. The lower Manville is composed of the Ostracod Beds and the Eilerslie Member. The Ostracod Beds are composed of a mix of fossiliferous limestones, shales, and sandstones. The formation is notable because of the abundants of Ostracod fossils but also include charophytes, gastropods, pelecypods, and fish teeth. The Manville rests on the post Paleozoic unconformity.

In the Medicine Hat area, the Cretaceous strata rests upon the Pekisko Formation of the Rundle Group. The Mississippian aged Pekisko has been described as light colored, coarsely crinoidal and fragmental, to fine grained, sparsely crinoidal and in part dense limestone. Below the Pekisko is the Banff Formation which is composed predominantly of shale and marlstones. The Banff Formation unconformably overlies the Exshaw Formation. The Exshaw Formation ranges in age from Lower Mississippian to Middle Tournaisian (Late Devonian) and is a black shale horizon that marks the Devonian – Mississippian boundary. The Exshaw is described as a anomalously radioactive, brownish to black, sparsely fossiliferous shale.

Underlying the Exshaw is the Big Valley Formation, a grey tan and brown micritic limestone. It is described to be locally bioclastic and commonly fossiliferous. The Big Valley conformably overlies the Stettler Formation. The Upper Devonian Stettler

Formation is composed of dolostones and evaporates. The dolostones range from microcrystalline to coarsely crystalline in texture. Beneath the Stettler lies the Crowfoot Formation of the Winterburn Group. The Crowfoot Formation is described as light grey to brown and red anhydrite and red to grey silty dolomite. The Nisku Formation of the Winterburn Group is described as light brown to light grey crystalline dolomite with minor brownish dolomitic siltstones, green shales and anhydrite. The lower portion of the Nisku is known to contain small stromatoporoid coral bioherms. The Ireton Formation is made up of greenish grey and grey shales with interbedded argillaceous limestone or micrite in the lower part. The upper Ireton is known to contain argillaceous dolomites and limestones, fine crystalline dolomites and biomicrites that are quite fossiliferous. The Leduc Formation is described to comprise a wide variety of facies attributable to a shallow water reef depositional environment. Reef texture is dominated by stromatoporoid buildups. Sediments include skeletal mudstones, boundstones, and floatstones to muddy skeletal packstones and wackestones. The Cooking Lake Formation is described as being predominately limestones that show a range in textures from mudstone to wackestones containing gastropods and ostracods, non-skeletal grainstones with pellets, intraclasts and coated grains, and light to medium brown stromatoporoid rudstones and floatstones. The Beaverhill Lake Formation is described as being composed of limey shales and argillaceous micrites. The reefal portion of the Beaverhill Lake Group, the Swan Hills Formation, is composed of stromatoporoids.

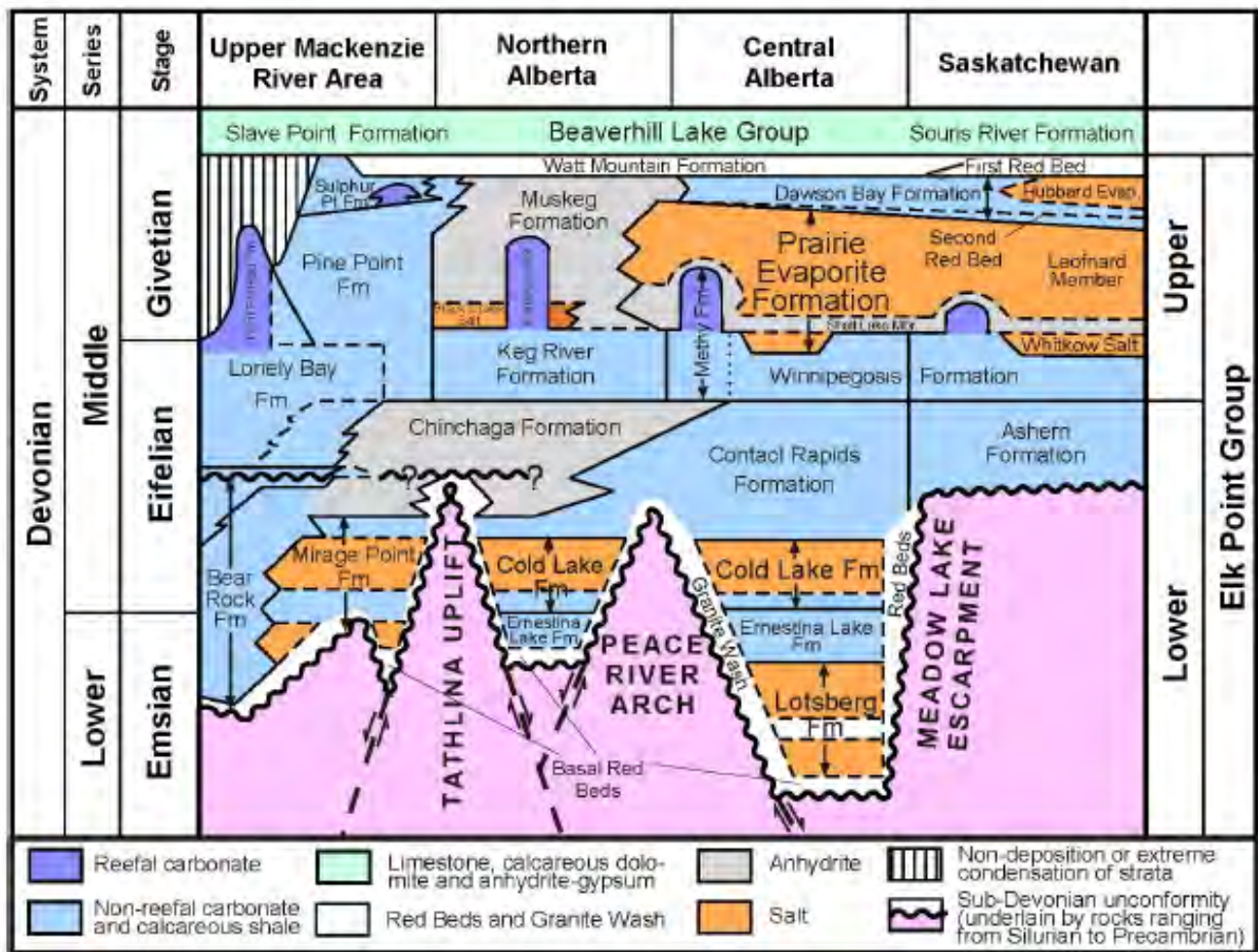
The major salt deposits of the WCSB occur within the Lower to Middle Devonian Elk Point Group, which comprises limestone, dolomite, anhydrite, rock salt, redbed and fine- to coarse-grained siliciclastic rocks (Figure 7). The Elk Point Group unconformably overlies Precambrian or lower Paleozoic rocks that have up to 1400 m of relief, and is topped by a thin, flat layer of green or reddish brown shale of the Watt Mountain Formation (Meijer Drees, 1994; Grobe, 2000). The Watt Mountain Formation is composed of red and green shales, sandstones, limestone breccia, anhydrite, dolomite, and limestone (First Red Beds). In well MED HAT 8-36-19-01W4, the Watt Mountain Formation was observed to be dominantly green shale. The deposition of the Watt Mountain Formation marked the end of Elk Point deposition.

The Elk Point Group has been mapped and studied in Alberta by Hamilton (1971), Meijer Drees (1986, 1994) and Grobe (2000); in Saskatchewan by Holter (1969) and Yang et al. (2009a–c); and in Manitoba by Bezys et al. (2008a, b). The Prairie Evaporite Formation within the Elk Point Group is the predominant, economic formation containing the potash deposits of Saskatchewan. The entire Alberta Potash Project is underlain by the Prairie Evaporite Formation.

In general, the underlying Prairie Evaporite Formation of the Elk Point Group, grades upward from layered halite and anhydrite into massive halite with several colour variations: colourless, white, light and dark grey, light and dark brown, light and dark pinkish to red. In Saskatchewan, the upper 60 m of the Prairie Evaporite Formation includes three potash-bearing members: the Esterhazy, Belle Plaine and Patience Lake members (e.g., Holter, 1969; Fuzesy, 1982; Yang et al., 2009a–c). Based on the work of Yang et al. (2009a), the Patience Lake Member is the most probable unit within the

Prairie Evaporite Formation that extends into southeastern Alberta. The potash zones are generally between 6 and 15 m thick and contain one or more beds of potash with intervening beds of lesser amounts of potash or barren salt. All three members contain sylvite (KCl) and are mined for potash in Saskatchewan, where there are currently eleven underground and/or solution mines in operation. Carnallite ($KCl \cdot MgCl_2 \cdot 6H_2O$) increases towards the margins of each member (Holter, 1969), except along the southern boundary of the Prairie Evaporite Formation. The uppermost member of the Prairie Evaporite Formation, the Patience Lake Member, ranges in thickness from 0 to 27 m (Holter, 1969) and contains sylvite-rich beds (10% to >30% sylvite; Holter, 1969) with halite and clay bands. The Patience Lake Member is mined in the Saskatoon, Lanigan and Mosaic Belle Plaine potash mines. Grobe (2000) showed that in southeastern Alberta the Prairie Evaporite Formation is between 100 and 130 m thick.

Figure 7. Formations of the Elk Point Group (after Grobe, 2000)



7.2 Regional Structures

The Meadow Lake Escarpment (Figure 5), dated as mid-Devonian, overlies the Precambrian Hearne Province of the Canadian Shield (Wright, 1994). It trends northwest across the northern part of the Lloydminster block and is composed of erosional mid-Cambrian clastics that formed a steep slope with a northwest trend. It represents the northwest erosional boundary of the lower Paleozoic strata and forms a relief for the southern depositional edge of the Middle Devonian Lower Elk Point evaporites. An initial transgression of middle Devonian seas, brought a sequence of evaporates, carbonates and clastics into the Lower Elk Point basin. The distribution of this strata shows that the southern shoreline of this basin, at the time, was formed by the Meadow Lake Escarpment (Haidl, 1989 and references therein).

The Southern Alberta rift is described as a deep-seated, graben-like structure that runs from 450 km north of Medicine Hat to the Rocky Mountains, southwest of Cranbrook, near the Idaho border (Kanasewich, 1968). This rift is approximately Precambrian in age and penetrates the crust until the Moho Discontinuity (Kanasewich et al., 1969). During the lower Cretaceous, reactivation of the rift was evident from the presence of a thick deposit of the Crowsnest volcanics centered in the rift (Pearce, 1969). Step-like structures related to the Southern Alberta rift, such as the Lewis and Clark fault system and the Great Falls Tectonic Zone are also deep-seated and have a history of recurrent fault movements.

Other structural features that affected the area include the Sweetgrass Arch and Bow Island Arch. Both these structures were formed during the late Paleozoic.

7.3 Diagenesis

Diagenesis has affected the rocks of the Prairie Evaporite Formation in two major ways. First, the soluble minerals within the Prairie Evaporite Formation have been re-precipitated. Trace element studies, as well as mineralogical and stratigraphic associations preclude the possibility of formation directly from oceanic brine (Holter, 1969; Fuzesy, 1982). This poses additional difficulties when predicting the proportions of sylvite and carnallite regionally. Secondly, and more importantly, dissolution has regionally removed parts of the Prairie Evaporite Formation in Saskatchewan and Alberta, including in a small part of the Grizzly Properties (Holter, 1969, Fuzesy, 1982, Grobe, 2000). Prairie Evaporite salts have been removed by dissolution along the northeastern margin of the formation (Holter, 1969; Hamilton, 1971; Fuzesy, 1982; Grobe, 2000). Although the Grizzly Properties are well within the area of potash occurrence, Grobe (2000) indicates that the edge of associated salt dissolution, which parallels the edge of complete salt removal to the northeast, lies adjacent to the North Block. Due to the lack of well control in this area, dissolution of the Prairie Evaporite Formation should be considered a possibility in this area.

7.4 Mineralization

The term potash refers to naturally occurring potassium-bearing salts and the commercial products derived from them. In the potash deposits of Western Canada, the minerals sylvite (KCl) and carnallite ($\text{KMgCl}_3 \cdot 6\text{H}_2\text{O}$) are the most important. When sylvite is present with halite (NaCl), they are collectively referred to as sylvinite, which comprises the high grade preferred ore. Carnallite is common in variable amounts, but its presence lowers the ore grade. Sylvite and carnallite may occur together or separately and it is believed that at least some carnallite mineralization is secondary, especially near the margins of the sylvinite beds (Fuzesy, 1982). Potassium is slightly radioactive, therefore, minerals such as sylvite and carnallite when present yield gamma log spikes on downhole geophysical surveys.

The Devonian aged Prairie Evaporite Formation is the predominant, economic formation containing the potash deposits of Saskatchewan. The entire Alberta Potash Project is underlain by the Prairie Evaporite Formation, which based upon down hole geophysical logs and examination of core contains at least two and possibly three potash bearing beds within the uppermost portion of the formation. A number of the Project's permits exist in close proximity to the historic VCO #15 well, the first recorded occurrence of potash in east-central Alberta. The well was originally completed in 1944 to test for oil and gas. The core from the well was revisited in 1965 and it was then recognized to contain potash similar in nature to the potash deposits of Saskatchewan (Golden, 1965; 1966).

In a compilation area of more than 62,000 km² there are only 15 wells that have penetrated the Prairie Evaporite Formation and have core available at the ERCB. However, there are more than 100 wells that have penetrated the Prairie Evaporite Formation and that have corresponding down hole gamma logs that can also be used to identify the presence of potash minerals. The analysis of well logs in and around the Project area has provided significant results with regards to identifying potential potash mineralization. At least 16 wells within the compilation yield calculated potash values of greater than 5% K₂O (7.9% KCl) based upon gamma logs or actual geochemical analyses from drill core. A total of 10 of the 16 wells are from on or within the confines of Grizzly's Property with another 4 wells in very close proximity to Grizzly's Property (<7 km from the boundary). The best measured or calculated grade obtained from the North (Lloydminster) Block was 7.0% K₂O (11.1% KCl), however, VCO#15 yielded up to 18.6% K₂O (29.4% KCl) and is less than 1.5 km from the Property boundary (Eccles et al., 2009). The best measured or calculated grade obtained from the 50% owned Provost Property is 20.7% K₂O (32.8% KCl) with a potential thickness of about 1.9 m. The best measured or calculated grade obtained from the South (Medicine Hat) Block is 21.6% K₂O (34.2% KCl) over 1.25 m.

In 2008, samples collected from cores from several Alberta wells were submitted to the Saskatchewan Research Council ("SRC") for physical geochemical analyses. At least one sample from each drill core viewed yielded greater than 1.0% K₂O and up to a high of 4.1% K₂O (6.5% KCl). The well that yielded the sample that returned 4.1% K₂O also

yielded a second sample of 1.31% K₂O. This well exists immediately adjacent to North (Lloydminster) Block of the Project.

During February 2009, a number of cores at the ERCB's Core Research Facility were examined and analyzed by a team that included personnel from APEX and the Alberta Geological Survey (AGS; Eccles et al., 2009). Historic well VCO #15, the original potash discovery hole that is located approximately 1.5 km from the boundary of Grizzly's North (Lloydminster) Block, was analysed and yielded values up to 18.6% K₂O (29.4% KCl) within an interval from 1,061.27 to 1,065.7 metres that averaged 3.6% K₂O (5.8% KCl) over 4.42 m. Portions of the core were missing from the examined and assayed interval. A total of 7 out of 22 analyses for the interval assayed between 7.73% K₂O (12.2% KCl) and 18.58% K₂O (29.4% KCl). It should be noted that more than half of the core in the main potash interval is missing from VCO #15, therefore the assays described here likely understate the grades that may have existed in this hole. Other holes of note include Wildemere Husky 10-3-49-6W4, which was drilled in close proximity to VCO #15 and yielded up to 11.5% K₂O (18.2% KCl) over 1.46 m and DEML MEDHAT 6-36-19-01W4, which exists within the central portion of the Company's South (Medicine Hat) Block and yielded approximately 21.6% K₂O (34.2% KCl) over 1.25 m based upon the gamma log signature.

8.0 Deposit Types

Potash is a generic term used to describe a variety of minerals that contain potassium. Potash includes potassium chloride (sylvite), potassium magnesium chloride (carnallite), potassium magnesium sulphate (langbeinite), potassium sulphate, and potassium nitrate. The dominant potash product is potassium chloride (KCl), or muriate of potash, a naturally occurring pink, salty mineral. It is derived from evaporative deposits of salt that contain the element potassium (K) in water-soluble form.

The major salt deposits of the Western Canada Sedimentary Basin occur within the Lower to Middle Devonian Elk Point Group. The Prairie Evaporite Formation, part of the Upper Elk Point Group underlies most of southern Saskatchewan and parts of southwestern Manitoba and eastern Alberta. In relation to the Property, potash exists within the Prairie Evaporite Formation.

8.1 Depositional Model

Salt deposits are formed from the excessive evaporation of seawater in a restricted or semi-restricted environment such as an embayment or basin that has been cut off from a larger water body by a barrier, for example a bar, reef or sill. This barrier stops the free circulation of water between the sea and the basin. With continuous evaporation, salt concentration increases in the water and the dissolved salts begin to precipitate. Deposition is controlled by solubility, with the less soluble salts deposited first and more soluble salts, like potassium salts, deposited later in the sequence (Eccles et al., 2009).

Depositional models vary from location to location. The models are controlled by local conditions including past salinity conditions, inflow parameters, variations in lithology and weathering patterns (Raymahashay and Sinha, 2004).

The Prairie Evaporite Formation was deposited in the epicontinental Elk Point Basin during the Middle Devonian (380 – 374 Ma). The Elk Point Basin was connected to the open ocean to the northwest (Fuzesy, 1982). However, due to a combination of arid conditions and the restriction of circulation by the Presqu'ile Reef, which lay between the Elk Point Basin and the open ocean, the Elk Point Basin was highly evaporative. During periods of evaporative drawdown, evaporites were deposited in the peritidal, lagoonal, and lacustrine environments of the basin (Meijer Drees, 1994). Several cycles of desiccation and flooding are observed, with each new flooding event re-dissolving part of the previous evaporite deposit. In areas where carbonate mounds are found in the underlying Winnipegosis Formation, the Prairie Evaporite may be anomalously thin (Holter, 1969).

The middle Devonian potash deposits that were deposited in the Elk Point Basin have been extensively studied in Saskatchewan and have been divided into three main evaporative cycles there:

The first cycle of evaporites includes the deposition of the Prairie Evaporite, Winnipegosis and Ashern Formations. The Prairie Evaporite Formation was deposited in an open sea that was later restricted by a barrier reef and banks of debris, cutting off the inflow and circulation of water to the inland sea. Due to an arid climate, reduced inflow of water and intense evaporation, the basin was occupied by a dead sea. With continuous evaporation, the least soluble salt precipitated first, anhydrite and halite respectively and accumulated at the bottom (Fuzesy, 1982).

As the sea became smaller in size there was an increasing presence of insoluble material, which were either spread amongst the evaporite salts or deposited as very thin layers. As the sea dried up the bittern salts collected in wide depressions at the southeastern part of the basin, forming precipitates of potassium and magnesium salts. At this point there was an invasion of less salty water that diluted the salty water which hindered precipitation of the bitter liquid or bittern salts, increasing the formation of halite. After much exposure to erosion the salt beds were overlain by muds from the Dawson Bay Formation as a result of the incoming Dawson Bay sea (Fuzesy, 1982).

The second and third cycles are not as intense as the previous first cycle of the Elk Point Group. The Souris River Formation, the third cycle, represents events of transgression, when the sea overflowed past the Elk Point basin (Fuzesy, 1982).

In the upper part of the Prairie Evaporite Formation, there are three main potash deposits in the Saskatchewan area, namely, the Esterhazy, Belle Plain and Patience Lake members, in ascending order. The deposits consist mainly of halite (NaCl), sylvite (KCl), carnallite (KCl.MgCl₂.6H₂O), anhydrite, dolomite and clay minerals (Fuzesy, 1982). The three major potash zones are separated by halite. At the central area of the

potash members, sylvinite seams exhibit rhythmic layering (Schwerdtner, 1964) and there is an abrupt change to carnallitic sylvinite or carnallitic halite toward the edges of the members (Fuzesy, 1982).

Halite ranges in colour from clear to brown/grey, has anhedral to euhedral crystals that range in size from 0.6 cm to 10 cm and occur as masses of interlocking crystals (Holter, 1969; Fuzesy, 1982). Sylvite and carnallite are potassium chloride minerals that can occur together and/or separately. They are found in halite as rich potassium beds, thin-layered crystal concentrations or even as scattered crystals. A mixture of sylvite and halite form sylvinite, an important and rich potash ore. Sylvite and halite can occur in a bedded sequence. Sylvinite ranges in colour from brownish red to pinkish in colour (Fuzesy, 1982).

Sylvite has a similar appearance to halite but is less dense and less brittle, it ranges in size from 0.6 cm-3 cm in diameter. It is clear and cloudy, and its colour varies from white to pink to light orange in colour, with pink cloudy crystals being the most prevalent (Holter, 1969). It is common for sylvite to possess red rims, which has to do with the amounts of insolubles present (Holter, 1969). Sylvite grades increase towards the south of the deposit and away from the carnallitic depositions. The grade reaches a maximum of 50 percent, as measured over an eight-foot interval in each member. It should also be taken into consideration that not all areas rich in sylvite are minable because of the stratigraphic position of carnallite and insolubles that are present (Holter, 1969).

Carnallite crystals are orthorhombic and lack cleavage (Fuzesy, 1982), usually red in colour but could range from clear white to translucent black (Holter, 1969) and are deliquescent. Crystals range in size from 0.6 cm to 10 cm in diameter. In thin section, hematite and goethite occur as plates and needles in carnallite as observed by Wardlaw (1968). Carnallite occurs as irregular vertical and horizontal veins and as xenomorphic fillings along halite and sylvite grains (Cole, 1948). In general, towards the northern edge of each member there is an increase in carnallite (Holter, 1969).

Clay minerals occur predominantly in the upper part of the formation as thick layers (~1.8 m) or as disseminations in the evaporite salts. Anhydrite and dolomite are common in the lower part of the Prairie Formation. Anhydrite is very fine grained and is light to dark grey/brown in colour. It occurs in halite as thin to thick interbeds or as disseminated lenses (Holter, 1969).

9.0 Exploration

9.1 Data Compilation

During 2008 and 2009, APEX Geoscience Ltd. was contracted by Grizzly to conduct a regional compilation of historical data along with available oil and gas data for the areas enclosed by and surrounding Grizzly's Properties. In 2012, the compilation area was expanded to create a continuous block encompassing all the Properties. Available

information consisted primarily of well log data, as well as archived drill core and published reports. Well logs provided the most extensive information source for this compilation. The petroleum industry uses downhole geophysical surveys (also known as wireline surveys) as a diagnostics tool to identify rock and fluid properties along the depth of a well, the results are known as well logs. Downhole geophysical surveys include gamma ray, caliper, electron, neutron, resistivity, and sonic. Gamma radiation is recorded in API units. The well logs in the compilation area were obtained through the GeoSCOUT™ software package. Over 14,000 wells exist in the compilation area, of these 185 wells intersect the Elk Point Group of which the Prairie Evaporite Formation is a part and 167 wells directly intersect the Prairie Evaporite Formation, the formation of interest for potash. The logs for these wells were available and obtained from GeoSCOUT™. Of the 167 wells that intersect the Prairie Evaporite Formation, a total of 44 wells are located on Grizzly's 100% owned permits with an additional 9 wells on the 50-50 Provost Property (Appendix 2). For the 167 wells of interest all logs were examined to confirm the accuracy of the assigned stratigraphic picks (Appendix 2). Figure 8 shows a sample well log and associated picks for the tops of the Elk Point Group and Prairie Evaporite Formation.

A rigorous method was applied to identify and isolate potash beds on the compiled well log data. Potash beds are most easily identifiable on gamma ray logs due to the presence of the naturally occurring, radioactive isotope Potassium-40 (^{40}K) which produces a distinct signature (peak) on the gamma-ray log. Shale beds which are locally present in the Prairie Evaporite Formation may also contain significant concentrations of ^{40}K , and may produce peaks on the gamma-ray logs. These shale beds can generally be differentiated from the potash beds using alternate properties identifiable from the other wireline logs. For example in a shale bed, caliper logs may show a significant decrease in borehole diameter (particularly if freshwater-based drilling muds are used), resistivity logs will show a significant decrease, and sonic travel time will be significantly increased in response to a shale bed.

The gamma-ray logs were also used to calculate estimated potash grades using an equation that includes the thickness of the unit and the radiation-intensity integral of the each peak, all calibrated against reported values for gamma intensity in the potash beds (based on Nelson, 2007). The response on the gamma-ray log is different for sylvite and carnallite but it is not possible to differentiate potash beds with carnallite versus sylvite. The actual ratio of sylvite to carnallite is not actually known for the potash in the Grizzly properties, so grade-estimates from well logs should be considered rough-estimates only.

Examination of the data collected indicates that potash occurrences and grades in Alberta increase towards the Saskatchewan border. Of the 167 wells that intersect the Prairie Evaporite Formation, 38 wells contain identifiable potash beds. The data available indicate that both potash occurrences and grades appear to be patchy, and from the data available individual beds cannot be accurately correlated over long distances. However, it was possible to identify areas where potash occurrences are more common (Figure 9).

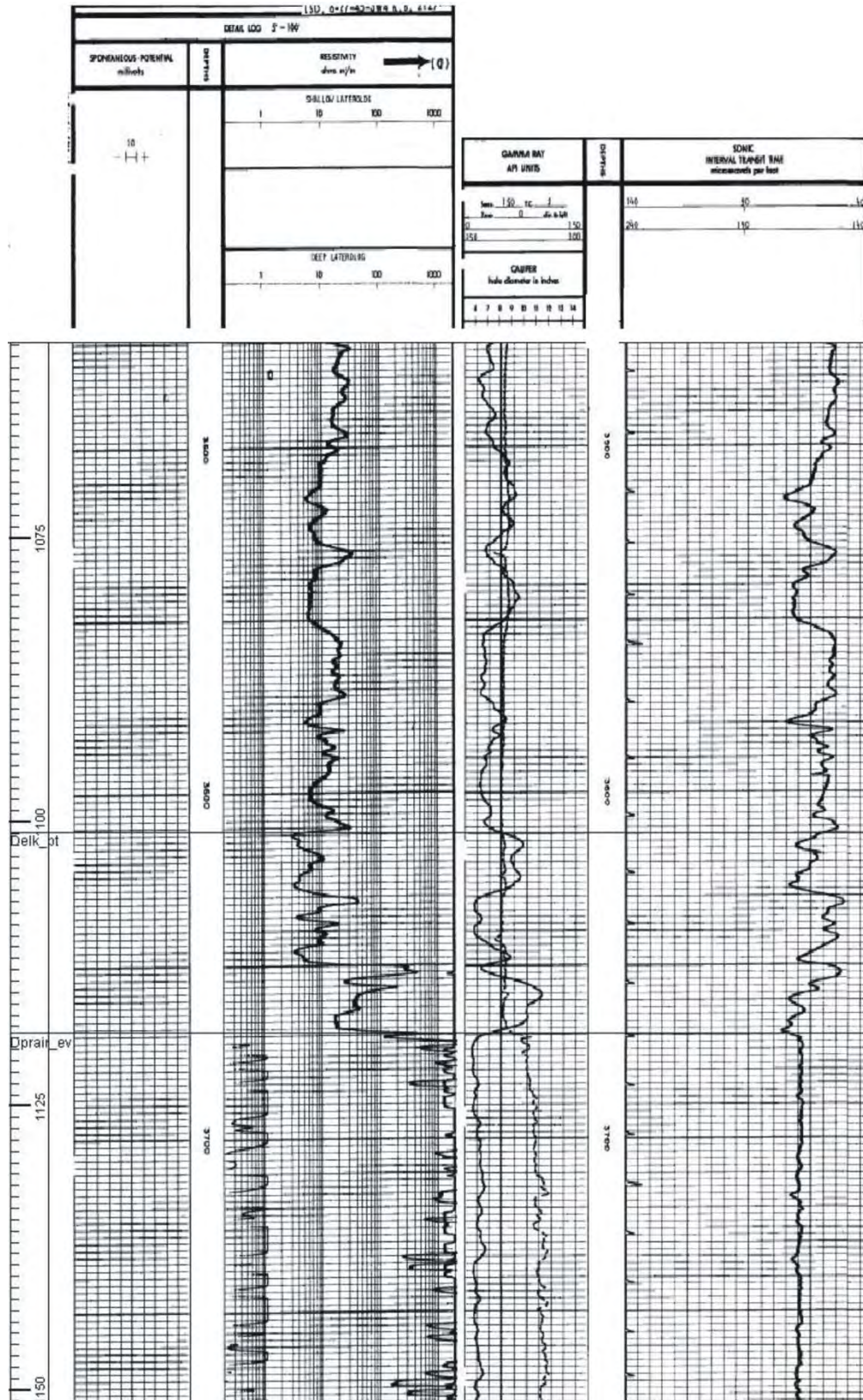


Figure 8. Sample Wireline Log with Formation Top Picks

The compilation area included a total of 14,651 wells available in GeoSCOUT™. The compilation determined that a total of 167 wells penetrated the Prairie Evaporite, with a total of 53 of the 167 wells on or within the boundaries of Grizzly's Potash Property. A total of 110 of the 167 wells have available down hole geophysical logs including a gamma log, however, a number of those wells were either not drilled deep enough, or their gamma logs did not completely test the Prairie Evaporite Formation, or their gamma logs were of poor quality and unable to evaluate the Prairie Evaporite Formation for potash potential. As an example, out of the 53 wells that were drilled deep enough to intersect the Prairie Evaporite on Grizzly's Property, only 36 contain a gamma log or core that permits an evaluation of the Prairie Evaporite Formation for the presence of potash. A total of 15 wells (including one re-entry well) within the compilation area with core from the Prairie Evaporite were available at the ERCB, with 5 of the wells on or within the confines of Grizzly's Potash Property.

Preliminary analysis determined that the Prairie Evaporite Formation, the host to the Saskatchewan potash deposits, underlies the vast majority of Grizzly's permits and at a number of locations appears to yield indications of potash with at least 16 wells yielding potash values of greater than 5% K₂O (7.9% KCl) based upon XRF geochemical analyses or calculated values from gamma logs. A total of 10 of the 16 wells were drilled on or within the confines of Grizzly's Property with another 4 wells in very close proximity to Grizzly's Property (<7 km from the boundary). A total of 8 wells yield greater than 10% K₂O (15.8% KCl) based upon XRF geochemical analyses or calculated values from gamma logs, with 5 of the wells on or within the confines of Grizzly's North (Lloydminster) Block or the 50:50 Provost Property or in very close proximity to the North (Lloydminster) Block or 50:50 Provost Property. A total of 3 wells that yield greater than 10% K₂O (15.8% KCl) based upon XRF geochemical analyses or calculated values from gamma logs exist on the South (Medicine Hat) Block. The best measured or calculated grade obtained from the North (Lloydminster) Block was 7.0% K₂O, however, VCO#15 (6-12-49-06W4) yielded up to 18.6% K₂O (29.4% KCl) and is less than 1.5 km from the property boundary. The best measured or calculated grade obtained from the 50:50 Provost Property is 20.7% K₂O (32.8% KCl) from Renaissance Provost 7-15-40-02W4 with a potential thickness of about 1.9 m. Also of interest on the 50:50 Provost Property is the well Renaissance Provost 8-14-40-03W4 which yields a peak value of about 15% K₂O (23.7% KCl) across approximately 1.25 m. The best measured or calculated grade obtained from the South (Medicine Hat) Block is 21.6% K₂O (34.2% KCl) over 1.25 m (Figure 9; Appendices 2 and 3).

The well Murphy Cts Lk N 7-30-36-28W3 is also of interest, located approximately 1 km east of the south portion of the 50:50 Provost Property in the province of Saskatchewan. There are two pronounced gamma ray responses in the top 20 metres of the Prairie Evaporite Formation in this well, both without a significant inverse neutron spike. The first, and strongest, gamma ray response occurs in the first 5 m of the formation; the API value of 255 may correspond to a peak value of 17% K₂O (26.9% KCl) over approximately 2.25 m. The second response, which occurs 12 m below the first, reaches 120 API, which may correspond to approximately 8% K₂O (12.7% KCl) over 1.25 m.

Two wells present within Pacific's 100% owned Provost Property also yield noticeable gamma ray responses. It is assumed that the permits were staked to cover the lands surrounding these wells. The first well, Renaissance Provost 4-18-38-1W4, shows two very pronounced gamma ray responses near the top of the Prairie Evaporite Formation (the neutron log indicates the formation top to be placed incorrectly). The first shows a gamma ray response of 375 API, which may correspond to a peak value of 25% K₂O (39.6% KCl) over 2.25 m. The second occurs about 1 m below the first and has a response of 230 API, which may correspond to a peak value of 15.3% K₂O (24.3% KCl) over 1.75 m. The second well, Sage et al Provost 11-20-37-01W4, has a pronounced gamma ray response near the top of the Prairie Evaporite Formation, but unfortunately the absence of an API, or correlative scale, limits the usefulness of the log.

9.2 Re-Sampling of Historical Core

In September, 2008, core from 8 historical archived wells was examined at the ERCB Core Research Facility in Calgary, Alberta, by APEX personnel (Table 3). Three historical wells 10-30-42-09W4 (west of the North Block), 10-32-45-01W4 (on the 50:50 Provost Property) and 10-33-40-7W4 (west of the North Block) were reviewed and sampled (Figure 9). A total of seven potash samples were collected. These potash samples were cut from the core at points that appeared to be representative of potential potash beds. The samples weighed between 80 and 255 grams and were collected from the upper part of the Prairie Evaporite Formation. The samples were sent for analysis to the Saskatchewan Research Council (SRC) in Saskatoon, Saskatchewan (Appendix 4). The ERCB would not allow any more extensive sampling.

Table 3 Cores Examined at the ERCB, September, 2008

Well	location	potash depths	samples
IMP Calstan Lake Newell	05-01-17-14W4	1749.0-1759.0	
Newalta Hughenden	10-33-40-07W4	1377.4-1384.1	1381.11 1383.13
Federated LPG3S Hardisty	10-30-42-09W4	1359.8-1369.8	1360.99 1363.23
BP Chauvin South	06-28-42-02W4	none	
Petal Dina	10-32-45-01W4	1352.4-1360.1	1055.68 1058.64 1060.92
VCO #15	06-12-49-06W4	1060.7-1076.2* 1137.2-1158.2*	
Devonian Blackfoot test well	12-15-50-02W4	1025.7-1034.0	
Calstan Pacific Marwayne	14-29-52-02W4	916.3-917.4	

*note: potash depths taken from Golden, 1965, because cores were too degraded in September 2008 to obtain accurate values.

The seven core samples that were analyzed returned a broad range of K₂O contents. The highest value, 4.1% K₂O (6.5% KCl), was returned from the sample collected from 1,055.7 m depth in hole 10-32-45-01W4. The lowest value, 0.2% K₂O, was returned from the sample collected from 1,361.0 m depth in hole 10-30-42-09W4. All analyses are included in Appendix 4. The cores that were sampled were several decades old (drilled in 1966, 1967 and 1958, respectively) and hence the core was of poor quality (see Golden, 1966). The potash minerals, carnallite and sylvite, are highly soluble and are selectively dissolved before halite. The analyses that were conducted on the samples are considered a preliminary series of tests on mineralization and give minimum grades of potash only (Appendix 4).

9.3 X-Ray Fluorescence (XRF) Analyses

In February 2009, cores from eight wells were analysed using a portable XRF (X-Ray Fluorescence) analyzer in order to provide a more comprehensive analytical dataset that could not be obtained due to limitations on physical sampling of the core. The work was completed at the ERCB Core Research Facility by a team from Elemental Controls Ltd., the Alberta Geological Survey and APEX (Eccles et al., 2009). The analyses were performed using a portable Niton XL3t 900 XRF analyzer. The XRF analyzer uses a 50 kV X-ray tube with a gold anode for primary radiation production and Si-PIN detector. The analyzer measures over a 2 x 1 cm area and displays element concentrations within the 95% confidence band. For these tests the analyzer was operated on Basic mode and Light Element Analysis mode to measure concentrations of elements from atomic numbers 12 to 92 (Mg-U). Each measurement lasted 90 seconds (75 s for the basic filter and 15 seconds for the light elements filter). Analytical results were available immediately for each measurement. The analyzer was calibrated against a standard before beginning each day and periodically throughout each day. The SRC returned the sample pucks from the seven samples that were analyzed by ICP-OES and these were also analyzed with the XRF.

In one instance it was possible to compare a K₂O grade estimated from a gamma log with the K₂O grade determined by XRF. For the well Pectal Dina 10-32-45-01W4, McMillan and Dufresne (2009) estimated the K₂O content between 1,056.3 and 1,059.3 m to be 2.8%. Averaging the XRF-K₂O values collected every 30 to 50 cm for the core between 1,056.50 and 1,059.48 m yields a K₂O value of 2.5% (with a standard deviation of 1.94). Although a single comparison is not a statistical analysis, the fairly good match between these two methods is encouraging.

Core from a total of 7 wells was analyzed using the hand held XRF analyzer. Six of the seven wells yielded spot values greater than 7% K₂O (11.1% KCl). The seventh core did not have core available from the top of the Prairie Evaporite Formation where potash bed are normally present (McMillan and Dufresne, 2009; Eccles et al., 2009). Spot tests as high as 18.6% K₂O (29.4% KCl) were returned from cores taken from well VCO#15 (6-12-49-06W4), near Grizzly's Property; however, observed spot grades were heterogeneous even on the scale of decimeters. As the core tested has undergone degradation, the values yielded by the core are minimum possible values. In general,

core condition ranged from good-moderate to very poor, and the K_2O concentrations as determined by XRF represent minimum values, since the potash in the cores may have partially dissolved particularly on the surface of the cores where the XRF analyzer is collecting its analyses from. Potash salts are significantly more soluble than halite, some of the cores analyzed are known to have been left exposed to the atmosphere for extended periods (e.g., Golden, 1965; Richner et al., 1992). The results of the XRF analyses are given in Appendix 5 and are discussed in Eccles et al. (2009). Wide low grade potash bearing zones were confirmed in four of the cores (McMillan and Dufresne, 2009; Eccles et al., 2009; Appendix 5).

9.4 Water Chemistry Compilation

In March, 2009, a compilation of formation water chemistry data was completed for wells in the area of the Alberta Potash Project. The compilation was restricted to wells that tested within or below Devonian strata and reported the test type as drillstem or swab test. With these criteria 2,426 wells with formation water chemistry were available and were accessed from the Geofluids module of the GeoSCOUT™ software package (Figure 10). The intent of the study was to see if high K in formation water in the Beaverhill Lake or Leduc formations (which sit immediately above the Prairie Evaporite Formation) could, a) be an indicator of high K in the Prairie Evaporite and to see if there are areas of high concentrations of K in formation waters that could be produced for their K content. A number of wells were identified with >1% up to 8.6% K in formation waters within carbonate hosted aquifers immediately above the Prairie Evaporite Formation (Figure 10). However, the data for many of the wells is subject to contamination and in many cases is suspect. An effort was made to eliminate any wells with indications of contamination including wells with comments such as 'Acid Completion Fluid' or 'Mud Filtrate KCl' along with a number of other comments. In addition, mass balance of the formation water was also reviewed in order to help eliminate suspect analyses.

Hitchon et al. (1995) after a fairly exhaustive quality review of wells with formation waters also identified high concentrations of K in Devonian aquifers in the region of Grizzly's permits.

The use of anomalous K in well water has been proposed as a potential indicator of potash mineralization in the underlying Prairie Evaporite Formation because potash minerals are highly soluble especially sylvite and carnallite. A number of potassium in formation water anomalies have been identified that show a patchy distribution in eastern Alberta. This is comparable to the patchy distribution observed for potash in the well logs. Given that the potash beds in eastern Alberta occur near the edge of the much larger potash deposits in Saskatchewan, and are a continuation of the Saskatchewan deposits (e.g., Worsley and Fuzesy, 1979), it is not difficult to reconcile the patchy distribution of potash in this area with geologic models of evaporite formation and diagenesis. It is possible that the patchy distribution is due to isolated deposition in small restricted sub-basins, partial dissolution by influxes of seawater from the northwest, post depositional dissolution due to the far greater solubility of potash salts

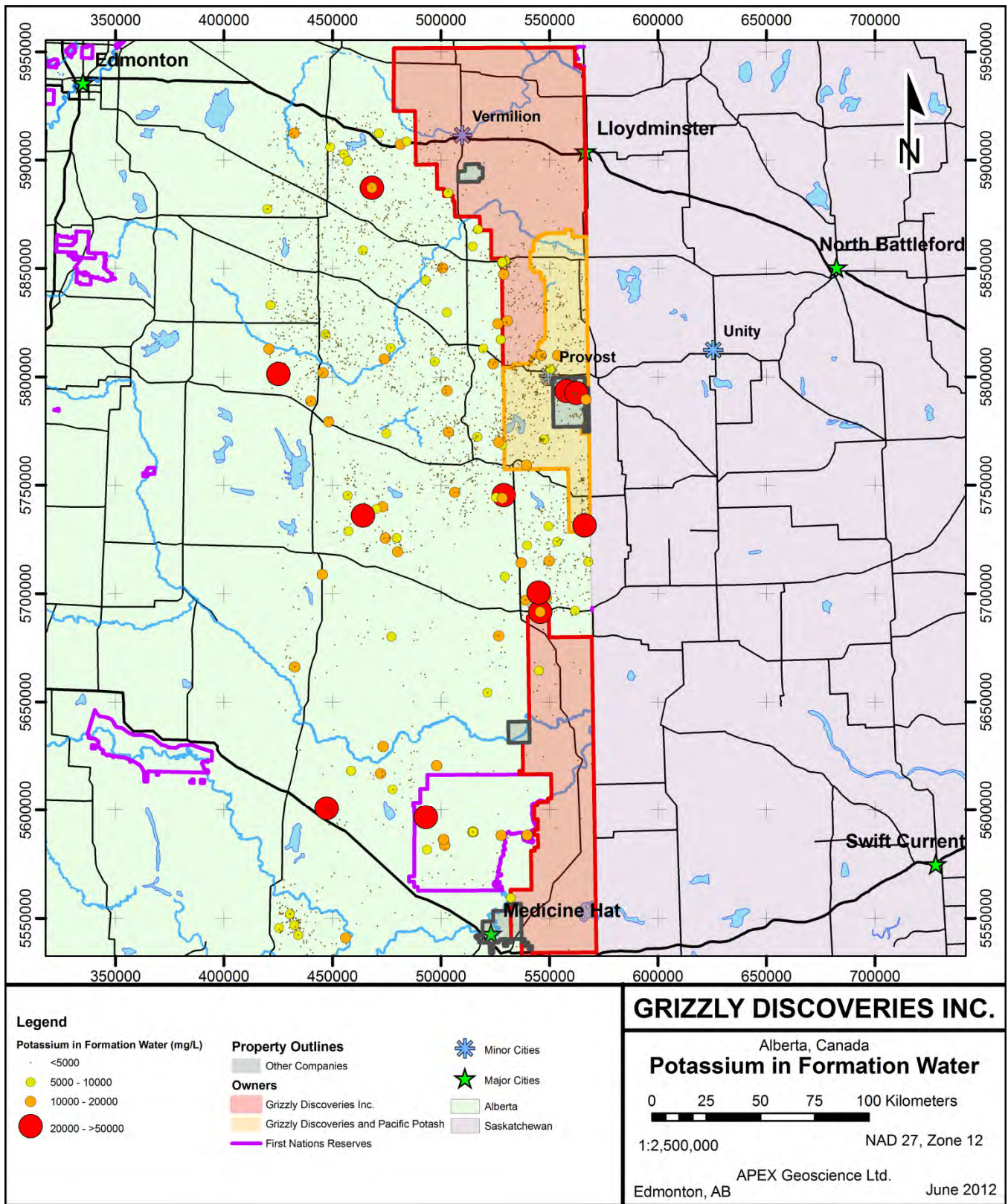


Figure 10. Potassium in Formation Water

vs. halite, or some combination of these possibilities. However, the limited number of wells along with the sampling which covers everything within or below the Devonian precludes any definitive mapping or conclusions. In addition, K contamination from drilling muds and kill fluids is of serious concern as a number of water chemistry analyses with reported high K in formation water in the GeoSCOUT™ database are likely due to contamination.

The use of deep water geochemistry for potash exploration is a very promising technique, but one that needs more work before the data could be used to pick test holes for potash in the Prairie Evaporite Formation or as an indicator of carbonate hosted formation waters that could be produced for their K content. It is possible that Devonian groundwater movement is spatially variable and structurally controlled to some extent within the properties, and therefore it is not known with certainty whether a formation water potassium anomaly represents a potash bed at a specific location and depth. If the use of formation water chemistry is better understood it could become a useful exploration technique to help in the search for potash and potentially formation waters that could be produced for their K content as well as a number of other elements.

9.5 Seismic Data Interpretation

In summer, 2011, Grizzly retained RPS Boyd PetroSearch of Calgary, Alberta, to compile and interpret all available seismic data in two areas of the Property (Figure 9). Existing 2D (2 dimensional) seismic data was purchased and reprocessed to increase data quality. The data was then modelled and correlated to local geology using well bore data. Depth conversion of the data produced structure maps for the tops of the Prairie Evaporite and Winnipegosis Formations and a resultant isopach map for the Prairie Evaporite Formation.

In the Albert Lake compilation area, on the North Block, the structure maps for both the Prairie Evaporite and Winnipegosis Formations show a regional dip down towards the southwest. The structure maps also indicate the presence of topographical features in both the Prairie Evaporite and Winnipegosis Formation. Both maps show a northeast to southwest structural low centred in Township 49, Range 2W4M and a structurally high nose that is centred in the northwest corner of Township 49, Range W4M. Two drillhole locations were proposed where the Prairie Evaporite Formation was interpreted to have a uniform thickness (RPS Boyd PetroSearch, 2011a, b; Appendix 6).

In the Suffield compilation area, covering the center of the South Block, the initial interpretation produced structure maps for both the Prairie Evaporite and Winnipegosis Formations that show a regional dip down towards the northeast (Appendix 6). No major perturbations were discovered that need to be avoided for drill targeting.

10.0 Drilling

In 2011, two wells were drilled on the Alberta Potash Project: PPC50 Provost 10-11-40-01W4 and GZD100 Med Hat 8-36-19-01W4. The wells were drilled by Ensign Energy Services of Calgary, Alberta and were managed by personnel from APEX and Barlon Engineering Group Ltd. (Barlon) of Calgary, Alberta. Downhole geophysical surveys were completed for the entire depth of both wells by Baker Hughes Canada (Baker Hughes), of Calgary, Alberta. Both wells were logged by APEX personnel on site during the drilling campaign.

At the well site the core was quick-logged, photographed and semi-quantitatively measured using a portable handheld XRF analyzer and GR scintillometer; measurements were taken every 0.5 m, with 0.25 m intervals over zones of visible potash mineralization. The core was sealed with plastic in boxes and was transported to Exova Holdings Ltd.'s (Exova; formerly Norwest Laboratories) laboratory in Calgary, Alberta, under the supervision of a representative of Barlon.

Standard downhole geophysical logs were conducted by Baker Hughes and included an induction, acoustic, density, neutron, gamma and calliper logs.

Grizzly announced on February 21st, 2012 that it discovered Potash in a well on its 100% owned Southern (Medicine Hat) Block in Well GZD100 Medhat 8-36-19-01W4. Coring commenced at 1,642 m below surface. Visible potash minerals were observed in the drill core for the interval between 1,648.5 m and 1,670.85 m below surface. During September 2011, Grizzly signed a LOI with Pacific Potash Corp. to commence a multiple potash drill hole exploration program on the Grizzly - Pacific 50:50 owned Provost Permits. The first and only potash test well to date was completed in mid November, 2011. The well, PPC40 Provost 10-11-040-01W4, yielded a wide low grade potash zone with two narrow higher grade zones.

10.1 PPC40 PROVOST 10-11-40-01W4

Between November 4th and 12th, 2011 Grizzly and Pacific drilled test well, PPC40 Provost 10-11-40-01W4, on the 50:50 Provost Potash Property. Both APEX (on behalf of Grizzly) and Dahrouge (on behalf of Pacific) personnel were on site for the complete duration of the drilling operations. The well was drilled to a depth of 1,400 m and terminated in the Winnipegosis Formation. The well was conventionally drilled to a depth of 1,256 m, core drilled from 1,256 m to 1,292 m and conventionally drilled to the final depth of 1,400 m. Full recovery was achieved along the coring interval due to the excellent competency of the evaporite beds.

The well, PPC40 Provost 10-11-040-01W4, yielded a wide low grade potash zone with two narrow higher grade zones. The wide low grade zone was intersected at a depth of 1,258.5 m and yielded 1.84% K₂O (2.91% KCl) over 23.3 m with a higher grade upper zone of 6.58% K₂O (10.41% KCl) over 0.75 m (Table 4). Visually, the zone yielded evidence of post-depositional remobilization or modification of the potash and with the

high levels of MgO present in all likelihood indicating the presence of significant carnallite in the zone. The well was drilled only 50 km west of the historic Unity Potash mine near Unity, Saskatchewan. Further drilling is warranted to the north of PPC40 Provost 10-11-040-01W4 towards the thick potash anomaly identified by the USGS, which is centered in townships 45 to 46, ranges 1 to 2 about 60 km to the north (Cocker et al., 2010). Further drilling is under consideration south of Pacific's 100% owned Provost Property on Grizzly's 50% Provost Permits. Higher grades of potash are indicated by Pacific's drill results on its 100% owned property to date and by historic drill intersections just into Saskatchewan where some higher grades have been encountered.

In PPC40 Provost, a 2 m meter thick zone of visible potash mineralization was observed in the core from 1,259.75 m to 1,261.75 m. A coincident response was observed on the gamma ray log of approximately 112.5 API roughly equivalent to 7.5% K₂O (12.0% KCl) over about 1 m confirming the intersection indicated by the sampling and assays. Visually, the zone has an estimated high carnallite to sylvite ratio, which is also confirmed by the high MgO content of the intersection. Below the potash zone, low grade, mottled potash in halite mineralization was encountered throughout much of the rest of the core. The well yielded two higher grade zones of 6.58% K₂O (10.41% KCl) over 0.75 m and 5.39% K₂O (8.54% KCl) over 1.1 m (Table 4).

Table 4. Summary of 2011 Drill Core Sample Assay Results.

Well		Depth				Thickness		Grade K ₂ O (wt. %)	Grade KCl (wt.%)	Grade MgO (wt.%)
		From		To		(m)	(ft)			
		(m)	(ft)	(m)	(ft)					
GZD100 MEDHAT 8-36- 19-01W4	average	1648.5	5408.5	1670.9	5481.8	22.4	73.3	2.62	4.15	0.09
	Upper Zone	1649.4	5411.4	1654	5426.4	4.55	14.9	6.4	10.14	0.11
	Includes	1649.7	5412.4	1652.4	5421.1	2.65	8.69	8.77	13.88	0.1
	Includes	1651.2	5417.3	1652.4	5421.1	1.15	3.77	13	20.58	0.14
	Includes	1651.7	5419	1652	5420	0.3	0.98	31.1	49.23	0.09
	Lower Zone	1661.7	5451.8	1665	5462.6	3.3	10.8	2.45	3.88	0.06
PPC40 PROVOST 10- 11-040-01W4	average	1258.5	4128.9	1281.8	4205.4	23.3	76.4	1.84	2.91	1.18
	Upper Zone	1258.9	4130.1	1263.4	4144.9	4.5	14.8	3.14	4.97	1.57
	Includes	1258.9	4130.1	1259.6	4132.6	0.75	2.46	6.58	10.41	1.67
	Lower Zone	1280.7	4201.8	1281.8	4205.4	1.1	3.61	5.39	8.54	4.41

10.2 GZD100 MEDHAT 8-36-19-01W4

Between November 28th and December 12th 2011, Grizzly drilled test well, GZD100 Med Hat 8-36-19-01W4, on the South Block. An APEX geologist was present for the complete duration of the drilling operations. The well was drilled to a total of 1,745 m depth and terminated in the Winnipegosis Formation. The well was conventionally drilled to a depth of 1,642 m, cored from 1,642 m to 1,678 m and drilled conventionally to the final depth of 1,745 m. There was full recovery in the coring interval. Hand held XRF spot analyses of the drill core at the well site yielded up to 17.64% K (21.2% K₂O).

The well cored a thick zone of Prairie Evaporite Formation salt intersecting a wide, low grade potash zone (22.35 m) near the top of the unit at a depth of 1,648.5 m. Within the wide low grade potash zone, the drilling intersected two zones of sylvite mineralization (an Upper zone and Lower zone) within what is likely the Patience Lake Member. Analytical results include a weighted average grade of 2.62% K₂O (4.15% KCl) over 22.35 m at a depth of 1,648.5 m for the low grade zone with higher grade portions including 6.4% K₂O (10.14% KCl) over 4.55 m, which includes 8.77% K₂O (13.88% KCl) over 2.65 m and which also includes 13.0% K₂O (20.58% KCl) over 1.15 m for the Upper Zone and 2.45% K₂O (3.88% KCl) over 3.3 m for the Lower Zone. The highest assay from the zone was 31.1% K₂O (49.2% KCl) for a 0.3 m core sample. Low grades of MgO indicate that sylvite likely is the major potash mineral, rather than carnallite.

Visible sylvite mineralization was observed in the core primarily from 1,649.7 m to 1,653.0 m. A coincident response of about 340 API was observed on the gamma log centered at a depth of about 1,652 m yielding a calculated grade of approximately 22.7% K₂O (35.8% KCl) over about 1.25 m roughly confirming the geochemical grades obtained from the core analyses. The upper zone yielded 6.4% K₂O (10.14% KCl) over 4.55 m that includes 8.77% K₂O (13.88% KCl) over 2.65 m with a higher grade of 13.0% K₂O (20.58 wt.% KCl) over 1.15 m (Table 4). The gamma log seems to indicate that higher grades over the 1.15 m high grade upper zone might have been expected. The lower high grade zone does show up on the gamma log with a couple of visible peaks of up to 40 API at 1,662 and 1,664 m. Below the main potash zone, low grade potash in halite mineralization was encountered throughout much of the rest of the core

In 1980, a historic oil well DEML MEDHAT 6-36-19-01W4, located 800 m west of the current well location for GZD100 MEDHAT, yielded a gamma log spike of about 218 API units at a depth of approximately 1,662 m below surface for a calculated maximum potash grade of approximately 21.6% K₂O (34.2% KCl) over 1.25 m. The depth of the potash intersections in DEML MEDHAT and GZD100 MEDHAT is at a similar depth to the Belle Plaine Potash Solution Mine near Regina Saskatchewan and would likely be ideally suited to solution mining due to high formation temperatures. Further potash drilling is warranted on Grizzly's South (Medicine Hat) Block. Further potash drill hole tests should step out south from well GZD100 MEDHAT 8-36-19-01W4.

11.0 Sample Preparation, Analyses and Security

11.1 Sampling of Historic Core

Seven potash samples were cut from the core at points that appeared to be representative of high-quality potash beds (McMillan and Dufresne, 2009). The samples weighed between 80 and 255 grams and were collected from the upper part of the Prairie Evaporite Formation. Several of the cores were visibly water-degraded, and a wet-saw had been accidentally used by the ERCB on at least two of the cores. All cut-surfaces (but not freshly-broken surfaces) were sanded with a standard home-workshop belt sander (using latex gloves to prevent dissolution by perspiration) to remove the outermost, potentially damaged, layer (about 2 mm) so that a truly representative sample could be analyzed. The samples were placed in individual plastic sample bags labeled with the sample number and sealed with a zip tie. Sample numbers and relevant associated data was noted in a field book and later transcribed into an excel file. The sample bags were placed in a bucket sealed with zip ties and shipped to the Saskatchewan Research Council's Geoanalytical Laboratories (SRC) in Saskatoon, Saskatchewan. The SRC is an ISO 17025:2005 accredited laboratory. The laboratory reported nothing unusual with respect to the samples once they were received.

At the SRC the samples were analysed to determine their K₂O, MgO and CaO contents as well as moisture content. The SRC is a ISO 17025:2005 accredited laboratory. The rock samples were jaw crushed to 60% passing through -2 mm. From the crush a 100-200 g sub sample was rifle split. The sub sample was pulverised to 90% passing through -106 microns using a puck and ring grinding mill. The pulp was then transferred to a labeled plastic snap top vial. For the measurement of the soluble component a 0.125 g aliquot of pulp was placed in a test tube with 2.25 ml of 30°C deionized water and shaken. The soluble solution was analysed by Inductively-Coupled Plasma Optical Emission Spectroscopy (ICP-OES) (Appendix 4; SRC, 2012). For the measurement of the insoluble component a 2.00 g aliquot of pulp was placed in a test tube with 15 ml of 30°C deionized water and centrifuged for 2 minutes, decanted and repeated. The remaining sample material (insoluble) was dried and weighed. To measure the moisture content an 1.00 g aliquot of pulp was placed into a pre-weighed crucible and heated overnight. The sample was then weighed again and the moisture was calculated as wt.%.

11.2 XRF Analysis of Historic Core

A portable Niton XL3t 900s analyzer with geometrically optimized large area drift detector (GOLDD™) technology was used to obtain semi-quantitative geochemical results on Prairie Evaporite Formation cores. This analyzer uses a miniature x-ray tube (50 kV with silver anode) for production of primary radiation and a silicon drift detector with approximately 150 electron volts (eV) resolution. It is equipped with a ¹⁰⁹Cd isotope source and uses NpL-shell emissions and 23.0 gamma-ray emission. The GOLDD technology collects 10 times the counts per second of previous analyzers, resulting in reduced measuring times and decreased error. The analyzer displays a primary screen

of elements that are within the 95% confidence band, and is capable of storing and downloading up to 10 000 assays with full spectral data (Eccles et al., 2009). One of the authors, Mr. Dufresne, a qualified person, was present during XRF analyses conducted in early 2009.

Spot measurements were conducted by placing the exposure window of the analyzer, which measures 1.0 by 2.0 cm in diameter, in direct contact with a flat core surface. The measurements were collected down the axis of the core to create a profile of elemental concentrations for potassium. Generally, in zones of visually observed mineralization, 25 cm spot spacing was used. In zones that appeared less prospective for potash minerals, a spot spacing of 75 cm was used. Homogenous-looking samples were preferentially selected to reduce sample matrix effects. The analyses were conducted using two modes: Soil Mode and Mining Mode. Soil Mode uses a Compton backscatter calibration method and provides accurate results in the limit of detection range 50–30,000 ppm for elements from sulfur (S, atomic number 16) to uranium (U, atomic number 92). Mining Mode uses the fundamental parameters calibration method and provides accurate results in the range 0.1%–100% for most elements. Mining Mode is the only mode that has the ability to detect the light elements from magnesium (Mg) to phosphorus (P), making this mode best suited for measuring the evaporite samples. A helium cylinder was coupled to the analyzer to lower the minimum limit of detection for the light elements. Measurement times used during this study were 90 seconds: 15 seconds for the Soil Mode and 75 seconds for the Mining Mode (Eccles et al., 2009; McMillan and Dufresne, 2009).

Analyses were begun at the top of the Prairie Evaporite Formation and continued until either no more core was available for analyses or until it was deemed there was no significant possibility of encountering further potash. The condition of the core ranged from good-moderate to very poor, therefore the K₂O concentrations determined by the XRF measurements represent minimum values as the potash in the cores may have been partially dissolved during storage. Potash salts are significantly more soluble than halite, and some of the cores analysed are known to have been left exposed to the atmosphere for extended periods (Golden, 1965).

11.3 Drill Core Sampling

At the well site the core was quick-logged, photographed and semi-quantitatively measured using a portable handheld XRF analyzer and GR scintillometer; measurements were taken every 0.5 m, with 0.25 m intervals over zones of visible potash mineralization. The core was covered in plastic and the boxes were taped shut and loaded for transport. The core was shipped to Exova Holdings Limited laboratory (Exova; formerly Norwest Laboratories) in Calgary, Alberta. The core was transported directly to Exova, under the supervision of a representative of Barlon Engineering.

At Exova, the core samples were unboxed, described, photographed, and depth corrected to the well logs. APEX personnel were on site for part of the sampling process. The core was cut into slabs using a dry saw and the half cores were geologically logged

in detail and photographed. The analysis also included geological and geotechnical characteristics of the salt back and units that overlie the ore zone. Sample intervals were determined based on geological boundaries. A total of 75 samples with sample intervals ranging from 0.2 m to 0.65 m were collected from well PPC40 PROVOST 10-11-40-1W4. A total of 55 samples with sample intervals ranging from 0.15 m to 0.7 m were collected from well MED HAT 8-36-019-1W4. The Exova building is secured by passcard and all visitors are required to sign in and out of the building. The core was stored by itself in room 2A. The samples were placed in sealed plastic buckets and shipped to the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon, Saskatchewan. The SRC reported nothing unusual with respect to the samples once they were received.

The samples were analyzed at the SRC using their analytical package for potash. The rock samples were jaw crushed to 95% passing through -2 mm. A representative sub-sample was collected from riffle splitter. All crushed "rejects" were vacuum sealed, returned to the original pails and stored until requested by the client. The sub-sample was homogenized by mild steel grind to 95% passing minus 0.106 mm. A portion of the homogenized aliquot was transferred to a bar-coded plastic snap top vial with the remaining ground material (pulp) sealed in the pulp bag. An aliquot of pulp was placed in a test tube with deionized water and shaken. The solution was then analysed by ICP-OES to measure the highly soluble evaporites. To measure the insoluble component an aliquot of pulp was placed in a test tube with deionized water. The sample was shaken and centrifuged until the solution was clear. The solution was decanted and diluted with 15 ml of deionized water, shaken and centrifuged again. The remaining sample material (insoluble) was dried and weighed. To measure the moisture content an aliquot of pulp was placed into a pre-weighed crucible and heated. The sample was then weighed again and the moisture was calculated as wt.%.

12.0 Data Verification

12.1 Historical Core Analyses

The SRC performs Quality Control Monitoring during the sample preparation and analysis process. A screen size analysis on 5% of samples was completed after crushing to minus 2 mm and after pulverization to minus 0.106mm with the criteria of 95% passing. Loss of mass monitoring on 5% of samples was completed after crushing to minus 2 mm and after pulverization to minus 0.106 mm with the criteria of 95% passing. The Grinding mills are cleaned with Quintus quartz (QQ) at the start of every group and as required between samples (i.e. for sticky samples). Sample blanks (QQ) are performed in the rate of 5% per group. All data is tracked and available to client. The potash standards POT003 and POT004 were analysed and a pulp repeat was included with sample set.

12.2 XRF Analyses

A detailed discussion of the analytical comparisons between the XRF analyzer and seven laboratory geochemical values from powdered samples obtained from three separate Prairie Evaporite Formation cores (10-30-42-9W4, 10-32-45-1W4 and 10-32-40-7W4) is discussed by Eccles et al. (2009) and summarized below.

The measurements with the XL3t 900S XRF analyzer were made on aliquots of the same powders that were used in the geochemical laboratory analysis. It was determined that the two methods showed a moderate to excellent correlation and that the XRF analyzer provided sufficient precision for these elements to conduct spot XRF analysis on the cores of interest. The r^2 values for K_2O , MgO , CaO and S are 82%, 96%, 71% and 97%, respectively.

Duplicate XRF measurements were collected on 22 randomly selected separates. The relative standard deviation showed significant variability for most elements including K_2O and MgO . Eccles et al. (2009) recommended that the potash values obtained by the XRF analysis be used with caution.

Eleven measurements were completed on reference material CCRMP Till-4, which has a certified potassium value of 3.25% K_2O or 2.69% K (Lynch, 1996). Measurements of the potassium content of Till-4 using the portable XRF analyzer were 2.828%, 2.348%, 3.148%, 2.359%, 2.277%, 2.333%, 2.41%, 2.37%, 2.26%, 2.369% and 2.367%; the average of these is 2.46% K and the standard deviation is 0.274. This error is on uncorrected data that could have a bias.

12.3 Drill Core Analyses

The SRC performs Quality Control Monitoring during the sample preparation and analysis process. A screen size analysis on 5% of samples was completed after crushing to minus 2 mm and after pulverization to minus 0.106 mm with the criteria of 95% passing. Loss of mass monitoring on 5% of samples was completed after crushing to minus 2 mm and after pulverization to minus 0.106 mm with the criteria of 95% passing. The Grinding mills are cleaned with Quintus quartz (QQ) at the start of every group and as required between samples (i.e. for sticky samples). Sample blanks (QQ) are performed in the rate of 5% per group. All data is tracked and available to client. The QQ sand blank, is run 1 per 20 samples or 1 per batch in case batches are less than 20. A pulp repeat is included with every set of 36 samples and 1 split sample repeat is included with every group. Additionally 1 reagent blank per group is included. The SRC analyzed a potash standard (either POT003 or POT004) every 20 sample analyses.

The main potash intersection for the well GZD100 MEDHAT was re-assayed at the SRC at the request of APEX and using larger aliquots for the dissolution and ICP analysis. The results compared well to the original lab results and no issues were indicated.

13.0 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing has been completed on the Project.

14.0 Mineral Resource Estimates

No Mineral Resource Estimates have been completed on this Project.

15.0 Adjacent Properties

The Properties lie along the Alberta-Saskatchewan border. The former producing Unity Potash Mine exists approximately 50 km east of the North (Lloydminster) Block. Historic drilling in and around the former Unity Potash Mine yielded wells such as Verbata No. 2 7-24-41-24W3 with 21.64% K₂O over 3.35 m thickness. Based upon gamma logs, other wells southwest of Unity near the Alberta border have yielded potash intersections, however, the area from the Alberta border east to about North Battleford is off limits for Potash exploration and development in Saskatchewan due to the high level of oil and gas activity in the region.

Pacific Potash Corporation holds a 100% interest in two MAIM permits covering portions of Townships 37 and 38, Ranges 1 and 2 west of the 4th meridian and totalling approximately 18,750 ha (46,330 acres). Pacific drilled two wells for potash during late 2011. In the south-central part of the property, drillhole PPC-37 intersected two zones of sylvite mineralization near the top of the Prairie Evaporite Formation (Patience Lake Member). A second hole, PPC-38, located 10 km north of PPC-37 intersected the Lower zone of the Patience Lake member. Results from the PPC-37 included 18.76% KCl and 11.85 % K₂O over 3 m in the Upper Zone of the Patience Member, and a 33.64% KCl and 21.25% K₂O over 0.4 m in the Lower Zone. From PPC-38, 34.11% KCl and 21.55% K₂O were reported over 0.3 m (Pacific Press Release, Feb. 15, 2012).

First Lithium Resources Ltd. holds a 100% interest in two MAIM permits totalling 4,160 ha (10,280 acres) that is called the Vermilion 15 Potash Project and encompasses the historic well VCO#15. The property is completely surrounded by Grizzly Permits belonging to its 100% owned North (Lloydminster) Block. A data compilation was completed for the property area, no further exploration is reported (Klarenbach and Gray, 2009). The 2009 AGS study indicated the presence of potash up to 18.6% K₂O (29.4% KCl) in drill core based on hand held XRF analyses (Eccles et al., 2009) even with missing core in the interval.

16.0 Other Relevant Data and Information

Potash is essential for modern agriculture because it improves water retention, crop yield, nutrient value, taste, colour, texture and disease resistance of food crops. There is no substitute for potash, therefore, approximately 95% of world potash is consumed for fertilizer. Smaller amounts are used for the manufacture of potassium-bearing chemicals, detergents, ceramics, and pharmaceuticals; as water conditioners; or as an alternative to de-icing salt (Stone, 2009).

Potash is a limited resource that is found in only a few places in the world. Four countries—Canada, Russia, Germany and Belarus—account for three-quarters of global output. Canada has the world's largest known potash resource: the Prairie Evaporite Deposit. The Prairie Evaporite Deposit lies underneath the southern plains of Saskatchewan and western Manitoba, and extends into northeastern Montana and North Dakota. In addition, potash deposits are found in Alberta, and Manitoba (Stone, 2009).

17.0 Interpretation and Conclusions

Potash is a potassium-rich salt mined from underground deposits and is essential for all plant, animal and human life. Approximately 95% of the world's potash is used in fertilizers. Potash is a critical component of fertilizer required for root system strengthening for which there is currently no economically viable alternative. Potash fertilizers increase global food production which is demanded from finite agricultural lands. Asia-Pacific is demanding increased food production to provide food for their ever increasing population and to satisfy their improving standard of living. Potash consumption and price growth has been steady over the last five years and is projected to continue.

Canada is the world's largest producer of potash with the potash ore bodies in Saskatchewan being the world's largest, richest and most economical to mine. A large portion of the world's potash supply is being produced by 11 mines in Saskatchewan that are all producing out of the Prairie Evaporite Formation. There have been no new mines built in Saskatchewan since the early 1980's although a number of expansions and new mines are currently being permitted and constructed. Saskatchewan's potash resources are estimated to be approximately 23 billion tonnes of KCl (Cocker et al., 2010) with potash ore grades between 16% and 27% K₂O (25% and 42% KCl).

Grizzly's Alberta Potash Property is comprised of two blocks, the Northern (Lloydminster) Block and the Southern (Medicine Hat) Block, which together comprise 2,454,458 acres (993,284 hectares) in 140 MAIM Permits along the Alberta – Saskatchewan border. The blocks exist within a region that is approximately 440 km in length by 30 to 90 km in width. The Northern Block can be further subdivided into the 100% owned Lloydminster Block (946,616 acres) and the 50% owned Provost Block (524,050 acres). The 100% owned Southern (Medicine Hat) Block totals 983,792 acres.

Between 2008 and 2012 APEX was retained by Grizzly to manage an exploration program for its Alberta Potash Project. Exploration during the period consisted of a compilation of all existing publically available data and assessment reports, a compilation and analysis of available historic drill core and down hole geophysical logs, the commission of a seismic geophysical study, drilling of two potash test holes and the subsequent preparation of a 43-101 compliant technical report, in order to evaluate the potential of the Alberta Potash Property to host an economic potash deposit.

The 2008 and 2009 compilation indicated that there was only limited historic data for previous potash exploration in Alberta. Much of the current information for the potash potential was obtained from historic oil and gas well drill hole data and archived drill core found at the government core storage facility at Alberta's ERCB. The compilation area included a total of 14,651 wells available in GeoSCOUT™. The compilation determined that a total of 167 wells penetrated the Prairie Evaporite, with a total of 53 of the 167 wells on or within the boundaries of Grizzly's Potash Property. A total of 110 of the 167 wells have available down hole geophysical logs including a gamma log, however, a number of those wells were not drilled deep enough, or their gamma logs did not completely test the Prairie Evaporite Formation or the gamma logs were of poor quality and unable to evaluate the Prairie Evaporite Formation for potash potential. As an example, out of the 53 wells that were drilled deep enough to intersect the Prairie Evaporite on Grizzly's Property, only 36 contain a gamma log or core that permits an evaluation of the Prairie Evaporite Formation for the presence of potash. A total of 15 wells within the compilation area with core from the Prairie Evaporite were available at the ERCB, with 5 of the wells on or within the confines of Grizzly's Potash Property.

Preliminary analysis determined that the Prairie Evaporite Formation, the host to the Saskatchewan potash deposits, underlies the vast majority of Grizzly's permits and at a number of locations appears to yield indications of potash with at least 16 wells yielding potash values of greater than 5% K₂O based upon XRF geochemical analyses or calculated values from gamma logs. A total of 10 of the 16 wells are on or within the confines of Grizzly's Property with another 4 wells in very close proximity to Grizzly's Property (<7 km from the boundary). A total of 8 wells yield greater than 10% K₂O based upon XRF geochemical analyses or calculated values from gamma logs, with 5 of the wells on or within the confines of Grizzly's North (Lloydminster) Block or the 50:50 Provost Property or in very close proximity to the North (Lloydminster) Block or 50:50 Provost Property. A total of 3 wells that yield greater than 10% K₂O based upon XRF geochemical analyses or calculated values from gamma logs exist on the South (Medicine Hat) Block. The best measured or calculated grade obtained from the North (Lloydminster) Block was 7.0% K₂O, however, VCO#15 yielded up to 18.6% K₂O and is less than 1.5 km from the property boundary. The best measured or calculated grade obtained from the 50:50 Provost Property is 20.7% K₂O with a potential thickness of about 1.9 m. The best measured or calculated grade obtained from the South (Medicine Hat) Block is 21.6% K₂O over 1.25 m.

Grizzly announced on February 21st, 2012 that it discovered Potash in a well on its 100% owned Southern (Medicine Hat) Block in Well GZD100 MEDHAT 8-36-19-01W4.

Coring commenced at 1,642 m below surface. Visible potash minerals were observed in the drill core for the interval between 1,648.5 m and 1,670.85 m below surface. The well cored a thick zone of Prairie Evaporite Formation salt intersecting a wide, low grade potash zone (22.35 m) at a depth of 1,648.5 m. Within the wide low grade potash zone, the drilling intersected two zones of sylvite mineralization (Upper zone and Lower zone) within the Patience Lake Member. Analytical results include a weighted average grade of 2.62% K₂O (4.15% KCl) over 22.35 m at a depth of 1,648.5 m for the low grade zone with higher grade portions including 6.4% K₂O (10.14% KCl) over 4.55 m, which includes 8.77% K₂O (13.88% KCl) over 2.65 m and which also includes 13.0% K₂O (20.58% KCl) over 1.15 m for the Upper Zone and 2.45% K₂O (3.88% KCl) over 3.3 m for the Lower Zone. The highest assay from the zone was 31.1% K₂O (49.2% KCl) for a 0.3 m core sample. Low grades of MgO indicate that sylvite is the major potash mineral, rather than carnallite. In 1980, a historic oil well, located 800 m west of the current well location, yielded a gamma log spike at a depth of approximately 1,662 m below surface for a calculated maximum potash grade of approximately 21.6% K₂O (34.2% KCl) over 1.25 m. The depth of these potash intersections is at a similar depth to the Belle Plaine Potash Solution Mine near Regina Saskatchewan and would likely be ideally suited to solution mining due to high formation temperatures. Further potash drilling is warranted on Grizzly's South (Medicine Hat) Block. Further potash drill hole tests should step out south from well GZD100 MEDHAT 8-36-19-01W4.

During September 2011, Grizzly signed a LOI with Pacific Potash Corp. to commence a multiple potash drill hole exploration program on the Grizzly - Pacific 50:50 owned Provost Permits. The first and only potash test well to date was completed in mid November, 2011. The well, PPC40 PROVOST 10-11-040-01W4, yielded a wide low grade potash zone with two narrow higher grade zones. The wide low grade zone was intersected at a depth of 1,258.5 m and yielded 1.84% K₂O (2.91% KCl) over 23.3 m with a higher grade upper zone of 6.58% K₂O (10.41% KCl) over 0.75 m. Visually, the zone yielded evidence of post-depositional remobilization or modification of the potash and with the high levels of MgO present in all likelihood indicating the presence of significant carnallite in the zone. The well was drilled only 50 km west from the historic Unity Potash Mine near Unity, Saskatchewan. Further drilling is warranted to the north of PPC40 PROVOST 10-11-040-01W4 towards the thick potash anomaly identified by the USGS, which is centered in Townships 45 to 46, Ranges 1 to 2 about 60 km to the north (Cocker et al., 2010). Further drilling is under consideration south of Pacific's 100% owned Provost Property on Grizzly's 50% Provost Permits. Higher grades of potash are indicated by Pacific's drill results on its 100% owned property to date and by historic drill intersections just into Saskatchewan where some higher grades have been encountered.

In March, 2009, a compilation of formation water chemistry data was completed for wells in the area of the Alberta Potash Project. A total of 2,426 wells were available with data and were accessed from the Geofluids module of the GeoSCOUT™ software package. A number of wells were identified with >1% up to 8.6% K in formation waters within carbonate hosted aquifers immediately above the Prairie Evaporite Formation. Hitchon et al. (1995) also identified high concentrations of K in Devonian aquifers in the region of Grizzly's permits. The use of deep formation water geochemistry for potash exploration

is a very promising technique, but one that needs more work before the data could be used to pick test holes for potash in the Prairie Evaporite Formation or as an indicator of carbonate hosted formation waters that could be produced for their K content.

18.0 Recommendations

Based upon the results of the compilation and the results of drilling to date, further potash exploration, including drilling, is strongly recommended for Grizzly's Alberta Potash Project. Further drilling is warranted on the 100% owned South (Medicine Hat) Block around well GZD100 MEDHAT 8-36-19-01W4, in order to identify further potash with higher grades and greater thickness that could lead to a maiden resource. Drilling is warranted on Grizzly's 100% owned North (Lloydminster) Block at three locations, just northeast of the historic well Vermillion Consolidated Oils #15 (VCO#15), just northwest of the historic well Renaissance Provost 7-15-40-2W4 and the town of Provost, and south of the town of Lloydminster somewhere in the vicinity of the USGS mapped potash anomaly, which is centered near the historic well PECTAL DINA 10-32-45-01W4. In addition, consideration should be given to drilling one or two wells on Grizzly's 50% owned Provost Permits south of Pacific's 100% owned block and west of a Saskatchewan well, which intersected potash close to the Alberta border (Pengrowth Cactus Lake 7-30-36-28W3).

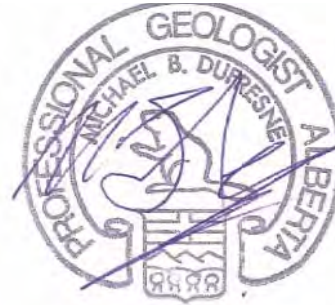
Strong consideration should be given to finding an appropriate technique to conduct water sampling of Devonian aquifers immediately above the Prairie Evaporite Formation in order to compare concentrations of K in the aquifers versus the potash content of the Prairie Evaporite obtained from the well intersections. The tool that was employed during the 2011 drilling was not successful in obtaining any reliable water samples. The goal would be to determine if the waters could be used as a future guide to targeting the Prairie Evaporite for potash and also whether K exists in high enough concentrations that it could be economically produced from the existing formation waters.

Consideration should be given to conducting some preliminary scoping level type engineering studies in order to ascertain what grade and thickness of an Alberta potash deposit will be required to support a possible future solution mine based upon the infrastructure that is in place, availability of water and Alberta's favourable tax regime, which should have an impact on the economics of any future development.

The authors propose a drilling focused program of up to \$5.0 million to conduct stage 1 of a two-stage exploration program on the Alberta Potash Project. Stage 1 should consist of drilling 4 to 5 wells in order to identify those areas that contain potentially economic potash grades over a mineable thickness potentially leading to a preliminary maiden resource estimate. The budget is comprised of drilling a total of approximately 7,000 m in 5 wells at an average all up per meter cost of \$650 per meter for a total cost of \$4.55 million along with \$250,000 for reclamation and \$200,000 for the collection and analysis of water samples and some baseline scoping studies, yielding a total cost for the Stage 1 program of \$5.0 million. If the Stage 1 results are positive, then further

drilling will be required as part of Stage 2 to progress the project to a resource stage along with the appropriate metallurgical work and engineering studies.

APEX Geoscience Ltd.



Michael B. Dufresne, M.Sc., P.Geol.

A handwritten signature in black ink, appearing to read "Kyle McMillan".

Kyle McMillan, M.Sc., P.Geol.

July 31st, 2012
Edmonton, Alberta, Canada

19.0 References

Bezys, R.K., Kreis, K., Martiniuk C., Barchyn, D., Christopher, J., Coolican, J., Conley, G.G., Costa, A., Haidl, F., Keller, G.R., Kent, D., Marsh, A., Matile, G.L.D., Nicolas, M.P.B., Thomas, P., Spooner, S., Yurkowski, M., Nimegeers, A., Nickel, E., Opseth, M. and Music, T. (2008a) Devonian Prairie Evaporite: isopach; Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, Stratigraphic Map SM2008-DPE-I, scale 1:1,000,000

Bezys, R.K., Kreis, K., Martiniuk C., Barchyn, D., Christopher, J., Coolican, J., Conley, G.G., Costa, A., Haidl, F., Keller, G.R., Kent, D., Marsh, A., Matile, G.L.D., Nicolas, M.P.B., Thomas, P., Spooner, S., Yurkowski, M., Nimegeers, A., Nickel, E., Opseth, M. and Music, T. (2008b) Devonian Prairie Evaporite: structure contour; Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, Stratigraphic Map

Brownless, E. A., (1966) Potash prospecting permit #5, Alberta Mineral Assessment Report 19660008. 3 pp. plus maps, figures, and cross-sections. SM2008-DPE-S scale 1:1,000,000

Cocker, M., Orris, G.J, Yang, C. and Dunlap, P. (2010) The United States Geological Survey's Assessment of "Undiscovered" Resources in the Prairie Evaporite Formation, Elk Point Basin, Canada and United States; Presentation a the Saskatchewan Geological Survey Open House 2010, December 5, 2010, 30p.

Cole, L. H., (1948) Potash discoveries in Western Canada; The Canadian Mining and Metallurgical (CIM) Bulletin, v, 41, March 1948. p, 149-158; or CIM Transactions, v, 51, p, 83-92

Dawson, F.M., Evans, C.G., Marsh, R. and Richardson, R. (1994) Uppermost Cretaceous and Tertiary Strata of the Western Canada Sedimentary Basin; in Geological Atlas of the Western Canada Sedimentary Basin, Canadian Society of Petroleum Geologists and Alberta Research Council, chapter 24, URL <http://www.ags.gov.ab.ca/publications/wcsb_atlas/a_ch24/ch_24.html#thick>, June 11/2012

Eccles, R., Al-Souqi, M., Grattan, K., and Dufresne, M.B., (2009) Preliminary Investigation of Potash Potential in Alberta, Alberta Geological Survey Open File Report 2009-20, 29p.

ERCB (Energy Resources Conservation Board), (2010) Stratigraphic Correlation Chart. 1p.

Fuzesy, A., (1982) "Potash in Saskatchewan," Saskatchewan Industry and Resources Report 181, 44 p.

Glass, D.J. (1990) Lexicon of Canadian Stratigraphy, Volume 4. Western Canada, including Eastern British Columbia, Alberta, Saskatchewan and Southern Manitoba; Canadian Society of Petroleum Geologists.

Golden, A., (1965) Potash occurrence in the Vermilion area of the province of Alberta, Alberta Mineral Assessment Report 19650002. 5 pp. plus appendices and figures

Golden, A., (1966) Potash occurrence in Alberta, Ernestina Lake area (prepared for Royal American Petroleum, Ltd.), Alberta Mineral Assessment Report 19660009. 4 pp

Grizzly Discoveries Inc., (2011) Grizzly Signs LOI For Provost Property And Proceeds With Permitting For Drilling, Company News Release, September 19, 2011 (Available at sedar.com and www.grizzlydiscoveries.com)

Grobe, M. (2000) Distribution and thickness of salt within the Devonian Elk Point Group, Western Canada Sedimentary Basin; Alberta Energy and Utilities Board, EUB/AGS Earth Sciences Report 2000-02, 35 p., URL http://www.ag.gov.ab.ca/publications/abstracts/ESR_2000_02.html, September 2009

Haidl, F.M (1989) Distribution of Lower Paleozoic strata in the vicinity of the Meadow Lake Escarpment, west-central Saskatchewan; in summary of investigations 1989, Saskatchewan Geological Survey; Saskatchewan Energy and Mines, Miscellaneous Report 89-4

Hamblin, P. (1997) Stratigraphic architecture of the Oldman Formation, Belly River Group, surface and subsurface of southern Alberta, Bulletin of Canadian Petroleum Geology, v. 45, p. 155-177

Hamilton, W.N., (1971), Salt in east-central Alberta, Research Council of Alberta Bulletin 29, 53 pp. plus maps

Hitchon, B., Bachu, S., Underschultz, J.R. and Yuan, L.P., (1995) Industrial Mineral Potential of Alberta Formation Water; Alberta Geological Survey, Bulletin 62, 64 p.

Holter, M. E., (1969) The Middle Devonian Prairie Evaporite of Saskatchewan; Saskatchewan Department of Mineral Resources, Report 123, 134p.

Kanasewich, E.R (1968) Precambrian rift: Genesis of strata-bound ore deposits; Science, v. 161, p. 1002-1005

Kanasewich, E.R., Clowes, R.M., and McCloughan, C.H (1969) A buried Precambrian rift in Western Canada; Tectonophysics, v. 8, p.513-527

Klarenbach J. and Gray, P.D., (2009) Technical Report on the Vermilion 15 Potash Property, for Mountain Capital Inc., April 10, 2009, 73p.

Leckie, D.A., Bhattacharya, J.P., Bloch, J., Gilboy, C.F., Norris, B. (1994) *in* Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL http://www.ag.gov.ab.ca/publications/wcsb_atlas/atlas.html

Lynch, J. (1996) Provisional elemental values for four new geochemical soil and till reference materials, TILL-1, TILL-2, TILL-3 and TILL-4; Geostandards Newsletter, v. 20, no. 2, p. 277–287

McMillan, K., and Dufresne, M.B. (2009) Alberta potash compilation on behalf of Grizzly Diamonds Ltd., A confidential internal report produced by APEX Geoscience Ltd. on behalf of Grizzly Diamonds Ltd., 23p.

Meijer Drees, N.C. (1986) Evaporite deposits of Western Canada; Geological Survey of Canada, Paper 81-18, 118 p.

Meijer Drees, N.C. (1994) Devonian Elk Point Group of the Western Canada Sedimentary Basin; *in* Geological atlas of the Western Canadian Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.). Canadian Society of Petroleum Geologists and Alberta Research Council, Special Report 4, p. 129–148

Mossop, G. and Shetsen, I. (eds.) (1994) Geological Atlas of the Western Canada Sedimentary Basin. Calgary, Canadian Society of Petroleum Geologists and Alberta Research Council, 510 p.

Nelson, P. H., (2007) Evaluation of potash grade with gamma-ray logs, United States Geological Survey Open File Report 2007-1292. 14 p.

Pacific Potash Corporation, (2012) Pacific Potash Discovers Potash in Alberta, Drills 10.01 feet of 18.79% KCl at Provost, Press Release February 15, 2012, <http://www.pacificpotash.com/939/pacific-potash-discovers-potash-in-alberta-drills-10-01-feet-of-18-79-kcl-at-provost/>

Pearce, T.H (1969) The analcite-bearing volcanic rocks of the Crowsnest Formation, Alberta; Canadian Journal of Earth Sciences, v. 7, p. 46-66

Raymahashay, B.C., Sinha, R., (2004) Evaporite mineralogy and geochemical evolution of the Sambhar Salt Lake, Rajasthan, India. Sedimentary Geology 166, p. 59-71

Richner, D.R., Shock, D.A., Ahlness, J.K., Tweeton, D.R., Larson, W.C., Millenacker, D.J., and Schmidt, R.D., (1992) Solution Mining: In situ Techniques, In: Hartman, H. L. (Ed.) SME Mining Engineering Handbook (2nd Ed.), Vol. 2: 1493-1528

RPS Boyd Petro Search (2011a) 2011 Albert Lake 2D Final Time Interpretation. Internal Report prepared for Grizzly Discoveries Inc., 16p.

RPS Boyd Petro Search (2011) 2011 Suffield 2D Initial Interpretation. Internal Report prepared for Grizzly Discoveries Inc., 25p.

Schwerdtner, W.M., (1964) Genesis of Potash in Middle Devonian Prairie Evaporite Formation of Saskatchewan. Bulletin of the American Association of Petroleum Geologist. Vol 48, No. 7 , p. 1108-1115

SRC, (2012) Geoanalytical laboratories Ppotash Exploration Package. http://www.src.sk.ca/html/labs_facilities/geo_labs/Potash/index.cfm, 2p.

Stone, K., (2012) Canadian Minerals Yearbook (CMY) – 2009, Potash. Natural Resources Canada, URL <http://www.nrcan.gc.ca/minerals-metals/business-market/canadian-minerals-yearbook/2009-review/4286>

Wardlaw, N.C., (1968) Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan”, Geol. Soc. Amer. Bull., V. 79, pp. 1273-1294

Worsley, N., and Fuzesy, A., (1979) The potash-bearing members of the Prairie Evaporite of southeastern Saskatchewan, south of the mining area, Economic Geology 74, p. 377-388

Wright, G.N, McMechan, M.E. and Potter, D.E.G. (1994) Uppermost Cretaceous and Tertiary Strata of the Western Canada Sedimentary Basin; in Geological Atlas of the Western Canada Sedimentary Basin, Canadian Society of Petroleum Geologists and Alberta Research Council, chapter 3, URL http://www.ags.gov.ab.ca/publications/wcsb_atlas/a_ch03/ch_03.html, June 2012

Yang, C., Jensen, G.K.S. and Berenyi, J. (2009a) Isopach map of the Patience Lake Member of the Prairie Evaporite Formation; Saskatchewan Energy and Resources, Open File 2009-24, 1:1 000 000 scale, URL <<http://www.er.gov.sk.ca/Default.aspx?DN=7cb2d3ee-30f0-4d4a-9e82-a5b142c302f6>> September 2009

Yang, C., Jensen, G.K.S. and Berenyi, J. (2009b) Isopach map of the Esterhazy Member of the Prairie Evaporite Formation; Saskatchewan Energy and Resources, Open File 2009-25, 1:1 000 000 scale, URL <<http://www.er.gov.sk.ca/Default.aspx?DN=7cb2d3ee-30f0-4d4a-9e82-a5b142c302f6>> September 2009

Yang, C., Jensen, G.K.S. and Berenyi, J. (2009c) Isopach map of the Belle Plaine Member of the Prairie Evaporite Formation; Saskatchewan Energy and Resources, Open File 2009-26, 1:1 000 000 scale, URL <<http://www.er.gov.sk.ca/Default.aspx?DN=7cb2d3ee-30f0-4d4a-9e82-a5b142c302f6>> September 2009

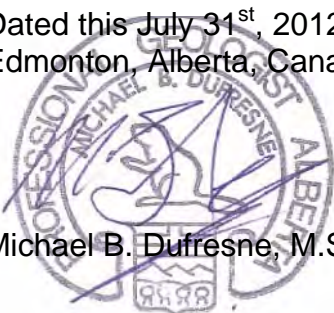
19.0 Certificate of Author

I, Michael B. Dufresne, M.Sc., P.Geol., do hereby certify that:

1. I am President of: APEX Geoscience Ltd.
Suite 200, 9797 – 45th Avenue
Edmonton, Alberta T6E 5V8
Phone: 780-439-5380
2. I graduated with a B.Sc. in Geology from the University of North Carolina at Wilmington in 1983 and with a M.Sc. in Economic Geology from the University of Alberta in 1987.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta since 1989.
4. I have worked as a geologist for more than 25 years since my graduation from university and I have conducted exploration in Alberta for a number of metallic and industrial mineral commodities including potash and salt bearing formation waters over the last 20 years.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101.
6. I am responsible for and have supervised the preparation of the Technical Report titled “*Technical Report on the Potash Potential of Grizzly Discoveries Inc.’s Alberta Potash Project*”, and dated July 31st, 2012 (the “Technical Report”). I visited the Property June 5th and October 23rd and 24th, 2008.
7. I am not aware of any scientific or technical information with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.
9. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this July 31st, 2012
Edmonton, Alberta, Canada

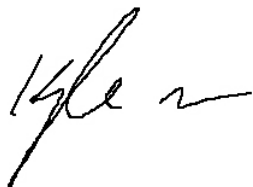
Michael B. Dufresne, M.Sc., P.Geol.



I, Kyle McMillan, M.Sc., P.Geol., do hereby certify that:

1. I am a geologist employed by: APEX Geoscience Ltd.
Suite 200, 9797 – 45th Avenue
Edmonton, Alberta T6E 5V8
Phone: 780-439-5380
2. I graduated from the University of Manitoba with a B.Sc. (Hons.) in Geology in 2003 and a M.Sc. in Geology in 2006.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta since 2012 and was previously registered as a member in training since 2009.
4. I have worked as a geologist for more than four years since my graduation from university and I have worked on the current potash exploration project as an employee of APEX Geoscience, Ltd. for approximately four years.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, that for the purposes of NI 43-101, I fulfill most requirements of a “Qualified Person” with the only exception being that of having less than five years of direct mineral exploration experience.
6. I assisted in the preparation of the Technical Report titled “*Technical Report on the Potash Potential of Grizzly Discoveries Inc.’s Alberta Potash Project*”, and dated July 31st, 2012 (the “Technical Report”).
7. I am not aware of any scientific or technical information with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.
9. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this July 31st, 2012
Edmonton, Alberta, Canada



Kyle McMillan, M.Sc., P.Geol.

**Appendix 1 –
Metallic and Industrial Mineral Permits Descriptions**

Permit No.	Permit Holder	Record Date	Legal Description	Area (hectares)	Claim Block
9308090583	APEX GEOSCIENCE LTD.	2008-09-09	PORTION(S) DESIGNATED AS LONELY LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LONELY LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LONELY LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON	3630.45	North
9308090584	APEX GEOSCIENCE LTD.	2008-09-09	PORTION(S) COMMENCING AT A POINT ON THE WESTERLY LIMIT OF THE SAID QUARTER PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA	3655.60	North
9308090585	APEX GEOSCIENCE LTD.	2008-09-09		3072.00	North
9308090586	APEX GEOSCIENCE LTD.	2008-09-09		256.00	North
9308090592	APEX GEOSCIENCE LTD.	2008-09-10	PORTION(S) LYING OUTSIDE AN AREA DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH WEST CORNER OF THE SAID QUARTER SECTION, THENCE NORTHERLY ALONG THE WESTERN BOUNDARY THEREOF A DISTANCE OF 301.752 METERS TO A POINT, THENCE EASTERLY AND PARALLEL WITH THE SOU	8826.00	North
9308090593	APEX GEOSCIENCE LTD.	2008-09-10		320.00	North
9308090594	APEX GEOSCIENCE LTD.	2008-09-10		3840.00	North
9308090595	APEX GEOSCIENCE LTD.	2008-09-10		1536.00	North
9308090596	APEX GEOSCIENCE LTD.	2008-09-10		320.00	North
9308090597	APEX GEOSCIENCE LTD.	2008-09-10		256.00	North
9308090598	APEX GEOSCIENCE LTD.	2008-09-10		7040.00	North
9308090599	APEX GEOSCIENCE LTD.	2008-09-10	PORTION(S) LYING OUTSIDE THE RIGHT OF WAY AND EXTRA LAND OF THE CANADIAN PACIFIC RAILWAY AS SHOWN ON RAILWAY PLAN 4999 C. L. EXCEPTING PORTION(S) LYING TO THE SOUTH AND WEST OF ROAD PLAN 4432 E. O.	9146.70	North
9308090600	APEX GEOSCIENCE LTD.	2008-09-10		9024.00	North
9308090601	APEX GEOSCIENCE LTD.	2008-09-10		384.00	North
9308110331	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSH	4573.86	North
9308110332	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSH	4913.50	North
9308110333	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) DESIGNATED AS LAKE NO. 1 ON	5639.34	North
9308110334	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE TREMBLE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE TREMBLE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1906/01/30. CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1906/01/	4497.56	North
9308110335	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS SOMERSET LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS SOMERSET LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS SOMERSET LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTA	4932.36	North
9308110336	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS SOMERSET LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSH	4842.28	North
9308110337	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP	4796.00	North
9308110338	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP	5272.24	North
9308110339	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP	4435.04	North
9308110340	APEX GEOSCIENCE LTD.	2008-11-06		256.00	North
9308110341	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1883	4407.14	North
9308110342	APEX GEOSCIENCE LTD.	2008-11-06		5056.00	North

Permit No.	Permit Holder	Record Date	Legal Description	Area (hectares)	Claim Block
9308110343	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN	5109.84	North
9308110344	APEX GEOSCIENCE LTD.	2008-11-06		4672.00	North
9308110345	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP	4879.56	North
9308110346	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 190	4367.64	North
9308110347	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTH WEST CORNER OF PORTION(S) DESIGNATED AS LAKE NO. 11 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 8 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 8 ON A TOWN	4815.24	North
9308110348	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE EMILIE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE EMILIE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE EMILIE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE EMILIE ON A T	5743.28	North
9308110349	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 AND LAKE NO. 6 ON A TOWNSHIP PLAN PORTION(S) DESIGNATED AS LAKE NO. 6 AND LAKE NO. 7 ON A TOWNSHIP PLAN PORTION(S) DESIGNATED AS LAKE NO. 7 ON A TOWNS	4420.36	North
9308110350	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN	2988.47	North
9308110351	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS SASKATCHEWAN RIVER ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS LAKE NO. 2 ON	5363.24	North
9308110352	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS BLACKHORSE LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS BLACKHORSE LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1906/07/13. CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 19	4699.56	North
9308110353	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS RAFT LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS RAFT LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS RAFT LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLA	4856.64	North
9308110354	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 9 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 9 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 9 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP	5159.16	North
9308110355	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 10 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE COTE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE COTE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE COTE ON A TOWNSHIP PL	4293.88	North
9308110356	APEX GEOSCIENCE LTD.	2008-11-06	PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 AND LAKE NO. 7 ON A TOWNSHIP PLAN PORTION(S) DESIGNATED AS LAKE NO. 6 ON A TOWNSHI	5109.72	North
9308110357	APEX GEOSCIENCE LTD.	2008-11-06		4352.00	North
9308110360	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP	7906.28	North
9308110361	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP	8597.72	North

Permit No.	Permit Holder	Record Date	Legal Description	Area (hectares)	Claim Block
9308110362	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 6 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP	9210.52	North
9308110363	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/05/02.	8268.50	North
9308110364	APEX GEOSCIENCE LTD.	2008-11-07		1536.00	North
9308110365	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/02/23.	6149.76	North
9308110366	APEX GEOSCIENCE LTD.	2008-11-07	PORTIONS(S) LYING OUTSIDE RIBSTONE CREEK HERITAGE RANGELAND NATURAL AREA. PORTION(S) DESIGNATED AS ALBA LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS BIRD LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS EVENING LAKE ON A TOW	9159.12	North
9308110367	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS MUSHROOM LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS MUSHROOM LAKE ON A TOW	9204.48	North
9308110368	APEX GEOSCIENCE LTD.	2008-11-07		256.00	North
9310110389	APEX GEOSCIENCE LTD.	2010-11-01		9216.00	North
9310110390	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) LYING OUTSIDE PARADISE VALLEY GRAIN ELEVATOR & STATION HISTORIC PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TO	9206.96	North
9310110391	APEX GEOSCIENCE LTD.	2010-11-01		9088.00	North
9310110392	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/09/16.	9192.88	North
9310110393	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP	9119.36	North
9310110394	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSH	9210.10	North
9310110395	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/03/31. CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/03/31.	9176.80	North
9310110396	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) DESIGNATED AS KENILWORTH LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS KENILWORTH LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS KENILWORTH LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS TWIN LAKE	8999.99	North
9310110397	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/02/12.	9183.80	North
9310110398	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) LYING OUTSIDE KITSICOTY PROVINCIAL RECREATION AREA. PORTION(S) DESIGNATED AS KENILWORTH LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/04/14.	9208.26	North
9310110399	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) LYING WITHIN THE RAILWAY RIGHT OF WAY AND STATION GROUNDS AS PORTION(S) LYING WITHIN THE RAILWAY RIGHT OF WAY AND STATION GROUNDS AS PORTION(S) LYING OUTSIDE VERMILION PROVINCIAL PARK. PORTION(S) LYING OUTSIDE VERMILION PROVINCIAL PARK. PORTIO	9183.03	North
9310110400	APEX GEOSCIENCE LTD.	2010-11-01		9216.00	North
9310110401	APEX GEOSCIENCE LTD.	2010-11-01	PORTION(S) LYING OUTSIDE THE ROADWAY AS SHOWN ON ROAD PLAN 970AU. PORTION(S) LYING OUTSIDE THE ROADWAY AS SHOWN ON ROAD PLAN 970AU.	9148.85	North
9310120521	APEX GEOSCIENCE LTD.	2010-12-14	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 AND LAKE NO. 2 ON A TOWNSHIP PLAN PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHI	8196.72	North
9310120522	APEX GEOSCIENCE LTD.	2010-12-14	PORTION(S) DESIGNATED AS ERNEST LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP	7272.20	North
9310120523	APEX GEOSCIENCE LTD.	2010-12-14		8256.00	North
9310120524	APEX GEOSCIENCE LTD.	2010-12-14		4160.00	North

Permit No.	Permit Holder	Record Date	Legal Description	Area (hectares)	Claim Block
9308110369	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSH	8003.00	South
9308110370	APEX GEOSCIENCE LTD.	2008-11-07		8768.00	South
9308110371	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) SHOWN AS DRY LAKE BED ON A PLAN OF SURVEY 0711567 BY C. J. PORTION(S) SHOWN AS DRY LAKE BED ON A PLAN OF SURVEY 0711567 BY C. J. PORTION(S) SHOWN AS DRY LAKE BED ON A PLAN OF SURVEY 0711567 BY C. J. ZAROWNY, A. L. S. ZAROWNY, A. L. S. ZAROWNY,	8375.02	South
9308110372	APEX GEOSCIENCE LTD.	2008-11-07	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1884	8593.30	South
9308110373	APEX GEOSCIENCE LTD.	2008-11-07		8704.00	South
9308110374	APEX GEOSCIENCE LTD.	2008-11-07		8704.00	South
9308110375	APEX GEOSCIENCE LTD.	2008-11-07		8768.00	South
9308110376	APEX GEOSCIENCE LTD.	2008-11-07		9216.00	South
9308110377	APEX GEOSCIENCE LTD.	2008-11-07		9216.00	South
9308110378	APEX GEOSCIENCE LTD.	2008-11-07		9216.00	South
9308110379	APEX GEOSCIENCE LTD.	2008-11-07		8000.00	South
9309010640	APEX GEOSCIENCE LTD.	2009-01-28		7744.00	South
9309010641	APEX GEOSCIENCE LTD.	2009-01-28		9024.00	South
9309010642	APEX GEOSCIENCE LTD.	2009-01-28	PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908. PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908. PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908.	9206.98	South
9309010643	APEX GEOSCIENCE LTD.	2009-01-28		9216.00	South
9309010644	APEX GEOSCIENCE LTD.	2009-01-28		8960.00	South
9309010645	APEX GEOSCIENCE LTD.	2009-01-28	PORTION(S) SHOWN AS A LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1884/07/29.	8731.30	South
9309010646	APEX GEOSCIENCE LTD.	2009-01-28		9216.00	South
9309010647	APEX GEOSCIENCE LTD.	2009-01-28		9216.00	South
9309010648	APEX GEOSCIENCE LTD.	2009-01-28		9216.00	South
9309010649	APEX GEOSCIENCE LTD.	2009-01-28		9216.00	South
9309010650	APEX GEOSCIENCE LTD.	2009-01-28		8896.00	South
9309010651	APEX GEOSCIENCE LTD.	2009-01-28		7744.00	South
9309010652	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010653	APEX GEOSCIENCE LTD.	2009-01-28		9088.00	South
9309010654	APEX GEOSCIENCE LTD.	2009-01-28	PORTION(S) DESIGNATED AS RED-DEER RIVER ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS RED-DEER RIVER ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS RED-DEER RIVER ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT O	8343.04	South
9309010655	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010656	APEX GEOSCIENCE LTD.	2009-01-28		7904.00	South
9309010657	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010658	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010659	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010660	APEX GEOSCIENCE LTD.	2009-01-28		8704.00	South
9309010661	APEX GEOSCIENCE LTD.	2009-01-28		8704.00	South
9309010662	APEX GEOSCIENCE LTD.	2009-01-28		8704.00	South
9309010663	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010664	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010665	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010666	APEX GEOSCIENCE LTD.	2009-01-28		8768.00	South
9309010667	APEX GEOSCIENCE LTD.	2009-01-28	PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908. PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908. PORTION(S) LYING OUTSIDE THE RAILWAY RIGHT OF WAY AS SHOWN ON PLAN RY22908. PORTION(S) LYING OUTSIDE T	9177.92	South
9309010668	APEX GEOSCIENCE LTD.	2009-01-28		9024.00	South
9309050296	APEX GEOSCIENCE LTD.	2009-05-06		1088.00	South
9310040520	APEX GEOSCIENCE LTD.	2010-04-07		9216.00	South
9310040521	APEX GEOSCIENCE LTD.	2010-04-07		960.00	South
9310080623	APEX GEOSCIENCE LTD.	2010-08-18		9216.00	South
9310080624	APEX GEOSCIENCE LTD.	2010-08-18		9024.00	South
9310080625	APEX GEOSCIENCE LTD.	2010-08-18		9216.00	South
9311060855	APEX GEOSCIENCE LTD.	2011-06-01		2560.00	South
9311080617	APEX GEOSCIENCE LTD.	2011-08-18		4672.00	South
9312020265	APEX GEOSCIENCE LTD.	2012-02-07		1664.00	South
9311040519	APEX GEOSCIENCE LTD.	2011-04-08		9216.00	50:50 Provost
9311040520	APEX GEOSCIENCE LTD.	2011-04-08		9216.00	50:50 Provost
9311040521	APEX GEOSCIENCE LTD.	2011-04-08		9152.00	50:50 Provost
9311040522	APEX GEOSCIENCE LTD.	2011-04-08		9216.00	50:50 Provost
9311040523	APEX GEOSCIENCE LTD.	2011-04-08		9200.00	50:50 Provost
9311040524	APEX GEOSCIENCE LTD.	2011-04-08		9152.00	50:50 Provost
9311040525	APEX GEOSCIENCE LTD.	2011-04-08		9088.00	50:50 Provost

Permit No.	Permit Holder	Record Date	Legal Description	Area (hectares)	Claim Block
9311040526	APEX GEOSCIENCE LTD.	2011-04-08		9216.00	50:50 Provost
9311040527	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 2 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP	9068.72	50:50 Provost
9311040528	APEX GEOSCIENCE LTD.	2011-04-08		9024.00	50:50 Provost
9311040529	APEX GEOSCIENCE LTD.	2011-04-08		9024.00	50:50 Provost
9311040530	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE SAINT LAWRENCE ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS LAKE SAINT LAWRENCE ON A TOWNSHIP PLAN APPROVED PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP	8595.18	50:50 Provost
9311040531	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP	7375.48	50:50 Provost
9311040532	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS GILLESPIE LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS GILLESPIE LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS GILLESPIE LAKE ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT O	8942.12	50:50 Provost
9311040533	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 5 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 4 ON A TOWNSHIP	8502.24	50:50 Provost
9311040534	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) LYING OUTSIDE KILLARNEY-REFLEX LAKES NATURAL AREA. PORTION(S) DESIGNATED AS LAKE NO. 7 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/12/12.	8693.84	50:50 Provost
9311040535	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 9 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 8 ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE A ON A TOWNSHIP PLAN APPROVED AND CONFIRMED PORTION(S) DESIGNATED AS CIPHER LAKE ON A TO	8914.01	50:50 Provost
9311040536	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS LAKE NO. 1 ON A TOWNSHIP PLAN APPROVED AND CONFIRMED BY THE SURVEYOR GENERAL AT OTTAWA ON 1904/12/02.	8967.36	50:50 Provost
9311040537	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) DESIGNATED AS JAMES LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS JAMES LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS JAMES LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGNATED AS LAKE NO. 3 ON A TOWNSHIP	8796.76	50:50 Provost
9311040538	APEX GEOSCIENCE LTD.	2011-04-08		8800.00	50:50 Provost
9311040539	APEX GEOSCIENCE LTD.	2011-04-08	PORTION(S) LYING OUTSIDE OXVILLE PROPOSED NATURAL AREA. PORTION(S) LYING OUTSIDE OXVILLE PROPOSED NATURAL AREA. PORTION(S) LYING OUTSIDE OXVILLE PROPOSED NATURAL AREA. PORTION(S) DESIGNATED AS PORTER LAKE ON A TOWNSHIP PLAN APPROVED AND PORTION(S) DESIGN	7739.80	50:50 Provost
9311080614	Dahrouge Geological Consulting Ltd	2011-04-08	1-7,8-25,26NE,27-36	8768.00	50:50 Provost
9311080615	Dahrouge Geological Consulting Ltd	2011-04-08	1-7,8-25P,26NE,27-36	8640.00	50:50 Provost
9311080616	Dahrouge Geological Consulting Ltd	2011-04-08	1-7,8-25,26NE,27-36	8768.00	50:50 Provost

**Appendix 2 –
Compilation Well Data Summary**

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
100/13-03-001-08W4/00	13	3	1	8	1	49.01	-111.01	1064.5	1064.0	1060.6	0.0
100/10-07-001-08W4/00	10	7	1	8	1	49.02	-111.06	1082.6	1082.9	1079.0	0.0
100/16-29-001-11W4/00	16	29	1	11	1	49.07	-111.43	983.0	983.0	979.0	0.0
100/12-32-001-04W4/00	12	32	1	4	1	49.08	-110.51	914.4	914.4	910.4	0.0
	13	25	3	2	1	49.24	-110.16	949.0	949.0	944.2	2021.0
	10	28	7	11	1	49.59	-111.43	857.7	857.6	853.4	1724.3
	10	29	8	10	1	49.68	-111.32	848.6	848.9	844.9	2083.6
100/08-23-010-09W4/00	8	23	10	9	1	49.83	-111.11	829.1	829.5	825.1	0.0
	10	3	12	4	1	49.97	-110.47	766.6	767.1	762.6	1765.0
	15	7	13	4	1	50.08	-110.53	714.1	714.1	709.7	1701.2
100/10-21-013-11W4/00	10	21	13	11	1	50.10	-111.45	751.0	757.1	747.1	0.0
100/03-27-013-09W4/00	3	27	13	9	1	50.11	-111.16	771.1	771.4	767.8	0.0
	16	30	13	7	1	50.12	-110.94	783.3	783.3	779.4	1749.6
	12	19	14	4	1	50.19	-110.55	740.3	743.1	735.7	2215.8
100/02-04-015-11W4/00	2	4	15	11	1	50.22	-111.46	749.0	749.0	744.6	0.0
	11	5	15	6	1	50.23	-110.80	762.0	761.7	757.7	1750.0
100/10-06-015-08W4/00	10	6	15	8	1	50.23	-111.09	737.7	738.0	733.7	0.0
	6	11	15	6	2	50.24	-110.73	712.9	712.9	709.3	1703.8
	12	12	15	7	1	50.25	-110.85	717.3	717.1	713.0	2152.0
	12	7	15	7	1	50.25	-110.96	718.6	718.0	714.0	1675.0
100/11-13-015-09W4/00	11	13	15	9	1	50.26	-111.12	756.5	757.0	751.4	0.0
	14	17	15	6	1	50.26	-110.80	715.1	715.7	712.0	1698.7
	15	14	15	6	1	50.26	-110.72	702.3	703.2	699.2	1690.4
	2	22	15	1	1	50.27	-110.06	817.2	817.3	813.8	1743.2
100/12-21-015-08W4/00	12	21	15	8	1	50.27	-111.06	747.5	747.0	742.4	0.0

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
	6	26	15	7	2	50.29	-110.87	707.2	706.8	702.9	1679.4
100/09-27-015-08W4/00	9	27	15	8	1	50.29	-111.02	755.2	755.0	751.2	0.0
100/12-29-015-08W4/00	12	29	15	8	1	50.29	-111.08	755.6	757.0	751.6	0.0
	3	32	15	5	1	50.30	-110.66	723.3	723.3	719.0	1720.0
	14	12	16	6	1	50.34	-110.71	695.9	696.0	691.6	1761.7
	11	20	16	4	1	50.36	-110.52	753.5	753.0	749.8	0.0
	11	20	16	7	1	50.36	-110.93	774.9	775.0	769.8	2208.0
100/11-22-016-08W4/00	11	22	16	8	1	50.36	-111.02	767.5	769.0	765.0	0.0
	6	30	16	6	1	50.37	-110.82	758.6	0.0	755.6	1761.7
	6	28	16	5	1	50.37	-110.64	747.7	749.2	744.6	1772.4
100/07-31-016-08W4/00	7	31	16	8	1	50.39	-111.09	807.5	808.0	802.4	0.0
100/10-36-016-08W4/00	10	36	16	8	1	50.39	-110.97	778.5	778.0	773.9	0.0
100/05-01-017-14W4/00	5	1	17	14	1	50.40	111.81	751.6	751.6	747.7	2219.2
100/10-01-017-08W4/00	10	1	17	8	1	50.41	-110.98	754.2	754.2	750.5	0.0
102/14-18-017-11W4/00	14	18	17	11	2	50.44	-111.51	750.9	0.0	746.4	0.0
	8	23	17	4	1	50.45	-110.44	754.7	754.7	750.7	1785.0
	7	22	17	5	1	50.45	-110.61	631.9	632.2	628.0	1645.0
102/03-30-017-11W4/00	3	30	17	11	2	50.46	-111.51	754.2	754.2	749.8	0.0
	7	29	17	6	1	50.46	-110.79	766.8	767.7	762.9	1754.0
	5	32	17	2	1	50.48	-110.25	802.5	802.4	797.9	1717.0
100/13-11-018-11W4/00	13	11	18	11	1	50.51	-111.42	765.4	765.4	761.0	0.0
100/11-14-018-08W4/00	11	14	18	8	1	50.52	-111.00	789.0	789.3	785.1	0.0
100/11-18-018-08W4/00	11	18	18	8	1	50.52	-111.10	797.8	797.1	793.9	0.0
	9	21	18	5	1	50.54	-110.63	660.3	660.6	656.4	1650.0
	6	28	18	5	1	50.55	-110.64	701.1	702.0	697.1	1700.0
102/06-30-018-08W4/00	6	30	18	8	2	50.55	-111.10	799.8	800.4	795.5	0.0
	6	36	18	5	1	50.56	-110.57	658.1	658.7	654.1	1664.2
	8	1	19	4	1	50.58	-110.42	698.0	698.0	693.4	1720.0
	6	1	19	7	1	50.58	-110.85	791.9	792.5	787.6	1786.1
100/10-04-019-11W4/00	10	4	19	11	1	50.58	-111.47	773.0	773.0	769.0	0.0
	7	11	19	5	1	50.59	-110.59	661.1	661.4	656.8	2132.1
102/06-07-019-08W4/00	6	7	19	8	2	50.59	-111.10	802.8	803.8	798.6	0.0

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
	7	18	19	3	1	50.61	-110.41	698.1	698.5	693.7	1734.0
	8	22	19	5	1	50.62	-110.61	748.9	750.1	744.9	1762.0
100/06-30-019-09W4/00	6	30	19	9	1	50.64	-111.24	814.4	814.4	810.5	0.0
	6	25	19	4	1	50.64	-110.43	665.7	666.2	661.7	1691.6
	6	30	19	7	1	50.64	-110.97	807.1	807.7	802.8	2269.2
100/06-36-019-01W4/00	6	36	19	1	1	50.65	-110.02	646.6	647.0	740.8	2231.0
	14	32	19	4	1	50.66	-110.53	708.1	708.7	704.1	1734.0
	5	2	20	3	1	50.66	-110.33	729.9	730.0	725.9	2195.0
	5	11	20	6	1	50.68	-110.74	793.1	793.1	788.5	2231.1
100/08-08-020-09W4/00	8	8	20	9	1	50.68	-111.21	776.2	776.8	772.2	0.0
	8	17	20	4	1	50.69	-110.51	740.4	740.7	736.1	2204.6
100/01-24-020-11W4/00	1	24	20	11	1	50.71	-111.39	755.7	755.5	751.3	0.0
100/14-36-020-01W4/00	14	36	20	1	1	50.74	-110.02	727.5	727.5	723.2	1704.0
100/07-26-021-11W4/00	7	26	21	11	1	50.81	-111.42	730.0	731.2	726.3	0.0
	7	12	22	1	1	50.85	-110.01	666.9	666.8	662.6	1764.2
	11	25	24	2	1	51.08	-110.16	740.9	741.3	737.6	1675.0
	10	18	26	2	1	51.22	-110.27	762.6	762.3	758.6	1708.4
100/03-15-027-08W4/00	3	15	27	8	1	51.30	-111.05	795.2	795.8	791.6	0.0
100/10-16-027-08W4/00	10	16	27	8	1	51.31	-111.07	792.7	791.4	788.4	0.0
100/04-01-028-11W4/00	4	1	28	11	1	51.36	-111.43	803.5	803.3	799.2	0.0
	7	2	28	4	1	51.36	-110.46	765.7	765.6	761.9	2240.0
1W0/13-12-029-11W4/00	13	12	29	11	0	51.47	-111.43	758.0	758.6	754.7	0.0

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
100/16-03-030-09W4/00	16	3	30	9	1	51.55	-111.18	770.5	770.5	766.9	0.0
	6	9	31	1	1	51.64	-110.09	734.3	734.3	730.0	2191.2
	7	2	36	8	1	52.06	-111.04	786.7	786.7	783.0	1693.2
	11	8	36	2	2	52.08	-110.26	723.1	722.9	718.4	1595.0
	16	22	36	9	1	52.11	-111.20	795.2	795.2	791.9	1787.7
	11	20	37	1	1	52.20	-110.11	693.4	694.0	691.0	1555.1
	1	33	37	3	1	52.22	-110.36	737.6	737.6	734.6	2126.6
	4	18	38	1	1	52.26	-110.14	696.2	696.2	691.9	1585.0
100/11-35-038-10W4/00	11	35	38	10	1	52.31	-111.33	766.3	766.3	762.3	0.0
	13	28	39	3	1	52.39	-110.38	668.1	668.1	664.5	1281.1
	7	15	40	2	1	52.44	-110.21	677.3	677.3	673.0	1517.0
	8	14	40	3	1	52.44	-110.32	701.7	702.7	698.1	1500.0
	10	13	40	5	1	52.44	-110.59	684.6	684.6	680.6	1301.9
	10	33	40	7	1	52.49	-110.95	698.9	698.9	694.9	1485.6
100/09-33-040-07W4/00	9	33	40	7	1	52.49	-110.94	694.3	694.6	690.7	1468.5
	15	33	40	7	2	52.49	-110.95	699.3	699.2	694.4	1495.0
100/16-33-040-07W4/00	16	33	40	7	1	52.49	-110.95	694.0	694.0	690.1	1488.0
100/10-15-042-11W4/00	10	15	42	11	1	52.62	-111.50	691.6	691.3	687.9	0.0
	6	28	42	2	1	52.64	-110.24	661.2	661.0	656.6	1944.0
100/10-30-042-09W4/00	10	30	42	9	4	52.65	-111.28	644.0	644.0	639.1	0.0
	9	30	42	9	3	52.65	-111.28	653.1	652.9	648.6	0.0
	14	30	42	9	1	52.65	-111.29	639.8	639.6	635.5	1467.6
	15	30	42	9	3	52.65	-111.29	647.9	647.6	643.9	0.0
	8	31	43	2	1	52.75	-110.27	626.7	626.7	623.6	1159.8
100/15-34-043-10W4/00	15	34	43	10	1	52.75	-111.36	672.5	672.6	667.9	0.0
	7	1	45	3	1	52.85	-110.30	662.0	662.0	658.4	1330.5
	7	7	45	3	1	52.86	-110.42	748.3	748.4	744.0	1257.3
	6	27	45	3	1	52.91	-110.36	648.3	648.3	644.3	1316.7
	10	30	45	3	1	52.91	-110.42	656.2	656.2	651.4	1125.3

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
	10	32	45	1	1	52.92	-110.11	630.9	631.0	628.2	1336.5
	6	18	46	6	2	52.96	-110.87	675.7	676.0	671.8	1389.9
	6	14	46	9	1	52.97	-111.20	704.7	704.7	701.3	2058.0
	8	30	46	2	1	52.99	-110.27	638.3	638.3	636.1	1058.3
	8	33	46	4	1	53.01	-110.52	655.6	655.6	652.0	1694.7
	7	1	47	5	1	53.02	-110.60	591.6	591.6	587.7	1246.6
	3	10	47	4	1	53.03	-110.51	657.5	657.5	653.8	1362.5
102/11-23-047-10W4/00	11	23	47	10	2	53.07	-111.36	710.5	710.2	706.5	0.0
	6	5	48	6	1	53.11	-110.85	703.5	703.5	699.5	1405.1
	14	12	48	2	1	53.13	-110.17	669.6	669.6	666.3	1034.2
100/07-23-048-11W4/00	7	23	48	11	1	53.15	-111.50	710.2	710.2	706.5	0.0
	16	27	48	6	1	53.17	-110.79	655.6	655.6	652.6	1110.4
100/10-03-049-06W4/00	10	3	49	6	1	53.20	-110.79	655.0	655.0	651.7	1822.1
	7	7	49	3	1	53.21	-110.43	696.2	696.2	692.5	1292.4
100/06-12-049-06W4/00	6	12	49	6	1	53.21	-110.75	604.4	604.4	602.9	1228.6
	10	15	49	1	1	53.23	-110.06	667.5	667.6	664.5	1782.2
100/11-22-049-11W4/00	11	22	49	11	1	53.24	-111.53	671.5	671.5	671.5	0.0
	7	33	49	5	1	53.27	-110.67	659.3	659.3	655.3	1288.7
100/10-09-050-11W4/00	10	9	50	11	1	53.30	-111.55	664.8	664.8	661.1	0.0
1A0/12-15-050-02W4/00	12	15	50	2	1	53.32	-110.22	697.1	697.2	695.6	1041.2
100/01-24-050-11W4/00	1	24	50	11	1	53.32	-111.47	653.8	652.9	651.1	0.0

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
	11	19	50	6	1	53.33	-110.88	624.2	624.4	621.2	1827.6
	7	1	51	4	1	53.37	-110.46	663.9	663.9	659.9	1243.6
	11	2	51	8	1	53.38	-111.08	624.8	625.0	621.2	1089.1
	10	3	51	7	1	53.38	-110.95	621.5	621.5	617.5	1402.1
	12	13	51	8	1	53.40	-111.06	652.3	652.3	650.4	1103.4
	10	15	51	6	1	53.40	-110.80	629.1	629.0	625.1	1809.0
	7	31	51	5	1	53.44	-110.73	625.4	625.8	622.1	1356.4
	13	36	51	7	1	53.45	-110.91	629.1	629.1	625.1	1041.2
100/14-29-052-02W4/00	14	29	52	2	1	53.52	-110.27	636.7	636.4	633.1	1677.0
100/08-09-053-03W4/00	8	9	53	3	1	53.56	-110.38	591.2	591.7	587.7	1400.0
	8	12	53	4	1	53.56	-110.45	600.5	600.5	596.5	1475.5
	6	12	53	4	1	53.56	-110.47	599.9	600.2	596.2	1105.0
100/14-11-053-10W4/00	14	11	53	10	1	53.57	-111.37	627.6	627.6	624.5	0.0
	10	15	53	1	1	53.58	-110.06	566.9	567.0	563.3	1095.8
	2	19	53	1	1	53.59	-110.14	610.8	610.3	607.3	1140.0
	6	24	53	5	1	53.59	-110.61	627.3	627.3	625.1	946.4
	10	17	54	5	1	53.67	-110.70	640.4	640.4	636.7	1407.3
	6	19	54	4	1	53.68	-110.59	613.3	613.3	609.6	1362.5
	11	21	54	1	1	53.68	-110.10	600.2	600.2	596.6	1211.6
	4	11	55	2	1	53.73	-110.20	579.4	579.4	576.4	1371.6
	7	11	55	9	1	53.73	-111.23	655.6	655.6	651.7	1066.8
	6	29	55	3	1	53.78	-110.42	592.0	592.0	588.1	835.0
	14	28	55	6	1	53.79	-110.84	673.0	673.1	668.0	1398.0
	11	35	55	4	1	53.80	-110.49	627.6	627.1	624.0	824.0
103/16-23-056-05W4/00	16	23	56	5	3	53.86	-110.63	574.3	575.5	570.9	0.0
100/01-26-056-05W4/00	1	26	56	5	1	53.86	-110.63	577.1	577.5	573.3	0.0
100/07-26-056-05W4/00	7	26	56	5	1	53.87	-110.63	560.8	560.8	558.4	0.0
100/05-26-056-05W4/00	5	26	56	5	1	53.87	-110.64	526.7	526.5	523.3	0.0
100/04-26-056-05W4/00	4	26	56	5	1	53.87	-110.64	531.9	531.9	526.4	0.0
104/07-27-056-05W4/00	7	27	56	5	4	53.87	-110.65	533.0	533.3	529.2	0.0
102/12-26-056-05W4/00	12	26	56	5	2	53.87	-110.64	534.6	534.3	529.1	0.0

Unique Well ID	LSD	SECTION	TOWNSHIP	RANGE W of 4th MERIDIAN	well number	Latitude NAD27	Longitude N27	government KB elevation	logs KB elevation	government GL	Total Depth (m)
100/12-26-056-02W4/00	12	26	56	2	1	53.87	-110.20	661.7	661.7	656.7	0.0
100/16-28-056-08W4/00	16	28	56	8	1	53.87	-111.12	630.0	630.0	626.4	0.0
100/01-13-057-05W4/00	1	13	57	5	1	53.92	-110.60	664.8	665.0	660.5	0.0
102/02-13-057-05W4/00	2	13	57	5	2	53.92	-110.61	665.7	665.7	660.9	0.0
100/03-14-057-06W4/00	3	14	57	6	1	53.92	-110.79	566.3	566.3	563.9	0.0
100/07-14-057-06W4/00	7	14	57	6	1	53.92	-110.78	604.7	604.1	601.1	0.0
100/02-21-057-05W4/00	2	21	57	5	1	53.94	-110.68	632.8	632.8	630.3	0.0

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
100/13-03-001-08W4/00		No			no
100/10-07-001-08W4/00		No			no
100/16-29-001-11W4/00		No			no
100/12-32-001-04W4/00		No			no
	logs do cross the right depths, but I see no sign of the normal signatures (esp. gamma) in these logs	No			yes
	logs do cross the right depths, but I see no sign of the normal signatures (esp. gamma) in these logs	No			yes
	logs do cross the right depths, but I see no sign of the normal signatures (esp. gamma) in these logs	No			yes
100/08-23-010-09W4/00		No	yes	cored, but gamma indicates no potash (we can examine cores to be sure)	yes
		Yes			yes
		Yes			yes
100/10-21-013-11W4/00		No			yes
100/03-27-013-09W4/00		No			no
	very thin (3 m) salt interval; if there is potash, it's within a very very thin interval	No			yes
		Yes			yes
100/02-04-015-11W4/00		No			yes
		No			yes
100/10-06-015-08W4/00		No			yes
		No			yes
	based on the sonic log, the whole PE Fm seems to be super dirty (shaley)	No			yes
		No			yes
100/11-13-015-09W4/00		No			no
		No			yes
	has a gamma log, but it's very straightà a little too straight if you ask me.	No			No
		Yes			No
100/12-21-015-08W4/00		No			no

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
	based on the sonic log, the whole PE Fm seems to be super dirty (shaley)	No			yes
100/09-27-015-08W4/00		No			yes
100/12-29-015-08W4/00		No			no
		No			yes
		No			yes
		No			yes
	PE Fm seems shaley	No			yes
100/11-22-016-08W4/00		No			no
		No			yes
		No			No
100/07-31-016-08W4/00		No			yes
100/10-36-016-08W4/00		No			yes
100/05-01-017-14W4/00		No	yes	cores have been examined	yes
100/10-01-017-08W4/00		No			yes
102/14-18-017-11W4/00		No			yes
		No			yes
		No			yes
102/03-30-017-11W4/00		No			no
		No			yes
		Yes			No
100/13-11-018-11W4/00		No			no
100/11-14-018-08W4/00		No			no
100/11-18-018-08W4/00		No			yes
	SP is really acting up	No			yes
		No			yes
102/06-30-018-08W4/00		No			no
		No			yes
		No			yes
		No			yes
100/10-04-019-11W4/00		No			no
	gamma logs on different master logs are off by about 2 m (I went with the one on the sonic)	No			yes
102/06-07-019-08W4/00		No			no

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
	other small blips in the PE Fm logs are likely shale beds	No			yes
		No			yes
100/06-30-019-09W4/00		No			yes
		No			yes
		No			yes
100/06-36-019-01W4/00	see core notes	Yes	Yes	core is almost certainly BELOW the PE Fm (though geoSCOUT has it listed as being at the base of PE Fm / top of Winnipgosis), and is definitely well below the potash interval	yes
		No			yes
		No			yes
		No			yes
100/08-08-020-09W4/00		No			no
	geoscout pics are way off	No			yes
100/01-24-020-11W4/00		No			no
100/14-36-020-01W4/00	first peak has a broad base; well was converted to H2O disposal in 1997, but the new logs look different	Yes	no		yes
100/07-26-021-11W4/00		No			yes
	note: caliper doesn't change much: so either oil based mud, or not evaporites; peaks are abnormally broad	Yes			yes
	gamma spikes correspond to small sonic lows, which are probably due to carnalite	Yes			yes
	gamma header not totally clear; I think the API scale goes from 0 to 150, though the other standard scales (100 and 120) would mean the grades are even higher)	Yes			yes
100/03-15-027-08W4/00		No			yes
100/10-16-027-08W4/00		No			no
100/04-01-028-11W4/00		No			yes
		No			yes
1W0/13-12-029-11W4/00		No			yes

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
100/16-03-030-09W4/00		No			yes
		No			yes
		No			yes
		YES-Provost			yes
		No			No
		No			yes
		YES-Provost			No
	Elk Point and Watt Mntn picked at different depths (!?); well was deepened in 2004	No			yes
100/11-35-038-10W4/00		No	yes	cored, but gamma indicates no potash (we can examine cores to be sure)	yes
		YES-Provost			No
		YES-Provost			yes
		YES-Provost			No
		No			No
	this well was later converted into gas-storage and effluent disposal	No	yes	cores have been examined	yes
100/09-33-040-07W4/00		No			yes
		No			yes
100/16-33-040-07W4/00		No			yes
100/10-15-042-11W4/00		No			yes
		YES-Provost			No
100/10-30-042-09W4/00		No	yes	cores have been examined	No
		No			No
		No			yes
		No			No
		YES-Provost			No
100/15-34-043-10W4/00		No	no		yes
	all gamma peaks are small except 1147.9-1149.1 m. Small peaks don't look like shale, but certainly not great potash beds either	YES-Provost			yes
	logs and well tickets disagree on picks (ticket picks are shown here)	Yes			No
		Yes			yes
		Yes			No

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
		YES-Provost	yes	cores have been examined	yes
		No			No
	well goes to basement; GeoScout picks seem fine, but logs are very low quality	No			No
		Yes			No
	gamma log is fairly active, but doesn't seem to show any significant potash beds	Yes			yes
		Yes			yes
		Yes			yes
102/11-23-047-10W4/00		No			No
	well may actually end in the Winnipegosis Fm; gamma peaks seem to be shale beds, based on other logs	Yes			yes
	I don't think the GeoScout pics are correct; I think the well ends before the PE Fm.	Yes			No
100/07-23-048-11W4/00		No			yes
	logs very unclear, wouldn't trust the GeoScout pick for the PE Fm top; no headers on logs	Yes			No
100/10-03-049-06W4/00	gamma log indicates vast potash deposit with some halite beds	Yes	no		yes
		Yes			yes
100/06-12-049-06W4/00	VCO # 15 well; cores in sad shape; put this well under well code #1, though it could easily be called #5; logs poor, only has resistivity and SP and they end above the E.P Group	Yes	Yes	cores have been examined (has a re-entry well)	No
	used GeoScout pick for Watt Mountain thickness	Yes			yes
100/11-22-049-11W4/00		No			No
	gamma peak doesn't exactly look like shale, but certainly not a great potash bed either	Yes			yes
100/10-09-050-11W4/00		No			No
1A0/12-15-050-02W4/00	cores are highly degraded; only SP and resistivity logs present (both extremely poor quality and do not extend to E.P. Group)	Yes	Yes	cores have been examined	No
100/01-24-050-11W4/00		No			yes

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
		Yes			yes
		Yes			yes
	well was deepened in 1961	Yes			No
		Yes			yes
	logs I have don't extend to PE Fm.	Yes			No
	logs and well tickets disagree on Elk Point pick (ticket picks are shown here)	Yes			yes
	gamma peak doesn't look like shale, but certainly not a great potash bed either	Yes			yes
		Yes			No
100/14-29-052-02W4/00		Yes	Yes	cores have been examined	No
100/08-09-053-03W4/00	core is almost certainly well below the potash interval	Yes	Yes	core is almost certainly below the potash interval	yes
		Yes			No
		Yes			yes
100/14-11-053-10W4/00		No			no
		Yes			yes
		Yes			yes
	licence date is 1952	Yes			No
		Yes			yes
		Yes			yes
		Yes			yes
		No			yes
		No			No
	water disposal well	No			No
		No			yes
		No			No
103/16-23-056-05W4/00		No			yes
100/01-26-056-05W4/00		No			yes
100/07-26-056-05W4/00		No			No
100/05-26-056-05W4/00		No	yes	cored, but gamma indicates no potash (we can examine cores to be sure)	yes
100/04-26-056-05W4/00		No			yes
104/07-27-056-05W4/00		No			No
102/12-26-056-05W4/00		No			yes

Unique Well ID	notes	Grizzly property	core in Prairie Evaporite Formation	Core Comments	Gamma Logs
100/12-26-056-02W4/00		No			yes
100/16-28-056-08W4/00		No			yes
100/01-13-057-05W4/00		No	yes	cored, but gamma indicates no potash (we can examine cores to be sure)	yes
102/02-13-057-05W4/00		No			yes
100/03-14-057-06W4/00		No	no		No
100/07-14-057-06W4/00		No	no		yes
100/02-21-057-05W4/00		No	yes	cored, but gamma indicates no potash (we can examine cores to be sure)	yes

**Appendix 3 –
Compilation Potash Occurrences Summary**

WELL CODE	well name	KB elev. (gov.)	GL (gov.)	LSD	SECTION	TOWNSHIP	RANGE	well #	LAT (N27)	LONG (N27)	CORE DATA: TOP (depth)
2	ENERMARK MEDHAT 10-3-12-4	766.6	762.6	10	3	12	4		49.97117	-110.46547	
3	ENERPLUS PCP MEDICINE HAT 15-7-13-4	714.1	709.7	15	7	13	4		50.07648	-110.53478	
4	CHEVRON MEDHAT 16-30-13-7	783.3	779.4	16	30	13	7		50.11889	-110.93939	
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	753.5	749.8	11	20	16	4		50.36261	-110.52222	
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	753.5	749.8	11	20	16	4		50.36261	-110.52222	
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	753.5	749.8	11	20	16	4		50.36261	-110.52222	
5	IMP CALSTAN LAKE NEWELL 5-1-17-14	751.6	747.7	5	1	17	14		50.40286	-111.81067	1749.0
2	DEML MEDHAT 6-36-19-1	746.6	740.8	6	36	19	1		50.65043	-110.02022	
2	CS ET AL AEC SUFFIELD 7-18-19-3	698.1	693.7	7	18	19	3		50.60678	-110.40641	
2	CS ET AL AEC SUFFIELD 7-18-19-3	698.1	693.7	7	18	19	3		50.60678	-110.40641	
3	AECOG (E) CS ET AL SUFF 6-25-19-4	665.7	661.7	6	25	19	4		50.63515	-110.43492	
3	AECOG (E) CS ET AL SUFF 6-25-19-4	665.7	661.7	6	25	19	4		50.63515	-110.43492	
3	CS ET AL AEC SUFFIELD 14-32-19-4	708.1	704.1	14	32	19	4		50.65725	-110.52607	
3	CS ET AL AEC SUFFIELD 14-32-19-4	708.1	704.1	14	32	19	4		50.65725	-110.52607	
3	CS ET AL AEC SUFFIELD 14-32-19-4	708.1	704.1	14	32	19	4		50.65725	-110.52607	
3	CS ET AL AEC SUFFIELD 14-32-19-4	708.1	704.1	14	32	19	4		50.65725	-110.52607	
3	AMOCO MEDHAT 14-36-20-1	727.5	723.2	14	36	20	1		50.74294	-110.01846	
3	AMOCO MEDHAT 14-36-20-1	727.5	723.2	14	36	20	1		50.74294	-110.01846	
4	PACIFIC AMOCO EMPRESS 7-12-22-1	666.9	662.6	7	12	22	1		50.8525	-110.01148	
4	PACIFIC AMOCO EMPRESS 7-12-22-1	666.9	662.6	7	12	22	1		50.8525	-110.01148	
4	PACIFIC AMOCO EMPRESS 7-12-22-1	666.9	662.6	7	12	22	1		50.8525	-110.01148	
2	GBASINS ET AL EMPRESS 11-25-24-2	740.9	737.6	11	25	24	2		51.07588	-110.16068	
2	GBASINS ET AL EMPRESS 11-25-24-2	740.9	737.6	11	25	24	2		51.07588	-110.16068	
2	DANSON NATOL ET AL ACADIA 10-18-26-2	762.6	758.6	10	18	26	2		51.22229	-110.26721	
2	DANSON NATOL ET AL ACADIA 10-18-26-2	762.6	758.6	10	18	26	2		51.22229	-110.26721	
2	CNRL ESTHER 6-9-31-1	734.3	730.0	6	9	31	1		51.63981	-110.08989	
2	CNRL ESTHER 6-9-31-1	734.3	730.0	6	9	31	1		51.63981	-110.08989	
2	CNRL ESTHER 6-9-31-1	734.3	730.0	6	9	31	1		51.63981	-110.08989	
6	ALTAIR KATEX VETERAN 7-2-36-8	786.7	783.0	7	2	36	8		52.06122	-111.03681	
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	

WELL CODE	well name	KB elev. (gov.)	GL (gov.)	LSD	SECTION	TOWNSHIP	RANGE	well #	LAT (N27)	LONG (N27)	CORE DATA: TOP (depth)
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	
6	SAGE ET AL PROVOST 11-20-37-1	693.4	691.0	11	20	37	1		52.19566	-110.11421	
1	IMPERIAL-PROVOST NO. 2	737.6	734.6	1	33	37	3		52.21643	-110.36290	1405.7
1	IMPERIAL-PROVOST NO. 2	737.6	734.6	1	33	37	3		52.21643	-110.36290	1435.9
2	PVR PROVOST 4-18-38-1	696.2	691.9	4	18	38	1		52.26241	-110.14228	
2	RENAISSANCE PROVOST 7-15-40-2	677.3	673.0	7	15	40	2		52.43937	-110.20728	
2	RENAISSANCE PROVOST 7-15-40-2	677.3	673.0	7	15	40	2		52.43937	-110.20728	
1	NEWALTA HUGHENDEN 10-33-40-7	698.9	694.9	10	33	40	7	1	52.48521	-110.94888	1377.37
1	NEWALTA HUGHENDEN 10-33-40-7	698.9	694.9	10	33	40	7	1	52.48521	-110.94888	
6	NEWLATA PROVOST 9-33-40-7	694.3	690.7	9	33	40	7		52.48521	-110.94440	
6	NEWLATA PROVOST 9-33-40-7	694.3	690.7	9	33	40	7		52.48521	-110.94440	
6	NEWLATA PROVOST 9-33-40-7	694.3	690.7	9	33	40	7		52.48521	-110.94440	
3	NEWALTA 15A1 PROVOST 15-33-40-7	699.3	694.4	15	33	40	7		52.48885	-110.94752	
6	NEWALTA HUGHENDEN 16-33-40-7	694.0	690.1	16	33	40	7		52.48905	-110.94528	
8	FEDERATED LPGS3 HARDISTY 10-30-42-9	643.7	639.8	10	30	42	9	1	52.64737	-111.28485	1359.8
1	PETCAL DINA 10-32-45-1	630.9	628.2	10	32	45	1		52.92461	-110.10950	1052.4
3	HUSKY D. H. PROSPECT 7-1-45-3	662.0	658.4	7	1	45	3		52.84766	-110.30097	
3	HUSKY D. H. PROSPECT 7-1-45-3	662.0	658.4	7	1	45	3		52.84766	-110.30097	
3	HUSKY D. H. PROSPECT 7-1-45-3	662.0	658.4	7	1	45	3		52.84766	-110.30097	
3	HUSKY D. H. PROSPECT 7-1-45-3	662.0	658.4	7	1	45	3		52.84766	-110.30097	
4	HUSKY DH KOKNEE 7-33-49-5	659.3	755.3	7	33	49	5		53.26786	-110.67044	
1	VERMILION CONSOLIDATED OILS #15	604.4	602.9	6	12	49	6		53.21138	-110.75252	1060.7
1	VERMILION CONSOLIDATED OILS #15	604.4	602.9	6	12	49	6		53.21138	-110.75252	1137.2
5	BLACKFOOT DEVONIAN TEST SYNDICATE #1	697.1	695.6	12	15	50	2		53.31530	-110.21949	1025.7
4	HUSKY DH VERMILION 7A-31-51-5	625.4	622.1	7	31	51	5		53.44323	-110.72502	

WELL CODE	well name	KB elev. (gov.)	GL (gov.)	LSD	SECTION	TOWNSHIP	RANGE	well #	LAT (N27)	LONG (N27)	CORE DATA: TOP (depth)
4	HUSKY DH VERMILION 7A-31-51-5	625.4	622.1	7	31	51	5		53.44323	-110.72502	
5	CALSTAN PACIFIC MARWAYNE 14-29-52-2	636.7	633.1	14	29	52	2		53.52438	-110.26592	916.3

WELL CODE	well name	BOTTOM (depth)	TOP A.S.L.	BOTTOM A.S.L.	thickness	lab grade	LOG DATA:		
							TOP (depth)	BOTTOM (depth)	TOP A.S.L.
2	ENERMARK MEDHAT 10-3-12-4						1674.5	1675.6	-903.9
3	ENERPLUS PCP MEDICINE HAT 15-7-13-4						1625.8	1627.8	-907.3
4	CHEVRON MEDHAT 16-30-13-7						1673.3	1674.0	-886.1
6	RICHFIELD-SHELL-RAPID NARROWS-11-20						1666.2	1666.7	-909.0
6	RICHFIELD-SHELL-RAPID NARROWS-11-20						1668.0	1669.2	-910.8
6	RICHFIELD-SHELL-RAPID NARROWS-11-20						1672.9	1674.0	-915.7
5	IMP CALSTAN LAKE NEWELL 5-1-17-14	1759.0	-993.5	-1003.5	10.0		1750.0	1761.2	-994.5
2	DEML MEDHAT 6-36-19-1						1660.5	1661.5	-908.1
2	CS ET AL AEC SUFFIELD 7-18-19-3						1594.5	1601.0	-892.0
2	CS ET AL AEC SUFFIELD 7-18-19-3						1602.9	1603.9	-900.4
3	AECOG (E) CS ET AL SUFF 6-25-19-4						1569.3	1570.3	-899.6
3	AECOG (E) CS ET AL SUFF 6-25-19-4						1577.0	1578.2	-907.3
3	CS ET AL AEC SUFFIELD 14-32-19-4						1613.6	1614.3	-901.5
3	CS ET AL AEC SUFFIELD 14-32-19-4						1618.1	1620.3	-906.0
3	CS ET AL AEC SUFFIELD 14-32-19-4						1624.6	1626.8	-912.5
3	CS ET AL AEC SUFFIELD 14-32-19-4						1630.5	1632.1	-918.4
3	AMOCO MEDHAT 14-36-20-1						1636.3	1639.1	-904.5
3	AMOCO MEDHAT 14-36-20-1						1648.7	1649.9	-916.9
4	PACIFIC AMOCO EMPRESS 7-12-22-1						1560.4	1566.0	-889.2
4	PACIFIC AMOCO EMPRESS 7-12-22-1						1567.4	1568.7	-896.2
4	PACIFIC AMOCO EMPRESS 7-12-22-1						1573.9	1578.1	-902.7
2	GBASINS ET AL EMPRESS 11-25-24-2						1606.5	1607.6	-862.3
2	GBASINS ET AL EMPRESS 11-25-24-2						1613.3	1614.4	-869.1
2	DANSON NATOL ET AL ACADIA 10-18-26-2						1606.4	1607.7	-839.8
2	DANSON NATOL ET AL ACADIA 10-18-26-2						1612.1	1613.1	-845.5
2	CNRL ESTHER 6-9-31-1						1514.0	1515.3	-775.4
2	CNRL ESTHER 6-9-31-1						1520.2	1520.9	-781.6
2	CNRL ESTHER 6-9-31-1						1607.7	1609.4	-869.1
6	ALTAIR KATEX VETERAN 7-2-36-8						1588.5	1590.1	-798.1
6	SAGE ET AL PROVOST 11-20-37-1						1338.0	1341.6	-642.2
6	SAGE ET AL PROVOST 11-20-37-1						1344.4	1345.6	-648.6

WELL CODE	well name	BOTTOM (depth)	TOP A.S.L.	BOTTOM A.S.L.	thickness	lab grade	LOG DATA:		
							TOP (depth)	BOTTOM (depth)	TOP A.S.L.
6	SAGE ET AL PROVOST 11-20-37-1						1352.3	1355.9	-656.5
6	SAGE ET AL PROVOST 11-20-37-1						1357.1	1359.7	-661.3
6	SAGE ET AL PROVOST 11-20-37-1						1361.3	1363.2	-665.5
6	SAGE ET AL PROVOST 11-20-37-1						1367.5	1368.4	-671.7
1	IMPERIAL-PROVOST NO. 2	1408.5	-665.1	-667.9	2.8	4.1			
1	IMPERIAL-PROVOST NO. 2	1437.4	-695.3	-696.8	1.5	3.32			
2	PVR PROVOST 4-18-38-1						1309.3	1313.5	-608.8
2	RENAISSANCE PROVOST 7-15-40-2						1259.5	1261.4	-577.9
2	RENAISSANCE PROVOST 7-15-40-2						1264.1	1266.8	-582.5
1	NEWALTA HUGHENDEN 10-33-40-7	1384.07	-674.5	-681.2	6.7	3.17 (@13	1376.6	1379.0	-673.7
1	NEWALTA HUGHENDEN 10-33-40-7						1383.1	1384.2	-680.2
6	NEWLATA PROVOST 9-33-40-7						1373.9	1374.9	-676.0
6	NEWLATA PROVOST 9-33-40-7						1379.2	1380.2	-681.3
6	NEWLATA PROVOST 9-33-40-7						1401.7	1403.5	-703.8
3	NEWALTA 15A1 PROVOST 15-33-40-7						1378.2	1382.3	-674.0
6	NEWALTA HUGHENDEN 16-33-40-7						1374.2	1376.6	-676.3
8	FEDERATED LPGS3 HARDISTY 10-30-42-9	1369.8	-712.2	-722.2	10.0	0.16 (@13	possible		
1	PETCAL DINA 10-32-45-1	1060.1	-418.8	-426.5	7.7	4.10 (@10	1056.3	1059.3	-422.7
3	HUSKY D. H. PROSPECT 7-1-45-3						1142.4	1143.6	-476.8
3	HUSKY D. H. PROSPECT 7-1-45-3						1147.9	1149.1	-482.3
3	HUSKY D. H. PROSPECT 7-1-45-3						1169.5	1172.6	-503.9
3	HUSKY D. H. PROSPECT 7-1-45-3						1203.4	1204.9	-537.8
4	HUSKY DH KOKNEE 7-33-49-5						1157.6	1160.2	-594.3
1	VERMILION CONSOLIDATED OILS #15	1076.2	-454.8	-470.3	15.5		possible		
1	VERMILION CONSOLIDATED OILS #15	1158.2	-531.3	-552.3	21.0		possible		
5	BLACKFOOT DEVONIAN TEST SYNDICATE #1	1034.0	-327.1	-335.4	8.3		possible		
4	HUSKY DH VERMILION 7A-31-51-5						1032.6	1036.3	-403.9

WELL CODE	well name	BOTTOM (depth)	TOP A.S.L.	BOTTOM A.S.L.	thickness	lab grade	LOG DATA:		
							TOP (depth)	BOTTOM (depth)	TOP A.S.L.
4	HUSKY DH VERMILION 7A-31-51-5						1030.2	1036.3	-401.5
5	CALSTAN PACIFIC MARWAYNE 14-29-52-2	917.4	-276.0	-277.1	1.1		possible		

WELL CODE	well name	BOTTOM A.S.L.	thickness	gamma units	log grade (% K20)
2	ENERMARK MEDHAT 10-3-12-4	-905.0	1.1	API	7.6
3	ENERPLUS PCP MEDICINE HAT 15-7-13-4	-909.3	2.0	API	1.2
4	CHEVRON MEDHAT 16-30-13-7	-886.8	0.7	API	1.3
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	-909.5	0.5	? Units not shown	
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	-912.0	1.2	? Units not shown	
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	-916.8	1.1	? Units not shown	
5	IMP CALSTAN LAKE NEWELL 5-1-17-14	-1005.7	11.2	? No header	
2	DEML MEDHAT 6-36-19-1	-909.1	1.0	API	18.0
2	CS ET AL AEC SUFFIELD 7-18-19-3	-898.5	6.5	API	5.7
2	CS ET AL AEC SUFFIELD 7-18-19-3	-901.4	1.0	API	4.2
3	AECOG (E) CS ET AL SUFF 6-25-19-4	-900.6	1.0	API	1.7
3	AECOG (E) CS ET AL SUFF 6-25-19-4	-908.5	1.2	API	1.5
3	CS ET AL AEC SUFFIELD 14-32-19-4	-902.2	0.7	API	1.6
3	CS ET AL AEC SUFFIELD 14-32-19-4	-908.2	2.2	API	1.2
3	CS ET AL AEC SUFFIELD 14-32-19-4	-914.7	2.2	API	0.9
3	CS ET AL AEC SUFFIELD 14-32-19-4	-920.0	1.6	API	1.0
3	AMOCO MEDHAT 14-36-20-1	-907.3	2.8	API	3.5
3	AMOCO MEDHAT 14-36-20-1	-918.1	1.2	API	2.7
4	PACIFIC AMOCO EMPRESS 7-12-22-1	-894.8	5.6	API	2.5
4	PACIFIC AMOCO EMPRESS 7-12-22-1	-897.5	1.3	API	0.8
4	PACIFIC AMOCO EMPRESS 7-12-22-1	-906.9	4.2	API	2.7
2	GBASINS ET AL EMPRESS 11-25-24-2	-863.4	1.1	API	6.6
2	GBASINS ET AL EMPRESS 11-25-24-2	-870.2	1.1	API	3.9
2	DANSON NATOL ET AL ACADIA 10-18-26-2	-841.1	1.3	API	9.8
2	DANSON NATOL ET AL ACADIA 10-18-26-2	-846.5	1.0	API	4.0
2	CNRL ESTHER 6-9-31-1	-776.7	-92.4	not API	
2	CNRL ESTHER 6-9-31-1	-782.3	6.9	not API	
2	CNRL ESTHER 6-9-31-1	-870.8	89.2	not API	
6	ALTAIR KATEX VETERAN 7-2-36-8	-799.7	1.6	? No header	
6	SAGE ET AL PROVOST 11-20-37-1	-645.8	3.6	not API	
6	SAGE ET AL PROVOST 11-20-37-1	-649.8	1.2	not API	

WELL CODE	well name	BOTTOM A.S.L.	thickness	gamma units	log grade (% K20)
6	SAGE ET AL PROVOST 11-20-37-1	-660.1	3.6	not API	
6	SAGE ET AL PROVOST 11-20-37-1	-663.9	2.6	not API	
6	SAGE ET AL PROVOST 11-20-37-1	-667.4	1.9	not API	
6	SAGE ET AL PROVOST 11-20-37-1	-672.6	0.9	not API	
1	IMPERIAL-PROVOST NO. 2				
1	IMPERIAL-PROVOST NO. 2				
2	PVR PROVOST 4-18-38-1	-613.0	4.2	API	18.8
2	RENAISSANCE PROVOST 7-15-40-2	-579.8	1.9	API	17.4
2	RENAISSANCE PROVOST 7-15-40-2	-585.2	2.7	API	3.4
1	NEWALTA HUGHENDEN 10-33-40-7	-676.1	2.4	not API	
1	NEWALTA HUGHENDEN 10-33-40-7	-681.3	1.1	not API	
6	NEWLATA PROVOST 9-33-40-7	-677.0	1.0	not API	
6	NEWLATA PROVOST 9-33-40-7	-682.3	1.0	not API	
6	NEWLATA PROVOST 9-33-40-7	-705.6	1.8	not API	
3	NEWALTA 15A1 PROVOST 15-33-40-7	-678.1	4.1	API	1.1
6	NEWALTA HUGHENDEN 16-33-40-7	-678.7	2.4	? Units not shown	
8	FEDERATED LPGS3 HARDISTY 10-30-42-9				
1	PETCAL DINA 10-32-45-1	-425.7	3.0	API	2.8
3	HUSKY D. H. PROSPECT 7-1-45-3	-478.0	1.2	API	1.2
3	HUSKY D. H. PROSPECT 7-1-45-3	-483.5	1.2	API	3.5
3	HUSKY D. H. PROSPECT 7-1-45-3	-507.0	3.1	API	1.3
3	HUSKY D. H. PROSPECT 7-1-45-3	-539.3	1.5	API	1.5
4	HUSKY DH KOKNEE 7-33-49-5	-596.9	2.6	API	1.4
1	VERMILION CONSOLIDATED OILS #15				
1	VERMILION CONSOLIDATED OILS #15				
5	BLACKFOOT DEVONIAN TEST SYNDICATE #1				
4	HUSKY DH VERMILION 7A-31-51-5	-407.6	3.7	API	0.9

WELL CODE	well name	BOTTOM A.S.L.	thickness	gamma units	log grade (% K20)
4	HUSKY DH VERMILION 7A-31-51-5	-407.6	6.1		0.6
5	CALSTAN PACIFIC MARWAYNE 14-29-52-2				

WELL CODE	well name	notes	reference
2	ENERMARK MEDHAT 10-3-12-4		well logs
3	ENERPLUS PCP MEDICINE HAT 15-7-13-4	weak or questionable peak	well logs
4	CHEVRON MEDHAT 16-30-13-7	weak or questionable peak	well logs
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	weak or questionable peak	well logs
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	weak or questionable peak	well logs
6	RICHFIELD-SHELL-RAPID NARROWS-11-20	weak or questionable peak	well logs
5	IMP CALSTAN LAKE NEWELL 5-1-17-14	traces of potash (carnalite veins) from about 1749-1759 m; also apperant in logs; ranges from 14.5 to 21.6 using constants for carnalite and sylvite respectively;	core, well logs
2	DEML MEDHAT 6-36-19-1	did on paper first	well logs
2	CS ET AL AEC SUFFIELD 7-18-19-3	did on paper first	well logs
2	CS ET AL AEC SUFFIELD 7-18-19-3	did on paper first	well logs
3	AECOG (E) CS ET AL SUFF 6-25-19-4	weak or questionable peak	well logs
3	AECOG (E) CS ET AL SUFF 6-25-19-4	weak or questionable peak	well logs
3	CS ET AL AEC SUFFIELD 14-32-19-4	weak or questionable peak	well logs
3	CS ET AL AEC SUFFIELD 14-32-19-4	weak or questionable peak	well logs
3	CS ET AL AEC SUFFIELD 14-32-19-4	weak or questionable peak	well logs
3	CS ET AL AEC SUFFIELD 14-32-19-4	weak or questionable peak	well logs
3	AMOCO MEDHAT 14-36-20-1		well logs
3	AMOCO MEDHAT 14-36-20-1		well logs
4	PACIFIC AMOCO EMPRESS 7-12-22-1	density logs indicate that this may be impure gypsum	well logs
4	PACIFIC AMOCO EMPRESS 7-12-22-1		well logs
4	PACIFIC AMOCO EMPRESS 7-12-22-1	gamma spikes abnormally broad	well logs
2	GBASINS ET AL EMPRESS 11-25-24-2		well logs
2	GBASINS ET AL EMPRESS 11-25-24-2		well logs
		gamma header not totally clear; I <i>think</i> the API scale goes from 0 to 150, though the other standard scales (100 and 120) would mean the grades are even higher)	
2	DANSON NATOL ET AL ACADIA 10-18-26-2		well logs
2	DANSON NATOL ET AL ACADIA 10-18-26-2		well logs
2	CNRL ESTHER 6-9-31-1	the only other gamma log has no header	well logs
2	CNRL ESTHER 6-9-31-1		well logs
2	CNRL ESTHER 6-9-31-1		well logs
6	ALTAIR KATEX VETERAN 7-2-36-8		well logs
6	SAGE ET AL PROVOST 11-20-37-1		well logs
6	SAGE ET AL PROVOST 11-20-37-1		well logs

WELL CODE	well name	notes	reference
6	SAGE ET AL PROVOST 11-20-37-1		well logs
6	SAGE ET AL PROVOST 11-20-37-1		well logs
6	SAGE ET AL PROVOST 11-20-37-1		well logs
6	SAGE ET AL PROVOST 11-20-37-1		well logs
1	IMPERIAL-PROVOST NO. 2		Cole, 1948
1	IMPERIAL-PROVOST NO. 2		Cole, 1948
2	PVR PROVOST 4-18-38-1	very nice.	well logs
2	RENAISSANCE PROVOST 7-15-40-2		well logs
2	RENAISSANCE PROVOST 7-15-40-2		well logs
		decent potash in core, though logs don't look that great; the good gamma log has a smudged header, but I'm virtually sure it's the same units as the other one, which are not API	
1	NEWALTA HUGHENDEN 10-33-40-7		core, well logs
1	NEWALTA HUGHENDEN 10-33-40-7		core, well logs
6	NEWLATA PROVOST 9-33-40-7	weak or questionable peak	well logs
6	NEWLATA PROVOST 9-33-40-7	weak or questionable peak	well logs
6	NEWLATA PROVOST 9-33-40-7	weak or questionable peak	well logs
3	NEWALTA 15A1 PROVOST 15-33-40-7	weak or questionable peak	well logs
6	NEWALTA HUGHENDEN 16-33-40-7	weak or questionable peak	well logs
8	FEDERATED LPGS3 HARDISTY 10-30-42-9		core
1	PETCAL DINA 10-32-45-1		Meijer Drees, 1986; core, well logs
3	HUSKY D. H. PROSPECT 7-1-45-3	did on paper first	well logs
3	HUSKY D. H. PROSPECT 7-1-45-3	did on paper first	well logs
3	HUSKY D. H. PROSPECT 7-1-45-3	questionable; did on paper first	well logs
3	HUSKY D. H. PROSPECT 7-1-45-3	questionable; did on paper first	well logs
		IF this is PE Fm, it's at the bottom, and this is virtually certain to be a shale bed;	
4	HUSKY DH KOKNEE 7-33-49-5	weak pr questionable peak with almost unreadable header; did on paper first	well logs Golden, 1965, Cole, 1948, indirect reference from every other 1960's
1	VERMILION CONSOLIDATED OILS #15	no gamma log	paper out there the interval between the 2 potash occurrences was not cored, so it may be
1	VERMILION CONSOLIDATED OILS #15	all data from publications	potash too
5	BLACKFOOT DEVONIAN TEST SYNDICATE #1	cores are a highly degraded	core
4	HUSKY DH VERMILION 7A-31-51-5	weak or questionable peak	well logs

WELL CODE	well name	notes	reference
4	HUSKY DH VERMILION 7A-31-51-5	weak or questionable peak; did on paper first	well logs
5	CALSTAN PACIFIC MARWAYNE 14-29-52-2	traces of potash (carnalite veins), which may go deeper in the core	core

**Appendix 4 –
Historic Core Sample Assay Results**

SRC Geoanalytical Laboratories
 125 - 15 Innovation Blvd., Saskatoon, Saskatchewan, S7N 2X8
 Tel: (306) 933-8118 Fax: (306) 933-5656 Email: geolab@src.sk.ca

Group #	Description	Date	Sample Type	CaO Potash ICP1 Soluble wt %	K2O Potash ICP1 Soluble wt %	MgO Potash ICP1 Soluble wt %	% Insoluble Insoluble Determination	Moisture	Moisture
							%		wt %
G-2008-1589	POT003	10-06-2008	Standard	0.15	19.7	1.31			
G-2008-1589	10-30-42-9W4/1360.99	10-06-2008	Potash	0.16	0.16	0.06	0.6		<0.1
G-2008-1589	10-30-42-9W4/1363.23	10-06-2008	Potash	0.28	1.54	0.04	0.1		0.1
G-2008-1589	10-32-45-1W4/1055.68	10-06-2008	Potash	0.19	4.1	3.58	0.4		5.9
G-2008-1589	10-32-45-1W4/1058.64	10-06-2008	Potash	0.38	1.31	1.11	2.4		1.6
G-2008-1589	10-32-45-1W4/1060.92	10-06-2008	Potash	0.2	0.66	0.53	0.5		0.8
G-2008-1589	10-33-40-7W4/1381.11	10-06-2008	Potash	0.19	3.17	0.06	0.2		<0.1
G-2008-1589	10-33-40-7W4/1383.13	10-06-2008	Potash	0.6	0.88	0.04	0.5		<0.1
G-2008-1589	10-33-40-7W4/1383.13 R	10-06-2008	Repeat	0.58	0.89	0.04	0.5		<0.1

**Appendix 5 –
XRF Analyses on Historic Core (from Eccles et al, 2009)**

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
690	CH LPGS 2 Hughenden 10-33-40-7W4	1374.13		%	16.865	4.527	0.000
691	CH LPGS 2 Hughenden 10-33-40-7W4	1374.28		%	0.000	0.000	0.000
692	CH LPGS 2 Hughenden 10-33-40-7W4	1374.51		%	2.422	0.650	0.000
693	CH LPGS 2 Hughenden 10-33-40-7W4	1374.79		%	17.791	4.775	10.936
694	CH LPGS 2 Hughenden 10-33-40-7W4	1375.02		%	6.433	1.727	0.654
695	CH LPGS 2 Hughenden 10-33-40-7W4	1375.3		%	12.957	3.478	1.119
697	CH LPGS 2 Hughenden 10-33-40-7W4	1375.56		%	20.464	5.493	2.532
698	CH LPGS 2 Hughenden 10-33-40-7W4	1375.78		%	18.556	4.980	0.000
699	CH LPGS 2 Hughenden 10-33-40-7W4	1376.03		%	13.483	3.619	0.368
700	CH LPGS 2 Hughenden 10-33-40-7W4	1376.31		%	12.637	3.392	6.888
701	CH LPGS 2 Hughenden 10-33-40-7W4	1376.55		%	8.261	2.217	0.467
702	CH LPGS 2 Hughenden 10-33-40-7W4	1376.83		%	2.251	0.604	15.352
703	CH LPGS 2 Hughenden 10-33-40-7W4	1377.01		%	8.078	2.168	4.861
704	CH LPGS 2 Hughenden 10-33-40-7W4	Duplicate of 703		%	16.465	4.419	1.937
705	CH LPGS 2 Hughenden 10-33-40-7W4	1377.26		%	16.225	4.355	1.362
706	CH LPGS 2 Hughenden 10-33-40-7W4	1377.41		%	15.460	4.149	0.364
707	CH LPGS 2 Hughenden 10-33-40-7W4	1377.74		%	19.173	5.146	0.896
708	CH LPGS 2 Hughenden 10-33-40-7W4	1378.01		%	11.986	3.217	0.027
709	CH LPGS 2 Hughenden 10-33-40-7W4	1378.22		%	10.741	2.883	0.879
710	CH LPGS 2 Hughenden 10-33-40-7W4	1378.4		%	12.672	3.401	0.000
711	CH LPGS 2 Hughenden 10-33-40-7W4	1378.67	sample taken by kyle	%	11.586	3.110	6.752
712	CH LPGS 2 Hughenden 10-33-40-7W4	duplicate of 711	ditto	%	16.762	4.499	7.380
713	CH LPGS 2 Hughenden 10-33-40-7W4	1378.8		%	8.581	2.303	0.971
714	CH LPGS 2 Hughenden 10-33-40-7W4	1378.95	lost core between 713 and 714?	%	20.259	5.437	0.000
715	CH LPGS 2 Hughenden 10-33-40-7W4	1379.13		%	20.784	5.579	0.000
716	CH LPGS 2 Hughenden 10-33-40-7W4	1379.36		%	19.276	5.174	0.957
717	CH LPGS 2 Hughenden 10-33-40-7W4	1379.55		%	17.596	4.723	0.090
718	CH LPGS 2 Hughenden 10-33-40-7W4	1379.72	possibly missing core in this box	%	12.980	3.484	0.418
719	CH LPGS 2 Hughenden 10-33-40-7W4	1379.98		%	17.894	4.803	0.000
720	CH LPGS 2 Hughenden 10-33-40-7W4	1380.15		%	21.081	5.658	1.121
721	CH LPGS 2 Hughenden 10-33-40-7W4	1380.47	9.33% K	%	22.453	6.026	11.045
722	CH LPGS 2 Hughenden 10-33-40-7W4	1380.72		%	15.208	4.082	0.770
723	CH LPGS 2 Hughenden 10-33-40-7W4	1380.82	sample taken by kyle	%	10.147	2.723	1.838
724	CH LPGS 2 Hughenden 10-33-40-7W4	duplicate of 723	ditto	%	8.627	2.315	2.117

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
725	CH LPGS 2 Hughenden 10-33-40-7W4	1381.14		%	10.878	2.920	0.000
726	CH LPGS 2 Hughenden 10-33-40-7W4	1381.35		%	21.184	5.686	5.774
727	CH LPGS 2 Hughenden 10-33-40-7W4	1381.55		%	16.625	4.462	1.617
728	CH LPGS 2 Hughenden 10-33-40-7W4	1381.78		%	37.181	9.979	2.591
729	CH LPGS 2 Hughenden 10-33-40-7W4	1382.03	getting out of the potash, drop sampling freq	%	23.984	6.437	0.000
730	CH LPGS 2 Hughenden 10-33-40-7W4	1382.41		%	12.912	3.465	0.000
731	CH LPGS 2 Hughenden 10-33-40-7W4	1382.67		%	23.424	6.287	0.217
732	CH LPGS 2 Hughenden 10-33-40-7W4	1382.98		%	12.283	3.297	0.000
733	CH LPGS 2 Hughenden 10-33-40-7W4	1383.34		%	16.168	4.340	0.000
734	CH LPGS 2 Hughenden 10-33-40-7W4	1383.67		%	6.719	1.803	0.458
735	CH LPGS 2 Hughenden 10-33-40-7W4	duplicate of 734	possibly missing core in this box	%	8.661	2.325	0.000
736	Calstan Pacific Marwayne 14-29-52-2W4	902.64	Iron oxidized redbed mudstone	%	40.917	10.982	8.600
737	Calstan Pacific Marwayne 14-29-52-2W4	903.79	Green Ca-S-rich mudstone	%	20.510	5.505	3.099
738	Calstan Pacific Marwayne 14-29-52-2W4	905.44	Banded anhydrite and green Ca-S-rich mudstone	%	34.930	9.375	3.240
739	Calstan Pacific Marwayne 14-29-52-2W4	905.99	Banded anhydrite and green Ca-S-rich mudstone with salty 'stringers'	%	34.302	9.207	3.305
740	Calstan Pacific Marwayne 14-29-52-2W4	906.24	Green Ca-S-rich mudstone	%	51.064	13.706	2.855
741	Calstan Pacific Marwayne 14-29-52-2W4	906.51	Anhydrite and green Ca-S-rich mudstone - near (above) salt contact	%	31.399	8.428	2.244
744	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1058.36	Fe-oxidized mudstone	%	28.623	7.682	2.891
746	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1058.97	Fe-oxidized, greenish mudstone	%	8.558	2.297	0.902
747	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1059.67	Fe-oxidized, greenish mudstone	%	9.278	2.490	1.493
748	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1060.33	Fe-oxidized, greenish mudstone	%	8.113	2.177	1.222
749	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1060.7	Fe-oxidized, greenish mudstone; right above the contact with anhydrite	%	8.798	2.361	1.184
750	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1060.78	grey anhydrite	%	10.089	2.708	0.000

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
751	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1060.95	purplish evaporite	%	13.369	3.588	0.000
752	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1061.19	grey evaporite	%	40.255	10.804	2.155
753	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1061.36	colourless evaporite w. red specks	%	5.679	1.524	29.404
754	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1061.59	colourless evaporite w. red specks	%	10.284	2.760	0.000
755	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1061.79	grey evaporite with red specks	%	8.170	2.193	2.206
756	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1061.91	grey-pink evaporite; 3481-3491 probably missing 1.5 feet of core	%	2.868	0.770	0.000
757	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.1	white evaporite w. red specks	%	12.900	3.462	20.371
758	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.19	white evaporite w. red specks	%	9.438	2.533	0.000
759	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.39	white evaporite w. red specks	%	10.958	2.941	12.242
760	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.56	pink evaporite	%	14.317	3.843	2.408
761	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.82	pink-grey evaporite	%	6.147	1.650	0.864
762	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1062.99	pink evaporite	%	3.268	0.877	0.555
763	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1063.13	pink evaporite	%	7.838	2.104	0.000
764	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1063.44	pinkish grey evaporite	%	31.594	8.480	0.524
765	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1063.76	pinkish grey evaporite	%	18.133	4.867	14.616
766	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1063.99	pinkish grey evaporite; 3481-3511 recovery seems to only be 50%	%	22.304	5.986	14.609
767	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1064.16	greyish pink evaporite	%	13.243	3.554	13.768
768	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1064.3	colourless evaporite w. red specks	%	10.329	2.772	0.000
769	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1064.55	greyish pink evaporite	%	16.294	4.373	0.000
770	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1064.84	greyish pink evaporite	%	0.000	0.000	0.000
771	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1065.15	greyish pink evaporite	%	16.225	4.355	0.460
772	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1065.39	greyish pink evaporite	%	27.834	7.471	6.991
773	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1065.55	greyish pink evaporite	%	29.674	7.964	9.901
774	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	Duplicate	Duplicate of 773	%	34.073	9.145	12.942
775	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1065.85	greyish pink evaporite	%	30.839	8.277	0.805
776	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1066.09	pinkish grey evaporite	%	24.326	6.529	0.000
777	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1066.42	grey evaporite	%	32.862	8.820	1.503
778	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1066.71	grey evaporite with red specks	%	18.945	5.085	0.360
779	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1067.03	pinkish grey evaporite	%	23.527	6.315	0.139

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
780	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1067.64	pinkish white evaporite	%	8.901	2.389	0.000
781	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1068.4	grey evaporite	%	19.996	5.367	0.000
782	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1069.06	pink evaporite	%	22.852	6.134	0.463
783	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1069.82	grey evaporite	%	14.797	3.972	0.000
784	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1070.61	pinkish grey evaporite	%	23.858	6.403	12.873
785	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1070.44	white evaporite	%	17.928	4.812	0.000
786	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1070.9	white evaporite	%	5.610	1.506	0.000
787	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1071.83	grey evaporite	%	27.903	7.489	11.828
788	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1071.63	white evaporite	%	12.100	3.248	0.000
789	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	Duplicate	duplicate of 789	%	12.009	3.223	0.000
790	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1072.05	pinkish white evaporite	%	23.035	6.183	0.000
791	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1072.48	clear white evaporite	%	14.443	3.876	0.000
792	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1073.44	pink evaporite	%	7.393	1.984	0.000
793	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1073.97	grey evaporite	%	23.538	6.318	4.102
794	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1074.68	pinkish white evaporite	%	19.550	5.247	1.962
795	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1075.04	grey evaporite	%	22.098	5.931	2.414
796	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	Duplicate	Duplicate of 795	%	18.979	5.094	2.416
797	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1075.81	grey-white evaporite	%	33.650	9.032	3.911
798	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1076.58	grey evaporite	%	19.905	5.342	0.139
799	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1077.37	grey evaporite	%	5.713	1.533	0.000
800	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1078.2	pink evaporite	%	16.088	4.318	0.000
801	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1078.97	grey evaporite	%	8.078	2.168	0.000
802	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1079.74	dark grey evaporite	%	7.804	2.095	0.000
803	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1082.54	dark grey evaporite	%	19.128	5.134	0.412
804	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1084.34	grey evaporite	%	32.485	8.719	2.441
805	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1086.55	grey evaporite	%	8.227	2.208	2.698
806	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1088.58	grey evaporite	%	20.556	5.517	0.000
807	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	1090.7	grey evaporite	%	11.198	3.005	0.000
808	Vermillion Consolidated Oils 15 (VCO#15) 6-12-49-6W4	Duplicate	Duplicate of 807	%	0.000	0.000	0.000
816	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1020.84	Green Mudstone	%	9.587	2.573	4.870
818	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1021.55	Green Mudstone	%	0.000	0.000	0.000
819	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1022.37	Green Mudstone	%	10.318	2.769	2.265
820	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1023.15	Green Mudstone	%	7.530	2.021	2.685
821	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1023.9	Hematitic stained Green Mudstone	%	18.910	5.076	3.978

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
822	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1024.65	Hematitic stained Green Mudstone	%	11.918	3.199	2.830
826	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1025.38	Hematitic stained Green Mudstone with anhydrite/salt - 20 cm above PE Contact	%	16.545	4.441	1.937
827	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1025.68	Anhydrite about 5 cm below PE Contact	%	27.914	7.492	0.000
828	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1025.95	PE Anhydrite; From 4.5 to 6.0 m about 25 cm lost core	%	13.563	3.640	0.000
830	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1026.16	PE Anhydrite	%	12.569	3.373	0.000
831	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1026.69	From 6.0 to 7.5 m about 85 cm lost core	%	6.342	1.702	0.000
834	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1027.05	PE Anhydrite	%	0.000	0.000	3.061
835	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4		Duplicate	%	4.433	1.190	2.672
837	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1028.07	PE Salt; From 7.5 to 9.0 m about 40 cm of lost core	%	0.000	0.000	0.000
838	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1028.38	Potash present PE	%	11.780	3.162	8.306
839	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1028.86	PE Salt	%	3.691	0.991	0.000
840	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1029.19	PE Salt	%	6.353	1.705	0.000
841	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1029.42	PE Salt	%	16.545	4.441	0.000
842	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1029.69	PE Salt; From 9.0 to 10.5 m about 60 cm of lost core	%	6.204	1.665	0.000
843	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1029.98	PE Salt - Potash present	%	27.789	7.458	7.988
844	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4		Duplicate	%	20.876	5.603	7.704
845	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1030.31	PE Salt - Potash present	%	1.988	0.534	11.066
846	Blackfoot Devonian Test Syndicate #1 12-15-50-2W4	1030.47	PE Salt	%	9.118	2.447	0.381
847	Pectal Dina 10-32-45-1W4	1048.7	Hematitic stained mudstone 10 cm above PE contact	%	35.490	9.525	2.679
848	Pectal Dina 10-32-45-1W4	1048.95	PE Anhydrite 5 cm below PE Contat	%	19.756	5.303	1.548
849	Pectal Dina 10-32-45-1W4	1049.52	PE Anhydrite	%	13.643	3.662	0.000
850	Pectal Dina 10-32-45-1W4	1049.88	PE Anhydrite and trace potash	%	24.189	6.492	0.952
851	Pectal Dina 10-32-45-1W4	1050.13	PE Salt, Anhydrite and minor potash	%	21.436	5.753	2.591
852	Pectal Dina 10-32-45-1W4	1050.42	PE Salt, Anhydrite and trace potash	%	13.403	3.597	0.080

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
853	Pectal Dina 10-32-45-1W4	1050.72	PE Salt, Anhydrite and trace potash	%	21.938	5.888	0.652
854	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 853	%	21.401	5.744	0.570
855	Pectal Dina 10-32-45-1W4	1051.06	PE Salt and Anhydrite	%	22.030	5.913	0.162
856	Pectal Dina 10-32-45-1W4	1051.2	PE Salt and minor Potash	%	12.603	3.383	1.074
857	Pectal Dina 10-32-45-1W4	1051.71	PE Salt and Potash	%	16.100	4.321	3.839
858	Pectal Dina 10-32-45-1W4	1052.06	PE Salt and minor Potash	%	23.012	6.177	1.049
859	Pectal Dina 10-32-45-1W4	1052.3	PE Salt and minor Potash	%	19.048	5.112	2.319
860	Pectal Dina 10-32-45-1W4	1052.56	PE Salt	%	12.660	3.398	0.311
861	Pectal Dina 10-32-45-1W4	1052.86	PE Salt and minor Potash	%	27.789	7.458	2.954
862	Pectal Dina 10-32-45-1W4	1053.12	PE Salt	%	10.318	2.769	0.479
863	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 862	%	12.809	3.438	0.420
864	Pectal Dina 10-32-45-1W4	1053.46	PE Salt	%	4.502	1.208	0.000
865	Pectal Dina 10-32-45-1W4	1053.82	PE Salt	%	18.191	4.882	0.000
866	Pectal Dina 10-32-45-1W4	1054.25	PE Salt and trace Potash	%	16.694	4.481	0.421
867	Pectal Dina 10-32-45-1W4	1054.63	PE Salt and minor Potash	%	26.452	7.100	1.857
868	Pectal Dina 10-32-45-1W4	1055.01	PE Salt and minor Potash	%	21.778	5.845	1.634
869	Pectal Dina 10-32-45-1W4	1055.24	PE Salt and minor Potash	%	17.734	4.760	1.722
870	Pectal Dina 10-32-45-1W4	1055.52	PE Salt and minor Potash	%	21.881	5.873	2.488
871	Pectal Dina 10-32-45-1W4	1055.85	PE Salt and minor Potash	%	26.337	7.069	2.201
872	Pectal Dina 10-32-45-1W4	1056.07	PE Salt and minor Potash	%	19.916	5.345	5.313
873	Pectal Dina 10-32-45-1W4	1056.5	PE Salt and minor Potash	%	10.044	2.696	4.037
874	Pectal Dina 10-32-45-1W4	1056.78	PE Salt and minor Potash	%	18.602	4.993	1.743
875	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 874	%	11.301	3.033	1.684
876	Pectal Dina 10-32-45-1W4	1057	PE Salt and Potash	%	40.975	10.998	12.767
877	Pectal Dina 10-32-45-1W4	1057.31	PE Salt and minor Potash	%	19.813	5.318	5.427
878	Pectal Dina 10-32-45-1W4	1057.71	PE Salt and minor Potash	%	32.153	8.630	4.052
879	Pectal Dina 10-32-45-1W4	1057.98	PE Salt and minor Potash	%	29.240	7.848	3.533
880	Pectal Dina 10-32-45-1W4	1058.22	PE Salt and minor Potash	%	20.887	5.606	3.732
881	Pectal Dina 10-32-45-1W4	1058.59	PE Salt and minor Potash	%	24.932	6.692	3.143
882	Pectal Dina 10-32-45-1W4	1058.83	PE Salt and minor Potash	%	18.431	4.947	1.766
883	Pectal Dina 10-32-45-1W4	1059.17	PE Salt and minor Potash	%	25.149	6.750	1.205
884	Pectal Dina 10-32-45-1W4	1059.48	PE Salt and minor Potash	%	12.512	3.358	4.491
885	Pectal Dina 10-32-45-1W4	1059.78	PE Salt and Potash	%	20.362	5.465	6.869
886	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 885	%	14.957	4.014	6.258
887	Pectal Dina 10-32-45-1W4	1060.07	PE Salt and minor Potash	%	28.588	7.673	4.611

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
888	Pectal Dina 10-32-45-1W4	1060.4	PE Salt and minor Potash	%	21.230	5.698	1.274
889	Pectal Dina 10-32-45-1W4	1060.61	PE Salt and minor Potash	%	30.051	8.066	2.185
890	Pectal Dina 10-32-45-1W4	1061	PE Salt and minor Potash	%	22.030	5.913	1.741
891	Pectal Dina 10-32-45-1W4	1061.3	PE Salt and minor Potash	%	17.379	4.665	2.338
892	Pectal Dina 10-32-45-1W4	1061.55	PE Salt and minor Potash	%	22.407	6.014	0.744
893	Pectal Dina 10-32-45-1W4	1061.88	PE Salt and minor Potash	%	29.103	7.811	4.527
894	Pectal Dina 10-32-45-1W4	1062.19	PE Salt and minor Potash	%	24.087	6.465	5.492
895	Pectal Dina 10-32-45-1W4	1062.56	PE Salt and minor Potash	%	33.593	9.016	3.438
896	Pectal Dina 10-32-45-1W4	1062.85	PE Salt and minor Potash	%	9.678	2.598	1.838
897	Pectal Dina 10-32-45-1W4	1063.06	PE Salt and minor Potash	%	13.997	3.757	1.726
898	Pectal Dina 10-32-45-1W4	1063.36	PE Salt and minor Potash	%	19.367	5.198	3.076
899	Pectal Dina 10-32-45-1W4	1063.65	PE Salt and minor Potash	%	29.434	7.900	1.752
900	Pectal Dina 10-32-45-1W4	1063.97	PE Salt and minor Potash	%	27.617	7.412	5.082
901	Pectal Dina 10-32-45-1W4	1064.16	PE Salt and Potash	%	47.476	12.743	8.463
902	Pectal Dina 10-32-45-1W4	1064.33	PE Salt and Potash	%	36.610	9.826	2.723
903	Pectal Dina 10-32-45-1W4	1064.62	PE Salt and Potash	%	45.065	12.095	12.076
905	Pectal Dina 10-32-45-1W4	1064.86	PE Salt	%	11.003	2.953	0.107
906	Pectal Dina 10-32-45-1W4	1065.24	PE Salt and minor Potash	%	19.539	5.244	1.114
907	Pectal Dina 10-32-45-1W4	1065.41	PE Salt and minor Potash	%	20.739	5.566	1.649
908	Pectal Dina 10-32-45-1W4	1065.76	PE Salt and minor Potash	%	12.855	3.450	4.147
909	Pectal Dina 10-32-45-1W4	1066.03	PE Salt and minor Potash	%	35.718	9.587	2.029
910	Pectal Dina 10-32-45-1W4	1066.36	PE Salt and minor Potash	%	25.766	6.916	4.643
911	Pectal Dina 10-32-45-1W4	1066.65	PE Salt and minor Potash	%	19.036	5.109	2.016
912	Pectal Dina 10-32-45-1W4	1067.03	PE Salt and minor Potash	%	17.596	4.723	2.370
913	Pectal Dina 10-32-45-1W4	1067.25	PE Salt and minor Potash	%	15.643	4.198	2.519
914	Pectal Dina 10-32-45-1W4	1067.53	PE Salt and minor Potash	%	17.928	4.812	3.652
915	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 914	%	12.900	3.462	3.911
916	Pectal Dina 10-32-45-1W4	1067.88	PE Salt and minor Potash	%	21.207	5.692	2.342
917	Pectal Dina 10-32-45-1W4	1068.06	PE Salt	%	6.170	1.656	0.000
918	Pectal Dina 10-32-45-1W4	1068.4	PE Salt and minor Potash	%	19.276	5.174	5.702
919	Pectal Dina 10-32-45-1W4	1068.56	PE Salt and trace Potash	%	13.540	3.634	0.896
920	Pectal Dina 10-32-45-1W4	1069.01	PE Salt	%	5.073	1.362	0.000
921	Pectal Dina 10-32-45-1W4	1069.38	PE Salt and minor Potash	%	44.962	12.068	1.691
922	Pectal Dina 10-32-45-1W4	1069.67	PE Salt and minor Potash	%	2.182	0.586	0.389
923	Pectal Dina 10-32-45-1W4	1070.02	PE Salt and Potash	%	26.612	7.143	8.478
924	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 923	%	42.300	11.353	11.144

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
931	Pectal Dina 10-32-45-1W4	1070.15	PE Salt and minor Potash	%	10.786	2.895	0.595
935	Pectal Dina 10-32-45-1W4	1070.5	PE Salt and minor Potash	%	14.866	3.990	2.153
936	Pectal Dina 10-32-45-1W4	1070.85	PE Salt and minor Potash	%	28.097	7.541	2.429
937	Pectal Dina 10-32-45-1W4	1071.15	Halite	%	8.707	2.337	0.019
938	Pectal Dina 10-32-45-1W4	1071.63	PE Salt and minor Potash	%	26.955	7.235	1.859
939	Pectal Dina 10-32-45-1W4	1072.07	Halite	%	21.367	5.735	0.622
940	Pectal Dina 10-32-45-1W4	1072.34	Halite	%	25.355	6.805	0.313
941	Pectal Dina 10-32-45-1W4	1072.66	PE Salt and minor Potash	%	2.400	0.644	3.053
942	Pectal Dina 10-32-45-1W4	1072.92	PE Salt and trace Potash	%	19.653	5.275	1.676
943	Pectal Dina 10-32-45-1W4	1073.29	Halite	%	20.442	5.487	0.000
944	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 943	%	16.659	4.471	0.000
945	Pectal Dina 10-32-45-1W4	1073.58	PE Salt and minor Potash	%	7.267	1.950	3.188
946	Pectal Dina 10-32-45-1W4	1073.9	PE Salt and minor Potash	%	20.567	5.520	0.942
947	Pectal Dina 10-32-45-1W4	1074.22	PE Salt and minor Potash	%	14.888	3.996	2.208
948	Pectal Dina 10-32-45-1W4	1074.63	PE Salt and minor Potash	%	26.349	7.072	1.588
949	Pectal Dina 10-32-45-1W4	1075.18	PE Salt and minor Potash	%	14.317	3.843	3.840
950	Pectal Dina 10-32-45-1W4	1075.79	PE Salt and minor Potash	%	12.729	3.416	0.646
951	Pectal Dina 10-32-45-1W4	1076.4	PE Salt and trace Potash	%	17.402	4.671	1.405
952	Pectal Dina 10-32-45-1W4	1077.06	PE Salt and minor Potash	%	19.082	5.122	7.187
953	Pectal Dina 10-32-45-1W4	1077.6	Salt	%	16.728	4.490	0.000
954	Pectal Dina 10-32-45-1W4	1078.22	PE Salt and Potash	%	6.627	1.779	9.914
955	Pectal Dina 10-32-45-1W4	1078.84	PE Salt and Potash	%	38.084	10.222	9.117
956	Pectal Dina 10-32-45-1W4	1079.45	PE Salt and trace Potash	%	13.232	3.551	0.847
957	Pectal Dina 10-32-45-1W4	1080.07	PE Salt and Potash	%	18.990	5.097	10.007
958	Pectal Dina 10-32-45-1W4	1080.57	Salt	%	11.860	3.183	0.021
959	Pectal Dina 10-32-45-1W4	1081.23	PE Salt and trace Potash	%	17.059	4.579	1.684
960	Pectal Dina 10-32-45-1W4	1081.83	PE Salt and minor Potash	%	13.517	3.628	3.537
961	Pectal Dina 10-32-45-1W4	1082.44	PE Salt and minor Potash	%	21.573	5.790	6.327
962	Pectal Dina 10-32-45-1W4	1083.06	PE Salt and minor Potash	%	8.353	2.242	1.646
963	Pectal Dina 10-32-45-1W4	Duplicate	Duplicate of 962	%	2.114	0.567	2.919
964	Pectal Dina 10-32-45-1W4	1083.62	PE Salt and minor Potash	%	24.578	6.597	7.441
965	Pectal Dina 10-32-45-1W4	1084.25	PE Salt and trace Potash	%	15.768	4.232	1.157
966	Pectal Dina 10-32-45-1W4	1084.76	PE Salt and minor Potash	%	14.808	3.975	5.953
967	Pectal Dina 10-32-45-1W4	1085.37	Salt	%	8.981	2.411	0.000
968	Pectal Dina 10-32-45-1W4	1086	PE Salt and minor Potash	%	20.007	5.370	4.390
969	Pectal Dina 10-32-45-1W4	1086.54	Salt	%	14.466	3.883	0.437

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
999	CDN Land MedHat 14-36-20-1W4	1667.24	Coarse-grained salt	%	12.032	3.229	0.000
1000	CDN Land MedHat 14-36-20-1W4	1667.9	Coarse-grained salt	%	10.364	2.782	0.000
1001	CDN Land MedHat 14-36-20-1W4	1668.5	Coarse-grained salt	%	5.028	1.349	0.000
1002	CDN Land MedHat 14-36-20-1W4	1669.1	Coarse-grained salt	%	12.272	3.294	0.000
1003	CDN Land MedHat 14-36-20-1W4	1669.72	Coarse-grained salt	%	8.135	2.184	0.000
1004	CDN Land MedHat 14-36-20-1W4	1670.34	Coarse-grained salt	%	0.468	0.126	0.000
1005	CDN Land MedHat 14-36-20-1W4	Duplicate	Duplicate of 1004	%	12.809	3.438	0.000
1006	CDN Land MedHat 14-36-20-1W4	1670.8	Coarse-grained salt and minor potash	%	12.432	3.337	13.827
1007	CDN Land MedHat 14-36-20-1W4	1671.28	Coarse-grained salt and minor potash	%	8.901	2.389	12.624
1008	CDN Land MedHat 14-36-20-1W4	1671.55	Coarse-grained salt	%	5.210	1.398	0.000
1009	CDN Land MedHat 14-36-20-1W4	1671.94	Coarse-grained salt	%	14.237	3.821	0.000
1010	CDN Land MedHat 14-36-20-1W4	1672.7	Coarse-grained salt and minor potash	%	13.666	3.668	6.287
1011	CDN Land MedHat 14-36-20-1W4	1673.2	Coarse-grained salt and trace potash	%	19.916	5.345	1.394
1012	CDN Land MedHat 14-36-20-1W4	1673.45	Coarse-grained salt and minor potash	%	10.455	2.806	14.345
1013	CDN Land MedHat 14-36-20-1W4	1673.77	Coarse-grained salt and minor potash	%	13.677	3.671	6.434
1014	CDN Land MedHat 14-36-20-1W4	1673.98	Coarse-grained salt and minor potash	%	10.192	2.736	15.758
1015	CDN Land MedHat 14-36-20-1W4	Duplicate	Duplicate of 1014	%	11.243	3.018	16.409
971	CDN Land MedHat 14-36-20-1W4	1674.2	Coarse-grained salt and minor potash	%	7.564	2.030	5.644
972	CDN Land MedHat 14-36-20-1W4	1674.91	Coarse-grained salt and trace potash	%	17.585	4.720	1.951
973	CDN Land MedHat 14-36-20-1W4	1675.68	Coarse-grained salt and trace potash	%	7.953	2.134	1.873
974	CDN Land MedHat 14-36-20-1W4	1676.3	Coarse-grained salt	%	15.837	4.251	0.000
975	CDN Land MedHat 14-36-20-1W4	1676.92	Coarse-grained salt	%	16.671	4.474	2.698
976	CDN Land MedHat 14-36-20-1W4	1677.54	Coarse-grained salt	%	0.000	0.000	0.000
977	CDN Land MedHat 14-36-20-1W4	1678.09	Coarse-grained salt and minor potash	%	3.999	1.073	3.802
978	CDN Land MedHat 14-36-20-1W4	1678.76	Coarse-grained salt	%	6.604	1.773	0.505

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
979	CDN Land MedHat 14-36-20-1W4	Duplicate	Duplicate of 978	%	15.265	4.097	0.543
980	CDN Land MedHat 14-36-20-1W4	1679.34	Coarse-grained salt	%	7.187	1.929	0.000
981	CDN Land MedHat 14-36-20-1W4	1679.86	Coarse-grained salt	%	7.633	2.049	0.000
982	CDN Land MedHat 14-36-20-1W4	1680.49	Coarse-grained salt and minor potash	%	16.317	4.379	5.902
983	CDN Land MedHat 14-36-20-1W4	1681.1	Coarse-grained salt	%	2.251	0.604	0.000
984	CDN Land MedHat 14-36-20-1W4	1681.72	Coarse-grained salt	%	5.496	1.475	0.000
985	CDN Land MedHat 14-36-20-1W4	1682.28	Coarse-grained salt	%	13.597	3.649	0.530
986	CDN Land MedHat 14-36-20-1W4	1682.9	Coarse-grained salt	%	6.810	1.828	0.000
987	CDN Land MedHat 14-36-20-1W4	1684.12	Coarse-grained salt	%	8.021	2.153	0.589
988	CDN Land MedHat 14-36-20-1W4	1685.3	Coarse-grained salt	%	10.352	2.779	0.000
989	CDN Land MedHat 14-36-20-1W4	1686.5	Coarse-grained salt	%	0.000	0.000	0.000
990	CDN Land MedHat 14-36-20-1W4	1687.75	Coarse-grained salt	%	0.000	0.000	0.000
991	CDN Land MedHat 14-36-20-1W4	1688.98	Coarse-grained salt	%	12.615	3.386	1.022
992	CDN Land MedHat 14-36-20-1W4	1690.17	Coarse-grained salt	%	7.804	2.095	0.000
993	CDN Land MedHat 14-36-20-1W4	1691.31	Intebbed salt and carbonates; At 24.23 into intebbed carbonates and salt	%	33.285	8.934	0.078
994	CDN Land MedHat 14-36-20-1W4	Duplicate	Duplicate of 993	%	32.451	8.710	0.116
1042	Husky DH Wildmere 10-3-49-6W4	1111.93	Contact (altered mudstone)	%	24.658	6.618	2.408
1043	Husky DH Wildmere 10-3-49-6W4	1112.23	Contact (salt with potash)	%	4.570	1.227	6.152
1044	Husky DH Wildmere 10-3-49-6W4	1112.45	Coarse dark grey salt	%	14.854	3.987	0.000
1045	Husky DH Wildmere 10-3-49-6W4	1113.4	Salt/anhydrite	%	10.535	2.828	0.000
1046	Husky DH Wildmere 10-3-49-6W4	1114.22	Salt/anhydrite	%	2.342	0.629	0.017
1047	Husky DH Wildmere 10-3-49-6W4	1114.91	Salt/anhydrite	%	10.946	2.938	0.000
1048	Husky DH Wildmere 10-3-49-6W4	1116.52	Salt/anhydrite	%	6.890	1.849	0.000
1049	Husky DH Wildmere 10-3-49-6W4	1116.98	Salt/anhydrite	%	3.588	0.963	0.000
1050	Husky DH Wildmere 10-3-49-6W4	1117.78	Salt (start of pinkish) with trace potash	%	19.882	5.336	2.172
1051	Husky DH Wildmere 10-3-49-6W4	1119.21	Dark brown salt	%	6.856	1.840	18.203
1052	Husky DH Wildmere 10-3-49-6W4	1120.69	Reddish salt	%	12.660	3.398	0.000
1053	Husky DH Wildmere 10-3-49-6W4	1122.18	Brown-red salt	%	14.923	4.005	0.000
1054	Husky DH Wildmere 10-3-49-6W4	Duplicate	Duplicate of 1053	%	13.334	3.579	0.000
1055	Husky DH Wildmere 10-3-49-6W4	1123.9	Red salt (sample prev.) with trace potash	%	11.255	3.021	1.791

Sample ID	Well	Sample depth (m)	Description	Unit	%Carnallite ¹	%KCl in Carnallite ¹	%KCl total ¹
1056	Husky DH Wildmere 10-3-49-6W4	1125.3	Brown salt with trace potash	%	15.951	4.281	1.049
1057	Husky DH Wildmere 10-3-49-6W4	1126.7	Red salt with trace potash	%	5.576	1.497	3.097
1058	Husky DH Wildmere 10-3-49-6W4	1128.4	Red salt with trace potash	%	5.622	1.509	3.713
1059	Husky DH Wildmere 10-3-49-6W4	1130.21	Dark grey salt	%	9.678	2.598	0.719
1060	Husky DH Wildmere 10-3-49-6W4	1131.62	Dark grey salt	%	2.937	0.788	0.000
1061	Husky DH Wildmere 10-3-49-6W4	1133.14	Pinkish-red salt	%	13.871	3.723	0.000
1062	Husky DH Wildmere 10-3-49-6W4	1134.56	Clear to pinkish salt	%	10.135	2.720	0.000
1063	Husky DH Wildmere 10-3-49-6W4	Duplicate	Duplicate of 1062	%	10.512	2.821	0.000
1064	Husky DH Wildmere 10-3-49-6W4	1145.13	Pinkish-clear salt	%	4.399	1.181	0.715

1 - Calculations provided by Bernard Gartner (SRC); note no references provided

2 - General determination of carnallite (Mg>K) versus sylvite (K>Mg); from Sinha and Raymahashay (2004)

3 - Halabura and Hardy (2007)

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
690	0.000	22.031	0.000	5.771	16.852	4.623	1.882	0.164	2.447	9.074	0.000	0.052	0.000	0.015	0.000	17.144	0.000	0.001	0.006
691	0.000	3.353	#DIV/0!	0.000	0.000	1.386	0.831	0.041	0.000	1.381	0.000	0.010	0.023	0.004	0.004	0.428	0.000	0.000	0.004
692	0.000	5.113	0.000	0.829	2.420	1.619	0.465	0.132	0.351	2.106	0.000	0.042	0.000	0.003	0.000	4.647	0.007	0.000	0.000
693	6.161	7.287	3.683	6.088	17.777	5.342	2.143	0.206	2.581	3.001	6.908	0.047	0.000	0.006	0.004	2.124	0.007	0.000	0.003
694	0.000	7.073	0.609	2.201	6.428	2.815	0.964	0.102	0.933	2.913	0.413	0.003	0.000	0.004	0.015	1.609	0.000	0.000	0.000
695	0.000	10.759	0.518	4.434	12.947	5.677	2.146	0.336	1.880	4.431	0.707	0.068	0.000	0.005	0.000	2.745	0.014	0.000	0.000
697	0.000	14.975	0.741	7.003	20.448	6.987	2.436	0.466	2.969	6.168	1.600	0.093	0.000	0.005	0.013	4.234	0.000	0.000	0.001
698	0.000	7.861	0.000	6.350	18.542	4.497	1.944	0.146	2.692	3.238	0.000	0.045	0.037	0.003	0.010	2.091	0.018	0.000	0.000
699	0.000	10.290	0.164	4.614	13.472	4.841	1.744	0.193	1.956	4.238	0.232	0.042	0.000	0.005	0.015	3.050	0.002	0.000	0.004
700	3.496	16.225	3.266	4.324	12.627	8.510	2.481	0.330	1.834	6.683	4.351	0.060	0.000	0.013	0.015	6.750	0.007	0.001	0.002
701	0.000	9.064	0.339	2.827	8.255	3.309	1.100	0.153	1.199	3.733	0.295	0.045	0.000	0.000	0.007	4.956	0.016	0.000	0.000
702	14.748	6.873	40.868	0.770	2.249	3.187	1.175	0.149	0.327	2.831	9.698	0.005	0.000	0.009	0.003	2.127	0.032	0.000	0.001
703	2.692	9.519	3.605	2.764	8.072	6.948	2.532	0.300	1.172	3.921	3.071	0.027	0.000	0.009	0.003	1.930	0.027	0.000	0.000
704	0.000	10.141	0.705	5.634	16.452	7.222	2.757	0.310	2.389	4.177	1.224	0.077	0.000	0.003	0.010	1.900	0.000	0.000	0.000
705	0.000	15.223	0.503	5.552	16.212	6.818	2.453	0.276	2.354	6.270	0.860	0.053	0.000	0.004	0.010	6.073	0.011	0.000	0.002
706	0.000	17.166	0.141	5.290	15.447	9.624	3.548	0.519	2.243	7.070	0.230	0.080	0.000	0.008	0.013	6.442	0.025	0.000	0.004
707	0.000	19.561	0.280	6.561	19.158	8.777	3.089	0.339	2.782	8.057	0.566	0.077	0.000	0.004	0.009	4.755	0.011	0.001	0.001
708	0.000	7.960	0.013	4.102	11.977	3.382	1.644	0.110	1.739	3.278	0.017	0.032	0.000	0.013	0.004	3.886	0.005	0.003	0.005
709	0.000	14.452	0.490	3.675	10.732	3.741	2.022	0.134	1.558	5.952	0.555	0.067	0.000	0.004	0.000	11.529	0.023	0.003	0.006
710	0.000	9.641	0.000	4.336	12.662	5.585	1.905	0.192	1.839	3.971	0.000	0.090	0.000	0.009	0.000	3.320	0.005	0.000	0.002
711	3.643	10.039	3.492	3.965	11.577	6.747	2.528	0.192	1.681	4.135	4.265	0.010	0.000	0.006	0.009	4.458	0.002	0.000	0.004
712	2.881	9.988	2.638	5.736	16.749	6.578	2.481	0.202	2.432	4.114	4.662	0.060	0.000	0.005	0.003	4.401	0.025	0.001	0.004
713	0.000	11.299	0.678	2.936	8.574	8.659	2.759	0.207	1.245	4.654	0.613	0.043	0.000	0.005	0.015	3.473	0.029	0.000	0.003
714	0.000	9.050	0.000	6.932	20.243	6.724	2.485	0.239	2.939	3.727	0.000	0.048	0.000	0.009	0.007	1.142	0.000	0.000	0.002
715	0.000	9.434	0.000	7.112	20.768	4.456	1.935	0.180	3.016	3.886	0.000	0.032	0.000	0.006	0.009	3.901	0.012	0.000	0.002
716	0.000	14.425	0.298	6.596	19.261	7.864	2.923	0.213	2.797	5.941	0.605	0.073	0.000	0.012	0.015	5.579	0.000	0.004	0.002
717	0.000	12.016	0.031	6.021	17.582	8.529	2.827	0.242	2.553	4.949	0.057	0.070	0.000	0.005	0.000	2.409	0.009	0.003	0.001
718	0.000	14.285	0.193	4.442	12.970	8.743	2.963	0.312	1.883	5.884	0.264	0.068	0.000	0.010	0.000	3.736	0.004	0.000	0.001
719	0.000	5.177	0.000	6.123	17.879	3.485	1.393	0.110	2.596	2.132	0.000	0.017	0.000	0.000	0.012	0.114	0.000	0.003	0.000
720	0.000	18.933	0.319	7.214	21.065	12.799	4.327	0.395	3.059	7.798	0.708	0.063	0.000	0.000	0.020	4.000	0.004	0.000	0.002
721	5.018	12.719	2.948	7.683	22.435	7.988	3.074	0.253	3.258	5.239	6.977	0.057	0.000	0.004	0.003	7.580	0.000	0.000	0.001
722	0.000	7.831	0.304	5.204	15.196	4.873	1.767	0.184	2.207	3.225	0.487	0.078	0.000	0.006	0.018	3.263	0.002	0.000	0.004
723	0.000	3.601	1.086	3.472	10.138	1.078	0.232	0.049	1.472	1.483	1.161	0.003	0.000	0.000	0.006	1.246	0.016	0.003	0.006
724	0.000	3.886	1.470	2.952	8.620	1.117	0.444	0.050	1.252	1.601	1.337	0.030	0.000	0.003	0.009	1.393	0.000	0.000	0.004

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
725	0.000	15.879	0.000	3.722	10.869	4.824	1.854	0.164	1.578	6.540	0.000	0.053	0.000	0.003	0.000	8.947	0.018	0.000	0.004
726	0.088	20.625	1.633	7.249	21.167	9.021	3.154	0.530	3.074	8.495	3.648	0.115	0.000	0.009	0.013	7.598	0.016	0.000	0.006
727	0.000	11.116	0.583	5.689	16.612	6.377	2.077	0.164	2.412	4.578	1.022	0.030	0.000	0.015	0.003	5.156	0.011	0.001	0.003
728	0.000	30.028	0.418	12.723	37.152	18.008	3.333	1.248	5.395	12.368	1.637	0.200	0.000	0.021	0.015	3.754	0.000	0.000	0.002
729	0.000	12.801	0.000	8.207	23.965	7.194	2.611	0.232	3.480	5.272	0.000	0.052	0.000	0.010	0.000	3.509	0.000	0.000	0.000
730	0.000	9.088	0.000	4.418	12.901	3.226	1.171	0.173	1.873	3.743	0.000	0.043	0.000	0.004	0.009	3.709	0.000	0.000	0.001
731	0.000	16.490	0.056	8.016	23.405	8.595	3.050	0.270	3.399	6.792	0.137	0.073	0.000	0.010	0.013	6.475	0.000	0.004	0.003
732	0.000	11.887	0.000	4.203	12.273	5.431	1.861	0.282	1.782	4.896	0.000	0.060	0.000	0.005	0.000	2.966	0.000	0.000	0.003
733	0.000	9.213	0.000	5.533	16.155	6.294	2.471	0.163	2.346	3.795	0.000	0.042	0.000	0.000	0.000	3.598	0.000	0.000	0.000
734	0.000	6.597	0.408	2.299	6.713	3.119	0.852	0.087	0.975	2.717	0.289	0.005	0.000	0.005	0.006	3.545	0.000	0.005	0.003
735	0.000	6.930	0.000	2.964	8.654	2.995	0.756	0.086	1.257	2.854	0.000	0.030	0.032	0.003	0.007	3.550	0.005	0.004	0.001
736	0.000	35.610	1.259	14.002	40.885	35.502	9.621	4.639	5.937	14.666	5.433	0.360	0.000	0.036	0.004	16.958	0.014	0.000	0.000
737	0.000	64.310	0.905	7.018	20.494	16.639	4.208	1.225	2.976	26.487	1.957	0.165	0.000	0.008	0.010	60.011	0.000	0.000	0.000
738	0.000	54.298	0.556	11.953	34.902	21.110	5.884	2.109	5.068	22.363	2.047	0.244	0.000	0.040	0.000	42.876	0.023	0.003	0.000
739	0.000	28.785	0.577	11.738	34.274	21.923	5.434	3.566	4.977	11.855	2.088	0.242	0.000	0.028	0.007	9.010	0.016	0.000	0.000
740	0.000	58.657	0.335	17.474	51.023	20.382	6.150	2.064	7.409	24.159	1.803	0.183	0.000	0.014	0.003	40.458	0.002	0.000	0.000
741	0.000	21.865	0.428	10.745	31.374	18.784	4.576	1.644	4.556	9.005	1.418	0.215	0.000	0.018	0.006	5.336	0.002	0.000	0.000
744	0.000	30.504	0.605	9.795	28.600	15.165	4.476	1.055	4.153	12.563	1.826	0.117	0.000	0.008	0.009	17.390	0.009	0.000	0.000
746	0.000	7.970	0.632	2.929	8.551	2.625	0.712	1.746	1.242	3.283	0.570	0.067	0.000	0.015	0.001	2.487	0.000	0.000	0.000
747	0.000	13.385	0.964	3.175	9.271	4.278	1.343	2.305	1.346	5.513	0.943	0.117	0.000	0.018	0.000	5.079	0.000	0.000	0.000
748	0.000	11.449	0.903	2.776	8.106	5.143	1.765	2.451	1.177	4.715	0.772	0.127	0.000	0.012	0.000	5.450	0.012	0.000	0.000
749	0.000	9.281	0.806	3.011	8.791	5.194	1.236	1.171	1.277	3.823	0.748	0.092	0.000	0.010	0.006	3.242	0.000	0.000	0.000
750	0.000	7.528	0.000	3.453	10.081	5.455	2.507	0.180	1.464	3.101	0.000	0.050	0.000	0.008	0.003	2.646	0.000	0.001	0.006

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
751	0.000	12.583	0.000	4.575	13.358	9.641	3.564	0.306	1.940	5.183	0.000	0.092	0.000	0.008	0.007	5.926	0.000	0.000	0.000
752	0.000	25.867	0.321	13.775	40.223	19.604	7.962	0.713	5.841	10.654	1.361	0.137	0.000	0.009	0.012	13.303	0.027	0.003	0.000
753	27.880	1.760	31.026	1.943	5.674	3.106	1.223	0.196	0.824	0.725	18.575	0.027	0.000	0.005	0.003	0.740	0.000	0.000	0.000
754	0.000	5.215	0.000	3.519	10.275	3.448	1.223	0.214	1.492	2.148	0.000	0.062	0.000	0.005	0.012	1.690	0.000	0.000	0.000
755	0.013	8.232	1.618	2.796	8.163	3.102	1.240	0.124	1.185	3.390	1.394	0.062	0.000	0.003	0.004	5.804	0.000	0.000	0.000
756	0.000	2.198	0.000	0.981	2.866	0.618	0.518	0.040	0.416	0.905	0.000	0.003	0.044	0.003	0.006	0.315	0.000	0.000	0.000
757	16.909	2.147	9.462	4.414	12.890	1.974	1.143	0.081	1.872	0.884	12.869	0.018	0.000	0.005	0.000	4.521	0.007	0.000	0.000
758	0.000	4.022	0.000	3.230	9.431	2.428	1.185	0.077	1.369	1.657	0.000	0.025	0.000	0.004	0.000	1.097	0.030	0.000	0.002
759	9.301	5.310	6.694	3.750	10.949	6.105	2.532	0.163	1.590	2.187	7.734	0.073	0.000	0.003	0.000	3.314	0.002	0.000	0.006
760	0.000	12.978	1.008	4.899	14.306	7.290	2.827	0.257	2.077	5.345	1.521	0.155	0.000	0.009	0.000	7.371	0.012	0.000	0.002
761	0.000	8.232	0.842	2.104	6.142	4.539	2.169	0.190	0.892	3.390	0.546	0.102	0.000	0.000	0.009	2.451	0.000	0.003	0.001
762	0.000	15.672	1.017	1.118	3.265	3.324	0.986	0.166	0.474	6.455	0.351	0.038	0.000	0.012	0.004	14.250	0.000	0.000	0.000
763	0.000	3.404	0.000	2.682	7.832	1.202	0.389	0.057	1.137	1.402	0.000	0.018	0.000	0.006	0.010	1.213	0.007	0.000	0.003
764	0.000	19.317	0.099	10.811	31.569	10.867	4.427	0.455	4.584	7.956	0.331	0.090	0.000	0.009	0.001	7.571	0.029	0.000	0.000
765	9.749	6.638	4.830	6.205	18.119	6.865	2.776	0.412	2.631	2.734	9.233	0.083	0.000	0.004	0.000	3.020	0.023	0.003	0.001
766	8.622	9.798	3.925	7.632	22.286	8.097	2.717	0.219	3.236	4.035	9.228	0.047	0.000	0.008	0.000	7.314	0.034	0.001	0.000
767	10.213	9.604	6.230	4.532	13.233	6.922	2.301	0.246	1.922	3.956	8.697	0.035	0.000	0.004	0.007	5.932	0.025	0.000	0.002
768	0.000	4.739	0.000	3.535	10.321	3.391	1.294	0.140	1.499	1.952	0.000	0.052	0.000	0.006	0.000	1.974	0.018	0.000	0.000
769	0.000	11.704	0.000	5.576	16.281	8.343	3.252	0.227	2.364	4.820	0.000	0.052	0.023	0.005	0.006	4.998	0.014	0.000	0.002
770	0.000	3.574	#DIV/0!	0.000	0.000	1.647	0.727	0.084	0.000	1.472	0.000	0.012	0.000	0.004	0.004	1.402	0.000	0.000	0.000
771	0.000	7.634	0.170	5.552	16.212	8.035	3.599	0.239	2.354	3.144	0.290	0.068	0.000	0.004	0.016	3.329	0.012	0.000	0.001
772	0.000	23.968	1.505	9.525	27.812	8.031	3.301	0.242	4.039	9.871	4.416	0.063	0.000	0.014	0.000	20.467	0.018	0.001	0.000
773	1.936	22.079	1.999	10.154	29.650	9.350	3.222	0.478	4.306	9.093	6.254	0.097	0.000	0.014	0.009	10.412	0.000	0.000	0.001
774	3.797	25.826	2.276	11.660	34.046	10.749	4.225	0.568	4.944	10.637	8.176	0.102	0.000	0.005	0.000	11.416	0.011	0.000	0.004
775	0.000	22.279	0.156	10.553	30.815	10.300	3.148	0.390	4.475	9.176	0.508	0.080	0.000	0.013	0.000	8.302	0.011	0.000	0.000
776	0.000	11.547	0.000	8.324	24.307	7.663	3.086	0.279	3.530	4.756	0.000	0.040	0.000	0.005	0.007	4.344	0.000	0.000	0.000
777	0.000	15.213	0.274	11.245	32.836	11.490	4.627	0.332	4.768	6.266	0.949	0.095	0.000	0.006	0.016	5.801	0.005	0.001	0.000
778	0.000	14.255	0.114	6.483	18.930	12.735	3.743	0.513	2.749	5.871	0.228	0.075	0.000	0.006	0.000	6.732	0.000	0.000	0.000
779	0.000	9.247	0.035	8.051	23.508	4.469	1.950	0.194	3.414	3.809	0.088	0.052	0.000	0.009	0.006	5.465	0.009	0.001	0.002

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
780	0.000	3.730	0.000	3.046	8.894	2.122	0.822	0.086	1.292	1.536	0.000	0.022	0.002	0.003	0.006	1.983	0.009	0.004	0.003
781	0.000	12.444	0.000	6.843	19.980	9.911	3.896	0.285	2.901	5.125	0.000	0.088	0.000	0.009	0.006	7.871	0.000	0.000	0.005
782	0.000	12.879	0.122	7.820	22.834	14.294	5.723	0.363	3.316	5.304	0.293	0.103	0.000	0.012	0.007	7.101	0.000	0.004	0.000
783	0.000	9.604	0.000	5.063	14.785	6.039	2.058	0.156	2.147	3.956	0.000	0.052	0.057	0.005	0.006	5.504	0.000	0.001	0.004
784	6.470	7.600	3.233	8.164	23.839	7.068	3.118	0.306	3.462	3.130	8.132	0.065	0.000	0.008	0.000	2.394	0.025	0.001	0.003
785	0.000	4.318	0.000	6.135	17.914	4.556	2.060	0.130	2.601	1.778	0.000	0.040	0.000	0.005	0.010	3.197	0.009	0.000	0.001
786	0.000	7.206	0.000	1.920	5.606	3.102	1.253	0.106	0.814	2.968	0.000	0.040	0.050	0.009	0.000	3.976	0.000	0.000	0.000
787	4.339	6.927	2.540	9.548	27.881	10.386	4.625	0.312	4.049	2.853	7.472	0.090	0.000	0.014	0.001	5.156	0.032	0.001	0.000
788	0.000	6.625	0.000	4.141	12.091	8.824	3.443	0.336	1.756	2.728	0.000	0.008	0.000	0.000	0.000	4.213	0.018	0.000	0.000
789	0.000	6.710	0.000	4.109	11.999	8.499	3.257	0.325	1.742	2.763	0.000	0.083	0.000	0.003	0.004	3.958	0.000	0.000	0.003
790	0.000	8.666	0.000	7.883	23.017	6.125	2.352	0.192	3.342	3.569	0.000	0.020	0.000	0.004	0.001	5.186	0.000	0.000	0.002
791	0.000	3.706	0.000	4.942	14.431	1.887	1.049	0.106	2.096	1.527	0.000	0.015	0.018	0.004	0.000	0.818	0.020	0.006	0.005
792	0.000	3.360	0.000	2.530	7.387	5.042	2.292	0.224	1.073	1.384	0.000	0.070	0.009	0.001	0.000	2.001	0.000	0.000	0.000
793	0.000	9.652	1.044	8.055	23.519	11.721	4.147	0.417	3.415	3.975	2.591	0.085	0.000	0.012	0.000	4.216	0.032	0.000	0.000
794	0.000	6.397	0.601	6.690	19.535	7.149	3.131	0.196	2.837	2.635	1.240	0.088	0.000	0.000	0.012	3.859	0.002	0.000	0.005
795	0.000	33.684	0.655	7.562	22.081	26.319	8.490	1.535	3.206	13.873	1.525	0.214	0.000	0.014	0.018	4.548	0.000	0.005	0.003
796	0.000	34.713	0.763	6.495	18.964	26.674	8.393	1.791	2.754	14.297	1.526	0.205	0.000	0.028	0.010	4.770	0.037	0.004	0.000
797	0.000	23.917	0.696	11.515	33.624	14.431	5.292	0.682	4.883	9.850	2.471	0.105	0.000	0.013	0.000	6.966	0.021	0.001	0.000
798	0.000	9.862	0.042	6.811	19.889	11.047	4.673	0.299	2.888	4.062	0.088	0.100	0.000	0.013	0.010	5.004	0.000	0.000	0.001
799	0.000	4.447	0.000	1.955	5.709	2.090	1.234	0.096	0.829	1.832	0.000	0.045	0.000	0.003	0.000	1.528	0.012	0.003	0.003
800	0.000	9.964	0.000	5.505	16.075	13.381	4.042	0.556	2.334	4.104	0.000	0.122	0.000	0.008	0.016	3.820	0.020	0.000	0.000
801	0.000	3.289	0.000	2.764	8.072	0.409	0.240	0.040	1.172	1.354	0.000	0.017	0.000	0.000	0.000	1.977	0.020	0.000	0.002
802	0.000	6.261	0.000	2.671	7.798	3.930	1.757	0.219	1.132	2.579	0.000	0.048	0.000	0.006	0.013	1.163	0.000	0.000	0.000
803	0.000	19.317	0.129	6.545	19.112	8.893	2.575	0.465	2.775	7.956	0.260	0.087	0.000	0.006	0.000	11.335	0.004	0.000	0.000
804	0.000	11.785	0.450	11.116	32.459	14.343	5.925	0.292	4.713	4.854	1.542	0.063	0.000	0.000	0.003	1.951	0.000	0.001	0.000
805	0.490	15.716	1.965	2.815	8.220	5.590	2.107	0.210	1.194	6.473	1.705	0.048	0.000	0.001	0.003	10.355	0.000	0.004	0.000
806	0.000	6.536	0.000	7.034	20.540	4.045	2.063	0.133	2.983	2.692	0.000	0.025	0.000	0.004	0.004	2.337	0.009	0.000	0.001
807	0.000	8.925	0.000	3.832	11.189	1.889	0.709	0.060	1.625	3.676	0.000	0.000	0.071	0.003	0.000	7.679	0.018	0.000	0.005
808	0.000	8.789	#DIV/0!	0.000	0.000	1.750	0.401	0.070	0.000	3.620	0.000	0.017	0.007	0.000	0.000	7.485	0.032	0.000	0.000
816	2.297	22.911	3.044	3.280	9.579	18.048	3.959	3.310	1.391	9.436	3.077	0.319	0.000	0.025	0.016	5.861	0.032	0.000	0.000
818	0.000	24.093	#DIV/0!	0.000	0.000	2.372	0.300	1.413	0.000	9.923	0.000	0.122	0.000	0.013	0.004	10.634	0.012	0.000	0.000
819	0.000	22.456	1.316	3.531	10.310	14.070	3.488	2.538	1.497	9.249	1.431	0.270	0.000	0.034	0.003	3.305	0.012	0.001	0.000
820	0.664	20.672	2.137	2.577	7.524	23.822	4.822	4.496	1.093	8.514	1.696	0.407	0.000	0.045	0.015	3.527	0.018	0.000	0.000
821	0.000	42.231	1.260	6.471	18.895	20.171	3.805	1.691	2.744	17.393	2.513	0.234	0.000	0.014	0.012	26.993	0.016	0.000	0.000

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
822	0.000	30.793	1.423	4.078	11.908	8.734	2.589	2.571	1.729	12.682	1.788	0.214	0.000	0.030	0.000	22.328	0.000	0.000	0.000
826	0.000	30.480	0.702	5.662	16.532	17.308	4.391	2.376	2.401	12.554	1.224	0.269	0.000	0.027	0.007	11.979	0.009	0.001	0.000
827	0.000	16.446	0.000	9.552	27.892	9.149	3.178	0.345	4.050	6.774	0.000	0.105	0.000	0.006	0.006	8.587	0.009	0.001	0.001
828	0.000	8.867	0.000	4.641	13.552	3.031	1.563	0.146	1.968	3.652	0.000	0.070	0.000	0.004	0.012	5.591	0.004	0.000	0.002
830	0.000	11.870	0.000	4.301	12.559	4.002	1.549	0.190	1.824	4.889	0.000	0.032	0.000	0.004	0.012	8.554	0.004	0.000	0.000
831	0.000	8.500	0.000	2.170	6.337	2.629	1.052	0.162	0.920	3.501	0.000	0.013	0.000	0.004	0.000	5.147	0.011	0.001	0.005
834	3.061	4.179	#DIV/0!	0.000	0.000	0.034	0.000	0.061	0.000	1.721	1.933	0.032	0.000	0.000	0.001	2.565	0.000	0.000	0.000
835	1.482	4.573	3.611	1.517	4.430	0.175	0.030	0.080	0.643	1.883	1.688	0.000	0.000	0.003	0.001	2.637	0.005	0.003	0.000
837	0.000	2.782	#DIV/0!	0.000	0.000	0.000	0.000	0.074	0.000	1.146	0.000	0.002	0.000	0.000	0.000	0.629	0.000	0.000	0.001
838	5.145	19.697	4.225	4.031	11.771	8.818	3.188	0.227	1.709	8.113	5.247	0.072	0.000	0.004	0.003	15.385	0.036	0.000	0.001
839	0.000	2.212	0.000	1.263	3.688	0.000	0.000	0.049	0.536	0.911	0.000	0.010	0.000	0.000	0.000	0.000	0.021	0.000	0.001
840	0.000	9.750	0.000	2.174	6.348	5.459	1.457	0.232	0.922	4.016	0.000	0.107	0.000	0.012	0.004	1.609	0.045	0.001	0.004
841	0.000	16.579	0.000	5.662	16.532	10.035	3.730	0.276	2.401	6.828	0.000	0.125	0.000	0.015	0.007	5.489	0.041	0.000	0.002
842	0.000	17.737	0.000	2.123	6.200	14.641	3.229	0.560	0.900	7.305	0.000	0.123	0.000	0.010	0.000	4.383	0.020	0.000	0.000
843	0.529	24.667	1.722	9.509	27.767	18.016	5.608	0.831	4.032	10.160	5.046	0.215	0.000	0.013	0.018	9.351	0.020	0.000	0.002
844	2.101	23.156	2.211	7.144	20.859	16.904	5.251	0.735	3.029	9.537	4.867	0.214	0.000	0.013	0.003	8.869	0.034	0.000	0.001
845	10.532	3.897	33.351	0.680	1.987	2.826	0.680	0.144	0.288	1.605	6.990	0.028	0.000	0.000	0.000	1.798	0.002	0.000	0.000
846	0.000	19.996	0.251	3.120	9.111	13.875	3.250	0.545	1.323	8.236	0.241	0.160	0.000	0.008	0.000	7.422	0.002	0.000	0.000
847	0.000	53.225	0.452	12.144	35.462	24.316	5.506	3.248	5.149	21.921	1.692	0.259	0.000	0.019	0.004	43.765	0.030	0.000	0.000
848	0.000	34.492	0.470	6.760	19.740	11.141	3.463	0.469	2.867	14.206	0.978	0.681	0.000	0.026	0.016	9.663	0.475	0.000	0.000
849	0.000	33.738	0.000	4.669	13.632	8.088	2.477	0.276	1.980	13.895	0.000	0.662	0.000	0.023	0.004	6.469	0.480	0.000	0.001
850	0.000	28.265	0.236	8.277	24.170	8.484	2.337	1.091	3.510	11.641	0.601	0.128	0.000	0.018	0.000	11.571	0.025	0.000	0.000
851	0.000	47.844	0.724	7.335	21.419	13.284	3.662	0.846	3.110	19.705	1.637	1.086	0.000	0.041	0.012	10.879	0.793	0.003	0.000
852	0.000	32.070	0.036	4.586	13.392	6.629	2.173	0.209	1.945	13.208	0.051	0.622	0.000	0.022	0.001	8.782	0.480	0.001	0.001

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
853	0.000	39.785	0.178	7.507	21.921	10.503	3.163	0.407	3.183	16.386	0.412	1.018	0.000	0.044	0.016	9.483	0.691	0.001	0.002
854	0.000	40.397	0.160	7.323	21.384	10.606	3.195	0.413	3.105	16.638	0.360	0.936	0.000	0.040	0.003	9.576	0.685	0.003	0.003
855	0.000	39.918	0.044	7.538	22.012	9.436	3.040	0.375	3.196	16.441	0.102	0.894	0.000	0.043	0.000	8.204	0.807	0.000	0.001
856	0.000	53.140	0.510	4.313	12.593	13.165	3.541	0.613	1.829	21.886	0.678	1.551	0.000	0.054	0.016	11.706	1.262	0.000	0.001
857	0.000	34.445	1.429	5.509	16.087	8.375	2.834	0.239	2.336	14.186	2.425	0.706	0.000	0.027	0.004	6.801	0.593	0.001	0.003
858	0.000	18.926	0.273	7.875	22.994	7.720	2.836	0.286	3.339	7.795	0.663	0.409	0.000	0.014	0.009	4.959	0.200	0.000	0.002
859	0.000	36.592	0.729	6.518	19.032	8.401	2.821	0.230	2.764	15.071	1.465	0.676	0.000	0.027	0.016	7.634	0.477	0.001	0.004
860	0.000	37.091	0.147	4.332	12.650	8.247	2.498	0.267	1.837	15.276	0.196	0.759	0.000	0.027	0.015	6.697	0.553	0.000	0.000
861	0.000	25.364	0.637	9.509	27.767	12.775	4.748	1.257	4.032	10.446	1.866	0.564	0.000	0.034	0.004	7.131	0.366	0.005	0.005
862	0.000	33.585	0.278	3.531	10.310	8.054	2.507	0.239	1.497	13.832	0.302	0.804	0.000	0.036	0.000	6.966	0.589	0.000	0.004
863	0.000	32.427	0.196	4.383	12.799	7.806	2.492	0.233	1.859	13.355	0.265	0.771	0.000	0.034	0.000	6.750	0.553	0.001	0.003
864	0.000	13.161	0.000	1.541	4.498	2.501	1.128	0.073	0.653	5.421	0.000	0.260	0.000	0.013	0.000	2.196	0.180	0.000	0.004
865	0.000	22.310	0.000	6.225	18.176	5.607	1.869	0.163	2.639	9.189	0.000	0.509	0.000	0.026	0.000	5.100	0.387	0.003	0.000
866	0.000	25.262	0.151	5.713	16.681	5.348	1.952	0.176	2.422	10.404	0.266	0.557	0.000	0.023	0.009	5.654	0.450	0.000	0.000
867	0.000	27.786	0.421	9.052	26.431	7.770	3.012	0.270	3.838	11.444	1.173	0.597	0.000	0.021	0.010	5.630	0.368	0.004	0.003
868	0.000	30.721	0.450	7.452	21.761	9.265	3.486	0.296	3.160	12.653	1.032	0.621	0.000	0.027	0.001	7.092	0.439	0.004	0.001
869	0.000	5.989	0.582	6.068	17.719	3.756	1.204	0.207	2.573	2.467	1.088	0.082	0.055	0.009	0.000	0.899	0.025	0.003	0.000
870	0.000	11.588	0.681	7.488	21.864	6.430	2.428	0.237	3.175	4.773	1.572	0.147	0.000	0.015	0.000	1.855	0.087	0.003	0.000
871	0.000	42.048	0.501	9.013	26.317	13.569	4.557	0.651	3.821	17.318	1.390	0.942	0.000	0.036	0.000	9.693	0.682	0.004	0.002
872	0.000	19.524	1.598	6.815	19.900	7.810	2.853	0.347	2.890	8.041	3.356	0.200	0.000	0.012	0.006	9.099	0.141	0.000	0.004
873	1.341	13.198	2.408	3.437	10.036	1.820	0.625	0.147	1.457	5.436	2.550	0.142	0.000	0.008	0.000	8.656	0.062	0.000	0.000
874	0.000	6.380	0.561	6.365	18.587	2.069	0.353	0.104	2.699	2.628	1.101	0.080	0.000	0.010	0.006	1.900	0.066	0.000	0.000
875	0.000	6.533	0.893	3.867	11.292	1.977	0.582	0.116	1.640	2.691	1.064	0.097	0.000	0.006	0.000	1.798	0.046	0.001	0.000
876	1.769	16.881	1.867	14.021	40.942	4.426	2.024	0.203	5.945	6.953	8.065	0.374	0.000	0.014	0.000	3.452	0.239	0.000	0.004
877	0.109	7.335	1.641	6.780	19.797	1.786	0.945	0.100	2.875	3.021	3.428	0.132	0.000	0.001	0.010	1.348	0.070	0.000	0.004
878	0.000	16.018	0.755	11.003	32.128	9.847	3.739	0.641	4.665	6.597	2.560	0.105	0.000	0.015	0.000	2.412	0.011	0.000	0.000
879	0.000	19.585	0.724	10.006	29.217	8.512	2.950	0.946	4.243	8.066	2.232	0.267	0.000	0.014	0.000	5.432	0.134	0.000	0.005
880	0.000	30.922	1.071	7.147	20.871	11.507	3.917	0.419	3.031	12.736	2.357	0.606	0.000	0.019	0.007	7.275	0.400	0.001	0.006
881	0.000	45.197	0.755	8.532	24.912	12.442	4.030	0.432	3.618	18.615	1.985	0.909	0.000	0.037	0.010	9.366	0.702	0.000	0.005
882	0.000	20.088	0.574	6.307	18.416	5.876	1.825	1.318	2.674	8.273	1.115	0.382	0.000	0.019	0.003	4.288	0.339	0.000	0.006
883	0.000	34.360	0.287	8.606	25.129	10.127	3.690	0.345	3.649	14.152	0.761	0.729	0.000	0.032	0.012	7.023	0.530	0.001	0.000
884	1.133	18.838	2.151	4.281	12.502	4.400	1.311	0.216	1.815	7.759	2.837	0.374	0.000	0.025	0.000	3.188	0.214	0.000	0.001
885	1.404	18.518	2.021	6.968	20.345	5.802	2.131	0.249	2.954	7.627	4.339	0.424	0.000	0.012	0.015	4.404	0.243	0.001	0.006
886	2.244	17.707	2.507	5.118	14.945	5.635	1.895	0.230	2.170	7.293	3.953	0.339	0.000	0.008	0.000	4.336	0.280	0.000	0.003
887	0.000	26.567	0.966	9.783	28.566	8.497	3.208	0.420	4.148	10.942	2.913	0.397	0.000	0.012	0.000	6.070	0.303	0.000	0.000

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO ₂	Al ₂ O ₃	Fe ₂ O ₃	MgO	CaO	K ₂ O	TiO ₂	P ₂ O ₅	MnO	Cr ₂ O ₃	SO ₄	V ₂ O ₅	NiO	Sb
888	0.000	29.665	0.360	7.265	21.213	9.107	2.827	0.340	3.080	12.218	0.805	0.684	0.000	0.034	0.006	6.978	0.421	0.001	0.000
889	0.000	31.387	0.436	10.283	30.027	16.307	4.877	0.769	4.360	12.927	1.380	0.487	0.000	0.019	0.018	8.099	0.268	0.001	0.001
890	0.000	27.956	0.474	7.538	22.012	10.454	3.626	0.475	3.196	11.514	1.100	0.505	0.000	0.013	0.019	7.029	0.364	0.001	0.003
891	0.000	36.256	0.806	5.947	17.366	12.664	3.807	0.529	2.522	14.932	1.477	0.699	0.000	0.036	0.015	8.243	0.532	0.001	0.005
892	0.000	18.821	0.199	7.668	22.389	6.925	2.642	0.259	3.251	7.752	0.470	0.280	0.000	0.013	0.006	7.796	0.141	0.000	0.001
893	0.000	15.933	0.932	9.959	29.080	7.228	2.747	0.290	4.223	6.562	2.860	0.209	0.000	0.014	0.000	3.667	0.134	0.000	0.005
894	0.000	15.519	1.366	8.242	24.067	9.235	2.258	0.608	3.495	6.392	3.469	0.187	0.000	0.010	0.003	2.691	0.041	0.001	0.000
895	0.000	30.045	0.613	11.495	33.567	11.319	3.405	0.495	4.874	12.375	2.172	0.724	0.000	0.035	0.028	6.894	0.525	0.001	0.002
896	0.000	7.481	1.138	3.312	9.670	3.637	1.098	0.157	1.404	3.081	1.161	0.137	0.000	0.010	0.000	2.133	0.089	0.000	0.000
897	0.000	14.211	0.739	4.790	13.986	4.509	1.769	0.157	2.031	5.853	1.090	0.255	0.000	0.017	0.006	3.437	0.195	0.001	0.001
898	0.000	29.016	0.952	6.627	19.352	6.965	2.400	0.312	2.810	11.951	1.943	0.515	0.000	0.025	0.000	6.295	0.407	0.001	0.000
899	0.000	26.618	0.357	10.072	29.411	8.480	3.352	0.246	4.271	10.963	1.107	0.405	0.000	0.017	0.006	5.750	0.286	0.004	0.007
900	0.000	19.018	1.103	9.450	27.595	7.994	2.847	0.465	4.007	7.833	3.210	0.138	0.000	0.009	0.009	7.604	0.086	0.003	0.001
901	0.000	17.822	1.068	16.246	47.438	5.406	2.075	0.237	6.889	7.340	5.346	0.300	0.000	0.009	0.015	3.622	0.164	0.000	0.002
902	0.000	27.953	0.446	12.528	36.581	8.826	2.902	0.357	5.312	11.513	1.720	0.242	0.000	0.009	0.013	5.876	0.145	0.004	0.006
903	0.000	25.632	1.606	15.421	45.029	9.164	2.864	0.410	6.539	10.557	7.629	0.492	0.000	0.030	0.001	5.207	0.393	0.000	0.002
905	0.000	20.159	0.058	3.765	10.995	3.690	1.345	0.154	1.597	8.303	0.067	0.337	0.000	0.014	0.000	3.050	0.228	0.000	0.001
906	0.000	30.704	0.342	6.686	19.523	11.004	3.042	0.279	2.835	12.646	0.703	0.535	0.000	0.026	0.015	5.426	0.409	0.000	0.000
907	0.000	32.797	0.477	7.097	20.722	7.810	2.407	0.217	3.009	13.508	1.042	0.764	0.000	0.019	0.013	7.365	0.478	0.000	0.005
908	0.697	21.216	1.933	4.399	12.844	5.286	1.332	0.353	1.865	8.738	2.620	0.596	0.000	0.021	0.010	4.581	0.453	0.000	0.000
909	0.000	17.856	0.340	12.223	35.690	9.207	3.042	0.227	5.183	7.354	1.282	0.224	0.000	0.010	0.000	3.823	0.129	0.000	0.000
910	0.000	23.349	1.080	8.817	25.746	5.412	1.959	0.183	3.739	9.617	2.933	0.497	0.000	0.019	0.004	5.543	0.318	0.000	0.001
911	0.000	30.113	0.634	6.514	19.021	6.989	2.294	0.309	2.762	12.403	1.273	0.609	0.000	0.030	0.001	7.233	0.455	0.000	0.000
912	0.000	38.362	0.807	6.021	17.582	8.582	2.439	0.326	2.553	15.800	1.497	0.926	0.000	0.040	0.016	8.698	0.721	0.003	0.005
913	0.000	16.392	0.965	5.353	15.630	4.343	1.723	0.127	2.270	6.751	1.591	0.212	0.000	0.012	0.000	7.874	0.145	0.003	0.001
914	0.000	30.225	1.221	6.135	17.914	6.715	2.343	0.197	2.601	12.449	2.307	0.582	0.000	0.021	0.000	5.663	0.428	0.000	0.003
915	0.449	29.312	1.817	4.414	12.890	6.730	2.205	0.190	1.872	12.072	2.471	0.592	0.000	0.025	0.000	5.591	0.446	0.000	0.003
916	0.000	43.600	0.662	7.257	21.190	8.835	3.084	0.347	3.077	17.957	1.479	0.961	0.000	0.039	0.012	9.663	0.810	0.000	0.000
917	0.000	1.705	0.000	2.111	6.165	0.000	0.096	0.014	0.895	0.702	0.000	0.025	0.000	0.003	0.006	0.360	0.021	0.003	0.004
918	0.528	22.204	1.772	6.596	19.261	3.087	1.132	0.119	2.797	9.145	3.602	0.355	0.000	0.019	0.009	7.461	0.252	0.001	0.003
919	0.000	23.387	0.397	4.633	13.529	3.006	0.678	0.262	1.965	9.632	0.566	0.616	0.000	0.021	0.003	4.812	0.493	0.004	0.007
920	0.000	6.339	0.000	1.736	5.069	0.000	0.072	0.021	0.736	2.611	0.000	0.055	0.057	0.001	0.000	3.784	0.023	0.000	0.002
921	0.000	25.405	0.225	15.386	44.927	4.199	1.725	0.209	6.524	10.463	1.068	0.482	0.000	0.019	0.003	5.001	0.370	0.006	0.000
922	0.000	2.636	1.068	0.747	2.181	0.000	0.079	0.021	0.317	1.086	0.246	0.000	0.011	0.010	0.000	0.740	0.041	0.001	0.004
923	1.335	13.022	1.909	9.106	26.591	2.650	0.918	0.266	3.861	5.363	5.356	0.222	0.000	0.021	0.000	3.455	0.171	0.000	0.000
924	0.000	11.911	1.579	14.475	42.266	2.445	1.020	0.250	6.138	4.906	7.040	0.237	0.000	0.013	0.009	3.736	0.186	0.004	0.000

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
931	0.000	8.272	0.331	3.691	10.778	1.904	0.240	0.276	1.565	3.407	0.376	0.095	0.000	0.000	0.000	3.338	0.005	0.000	0.000
935	0.000	29.087	0.868	5.087	14.854	6.328	2.120	0.315	2.157	11.980	1.360	0.470	0.000	0.023	0.003	5.031	0.298	0.001	0.002
936	0.000	33.113	0.518	9.615	28.075	8.088	2.713	0.232	4.077	13.638	1.535	0.611	0.000	0.022	0.004	9.099	0.421	0.001	0.005
937	0.000	11.377	0.013	2.979	8.700	2.396	0.780	0.133	1.263	4.686	0.012	0.167	0.000	0.003	0.000	3.134	0.095	0.001	0.000
938	0.000	35.162	0.413	9.224	26.933	8.822	2.910	0.305	3.911	14.482	1.174	0.542	0.000	0.025	0.019	13.863	0.448	0.003	0.001
939	0.000	38.929	0.174	7.312	21.350	9.325	3.006	0.250	3.100	16.033	0.393	0.702	0.000	0.022	0.019	9.654	0.516	0.003	0.003
940	0.000	12.730	0.074	8.676	25.335	3.187	1.238	0.160	3.679	5.243	0.198	0.209	0.000	0.017	0.009	2.792	0.136	0.000	0.000
941	2.409	4.406	7.624	0.821	2.398	0.582	0.272	0.053	0.348	1.815	1.929	0.038	0.000	0.012	0.000	0.276	0.046	0.000	0.006
942	0.000	11.051	0.511	6.725	19.638	2.315	1.030	0.099	2.852	4.552	1.059	0.209	0.000	0.008	0.013	1.744	0.121	0.001	0.004
943	0.000	12.614	0.000	6.995	20.425	3.827	1.880	0.150	2.966	5.195	0.000	0.224	0.000	0.009	0.012	1.097	0.125	0.000	0.000
944	0.000	12.424	0.000	5.701	16.646	3.607	1.874	0.156	2.417	5.117	0.000	0.222	0.000	0.006	0.000	1.043	0.143	0.000	0.001
945	1.238	7.770	2.629	2.487	7.261	1.065	0.510	0.054	1.054	3.200	2.014	0.145	0.000	0.009	0.003	2.349	0.095	0.003	0.000
946	0.000	44.640	0.274	7.038	20.551	8.681	2.657	0.340	2.984	18.385	0.595	1.143	0.000	0.036	0.012	8.422	0.868	0.001	0.000
947	0.000	33.473	0.889	5.095	14.877	8.242	2.849	0.295	2.160	13.786	1.395	0.716	0.000	0.030	0.019	6.990	0.580	0.000	0.003
948	0.000	43.536	0.361	9.016	26.328	14.934	4.941	0.443	3.823	17.931	1.003	0.904	0.000	0.032	0.020	8.866	0.536	0.001	0.002
949	0.000	28.591	1.607	4.899	14.306	5.521	1.978	0.202	2.077	11.776	2.426	0.489	0.000	0.022	0.000	5.801	0.386	0.005	0.004
950	0.000	22.904	0.304	4.356	12.719	5.063	2.058	0.130	1.847	9.433	0.408	0.355	0.000	0.027	0.000	5.013	0.282	0.000	0.001
951	0.000	27.993	0.484	5.955	17.388	8.993	3.018	0.270	2.525	11.529	0.888	0.497	0.000	0.017	0.020	7.967	0.325	0.000	0.002
952	2.065	10.372	2.257	6.530	19.067	0.898	0.382	0.172	2.769	4.272	4.540	0.304	0.000	0.019	0.006	1.273	0.195	0.000	0.001
953	0.000	8.829	0.000	5.724	16.715	1.547	0.966	0.099	2.427	3.637	0.000	0.125	0.000	0.013	0.003	1.420	0.100	0.003	0.004
954	8.135	11.228	8.964	2.268	6.622	0.864	0.419	0.104	0.962	4.624	6.263	0.235	0.000	0.019	0.006	1.846	0.154	0.004	0.001
955	0.000	26.064	1.434	13.032	38.054	4.631	1.808	0.510	5.526	10.735	5.759	0.487	0.000	0.019	0.001	5.207	0.384	0.004	0.001
956	0.000	42.044	0.383	4.528	13.221	5.286	1.357	0.297	1.920	17.316	0.535	1.166	0.000	0.037	0.026	6.661	0.914	0.000	0.003
957	4.910	23.213	3.158	6.498	18.975	6.088	2.101	1.443	2.755	9.561	6.322	0.359	0.000	0.017	0.000	3.766	0.252	0.000	0.004
958	0.000	8.007	0.011	4.059	11.851	0.978	0.503	0.133	1.721	3.298	0.013	0.182	0.000	0.004	0.000	1.145	0.112	0.001	0.004
959	0.000	11.591	0.591	5.838	17.046	1.795	0.646	0.419	2.475	4.774	1.064	0.410	0.000	0.023	0.026	1.672	0.321	0.001	0.001
960	0.000	34.543	1.568	4.626	13.507	9.107	2.972	0.305	1.961	14.227	2.235	0.684	0.000	0.030	0.010	7.991	0.443	0.000	0.000
961	0.537	17.197	1.757	7.382	21.556	4.800	1.706	0.233	3.130	7.083	3.997	0.279	0.000	0.019	0.016	3.913	0.211	0.006	0.002
962	0.000	8.490	1.181	2.858	8.346	1.431	0.627	0.066	1.212	3.497	1.040	0.133	0.000	0.006	0.012	1.882	0.059	0.000	0.004
963	2.352	8.548	8.276	0.723	2.112	1.476	0.499	0.071	0.307	3.520	1.844	0.133	0.032	0.010	0.004	2.193	0.096	0.000	0.004
964	0.844	13.973	1.814	8.410	24.558	1.791	0.603	0.752	3.566	5.755	4.700	0.279	0.000	0.015	0.000	1.402	0.223	0.001	0.001
965	0.000	16.735	0.440	5.396	15.756	4.274	1.542	0.172	2.288	6.892	0.731	0.359	0.000	0.017	0.000	6.571	0.270	0.003	0.000
966	1.979	4.912	2.409	5.067	14.797	0.122	0.246	0.136	2.149	2.023	3.761	0.047	0.000	0.001	0.007	1.195	0.036	0.000	0.002
967	0.000	8.174	0.000	3.073	8.974	1.673	0.845	0.086	1.303	3.366	0.000	0.145	0.000	0.005	0.010	2.858	0.100	0.000	0.000
968	0.000	12.169	1.315	6.846	19.992	1.376	0.533	0.083	2.903	5.012	2.773	0.262	0.000	0.012	0.000	1.351	0.155	0.000	0.004
969	0.000	18.546	0.181	4.950	14.454	3.179	1.175	0.312	2.099	7.638	0.276	0.262	0.000	0.015	0.000	2.112	0.280	0.000	0.000

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
999	0.000	2.680	0.000	4.117	12.022	0.000	0.183	0.222	1.746	1.104	0.000	0.063	0.000	0.009	0.000	0.518	0.079	0.000	0.000
1000	0.000	13.929	0.000	3.546	10.355	2.834	1.194	0.167	1.504	5.737	0.000	0.080	0.000	0.008	0.004	9.069	0.023	0.000	0.002
1001	0.000	13.168	0.000	1.720	5.024	2.323	1.052	0.114	0.729	5.423	0.000	0.153	0.000	0.005	0.001	8.707	0.111	0.000	0.001
1002	0.000	2.052	0.000	4.199	12.262	0.000	0.355	0.031	1.781	0.845	0.000	0.035	0.000	0.003	0.000	0.342	0.029	0.001	0.006
1003	0.000	2.460	0.000	2.784	8.129	0.000	0.000	0.021	1.180	1.013	0.000	0.035	0.000	0.005	0.000	1.417	0.032	0.001	0.002
1004	0.000	2.854	0.000	0.160	0.468	0.246	0.229	0.039	0.068	1.175	0.000	0.108	0.000	0.005	0.000	0.425	0.089	0.000	0.002
1005	0.000	3.496	0.000	4.383	12.799	0.777	0.556	0.036	1.859	1.440	0.000	0.070	0.000	0.008	0.000	0.677	0.068	0.001	0.000
1006	10.490	1.369	6.665	4.254	12.422	0.079	0.198	0.034	1.804	0.564	8.735	0.052	0.000	0.009	0.000	0.761	0.014	0.000	0.003
1007	10.235	3.428	8.498	3.046	8.894	0.332	0.246	0.100	1.292	1.412	7.974	0.018	0.000	0.001	0.000	1.986	0.009	0.000	0.000
1008	0.000	4.348	0.000	1.783	5.206	0.308	0.161	0.033	0.756	1.791	0.000	0.025	0.000	0.001	0.000	2.415	0.012	0.003	0.002
1009	0.000	1.930	0.000	4.872	14.226	0.000	0.000	0.023	2.066	0.795	0.000	0.033	0.016	0.003	0.000	0.219	0.025	0.003	0.000
1010	2.619	11.761	2.757	4.676	13.655	3.767	1.901	0.180	1.983	4.844	3.972	0.212	0.000	0.005	0.000	7.440	0.184	0.000	0.000
1011	0.000	9.200	0.419	6.815	19.900	2.777	1.487	0.096	2.890	3.789	0.881	0.204	0.000	0.010	0.000	5.645	0.111	0.004	0.002
1012	11.539	7.882	8.222	3.578	10.447	1.519	0.811	0.106	1.517	3.246	9.062	0.073	0.000	0.006	0.004	7.011	0.055	0.001	0.002
1013	2.763	5.368	2.819	4.680	13.666	1.149	0.644	0.054	1.985	2.211	4.064	0.117	0.000	0.006	0.004	3.290	0.080	0.000	0.000
1014	13.023	6.207	9.265	3.488	10.184	1.192	0.794	0.034	1.479	2.556	9.955	0.087	0.000	0.005	0.009	5.888	0.020	0.001	0.001
1015	13.391	6.394	8.745	3.847	11.235	1.209	0.775	0.049	1.631	2.633	10.366	0.107	0.000	0.004	0.000	6.085	0.041	0.000	0.001
971	3.614	33.575	4.471	2.588	7.558	8.574	2.711	1.057	1.098	13.828	3.566	1.053	0.000	0.057	0.000	20.054	0.991	0.000	0.000
972	0.000	18.355	0.665	6.017	17.571	5.825	2.324	0.495	2.552	7.560	1.232	0.445	0.000	0.022	0.000	11.158	0.403	0.000	0.006
973	0.000	4.841	1.411	2.721	7.946	1.025	0.550	0.050	1.154	1.994	1.183	0.047	0.073	0.010	0.000	3.347	0.045	0.001	0.004
974	0.000	4.848	0.000	5.419	15.824	1.155	0.812	0.046	2.298	1.997	0.000	0.038	0.000	0.003	0.018	2.876	0.048	0.000	0.004
975	0.000	30.422	0.970	5.705	16.658	10.589	4.049	0.813	2.419	12.530	1.705	0.217	0.000	0.013	0.004	28.134	0.059	0.000	0.000
976	0.000	2.667	#DIV/0!	0.000	0.000	0.000	0.208	0.051	0.000	1.098	0.000	0.078	0.000	0.004	0.007	1.201	0.061	0.001	0.000
977	2.729	3.037	5.697	1.369	3.996	0.000	0.304	0.076	0.580	1.251	2.402	0.028	0.000	0.004	0.001	2.208	0.002	0.000	0.000
978	0.000	1.118	0.458	2.260	6.599	0.000	0.000	0.013	0.958	0.460	0.319	0.000	0.041	0.000	0.000	0.237	0.012	0.000	0.000

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
979	0.000	1.831	0.213	5.224	15.253	0.034	0.346	0.030	2.215	0.754	0.343	0.005	0.025	0.003	0.016	0.126	0.018	0.000	0.002
980	0.000	0.679	0.000	2.459	7.181	0.000	0.000	0.020	1.043	0.280	0.000	0.040	0.000	0.005	0.000	0.000	0.000	0.001	0.000
981	0.000	2.735	0.000	2.612	7.627	0.496	0.327	0.047	1.107	1.126	0.000	0.018	0.000	0.000	0.001	1.429	0.002	0.000	0.004
982	1.522	13.300	2.167	5.583	16.304	3.335	1.206	0.339	2.367	5.478	3.728	0.087	0.000	0.010	0.000	8.557	0.005	0.000	0.000
983	0.000	9.122	0.000	0.770	2.249	0.019	0.000	0.097	0.327	3.757	0.000	0.057	0.000	0.009	0.010	6.244	0.012	0.000	0.000
984	0.000	14.336	0.000	1.881	5.492	2.201	0.839	0.113	0.797	5.905	0.000	0.204	0.000	0.008	0.000	18.520	0.118	0.000	0.000
985	0.000	19.507	0.234	4.653	13.586	7.070	3.016	0.250	1.973	8.034	0.335	0.555	0.000	0.027	0.000	10.145	0.471	0.004	0.000
986	0.000	10.039	0.000	2.330	6.805	1.957	0.947	0.067	0.988	4.135	0.000	0.142	0.002	0.009	0.009	5.498	0.102	0.000	0.000
987	0.000	18.277	0.440	2.745	8.015	6.989	3.303	0.219	1.164	7.528	0.372	0.322	0.000	0.015	0.003	9.792	0.230	0.000	0.002
988	0.000	12.658	0.000	3.542	10.344	3.682	1.532	0.129	1.502	5.213	0.000	0.240	0.000	0.013	0.000	7.326	0.211	0.000	0.003
989	0.000	1.169	#DIV/0!	0.000	0.000	0.000	0.000	0.016	0.000	0.481	0.000	0.023	0.044	0.008	0.003	0.000	0.014	0.000	0.002
990	0.000	17.180	#DIV/0!	0.000	0.000	1.035	0.758	0.097	0.000	7.076	0.000	0.150	0.000	0.009	0.000	14.136	0.111	0.000	0.000
991	0.000	4.515	0.486	4.317	12.605	1.696	1.434	0.087	1.830	1.860	0.646	0.057	0.000	0.005	0.001	2.121	0.041	0.004	0.000
992	0.000	6.353	0.000	2.671	7.798	1.889	1.075	0.080	1.132	2.617	0.000	0.157	0.000	0.008	0.000	4.482	0.154	0.001	0.005
993	0.000	30.161	0.014	11.390	33.258	5.810	1.321	0.376	4.829	12.422	0.049	0.157	0.000	0.009	0.000	11.407	0.041	0.003	0.000
994	0.000	31.961	0.021	11.104	32.425	6.191	1.171	0.382	4.708	13.164	0.073	0.095	0.000	0.001	0.000	11.796	0.059	0.000	0.000
1042	0.000	23.720	0.585	8.438	24.638	21.604	4.705	2.998	3.578	9.769	1.521	0.209	0.000	0.030	0.031	1.723	0.021	0.001	0.000
1043	4.925	1.947	8.065	1.564	4.567	1.076	0.508	0.176	0.663	0.802	3.886	0.048	0.000	0.006	0.000	0.458	0.000	0.000	0.001
1044	0.000	5.972	0.000	5.083	14.842	3.712	1.100	0.159	2.155	2.460	0.000	0.057	0.009	0.006	0.000	1.921	0.000	0.001	0.000
1045	0.000	5.449	0.000	3.605	10.527	4.375	1.338	0.242	1.529	2.244	0.000	0.042	0.030	0.005	0.006	0.662	0.016	0.005	0.003
1046	0.000	4.253	0.044	0.802	2.341	2.426	0.527	0.456	0.340	1.752	0.011	0.093	0.000	0.009	0.000	0.237	0.000	0.000	0.004
1047	0.000	4.134	0.000	3.746	10.938	0.971	0.444	0.047	1.588	1.703	0.000	0.015	0.000	0.000	0.006	1.732	0.023	0.000	0.000
1048	0.000	2.939	0.000	2.358	6.885	0.738	0.610	0.102	1.000	1.210	0.000	0.027	0.000	0.006	0.000	0.674	0.012	0.000	0.001
1049	0.000	1.277	0.000	1.228	3.585	0.148	0.246	0.024	0.521	0.526	0.000	0.028	0.000	0.008	0.003	0.000	0.029	0.003	0.003
1050	0.000	7.331	0.655	6.803	19.866	4.263	1.419	0.123	2.885	3.019	1.372	0.040	0.044	0.003	0.000	2.022	0.014	0.000	0.003
1051	16.363	0.696	15.910	2.346	6.850	1.450	0.414	0.074	0.995	0.287	11.499	0.017	0.000	0.005	0.000	0.000	0.016	0.001	0.003
1052	0.000	15.152	0.000	4.332	12.650	3.239	0.888	0.169	1.837	6.240	0.000	0.043	0.000	0.003	0.010	9.007	0.000	0.000	0.003
1053	0.000	4.236	0.000	5.106	14.911	2.948	1.385	0.166	2.165	1.745	0.000	0.073	0.000	0.000	0.004	1.609	0.000	0.003	0.000
1054	0.000	4.315	0.000	4.563	13.324	2.909	1.393	0.187	1.935	1.777	0.000	0.032	0.069	0.000	0.003	1.585	0.005	0.001	0.000
1055	0.000	5.959	0.953	3.851	11.246	4.368	1.591	0.303	1.633	2.454	1.131	0.365	0.009	0.015	0.006	2.661	0.232	0.000	0.001

Sample ID	%KCl sylvite ¹	%CaSO ₄ ¹	K/Mg molar ²	MgCl ₂ ³	Carnallite ³	SiO2	Al2O3	Fe2O3	MgO	CaO	K2O	TiO2	P2O5	MnO	Cr2O3	SO4	V2O5	NiO	Sb
1056	0.000	4.923	0.394	5.458	15.938	3.833	1.340	0.315	2.314	2.027	0.663	0.057	0.000	0.009	0.000	1.870	0.011	0.000	0.000
1057	1.600	2.670	3.328	1.908	5.572	0.674	0.191	0.122	0.809	1.100	1.956	0.028	0.000	0.004	0.000	2.244	0.004	0.000	0.004
1058	2.204	2.252	3.957	1.924	5.617	0.477	0.000	0.094	0.816	0.928	2.345	0.002	0.000	0.000	0.004	1.240	0.012	0.000	0.000
1059	0.000	1.617	0.445	3.312	9.670	0.404	0.128	0.089	1.404	0.666	0.454	0.013	0.000	0.001	0.001	0.135	0.000	0.001	0.000
1060	0.000	5.371	0.000	1.005	2.934	1.542	0.321	0.064	0.426	2.212	0.000	0.023	0.000	0.009	0.000	2.175	0.002	0.001	0.007
1061	0.000	7.854	0.000	4.747	13.860	3.151	1.022	0.259	2.013	3.235	0.000	0.048	0.000	0.006	0.009	3.116	0.036	0.000	0.008
1062	0.000	7.454	0.000	3.468	10.127	2.126	0.512	0.096	1.471	3.070	0.000	0.032	0.000	0.005	0.009	4.225	0.027	0.000	0.001
1063	0.000	7.892	0.000	3.597	10.504	2.039	0.493	0.090	1.525	3.250	0.000	0.053	0.000	0.005	0.000	4.554	0.007	0.000	0.002
1064	0.000	9.251	0.974	1.505	4.396	1.174	0.214	0.064	0.638	3.810	0.452	0.020	0.000	0.004	0.003	6.484	0.014	0.001	0.002

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
690	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.007	0.005	32.026	0.750	0.000	0.001	0.000	0.001	0.000	0.001	0.005	0.001	0.000
691	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.006	0.005	31.355	0.833	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
692	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	38.296	0.738	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
693	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.005	0.004	29.558	0.781	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
694	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	34.970	0.764	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
695	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	34.637	0.739	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
697	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	36.637	0.724	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
698	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	29.880	0.810	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
699	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.006	0.005	31.841	0.849	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000
700	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	38.658	0.691	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
701	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.004	34.328	0.746	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
702	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.006	0.004	33.303	0.744	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
703	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	36.038	0.715	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
704	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	32.817	0.758	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
705	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.005	34.018	0.740	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
706	0.005	0.001	0.004	0.001	0.003	0.000	0.001	0.006	0.005	33.986	0.727	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
707	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	36.417	0.706	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000
708	0.005	0.003	0.004	0.002	0.003	0.001	0.001	0.007	0.005	28.532	0.823	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
709	0.005	0.003	0.004	0.003	0.003	0.001	0.001	0.006	0.004	29.324	0.789	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
710	0.005	0.001	0.004	0.001	0.003	0.000	0.001	0.008	0.006	31.409	0.794	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
711	0.005	0.002	0.004	0.001	0.003	0.001	0.001	0.008	0.006	29.911	0.781	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
712	0.005	0.003	0.004	0.000	0.003	0.001	0.001	0.007	0.005	29.466	0.798	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
713	0.005	0.004	0.004	0.000	0.003	0.001	0.001	0.005	0.003	33.421	0.744	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000
714	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.405	0.791	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
715	0.005	0.004	0.004	0.002	0.003	0.001	0.001	0.006	0.004	29.629	0.800	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
716	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	31.830	0.767	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
717	0.005	0.002	0.004	0.002	0.003	0.001	0.001	0.008	0.005	30.845	0.829	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.000
718	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	32.264	0.756	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
719	0.005	0.001	0.004	0.002	0.003	0.001	0.001	0.006	0.004	30.678	0.807	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
720	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	32.607	0.733	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
721	0.005	0.000	0.004	0.000	0.003	0.002	0.001	0.006	0.004	28.237	0.774	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.000
722	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.007	0.005	31.101	0.794	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
723	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.007	0.005	30.863	0.853	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000
724	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.403	0.808	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
725	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.899	0.776	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
726	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.005	0.003	34.978	0.692	0.000	0.001	0.000	0.001	0.001	0.001	0.005	0.001	0.001
727	0.005	0.004	0.004	0.000	0.003	0.001	0.001	0.005	0.004	30.520	0.788	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
728	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.002	0.002	50.065	0.511	0.000	0.001	0.000	0.001	0.002	0.001	0.007	0.001	0.002
729	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	30.987	0.773	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
730	0.004	0.002	0.004	0.000	0.002	0.001	0.001	0.005	0.004	31.929	0.771	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
731	0.005	0.002	0.004	0.000	0.003	0.001	0.001	0.004	0.003	32.501	0.745	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
732	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.005	34.600	0.745	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
733	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	33.029	0.759	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
734	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.007	0.005	30.653	0.796	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
735	0.005	0.000	0.004	0.002	0.003	0.002	0.001	0.006	0.004	30.607	0.845	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
736	0.004	0.000	0.004	0.000	0.002	0.001	0.001	0.000	0.002	46.984	0.441	0.000	0.001	0.001	0.001	0.005	0.001	0.030	0.001	0.005
737	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	41.317	0.509	0.000	0.001	0.000	0.001	0.003	0.001	0.059	0.001	0.002
738	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	47.133	0.471	0.001	0.001	0.001	0.001	0.004	0.001	0.060	0.001	0.002
739	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	57.204	0.408	0.000	0.001	0.001	0.001	0.004	0.001	0.016	0.001	0.004
740	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	45.597	0.492	0.000	0.001	0.001	0.001	0.002	0.001	0.049	0.001	0.003
741	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	45.676	0.574	0.000	0.001	0.001	0.001	0.005	0.001	0.005	0.001	0.002
744	0.004	0.000	0.004	0.001	0.002	0.001	0.001	0.000	0.002	42.261	0.556	0.000	0.001	0.001	0.001	0.006	0.001	0.031	0.001	0.002
746	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	50.381	0.540	0.000	0.001	0.001	0.001	0.003	0.001	0.039	0.001	0.004
747	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	45.439	0.560	0.000	0.001	0.001	0.001	0.004	0.001	0.028	0.001	0.005
748	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.001	0.002	42.099	0.607	0.000	0.001	0.001	0.001	0.005	0.001	0.039	0.001	0.003
749	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	48.737	0.535	0.000	0.001	0.001	0.001	0.005	0.001	0.020	0.001	0.003
750	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	32.589	0.777	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
751	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	35.171	0.739	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
752	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.004	30.318	0.731	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
753	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.554	0.762	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
754	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	36.611	0.745	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
755	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	33.699	0.766	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
756	0.005	0.001	0.004	0.001	0.003	0.000	0.001	0.005	0.004	31.075	0.818	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000
757	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.004	0.003	28.014	0.804	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
758	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	35.108	0.762	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
759	0.005	0.003	0.004	0.000	0.003	0.001	0.001	0.006	0.004	28.498	0.853	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
760	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.004	0.003	32.346	0.758	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
761	0.005	0.006	0.005	0.001	0.003	0.000	0.001	0.008	0.006	31.111	0.833	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
762	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	43.183	0.660	0.001	0.001	0.000	0.001	0.000	0.001	0.006	0.001	0.000
763	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	31.732	0.802	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.000
764	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.003	0.002	31.382	0.759	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
765	0.005	0.006	0.004	0.000	0.003	0.000	0.001	0.006	0.004	30.755	0.758	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
766	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.046	0.755	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
767	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.007	0.005	36.328	0.705	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
768	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.005	0.003	32.615	0.783	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
769	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	32.380	0.775	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
770	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	35.368	0.759	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
771	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.007	0.005	26.601	0.837	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
772	0.005	0.003	0.004	0.001	0.003	0.000	0.001	0.006	0.004	27.360	0.776	0.000	0.001	0.001	0.001	0.000	0.001	0.007	0.001	0.001
773	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.004	0.003	35.125	0.705	0.000	0.001	0.001	0.001	0.000	0.001	0.004	0.001	0.001
774	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.003	31.582	0.730	0.000	0.001	0.000	0.001	0.001	0.001	0.005	0.001	0.001
775	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	37.451	0.686	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
776	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.004	0.003	31.923	0.775	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
777	0.005	0.000	0.004	0.003	0.003	0.000	0.001	0.007	0.005	32.522	0.751	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
778	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	41.128	0.693	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
779	0.005	0.004	0.004	0.000	0.003	0.001	0.001	0.005	0.004	31.738	0.773	0.000	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.001

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
780	0.005	0.006	0.004	0.000	0.003	0.000	0.001	0.006	0.004	31.668	0.799	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
781	0.005	0.003	0.004	0.002	0.003	0.001	0.001	0.008	0.005	30.417	0.767	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
782	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.007	0.005	30.586	0.766	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
783	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	32.344	0.829	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
784	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	29.751	0.770	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
785	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.424	0.812	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001
786	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	34.215	0.763	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
787	0.005	0.004	0.004	0.001	0.003	0.001	0.001	0.006	0.005	27.708	0.779	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
788	0.005	0.002	0.004	0.002	0.003	0.000	0.001	0.006	0.004	32.739	0.761	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
789	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.006	0.004	32.039	0.763	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.001
790	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	31.318	0.792	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
791	0.005	0.004	0.004	0.000	0.003	0.001	0.001	0.007	0.005	28.224	0.844	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
792	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	35.288	0.752	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
793	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	32.762	0.751	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
794	0.005	0.002	0.004	0.001	0.003	0.002	0.002	0.008	0.006	32.118	0.761	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
795	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.007	0.005	39.473	0.620	0.001	0.001	0.000	0.001	0.001	0.001	0.003	0.001	0.001
796	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.004	0.003	39.386	0.618	0.000	0.001	0.001	0.001	0.001	0.001	0.003	0.001	0.001
797	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.006	0.005	35.738	0.687	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
798	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	31.257	0.777	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
799	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.006	0.004	28.838	0.832	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
800	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	35.351	0.733	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
801	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.175	0.862	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
802	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	35.547	0.746	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
803	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	39.482	0.669	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
804	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.933	0.763	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001
805	0.004	0.000	0.004	0.000	0.003	0.001	0.001	0.005	0.004	35.328	0.718	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
806	0.004	0.001	0.004	0.000	0.002	0.001	0.001	0.003	0.002	31.278	0.784	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
807	0.005	0.004	0.004	0.000	0.003	0.000	0.001	0.006	0.004	32.644	0.780	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
808	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	37.375	0.717	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001
816	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	51.313	0.454	0.000	0.001	0.001	0.001	0.007	0.001	0.024	0.001	0.005
818	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.000	0.002	64.422	0.457	0.000	0.001	0.000	0.001	0.004	0.001	0.047	0.001	0.002
819	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	53.232	0.445	0.000	0.001	0.001	0.001	0.009	0.001	0.020	0.001	0.004
820	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	56.095	0.393	0.000	0.001	0.001	0.001	0.008	0.001	0.010	0.001	0.007
821	0.004	0.000	0.004	0.001	0.002	0.001	0.001	0.000	0.002	44.020	0.486	0.000	0.001	0.001	0.001	0.005	0.001	0.044	0.001	0.003

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
822	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	44.428	0.546	0.000	0.001	0.000	0.001	0.004	0.001	0.051	0.001	0.003
826	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	53.350	0.440	0.000	0.001	0.001	0.001	0.003	0.001	0.036	0.001	0.004
827	0.005	0.001	0.004	0.001	0.003	0.001	0.001	0.007	0.005	34.536	0.719	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000
828	0.005	0.001	0.004	0.001	0.003	0.001	0.001	0.006	0.005	31.061	0.785	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
830	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	36.698	0.704	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.000
831	0.005	0.001	0.004	0.002	0.003	0.000	0.001	0.007	0.005	33.335	0.754	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
834	0.005	0.000	0.005	0.000	0.003	0.000	0.001	0.005	0.004	36.019	0.775	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
835	0.005	0.002	0.005	0.000	0.003	0.000	0.001	0.005	0.004	34.169	0.799	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
837	0.006	0.000	0.005	0.000	0.003	0.000	0.001	0.002	0.002	51.151	0.712	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
838	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.004	32.888	0.703	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
839	0.006	0.000	0.005	0.000	0.003	0.000	0.002	0.005	0.004	38.634	0.897	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
840	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.004	36.378	0.721	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
841	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.007	0.005	35.291	0.723	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
842	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.002	0.002	45.532	0.636	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
843	0.004	0.005	0.004	0.002	0.003	0.001	0.001	0.005	0.004	35.674	0.647	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
844	0.005	0.001	0.004	0.001	0.003	0.001	0.001	0.006	0.004	36.745	0.647	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
845	0.005	0.000	0.005	0.000	0.003	0.000	0.001	0.004	0.003	47.301	0.658	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
846	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	44.788	0.611	0.001	0.001	0.000	0.001	0.001	0.001	0.003	0.001	0.001
847	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	45.938	0.470	0.000	0.001	0.001	0.001	0.006	0.001	0.045	0.001	0.003
848	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	42.804	0.607	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
849	0.005	0.004	0.004	0.000	0.003	0.000	0.001	0.006	0.004	43.453	0.725	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
850	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.000	0.002	46.739	0.562	0.000	0.001	0.001	0.001	0.003	0.001	0.018	0.001	0.002
851	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.005	0.004	45.601	0.549	0.001	0.001	0.000	0.001	0.001	0.001	0.006	0.001	0.001
852	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	40.194	0.647	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
853	0.005	0.002	0.004	0.001	0.003	0.001	0.001	0.006	0.004	41.067	0.615	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
854	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.006	0.005	40.294	0.623	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
855	0.005	0.003	0.004	0.001	0.003	0.000	0.001	0.006	0.004	39.729	0.634	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.000
856	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	47.488	0.541	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
857	0.005	0.004	0.004	0.002	0.003	0.001	0.001	0.006	0.004	38.574	0.648	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
858	0.005	0.001	0.004	0.002	0.003	0.001	0.001	0.007	0.005	35.823	0.707	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
859	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.009	0.006	38.937	0.651	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
860	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.005	0.003	40.521	0.639	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
861	0.005	0.002	0.004	0.000	0.002	0.001	0.001	0.004	0.003	39.705	0.633	0.000	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
862	0.005	0.004	0.004	0.002	0.003	0.001	0.001	0.007	0.005	41.171	0.627	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
863	0.005	0.004	0.004	0.001	0.003	0.001	0.001	0.009	0.007	40.620	0.640	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
864	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.007	0.005	34.445	0.809	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.001	0.000
865	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.007	0.005	38.168	0.689	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.001
866	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	38.216	0.681	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
867	0.005	0.003	0.004	0.003	0.003	0.001	0.001	0.006	0.004	36.488	0.691	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
868	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.004	38.283	0.661	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.000
869	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	38.080	0.826	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
870	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.004	0.003	38.086	0.699	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
871	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.006	0.005	42.089	0.593	0.001	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
872	0.005	0.001	0.004	0.002	0.003	0.000	0.001	0.005	0.004	41.013	0.647	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
873	0.005	0.000	0.005	0.000	0.003	0.000	0.001	0.004	0.003	46.062	0.658	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.002
874	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	39.651	0.699	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
875	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.005	0.004	39.813	0.694	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
876	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.007	0.005	35.894	0.702	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.003
877	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.940	0.789	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
878	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.006	0.004	37.191	0.690	0.000	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.002
879	0.005	0.003	0.004	0.001	0.003	0.000	0.001	0.004	0.003	41.128	0.652	0.001	0.001	0.000	0.001	0.001	0.001	0.006	0.001	0.002
880	0.005	0.003	0.004	0.004	0.003	0.002	0.001	0.007	0.005	38.892	0.644	0.000	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.001
881	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.007	0.005	40.915	0.610	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.000
882	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.007	0.005	39.247	0.677	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
883	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	38.763	0.653	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
884	0.005	0.004	0.004	0.000	0.003	0.000	0.001	0.007	0.005	36.795	0.711	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
885	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	38.187	0.686	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
886	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.004	39.874	0.667	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
887	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.004	0.003	37.002	0.673	0.000	0.001	0.000	0.001	0.001	0.001	0.003	0.001	0.001

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
888	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	41.214	0.640	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
889	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	42.404	0.612	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
890	0.005	0.003	0.004	0.002	0.003	0.001	0.001	0.008	0.005	39.425	0.649	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
891	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	44.063	0.581	0.000	0.001	0.000	0.001	0.000	0.001	0.005	0.001	0.001
892	0.005	0.005	0.004	0.001	0.003	0.002	0.001	0.005	0.003	35.588	0.708	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
893	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.004	35.017	0.719	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
894	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	45.480	0.616	0.000	0.001	0.000	0.001	0.001	0.001	0.003	0.001	0.001
895	0.004	0.000	0.004	0.000	0.002	0.001	0.001	0.005	0.004	40.140	0.627	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
896	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	39.923	0.691	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
897	0.005	0.002	0.004	0.004	0.003	0.001	0.001	0.005	0.003	37.728	0.697	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
898	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.005	0.003	40.204	0.654	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
899	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.007	0.005	37.050	0.691	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
900	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.006	0.004	39.330	0.660	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.002
901	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	33.616	0.728	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
902	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.005	0.004	38.172	0.664	0.001	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
903	0.005	0.006	0.004	0.001	0.003	0.001	0.001	0.005	0.004	35.350	0.684	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
905	0.005	0.004	0.004	0.003	0.003	0.001	0.001	0.006	0.004	36.889	0.712	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
906	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	39.114	0.658	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
907	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.005	0.004	41.649	0.631	0.001	0.001	0.001	0.001	0.000	0.001	0.003	0.001	0.001
908	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	52.699	0.542	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
909	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	36.517	0.704	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
910	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.004	38.190	0.674	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
911	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	42.409	0.637	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
912	0.005	0.004	0.004	0.000	0.003	0.000	0.001	0.007	0.005	44.622	0.597	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
913	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.005	0.004	35.886	0.711	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
914	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.008	0.005	37.544	0.680	0.001	0.001	0.001	0.001	0.000	0.001	0.003	0.001	0.001
915	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	39.291	0.649	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
916	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.006	0.005	42.836	0.600	0.001	0.001	0.001	0.001	0.000	0.001	0.005	0.001	0.001
917	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.006	0.004	31.193	0.807	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
918	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.005	0.003	34.944	0.713	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
919	0.005	0.003	0.004	0.001	0.003	0.000	0.001	0.007	0.005	44.987	0.647	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
920	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.004	31.458	0.792	0.000	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.001
921	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.005	0.003	37.928	0.696	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
922	0.005	0.003	0.004	0.002	0.003	0.001	0.001	0.005	0.003	32.679	0.788	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
923	0.005	0.000	0.004	0.001	0.003	0.001	0.001	0.007	0.005	38.141	0.704	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.002
924	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.004	37.375	0.704	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.002

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
931	0.005	0.000	0.005	0.000	0.003	0.000	0.001	0.004	0.003	48.901	0.653	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
935	0.005	0.001	0.004	0.001	0.003	0.000	0.001	0.008	0.006	39.961	0.654	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
936	0.005	0.004	0.004	0.001	0.003	0.000	0.001	0.008	0.005	38.288	0.660	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
937	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	37.942	0.715	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
938	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.005	0.004	36.585	0.670	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
939	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	40.424	0.635	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
940	0.005	0.001	0.004	0.002	0.003	0.001	0.001	0.006	0.004	35.071	0.735	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
941	0.005	0.002	0.004	0.002	0.003	0.001	0.001	0.009	0.006	32.941	0.827	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
942	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.006	0.005	33.337	0.764	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
943	0.004	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	33.424	0.755	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
944	0.004	0.001	0.004	0.000	0.002	0.000	0.001	0.006	0.004	33.246	0.812	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
945	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	33.983	0.756	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
946	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	42.985	0.595	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
947	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	41.307	0.631	0.001	0.001	0.001	0.001	0.000	0.001	0.003	0.001	0.001
948	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.006	0.004	40.057	0.623	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
949	0.005	0.003	0.004	0.001	0.003	0.000	0.001	0.009	0.006	36.071	0.692	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
950	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.007	0.005	36.559	0.705	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
951	0.004	0.000	0.004	0.000	0.002	0.001	0.001	0.006	0.004	39.087	0.645	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
952	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	32.884	0.768	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
953	0.005	0.003	0.004	0.000	0.003	0.001	0.001	0.007	0.005	32.917	0.779	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
954	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	32.703	0.803	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
955	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.008	0.006	37.673	0.685	0.000	0.001	0.000	0.001	0.000	0.001	0.005	0.001	0.003
956	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	44.213	0.613	0.001	0.001	0.000	0.001	0.000	0.001	0.005	0.001	0.001
957	0.005	0.001	0.004	0.001	0.003	0.000	0.001	0.006	0.005	39.589	0.666	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.003
958	0.005	0.002	0.004	0.003	0.003	0.001	0.001	0.007	0.005	34.745	0.772	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
959	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	35.759	0.730	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
960	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.004	41.440	0.617	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.001
961	0.005	0.005	0.004	0.002	0.003	0.000	0.001	0.007	0.005	34.617	0.719	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
962	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	33.135	0.769	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
963	0.005	0.005	0.004	0.000	0.003	0.001	0.001	0.008	0.006	33.166	0.813	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
964	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	39.762	0.695	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.003
965	0.004	0.000	0.004	0.001	0.003	0.001	0.001	0.006	0.004	36.067	0.708	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
966	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	38.824	0.713	0.001	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
967	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.007	0.005	36.464	0.734	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
968	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	34.490	0.744	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
969	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.007	0.005	35.266	0.735	0.000	0.001	0.000	0.001	0.001	0.001	0.003	0.001	0.001

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
999	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	38.266	0.722	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.001	0.001
1000	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	34.916	0.731	0.001	0.001	0.001	0.001	0.001	0.001	0.008	0.001	0.001
1001	0.005	0.000	0.005	0.000	0.003	0.000	0.001	0.005	0.004	36.680	0.749	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.001	0.000
1002	0.005	0.006	0.004	0.001	0.003	0.001	0.001	0.008	0.006	31.371	0.812	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
1003	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.005	0.004	35.977	0.753	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1004	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.004	0.003	34.089	0.824	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
1005	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.004	0.003	31.802	0.841	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
1006	0.005	0.001	0.004	0.000	0.003	0.001	0.001	0.006	0.004	31.390	0.777	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
1007	0.004	0.002	0.004	0.001	0.003	0.001	0.001	0.005	0.004	32.625	0.807	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1008	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.004	33.032	0.781	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
1009	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.004	29.300	0.887	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
1010	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	33.224	0.750	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001
1011	0.005	0.001	0.004	0.001	0.003	0.001	0.001	0.005	0.003	31.159	0.783	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1012	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.005	0.004	30.912	0.823	0.001	0.001	0.000	0.001	0.001	0.001	0.005	0.001	0.001
1013	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	34.083	0.757	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1014	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.922	0.773	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
1015	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.328	0.779	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
971	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	45.933	0.590	0.001	0.001	0.001	0.001	0.001	0.001	0.019	0.001	0.001
972	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.008	0.005	35.002	0.719	0.001	0.001	0.000	0.001	0.001	0.001	0.017	0.001	0.001
973	0.005	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	32.378	0.777	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
974	0.005	0.002	0.004	0.002	0.003	0.000	0.001	0.009	0.006	30.014	0.815	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
975	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.004	0.003	34.482	0.667	0.000	0.001	0.000	0.001	0.001	0.001	0.012	0.001	0.001
976	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	31.013	0.859	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
977	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.003	32.085	0.792	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.001
978	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	30.178	0.818	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
979	0.005	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	30.200	0.862	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
980	0.004	0.002	0.004	0.000	0.003	0.000	0.001	0.006	0.004	30.940	0.813	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000
981	0.005	0.004	0.004	0.001	0.003	0.000	0.001	0.007	0.005	32.573	0.783	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
982	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	38.292	0.684	0.000	0.001	0.000	0.001	0.001	0.001	0.006	0.001	0.001
983	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	35.277	0.741	0.001	0.001	0.000	0.001	0.000	0.001	0.005	0.001	0.001
984	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	34.797	0.734	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
985	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.007	0.005	34.909	0.710	0.000	0.001	0.001	0.001	0.000	0.001	0.003	0.001	0.001
986	0.004	0.000	0.004	0.001	0.003	0.000	0.001	0.007	0.005	36.258	0.783	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
987	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	33.545	0.731	0.000	0.001	0.001	0.001	0.000	0.001	0.006	0.001	0.000
988	0.005	0.000	0.004	0.000	0.002	0.000	0.001	0.006	0.004	33.686	0.746	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
989	0.005	0.003	0.004	0.000	0.002	0.000	0.001	0.005	0.003	31.018	0.852	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
990	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.006	0.005	35.166	0.731	0.001	0.001	0.000	0.001	0.000	0.001	0.010	0.001	0.001
991	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	33.078	0.834	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001
992	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.006	0.004	31.691	0.843	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
993	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.002	0.002	38.667	0.654	0.000	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
994	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.004	0.003	40.118	0.638	0.000	0.001	0.000	0.001	0.001	0.001	0.004	0.001	0.001
1042	0.004	0.000	0.004	0.000	0.002	0.001	0.001	0.000	0.002	51.474	0.474	0.000	0.001	0.001	0.001	0.005	0.001	0.012	0.001	0.003
1043	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	33.590	0.758	0.001	0.001	0.001	0.001	0.000	0.001	0.002	0.001	0.000
1044	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	34.422	0.745	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.000
1045	0.005	0.001	0.004	0.000	0.003	0.000	0.001	0.007	0.005	34.757	0.743	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1046	0.005	0.000	0.004	0.002	0.003	0.000	0.001	0.006	0.004	37.827	0.763	0.000	0.001	0.000	0.001	0.001	0.001	0.006	0.001	0.001
1047	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.004	0.003	32.528	0.781	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.001	0.000
1048	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	33.722	0.775	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1049	0.005	0.003	0.004	0.001	0.003	0.001	0.001	0.006	0.004	31.853	0.794	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001
1050	0.005	0.003	0.005	0.000	0.003	0.000	0.001	0.007	0.005	32.625	0.805	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1051	0.005	0.000	0.004	0.000	0.003	0.000	0.001	0.005	0.004	30.200	0.791	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1052	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.005	0.004	40.968	0.693	0.000	0.001	0.000	0.001	0.001	0.001	0.012	0.001	0.002
1053	0.004	0.002	0.004	0.000	0.003	0.001	0.001	0.005	0.003	32.445	0.782	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1054	0.004	0.001	0.004	0.000	0.003	0.001	0.001	0.005	0.004	31.678	0.846	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1055	0.004	0.001	0.004	0.000	0.003	0.001	0.001	0.006	0.004	33.368	0.750	0.000	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001

Sample ID	Sb Error	Sn	Sn Error	Cd	Cd Error	Pd	Pd Error	Ag	Ag Error	Bal	Bal Error	Mo	Mo Error	Nb	Nb Error	Zr	Zr Error	Sr	Sr Error	Rb
1056	0.004	0.000	0.004	0.000	0.002	0.000	0.001	0.005	0.003	35.547	0.781	0.000	0.001	0.000	0.001	0.001	0.001	0.002	0.001	0.001
1057	0.005	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.005	40.025	0.687	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1058	0.004	0.000	0.004	0.000	0.003	0.000	0.001	0.003	0.002	41.677	0.674	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.003
1059	0.004	0.000	0.004	0.000	0.003	0.001	0.001	0.006	0.004	36.861	0.738	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1060	0.005	0.004	0.004	0.001	0.003	0.001	0.001	0.006	0.004	35.036	0.749	0.000	0.001	0.001	0.001	0.000	0.001	0.003	0.001	0.000
1061	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.008	0.006	34.278	0.773	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1062	0.005	0.003	0.004	0.000	0.003	0.000	0.001	0.005	0.004	34.664	0.749	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.000
1063	0.005	0.002	0.004	0.001	0.003	0.000	0.001	0.005	0.003	34.946	0.815	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.001	0.001
1064	0.005	0.002	0.004	0.000	0.003	0.001	0.001	0.005	0.003	32.167	0.778	0.001	0.001	0.000	0.001	0.000	0.001	0.004	0.001	0.001

Sample ID	Rb Error	Bi	Bi Error	As	As Error	Se	Se Error	Au	Au Error	Pb	Pb Error	W	W Error	Zn	Zn Error	Cu	Cu Error	Ni	Ni Error	Co
725	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.000	0.006	0.004	0.001	0.000	0.002	0.000	0.004	0.000
726	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.002	0.006	0.002	0.001	0.001	0.002	0.000	0.003	0.000
727	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.001	0.006	0.001	0.001	0.002	0.002	0.001	0.004	0.002
728	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.006	0.001	0.001	0.001	0.002	0.000	0.003	0.000
729	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.002	0.001	0.001	0.002	0.000	0.004	0.000
730	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.005	0.006	0.001	0.001	0.001	0.002	0.000	0.004	0.000
731	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.005	0.006	0.001	0.001	0.000	0.002	0.003	0.004	0.000
732	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.002	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000
733	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.001	0.006	0.001	0.001	0.000	0.002	0.000	0.004	0.000
734	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.002	0.006	0.002	0.001	0.001	0.002	0.004	0.004	0.000
735	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.001	0.001	0.002	0.002	0.003	0.004	0.000
736	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.004	0.001	0.000	0.002	0.000	0.003	0.000
737	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.003	0.000
738	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.005	0.002	0.001	0.001	0.002	0.002	0.003	0.000
739	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.003	0.001	0.000	0.002	0.000	0.003	0.002
740	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.003	0.001	0.002	0.002	0.000	0.003	0.000
741	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.006	0.001	0.001	0.000	0.002	0.000	0.003	0.000
744	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.005	0.000	0.001	0.000	0.002	0.000	0.003	0.001
746	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.005	0.002	0.001	0.000	0.002	0.000	0.003	0.002
747	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.003	0.001	0.001	0.002	0.000	0.003	0.008
748	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.005	0.002	0.001	0.000	0.002	0.000	0.003	0.013
749	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.002	0.001	0.000	0.001	0.000	0.003	0.012
750	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.001	0.002	0.001	0.004	0.000

Sample ID	Rb Error	Bi	Bi Error	As	As Error	Se	Se Error	Au	Au Error	Pb	Pb Error	W	W Error	Zn	Zn Error	Cu	Cu Error	Ni	Ni Error	Co
822	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.004	0.001	0.000	0.002	0.000	0.003	0.006
826	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.005	0.003	0.001	0.001	0.002	0.001	0.003	0.000
827	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.001	0.001	0.002	0.006	0.001	0.001	0.000	0.002	0.001	0.004	0.001
828	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.002	0.002	0.000	0.003	0.000
830	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.005	0.006	0.000	0.001	0.000	0.002	0.000	0.003	0.000
831	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.002	0.006	0.001	0.001	0.001	0.002	0.001	0.004	0.000
834	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.003	0.000	0.001	0.000	0.007	0.000	0.001	0.003	0.002	0.000	0.004	0.003
835	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.003	0.000	0.001	0.000	0.007	0.000	0.001	0.000	0.002	0.002	0.004	0.000
837	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.003	0.001	0.001	0.001	0.008	0.001	0.001	0.000	0.003	0.000	0.004	0.000
838	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.005	0.006	0.002	0.001	0.000	0.002	0.000	0.004	0.000
839	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.003	0.001	0.001	0.000	0.009	0.002	0.001	0.000	0.003	0.000	0.005	0.000
840	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.003	0.001	0.000	0.006	0.003	0.001	0.003	0.002	0.001	0.004	0.000
841	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.003	0.001	0.000	0.002	0.000	0.004	0.000
842	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.002	0.001	0.005	0.007	0.009	0.002	0.000	0.002	0.000	0.004	0.000
843	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.002	0.001	0.003	0.006	0.010	0.001	0.001	0.002	0.000	0.003	0.000
844	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.003	0.001	0.001	0.006	0.012	0.002	0.001	0.002	0.000	0.003	0.000
845	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.003	0.000	0.001	0.000	0.007	0.002	0.001	0.001	0.002	0.000	0.004	0.000
846	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.002	0.006	0.005	0.001	0.002	0.002	0.000	0.004	0.000
847	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.005	0.002	0.001	0.001	0.002	0.000	0.003	0.000
848	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.003	0.006	0.008	0.001	0.002	0.002	0.000	0.003	0.000
849	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.006	0.006	0.005	0.001	0.000	0.002	0.000	0.004	0.000
850	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.005	0.001	0.001	0.000	0.002	0.000	0.003	0.003
851	0.001	0.001	0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.006	0.001	0.000	0.006	0.018	0.002	0.001	0.002	0.002	0.004	0.000
852	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.006	0.003	0.001	0.000	0.002	0.001	0.004	0.001

Sample ID	Rb Error	Bi	Bi Error	As	As Error	Se	Se Error	Au	Au Error	Pb	Pb Error	W	W Error	Zn	Zn Error	Cu	Cu Error	Ni	Ni Error	Co
999	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.002	0.001	0.000	0.002	0.000	0.004	0.000
1000	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000
1001	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.003	0.000	0.001	0.000	0.007	0.000	0.001	0.000	0.002	0.000	0.004	0.000
1002	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.001	0.002	0.001	0.004	0.001
1003	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.009	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.000
1004	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.007	0.006	0.000	0.001	0.000	0.002	0.000	0.004	0.001
1005	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.001	0.001	0.000	0.002	0.001	0.004	0.000
1006	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.004	0.001
1007	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.003	0.000
1008	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.002	0.006	0.000	0.001	0.001	0.002	0.002	0.004	0.000
1009	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.002	0.004	0.003
1010	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.003	0.000
1011	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.001	0.001	0.001	0.002	0.003	0.004	0.000
1012	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.000	0.001	0.001	0.002	0.001	0.004	0.004
1013	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.004	0.000
1014	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.001
1015	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.002	0.006	0.001	0.001	0.003	0.002	0.000	0.004	0.002
971	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.002	0.003	0.003	0.001	0.000	0.007	0.014	0.002	0.002	0.002	0.000	0.004	0.000
972	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.001	0.002	0.000	0.001	0.004	0.006	0.001	0.001	0.000	0.002	0.000	0.004	0.000
973	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.001	0.002	0.001	0.004	0.001
974	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.004	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000
975	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.001	0.001	0.001	0.002	0.000	0.003	0.000
976	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.004	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.003
977	0.001	0.001	0.001	0.000	0.001	0.001	0.001	0.002	0.002	0.000	0.001	0.004	0.006	0.000	0.001	0.000	0.002	0.000	0.004	0.001
978	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.005	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000

Sample ID	Rb Error	Bi	Bi Error	As	As Error	Se	Se Error	Au	Au Error	Pb	Pb Error	W	W Error	Zn	Zn Error	Cu	Cu Error	Ni	Ni Error	Co
979	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.004	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.003
980	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.011	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.000
981	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.001	0.001	0.007	0.006	0.000	0.001	0.002	0.002	0.000	0.004	0.000
982	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.002	0.006	0.000	0.001	0.000	0.002	0.000	0.004	0.000
983	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000
984	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.005	0.006	0.000	0.001	0.001	0.002	0.000	0.004	0.000
985	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.002	0.006	0.003	0.001	0.002	0.002	0.003	0.004	0.000
986	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.002	0.002	0.000	0.003	0.000
987	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.005	0.001	0.000	0.002	0.000	0.004	0.000
988	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.006	0.002	0.001	0.000	0.002	0.000	0.004	0.000
989	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.000	0.002	0.000	0.003	0.000
990	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.001	0.001	0.001	0.002	0.000	0.004	0.001
991	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.001	0.006	0.001	0.001	0.001	0.002	0.003	0.004	0.000
992	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.004	0.006	0.001	0.001	0.000	0.002	0.001	0.004	0.000
993	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.002	0.004	0.000
994	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.002	0.002	0.000	0.003	0.000
1042	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.005	0.005	0.004	0.001	0.001	0.002	0.001	0.003	0.000
1043	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.004	0.006	0.001	0.001	0.001	0.002	0.000	0.004	0.001
1044	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.001	0.001	0.001	0.006	0.005	0.001	0.000	0.002	0.001	0.004	0.000
1045	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.002	0.006	0.004	0.001	0.001	0.002	0.004	0.004	0.000
1046	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.004	0.006	0.002	0.001	0.001	0.002	0.000	0.003	0.001
1047	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.004	0.006	0.000	0.001	0.000	0.002	0.000	0.004	0.000
1048	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.003	0.001	0.000	0.002	0.000	0.004	0.000
1049	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.000	0.001	0.000	0.002	0.002	0.004	0.001
1050	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.003	0.000	0.001	0.000	0.007	0.005	0.001	0.000	0.002	0.000	0.004	0.000
1051	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.006	0.002	0.001	0.002	0.002	0.001	0.004	0.000
1052	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.003	0.000	0.001	0.004	0.007	0.002	0.001	0.002	0.002	0.000	0.004	0.000
1053	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.002	0.006	0.000	0.001	0.002	0.002	0.002	0.004	0.000
1054	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.000	0.001	0.000	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.000
1055	0.001	0.000	0.001	0.001	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.004	0.001	0.000	0.002	0.000	0.003	0.000

Sample ID	Rb Error	Bi	Bi Error	As	As Error	Se	Se Error	Au	Au Error	Pb	Pb Error	W	W Error	Zn	Zn Error	Cu	Cu Error	Ni	Ni Error	Co
1056	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.000	0.002	0.000	0.003	0.000
1057	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.003	0.006	0.000	0.001	0.002	0.002	0.000	0.004	0.003
1058	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.001	0.001	0.000	0.002	0.000	0.004	0.000
1059	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.002	0.006	0.000	0.001	0.000	0.002	0.001	0.004	0.000
1060	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.002	0.002	0.001	0.001	0.000	0.006	0.002	0.001	0.001	0.002	0.001	0.004	0.000
1061	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.000	0.002	0.000	0.001	0.006	0.006	0.005	0.001	0.001	0.002	0.000	0.004	0.000
1062	0.001	0.000	0.001	0.000	0.001	0.000	0.001	0.001	0.002	0.000	0.001	0.000	0.006	0.003	0.001	0.002	0.002	0.000	0.004	0.002
1063	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.002	0.001	0.001	0.002	0.000	0.004	0.000
1064	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003	0.002	0.000	0.001	0.000	0.006	0.000	0.001	0.002	0.002	0.001	0.004	0.002

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
690	0.003	0.115	0.009	0.012	0.006	0.000	0.009	0.000	0.015	0.031	0.023	0.996	0.137	0.000	0.028	2.161	0.050	6.485	0.078	0.000
691	0.002	0.029	0.006	0.003	0.005	0.003	0.009	0.000	0.015	0.006	0.021	0.440	0.157	0.010	0.031	0.648	0.049	0.987	0.027	0.000
692	0.003	0.092	0.009	0.002	0.006	0.000	0.009	0.004	0.017	0.025	0.024	0.246	0.132	0.000	0.029	0.757	0.048	1.505	0.031	0.000
693	0.003	0.144	0.010	0.005	0.006	0.003	0.009	0.004	0.016	0.028	0.023	1.134	0.147	0.000	0.027	2.497	0.052	2.145	0.040	5.735
694	0.003	0.071	0.008	0.003	0.006	0.010	0.010	0.000	0.015	0.002	0.022	0.510	0.140	0.000	0.029	1.316	0.050	2.082	0.038	0.343
695	0.004	0.235	0.013	0.004	0.006	0.000	0.009	0.008	0.016	0.041	0.023	1.136	0.139	0.000	0.028	2.654	0.055	3.167	0.047	0.587
697	0.004	0.326	0.015	0.004	0.006	0.009	0.010	0.000	0.016	0.056	0.025	1.289	0.136	0.000	0.028	3.266	0.058	4.408	0.059	1.328
698	0.003	0.102	0.009	0.002	0.005	0.007	0.009	0.010	0.016	0.027	0.022	1.029	0.154	0.016	0.030	2.102	0.053	2.314	0.040	0.000
699	0.003	0.135	0.010	0.004	0.006	0.010	0.010	0.001	0.016	0.025	0.023	0.923	0.164	0.000	0.032	2.263	0.060	3.029	0.051	0.193
700	0.004	0.231	0.013	0.010	0.007	0.010	0.010	0.004	0.017	0.036	0.024	1.313	0.128	0.000	0.027	3.978	0.061	4.776	0.063	3.612
701	0.003	0.107	0.009	0.000	0.005	0.005	0.009	0.009	0.016	0.027	0.023	0.582	0.137	0.000	0.028	1.547	0.049	2.668	0.043	0.245
702	0.003	0.104	0.009	0.007	0.006	0.002	0.009	0.018	0.017	0.003	0.021	0.622	0.134	0.000	0.027	1.490	0.048	2.023	0.040	8.051
703	0.004	0.210	0.012	0.007	0.006	0.002	0.009	0.015	0.017	0.016	0.022	1.340	0.135	0.000	0.028	3.248	0.057	2.802	0.044	2.549
704	0.004	0.217	0.012	0.002	0.005	0.007	0.009	0.000	0.014	0.046	0.023	1.459	0.146	0.000	0.029	3.376	0.058	2.985	0.046	1.016
705	0.004	0.193	0.012	0.003	0.006	0.007	0.010	0.006	0.016	0.032	0.023	1.298	0.140	0.000	0.028	3.187	0.056	4.481	0.060	0.714
706	0.004	0.363	0.015	0.006	0.006	0.009	0.010	0.014	0.017	0.048	0.024	1.878	0.142	0.000	0.028	4.499	0.061	5.053	0.063	0.191
707	0.004	0.237	0.013	0.003	0.006	0.006	0.009	0.006	0.016	0.046	0.024	1.635	0.135	0.000	0.027	4.103	0.060	5.758	0.070	0.470
708	0.003	0.077	0.008	0.010	0.006	0.003	0.009	0.003	0.015	0.019	0.022	0.870	0.156	0.000	0.030	1.581	0.050	2.343	0.041	0.014
709	0.003	0.094	0.008	0.003	0.005	0.000	0.009	0.013	0.017	0.040	0.023	1.070	0.148	0.000	0.028	1.749	0.049	4.254	0.059	0.461
710	0.003	0.134	0.010	0.007	0.006	0.000	0.009	0.003	0.017	0.054	0.025	1.008	0.148	0.000	0.029	2.611	0.055	2.838	0.046	0.000
711	0.003	0.134	0.010	0.005	0.006	0.006	0.009	0.001	0.015	0.006	0.021	1.338	0.149	0.000	0.028	3.154	0.056	2.955	0.047	3.541
712	0.003	0.141	0.010	0.004	0.006	0.002	0.009	0.014	0.017	0.036	0.023	1.313	0.152	0.000	0.029	3.075	0.056	2.940	0.048	3.870
713	0.003	0.145	0.010	0.004	0.006	0.010	0.010	0.016	0.017	0.026	0.022	1.460	0.143	0.000	0.029	4.048	0.061	3.326	0.049	0.509
714	0.004	0.167	0.011	0.007	0.006	0.005	0.009	0.000	0.015	0.029	0.023	1.315	0.152	0.000	0.029	3.143	0.057	2.664	0.043	0.000
715	0.003	0.126	0.009	0.005	0.006	0.006	0.009	0.007	0.016	0.019	0.022	1.024	0.152	0.000	0.029	2.083	0.052	2.777	0.044	0.000
716	0.003	0.149	0.010	0.009	0.006	0.010	0.010	0.000	0.016	0.044	0.024	1.547	0.147	0.000	0.029	3.676	0.059	4.246	0.058	0.502
717	0.003	0.169	0.011	0.004	0.006	0.000	0.008	0.005	0.016	0.042	0.023	1.496	0.165	0.000	0.032	3.987	0.066	3.537	0.054	0.047
718	0.004	0.218	0.012	0.008	0.006	0.000	0.009	0.002	0.016	0.041	0.024	1.568	0.145	0.000	0.029	4.087	0.060	4.205	0.057	0.219
719	0.003	0.077	0.008	0.000	0.005	0.008	0.009	0.000	0.015	0.010	0.021	0.737	0.152	0.000	0.030	1.629	0.051	1.524	0.032	0.000
720	0.004	0.276	0.013	0.000	0.005	0.014	0.010	0.002	0.016	0.038	0.023	2.290	0.146	0.000	0.028	5.983	0.066	5.573	0.068	0.588
721	0.003	0.177	0.011	0.003	0.005	0.002	0.009	0.000	0.015	0.034	0.022	1.627	0.149	0.000	0.028	3.734	0.056	3.744	0.054	5.792
722	0.003	0.129	0.010	0.005	0.006	0.012	0.010	0.001	0.016	0.047	0.024	0.935	0.150	0.000	0.029	2.278	0.054	2.305	0.040	0.404
723	0.003	0.034	0.006	0.000	0.005	0.004	0.009	0.009	0.016	0.002	0.021	0.123	0.160	0.000	0.032	0.504	0.049	1.060	0.029	0.964
724	0.003	0.035	0.006	0.002	0.005	0.006	0.009	0.000	0.015	0.018	0.022	0.235	0.149	0.000	0.029	0.522	0.045	1.144	0.029	1.110

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
725	0.003	0.115	0.009	0.002	0.005	0.000	0.009	0.010	0.016	0.032	0.023	0.981	0.145	0.000	0.029	2.255	0.052	4.674	0.062	0.000
726	0.005	0.371	0.015	0.007	0.006	0.009	0.009	0.009	0.016	0.069	0.025	1.669	0.132	0.000	0.026	4.217	0.058	6.071	0.072	3.028
727	0.003	0.115	0.009	0.012	0.006	0.002	0.009	0.006	0.016	0.018	0.022	1.099	0.150	0.000	0.029	2.981	0.057	3.272	0.050	0.848
728	0.006	0.873	0.023	0.016	0.007	0.010	0.009	0.000	0.016	0.120	0.027	1.764	0.097	0.000	0.022	8.418	0.076	8.839	0.086	1.359
729	0.003	0.162	0.011	0.008	0.006	0.000	0.009	0.000	0.015	0.031	0.023	1.382	0.148	0.000	0.029	3.363	0.057	3.768	0.053	0.000
730	0.003	0.121	0.009	0.003	0.005	0.006	0.009	0.000	0.015	0.026	0.022	0.620	0.144	0.000	0.029	1.508	0.049	2.675	0.043	0.000
731	0.004	0.189	0.011	0.008	0.006	0.009	0.009	0.000	0.016	0.044	0.023	1.614	0.143	0.000	0.028	4.018	0.059	4.854	0.062	0.114
732	0.004	0.197	0.012	0.004	0.006	0.000	0.009	0.000	0.015	0.036	0.023	0.985	0.139	0.000	0.028	2.539	0.055	3.499	0.051	0.000
733	0.003	0.114	0.009	0.000	0.005	0.000	0.008	0.000	0.015	0.025	0.023	1.308	0.145	0.000	0.029	2.942	0.056	2.712	0.043	0.000
734	0.003	0.061	0.007	0.004	0.006	0.004	0.009	0.000	0.015	0.003	0.021	0.451	0.147	0.000	0.029	1.458	0.050	1.942	0.037	0.240
735	0.003	0.060	0.007	0.002	0.005	0.005	0.009	0.003	0.015	0.018	0.021	0.400	0.160	0.014	0.032	1.400	0.054	2.040	0.040	0.000
736	0.011	3.245	0.043	0.028	0.007	0.003	0.008	0.008	0.016	0.216	0.028	5.092	0.108	0.000	0.019	16.596	0.099	10.482	0.086	4.510
737	0.006	0.857	0.022	0.006	0.006	0.007	0.009	0.000	0.015	0.099	0.025	2.227	0.095	0.000	0.023	7.778	0.063	18.930	0.158	1.625
738	0.008	1.475	0.029	0.031	0.007	0.000	0.008	0.013	0.016	0.146	0.027	3.114	0.097	0.000	0.022	9.868	0.074	15.983	0.130	1.699
739	0.010	2.494	0.037	0.022	0.007	0.005	0.008	0.009	0.015	0.145	0.025	2.876	0.089	0.000	0.019	10.248	0.082	8.473	0.074	1.733
740	0.008	1.444	0.029	0.011	0.006	0.002	0.008	0.001	0.015	0.110	0.025	3.255	0.101	0.000	0.021	9.528	0.073	17.266	0.138	1.497
741	0.007	1.150	0.026	0.014	0.007	0.004	0.009	0.001	0.016	0.129	0.027	2.422	0.117	0.000	0.025	8.781	0.079	6.436	0.069	1.177
744	0.006	0.738	0.020	0.006	0.006	0.006	0.009	0.005	0.015	0.070	0.023	2.369	0.109	0.000	0.023	7.089	0.065	8.979	0.085	1.516
746	0.007	1.221	0.026	0.012	0.006	0.001	0.008	0.000	0.014	0.040	0.021	0.377	0.097	0.000	0.024	1.227	0.044	2.346	0.033	0.473
747	0.008	1.612	0.029	0.014	0.006	0.000	0.007	0.000	0.014	0.070	0.022	0.711	0.104	0.000	0.024	2.000	0.046	3.940	0.046	0.783
748	0.009	1.714	0.031	0.009	0.006	0.000	0.008	0.007	0.015	0.076	0.023	0.934	0.113	0.000	0.025	2.404	0.049	3.370	0.043	0.641
749	0.006	0.819	0.021	0.008	0.006	0.004	0.008	0.000	0.014	0.055	0.022	0.654	0.098	0.000	0.024	2.428	0.049	2.732	0.036	0.621
750	0.003	0.126	0.010	0.006	0.006	0.002	0.009	0.000	0.015	0.030	0.023	1.327	0.148	0.000	0.029	2.550	0.055	2.216	0.038	0.000

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
751	0.004	0.214	0.012	0.006	0.006	0.005	0.009	0.000	0.016	0.055	0.025	1.886	0.144	0.000	0.029	4.507	0.064	3.704	0.052	0.000
752	0.005	0.499	0.018	0.007	0.006	0.008	0.009	0.015	0.017	0.082	0.026	4.214	0.162	0.000	0.028	9.164	0.075	7.614	0.084	1.130
753	0.003	0.137	0.010	0.004	0.006	0.002	0.009	0.000	0.015	0.016	0.022	0.647	0.138	0.000	0.026	1.452	0.046	0.518	0.030	15.420
754	0.004	0.150	0.011	0.004	0.006	0.008	0.010	0.000	0.016	0.037	0.024	0.647	0.137	0.000	0.029	1.612	0.051	1.535	0.031	0.000
755	0.003	0.087	0.009	0.002	0.006	0.003	0.009	0.000	0.016	0.037	0.024	0.656	0.140	0.000	0.029	1.450	0.049	2.423	0.042	1.157
756	0.003	0.028	0.006	0.002	0.006	0.004	0.009	0.000	0.015	0.002	0.021	0.274	0.151	0.019	0.030	0.289	0.045	0.647	0.021	0.000
757	0.003	0.057	0.007	0.004	0.006	0.000	0.008	0.004	0.016	0.011	0.022	0.605	0.146	0.000	0.027	0.923	0.044	0.632	0.029	10.683
758	0.003	0.054	0.007	0.003	0.005	0.000	0.009	0.017	0.017	0.015	0.022	0.627	0.143	0.000	0.030	1.135	0.049	1.184	0.027	0.000
759	0.003	0.114	0.009	0.002	0.005	0.000	0.008	0.001	0.016	0.044	0.024	1.340	0.166	0.000	0.031	2.854	0.060	1.563	0.038	6.420
760	0.004	0.180	0.011	0.007	0.006	0.000	0.008	0.007	0.017	0.093	0.027	1.496	0.144	0.000	0.028	3.408	0.057	3.820	0.054	1.263
761	0.003	0.133	0.011	0.000	0.006	0.006	0.010	0.000	0.017	0.061	0.027	1.148	0.155	0.000	0.030	2.122	0.055	2.423	0.044	0.453
762	0.003	0.116	0.010	0.009	0.006	0.003	0.009	0.000	0.015	0.023	0.024	0.522	0.117	0.000	0.028	1.554	0.050	4.613	0.061	0.291
763	0.003	0.040	0.006	0.005	0.006	0.007	0.009	0.004	0.016	0.011	0.022	0.206	0.147	0.000	0.030	0.562	0.046	1.002	0.026	0.000
764	0.004	0.318	0.015	0.007	0.006	0.001	0.009	0.016	0.017	0.054	0.025	2.343	0.151	0.000	0.028	5.080	0.063	5.686	0.070	0.275
765	0.004	0.288	0.014	0.003	0.006	0.000	0.009	0.013	0.017	0.050	0.024	1.469	0.144	0.000	0.027	3.209	0.055	1.954	0.038	7.665
766	0.003	0.153	0.010	0.006	0.006	0.000	0.009	0.019	0.017	0.028	0.023	1.438	0.142	0.000	0.027	3.785	0.057	2.884	0.047	7.661
767	0.003	0.172	0.011	0.003	0.006	0.005	0.009	0.014	0.017	0.021	0.022	1.218	0.132	0.000	0.027	3.236	0.056	2.827	0.046	7.220
768	0.003	0.098	0.009	0.005	0.006	0.000	0.009	0.010	0.016	0.031	0.023	0.685	0.146	0.000	0.029	1.585	0.051	1.395	0.030	0.000
769	0.003	0.159	0.011	0.004	0.006	0.004	0.009	0.008	0.017	0.031	0.024	1.721	0.150	0.010	0.029	3.900	0.061	3.445	0.051	0.000
770	0.003	0.059	0.007	0.003	0.006	0.003	0.009	0.000	0.015	0.007	0.021	0.385	0.139	0.000	0.029	0.770	0.047	1.052	0.026	0.000
771	0.004	0.167	0.011	0.003	0.006	0.011	0.010	0.007	0.016	0.041	0.023	1.905	0.166	0.000	0.030	3.756	0.060	2.247	0.040	0.241
772	0.003	0.169	0.011	0.011	0.006	0.000	0.008	0.010	0.016	0.038	0.023	1.747	0.148	0.000	0.028	3.754	0.055	7.055	0.084	3.666
773	0.004	0.334	0.015	0.011	0.006	0.006	0.009	0.000	0.016	0.058	0.025	1.705	0.133	0.000	0.026	4.371	0.060	6.499	0.078	5.192
774	0.005	0.397	0.016	0.004	0.006	0.000	0.009	0.006	0.017	0.061	0.025	2.236	0.142	0.000	0.026	5.025	0.061	7.602	0.088	6.787
775	0.004	0.273	0.013	0.010	0.006	0.000	0.008	0.006	0.016	0.048	0.024	1.666	0.131	0.000	0.027	4.815	0.063	6.558	0.076	0.422
776	0.004	0.195	0.012	0.004	0.006	0.005	0.009	0.000	0.016	0.024	0.023	1.633	0.150	0.000	0.029	3.582	0.059	3.399	0.050	0.000
777	0.004	0.232	0.012	0.005	0.006	0.011	0.010	0.003	0.016	0.057	0.025	2.449	0.152	0.000	0.028	5.371	0.065	4.478	0.059	0.788
778	0.005	0.359	0.016	0.005	0.006	0.000	0.009	0.000	0.017	0.045	0.025	1.981	0.136	0.000	0.029	5.953	0.073	4.196	0.057	0.189
779	0.003	0.136	0.010	0.007	0.006	0.004	0.009	0.005	0.016	0.031	0.022	1.032	0.147	0.000	0.029	2.089	0.052	2.722	0.043	0.073

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
780	0.003	0.060	0.007	0.002	0.005	0.004	0.009	0.005	0.016	0.013	0.021	0.435	0.149	0.001	0.030	0.992	0.048	1.098	0.027	0.000
781	0.004	0.199	0.012	0.007	0.006	0.004	0.009	0.000	0.016	0.053	0.024	2.062	0.151	0.000	0.029	4.633	0.062	3.663	0.051	0.000
782	0.004	0.254	0.013	0.009	0.006	0.005	0.009	0.000	0.015	0.062	0.025	3.029	0.159	0.000	0.029	6.682	0.069	3.791	0.052	0.243
783	0.003	0.109	0.009	0.004	0.006	0.004	0.009	0.000	0.015	0.031	0.023	1.089	0.161	0.025	0.033	2.823	0.062	2.827	0.047	0.000
784	0.004	0.214	0.012	0.006	0.006	0.000	0.008	0.014	0.016	0.039	0.023	1.650	0.149	0.000	0.027	3.304	0.056	2.237	0.040	6.751
785	0.003	0.091	0.008	0.004	0.006	0.007	0.009	0.005	0.016	0.024	0.022	1.090	0.156	0.000	0.030	2.130	0.054	1.271	0.029	0.000
786	0.003	0.074	0.008	0.007	0.006	0.000	0.009	0.000	0.015	0.024	0.023	0.663	0.140	0.022	0.029	1.450	0.050	2.121	0.038	0.000
787	0.003	0.218	0.012	0.011	0.006	0.001	0.009	0.018	0.017	0.054	0.024	2.448	0.157	0.000	0.028	4.855	0.061	2.039	0.038	6.203
788	0.004	0.235	0.013	0.000	0.005	0.000	0.009	0.010	0.016	0.005	0.021	1.822	0.149	0.000	0.029	4.125	0.062	1.950	0.035	0.000
789	0.004	0.227	0.012	0.002	0.005	0.003	0.009	0.000	0.016	0.050	0.024	1.724	0.149	0.000	0.029	3.973	0.060	1.975	0.035	0.000
790	0.003	0.134	0.010	0.003	0.006	0.001	0.009	0.000	0.016	0.012	0.022	1.245	0.150	0.000	0.029	2.863	0.056	2.551	0.042	0.000
791	0.003	0.074	0.008	0.003	0.005	0.000	0.008	0.011	0.016	0.009	0.021	0.555	0.160	0.008	0.030	0.882	0.048	1.091	0.028	0.000
792	0.004	0.157	0.011	0.001	0.005	0.000	0.009	0.000	0.015	0.042	0.024	1.213	0.143	0.004	0.029	2.357	0.055	0.989	0.024	0.000
793	0.004	0.292	0.014	0.009	0.006	0.000	0.009	0.018	0.017	0.051	0.024	2.195	0.149	0.000	0.029	5.479	0.066	2.841	0.044	2.151
794	0.003	0.137	0.010	0.000	0.005	0.008	0.009	0.001	0.016	0.053	0.024	1.657	0.148	0.000	0.028	3.342	0.057	1.883	0.034	1.029
795	0.007	1.074	0.027	0.011	0.007	0.012	0.010	0.000	0.017	0.128	0.029	4.493	0.142	0.000	0.025	12.303	0.090	9.915	0.100	1.266
796	0.007	1.253	0.029	0.022	0.007	0.007	0.010	0.021	0.018	0.123	0.028	4.442	0.143	0.000	0.026	12.469	0.090	10.218	0.102	1.267
797	0.005	0.477	0.018	0.010	0.006	0.000	0.009	0.012	0.017	0.063	0.025	2.801	0.140	0.000	0.026	6.746	0.068	7.040	0.079	2.051
798	0.004	0.209	0.012	0.010	0.006	0.007	0.009	0.000	0.015	0.060	0.025	2.473	0.157	0.000	0.029	5.164	0.065	2.903	0.045	0.073
799	0.003	0.067	0.007	0.002	0.005	0.000	0.009	0.007	0.016	0.027	0.022	0.653	0.156	0.000	0.030	0.977	0.048	1.309	0.030	0.000
800	0.005	0.389	0.016	0.006	0.006	0.011	0.010	0.011	0.018	0.073	0.026	2.139	0.145	0.000	0.029	6.255	0.071	2.933	0.044	0.000
801	0.003	0.028	0.006	0.000	0.005	0.000	0.008	0.011	0.016	0.010	0.021	0.127	0.162	0.000	0.032	0.191	0.046	0.968	0.028	0.000
802	0.003	0.153	0.010	0.005	0.006	0.009	0.009	0.000	0.015	0.029	0.023	0.930	0.140	0.000	0.029	1.837	0.052	1.843	0.034	0.000
803	0.004	0.325	0.015	0.005	0.006	0.000	0.009	0.002	0.016	0.052	0.024	1.363	0.125	0.000	0.027	4.157	0.060	5.686	0.068	0.216
804	0.004	0.204	0.012	0.000	0.005	0.002	0.009	0.000	0.015	0.038	0.023	3.136	0.161	0.000	0.028	6.705	0.070	3.469	0.049	1.280
805	0.003	0.147	0.010	0.001	0.005	0.002	0.009	0.000	0.015	0.029	0.022	1.115	0.134	0.000	0.028	2.613	0.054	4.626	0.061	1.415
806	0.003	0.093	0.008	0.003	0.005	0.003	0.009	0.005	0.015	0.015	0.021	1.092	0.150	0.000	0.029	1.891	0.052	1.924	0.035	0.000
807	0.003	0.042	0.006	0.002	0.005	0.000	0.009	0.010	0.016	0.000	0.021	0.375	0.142	0.031	0.029	0.883	0.047	2.627	0.043	0.000
808	0.003	0.049	0.007	0.000	0.005	0.000	0.009	0.018	0.017	0.010	0.022	0.212	0.128	0.003	0.029	0.818	0.046	2.587	0.042	0.000
816	0.009	2.315	0.035	0.019	0.007	0.011	0.009	0.018	0.016	0.191	0.027	2.095	0.091	0.000	0.021	8.437	0.071	6.744	0.064	2.554
818	0.007	0.988	0.027	0.010	0.007	0.003	0.010	0.007	0.018	0.073	0.027	0.159	0.080	0.000	0.024	1.109	0.049	7.092	0.079	0.000
819	0.008	1.775	0.030	0.026	0.007	0.002	0.008	0.007	0.015	0.162	0.026	1.846	0.088	0.000	0.020	6.577	0.063	6.610	0.062	1.188
820	0.011	3.145	0.041	0.035	0.007	0.010	0.009	0.010	0.016	0.244	0.028	2.552	0.084	0.000	0.019	11.136	0.082	6.085	0.055	1.408
821	0.007	1.183	0.025	0.011	0.006	0.008	0.009	0.009	0.015	0.140	0.025	2.014	0.092	0.000	0.022	9.429	0.069	12.431	0.105	2.086

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
822	0.009	1.798	0.033	0.023	0.007	0.000	0.008	0.000	0.015	0.128	0.026	1.370	0.100	0.000	0.023	4.083	0.053	9.064	0.087	1.484
826	0.008	1.662	0.030	0.021	0.007	0.005	0.008	0.005	0.015	0.161	0.026	2.324	0.090	0.000	0.020	8.091	0.070	8.972	0.079	1.016
827	0.004	0.241	0.013	0.005	0.006	0.004	0.009	0.005	0.016	0.063	0.025	1.682	0.138	0.000	0.028	4.277	0.060	4.841	0.061	0.000
828	0.003	0.102	0.009	0.003	0.006	0.008	0.009	0.002	0.016	0.042	0.023	0.827	0.147	0.000	0.029	1.417	0.049	2.610	0.042	0.000
830	0.003	0.133	0.010	0.003	0.005	0.008	0.009	0.002	0.015	0.019	0.022	0.820	0.130	0.000	0.027	1.871	0.050	3.494	0.049	0.000
831	0.003	0.113	0.009	0.003	0.005	0.000	0.008	0.006	0.016	0.008	0.021	0.557	0.139	0.000	0.029	1.229	0.048	2.502	0.041	0.000
834	0.003	0.043	0.007	0.000	0.006	0.001	0.009	0.000	0.016	0.019	0.024	0.000	0.138	0.000	0.029	0.016	0.043	1.230	0.030	1.605
835	0.003	0.056	0.008	0.002	0.006	0.001	0.010	0.003	0.017	0.000	0.022	0.016	0.142	0.000	0.030	0.082	0.044	1.346	0.032	1.401
837	0.003	0.052	0.009	0.000	0.006	0.000	0.011	0.000	0.019	0.001	0.026	0.000	0.125	0.000	0.032	0.000	0.051	0.819	0.025	0.000
838	0.003	0.159	0.010	0.003	0.005	0.002	0.009	0.020	0.017	0.043	0.023	1.687	0.133	0.000	0.027	4.122	0.056	5.798	0.071	4.356
839	0.003	0.034	0.008	0.000	0.006	0.000	0.011	0.012	0.022	0.006	0.028	0.000	0.156	0.000	0.035	0.000	0.051	0.651	0.025	0.000
840	0.003	0.162	0.011	0.009	0.006	0.003	0.009	0.025	0.018	0.064	0.025	0.771	0.133	0.000	0.028	2.552	0.055	2.870	0.044	0.000
841	0.004	0.193	0.012	0.012	0.006	0.005	0.010	0.023	0.018	0.075	0.026	1.974	0.142	0.000	0.028	4.691	0.063	4.880	0.062	0.000
842	0.005	0.392	0.017	0.008	0.006	0.000	0.009	0.011	0.018	0.074	0.027	1.709	0.123	0.000	0.029	6.844	0.078	5.221	0.066	0.000
843	0.005	0.581	0.019	0.010	0.006	0.012	0.009	0.011	0.017	0.129	0.027	2.968	0.133	0.000	0.025	8.422	0.072	7.261	0.078	4.189
844	0.005	0.514	0.018	0.010	0.006	0.002	0.009	0.019	0.018	0.128	0.028	2.779	0.132	0.000	0.026	7.902	0.071	6.816	0.076	4.040
845	0.003	0.101	0.010	0.000	0.006	0.000	0.010	0.001	0.017	0.017	0.024	0.360	0.116	0.000	0.028	1.321	0.052	1.147	0.030	5.803
846	0.005	0.381	0.016	0.006	0.006	0.000	0.009	0.001	0.017	0.096	0.027	1.720	0.118	0.000	0.027	6.486	0.072	5.886	0.069	0.200
847	0.009	2.272	0.037	0.015	0.007	0.003	0.009	0.017	0.017	0.155	0.027	2.914	0.095	0.000	0.022	11.367	0.079	15.667	0.126	1.405
848	0.004	0.328	0.014	0.020	0.007	0.011	0.012	0.266	0.032	0.408	0.040	1.833	0.117	0.000	0.025	5.208	0.063	10.153	0.102	0.812
849	0.004	0.193	0.012	0.018	0.007	0.003	0.012	0.269	0.033	0.397	0.041	1.311	0.143	0.000	0.032	3.781	0.072	9.931	0.111	0.000
850	0.006	0.763	0.021	0.014	0.006	0.000	0.008	0.014	0.016	0.077	0.024	1.237	0.104	0.000	0.024	3.966	0.057	8.320	0.083	0.499
851	0.005	0.592	0.019	0.032	0.008	0.008	0.013	0.444	0.038	0.651	0.047	1.938	0.104	0.000	0.022	6.210	0.065	14.083	0.129	1.359
852	0.003	0.146	0.010	0.017	0.007	0.001	0.011	0.269	0.031	0.373	0.038	1.150	0.120	0.000	0.026	3.099	0.054	9.440	0.098	0.042

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
853	0.004	0.285	0.014	0.034	0.008	0.011	0.012	0.387	0.037	0.610	0.046	1.674	0.116	0.000	0.024	4.910	0.060	11.711	0.114	0.342
854	0.004	0.289	0.014	0.031	0.008	0.002	0.012	0.384	0.036	0.561	0.045	1.691	0.118	0.000	0.024	4.958	0.060	11.891	0.116	0.299
855	0.004	0.262	0.013	0.033	0.008	0.000	0.012	0.452	0.038	0.536	0.044	1.609	0.119	0.000	0.025	4.411	0.058	11.750	0.115	0.085
856	0.005	0.429	0.017	0.042	0.009	0.011	0.015	0.707	0.047	0.930	0.056	1.874	0.103	0.000	0.023	6.154	0.067	15.642	0.145	0.563
857	0.003	0.167	0.011	0.021	0.007	0.003	0.012	0.332	0.034	0.423	0.040	1.500	0.122	0.000	0.025	3.915	0.056	10.139	0.104	2.013
858	0.003	0.200	0.012	0.011	0.006	0.006	0.010	0.112	0.024	0.245	0.034	1.501	0.135	0.000	0.027	3.609	0.057	5.571	0.067	0.550
859	0.003	0.161	0.011	0.021	0.007	0.011	0.012	0.267	0.032	0.405	0.040	1.493	0.122	0.000	0.025	3.927	0.057	10.771	0.110	1.216
860	0.003	0.187	0.011	0.021	0.007	0.010	0.012	0.310	0.034	0.455	0.042	1.322	0.119	0.000	0.025	3.855	0.057	10.918	0.111	0.163
861	0.006	0.879	0.023	0.026	0.007	0.003	0.010	0.205	0.028	0.338	0.036	2.513	0.128	0.000	0.025	5.972	0.065	7.466	0.079	1.549
862	0.003	0.167	0.011	0.028	0.007	0.000	0.011	0.330	0.034	0.482	0.042	1.327	0.117	0.000	0.025	3.765	0.057	9.886	0.101	0.251
863	0.003	0.163	0.011	0.026	0.007	0.000	0.011	0.310	0.034	0.462	0.042	1.319	0.119	0.000	0.025	3.649	0.056	9.545	0.100	0.220
864	0.003	0.051	0.007	0.010	0.006	0.000	0.009	0.101	0.023	0.156	0.030	0.597	0.153	0.000	0.031	1.169	0.053	3.874	0.058	0.000
865	0.003	0.114	0.009	0.020	0.007	0.000	0.011	0.217	0.030	0.305	0.037	0.989	0.127	0.000	0.027	2.621	0.053	6.567	0.077	0.000
866	0.003	0.123	0.009	0.018	0.007	0.006	0.011	0.252	0.031	0.334	0.037	1.033	0.126	0.000	0.026	2.500	0.052	7.436	0.083	0.221
867	0.003	0.189	0.011	0.016	0.007	0.007	0.011	0.206	0.029	0.358	0.038	1.594	0.132	0.000	0.026	3.632	0.057	8.179	0.089	0.974
868	0.004	0.207	0.012	0.021	0.007	0.001	0.011	0.246	0.031	0.372	0.038	1.845	0.128	0.000	0.026	4.331	0.059	9.043	0.095	0.857
869	0.003	0.145	0.010	0.007	0.006	0.000	0.009	0.014	0.017	0.049	0.024	0.637	0.161	0.024	0.035	1.756	0.062	1.763	0.038	0.903
870	0.003	0.166	0.011	0.012	0.006	0.000	0.009	0.049	0.020	0.088	0.026	1.285	0.133	0.000	0.027	3.006	0.056	3.411	0.048	1.305
871	0.005	0.455	0.017	0.028	0.007	0.000	0.011	0.382	0.036	0.565	0.044	2.412	0.117	0.000	0.023	6.343	0.065	12.377	0.117	1.154
872	0.004	0.243	0.013	0.009	0.006	0.004	0.010	0.079	0.022	0.120	0.028	1.510	0.122	0.000	0.026	3.651	0.057	5.747	0.069	2.786
873	0.003	0.103	0.010	0.006	0.006	0.000	0.010	0.035	0.020	0.085	0.028	0.331	0.116	0.000	0.028	0.851	0.048	3.885	0.056	2.117
874	0.003	0.073	0.008	0.008	0.006	0.004	0.010	0.037	0.019	0.048	0.024	0.187	0.126	0.000	0.028	0.967	0.047	1.878	0.034	0.914
875	0.003	0.081	0.008	0.005	0.006	0.000	0.009	0.026	0.018	0.058	0.025	0.308	0.126	0.000	0.028	0.924	0.046	1.923	0.034	0.883
876	0.003	0.142	0.010	0.011	0.006	0.000	0.010	0.134	0.025	0.224	0.033	1.071	0.129	0.000	0.025	2.069	0.049	4.969	0.064	6.695
877	0.003	0.070	0.008	0.001	0.005	0.007	0.010	0.039	0.019	0.079	0.026	0.500	0.145	0.000	0.028	0.835	0.045	2.159	0.039	2.846
878	0.005	0.448	0.017	0.012	0.006	0.000	0.009	0.006	0.016	0.063	0.025	1.979	0.135	0.000	0.026	4.603	0.062	4.715	0.059	2.125
879	0.006	0.662	0.021	0.011	0.006	0.000	0.009	0.075	0.022	0.160	0.030	1.561	0.124	0.000	0.026	3.979	0.059	5.765	0.068	1.853
880	0.004	0.293	0.014	0.015	0.007	0.005	0.011	0.224	0.030	0.363	0.038	2.073	0.125	0.000	0.025	5.379	0.063	9.102	0.095	1.957
881	0.004	0.302	0.014	0.029	0.008	0.007	0.012	0.393	0.037	0.545	0.045	2.133	0.117	0.000	0.024	5.816	0.063	13.304	0.127	1.648
882	0.006	0.922	0.024	0.015	0.007	0.002	0.011	0.190	0.028	0.229	0.033	0.966	0.125	0.000	0.026	2.747	0.054	5.913	0.070	0.926
883	0.004	0.241	0.013	0.025	0.007	0.008	0.012	0.297	0.033	0.437	0.041	1.953	0.126	0.000	0.025	4.734	0.060	10.114	0.103	0.632
884	0.003	0.151	0.011	0.019	0.007	0.000	0.010	0.120	0.025	0.224	0.034	0.694	0.129	0.000	0.027	2.057	0.051	5.545	0.070	2.355
885	0.003	0.174	0.011	0.009	0.006	0.010	0.011	0.136	0.026	0.254	0.035	1.128	0.127	0.000	0.026	2.712	0.053	5.451	0.068	3.602
886	0.003	0.161	0.011	0.006	0.006	0.000	0.010	0.157	0.026	0.203	0.032	1.003	0.123	0.000	0.026	2.634	0.053	5.212	0.065	3.282
887	0.004	0.294	0.014	0.009	0.006	0.000	0.010	0.170	0.026	0.238	0.033	1.698	0.129	0.000	0.025	3.972	0.057	7.820	0.085	2.418

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
888	0.004	0.238	0.013	0.026	0.007	0.004	0.011	0.236	0.031	0.410	0.041	1.496	0.120	0.000	0.026	4.257	0.060	8.732	0.093	0.668
889	0.005	0.538	0.019	0.015	0.007	0.012	0.011	0.150	0.026	0.292	0.036	2.581	0.124	0.000	0.025	7.623	0.074	9.239	0.095	1.146
890	0.004	0.332	0.014	0.010	0.006	0.013	0.011	0.204	0.028	0.303	0.036	1.919	0.126	0.000	0.026	4.887	0.062	8.229	0.088	0.913
891	0.004	0.370	0.015	0.028	0.007	0.010	0.012	0.298	0.032	0.419	0.040	2.015	0.113	0.000	0.024	5.920	0.065	10.672	0.104	1.226
892	0.004	0.181	0.011	0.010	0.006	0.004	0.010	0.079	0.022	0.168	0.030	1.398	0.134	0.000	0.027	3.237	0.056	5.540	0.067	0.390
893	0.003	0.203	0.012	0.011	0.006	0.000	0.009	0.075	0.021	0.125	0.028	1.454	0.137	0.000	0.027	3.379	0.057	4.690	0.060	2.374
894	0.005	0.425	0.017	0.008	0.006	0.002	0.009	0.023	0.018	0.112	0.028	1.195	0.115	0.000	0.026	4.317	0.063	4.568	0.058	2.880
895	0.004	0.346	0.015	0.027	0.007	0.019	0.012	0.294	0.032	0.434	0.040	1.802	0.120	0.000	0.025	5.291	0.062	8.844	0.091	1.803
896	0.003	0.110	0.009	0.008	0.006	0.000	0.009	0.050	0.020	0.082	0.026	0.581	0.126	0.000	0.028	1.700	0.051	2.202	0.037	0.964
897	0.003	0.110	0.009	0.013	0.006	0.004	0.010	0.109	0.023	0.153	0.029	0.936	0.130	0.000	0.027	2.108	0.051	4.183	0.055	0.905
898	0.004	0.218	0.012	0.019	0.007	0.000	0.011	0.228	0.030	0.309	0.037	1.270	0.121	0.000	0.025	3.256	0.055	8.541	0.093	1.613
899	0.003	0.172	0.011	0.013	0.006	0.004	0.011	0.160	0.027	0.243	0.034	1.774	0.133	0.000	0.026	3.964	0.058	7.835	0.087	0.919
900	0.004	0.325	0.014	0.007	0.006	0.006	0.010	0.048	0.019	0.083	0.026	1.507	0.125	0.000	0.026	3.737	0.057	5.598	0.067	2.665
901	0.003	0.166	0.010	0.007	0.006	0.010	0.010	0.092	0.022	0.180	0.030	1.098	0.137	0.000	0.026	2.527	0.052	5.246	0.065	4.438
902	0.004	0.250	0.013	0.007	0.006	0.009	0.010	0.081	0.022	0.145	0.029	1.536	0.126	0.000	0.025	4.126	0.058	8.228	0.088	1.428
903	0.004	0.287	0.014	0.023	0.007	0.001	0.011	0.220	0.029	0.295	0.036	1.516	0.128	0.000	0.025	4.284	0.057	7.545	0.084	6.333
905	0.003	0.108	0.009	0.011	0.006	0.000	0.010	0.128	0.025	0.202	0.032	0.712	0.130	0.000	0.027	1.725	0.049	5.934	0.072	0.056
906	0.004	0.195	0.011	0.020	0.007	0.010	0.011	0.229	0.030	0.321	0.037	1.610	0.125	0.000	0.026	5.144	0.064	9.038	0.096	0.584
907	0.003	0.152	0.010	0.015	0.007	0.009	0.012	0.268	0.032	0.458	0.042	1.274	0.116	0.000	0.025	3.651	0.056	9.654	0.100	0.865
908	0.004	0.247	0.013	0.016	0.007	0.007	0.012	0.254	0.032	0.357	0.039	0.705	0.097	0.000	0.024	2.471	0.053	6.245	0.071	2.175
909	0.003	0.159	0.010	0.008	0.006	0.000	0.009	0.072	0.021	0.134	0.029	1.610	0.135	0.000	0.027	4.304	0.061	5.256	0.065	1.064
910	0.003	0.128	0.009	0.015	0.006	0.003	0.010	0.178	0.027	0.298	0.035	1.037	0.125	0.000	0.026	2.530	0.052	6.873	0.078	2.435
911	0.004	0.216	0.012	0.023	0.007	0.001	0.011	0.255	0.031	0.365	0.039	1.214	0.118	0.000	0.026	3.267	0.056	8.864	0.094	1.057
912	0.004	0.228	0.012	0.031	0.008	0.011	0.013	0.404	0.038	0.555	0.045	1.291	0.110	0.000	0.024	4.012	0.058	11.292	0.113	1.243
913	0.003	0.089	0.008	0.009	0.006	0.000	0.009	0.081	0.022	0.127	0.028	0.912	0.131	0.000	0.027	2.030	0.050	4.825	0.062	1.321
914	0.003	0.138	0.010	0.016	0.007	0.000	0.011	0.240	0.031	0.349	0.038	1.240	0.126	0.000	0.026	3.139	0.054	8.897	0.097	1.915
915	0.003	0.133	0.010	0.019	0.007	0.000	0.010	0.250	0.030	0.355	0.037	1.167	0.120	0.000	0.025	3.146	0.054	8.628	0.092	2.051
916	0.004	0.243	0.013	0.030	0.008	0.008	0.013	0.454	0.039	0.576	0.046	1.632	0.112	0.000	0.024	4.130	0.057	12.834	0.124	1.228
917	0.002	0.010	0.004	0.002	0.005	0.004	0.009	0.012	0.016	0.015	0.021	0.051	0.149	0.000	0.030	0.000	0.040	0.502	0.019	0.000
918	0.003	0.083	0.008	0.015	0.006	0.006	0.010	0.141	0.025	0.213	0.032	0.599	0.129	0.000	0.026	1.443	0.046	6.536	0.078	2.990
919	0.004	0.183	0.012	0.016	0.007	0.002	0.012	0.276	0.034	0.369	0.041	0.359	0.114	0.000	0.027	1.405	0.049	6.884	0.081	0.470
920	0.002	0.015	0.005	0.001	0.005	0.000	0.008	0.013	0.016	0.033	0.023	0.038	0.144	0.025	0.029	0.000	0.040	1.866	0.036	0.000
921	0.003	0.146	0.010	0.015	0.007	0.002	0.011	0.207	0.029	0.289	0.036	0.913	0.128	0.000	0.026	1.963	0.049	7.478	0.084	0.887
922	0.002	0.015	0.005	0.008	0.006	0.000	0.009	0.023	0.017	0.000	0.020	0.042	0.144	0.005	0.029	0.000	0.041	0.776	0.023	0.204
923	0.003	0.186	0.011	0.016	0.007	0.000	0.010	0.096	0.023	0.133	0.029	0.486	0.127	0.000	0.026	1.239	0.047	3.833	0.054	4.446
924	0.004	0.175	0.011	0.010	0.006	0.006	0.010	0.104	0.023	0.142	0.029	0.540	0.127	0.000	0.026	1.143	0.045	3.506	0.051	5.844

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
931	0.004	0.193	0.012	0.000	0.006	0.000	0.010	0.003	0.018	0.057	0.027	0.127	0.116	0.000	0.029	0.890	0.051	2.435	0.041	0.312
935	0.004	0.220	0.012	0.018	0.007	0.002	0.010	0.167	0.027	0.282	0.035	1.122	0.121	0.000	0.026	2.958	0.054	8.562	0.092	1.129
936	0.004	0.162	0.011	0.017	0.007	0.003	0.011	0.236	0.031	0.366	0.039	1.436	0.123	0.000	0.025	3.781	0.056	9.747	0.102	1.274
937	0.003	0.093	0.008	0.002	0.005	0.000	0.009	0.053	0.020	0.100	0.027	0.413	0.130	0.000	0.028	1.120	0.048	3.349	0.049	0.010
938	0.004	0.213	0.012	0.019	0.007	0.013	0.012	0.251	0.031	0.325	0.037	1.540	0.125	0.000	0.025	4.124	0.057	10.350	0.106	0.975
939	0.003	0.175	0.011	0.017	0.007	0.013	0.012	0.289	0.033	0.421	0.041	1.591	0.119	0.000	0.025	4.359	0.059	11.459	0.114	0.326
940	0.003	0.112	0.009	0.013	0.006	0.006	0.010	0.076	0.022	0.125	0.028	0.655	0.136	0.000	0.027	1.490	0.048	3.747	0.052	0.164
941	0.002	0.037	0.006	0.009	0.006	0.000	0.009	0.026	0.017	0.023	0.022	0.144	0.154	0.000	0.031	0.272	0.047	1.297	0.032	1.601
942	0.003	0.069	0.008	0.006	0.006	0.009	0.010	0.068	0.021	0.125	0.028	0.545	0.141	0.000	0.028	1.082	0.047	3.253	0.049	0.879
943	0.003	0.105	0.009	0.007	0.006	0.008	0.010	0.070	0.021	0.134	0.028	0.995	0.143	0.000	0.028	1.789	0.050	3.713	0.052	0.000
944	0.003	0.109	0.009	0.005	0.005	0.000	0.009	0.080	0.021	0.133	0.028	0.992	0.159	0.000	0.031	1.686	0.055	3.657	0.054	0.000
945	0.003	0.038	0.006	0.007	0.006	0.002	0.009	0.053	0.020	0.087	0.026	0.270	0.137	0.000	0.028	0.498	0.043	2.287	0.040	1.672
946	0.004	0.238	0.012	0.028	0.007	0.008	0.013	0.486	0.040	0.685	0.048	1.406	0.110	0.000	0.024	4.058	0.057	13.140	0.124	0.494
947	0.004	0.206	0.012	0.023	0.007	0.013	0.012	0.325	0.034	0.429	0.041	1.508	0.119	0.000	0.025	3.853	0.057	9.853	0.102	1.158
948	0.004	0.310	0.014	0.025	0.007	0.014	0.012	0.300	0.034	0.542	0.045	2.615	0.125	0.000	0.025	6.981	0.069	12.815	0.124	0.833
949	0.003	0.141	0.010	0.017	0.007	0.000	0.010	0.216	0.029	0.293	0.036	1.047	0.127	0.000	0.026	2.581	0.051	8.416	0.093	2.014
950	0.003	0.091	0.008	0.021	0.007	0.000	0.010	0.158	0.026	0.213	0.032	1.089	0.131	0.000	0.027	2.367	0.052	6.742	0.079	0.339
951	0.003	0.189	0.011	0.013	0.006	0.014	0.011	0.182	0.027	0.298	0.035	1.597	0.124	0.000	0.026	4.204	0.058	8.240	0.087	0.737
952	0.003	0.120	0.009	0.015	0.006	0.004	0.010	0.109	0.024	0.182	0.031	0.202	0.140	0.000	0.028	0.420	0.043	3.053	0.048	3.769
953	0.003	0.069	0.008	0.010	0.006	0.002	0.009	0.056	0.020	0.075	0.026	0.511	0.144	0.000	0.029	0.723	0.046	2.599	0.043	0.000
954	0.003	0.073	0.007	0.015	0.006	0.004	0.010	0.086	0.022	0.141	0.028	0.222	0.149	0.000	0.030	0.404	0.045	3.305	0.054	5.199
955	0.004	0.357	0.015	0.015	0.007	0.001	0.011	0.215	0.029	0.292	0.036	0.957	0.125	0.000	0.025	2.165	0.049	7.672	0.086	4.781
956	0.004	0.208	0.012	0.029	0.008	0.018	0.014	0.512	0.042	0.699	0.050	0.718	0.109	0.000	0.025	2.471	0.052	12.376	0.123	0.444
957	0.007	1.009	0.026	0.013	0.007	0.000	0.010	0.141	0.026	0.215	0.033	1.112	0.122	0.000	0.025	2.846	0.053	6.833	0.079	5.248
958	0.003	0.093	0.008	0.003	0.005	0.000	0.009	0.063	0.021	0.109	0.027	0.266	0.143	0.000	0.029	0.457	0.045	2.357	0.041	0.011
959	0.004	0.293	0.014	0.018	0.007	0.018	0.011	0.180	0.027	0.246	0.034	0.342	0.133	0.000	0.027	0.839	0.045	3.412	0.049	0.883
960	0.004	0.213	0.012	0.023	0.007	0.007	0.011	0.248	0.031	0.410	0.040	1.573	0.117	0.000	0.025	4.257	0.058	10.168	0.103	1.855
961	0.003	0.163	0.011	0.015	0.007	0.011	0.011	0.118	0.024	0.167	0.030	0.903	0.133	0.000	0.027	2.244	0.051	5.062	0.064	3.318
962	0.003	0.046	0.006	0.005	0.006	0.008	0.010	0.033	0.018	0.080	0.026	0.332	0.141	0.000	0.029	0.669	0.045	2.499	0.042	0.863
963	0.003	0.050	0.007	0.008	0.006	0.003	0.009	0.054	0.020	0.080	0.026	0.264	0.151	0.014	0.031	0.690	0.049	2.516	0.045	1.531
964	0.005	0.526	0.019	0.012	0.007	0.000	0.010	0.125	0.025	0.167	0.031	0.319	0.123	0.000	0.026	0.837	0.045	4.113	0.057	3.902
965	0.003	0.120	0.009	0.013	0.006	0.000	0.010	0.151	0.026	0.215	0.032	0.816	0.131	0.000	0.027	1.998	0.050	4.926	0.062	0.607
966	0.003	0.095	0.009	0.001	0.006	0.005	0.010	0.020	0.018	0.028	0.023	0.130	0.127	0.000	0.027	0.057	0.041	1.446	0.031	3.122
967	0.003	0.060	0.007	0.004	0.006	0.007	0.010	0.056	0.020	0.087	0.027	0.447	0.134	0.000	0.028	0.782	0.046	2.406	0.040	0.000
968	0.003	0.058	0.007	0.009	0.006	0.000	0.009	0.087	0.022	0.157	0.030	0.282	0.135	0.000	0.027	0.643	0.044	3.582	0.052	2.302
969	0.004	0.218	0.012	0.012	0.006	0.000	0.010	0.157	0.026	0.157	0.030	0.622	0.135	0.000	0.028	1.486	0.048	5.459	0.069	0.229

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
999	0.003	0.155	0.010	0.007	0.006	0.000	0.009	0.044	0.019	0.038	0.023	0.097	0.131	0.000	0.028	0.000	0.040	0.789	0.022	0.000
1000	0.003	0.117	0.009	0.006	0.006	0.003	0.009	0.013	0.017	0.048	0.024	0.632	0.134	0.000	0.028	1.325	0.047	4.100	0.056	0.000
1001	0.003	0.080	0.009	0.004	0.006	0.001	0.010	0.062	0.022	0.092	0.029	0.557	0.134	0.000	0.029	1.086	0.048	3.876	0.056	0.000
1002	0.002	0.022	0.005	0.002	0.005	0.000	0.009	0.016	0.017	0.021	0.022	0.188	0.151	0.000	0.030	0.000	0.042	0.604	0.021	0.000
1003	0.002	0.015	0.005	0.004	0.006	0.000	0.009	0.018	0.017	0.021	0.022	0.000	0.136	0.000	0.029	0.000	0.040	0.724	0.021	0.000
1004	0.002	0.027	0.006	0.004	0.006	0.000	0.009	0.050	0.019	0.065	0.025	0.121	0.154	0.000	0.032	0.115	0.047	0.840	0.025	0.000
1005	0.002	0.025	0.005	0.006	0.006	0.000	0.009	0.038	0.018	0.042	0.023	0.294	0.159	0.000	0.031	0.363	0.047	1.029	0.027	0.000
1006	0.002	0.024	0.005	0.007	0.006	0.000	0.008	0.008	0.016	0.031	0.022	0.105	0.141	0.000	0.027	0.037	0.040	0.403	0.023	7.251
1007	0.003	0.070	0.007	0.001	0.005	0.000	0.008	0.005	0.015	0.011	0.021	0.130	0.150	0.000	0.030	0.155	0.044	1.009	0.032	6.620
1008	0.002	0.023	0.005	0.001	0.005	0.000	0.008	0.007	0.016	0.015	0.022	0.085	0.142	0.000	0.029	0.144	0.043	1.280	0.029	0.000
1009	0.003	0.016	0.005	0.002	0.005	0.000	0.008	0.014	0.017	0.020	0.022	0.000	0.167	0.007	0.032	0.000	0.044	0.568	0.022	0.000
1010	0.003	0.126	0.009	0.004	0.005	0.000	0.009	0.103	0.023	0.127	0.028	1.006	0.140	0.000	0.028	1.761	0.050	3.462	0.051	3.297
1011	0.003	0.067	0.007	0.008	0.006	0.000	0.009	0.062	0.021	0.122	0.028	0.787	0.146	0.000	0.028	1.298	0.048	2.708	0.044	0.731
1012	0.003	0.074	0.008	0.005	0.006	0.003	0.009	0.031	0.018	0.044	0.023	0.429	0.153	0.000	0.030	0.710	0.047	2.320	0.046	7.523
1013	0.002	0.038	0.006	0.005	0.006	0.003	0.009	0.045	0.019	0.070	0.025	0.341	0.139	0.000	0.028	0.537	0.044	1.580	0.033	3.374
1014	0.002	0.024	0.005	0.004	0.006	0.006	0.009	0.011	0.017	0.052	0.024	0.420	0.139	0.000	0.027	0.557	0.042	1.827	0.039	8.264
1015	0.003	0.034	0.006	0.003	0.005	0.000	0.008	0.023	0.018	0.064	0.025	0.410	0.140	0.000	0.027	0.565	0.042	1.882	0.039	8.605
971	0.006	0.739	0.023	0.044	0.009	0.000	0.013	0.555	0.043	0.631	0.049	1.435	0.109	0.000	0.025	4.008	0.059	9.883	0.104	2.960
972	0.004	0.346	0.015	0.017	0.007	0.000	0.011	0.226	0.029	0.267	0.034	1.230	0.135	0.000	0.028	2.723	0.054	5.403	0.067	1.023
973	0.003	0.035	0.006	0.008	0.006	0.000	0.008	0.025	0.017	0.028	0.022	0.291	0.143	0.032	0.029	0.479	0.044	1.425	0.031	0.982
974	0.002	0.032	0.006	0.002	0.006	0.012	0.010	0.027	0.017	0.023	0.022	0.430	0.152	0.000	0.029	0.540	0.045	1.427	0.031	0.000
975	0.005	0.569	0.018	0.010	0.006	0.003	0.009	0.033	0.018	0.130	0.027	2.143	0.129	0.000	0.027	4.950	0.058	8.955	0.093	1.415
976	0.003	0.036	0.006	0.003	0.006	0.005	0.009	0.034	0.018	0.047	0.024	0.110	0.161	0.000	0.032	0.000	0.045	0.785	0.025	0.000
977	0.003	0.053	0.007	0.003	0.005	0.001	0.009	0.001	0.015	0.017	0.022	0.161	0.144	0.000	0.029	0.000	0.041	0.894	0.026	1.994
978	0.002	0.009	0.004	0.000	0.005	0.000	0.008	0.007	0.016	0.000	0.020	0.000	0.149	0.018	0.030	0.000	0.041	0.329	0.017	0.265

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
979	0.003	0.021	0.005	0.002	0.005	0.011	0.009	0.010	0.016	0.003	0.020	0.183	0.163	0.011	0.032	0.016	0.045	0.539	0.022	0.285
980	0.002	0.014	0.005	0.004	0.005	0.000	0.009	0.000	0.015	0.024	0.022	0.000	0.149	0.000	0.030	0.000	0.042	0.200	0.014	0.000
981	0.002	0.033	0.006	0.000	0.005	0.001	0.009	0.001	0.015	0.011	0.021	0.173	0.144	0.000	0.029	0.232	0.043	0.805	0.023	0.000
982	0.004	0.237	0.012	0.008	0.006	0.000	0.008	0.003	0.016	0.052	0.024	0.638	0.124	0.000	0.027	1.559	0.048	3.915	0.053	3.095
983	0.003	0.068	0.008	0.007	0.006	0.007	0.009	0.007	0.016	0.034	0.023	0.000	0.132	0.000	0.028	0.009	0.040	2.685	0.043	0.000
984	0.003	0.079	0.008	0.006	0.006	0.000	0.010	0.066	0.022	0.122	0.029	0.444	0.131	0.000	0.028	1.029	0.046	4.220	0.058	0.000
985	0.003	0.175	0.011	0.021	0.007	0.000	0.011	0.264	0.031	0.333	0.037	1.596	0.136	0.000	0.027	3.305	0.055	5.742	0.069	0.278
986	0.002	0.047	0.006	0.007	0.006	0.006	0.010	0.057	0.020	0.085	0.026	0.501	0.148	0.001	0.032	0.915	0.051	2.955	0.048	0.000
987	0.003	0.153	0.010	0.012	0.006	0.002	0.010	0.129	0.025	0.193	0.031	1.748	0.141	0.000	0.028	3.267	0.056	5.380	0.067	0.309
988	0.003	0.090	0.008	0.010	0.006	0.000	0.009	0.118	0.023	0.144	0.029	0.811	0.139	0.000	0.028	1.721	0.050	3.726	0.052	0.000
989	0.002	0.011	0.005	0.006	0.006	0.002	0.009	0.008	0.016	0.014	0.021	0.000	0.159	0.019	0.032	0.000	0.044	0.344	0.018	0.000
990	0.003	0.068	0.008	0.007	0.006	0.000	0.009	0.062	0.021	0.090	0.027	0.401	0.130	0.000	0.028	0.484	0.042	5.057	0.066	0.000
991	0.003	0.061	0.007	0.004	0.006	0.001	0.009	0.023	0.017	0.034	0.023	0.759	0.160	0.000	0.032	0.793	0.051	1.329	0.032	0.536
992	0.003	0.056	0.007	0.006	0.006	0.000	0.009	0.086	0.022	0.094	0.027	0.569	0.160	0.000	0.032	0.883	0.051	1.870	0.038	0.000
993	0.004	0.263	0.013	0.007	0.006	0.000	0.008	0.023	0.017	0.094	0.026	0.699	0.117	0.000	0.025	2.716	0.051	8.878	0.092	0.041
994	0.004	0.267	0.013	0.001	0.005	0.000	0.009	0.033	0.018	0.057	0.024	0.620	0.114	0.000	0.025	2.894	0.052	9.408	0.096	0.061
1042	0.009	2.097	0.035	0.023	0.007	0.021	0.010	0.012	0.016	0.125	0.025	2.490	0.098	0.000	0.022	10.099	0.081	6.982	0.067	1.263
1043	0.003	0.123	0.009	0.005	0.006	0.000	0.008	0.000	0.014	0.029	0.022	0.269	0.139	0.000	0.028	0.503	0.044	0.573	0.022	3.226
1044	0.003	0.111	0.009	0.005	0.006	0.000	0.008	0.000	0.015	0.034	0.023	0.582	0.138	0.004	0.029	1.735	0.051	1.758	0.033	0.000
1045	0.003	0.169	0.011	0.004	0.006	0.004	0.009	0.009	0.016	0.025	0.022	0.708	0.138	0.013	0.029	2.045	0.052	1.604	0.031	0.000
1046	0.004	0.319	0.014	0.007	0.006	0.000	0.008	0.000	0.016	0.056	0.024	0.279	0.143	0.000	0.031	1.134	0.053	1.252	0.029	0.009
1047	0.002	0.033	0.006	0.000	0.005	0.004	0.009	0.013	0.016	0.009	0.021	0.235	0.143	0.000	0.029	0.454	0.044	1.217	0.028	0.000
1048	0.003	0.071	0.008	0.005	0.006	0.000	0.009	0.007	0.016	0.016	0.022	0.323	0.143	0.000	0.029	0.345	0.044	0.865	0.023	0.000
1049	0.002	0.017	0.005	0.006	0.006	0.002	0.009	0.016	0.016	0.017	0.022	0.130	0.146	0.000	0.029	0.069	0.042	0.376	0.017	0.000
1050	0.003	0.086	0.009	0.002	0.006	0.000	0.009	0.008	0.017	0.024	0.024	0.751	0.148	0.019	0.030	1.993	0.054	2.158	0.040	1.139
1051	0.002	0.052	0.007	0.004	0.005	0.000	0.008	0.009	0.016	0.010	0.021	0.219	0.144	0.000	0.028	0.678	0.044	0.205	0.024	9.546
1052	0.003	0.118	0.010	0.002	0.006	0.007	0.010	0.000	0.016	0.026	0.024	0.470	0.124	0.000	0.028	1.514	0.050	4.460	0.060	0.000
1053	0.003	0.116	0.009	0.000	0.005	0.003	0.009	0.000	0.015	0.044	0.023	0.733	0.148	0.000	0.029	1.378	0.050	1.247	0.028	0.000
1054	0.003	0.131	0.009	0.000	0.005	0.002	0.009	0.003	0.015	0.019	0.022	0.737	0.163	0.030	0.032	1.360	0.054	1.270	0.031	0.000
1055	0.003	0.212	0.012	0.012	0.006	0.004	0.010	0.130	0.024	0.219	0.032	0.842	0.141	0.004	0.029	2.042	0.052	1.754	0.033	0.939

Sample ID	Co Error	Fe	Fe Error	Mn	Mn Error	Cr	Cr Error	V	V Error	Ti	Ti Error	Al	Al Error	P	P Error	Si	Si Error	Ca	Ca Error	K
1056	0.004	0.220	0.012	0.007	0.006	0.000	0.008	0.006	0.016	0.034	0.022	0.709	0.150	0.000	0.031	1.792	0.056	1.449	0.032	0.550
1057	0.003	0.085	0.008	0.003	0.005	0.000	0.009	0.002	0.016	0.017	0.022	0.101	0.123	0.000	0.027	0.315	0.042	0.786	0.022	1.624
1058	0.003	0.066	0.007	0.000	0.005	0.003	0.009	0.007	0.016	0.001	0.021	0.000	0.120	0.000	0.027	0.223	0.042	0.663	0.021	1.947
1059	0.003	0.062	0.007	0.001	0.005	0.001	0.009	0.000	0.015	0.008	0.021	0.068	0.134	0.000	0.029	0.189	0.043	0.476	0.018	0.377
1060	0.002	0.045	0.007	0.007	0.006	0.000	0.009	0.001	0.015	0.014	0.022	0.170	0.136	0.000	0.029	0.721	0.046	1.581	0.031	0.000
1061	0.004	0.181	0.012	0.005	0.006	0.006	0.010	0.020	0.018	0.029	0.024	0.541	0.141	0.000	0.029	1.473	0.051	2.312	0.040	0.000
1062	0.003	0.067	0.007	0.004	0.006	0.006	0.009	0.015	0.017	0.019	0.022	0.271	0.136	0.000	0.029	0.994	0.047	2.194	0.038	0.000
1063	0.003	0.063	0.007	0.004	0.006	0.000	0.009	0.004	0.016	0.032	0.023	0.261	0.153	0.000	0.032	0.953	0.053	2.323	0.043	0.000
1064	0.003	0.045	0.006	0.003	0.005	0.002	0.009	0.008	0.016	0.012	0.021	0.113	0.141	0.000	0.029	0.549	0.044	2.723	0.045	0.375

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
690	0.037	50.939	0.323	5.722	0.047	1.476	0.579
691	0.037	66.355	0.404	0.143	0.029	0.000	0.705
692	0.038	57.298	0.389	1.551	0.033	0.212	0.595
693	0.086	56.465	0.331	0.709	0.027	1.557	0.616
694	0.047	59.574	0.387	0.537	0.028	0.563	0.616
695	0.044	55.466	0.347	0.916	0.029	1.134	0.580
697	0.049	49.459	0.318	1.413	0.030	1.791	0.555
698	0.038	62.171	0.384	0.698	0.029	1.624	0.654
699	0.049	59.355	0.373	1.018	0.034	1.180	0.700
700	0.066	43.987	0.284	2.253	0.033	1.106	0.518
701	0.042	58.086	0.366	1.654	0.032	0.723	0.599
702	0.105	53.455	0.313	0.710	0.027	0.197	0.592
703	0.058	52.410	0.326	0.644	0.027	0.707	0.552
704	0.048	55.988	0.345	0.634	0.028	1.441	0.593
705	0.045	52.599	0.332	2.027	0.033	1.420	0.572
706	0.040	50.423	0.313	2.150	0.033	1.353	0.552
707	0.041	48.036	0.302	1.587	0.030	1.678	0.533
708	0.042	64.170	0.390	1.297	0.032	1.049	0.672
709	0.043	58.167	0.356	3.848	0.040	0.940	0.627
710	0.043	59.701	0.386	1.108	0.031	1.109	0.628
711	0.068	56.419	0.338	1.488	0.031	1.014	0.614
712	0.072	56.171	0.337	1.469	0.031	1.467	0.630
713	0.044	55.100	0.341	1.159	0.030	0.751	0.580
714	0.037	60.088	0.371	0.381	0.027	1.773	0.627
715	0.037	61.179	0.376	1.302	0.031	1.819	0.642
716	0.044	54.411	0.342	1.862	0.033	1.687	0.592
717	0.044	57.494	0.353	0.804	0.032	1.540	0.669
718	0.041	54.987	0.345	1.247	0.030	1.136	0.583
719	0.039	63.713	0.394	0.038	0.027	1.566	0.660
720	0.042	49.428	0.305	1.335	0.029	1.845	0.546
721	0.083	52.135	0.300	2.530	0.034	1.965	0.599
722	0.045	60.339	0.376	1.089	0.031	1.331	0.639
723	0.055	65.102	0.397	0.416	0.031	0.888	0.730
724	0.052	65.280	0.397	0.465	0.029	0.755	0.675

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
725	0.038	57.071	0.346	2.986	0.037	0.952	0.617
726	0.057	45.155	0.270	2.536	0.033	1.854	0.519
727	0.047	57.927	0.356	1.721	0.033	1.455	0.628
728	0.036	24.005	0.154	1.253	0.024	3.254	0.353
729	0.037	57.012	0.352	1.171	0.030	2.099	0.605
730	0.033	60.723	0.368	1.238	0.031	1.130	0.629
731	0.038	52.413	0.323	2.161	0.033	2.050	0.570
732	0.041	56.054	0.353	0.990	0.029	1.075	0.589
733	0.040	57.239	0.362	1.201	0.030	1.415	0.595
734	0.043	63.379	0.390	1.183	0.031	0.588	0.654
735	0.042	63.483	0.386	1.185	0.034	0.758	0.714
736	0.046	3.547	0.027	5.660	0.043	3.581	0.239
737	0.034	5.263	0.040	20.029	0.106	1.795	0.324
738	0.033	3.094	0.026	14.310	0.086	3.057	0.286
739	0.032	10.751	0.073	3.007	0.030	3.002	0.258
740	0.031	3.255	0.027	13.503	0.080	4.469	0.303
741	0.040	29.665	0.193	1.781	0.029	2.748	0.401
744	0.036	28.601	0.171	5.804	0.044	2.505	0.382
746	0.033	42.288	0.258	0.830	0.025	0.749	0.426
747	0.032	42.872	0.240	1.695	0.028	0.812	0.441
748	0.034	46.149	0.269	1.819	0.029	0.710	0.474
749	0.032	42.046	0.250	1.082	0.025	0.770	0.415
750	0.036	59.367	0.379	0.883	0.030	0.883	0.612

Sample ID	K Error	CI	CI Error	S	S Error	Mg	Mg Error
751	0.039	51.294	0.340	1.978	0.033	1.170	0.555
752	0.043	38.968	0.245	4.440	0.042	3.523	0.503
753	0.165	50.492	0.272	0.247	0.024	0.497	0.608
754	0.036	57.916	0.383	0.564	0.028	0.900	0.594
755	0.053	57.818	0.375	1.937	0.033	0.715	0.609
756	0.034	67.288	0.422	0.105	0.028	0.251	0.684
757	0.130	56.421	0.322	1.509	0.030	1.129	0.646
758	0.039	60.644	0.383	0.366	0.028	0.826	0.623
759	0.098	57.077	0.339	1.106	0.032	0.959	0.689
760	0.049	53.650	0.339	2.460	0.035	1.253	0.583
761	0.052	61.162	0.414	0.818	0.030	0.538	0.655
762	0.043	44.627	0.308	4.756	0.046	0.286	0.509
763	0.035	65.319	0.408	0.405	0.029	0.686	0.668
764	0.040	49.529	0.313	2.527	0.035	2.765	0.564
765	0.099	51.975	0.302	1.008	0.028	1.587	0.587
766	0.099	49.567	0.292	2.441	0.033	1.952	0.577
767	0.095	45.797	0.278	1.980	0.032	1.159	0.540
768	0.036	61.998	0.391	0.659	0.029	0.904	0.636
769	0.040	55.227	0.359	1.668	0.033	1.426	0.594
770	0.034	61.872	0.396	0.468	0.029	0.000	0.622
771	0.044	62.472	0.382	1.111	0.031	1.420	0.659
772	0.065	46.899	0.281	6.831	0.050	2.436	0.587
773	0.075	40.606	0.249	3.475	0.037	2.597	0.520
774	0.087	39.483	0.234	3.810	0.038	2.982	0.531
775	0.039	43.268	0.276	2.771	0.035	2.699	0.510
776	0.038	55.642	0.356	1.450	0.031	2.129	0.597
777	0.044	49.253	0.311	1.936	0.032	2.876	0.558
778	0.044	42.222	0.299	2.247	0.035	1.658	0.506
779	0.041	58.255	0.358	1.824	0.033	2.059	0.618

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
780	0.034	64.252	0.396	0.662	0.030	0.779	0.663
781	0.039	54.556	0.343	2.627	0.036	1.750	0.583
782	0.041	50.948	0.329	2.370	0.035	2.000	0.558
783	0.041	57.587	0.363	1.837	0.037	1.295	0.676
784	0.091	53.126	0.306	0.799	0.027	2.088	0.597
785	0.041	62.296	0.391	1.067	0.031	1.569	0.654
786	0.035	59.591	0.385	1.327	0.031	0.491	0.612
787	0.086	52.258	0.304	1.721	0.031	2.442	0.587
788	0.038	56.627	0.363	1.406	0.031	1.059	0.586
789	0.036	57.615	0.365	1.321	0.031	1.051	0.590
790	0.036	58.109	0.377	1.731	0.033	2.016	0.619
791	0.040	67.573	0.409	0.273	0.029	1.264	0.705
792	0.036	58.620	0.381	0.668	0.029	0.647	0.593
793	0.056	50.721	0.324	1.407	0.030	2.060	0.561
794	0.047	56.747	0.357	1.288	0.030	1.711	0.589
795	0.040	27.839	0.181	1.518	0.027	1.934	0.397
796	0.040	27.511	0.177	1.592	0.028	1.661	0.399
797	0.049	39.771	0.248	2.325	0.032	2.945	0.488
798	0.042	54.416	0.352	1.670	0.032	1.742	0.582
799	0.034	67.087	0.410	0.510	0.029	0.500	0.689
800	0.039	50.134	0.336	1.275	0.030	1.408	0.543
801	0.046	67.099	0.413	0.660	0.032	0.707	0.739
802	0.036	58.561	0.374	0.388	0.027	0.683	0.595
803	0.038	43.240	0.283	3.783	0.040	1.674	0.500
804	0.048	50.721	0.319	0.651	0.027	2.843	0.558
805	0.048	50.531	0.313	3.456	0.039	0.720	0.560
806	0.035	61.098	0.374	0.780	0.029	1.799	0.631
807	0.032	59.819	0.381	2.563	0.037	0.980	0.634
808	0.031	56.415	0.365	2.498	0.036	0.000	0.578
816	0.040	23.459	0.140	1.956	0.026	0.839	0.308
818	0.035	22.531	0.171	3.549	0.041	0.000	0.347
819	0.030	26.526	0.155	1.103	0.021	0.903	0.310
820	0.029	17.381	0.108	1.177	0.020	0.659	0.250
821	0.036	17.943	0.108	9.009	0.056	1.655	0.321

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
822	0.036	29.057	0.175	7.452	0.051	1.043	0.391
826	0.029	18.895	0.118	3.998	0.036	1.448	0.291
827	0.036	49.016	0.311	2.866	0.036	2.443	0.543
828	0.034	60.852	0.373	1.866	0.033	1.187	0.634
830	0.032	52.980	0.332	2.855	0.036	1.100	0.555
831	0.032	59.949	0.369	1.718	0.033	0.555	0.613
834	0.060	60.195	0.403	0.856	0.030	0.000	0.634
835	0.059	61.643	0.413	0.880	0.031	0.388	0.655
837	0.044	47.756	0.406	0.210	0.030	0.000	0.566
838	0.068	44.736	0.271	5.135	0.043	1.031	0.523
839	0.051	60.326	0.506	0.000	0.031	0.323	0.727
840	0.034	56.048	0.354	0.537	0.027	0.556	0.572
841	0.036	49.558	0.317	1.832	0.032	1.448	0.543
842	0.038	38.179	0.273	1.463	0.031	0.543	0.462
843	0.061	35.151	0.210	3.121	0.034	2.432	0.452
844	0.061	36.225	0.220	2.960	0.034	1.827	0.455
845	0.091	43.160	0.304	0.600	0.027	0.174	0.512
846	0.038	37.140	0.251	2.477	0.034	0.798	0.442
847	0.030	2.474	0.022	14.607	0.088	3.106	0.286
848	0.038	33.175	0.206	3.225	0.035	1.729	0.438
849	0.041	37.264	0.241	2.159	0.038	1.194	0.574
850	0.033	32.362	0.200	3.862	0.038	2.117	0.415
851	0.037	23.528	0.144	3.631	0.035	1.876	0.378
852	0.035	41.148	0.248	2.931	0.035	1.173	0.494

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
853	0.033	33.849	0.205	3.165	0.034	1.920	0.446
854	0.033	34.498	0.208	3.196	0.034	1.873	0.453
855	0.033	36.430	0.217	2.738	0.033	1.928	0.467
856	0.034	21.106	0.136	3.907	0.038	1.103	0.372
857	0.047	39.203	0.229	2.270	0.031	1.409	0.484
858	0.040	48.679	0.300	1.655	0.030	2.014	0.540
859	0.042	38.541	0.230	2.548	0.032	1.667	0.484
860	0.035	38.873	0.234	2.235	0.031	1.108	0.479
861	0.042	36.499	0.222	2.380	0.031	2.432	0.454
862	0.035	39.317	0.236	2.325	0.031	0.903	0.470
863	0.035	40.270	0.246	2.253	0.031	1.121	0.478
864	0.038	58.442	0.357	0.733	0.032	0.394	0.675
865	0.035	47.676	0.297	1.702	0.031	1.592	0.533
866	0.037	46.492	0.282	1.887	0.031	1.461	0.526
867	0.042	44.131	0.264	1.879	0.030	2.315	0.522
868	0.040	40.495	0.244	2.367	0.032	1.906	0.490
869	0.056	54.750	0.354	0.300	0.032	1.552	0.693
870	0.047	50.040	0.315	0.619	0.027	1.915	0.539
871	0.037	28.617	0.172	3.235	0.034	2.305	0.413
872	0.055	40.031	0.255	3.037	0.035	1.743	0.478
873	0.057	42.743	0.300	2.889	0.038	0.879	0.511
874	0.046	53.954	0.347	0.634	0.027	1.628	0.563
875	0.046	54.377	0.347	0.600	0.027	0.989	0.559
876	0.086	44.021	0.257	1.152	0.027	3.586	0.538
877	0.063	60.316	0.363	0.450	0.027	1.734	0.642
878	0.051	45.219	0.280	0.805	0.026	2.814	0.514
879	0.047	40.403	0.255	1.813	0.030	2.559	0.486
880	0.046	37.403	0.223	2.428	0.032	1.828	0.467
881	0.041	29.572	0.176	3.126	0.033	2.182	0.429
882	0.043	45.772	0.281	1.431	0.029	1.613	0.524
883	0.037	38.222	0.231	2.344	0.031	2.201	0.478
884	0.056	49.854	0.306	1.064	0.028	1.095	0.558
885	0.063	45.060	0.275	1.470	0.029	1.782	0.525
886	0.060	44.694	0.275	1.447	0.029	1.309	0.512
887	0.051	41.836	0.248	2.026	0.030	2.502	0.503

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
888	0.038	38.514	0.241	2.329	0.032	1.858	0.473
889	0.040	30.645	0.197	2.703	0.033	2.630	0.425
890	0.040	39.457	0.241	2.346	0.032	1.928	0.477
891	0.039	30.674	0.187	2.751	0.032	1.521	0.413
892	0.039	48.816	0.302	2.602	0.034	1.961	0.542
893	0.055	48.880	0.294	1.224	0.029	2.547	0.553
894	0.056	37.969	0.247	0.898	0.026	2.108	0.460
895	0.044	35.736	0.214	2.301	0.031	2.940	0.459
896	0.046	52.809	0.343	0.712	0.028	0.847	0.546
897	0.044	51.353	0.313	1.147	0.029	1.225	0.549
898	0.046	40.525	0.247	2.101	0.031	1.695	0.491
899	0.042	43.339	0.267	1.919	0.031	2.576	0.515
900	0.053	41.716	0.259	2.538	0.033	2.417	0.493
901	0.069	47.233	0.274	1.209	0.028	4.155	0.567
902	0.043	40.824	0.245	1.961	0.030	3.204	0.497
903	0.080	38.437	0.221	1.738	0.028	3.944	0.508
905	0.038	52.230	0.322	1.018	0.028	0.963	0.563
906	0.039	40.196	0.246	1.811	0.030	1.710	0.490
907	0.039	37.701	0.232	2.458	0.032	1.815	0.470
908	0.048	32.140	0.213	1.529	0.028	1.125	0.407
909	0.044	46.460	0.291	1.276	0.029	3.126	0.532
910	0.053	44.186	0.261	1.850	0.030	2.255	0.521
911	0.043	38.224	0.236	2.414	0.033	1.666	0.481
912	0.041	31.824	0.197	2.903	0.034	1.540	0.437
913	0.047	50.696	0.309	2.628	0.035	1.369	0.557
914	0.049	43.035	0.256	1.890	0.030	1.569	0.517
915	0.048	41.938	0.245	1.866	0.030	1.129	0.495
916	0.039	30.916	0.187	3.225	0.034	1.856	0.431
917	0.035	67.521	0.412	0.120	0.028	0.540	0.684
918	0.059	48.834	0.287	2.490	0.033	1.687	0.563
919	0.042	42.215	0.277	1.606	0.031	1.185	0.506
920	0.039	64.822	0.397	1.263	0.032	0.444	0.663
921	0.042	44.538	0.273	1.669	0.030	3.935	0.537
922	0.044	65.785	0.407	0.247	0.028	0.191	0.663
923	0.072	47.913	0.294	1.153	0.028	2.329	0.555
924	0.082	46.177	0.279	1.247	0.028	3.702	0.551

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
931	0.047	45.013	0.329	1.114	0.031	0.944	0.517
935	0.042	42.567	0.257	1.679	0.029	1.301	0.498
936	0.042	39.158	0.237	3.037	0.034	2.459	0.491
937	0.039	55.091	0.348	1.046	0.029	0.762	0.576
938	0.040	38.596	0.234	4.627	0.041	2.359	0.497
939	0.035	35.807	0.218	3.222	0.035	1.870	0.466
940	0.039	55.369	0.343	0.932	0.028	2.219	0.586
941	0.059	63.318	0.383	0.092	0.029	0.210	0.707
942	0.046	58.296	0.356	0.582	0.028	1.720	0.619
943	0.036	57.583	0.351	0.366	0.026	1.789	0.603
944	0.041	58.268	0.349	0.348	0.029	1.458	0.673
945	0.053	59.658	0.364	0.784	0.029	0.636	0.620
946	0.034	31.828	0.188	2.811	0.032	1.800	0.435
947	0.041	37.659	0.230	2.333	0.031	1.303	0.467
948	0.037	30.215	0.185	2.959	0.033	2.306	0.433
949	0.049	45.979	0.269	1.936	0.031	1.253	0.534
950	0.039	49.608	0.302	1.673	0.031	1.114	0.549
951	0.038	41.234	0.246	2.659	0.033	1.523	0.485
952	0.069	57.123	0.334	0.425	0.027	1.670	0.633
953	0.040	61.076	0.379	0.474	0.028	1.464	0.637
954	0.084	56.626	0.322	0.616	0.030	0.580	0.677
955	0.070	40.768	0.239	1.738	0.029	3.333	0.524
956	0.037	34.896	0.211	2.223	0.031	1.158	0.465
957	0.074	40.049	0.238	1.257	0.027	1.662	0.505
958	0.041	60.448	0.373	0.382	0.028	1.038	0.642
959	0.045	55.935	0.338	0.558	0.027	1.493	0.594
960	0.045	35.931	0.215	2.667	0.033	1.183	0.454
961	0.062	50.155	0.295	1.306	0.029	1.888	0.565
962	0.047	60.949	0.369	0.628	0.029	0.731	0.635
963	0.056	60.678	0.371	0.732	0.031	0.185	0.684
964	0.068	47.597	0.295	0.468	0.025	2.151	0.549
965	0.041	51.493	0.314	2.193	0.033	1.380	0.559
966	0.065	54.557	0.348	0.399	0.026	1.296	0.576
967	0.039	57.923	0.370	0.954	0.029	0.786	0.592
968	0.057	56.166	0.338	0.451	0.026	1.751	0.604
969	0.040	54.403	0.332	0.705	0.027	1.266	0.588

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
999	0.035	59.357	0.379	0.173	0.026	1.053	0.594
1000	0.038	54.882	0.344	3.027	0.037	0.907	0.582
1001	0.039	54.203	0.368	2.906	0.038	0.440	0.590
1002	0.035	66.556	0.411	0.114	0.028	1.074	0.682
1003	0.031	62.032	0.397	0.473	0.028	0.712	0.625
1004	0.036	64.487	0.400	0.142	0.030	0.041	0.707
1005	0.035	65.037	0.406	0.226	0.030	1.121	0.712
1006	0.099	59.385	0.340	0.254	0.026	1.088	0.645
1007	0.098	57.917	0.331	0.663	0.030	0.779	0.685
1008	0.034	64.132	0.402	0.806	0.030	0.456	0.650
1009	0.038	68.735	0.426	0.073	0.030	1.246	0.766
1010	0.065	53.194	0.320	2.483	0.035	1.196	0.593
1011	0.046	59.409	0.366	1.884	0.033	1.743	0.629
1012	0.105	54.669	0.319	2.340	0.037	0.915	0.682
1013	0.067	57.619	0.346	1.098	0.030	1.197	0.622
1014	0.108	55.043	0.320	1.965	0.032	0.892	0.623
1015	0.111	55.051	0.318	2.031	0.032	0.984	0.629
971	0.054	26.411	0.175	6.693	0.053	0.662	0.420
972	0.045	48.457	0.298	3.724	0.039	1.539	0.558
973	0.049	62.482	0.383	1.117	0.031	0.696	0.642
974	0.039	65.119	0.402	0.960	0.031	1.386	0.674
975	0.042	36.435	0.221	9.390	0.059	1.459	0.480
976	0.038	67.548	0.417	0.401	0.031	0.000	0.739
977	0.059	63.688	0.390	0.737	0.030	0.350	0.660
978	0.045	68.521	0.422	0.079	0.028	0.578	0.692

Sample ID	K Error	Cl	Cl Error	S	S Error	Mg	Mg Error
979	0.048	67.319	0.410	0.042	0.029	1.336	0.740
980	0.035	68.165	0.417	0.000	0.027	0.629	0.691
981	0.039	64.996	0.404	0.477	0.029	0.668	0.652
982	0.061	47.900	0.294	2.856	0.035	1.428	0.538
983	0.032	59.605	0.377	2.084	0.034	0.197	0.607
984	0.035	52.558	0.345	6.181	0.050	0.481	0.578
985	0.038	48.777	0.301	3.386	0.038	1.190	0.541
986	0.043	56.718	0.354	1.835	0.036	0.596	0.652
987	0.040	51.269	0.316	3.268	0.038	0.702	0.560
988	0.034	56.322	0.344	2.445	0.035	0.906	0.599
989	0.033	68.561	0.418	0.000	0.029	0.000	0.738
990	0.033	53.919	0.344	4.718	0.044	0.000	0.581
991	0.050	61.555	0.386	0.708	0.032	1.104	0.695
992	0.036	62.544	0.392	1.496	0.035	0.683	0.705
993	0.033	41.880	0.252	3.807	0.038	2.913	0.502
994	0.033	39.744	0.240	3.937	0.038	2.840	0.488
1042	0.033	22.649	0.142	0.575	0.019	2.158	0.316
1043	0.066	61.109	0.366	0.153	0.026	0.400	0.626
1044	0.033	59.390	0.372	0.641	0.028	1.300	0.601
1045	0.034	59.495	0.376	0.221	0.026	0.922	0.595
1046	0.042	58.802	0.368	0.079	0.028	0.205	0.642
1047	0.035	63.959	0.400	0.578	0.029	0.958	0.645
1048	0.033	63.804	0.402	0.225	0.027	0.603	0.640
1049	0.032	67.175	0.411	0.000	0.027	0.314	0.668
1050	0.055	58.755	0.391	0.675	0.029	1.740	0.638
1051	0.120	58.455	0.327	0.000	0.025	0.600	0.655
1052	0.040	48.285	0.327	3.006	0.038	1.108	0.542
1053	0.039	62.170	0.382	0.537	0.029	1.306	0.640
1054	0.041	63.059	0.389	0.529	0.031	1.167	0.709
1055	0.046	58.577	0.356	0.888	0.029	0.985	0.605

Sample ID	K Error	CI	CI Error	S	S Error	Mg	Mg Error
1056	0.047	57.653	0.357	0.624	0.031	1.396	0.646
1057	0.050	55.782	0.355	0.749	0.028	0.488	0.559
1058	0.054	54.492	0.348	0.414	0.026	0.492	0.549
1059	0.043	61.050	0.388	0.045	0.026	0.847	0.610
1060	0.031	61.409	0.386	0.726	0.029	0.257	0.616
1061	0.037	58.863	0.388	1.040	0.030	1.214	0.618
1062	0.040	59.447	0.377	1.410	0.031	0.887	0.609
1063	0.044	58.954	0.377	1.520	0.036	0.920	0.685
1064	0.044	61.431	0.376	2.164	0.035	0.385	0.644

**Appendix 6 –
Seismic Interpretation Reports**

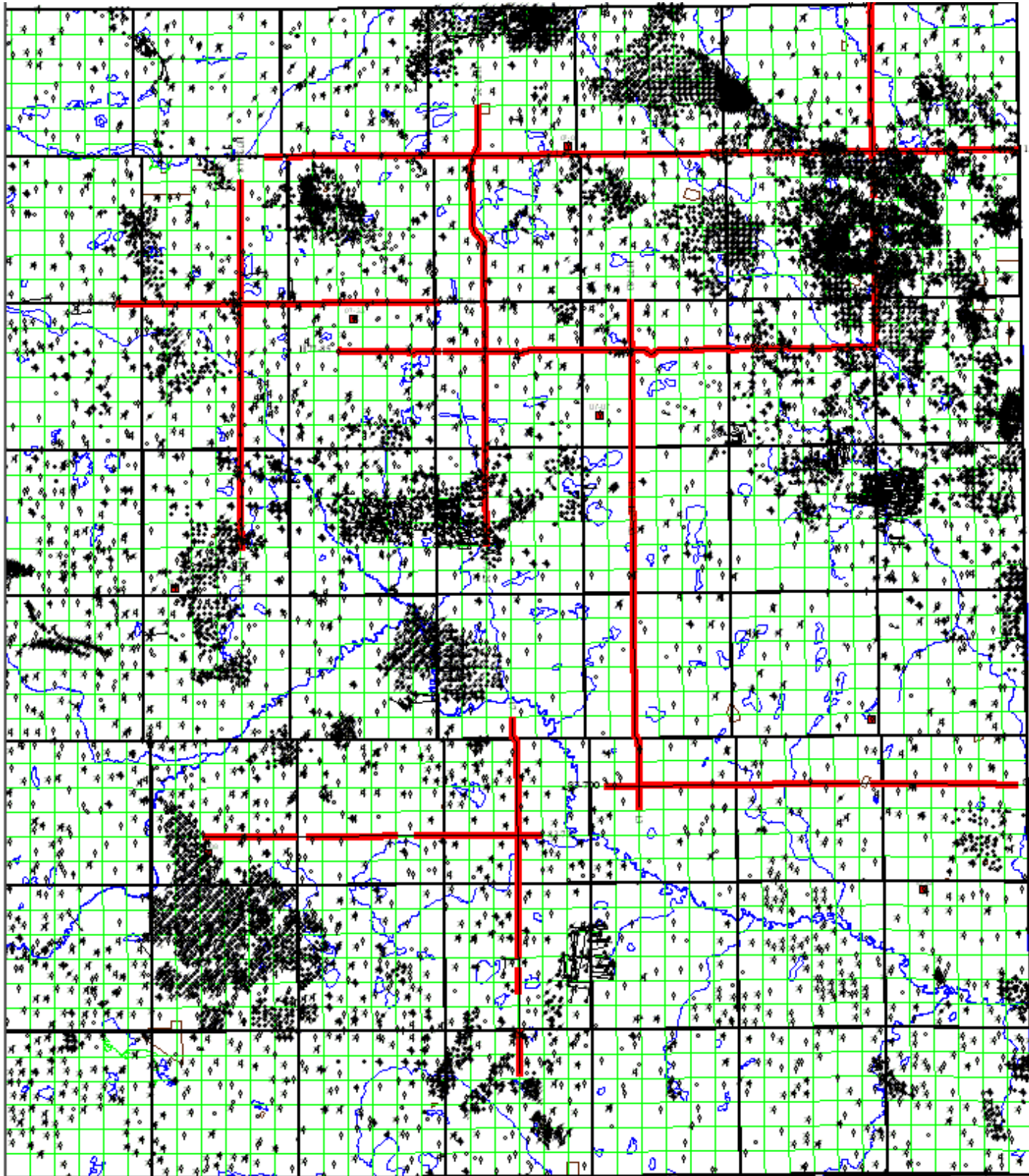
2011 ALBERT LAKE 2D FINAL TIME INTERPRETATION



PROJECT OUTLINE OBJECTIVES, ETC

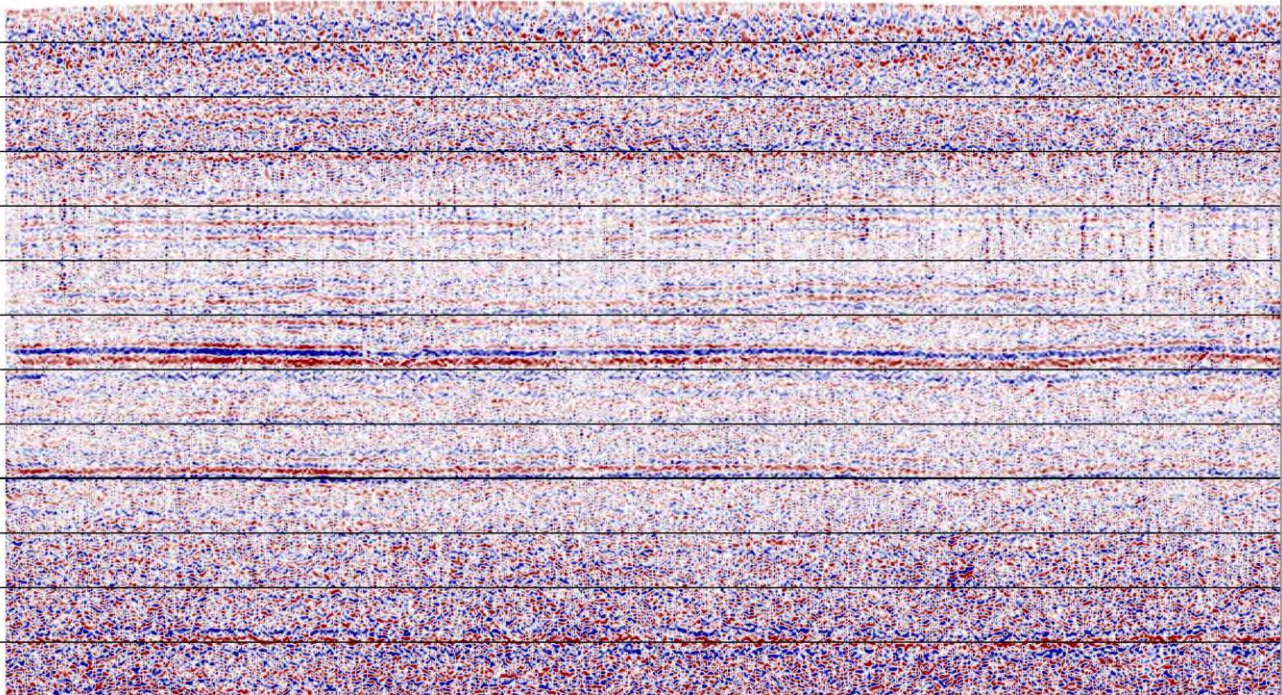
- Review all available geological and geophysical data with the Client;
 - Recover and retrieve all relevant digital data including but not limited to original seismic data, well bore log data, geological tops from well bores;
 - Prepare parameters and manage the processing of the seismic data at a data processing centre in Calgary;
 - Load the available seismic data and well bore log data onto the interpretation workstation;
 - Interpret the seismic data and well data to create a geological model in time;
 - Load the interpreted data and available well information into GOCAD;
 - If required, using available well and geological data create a velocity model for depth conversion process and provide an interpretation in depth;
 - Present final results to Client technical staff and delivery of final report.
-
- Primary objective is to map the continuity and thickness of the Prairie Evaporite .
 - Secondary objectives include the identification and mapping of any structures and/or anomalies that may have an influence on future mining operations.

LOCATION MAP

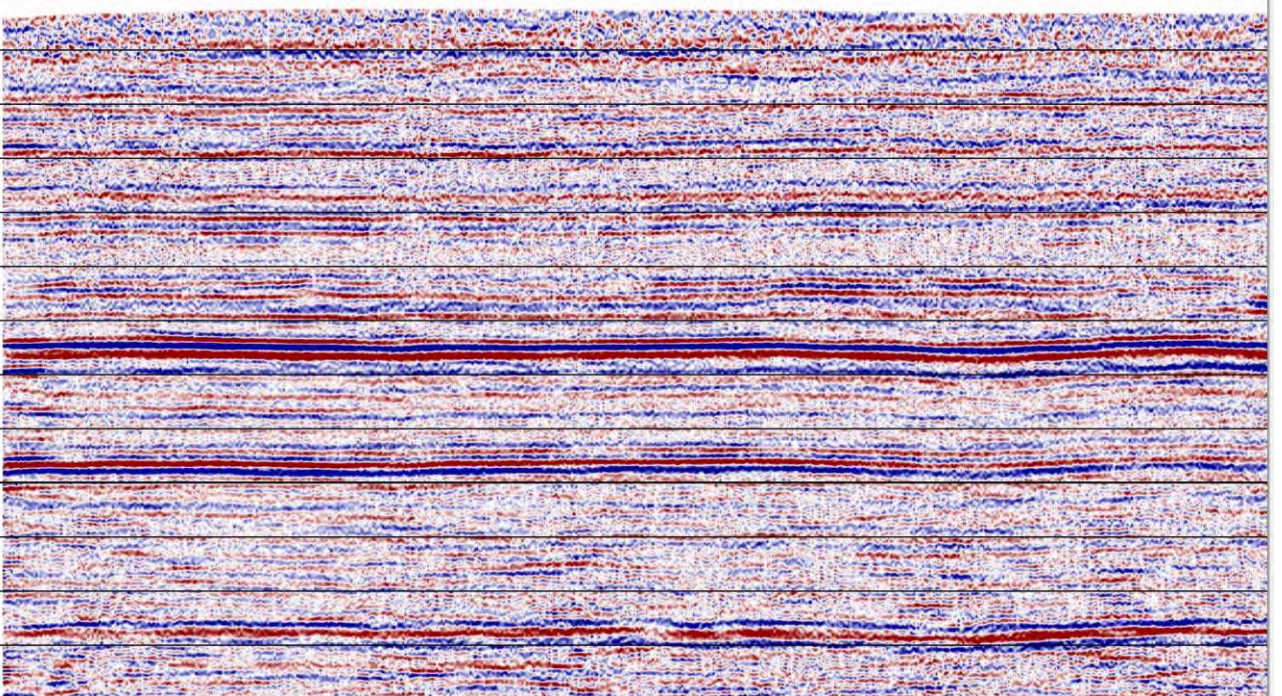


PROCESSING COMPARISON

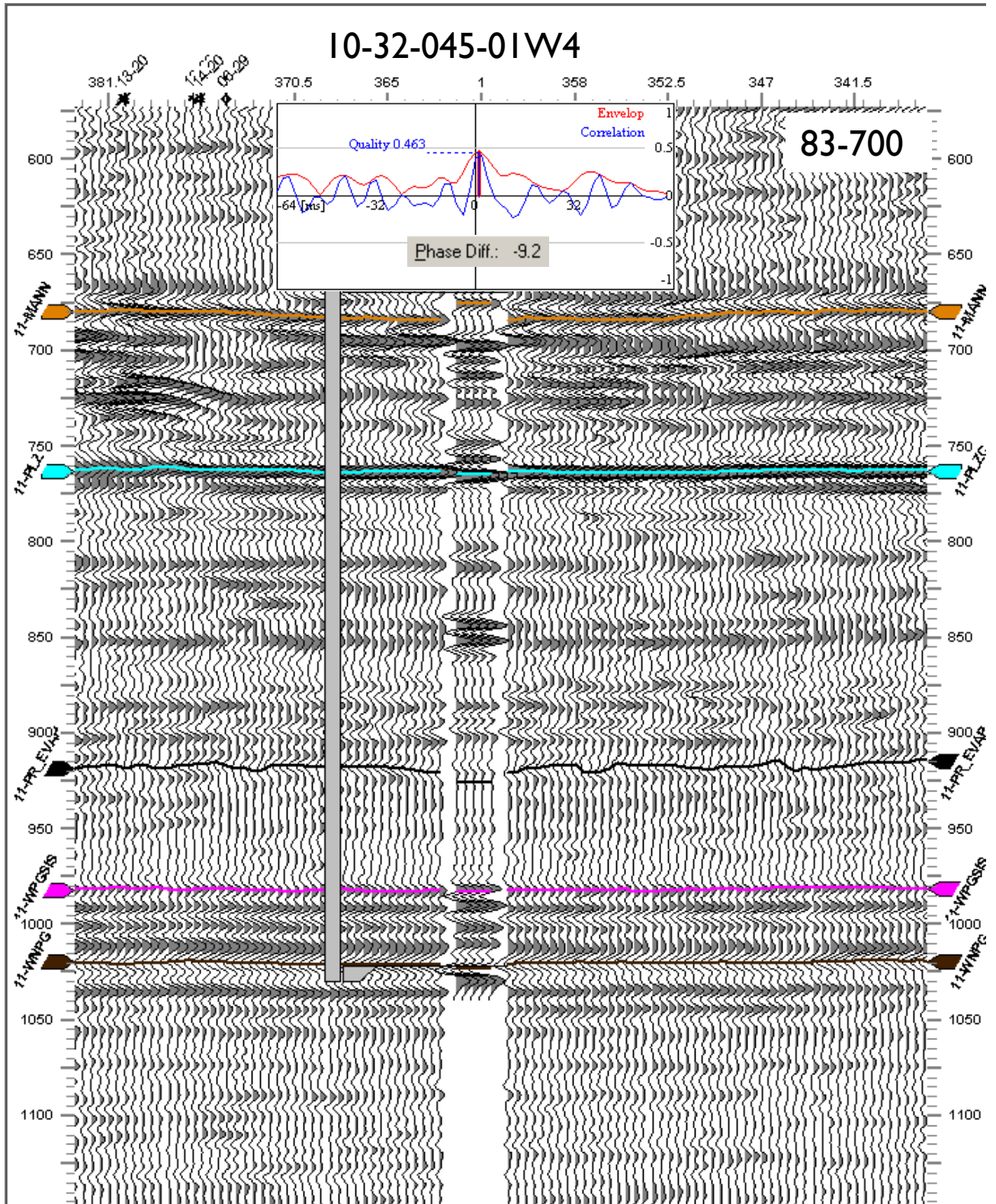
Line L-2 Before



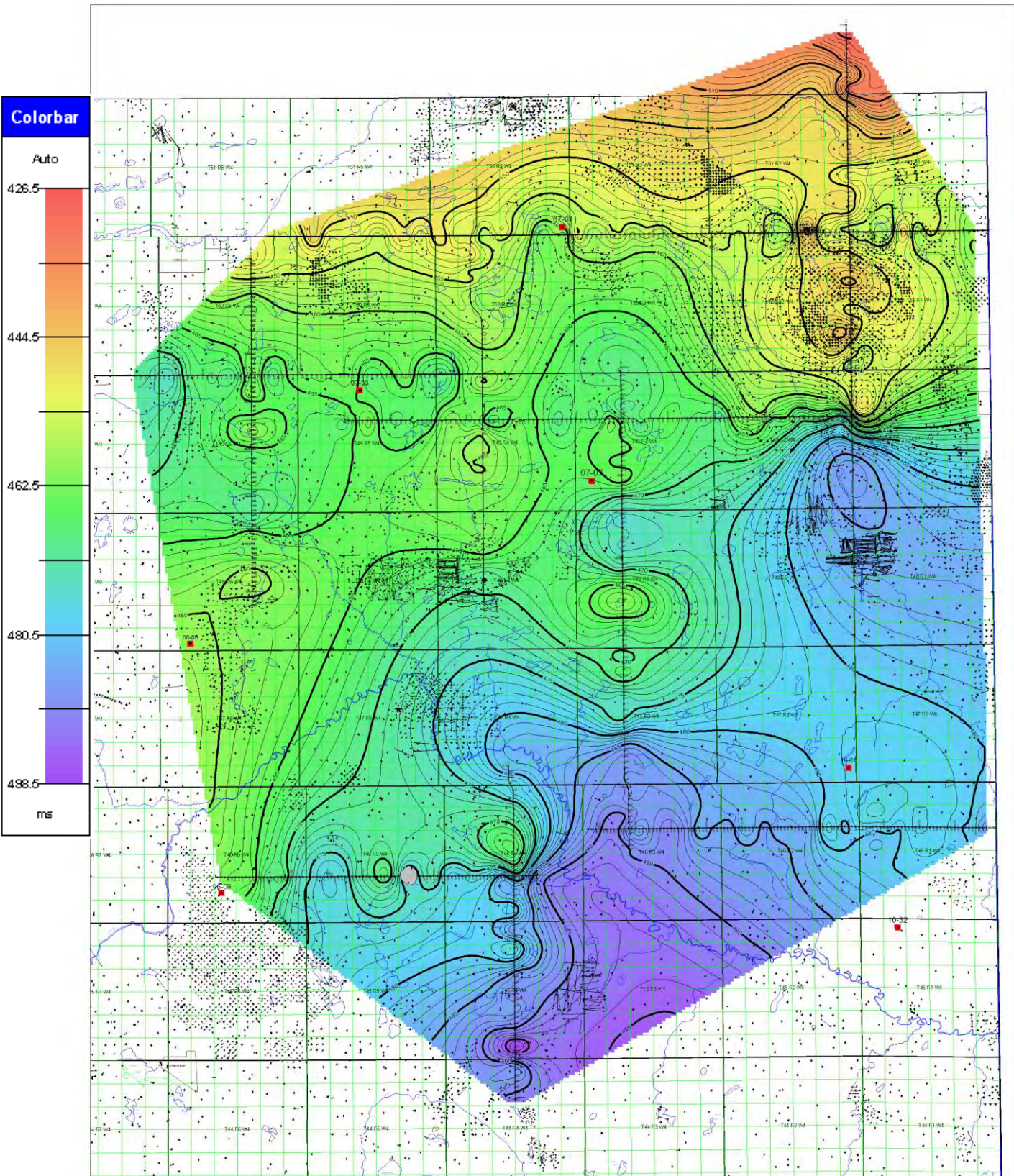
Line L-2 After



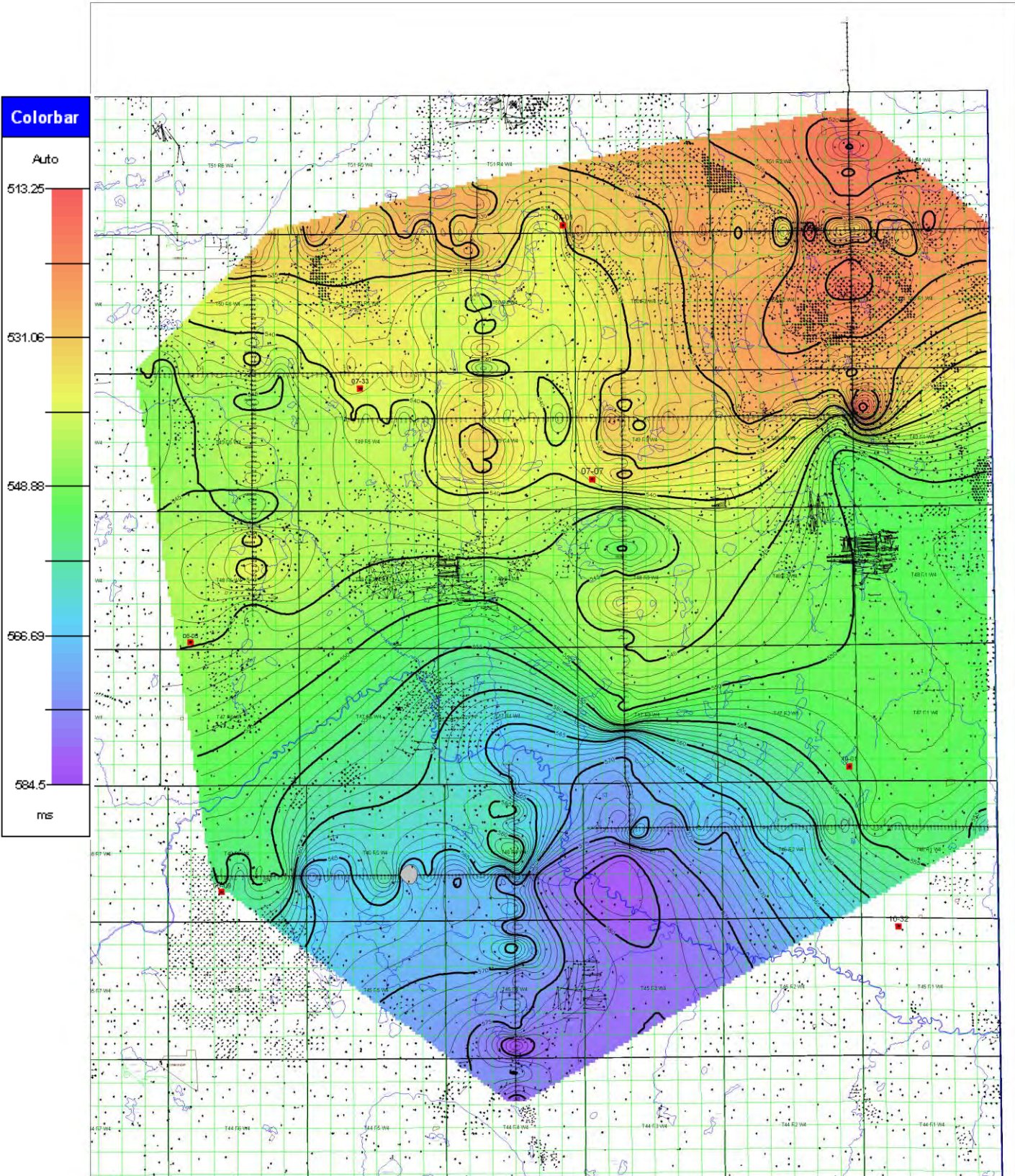
PHASE MATCH AND HORIZON IDENTIFICATION



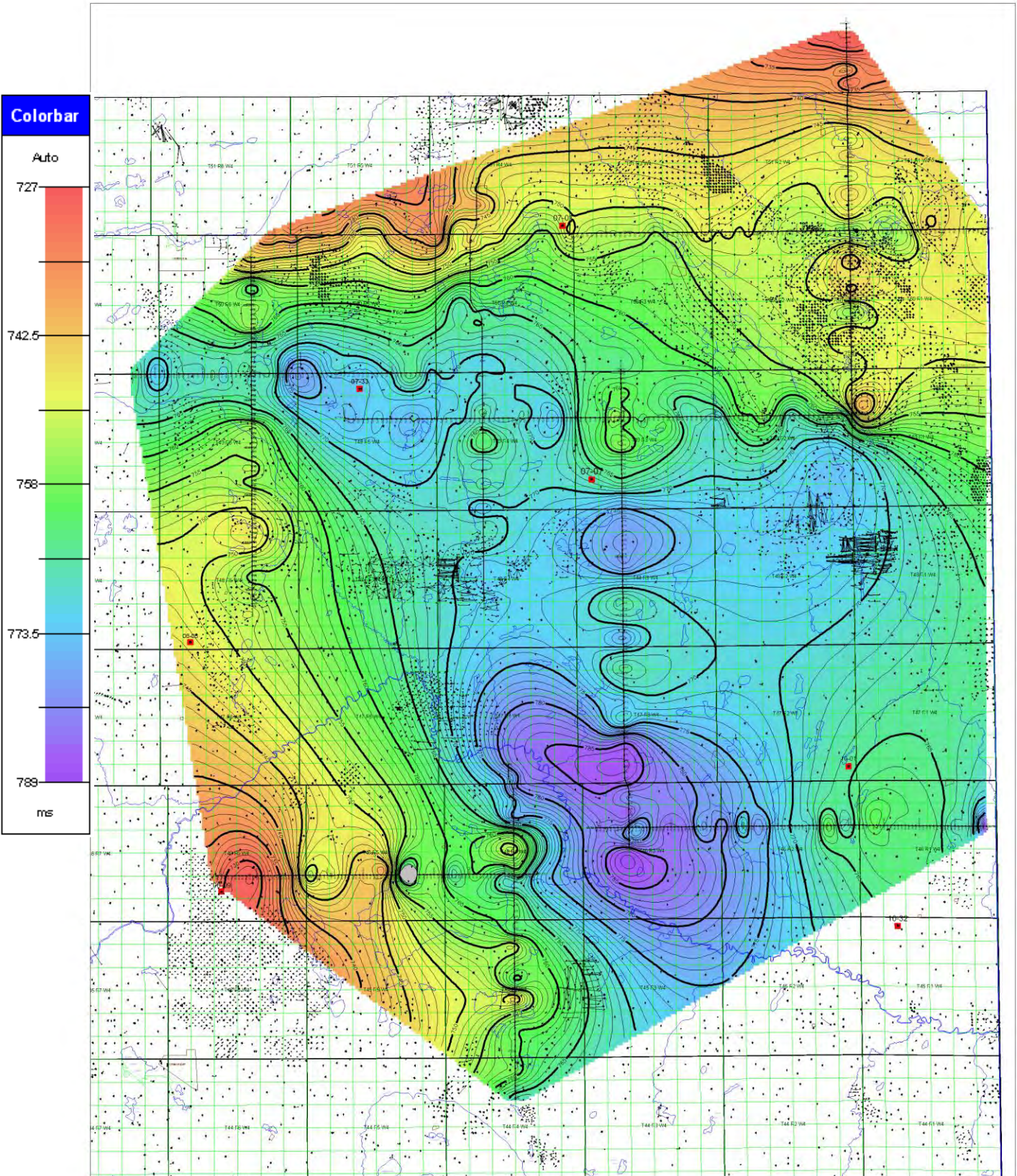
COLORADO TIME STRUCTURE (MS)



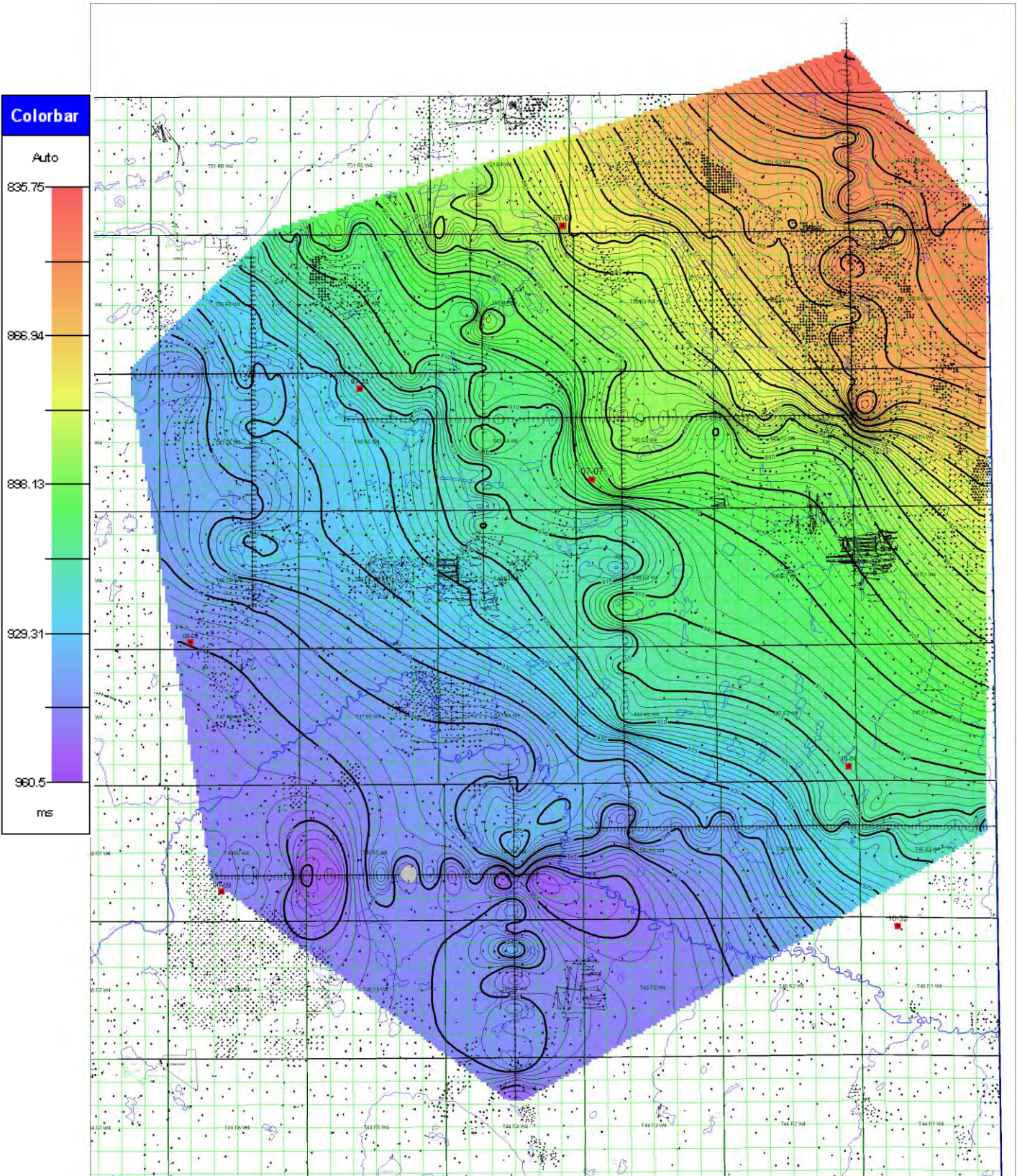
2WS TIME STRUCTURE (MS)



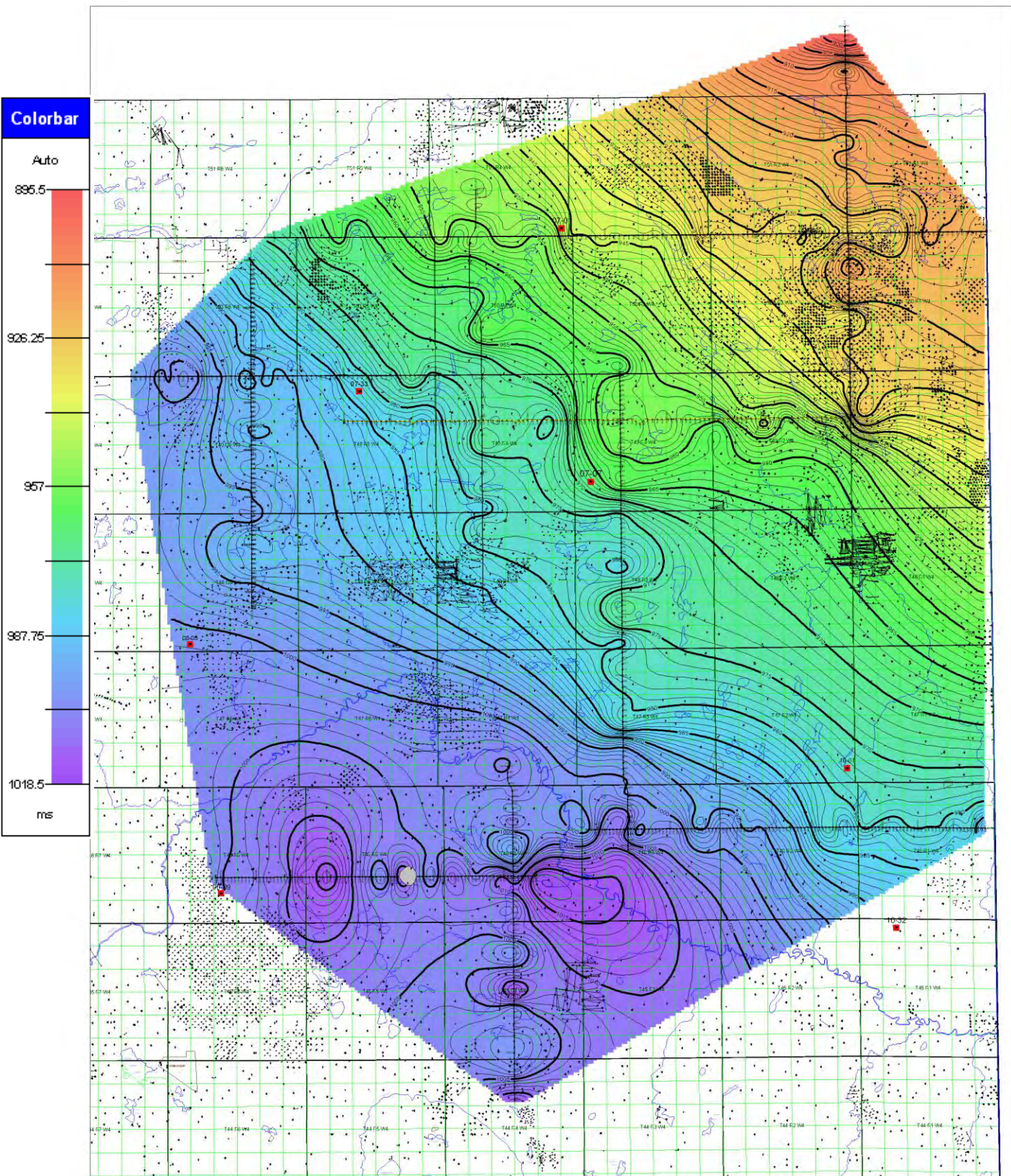
PALEOZOIC TIME STRUCTURE (MS)



PRAIRIE EVAPORITE TIME STRUCTURE (MS)

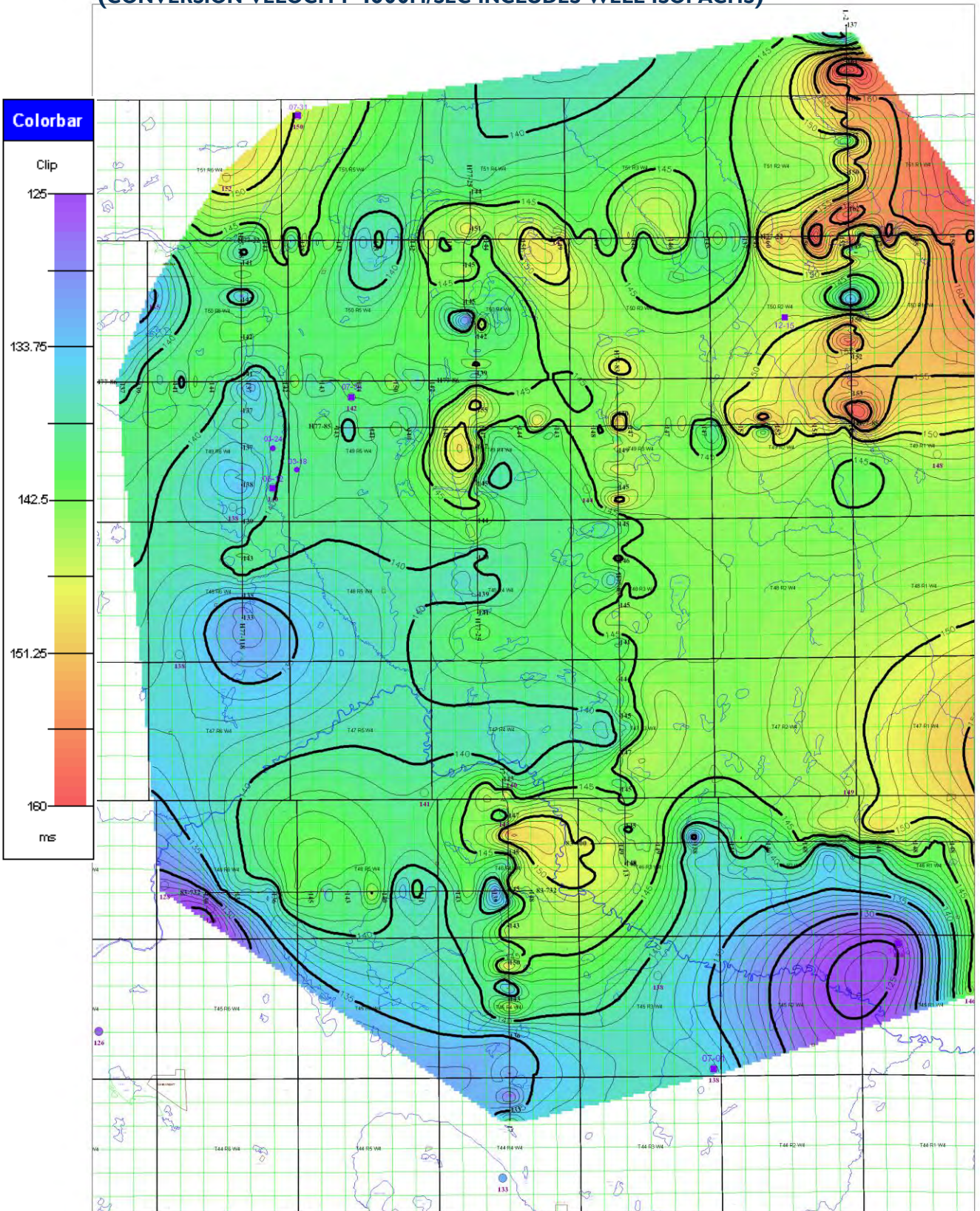


WINNIPEGOSIS TIME STRUCTURE (MS)

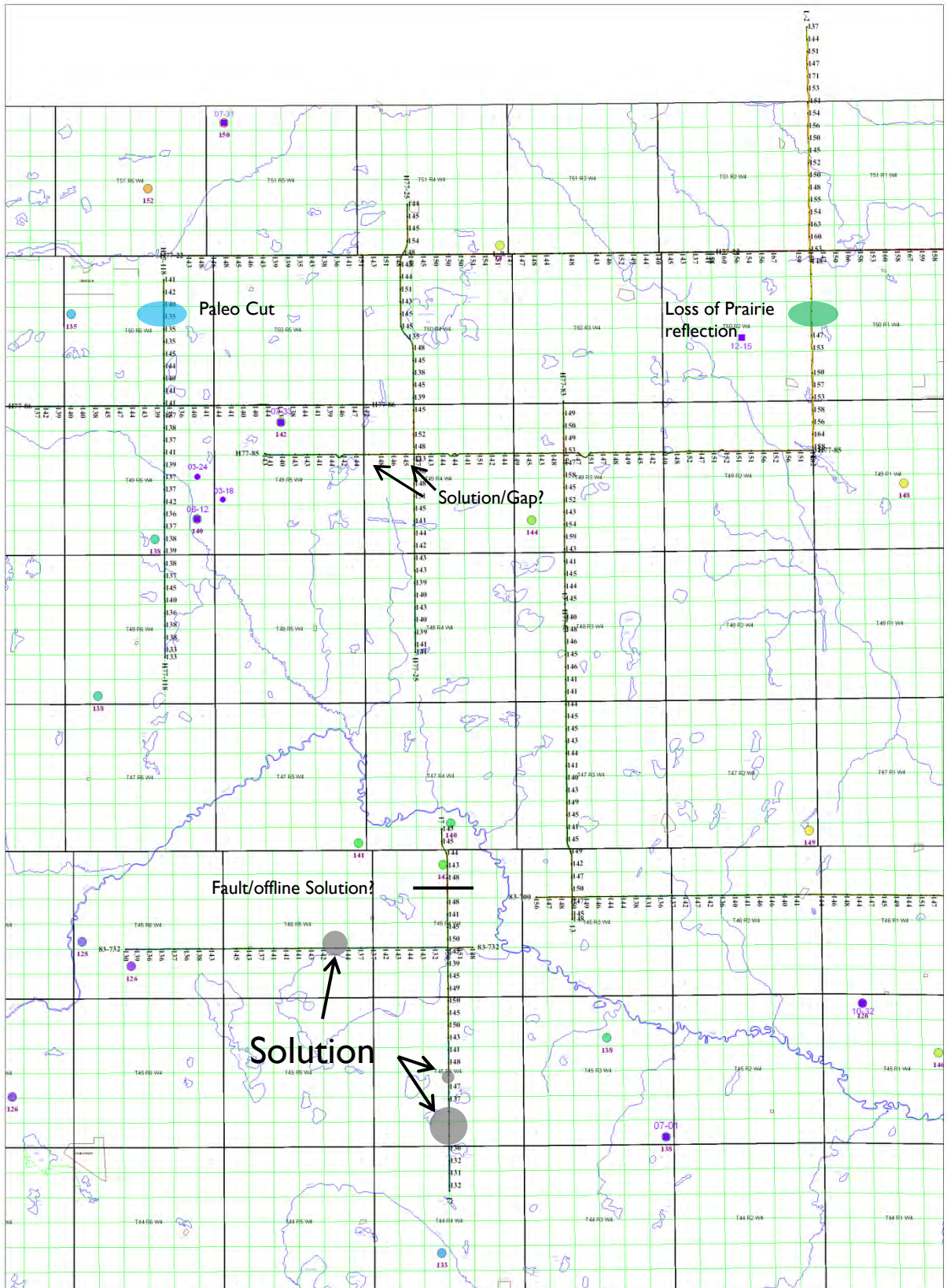


PRAIRIE EVAPORITE – WINNIPEGOSIS ISOPACH (M)

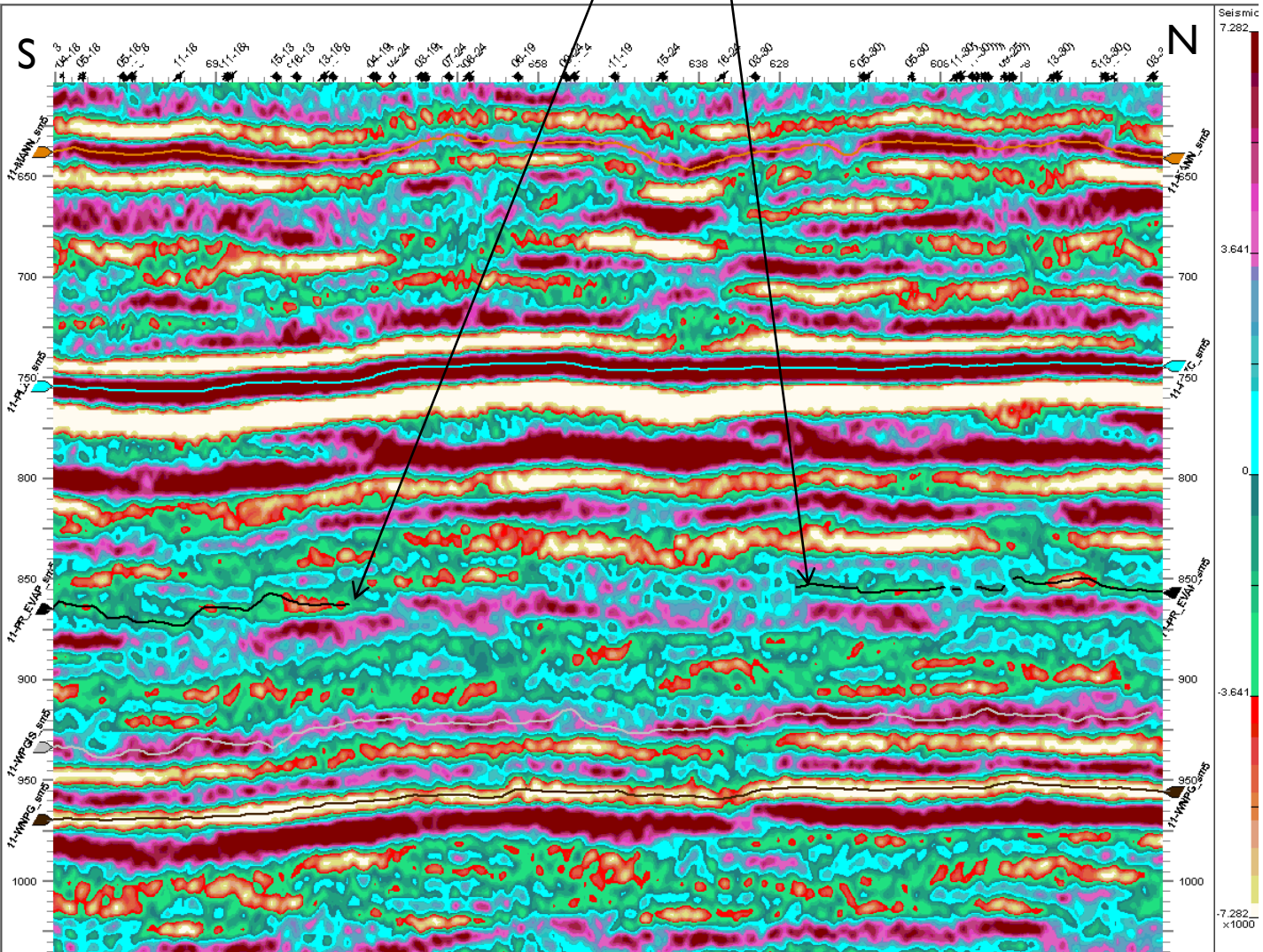
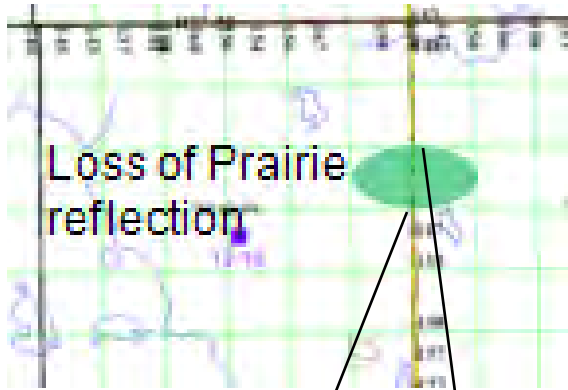
(CONVERSION VELOCITY 4600M/SEC INCLUDES WELL ISOPACHS)



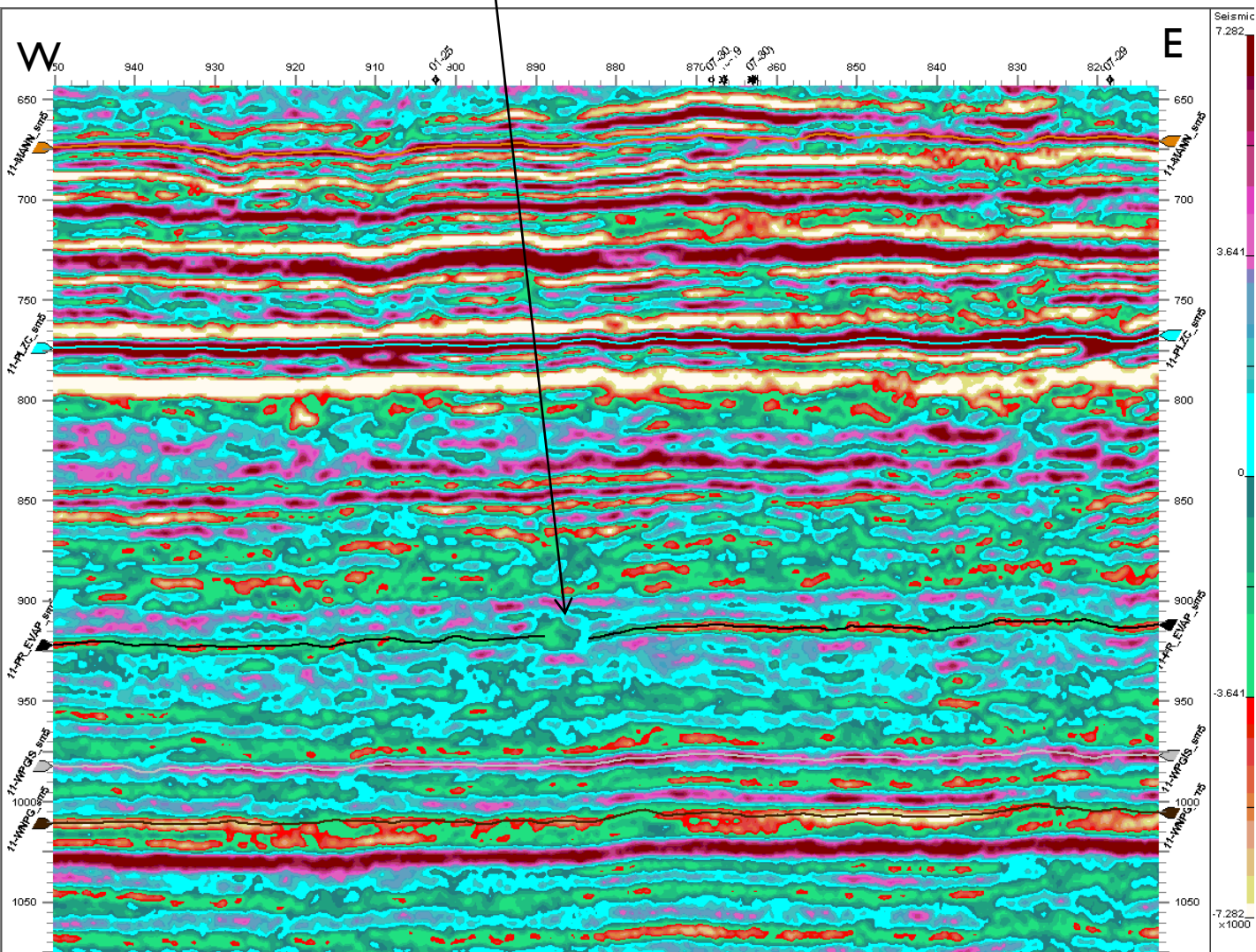
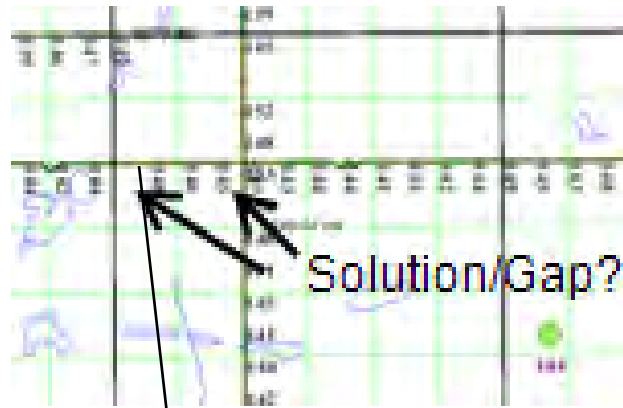
ANOMALY MAP



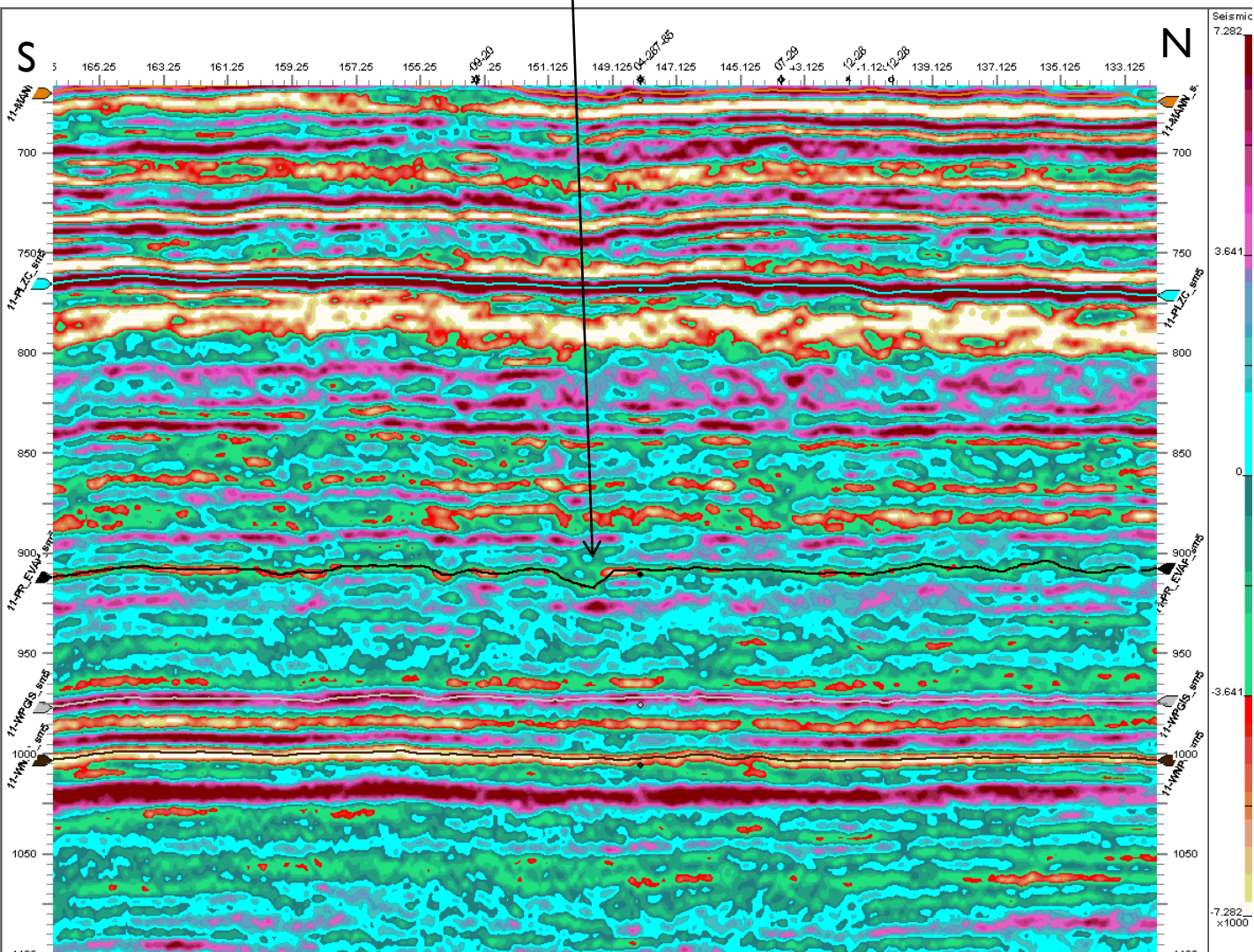
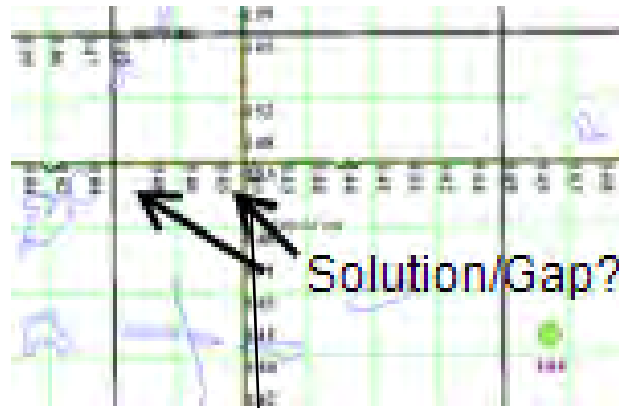
LOSS OF PRAIRIE EVAPORITE REFLECTION – LINE L-2



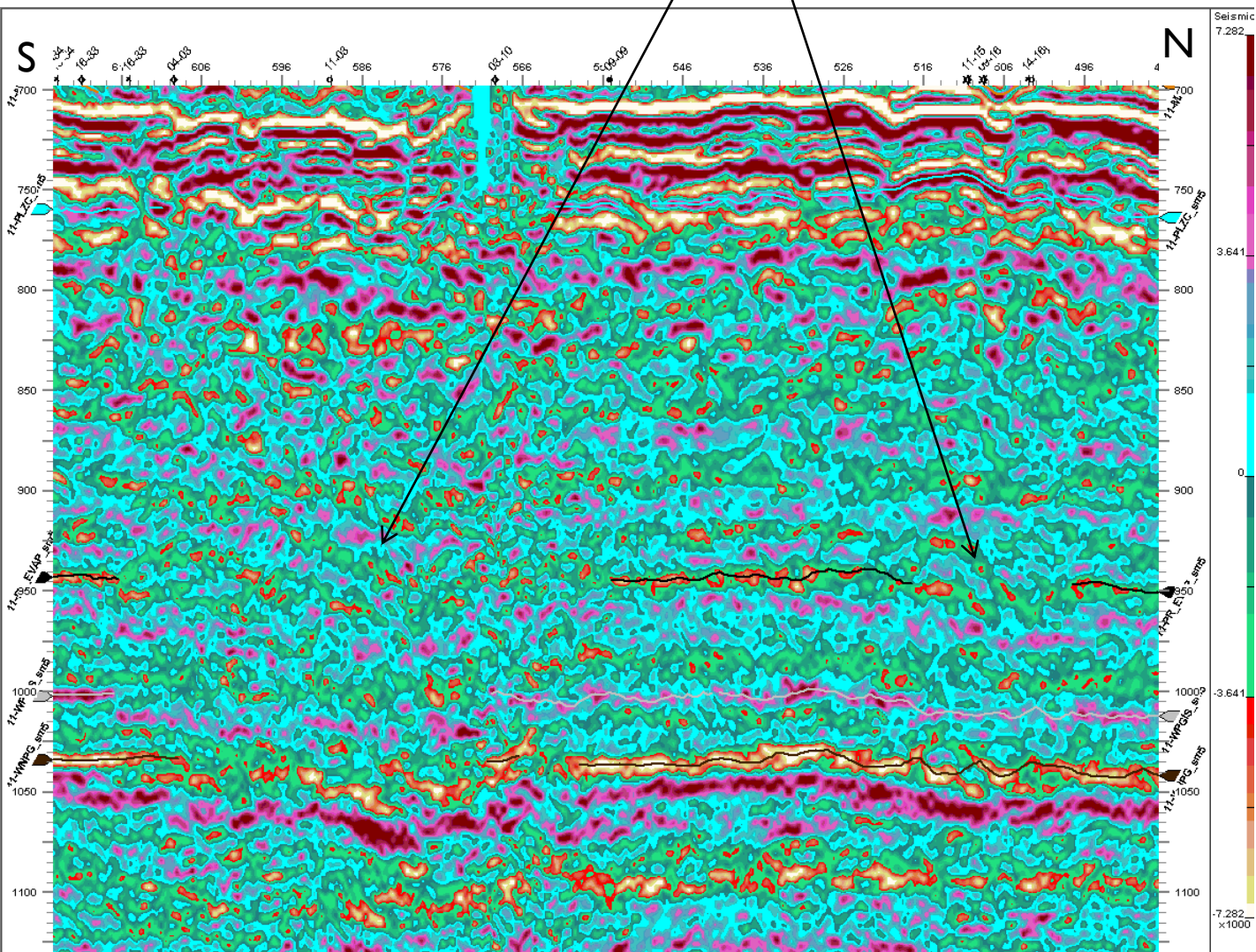
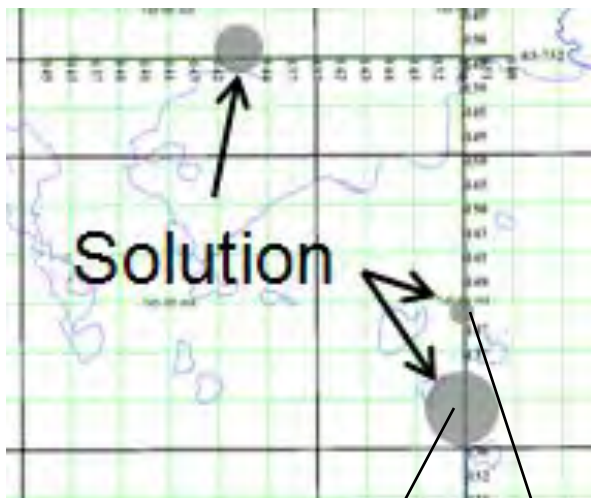
POSSIBLE SALT SOLUTION – LINE H77-85



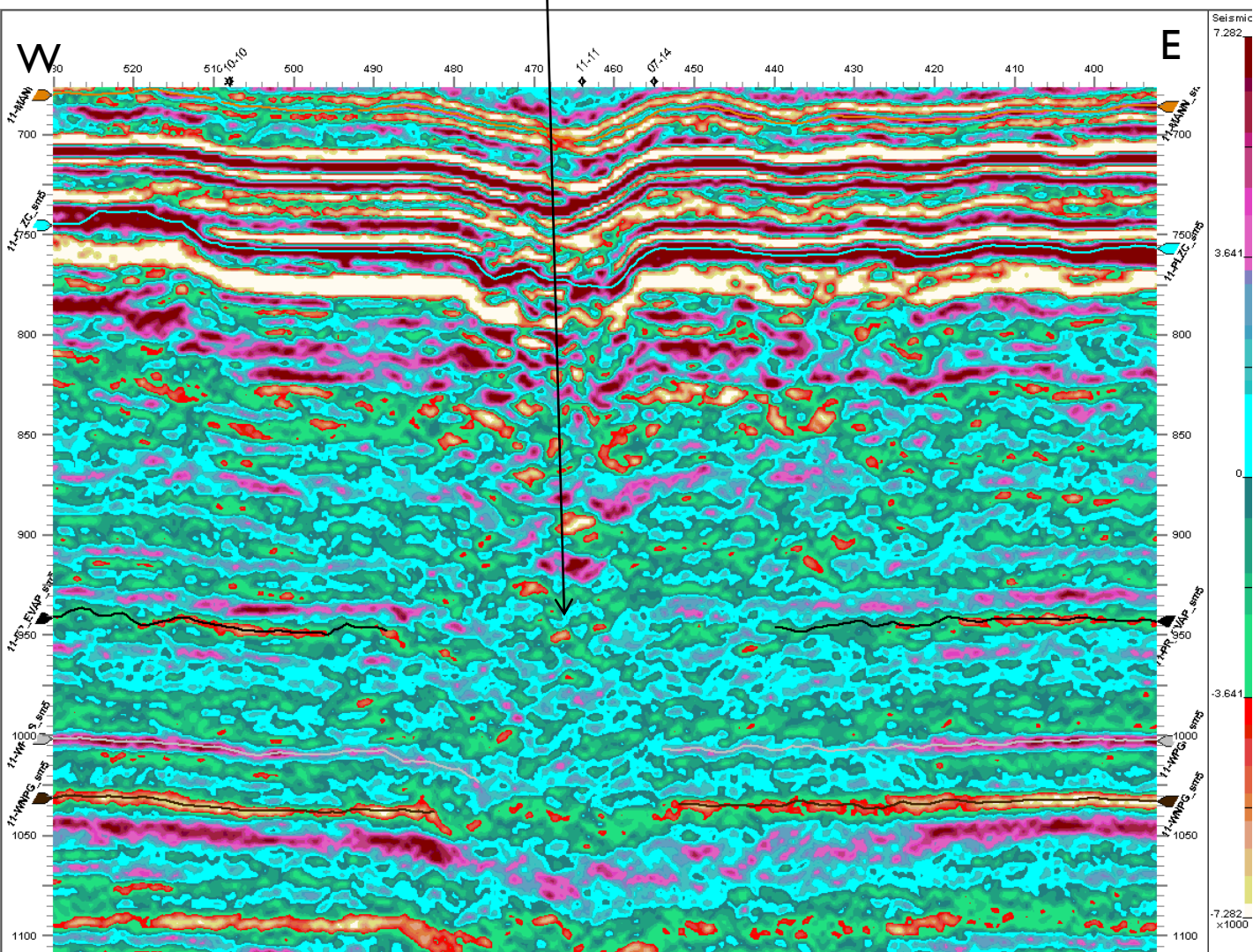
POSSIBLE SALT SOLUTION – LINE H77-25



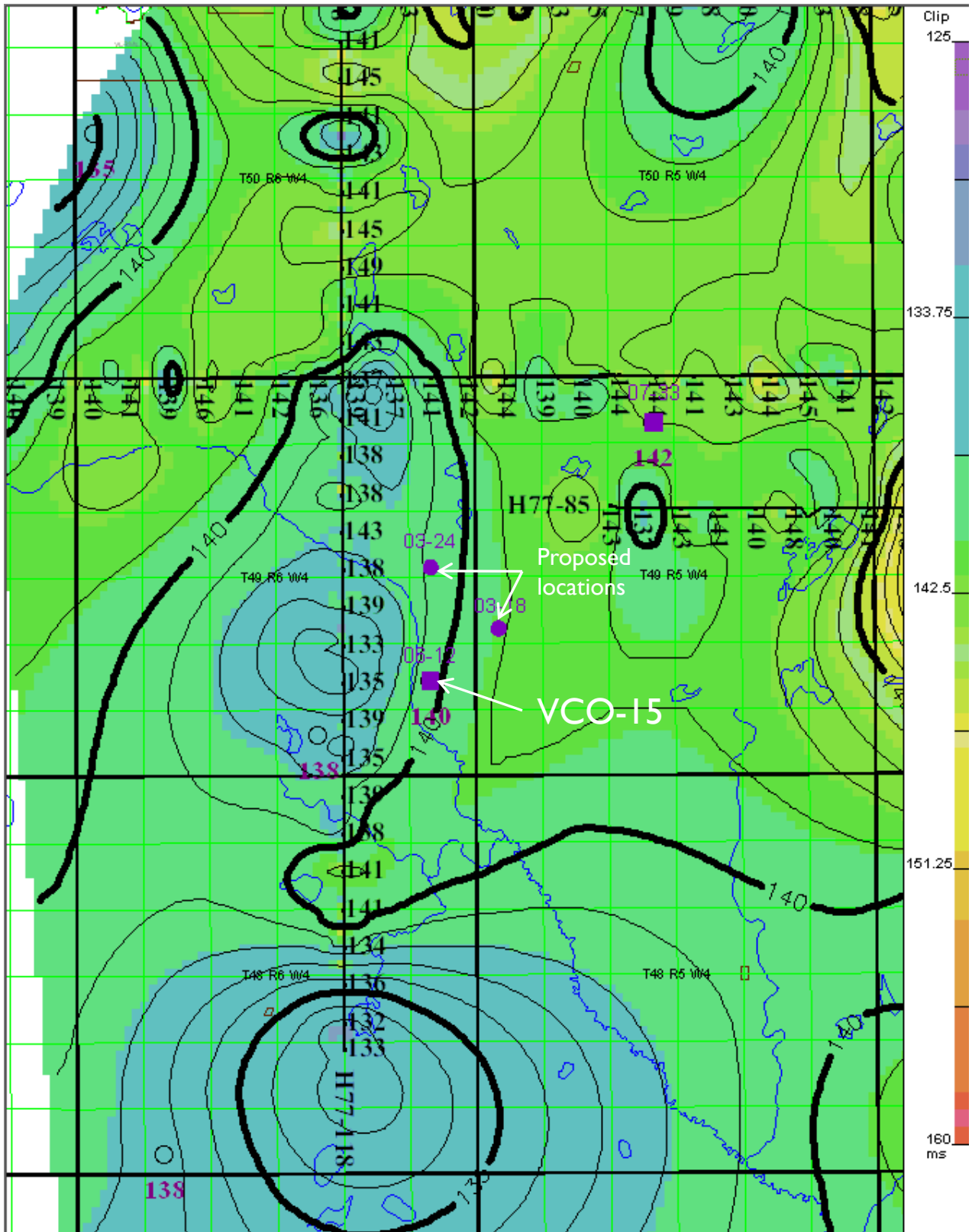
SALT SOLUTION - LINE 17



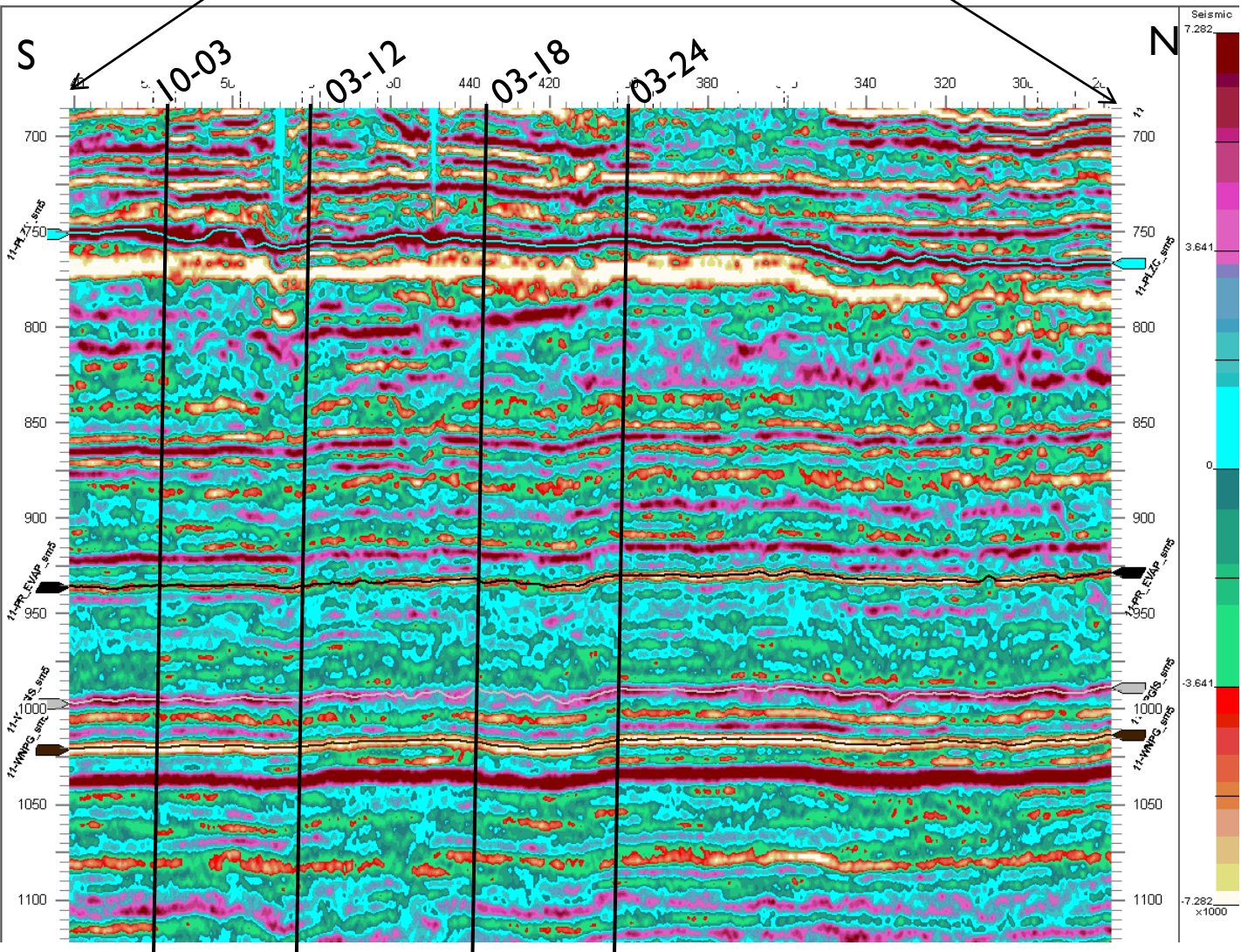
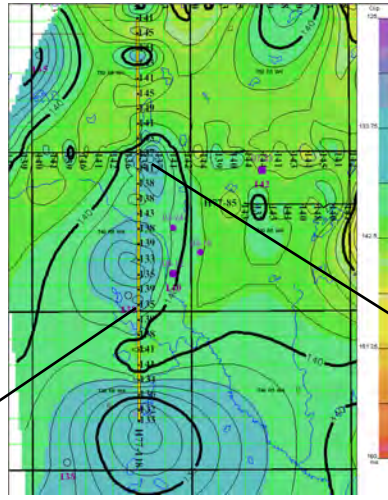
SALT SOLUTION - LINE 83-732



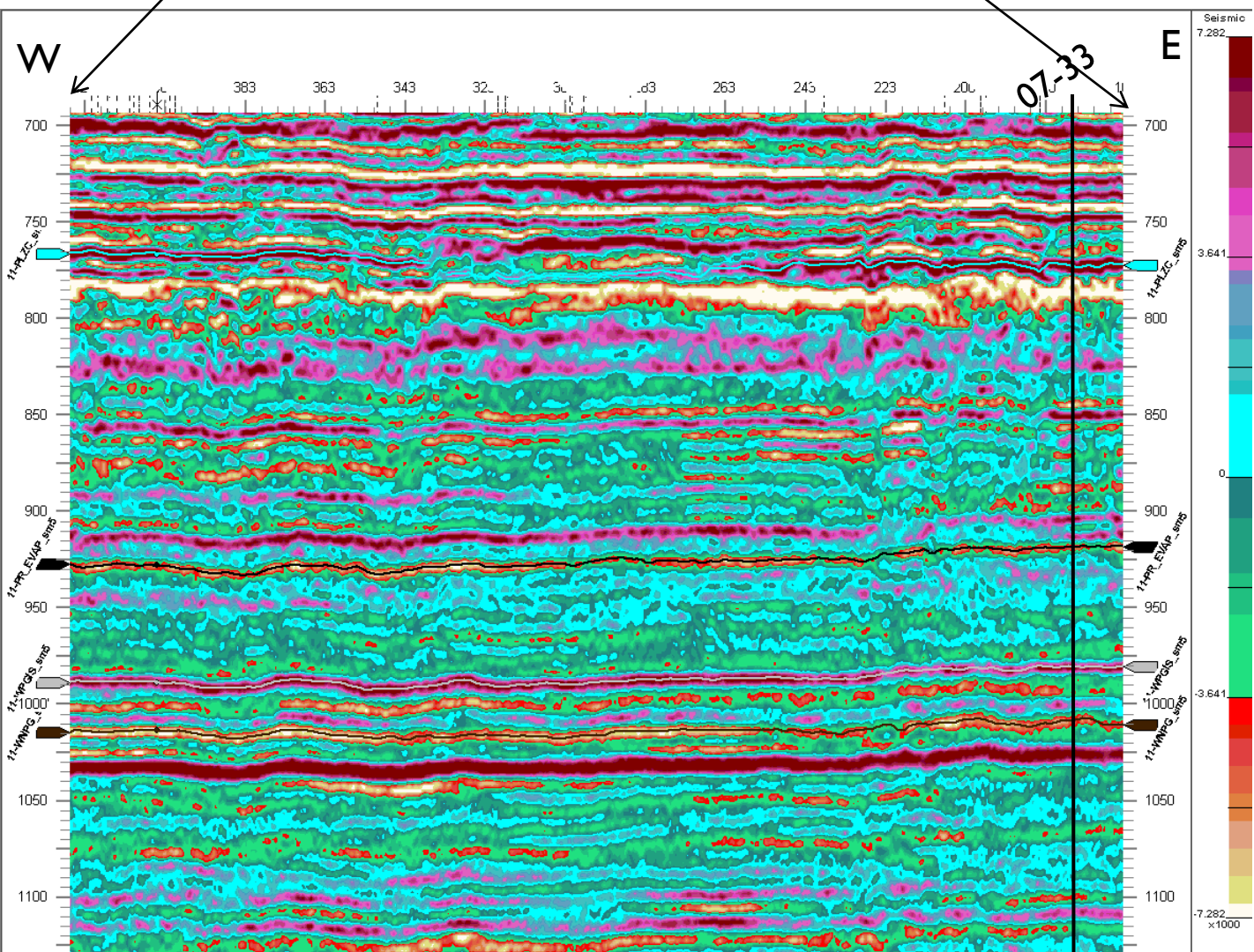
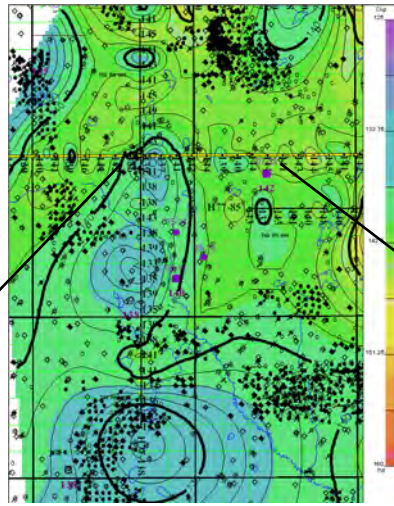
PROPOSED DRILL LOCATIONS



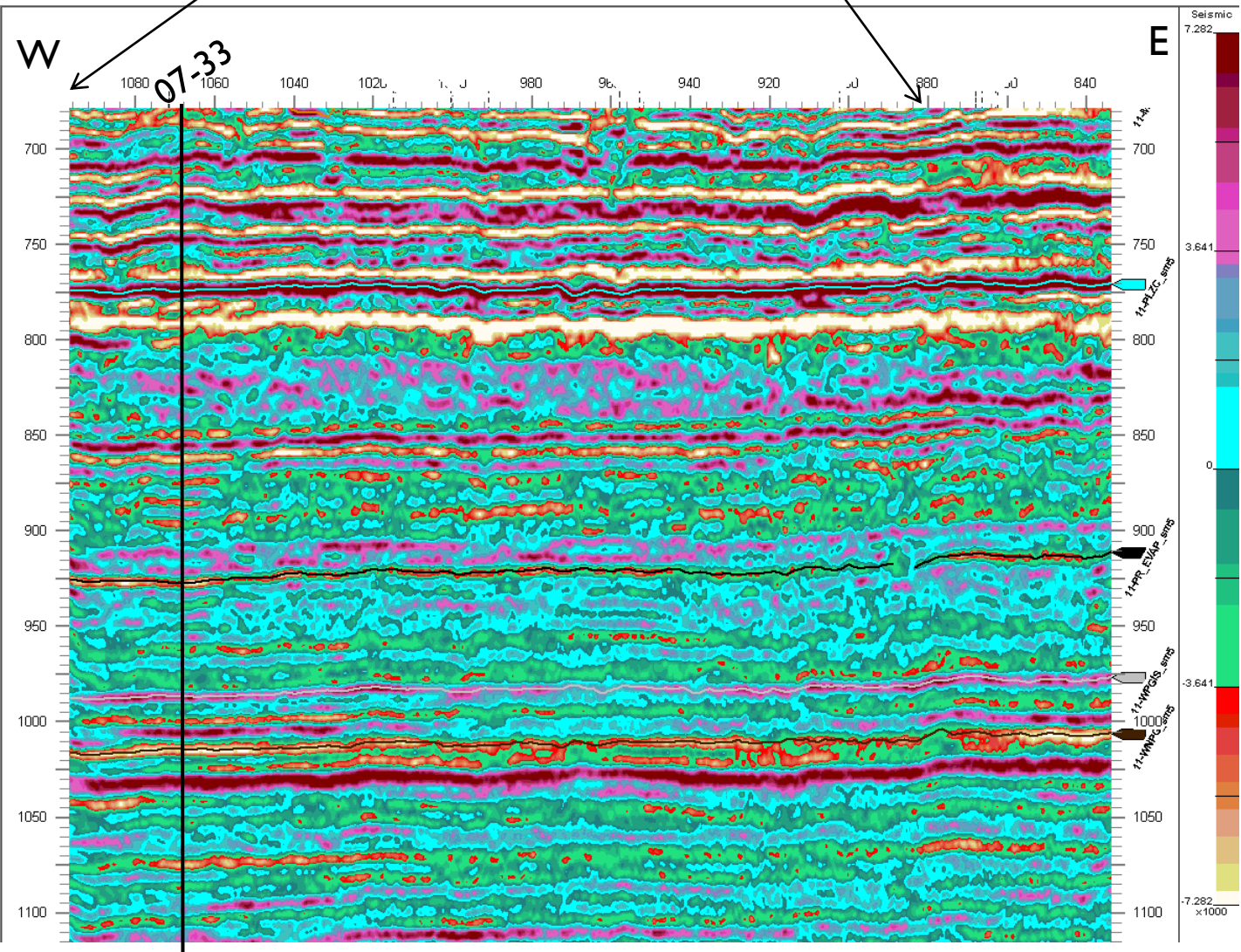
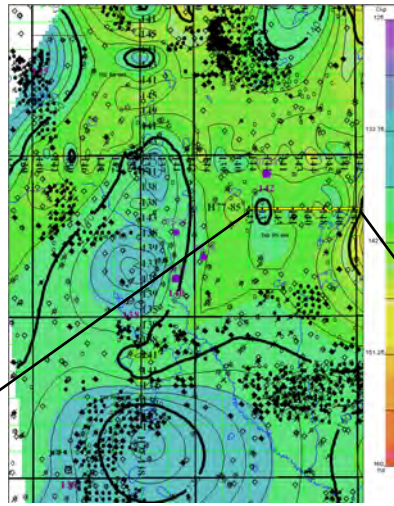
LOCATIONS PROJECTED TO LINE H77-118



LINE H77-86



LINE H77-85



OVERVIEW AND FUTURE WORK

- The available 2D trade data has been reprocessed. As illustrated, the reprocessing of the 2D increased the overall quality of the data and increased resolution and confidence.
- Using existing well control, the seismic data has been correlated to the local geology.
- Using synthetic wavelets from available geophysical logs, the 2D data has been phase rotated to approximate a zero phase wavelet.
- To date the initial time interpretation is completed.

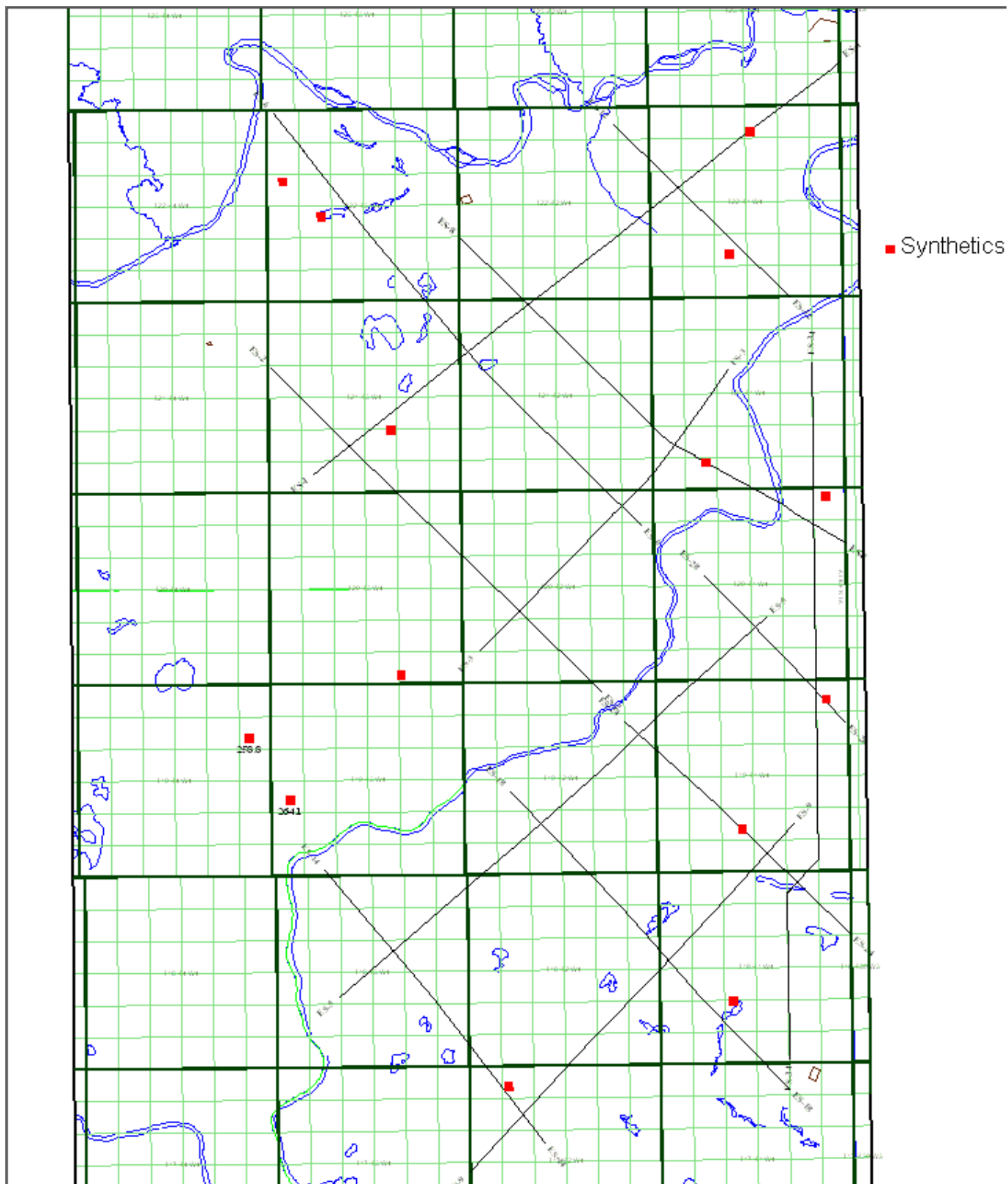
- Two proposed well locations in the vicinity of VC-015 are proposed.
- The proposed well locations are not located adjacent to a seismic line, as such a definitive analysis is not available.
- Projection of the well locations to adjacent seismic lines suggests that the Prairie Evaporite is uniformly thick. No amplitude variations at the Second Red Bed/top of Prairie Evaporite exists.
- New drilling results will allow for detailed correlation of the local geology to the seismic response.

- The 2D data will now be loaded with the available well information into GOCAD;
- As required, using available well and geological data create a velocity model for depth converting seismic horizons to depth;
- Prepare a detailed PPT and present the final results to Grizzly Discoveries.

2011 SUFFIELD 2D INITIAL INTERPRETATION

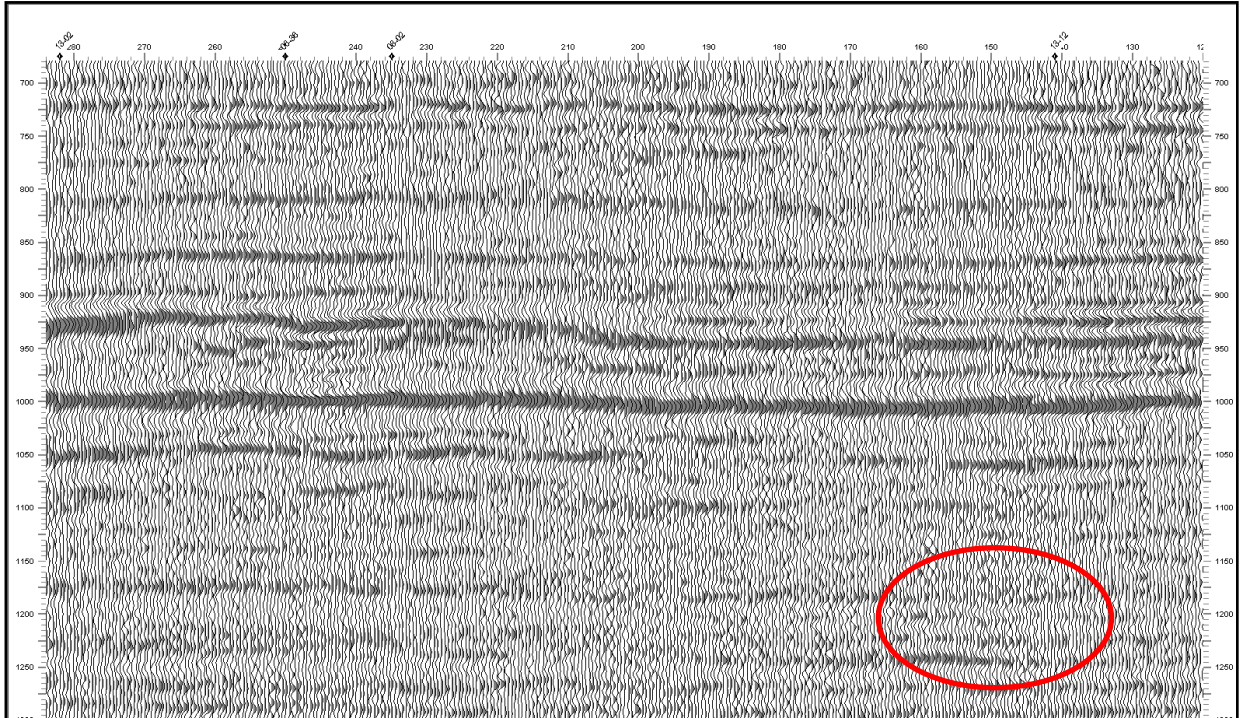


LOCATION MAP

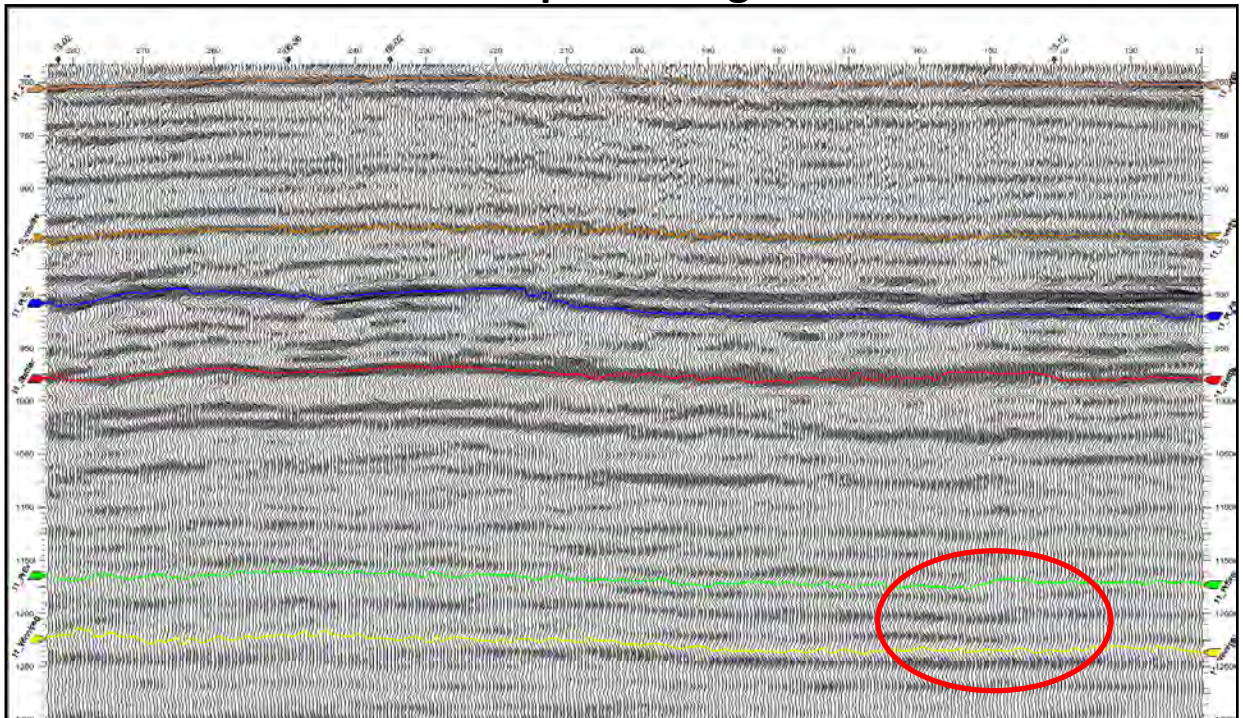


ES-I REPROCESSING IMPROVEMENT IN A POOR DATA AREA

Original Processing

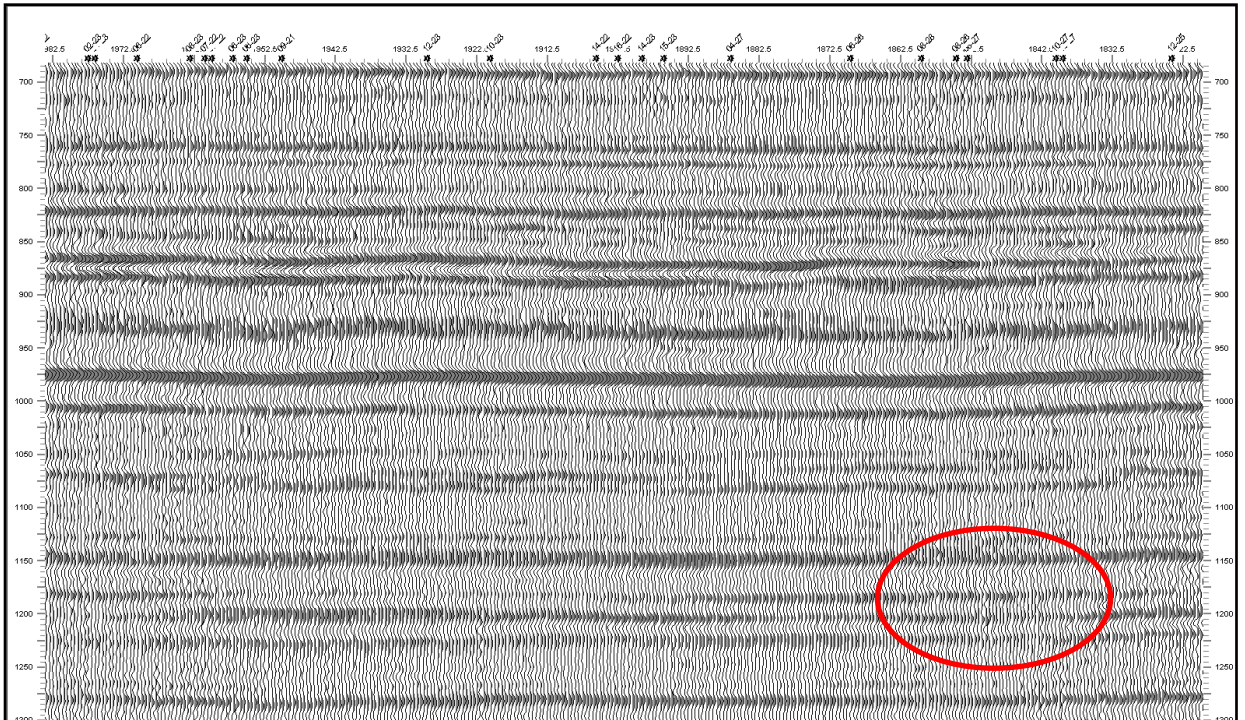


Reprocessing

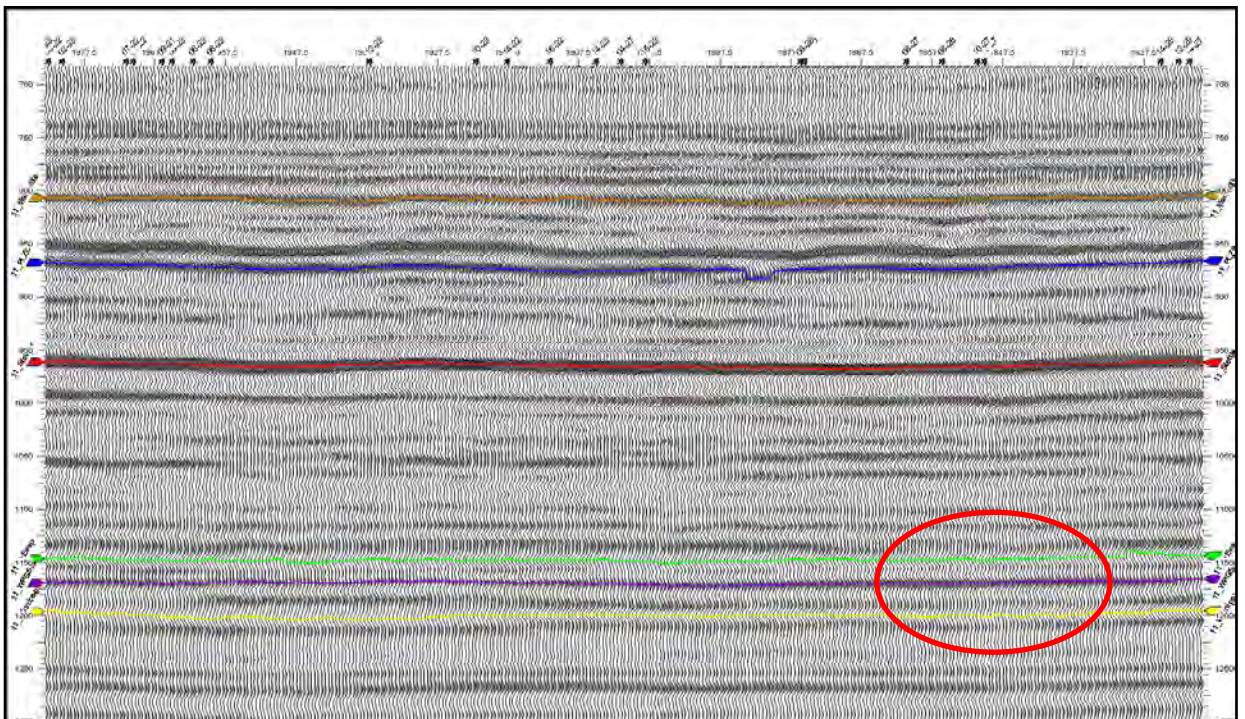


ES-34 REPROCESSING IMPROVEMENT IN A GOOD DATA AREA

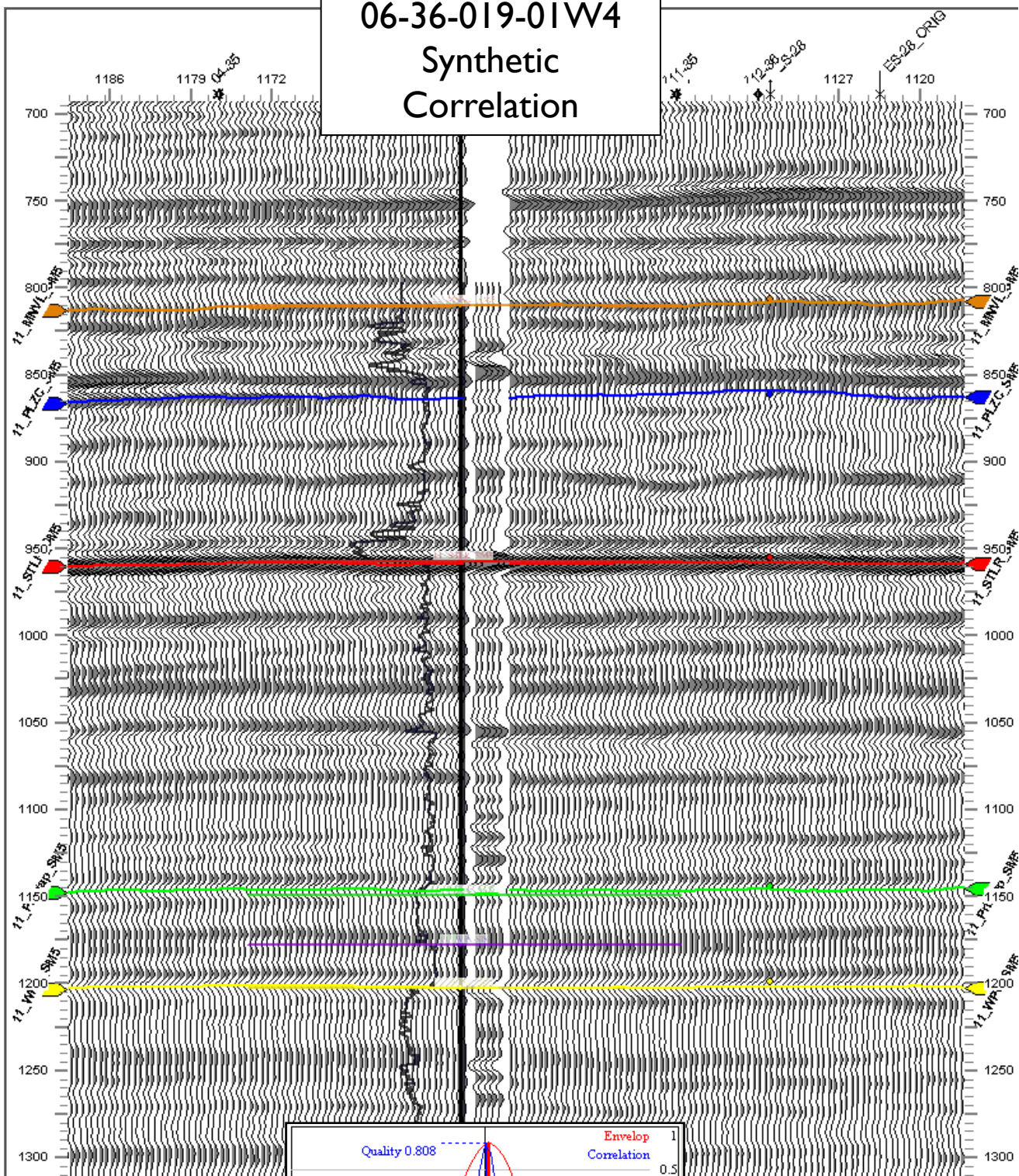
Original Processing



Reprocessing

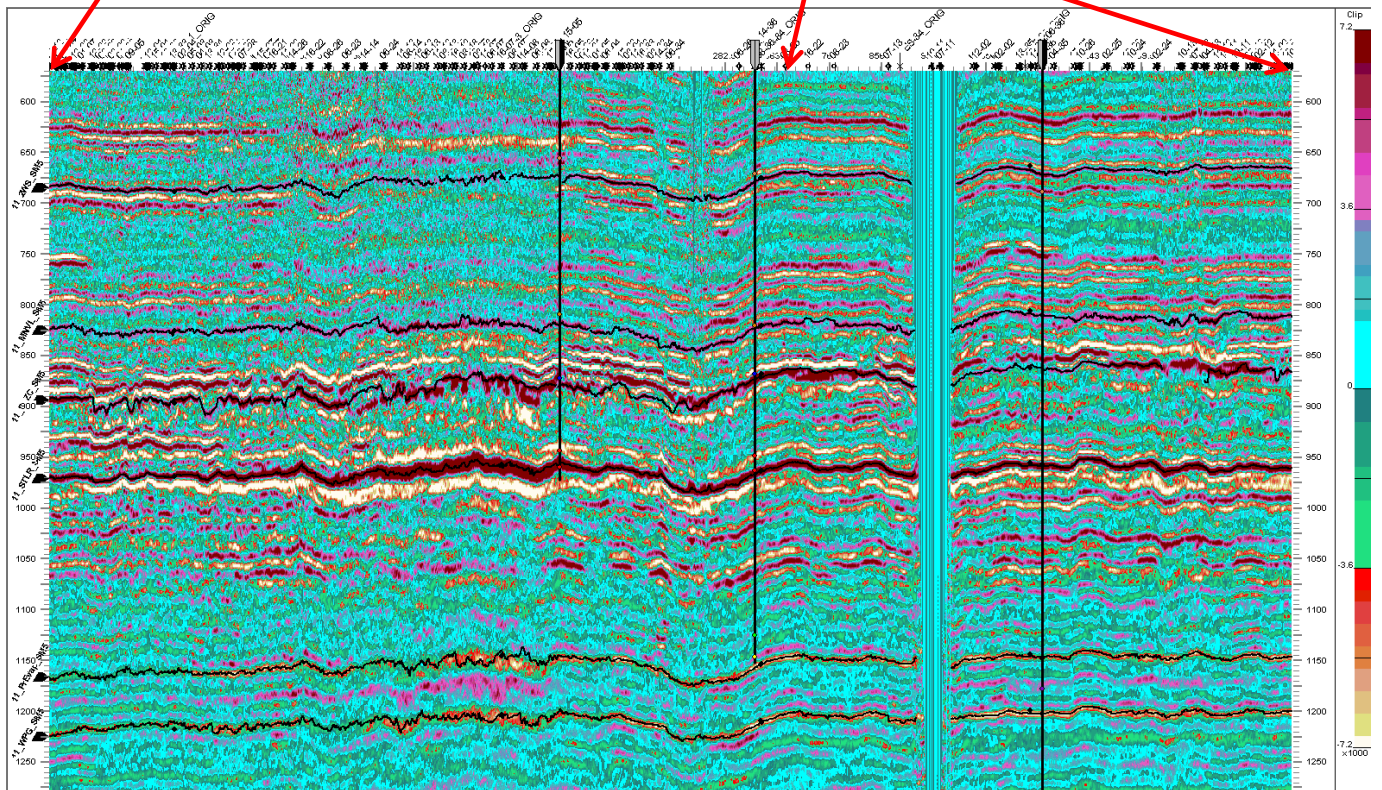
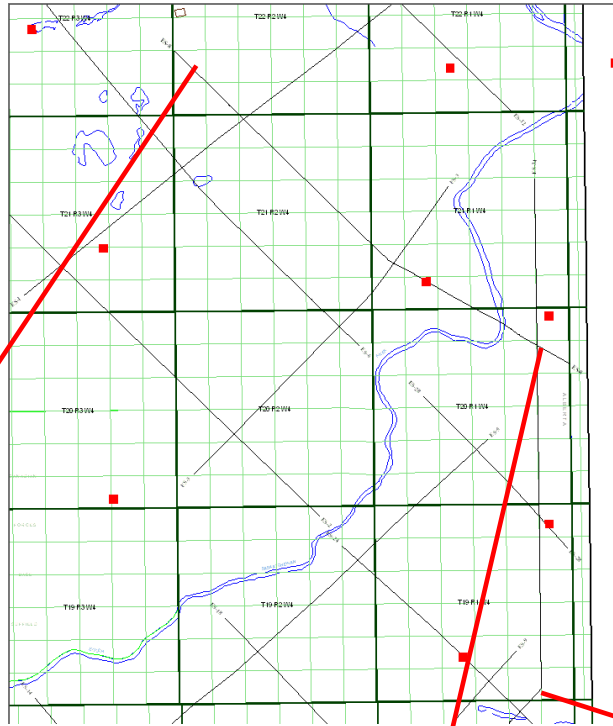


06-36-019-01V4 Synthetic Correlation

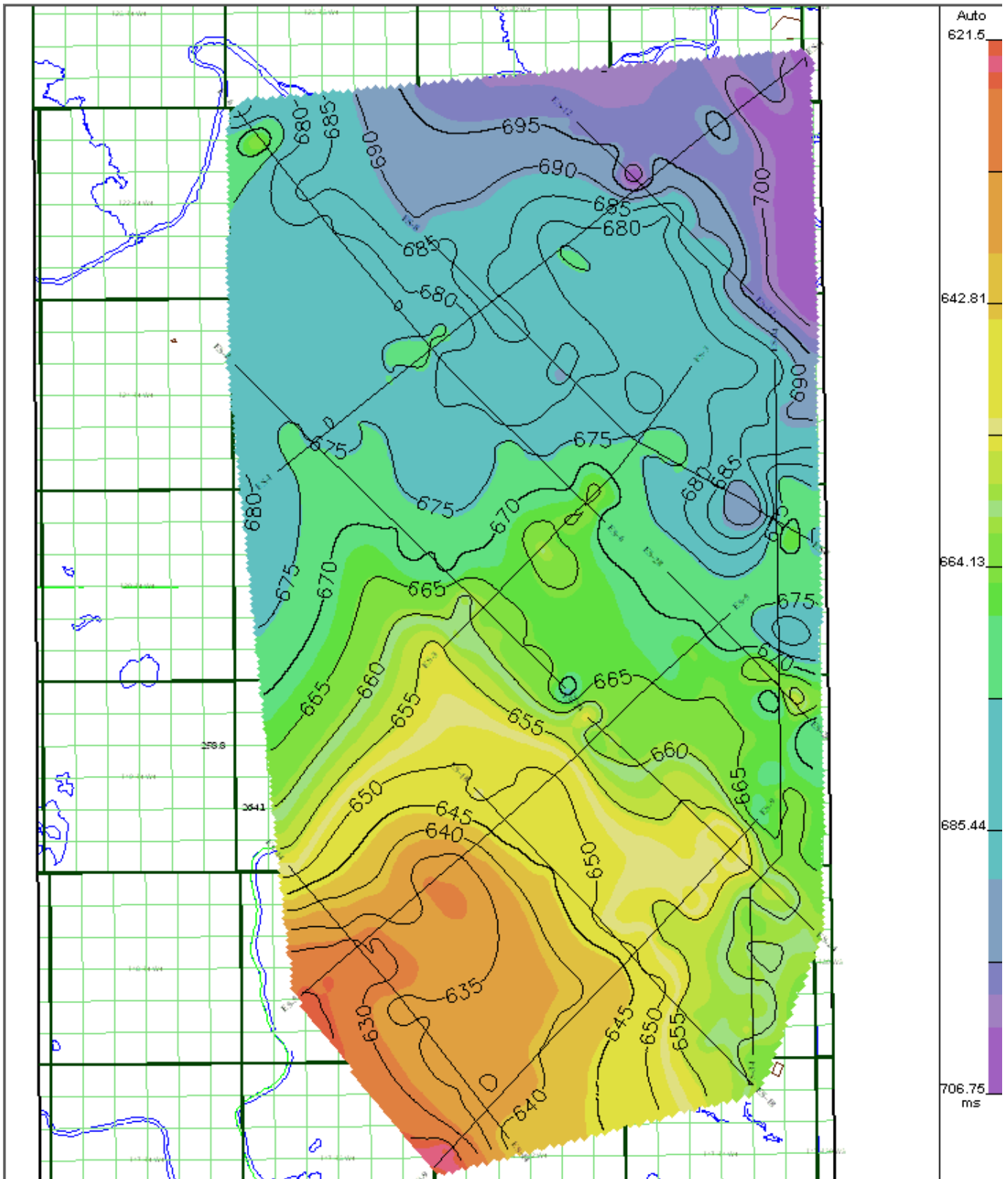


SEISMIC DATA & HORIZONS

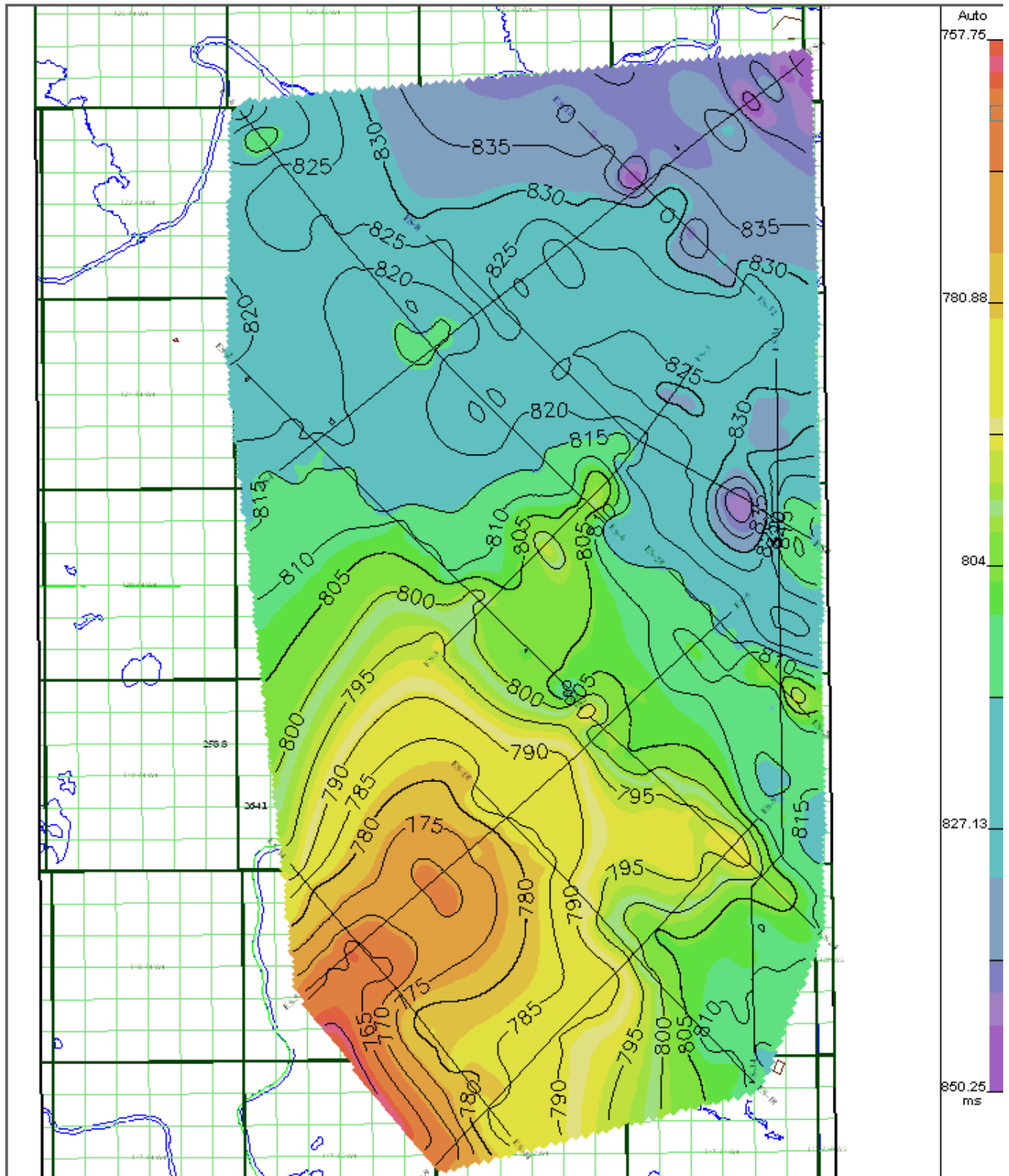
Fenceline showing poor data in the north to good data in the south.



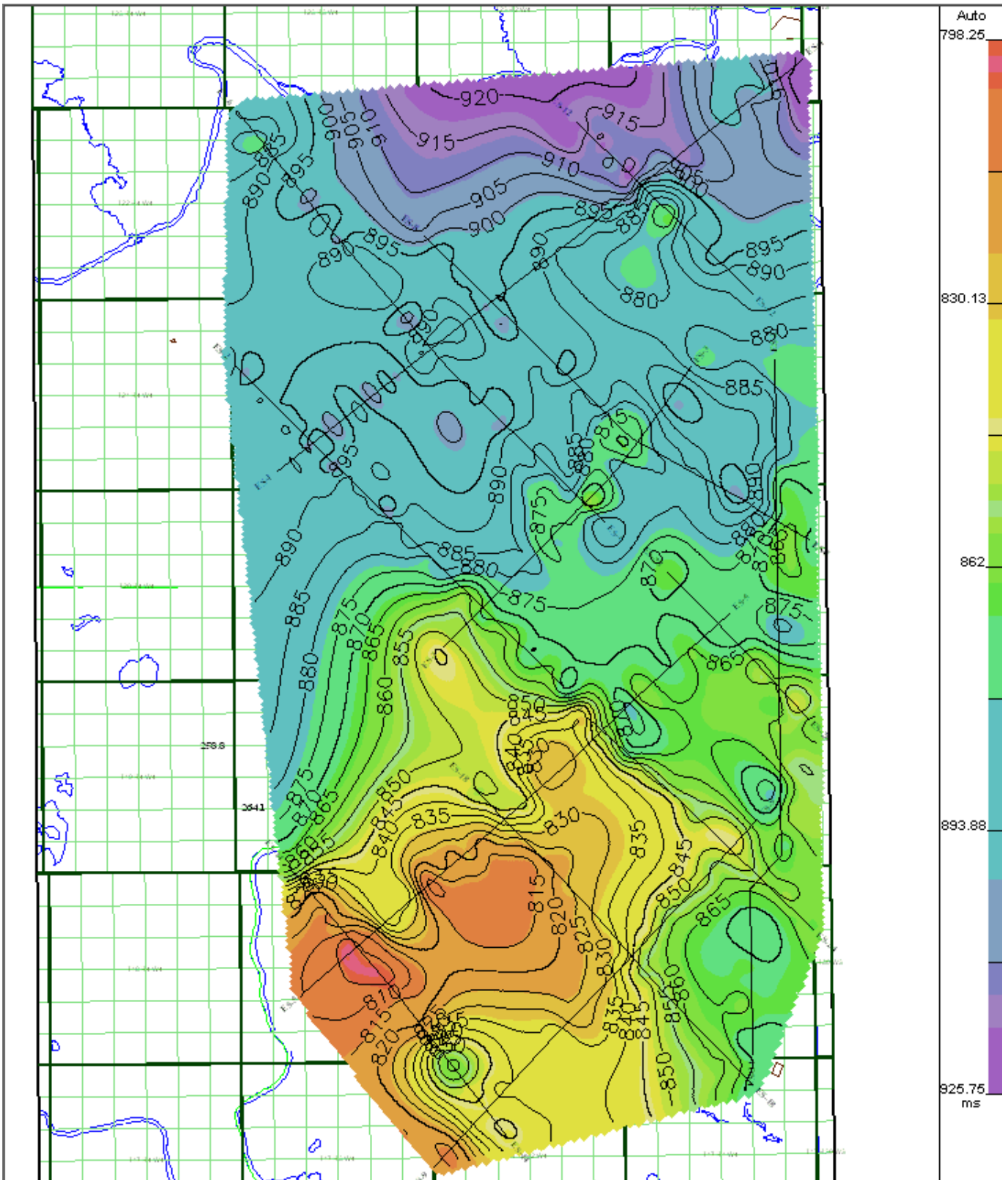
2WS TIME STRUCTURE



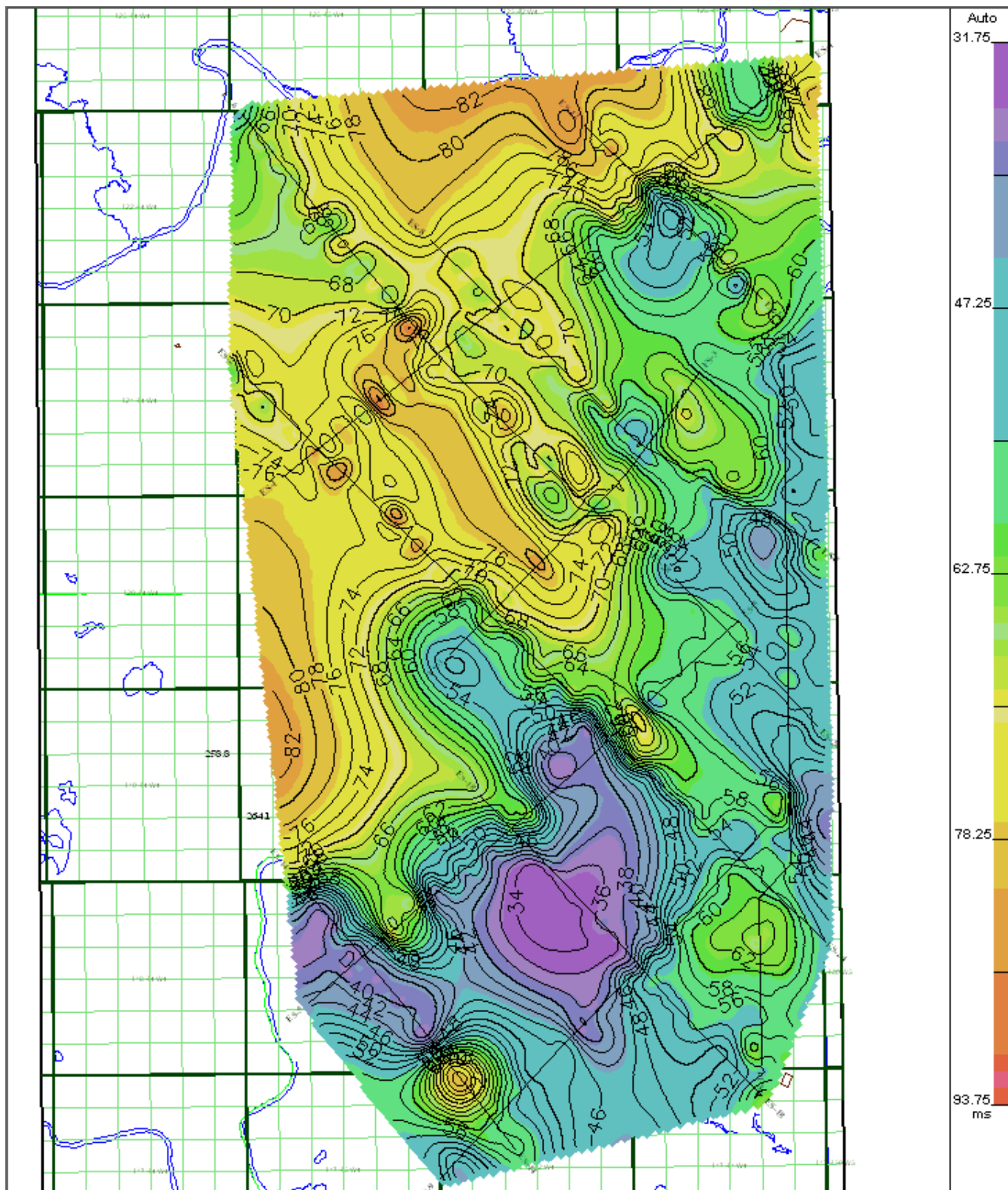
MANNVILLE TIME STRUCTURE



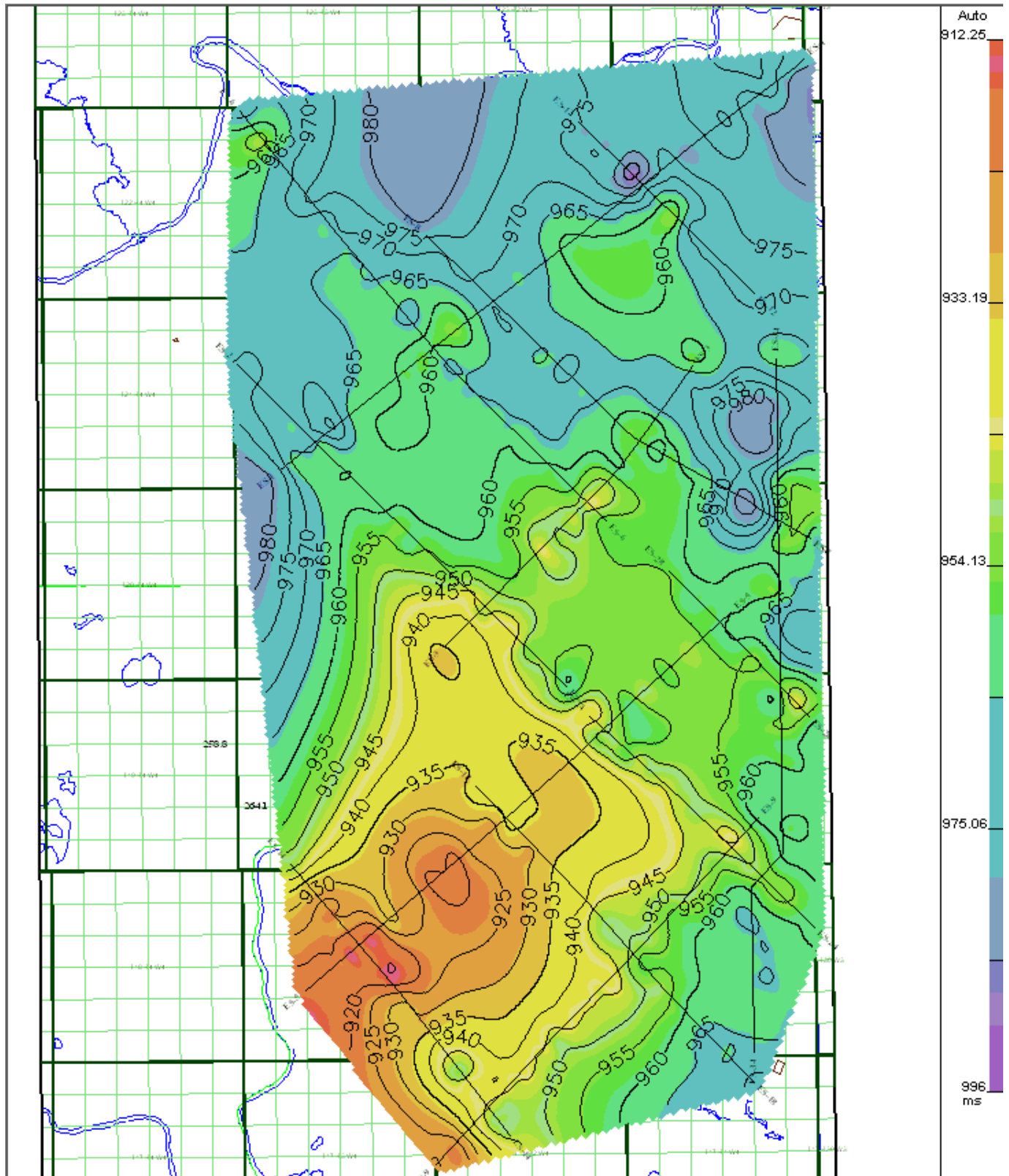
PALEOZOIC TIME STRUCTURE



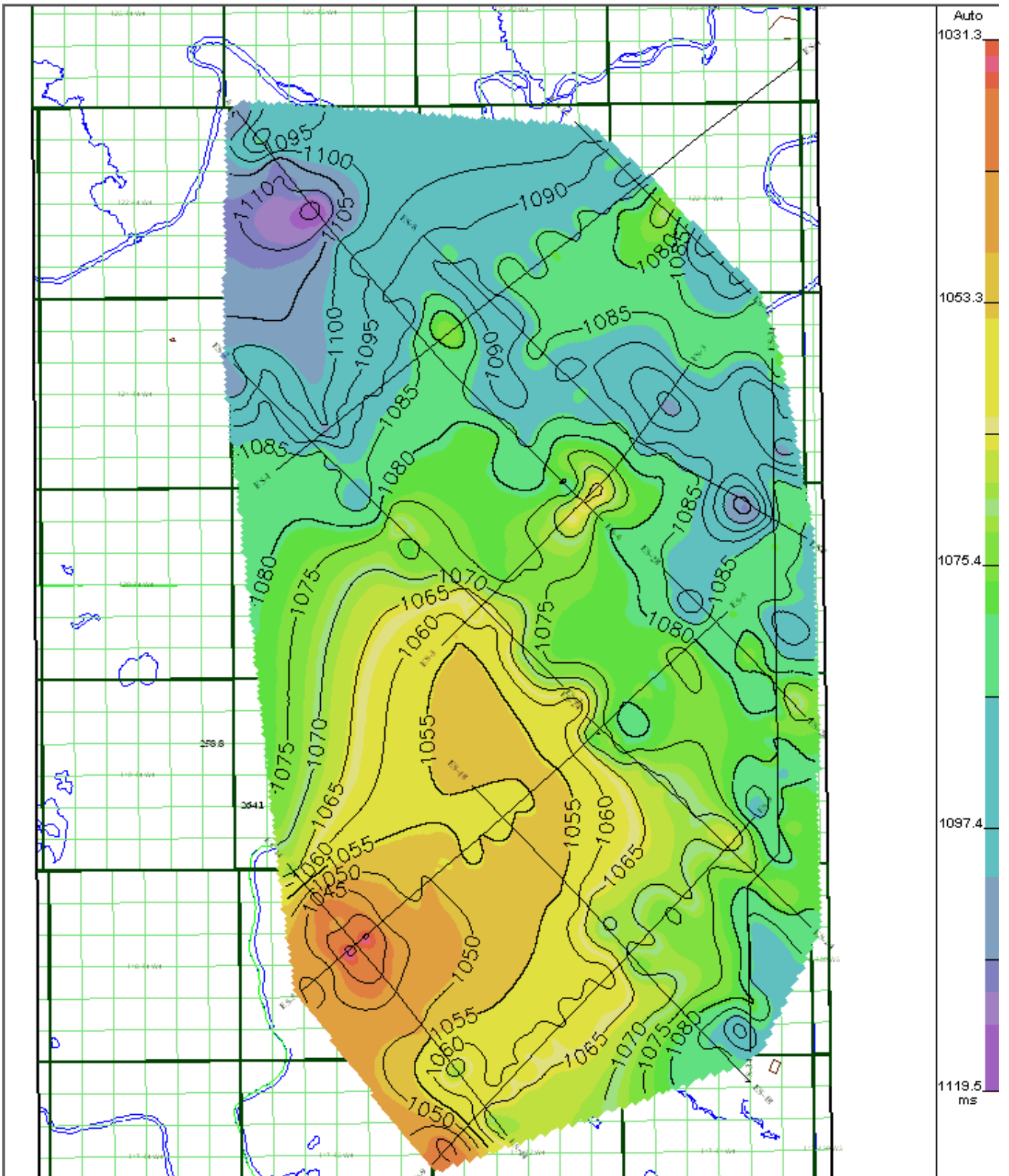
MANNVILLE – PALEOZOIC ISOCHRON



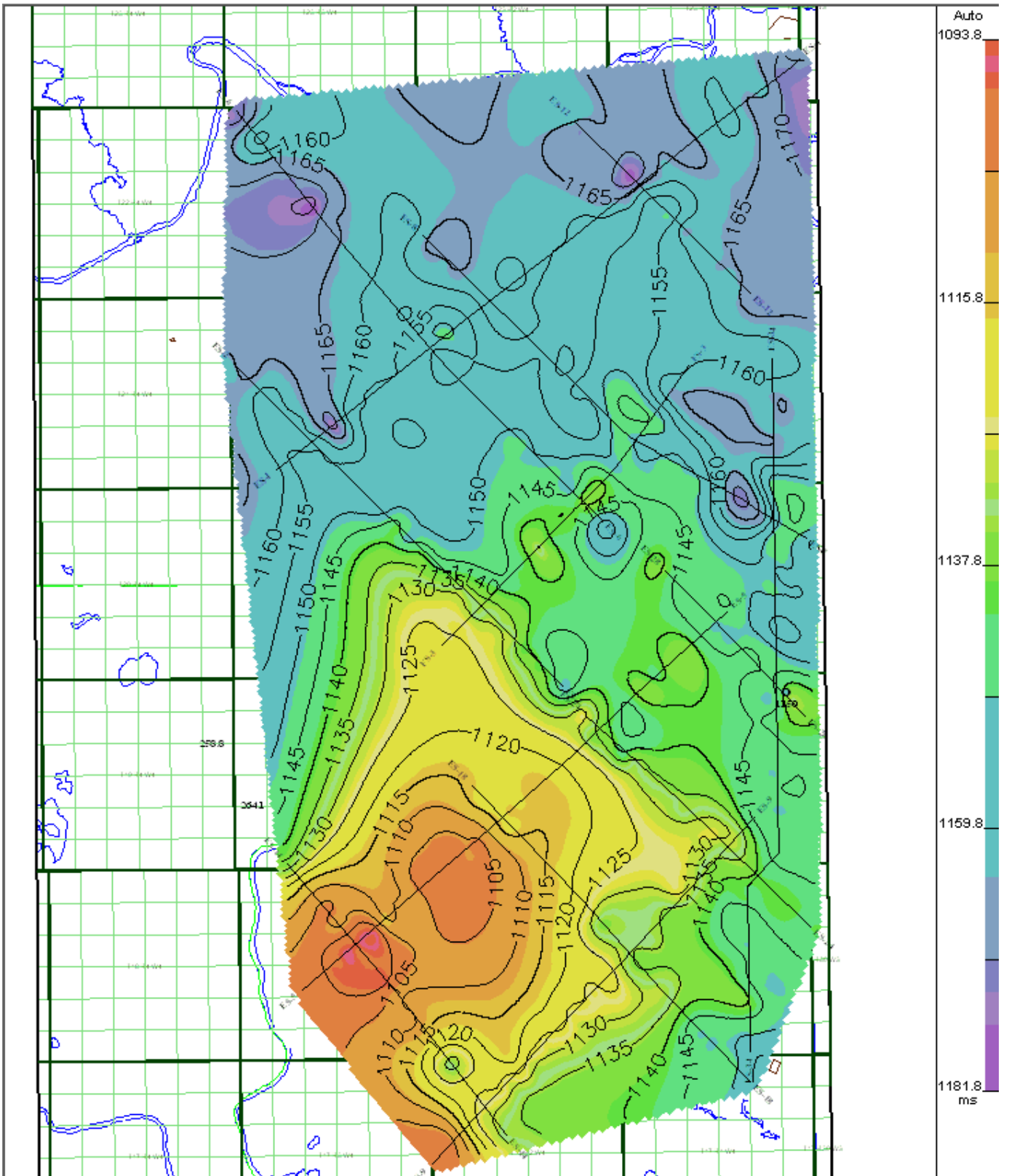
STETTLER TIME STRUCTURE



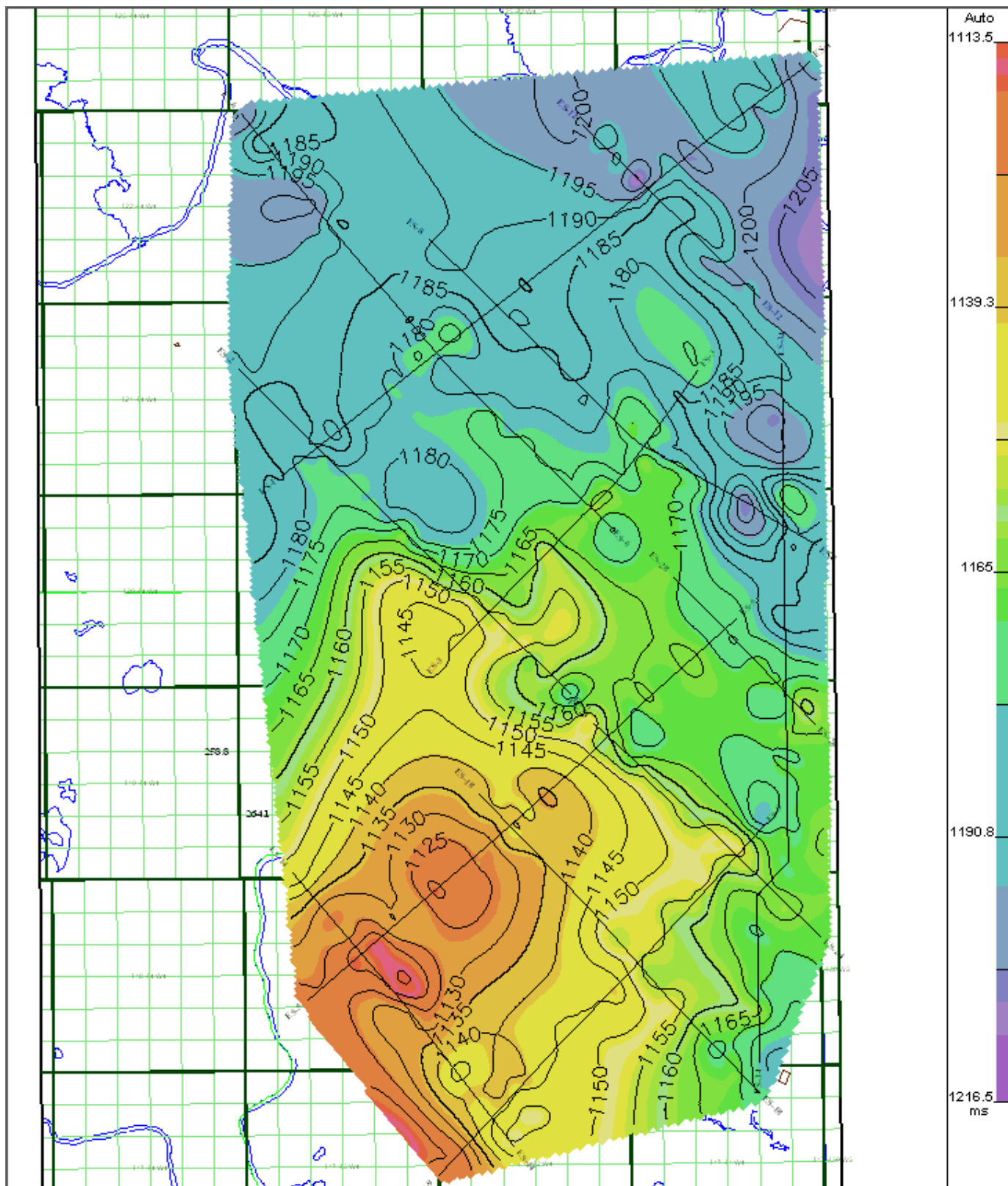
BEAVERHILL LAKE TIME STRUCTURE



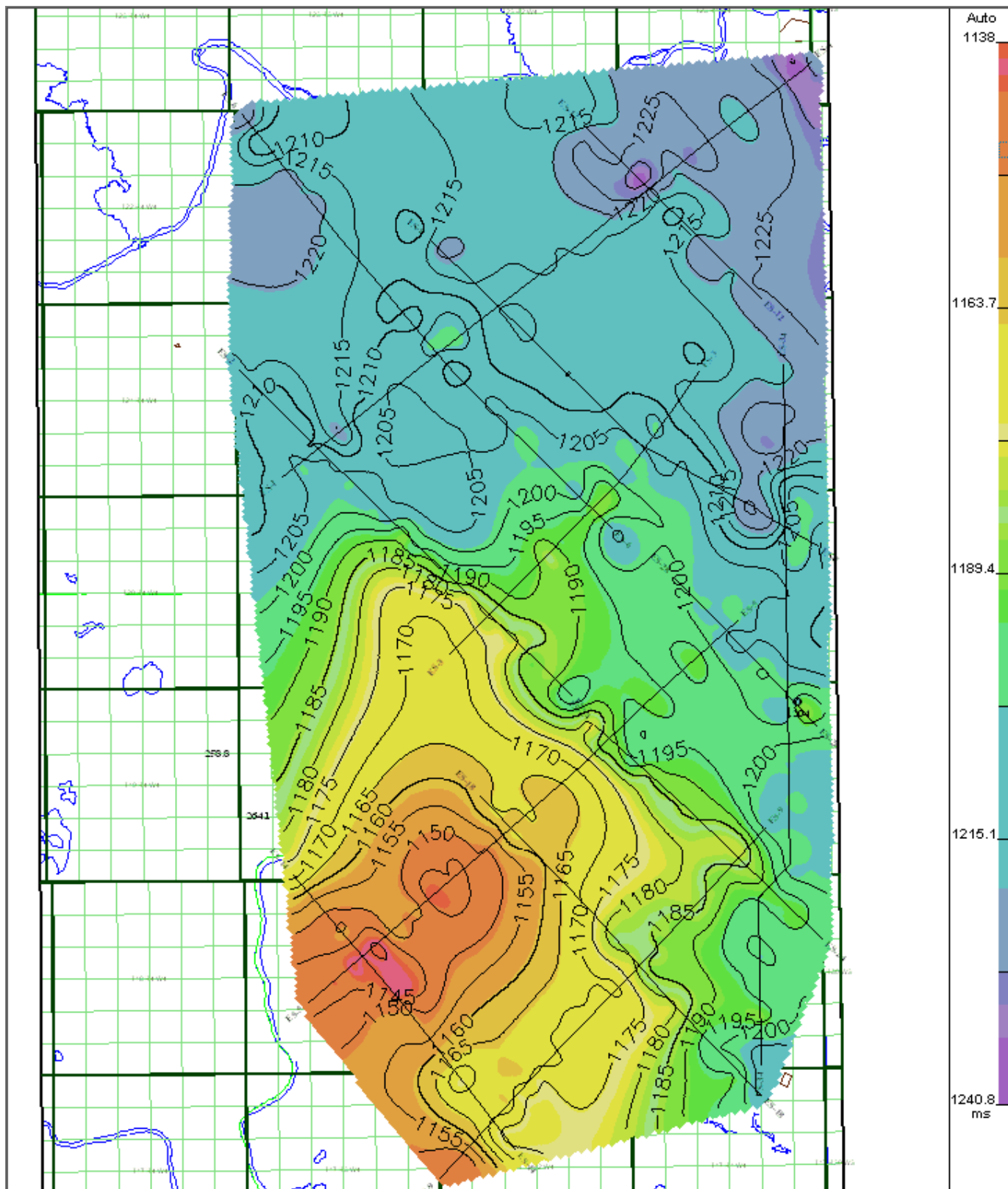
PRAIRIE EVAPORITE TIME STRUCTURE



WINNIPEGOSIS TIME STRUCTURE



WINNIPEG TIME STRUCTURE



PRAIRIE EVAPORITE – WINNIPEGOSIS ISOPACH

