

**PRELIMINARY FEASIBILITY STUDY  
OF THE CADOTTE LEASES  
ALBERTA, CANADA**

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## EXECUTIVE SUMMARY

At the request of Strata Oil & Gas, Inc. (“Strata”), Norwest Corporation (“Norwest”) has prepared a Preliminary Feasibility Study for some of Strata’s oil sand leases that are collectively referred to as the Cadotte Leases. The following report summarizes the findings of the study and has an applicable date of February 29, 2008.

Strata hold title to the bitumen under leases issued by the Provincial Government of Alberta. Although these are legally described as oil sand leases, in this area the bitumen mainly occurs in carbonate basement rock of Carboniferous age. The geology of this deposit and an estimate of the in-situ bitumen resources were previously described in an earlier report prepared by Norwest, dated August 16, 2007. The Cadotte Leases (“Cadotte”) are located in the Peace River oil sands area of Western Sedimentary Basin in northwestern Alberta, Canada. For the purpose of the present study, it is anticipated that production of the bitumen from these leases will be achieved by the application of one or more forms of in-situ extraction technology.

In accordance with procedures adopted in the geology and in-situ resource report of August, in the present Preliminary Feasibility Study Norwest utilized deterministic methods to produce its resource estimates. The August report resource estimate is presented on an in-situ basis and is classified as “Discovered PIIP”, in accordance with the criteria and classification scheme of the Canadian Oil and Gas Evaluation Handbook (COGE Handbook). The present Preliminary Feasibility Study restates those results and quotes other geological information from that report as is necessary to provide adequate explanation.

In the August report, the volumetric method was utilized to develop low, most likely or best, and high estimates of the original bitumen-in-place (OBIP) for the Cadotte leases. Note that Norwest estimated in that report an Effective OBIP rather than a gross OBIP: Effective OBIP is a lower or more conservative estimate of OBIP than a gross OBIP estimate. In the present Preliminary Feasibility Study Norwest has used the Effective OBIP and made an estimate of the potentially recoverable bitumen contained within it. It is important to note that the estimate of potentially recoverable bitumen is still classified as Discovered PIIP in accordance with the COGE Handbook criteria. The reasons for this are discussed in detail in the main body of the present report.

The analogy method was utilized to develop recovery factors that were applied to the OBIP estimates to obtain a low, most likely, and high estimate for potentially recoverable bitumen. Several projects using technology similar to that expected to be implemented on the Cadotte leases were used as analogies for a bitumen recovery method and a resultant range of recovery factors. Shell's Carmon Project ("Carmon Creek") was one of the primary analogies utilized by Norwest for the recovery factor estimates. Norwest reviewed the Carmon Creek Project and concluded that some bitumen bearing stratigraphy on Strata's land correlates with the same stratigraphy at Carmon Creek. Over the last 25 years, Shell has tested numerous recovery methods at Peace River and has recently concluded that Horizontal Cyclic Steam ("HCS") is the optimal recovery method for Carmon Creek. The present Preliminary Feasibility Study for Cadotte is based on the application of that method of extraction, as well as the Shell Carmon Project well layout and designs which were obtained from various public disclosure reports.

For the Cadotte leases a production schedule was developed over the key Target Area of twenty nine sections. Each section, which has an area of one square mile, is about the same size as the Carmon Project pad and development block design. Each pad and development block includes 20 wells of 1,400 m length, each of which is about 600 m in the vertical direction and 800 m horizontally. In the design the pads are "brought on stream" over a four year build-up period. The development block sequence is implemented such that the highest grade and thickest ore blocks are addressed first as long as the local infrastructure is able to service those areas. During the main period of development, the daily production rate for the leases is about 56,000 barrels. The production life for this schedule exceeds 20 years. Cost estimates for this preliminary feasibility study were obtained from a review of public literature.

In the August report, the Discovered Resource estimate for the Effective OBIP<sup>1</sup> was presented as follows:

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<sup>1</sup> Effective OBIP is the effective OBIP to the 100% interest. i.e., Crown royalty has not been deducted from the volumes and it has been assumed that Strata owns 100% of the properties..

**TABLE 1**  
**EFFECTIVE OBIP FOR THE CADOTTE AREA BY TARGET ZONE**  
**IN MILLIONS OF STOCK TANK BARRELS (MMSTB)**

<b>Formation</b>	<b>Low Estimate</b>	<b>Most Likely Estimate</b>	<b>High Estimate</b>
Bluesky/Gething	N/A	N/A	103
Debolt	1,443	1,500	1,503
Elkton	N/A	490	644
<b>Total</b>	<b>1,443</b>	<b>1,990</b>	<b>2,251</b>

In the present Preliminary Feasibility Study the potentially Recoverable Portion of the in-situ Discovered PIIP is estimated as follows:

**TABLE 2**  
**POTENTIALLY RECOVERABLE PORTION OF THE DISCOVERED PIIP FOR**  
**THE CADOTTE AREA BY TARGET ZONE IN MILLIONS OF STOCK TANK**  
**BARRELS (MMSTB)**

<b>Formation</b>	<b>Low Estimate</b>	<b>Most Likely Estimate</b>	<b>High Estimate</b>
Bluesky/Gething	N/A	N/A	39
Debolt	245	390	571
Elkton	N/A	127	245
<b>Total</b>	<b>245</b>	<b>517</b>	<b>855</b>

Risks associated with the successful development of Cadotte are both geological and technical. The geological risks are primarily factors that affect the OBIP estimate and data necessary for determining the higher pay quality areas within the Cadotte Area. Satisfactory data were available to map the target zones for the area; however, more detailed mapping will have to be done as the property is developed to better define the higher quality pay areas within Cadotte. The selection and the predictive modeling of a recovery method for a heavy oil accumulation is a function of the following parameters for the target zone(s) or reservoir:

- oil viscosity
- permeability – both horizontal and vertical
- thickness

- temperature
- pressure
- porosity
- presence of basal water and/or top gas in target zone
- meters of overburden

Strata have drilled four wells during the last year on the Cadotte leases; three of which were within the Cadotte Target Area (“Target Area”). Norwest gathered well data from the four wells including logs, cores, and oil samples. Thus, Strata have data for Bluesky, Gething, Debolt, and Elkton target zones within the Target Area for all of the above reservoir parameters except for permeability. Additionally, Norwest reviewed 19 wells with high quality data including logs and cores in the immediate Cadotte area and 39 more distant wells in the area. The Target Area is very large with a high likelihood of variations in the reservoir parameters throughout the area. Therefore, technical risks still exist for the target zones within the Target Area but primarily center on the key parameters of reservoir permeability, oil viscosity, and effective pay thickness.

The probability of encountering bitumen reservoirs is high in the geological sequence evaluated in the Cadotte area. Therefore the judgment has been made that there are sufficient data available to classify the in-place resource as Discovered in accordance with the COGE Handbook criteria. In other circumstances, the recoverable portion of the Discovered PIIP is referred to as the Contingent Resource. However, in the Cadotte lease case there are several factors, and one in particular, that prevent such a resource classification being made. This major factor is that, at present, there is no pilot project that is applying in-situ recovery methods to bitumen in a hardrock carbonate host that can be used as a demonstration of recoverability. Because of this the potentially recoverable bitumen for the project area is still classified as “Discovered”. This aspect is discussed in further detail in the body of the report.

Norwest conducted an initial economic evaluation of the Cadotte area, at a level of study consistent with that of a Preliminary Feasibility Study, based on the Most Likely potentially recoverable Discovered PIIP estimate of 517 MMSTB. Based on forecast prices and constant costs, this Preliminary Feasibility economic analysis indicates that the development of the Cadotte area is economically viable with a net present value (discounted at 10%) of cash flows before income taxes of about

\$US1.2 billion. Since Strata have not completed a pre-feasibility cost estimate, the assumptions utilized in the economic evaluation were based on a review of published public data for similar projects. Based on the favorable results of the pre-feasibility economic analysis, the Cadotte area warrants further evaluation including a pilot well test program and feasibility level project design and cost estimates.

## **1 INTRODUCTION**

### **1.1 AUTHORIZATION**

Norwest Corp. (“Norwest”) has been retained by Strata Oil & Gas, Inc. (“Strata”) to prepare a Preliminary Feasibility Study for the extraction of the bitumen resource within a selected part of its Cadotte oil sand leases, located in Alberta, Canada. The selected lease portion has previously been referred to as the Cadotte Target Area (“Cadotte”) and was first described and documented in the August report.

### **1.2 INTENDED PURPOSE AND USERS OF REPORT**

The purpose of this report is to provide Strata with a summary of the results of our Preliminary Feasibility Study addressing the potential recovery of the bitumen resource. It is also intended to provide a preliminary economic assessment of the application of one possible recovery methodology. This report is based on a previous one prepared by Norwest that addresses the geology and in-place Discovered bitumen resource of the property. That report was released to Strata in August of 2007 and is frequently referred to or referenced in the present report.

### **1.3 OWNER CONTACT AND PROPERTY INSPECTION**

Norwest has had frequent contact with Strata up to the date of this report. Norwest has provided geologic and engineering advisory services to Strata since July 2006. Norwest personnel have visited the Cadotte properties and have designed and supervised geologic evaluation procedures for Strata.

### **1.4 SCOPE OF WORK**

The following report describes and quantifies the potentially recoverable bitumen resource of the Cadotte oil sand leases located in the Peace River District of the Western Sedimentary Basin in northwestern Alberta, Canada (Figure 1). Cadotte is located north of Shell’s Peace River Complex within the Peace River deposits (Figure 2). This report focuses on the Target Area within Strata’s leases of the Cadotte properties (Figure 3). The leases that form the Target Area cover an area of 29 sections located in Townships 86 and 87, Ranges 18, and 19 W5 (Figure 3).

The target zones within the Cadotte leases include:

- Bluesky and Gething clastic Cretaceous Formations and
- Debolt Formation and Elkton Member carbonate Carboniferous units

## **1.5 APPLICABLE STANDARDS**

This report has been prepared in compliance with Canadian National Instrument 51-101 guidelines for disclosure concerning oil and gas resources in Canada. NI 51-101 requires that the procedures and criteria of the Canadian Oil and Gas Evaluation Handbook (“COGE Handbook”) be used for resource classification and these standards and criteria have been used in this report. In this case it has been found that the estimate of potentially recoverable bitumen cannot yet be classified as a Contingent Resource. As is described in a later section of this report, the potentially recoverable bitumen resource estimate must be still be classified as Discovered.

The National Instrument also requires disclosure of specific information concerning prospects. This is addressed in Section 2 of this report.

## **1.6 ASSUMPTIONS AND LIMITING CONDITIONS**

This report is limited in scope to document only the potentially recoverable portion of the Discovered Petroleum Initially In Place (Discovered PIIP), formerly referred to as Discovered Resources, within the Target Area of the Cadotte properties. This report does not attempt to place a Fair Market Value on that resource portion.

Norwest reserves the right to revise its opinions of all estimates of resources if new information is deemed sufficiently credible to do so.

The accuracy of any estimate is a function of available time, data, geological engineering, commercial interpretation, and judgment. While the resource estimates presented herein are believed to be reasonable, they should be viewed with an understanding that additional analysis of new data may justify their revision and Norwest reserves the right to make such revisions.

## **1.7 INDEPENDENCE/DISCLAIMER OF INTEREST**

Norwest acted independently in the preparation of this report. Neither Norwest nor any of Norwest employees have direct or indirect ownership in the property

appraised or the area of study described nor in the Company, itself. This report was prepared under the supervision of John D. Wright, Ph.D., P.E., P. Eng. who is a Qualified Person.

Our fee for this report and the other services that may be provided is not dependent on the amount of resources estimated.

## **2 REQUIRED DISCLOSURES REGARDING PROSPECTS**

### **2.1 LOCATION AND BASIN NAME**

The Cadotte bitumen resources occur in the Peace River area of the Western Sedimentary Basin in northwestern Alberta. The target zones within Cadotte leases include the Bluesky and Gething clastic Cretaceous Formations and the Debolt Formation and Elkton Member carbonate Carboniferous (Mississippian) units (Figure 4).

### **2.2 GROSS AND NET INTEREST IN THE PROPERTY**

Strata's working interest is 100 percent in the Cadotte Leases and their net revenue interest depends on the provincial royalty scheme which is 1% until all costs including a return allowance are recovered and 25% of the net project revenues thereafter. The new royalty scheme includes a sliding scale based on WTI oil prices over \$55 per barrel.

### **2.3 EXPIRY DATE OF INTEREST**

Strata have oil sand mineral lease agreements with the Department of Energy, which manages the Crown-owned mineral interests on behalf of the citizens of Alberta. The Primary leases are 15-year leases that expire in 2021. The leases include an upfront bonus payment determined as part of a public offering process and annual rental payments of CN\$3.50 per hectare.

### **2.4 DESCRIPTION OF TARGET ZONES**

The target zones within the Cadotte leases include the Bluesky and Gething clastic Cretaceous Formations and the Debolt Formation and Elkton Member carbonate Carboniferous units (Figure 4). The cross-section of the Cadotte area (Figure 5) illustrates the target zones.

As part of the Cadotte evaluation, Norwest reviewed Shell's Carmon Creek project and concluded that the bitumen bearing stratigraphy on Strata's leases correlate with producing stratigraphy at Carmon Creek. The Carmon Creek project area is about 10 km south of Cadotte (Figure 2).

According to public documents prepared by Shell personnel, their Carmon Creek bitumen deposit is mainly contained in two zones, both of which are in the Lower Cretaceous Bluesky Formation. They describe the upper zone as consisting mainly of siliciclastic sediments of fluvial origin. The lower zone is described in one report as being of estuarine origin with brackish marine characteristics but mainly including clastic sediments and only a small amount of carbonate. The Shell data also describes other bitumen-bearing zones at greater depth in the sequence within the Carboniferous Debolt Formation. The data that are available in the Shell Canada material include various clear illustrations of logs and core descriptions of the bitumen zones and these have been used to correlate with bitumen zones found in the sequence of the Cadotte Area.

A line of correlation was made between the available data from the Cadotte Area and the Carmon Creek Project area extending from the northwest side of the Shell leases. Resistivity log data shows that the ore zones in this area can be easily correlated. The Alberta Provincial Energy and Utilities Board (“EUB”) formation tops on the logs, exemplified by those in well 04-26-086-18W5, show that the bitumen bearing Bluesky/Gething Formation of the Cadotte Area is the same as the upper Bluesky Formation zone at Carmon Creek, although the thickness of the unit is much reduced in the Cadotte Area. However there is confusion concerning the correlation of the Gething Formation as identified by the EUB in this area; the EUB’s bitumen bearing Gething Formation appears to be Strata’s and Shell’s Debolt Formation. The Debolt is the principal ore zone at Cadotte. The relationship between the stratigraphic sequence on the Cadotte leases and the ore zones as used in the present report is shown on Figure 5. This illustration is a cross-section prepared from several of the wells on the leases.

The lower ore zone of Strata’s target area is identified as being contained within the Elkton Member of the Debolt Formation. This correlation is universal on well logs of Strata, Shell and those interpreted by the EUB throughout this area.

At the present time tests are being conducted on the cores recovered in the wells drilled this year for Strata on the Cadotte Area. These tests will identify the lithology of the host rock in the main bitumen ore zone. This will allow a definitive stratigraphic nomenclature to be established.

## **2.5 DISTANCE TO NEAREST COMMERCIAL PRODUCTION**

Shell's Carmon Creek Project is located approximately 10 km to the south-southeast of Cadotte. Carmon Creek is an expansion of the existing Peace River Complex. The Peace River Complex currently produces over 9,000 barrels of oil per day. Since 1979, Shell has tested several different thermal processes and well configurations, including:

- vertical wells
- horizontal wells
- horizontal well pairs
- multilateral wells

These well designs have been used with various recovery processes such as:

- pressure cycle steam drive (PCSD)
- steam drive
- steam-assisted gravity drainage (SAGD)
- horizontal cyclic steam (HCS)

Shell tested several of these recovery processes and well designs within the Carmon Creek Project area. Shell has found that an HCS recovery process using a J-well design is the most effective recovery process and well design. Due to the presence of thick basal water and a high vertical permeability contrast, SAGD and even HCS in a typical well configuration did not work well. The Shell Carmon Creek Project application indicates an estimated recovery factor range of 17 to 22 percent for HCS in a J-well configuration. Shell's documentation describes this configuration to be one where "the toe of the horizontal section is higher than the heel. This design is intended to distribute steam more effectively."

## **2.6 PRODUCT TYPES REASONABLY EXPECTED**

Bitumen is reasonably expected from all target zones in the Cadotte area. Only minor amounts of natural gas production are expected and assumed to be utilized within the area for field operations and thus no gas sales are expected.

## **2.7 RANGE OF POOL OR FIELD SIZES**

The oil or bitumen accumulation in the Cadotte area is expected to form a continuous pool with varying degrees of technically and economically recoverable oil. The

Cadotte properties are best thought of in terms of in-place resources and potentially recoverable resources for the area. A deterministic analysis of the likely distribution of resources for the Cadotte properties is described in Section 3 of this report. This analysis predicts the potentially recoverable bitumen resources that may be present in the target zones and has resulted in a low estimate of 245 MMSTB<sup>2</sup>, most likely or best estimate of 517 MMSTB, and high estimate of 855 MMSTB.

## **2.8 DEPTH OF TARGET ZONE**

The Bluesky, Gething, Debolt, and Elkton target zones are at depths ranging from 440 m to 615 m.

## **2.9 ESTIMATED DRILLING AND TESTING COSTS**

Based on industry data for wells in the area, total drilling and completion costs are estimated at \$625,000 USD per well for a J-well to a depth of 625 m. This estimate is based on a full-field development process. Well costs for initial testing and/or a pilot area will likely exceed this estimate.

## **2.10 EXPECTED TIMING OF DRILLING AND COMPLETION**

The expected timing for commencement of operations within the Cadotte area is unknown at the time of this report. Strata plan to drill and/or test three wells in the area by the end of 2008. This will include a detailed core and fluid analysis program.

Commencement of full-field development is dependent upon:

- a) Results of the test wells and pilot area program;
- b) Rig, service company, and labor availability; and
- c) Time required for permitting locations and meeting all regulatory requirements.

Since wells are shallow, (approx. 500 m to 600 m) it is estimated that it will take five to six days to drill and complete a J-well during full-field development.

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<sup>2</sup> MMSTB stands for million stock tank barrels

## **2.11 EXPECTED PRICES**

Limited pricing data are available for the area. It is anticipated that heavy oil will sell at a pricing similar to Shell's Peace River project.

## **2.12 POTENTIAL MARKETING AND TRANSPORTATION ARRANGEMENTS**

There are existing facilities for the export of diluted bitumen, or dilbit, in the area by virtue of the operations and exports from the Shell and Blackrock projects. Strata may work with Shell and Blackrock to expand and share existing pipelines or build their own pipeline to the Haig Lake terminal for transfer into the Rainbow Pipe Line system. The Rainbow Pipe Line system connects with refineries in Edmonton, Alberta. Strata will not only have to contract for the transportation and marketing of the bitumen but also for the supply of diluent. There may also be local sources of diluent available via truck or pipeline to use as an alternative or to serve as back-up.

## **2.13 IDENTITY AND RELEVANT EXPERIENCE OF THE OPERATOR**

Strata will operate the Cadotte properties. Norwest has not yet qualified Strata's experience with the development and operations of heavy oil fields. Norwest will continue to assist Strata in design and supervision of geologic and engineering procedures.

## **2.14 RISKS AND PROBABILITY OF SUCCESS**

Risks associated with the successful development of Cadotte are both geological and technical. The geological risks are in two primary categories:

- (1) factors that affect the original bitumen-in-place ("OBIP") estimate; and
- (2) determining the higher pay quality area(s) within the Cadotte properties.

Factors that affect the OBIP estimate are thickness, grade weight percentage or oil saturation, porosity, and the areal extent of the target zones. Numerous cores and old well logs are available for the area. This allows reasonable mapping of the productive zones and porosity mapping.

The technical risks are centered on the key issues for the target zones which include:

- permeability (both vertical and horizontal)
- oil viscosity, and
- thickness of the zone

The recoverable reserves and the method for oil recovery in the area are a direct function of the bitumen viscosity, permeability, and pay thickness. Additional exploration wells should be drilled and evaluated to properly evaluate in-situ reservoir conditions, especially bitumen viscosity and permeability.

The probability of success is high for encountering oil-saturated reservoirs. The main risk is whether or not the production rates and recoverable resources in the Cadotte area are economically viable (a function of OBIP, recovery method, and existing economic conditions). One or more pilot projects will have to be installed at Cadotte to assess these parameters.

### **3 DETERMINISTIC ESTIMATE OF THE DISCOVERED PETROLEUM INITIALLY IN-PLACE**

#### **3.1 GENERAL**

This section of the report describes the in-place geological estimate of the bitumen resource on the Cadotte Target Area. This material was presented in greater detail in the Norwest report dated August 16, 2007 and titled “Technical Report – Evaluation of In-place Bitumen Resources, Cadotte Leases”. In that report Norwest utilized deterministic methods to produce its various resource estimates. The August report resource estimate is classified as “Discovered Resources”, in accordance with the criteria and former classification scheme of the COGE Handbook. The current version of the COGE Handbook has re-titled “Discovered Resources” as “Discovered Petroleum Initially In Place”. The present Preliminary Feasibility Study restates those results and quotes other geological information from that report as is necessary to provide adequate explanation.

In the August report, the volumetric method was utilized to develop low, most likely or best, and high estimates of the original bitumen-in-place (OBIP) for the Cadotte leases. Note that Norwest estimated in that report an Effective OBIP rather than a gross OBIP. Effective OBIP is a lower or more conservative estimate of OBIP than a gross OBIP estimate. The effective OBIP takes into account the effective pay, rather than the gross pay, which is determined using core-based facies description. For example, shale and clay content is not included in the estimate of effective pay.

#### **3.2 INPUT PARAMETERS**

The deterministic method involves developing low, most likely, and high estimates for the variables in the volumetric formula used to calculate effective OBIP. The Low, Most likely, and High OBIP estimates were based on the following parameters:

- The thickness of the formation was determined from logs using a minimum grade of 8 wt percent
- The Low Estimate includes all of the area that has a minimum grade of 8 wt percent and a minimum thickness of 10 m;
- The Most Likely or Best Estimate includes all of the area that has a minimum grade of 8 wt % but no minimum thickness; and

- The High Estimate includes all of the area without any grade or thickness constraint (other than that imposed by the thickness determination).

All of the above estimates are based on core and log analysis to yield an effective OBIP determination and not a gross OBIP estimate.

### **Effective OBIP**

The following equation was utilized to obtain the OBIP estimate for the Strata properties in the Cadotte area:

$$\text{OBIP} = \frac{6.29 * \text{Area} * \text{Thickness} * \text{Porosity} * \text{Oil Saturation}}{\text{Formation Volume Factor}}$$

Where:

- OBIP = Original Bitumen in-place, barrels (42 U.S. gal/bbl)
- Area = Estimated potentially productive area, m<sup>3</sup>
- Thickness = Estimated potentially productive average thickness, m<sup>3</sup>
- Porosity = Average pore volume/unit rock volume
- Oil Saturation = Average oil saturation in pore volume
- Formation Volume Factor = Reciprocal of Bitumen shrinkage when it is extracted, Reservoir volume/Surface volume.

### **Area and Thickness**

Norwest mapped the target zones in the Cadotte area based on geologic interpretation of public data sources as well as core and log data from new and old wells in the area. Figure 10 and Figure 14 are thickness maps for the Bluesky/Gething and Debolt Formations and Elkton Member, respectively.

The Bluesky/Gething Formation is thin and has lower bitumen grade weight percentage or oil saturation throughout the Target Area (Figure 6 and Figure 8). Accordingly, the Bluesky/Gething Formation is not included in the Low or Most Likely estimates but is included in the High Estimate. The High and most likely estimates do not include a thickness cutoff while the Low Estimate includes a ten meter thickness cutoff. The Debolt Formation is the primary target zone based on geologic mapping. Within the Target Area, the Debolt Formation is almost always

greater than ten meters thick (Figure 10). Thus, the Debolt Formation has Low, Most Likely, and High Estimates with little variation. The thickness of the Elkton Member varies throughout the Cadotte Area and does not exceed ten meters (Figure 14). Therefore, the Elkton Member does not have a low OBIP estimate.

## **Porosity**

Norwest developed porosity maps for the targets zones using core and well log data. Figure 7, Figure 11 and Figure 15 are porosity maps for the Bluesky/Gething, Debolt, and Elkton units, respectively.

The porosity of the Bluesky/Gething Formation varies throughout the Target Area with an average in excess of 18 percent. The Debolt Formation porosity varies less than the Bluesky/Gething within the Target Area and averages over 24 percent. The Elkton porosity varies even less than the Debolt and averages about 20 percent within the Cadotte Area.

## **Bitumen Grade and Oil Saturation**

Norwest estimated oil saturation and bitumen grade for the target zones, based on core and well log data. Based on these data and analyses, Norwest developed 8 percent weight bitumen grade maps for the target zones. Figure 8, Figure 12 and Figure 16 are 8 percent weight bitumen grade maps for the Bluesky/Gething, Debolt, and Elkton units, respectively. Figure 9, Figure 13 and Figure 17 are oil saturation maps for the Bluesky/Gething, Debolt, and Elkton units, respectively.

As noted above, the Bluesky/Gething Formation has low bitumen grade (less than 8 percent weight on average) throughout the Cadotte Area (Figure 8). The Debolt Formation, however, has a high bitumen grade (over 10 percent weight on average) throughout the Cadotte Area (Figure 12). The high grade and the thickness of the Debolt Formation make it an attractive target zone throughout the Cadotte Area. The Elkton Member has a good bitumen grade that varies slightly throughout the Cadotte Area with an average of over 8 percent weight (Figure 16).

The Bluesky/Gething Formation has highly variable and relatively low (less than 30 percent on average) oil saturation throughout the Target Area (Figure 13). The Debolt Formation has not only less variability than the Bluesky/Gething but, also

much higher (greater than 65 percent on average) oil saturation throughout the Cadotte Area (Figure 13). The oil saturations in the Elkton Member have less variability across the Target Area than the Debolt or Bluesky/Gething Formations with an average in excess of 60 percent.

### Formation Volume Factor

Since no in-situ samples of the oil have been obtained, Norwest estimated the formation volume factor (“FVF”) for the Cadotte Area based on an analogy to other bitumen reservoirs in the area. The reservoir temperature is about 20C and there is very little evidence of any gas in the oil samples. Therefore, Norwest estimated the formation factor would be low in the range of 1.01– 1.05 reservoir barrels per stock tank barrel.

### 3.3 EFFECTIVE OBIP RESULTS

From the August Report, the Cadotte area has estimated Effective OBIP as follows:

**TABLE 3**  
**EFFECTIVE OBIP FOR THE CADOTTE AREA BY TARGET ZONE IN MILLIONS OF STOCK TANK BARRELS (MMSTB)**

Formation	Low Estimate	Most Likely Estimate	High Estimate
Bluesky/Gething	N/A	N/A	103
Debolt	1,443	1,500	1,503
Elkton	N/A	490	644
<b>Total</b>	<b>1,443</b>	<b>1,990</b>	<b>2,251</b>

The uncertainty in the geologic and reservoir data has been factored into Norwest’s low, most likely, and high estimates of OBIP and recoverable reserves. This approach allows for the consideration of “most likely” resources for planning purposes while gaining an understanding of what volumes of resources may have certainty and what the potential upside may be for the project.

Due to the lack of detailed oil production data within the Cadotte area and limited reservoir data, the volumetric method will be utilized to estimate a distribution of the

original bitumen-in-place (OBIP) for the Cadotte properties. The analogy method will be utilized to estimate a range of recovery factors and recoverable reserves.

Note that Norwest estimated an effective OBIP which was used for the estimation of potentially recoverable bitumen as is described in Section 5 of this report. Effective OBIP is a lower or more conservative estimate of OBIP than a gross OBIP estimate. The effective OBIP takes into account the effective pay rather than the gross pay, which is determined using core-based facies description. For example, shale and clay content is not included in the estimate of effective pay. Our research of analogous bitumen recovery projects found that other operators such as Shell at Carmon Creek, document OBIP on a gross basis. Thus, Norwest has adjusted the potential recovery factors for the Cadotte area to account for the usage of an effective rather than a gross OBIP estimate.

## 4 DETERMINISTIC ESTIMATE OF POTENTIALLY RECOVERABLE BITUMEN

### 4.1 GENERAL

The estimate of Discovered PIIP described in the previous section, which was presented in the August report, was used as the foundation for a new estimate of potentially recoverable bitumen. The latter estimate was performed as part of the present study. The procedures used to arrive at this estimate are discussed in this section. Some aspects also require further discussion of the procedures from the earlier report and those are included as needed in this section. In general they address issues to importance to the determination of recoverability.

### 4.2 INPUT PARAMETERS

As with the estimation of the Discovered PIIP, the deterministic method was used for the estimation of potentially recoverable bitumen. The potentially recoverable resource portion is estimated from the OBIP tabulated in Section 3 by using the same low, most likely, and high categories. Applicable recovery factors were determined by considering “closest analogues” and these factors were then used in the estimation of potentially recoverable resources. Criteria considered in this estimate are described as follows.

#### **Potentially Recoverable Resources**

The estimate of potentially recoverable resources was obtained by multiplying the effective OBIP times a recovery factor.

#### **Recovery Factors**

Norwest investigated two methods, conceptual reservoir simulation and analogy, for estimating recovery factors based on Horizontal Cyclic Steam (HCS) in a J-well configuration. Norwest was not able to obtain reasonable results based on a conceptual simulation. HCS involves injecting steam at a high pressure to fracture the reservoir. The conceptual reservoir simulation is difficult to perform due to the geomechanical effects of the fracture stimulation in the reservoir. A paper presented by Shell highlighted the difficulty on simulating this process using J-Wells and the fact that they decided to test J-Well performance directly in the field <sup>[1]</sup>. Norwest is

currently studying the inclusion of geomechanical effects on high pressure HCS simulations using horizontal wells; however the results from conceptual simulations are limited at this point. Obtaining reasonable results will require further efforts and may be obtained for a future engineering phase.

Given the difficulties in the conceptual reservoir simulation of HCS, Norwest focused on the analogy method to estimate recovery factors. As previously mentioned, Norwest has utilized Shell's Carmon Creek project as an analogy for the Cadotte lease. However, currently the only recovery factors available for HCS in a J-well configuration are those presented by Shell on their Carmon Creek project application. This project is located in Peace River and appears to have comparable characteristics to those of the Cadotte lease. Shell presents recovery factors between 17 and 22 percent for high pressure Cyclic Steam Stimulation (CSS) using single horizontal wells, both J-Well and flat wells. That said, Shell relates their recovery factors to a gross and not an effective OBIP estimate. Therefore, Norwest conducted a literature review of projects operating in the Alberta Oil Sands utilizing high pressure CSS in horizontal wells to obtain a broader spectrum of recovery factors applicable to the Cadotte lease. The goal of this investigation was to clarify the nature and/or probabilities associated with Shell's recovery factors and relate the recovery factors to an effective OBIP estimate. Three companies in Alberta are using CSS, two of which are located in the Cold Lake area:

- Imperial Oil at the Cold Lake Project;
- Canadian Natural Resources Limited ("CNRL") at the Wolf Lake and Primrose Projects; and
- Shell in the Peace River area

Imperial Oil predicts ultimate recoveries of 26 percent while CNRL estimates recoveries between 20 and 25 percent. Imperial further states that predicted ultimate recoveries will be 38 percent of effective OBIP which is 50 percent higher than the 26 percent recovery factor based on gross OBIP. Norwest estimates that the gross OBIP would be roughly 50 percent higher than the current effective OBIP estimate.

Based on the analogy method with an adjustment for difference between gross and effective OBIP calculations, Norwest estimated the following recovery factors for application to the effective OBIP deterministic cases:

- 17 percent for the Low estimate
- 26 percent for the Most Likely estimate, and
- 38 percent for the High estimate.

#### **4.3 CLASSIFICATION OF POTENTIALLY RECOVERABLE RESOURCES**

The probability of encountering bitumen reservoirs is high in the geological sequence evaluated in the Cadotte area. Therefore the judgment has been made that there are sufficient data available to classify the Discovered PIIP in accordance with the COGE Handbook criteria. In other circumstances, the recoverable portion of the Discovered PIIP might be classified as a Contingent Resource. However, in the Cadotte lease case there are several factors, and one in particular, that prevent such a resource classification being made. The major factor is that, at present, there is no pilot project that is applying in-situ recovery methods to bitumen in a hardrock carbonate host that can be used as a demonstration of recoverability. Not only is this the case for Canada but there are no suitable examples anywhere in the world. This means that existing pilot projects in clastic hosts, which have different physical characteristics from carbonates, have to be used for performance prediction. This additional risk prevents the “Contingent Resource” classification being made. The additional factors that also prevent classification as a Contingent Resource include:

1. A lack of a cost estimate for the full-field development and operation of a bitumen recovery and upgrading project;
2. Lack of permeability data for the target zones; and
3. Limited geologic and reservoir data samples for the target zones

#### **4.4 RESULTS**

Norwest applied the recovery factors shown above to the effective OBIP estimates of Section 3 to obtain the Low, Most Likely, and High Resource estimates for the Cadotte Area as follows:

**TABLE 4**  
**POTENTIALLY RECOVERABLE PORTION OF DISCOVERED P11P FOR**  
**THE CADOTTE AREA BY TARGET ZONE IN MILLIONS OF STOCK TANK**  
**BARRELS (MMSTB)**

<b>Formation</b>	<b>Low Estimate</b>	<b>Most Likely Estimate</b>	<b>High Estimate</b>
Bluesky/Gething	N/A	N/A	39
Debolt	245	390	571
Elkton	N/A	127	245
<b>Total</b>	<b>245</b>	<b>517</b>	<b>855</b>

## 5 PRELIMINARY FEASIBILITY STUDY PROCEDURE

In order to evaluate the economic potential of this project, the potentially recoverable bitumen, estimated in the previous section, was used in a conceptual development model. The model, which is the central exercise for the completion of the Preliminary Feasibility Study, included sufficient detail so that costing and economic evaluation through cash flow forecasting could be completed. For the present study, the approach taken for the completion of the technical and economic analysis is of a conventional nature. Several steps were followed in sequence. These are summarized as follows:

- Identification of a production method;
- Design of the production layout;
- Preparation of a production schedule for the life of the resource;
- Estimation of capital and operating costs;
- Determination of revenue stream; and
- Completion of a cash flow forecast

### 5.1 PRODUCTION METHOD

The production method selected for this analysis is the preferred option described in the public literature for the Carmon Creek Project. This method is referred to as Horizontal Cyclic Steam (HCS). In this system production is achieved from a single horizontal well. Stimulation of the bitumen to achieve flow to the well bore is achieved by using steam under pressure in a series of pulses with “soak” intervals between each injection event. This allows the heat to permeate the ore body and reduce the viscosity of the product allowing flow to occur. The injection events tend to create flow paths for the steam, and thus the heat, to be distributed progressively further into the ore zone more distant from the well bore providing more access to the “Bitumen in-place”.

The HCS wells are drilled vertically at the surface and then deviated to be nearly horizontal by the time the ore zone is intersected. In general, the vertical well segment is about 600 m and the horizontal component beyond the vertical depth is about 800 m. These parameters were used in the present case for well design. The

surface locations of the wells are laid out in “pads” with a surrounding development block. This layout is intended to provide the most efficient access to the bitumen in the ore zone. The layout used in this case includes 20 wells per pad and each development block covers a plan area of about one square mile, or one section. These dimensions are those that are available in the public data for the layout proposed for the Carmon Creek Project. A schematic of a typical pad layout of wells for the present project is shown on Figure 18.

## **5.2 PRODUCTION LAYOUT**

The development block design described above was used to prepare a layout for production throughout the twenty nine section part of the Cadotte leases that are central focus for the present study. In the preparation of this layout consideration was given to the location of the parts of the ore body that is the thickest and that has the highest bitumen grade. While these factors were given priority, access to the pads for development was also considered. Each new pad was “brought on stream” in a location adjacent to previously developed ones so that the cost of infrastructure development was kept as low as possible and constant through the life of the project. For the production sequence each development block was taken to cover one section. A schematic illustration of the pad development sequence is shown on Figure 19.

## **5.3 PRODUCTION SCHEDULE**

The build-up to full production was achieved by developing the needed pads in sequence over a four year period. At that time the production rate was about 56,000 Bbls/day and the product is anticipated to be “dil-bit”, rather than synthetic crude oil. Pads were developed in sequence as needed to maintain the daily production rate and, at the end of the project, each pad was continued to be operated until it could no longer sustain commercial production. Although the production schedule continues for many years the economic analysis addressed the first 20 years of operation. Figure 20 contains the anticipated build up of production and the sequencing of new development blocks for the first 20 years of operation

## **5.4 CAPITAL AND OPERATING COSTS**

In order to complete the economic analysis a wide range of data for the estimation of capital and operating cost had to be assembled. Data of this kind is not available in the public descriptions of the Carmon Creek Project and so other sources had to be consulted. The information was derived from various public sources and, as

available, from various projects that Norwest Questa has worked on over recent years.

## **5.5 REVENUE FORECAST**

Revenue for the project is based on the assumption that a bitumen product can be sold to a suitable third party. The forecast of bitumen price is based on public data that provides a bitumen price relative to the current WTI price. The forecast of the future prices for WTI came from the public information presented by Sproule and Associates in August 2007 (Reference Article 2).

## **5.6 CASH FLOW FORECAST**

Once all of the costing and revenue data was assembled a cash flow forecast was prepared. The procedure used in this case is a simple one and the cash flow forecast was done in a spreadsheet. At the level of study for this Preliminary Feasibility Study a more rigorous form of analysis is not appropriate. The results of the analysis are discussed in subsequent sections of this report.

## 6 ECONOMIC EVALUATION

### 6.1 GENERAL

At Strata's request, Norwest conducted an initial economic assessment of the Cadotte Area based on the Most Likely Potentially Recoverable Resource estimate of 517 MMSTB.

### 6.2 ECONOMIC ASSUMPTIONS

The assumptions utilized in the economic evaluation were based on a review of published public data for similar projects. At the time of this report, Strata have not completed a pre-feasibility cost estimate for the development of the Cadotte area. Given the range of assumptions used in this evaluation, the estimated costs are believed to be within +/- 50% of what could be expended in 2007 dollars on this development. This economic evaluation was conducted in real terms or constant 2007 dollars. Therefore, operating and capital costs were not escalated but instead were held constant for an approximate thirty-two year period of the economic evaluation.

#### **Ownership Interests and Crown Royalties**

Strata own 100% of the working interests for the Cadotte area. Alberta Crown royalties were modeled as 1% of operating cash flow until recovery of all capital costs including a return allowance followed by an increase to 25% thereafter, as is currently applicable. The impact of the new planned Provincial Government royalty regime is commented on in the results. Cash flow available for recovery of capital costs is based on operating cash flow before income taxes or net revenue less cash operating costs.

#### **Bitumen Production and Project Schedule**

Individual well performance is based on production profile data contained in the Carmon Creek application published by Shell for a HCS in a J-well configuration. Norwest utilized this well performance to schedule the development of the Cadotte area. The initial project development schedule was based on a 56,000 bopd facility or capacity size. The project development schedule was categorized into three sequential phases:

- pilot well testing and design engineering
- construction of project infrastructure

- drilling and completion of wells

Pilot well testing and design engineering was estimated to take about two and one half years followed by about two years to construct the project infrastructure. This would be followed by the drilling and completion of 540 production wells on 27 pads (20 wells per pad). The wells are designed for both steam injection and bitumen production. Based on the facilities capacity, the bulk of the 540 wells were scheduled to be drilled during the initial four years of the well development phase with the remainder to be drilled over the next 18 years.

### **Capital Costs**

Capital costs to drill and complete all wells and construct facilities without an on-site bitumen upgrader were estimated to be about \$US1.6 billion in 2007 dollars. Timing of expenditures in the economic model was based on the development schedule summarized above. For the economic evaluation the capital costs were not escalated but were held constant in 2007 dollars.

### **Operating Costs**

The costs to operate the project including well costs, steam generation and facilities operation were estimated to be about \$US16 per barrel of produced bitumen based on a \$US6.25 per MMBtu gas price. Additionally, the cost to maintain facilities and production wells was estimated to be about \$US16 million per year starting after the initial period of well drilling. For the economic evaluation the operating costs were not escalated and were held constant in 2007 dollars.

### **Product Prices**

Since the capital cost estimate does not include bitumen upgrading, product pricing is based on bitumen pricing. The price differential for bitumen in the Peace River area relative to a crude oil price index such as West Texas Intermediate (“WTI”) is difficult to estimate at this time. Both Sproule and McDaniel and Associates forecast that Alberta Heavy Crude Oil will sell for about \$US25 per barrel less than WTI. For this economic evaluation, Norwest used constant prices of US\$55, US\$65 and US\$75 per barrel.

### 6.3 RESULTS AND CONCLUSIONS

A summary of the economic evaluations at different oil price assumptions is shown in Table 5.

**TABLE 5**  
**SUMMARY OF ECONOMIC EVALUATIONS**  
**AT DIFFERENT OIL PRICE ASSUMPTIONS (\$US BILLIONS)**

Oil Price	Gross Oil Revenue	Net Investment	Total Operating Expenses	Crown Royalties	Cumulative Cash Flow	Cumulative Disc. (10%) Cash Flow	IRR
Constant \$65 WTI	19.7	1.6	8.2	2.1	7.8	1.2	27%
Constant \$55 WTI	14.8	1.6	8.2	0.8	4.2	0.4	17%
Constant \$75 WTI	24.7	1.6	8.2	3.3	11.5	2.0	35%

Based on forecast prices and costs, this preliminary feasibility economic analysis indicates that the development of the Cadotte area is economically viable with a return on capital investment of 27% and Net Present Value (“NPV”) discounted at 10% of \$1.2 billion. At a WTI crude oil price of \$65 per barrel, the impact of the planned royalty change is only about a 1% reduction of return on capital investment. At a constant \$55 per barrel WTI price, the return on capital investment is just over 17%. Based on the favorable results of the pre-feasibility economic analysis, the Cadotte area warrants further evaluation including a pilot well test program and feasibility level project design and cost estimates.

### 6.4 RECOMMENDATIONS

From this study, the Cadotte property has merit and is worthy of further evaluation and development activity to further access its development potential. This work should be focused on further drilling to define the bitumen resource and to assess the suitability of the various potential recovery methods.

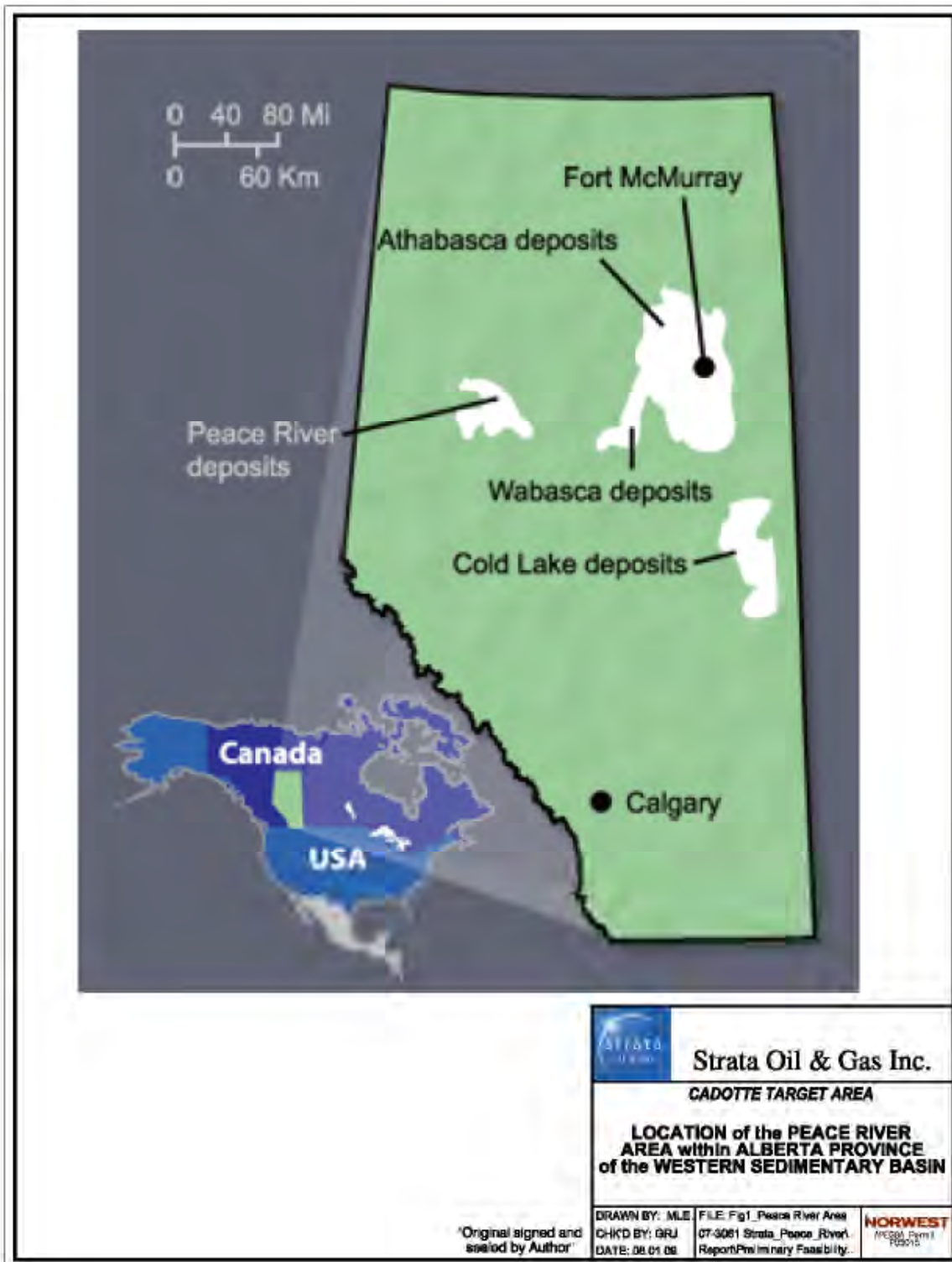
Bitumen recovery by in-situ extraction methods from carbonates is an engineering discipline and science that is presently in its infancy. Strata Oil and Gas, and others, will have to dedicate considerable effort in the collection of data for engineering

planning and for the construction and operation of pilot facilities. In Strata's case this work has already commenced; this should be the principal focus of the exploration work into the future and will ultimately lead to the implementation of a pilot extraction program for the project.

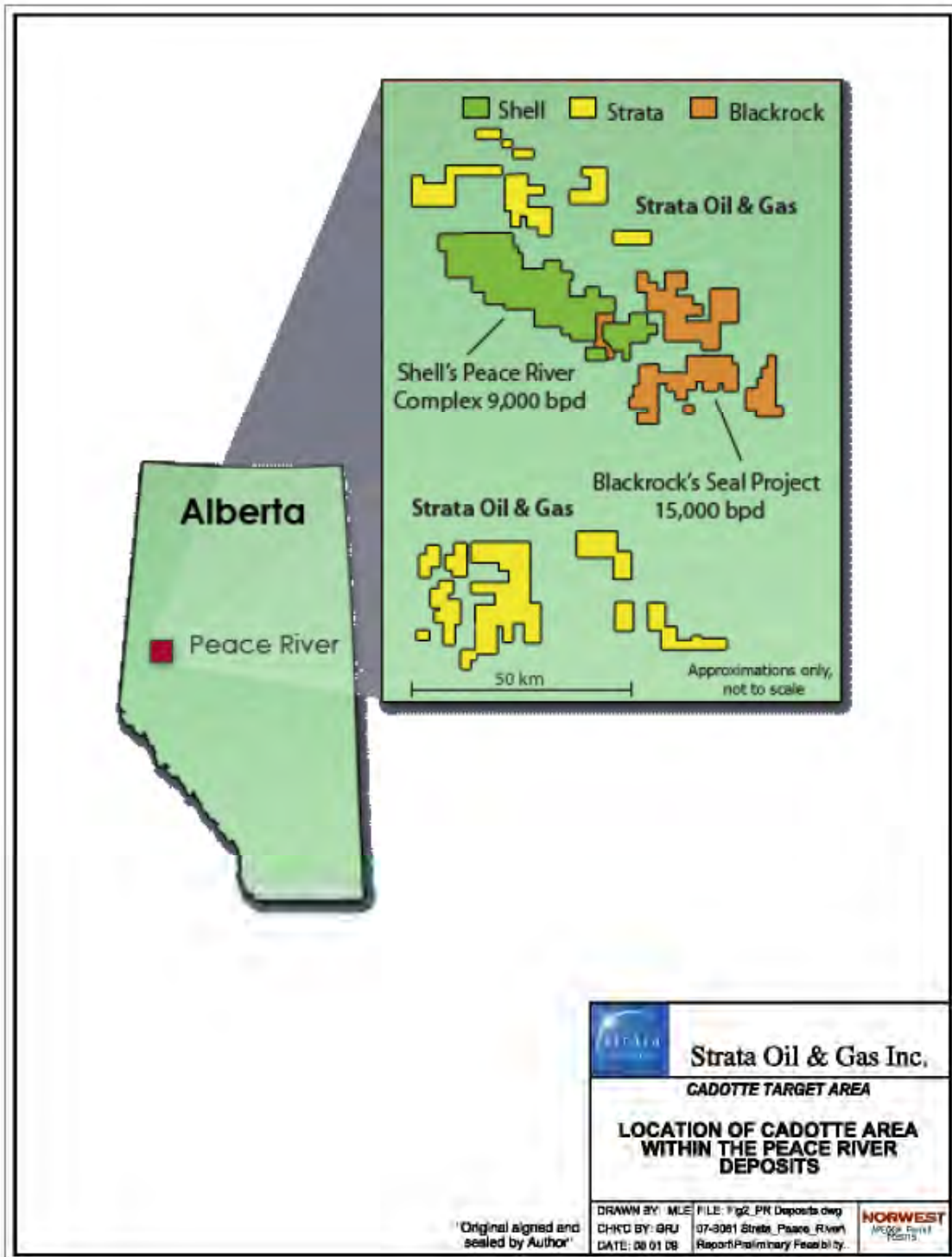
## 7 REFERENCES

1. Brissenden S.J. / Shell Canada, “Steaming Uphill: Using J-Wells for CSS at Peace River”, Presented in the 6<sup>th</sup> CIPC, Calgary, AB, June 2005 (Paper 2005-107)]
2. SPROULE AND ASSOCIATES as of October 2007  
[http://www.sproule.com/prices/oil\\_escalated.htm](http://www.sproule.com/prices/oil_escalated.htm)

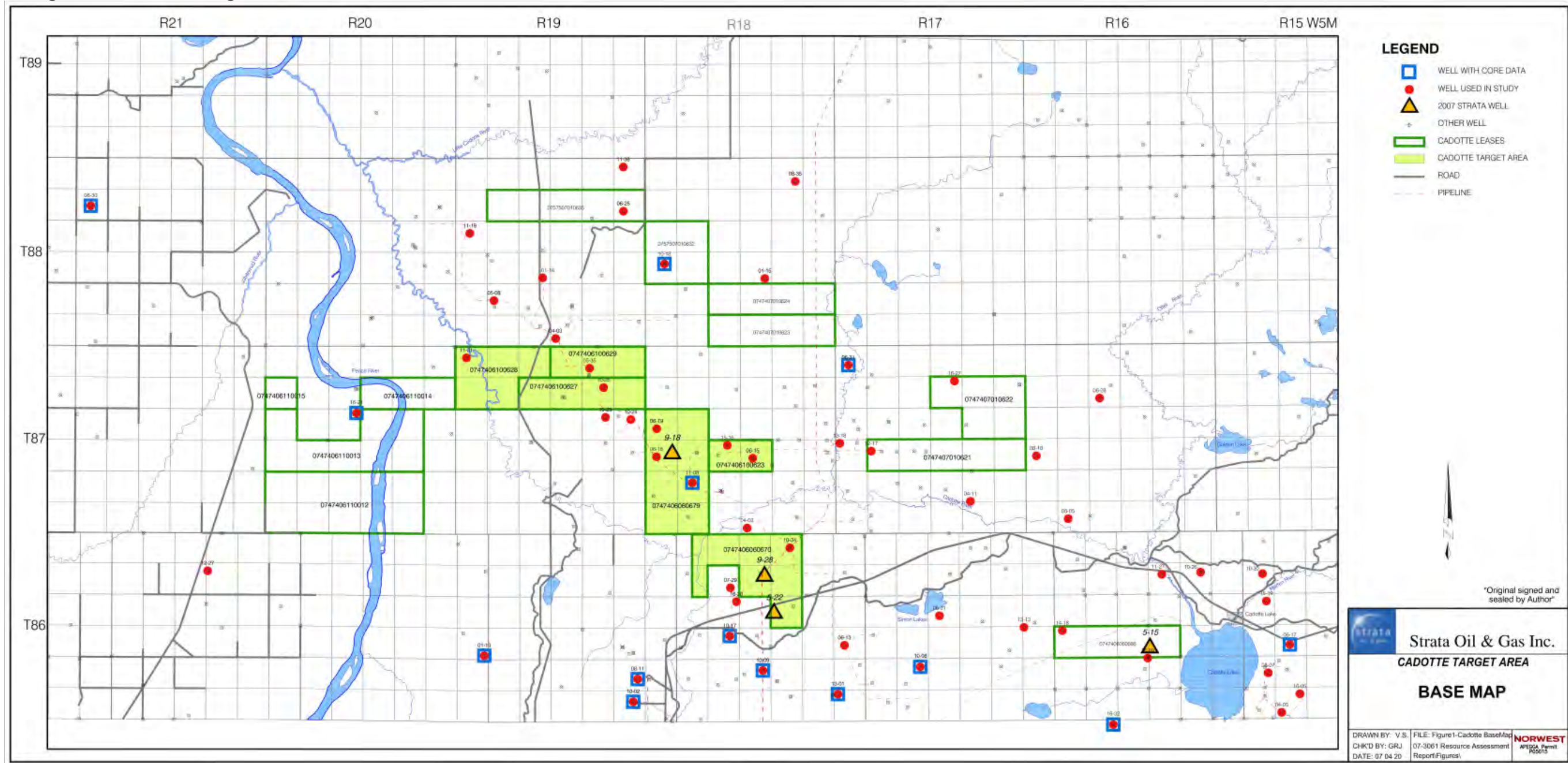
**Figure 1 Location of the Peace River Area within Alberta Province of the Western Sedimentary Basin**



**Figure 2 Location of Cadotte Area within the Peace River deposits**



**Figure 3 Location of Target Area within Cadotte Leases**



**Figure 4 Stratigraphic Column including Target Zones in Cadotte Area**

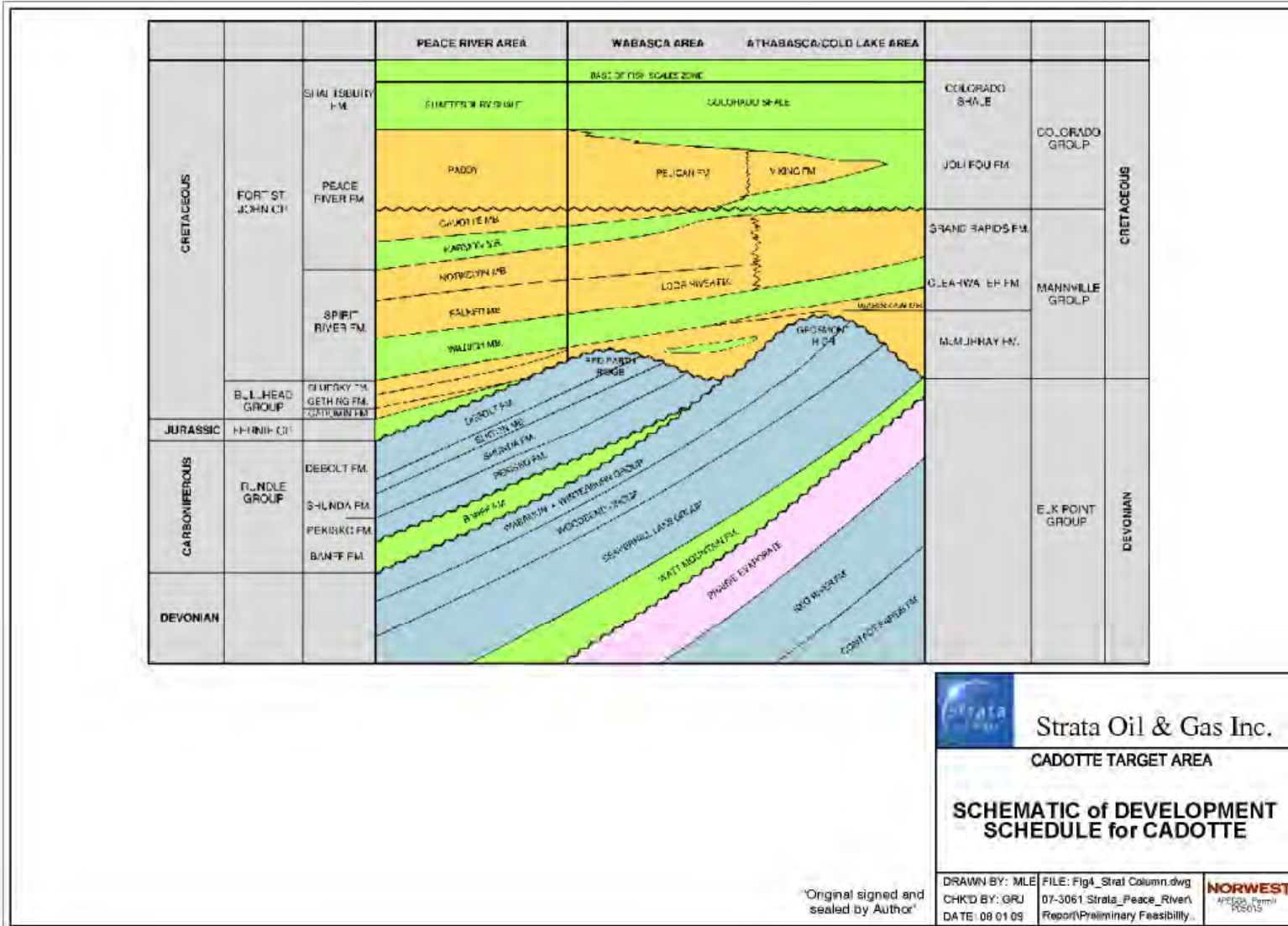
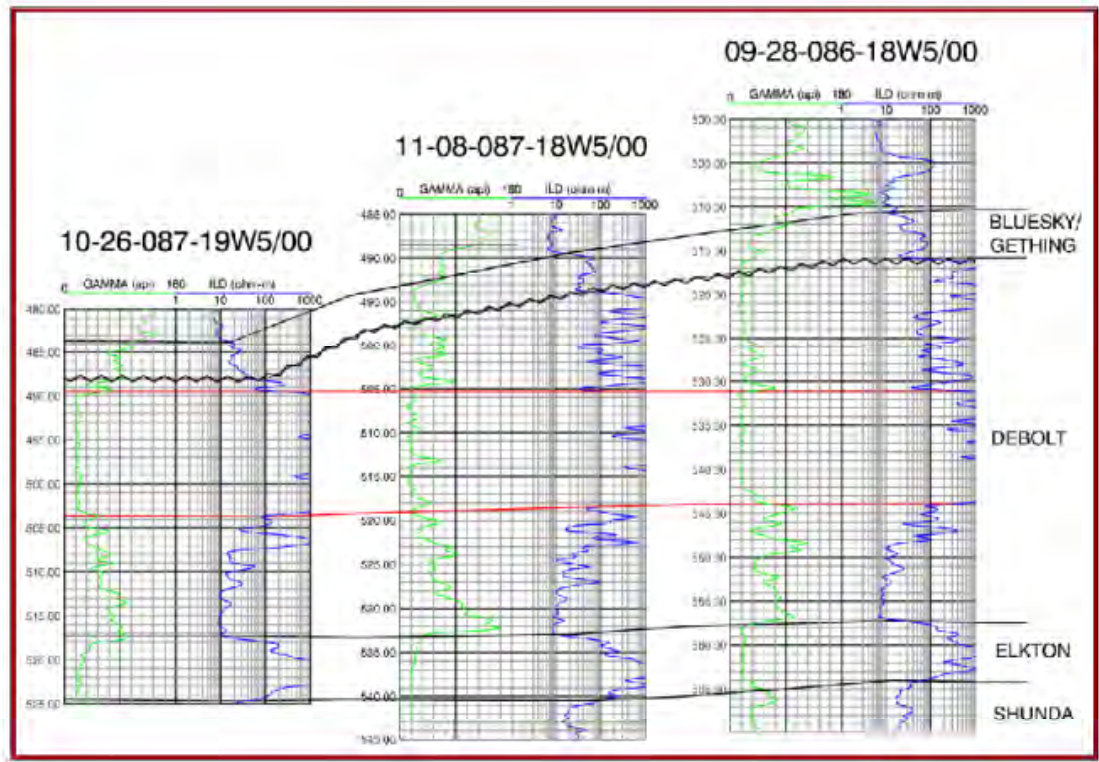


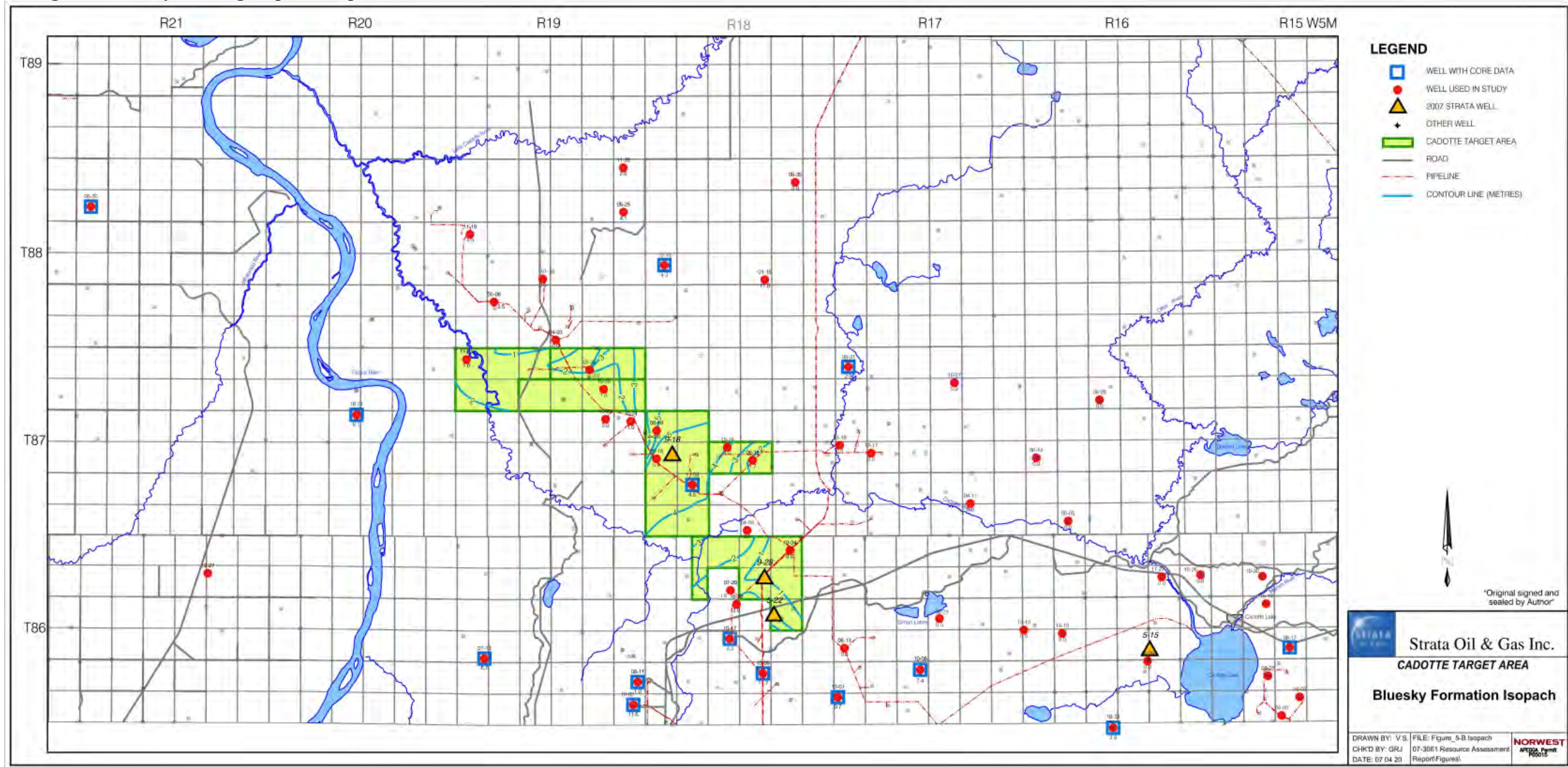
Figure 5 Cross-Section Illustrating Ore Zones



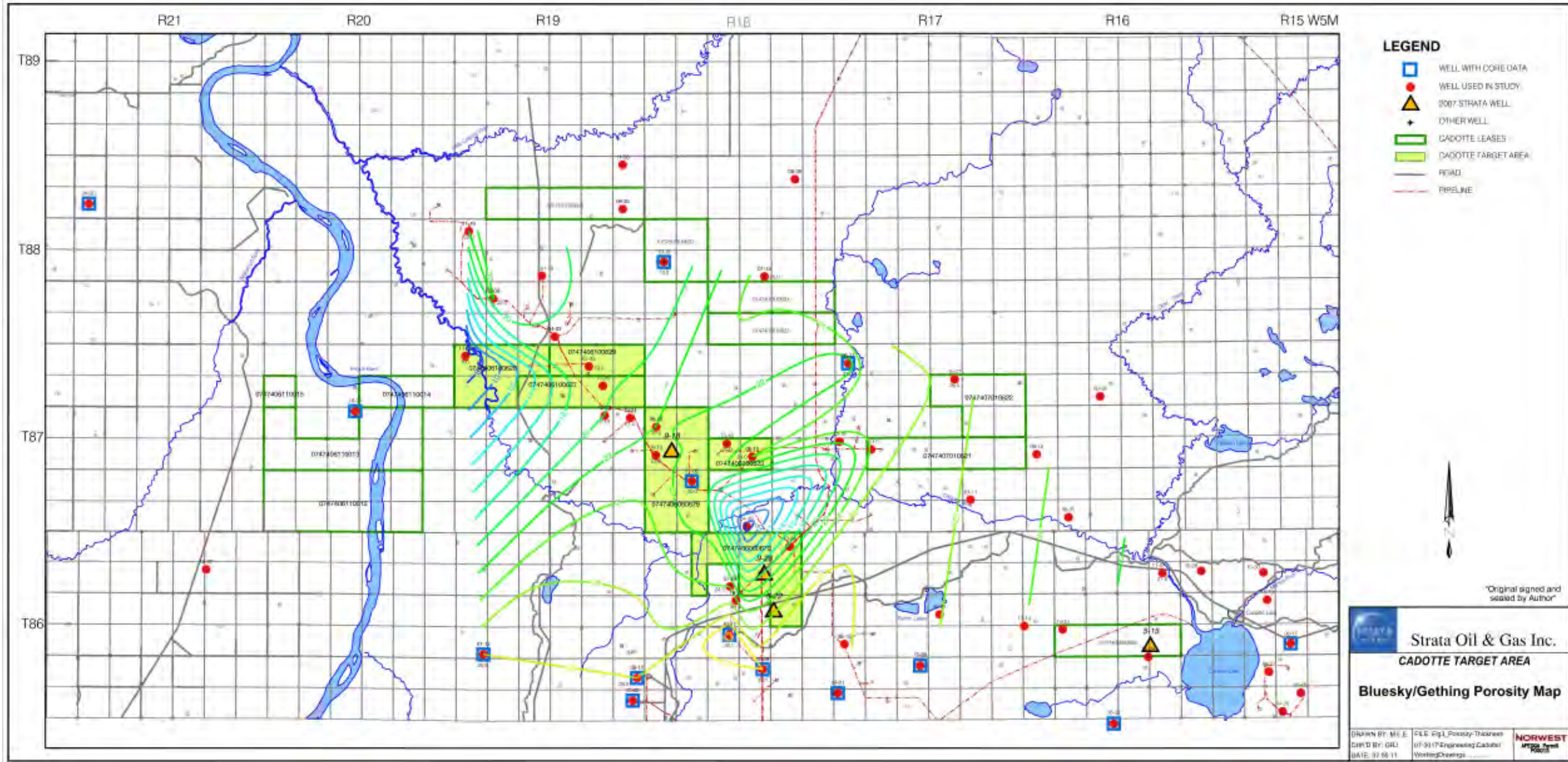
 <p>Strata Oil &amp; Gas Inc.</p>	
<p>CADOTTE TARGET AREA</p>	
<p><b>CROSS SECTION ILLUSTRATING ORE ZONE</b></p>	
<p>DRAWN BY: MLE                  CHECKED BY: GRJ                  DATE: 03/01/09</p>	<p>FILE: Fig5_Cross Section.dwg                  07-3061 Strata_Peace_River                  Report/Preliminary Feasibility</p>
 <p>NORWEST ENERGY SYSTEMS</p>	

Original signed and sealed by Author

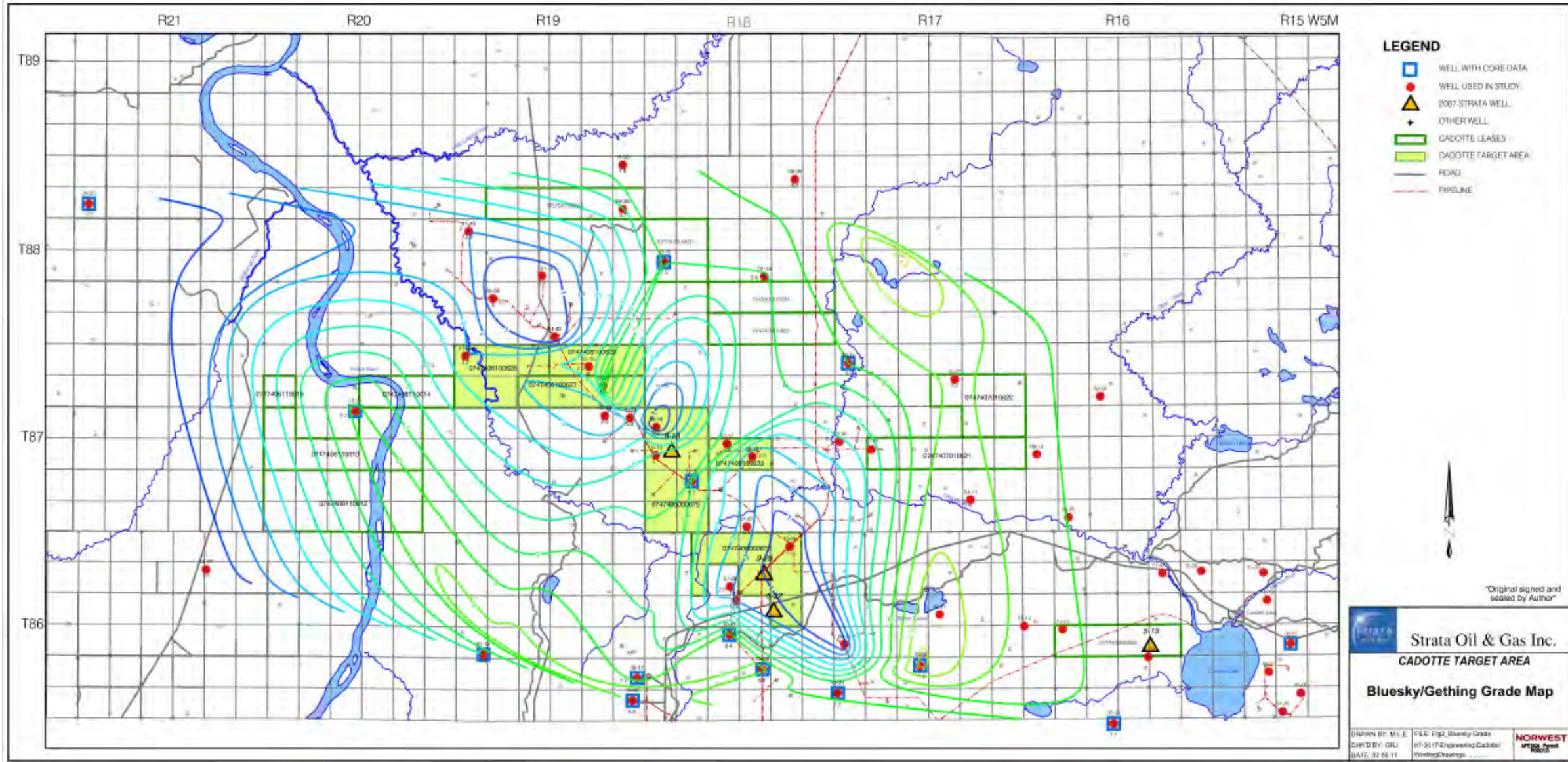
**Figure 6 Bluesky/Gething Isopach Map**



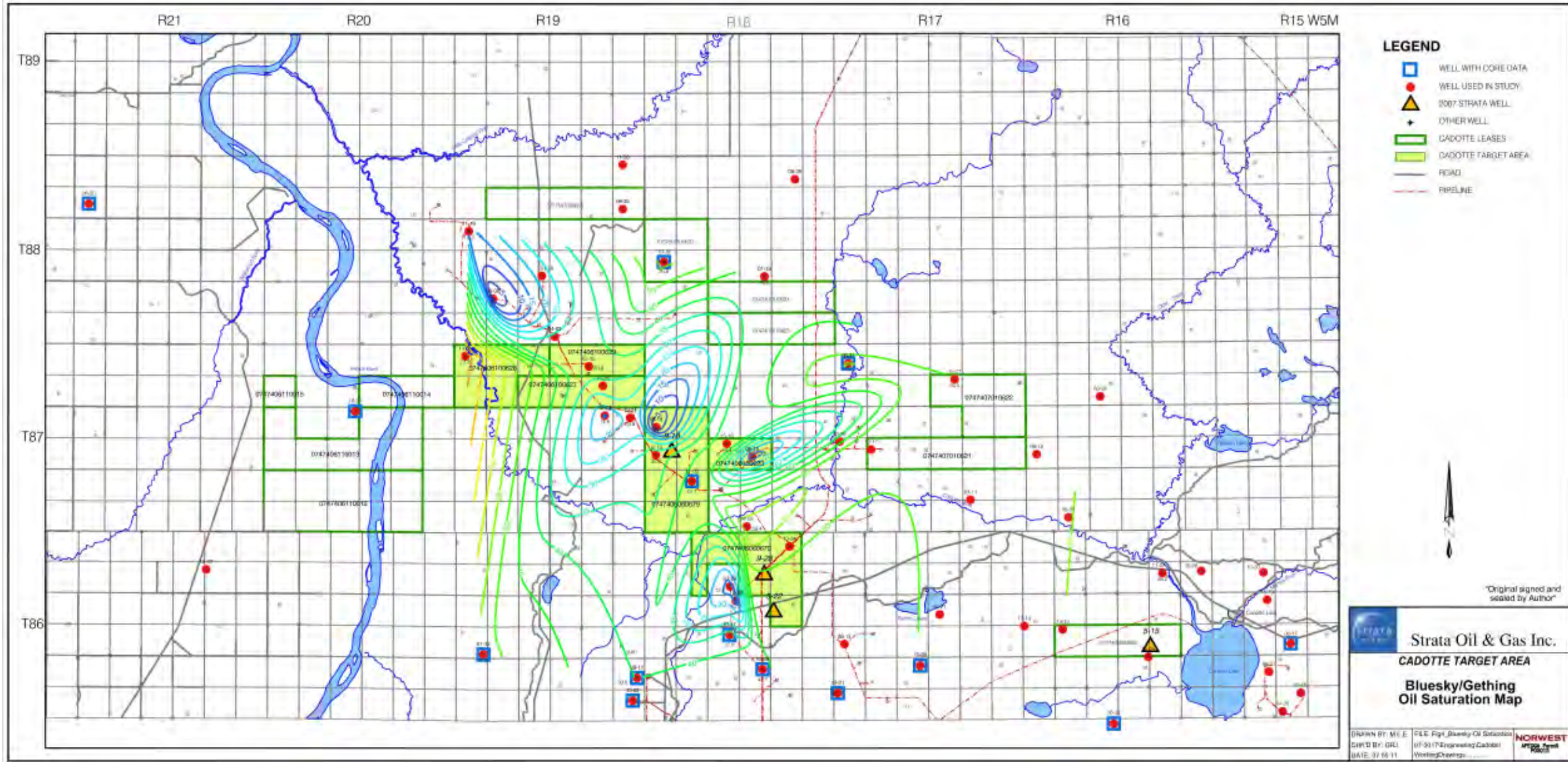
**Figure 7 Bluesky/Gething Porosity Map**



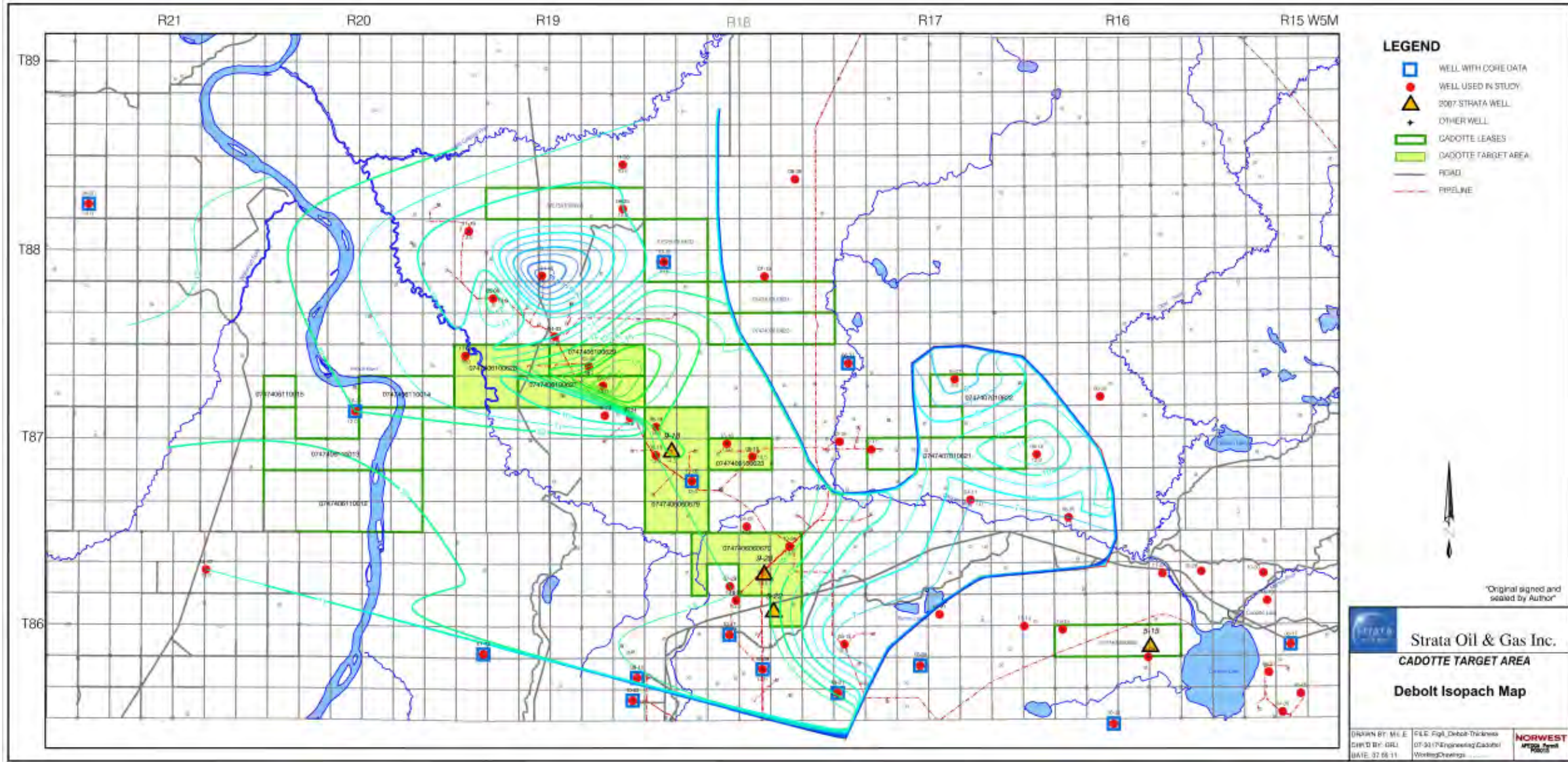
**Figure 8 Bluesky/Gething Grade Map**



**Figure 9 Bluesky/Gething Oil Saturation Map**



**Figure 10 Debolt Isopach Map**



**Figure 11 Debolt Porosity Map**

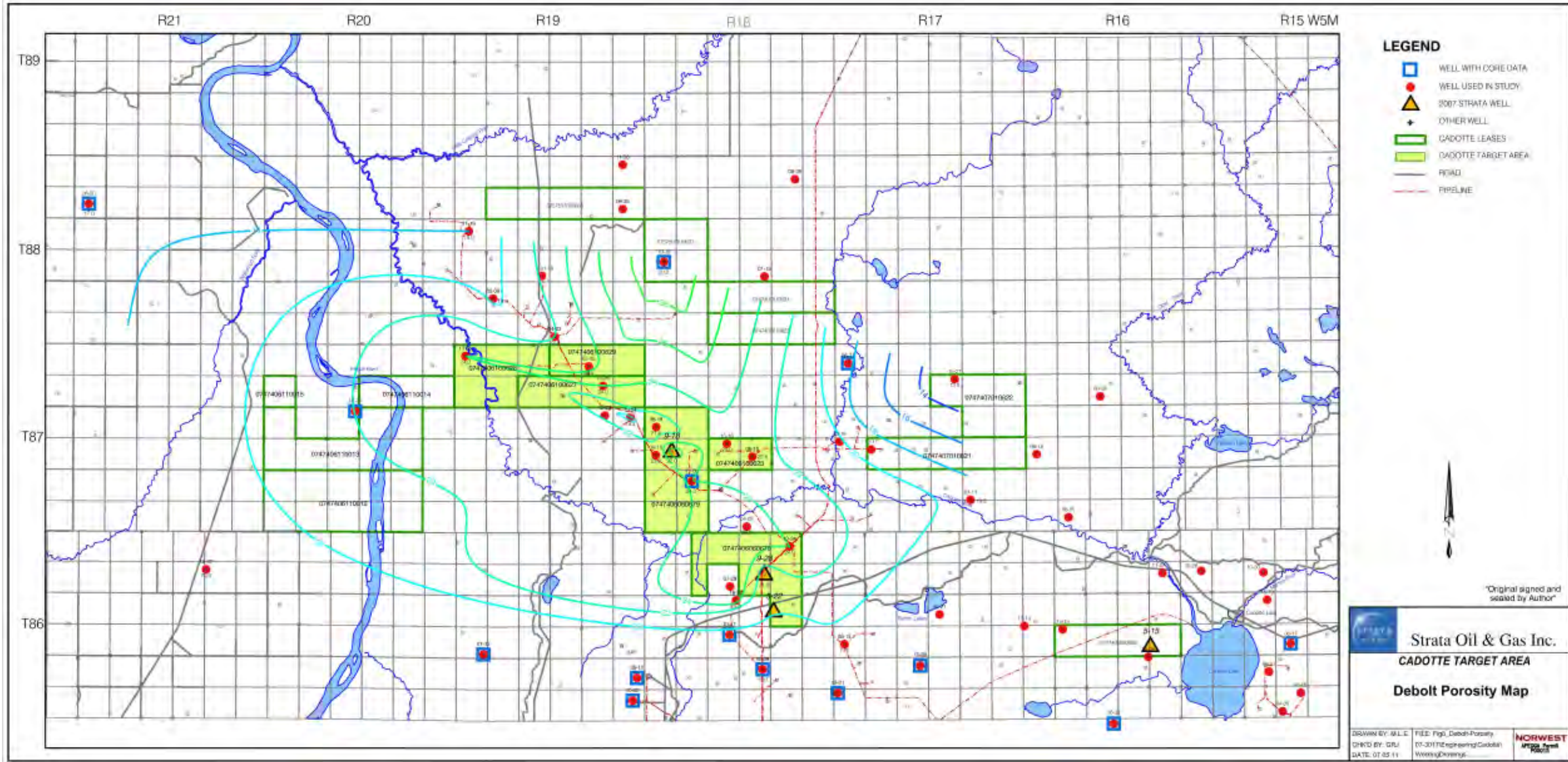
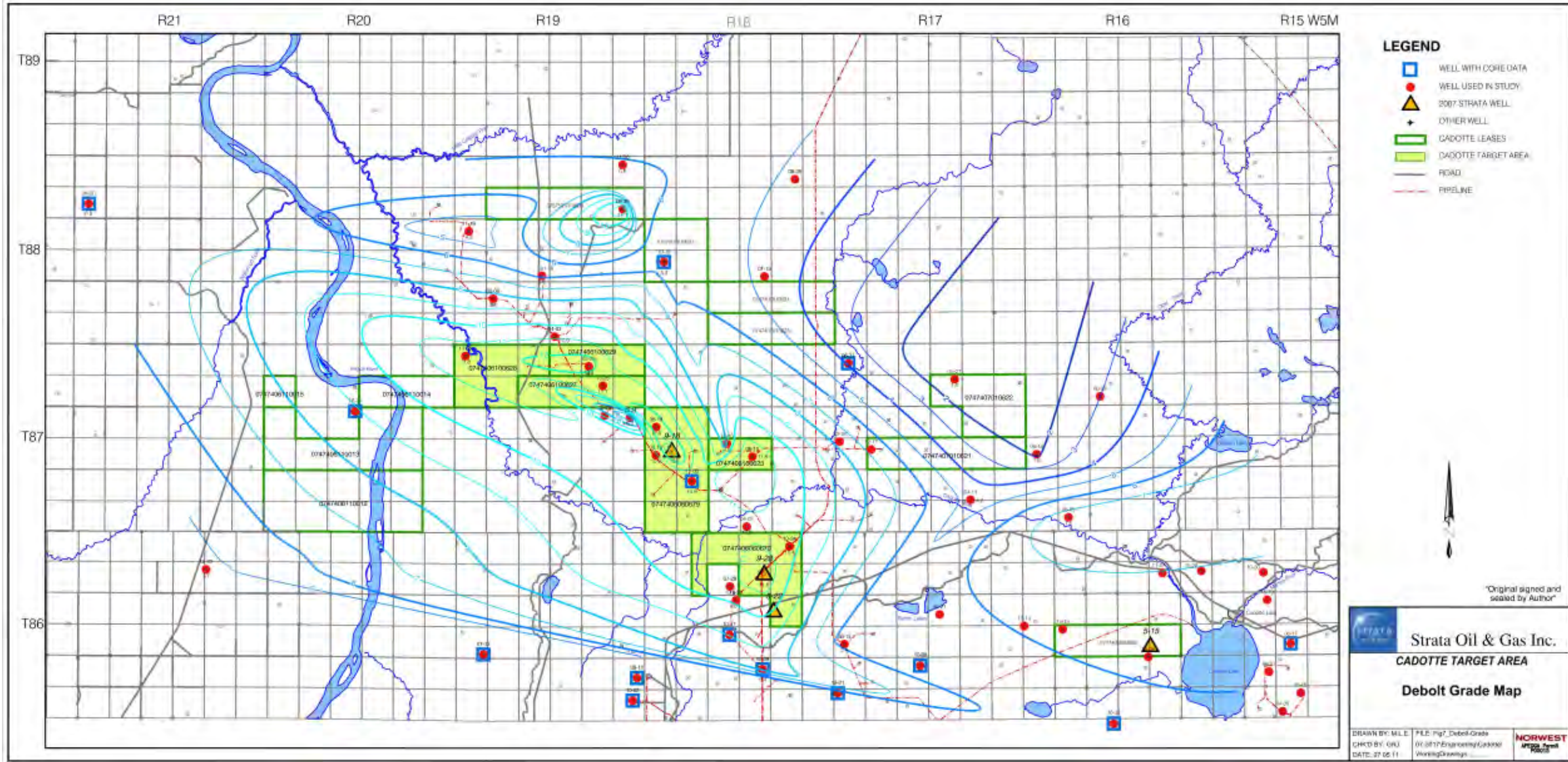


Figure 12 Debolt Grade Map



**Figure 13 Debolt Oil Saturation Map**

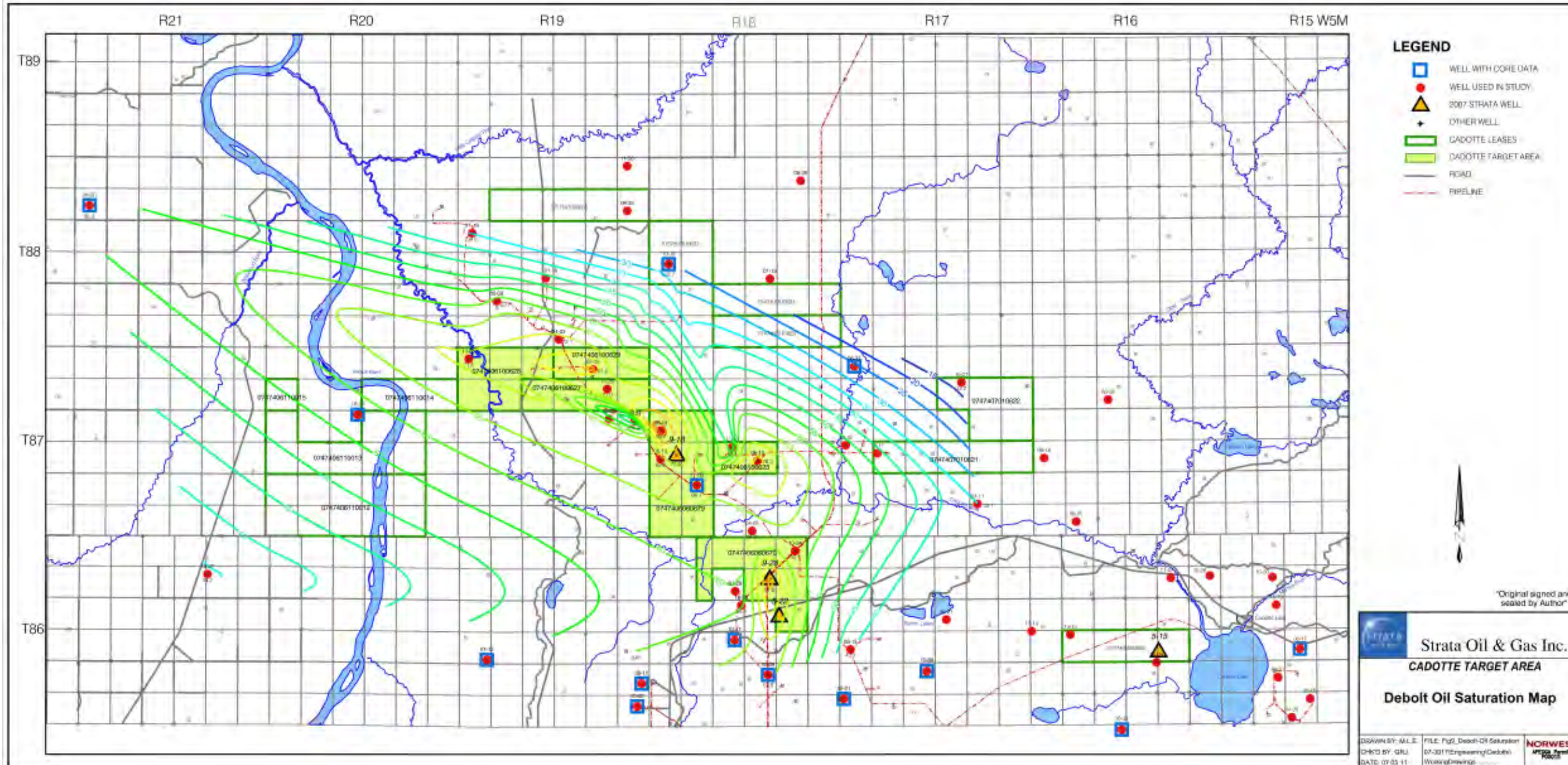
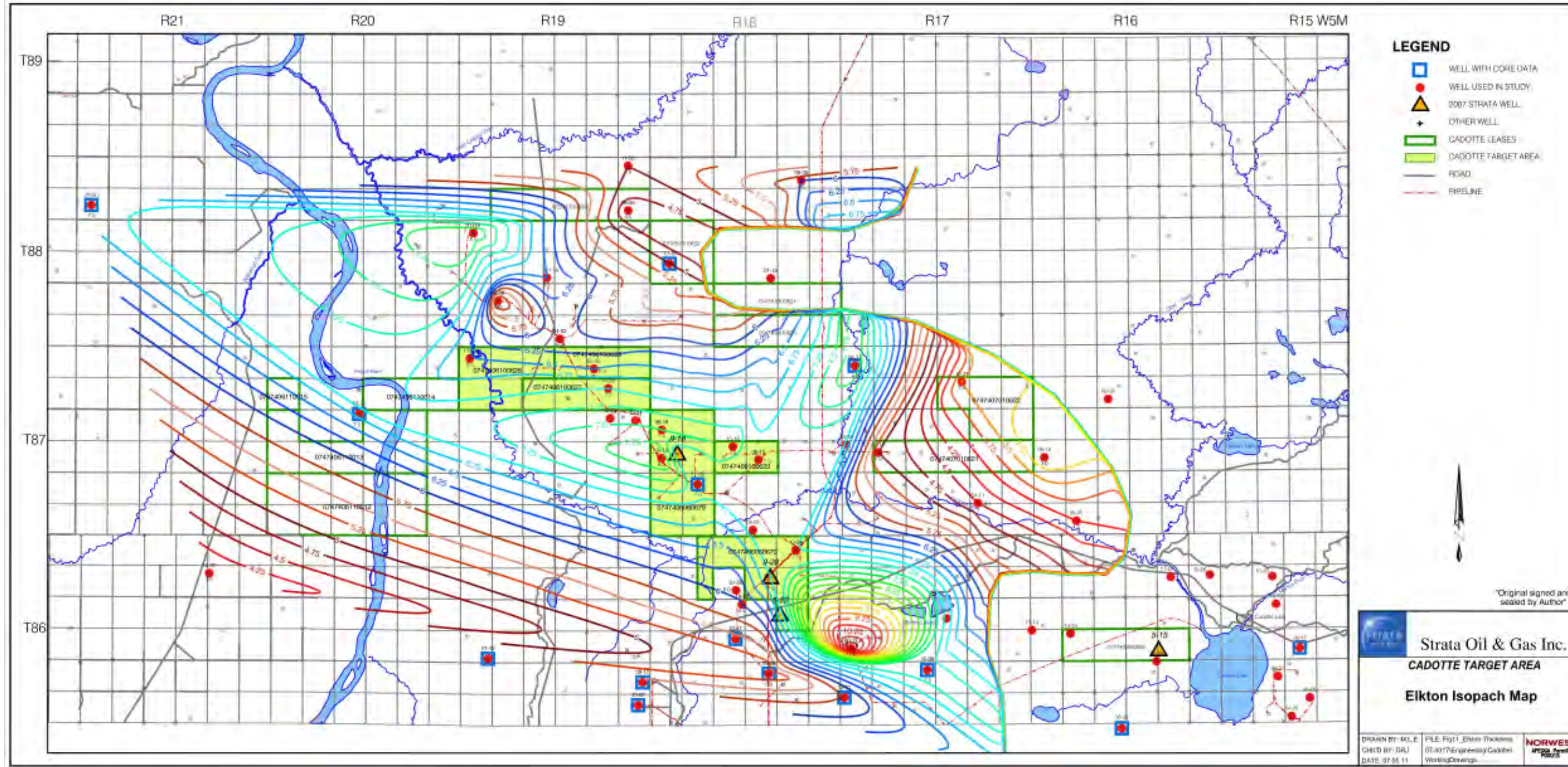
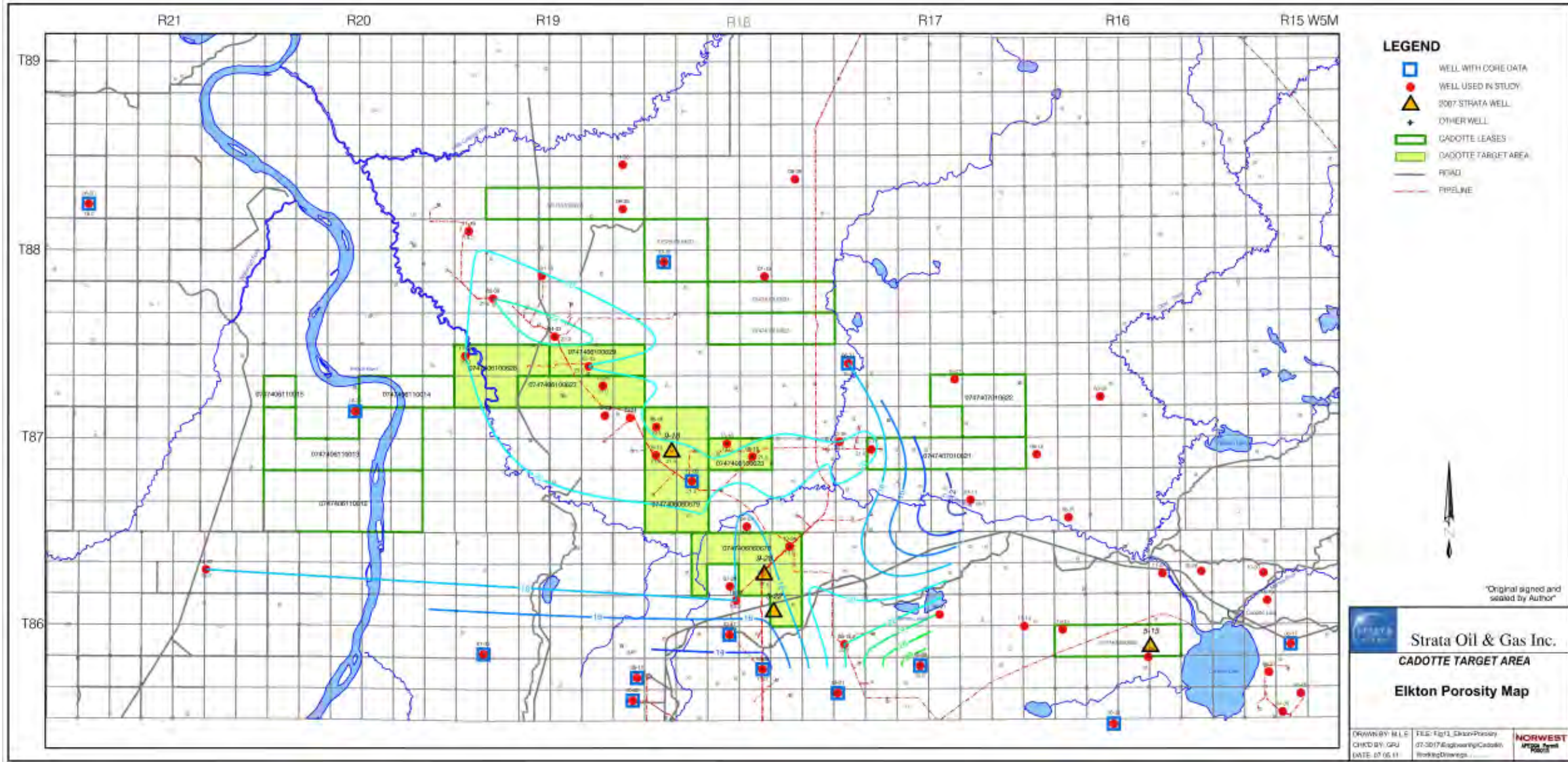


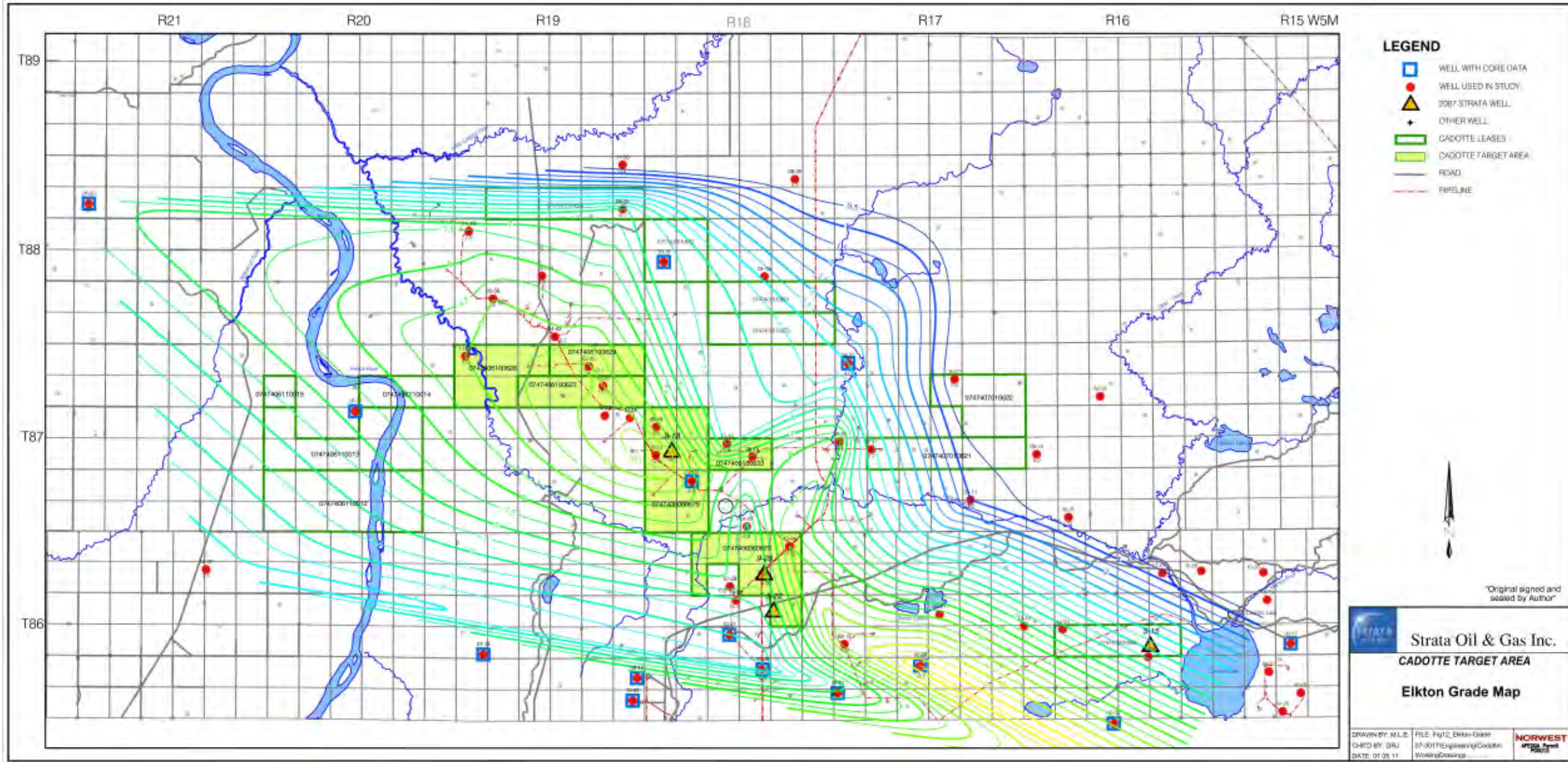
Figure 14 Elkton Isopach Map



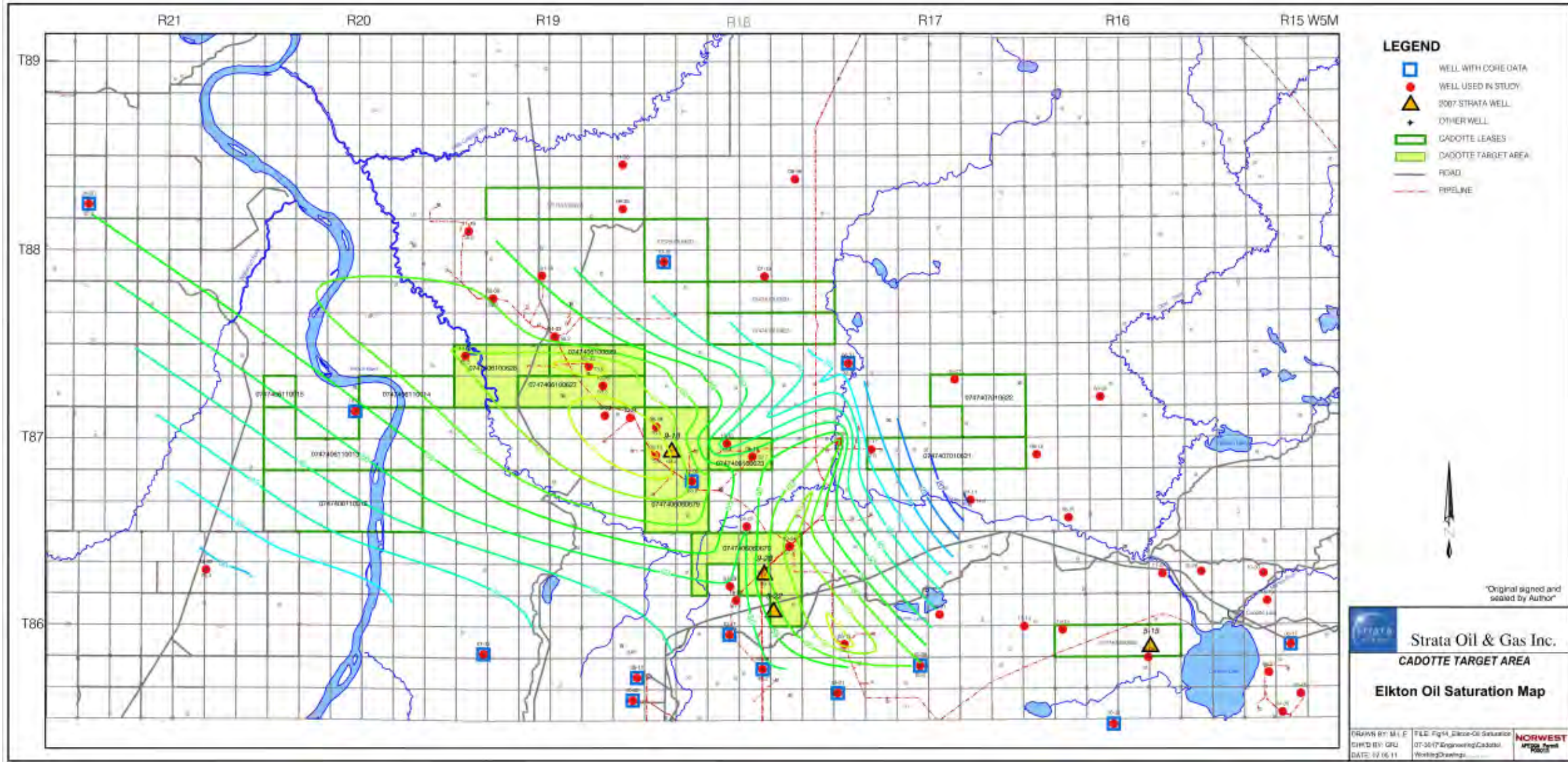
**Figure 15 Elkton Porosity Map**



**Figure 16 Elkton Grade Map**



**Figure 17 Oil Saturation Map**



- LEGEND**
- WELL WITH CORE DATA
  - WELL USED IN STUDY
  - ▲ 3007 STRATA WELL
  - + OTHER WELL
  - ▭ CADOTTE LEASES
  - ▭ CADOTTE TARGET AREA
  - ROAD
  - PIPELINE

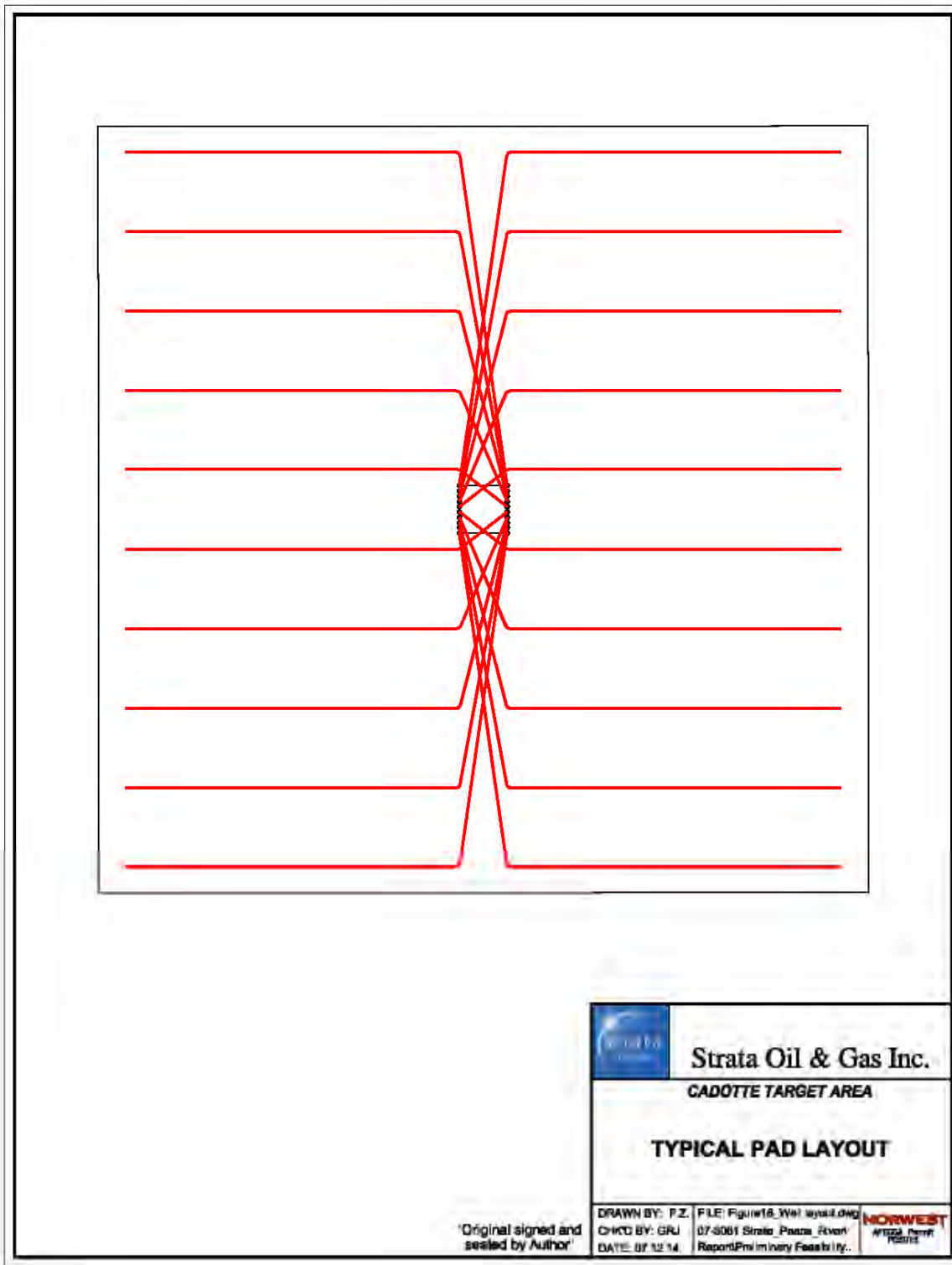
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**Strata Oil & Gas Inc.**  
**CADOTTE TARGET AREA**  
**Elkton Oil Saturation Map**

DRAWN BY: M.L.F.    FILE: Fig14\_Elkton-Oil Saturation  
CHECKED BY: CRJ    07-30(7)Engineering/Control  
DATE: 07/06/11    Working Drawings



**Figure 18 Typical Pad Layout**



	<b>Strata Oil &amp; Gas Inc.</b>	
<b>CADOTTE TARGET AREA</b>		
<b>TYPICAL PAD LAYOUT</b>		
<small>DRAWN BY: P.Z.</small>	<small>FILE: Figure18_Well layout.dwg</small>	
<small>CHECK BY: GRJ</small>	<small>07-5081 Strata_Padma_River</small>	
<small>DATE: 07-12-14</small>	<small>Report/Preliminary Feasibility..</small>	

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**Figure 19 Pad Development Sequence**

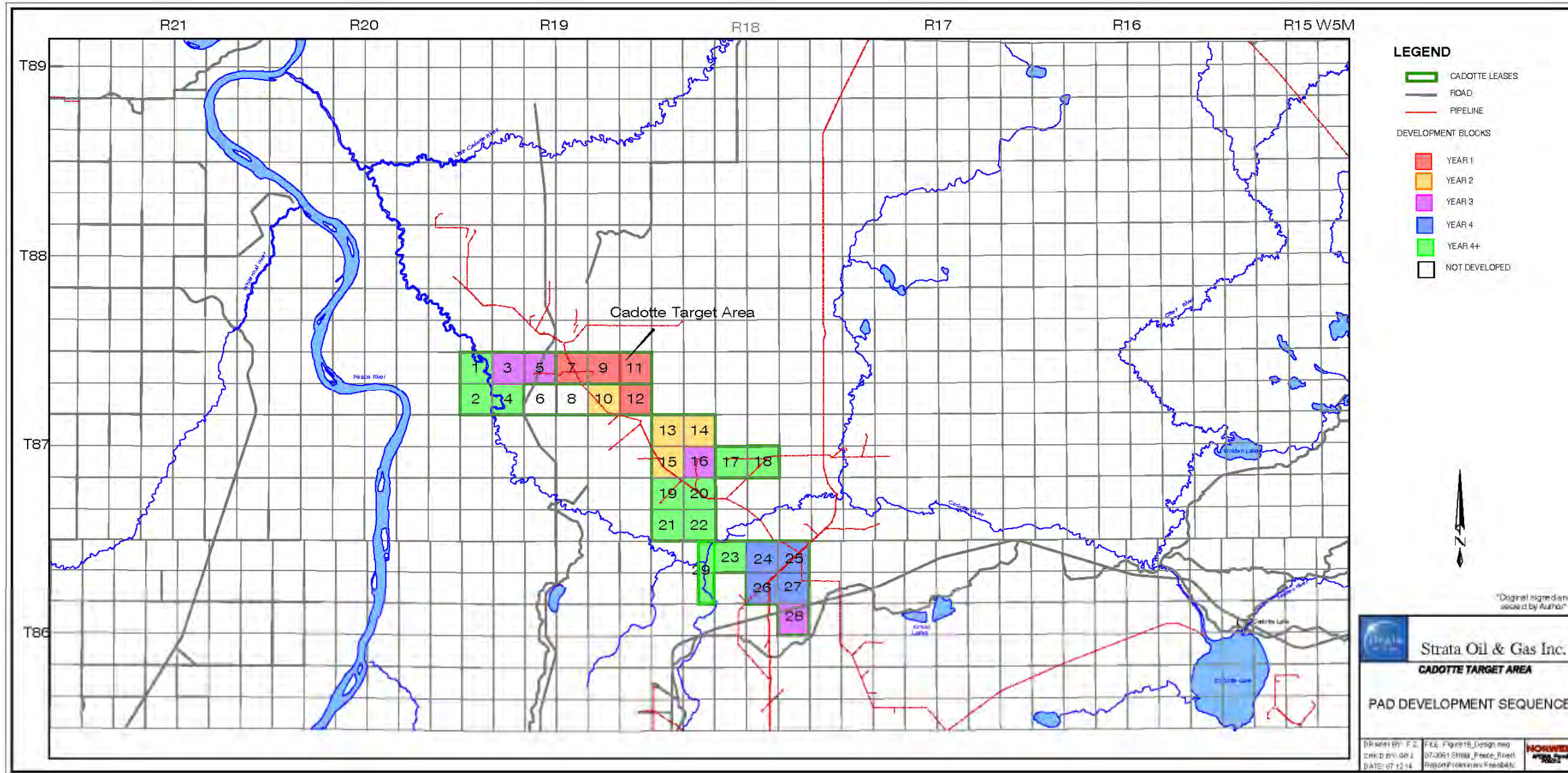


Figure 20 Proposed Development Schedule for HCS Development at Cadotte over the Initial 20 Years

Proposed Development Schedule (Thousands of Barrels)																				
Block Number	Years																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1														3.50	3.50	3.50	3.50	3.50	2.70	2.70
2														3.50	3.50	3.50	3.50	3.50	3.50	2.70
3			3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
4													3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70
5			3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
7	3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
9	3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
10		3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
11	3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
12	3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
13		3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
14		3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
15		3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
16			3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.78
17																		3.50	3.50	3.50
18																				3.50
19								3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78
20								3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78
21										3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78
22											3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	1.78
23												3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	1.78
24				3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78
25				3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78
26				3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78
27				3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.78
28			3.50	3.50	3.50	3.50	3.50	2.70	2.70	2.70	2.70	2.70	1.78	1.78	1.78	1.78	1.78	1.78	1.44	0.00
29																				
30																				
<b>DAILY PRODUCTION</b> (Thousands)	14.00	28.00	42.00	56.00	56.00	52.80	53.10	53.40	50.20	53.70	53.52	52.54	51.56	51.38	54.08	53.28	51.56	53.34	52.20	52.54
<b>ANNUAL PRODUCTION</b> (Thousands)	5,110	10,220	15,330	20,440	20,440	19,272	19,382	19,491	18,323	19,601	19,535	19,177	18,819	18,754	19,739	19,447	18,819	19,469	19,051	19,177
<b>CUMULATIVE</b> (Thousands)	5,110	15,330	30,660	51,100	71,540	90,812	110,194	129,685	148,008	187,608	187,143	208,320	226,139	243,893	263,832	283,078	301,899	321,368	340,419	358,596

Strata Oil & Gas Inc.  
**CADOTTE TARGET AREA**  
 PROPOSED DEVELOPMENT  
 SCHEDULE for HCS  
 DEVELOPMENT at CADOTTE OVER  
 the INITIAL 20 YEARS

Drawn by: FZ  
 Checked by: GH  
 Date: 08/01/04

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