To the Graduate Council:

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POTENTIAL SUBSURFACE STRUCTURES AND HYDROCARBON RESERVOIRS IN THE SOUTHERN APPALACHIAN BASIN BENEATH THE CUMBERLAND PLATEAU AND EASTERN HIGHLAND RIM, TENNESSEE, KENTUCKY, AND SOUTHWESTERN VIRGINIA

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Jonathan Charles Evenick
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Dedication

This dissertation is dedicated to my late grandfather Frank Joaquin Abreu.

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Abstract

Oil and gas exploration in the southern Appalachian basin is typically concentrated around areas with historically proven reserves and very limited prospecting is conducted elsewhere in the region. To remove possible correlation problems and promote regional prospecting a standardized picking methodology was established in geophysical logs for the Middle Ordovician carbonate lithofacies (Nashville-Stones River Groups). This methodology was then used to correlate the units across Cumberland Plateau of Tennessee, Kentucky, and Virginia, from the Nashville-Jessamine domes to the Clinchport-Whiteoak Mountain thrust in the Valley and Ridge. The same lithofacies may extend in Ohio, Pennsylvania, and New York, suggesting a standardized nomenclature be established. This methodology is key to resolving regional and local structures, and structural trends in this area.

To identify deformation probably associated with blind structural trends and producing fields, regional structure contour, trend surface residual anomaly, and isopach maps were constructed using data from 7,639 geophysical logs, 1,960 drill cores, and 433 surface contacts. These maps correlate well with known producing fields and identified a possible décollement in the Chattanooga Shale along with the southern extension of the Rome trough in Tennessee. A geologic model for hydrocarbon emplacement was constructed to accommodate all the available structural and petroleum information. The model illustrates a proposed décollement soled in the Chattanooga Shale that forms linear potential Mississippian-age traps and a previously unidentified continuation of the Rome trough and Sequatchie Valley fault beneath the western section of the Wartburg basin in Tennessee.

The Flynn Creek impact structure was also investigated because it has a good hydrocarbon potential and may have economical reserves. The impact occurred in a carbonate-dominated target during the Late Devonian. Four persistent, concentric faults indicate the Flynn Creek impact structure is not asymmetric and has a diameter of 4.7 km (2.9 mi), which was calculated from the outermost partially developed fault system, or 4 km (2.5 mi) using the third fault system, which is fully developed. Both estimates are larger than the previously estimated 3.8 km.

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1 Introduction

1.1 Statement of Problem and Previous Work

The Appalachian basin has been studied and explored for hydrocarbons for over 175 years (e.g., De Witt, 1997; Brice, 2000). An array of surface structures (Fig. 1) have been identified and mapped in the southern Appalachian Plateau (Stearns, 1954; Wilson and Stearns, 1958; Gwinn, 1964; Hardeman, 1966a, 1966b; Harris and Milici, 1977; Kentucky State Geological Survey, 1992; Virginia Division of Mineral Resources, 1993; Shumaker, 1996), but few subsurface studies concentrating on potential structural traps in the southern Appalachian basin have been conducted except for the region surrounding the Rome trough (e.g., Weaver and McGuire, 1977; Ammerman and Keller, 1979; Cable and Beardsley, 1984; Dever, 1986; Thomas, 1991; Gao et al., 2000) and the Pine Mountain thrust (e.g., Wentworth, 1921; Rich, 1934; Miller and Fuller, 1954; Mitra, 1988). Recent work has described tectonic stylolites in the Monteagle Limestone west of the Sequatchie anticline (Railsback and Andrews, 1995), which may indicate a lower detachment fault may be present or that deformation associated with Sequatchie anticline extends further west than previously identified. In the northern Plateau of Pennsylvania and New York, tectonic stylolites, layer-parallel shortening, and other pressure solution structures are commonly found above blind décollements ramping upward from the Silurian salt in the central Appalachians (Engelder and Engelder, 1977; Geiser and Engelder, 1983).

Previous studies of pre-Chattanooga stratigraphy have been made throughout the region, including Sequatchie anticline (Milici, 1969), the Nashville dome (Wilson, 1949,

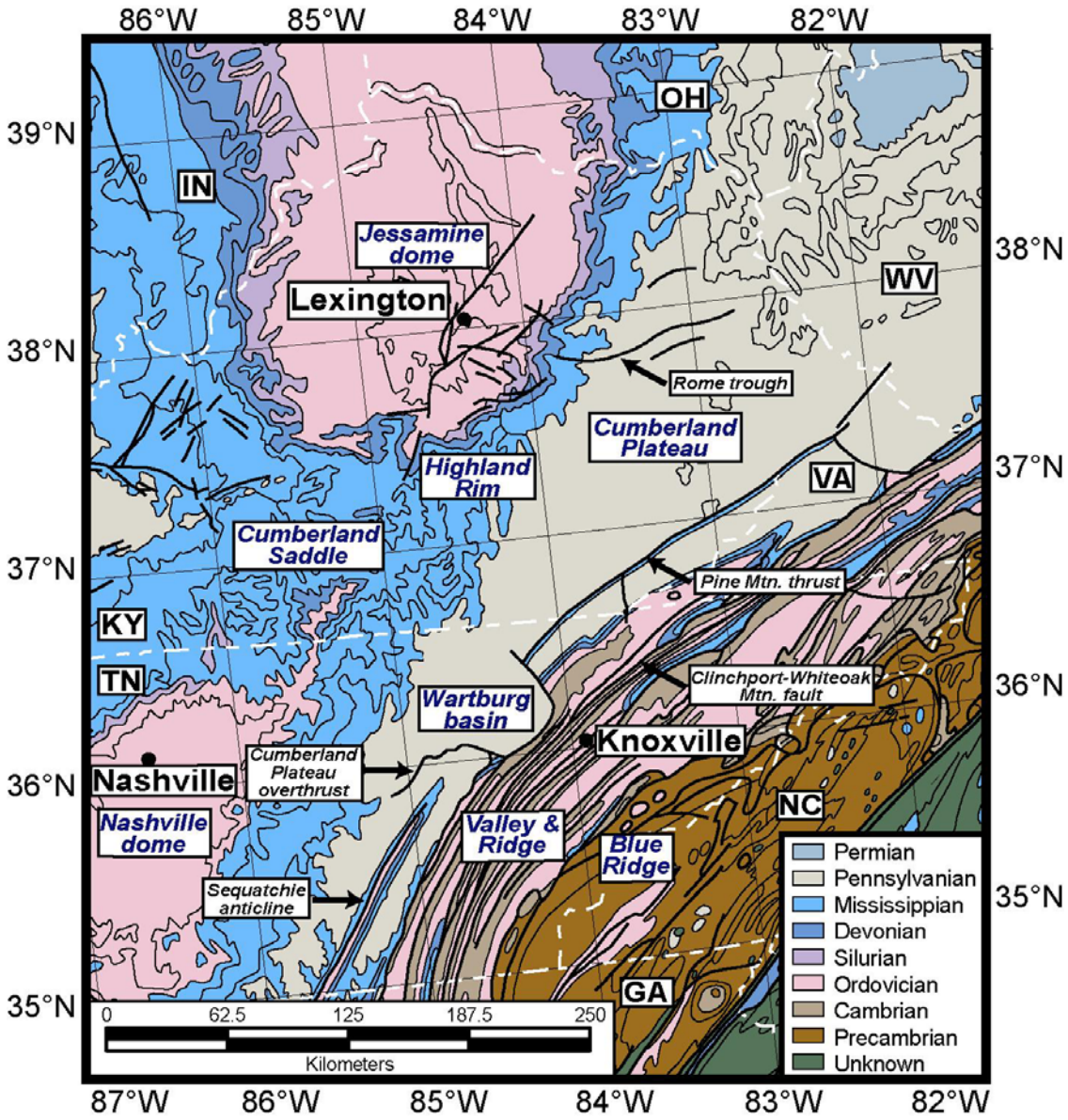


Figure 1. Generalized geologic map of the Cumberland Plateau. Study area includes the Cumberland Plateau, the eastern Highland Rim and the Valley and Ridge west of the Whiteoak Mountain fault. (Adapted from Schruben et al., 1998).

1962; Cressman and Peterson, 1986; Stearns and Reesman, 1986), and the southern Valley and Ridge (Hatcher et al., 1992). This study has incorporated data from these studies wherever possible. Calibrated geophysical logs help reveal subsurface facies changes in pre-Chattanooga units from the eastern Highland Rim to the western Valley and Ridge. These logs, along with exposed sections, aided in stratigraphic correlation (Fig. 2), which are crucial to future basin reconstruction, subsurface structural studies, and hydrocarbon research.

The Cumberland Plateau and eastern Highland Rim are characterized by Alleghanian décollements and map-scale folds (i.e., the Sequatchie anticline). The Cumberland Plateau overthrust and the Sequatchie and Pine Mountain thrusts are the largest exposed faults in the Plateau of Tennessee, Kentucky, and southwestern Virginia (Wentworth, 1921; Rich, 1934; Stearns, 1954; Wilson and Stearns, 1958; Harris and Milici, 1977; Mitra, 1988). In the Valley and Ridge, brittle deformation associated with thrust faults increases towards the fault surface (Harris and Milici, 1977; Mitra, 2002) and probably is similar smaller-scale deformation underneath the Plateau (Wojtal and Mitra, 1988). Faults typically are bedding-plane faults soled within shale or other weak lithologic units and ramp up-section to higher décollements, crosscutting more competent carbonate and sandstone units (Gwinn, 1964; Harris and Milici, 1977; Harris and Bayer, 1979; Mitra, 2002). Faults are difficult to identify and map beneath the Plateau because of small horizontal and vertical displacements and the localized nature of associated deformation.

Well data from the southern Cumberland Plateau indicate regions with positive residual anomaly trends or subsurface regions that higher than expected (possibly

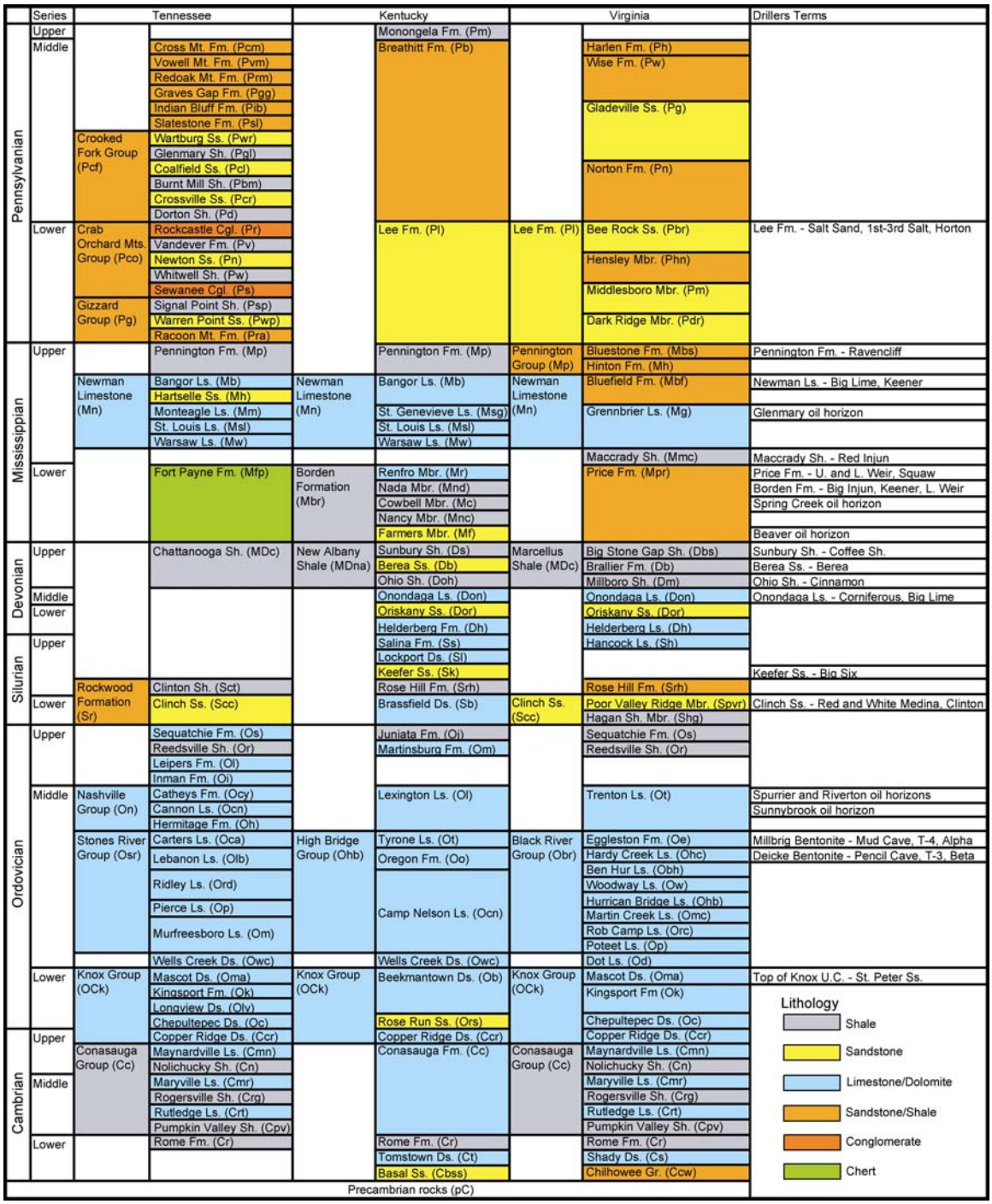


Figure 2. Stratigraphic chart for the Cumberland Plateau of Tennessee, Kentucky, and Virginia with common drillers' terminology. The Millbrig and Deicke bentonites are located in the upper Carters Limestone (Stones River Group). (After Patchen et al., 1985).

correlating with faults), minor faults in geophysical logs, and subsurface temperature spikes (Fig. 3) are correlated to minor décollement structures terminating beneath the Cumberland-Allegheny Plateau and possibly the eastern Highland Rim. Changing deformation styles associated with décollements can change the geophysical signature of a unit, along with increasing the permeability and porosity of a unit, making it a suitable location for hydrocarbon accumulation (Harris and Milici, 1977). Mapping these buried structures is crucial for resolving structural and stratigraphy, and attracting additional petroleum exploration of Ordovician plays. Subsurface décollements are difficult to map and delineate because the vertical resolution of seismic data is too coarse. Basic geophysical well data and well log maps also are inadequate to use for mapping subsurface décollements because the associated deformation changes vertically above the structures (Harris and Milici, 1977) and because regional dips mask subtle elevation deviations, regional structure contour maps cannot straightforwardly indicate the presence of underlying structures or identify faults not previously recognized in the well data.

The Cumberland Plateau has been explored for many years using isopach and structure contour maps (i.e., Wilson, 1949; Freeman, 1953; Manning and Statler, 1975; Moore and Horton, 1999), and seismic reflection data, but this methodology has failed to produce an efficient technique for identifying medium to large potential traps and plays.

Historically, Tennessee has had a very small amount of oil and gas production (Zurawski, 2004; Fig. 4), which may result from inefficient prospecting or the potential lack of large plays. Most oil and gas fields in Kentucky and Tennessee are in Mississippian limestone

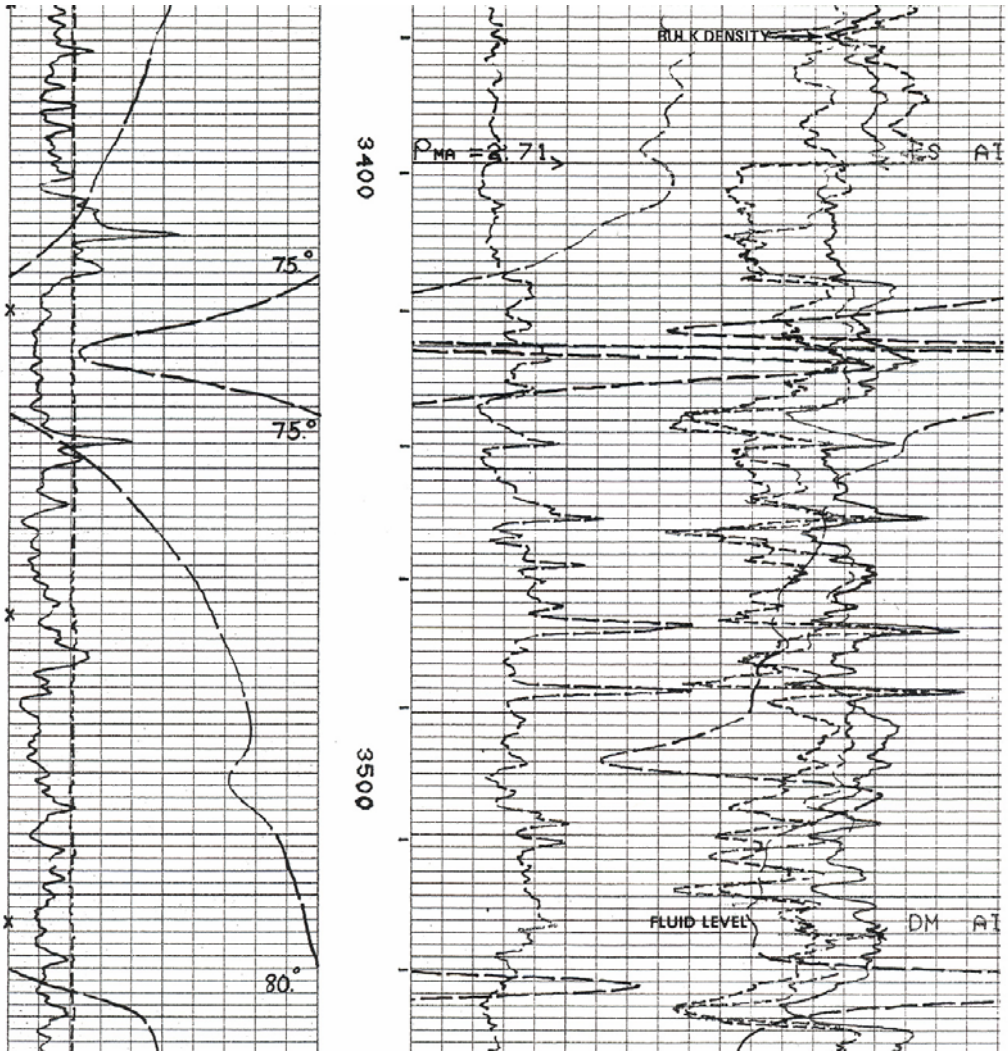


Figure 3. Typical temperature spike (long-dashed line in the left track) caused by the expansion of gas flowing into a borehole associated with a small fault. This is part of the geophysical log for a well (API 41-151-21024) from Scott County, Tennessee, and the amount of fault displacement probably does not exceed a few meters. Vertical scale divisions are 2 feet. Temperature scale (horizontal) is in degrees Fahrenheit.

Year	Permits	Oil (Barrels)	Value ($)	Gas (Mcf)	Value ($)
1866-1969		1,104,436	13,708,493		
1908-1969				51,311,756	335,000
1968	13				
1969	27				
1970	161	318,613		63,959	13,000
1971	179	400,508		90,305	20,000
1972	137	198,234		24,636	8,000
1973	128	204,827		31,497	6,000
1974	250	768,674	7,256,283	16,628	6,000
1975	254	682,457	7,855,080	26,651	12,000
1976	180	598,427	8,210,418	46,964	24,000
1977	318	819,747	11,271,521	262,460	195,000
1978	397	593,130	7,532,751	467,762	767,000
1979	619	613,671	14,494,909	941,049	1,336,290
1980	927	742,926	25,437,786	1,248,094	2,196,645
1981	1,228	917,524	32,636,329	1,718,915	4,383,233
1982	1,069	1,157,897	35,813,754	3,026,863	9,080,589
1983	822	1,104,960	31,734,451	4,549,097	11,372,743
1984	670	967,719	28,063,851	5,022,717	17,579,510
1985	336	796,089	20,698,314	4,686,381	11,622,225
1986	248	644,497	9,667,455	3,464,266	6,166,393
1987	256	614,581	9,734,963	2,707,204	3,546,437
1988	93	600,466	8,400,519	2,102,074	3,026,987
1989	105	531,854	8,557,531	1,929,645	2,682,207
1990	76	508,292	10,023,518	2,078,415	3,429,385
1991	95	485,317	9,376,324	1,854,118	3,189,083
1992	85	500,724	9,108,170	1,777,736	3,128,147
1993	122	418,532	6,780,218	1,719,507	4,556,694
1994	119	417,083	5,826,650	1,991,493	4,321,540
1995	93	384,244	5,802,084	1,822,286	2,879,212
1996	86	380,750	7,340,860	1,692,234	4,332,119
1997	124	367,267	6,339,029	1,510,010	3,850,526
1998	141	305,597	3,386,015	1,416,109	3,058,795
1999	138	347,993	5,543,528	1,230,246	2,743,449
2000	205	346,332	9,101,592	1,154,197	4,709,124
2001	167	386,428	8,485,967	2,002,812	7,256,189
2002	140	316,234	6,922,362	2,051,213	6,990,641
2003	281	359,924	9,559,581	1,802,531	9,411,962
Totals	10,289	19,905,954	384,670,306	107,841,830	138,236,125

Figure 4. Historical oil and gas production in Tennessee from 1866-2003. Values calculated by using price of hydrocarbons during production year. (From Zurawski, 2004).

reservoirs (Butts, 1919; Born and Burwell, 1939; Tennessee Division of Geology, 1993) sourced by the Devonian-Mississippian Chattanooga Shale (e.g., Burruss and Ryder, 2003). Limited drilling to targets below the Chattanooga Shale has occurred because "conventional wisdom" states that deeper, organic-rich shale source beds do not exist; therefore, the Ordovician carbonate rocks should not contain commercial hydrocarbons. The Rose Hill field in the Powell Valley anticline, in southwest Virginia, however, has been producing from Middle Ordovician carbonates since 1943 (Miller and Fuller, 1954), and the developed Swan Creek field in northeast Tennessee is producing gas from the Upper Knox Group and oil from the Middle Ordovician Stones River and Nashville Groups (Hatcher et al., 2001) suggesting Ordovician hydrocarbon reservoirs can have sources in carbonate rocks, as shown in other Ordovician-age units in the Appalachian basin (Epstein et al., 1977; Obermajer et al., 1999). The largest gas and second best producing oil wells in Tennessee produce from the Lower and Middle Ordovician sections (Stones River Group–oil and gas; Knox Group–gas) in the Swan Creek field, Hancock County (Zurawski, 2004; Fig. 5). The possibility thus exists for substantial Knox and Middle Ordovician stratigraphic and structural plays beneath the Cumberland Plateau.

Because there are few wells drilled through the Silurian in Tennessee and Virginia, the probable stratigraphic and structural traps beneath the Cumberland-Allegheny Plateau and the eastern Highland Rim have not been thoroughly investigated. Kentucky, on the other hand, has a relatively large number of wells penetrating Cambrian rocks (Nuttall, 2000). Previous research has mainly focused on determining depth to basement, orientation of the Rome trough (Freeman, 1953; Weaver and McGuire, 1977;

County	Gas Production (Mcf)
Hancock	461,953
Claiborne	322,070
Morgan	290,250
Campbell	272,501
Scott	215,137
Anderson	199,966
Fentress	40,654
Total	**1,802,531**

Well Name	County	2003 Production	Cumulative Production
Warren Reed #2	Hancock	91,949	490,376 (4/01)
Lindsay Land Company #12	Campbell	69,827	150,762 (3/02)
Paul Reed #9	Hancock	60,316	103,379 (8/02)
Laura J. Lawson Unit #2	Hancock	55,382	202,719 (5/01)
Paul Reed #4	Hancock	53,450	341,070 (4/01)

County	Oil Production (Barrels)
Overton	102,331
Morgan	58,855
Scott	55,040
Pickett	40,241
Fentress	30,014
Claiborne	26,841
Hancock	24,284
Campbell	14,547
Anderson	6,528
Clay	745
Cumberland	375
Robertson	123
Total	**359,924**

Well Name	County	2003 Production	Cumulative Production
Ostil and Freddie Paul #19	Overton	22,836	24,474 (12/02)
Paul Reed #8	Hancock	18,072	21,523 (11/02)
Ostil Paul #19-1	Pickett	9,448	13,503 (11/02)
Wayne Poore #3-6	Pickett	5,769	5,947 (12/02)
Delores Hancock #8	Overton	5,196	20,870 (3/01)

Figure 5. Top producing oil and gas wells in Tennessee in 2003. (From Zurawski, 2004).

Ammerman and Keller, 1979; Cable and Beardsley, 1984; Dever, 1986; Thomas, 1991; Drahovzal and Noger, 1995; Ryder et al., 1996, 1997), and the hydrocarbon potential of the Cambrian strata in the Rome trough, rather than on possible structural and stratigraphic traps in Ordovician rocks (i.e., Gao et al., 2000). Detailed subsurface mapping of the Ordovician strata, which is needed to identify potential traps, has not been previously conducted in Tennessee, Kentucky, or Virginia because of the perceived similarity in geophysical properties of the rocks and lack of obvious stratigraphic markers, except for the Deicke (Pencil Cave) and Millbrig (Mud Cave) bentonites near the top of the Stones River Group (Huff, 1983; Huff and Kolata, 1990; Schumacher and Carlton, 1991; Haynes, 1994; Kolata et al., 1996).

1.2 Well Log Responses and Patterns

It has been shown that geophysical subdivision of the Stones River and Nashville Groups is possible using straightforward markers and geophysical patterns (Evenick and Hatcher, 2006a). During the course of this study numerous types of geophysical well data were interpreted and correlated. Each type of log measures an aspect of the borehole environment (Fig. 6) that can either be useful by itself to identify lithologies or the presence of certain types of fluids (Fig. 7.), or enhanced when cross-plotted (e.g., cross-plotting density and neutron logs to identify the "gas effect" or crossover). The most common logs run in the region are gamma ray (GR), caliper, neutron, density, resistivity, sonic, spontaneous potential (SP), photoelectric effect (PE), dip-meter, and temperature. Certain logs are useful only in particular areas, whereas others are always run.

The information derived from a geophysical log can be exact (e.g., using particular values to calculate water saturations) or interpreted (e.g., correlating stratigraphy using basic pattern recognition or identify a section repeated by faulting). In this study, pattern recognition was the dominant use of the well logs for stratigraphic and structural interpretations. Irregular patterns (Fig. 8), (i.e., trends that have sharp boundaries with similar magnitudes and have a saw blade appearance) indicate an aggradational or fluctuating depositional environment. Flat patterns (i.e., trends that do not have sharp boundaries and have a consistent magnitude) indicate steady-state depositional environments. Funnel patterns (i.e., signatures that gradually decrease) are indicative of coarsening or fining upward sections (depending on the log type). Bell patterns (i.e., signatures that gradually increase) are also indicative of coarsening or fining upward sections (depending on the log type). Symmetric patterns are trends

Log Type	Records	Units	Mainly used to identify
Gamma Ray	Natural radioactivity	API	Shale and bentonites
Resistivity	Resistivity	Ohms*m	Porosity and hydrocarbons
Spontaneous Potential	Electrical current	mV	Shale
Photoelectric Effect	Gamma radiation	barns/e^-	Formation composition/lithology
Neutron	Hydrogen content	% porosity	Gas and porosity
Density	Density	g/cm^3	Gas and porosity
Dipmeter	Dip of strata	Strike and dip	Structures and bedding
Caliper	Borehole width	inches	Cave-in zones and clay
Sonic	Formation velocity	µs/ft	Formation density and gas
Temperature	Borehole temperature	°F	Geothermal gradient and hydrocarbons

Figure 6. Basic geophysical log types and common uses.

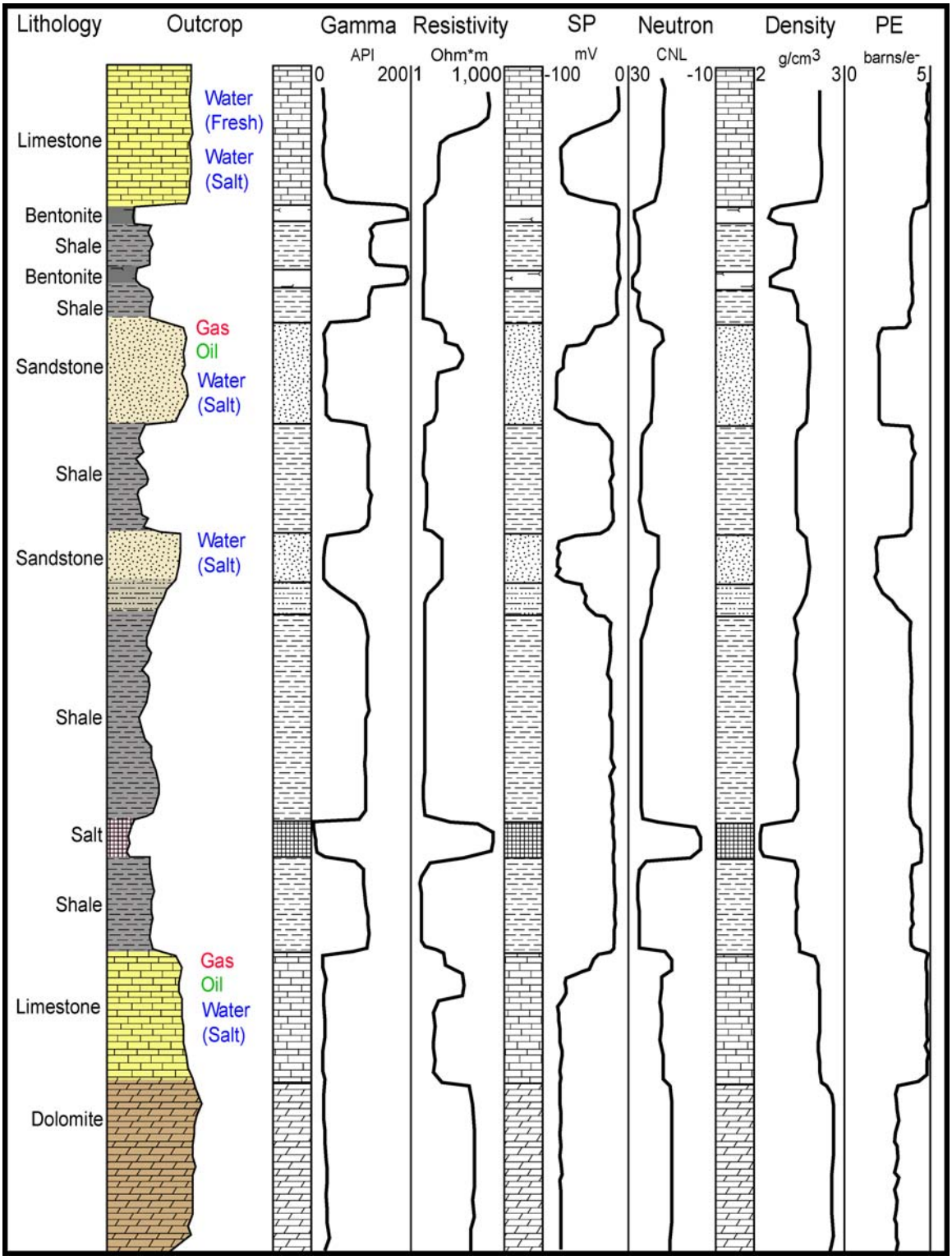


Figure 7. General well log responses for common lithologies, bentonites, and fluids. SP–spontaneous potential. PE–photoelectric effect.

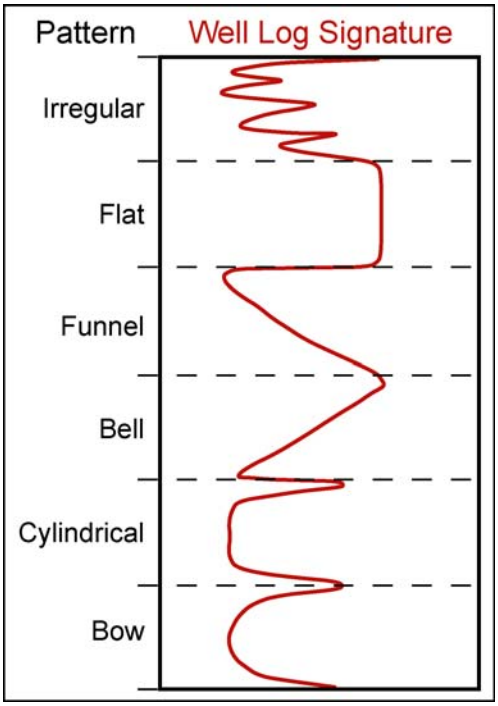


Figure 8. Generalized well log signature patterns. Similar patterns do not necessarily indicate common depositional environments because different log types represent different borehole properties (i.e., lithology, density, and resistivity) and patterns are scale dependent.

that have a horizontal line of symmetry (e.g., cylindrical and bow patterns). Cylindrical patterns are flat trends that are bounded by sharp edges. This pattern indicates steady-state depositional environment. Bow patterns that have a gradual decrease then increase in the signature are indicative of coarsening or fining upward sections.

2 Methodology

2.1 Geophysical Well Logs

2.1.1 Identifying and Locating Logs

Key marker beds from 7,639 geophysical logs and 1,960 mining logs were correlated (Appendix A). Some well log data were gathered, but were not used because of either uncorrectable errors in the log (i.e., incorrect elevation or location) or the log was not deep enough to encounter any of the regional marker beds used in this study. Paper copies of well logs were read at the Tennessee Division of Geology in Nashville and the Virginia Division of Oil and Gas in Abingdon. Kentucky well data and electronic logs were viewed via the Internet.

Several stratigraphic/well studies and compilations (i.e., Butts, 1919; Huddle et al., 1956; Milhous, 1959; Burwell, 1967a, 1967b; Wilson, 1949, 1962; Milici, 1996; Moore and Horton, 1999; Nuttall, 2000) have been performed in the regions that indicated subsurface correlations were possible (Freeman, 1953; Cable and Beardsley, 1984; Farmer and Hollyday, 1999). These correlations were expanded and correlated across the southern Appalachians using outcrop and well data. All well logs that were interpreted were measured in feet. Hence, the maps and figures created by this study retain that system of measurement to eliminate possible problems in reading and rechecking the well logs. All well log data were contoured and plotted using Surfer 8.0. Identification of individual faults was limited to areas with good well coverage. In other areas, fault extents and connectivity were inferred from residual anomaly and structure contour maps, and cross sections.

2.1.2 Selecting and Picking Horizons

Key marker units or beds, such as the tops of the Knox and Nashville Groups, Deicke bentonite ("Pencil Cave"), Chattanooga Shale, Bangor Limestone ("Big Lime"), and Pennington Group, were chosen because of their stratigraphic location and/or ease of identification. Well-log correlations were made on sub-Pennsylvanian wells using gamma ray, spontaneous potential, density, and resistivity logs to define and pick marker units. Gamma ray, density, and resistivity logs were the most useful in regional correlations because they are the most commonly available logs for wells drilled after 1960. Typical log signatures for common sedimentary rocks are straightforward, but facies changes and formation fluids (e.g., fresh water, hydrocarbons, and saltwater) alter these signatures and make correlations difficult. Other types of logs were occasionally utilized (i.e., dipmeter, lithologic, and drillers' logs), but mainly for stratigraphic comparison or fault identification. PE logs are rarely acquired in the region, but should be run more frequently to significantly facilitate lithologic identification (particularly for the separation of carbonate).

2.1.3 Structure Contour Maps

Structure contour maps (Appendix B) were made by identifying marker units or beds and subtracting that value from the reported well elevation or noted elevation datum. The resulting value was then mapped and contoured. These maps were used to identify structural high or low regions, faults, and depositional features. A structure contour map was made for each unit studied. Thin black lines in the maps represent county boundaries and thicker lines represent state boundaries.

2.1.4 Trend Surface Residual Anomaly Maps

Trend surface residual anomaly maps (Appendix B) were created for key horizons. The maps were made primarily to identify structures, fault zones, and possible changes in deformational patterns. Best-fit trend surfaces were generated from the datasets using Surfer 8.0. The trend-surface data were then removed from the structure contour and surface elevation data, producing trend surface residual anomaly maps that were used to identify the location, magnitude, and depth of potential structures. Positive residual anomalies correspond to observed data (i.e., structure contour data) being larger than the calculated trend surface data for a given location(s). Residual anomaly maps were then compared to known surface and subsurface structures and potential structures were examined using all available data. Thin black lines in the maps represent county boundaries and thicker lines represent state boundaries.

2.2 Surface Picks

Surface picks were used in Tennessee to decrease the data spacing or to fill large data gaps (particularly in southern Tennessee around the eastern Highland Rim and in Sequatchie Valley) in order to more accurately represent known surface structures (i.e., the Sequatchie anticline, which has very limited well data surrounding the structure). A total of 433 surface picks were made by overlaying 10-m resolution DEMs over a digitized geologic map of Tennessee and recording estimated values (surface data are noted in Appendix A). These picks were made with the assistance of Jennifer B. Whisner.

2.3 Field Work

The Cumberland Plateau has already been mapped, but it was necessary to investigate certain outcrops of the Chattanooga Shale and Nashville and Stones River Groups to ensure that units were correlative across the region and to investigate possible facies changes. Outcrops of Nashville and Stones River Groups stratigraphy were examined east of Nashville, TN, in Oak Ridge, TN, Sneedville, TN, the Kentucky River Gorge, KY, and in the Flynn Creek impact structure, TN. The Chattanooga Shale was examined in the Flynn Creek impact structure, TN, east of Nashville, TN, in Sequatchie Valley, TN, and east of Lexington, KY. Field work was also conducted around Fall Creek Falls State Park, Short Mountain, Rock Island State Park, Prentice Cooper State Park, and Sequatchie Valley to examine the nature of faulting associated with the Cumberland Plateau overthrust.

The Flynn creek impact structure (southeastern quarter of the Gainesboro Quadrangle) in Jackson County, TN was mapped by Wilson and Roddy (1990), but it contained several structural and stratigraphic problems that needed to be addressed. The lack of strike and dip data made interpreting the basic characteristics of the structure (e.g., shape, size, fault linkages) difficult. Recent field mapping has also discovered previously unknown occurrences of hydrothermal dolomite in the crater rim (Nashville Group) and in the matrix of breccias (Devonian) within the crater. The discovery of hydrothermal dolomite may indicate the structure has some hydrocarbon potential. Therefore, to better constrain the age of the impact, timing of hydrothermal dolomitization, delineate the bounding faults, and to create new cross sections, it was necessary to remap the structure. The published geologic map was used as a base map

and contacts and lithologies were changed when there was evidence of an error or if structural data indicated the map should be altered. Structural data were incorporated (Roddy, 1966) and subsurface unit thicknesses were derived from a nearby basement test (Pasminco well 4-44-309) and from Roddy (1979).

A fracture analysis study was also undertaken to investigate the nature of jointing surrounding the crater and to better constrain the structure's age and shape. 10-m scanlines were used at various outcrops in and around the impact structure. Certain outcrops (i.e., Devonian breccia units) contained so few joints that all joints were systematically measured to ensure that a joint was not measured twice. The Catheys/Leipers (Ordovician), Chattanooga Shale (Mississippian-Devonian), impact related breccias and dolomitic units (Devonian), and Stones River Group (Ordovician) were investigated and data collected are listed in Appendix C.

3 Potential Sources of Error

3.1 Well Elevation

3.1.1 Misreported Well Elevation

Well elevation errors can occur when the drilling report incorrectly records the elevation or does not specify to what altitude well log was calibrated (i.e., ground level or Kelly Bushing). Another common well elevation error is using the Kelly Bushing elevation as ground level. The Kelly Bushing (KB) is the platform on a drilling rig from where a well log usually starts recording. Regionally the KB is 10 ft taller than ground level; consequently, ground level on a log run from the Kelly Bushing is recorded at 10 ft. Digital data and some paper-copy logs do not indicate the starting position of the log. Hence, if no distinction is noted on the front of the log, pick data subtracted from ground level instead of the KB would be 10 ft too low. This error cannot be systematically identified subsequent to mapping. Errors can also be created during the process of entering well information into a state's digital database.

3.1.2 Gravity Derived Elevation

Elevation errors derived from gravity surveys are probably very small, but could be significant in older data reports. Old well maps and surveying techniques could have systematically contained minor errors on the order of 10 ft. These systematic errors cannot be readjusted because many of the old abandoned wells cannot be relocated or remapped. However, they can usually be identified in maps by isolated highs or lows occurring in areas first drilled in the region (i.e., Clay, Fentress, and Overton Counties).

3.2 Misreported Well Location

Inaccurate well locations are not a major problem because regional dip and topography are so small that even large horizontal errors generally only account for vertical errors on the order of several feet. Typical values of regional dip on the Cumberland Plateau are less than a few degrees. A major horizontal surveying error of 200 ft in the region would only yield an error of around 5 ft. Newer well data (1970-present) have been resurveyed or revised and probably have an accuracy of under a few feet. Older well data (pre-1970) could have larger positioning errors, but only account for a minor part of overall datasets collected.

3.3 Stratigraphic Pick Data

3.3.1 Different Drillers' Picks

Drillers commonly use different names for units that are not consistent with the published literate or have different picks corresponding to different stratigraphic units. This problem can introduce errors that range from a couple feet (i.e., picks generated from a lower resolution log) to tens of feet (i.e., confusing the top of the Carters Limestone with the Deicke bentonite). These errors can be identified by cross-checking systematic errors in the generated maps that relate to particular petroleum fields (which are typically drilled by the same company and interpreted by the same geologists).

3.3.2 Undeclared Deviated Drilling

Well-logging errors or inaccuracies are very small. A typical well log has a vertical error less than 1 ft, although certain errors could be introduced via undocumented

deviated drilling (which would increase the recorded depth of a horizon). Depending on the amount of deviation, this error could theoretically be large, but can be identified by an anomalous depression that increases in magnitude in lower horizon maps.

3.3.3 Old Well Data

Well data (pre-1970) account for a minor amount of total well data, but could have horizontal and vertical location, basic log, and stratigraphic pick data errors. Surveying errors usually cannot be rectified because the wells are commonly not relocatable. Basic log errors cannot be remedied unless the well has not been plugged and abandoned, or if it has been relogged. Stratigraphic pick errors are usually generated by misspicking a horizon in drillers' logs or cuttings. This error cannot be corrected without running a geophysical log, examining available core/cuttings, or redefining stratigraphic contacts based on the original lithologic descriptions.

3.3.4 Facies Changes

Common sources of error in regional correlations of well data are changes in facies related to different depositional environments and the mapping of regional lithostratigraphic contacts as chronostratigraphic features. However, this probably is a minor issue because trend-surface residual anomaly mapping is based on lithostratigraphy, not chronostratigraphy (with the exception of bentonites, as each bed was deposited at a particular time). The amount of error is unknown, but could potentially be on the order of tens of feet.

3.4 Contouring

3.4.1 Data Spacing

Data spacing can have an adverse affect on computer contouring because it can generate of artificial patterns and artifacts (Krajewski and Gibbs, 1994, 2001). Contouring errors generated by irregular data spacing can only be treated by data "smoothing" because well locations are static and new data are dependent on the location of new wells. The errors associated with irregular data spacing can be reduced by using more robust contouring algorithms such as minimum curvature and kriging. Another helpful technique to minimize this problem is to selectively critique the maps to identify suspect geological patterns (Krajewski, and Gibbs, 1994). Examples of critiquing a map include identifying crossing horizon or contour patterns that do not fit into the regional tectonic regime (i.e., normal faults associated with strike-slip motion in a compressional region). Most contour programs also find it difficult to properly illustrate fault surfaces (e.g., programs will commonly contour unreliable throws on a fault surface).

3.4.2 Edge Effects

Edge effects are common errors in maps that are produced by imposing boundary conditions on contouring algorithms. The boundary conditions cause contours to deviate in anomalous directions or patterns while still honoring data points (Krajewski and Gibbs, 1994, 2001). This potential source of error can be reduced by enlarging the contouring boundaries or choosing a more robust contouring algorithm.

4 Results and Interpretations

4.1 Geophysical Log Characteristics for Subdividing the Nashville (Trenton) and Stones River (Black River) Groups beneath the Eastern Highland Rim and Southern Cumberland Plateau in Tennessee and Southern Kentucky

This section is a slightly revised version of a peer-reviewed paper published by the Tennessee Division of Geology in 2006 by Jonathan C. Evenick and Robert D. Hatcher, Jr.:

Evenick, J. C. and Hatcher, R. D., Jr., 2006, Geophysical log characteristics for subdividing the Nashville and Stones River Groups beneath the eastern Highland Rim and southern Cumberland Plateau in Tennessee and southern Kentucky: Tennessee Division of Geology, Report of Investigation No. 52, 15 p.

My major contributions to this paper include: 1) correlating and interpreting the geophysical well logs; 2) writing the manuscript; and 3) creating most of the illustrations.

4.1.1 Abstract

The Nashville and Stones River Groups have great potential as hydrocarbon reservoirs in Tennessee and southern Kentucky. They have not been mapped in sufficient detail in the subsurface principally because surface lithologies have not previously been related to geophysical logs, with the exception of the lower Stones River Group on the southeastern crest of the Nashville dome. Making picks in geophysical logs within these units has previously proved difficult. Geophysical well logs do, however, reveal characteristics that indicate subdivision is feasible. While sonic, neutron, spontaneous potential, and other logs provide useful information, the most consistent and most universally available log useful for correlation is the gamma-ray log. The Millbrig (mud cave or T-4) and Deicke (pencil cave or T-3) K-bentonites, along with the Pierce Limestone and Hermitage Formation, display recognizable gamma-ray signatures in the Stones River and Nashville Groups. Each formation is geophysically separable, but parts

of the stratigraphic section contain notable problems: 1) the top of the Carters Limestone is not correlative with the Deicke bentonite, but rather with the limestone immediately above the Millbrig bentonite or with the bentonite itself; 2) the top of the Carters Limestone is also locally unconformable with erosion occasionally removing the Millbrig bentonite; a higher bentonite in the Hermitage Formation (i.e., T-5) may be mistaken for the Millbrig; 3) the beds within the Ridley Limestone are lithologically and geophysically similar to the top of the Pierce Limestone, but should not be included in the Pierce Limestone; 4) a 40 ft (12 m)-thick shale unit characteristically occurs near the middle of the Carters Limestone toward southwestern Virginia and should not be mistaken for the base of the unit; 5) the Carters Limestone gamma-ray signature is similar to that of the Bigby-Cannon Limestone and other massive limestones, but can be differentiated by recognition of bentonite(s) in the Carters Limestone; and 6) the base of the Wells Creek Formation is a discontinuous, shaly, reworked carbonate unit that is difficult to pick.

Gamma-ray log signatures for the Stones River and Nashville Groups have been recognized and are generally straightforward. The Wells Creek Formation, if present, has irregular gamma-ray amplitudes over 80 American Petroleum Institute (API) units. The Murfreesboro Limestone has an irregular gamma-ray signature that ranges in amplitude from 20 to 80 API units. The Pierce Limestone is marked by two prominent shaly limestone sections that have gamma-ray signatures with amplitudes of 60 to 70 API units. The massive Ridley Limestone has a low amplitude, almost flat, gamma-ray signature ranging from 20 to 30 API units. The Lebanon Limestone has a heterogeneous gamma-ray signature, typically 25 to 40 API units. The massive Carters Limestone generally has a flat gamma-ray signature of 20 to 30 API units, but contains several bentonites. The

gamma-ray signature of the variably shaly, sandy Hermitage Formation is characteristically irregular and has amplitudes ranging from 60 to 80 API units, with occasional spikes approaching 200 API units. The clean, medium-bedded Bigby-Cannon Limestone has a consistently flat and low amplitude gamma-ray signature of 20 to 30 API units. The gamma-ray signature of the shaly Catheys Formation is higher in overall intensity (30 to 80 API units) and is very irregular, much like the Hermitage Formation. It is difficult to separate the Catheys from the overlying Leipers Formation either in geophysical logs or in the field.

4.1.2 Introduction

The Middle Ordovician Stones River Group (Black River Group in Pennsylvania, West Virginia, Ohio, and New York, and High Bridge Group in Kentucky) and Nashville Group (Trenton Group in Pennsylvania, West Virginia, Ohio, and New York, and Lexington Group in Kentucky) have long been prospected for oil and gas throughout the Appalachian basin (e.g., Butts, 1919; Born and Burwell, 1939; Heck, 1948; Keith and Wickstrom, 1991). Despite long-term production from these units in Tennessee (mainly Overton and Fentress Counties) and southern Kentucky (Butts, 1919; Born and Burwell, 1939), they remain largely unexplored in these areas because: 1) targets with a greater likelihood of success exist in shallower Devonian shales, and Mississippian Fort Payne Waulsortian reefs and limestones (Butts, 1919; Born and Burwell, 1939; Harris and Milici, 1977); 2) deeper drilling into the Ordovician requires larger financial commitments; 3) Stones River and Nashville Groups formations have not been correlated beneath the southern Cumberland Plateau (Fig. 9) making the identification of regional

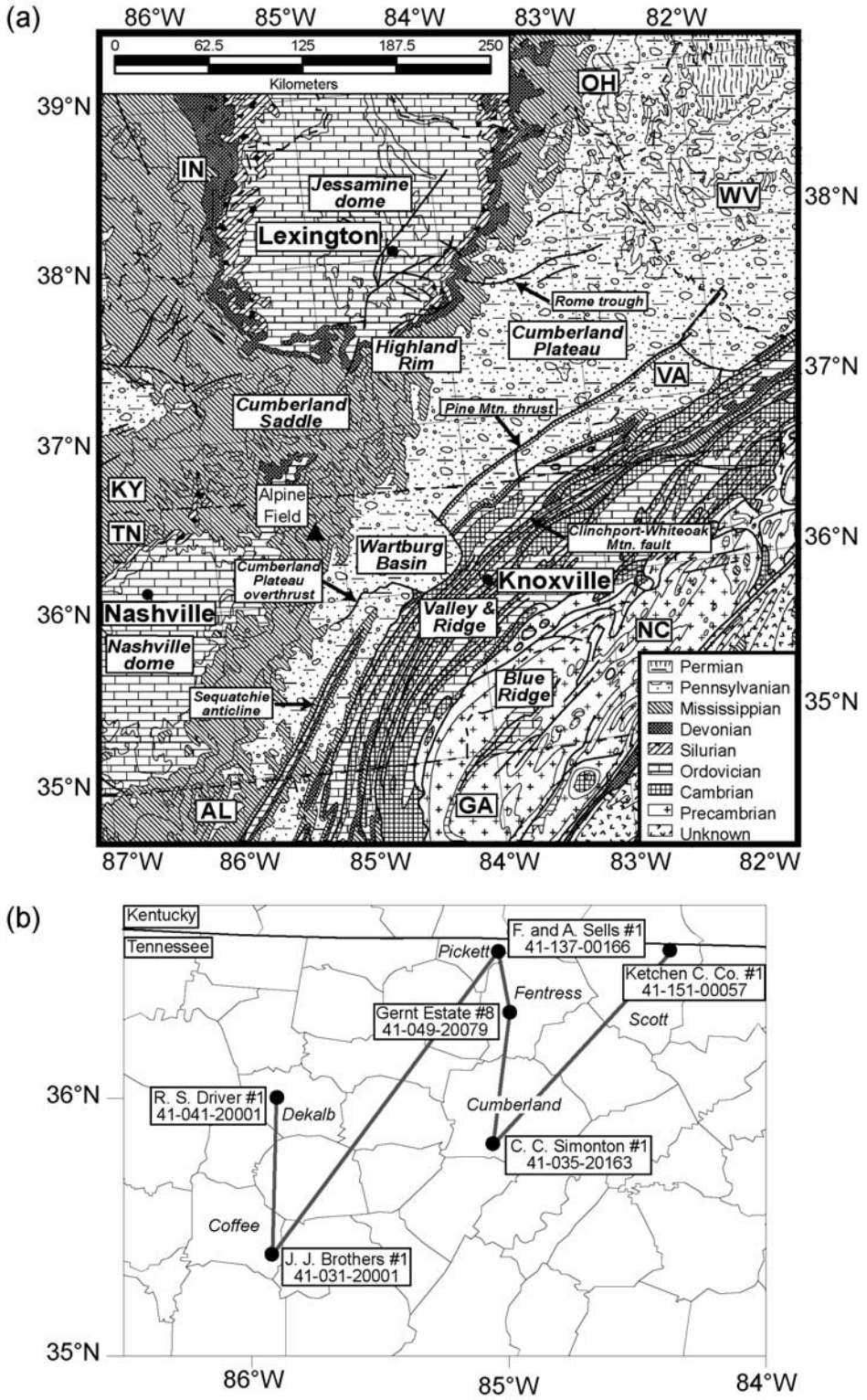


Figure 9. (a) Geologic map showing the location of the Cumberland Plateau and nearby prominent geologic features. Black triangle represents the location of the Alpine field in Overton County, Tennessee. (Adapted from Schruben et al., 1998). (b) Location map of the wells in Figure 11.

pay zones between wells difficult and inconsistent; 4) few viable exploration models have been formulated; and 5) modern technology, available to major oil companies (e.g., broad log suites, 3-D seismic) is cost prohibitive for smaller independents.

Our purpose is to establish a basis for subdividing and correlating the Stones River and Nashville Groups in the subsurface of the Cumberland Plateau and eastern Highland Rim, using geophysical well logs. Farmer and Hollyday (1999) (using mostly gamma-ray logs) geophysically subdivided the lower Stones River Group only on the Nashville dome, but did not subdivide the upper Stones River or Nashville Groups. The main hindrances to geophysically subdividing the Stones River and Nashville Groups have been similar lithologies and gradational contacts (Wilson, 1949; Freeman, 1953; Wilson and Stearns, 1958; Wilson, 1962; Hardeman, 1966b; Milici, 1969; Farmer and Hollyday, 1999). Subsurface identification of individual units is crucial for future exploration of the Ordovician strata in the region. Born and Burwell (1939) recognized that the Stones River and Nashville Groups had potential to contain large, multi-zone stratigraphic reservoirs. Minor, but persistent, interbedded shales form seals and may be hydrocarbon sources. Also, the limestones could be serving both as sources and reservoirs (Born and Burwell, 1939; Epstein et al., 1977), like Ordovician strata in the northern Appalachian basin (Obermajer et al., 1999). Structural traps involving these groups may exist, but limited deep well data and the paucity of even 2-D seismic reflection profiles in Tennessee and southern Kentucky have impeded subsurface mapping west of the Sequatchie anticline and Pine Mountain thrust block (Harris and Milici, 1977). Resolution of structure beneath the eastern Highland Rim must currently

be made using a combination of well and seismic reflection data, but not enough of either are available.

4.1.3 Methodology

This study incorporated surface, subsurface, and stratigraphic data to help define the characteristic geophysical log signature for each formation in the Stones River and Nashville Groups. Subsurface mapping of the Middle Ordovician by Cable and Beardsley (1984) and Farmer and Hollyday (1999) was integrated with the detailed measured sections of Wilson (1949, 1962), Milici (1969), and Hatcher et al. (1992), and then correlated with data from over 2,000 wells across the Cumberland Plateau and eastern Highland Rim of Tennessee and southern Kentucky. Picks in the lower Stones River Group were based on zinc mining data and Farmer and Hollyday (1999). Older well data and sample descriptions from Freeman (1953), Milhous (1959), and Burwell (1967a, 1967b) were also incorporated into this study wherever possible. Correlations of gamma-ray, neutron, and resistivity logs from representative well logs led to the compilation of a type log and regional cross section (Figs. 10 and 11). Other logs (e.g., spontaneous potential and sonic) were correlated where available, but gamma-ray correlations were mostly used because lithologies, faults, and contacts can more easily be recognized in a gamma ray log (Fig. 12) and this log is run in almost every well (Serra, 1984; Luthi, 2001).

A gamma ray log records the natural radioactivity of a formation in API units (Serra, 1984; Luthi, 2001). The radioactivity results mainly from the of decay of

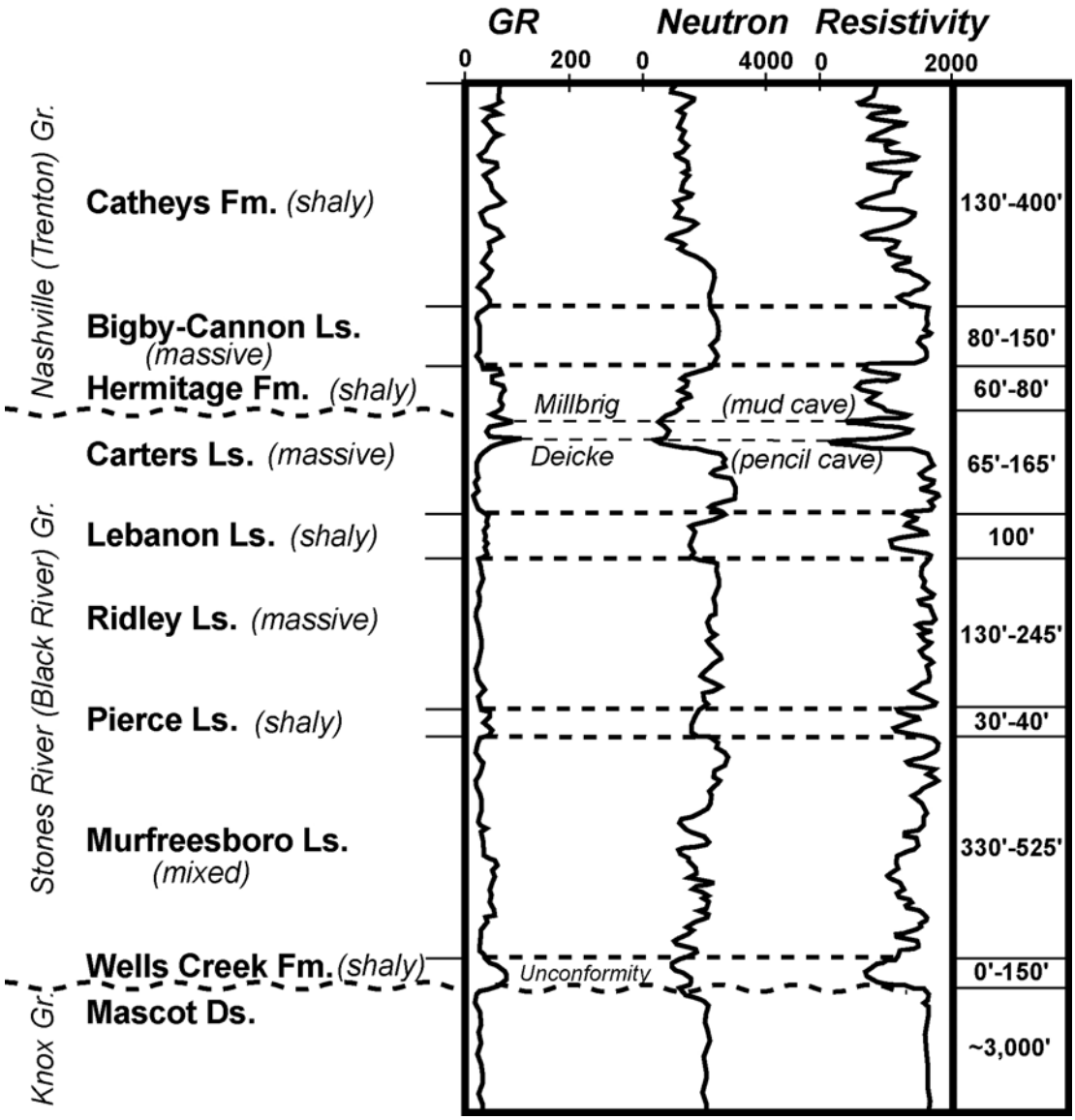


Figure 10. Type gamma ray (GR), neutron, and resistivity logs for the Nashville and Stones River Groups.

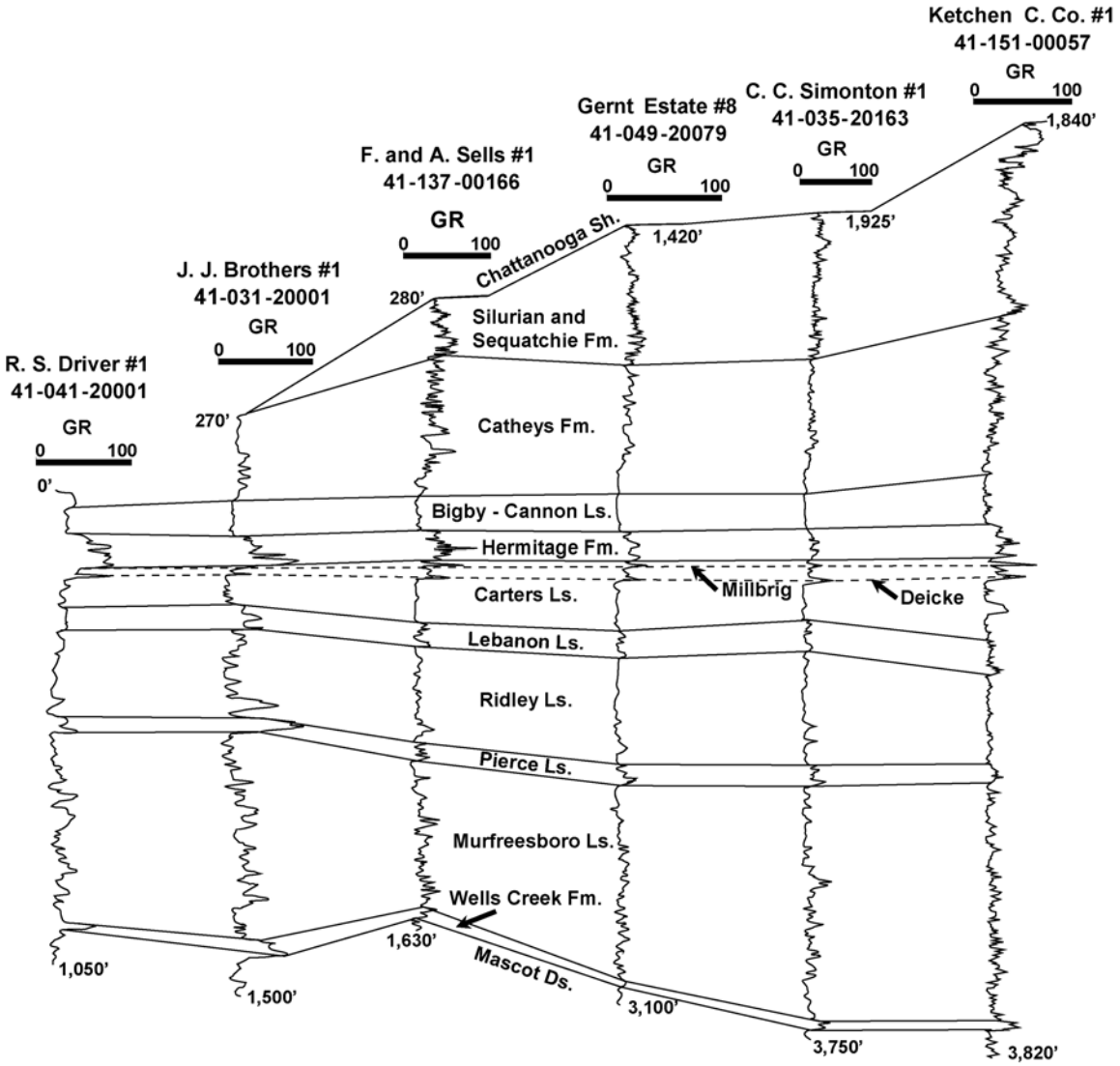


Figure 11. Cross section across the eastern Highland Rim and the Cumberland Plateau. See Figure 9 for well locations. The vertical datum is the Millbrig bentonite. Note the Millbrig K-bentonite's relation to the Carters–Hermitage contact.

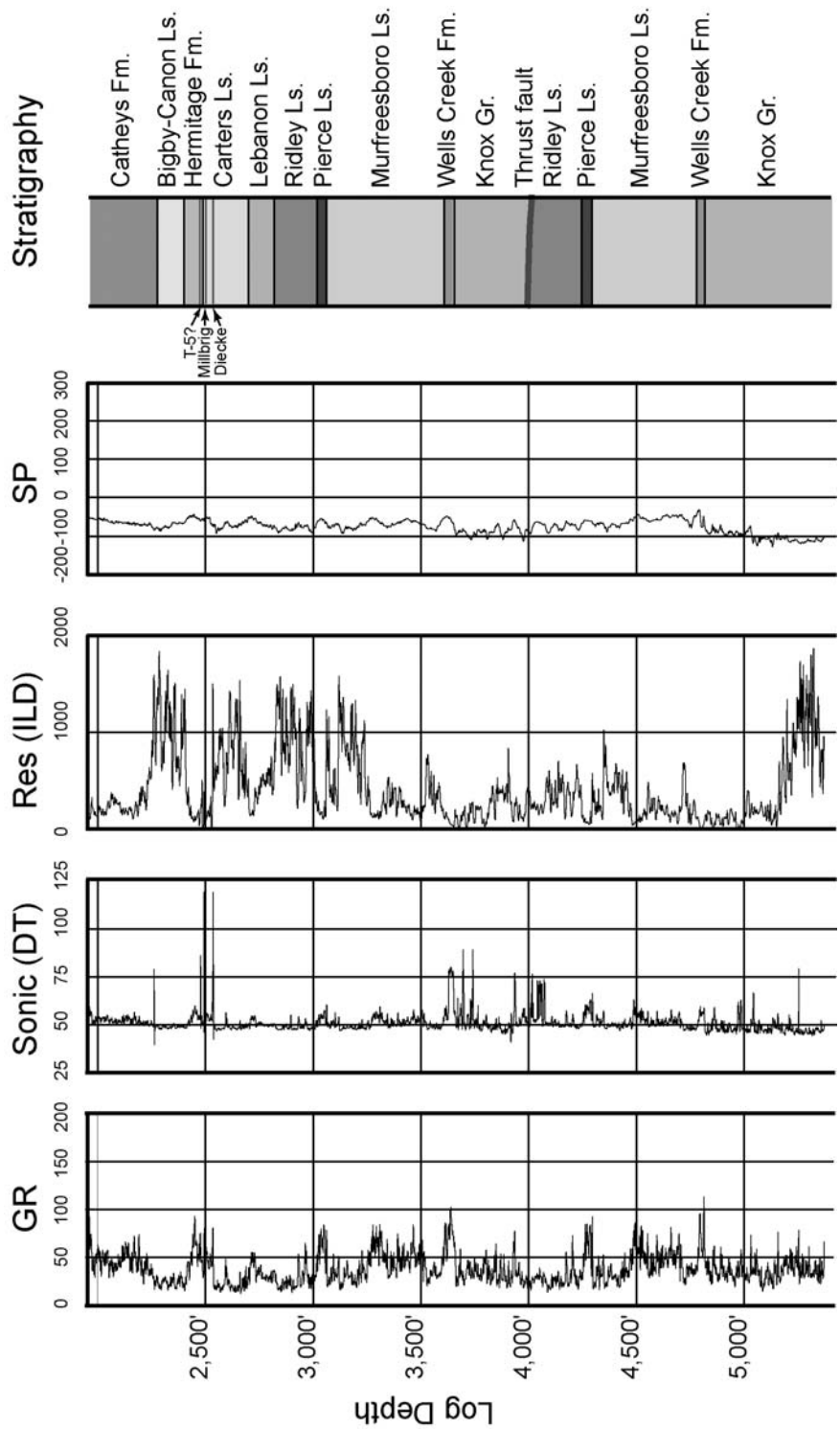


Figure 12. Gamma ray (GR), sonic (DT), resistivity (ILD), and spontaneous potential (SP) well logs for the T.J. Kemmer #1 (API #41-035-20041) well in Cumberland County, Tennessee. Note the correlation between the repeated Stones River section and the gamma ray log. Also note the high gamma ray spike in the Hermitage Formation that does not correlate with a sonic/density spike and is therefore not a bentonite.

Potassium (K), Thorium (Th), and Uranium (U). Thus, shale units will have high API values and sandstone and limestones will have low API values. Gradational contacts were picked on the first appearance of a geophysical characteristic typical of the unit above or below the gradational zone that is consistent with known surface stratigraphy. A neutron log measures the porosity of a formation based on the quantity of hydrogen present in the formation. Fluid within formation can be identified from gas because water and oil have approximately the same hydrogen content, whereas gas has less hydrogen per equal volume (Serra, 1984; Luthi, 2001). Hence, if gas is present in a formation the compensated neutron log (CNL) will underestimate porosity.

A resistivity log records the resistance to the flow of electricity of a formation in Ohm meters. Resistivity is the reciprocal of conductivity and is related to the porosity and the fluid present in the rock and borehole. The most important use of resistivity logs is distinguishing hydrocarbons from water (Serra, 1984; Luthi, 2001). A high-porosity or hydrocarbon bearing formation has high resistivity, and a low-porosity or salt water bearing formation has low resistivity. There are numerous types of resistivity logs that correspond mainly to the depth of the measurement (e.g., shallow, medium, deep). Shallow readings record the interface of the borehole and the drilling fluid and deep readings correspond to "true or uninvaded" formation resistivity. Hydrocarbons may be present in a formation when deep resistivity is greater than shallow resistivity. Shales typically have low resistivity and sandstones and carbonates have high resistivity (Serra, 1984; Luthi, 2001).

Research on Ordovician K-bentonites has been divided into three general periods: (1) the early recognition that K-bentonites were of volcanic origin; (2) the discovery of

similar K-bentonites across the region; and (3) recent regional K-bentonite correlations using a variety of geochemical and mineralogical techniques (Kolata et al., 1996). Identification of the Millbrig and Deicke K-bentonites were mainly based on regional chemical fingerprint correlations by Haynes (1994) and Kolata et al. (1996). These marker beds along with other smaller, less continuous bentonite beds were identified by the presence of a very high gamma-ray spike that corresponds with a low density or possible washout zone typical of bentonite horizons (Huff, 1983; Huff and Kolata, 1990; Schumacher and Carlton, 1991; Haynes, 1994; Kolata et al., 1996). The regional stratigraphic position of the K-bentonites is discussed below.

4.1.4 Results

4.1.4.1 Stones River Group

4.1.4.1.1 Wells Creek Formation

The Wells Creek (Pond Spring, Blackford) Formation (Douglas Lake Member; Rodgers, 1953) was deposited on the post-Knox unconformity following uplift and karst development (Milici, 1969). The Wells Creek ranges from absent to 150 ft (45 m) thick and consists of cherty dolomite- and calcite-cemented breccia, and calcareous dolomite (Wilson, 1949; Hardeman, 1966b; Milici, 1969). The base of the unit is picked at the top of Knox Group massive bedded dolomite that typically produces a small density anomaly that kicks right or left and then stabilizes downward into the Mascot Dolomite. The density contrast at the top of the Knox may be related to karst formation and regolith accumulated at the disconformable contact. The upper part of the formation is made up

of shaly limestone and dolomite. The formation commonly has gamma-ray amplitudes over 80 API units.

4.1.4.1.2 Murfreesboro Limestone

The Murfreesboro Limestone is a mixture of massive-bedded, dark gray limestone and medium to thick-bedded shaly limestone (Wilson, 1949; Hardeman, 1966b; Milici, 1969; Farmer and Hollyday, 1999). It has an irregular gamma-ray signature that ranges in amplitude from 20 to 80 API units. The unit ranges from 330 to 525 ft (100 to 160 m) thick. If the Wells Creek Formation is absent, the bottom of the Murfreesboro Limestone is picked at the top of the massive-bedded Mascot Dolomite. The top of the Murfreesboro Limestone is picked at the base of the second and more prominent shaly limestone in the Pierce Limestone (Farmer and Hollyday, 1999).

4.1.4.1.3 Pierce Limestone

The Pierce Limestone is a fine-grained, thin-bedded shaly limestone with a characteristic massive-bedded, clean limestone in the middle (Wilson, 1949, 1962; Milici, 1969; Farmer and Hollyday, 1999). The unit thickness is 30 to 40 ft (9 to 12 m). Geophysically, it can be identified by two prominent shaly limestones of varying thicknesses that have gamma-ray signatures with amplitudes of 60 to 70 API units separated by a low-amplitude interval ranging from 20 to 40 API units (Farmer and Hollyday, 1999).

4.1.4.1.4 Ridley Limestone

The Ridley Limestone is a massive-bedded limestone with minor dolomitic and shaly limestone interbeds (Wilson, 1949; Hardeman, 1966b; Milici, 1969; Farmer and Hollyday, 1999). Near the base of the unit is a prominent, but laterally inconsistent, shaly limestone section that produces an irregular gamma-ray signature ranging from 20 to 40 API units. These lower shaly intervals can easily be miscorrelated or mapped as the top of the Pierce Limestone (Farmer and Hollyday, 1999). It is important to properly identify the massive-bedded limestone underlying the shaly limestone portion of the Ridley to accurately resolve the base of the unit. They lies above a lower more prominent (over 60 API units) shaly limestone unit that represents the actual top of the Pierce Limestone. The upper Ridley is homogenous, massive-bedded limestone that has a low-amplitude, almost flat gamma-ray signature of 20 to 30 API units. The thickness of the Ridley Limestone is 130 to 245 ft (40 to 75 m).

4.1.4.1.5 Lebanon Limestone

The Lebanon Limestone consists of thin-bedded limestone with minor calcareous shale and several coquina beds. It is approximately 100 ft (30 m) thick (Wilson, 1949; Hardeman, 1966b; Milici, 1969). The base of the Lebanon is picked at the lowest shaly limestone unit that displays a characteristic, irregular gamma-ray signature. The contact with the underlying Ridley is sometimes difficult to locate precisely in geophysical logs because it is gradational. The contact with the overlying Carters Limestone is marked by the disappearance of shaly limestone and minor shale interbeds that yield a heterogeneous gamma-ray signature typically ranging from 25 to 40 API units. This shaly limestone

must be in a continuous section of similar amplitude units, and not in a shale located near the middle of the Carters Limestone that appears in logs near the Wartburg basin.

4.1.4.1.6 Carters Limestone

The Carters Limestone contains an upper thin-bedded limestone member east of the Nashville dome and a lower massive to thick-bedded limestone that both contain key marker K-bentonites (Wilson, 1949; Hardeman, 1966b; Milici, 1969; Huff, 1983; Huff and Kolata, 1990; Schumacher and Carlton, 1991; Haynes, 1994; Kolata et al., 1996). Unit thicknesses range from 65 to 160 ft (20 to 50 m). A 40 ft (12 m) -thick shale bed characteristically occurs near the middle of the Carters Limestone near the Wartburg basin and must not be mistaken as the base of the unit. This shale bed can be seen in the Ketchen C. Co. #1 well in Figure 11. The base of the unit is the top of the highest shaly limestone associated with a heterogeneous gamma-ray signature. The Carters Limestone generally has a flat gamma-ray signature of 20 to 30 API units. This typical, semihomogenous limestone signature is similar in magnitude to the Bigby-Cannon Limestone, but the separation of the Carters and the Bigby-Cannon Limestones by the Hermitage Formation, and the presence of several K-bentonites in the Carters, make these two units easy to distinguish. The top of the Carters Limestone is picked as the base of interbedded limestones—shaly limestone signature above the Millbrig K-bentonite (mud cave or T-4) (Fig. 13), if present, or at the base of the lowest major shale spike associated with the Hermitage Formation, if the bentonite is not recognizable. The top of the Carters Limestone is locally an unconformity with erosion locally removing the Millbrig K-bentonite; a higher bentonite in the Hermitage Formation (i.e., T-5) may be mistaken

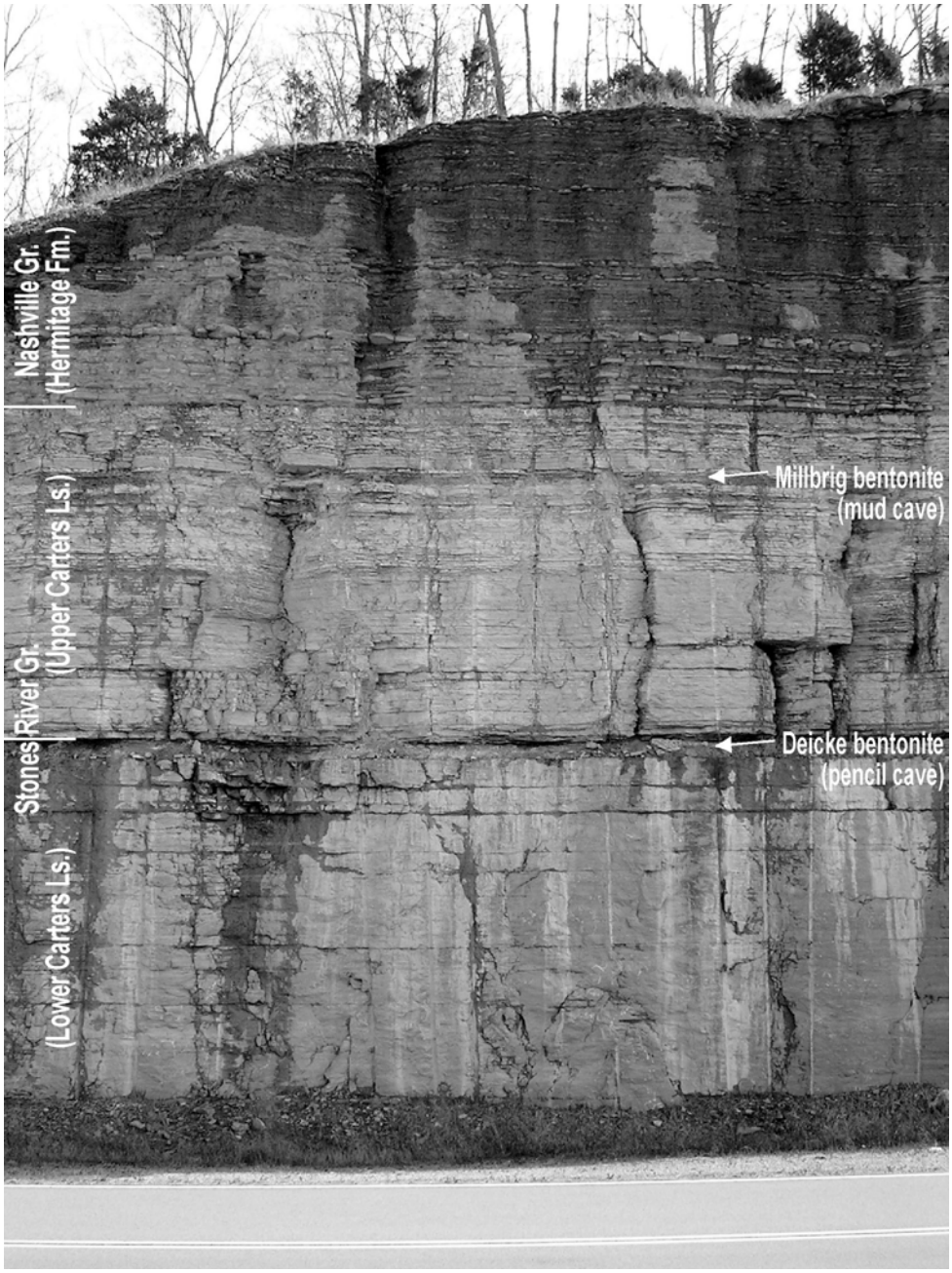


Figure 13. Carters–Hermitage contact on the exit ramp from I-40 East to TN 109 (Gallatin exit). Note that the Millbrig (mud cave or T-4) and Deicke bentonites (pencil cave or T-3) are separated by approximately 20 feet.

for the Millbrig K-bentonite (Wilson, 1949; Huff, 1983; Huff and Kolata, 1990; Schumacher and Carlton, 1991).

4.1.4.1.6.1 Bentonite Horizons

The Millbrig (mud cave or T-4) and the Deicke (pencil cave or T-3) K-bentonite signatures have a typical amplitude of over 80 API units and are less than 30 in (75 cm) thick (Wilson, 1949; Huff, 1983; Huff and Kolata, 1990). Bentonites are also identifiable in well logs as low density anomalies and borehole washouts (Luthi, 2001). The density anomalies are the keys to distinguishing bentonite from shale. Note the high gamma ray spike in the Hermitage Formation (Fig. 12) that does not correlate with a sonic/density spike and is therefore not a bentonite. The Deicke K-bentonite is typically 23 ft (7 m) below the Millbrig K-bentonite, if the Millbrig is present. The Deicke K-bentonite is frequently and erroneously picked as the top of the Carters Limestone in drillers' logs. The Millbrig K-bentonite is picked as the highest large amplitude gamma-ray spike near the top of the Carters Limestone, but may occasionally be eroded because the Carters–Hermitage contact is locally disconformable (Wilson, 1949; Huff, 1983; Huff and Kolata, 1990; Schumacher and Carlton, 1991). The Pierce Limestone and the K-bentonites are the best geophysical log marker horizons in the Stones River Group.

4.1.4.2 Nashville Group

4.1.4.2.1 Hermitage Formation

The Hermitage Formation consists of thin-bedded to laminated shaly limestone with thin shale interbeds on the east flank of the Nashville dome (Wilson, 1949, 1962;

Hardeman, 1966b; Milici, 1969). Shaly limestones are thicker bedded in the lower half of the section. On the flanks of the Nashville dome, a 5 to 10 ft (2 to 3 m) thick, medium-grained limestone with shale partings is present at the base of the unit (Wilson's Curdsville Limestone member). The absence of this unit on the crest of the Nashville dome and a basal conglomerate with reworked Carters Limestone clasts demonstrate the underlying contact is locally unconformable (Wilson, 1949, 1962). The Hermitage Formation is typically 60 to 80 ft (20 to 25 m) thick and is a good geophysical marker unit. The gamma-ray signature is characteristically irregular with numerous spikes and has amplitudes ranging from 60 to 80 API units with spikes approaching 200 API units. The high overall gamma-ray intensity and the spikes facilitate identifying the unit. The base of the Hermitage is correlated with the base of the lowest shaly unit that is over 60 API units. The top of the Hermitage is picked at the base of the first clean limestone associated with a flat gamma-ray signature of the Bigby-Cannon Limestone. The T-5 bentonite occurs near the base of the Hermitage Formation and may only be a foot above the lower contact (Wilson, 1962).

4.1.4.2.2 Bigby-Cannon Limestone

The Bigby-Cannon Limestone is a medium-bedded limestone (Wilson, 1949, 1962; Hardeman, 1966b; Milici, 1969) and a good hydrocarbon reservoir (Harris and Milici, 1977), referred to by drillers as the Upper Sunnybrook horizon (Born and Burwell, 1939). The unit has a consistently flat and low amplitude gamma-ray signature of 20 to 30 API units. Thickness of the unit ranges from 80 to 150 ft (25 to 45 m). The base of the Bigby-Cannon is picked at the uppermost definitive shaly limestone lithology

associated with the irregular signature of the Hermitage Formation. The contact with the overlying Catheys Formation is picked where overall gamma-ray intensity increases and becomes irregular.

4.1.4.2.3 Catheys Formation

The Catheys Formation is thin- to medium-bedded shaly nodular limestone with minor shaly interbeds (Wilson, 1949, 1962; Hardeman, 1966b; Milici, 1969). The gamma-ray signature of the unit is higher in overall intensity and is very irregular, much like the Hermitage Formation. Gamma-ray amplitude ranges from 30 to 80 API units. The base of the unit is correlated with the uppermost homogenous, clean limestone bed that has a low amplitude and flat gamma-ray signature. The top of the unit does not have a consistent marker or signature on which to make a pick because it grades into the overlying Upper Ordovician Leipers Formation, and is difficult to separate both in the field and in the subsurface. These units are commonly not subdivided on published geologic quadrangle maps in Central Tennessee (e.g., Wilson, 1971). Milici (1969) was, however, able to divide the Catheys Formation in Sequatchie Valley into three members: a lower laminated argillaceous limestone; a middle fossiliferous limestone; and an upper argillaceous limestone. A general pick may be made at the highest appearance of shaly limestone or the unit may be combined with the rest of the overlying Upper Ordovician. The quality and regional reproducibility of this pick is poor. The Catheys Formation is 130 to 400 ft (40 to 120 m) thick and generally thickens eastward (Wilson, 1949).

4.1.5 Discussion

Local geologists and drillers have different opinions concerning the regional position of the Millbrig (mud cave) and Deicke (pencil cave) K-bentonites. These problems may have arisen from the usage of the terms "mud cave" and "pencil cave" by Born and Burwell (1939). They noted that the mud cave is located in the Hermitage Formation and the pencil cave separates the upper and lower Carters Limestone in Clay County, Tennessee. Wilson (1949) later renamed the mud cave K-bentonite as T-5 and the pencil cave as T-3. The Millbrig (T-4) is not present in the area described by Born and Burwell (1939) and the upper Carters in the region is only 10 ft thick; in Clay County, the Millbrig and Deicke should be separated by around 15 ft. Absence of the Millbrig K-bentonite and the initial usage of the term mud cave may have led to the current state of confusion. Additional research and mapping have redefined the terms and location of the mud cave in Kentucky, Tennessee, and Virginia (Miller and Fuller, 1954; Conkin and Conkin, 1983; Kolata et al., 1987; Huff and Kolata, 1990; Conkin and Conkin, 1992; Haynes, 1994; Kolata et al., 1996). Chemical fingerprinting of the Millbrig and Deicke K-bentonites permits correlation of these redefined marker beds throughout the eastern United States (Kolata et al., 1987; Huff and Kolata, 1990; Haynes, 1994; Kolata et al., 1996), and ties them to the type localities and early published descriptions in Tennessee (e.g., Fox and Grant, 1944; Wilson, 1949) (Figs. 14 and 15).

Regional correlations indicate that the Trenton–Black River contact is diachronous (Kolata et al., 1987; Haynes, 1994; Kolata et al., 1996, 2001). In the Michigan and Illinois basins, the Millbrig K-bentonite is situated near the base of the Spechts Ferry Shale and the Deicke K-bentonite is located in the upper part of Platteville

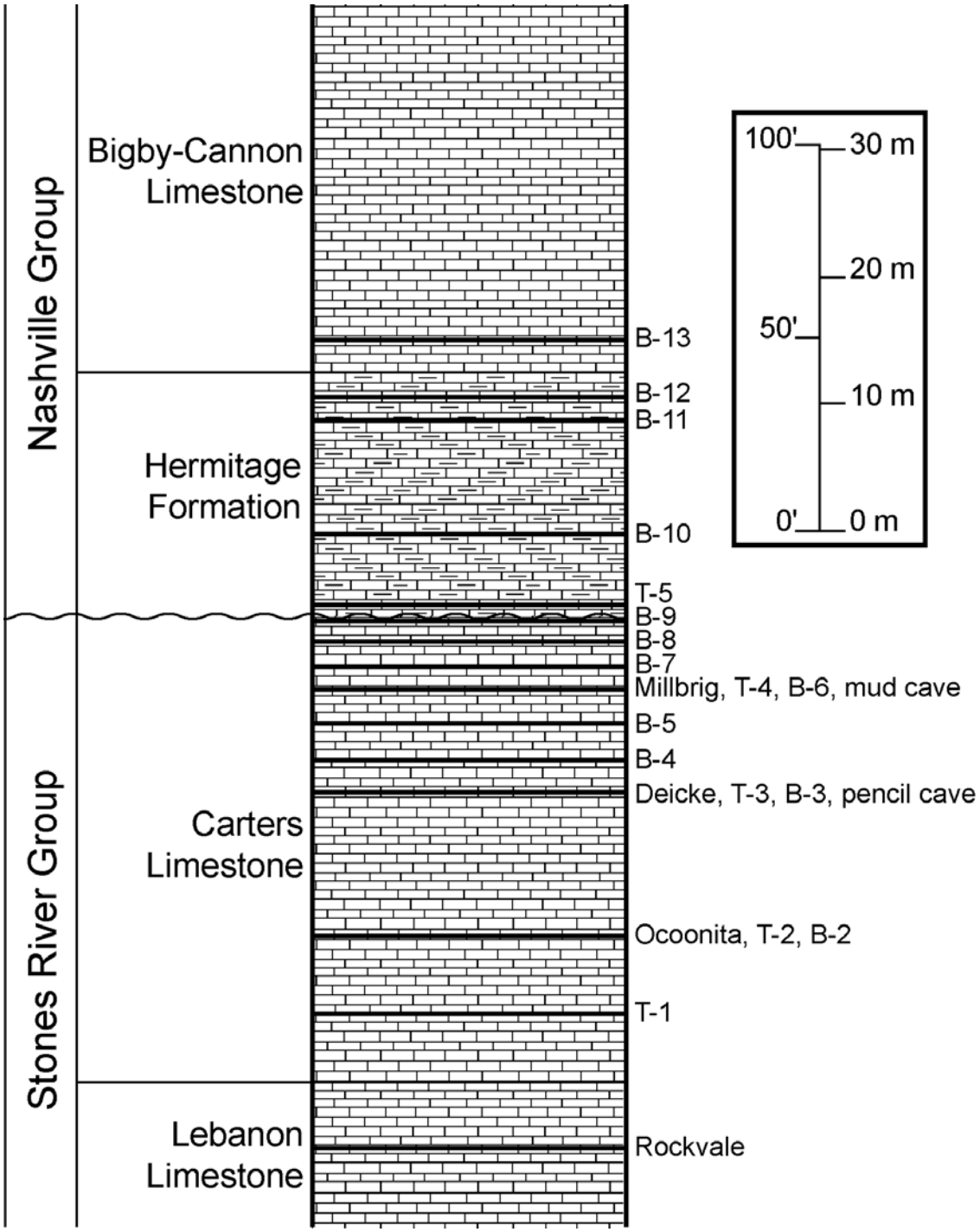


Figure 14. Generalized stratigraphic position of major Ordovician bentonites in the southern Appalachians. T-1 through T-5 from Wilson (1949) and B-2 through B-13 from Fox and Grant (1944). Note that B-1 is located in the lower Murfreesboro and B-14 is located in the Sequatchie Formation and not shown. (Modified from Kolata et al., 1996).

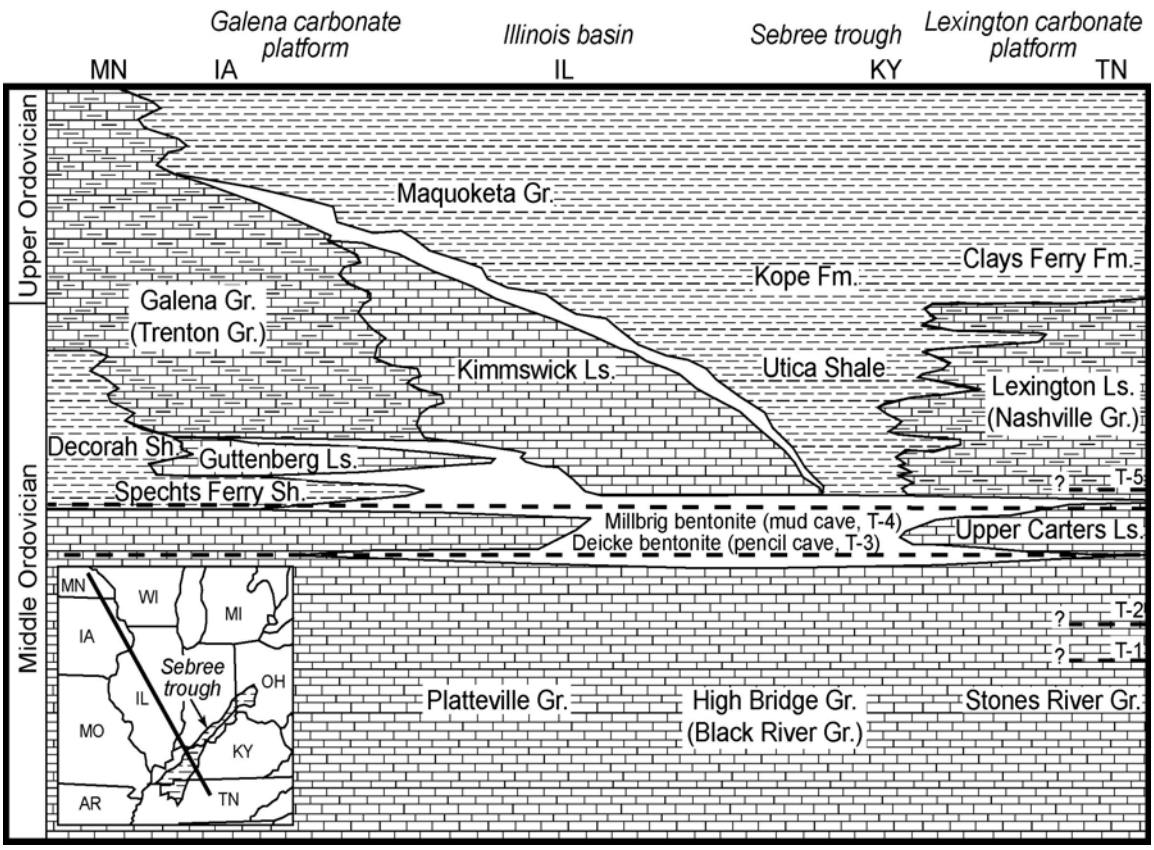


Figure 15. Stratigraphic reconstruction of the Middle to Late Ordovician mid-continent carbonate platform. Note the Millbrig bentonite crosses the Trenton–Black River contact illustrating the unconformity is diachronous. (Adapted from Kolata et al., 2001).

Group, which is composed predominantly of limestones equivalent to the Carters Limestone. In the Appalachian basin both K-bentonites are located in the upper Black River and equivalent groups (Haynes, 1994; Kolata et al., 1996, 2001). A bentonite in the Hermitage Formation (T-5) may be mistaken for the Millbrig. Consequently, bentonites located in the Hermitage Formation in the southern Appalachian basin are not the Millbrig K-bentonite, but instead correlate with one of the other locally prominent bentonites (Haynes, 1994; Kolata et al., 1996, 2001). Problems may arise when using older drillers' logs or publications that do not describe the bentonites in detail or their exact stratigraphic position (e.g., Freeman, 1953; Milhous, 1959). Additional difficulties in standardizing nomenclature arise from common differences between drillers and academic geologists. Individual geologists and companies use a variety of picks to construct structure contour maps of particular markers, which may or may not correspond to actual regional stratigraphic tops. These inconsistencies will not affect exploration in small areas (e.g., Fentress or Overton Counties, TN), but regional correlations will lead to significant errors and the targeting of data artifacts. The Millbrig and Deicke K-bentonite correlations are straightforward (Fig. 16), but local or regional correlations of other locally prominent bentonites are not definitive (e.g., compare Figs. 11 and 16). Several prominent bentonites are present in the Alpine field (Fig. 16) that can be correlated with the F. A. Sells #1 well in Fentress County (Fig. 11), but cannot be definitely correlated in the other wells. Incorporating older published data or picks made by other geologists will inherently create consistent errors and deviations. These problems can be circumvented by establishing a standardized pick methodology that is internally and regionally

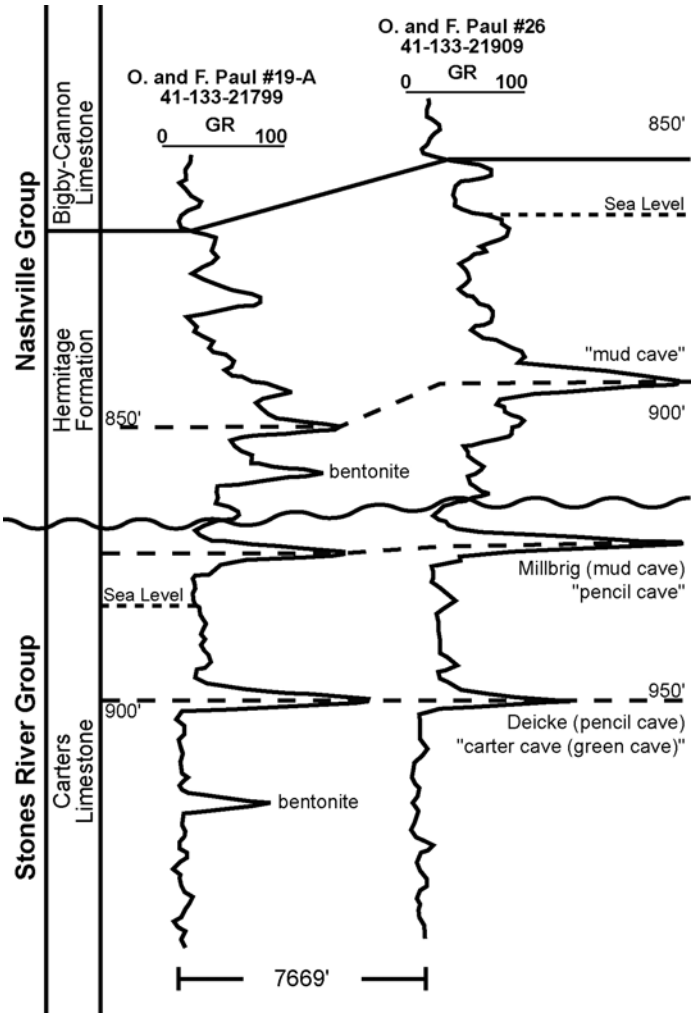


Figure 16. Millbrig and Deicke K-bentonite correlations from the Alpine field, Overton County, Tennessee. The vertical datum is the Deicke K-bentonite. Note that several other prominent bentonites are present in the wells that can be correlated with the F. A. Sells #1 well in Fentress County, but not definitively in the other wells. Names of commonly miscorrelated bentonites are in quotation marks.

consistent. This will allow explorationists to better locate potential targets and tie published regional data into their maps or datasets.

4.1.6 Conclusions

1.) Examination of gamma-ray and other well logs confirm that subsurface subdivision of the Stones River and Nashville Groups is feasible between the Nashville dome and Valley and Ridge.

2.) The Deicke (pencil cave or T-3) K-bentonite marks the top of Wilson's lower Carters. The Millbrig (mud cave or T-4) K-bentonite occurs near the top of Wilson's upper Carters.

3.) The top of the Carters Limestone is locally an unconformity with erosion locally removing the Millbrig bentonite; in these areas a higher bentonite in the Hermitage Formation (i.e., T-5) may be mistaken for the Millbrig.

4.) The base of the Ridley Limestone contains beds that are lithologically and geophysically similar to the top of the Pierce Limestone. Hence, care must be taken not to miscorrelate these units.

5.) A 40 ft (12 m)-thick shale bed occurs near the middle of the Carters Limestone toward southwestern Virginia and can easily be mistaken for the base of the unit.

6.) The Millbrig and Deicke bentonites, along with the Pierce Limestone and Hermitage Formation, are the best subsurface marker horizons in the Stones River and Nashville Groups.

4.2 Differentiating the Nashville-Stones River (Trenton-Black River) Groups' Carbonate Platform Facies and Hydrothermal Dolomite Traps: Subsurface Identification and Hydrocarbon Emplacement in the Southern Appalachians

This section is a slightly revised version of a peer-reviewed paper to be submitted to the Oil and Gas Journal in 2006 by Jonathan C. Evenick and Robert D. Hatcher, Jr.: My major contributions to this paper include: 1) correlating and interpreting the geophysical well logs; 2) writing the manuscript; and 3) creating the illustrations except for Figure 22.

4.2.1 Introduction

The Middle Ordovician carbonate platform facies and petroleum system (Nashville-Stones River or Trenton-Black River Groups) are currently the most active hydrocarbon plays in eastern North America. The facies are recognizable at the surface on the Nashville and Jessamine domes, and can be traced using geophysical well log signatures from central Tennessee eastward beneath the Cumberland Plateau into Kentucky, Virginia, and the western Valley and Ridge of Tennessee.

The Cumberland Plateau contains the western limit of deformation in the Appalachian overthrust region, but is otherwise characterized by strata dipping gently southeastward from the Nashville and Jessamine domes (Wilson and Stearns, 1958; Rodgers, 1970; Roeder et al., 1978; Fig. 17). The Nashville-Stones River Groups are proven oil and gas reservoirs in the Highland Rim, Plateau, and Valley and Ridge. Major producing fields exist in Overton and Pickett Counties, Tennessee, and Clinton and Wayne Counties, Kentucky in the eastern Highland Rim. The Rose Hill and Swan Creek fields are productive oil and gas fields in the thrust belt of southwestern Virginia and northeastern Tennessee (Miller and Fuller, 1954; Clendening and McCown, 1999; Hatcher et al., 2001). Future exploration in the region is attractive because of the

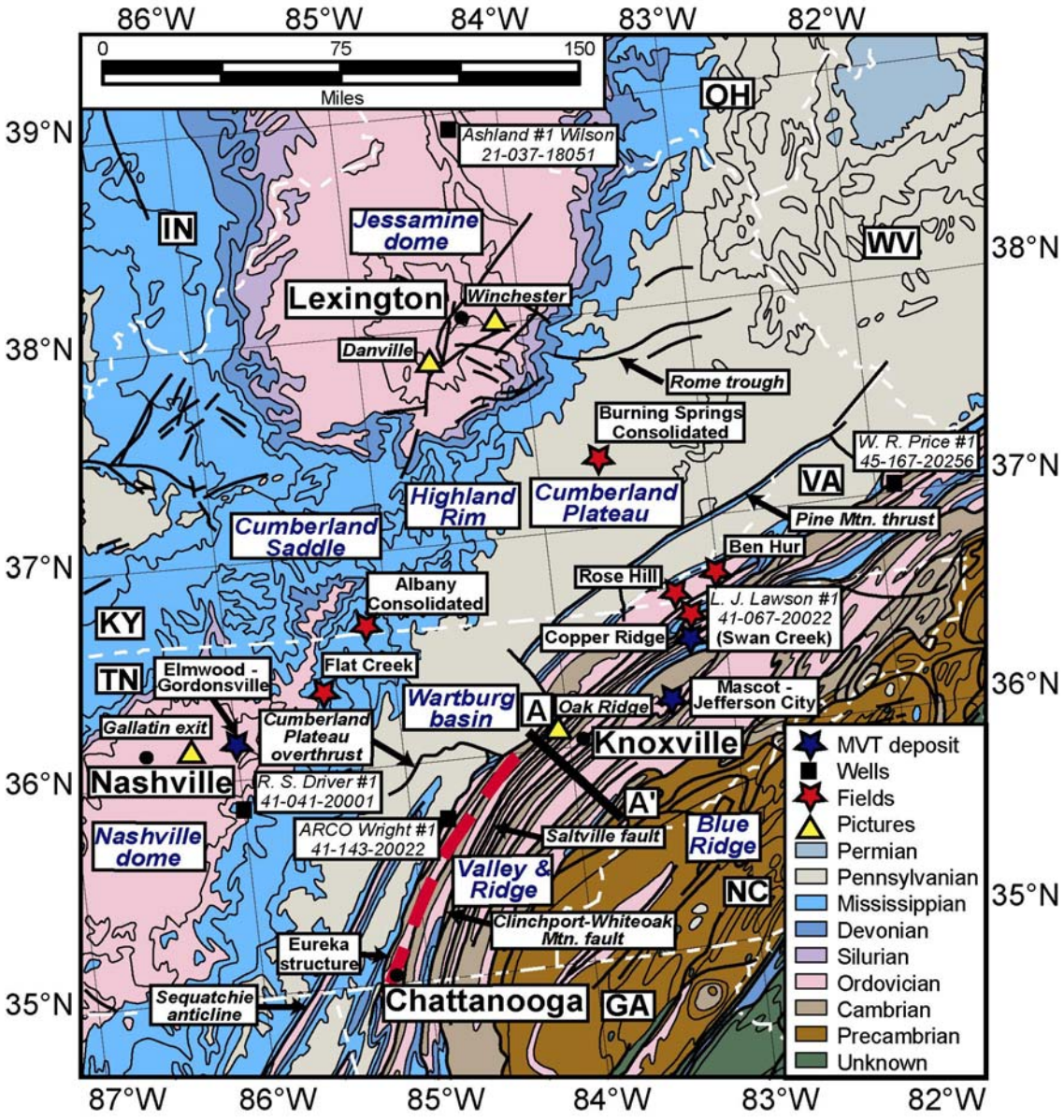


Figure 17. Generalized geologic map of the southern Appalachian basin with some known fields producing from Ordovician strata. (Adapted from Schruben et al., 1998).

presence of both stratigraphic and structural traps (Born and Burwell, 1939; Harris and Milici, 1977; Whisner and Hatcher, 2003), shallow drilling depths, and reservoirs that may be self-sourcing (Epstein et al., 1977; Obermajer et al., 1999).

Hydrothermal dolomite (HTD) plays have become an increasingly prominent exploration target in the southern Appalachians, but are difficult to identify in the subsurface with conventional technology. Large known hydrothermal dolomite fields in the Michigan and Illinois basins (i.e., Albion-Scipio and Lima-Indiana trends) and smaller, productive fields in the northern Appalachian basin (i.e., Glodes Corner field, NY) have demonstrated that these are excellent reservoirs and petroleum targets (Coogan and Parker, 1984; Keith and Wickstrom, 1991). Consequently, interest has been growing in the southern Appalachian basin in the potential of similar hydrothermal dolomite plays. While it is difficult to identify and prospect these targets for hydrocarbons, the interest is justified because major Mississippi Valley Type (MVT) zinc deposits have been mined for decades in Tennessee and southwestern Virginia. There are large amounts of data on hydrothermal dolomite as a result of mining and prospecting these deposits (Oliver, 1986; Misra et al., 1996). Mining MVT deposits in Tennessee (Elmwood-Gordonsville, Mascot-Jefferson City, and Copper Ridge districts) and Virginia (Austinville district) generated a large amount of information on mineral paragenesis, pressure and temperature estimates, and mineralization horizons (Misra et al., 1996). This information is important not only to future MVT hydrocarbons prospecting in the region, but also to regional HTD exploration.

4.2.2 Stratigraphy

The Middle Ordovician sequence has been subdivided into nine lithostratigraphic units on the surface that have been recognized in the subsurface beneath the Highland Rim, Cumberland Plateau, and western Valley and Ridge (Wilson, 1949; Evenick and Hatcher, 2006b; Figs. 18-21). These lithofacies extend into the Valley and Ridge to the footwall of the Clinchport-Whiteoak Mountain-Wallen Valley thrust system (Fig. 22). To the east of the thrust system, a thin platform carbonate bank facies changes to a thinned, bank-edge facies, to a very thick siliclastic basin facies to the east of the Saltville fault (Walker et al., 1983). The thinning carbonate facies mark the approximate western edge of the foreland basin (Walker et al., 1983; Quinlan and Beaumont, 1984).

Geophysically subdividing the Nashville-Stones River Groups into the known formations is readily achievable in the southern Appalachian basin (Evenick and Hatcher, 2006a; Figs. 23 and 24), and doing so enhances the success in identifying possible structures, potential pay horizons, and traps. While large log suites exist for some of the deeper tests, the most commonly available log useful for stratigraphic correlation is the gamma-ray log. Gamma-ray signatures of Nashville-Stones River Groups units are commonly diagnostic. The discontinuous Wells Creek Formation, if present, has irregular gamma-ray amplitudes over 80 API units. The Murfreesboro Limestone has an irregular gamma-ray signature that ranges in amplitude from 20 to 80 API units. The Pierce Limestone is around 30 ft thick and bounded by two prominent shaly limestone sections (Wilson, 1949) that have gamma-ray signatures with amplitudes of 60 to 70 API units. The massive Ridley Limestone has a low amplitude and an almost flat gamma-ray signature of 20 to 30 API units. Lebanon Limestone is around 100 ft thick (Wilson,

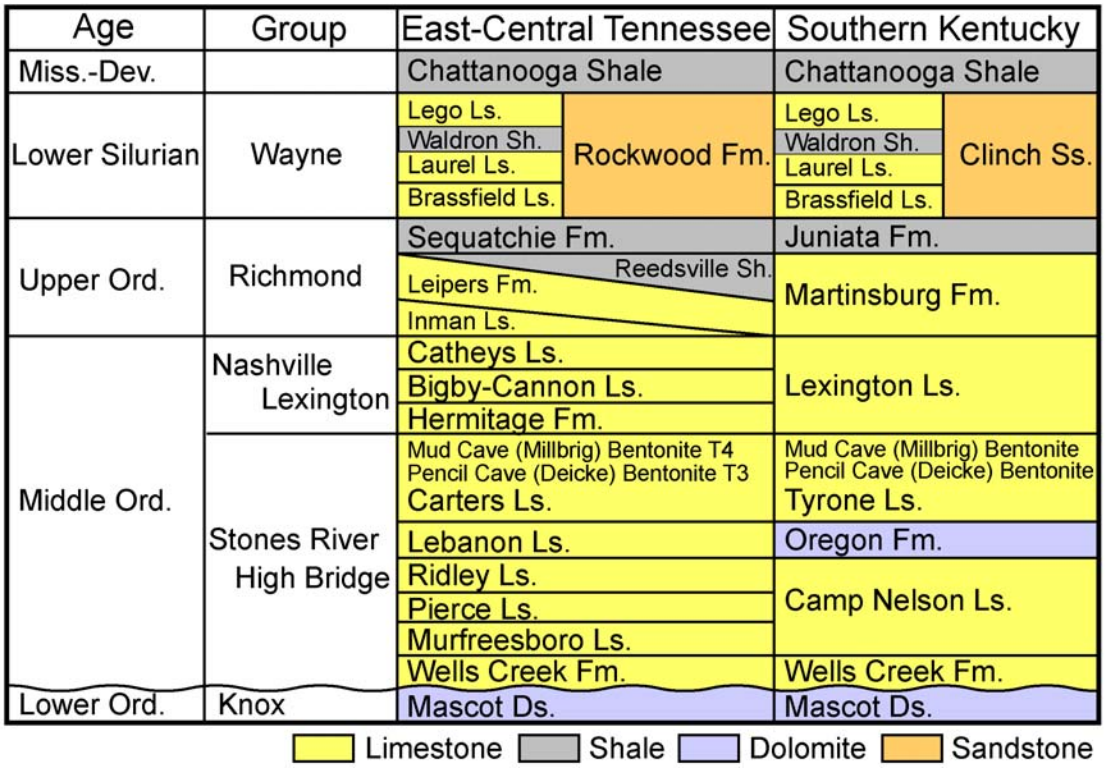


Figure 18. Stratigraphic correlation chart of Tennessee and Kentucky rock units.



Figure 19. Stones River Group–Nashville Group contact on TN 109, off I-40 East - Gallatin exit. The Millbrig and Deicke bentonites are roughly 20 feet apart. See Figure 17 for location.



Figure 20. Stones River Group–Nashville Group contact at the Oak Ridge Sportsmen's Association, TN. See Figure 17 for location.

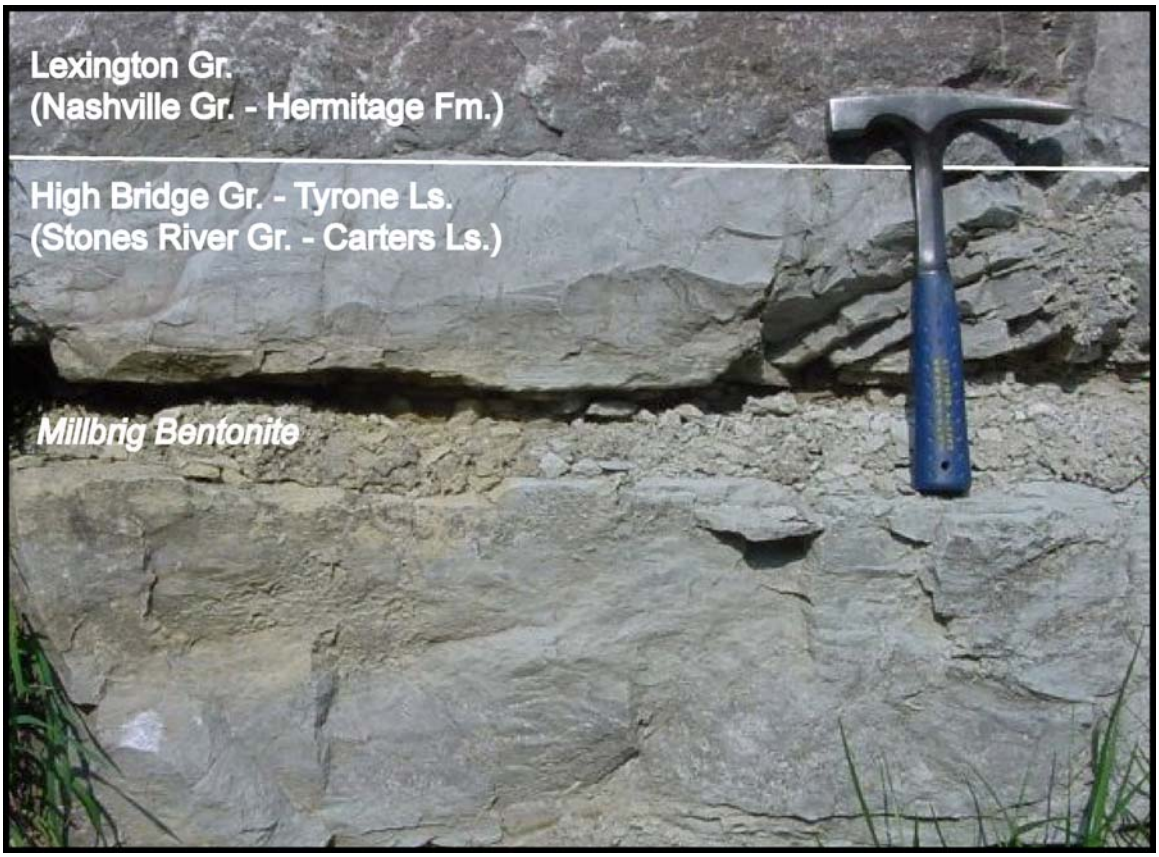


Figure 21. High Bridge Group–Lexington Group contact on Route 34, Danville, KY. See Figure 17 for location. (Picture taken by Rick Schrantz).

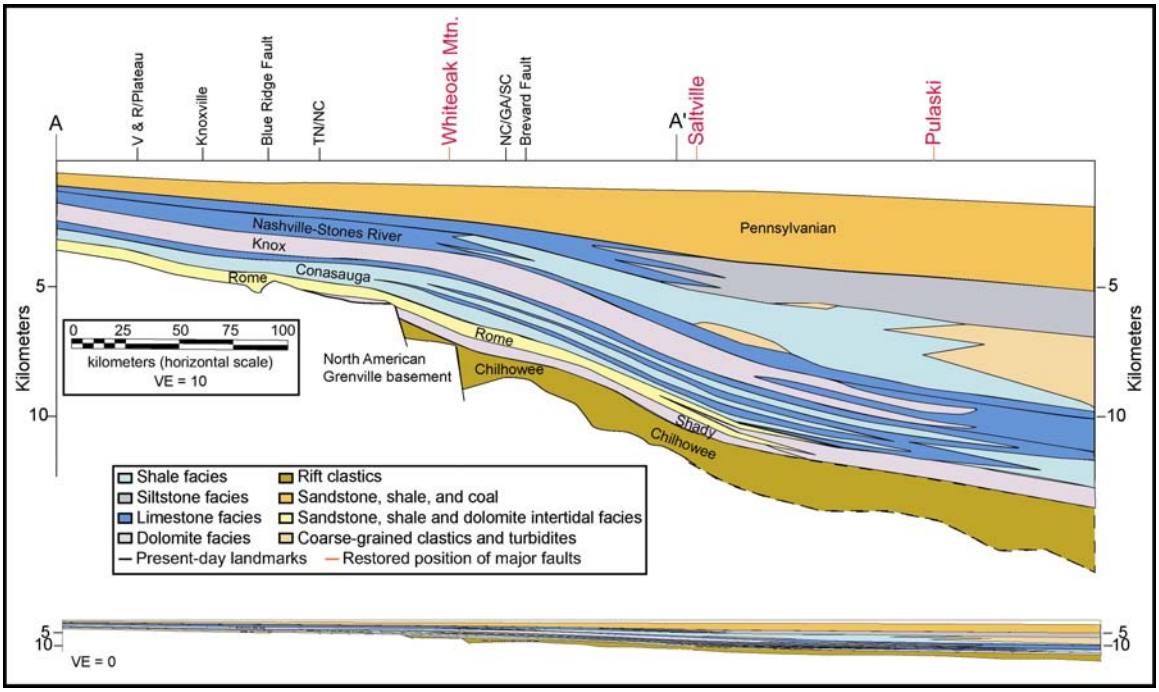


Figure 22. Palinspastically restored facies in East Tennessee. Facies diagram is quantitatively reconstructed by relating major faults and facies boundaries to structural features in the undeformed basement. Names of three major thrusts are indicated in red above their retrodeformed positions on the section. See Figure 17 for cross section location. (Unpublished figure courtesy of Hatcher and Whisner).

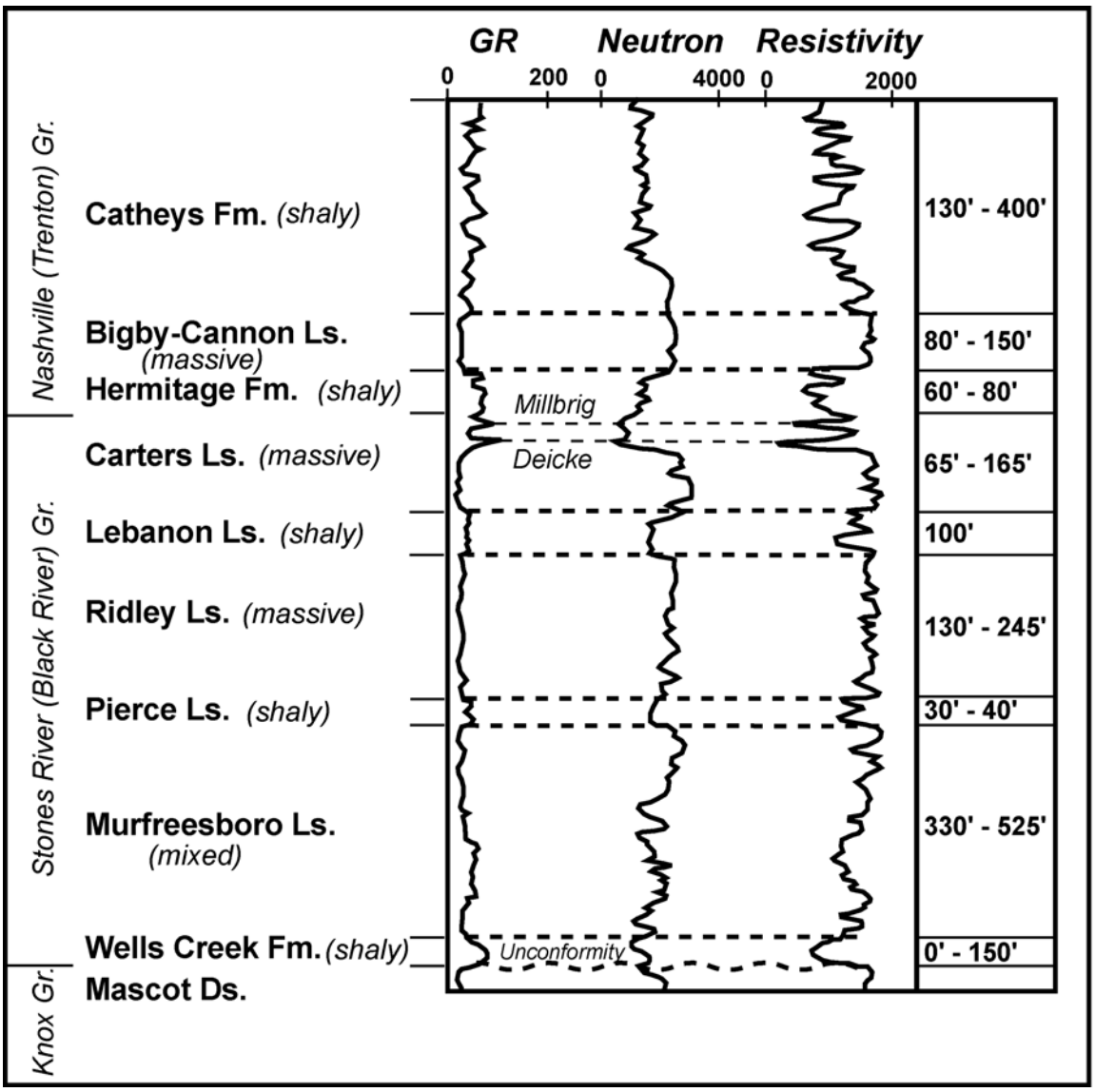


Figure 23. Type logs for the Nashville and Stones River Groups.

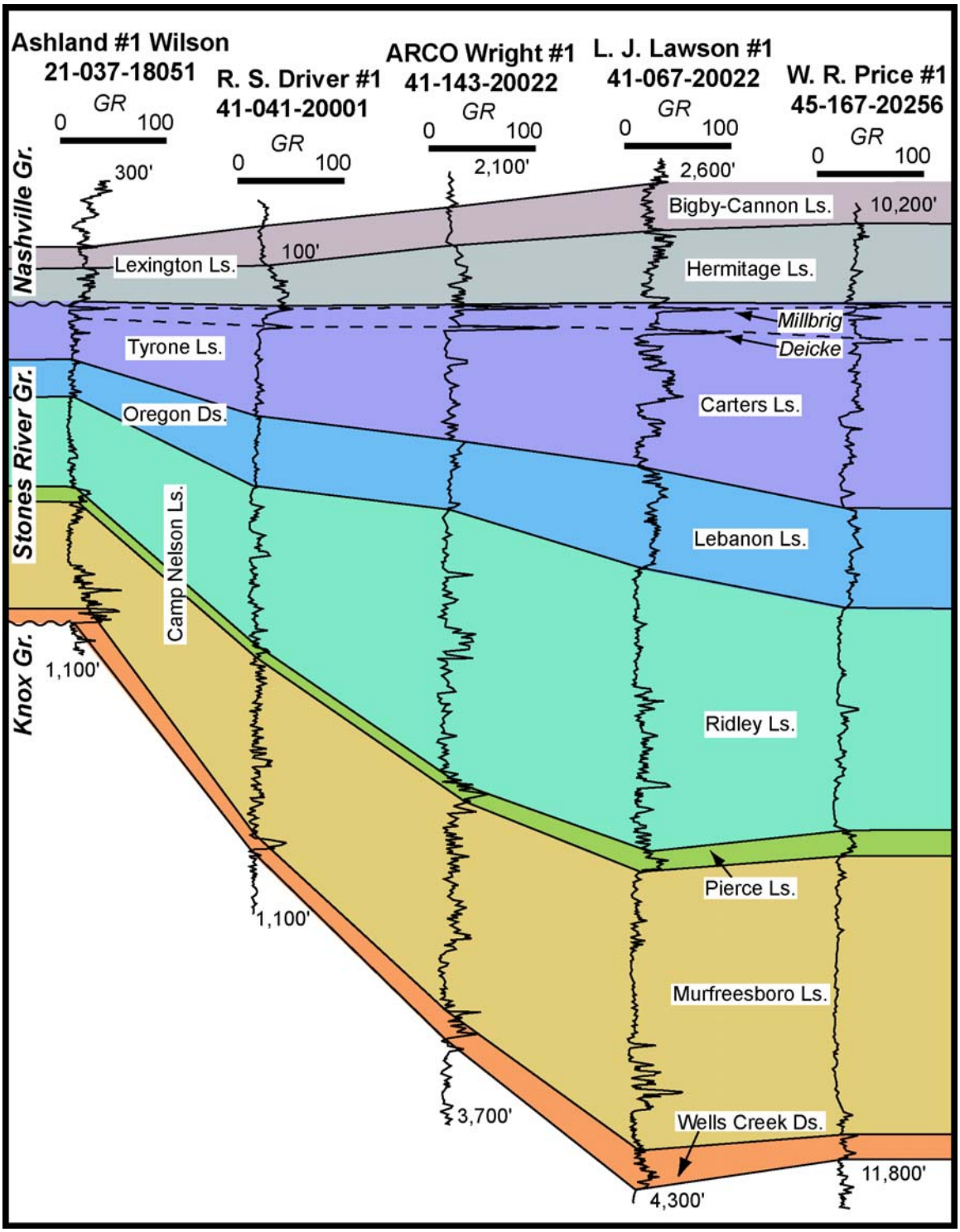


Figure 24. Regional geophysical log correlation of Stones River and Nashville Groups units across the study area with the Millbrig bentonite as the vertical datum. See Figure 17 for well locations. Tennessee stratigraphic names are used on the right and Kentucky terminology is to the left. The Camp Nelson Limestone correlates with the Ridley, Pierce, and Murfreesboro Limestones.

1949) and, because of its mixed massive to thin-bedded and shaly character, has a heterogeneous gamma-ray signature typically of 25 to 40 API units. The massive Carters Limestone generally has a flat gamma-ray signature of 20 to 30 API units (Evenick and Hatcher, 2006a).

The gamma-ray signature of the shaly-sandy limestone of the Hermitage Formation (basal Nashville Group) is irregular and has amplitudes ranging from 60 to 80 API units with occasional spikes approaching 200 API units. The overlying, clean medium-bedded Bigby-Cannon Limestone has a consistently flat and low amplitude gamma-ray signature of 20 to 30 API units. The gamma-ray signature of the Catheys Formation is higher in overall intensity (30 to 80 API units) and is very irregular, much like the Hermitage Formation (Evenick and Hatcher, 2006a).

4.2.3 Oil and Gas Reservoirs

The region west of the Clinchport-Whiteoak Mountain fault system lies in the oil/gas window (Epstein et al., 1977). Recognition of the continuity in stratigraphy over this wide region is significant to future drilling in the southern Valley and Ridge province because the Nashville-Stones River Groups are known hydrocarbon producers and comprise one or more petroleum systems. Proven reserves have been found in Ordovician strata in Tennessee (i.e., Swan Creek and Flat Creek fields; Born and Burwell, 1939; Wickstrom, 1996; Clendening and McCown, 1999; Hatcher et al., 2001), Kentucky (i.e., Burning Springs and Albany consolidated fields; Baranoski et al., 1996; Nuttall, 1996; Wickstrom, 1996), and Virginia (i.e., Rose Hill and Ben Hur fields; Miller and Fuller, 1954; Wickstrom, 1996). The Bigby-Cannon Limestone (lower Sunnybrook

horizon) and Murfreesboro are known oil-producing intervals, and the uppermost Knox Group (Mascot Dolomite) is a prominent gas-producing zone (Born and Burwell, 1939; Baranoski et al., 1996; Hatcher et al., 2001). The enhanced ability to identify and target these intervals or reservoirs, therefore, could open the region to more exploratory drilling because drilling depths are shallower in the southern Appalachian basin, and because large, unexplored anticlinal plays, such as the Eureka structure (Whisner and Hatcher, 2003), are present. In Overton County, Tennessee, possible HTD related sags are actively being prospected.

4.2.4 Hydrothermal Dolomite Traps

HTD structures in the Appalachian basin have a number of similarities, yet, the stratigraphic horizons where HTD structures have been found vary regionally: in the MVT mining districts of Tennessee HTD structures occur in the Kingsport Formation and Mascot Dolomite (upper Knox Group), and Murfreesboro Limestone (lower Stones River–Black River Group; Misra et al., 1996). In central New York, 300 feet of the upper Black River Group is pervasively hydrothermally dolomitized (Von Rudloff, 2005). In Kentucky, HTD structures have been found only in the Lexington (Trenton) Group, but not in the upper High Bridge (Black River) Group (Black et al., 1981). A recent test core drilled by the Kentucky Geological Survey into the largest known outcropping HTD structure (sometimes called “light bulb” or “dolomite chimney” structures) indicates that dolomitization decreases with depth and does not appear to be directly related to the proximity of the fault zone thought to have served as the conduit for hydrothermal fluids (Harris et al., 2005). An exposed HTD structure in Kentucky

suggest that dolomitizing basal fluids migrated up section (Fig. 25) through a small thrust fault and dolomited around the tip of the fault causing the circular structure. It is likely that future prospecting in the region will identify additional HTD structures in Kentucky and Tennessee. It is also probable that producing fields have not been accurately identified as being related to HTD structures where a well or field with anomalously high porosity could be on the flanks of an unknown structure. A small, productive HTD structure has recently been postulated, although unconfirmed, to exist in part of the Swan Creek field in the upper Carters Limestone (upper Stones River Group) (Fig. 26; Bailey et al., 2005). The thickness of this weakly dolomitized section is only a few feet, but may be responsible for the best oil production in the field (Bailey et al., 2005). Production data from this possible hydrothermal dolomite structure indicate that these plays can be prolific (>300 barrels of oil per day), but production may last only days or months.

These typically small, but potentially high-yield reservoirs commonly have structural lows over the structures because the overlying stratigraphy subsides as dolomitization continues. These structures, therefore, should be differentiated from synclinal trends before being prospected. Drilling structural lows is not a widespread practice, although they may be identified in seismic reflection data. Identification of HTD structures requires the differentiation of dolomitization-related sags from synclines (Fig. 27). Dolomite sags: 1) will correspond to a thinned isopach map (for the unit that contains the dolomite), whereas folded stratigraphy typically does not thin or thicken near the fold hinges, especially in the synclinal hinge; 2) are characterized by localized, linear lows while synclines are typically broad and gentle linear lows; 3) will not commonly

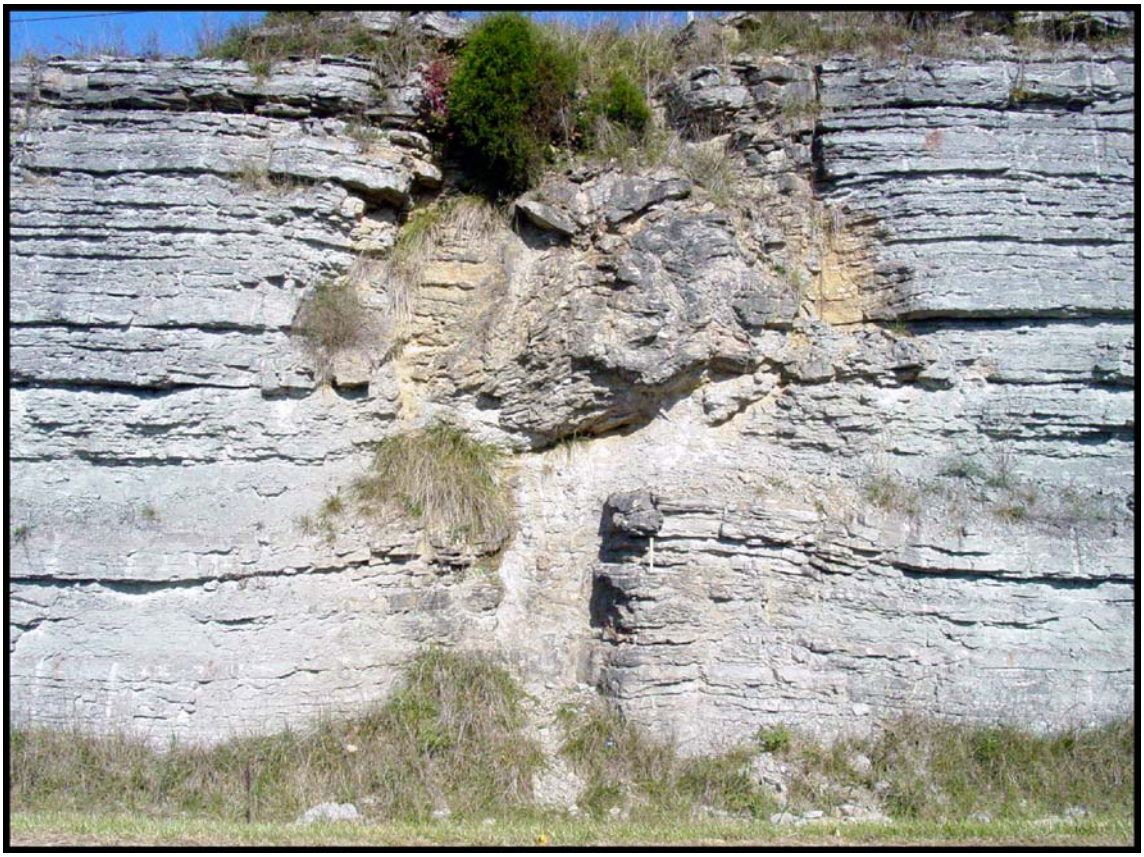


Figure 25. Hydrothermal dolomitization in the Lexington Limestone at the inferred fault tip of a minor thrust fault, Highway 627, south of Winchester, Kentucky. Regionally these features have been called “light bulb” or “dolomite chimney” structures. Hammer for scale.

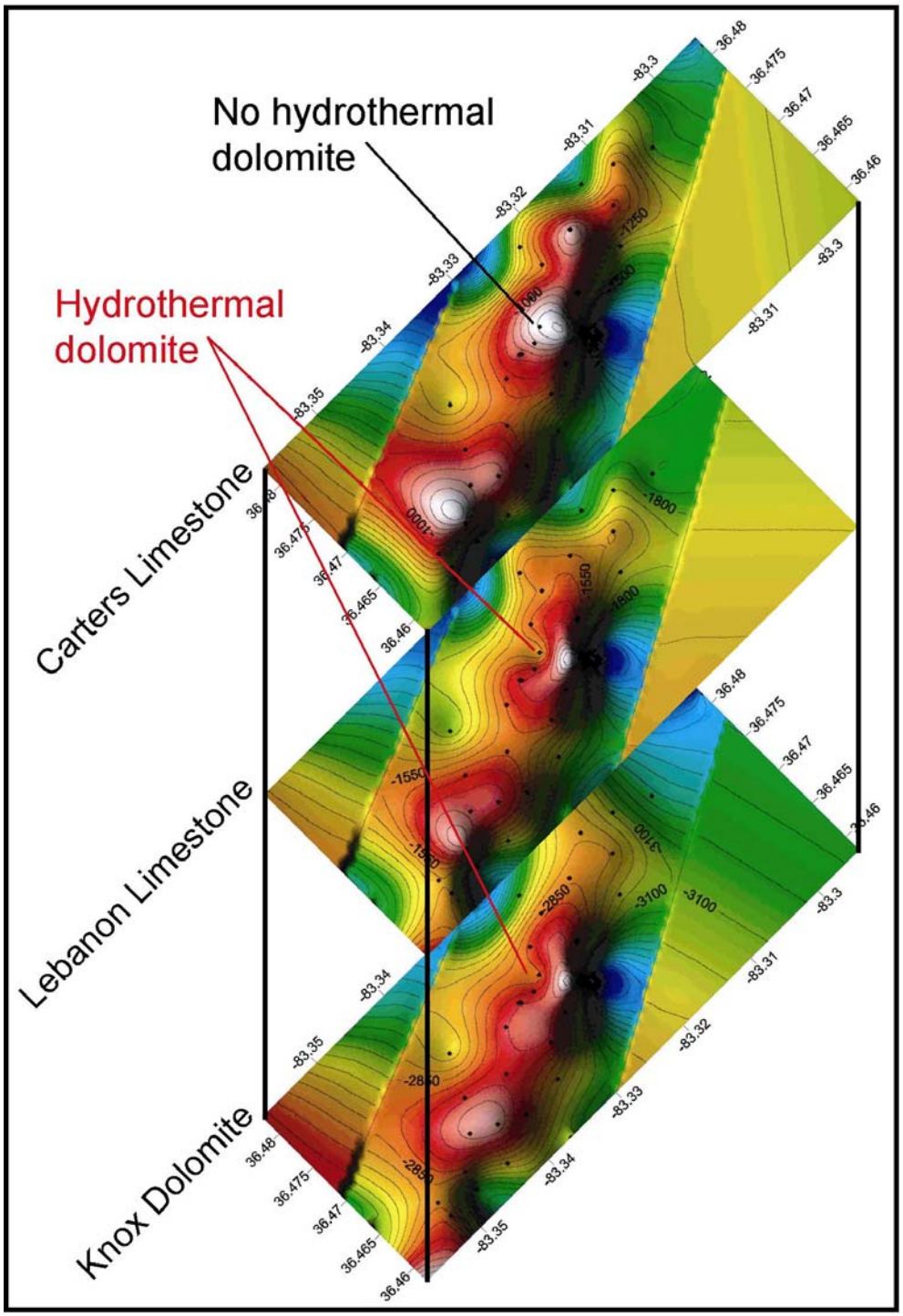


Figure 26. Structure contour maps from the Swan Creek field, Tennessee. Note the structural low superposed on the northwestern flank of an anticline. Hydrocarbon production from surrounding wells is from the top of the Stones River (Carters Limestone). The structural low is evident from top of the Lebanon Limestone downward into the Knox Group, but is not present in younger horizons.

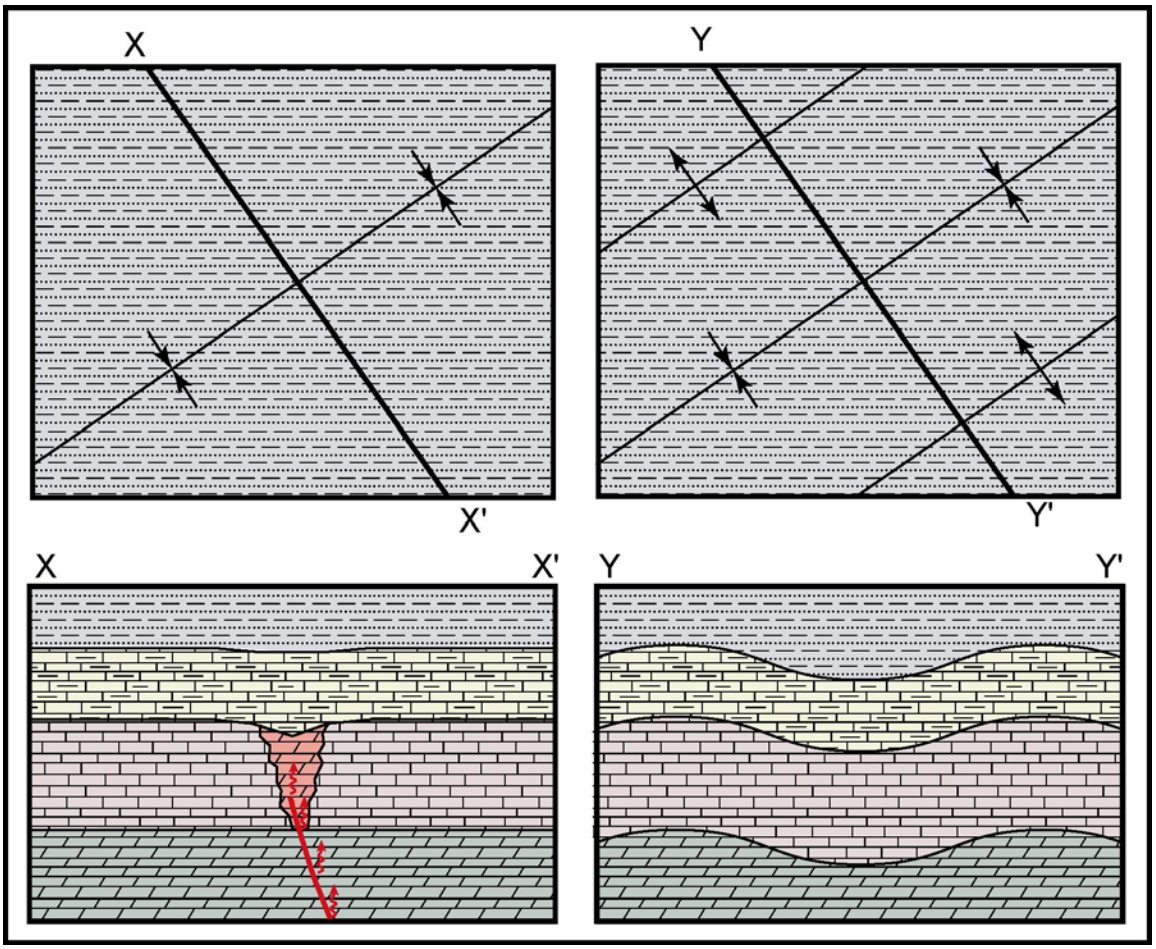


Figure 27. Schematic map (top) and cross sectional (bottom) views of a hydrothermal dolomite sag (left) and classic folds (right). Note the constant unit thickness and paired anticlines associated with the syncline, whereas the hydrothermal sag does not maintain thickness or have paired anticlines.

follow regional strike because they are generally controlled by basement faults and fractures; and 4) commonly do not have an anticlinal component.

MVT deposits typically have the highest concentration of economic minerals in the center where secondary porosity related to dolomitization and/or brecciation is cemented with gangue minerals (Misra et al., 1996). Conversely, drilling data indicate hydrocarbons typically occur on the flanks or "baked zone" halo of the MVT deposits (Smith, 2004; Von Rudloff, 2005) where the leached limestone/dolomite retains its secondary porosity (Fig. 28). Surface analog Ordovician HTD structures in Kentucky mimic this general pattern: thin sections from within a HTD structure typically have 0-10 percent porosity, 5-30 percent porosity within 100 feet of the structure, and 0-1 percent regional porosity (Wilcox, 2005). This relationship has been confirmed by recent drilling in central New York, where wells in the center of a HTD structure are commonly dry and the best production is noted near the flanks of the structure (Von Rudloff, 2005). Horizontal drilling also enhances recovery rates, because both sides of the HTD structures are tested with one hole.

The temporal relationship between dolomitization (with or without brecciation) and mineral emplacement have been studied extensively by mining companies (Misra et al., 1996). Dolomitization commonly occurs first and is followed by precipitation of pyrite, calcite, sphalerite, galena, and fluorite, and then localization of hydrocarbons (Fig. 29; Misra et al., 1996; Wilcox, 2005). This sequence can vary depending on the number of hydrothermal fluid pulses and the temperature and composition of the fluid (Wilcox, 2005). These relationships can be seen in thin- or polished-section to outcrop-scale exposures and have helped mining companies avoid hydrocarbons. The presence of oil is

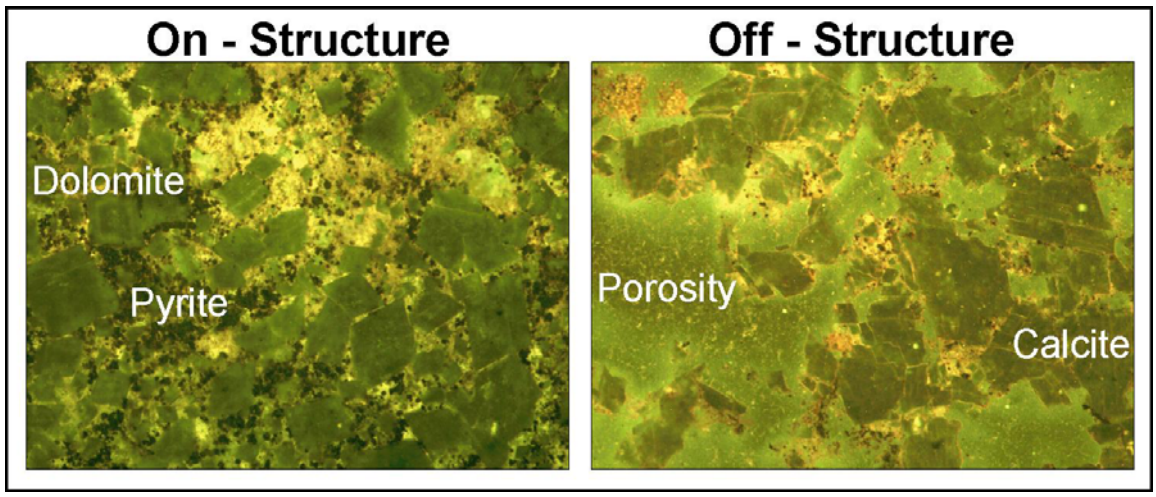


Figure 28. Thin sections on- and approximately 100 feet off-structure from the hydrothermal structure in Figure 25. Note the iron staining in both photos (yellow/brown) and increased porosity off-structure. (1.03 mm x 1.37 mm, blue light, plane polar).

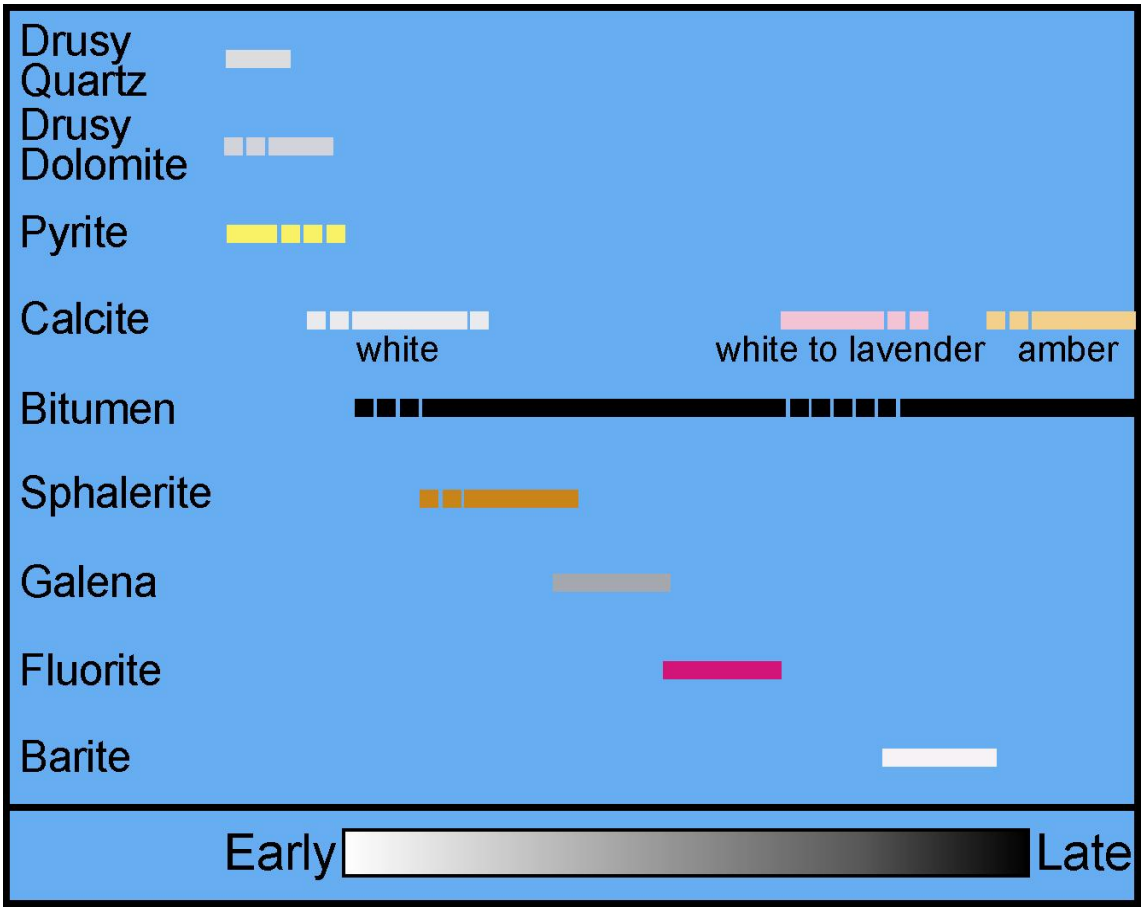


Figure 29. Paragenetic sequence of mineral deposition in Elmwood-Gordonsville mine. (From Misra et al., 1996).

a hindrance to mining and processing, and can force a company to abandon a prospect (Smith, 2004). Numerous test cores in Tennessee and HTD outcrops in Kentucky reveal that there commonly are not economic amounts of oil associated with these structures, making them difficult to identify or prospect in the subsurface. Most HTD outcrops in Kentucky have an aerial extent of 0.1 mi^2. If they were buried to a considerable depth, they would not be positively identifiable in seismic reflection data, because the associated sags and velocity contrasts would be too small.

The potential of other HTD plays is high in the Cumberland Plateau and eastern Highland Rim of southern Tennessee and northern Alabama because prospecting and drilling in that area have been very limited. Hydrothermal dolomite has recently been identified in the Catheys-Leipers Formation (Nashville Group) and impact breccias (Devonian) at the Flynn Creek impact structure, but the age, extent, and amount of hydrothermal dolomite is unclear. Other known large and cursorily tested structures are present in the region (Whisner and Hatcher, 2003) that should be prospected.

4.2.5 Oil Migration

Oil migration processes and timing of oil migration are key to understanding how to prospect and develop potential hydrothermal dolomite plays. Since hydrocarbons are typically the last fluid to migrate into hydrothermal traps (Misra et al., 1996), it is plausible that hydrocarbons are generated in a "baked zone" surrounding the conduits accommodating hydrothermal fluid migration (Fig. 30). The increased temperature would facilitate the localized generation of oil that would be proportional to the temperature and amount of hydrothermal fluid, the organic content of surrounding host

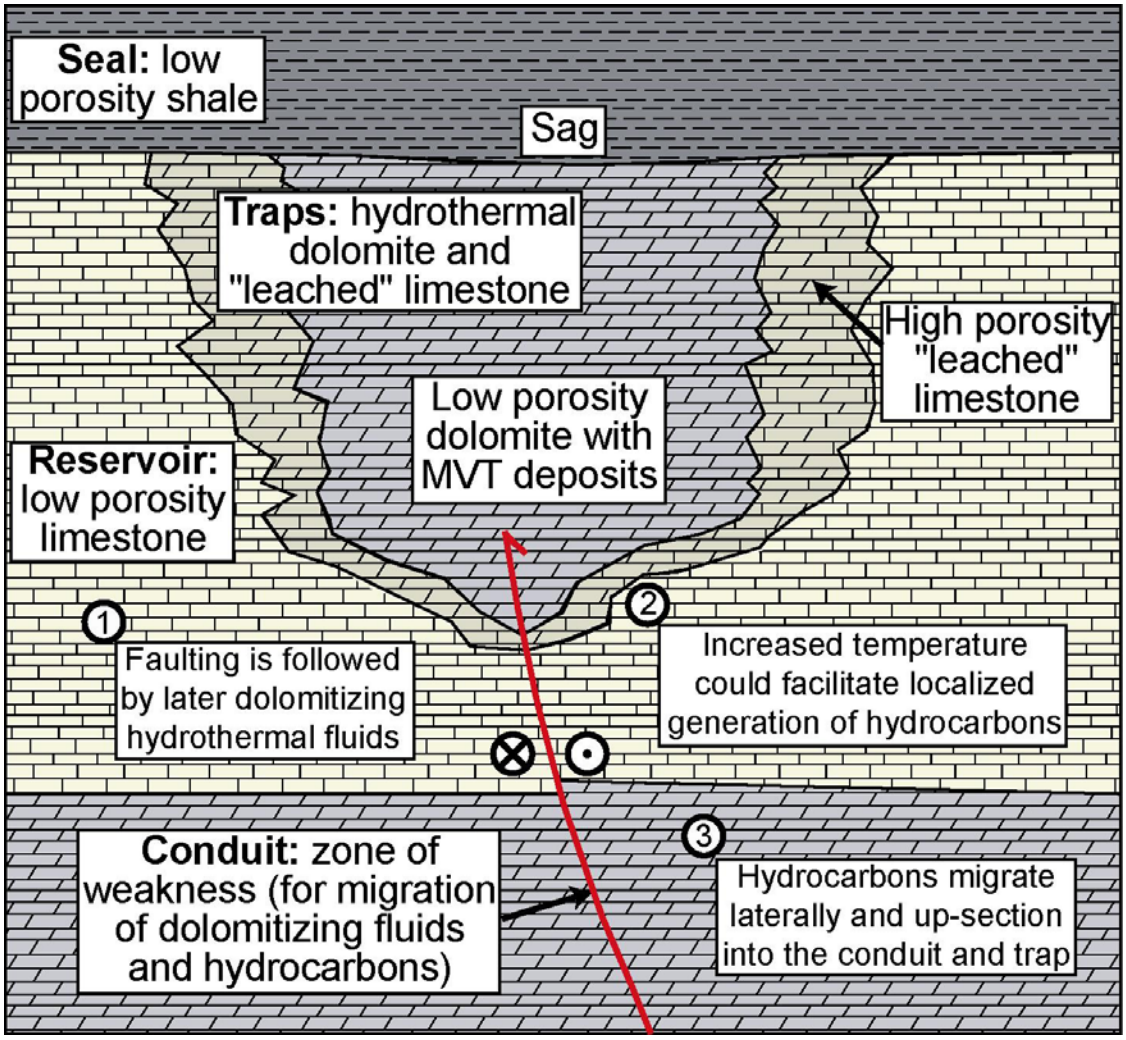


Figure 30. Schematic cross section of a hydrothermal dolomite trap associated with a transpressional fault and timing of hydrocarbon migration.

rocks, and the aperture and density of fracture zones. The generated hydrocarbons would then migrate into the fluid pathway and up-section into the highest suitable structural or stratigraphic trap. The inferred lag time between hydrocarbon sourcing and migration into the HTD traps would explain the presence of bitumen in vugs and the lack of oil inside Tennessee's MVT deposits that have had early-stage quartz, pyrite or calcite cementation (Misra et al., 1996; Smith, 2004).

4.2.6 Discussion

4.2.6.1 Preferential Dolomitization

Why hydrothermal fluids preferentially dolomitize certain units and not others is still unresolved (Oliver, 1986). MVT and HTD deposits require a hydrothermal fluid source, conduit, suitable reservoir, seal, and source of ions (Mg to form dolomite). This generalization, however, does not explain why certaincarbonate units in the Knox Group and other horizons below known MVT deposits are not dolomitized, because they appear to be ideal hosts and were closer to the dolomitizing fluid source. Principal HTD horizons in the Appalachian region are located in Cambrian and Ordovician rocks and have a large size range. Therefore, a single model will not account for all the chemical, stratigraphic, geologic, and temporal variables that control emplacement of MVT deposits and possible hydrocarbon migration.

4.2.6.2 Extending Correlations and the Nomenclature of the Middle Ordovician Lithofacies across the Appalachian Basin

It has been demonstrated that the Middle Ordovician lithofacies in the southern Appalachian basin can be correlated into the Central Basin (from southern Tennessee to southern Ohio) with little difficulty. The only facies that does not correlate well is the Lebanon Limestone–Oregon Dolomite because of probable regional dolomitization of the Lebanon Limestone in east-central Kentucky. It is known that the Middle Ordovician carbonates are similar in Canada and New York (Patchen et al., 1985) and recent studies have correlated lithofacies into the northern Appalachian basin (Brett et al., 2004). If these correlations could be verified in the subsurface between New York and Kentucky, it would indicate that a standard nomenclature should be established. It would be beneficial to use the most widespread nomenclature (Trenton-Black River Groups) and subdivide it using Wilson's (1949) lithofacies. Using this convention, the Nashville-Lexington and Stones River-High Bridge Groups nomenclature would be replaced by Trenton-Black River. This would help in the transfer of ideas, information, and data across state boundaries.

4.3 An Exploration and Geologic Model for Hydrocarbon Emplacement in the Southern Appalachian Basin

This section is a slightly revised version of a paper to be submitted to American Association of Petroleum Geologists Bulletin in 2006 by Jonathan C. Evenick, Robert D. Hatcher, Jr., and Donald B. Potter, Jr.:

My major contributions to this paper include: 1) correlating and interpreting the geophysical well logs; 2) writing the manuscript (except a section on the surface evidence of the Chattanooga décollement near Short Mountain); and 3) creating the illustrations except Figure 35.

4.3.1 Abstract

Hydrocarbon production in the Cumberland Plateau region of Tennessee and southern Kentucky is difficult to delineate and prospect because of inadequate exploration and geologic models. Regional-scale structures have not been systematically investigated (such as the Eureka structure in the western Valley and Ridge) even though petroleum production is associated with known large-scale surface structures. Hydrocarbon sources and production however, differ for each major reservoir. Oil production in Tennessee and Kentucky is mainly from Mississippian and Ordovician limestones, and gas production from the Knox Group. The Knox Group reservoir is mainly a stratigraphic trap that is probably sourced from the Conasauga Group and Rome Formation. Trenton-Black River Group oil and gas plays are mainly fracture dominated or related to hydrothermal dolomite bodies, and are self-sourced or sourced from lower units. Mississippian reservoirs are likely sourced by the Chattanooga Shale and are at least locally controlled by a proposed décollement soled in the Chattanooga Shale. Well data and new regional cross sections also indicate the Rome trough and Sequatchie anticline extend beneath the western part of the Wartburg basin. The inferred bounding faults of the Rome trough cannot be resolved at this time because of a paucity of seismic and basement data. The trough exhibits a pronounced thickening of the Rome and Conasauga Formations (up to 2,000') and a linear low in Precambrian–Ordovician trend surface residual anomaly (TSRA) maps. Extension of the Sequatchie anticline is based on well data and cross-section interpretations, but drilling is needed to confirm these hypotheses.

4.3.2 Introduction

Hydrocarbons in the Cumberland Plateau region of Tennessee and southern Kentucky (Fig. 31) are difficult to delineate and prospect because there is a basic lack of adequate exploration and geologic models. Regional structures such as the Pine Mountain thrust, Sequatchie Valley anticline, and the Cumberland Plateau overthrust are well known, but smaller-scale structures have not been thoroughly investigated even though most of the known petroleum production is from areas with no known surface structures. Historical hydrocarbon production from 1866 to 2003 in Tennessee (approximately 19.9 Mbl and 107.8 Tcf) is small given the large period of time (Zurawski, 2004), but this production has come mainly come from a small area of the Cumberland Plateau and western Valley and Ridge. Potential reserves in the unexplored southern Cumberland Plateau are probably on the same order as production in the northern Cumberland Plateau and will not attract major companies back to the southern Appalachian basin. Mid-major and smaller companies, however, will probably find many economical fields in this region.

Regionally oil and gas production is from Mississippian and Ordovician limestones, and gas from the Knox Group (Fig. 32). It is widely believed that the Chattanooga Shale or Ordovician shales in the foreland basin are the source of all the hydrocarbons in the region (e.g., Oliver, 1986; Ryder et al., 1998), but it is more probable that Mississippian hydrocarbons are sourced from the Chattanooga Shale, whereas the Ordovician limestones are sourced from below or self-sourced (e.g., Obermajer et al., 1999; Burruss and Ryder, 2003). Gas found in the Knox Group is probably sourced from underlying Conasauga Group and, if present, the Rome Formation.

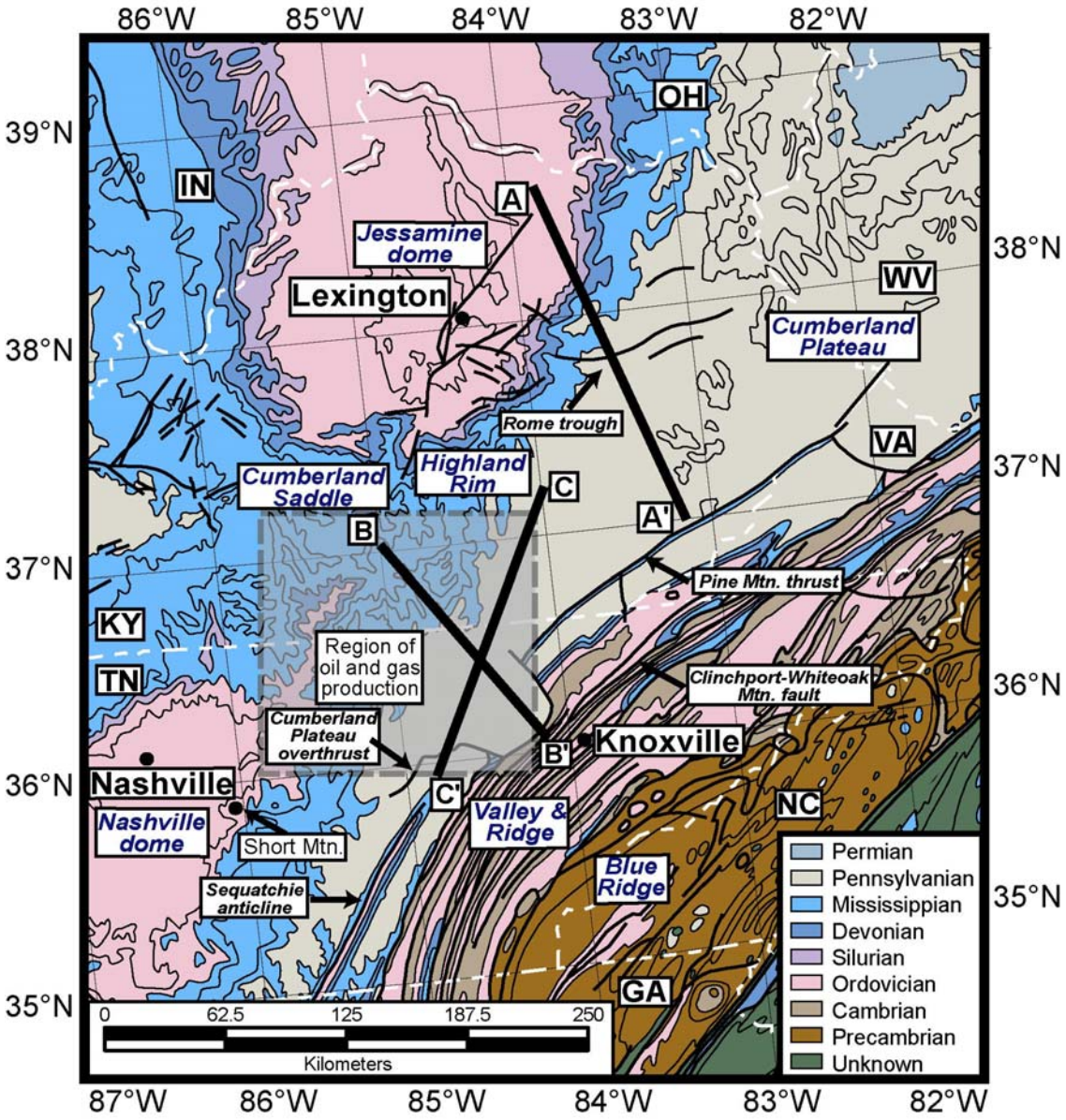


Figure 31. Generalized geologic map. Note: around the Nashville dome Devonian stratigraphy was combined with Mississippian. (Adapted from Schruben et al., 1998).

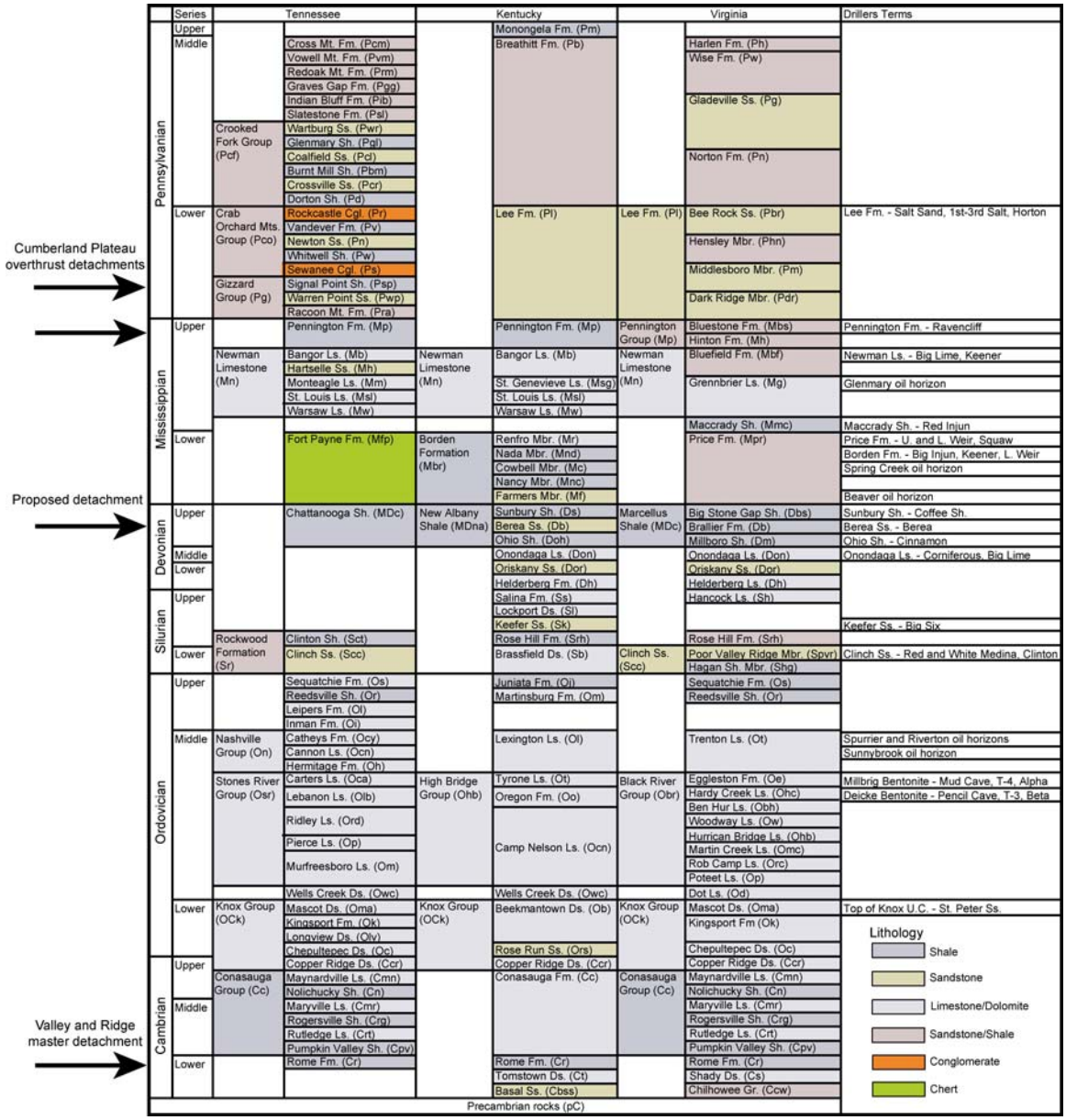


Figure 32. Regional stratigraphic column with known and proposed detachment horizons. (After Patchen et al., 1985).

4.3.3 Methodology

Key marker beds from 7,579 geophysical logs were correlated and tied to surface outcrops throughout eastern Tennessee and Kentucky and parts of western Virginia. Structure contour, isopach and trend surface residual anomaly maps were made to help identify stratigraphic and structural features. Numerous stratigraphic/well studies and compilations (i.e., Butts, 1919; Wilson, 1949, 1962; Freeman, 1953; Ammerman and Keller, 1979; Drahovzal and Noger, 1995; Milici, 1996) have been made in the regions of interest that proved useful for subsurface correlation, but these studies did not correlate the well data to structural features. This study aims to take the large available well dataset and derive a model to explain petroleum production and exploration trends in the region. Identification of individual faults was limited to areas with good well coverage, and overall fault trends and connectivity were inferred from subsurface maps and cross sections.

Trend surface residual anomaly maps were made by constructing a best-fit surface to the structure contour data using a standard regression matrix, and then subtracting the observed data from the trend surface to remove regional trends that naturally mask subtle structures or trends (Evenick, 2002; Evenick et al., 2005). Typically, first- and second-order trend surfaces are used for local (county) studies because trend surface residual values display a good correlation with fault displacements calculated in well logs. For regional (state) studies, however, a high-order surface must be used to achieve similar correlations. Minimum curvature and kriging algorithms generally produced the best trend surfaces and must be judged qualitatively. Trend surface residual anomaly maps are most effectively used when known fault displacements (derived from well or seismic

data) are equal or slightly higher than the calculated value (Evenick et al., 2005) because residual anomaly values less than a known fault displacements indicates the trend surface matches the structure contour data, and therefore masks the desired anomaly amplitudes and limits the limits the usefulness of the map (Evenick, 2002).

Cross sections were also constructed to help visualize regional structural trends. They were made by slicing individual structure contour maps and stacking the resulting profiles. Along-strike or nearby wells were projected onto the section line as control points and to ensure accuracy. Two cross sections were constructed across regional strike and one, across the Wartburg basin, roughly along-strike. There were not enough well data in the Wartburg basin to constrain an ideal along-strike cross section. No cross sections were constructed in the southern Cumberland Plateau of Tennessee because there is a general lack of well data. The cross sections were made to help constrain the location of the Rome trough in Kentucky and Tennessee.

4.3.4 Geologic and Exploration Models

Exploration models historically have not been used in the southern Appalachian basin because the different petroleum systems and trapping styles have not been categorized. Commonly a successful wildcat drilling has not led to the development of a producing field. It has been proposed that regionally there are three main types of fields (structural, stratigraphic and fracture-dominated plays) in the region that can be identified by a combination of seismic imaging, well data, trend surface residual anomaly mapping, or soil gas anomalies (Fountain and Jacobi, 2000; Evenick et al., 2005).

Regionally the Ordovician plays, such as the Nashville-Stones River (Trenton-Black River) are predominantly stratigraphic plays (Nuttall, 1996; Wickstrom, 1996). There may be small structural plays near the Nashville dome where small gentle folds caused by the migration of the Taconic peripheral bulge have been noted (Stearns and Reesman, 1986; Reesman and Stearns, 1989). The Cambrian-Ordovician Knox Group, the Mississippian Fort Payne reef, and the Pennsylvanian coal-bed methane plays are also considered stratigraphic, although they are mostly small and isolated traps (i.e., Baranoski et al., 1996). Sometimes associated with these stratigraphic traps are the fracture-dominated plays, which are larger in size and are not associated with structural highs, but rather with regional jointing patterns and deep-seated faults (Wickstrom, 1996). Secondary hydrothermal dolomitization is sometimes associated with fracture plays, particularly in the Black River Group, but hydrothermal dolomite plays are difficult to initially prospect and delineate because they are represented by structural lows that may not indicate secondary dolomitization (Evenick and Hatcher, 2006b).

In the Ordovician section the shaly limestones, especially the Hermitage and Murfreesboro Limestones of the Trenton and Black River Groups, are some of the probable source and reservoir horizons found within the groups. Other pay horizons have been identified throughout the groups and vary by geographic location (Butts, 1919; Born and Burwell, 1939; Clendening and McCown, 1999). Well, seismic and trend surface residual anomaly data do not indicate that production from these groups is structurally related. This suggests these traps are mainly stratigraphic or fracture dominated reservoirs (i.e., Wickstrom, 1996), but more data is needed. It is unlikely that the Knox and Trenton–Black River Groups are sourced from the Chattanooga Shale because

hydrocarbons would have to migrate down-section or laterally (up-dip) and across stratigraphic contacts (e.g., Ryder et al., 1998). This hypothesis also cannot adequately explain emplacement of shallow hydrocarbons in the central basin in the Knox Group.

It is proposed that the Mississippian plays are structural traps sourced from the underlying Chattanooga Shale. Trend surface residual anomaly maps (Fig. 33) indicate that there are many small, linear highs that are oriented parallel to regional strike. All of the mapped Mississippian horizons, such as the Pennington Limestone, Bangor Limestone, and Fort Payne Limestone, contain these features, although the number of linear highs increases and amplitudes of the residuals decrease down-section. Some of these linear highs are evident in the Chattanooga Shale horizon, but they are minor. Below the Chattanooga Shale this pattern is not noticeable, indicating that these features are related to Alleghanian deformation that is correlated with a blind décollement soled in the Chattanooga Shale. The deformation could both increase reservoir permeability and porosity, along with creating a linear trap.

4.3.4.1 Chattanooga décollement

Mississippian reservoirs, such as the "Big Lime" (Bangor Limestone) and some of the Fort Payne non-reef plays, are commonly structurally related to small décollement splays and faults ramping from the Chattanooga Shale. Trend surface residual anomaly maps (Fig. 33) show linear highs that decrease in amplitude in lower sections until the pattern changes in horizons lower than the Chattanooga Shale. This indicates faults may be soled in the Chattanooga Shale. Faulting in the Chattanooga Shale has also been recognized in well logs (Fig. 34), but the minor offsets would probably be below seismic

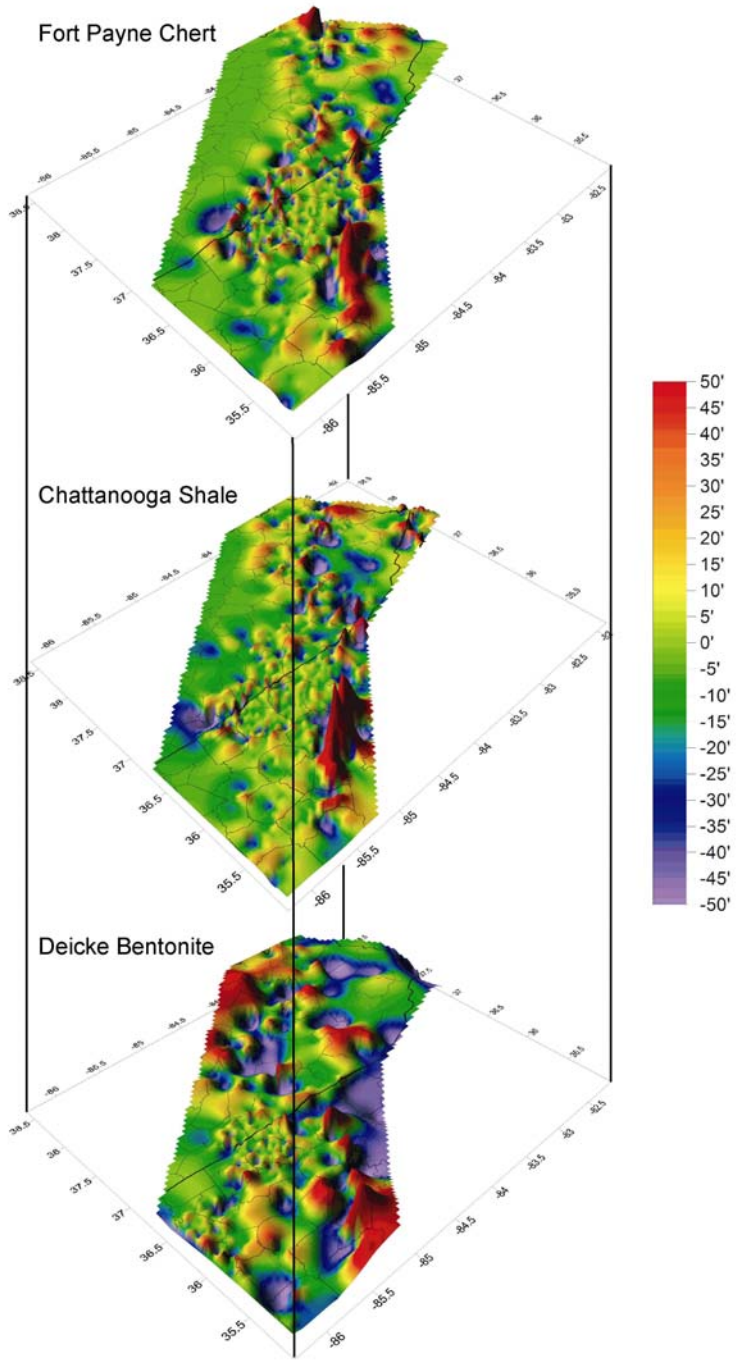


Figure 33. Three-dimensional view of three trend surface residual anomaly maps. The change in the overall map pattern below the Chattanooga Shale horizon and the decreasing anomaly amplitudes of northeast trending linear highs above the Chattanooga Shale suggest there is a detachment in the Chattanooga Shale. Note: the Deicke bentonite is also known as the Pencil Cave and the linear high spikes in the lower section of the maps correspond to Sequatchie anticline.

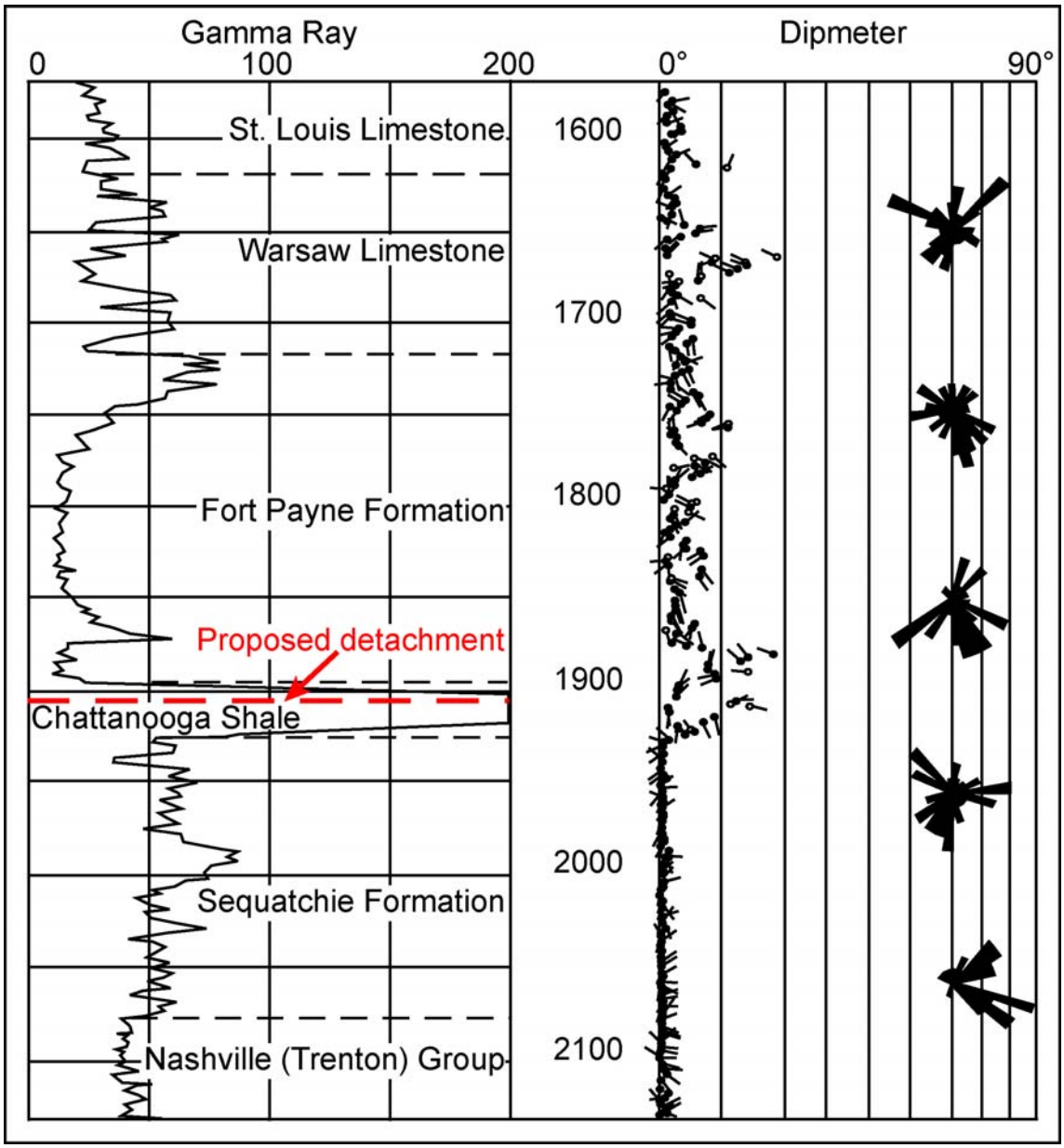


Figure 34. Dipmeter log (API #41-035-20163) demonstrating a shift in the stratigraphy above a proposed detachment soled in the Chattanooga Shale. Below Chattanooga Shale the strata is flat-lying, but above the proposed fault, the strata is not. If this pattern were not structurally related, some of the dips above the fault should also be zero. The well is located west of Sequatchie anticline where no deformation is typically noted below the Cumberland Plateau overthrust.

resolution. These minor offsets are exposed in northwestern Georgia (Chowns, 2005), but have not been projected into Tennessee. The limited amount of well data and the paucity of other data make delineating and identifying the extent of the fault system difficult. Most producing fields in Tennessee, however, appear to trend northeast and linear (Tennessee Division of Geology, 1993) and similar to the patterns seen in the trend surface residual anomaly maps. Deformation associated with the Chattanooga décollement could locally enhance porosity and permeability (Harris and Milici, 1977) an may be related to the structural thickening of the Chattanooga Shale (up to 300 ft thick) in front of the Pine Mountain thrust (Bible, 2004). Fort Payne exploration and production has typically been constrained in Morgan and Fentress Counties, but an oil-filled Fort Payne reef exposed in Bledsoe County indicates that prospecting should be extended southward.

The Chattanooga detachment is present west of Sequatchie anticline as indicated in well data, but it is unclear whether the detachment ramps up-section into the Cumberland Plateau overthrust, terminates in the subsurface or is exposed on the western Cumberland escarpment. Small-displacement thrust faults exposed in the Pennsylvanian section at Short Mountain, TN, however, suggests the Chattanooga décollement probably ramps up-section into the Pennington Formation or Gizzard Group.

Short Mountain (elevation 2,092 ft) is a Cumberland Plateau erosional remnant located on the western edge of the eastern Highland Rim. It lies 24 mi (38 km) from the Plateau as measured along the N65°W direction of local tectonic transport for the Cumberland overthrust (Uzzelle and Potter, 1997), and is 32 mi (52 km) due west of the Plateau. The mountain is capped with early Pennsylvanian clastics of the Gizzard and

Crab Orchard Mountain Groups, including the Sewanee Conglomerate. The Sewanee, a bluff-former that rings the mountain at the 1,940-1,980 ft elevation, is 40-50' thick and forms an almost continuous outcrop on the eastern and SW sides of the mountain. The bluffs are cut by NE- and NW-striking vertical joints, many of which have been reactivated as strike-slip faults with subhorizontal slickenlines. A majority (90 of the 94) of the thrust faults (Fig. 35) trend NE as indicated by slickensided surfaces (Potter and Rotman, 2003). NW- and NE-striking fracture sets were probably active at the time of overthrusting, but the high angle of the NE-striking fracture set with respect to the NW-directed transport created enough shear stress and friction across the faults to form slickensides and slickenfibers. The faults and slickenfibers that cut the Sewanee Conglomerate are very similar to those described from Mitchell Cove on the Cumberland Plateau (Jones et al.,1997) near Sewanee, Tennessee, where vertical faults (reactivated joint surfaces) in the Warren Point Sandstone lie above deformed coals in the Raccoon Mountain Formation.

A décollement horizon at Short Mountain has not been located. It probably lies either in the shales of the Pennington Formation, directly below the Sewanee Conglomerate, or in a deeper horizon. The shallow décollement to the SE, on the Cumberland Plateau, is in the shales and coals of the Raccoon Mountain Formation, but the Raccoon Mountain Formation is absent at Short Mountain. In contrast to field sites farther southeast along the Cumberland Plateau near Sewanee, TN, the local direction of tectonic transport cannot be determined at Short Mountain. Minor folds and faults in the coals and clastics of the Raccoon Mountain Formation on the Plateau provide a transport direction, but on Short Mountain the best deformation indicators within the thrust sheet

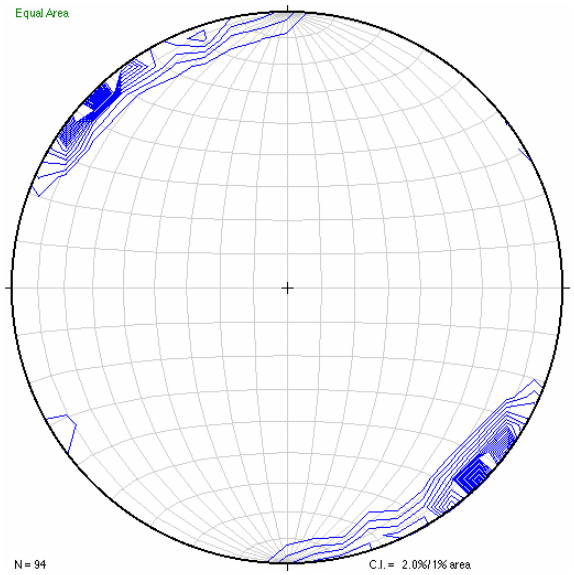


Figure 35. Poles to fault surfaces exposed at Short Mountain, Tennessee.

(prominent shearing on surfaces positioned at a high angle to NW transport) do not provide a definitive azimuth.

4.3.4.2 Rome trough and Sequatchie Valley fault

The Knox to Precambrian isopach map (Fig. 36) and a regional cross section (Figs. 37, 38, and 39) indicate that the Rome trough extends into Tennessee and partially beneath historically productive areas (Tennessee Division of Geology, 1993). It is probable that faults associated with the Rome trough are coupled with blind secondary hydrothermal fluid migration and gas production from the Knox Group (Fig. 40). It is believed that secondary dolomitization is minor in the region and not a major play in the southern Appalachian basin. The amount and extent of sourcing from the deeper part of the basin and from the Rome trough is still unclear, but migration is expected of hydrocarbons up-dip into suitable horizons and traps.

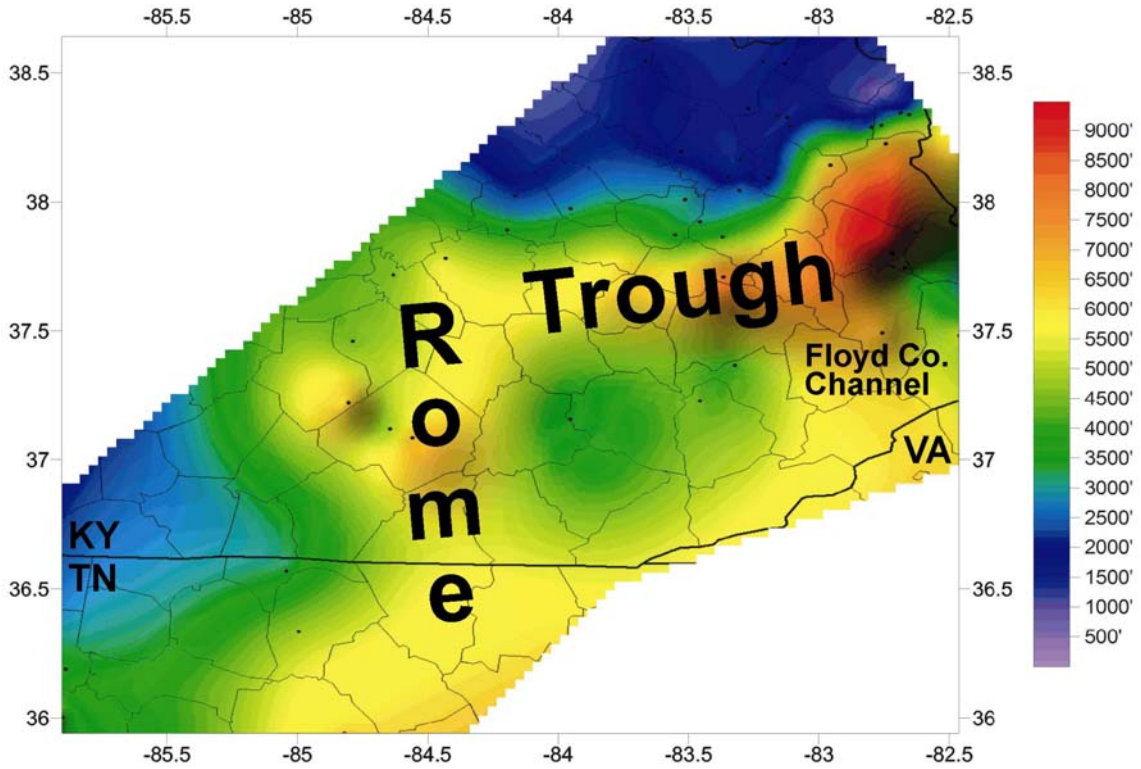


Figure 36. Knox-Precambrian isopach map illustrating the extension of the Rome trough into Tennessee. Small dots are data locations.

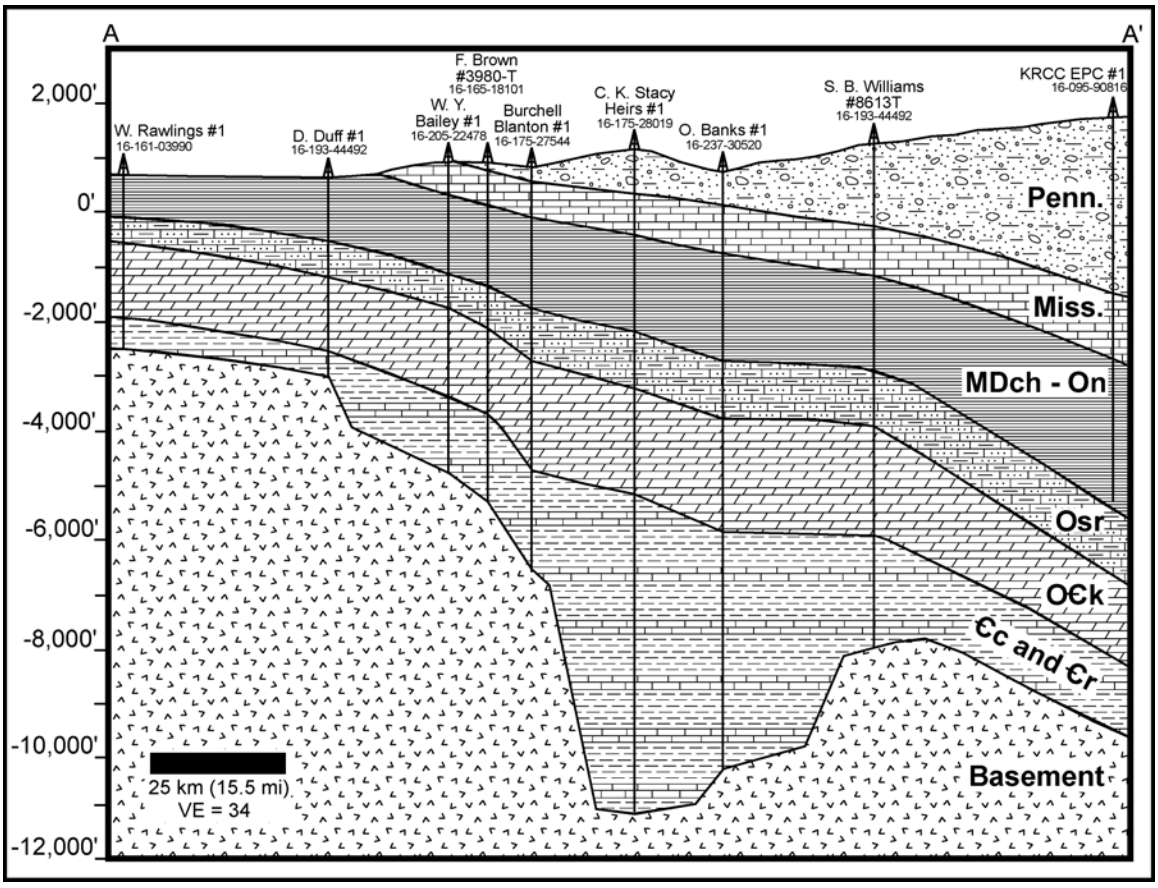


Figure 37. Cross section A-A'. Note the thickening of Cambrian through Ordovician strata in the Rome trough in Eastern Kentucky indicating rifting persisted until at least late Ordovician. Lithologies have been generalized. See Figure 31 for cross-section location.

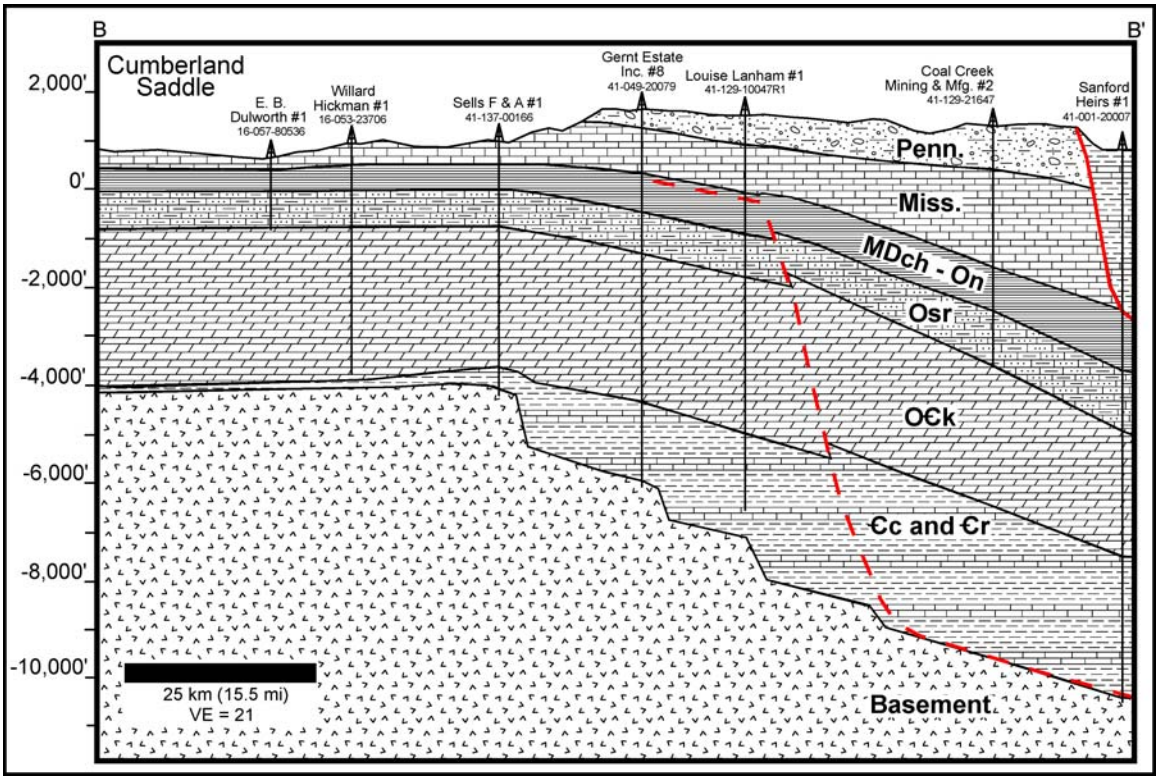


Figure 38. Cross section B-B'. Note the thickening of the Rome and Conasauga in the Rome trough in Tennessee and the projected (dashed) fault from Sequatchie valley and the westernmost Valley and Ridge fault (the Chattanooga fault). The cross section is perpendicular to regional strike, but oblique to the Rome trough. Lithologies have been generalized. See Figure 31 for cross-section location.

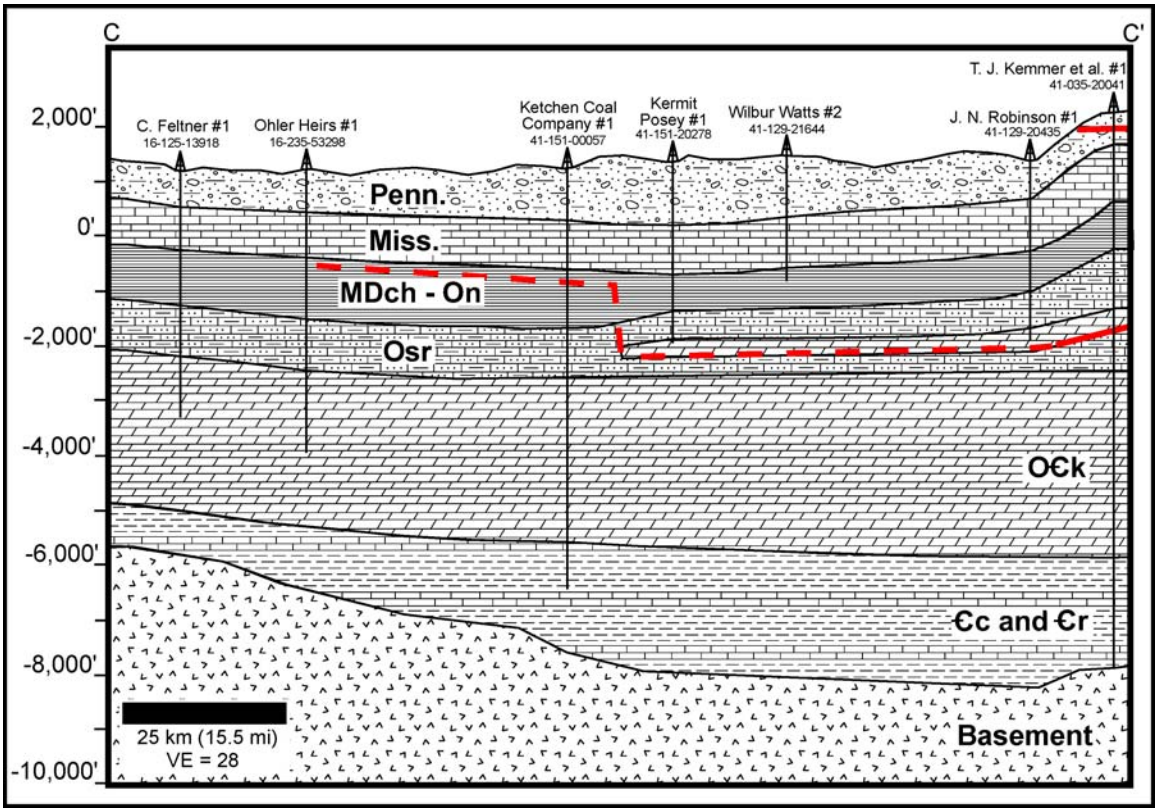


Figure 39. Cross section C-C'. Note the thickening of the Rome and Conasauga in the Rome trough in Tennessee. Depth-to-basement was constrained by slicing structure contour maps along the profile. The lower fault is extrapolated from a known fault in Sequatchie valley and would account for the shallower than expected Knox horizon. The upper fault is the Cumberland Plateau overthrust. Lithologies have been generalized and basement was constrained by structure contour maps. See Figure 31 for cross-section location.

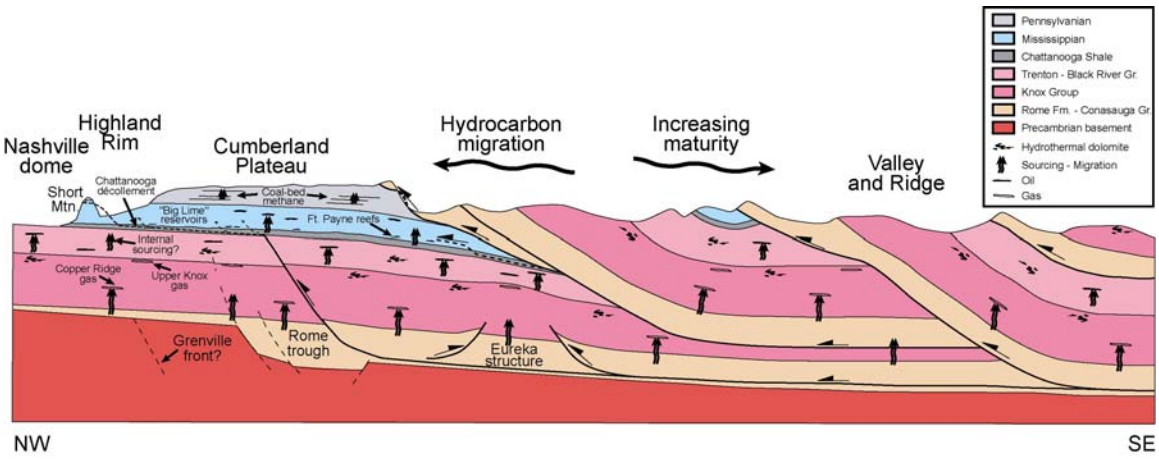


Figure 40. Schematic geologic model for hydrocarbon emplacement in Tennessee and southern Kentucky. Known hydrocarbon reservoir types and sources in the southern Appalachian basin in Tennessee and southern Kentucky in the petroleum systems are currently recognized in the region.

Cross sections (Figs. 38 and 39) also indicate that the Sequatchie Valley fault extends into the Wartburg basin. In the Wartburg basin the Knox Group is higher than expected, when compared to its elevation to the west of the Pine Mountain thrust. In Figure 39, note the elevation difference between Ketchen Coal Company #1 and Kermit Posey #1 wells. It is possible the Sequatchie Valley fault extents into the western part of the Wartburg basin and has not been identified before because most wells are stopped in the uppermost Knox Group and no wells have yet drilled through the repeated Knox section (see T. J. Kemmer et al., #1 in Fig. 39). Also it is possible that the fault soles in the Chattanooga Shale because the unit is structurally weak and the Mississippian and Pennsylvanian strata appear not to be folded at the surface. The postulated extension of the Sequatchie Valley fault requires seismic data or a deep drill test for confirmation.

4.3.5 Discussion

The trend surface residual anomaly trends are better constrained when the amount of well data is large. This indicates that regional trends could extend further, but the limited amount of well data makes it difficult to accurately extrapolate trends. The Rome trough extends into northeast Tennessee, but the lack of basement data makes projecting the trough difficult past the Wartburg basin. If the Rome trough is still capable of sourcing hydrocarbons, it could indicate that there is more probable hydrocarbon potential in the Valley and Ridge or along strike in southern Tennessee or in deeper potential structural traps (Whisner and Hatcher, 2003).

4.3.6 Conclusions

1. A new exploration and geologic model has been generated using all of the available subsurface data and a series of cross sections has been produced.

2. An arm of the Rome trough has been extended into Tennessee, beneath the Cumberland Plateau.

3. Cross section and well data indicate that the Sequatchie Valley fault extends beneath the Wartburg basin and may sole into the Chattanooga décollement.

4. There is a décollement soled in the Chattanooga shale that forms a series of linear potential traps in the Mississippian. The structure helps explain tectonic stylolites west of Sequatchie anticline in Mississippian section, the minor deformation noted a Short Mountain, why the Pennsylvanian is not folded in the Warburg basin, TSRA map patterns above and below the Chattanooga Shale, and the noted subsurface deformation noted in well logs.

4.4 Trend Surface Residual Anomaly Mapping and Well Data: An Underutilized Combination?

This section is a slightly revised version of a paper to be submitted to the American Association of Petroleum Geologists Bulletin in 2006 by Jonathan C. Evenick, Gregory S. Baker, Shilong Mei, and Robert D. Hatcher, Jr.:

My major contributions to this paper include: 1) writing the manuscript; 2) creating the illustrations; and 3) correlating and interpreting the geophysical well logs.

4.4.1 Abstract

Trend surface residual anomaly (TSRA) mapping techniques have been applied to three different regions to demonstrate their use in the identification of blind structures and trends in areas with substantial well data. The case studies focus on the Chautauqua anticline in western New York, the Rome trough in Kentucky and Tennessee, and the Leduc Formation reefs in the Alberta basin. TSRA mapping is a straightforward technique, capable of detecting individual fault(s) and structures secondary to faults, structural trends, reef structures, and sole horizons that standard structure contour mapping cannot because they are obscured by the regional dip.

First- and second-order residuals are commonly used for local-size datasets, whereas third-order to best-fit residuals are needed for regional mapping. The order of the trend surface is dependent on the correlation of known fault displacements, structures, or reef thicknesses with the residual anomaly values. Calculated TSRA values should ideally be just above known fault displacements or reef thicknesses. TSRA values below known displacements/thicknesses will negate the map and a lower-order trend surface should be attempted until the generated values are slightly above the observed value. TSRA mapping is not able to extrapolate or identify structures in areas with poor well

coverage or large data gaps and therefore may be of limited use in initial exploration. The implementation of this technique in mature basins or fields with large amounts of well data, however, could identify unknown or better delineate known petroleum traps.

4.4.2 Introduction

Blind thrusts, décollements, and reefs are difficult to identify and delineate because of the inherent lack of surface information. Typical exploration involves correlating available seismic and well data in conjunction with potential field and lineament data. Extrapolating trends or structures usually involves gathering more data or drilling. Décollements are especially difficult to identify in seismic and borehole data because the fault surface is parallel to bedding without marker offsets. Only when a décollement ramps up-section or splays can it be more easily identified, yet the associated structures will be localized and decrease up-section (i.e., Harris and Milici, 1977; Beinkafner, 1983; Evenick et al., 2005).

Trend surface analysis is an old technique that has long been used by geologists for the analysis of geological data (e.g., Chayes, 1970; Baird et al., 1971), approximation of regional dip (Krumbein, 1958; Pelletier, 1958; Davis, 2002), and general subsurface exploration (Davis, 2002). The technique represents a methodology for approximating observed data and serves as a graphical representation of the mathematical equation. Trend surface and TSRA mapping have long been used in potential field mapping and modeling, but application of this technique to well data is uncommon. Well data are frequently only presented as structure contour and isopach maps, along with cross sections. In essentially flat-lying stratigraphy, low-amplitude targets may be impossible

to properly identify using standard maps. However, TSRA mapping has been shown to detect or delineate individual fault(s), structures, structural trends, reef structures, and sole horizon(s) (Davis, 2002; Evenick, 2002; Evenick et al., 2005).

4.4.3 Methodology

Trend surfaces are made by fitting a generated surface to the structure contour data using a regression matrix (Davis, 2002). TSRA values are derived by subtracting the observed data (structure contour data) from the generated data (trend surface data). First- and second-order residuals are commonly used in areas with small horizontal extent and horizontal stratigraphy or in larger areas with limited data, and third-order or higher residuals are usually used in regional mapping. The order of the trend surface is mainly dependent on correlations of known fault displacements or reef thicknesses with the residual anomaly values, but also to the amount of data and data spacing. In general, the less amount of data or data coverage will lower the order of the trend surface because higher-order trend surfaces will increase the amount of edge effects and contouring errors. Statistical tests may not be appropriate guides for the selection of degree of the residual anomalies because the targets are ultimately qualitatively chosen based on geologic correlations and not by "goodness of fit" (Davis, 2002). TSRA values below known values will work against the usefulness of the map because observed values were larger; consequently, a lower-order trend surface residual anomaly map should be generated until the residual anomaly values are slightly above observed or estimated fault displacements or reef thicknesses. For example, a fault identified in a geophysical log with approximately 10 m of offset should ideally match the TSRA value or be slightly

higher than the measured displacement. Therefore, if a TSRA value derived from a first-order trend surface was 12 m, then the map would be acceptable. If a second-order TSRA value was calculated to be 7 m, the map should be disregarded, because the TSRA value was less than known fault displacement. Ideally multiple observed values should be used to tie the residual values and observed data. This illustrates the subjective and iterative nature of trend surface mapping. However, statistical tests and knowledge of the regional geology can help minimize misinterpretations. After a TSRA map has been generated, one is able to identify a potential structure or trend, but further in-depth well log mapping and seismic reflection data can then be used to define the detailed characteristics and possible origin of the structure(s) or trend.

4.4.4 Results

Three case studies are presented that illustrate the varied uses of TSRA mapping in the Appalachian and Alberta basins (Fig. 41). Each case has a different tectonic setting and target, but they are approached using the methodology described above. The order of the trend surfaces was based on known and estimated fault displacements or reef thicknesses. All interpretations were based on the understanding of the regional geology and stratigraphy. The targeted features were the Rome trough in the southern Appalachian basin, the Chautauqua anticline and a décollement in the northern Appalachian basin, and Devonian reef structures in the Alberta basin.

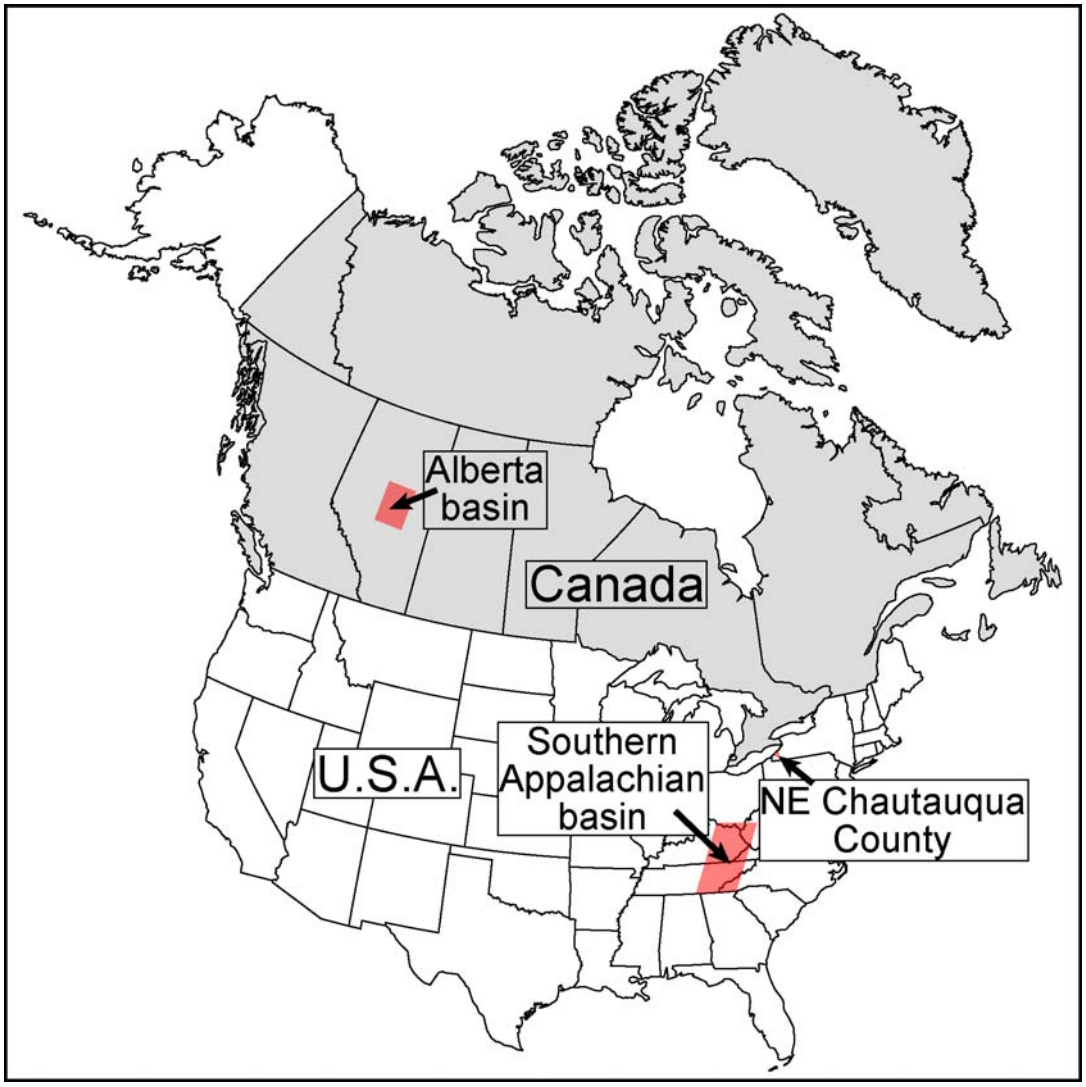


Figure 41. Location map showing study areas.

4.4.4.1 Thrust Faults and Décollements

The Chautauqua anticline (also known as the Bass Islands structural trend) in western New York is associated with small-displacement thrust faults splaying from the termination of the blind décollement soled in Silurian Salina Group salts (Gwinn, 1964; Beinkafner, 1983; Bastedo and Van Tyne, 1990; Evenick et al., 2005). The anticline has been extensively drilled for hydrocarbons, and therefore serves as an ideal case study. It is difficult to delineate the structure using standard structure contour maps, but it is clearly identifiable in a TSRA map (Fig. 42). This open anticline has a limited surface expression (Jacobi, 2002), but tightens down-section. The horizons chosen to illustrate this structure were the Dunkirk Shale (Upper Devonian), Onondaga Limestone (Middle Devonian), and Medina Formation (Lower Silurian). Each horizon is separated by approximately 1,000 feet (Fig. 43). The upper two horizons are above the décollement and delineate the Chautauqua anticline along with other structures. The northwestern shift in the anticlines signature on the TSRA maps from the Onondaga Limestone to the Dunkirk Shale denotes the structure has northwest vergence. In the Medina Formation TSRA map the Chautauqua anticline is no long identifiable because the horizon is situated below the detachment. Hence, to bracket or validate the sole of a décollement, one must generate maps above and below the sole horizon in order to properly identify the changing deformational patterns. Other structures are also revealed in the TSRA maps. Notice that the Lakeshore anticline is still evident in the Medina Formation TSRA map. The Medina Formation is below the inferred master detachment, so this structure is probably associated with another unknown feature (i.e., a deeper décollement or basement structure). Also, the NNW-SSE feature, increasingly evident in the lower

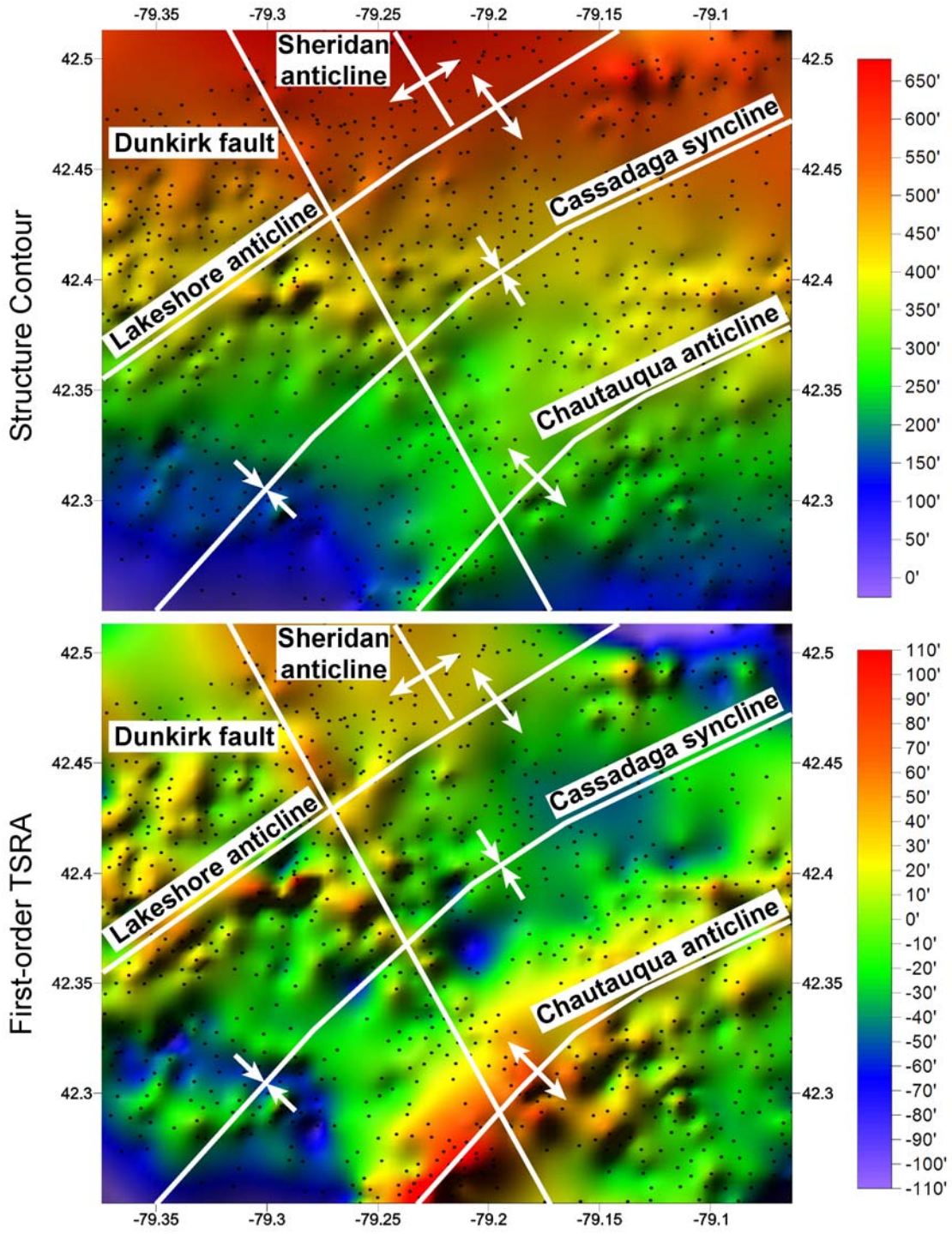


Figure 42. Structure contour map and first-order residual anomaly map of the Upper Devonian Dunkirk Shale. The northeast-trending Chautauqua anticline was masked by the regional trend, but is prominently displayed in the residual anomaly map. Black circles represent data points.

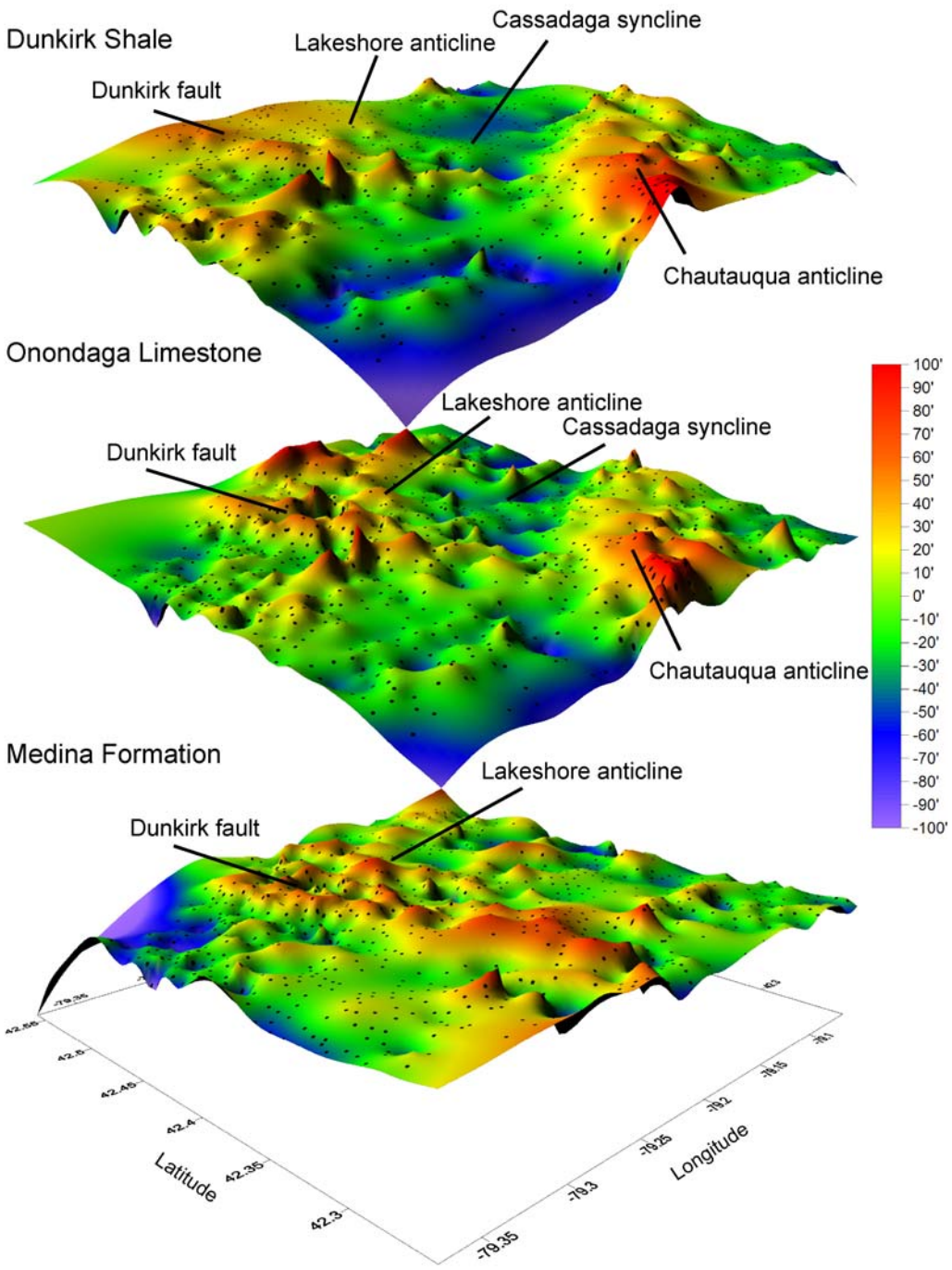


Figure 43. TSRA maps for the Medina Formation, Onondaga Formation, and Dunkirk Shale. Note the northeastern-trending Chautauqua anticline is only evident in the top two horizons and not in the lowest. This distinction is to due to the sole of the décollement associated with the structure occurring between the horizons. Also note the prominence of the almost north-trending Dunkirk fault in the lower maps. Each horizon is separated by roughly 1,000 ft. Black circles represent data points. (Modified from Evenick et al., 2005).

horizons, is associated with the Dunkirk fault. It is interpreted as a reactivated basement fault (Evenick et al., 2005). The Sheridan anticline may also be related to the Dunkirk fault as they are parallel and the anticline is on the inferred hanging wall.

4.4.4.2 Normal Faults

The Rome Trough is a northeast-trending failed rift that is related to Iapetus rifting during the Cambrian. In eastern Kentucky, the Rome Trough (Fig. 44) is bounded on the west by the Lexington fault system, on the north by the Kentucky River fault system, and on the south by the Rockcastle River fault system (Ammerman and Keller, 1979; Drahovzal and Noger, 1995; Gao et al., 2000). The trough extends from New York to Tennessee, but is poorly delineated near its distal ends due to limited data (e.g., Parrish and Lavin, 1982; Jacobi, 2002). Sparse basement drilling and seismic reflection data in the region have hindered the delineation of the structure in Tennessee and Kentucky. First- and second-order TSRA values generated from well data were smaller than inferred fault displacements (Drahovzal and Noger, 1995; Ryder et al., 1996; 1997) and therefore a first-order TSRA map was chosen to best delineate the rift system. Ideally more data are needed to more accurately express the subsurface extent of the rift system. The basement structure contour map clearly shows the main section of the Rome trough in eastern Kentucky; but the extent of the rift system is not obvious. It is difficult to identify the Rockcastle River fault system, and the Floyd County channel is represented as a very large feature (due to regional dip masking the relatively small size of the feature). Even with a limited dataset and using a first-order TSRA map, the basement TSRA map can clearly identify all of the major rift systems and project the Rome trough into Tennessee.

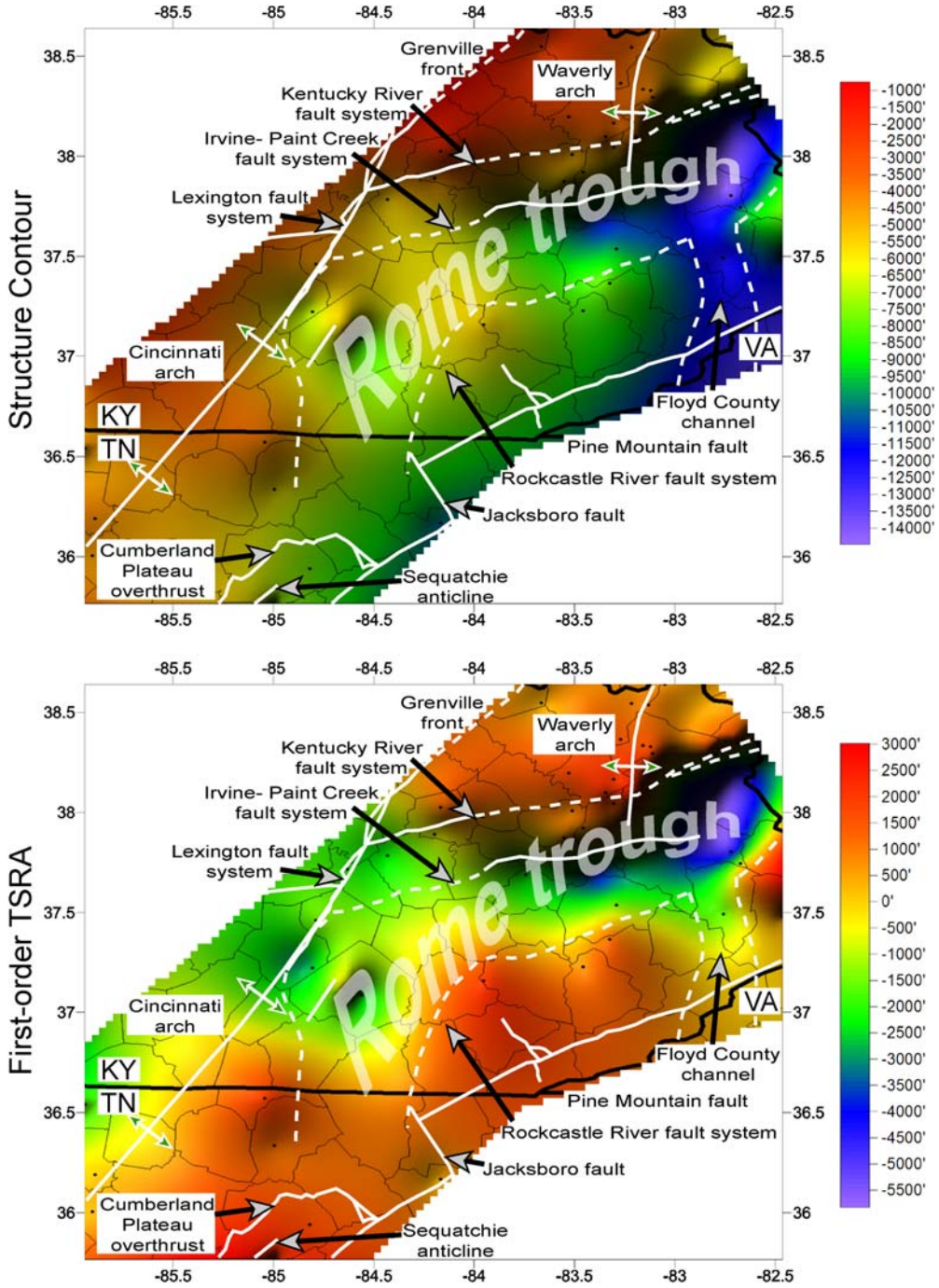


Figure 44. Structure contour and first-order residual anomaly maps of the Precambrian basement. Note the good correlation of the TSRA map with regional surface (solid line) and subsurface (dashed line) structures. Also notice the better qualitative representation of the Rockcastle River fault system and Floyd County channel in the TSRA map as compared with the structure contour map. Black circles represent data points. (Structure locations adapted from Dever [1986] and Drahovzal and Noger [1995]).

The Floyd County channel also is more evident and accurately shown in this map. Since the amount of data is sparse, the residual maps are ultimately not quantitative or correlatable with estimated fault displacements. Therefore, this map can only be used to generally illustrate fault system locations and provide relative displacement estimates.

4.4.4.3 Reef Structures

The Alberta basin is a well known productive hydrocarbon basin. The main target horizons in the basin are the lower Cretaceous section and the Upper Devonian carbonate reefs (Wright et al., 1994), such as those in the Leduc Formation (Fig. 45). Differential compaction of the overlying strata (i.e., the Ireton Shale) over these reefs has created drape structures that become less evident in shallower horizons (Labute and Gretener, 1969; Mossop, 1972; O'Connor and Gretener, 1974; Anderson et al., 1989; Edwards and Brown, 1999). A prominent southwest regional dip and the localized nature of the differential compaction, and some previous drilling or knowledge of the target make it difficult to identify these reefs in structure contour maps (Fig. 46) and prospect. The NNE trends and locations of the Leduc reefs may be associated with basement topography or faults (Edwards and Brown, 1999). Prospecting these reefs can be done by removing the prominent southwestern regional dip from shallower horizons (i.e., Davis, 2002) and correlating the TSRA values with the estimated amounts of differential compaction. A second-order residual was used because it more prominently delineates the potential structures and it correlates well with differential compaction estimates rates and reef thicknesses. Note the dominant northeastern trending linear highs in both TSRA

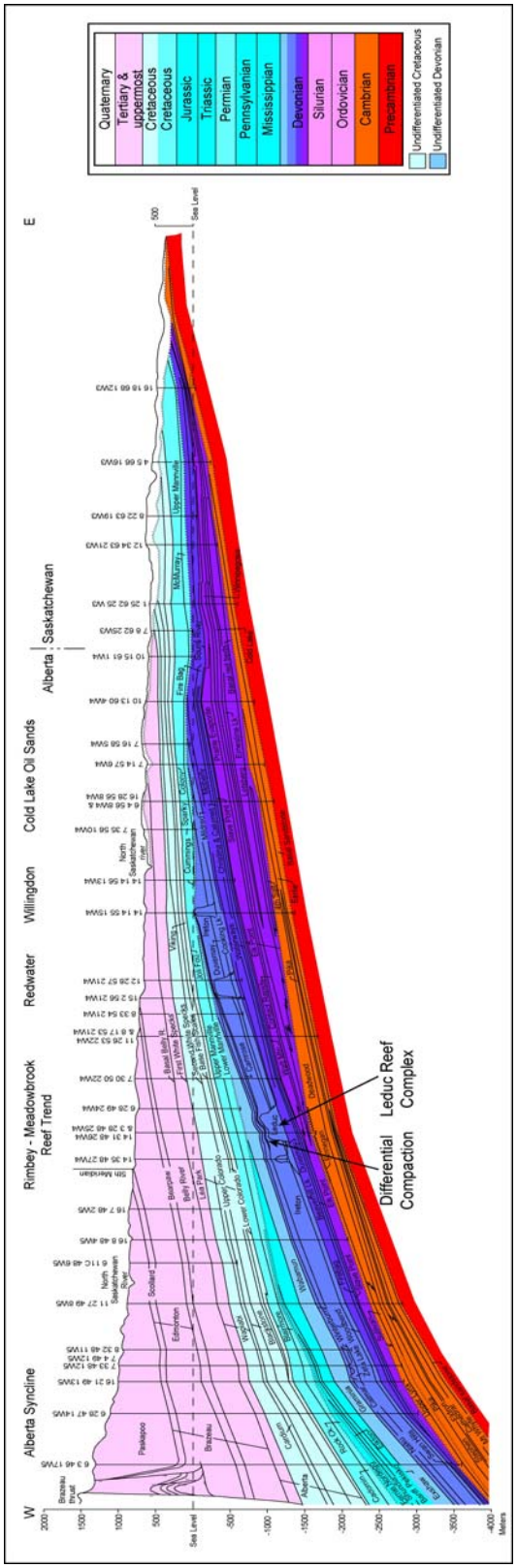


Figure 45. Generalized cross section of the Alberta basin showing the differential shale compaction over a Leduc Reef complex. (Adapted from Wright et al., 1994).

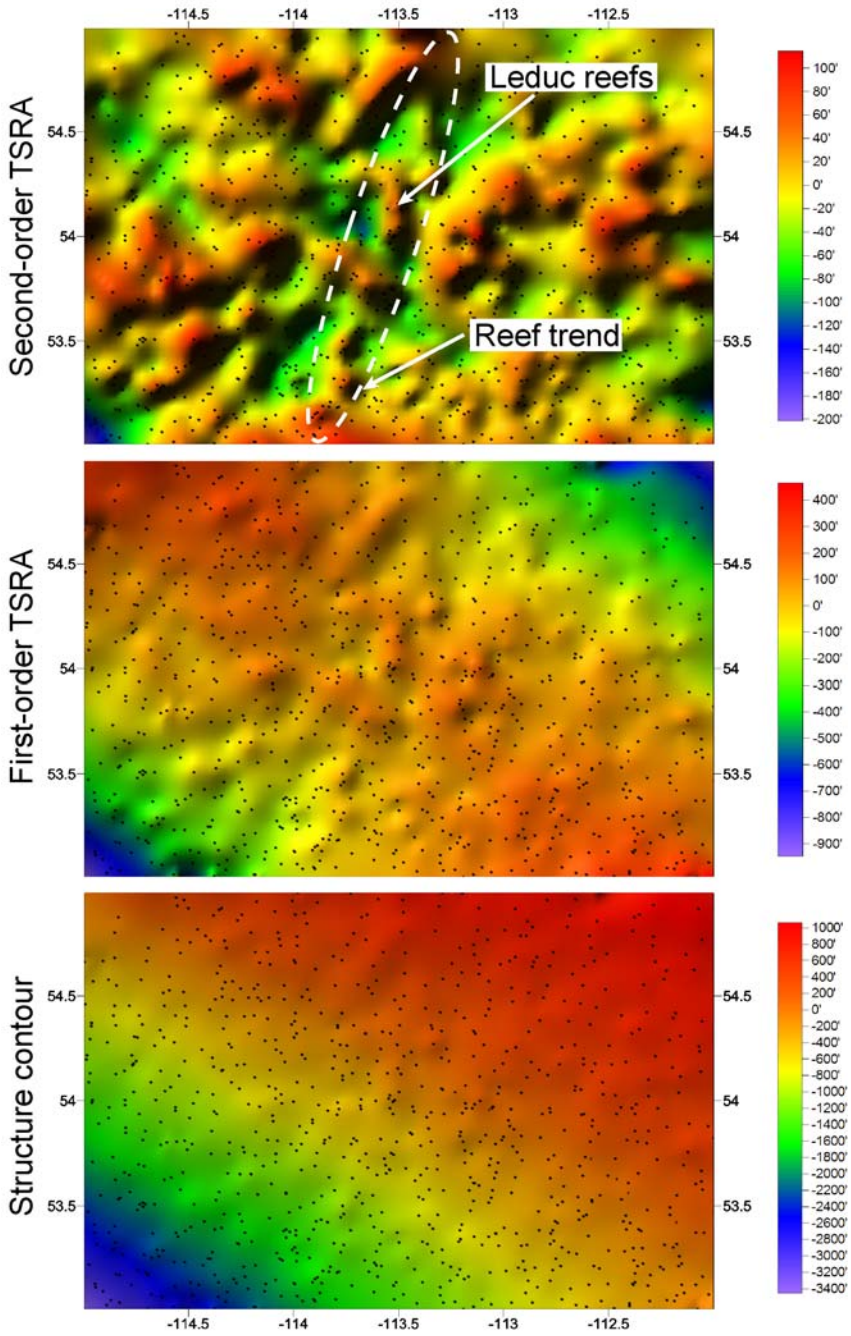


Figure 46. Structure contour, first-order TSRA, and second-order TRSA map of the Upper Devonian Viking Formation in Alberta. Differential compaction of the Ireton Shale over the NNE trending Leduc reefs has created drape structures that are identifiable in Viking Formation maps (within the ellipse). The second-order residual is most usefully because it more prominently delineates the potential structures and it correlates well with differential compaction estimates rates and reef thicknesses. Note that other reef structures may also be present in the maps and previous drilling or knowledge is required prior to prospect for these targets. Black circles represent data points.

maps that may also be related to differential burial or reefs. However, the Leduc reefs trend NNE, which make the identification of the trend straightforward.

4.4.5 Discussion

TSRA mapping is a fast, simple, and inexpensive technique that can be applied to existing datasets. It is possible to create TSRA maps by creating synthetic datasets from a digitized structure contour map or 3D seismic data. TSRA mapping does not have the ability to extrapolate or identify structures in areas with poor well coverage or in large data gaps (Davis, 2002) and therefore may be of limited use in exploratory areas with little well data. However, the implementation of this technique in a mature basin or field, with a large amount of well or 3D seismic data, could help identify unknown or better delineate known petroleum traps.

4.4.6 Conclusions

1) TSRA mapping is capable of identifying blind structures and trends in areas using existing well data.
2) TSRA mapping technique is able to detect or delineate individual fault(s), deformation caused by the faults, structural trends, reef structures, and sole horizon(s), whereas it would be difficult using standard structure contour maps.
3) The order of the trend surface is dependent on the correlation of known fault displacements, structures, or reef thicknesses with the residual anomaly values. Ideally, calculated TSRA values should be just above known fault displacements or reef thicknesses.

4) Implementation of this technique in a mature basin or field with a large amount of well data could help identify unknown or better delineate known petroleum traps.

4.5 Revisiting the Flynn Creek Impact Structure: Addressing its Size, Shape, Age, Stratigraphy, and Hydrocarbon Potential

This section is a slightly revised version of a paper to be submitted to Geological Society of America Bulletin by Jonathan C. Evenick and Robert D. Hatcher, Jr.:

My major contributions to this paper include: 1) remapping the impact structure; 2) generation of a new geologic map; 3) construction of cross sections; 4) correlating and interpreting the local geophysical well logs; 5) writing the manuscript; and 6) creating the illustrations.

4.5.1 Abstract

The Flynn Creek impact structure is located in east-central Tennessee, southwest of Gainesboro, on the northeast flank of the Nashville dome. It has been remapped in order to better understand the structure and to resolve stratigraphic and structural discrepancies. It provides an opportunity to study a small area of Knox Dolomite and Middle Ordovician units not commonly exposed at the surface in this area. Four persistent, almost circular, concentric faults delineate the structure, which has a diameter of 4.7 km (2.9 mi) (or more conservatively, 4 km [2.5 mi]). The larger estimate was derived from the outer bounding fault that did not completely breach the surface in the eastern part of the crater. Both estimates, however, are larger than the previously projected 3.8 km (2.4 mi).

Various structural and stratigraphic discrepancies noted in previous maps and structural interpretations are also addressed in a series of new cross sections. Structural data and surface data indicate impact deformation extended farther than previously

demonstrated. Stratigraphic relationships, breccia compositions, possible coeval hydrothermal dolomitization of the impact breccia and rim, and fossil evidence confirm impact occurred in the Late Devonian. Hydrothermal dolomite has been found in the outer rim within the Nashville Group (Ordovician) and in the carbonate-dominated, bedded breccia (Devonian) within the crater. This, along with bitumen, indicates the regional emplacement of Mississippi Valley type (MVT) deposits was Devonian. This hypothesis may warrant renewed hydrocarbon prospecting in the vicinity of the structure. Remapping the structure has better delimited the depositional history and crater evolution.

An impact model has derived to account for deformational and faulting patterns mapped in the crater. The model indicates that thrust faults and buckle folds are created during the excavation stage and are later reactivated as normal faults during the modification stage. Normal faults then propagate downward and sole into a master décollement.

4.5.2 Introduction

The Flynn Creek impact structure is situated in north-central Tennessee (36°17' N, 85°40' W), in the Eastern Highland Rim (Fig. 47). The structure was first noted as a disturbance by Stafford (1869), and later mapped and interpreted as a pre-Chattanooga sinkhole by Lusk (1927, 1935) based on features in the thickened Chattanooga Shale. Crater remapping by Wilson and Born (1936) led the authors to refute this hypothesis and favor a cryptovolcanic mechanism instead, and they proposed the presumed asymmetric crater had a maximum diameter of 3.2 km (2 mi). Subsequent detailed mapping and

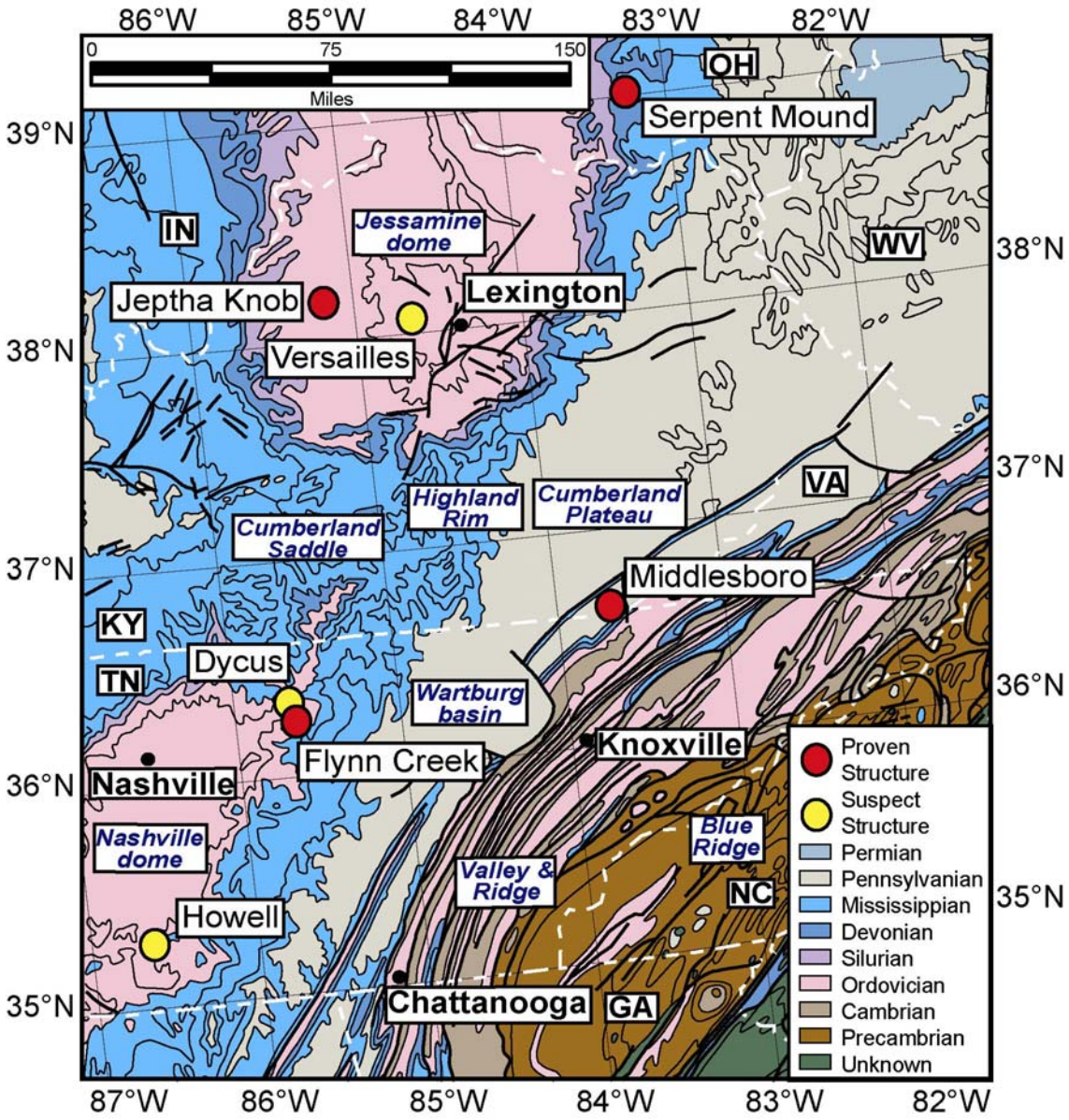


Figure 47. Generalized geologic map of the southern Appalachian basin showing proven and suspect impact structure locations. (Adapted from Schruben et al., 1998).

subsurface research by Roddy (1964, 1966, 1968, 1977a, 1977b, 1979) and Wilson and Roddy (1990) more accurately described the crater as being a 3.8 km-diameter complex impact crater, with a central uplift and terraced (collapsed) crater rim (Fig. 48, Plate 1). Confirmation of an impact origin came with the discovery of shatter cones (Fig. 49) exposed in Knox Group strata in the central uplift (Roddy, 1977b). Linear planar features in quartz and deformational strain in calcite were also reported (Roddy, 1977b), but no detailed petrographic information has been published (Koeberl and Anderson, 1996).

The Flynn Creek impact structure was formed ~382 Ma, which corresponds with the initial deposition of the Chattanooga Shale (Schieber and Over, 2005). Target rocks in this probable marine impact are Ordovician carbonates and older rocks. Almost all rim exposures consist of Catheys-Leipers Formation, while central uplift exposures are brecciated and faulted Knox and Stones River Group rocks. Although most of the crater is buried, there are exposed surface faults, folds, and large outcrops of impact breccia within the crater.

Following the impact in the Late Devonian, Flynn Creek crater was filled by impact-related breccia, reworked ejecta material, and later by the Chattanooga Shale. In this region, the Chattanooga Shale normally is ~6 m (20 ft) thick, but in the Flynn Creek structure it attains a thickness over 60 m (200 ft) (Roddy, 1979; Wilson and Roddy, 1990). The shale is overlain by the lower Mississippian Fort Payne and upper Mississippian Warsaw Limestone (Wilson and Roddy, 1990), which now cap the local ridges. Later, regional uplift led to incision of the region (Stearns and Reesman, 1986) and exposure of the buried structure.

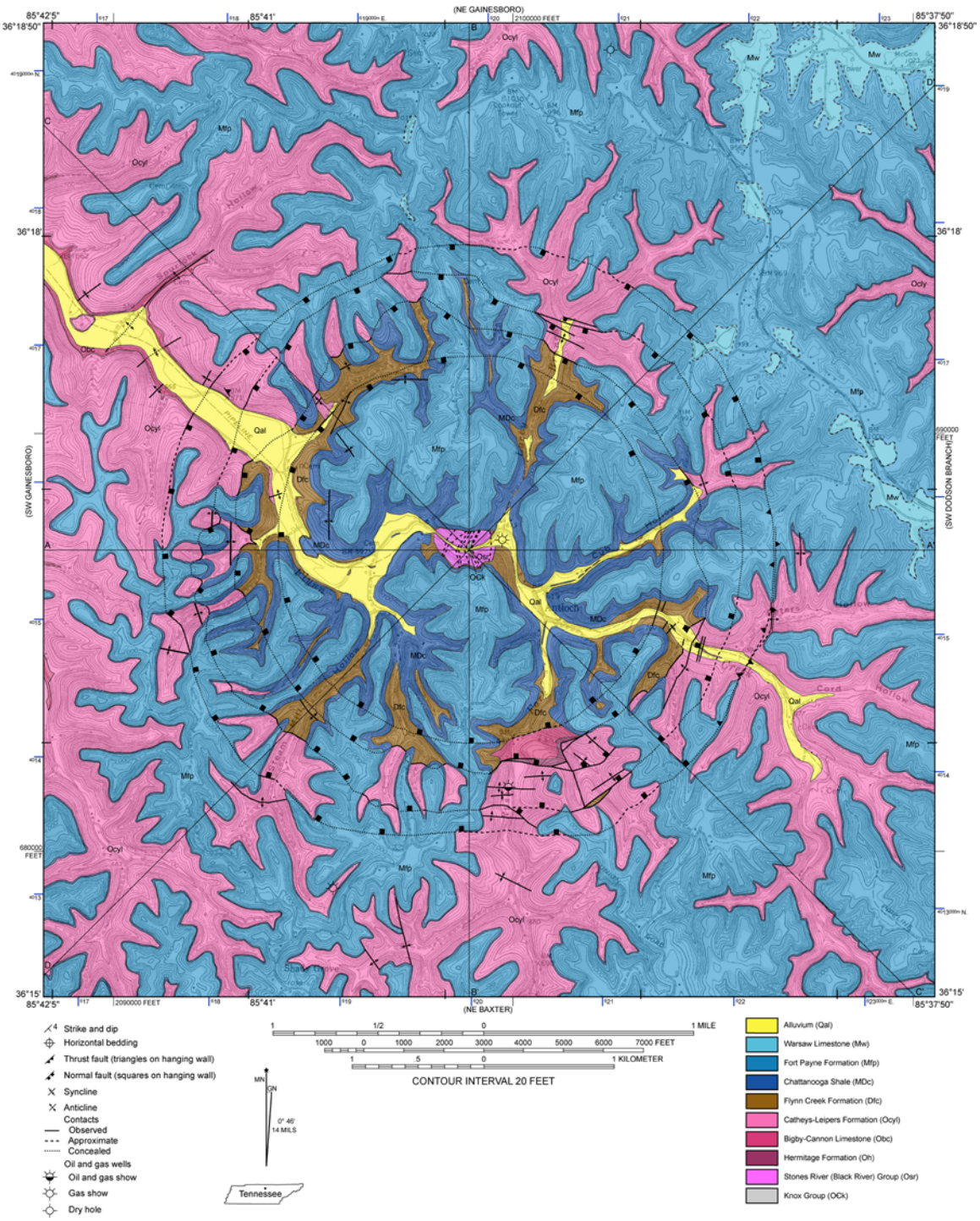


Figure 48. Revised geologic map of the Flynn Creek impact structure. Note that the structure is not asymmetric as indicated in earlier mapping. (Modified from Wilson and Roddy, 1990).



Figure 49. Shatter cones developed in Knox Dolomite. All shatter cones occur in the exposed Knox Group in the central uplift.

4.5.3 Stratigraphy

Exposed Flynn Creek impact structure stratigraphy (Fig. 50) ranges from Cambrian-Ordovician to upper Mississippian and is overlain by unconsolidated Quaternary floodplain deposits and colluvium. The regional pre-Chattanooga stratigraphy was described by Wilson (1949), but local stratigraphy in the vicinity of the Flynn Creek impact structure was first fully described by Roddy (1966) and then modified by Wilson and Roddy (1990).

4.5.3.1 Knox Group (O€k)

The Knox Group is largely composed of a light- to dark-gray or brown, very fine- to fine-grained, medium- to thick-bedded dolomite that occasionally contains chert horizons in the upper section (Wilson and Roddy, 1990). It is exposed only in the central uplift where it is partially brecciated. It is not exposed on the western flank of the central uplift as previously mapped by Wilson and Roddy (1990). Shatter cones have only been found in this unit (in place or as float) in the central uplift. The Knox Group rocks probably belong to the Mascot Dolomite, although this is not independently confirmed.

4.5.3.2 Stones River (Black River) Group (Osr)

The Stones River (Black River) Group is mainly composed of interbedded limestone and shaly limestone with minor shale and dolomite beds. It is commonly light brown to dark gray, fine- to coarse-grained, and thin- to thick-bedded (Wilson, 1949). The unit is exposed only in the central uplift where it is locally brecciated, folded, and faulted. The Deicke and Millbrig bentonites are found near the top of the unit, but the

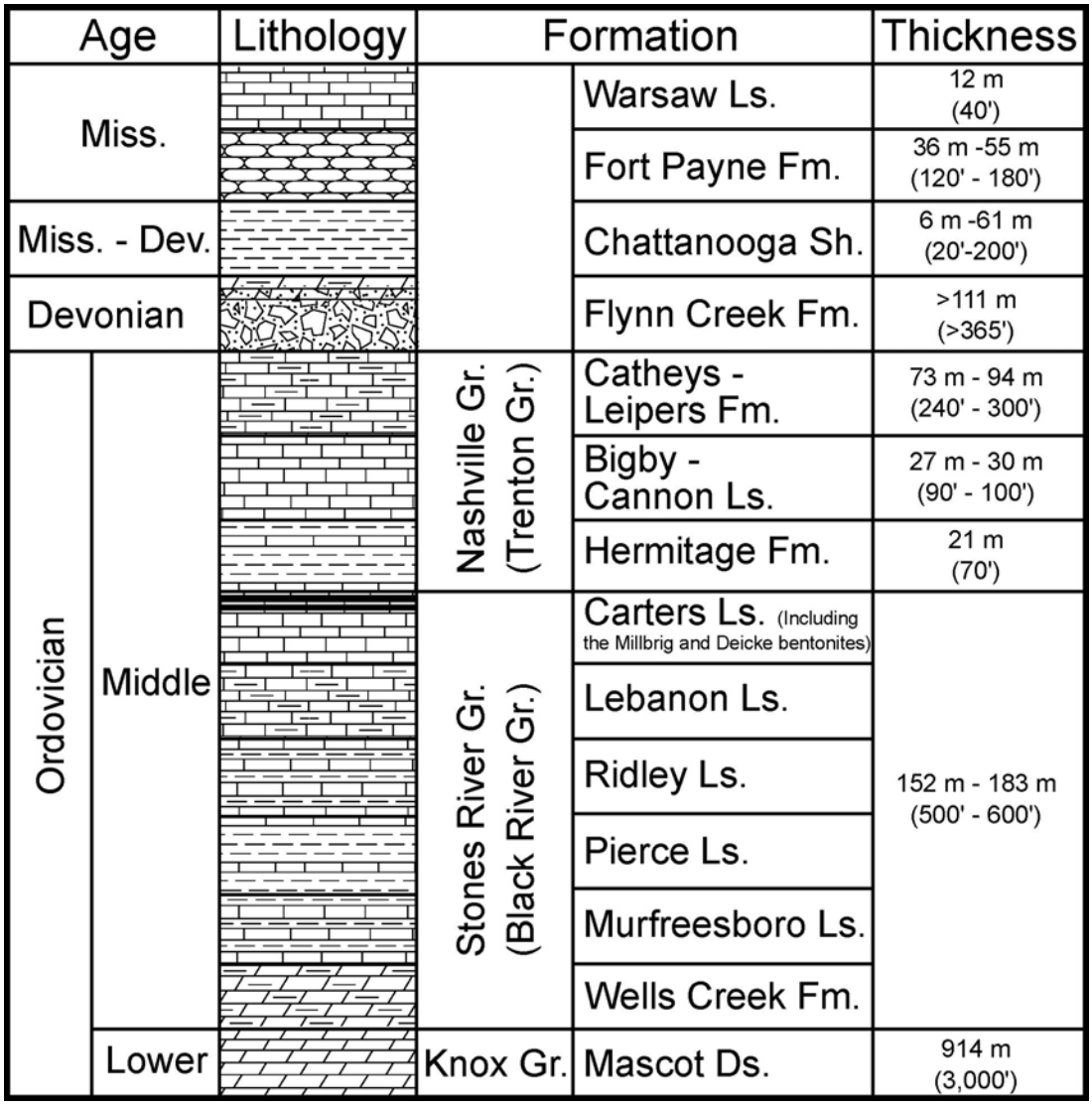


Figure 50. Stratigraphic section exposed in and around the Flynn Creek impact crater. (Modified from Wilson and Roddy, 1990).

Millbrig bentonite is locally eroded (Wilson, 1949; Huff and Kolata, 1990; Haynes 1994; Kolata et al., 1996). Neither bentonite nor key Stones River Group marker units (i.e., the Lebanon or Pierce Limestones) have been identified in the crater. Total thickness of exposed section is unknown.

4.5.3.3 Hermitage Formation (Oh)

The Hermitage Limestone is an argillaceous, medium- to dark-gray or brown, fine-grained, thin- and nodular-bedded limestone (Wilson, 1949) that is exposed only in the modified southern crater rim. It is ~21 m (70 ft) thick (Roddy, 1964; Wilson and Roddy, 1990).

4.5.3.4 Bigby-Cannon Limestone (Obc)

The Bigby-Cannon Limestone is a dark-gray to brownish-black, microcrystalline to medium-grained, thin- to thick-bedded limestone with the upper parts containing thin shaly interbeds near the contact with the Catheys-Leipers Formation. This contact is difficult to locate (Wilson, 1949; Wilson and Roddy, 1990). Yellowish and clear vein calcite is occasionally found west of the crater near inferred fracture systems. The "dove-colored" facies (Wilson, 1949) does not outcrop in the mapped area.

4.5.3.5 Catheys-Leipers Formation (Ocyl)

The Catheys-Leipers Formation is a medium- to dark-gray, fossiliferous, microcrystalline to medium-grained shaly limestone with interbedded medium gray, finely laminated shale. The Catheys Limestone is also thin bedded and occasionally

nodular with shaly partings. The Leipers Limestone can contain more massive, exfoliating silty-shaly limestone. The two units are difficult to separate because of their gradational character, but certain brachiopods (e.g., *Platystrophia* and *Hebertella*) are commonly much larger in the Leipers (Wilson, 1949). Occasional sandstone interbeds are brown-gray, medium- to coarse-grained, and locally crossbedded (Wilson and Roddy, 1990). Dewatering structures are present near the eastern crater rim along with hydrothermal dolomite, vein calcite, and minor quartz.

4.5.3.6 Flynn Creek Formation (Dfc)

The crater fill was described by Wilson and Roddy (1990), but their descriptions do not correlate well with current field exposures. We have therefore separated the crater fill material (here called the Flynn Creek Formation with the crater as the type area) into four "facies": non-bedded breccia, bedded breccia, coarse-grained dolomitic sandstone, and fine-grained dolomite. The formation is found only within the crater and its overall thickness is unknown, but drilling data estimate a thickness >111 m (365 ft) thick (Roddy 1964, 1977b, 1979; Wilson and Roddy, 1990).

Non-bedded breccia is the basal breccia unit (Fig. 51) found in the impact structure; it is composed predominantly of angular and unsorted limestone with minor dolomite and chert clasts up to 0.3 m (1 ft) in diameter. It is typically light- to dark-gray, and has a fine- to coarse-grained carbonate matrix. The lower unexposed portions of the unit should have larger clast sizes, but no larger clasts have been found in outcrop. Brecciated outcrops in the central uplift were not considered to be non-bedded breccia and may have been called mega-breccia by Wilson and Roddy (1990).

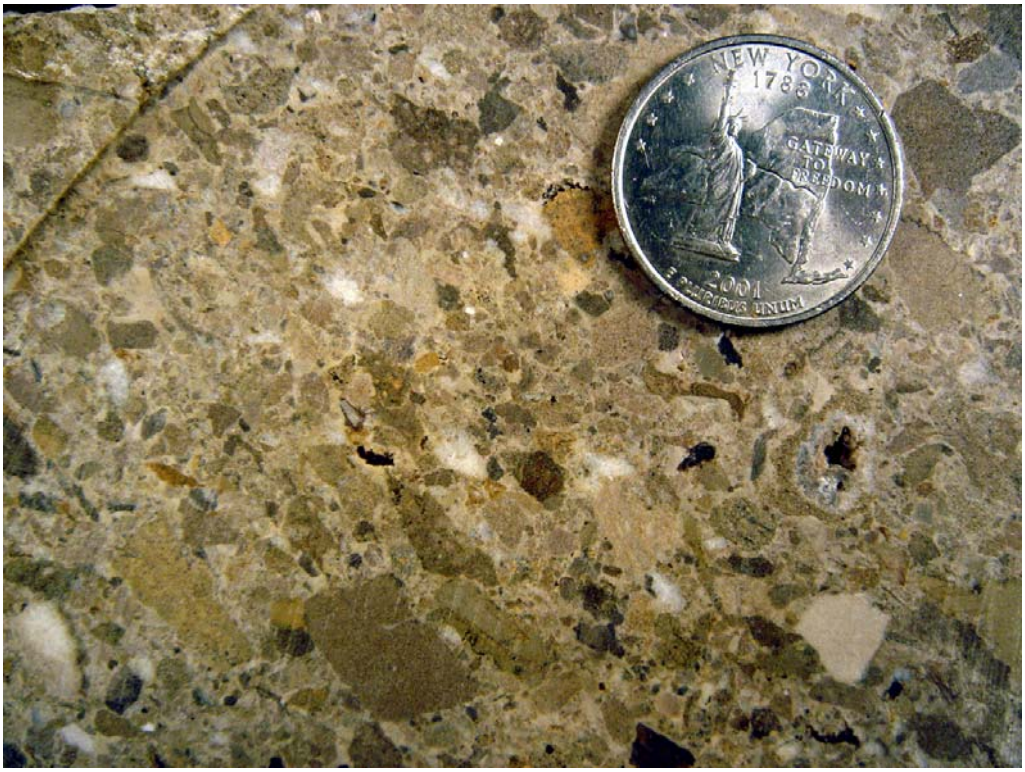


Figure 51. Typical non-bedded impact breccia with carbonate and dolomitic clasts.

Overlying the non-bedded breccia is bedded breccia. It is an angular and unsorted breccia composed of limestone, minor dolomite, chert, and shale clasts that are up to 0.1 m (0.3 ft) in diameter. The unit is colored light brown to dark gray and has a fine- to coarse-grained carbonate matrix (Wilson and Roddy, 1990). Calcite, bitumen, quartz, barite, sphalerite, minor gypsum, and hydrothermal dolomite have been found in breccia exposures where bedding is less apparent or possibly fragmented by hydrothermal fluid. Finer-grained breccia is locally crossbedded, implying a marine depositional environment. Total thickness is unknown. This unit is inferred to represent crater filling soon after impact. A localized disconformity occurs at the top of the unit, but is not always very pronounced. It is recognized as a contact between the breccia and overlying coarse-grained dolomitic sandstone (Fig. 52).



Figure 52. Disconformity between a dolomitic bedded breccia that contains dolomitic and limestone clasts (bottom) and a localized dolomitic sandstone (top).

Coarse-grained dolomitic sandstone is composed of reworked and sorted light-brown or yellow to dark-gray dolomite and carbonate breccia. It is fine- to coarse-grained, locally cross bedded, and medium- to thick-bedded. Weathered exposures occasionally appear vesicular because of weathering of carbonate clasts. Flattened vesicular sections are occasionally tilted, but parallel to the Chattanooga Shale and Fort Payne Formation, confirming post-Fort Payne crater modification. The unit is commonly ~3-6 m (10-20 ft) thick and has a sharp upper contact with the fine-grained dolomite.

Fine-grained dolomite is light brown to medium gray, and laminated to thin-bedded. It locally appears to have a gradational contact with the Chattanooga Shale and is up to 3 m (10 ft) thick. The gradational contact and conodonts from the dolomitic units also indicate the impact was Late Devonian (Huddle, 1963). Coarse-grained dolomitic sandstone and fine-grained dolomite are probably fallback and ejecta that settled into the submerged crater following impact. The large proportion of dolomite in the upper part of the Flynn Creek Formation suggests that it is fallback debris and ejecta, because the impact area is carbonate-dominated and the minor amount of dolomite in the Nashville and Stones River Groups would not as readily vaporize near the boundary of the initial impact (Melosh, 1989). Also, the limited spatial and inferred temporal position of the two non-breccia units with respect to the Chattanooga Shale and underlying breccia units indicates these units were not deposited as a result of regional or tectonic forces.

4.5.3.7 Chattanooga Shale (MDc)

The Chattanooga Shale is a fissile black to dark-gray, thinly laminated carbonaceous shale. A thin bentonite is found near the middle of the unit outside the

crater (Wilson and Roddy, 1990). The unit is regionally ~5-8 m (15-25 ft) thick (Roddy, 1966; Wilson and Roddy, 1990) and does not systematically thicken toward the crater. The base of the unit has some minor locally fine- to medium-grained sandstone (Schieber and Over, 2005) with occasional reworked black shale clasts presumably from the modified crater rim.

Inside the crater, the Chattanooga Shale is over 60 m (200 ft) thick. Presumably the same thin bentonite exposed outside the crater is located ~8 m (25 ft) below the top of the unit inside the crater (Wilson and Roddy, 1990). The base of the unit locally contains light brown to dark gray, cross bedded, fine- to medium-grained sandstones with reworked breccia, but no in-place exposures have been identified. Location of the bentonite and fossil evidence (Huddle, 1963; Schieber and Over, 2005) indicate that only the upper section of the Chattanooga Shale is correlative with Chattanooga Shale outside the crater (Schieber and Over, 2005).

4.5.3.8 Fort Payne Formation (Mfp)

The Fort Payne Formation is composed predominantly of calcareous silicastone, crinoidal limestone (Walsortian reefs), and chert with minor amounts dolomitic limestone and shale. The silicastone, limestone, and chert are light to dark gray, or green and brown-gray. Bed thicknesses range from thin to medium and are fine- to medium-grained. Crinoidal limestone and light-gray chert lenses occur at different parts of the unit (Wilson and Roddy, 1990). Interbedded green shale is also found throughout the unit, but a 0.3-0.6 m (1-2 ft) thick green shale (Maury Shale) is found at the base. The

Fort Payne Formation weathers to yellowish-orange chert rubble (Wilson and Roddy, 1990). The formation is 37-55 m (120-180 ft) thick.

4.5.3.9 Warsaw Limestone (Mw)

The Warsaw Limestone is exposed only outside the crater and is identified by the presence of a yellow-brown to reddish-orange soil that is sandy and contains minor amounts of chert (Wilson and Roddy, 1990). The contact of the Warsaw Limestone with the underlying Fort Payne Formation was not remapped.

4.5.4 Results

4.5.4.1 Timing of impact

The Flynn Creek impact structure was first described as a pre-Chattanooga structure based on thickness of the Chattanooga Shale and the absence of deformation or breccia in the unit (Lusk, 1927, 1935; Wilson and Born, 1936). Stratigraphic and fossil evidence indicate the impact occurred at ~382 Ma (Late Devonian) (Schieber and Over, 2005). Field mapping of the crater has also revealed: 1) a gradational contact between the basal Chattanooga Shale and the uppermost unit in the Flynn Creek Formation (fine-grained dolomite); 2) hydrothermal dolomite in the crater rim and fill; 3) Chattanooga Shale and strained quartz clasts reworked into sandstones near the base of the Chattanooga Shale with modified crater rim; and 4) rare impact breccia clasts with possible Chattanooga Shale affinity. This new information, along with the previously confirmed thickened Chattanooga Shale sequence and Devonian conodonts in the basal impact breccias, support a Late Devonian impact age.

The top of the Flynn Creek Formation (the fine-grained dolomitic unit) is locally conformable with the Chattanooga Shale. This implies deposition of the Chattanooga Shale occurred during final deposition of impact-related material. The presence of angular Chattanooga Shale clasts (Fig. 53) in sandstone near the base of the Chattanooga Shale is problematic because it would imply the Chattanooga Shale had already lithified. The clasts could also be derived from the Sequatchie Formation or Reedsville Shale (Upper Ordovician), but it is unclear if these units were originally deposited or exposed in the area.

Impact structures can be traps or sources for economical amounts of hydrocarbons (Isaac and Stewart, 1993; Reimold et al., 2005). Hydrothermal dolomite (Fig. 54), a common mineral associated with hydrocarbon plays, was found in the eastern modified crater rim in the Catheys-Leipers Formation (Ordovician) and in the carbonate-dominated bedded breccias (Devonian) within the crater, indicating regional emplacement of MVT deposits was Devonian or younger unless the emplacement was not coeval. Also found associated with the hydrothermal dolomite were dewatering structures, bitumen, barite, sphalerite, and calcite, which has been correlated with prolific hydrocarbon production near the structure (Lusk, 1935). Identification of deformation outside the transient crater and discovery of hydrothermal dolomite within the crater rim and fill may warrant renewed hydrocarbon exploration in the area.

4.5.4.2 Stratigraphic and structural discrepancies

Field mapping uncovered some stratigraphic and structural discrepancies in the published geologic map and cross sections. The main stratigraphic discrepancies include



Figure 53. Sandstone float (located near the base of the Chattanooga Shale) on the southeastern rim displaying reworked Chattanooga Shale clasts probably derived locally from the modified crater rim.



Figure 54. Hydrothermal dolomite found in the tilted, eastern rim. Hydrothermal dolomite has also been identified in the carbonate-dominated bedded breccia within the crater.

the miscorrelation of impact breccias. For example, the current geologic map has a second central uplift region denoted by a second outcrop of the Stones River and Knox Group on the western flank of the main central uplift. This was initially mapped by Roddy (1966) as impact breccia, but was later changed by Wilson and Roddy (1990) to Knox-Stones River Group. On the eastern flank of the central uplift, Roddy (1966) included a Stones River or Knox Group mega-breccia that is labeled as unbrecciated on the published map. Field mapping and nearby well information are in agreement with earlier mapping.

Structural inconsistencies have also been observed in the literature dealing with crater deformation, asymmetry, and overall diameter. Wave Cave (Fig. 55) is located on the eastern rim of the crater and formed in the core of an anticline. The cave (~43 m [141 ft] long) follows a concentric, west-vergent buckle fold that is broken by a small-displacement thrust fault. The location and orientation of the cave with respect to the crater and the lack of tectonic deformation in the vicinity suggests the structure is impact related (Roddy, 1979), although it is clearly compressional. Numerous caves exist in and near the Flynn Creek impact structure (Hawkins Cave is even located in the central uplift) and are normally developed in Ordovician limestones near inferred blind structures. Wave Cave was suggested to be the manifestation of a blind, normal fault (Roddy, 1979) (Fig. 56a). This interpretation, however, does not correlate with observed structural data. The anticline is not a passive bend fold, but rather a west-verging buckle fold that was formed as the result of a thrust (Fig. 56b). This revised interpretation also suggests a blind thrust fault beneath the cave that tilted the crater rim, but did not propagate to the surface. This is probably why the fault was not reactivated as a normal fault during post-

a)



b)



Figure 55. a) Entrance to Wave Cave, which is located on the eastern rim of the modified crater. b) The cave has formed in the core of a west-vergent buckle fold that is broken by a small-displacement thrust fault. Caves are commonly found in the modified crater rim.

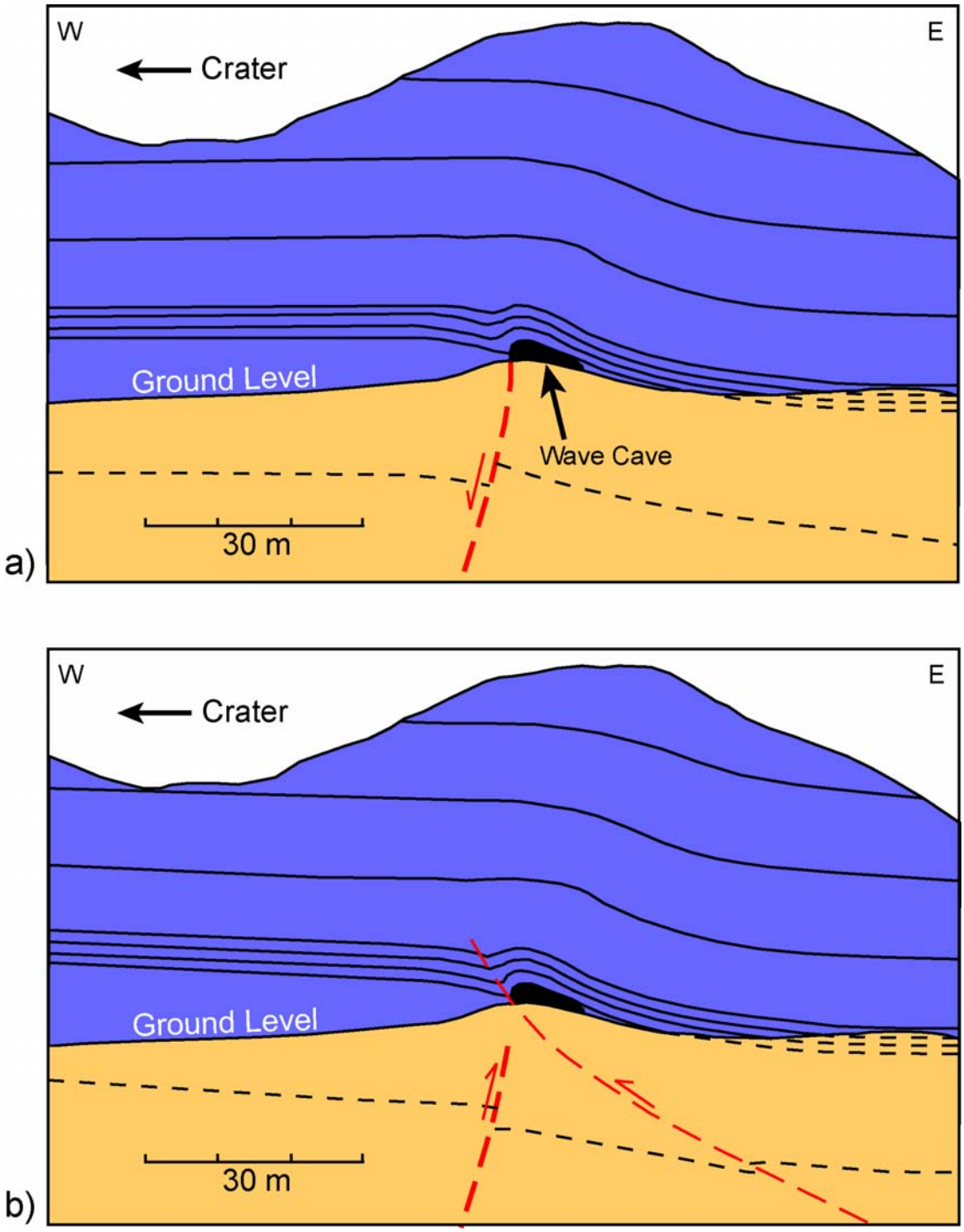


Figure 56. Structural models for Wave Cave. A) Normal fault model from Roddy (1979). Note that the model does not balance or take asymmetry into account. B) A new interpretation of Wave Cave. Most normal faults that define the crater's modified rim are associated with a breached anticline, suggesting the region beyond the transient crater was first uplifted via thrusting during the initial excavation phase and later reutilized during final crater development and modification phases.

impact modification; most normal faults that define the crater's modified rim have a breached compressional anticline in the hanging wall (Roddy, 1968), suggesting that uplift first occurs around the peripheral border of the transient crater via outward thrusting during the initial excavation phase. Thrusts that propagate to the surface are then inverted during subsequent crater development and modification phases.

Four cross sections (Fig. 57, Plate 1) were constructed across the crater employing available structural data (i.e., Roddy, 1966; Wilson and Roddy, 1990) and data collected during 2005 and 2006. The cross sections are not fully constrained due to the lack of earlier drilling data and absence of seismic reflection data. However, depth to basement and unit thickness are well constrained by surface outcrop and nearby well data. The maximum thickness of breccia fill was taken from Roddy (1979) and the thickness of Chattanooga Shale from Wilson and Born (1936) and Roddy (1979). These combined thicknesses fall within the estimated depths of excavation when compared with various scaling estimates from Melosh (1989).

Earlier mapping of the asymmetric central uplift, which verges east-southeast and exposed faults in the inferred rim led to the idea that the crater morphology was asymmetric. These features, however, appear to result from differences in faulting patterns in the modified crater rim and possibly to misinterpreted fault linkages in the bounding faults. Drilling on the eastern side of the central uplift contacted the top of the Knox Group near its expected regional depth, indicating the central jet is very narrow or that the central uplift is verging eastward as noted earlier (e.g., Roddy, 1966; 1979; Wilson and Roddy, 1990). The drilling information and log, however, are not available

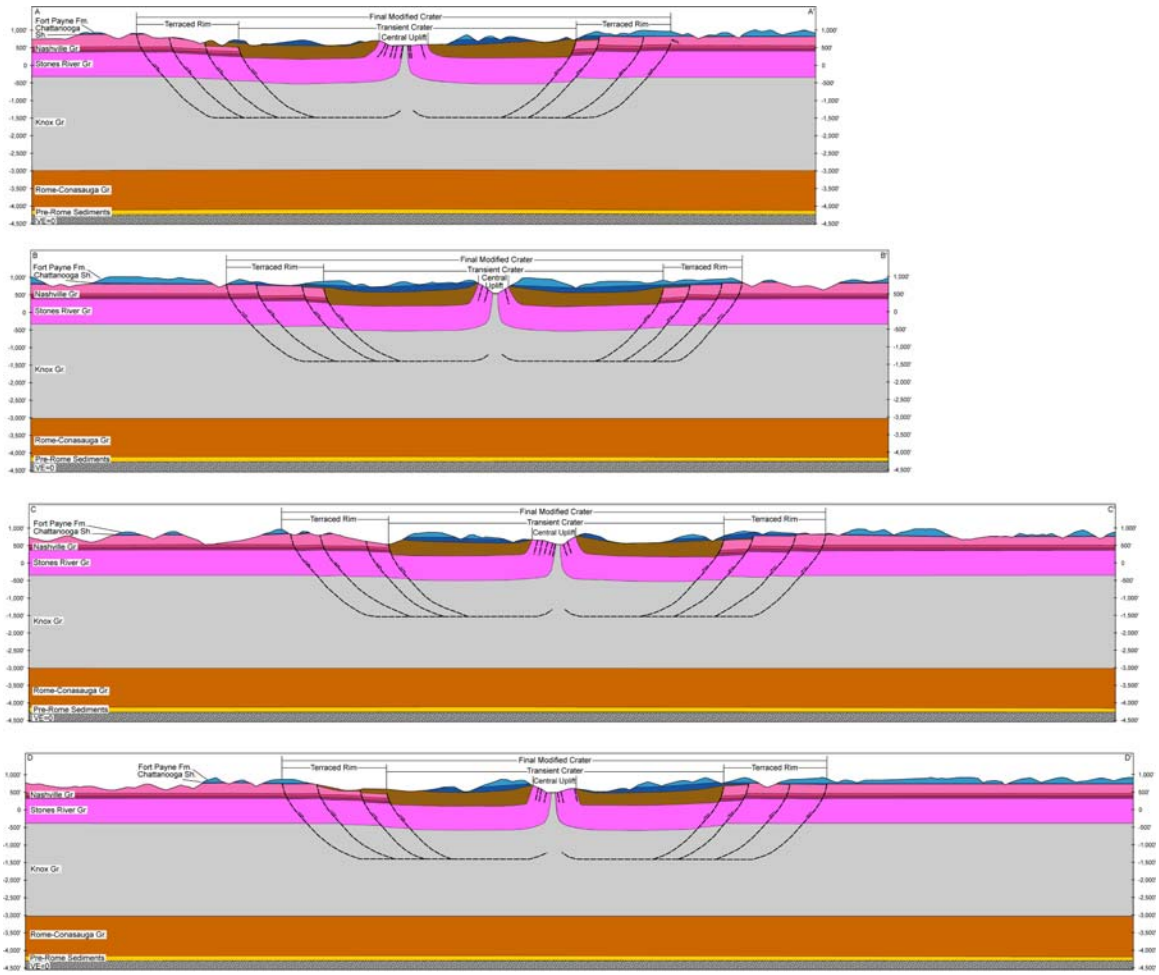


Figure 57. Cross sections A-A' through D-D' with the crater delimited. Depth to basement estimated from nearby a basement core hole test (Pasminco 4-44-309) and depth of crater fill from Roddy (1979). See Figure 48 for cross section locations.

and, as a result, the asymmetry has not been properly addressed in the subsurface. The eastern half of the central uplift is very poorly exposed, and it is unlikely that surface mapping can accurately project the central jet (Fig. 58) or central uplift into the subsurface.

The crater diameter had been estimated to be 3.8 km (2.4 mi) (Roddy, 1966, 1968, 1977a, 1977b, 1979). The revised geologic map (Fig. 48) and cross sections, however, suggest that a fourth persistent concentric fault (from the center of the structure) denotes the true final modified crater, which would increase the diameter of the structure to approximately 4.7 km (2.9 mi). The only drawback with this estimate is that the blind bounding fault did not fully develop or propagate to the surface around the entire structure, as suggested in the discussion of Wave Cave. A more conservative estimate, using the fully developed third bounding fault, would indicate the crater is 4 km (2.5 mi) in diameter. The concentric pattern of the bounding faults also does not support the idea that the crater morphology is elliptical, which would be uncommon for undeformed impact structures (Melosh, 1989). The theory of crater asymmetry was related to the miscorrelation of the bounding faults and the misidentification of structures in the modified crater rim.

4.5.4.3 Evolution of the impact structure

Stratigraphic and structural field relationships in the Flynn Creek impact structure indicate the following history: 1) Late Devonian impact in a marine environment followed by excavation and subsequent formation of an asymmetric central uplift; 2) deposition of a basal, non-bedded breccia; 3) filling of the crater with carbonate-

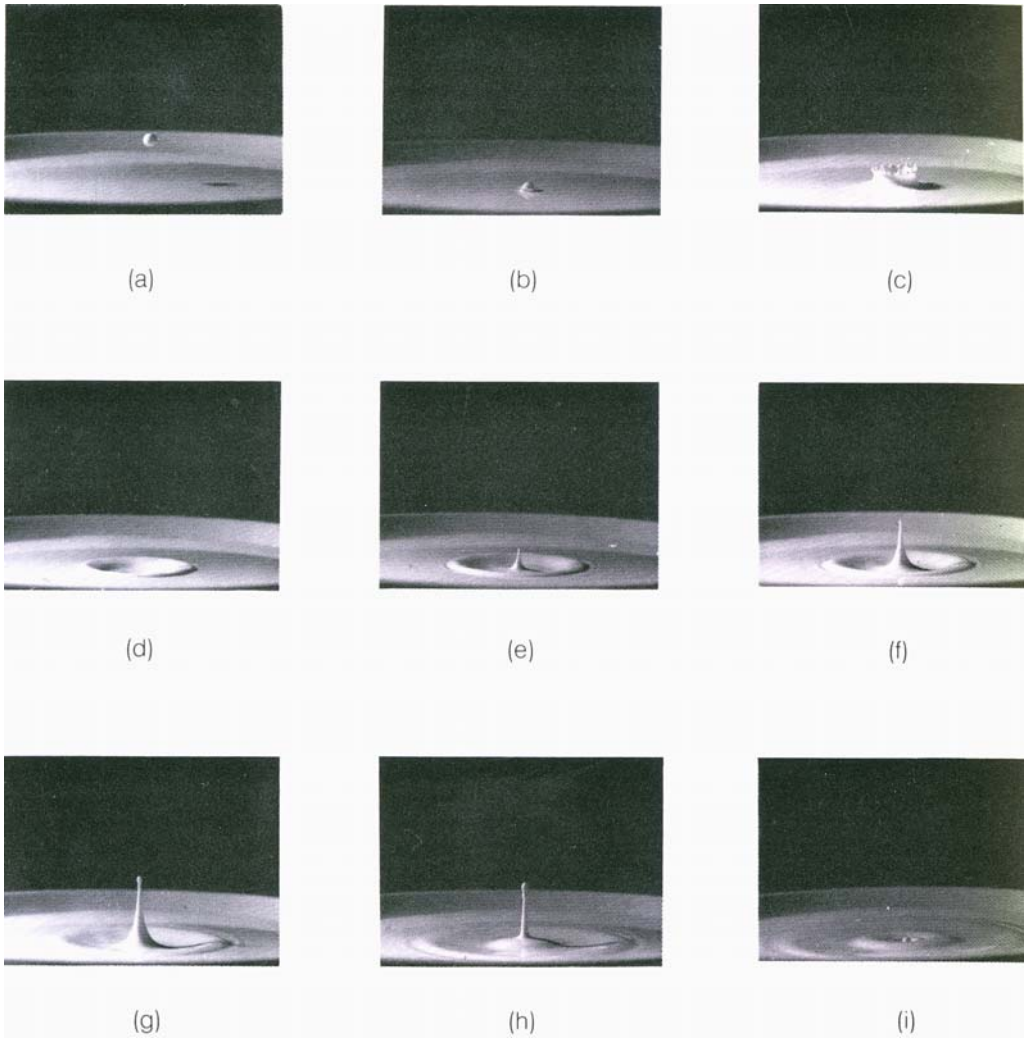


Figure 58. Model of central uplift formation illustrated by the central jet of water rising upward (e-g) following impact (a-d) and the subsequently destabilizing (h) and collapse of the central jet creating an inner ring (i). (Photo sequence by R. B. Baldwin, from Melosh, 1989).

dominated, bedded breccia that is locally reworked in marine environment; 4) localized disconformity; 5) fallback and ejecta washed into the crater and led to the deposition of coarse-grained dolomitic sandstone that fines upward and ultimately grades into the Chattanooga Shale; 6) hydrothermal fluids and possibly hydrocarbons that migrated into the modified crater rim and bedded breccia units in the crater; 7) deposition of Mississippian and possibly Pennsylvanian strata; 8) regional uplift and erosion leading to or enhancing formation of numerous caves near the modified crater rim and local lineaments; 9) dissection of the Cumberland Plateau and development of an internal drainage system in the crater, controlled by fault and fracture systems, leading to the present partial exposure of the crater; and 10) crater modification and adjustments persisting throughout post-impact deposition.

4.5.5 Structural Models of Complex Impact Craters

Physical models of impacts and nuclear explosions have been made (e.g., Nordyke, 1961; Shoemaker, 1968; Short, 1968; Melosh, 1980, 1989) and are well understood, but very little is known about the subsurface deformation accompanying impact events (particularly the bounding faults associated with complex craters). This is because impact processes destroy or alter earlier crater formation stages, and there are also little subsurface data to reveal fault and rheological behavior at depth. Preexisting topography, subsurface heterogeneity, depth to basement, target type (marine or terrestrial), low- vs. high-angle impact, and preexisting zones of weakness (i.e., fault or joints) could greatly alter the final crater morphology, but research addressing these issues is limited. The interaction of preexisting structures and impact processes can be seen at Meteor Crater,

Arizona (Fig. 59), where the rim of this simple crater is square shaped and not circular due to the interaction of the crater rim with the regional orthogonal joint system (Melosh, 1989). Extent of the deformation at depth can be estimated with deep drilling, where available, and the 3-D shape of the crater can be delimited by seismic reflection data (Fig. 60), but it is difficult to delineate fault geometries at depth and the timing of rim deformation. It is likely that the bounding faults are linked in the subsurface, as represented in Figure 60. With this in mind, it is not surprising that numerous contrasting schematic sedimentary target models (Fig. 61) have been formulated that project known surface data differently into the subsurface. Even though every impact is unique as a result of some of the factors mentioned above, all impacts should contain broadly similar features because they are created by the same processes.

There are two categories of impact craters: simple and complex. Simple craters are bowl-shaped depressions, less than a few kilometers across, and have larger depth-to-diameter ratios than complex craters (Melosh, 1989). Complex craters are larger structures (>2-4 km) and have a terraced or modified crater rim along with a central uplift or peak ring. The modified crater rim is formed by concentric normal faults outside the transient crater. The central uplift is a complex feature formed as the crater floor rebounded upward and rises approximately 8 percent of the final crater diameter (Melosh, 1989).

The three stages involved in the cratering process (stage 1 or contact and compression, stage 2 or excavation, and stage 3 or modification) are somewhat arbitrary, but are dominated by different forces and mechanisms (Melosh, 1989; French, 1998). During the contact and compression stage (Fig. 62) the bolide hits the ground and the



Figure 59. Meteor Crater, Arizona, is more square shaped than circular due to the interaction of the crater rim with a regional orthogonal joint set. Notice how straight the crater rim appears to be and the rim uplift. (Photo courtesy of Candace Kohl).

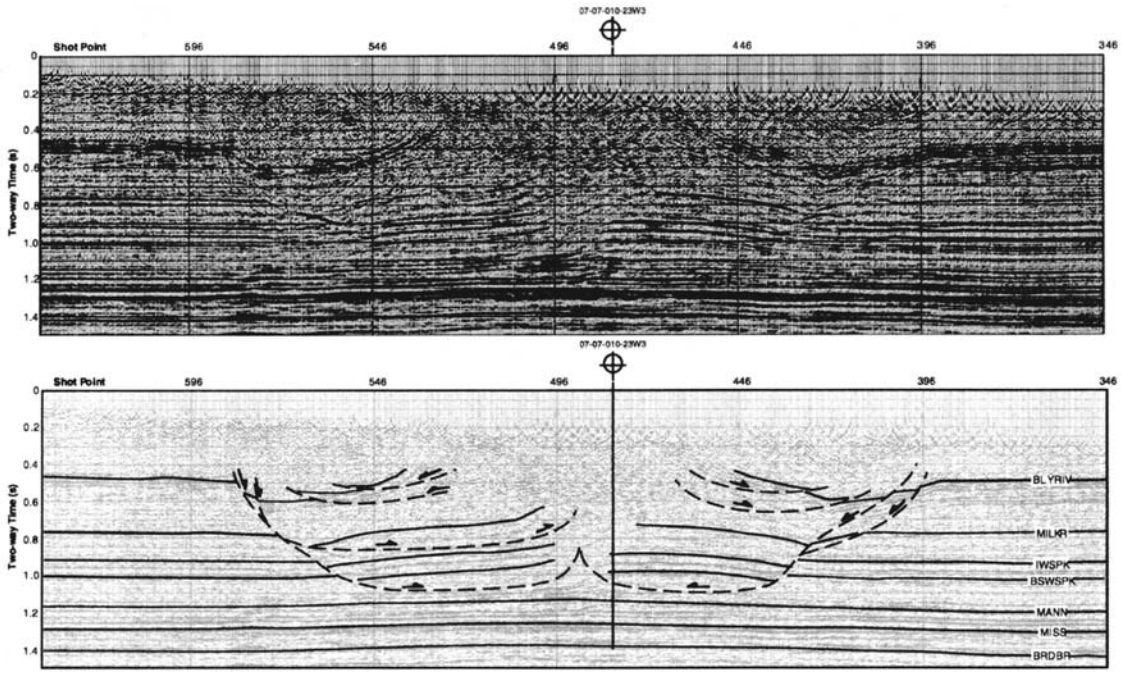


Figure 60. Seismic reflection profile across the White Valley structure, Saskatchewan. The structure has a diameter of 6 km and displays numerous features indicative of a complex impact structure. Note lack of deformation in the deeper horizons. (From Mazur and Stewart, 1997).

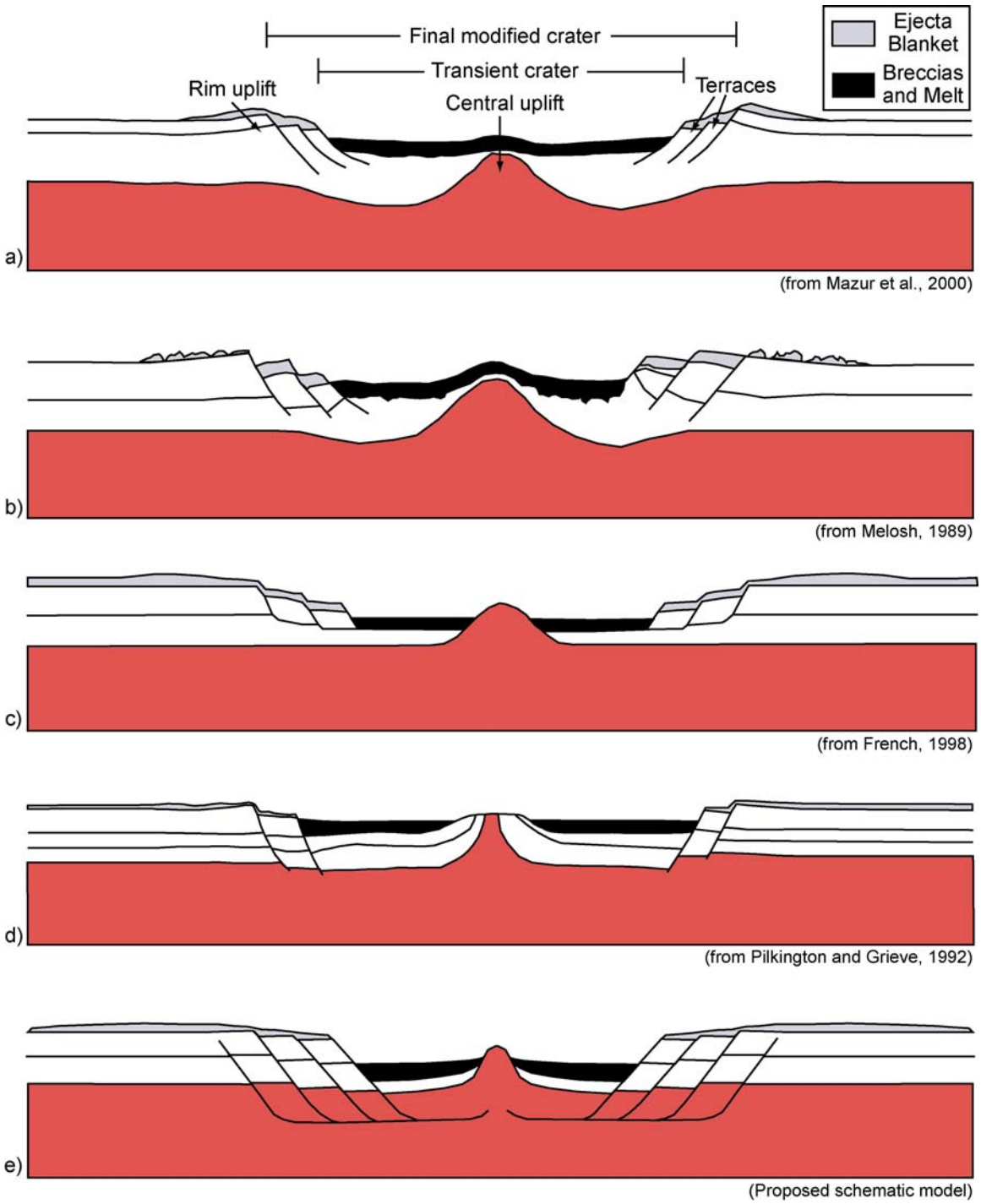


Figure 61. Various schematic models of complex craters developed in heterogeneous sedimentary targets. Notice how bounding faults are projected at depth outside the transient crater. Basement is not represented in these models.

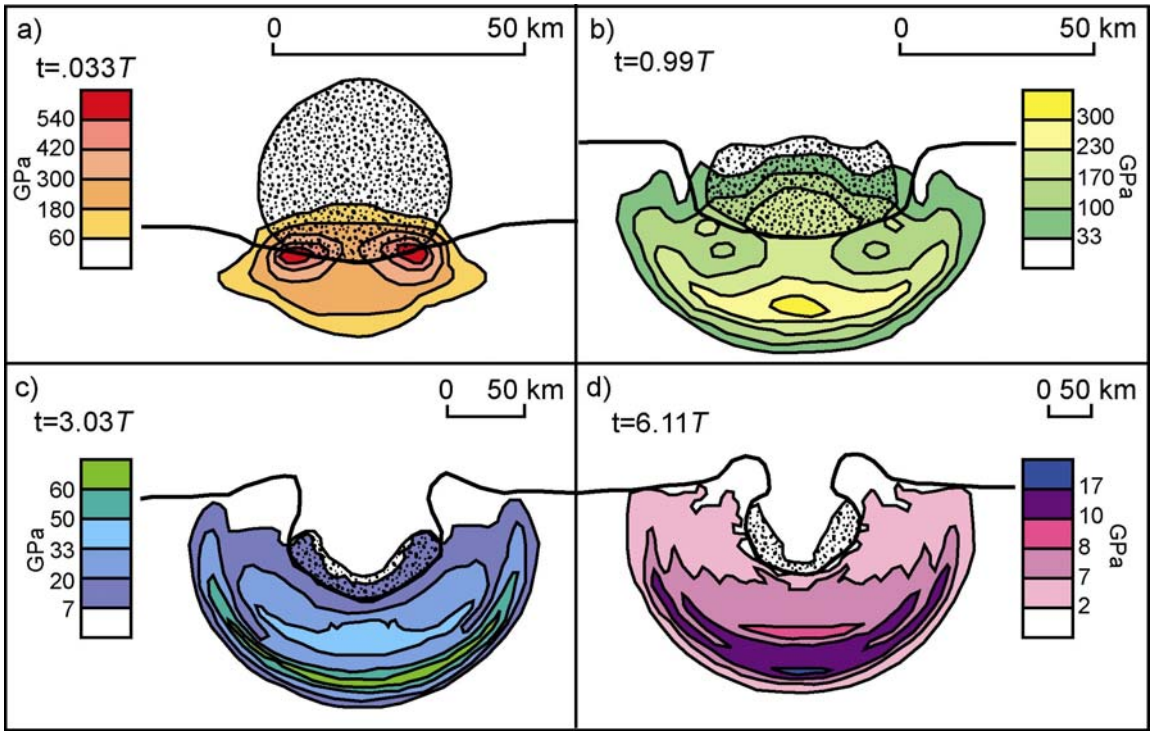


Figure 62. Contact and compression stage for vertical impact of a 46.4 km diameter iron impactor on a gabbroic anorthosite target at 15 km/s. T = diameter of the projectile/impactor velocity. Note the changing scales, contour intervals, and problematic contouring in c and d. The last snapshot is starting the excavation stage. (From Melosh, 1989).

energy is transmitted into the target. A shock wave is generated that propagates into the target and back into the impactor, compressing the two. When the shock wave reaches the back of the projectile, the wave is reflected to the front of the impactor via a rarefaction wave, marking the end of the very brief contact and compression stage (Melosh, 1989; French, 1998).

The rarefaction wave continues into the target during the excavation stage and decompresses or unloads the target (as it did in the impactor). The tremendous heat created by the unloading event melts or vaporizes the impactor and some of the target rock (Fig. 63). Kinetic energy is transferred into the target rock by reflection of the hemispherical shock wave by the ground surface, and some of the target is ejected or spalled up and away from the impact site. Lower strata are displaced downward and outward during the excavation stage (Melosh, 1989; French, 1998) and inward vergent concentric buckle folds and thrust faults in the near surface may be formed that are reactivated during the modification stage (Fig. 64). Ultimately, a bowl-shaped transient crater is formed by differential movement of material during the excavation phase. The transient crater size is increased until there is not enough energy in the expanding shock and rarefaction waves to deform and expel the target rocks; it is at this point the modification phase begins (Melosh, 1989; French, 1998).

The modification phase is dominated by the gravitational collapse of the crater rim and infilling by fall-back debris, melt, and breccias. In complex craters a central uplift develops because of rebound of the crater floor as deep-seated strata ascend in the middle of the structure. Central uplift formation starts when the crater stops growing in depth, but before the rim is fully excavated and thus the transient crater is never

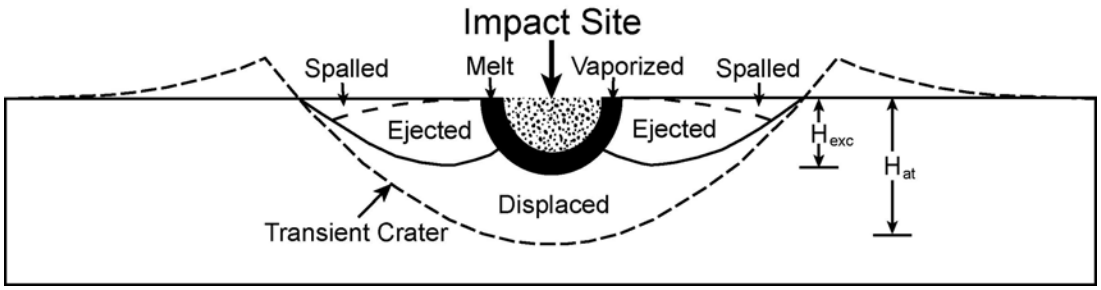


Figure 63. Provenance of impacted material. H_{exc} = depth of excavation; H_{at} = final transient crater depth. (From Melosh, 1989).

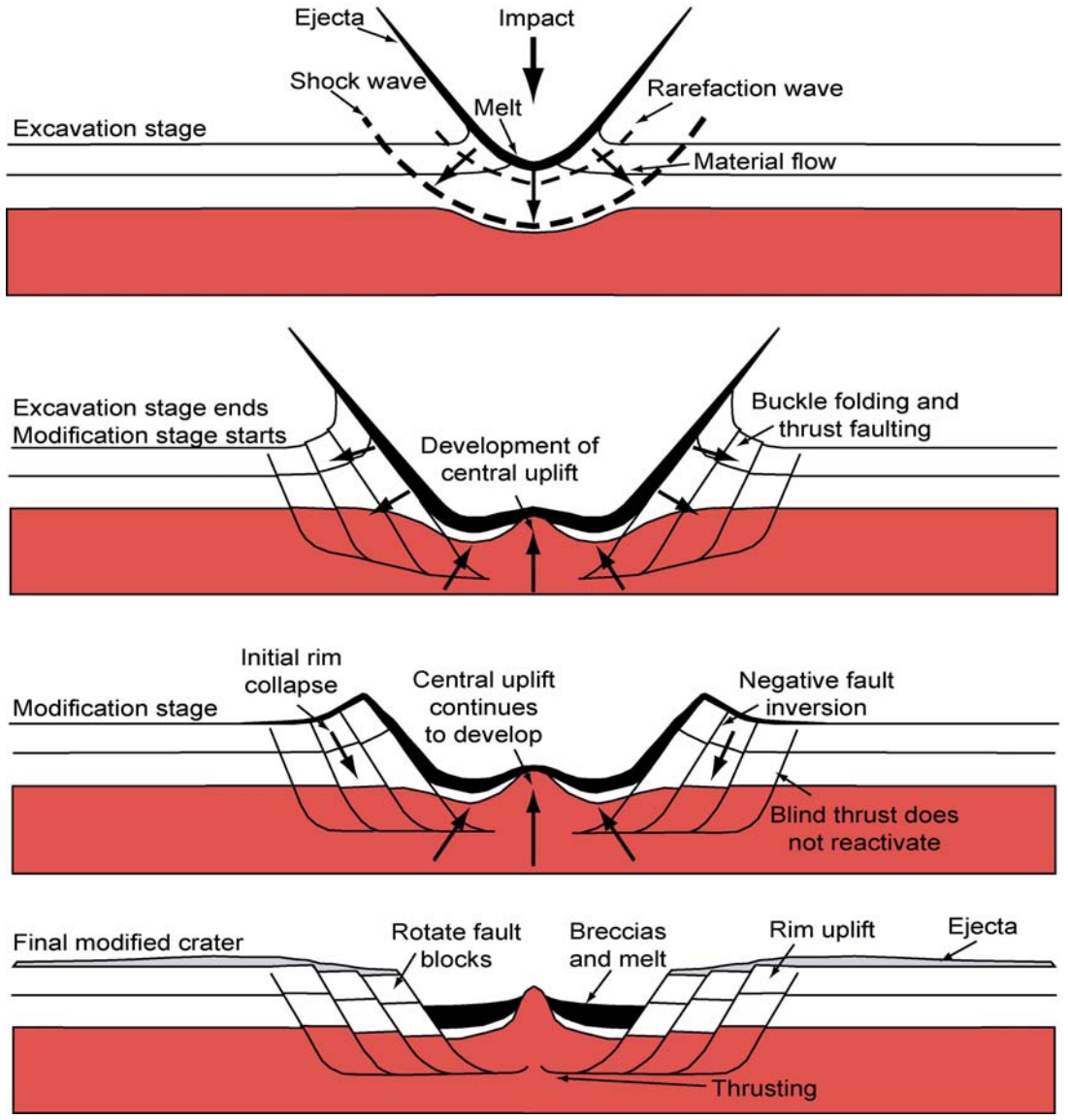


Figure 64. Schematic model of an impact event from excavation to the end of the modification stage. (Modified from French, 1998).

completely parabolic (Melosh, 1989). As the central uplift develops, the crater rim collapses along normal faults that were originally thrust faults and zones of weakness created during the excavation phase. At the Flynn Creek impact structure, some of these inward verging thrust faults are exposed in the modified crater rim where inferred outward verging blind thrusts did not propagate to the surface and therefore, were not reactivated. Further evidence of this negative inversion is the breached concentric buckle folds associated with the bounding faults (Roddy, 1968), indicating the normal faults developed in previous zones of compression. Movement along the listric bounding normal faults causes the modified crater rim to collapse and the fault blocks to rotate away from the impact. As the normal faults propagate inward, along a master décollement, the fault tips to pass into compression, and folds or thrust faults will develop as has noted in other media (e.g., Hansen, 1971; Davis, 1975; Hatcher, 1995). The inferred late-stage compressional regime below the center of the crater could account for some of the crater floor uplift, but this has not been demonstrated. The depth of the décollement is probably dictated by the energy of the impact rather than lithologic competencies because the target rocks would briefly lose competency and behave elastically. Seismic reflection data from other impact structures indicate that impact deformation and modification are relatively shallow as deep reflectors usually appear undisturbed (Fig. 60).

4.5.6 Discussion of the Dycus Disturbance

The Dycus disturbance (Fig. 65) is a small suspect impact structure in Jackson County, Tennessee (85° 46’ 50” W, 36° 22’ 43” N) located approximately 13 km (8 mi)

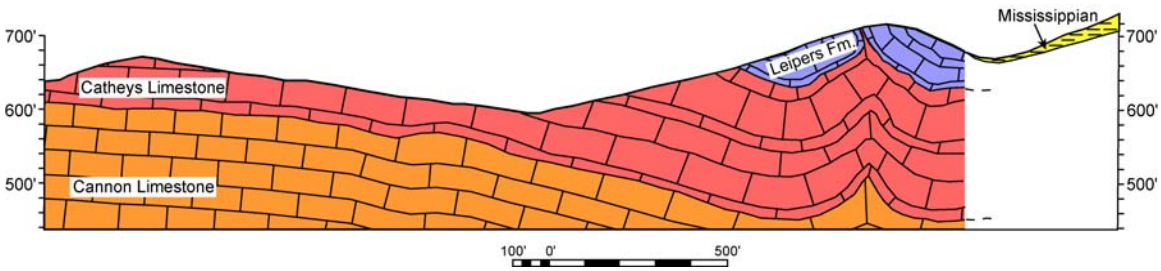


Figure 65. Cross section through part of the Dycus disturbance. (From Mitchum, 1951).

north-northwest of the Flynn Creek impact structure (Mitchum, 1951; Deane et al., 2006). The feature has not been fully delimited because it is partially buried, but it is currently estimated to be 0.6 km (2000 ft) in diameter and possibly elliptical. A central uplift was proposed to exist near the northern extent of the mapped disturbance (Mitchum, 1951), but this has not yet been demonstrated in the field (Deane et al., 2006) or geophysically. The disturbance is not denoted on the published geologic quadrangle (Wilson and Moore, 1988).

The disturbance is considered a suspect impact structure, because no direct evidence has been found to confirm it has an impact origin. Mitchum (1951) proposed the Dycus disturbance had an impact origin rather than being a cryptovolcanic structure because of the nature of the deformation and lack of volcanic rocks. No shatter cones, breccia, or shock indicators have been found (Deane et al., 2006), but the presence of normal faults, buckle folds, and localized vertical bedding in the Catheys-Leipers Formation (Upper Ordovician), in a region where regional dip is typically less than one degree, indicate the area has been altered by intense localized deformation (Mitchum, 1951; Deane et al., 2006).

The question naturally arises regarding the relationship of the Dycus Disturbance and the Flynn Creek impact structure. Are they associated with the same impact event or

coincidentally positioned? They do have several similarities, but there is no field evidence to link the two structures at this time (Deane et al., 2006). If the Dycus disturbance is an impact structure, then both structures would have had Ordovician (carbonate-dominated) targets; and the possible asymmetry proposed for the Dycus disturbance is generally oriented toward the Flynn Creek impact structure indicating they may be associated with each other. The Flynn Creek impact structure, however, was filled in by a thickened Chattanooga Shale section (over 60 m) whereas the Chattanooga Shale capping the Dycus disturbance is only 6 m thick (Deane et al., 2006). This does not rule out the hypothesis that these two structures are linked, but until the Dycus disturbance is proven to be an impact structure and remapped, the association cannot be confirmed. The disparity in Chattanooga Shale thicknesses may be a function of the available accommodation space, the timing of each impact, the impact environment, or the location of the outcrop in the Dycus disturbance (the Chattanooga Shale would be thinner near the inferred central uplift as it is in the Flynn Creek impact structure). Ultimately proving the disturbance is an impact structure may be difficult, because possibly only half of the crater is exposed. Dating the deformation will also be difficult because of the lack of impact breccias and the age gap between the Catheys-Leipers Formation (Upper Ordovician) and the overlying Chattanooga Shale (Upper Devonian).

4.5.7 Conclusions

1) Four persistent, concentric faults indicate the Flynn Creek impact structure is symmetric and has a diameter of 4.7 km (2.9 mi), which was calculated from the outermost partially developed fault system, or 4 km (2.5 mi) using the third fault

system, which is fully developed. Both estimates are larger than the previously estimated 3.8 km diameter.

2) New field mapping has documented: 1) a gradational contact between the basal Chattanooga Shale and the uppermost unit in the Flynn Creek Formation (fine-grained dolomite); 2) hydrothermal dolomite in the crater rim and fill; and 3) Chattanooga Shale clasts reworked into a sandstone near the base of the Chattanooga Shale in the modified crater rim. This new information, along with the previously confirmed thickened Chattanooga Shale sequence and Devonian conodonts within the basal impact breccias, strongly constrains the impact age to the Late Devonian.
3) Structural and stratigraphic investigations have led to the development of a new interpretation for Wave Cave, a revised geologic map, a series of cross sections, and a revised classification of the crater fill units based on outcrop exposure.
4) Impact deformation or post-impact crater modification extend outside the transient crater. This, along with the discovery of hydrothermal dolomite, could open the area to future hydrocarbon prospecting.
5) A new model for subsurface faulting is proposed that is consistent surface structural features and subsurface seismic reflection data. The model indicates that thrust faults and buckle folds are created during the excavation stage and are later reactivated as normal faults during the modification stage. Normal faults then propagate downward and sole into a master décollement.
6) The Dycus disturbance is a small (.6 km diameter) suspect impact crater located 13 km north-northwest of the Flynn Creek impact structure. Ultimately proving

the disturbance is an impact structure may be difficult, because possibly only half of the crater is exposed and evidence has not been found to indicate it is of an impact origin. The geographic proximately and age of the deformed strata at the two locations, however, suggests they may be related.

5 Discussion

5.1 Regional Subsurface Maps and Artifacts

Using large-scale structure contour maps is not suitable for identifying regionally economic plays. Small-scale structures and possible hydrocarbon targets are present throughout the region as evident by widespread hydrocarbon production, but they are impossible to identify in regional structure contour maps. The maps would have to be at quadrangle scale in order to identify the targets commonly prospected in the region. Trend surface residual anomaly mapping is a better suited technique, capable of identifying smaller patterns on larger-scale maps that indicate a deviation from the expected, which may or may not correlate to structural deformation (faulting or folding) or stratigraphic features (facies changes, reef development). For example, in the Knox Group TSRA map (Fig. 66), the Sequatchie anticline is displayed as a prominent linear high with a parallel and interestingly more pronounced linear high to the northwest. This secondary high has an amplitude of 100' (same as the Sequatchie anticline) and extends from southern Tennessee to the Kentucky border. Other mapped surfaces also have a similar linear high in the same position, but it is likely an artifact due to the distinctive change in residual pattern to the northwest where the amount of data is greater. If real, though, this possibly could be the result of a blind fault or fold at depth denoting the approximate area where the Rome Formation pinches out.

In areas of increased data coverage the width and amplitude of the anomalies decrease indicating that wide and isolated highs are at least partially artifacts. The varying positive anomaly widths are related to the amount and spacing of the well data. It is important to realize that large artifacts likely correspond to smaller-scale structures,

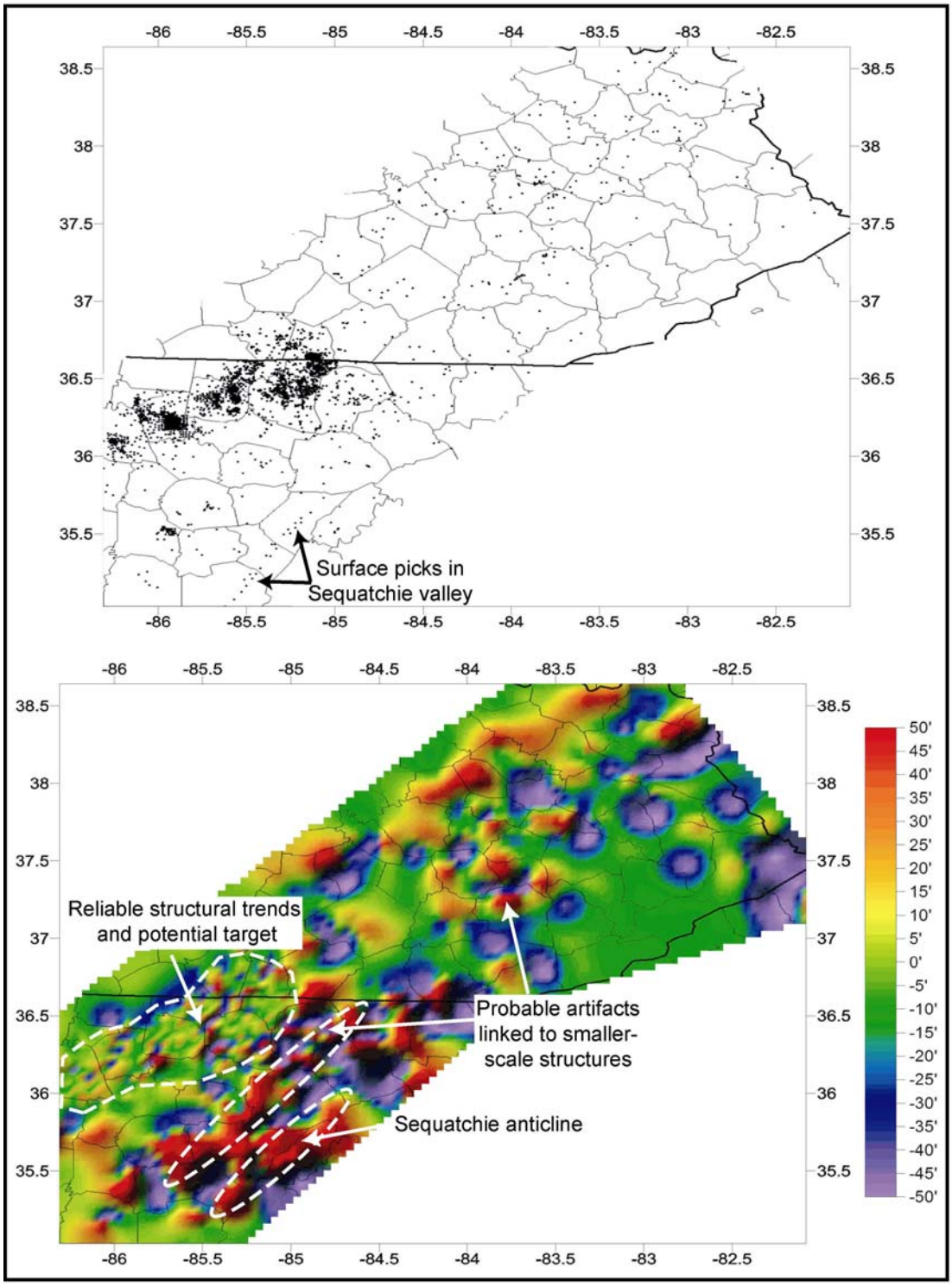


Figure 66. Trend surface residual anomaly and well location map of the Knox Group. Note the prominent linear high parallel to and northwest of Sequatchie anticline. This is probably an example of a regional-scale data artifact related to the spacing and amount of well data.

but the exact locations are impossible to identify without more data control. Residual anomaly highs seem to commonly correspond to known producing fields like the Burning Springs Consolidated field in Kentucky. Mapped horizons above the Chattanooga Shale show pronounced linear trends parallel to regional strike, possibly indicating blind deformation associated with Alleghanian faulting. Mapped horizons below the Chattanooga Shale do not have these linear trends, signifying there is no deformation below the detachment or that the trends were not able to be represented due to the smaller amount of data.

All of the generated structure contour maps had limited exploration utility. The maps plainly confirm regional dip is to the southeast and show large structures (i.e., the Rome trough), but interestingly did not show other large-scale structures such as the Pine Mountain thrust and Cumberland Plateau overthrust. The structure contour maps, however, were crucial in the construction of cross sections. The regional dips for all of the horizons mapped in this study were to the southeast. Slicing a structure contour map allows for an estimated profile to be generated for any given section line. Stacking profiles will create a synthetic cross section that can later be tied to along-strike or projected well data. Crossing profiles would be a sign of a flawed dataset or possibly an inappropriate contouring algorithm.

6 Conclusions

1. A standardized picking methodology demonstrated the Middle Ordovician carbonate lithofacies described by C. W. Wilson (1949) are not only correlatable across the Cumberland Plateau of Tennessee, but also across eastern Kentucky, western Virginia, and into the Valley and Ridge province. These correlations may also be possible in Ohio, Pennsylvania, and New York, suggesting a standardized nomenclature be established.

2. The Clinchport-Whiteoak Mountain thrust in the Valley and Ridge approximately marks the eastern boundary of the Middle Ordovician carbonate bank. Palinspastically restored cross sections locate the eastern edge of the Ordovician paleo-carbonate bank 50-75 km east of the Clinchport-Whiteoak Mountain fault, at approximately today's Tennessee-North Carolina border.

3. A geologic model for hydrocarbon illustrates 1) a proposed décollement soled in the Chattanooga shale forms linear potential Mississippian-aged traps; 2) the previously unidentified extension of Rome trough in Tennessee; 3) cross section and well data indicate that the Sequatchie Valley fault extends beneath the Wartburg basin; 4) Mississippian reservoirs are sourced by the Chattanooga Shale, whereas Upper Ordovician reservoirs are self-sourced; and 5) gas in the Knox Group is probably sourced from the Conasauga Group and Rome Formation, possibly from the Rome trough.

4. Hydrothermal dolomite plays have become a prominent exploration target in the Appalachian basin from Ontario to Tennessee. However, these targets have inherent

exploration and development, and production difficulties that probably make the typically small traps inappropriate for extensive exploration.

5. TSRA mapping is able to detect or delineate individual fault(s), deformation caused by the faults, structural trends, reef structures, and sole horizon(s), whereas it would be difficult using standard structure contour maps. Generated trend surfaces can approximate regional dip. The order of the trend surface is dependent on the correlation of known fault displacements, structures, or reef thicknesses with the residual anomaly values. Ideal calculated TSRA values should be just above known fault displacements or reef thicknesses.

6. The Flynn Creek impact structure was a marine impact into a carbonate-dominated target during the Late Devonian. Four persistent, concentric faults indicate the Flynn Creek impact structure is not asymmetric and has a diameter of 4.7 km (2.9 mi), which was calculated from the outermost partially developed fault system, or 4 km (2.5 mi) using the third fault system, which is fully developed. Both estimates are larger than the previously estimated 3.8 km. The discovery of hydrothermal dolomite associated with the bounding faults indicates the structure has a good hydrocarbon potential and may have economical reserves.

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List of References

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Appendices

Appendix A. Well Data

All data are in feet, relative to sea level, and sorted by API number. Surface data are denoted as "surface" in the elevation column and mining data are denoted as "core" in the API column. The following list corresponds to the abbreviations used;

D. Long – Decimal longitude
D. Lat – Decimal latitude
Elv. – Elevation
Mp – Mississippian Pennington Formation
Mp R. – Mississippian Pennington Formation residual
Mb – Mississippian Bangor Limestone
Mb R. – Mississippian Bangor Limestone residual
Mfp – Mississippian Fort Payne Formation
Mfp R. – Mississippian Fort Payne Formation residual
MDch – Mississippian-Devonian Chattanooga Shale
MDch R. – Mississippian-Devonian Chattanooga Shale residual
On – Ordovician Nashville Group
On R. – Ordovician Nashville Group residual
Osr – Ordovician Stones River Group
Om – Ordovician Millbrig bentonite
Od – Ordovician Deicke bentonite
Od R. – Ordovician Deicke bentonite residual
Owc – Ordovician Well Creek Formation
OЄk – Ordovician-Cambrian Knox Group
OЄk R. – Ordovician-Cambrian Knox Group residual
Єcr – Cambrian Copper Ridge Dolomite
Єc – Cambrian Conasauga Group
Єr – Cambrian Rome Formation
Pc – Precambrian basement

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-011-00000	-83.5915	38.0148		2202	D&A	910							480	-13			-980		-990	-102	-1606	-1689	-141				
16-011-00000	-83.6834	38.1607		2205	D&A	765											-195		-213	-23	-728	-822	8				
16-011-00249	-83.6757	38.0598	249	2194	D&A	723							705	39			-397		-414	-33	-976	-1083	-77				
16-011-02176	-83.6775	38.1161	2176	2210	D&A	796											-240		-260	5	-804	-864	5				
16-011-10763	-83.8357	38.2023	10763	2231	D&A	870									456	83	235	235	213	19	-297	-373	-6	-768			
16-011-19092	-83.8992	38.2041	19092	2232	D&A	931									567	41	344	344	324	122	-136	-153	23	-680			
16-011-19166	-83.8355	38.2697	19166	2233	D&A	882									447	71	228	228	214	61	-315	-349	50	-729			
16-013-00000	-83.6628	36.8293		2294	D&A	1175			-918	-151			-1475	-212													
16-013-00467	-83.6620	36.7526	467E9	2305	D&A	1646	991	344	140	393	-312	200	-592	275													
16-013-00964	-83.6628	36.7493	964E9	2275	D&A	1491	590	-22	-324	-39	-647	-131	-872	67	-2804	5	-3217	-3217	-3255	57	-4377	-4436	-5	-5672	-7035	-7239	
16-013-02567	-83.6688	36.6801	2567EF	2268	D&A	1145	-370	-275			-1526	-12	-1775	-38			-3537		-3569	-26							
16-013-02663	-83.6064	36.7929	2663EF	2302	D&A	1078							-1571	-18			-3452					-4662	-96				
16-013-39813	-83.6727	36.6964	39813	2267	D&A	1640	72	2	-1082	-272	-1493	0	-1752	-69													
16-019-00000	-82.7438	38.3330		2349	D&A	671	71	68	42	42	-18	179	-792	6			-3352										
16-019-18327	-82.6715	38.3355	18327	2353	Oil	644	-115	-32	-137	4	-273	25	-1000	-32	-3485	-9	-3781	-3781	-3794	-157	-4506	-4606	-38	-5032	-5892	-6058	
16-019-20459	-82.7620	38.2973	20459	2348	D&A	846	-57	-37	-89	-36	-679	-219	-884	-25	-3234	-13	-3521	-3521	-3537	-3	-4219	-4311	4	-4699	-5589	-5741	-7631
16-019-20876	-82.6558	38.3383	20876	2356	D&A	852			-213	-33	-332	-28	-1068	-71	-3638	-187	-3938	-3938			-4662	-4774	-109	-5250	-6052	-6222	-8512
16-019-21652	-82.6884	38.3468	21652	2354	Gas	698	-5	85	-20	81	-143	70	-859	43	-3267	108	-3552	-3552	-3569	81	-4231	-4249	173	-4637	-5423	-5554	-6003
16-019-23546	-82.6707	38.3553	23546	75195	Gas	722			-66	54	-186	53	-910	15													
16-019-23945	-82.6999	38.3491	23945	75215	Gas	727			-4	79	-121	66	-838	32													
16-019-24649	-82.7164	38.3487	24649	75192	D&A	646	16	89	3	68	-81	40	-832	-1													
16-019-27870	-82.6617	38.3381	27870	2357	D&A	703			-191	-27	-302	-11	-1035	-51							-4606	-4683	-57	-5173	-5981	-6153	
16-019-29859	-82.7064	38.3378	29859	75216	Gas	859							-859	12													
16-019-29955	-82.6804	38.3393	29955	75196	Gas	771	-23	60	-49	68	-171	95	-901	37													
16-019-33238	-82.6891	38.3635	33238	75177	Gas	610	-130	-30	-151	-77	-272	-94	-862	6													
16-019-33239	-82.6739	38.3707	33239	75211	Gas	667	-144	-2	-161	-71	-275	-55	-876	6													
16-019-33699	-82.7155	38.3449	33699	75193	Gas	626	-114	-34	-122	-44	-259	-120	-828	10													
16-019-33744	-82.7034	38.3573	33744	75178	Gas	696	-96	-20	-119	-60	-249	-96	-828	20													
16-019-75364	-82.6820	38.4461	75364	81804	Gas	793			113	-4	43	-42	-709	14													
16-025-00611	-83.2903	37.5366	611E8	2414	D&A	750	-98	-20	-273	-3	-443	9	-1063	-21	-2563	-42	-2788	-2788	-2818	-24	-3610	-3786	-17	-4728	-5903	-6178	-10225
16-043-00000	-83.0495	38.2556		2913	D&A	810	707	-42	700	14	565	6	-52	26													
16-043-00000	-82.8480	38.2771		2944	D&A	730			-60	5	-100	-88	-733	4			-3120										
16-043-00000	-82.9818	38.3349		2995	D&A	600			560	46	525	25	-225	15													
16-043-00000	-83.1589	38.3401		2982	D&A	957							112	31			-1733				-2318	-2376	-29	-2688			
16-043-00000	-83.0422	38.3826		2989	D&A	700					694	2	-56	1			-2130					-2718	21				
16-043-00000	-83.0801	38.4222		3037	D&A	1006							38	-8			-1686				-2538	-2600	-34				
16-043-00019	-83.0097	38.3685	19E8	2987	D&A	647			631	-7	622	2	-168	-28			-2199		-2214	51	-2880	-2911	-24				
16-043-00112	-82.9377	38.1724	112E0	2861	D&A	760			-13	-43	-112	-42															
16-043-00398	-83.1221	38.3278	398E9	2908	D&A	846			809	0	675	-8	-23	-1	-1652	10	-1906	-1911	-1924	-29	-2486	-2531	-52	-2779	-3708	-3904	-4202
16-043-06285	-83.2013	38.3334	6285	2977	D&A	860							216	23								-2183	-21				
16-043-16235	-83.1113	38.2934	16235	2909	D&A	948			752	-9	630	-23	-36	2			-1941	-1941	-1955	-6		-2508	-17	-2890	-3790	-3952	-4270
16-043-22935	-82.7999	38.2901	22935	2958	D&A	761			19	-6	-72	23	-769	5	-2917	77	-3238	-3238			-3963	-4018	98	-4372	-5242	-5478	-6393
16-043-25730	-82.9468	38.1738	25730	2860	D&A	791			55	-17	-119	-46	-692	-101													
16-043-26445	-82.9546	38.1771	26445	2862	D&A	665			69	-40	-55	22	-643	-69													
16-043-26995	-83.1574	38.3345	26995	2983	D&A	973			901	10	780	9	64	-8	-1513	35	-1769	-1769	-1783	-11	-2347	-2391	-41	-2835	-3577	-3635	-4069
16-045-00000	-85.0065	37.1680		3105	Oil	850											130										
16-045-00000	-85.0051	37.1789		3103	Oil	848											188		178	81	-522	-542	79				
16-045-00000	-84.8430	37.2001		3220	D&A	938											176				-507	-562	-12				
16-045-00000	-84.8599	37.3034		3257	D&A	1229							994	15			222		202	-2							
16-045-00000	-85.0778	37.3839		3297	D&A	875											197		187	30	-421	-454	24				
16-045-00000	-84.9814	37.3976		3304	D&A	1024							932	-30					148	-19							
16-045-00000	-84.8525	37.4181		3323	D&A	875											305				-330	-351	36				
16-045-00000	-84.9724	37.4648		3317	D&A	868											360		352	-49							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-045-02298	-84.9927	37.1783	2298	3179	Oil	788													23	-76	-610	-630	-13				
16-045-02887	-84.9802	37.1789	2887	3162	D&A	1046															-626	-640	-22				
16-045-03026	-84.9817	37.1755	3026	3169	Oil	934															-617	-624	-4				
16-045-03027	-84.9801	37.1738	3027	3158	Oil	907																-629	-7				
16-045-03212	-84.9692	37.1594	3212	3057	D&A	838													138	31							
16-045-03603	-84.9632	37.1532	3603	3051	D&A	1053																-656	-4				
16-045-03944	-84.8523	37.1673	3944	3232	D&A	918													166	4		-632	-19				
16-045-05046	-84.9824	37.2952	5046	3252	D&A	817							729	-26					-75	-58	-783	-798	-29				
16-045-34578	-84.8063	37.2225	34578	3237	D&A	1220					1180	-2	957	6	471	15	195	195	175	-5	-445	-482	1	-2240	-3924	-4418	-6928
16-045-79687	-84.8486	37.1662	79687	100814	D&A	926							915	-8					114	-48	-600	-642	-31				
16-049-00000	-84.0786	37.9277		3447	D&A	915									480	123	295				-270	-347	32				
16-049-00000	-83.9737	37.9362		3448	D&A	703											-255		-271	-144		-855	20				
16-049-00000	-84.1424	37.9832		3443	D&A	926											656				108	67	41	-539			
16-049-08246	-84.0710	37.8743	8246	3437	Gas	881											-124		-143	9	-728						
16-049-08448	-84.0782	37.8710	8448	3432	Gas	871											-106		-127	23	-710						
16-049-08466	-84.0676	37.8511	8466	3438	D&A	812											-200		-220	-13	-787	-903	-21				
16-049-08947	-84.0521	37.8760	8947	3431	D&A	823											-197		-215	-30	-808	-895	-54				
16-049-10287	-84.3018	37.9469	10287	3442	D&A	930											745	745	731	17	214	127	19	-527			
16-049-17516	-84.0749	37.8706	17516	3434	Gas	837									135	45	-137	-137	-151	6	-720	-809	6	-1659			
16-049-18142	-84.1657	38.0249	18142	3451	D&A	940											649	649	633	39	139	83	-2	-528	-1735	-1817	-2125
16-049-22398	-84.1971	37.8916	22398	3422	D&A	650											321	321	308	-93	-241	-297	46	-1050	-2407	-2497	-4105
16-049-25602	-84.0452	37.9421	25602	3446	D&A	907									340	-67	72	72	60	41	-482	-568	26	-1350	-2689	-2804	
16-051-00000	-83.9424	37.1636		3455	D&A	1198							-101	43			-1280				-2079	-2184	14				
16-051-00000	-83.6824	37.2081		29686	D&A	862	157	-52	-122	-31	-368	-36	-648	-47													
16-051-00000	-83.8687	37.2427		77891	D&A	1083	348	-199	82	-268	-30	-201	-448	-199													
16-051-00000	-83.8197	37.2468		3506	D&A	960							-68	77								-2345	31				
16-051-03507	-83.9262	37.1680	3507EF	3473	D&A	1151							-109	36								-2244	-4				
16-051-14386	-83.9419	37.1711	14386	3478	Oil	1180			465	78	291	60	-69	78	-941	3	-1247	-1247	-1275	6	-2083	-2138	55	-3269	-4599	-4681	
16-051-14732	-83.9535	37.1679	14732	3482	D&A	1120							-178	-32													
16-051-14735	-83.8659	37.1971	14735	3502	D&A	939	612	-2	392	9	218	6	-147	20													
16-051-14736	-83.8530	37.2141	14736	3490	D&A	1138	645	26	412	48	239	34	-111	57													
16-051-15029	-83.8611	37.2135	15029	3488	D&A	1160							-130	35													
16-051-15089	-83.8894	37.2039	15089	77811	Oil	1165	635	12	435	29	315	56	-93	49													
16-051-15438	-83.9214	37.1147	15438	3464	D&A	1118	464	11	168	-10	41	6	-338	2													
16-051-15729	-83.8886	37.2053	15729	3498	Oil	1169							-193	-53													
16-051-15996	-83.8943	37.2292	15996	3485	D&A	1100	610	35	347	-24	235	30	-200	8													
16-051-16153	-83.9205	37.2410	16153	77821	D&A	1109	564	-14	340	-16	215	-13	-197	-12													
16-051-16191	-83.9177	37.1995	16191	3471	D&A	1122	572	-32	362	-30	232	-19	-178	-18													
16-051-18372	-83.9542	37.1779	18372	3480	D&A	1043	503	-89	287	-91	137	-85															
16-051-18737	-83.8032	37.2728	18737	80531	Gas	942	493	-66	314	33	173	-17	-189	9													
16-051-33160	-83.7446	37.2342	33160	29678	Gas	908	382	-26	178	-5	-10	3	-336	-30													
16-051-45279	-83.9549	37.1586	45279	3462	D&A	1066			450	72	269	53	-105	43	-945	-19	-1252	-1252	-1284	-7	-2092	-2149	15	-3360	-4622	-4710	-5540
16-051-46313	-83.6621	37.3163	46313	3574	Gas	855			171	78	-41	91	-355	67													
16-051-46392	-83.8400	37.2129	46392	3487	Gas	1125	628	12	375	43	190	4	-140	29													
16-051-54583	-83.7003	37.3091	54583	28528	Gas	1050	369	17	166	46	-34	-13	-350	-9													
16-051-54805	-83.7686	37.2310	54805	3507	Gas	882	457	11	242	-45	50	-8	-274	-9													
16-051-55678	-83.7222	37.2955	55678	28529	Oil	1015	467	42	287	76	95	59	-230	72													
16-051-57998	-83.7905	37.1794	57998	49000	O&G	1080			228	37	4	37	-280	37													
16-051-58204	-83.7156	37.3005	58204	28527	Gas	1018	456	49	271	90	66	43	-237	78													
16-051-58454	-83.7845	37.1743	58454	28524	Oil	1030	420	17	163	-8			-340	5													
16-051-59929	-83.7413	37.2885	59929	28526	Oil	955	491	18	247	-13	125	61	-264	10													
16-051-61388	-83.8832	37.1321	61388	30529	Gas	1135							-343	-29													
16-051-61577	-83.8096	37.2036	61577	31923	Gas	1050	450	-67	237	2	88	-7	-262	-20													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-051-61976	-83.8862	37.1556	61976	34244	Gas	1120							-234	4													
16-051-62298	-83.9311	37.1592	62298	35277	O&G	1290	614	26	378	-15	247	25	-126	22													
16-051-62402	-83.6573	37.3344	62402	36124	Gas	778			193	119	-2	152	-292	179													
16-051-62525	-83.9001	37.2205	62525	36504	Gas	1082	607	11	337	-43	223	-8	-188	-7													
16-051-64037	-83.7315	37.2856	64037	42886	Gas	1150							-237	52													
16-051-65665	-83.7366	37.3042	65665	47353	Gas	978	359	-82	128	-93	-20	-67	-362	-69													
16-051-65859	-83.7933	37.2787	65859	47721	Gas	974	514	-18	304	15	156	-7	-211	7													
16-051-66755	-83.6513	37.3323	66755	49190	Gas	739	123	-55	-85	-166	-291	-116	-622	-129								-3161	-135				
16-051-66890	-83.6911	37.3018	66890	49660	Gas	850							-304	44													
16-051-66918	-83.7290	37.2890	66918	49756	Gas	1138	516	71	277	31	152	108	-227	67													
16-051-66995	-83.7433	37.2817	66995	49862	Gas	1103			319	43	187	122	-197	66													
16-051-67077	-83.7434	37.1900	67077	50221	Gas	870	267	9	42	-23	-176	13	-466	16													
16-051-67101	-83.8603	37.2919	67101	50222	D&A	1090	580	17	402	-15	300	57	-117	33													
16-051-67251	-83.6804	37.2886	67251	50761	Gas	824	336	-25	126	12	-94	-19	-384	-15													
16-051-67410	-83.6634	37.3017	67410	51127	Gas	798	342	2	144	51	-74	48	-362	28													
16-051-67411	-83.6931	37.2914	67411	51126	Gas	873							-368	-23													
16-051-67633	-83.6810	37.3140	67633	52024	Gas	998	350	40	141	59	-68	6	-376	6													
16-051-67801	-83.9380	37.1422	67801	52809	Gas	1152							-232	-35													
16-051-67846	-83.7238	37.1821	67846	53061	D&A	940	228	1	-10	18	-252	-9	-538	18			-2030		-2368	-108							
16-051-67898	-83.7142	37.3101	67898	53273	Gas	1042	352	-27	167	11	-32	-46	-346	-21													
16-051-67899	-83.7356	37.2682	67899	53274	Gas	978			284	49	124	90	-234	38													
16-051-68000	-83.7436	37.3087	68000	53872	Gas	1042							-379	-91													
16-051-68083	-83.7407	37.2625	68083	54010	Gas	1122	487	-12	267	34	96	46	-255	-4													
16-051-68497	-83.7002	37.2560	68497	56089	Gas	965	345	-40	104	-14	-116	11	-420	-17													
16-051-68706	-83.8996	37.2009	68706	57442	Oil	1166			406	2	286	33	-109	43													
16-051-69101	-83.7608	37.2618	69101	58593	Gas	1040	572	54	353	66	178	53	-146	72													
16-051-69385	-83.6588	37.3184	69385	59192	O&G	829	363	104	163	67	-44	100	-358	75													
16-051-69620	-83.7414	37.2769	69620	60162	Gas	1112							-235	28													
16-051-69812	-83.8558	37.2363	69812	60599	O&G	1095	559	-39	329	-17	184	-16	-199	-1													
16-051-69813	-83.8537	37.2391	69813	60598	O&G	1090							-180	16													
16-051-70022	-83.7855	37.2537	70022	61008	Gas	1075	603	68	374	81	216	23	-129	44													
16-051-70057	-83.8319	37.2382	70057	61415	O&G	1100	696	37	423	121	258	41	-83	61													
16-051-70442	-83.9373	37.1757	70442	62421	Gas	1178			416	27	283	45	-94	55													
16-051-70699	-83.7101	37.2217	70699	63863	Gas	1110	291	8	29	-4	-176	-1	-489	-3													
16-051-70713	-83.5460	37.0257	70713	63940	Gas	1006	-394	86	-895	5	-1147	-8	-1444	-6													
16-051-70892	-83.7555	37.2567	70892	64625	Gas	1040	540	20	322	54	140	22	-180	37													
16-051-70902	-83.5992	37.0920	70902	64623	Gas	1018	-193	-11	-605	-5	-846	-51	-1129	-21													
16-051-71308	-83.6729	37.3356	71308	66075	Gas	741	107	-106	-65	-134	-276	-176	-611	-176													
16-051-71533	-83.8398	37.1994	71533	66458	Gas	1118	578	-16	320	-16	127	-32	-207	-16													
16-051-71779	-83.7482	37.2565	71779	67075	Gas	1029							-239	-14													
16-051-72040	-83.7006	37.2722	72040	67769	D&A	951			151	-5	-76	-4	-379	-8													
16-051-72048	-83.7112	37.2877	72048	67837	Gas	930	410	5	208	13	10	2	-315	9													
16-051-72084	-83.8444	37.1785	72084	67998	Gas	886							-281	-36													
16-051-72093	-83.7528	37.3175	72093	68006	Gas	810			212	-8	17	-38	-322	-38								-2938	-29				
16-051-72148	-83.7707	37.2675	72148	68166	Gas	1115							-123	94													
16-051-72226	-83.6968	37.2812	72226	68311	Gas	994	367	-9	152	-11	-64	-10	-366	-6													
16-051-72265	-83.8319	37.2210	72265	68351	Gas	1118							-198	-33													
16-051-72389	-83.8711	37.1987	72389	68663	Gas	939	602	-18	373	-17	219	-8	-161	-4													
16-051-72697	-83.7244	37.2714	72697	69504	Gas	1058	408	-38	216	-4	74	74	-312	-7													
16-051-72864	-83.7809	37.2955	72864	69947	Gas	979							-295	-35													
16-051-72896	-83.6556	37.3155	72896	70004	Gas	824	357	90	148	50	-68	87	-382	52													
16-051-72900	-83.7953	37.2927	72900	70002	Gas	813			243	-47	116	-27	-269	-23													
16-051-72989	-83.6736	37.3312	72989	70195	Gas	801	165	-67	-11	-83	-227	-128	-557	-131													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-051-73180	-83.8652	37.2270	73180	70640	Oil	1263	624	31	381	21	222	20	-154	45													
16-051-73247	-83.7751	37.2877	73247	70759	O&G	1005	465	-42	241	-49	77	-41	-269	-20													
16-051-73799	-83.7635	37.2559	73799	73293	Gas	1140	645	120	410	116	238	100	-100	106													
16-051-73809	-83.7520	37.2512	73809	73318	Gas	969	534	30	299	49	119	14	-206	8													
16-051-73970	-83.7104	37.2738	73970	74219	Gas	1066	421	12	196	9	-18	20	-338	4													
16-051-74022	-83.8659	37.2190	74022	74419	Oil	1166	651	41	436	67	262	48	-97	82													
16-051-74024	-83.7183	37.2751	74024	74426	Oil	1117	424	-4	239	25	65	75	-292	28													
16-051-74025	-83.7597	37.2542	74025	74424	Gas	994	559	37	311	30	131	0	-192	16													
16-051-74043	-83.7638	37.2928	74043	74422	Oil	1022	474	-18	244	-33	77	-19	-265	-1													
16-051-74044	-83.7991	37.2479	74044	74421	Gas	1077			246	-27	233	7	-101	60													
16-051-74334	-83.8851	37.1992	74334	76220	Gas	1132	604	-18	404	-1	272	20	-128	21													
16-051-74540	-83.7579	37.2639	74540	78112	Gas	1181			360	80	182	65	-143	81													
16-051-74579	-83.8747	37.2118	74579	78534	Gas	1036	670	40	470	87	318	79	-56	101													
16-051-75363	-83.8778	37.2102	75363	81805	Gas	1167	731	94	455	68	309	61	-75	74													
16-051-76158	-83.9604	37.1684	76158	84255	Gas	1218	586	2	338	-37	186	-23	-159	-12													
16-051-76604	-83.7625	37.2902	76604	86365	O&G	1021	469	-24	233	-47	61	-35	-274	-14													
16-051-77537	-83.7579	37.2861	77537	88817	O&G	961	471	-22	313	31	60	-34	-292	-35	-822	11	-2014				-2561	-2607	107				
16-051-79915	-83.5881	37.2798	79915	101167	Gas	928	168	30	-82	58	-342	30	-648	20	-865	141											
16-051-80052	-83.5915	37.2871	80052	101323	Gas	1149			-119	6	-380	-29	-680	-21			-2326										
16-051-81054	-83.8187	37.2987	81054	102687	Gas	978	518	6	310	-16	177	-27	-229	-5	-776	96	-1668				-2522	-2618	-59				
16-051-81191	-83.8021	37.3042	81191	102838	Gas	1035	448	-64	261	-37	159	-12	-256	-21	-804	103	-1757				-2555	-2635	-48				
16-051-81337	-83.8207	37.2895	81337	102993	Gas	985	515	-26	305	-14	174	-23	-233	-15	-781	40	-1667				-2549	-2636	-133				
16-051-81452	-83.8050	37.3021	81452	103112	Gas	980	565	53	320	20	182	6	-234	0	-786	103	-2224				-2621						
16-051-81499	-83.8139	37.2921	81499	103163	Gas	881	452	-78	261	-44	141	-40	-263	-34	-832	-6	-1708	-1708			-2569	-2687	-165				
16-051-81500	-83.8028	37.2940	81500	103164	Gas	895	580	60	275	-18	135	-24	-238	4	-782	51	-1682	-1682			-2505	-2547	-9				
16-051-83114	-83.7444	37.2695	83114	105403	D&A	1155	570	70	350	94	189	122	-166	81													
16-051-83705	-83.8320	37.2436	83705	106451	O&G	1025	679	9	399	96	235	8	-117	20													
16-051-84076	-83.8476	37.2329	84076	106992	Gas	1092			398	57	234	25	-133	43													
16-051-85115	-83.6962	37.1834	85115	108765	Gas	928			-112	9	-335	-16	-618	14													
16-051-90529	-83.7874	37.1720	90529	120489	Oil	1007	402	-10	127	-49	-80	-15	-368	-32	-1415	-33	-1681	-1681	-1730	45	-2559	-2683	31				
16-051-90833	-83.6843	37.1162	90833	120833	Gas	1020	152	36	-292	11	-428	8	-784	24	-1978	-10	-2258	-2258	-2315	4	-3046	-3200	-23				
16-053-00000	-85.1698	36.6356		3770	D&A	885							592	1													
16-053-00000	-85.1555	36.6435		3834	D&A	990							645	73					60	89							
16-053-00000	-85.0484	36.6502		3915	D&A	950							562	1			-10				-802	-824	7				
16-053-00000	-85.0452	36.6549		3906	Oil	899							539	-19					-61	-10	-829						
16-053-00000	-85.0593	36.6571		3922	D&A	884							582	32			-6		-37	16	-795	-818	28				
16-053-00000	-85.0812	36.6589		3980	Gas	842							548	7													
16-053-00000	-85.1428	36.6671		4886	D&A	963													-54	-17		-770	36				
16-053-00000	-85.2345	36.6841		4367	D&A	975							595	-15					3	-6							
16-053-00000	-85.1363	36.6882		4851	D&A	908							557	11					-45	0		-751	34				
16-053-00000	-85.2476	36.7088		4363	D&A	680							582	-6					9	-5							
16-053-00000	-85.1757	36.7102		4310	D&A	960													-15	-3		-715	33				
16-053-00000	-85.2452	36.7110		4361	Oil	910							558	-30					-34	-49							
16-053-00000	-85.2329	36.7275		21691	D&A	1000							583	-10					-26	-32		-730	-7				
16-053-00000	-85.2510	36.7290		4062	D&A	980							620	22					-67	-75		-780	-56				
16-053-00000	-85.2282	36.7309		4236	D&A	748													21	19		-680	48				
16-053-00000	-85.2084	36.7317		4259	D&A	1008							551	-37					-60	-59							
16-053-00000	-85.2219	36.7323		4228	Oil	905							575	-19					-22	-22		-709	25				
16-053-00000	-85.1353	36.7348		4667	D&A	1040							558	33													
16-053-00000	-85.2402	36.7388		4199	D&A	930													27	31							
16-053-00000	-85.2095	36.7425		4179	D&A	984							669	74					74	83							
16-053-00000	-85.1840	36.7558		5156	Oil	993							584	15					-42	22		-727	63				
16-053-00000	-85.1880	36.7608		5142	Oil	975													-52	11							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-00000	-85.1663	36.7627		5293	D&A	978							553	-2					-97	11							
16-053-00000	-85.0976	36.7628		5277	D&A	945							608	37					-1	89		-715	96				
16-053-00000	-85.1669	36.7660		5128	D&A	940							521	-41					-108	-8							
16-053-00000	-85.1693	36.7673		5105	D&A	930							511	-55					-148	-55		-853	-65				
16-053-00000	-85.1542	36.7733		5252	D&A	900							521	-46					-198	-103							
16-053-00000	-85.1370	36.7794		5256	Oil	905							543	-28					-113	-28							
16-053-00000	-85.1741	36.7806		5107	D&A	985							602	6					-83	-22							
16-053-00000	-85.1770	36.7812		5100	D&A	1005							604	3					-30	25							
16-053-00000	-85.1331	36.7856		5226	D&A	997							644	60					-2	65							
16-053-00000	-85.1436	36.7959		5227	D&A	910							621	9					-40	0		-750	24				
16-053-00000	-85.1881	36.8065		5027	Oil	989							642	-11					-28	-18							
16-053-00110	-85.2091	36.7292	110	4260	Oil	997							621	34					47	46							
16-053-00150	-85.1884	36.7673	150	5090	D&A	990							611	20													
16-053-00156	-85.2264	36.7201	156	4245	D&A	725							577	-10					39	27							
16-053-00291	-85.1611	36.6665	291	3826	D&A	936							548	-24					-39	-12							
16-053-00353	-85.1892	36.7648	353	5151	D&A	1004							616	28					-30	26							
16-053-00354	-85.1882	36.7664	354	5150	D&A	1010							616	26					-78	-22							
16-053-00369	-85.1611	36.7641	369	5289	D&A	1000							555	2					-70	42							
16-053-00449	-85.1903	36.7671	449	5095	D&A	992							609	16					-44	7							
16-053-00460	-85.1669	36.7688	460	5101	D&A	920							522	-45					-136	-41							
16-053-00539	-85.2206	36.6427	539	3722	D&A	980							600	-40					-15	-22							
16-053-00614	-85.1725	36.7696	614	5104	Oil	950							503	-71					-137	-54							
16-053-00687	-85.1584	36.7924	687	5237	D&A	974							639	31													
16-053-01455	-85.1778	36.7705	1455	5118	Oil	944							555	-28													
16-053-01479	-85.2555	36.7054	1479	4067	D&A	922							607	23					21	5							
16-053-01821	-85.1768	36.7718	1821	5121	Oil	944							550	-34					-110	-39							
16-053-01878	-85.1815	36.7674	1878	5106	D&A	1005							663	81					-105	-36							
16-053-05793	-85.2219	36.7323	5793	4229	Oil	905							575	-19					-22	-22		-709	25				
16-053-08707	-85.1458	36.6619	8707	3816	D&A	1002													-28	8		-768	41				
16-053-23706	-85.1458	36.6619	23706	3819	D&A	1002			787	-15	684	-50	548	-13	200	-42	-26	-26	-54	-18	-745	-790	19	-1766			
16-053-29457	-85.1546	36.6630	29457	3827	D&A	942							642	74													
16-053-29538	-85.0856	36.6244	29538	3875	Oil	985													-76	-25							
16-053-30295	-85.1086	36.6621	30295	3804	D&A	883							533	-10													
16-053-31719	-85.1139	36.6594	31719	3802	D&A	929													-51	0							
16-053-31756	-85.0847	36.6637	31756	3784	Oil	878													-68	-13							
16-053-31757	-85.0843	36.6542	31757	3797	D&A	842													-71	-15							
16-053-31767	-85.0881	36.6397	31767	3867	D&A	957							506	-45					-58	-2							
16-053-32105	-85.0847	36.6332	32105	3874	D&A	951																-849	-18				
16-053-33433	-85.1962	36.7279	33433	33616	D&A	1010					951	41	577	-2	315	-32	19				-718	-790	-37				
16-053-38312	-85.1541	36.6449	38312	3828	D&A	958													-24	6		-792	20				
16-053-38617	-85.1203	36.6335	38617	3861	D&A	885													-65	-8							
16-053-38959	-85.1466	36.6404	38959	3841	Oil	729													29	65		-721	93				
16-053-39819	-85.0843	36.6586	39819	3788	Oil	900													-50	5							
16-053-40128	-85.0850	36.6576	40128	3789	D&A	900													-42	13		-828	10				
16-053-40129	-85.0846	36.6599	40129	3793	D&A	930													-67	-12		-850	-11				
16-053-40977	-85.0860	36.6618	40977	3796	Oil	900													-50	5		-844	-5				
16-053-41469	-85.0882	36.6634	41469	21613	D&A	962													-90	-35		-900	-63				
16-053-41680	-85.1606	36.6363	41680	3835	D&A	876																-914	-109				
16-053-42214	-85.0977	36.6321	42214	3873	D&A	956													-66	-10		-819	8				
16-053-43247	-85.0896	36.6291	43247	21619	D&A	978													-62	-8		-874	-45				
16-053-43784	-85.1298	36.6555	43784	3806	D&A	837													25	71		-720	92				
16-053-43892	-85.1260	36.6664	43892	3807	D&A	927													49	95		-733	75				
16-053-44185	-85.1524	36.6370	44185	3833	D&A	698													35	66		-677	136				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-44929	-85.0837	36.6638	44929	21612	D&A	890													-98	-43		-832	9				
16-053-45197	-85.1483	36.6384	45197	3714	D&A	910													-61	-26		-800	14				
16-053-45553	-85.1438	36.6329	45553	3884	D&A	755													-55	-16		-821	-5				
16-053-45948	-85.1304	36.6666	45948	67262	D&A	865													-16	27		-820	-12				
16-053-46337	-85.1628	36.6594	46337	3825	D&A	964													24	50		-845	-54				
16-053-46438	-85.1268	36.6415	46438	3854	D&A	815													-145	-94		-870	-53				
16-053-46627	-85.1456	36.6362	46627	3844	D&A	722													47	84		-843	-28				
16-053-46648	-85.1446	36.6429	46648	3840	D&A	880													-60	-23		-855	-41				
16-053-46751	-85.1508	36.6378	46751	3829	D&A	710													-40	-7		-930	-116				
16-053-47062	-85.1464	36.6336	47062	3846	Oil	705													-47	-11		-815	0				
16-053-47239	-85.1433	36.6357	47239	3839	D&A	715													13	52		-790	25				
16-053-47379	-85.1056	36.6301	47379	3881	D&A	923																-877	-52				
16-053-47725	-85.1105	36.6462	47725	3866	D&A	829													-67	-13		-857	-37				
16-053-48184	-85.1334	36.6413	48184	3843	Oil	730													-25	21							
16-053-48357	-85.1145	36.6431	48357	3864	D&A	890																-780	38				
16-053-48378	-85.1308	36.6345	48378	3853	Oil	874																-886	-68				
16-053-48379	-85.1402	36.6408	48379	3850	Oil	880													-33	8		-690	125				
16-053-48380	-85.1522	36.6643	48380	3821	D&A	942													-76	-44		-788	20				
16-053-48392	-85.1192	36.6423	48392	3862	Oil	855													-38	17		-845	-27				
16-053-48630	-85.1647	36.6569	48630	3823	Gas	992													-25	-1		-723	63				
16-053-48645	-85.0910	36.6414	48645	38970	Gas	977													42	98		-798	32				
16-053-48663	-85.1398	36.6621	48663	38473	Gas	941													-43	-4		-849	-39				
16-053-48665	-85.1121	36.6554	48665	3803	D&A	840													-84	-32		-905	-89				
16-053-48668	-85.1391	36.6459	48668	3842	D&A	840													30	71							
16-053-48763	-85.1197	36.6270	48763	3883	D&A	931													-7	46		-819	4				
16-053-49119	-85.0833	36.6512	49119	3799	D&A	857													-73	-17		-873	-35				
16-053-49127	-85.1367	36.6401	49127	3836	Gas	785													-75	-31		-800	16				
16-053-49131	-85.1393	36.6384	49131	3838	Gas	770													-115	-73							
16-053-49134	-85.1472	36.6327	49134	3886	D&A	725													-56	-20							
16-053-49237	-85.1271	36.6352	49237	3859	D&A	776																-979	-160				
16-053-49311	-85.0980	36.6322	49311	38971	Oil	958							573	24					23	79		-822	5				
16-053-49578	-85.1105	36.6646	49578	29093	D&A	985													1	52		-804	11				
16-053-49579	-85.1196	36.6632	49579	3810	D&A	960													-50	0		-850	-39				
16-053-49870	-85.0839	36.6647	49870	3787	D&A	870													-104	-49							
16-053-49888	-85.1401	36.6482	49888	76158	D&A	777													-213	-173							
16-053-50137	-85.1615	36.6574	50137	76163	D&A	960													-30	-4							
16-053-50342	-85.1615	36.6425	50342	3832	Gas	942													-55	-30		-851	-50				
16-053-51865	-85.0845	36.6342	51865	20976	D&A	949																-801	30				
16-053-51871	-85.1132	36.6511	51871	3805	D&A	828													-52	1		-842	-26				
16-053-52144	-85.1336	36.6528	52144	3814	Oil	913													-67	-23		-837	-24				
16-053-52186	-85.0863	36.6265	52186	3877	D&A	1000													-5	47		-775	54				
16-053-52252	-85.1335	36.6512	52252	3820	D&A	920													-50	-6		-850	-37				
16-053-52281	-85.1336	36.6500	52281	3845	Oil	903													-51	-7		-725	88				
16-053-52649	-85.1346	36.6462	52649	29980	Oil	900													-55	-11		-720	94				
16-053-52748	-85.1340	36.6489	52748	29981	Oil	900													-45	-1		-715	99				
16-053-52855	-85.1321	36.6497	52855	3852	D&A	881													-53	-8		-799	15				
16-053-53036	-85.0732	36.6654	53036	20960	Oil	901					811	64	522	-17			-109	-49	-80	-24	-779	-889	-38				
16-053-53105	-85.1326	36.6541	53105	38588	D&A	928													-62	-18		-847	-35				
16-053-53595	-85.0874	36.6536	53595	29229	Oil	875													-115	-60		-855	-20				
16-053-53749	-85.0744	36.6659	53749	20983	Oil	912					827	79	532	-6			-88				-788	-843	6				
16-053-53829	-85.1775	36.6714	53829	4442	Oil	902							558	-38	236	-68	14	14	-14	-1	-709	-750	-11	-1792			
16-053-53919	-85.0762	36.6656	53919	29231	Oil	929					839	93	559	21			-75	-1	-43	13							
16-053-53958	-85.1450	36.6274	53958	29987	Gas	830							515	-45													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-54099	-85.0755	36.6667	54099	66286	Oil	933					683	-66	541	3			-91	-27	-57	-1	-767	-882	-35				
16-053-54392	-85.1501	36.6281	54392	38583	D&A	885													-25	3		-805	11				
16-053-54745	-85.0904	36.6556	54745	3795	D&A	924													-67	-12		-816	17				
16-053-55194	-85.0842	36.6563	55194	29245	Oil	980													51	107							
16-053-55262	-85.0753	36.6650	55262	72488	Oil	915					659	-86	541	2			-85	-21	-53	3	-735	-825	24				
16-053-55734	-85.1648	36.6418	55734	38580	Gas	960													-20	2		-790	4				
16-053-55743	-85.1370	36.6469	55743	29993	D&A	840													-76	-34		-810	4				
16-053-56341	-85.0850	36.6574	56341	38941	D&A	898													-37	18		-837	1				
16-053-56499	-85.2148	36.7313	56499	38565	D&A	918							602	10					-17	-17							
16-053-57924	-85.1321	36.6559	57924	70597	D&A	927													27	71		-783	29				
16-053-58011	-85.1646	36.6385	58011	29899	D&A	960													-10	12		-750	46				
16-053-59071	-85.1536	36.6451	59071	38735	D&A	950													25	56		-790	22				
16-053-61154	-85.1656	36.6377	61154	29378	D&A	923													7	29		-737	57				
16-053-61275	-85.1220	36.6301	61275	30140	Gas	895													-69	-15		-819	2				
16-053-61276	-85.1138	36.6257	61276	30139	Gas	935													-61	-9		-820	5				
16-053-61414	-85.1100	36.6257	61414	30571	Oil	950													-12	40							
16-053-61415	-85.1163	36.6235	61415	30572	D&A	940							532	-7					-8	42		-812	13				
16-053-61416	-85.1125	36.6279	61416	30573	Gas	950													-1	53		-803	21				
16-053-61417	-85.1232	36.6264	61417	30574	Gas	930													-47	3							
16-053-61705	-85.1082	36.6292	61705	32117	Gas	968													7	61		-733	92				
16-053-61706	-85.1129	36.6309	61706	32118	Oil	970													-1	55		-736	87				
16-053-62467	-85.1947	36.7185	62467	36399	D&A	993					953	62	663	86			-10	23	-7	-7		-767	-20				
16-053-64669	-85.0910	36.6269	64669	44590	Oil	963													-45	8		-802	26				
16-053-65266	-85.1030	36.6392	65266	46187	D&A	935													-31	25		-810	15				
16-053-65341	-85.0924	36.6281	65341	46620	Oil	953													-126	-73		-873	-45				
16-053-66007	-85.1362	36.6542	66007	47917	D&A	860													10	52		-740	72				
16-053-66141	-85.0955	36.6312	66141	48058	D&A	960													-32	24		-845	-17				
16-053-66687	-85.0904	36.6285	66687	48890	Oil	965																-914	-86				
16-053-67249	-85.0896	36.6269	67249	50836	Oil	970													-24	28		-810	18				
16-053-67318	-85.0918	36.6291	67318	50891	Oil	961																-886	-58				
16-053-67595	-85.0887	36.6328	67595	51879	Oil	990													-58	-2		-836	-6				
16-053-67781	-85.0956	36.6267	67781	52723	Oil	998													-52	0		-860	-33				
16-053-67942	-85.1324	36.6487	67942	53610	D&A	858													-56	-11		-832	-18				
16-053-68022	-85.1508	36.6378	68022	53886	D&A	710													-57	-24		-862	-48				
16-053-68130	-85.0969	36.6265	68130	54191	Oil	1060													-16	36		-824	3				
16-053-68210	-85.0881	36.6283	68210	54871	D&A	985													-60	-7		-895	-66				
16-053-68313	-85.0971	36.6249	68313	55606	D&A	982													-26	25		-848	-21				
16-053-68546	-85.0882	36.6294	68546	56306	Oil	985													-64	-10		-895	-66				
16-053-68727	-85.0983	36.6264	68727	57708	D&A	1080													-33	19		-828	-1				
16-053-68808	-85.1456	36.6333	68808	57634	D&A	718													-50	-13		-807	8				
16-053-69070	-85.0935	36.6290	69070	58373	D&A	955													-60	-6		-850	-22				
16-053-69195	-85.0868	36.6292	69195	58708	Oil	990													-95	-41		-845	-16				
16-053-69678	-85.0968	36.6854	69678	60113	D&A	867							512	-27	174	-57	-57	-57	-82	-27	-813	-853	-42	-1792			
16-053-69710	-85.0951	36.6277	69710	60421	D&A	986													6	59							
16-053-69769	-85.0868	36.6281	69769	60470	Oil	982													-64	-11		-880	-51				
16-053-70949	-85.1751	36.8068	70949	64795	D&A	1000							680	42				8	-15	3		-675	63				
16-053-71161	-85.0884	36.6336	71161	65646	Gas	990													-63	-7		-828	2				
16-053-72633	-85.2254	36.7148	72633	69359	Oil	927					872	13	592	9			42	82	46	33	-680	-703	21				
16-053-72729	-85.2197	36.7156	72729	69573	Oil	954					943	78	586	4			41				-621	-778	-50				
16-053-72730	-85.2211	36.7154	72730	69572	Oil	949					664	-199	574	-9			24	81	32	20	-646	-686	41				
16-053-74159	-85.1305	36.6415	74159	75092	Oil	721													-102	-54							
16-053-74189	-85.1033	36.6621	74189	75168	Gas	858													-38	14		-792	30				
16-053-75451	-85.0287	36.6683	75451	81988	D&A	982							527	-26			-92		-89	-40		-880	-25				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-75836	-85.0889	36.6356	75836	83203	Oil	1030													-60	-4		-844	-14				
16-053-76016	-85.0895	36.6338	76016	83499	Oil	966													-62	-6		-870	-40				
16-053-76225	-85.0874	36.6364	76225	84395	Oil	967													-61	-5		-843	-12				
16-053-76328	-85.1244	36.6393	76328	84755	D&A	818													-80	-27		-682	136				
16-053-78720	-85.1903	36.7815	78720	91975	Oil	1019							599	-19													
16-053-78960	-85.2117	36.7599	78960	92909	D&A	965					845	-50	533	-77			15	15	-7	15	-635	-700	54				
16-053-79998	-85.2641	36.6931	79998	101258	Oil	1000					988	161	625	52													
16-053-80034	-85.2312	36.7092	80034	101296	D&A	860					857	13	579	-9	260	-226	12	40	17	4	-648	-766	-48				
16-053-80457	-85.2227	36.7043	80457	101928	Oil	800					540	-303	465	-133	436	-30	-78	-78	-107	-119	-820	-840	-128				
16-053-80458	-85.2282	36.7022	80458	101929	D&A	740					916	79	555	-43			285	285	277	265	-422	-435	264				
16-053-80459	-85.2261	36.7007	80459	101930	D&A	920					660	-178	605	3	570	89	37	65	40	28	-667	-680	15				
16-053-80461	-85.2283	36.6992	80461	101932	D&A	930					915	77	575	-27			8	38	12	0	-695	-720	-33				
16-053-80487	-85.2231	36.7030	80487	101965	Oil	961					601	-240	576	-24	549	80	25	25	1	-11	-701	-714	-7				
16-053-80629	-85.1290	36.6423	80629	102186	Oil	856					665	-61	507	-35			-116	-55	-86	-37							
16-053-80643	-85.1311	36.6426	80643	102201	Oil	720					631	-96	516	-29			-10	-40	-70	-23	-849	-851	-35				
16-053-80647	-85.0917	36.6283	80647	102205	D&A	952													-69	-16		-858	-30				
16-053-80650	-85.1325	36.6308	80650	102209	D&A	919													-81	-35							
16-053-80665	-85.0926	36.6311	80665	102223	Oil	981													-58	-3		-859	-31				
16-053-80688	-85.1296	36.6480	80688	102265	D&A	827													-58	-11		-833	-19				
16-053-80741	-85.1344	36.6442	80741	102320	Oil	838													-42	3							
16-053-80776	-85.1866	36.6866	80776	102350	Gas	940					850	9	600	-3			40	40	13	16		-738	-14				
16-053-80830	-85.1602	36.6498	80830	102410	D&A	876													-29	-3		-824	-21				
16-053-80859	-85.1139	36.6596	80859	102441	Oil	930							528	-15			-32	-32	-62	-11	-829	-855	-42				
16-053-80862	-85.1247	36.6381	80862	102444	D&A	842													-79	-26		-872	-54				
16-053-80863	-85.1160	36.6451	80863	102445	Oil	885					725	5	508	-33			-35	-35	-67	-13	-840	-855	-38				
16-053-80884	-85.1222	36.6505	80884	102471	D&A	920													-53	-1		-795	20				
16-053-80893	-85.2236	36.6987	80893	102480	Oil	930					890	50	627	19	598	124	91	91	70	58							
16-053-80905	-85.1253	36.6518	80905	102496	D&A	900													-62	-12		-795	19				
16-053-80906	-85.1272	36.6292	80906	102497	D&A	930					918	190	577	41			-2	-2	-23	26		-755	65				
16-053-80907	-85.1306	36.6302	80907	102498	D&A	905					687	-42	535	-6			-45	-45	-66	-19		-815	4				
16-053-80908	-85.1178	36.6445	80908	102499	D&A	905													-44	11		-714	103				
16-053-80909	-85.1209	36.6442	80909	102500	D&A	858													-29	25		-752	65				
16-053-80910	-85.1219	36.6454	80910	102501	D&A	862													-37	16		-763	53				
16-053-80940	-85.1552	36.6498	80940	102571	D&A	920					670	-79	520	-51			-36	-36	-62	-32	-795	-860	-49				
16-053-80952	-85.1564	36.6493	80952	102585	D&A	890					685	-66	541	-31			-20	-20	-45	-16	-783	-845	-34				
16-053-80955	-85.1200	36.6453	80955	102588	D&A	888													-29	25		-752	65				
16-053-80965	-85.1123	36.6597	80965	102598	Gas	915							535	-8				-22	-53	-2	-815	-845	-31				
16-053-80968	-85.1257	36.6463	80968	102601	O&G	925													-50	1		-838	-23				
16-053-80969	-85.1265	36.6454	80969	102602	D&A	927											-11	-11	-41	9	-783	-805	11				
16-053-80970	-85.1273	36.6444	80970	102603	Oil	889					832	107	516	-25			-34	-34	-64	-14	-800	-818	-2				
16-053-80989	-85.1370	36.6490	80989	102624	Oil	876													-31	11		-826	-13				
16-053-81010	-85.1322	36.6453	81010	102643	Oil	800													-44	2		-835	-20				
16-053-81013	-85.1339	36.6431	81013	102646	Oil	725							555	7			19	19	-11	34							
16-053-81014	-85.1284	36.6433	81014	102647	Oil	872					681	-44	498	-44			-59		-89	-40							
16-053-81016	-85.1179	36.6567	81016	102649	D&A	950							514	-29			-42	-42	-72	-21	-834	-852	-39				
16-053-81019	-85.1392	36.6567	81019	102652	D&A	886					646	-79	502	-53			-76	-76	-96	-56		-824	-13				
16-053-81028	-85.1176	36.6455	81028	102661	D&A	913													-63	-9		-767	50				
16-053-81039	-85.2274	36.7111	81039	102672	Oil	980					954	103	587	1					42	29	-636	-651	70				
16-053-81084	-85.1511	36.6333	81084	102733	D&A	839													-79	-47		-882	-68				
16-053-81107	-85.2029	36.7121	81107	102755	D&A	996					916	45	551	-28			16	16	-4	-12		-774	-36				
16-053-81175	-85.1436	36.6270	81175	102823	D&A	835							540	-18					-64	-32		-875	-58				
16-053-81185	-85.1672	36.7058	81185	102833	Oil	1145					925	68	665	95			22	22	-7	12	-707	-735	12				
16-053-81200	-85.0728	36.8335	81200	102847	Oil	991					981	163	648	-35	617	7	5					-774	-41				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-81202	-85.1343	36.6413	81202	102849	Oil	723					685	-43	553	5				13	-10	35							
16-053-81205	-85.2537	36.7160	81205	102852	D&A	721					681	-111	633	41			59	59	34	14	-752	-776	-61				
16-053-81206	-85.2542	36.7193	81206	102853	O&G	727					672	-110	581	-13			14	14	-11	-31	-775	-803	-85				
16-053-81209	-85.1421	36.6581	81209	102856	D&A	918							559	1					-32	6		-781	29				
16-053-81218	-85.1181	36.6434	81218	102866	D&A	876													-48	7		-815	3				
16-053-81229	-85.1091	36.6443	81229	102876	Oil	765							514	-29					-123	-68							
16-053-81231	-85.1163	36.6442	81231	102878	D&A	876					686	-35	522	-19				-20	-50	5	-810	-829	-11				
16-053-81233	-85.1105	36.6446	81233	102880	Oil	810							490	-53			-100	-38	-68	-13	-798						
16-053-81246	-85.1446	36.6343	81246	102897	Oil	723							523	-37					-55	-17		-844	-29				
16-053-81255	-85.1530	36.6526	81255	102906	D&A	926													-31	0		-834	-24				
16-053-81264	-85.1333	36.6446	81264	102915	D&A	892					708	-19	572	24				25	-4	41		-783	32				
16-053-81267	-85.1290	36.6402	81267	102918	D&A	760							519	-23					-70	-21		-865	-48				
16-053-81268	-85.1299	36.6433	81268	102919	D&A	860											-38	-38									
16-053-81271	-85.1146	36.6451	81271	102922	D&A	785					774	54	518	-24			-50	-50				-850	-32				
16-053-81273	-85.1308	36.6385	81273	102924	Oil	833													-81	-33		-785	32				
16-053-81291	-85.1286	36.6586	81291	102947	D&A	820													-72	-26		-835	-24				
16-053-81302	-85.1265	36.6372	81302	102958	D&A	849													-81	-29		-874	-56				
16-053-81315	-85.1373	36.6508	81315	102971	Oil	877							540	-13					-41	1		-823	-10				
16-053-81349	-85.2241	36.6998	81349	103005	Oil	927					907	67	626	21			107	107	82	70							
16-053-81350	-85.2226	36.6997	81350	103006	Oil	938					922	82	640	33			124	124	101	89							
16-053-81352	-85.1310	36.6370	81352	103008	D&A	870					710	-18	540	-3				-19	-50	-2	-824	-850	-33				
16-053-81356	-85.1402	36.6484	81356	103012	D&A	880							550	-5					-21	19		-790	23				
16-053-81361	-85.1385	36.6495	81361	103018	D&A	832							529	-25					-56	-15		-840	-27				
16-053-81372	-85.2221	36.6986	81372	103029	Oil	925					902	61	623	14	598	129	105	105	83	71							
16-053-81385	-85.2492	36.7089	81385	103043	Oil	678					631	-186	570	-18				17	-5	-20		-702	7				
16-053-81396	-85.0699	36.8340	81396	103055	Oil	950					785	-33	656	-29			22	22	-9	-26	-735	-754	-23				
16-053-81397	-85.2227	36.6971	81397	103056	Oil	918					884	43	576	-35				8	-20	-32		-712	-26				
16-053-81398	-85.1372	36.6445	81398	103057	D&A	814							519	-33					-46	-3		-814	0				
16-053-81428	-85.0650	36.8324	81428	103087	Oil	1020					730	-85	646	-41			18		-7	-26		-725	4				
16-053-81436	-85.1206	36.6427	81436	103096	D&A	849													-53	2		-813	4				
16-053-81456	-85.0655	36.8333	81456	103116	Oil	1038					888	72	680	-8					20	1		-707	23				
16-053-81465	-85.1556	36.6517	81465	103127	Oil	879							554	-17					-28	2		-825	-15				
16-053-81474	-85.1687	36.7060	81474	103135	D&A	1087					777	-81	544	-28	517	69	15	15	-11	7		-745	1				
16-053-81483	-85.0640	36.8331	81483	103144	Oil	1012					741	-74	652	-37					-17	-36		-727	2				
16-053-81484	-85.1361	36.6441	81484	103145	Oil	741													-60	-17							
16-053-81577	-85.1384	36.6261	81577	103246	D&A	900							550	-1					-5	31		-790	29				
16-053-81586	-85.1350	36.6403	81586	103256	Oil	710					679	-50	513	-36				10	-20	25	-735	-765	51				
16-053-81599	-85.1369	36.6410	81599	103268	Oil	839					619	-110	489	-62			-14	-14	-51	-8							
16-053-81600	-85.1369	36.6422	81600	103269	Oil	858													-34	9							
16-053-81653	-85.1353	36.6457	81653	103314	D&A	848													-49	-5		-837	-23				
16-053-81683	-85.1651	36.6492	81683	103355	Oil	905					897	130	547	-34				-18	-40	-17	-770	-833	-44				
16-053-81694	-85.1359	36.6506	81694	103366	Oil	782							542	-9					-42	1		-892	-79				
16-053-81713	-85.0108	36.6360	81713	103386	Oil	1085							560	-50			-45	-45	-75	-38							
16-053-81727	-85.1371	36.6460	81727	103400	D&A	796							588	36					-48	-6		-894	-80				
16-053-81770	-85.1662	36.7066	81770	103442	D&A	1169					709	-149	546	-23				25				-711	35				
16-053-81776	-85.2472	36.7055	81776	103448	D&A	954					870	44	591	4			50	50	21	8		-701	-1				
16-053-81778	-85.1336	36.6404	81778	103450	Oil	741							690	143					-30	16							
16-053-81796	-85.1924	36.7982	81796	103469	Oil	922					902	42	664	15				25	2	17	-698	-768	-7				
16-053-81833	-85.1391	36.6514	81833	103547	D&A	886							530	-25					-54	-14		-840	-28				
16-053-81842	-85.1569	36.6527	81842	103556	D&A	936					771	19	546	-26				-2	-36	-7		-835	-25				
16-053-81880	-85.1154	36.6521	81880	103621	Oil	877					837	117	556	14				62				-778	37				
16-053-81903	-85.1645	36.7039	81903	103693	Oil	1081					871	19	527	-41				-1	-27	-5	-733	-762	-13				
16-053-81929	-85.1276	36.6634	81929	103803	D&A	914							594	47					-8	38							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-81933	-85.2147	36.6927	81933	103715	Oil	920					640	-204	563	-69			70	52	34	20	-725						
16-053-81934	-85.1368	36.6519	81934	103716	Oil	856							546	-6					-34	8		-818	-6				
16-053-81968	-85.0892	36.7952	81968	103752	Gas	920					857	-11	682	43			55		70	82		-610	187				
16-053-82008	-85.2148	36.6915	82008	103871	D&A	935					885	41	594	-40					48	34	-665	-690	-9				
16-053-82069	-85.1098	36.6433	82069	103953	Oil	758							536	-7					-65	-10							
16-053-82146	-85.1104	36.6423	82146	104057	Oil	753					708	-10	538	-5				-12				-777	44				
16-053-82158	-85.2278	36.6515	82158	104086	D&A	989					854	-6	839	205				39	29	18		-511	100				
16-053-82183	-85.2265	36.7128	82183	104115	D&A	942					934	79	574	-9					30	17	-678	-733	-11				
16-053-82185	-85.2280	36.7170	82185	104117	D&A	959							579	-7					34	20		-705	18				
16-053-82195	-85.2380	36.7514	82195	104127	D&A	1002					976	151	602	-7					-114	-97		-821	-93				
16-053-82196	-85.1185	36.6516	82196	104128	Oil	920							510	-32			-30	-30	-62	-9		-840	-25				
16-053-82210	-85.1118	36.6414	82210	104158	D&A	757							527	-15					-79	-24							
16-053-82211	-85.1112	36.6434	82211	104159	Oil	807							511	-32					-58	-3		-786	34				
16-053-82249	-85.2219	36.6301	82249	104221	D&A	942					892	51	542	-80					25	17	-658	-708	8				
16-053-82280	-85.2168	36.6936	82280	104262	Oil	845							636	10					56	43		-697	-13				
16-053-82281	-85.2181	36.6938	82281	104263	Oil	835													3	-10		-690	-8				
16-053-82324	-85.1325	36.6429	82324	104306	Oil	720							546	0					-50	-4							
16-053-82325	-85.1339	36.6393	82325	104307	D&A	768							527	-20								-822	-6				
16-053-82327	-85.1350	36.6381	82327	104309	D&A	698							516	-32					-144	-99		-800	16				
16-053-82328	-85.1093	36.6450	82328	104310	D&A	763							509	-34					-68	-13		-827	-6				
16-053-82370	-85.2163	36.7032	82370	104367	D&A	905					892	47	535	-69			-30					-765	-51				
16-053-82372	-85.1320	36.6406	82372	104369	Oil	805							485	-60					-97	-50		-828	-12				
16-053-82402	-85.0552	36.6604	82402	104407	D&A	885					785	37	570	21				55	15	68	-715	-765	85				
16-053-82461	-85.1636	36.7030	82461	104490	D&A	1058							514	-53				-17	-44	-21	-762	-787	-36				
16-053-82488	-85.1130	36.6518	82488	104518	Oil	824					737	18	504	-39				-37	-68	-15	-781	-816	0				
16-053-82520	-85.1876	36.8344	82520	104565	D&A	931							666	4													
16-053-82531	-85.2118	36.6380	82531	104576	D&A	903					743	-90	603	-38			35	35	8	9	-692	-752	-54				
16-053-82534	-85.1167	36.6495	82534	104579	D&A	879													-62	-9		-840	-24				
16-053-82566	-85.1489	36.6483	82566	104614	D&A	870							533	-31					-69	-35		-855	-43				
16-053-82604	-85.1113	36.6527	82604	104696	D&A	818							508	-35					-46	7		-867	-50				
16-053-82607	-85.1036	36.6432	82607	104699	Oil	920							534	-11					-63	-8		-806	18				
16-053-82608	-85.1237	36.6560	82608	104700	D&A	942							511	-32					-85	-35		-850	-37				
16-053-82734	-85.1107	36.6532	82734	104846	Oil	797					737	19	503	-40			56	56	24	77	-693	-733	85				
16-053-82735	-85.1154	36.6383	82735	104847	Oil	908							556	15					-38	18							
16-053-82845	-85.1564	36.6275	82845	105026	Oil	695							520	-56					-55	-34		-835	-21				
16-053-82873	-85.2168	36.7245	82873	105038	D&A	914							601	13			89	89	89	83		-671	63				
16-053-83004	-85.1430	36.6338	83004	105221	Gas	766							532	-26					-50	-11		-852	-36				
16-053-83025	-85.1592	36.6745	83025	105254	D&A	938					768	-19	520	-49			-74	-74	-100	-71		-872	-83				
16-053-83090	-85.0695	36.7918	83090	105350	D&A	1070					945	47	610	-38			-29	-29	-61	-57	-820	-821	-97				
16-053-83112	-85.0546	36.6686	83112	105372	Oil	996							613	71					-12	41	-774	-828	23				
16-053-83113	-85.1130	36.6385	83113	105402	D&A	893							533	-9					-43	13		-779	42				
16-053-83146	-85.1006	36.6521	83146	105457	Oil	840					595	-122	526	-18													
16-053-83146	-85.1006	36.6521	83146	107161	Oil	840													-55	-1							
16-053-83152	-85.2183	36.7029	83152	105463	D&A	980					953	110	587	-16			39	39	16	4	-630	-685	26				
16-053-83164	-85.2153	36.7032	83164	105475	Oil	952					938	92	579	-25			37	37	14	2	-683	-708	7				
16-053-83167	-85.1112	36.6359	83167	105478	D&A	982							600	58					13	70							
16-053-83191	-85.1275	36.6291	83191	105511	D&A	934							532	-5					-68	-19		-867	-47				
16-053-83223	-85.1159	36.6402	83223	105546	D&A	820							542	1					-46	10		-786	33				
16-053-83224	-85.1147	36.6397	83224	105547	D&A	877							535	-6					-56	0		-801	18				
16-053-83225	-85.1095	36.6412	83225	105548	Oil	811							547	4					-29	26		-777	44				
16-053-83228	-85.1019	36.6515	83228	105558	Oil	818					633	-83	535	-9													
16-053-83228	-85.1019	36.6515	83228	107162	Oil	818													-39	15							
16-053-83257	-85.1187	36.6423	83257	105594	Oil	857							541	1					-38	17		-813	5				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-83289	-85.1033	36.6515	83289	105653	Oil	800							535	-9					-59	-5		-796	27				
16-053-83332	-85.1147	36.6592	83332	105708	D&A	884							527	-16					-58	-7							
16-053-83341	-85.1040	36.6563	83341	105733	D&A	822							515	-28					-76	-23		-846	-24				
16-053-83403	-85.0742	36.6255	83403	105855	D&A	978							611	43					31	82		-790	40				
16-053-83411	-85.1310	36.6312	83411	105862	D&A	904							516	-26					-70	-22		-863	-44				
16-053-83412	-85.1296	36.6319	83412	105863	D&A	879							543	3					-63	-14		-846	-27				
16-053-83431	-85.1074	36.6434	83431	105883	D&A	805							529	-15					-37	18		-778	44				
16-053-83468	-85.0999	36.6541	83468	105924	D&A	911							530	-13					-66	-12		-863	-37				
16-053-83470	-85.1024	36.6536	83470	105926	D&A	895							519	-24					-70	-16		-849	-25				
16-053-83479	-85.1179	36.6312	83479	105947	D&A	953							582	43					-19	37		-797	25				
16-053-83500	-85.1299	36.6290	83500	106016	D&A	882							522	-18					-78	-31		-878	-58				
16-053-83503	-85.0853	36.6508	83503	106043	D&A	880							522	-24					-94	-38		-895	-59				
16-053-83581	-85.1065	36.6503	83581	106260	Oil	800							475	-68					-102	-48							
16-053-83609	-85.1136	36.6488	83609	106293	D&A	783							534	-8					-38	16		-795	22				
16-053-83645	-85.1054	36.6404	83645	106345	D&A	960							569	24					-12	44		-755	69				
16-053-83647	-85.1085	36.6497	83647	106347	Oil	888							509	-34					-64	-10		-795	25				
16-053-83648	-85.1083	36.6486	83648	106348	Oil	922							503	-40					-69	-15		-801	19				
16-053-83650	-85.1227	36.6605	83650	106350	D&A	965							554	10					-49	0		-817	-6				
16-053-83685	-85.1513	36.6483	83685	106446	D&A	860							548	-19					-50	-18		-845	-34				
16-053-83686	-85.1417	36.6567	83686	106447	D&A	955							520	-37					-78	-40		-875	-64				
16-053-83687	-85.1068	36.6523	83687	106448	Oil	802							516	-27					-68	-14							
16-053-83698	-85.0999	36.6556	83698	106436	D&A	889							485	-58					-114	-60		-921	-95				
16-053-83710	-85.1167	36.6509	83710	106456	Oil	873							521	-21					-49	4		-837	-22				
16-053-83716	-85.1010	36.6534	83716	106462	Oil	871							530	-13					-59	-5		-801	24				
16-053-83720	-85.1091	36.6519	83720	106466	D&A	840							515	-28					-50	3							
16-053-83727	-85.1057	36.6545	83727	106499	D&A	844							522	-21					-63	-10		-821	0				
16-053-83738	-85.1057	36.6491	83738	106513	Oil	847							511	-33					-67	-13		-805	17				
16-053-83752	-85.0915	36.6329	83752	106528	D&A	988							563	10					-46	10		-817	12				
16-053-83757	-85.1070	36.6489	83757	106533	Oil	858							506	-37					-70	-16		-806	15				
16-053-83758	-85.1064	36.6479	83758	106534	Oil	898							508	-36					-69	-15		-808	14				
16-053-83759	-85.1051	36.6471	83759	106535	Oil	921							517	-27					-61	-6		-797	26				
16-053-83774	-85.1396	36.6569	83774	106559	D&A	899							508	-48					-99	-59		-901	-90				
16-053-83775	-85.1193	36.6459	83775	106560	D&A	918							533	-8					-31	23		-750	67				
16-053-83795	-85.0912	36.6350	83795	106597	D&A	1058							586	34					-20	36		-775	54				
16-053-83796	-85.1404	36.6580	83796	106598	D&A	906							522	-34					-88	-49		-890	-79				
16-053-83809	-85.1025	36.6543	83809	106617	D&A	870							525	-18					-65	-11		-847	-23				
16-053-83825	-85.1386	36.6603	83825	106643	D&A	880							513	-42					-94	-54		-900	-90				
16-053-83858	-85.0724	36.6315	83858	106673	D&A	1002							610	46					2	56							
16-053-83891	-85.1075	36.6532	83891	106732	Oil	793													-73	-20		-820	0				
16-053-83897	-85.1016	36.6572	83897	106737	Oil	951							531	-12					-66	-13		-819	5				
16-053-83902	-85.1101	36.6467	83902	106742	D&A	844							507	-36					-61	-7		-820	0				
16-053-83914	-85.1040	36.6464	83914	106754	D&A	927							513	-31					-76	-21		-854	-31				
16-053-83916	-85.1084	36.6543	83916	106755	D&A	794							519	-24					-66	-13		-822	-3				
16-053-83943	-85.1067	36.6468	83943	106792	Oil	887							520	-24					-57	-2		-793	29				
16-053-83975	-85.1221	36.6308	83975	106826	D&A	903							541	5					-72	-17		-827	-6				
16-053-84018	-85.2274	36.8799	84018	106887	Oil	600									375	-35	35		40	7		-650	21				
16-053-84021	-85.1464	36.6244	84021	106890	D&A	740							470	-92					-38	-11		-800	17				
16-053-84025	-85.1077	36.6475	84025	106894	D&A	928							515	-28					-62	-8		-814	7				
16-053-84040	-85.1231	36.6282	84040	106942	D&A	900							552	17					-50	2		-825	-3				
16-053-84042	-85.1633	36.6464	84042	106944	D&A	963							579	-1					-2	22		-772	23				
16-053-84044	-85.1323	36.6271	84044	106960	Oil	920							556	13					-42	1		-806	14				
16-053-84052	-85.1097	36.6484	84052	106968	D&A	929							510	-33					-65	-11		-815	5				
16-053-84053	-85.1513	36.6378	84053	106969	D&A	682							542	-26					-55	-23		-823	-10				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-053-84124	-85.1421	36.6465	84124	107065	D&A	945							551	-6					-39	0		-830	-17				
16-053-84166	-85.1385	36.6539	84166	107146	D&A	920							530	-24					-51	-10		-831	-19				
16-053-84191	-85.1002	36.6493	84191	107183	Oil	839							505	-39					-79	-24		-885	-59				
16-053-84285	-85.1024	36.6447	84285	107330	D&A	933							525	-20					-67	-12		-859	-34				
16-053-84286	-85.0965	36.6486	84286	107331	D&A	962							618	73					19	74		-782	46				
16-053-84297	-85.0908	36.6530	84297	107343	D&A	851							533	-11					-73	-18		-867	-34				
16-053-84345	-85.0882	36.6415	84345	107393	D&A	968							548	-2					-38	18		-814	18				
16-053-84360	-85.1080	36.6470	84360	107421	D&A	885							517	-26					-59	-5		-847	-26				
16-053-84361	-85.0874	36.6481	84361	107423	Oil	863							541	-6					-69	-13		-877	-43				
16-053-85299	-85.1953	36.7545	85299	108977	D&A	985												-82	-110	-70	-820	-830	-59				
16-053-85777	-85.1282	36.7720	85777	109577	D&A	827					717	-132	454	-92			-184	-214	-244	-135	-931	-1014	-173				
16-053-86093	-85.1352	36.7931	86093	110393	D&A	942					852	33	649	45			-10				-733	-778	36				
16-053-86450	-85.2074	36.8151	86450	111329	D&A	980							672	-3			16	16	-12	-15	-715	-780	-16				
16-053-87474	-85.0821	36.7556	87474	113072	D&A	970							608	18				-30	-70	-12							
16-053-88291	-85.2608	36.6977	88291	114377	Oil	1052							622	48				57	44	28		-668	6				
16-053-88855	-85.2327	36.7220	88855	114980	Oil	862							561	-29				-3	-25	-36	-732	-820	-98				
16-053-88984	-85.1277	36.7881	88984	115116	D&A	877							602	14				17	-8	52							
16-053-89075	-85.1917	36.7948	89075	115207	Oil	882							645	3				7	-15	4		-791	-31				
16-053-89104	-85.2653	36.6907	89104	115238	D&A	975							602	30				48	13	-2		-725	-67				
16-053-89105	-85.2302	36.8778	89105	115239	D&A	584												50	33	-1		-711	-39				
16-053-89136	-85.1289	36.7911	89136	115270	D&A	918							618	21				19	-6	45							
16-053-89155	-85.1380	36.6692	89155	115301	D&A	952							550	-5				20	-13	26	-688	-758	46				
16-053-89167	-85.0775	36.6483	89167	115277	Oil	903												-46	-77	-21	-795	-832	8				
16-053-89168	-85.0762	36.6484	89168	115276	D&A	918							533	-17				-47	-69	-13	-797	-857	-16				
16-053-89216	-85.1404	36.7584	89216	115352	D&A	945							580	58				-45	-65	64		-840	-8				
16-053-89230	-85.2094	36.7114	89230	115367	D&A	1037							582	0				57	31	20	-668						
16-053-89261	-85.2575	36.6928	89261	115434	D&A	945							601	32				67	51	39		-685	-31				
16-053-89283	-85.2333	36.6938	89283	115405	Oil	921							561	-42					-12	-23		-754	-97				
16-053-89295	-85.1837	36.8206	89295	115417	Oil	982							672	19					3	8							
16-053-89316	-85.2590	36.6928	89316	115510	D&A	977							527	-40					-25	-38		-715	-59				
16-053-89317	-85.2280	36.7178	89317	115511	D&A	963							597	11				73	49	35	-647	-682	41				
16-053-89335	-85.1824	36.8196	89335	115535	D&A	968							663	11				13	-12	-6		-767	-19				
16-053-89360	-85.0829	36.6337	89360	115562	D&A	959							527	-30			-78		-81	-25	-809	-851	-19				
16-053-89380	-85.0523	36.6903	89380	115585	Oil	943							538	-11				-19	-51	-1		-832	-6				
16-053-89398	-85.1314	36.7667	89398	115608	D&A	865							515	-20				-110	-135	-11		-930	-95				
16-053-89435	-85.2547	36.6922	89435	115616	D&A	1001							570	-2				15	1	-9		-694	-46				
16-053-89436	-85.1948	36.7385	89436	115617	D&A	1018							562	-18				1	-24	-1		-802	-39				
16-053-89473	-85.2555	36.6941	89473	115688	Oil	1015							605	32				55	35	24		-695	-39				
16-053-89521	-85.1453	36.6417	89521	115739	D&A	842							518	-43				-53	-76	-39		-878	-64				
16-053-89837	-85.0697	36.6358	89837	116093	D&A	988							604	41					2	57	-752	-780	53				
16-053-90047	-85.1378	36.7660	90047	120014	Oil	941							543	5				-84	-114	8	-809	-869	-42				
16-053-90098	-85.1391	36.7673	90098	120067	D&A	898							526	-16					-135	-17	-852	-892	-68				
16-053-90113	-85.1373	36.7674	90113	120076	D&A	940							510	-31				-120	-120	-2	-150	-850	-24	-890			
16-053-91204	-85.1439	36.7819	91204	121060	Oil	904							626	46							-686	-716	76				
16-053-91309	-85.1375	36.7642	91309	121316	Oil	943							563	30				-65	-95	32	-812	-862	-33				
16-057-00000	-85.4169	36.6633		5384		900							646	20					74	-38							
16-057-00000	-85.3586	36.6753		6074	Oil	670													58	-9		-724	-44				
16-057-00000	-85.4267	36.6803		5815	D&A	890							856	172					243	151		-500	75				
16-057-00000	-85.3732	36.7163		5997	D&A	850							681	-15					19	-66		-706	-30				
16-057-00000	-85.3171	36.7174		6160	D&A	915							624	13					45	3		-665	62				
16-057-00000	-85.4429	36.7286		5717	D&A	605													61	-56		-634	-15				
16-057-00000	-85.3753	36.7482		5857	D&A	562													-48	-55							
16-057-00000	-85.3179	36.7546		6884	D&A	700							532	-83					94	89							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-057-00000	-85.4918	36.7657		6517	D&A	542													10	-48							
16-057-00000	-85.4907	36.7707		6436	D&A	575													101	47							
16-057-00000	-85.3450	36.7790		6662	D&A	622													-18	2							
16-057-00000	-85.4293	36.7855		6418	D&A	575													78	22							
16-057-00000	-85.3397	36.8076		6588	D&A	560													-36	19		-770	-12				
16-057-00000	-85.2359	36.8493		7512	Oil	625													-1	-13		-688	40				
16-057-00000	-85.2865	36.9085		7177	D&A	600													-20	-15							
16-057-00143	-85.2941	36.7597	143	6867	D&A	603							596	-25			-24	-24	-45	-25							
16-057-00290	-85.2530	36.7567	290	6860	D&A	980							586	-27					42	65							
16-057-00744	-85.3745	36.7398	744	5871	D&A	565													61	32							
16-057-00771	-85.3738	36.7148	771	5999	Oil	698													-4	-89		-758	-84				
16-057-01066	-85.2465	36.8364	1066	7519	D&A	629													9	12							
16-057-01161	-85.3312	36.8154	1161	6773	D&A	608													-68	-15							
16-057-01215	-85.4863	36.7756	1215	6435	D&A	569													-4	-59		-709	-51				
16-057-01249	-85.3195	36.6905	1249	6274	Oil	900													35	-6	-658						
16-057-01452	-85.2635	36.7296	1452	6194	D&A	952							611	10					29	17							
16-057-01579	-85.4928	36.7729	1579	6430	D&A	663													107	57							
16-057-01627	-85.4804	36.7082	1627	5765	D&A	577													186	74							
16-057-01909	-85.2630	36.7247	1909	6197	D&A	930							593	-5					-17	-35							
16-057-02003	-85.4026	36.8205	2003	6569	D&A	662													28	34							
16-057-02185	-85.3048	36.8426	2185	7479	D&A	649													-3	26							
16-057-03620	-85.3217	36.7614	3620	6886	D&A	643							620	3					-47	-49		-782	-30				
16-057-12071	-85.3292	36.7534	12071	6885	D&A	588																-657	87				
16-057-30298	-85.2858	36.7570	30298	6866	D&A	605							578	-40					-64	-46							
16-057-30729	-85.2896	36.7583	30729	6865	D&A	604							588	-31			-47	-47	-67	-47							
16-057-31426	-85.3138	36.7823	31426	6840	D&A	674							667	29			47	47	-9	4							
16-057-31450	-85.3303	36.7758	31450	6839	D&A	650													-10	1		-857	-115				
16-057-31570	-85.2700	36.7506	31570	6863	D&A	690							623	11													
16-057-31648	-85.2761	36.7612	31648	6864	D&A	680							647	26			-25	-25	-46	-21							
16-057-32150	-85.3090	36.7813	32150	6841	D&A	700							661	20			-22	-22	-42	-31							
16-057-38011	-85.3840	36.6351	38011	5579	D&A	912							612	40			110	110	94	28		-738	-71				
16-057-38878	-85.3069	36.7597	38878	6879	D&A	586							566	-55					126	135		-664	108				
16-057-39023	-85.3004	36.7547	39023	6880	D&A	830							626	7													
16-057-39026	-85.3018	36.7546	39026	6883	Oil	680							632	13													
16-057-39662	-85.2994	36.7539	39662	6872	Oil	850							634	16													
16-057-40447	-85.3802	36.6349	40447	5592	D&A	720							480	-97			-80	-80	-95	-149	-710	-745	-68	-1604			
16-057-40894	-85.2988	36.7529	40894	6874	D&A	690							657	40													
16-057-40895	-85.2973	36.7508	40895	6876	Oil	720							650	34													
16-057-40896	-85.2983	36.7518	40896	6873	D&A	850							648	31													
16-057-40897	-85.2993	36.7510	40897	6875	D&A	952							660	44													
16-057-41502	-85.3027	36.7578	41502	6882	D&A	880							611	-10													
16-057-41503	-85.3018	36.7589	41503	6881	D&A	880							611	-11													
16-057-42160	-85.3295	36.7817	42160	6838	D&A	720											70	70	40	58							
16-057-42233	-85.3214	36.7742	42233	70364	D&A	640											-4	-4									
16-057-44115	-85.3096	36.7736	44115	6842	D&A	632													-5	5		-748	9				
16-057-44310	-85.3102	36.7714	44310	6843	D&A	664													-21	-11		-696	62				
16-057-45135	-85.3091	36.7767	45135	6844	D&A	643													-57	-46		-682	73				
16-057-46328	-85.2735	36.7755	46328	6848	D&A	758							706	67													
16-057-46329	-85.2711	36.7784	46329	6849	D&A	716							671	29			12	12	2	23		-676	80				
16-057-47262	-85.3096	36.7528	47262	38440	D&A	611											-1	-1	-21	-22		-777	-3				
16-057-48171	-85.2771	36.7722	48171	6850	Oil	685							632	-3													
16-057-48172	-85.2787	36.7742	48172	6851	D&A	850							595	-42													
16-057-48173	-85.2788	36.7754	48173	6852	D&A	880							667	28			30	30	0	18		-685	81				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-057-48313	-85.3180	36.7541	48313	6887	Oil	655											117	117	93	87							
16-057-48915	-85.2986	36.7670	48915	27380	D&A	655							610	-20													
16-057-48916	-85.3005	36.7639	48916	22257	D&A	599							593	-34													
16-057-49331	-85.3205	36.7763	49331	44544	Oil	635											38	38	20	31							
16-057-49379	-85.2936	36.7517	49379	28877	Oil	935							577	-39													
16-057-49474	-85.2951	36.7602	49474	6868	D&A	582											-38	-38	-62	-42		-856	-69				
16-057-51025	-85.2924	36.7504	51025	83569	Oil	931							590	-25													
16-057-52628	-85.2917	36.7514	52628	27377	Oil	940							597	-19													
16-057-53240	-85.2989	36.7715	53240	6846	D&A	666							641	6			-48	-48	-70	-57		-860	-92				
16-057-53572	-85.3834	36.7200	53572	22093	D&A	923							770	63	398	18	182	182	155	67	-581	-607	51	-1669			
16-057-56411	-85.3089	36.7778	56411	44517	Oil	840											230		213	224							
16-057-58648	-85.3100	36.7750	58648	51504	Oil	640											42	42	24	35		-678	78				
16-057-58898	-85.3094	36.7801	58898	29658	Oil	675							647	8			14	14	-3	8		-760	-8				
16-057-58926	-85.3130	36.7823	58926	44520	D&A	675							651	13			4	4	-12	1		-740	8				
16-057-59706	-85.3112	36.7807	59706	51505	D&A	650											-2		-17	-5		-785	-35				
16-057-60003	-85.3140	36.7718	60003	44515	D&A	670							637	8			-28	-28	-48	-39		-794	-39				
16-057-60005	-85.3050	36.7775	60005	44516	D&A	740							676	36			11	11	-6	4		-752	4				
16-057-60006	-85.3100	36.7823	60006	51507	D&A	670							664	23					-38	-26		-775	-26				
16-057-60649	-85.3295	36.7512	60649	26229	D&A	590													35	18		-810	-66				
16-057-61176	-85.5579	36.8334	61176	29512	D&A	780							505	-77			15	15	-9	3	-640	-705	-2				
16-057-61659	-85.2745	36.7794	61659	32034	D&A	720							647	3													
16-057-61660	-85.2729	36.7811	61660	32035	D&A	700							667	21													
16-057-61760	-85.3302	36.7556	61760	32668	D&A	588													48	34		-762	-19				
16-057-63924	-85.3108	36.7787	63924	42487	Oil	740							715	78			67	67	50	61							
16-057-64396	-85.4091	36.6703	64396	43974	Oil	954					938	44	608	-15			339										
16-057-64433	-85.3135	36.7733	64433	44026	Oil	660							653	23													
16-057-64434	-85.3142	36.7743	64434	44027	Oil	680							667	36													
16-057-64435	-85.3118	36.7714	64435	44028	Oil	640							637	7													
16-057-64436	-85.3108	36.7706	64436	44029	Oil	630							625	-5													
16-057-65370	-85.4440	36.6840	65370	46625	Oil	920							691	-29	414	17	105	105	86	-8	-578	-616	2				
16-057-68010	-85.2745	36.7824	68010	53893	D&A	745							680	33					-18	0		-778	-25				
16-057-68132	-85.5564	36.8480	68132	54198	D&A	695											-55		-62	-44							
16-057-68146	-85.2761	36.7823	68146	54314	D&A	760							672	25					-28	-11		-795	-41				
16-057-68478	-85.2517	36.8283	68478	56158	Oil	620																-770	-12				
16-057-68479	-85.2520	36.8294	68479	56159	Oil	560												5	-10	2		-764	-5				
16-057-68725	-85.4468	36.6793	68725	57712	Oil	880					870	23	646	-66	330	-56	42				-658	-704	-75				
16-057-68816	-85.2734	36.7813	68816	57580	D&A	720							680	34			5	5	-17	2		-800	-46				
16-057-68826	-85.2738	36.7827	68826	57579	D&A	740							690	42			17	17	-5	13		-795	-42				
16-057-68890	-85.4413	36.6767	68890	57849	Oil	900					885	31	639	-58	325	-53											
16-057-69613	-85.3101	36.7731	69613	60203	D&A	710							660	28			-2		-21	-11		-765	-8				
16-057-69921	-85.4388	36.6906	69921	60759	Oil	950					857	-9	691	-39	297	-112	55		57	-43	-635	-685	-81				
16-057-69987	-85.4407	36.6879	69987	60953	Oil	915							684	-42	662	258											
16-057-70112	-85.2562	36.8225	70112	61646	Oil	690					687	-55	677	2	650	53	-22		-27	-10	-760	-775	-17				
16-057-70369	-85.3059	36.7796	70369	62298	D&A	700							679	38			20	20	0	10		-703	51				
16-057-72876	-85.5478	36.7803	72876	69951	Oil	593											-35		-9	6							
16-057-73125	-85.3185	36.7347	73125	70517	D&A	636					634	-173	630	17			51	51	32	6	-634	-704	41				
16-057-74639	-85.3292	36.7312	74639	79217	D&A	966					854	19	666	48				72	66	34	-646	-694	40				
16-057-74812	-85.4546	36.6424	74812	80055	Oil	679							205	-458													
16-057-76322	-85.3234	36.7731	76322	84757	Oil	677							646	22													
16-057-76556	-85.4230	36.8211	76556	86111	D&A	680											65	65	55	31							
16-057-76641	-85.3202	36.7814	76641	86658	D&A	691							650	18			-11	-11	-29	-14							
16-057-77558	-85.4600	36.7053	77558	88839	D&A	823							813	17			187	203	189	61	-518	-577	45				
16-057-77853	-85.2717	36.7016	77853	89267	D&A	1011					951	121	651	65			46	66	48	25		-704	-14				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-057-78182	-85.4241	36.7943	78182	89917	D&A	562											12		84	32	-618	-683	14				
16-057-78290	-85.4436	36.6650	78290	90414	D&A	642							637	-38					52	-44	-633	-693	-64				
16-057-78875	-85.2723	36.7032	78875	92544	Oil	998					938	113	618	31			48	48	25	1		-732	-39				
16-057-80435	-85.5489	36.7832	80435	104851	Oil	585															-715	-780	-46				
16-057-80489	-85.4230	36.8211	80489	101967	D&A	680											13		13	-11		-755	-24				
16-057-80491	-85.5088	36.7759	80491	101969	D&A	595					587	-101	425	-173			43	43	5	-25							
16-057-80492	-85.5076	36.7765	80492	101970	D&A	601					592	-95	451	-152			51	51	11	-20							
16-057-80518	-85.3382	36.9176	80518	102056	Oil	680					668	-70	635	-11													
16-057-80536	-85.4073	36.9309	80536	102074	D&A	938							666	-2			-33		-31	-13		-752	-13				
16-057-80690	-85.5260	36.7835	80690	102267	D&A	592											-25	-25	-35	-42		-777	-67				
16-057-80913	-85.5231	36.8008	80913	102504	Oil	640									560	240	5		13	11							
16-057-80950	-85.3372	36.9166	80950	102580	Oil	747					707	-26	636	-9													
16-057-81018	-85.5262	36.7952	81018	102651	D&A	620											0	0	-7	-9							
16-057-81177	-85.5248	36.8031	81177	102825	D&A	656					644	-109							12	13		-664	47				
16-057-81260	-85.3018	36.8927	81260	102911	D&A	820					680	-33	608	-30					-50	-7		-795	-2				
16-057-81355	-85.2572	36.7224	81355	103011	D&A	814					639	-123	501	-95			-65	-65	-90	-108	-761	-776	-53				
16-057-81469	-85.5259	36.8022	81469	103131	Oil	710					705	-50	690	-13	165	-164											
16-057-81508	-85.4886	36.7883	81508	103172	Oil	658													36	-5		-612	48				
16-057-81511	-85.3686	36.6525	81511	103175	Oil	1019					854	24	615	22			79	79	54	-11	-643	-676	5				
16-057-81544	-85.5476	36.7837	81544	103228	Oil	612											-16	-16	-28	-13	-728	-793	-58				
16-057-81545	-85.5209	36.8008	81545	103211	Oil	806					801	66	716	21	226	-91											
16-057-81608	-85.2945	36.9191	81608	103277	D&A	870							622	-31								-759	-18				
16-057-81672	-85.3692	36.6516	81672	103345	Oil	1008							608	16	308	-28	68	68			-612	-632	50				
16-057-81710	-85.2787	36.6855	81710	103383	D&A	885							578	-8					-44	-64		-670	0				
16-057-81924	-85.5267	36.8032	81924	103706	D&A	791					788	25	701	-2	171	-162											
16-057-82058	-85.2874	36.7597	82058	103942	D&A	653					633	-20	608	-13			-25	-25	-46	-24	-772	-828	-31				
16-057-82060	-85.2766	36.7508	82060	103944	Oil	640					615	-5	590	-23													
16-057-82091	-85.3569	36.6352	82091	103975	D&A	740					652	-70	649	41			130	130	115	44		-630	50				
16-057-82184	-85.4739	36.7000	82184	104116	D&A	608															-516	-566	82				
16-057-82311	-85.2943	36.7599	82311	104293	D&A	597															-761						
16-057-82369	-85.2985	36.6868	82369	104366	D&A	954					919	15	633	19					84	53		-701	-9				
16-057-82628	-85.4919	36.7853	82628	104722	D&A	636									227	-2			32	-9		-683	-23				
16-057-82629	-85.4934	36.7855	82629	104723	D&A	661									227	-5			31	-8		-683	-23				
16-057-82647	-85.2977	36.6892	82647	104747	D&A	1037					1021	112	686	75								-633	60				
16-057-82648	-85.2990	36.6879	82648	104748	D&A	1002					991	82	654	40													
16-057-82685	-85.3216	36.7694	82685	104788	Oil	645							630	8					-36	-31		-815	-65				
16-057-82686	-85.3185	36.7714	82686	104789	D&A	680													-40	-32		-805	-54				
16-057-82731	-85.3898	36.7752	82731	104843	D&A	618							608	13			-96	-96	-107	-97		-730	-25				
16-057-82732	-85.2894	36.9104	82732	104844	D&A	730							664	9					4	12		-689	65				
16-057-82760	-85.2935	36.6886	82760	104875	D&A	965					959	65	699	93					127	98		-635	55				
16-057-82872	-85.3778	36.7207	82872	105037	Oil	931					919	40	759	65			209	209	188	104		-589	81				
16-057-82945	-85.4488	36.6833	82945	105141	Oil	880							665	-61			60	60	42	-52		-726	-95				
16-057-82959	-85.4375	36.6844	82959	105173	D&A	940							658	-54			62	62	42	-53		-688	-85				
16-057-83042	-85.2810	36.6914	83042	105281	D&A	923					894	35	594	4					-73	-97		-817	-136				
16-057-83072	-85.4724	36.7105	83072	105332	Oil	850							820	-4			192	192	162	36		-607	31				
16-057-83139	-85.3166	36.6639	83139	105429	D&A	938					835	-9	580	-40				40	25	-25		-706	-19				
16-057-83718	-85.2745	36.7524	83718	106464	D&A	668							596	-18				-55									
16-057-83719	-85.2939	36.7586	83719	106465	D&A	665							609	-11													
16-057-86364	-85.2715	36.7276	86364	111110	Oil	940							522	-79			41	39				-660	81				
16-057-87948	-85.3253	36.9189	87948	114012	D&A	942							655	9					-33	-8		-768	-3				
16-057-87997	-85.4129	36.7381	87997	114069	D&A	575												111	107	32							
16-057-88132	-85.4282	36.7950	88132	114211	D&A	555											65	63			-629	-699	-5				
16-057-88465	-85.2744	36.7277	88465	114574	D&A	957							582	-19				45	27	8	-679	-738	6				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-057-89226	-85.3456	36.6976	89226	115363	D&A	682							634	6				64	44	-12	-663	-723	-24				
16-057-89296	-85.2736	36.7347	89296	115418	D&A	962							597	-7			-23		-28	-38	-688	-828	-70				
16-057-89401	-85.3459	36.7038	89401	115611	D&A	890							594	-39				19	0	-56	-698	-757	-55				
16-057-90112	-85.3290	36.7625	90112	120082	Oil	608												-12	-33	-39							
16-057-93138	-85.2581	36.7371	93138	123866	Oil	981							660	56				83	59	58	-629	-709	32				
16-063-00000	-83.0482	38.0965		8422	D&A	796	544	19	491	16	379	19	-164	19			-2347					-3239	-63				
16-063-00271	-83.1966	38.0949	271E0	8406	D&A	968	722	27	698	-2	674	-3	-8	1	-1477	-41	-1782	-1799	-1813	-13	-2412	-2514	-15	-2847	-3808	-3852	-4222
16-063-01555	-83.1726	38.0980	1555	8405	D&A	918			691	11	656	3	-9	10			-1867				-2522	-2657	-91				
16-063-23542	-82.9608	38.1355	23542	8424	O&G	676	234	-14	178	11	75	-8	-479	-6													
16-063-25781	-82.9733	38.1393	25781	8423	Gas	697	228	-23	158	-52	93	-18	-491	-26													
16-063-26619	-82.9558	38.1206	26619	8427	D&A	784	301	28	248	55	142	37	-424	30													
16-063-27685	-82.9428	38.1493	27685	8425	D&A	682	136	-75	116	16	-18	-29	-572	-50													
16-063-28289	-82.9397	38.1138	28289	37252	Gas	1032	297	32	227	15	117	6	-424	44													
16-063-29843	-83.0785	38.1222	29843	8421	D&A	798	573	2	545	17	412	9	-136	7	-1834	82	-2171	-2171	-2185	-29	-2698	-2738	-17	-3245			
16-063-67748	-82.9559	38.1448	67748	52437	D&A	715			187	43	20	-15	-511	-16	-2732	-5	-3001				-3727	-3978	-153	-4302	-5509	-5569	-10240
16-063-76821	-83.0742	38.1106	76821	87598	D&A	829	532	-21	485	-35	357	-22	-162	-4													
16-063-86988	-82.9271	38.1356	86988	112140	Gas	680	250	42	177	50	64	17	-489	41	-2804	-2			-3107	-37	-3931	-4170	-72	-4505	-5704	-5803	
16-063-87820	-83.0530	38.0534	87820	113876	Gas	965	481	46	422	39	279	37	-222	36	-2015	125	-2347	-2347	-2399	83	-3077	-3267	153	-3686	-4760	-4827	
16-063-87977	-83.0628	38.0386	87977	114049	Gas	1045			427	34	255	4	-260	6			-2368	-2368									
16-063-88019	-83.0625	38.0321	88019	114092	Gas	1040			418	24			-249	26	-2029	125	-2370	-2370	-2423	48	-3100	-3276	193	-3734	-4793	-4864	
16-063-91734	-83.0514	38.0400	91734	121737	Gas	959	409	8	299	-54	202	-29	-295	-7	-2245	-67	-2463	-2463	-2521	-1	-3207	-3569	-81				
16-063-91932	-83.0432	38.0327	91932	121995	Gas	956	322	-51	240	-100	134	-89	-382	-58	-2351	-117	-2635	-2635	-2658	-85	-3358	-3703	-156				
16-065-00000	-84.0670	37.5833		8431	D&A	755													-505	-56							
16-065-00000	-84.0657	37.5968		8441	D&A	722							644	-9			-528					-1269	-103				
16-065-00000	-84.1087	37.6165		8434	D&A	860											-130					-890	-18				
16-065-00000	-83.9407	37.6955		8524	D&A	643											-700				-1377	-1477	-17				
16-065-00000	-83.7554	37.7286		8593	Gas	1030							458	25			-1007					-1818	-26				
16-065-00000	-83.9857	37.7374		8504	Gas	727											-317				-973						
16-065-00000	-83.9567	37.7497		8502	D&A	716											-434					-1152	20				
16-065-00000	-83.8652	37.7513		8625	D&A	1356							681	-27			-620					-1381	-39				
16-065-00000	-83.8580	37.7576		8624	Gas	1294							723	32			-537				-1183	-1296	56				
16-065-00000	-83.9586	37.7582		8618	D&A	782							762	4			-466					-1202	-51	-2043			
16-065-00000	-83.8523	37.7583		8623	Gas	1337							724	43			-532					-1281	67				
16-065-00000	-83.8476	37.7586		8620	Gas	1274							711	39			34										
16-065-00000	-83.8626	37.7589		8622	Gas	1367							728	29			-529					-1290	69				
16-065-00000	-83.8263	37.7620		8628	D&A	1340											-664				-1322						
16-065-00000	-83.8338	37.7627		8621	Gas	1279							689	46								-1356	-21				
16-065-00000	-83.8326	37.7637		8627	D&A	1320																-1385	-49				
16-065-21865	-84.0058	37.6725	21865	8482	D&A	639									-73	15	-353	-353	-375	-4	-1003	-1101	19	-2051	-3558	-3789	
16-065-44506	-83.7522	37.7269	44506	8589	Oil	1081							470	49	-657	31	-998	-998	-1019	33	-1677	-1792	21	-2751			
16-065-67141	-83.7905	37.6945	67141	50297	D&A	1140			1013	21	896	9	405	1	-644	16	-980	-980	-1002	12	-1653	-1772	-1	-2719			
16-069-00000	-83.6707	38.2693		8657	D&A	770													10	33							
16-069-00000	-83.6436	38.2830		8660	D&A	786											-175				-712	-728	41	-1312			
16-069-00000	-83.4748	38.3796		8663	D&A	850											-628		-652	34	-1165	-1230	29				
16-069-04122	-83.6833	38.4085	4122	8661	D&A	808											-47										
16-071-03213	-82.7152	37.5599	3213EF	8687	Gas	827							-1233	4			-4266		-4278	-63							
16-071-14518	-82.7796	37.5008	14518	61094	Gas	705	-88	8	-554	38	-718	0	-1139	-7													
16-071-27312	-82.7224	37.2946	27312	62740	D&A	1568	-436	0	-956	-1	-1118	8	-1654	0													
16-071-27524	-82.7580	37.4933	27524	8667	D&A	677			-628	13	-760	-6	-1180	5	-3605	-53	-4131	-4131	-4166	-2	-5142	-5339	-60	-5867	-6979	-7138	-12100
16-079-00000	-84.4072	37.5534		8776	D&A	925											265										
16-079-00000	-84.4263	37.5580		8773	D&A	918											363										
16-079-00000	-84.3808	37.5778		8774	Gas	976											256					-466	18				
16-079-00000	-84.5066	37.6184		8808	D&A	984											427		427	-35	-241	-281	-47				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-079-00000	-84.5455	37.6403		8803	D&A	970											220										
16-079-01670	-84.6342	37.7988	1670	8820	D&A	920													882	71							
16-079-21048	-84.6322	37.7174	21048	8816	D&A	961									668	-52	496	496	471	-49	-110	-157	-37	-1226	-2738	-2926	-4668
16-079-21674	-84.4838	37.7027	21674	8818	D&A	684									684	-10	515	515	484	10	-97	-153	7	-1199	-2765	-3009	
16-079-22037	-84.4257	37.5624	22037	8771	D&A	924									597	-2	371	371	346	35	-268	-331	36	-1555	-3266	-3451	
16-079-22875	-84.4854	37.6219	22875	8813	D&A	937									754	8	528	528	507	19	-93	-140	44	-1349	-2891	-3067	
16-079-23921	-84.6285	37.7235	23921	8815	D&A	959									675	-47	511	511	487	-35	-91	-141	-21	-1224	-2716	-2950	
16-079-25811	-84.6367	37.6432	25811	8794	D&A	817									728	-25	590	590	550	19	-38	-86	41	-1251	-2730	-2932	
16-079-33879	-84.6329	37.6374	33879	8798	D&A	1003									767	14	538		517	-2	-79	-126	18	-1260	-2770	-2996	
16-079-34963	-84.6390	37.6446	34963	8797	D&A	844									755	2	625	625	586	50	-1	-52	69	-1225	-2700	-2905	
16-079-38876	-84.6375	37.7204	38876	8814	Gas	965									749	29	560	560	534	-8	-46	-90	27	-1156	-2669	-2908	
16-079-39281	-84.6367	37.6432	39281	8795	D&A	817																-175	-48	-1239	-2727	-2927	
16-079-41300	-84.6385	37.7135	41300	8817	D&A	982									701	-17	533	533	506	-21	-76	-121	-2	-1209	-2689	-2933	
16-079-77619	-84.4214	37.5657	77619	88918	Gas	983											393				-293	-357	9				
16-089-00654	-82.9509	38.4166	654E9	9696	D&A	707							-228	-9			-2408		-2421	-17		-3085	-31				
16-089-20187	-83.0829	38.5841	20187	9704	D&A	1096					958	35	266	-10	-1560	-27	-1818	-1818	-1834	-10	-2330	-2398	-14	-2608			
16-089-21256	-83.0514	38.6395	21256	9702	D&A	1043					953	8	294	9	-1639	-2	-1845	-1845	-1861	10		-2318	18	-2656	-3505	-3577	-4125
16-089-22214	-83.0504	38.6382	22214	66851	D&A	1031							297	14													
16-089-30078	-83.0670	38.6022	30078	9703	D&A	1075							282	15	-1603	-14	-1857	-1857	-1871	-14	-2371	-2437	-35	-2675			
16-095-00094	-83.3710	36.8205	94	9917	D&A	1643	-797	11	-1627	43	-2030	19															
16-095-29757	-83.1905	36.9720	29757	9927	D&A	1641			-1711	-42	-2001	-43	-2367	-24													
16-095-87537	-83.4087	36.7251	87537	113539	Gas	1725			-1916	-20	-2363	-95	-2736	-39	-4380	-224	-4712	-4712	-4750	-82							
16-095-90816	-83.1778	36.9750	90816	120816	D&A	1780	-700	21	-1712	-39	-2002	-39	-2360	-5													
16-095-92706	-83.4133	36.7461	92706	123481	Gas	1789	-749	-16	-1851	-25	-2239	33	-2639	3													
16-109-00038	-83.8425	37.3218	38E0	80485	D&A	977	630	34	457	15	334	15	-83	26													
16-109-07928	-84.0640	37.4232	7928	11159	D&A	1422			1021	15	855	-5	475	6								-1578	-16				
16-109-10134	-83.9144	37.4707	10134	11162	D&A	877			837	2	742	6															
16-109-11910	-83.9563	37.5401	11910	11166	D&A	1273			1057	14	943	5	515	12													
16-109-15492	-83.7992	37.3548	15492	11156	D&A	1074	484	-9	394	24	314	68															
16-109-27869	-84.0274	37.4222	27869	11158	D&A	1022			972	11	832	14															
16-109-29847	-83.9475	37.4537	29847	11161	D&A	1346	1160	20	906	6	765	-4	392	6	-758	-14	-1037	-1037	-1064	10	-1768	-1868	16	-3178	-4718	-4968	
16-109-72420	-83.9003	37.3288	72420	68769	D&A	1261	893	111	593	-5	443	-1															
16-109-82257	-83.9278	37.3917	82257	104240	Gas	1290			814	14	702	9	312	4													
16-115-00000	-84.0827	37.4225		11160	D&A	1462	1102	-14			898	6	512	16			-653	-653			-1373	-1455	48				
16-115-00000	-82.7665	37.7507		81440	D&A	774	-86	-7	-222	11	-356	-35	-816	2													
16-115-00000	-82.8968	37.8484		36493	D&A	646			209	-62	90	-16	-392	-49													
16-115-00000	-82.8964	37.9523		43866	Gas	860	545	-68	500	17	395	42	-60	7													
16-115-00016	-82.9497	37.9366	16EF	11237	Gas	843							-52	60			-2743				-3867	-4027	8	-4375			
16-115-14519	-82.8638	37.7684	14519	11187	D&A	671	128	-3	62	19	23	23	-515	25													
16-115-26311	-82.7221	37.8026	26311	11195	D&A	713	-88	13	-269	-4	-419	-14	-875	-7			-3379				-5039	-5209	-10	-5781	-6775	-6949	-13773
16-115-26604	-82.9196	37.9728	26604	11223	D&A	914	714	134	525	18	367	1	-25	102													
16-115-27189	-82.7298	37.7997	27189	11197	D&A	677	-79	9	-236	13	-384	5	-867	-10													
16-115-27485	-82.7155	37.8024	27485	11196	D&A	762	-175	-59	-303	-22	-449	-26	-923	-38													
16-115-33174	-82.9895	37.8578	33174	11206	Gas	852							98	24													
16-115-34554	-82.7516	37.7856	34554	11189	D&A	717	-36	23	-199	10	-341	-3	-825	12													
16-115-39121	-82.6721	37.7439	39121	11185	D&A	686	-309	-3	-467	28	-620	1	-1118	5	-3625	-1	-4203	-4203			-5274	-5302	22		-6869	-6995	-10171
16-115-46179	-82.9938	37.8537	46179	11207	Oil	892	544	-93	512	-42	456	-66	125	60													
16-115-51624	-82.9908	37.8506	51624	11210	Oil	901			382	-173	326	-183	-113	-179	-1504	100	-2431										
16-115-52238	-82.9907	37.8534	52238	11208	Gas	916	680	42	620	67	573	55	133	64													
16-115-59631	-82.9844	37.8536	59631	38087	Gas	923							129	71													
16-115-60712	-82.9954	37.8606	60712	26154	Gas	997	687	33	671	120	611	62	53	-19													
16-115-62328	-82.9607	37.9779	62328	35470	D&A	979	574	62	437	22	293	29	-153	81													
16-115-63403	-82.9840	37.8593	63403	41558	Gas	1076	712	63	683	135	618	87	103	41													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-115-67525	-82.9759	37.8541	67525	51571	Gas	901	556	-67	522	-25	469	-39	92	67													
16-115-67526	-82.9675	37.8533	67526	51572	O&G	908	658	50	624	80	555	56	94	104													
16-115-67549	-83.0026	37.8613	67549	51570	Gas	796			671	121	610	69	66	-1													
16-115-91641	-82.8175	37.7923	91641	121692	Gas	851					-84	22	-621	-15													
16-119-00000	-82.8825	37.2926		11259	Gas	1235	-315	6			-1100	16	-1425	-3													
16-119-00000	-82.9357	37.4855		57053	O&G	1340	0	-8	-498	24	-535	4	-925	2													
16-119-91125	-83.0134	37.4120	91125	121118	Gas	1398					-762	43	-1189	-39													
16-121-00000	-83.9584	36.7982		11346	D&A	962							-878	31			-2270		-2278	28	-3248	-3305	-10				
16-121-00000	-83.8422	36.9373		11425	D&A	1031	-39	8	-389	9	-580	1	-949	6			-2319				-3277	-3350	-67				
16-121-21553	-83.7957	36.8244	21553	11357	D&A	1050	163	28	-298	108	-550	47	-826	106	-2023	12	-2375	-2375	-2409	-41	-3360	-3441	43	-4713			
16-121-45127	-83.7916	36.8250	45127	11359	Gas	1074			-322	85	-569	30	-850	67													
16-121-45128	-83.7911	36.8291	45128	11360	Gas	1087							-793	105													
16-121-45130	-83.7812	36.8331	45130	11355	Gas	1120	188	-22	-326	36	-590	3	-860	25													
16-121-46122	-83.7712	36.8059	46122	11364	Gas	1164			-643	-48	-896	-106	-1176	-210													
16-121-76788	-83.7975	36.9650	76788	87417	Gas	1126	-74	-29	-463	-6	-671	-14	-1014	-21													
16-121-77280	-83.8517	36.7660	77280	88440	Gas	1408	-276	11	-846	-30	-1042	53	-1369	-46													
16-121-79689	-83.8188	36.9077	79689	100816	Gas	1045	-115	-61	-506	-59	-719	-47	-1045	-46													
16-121-81470	-83.8601	36.9655	81470	103150	Gas	1085			-328	-16	-519	-29	-881	16													
16-121-84798	-83.9788	36.8737	84798	108224	Gas	973	-27	-25	-298	5	-566	-17	-889	-46	-1239	-24											
16-121-88706	-83.8526	36.8331	88706	114832	Gas	980	53	110	-432	30	-582	44	-952	81	-2036	-50	-2297	-2297	-2358	24							
16-125-00000	-84.2242	37.0988		11449	D&A	939	689	-40	509	-59	299	-21	-11	-45			-616				-1961	-2001	-7				
16-125-00000	-83.9778	37.1432		11445	Oil	1168							-85	73													
16-125-00000	-83.9709	37.1532		11462	Gas	1210							-74	77			-1340				-2020	-2103	37				
16-125-00000	-84.2095	37.1589		11446	D&A	1216							16	-29													
16-125-00017	-84.2286	36.9575	17E0	30931	D&A	1168	509	0	336	0	123	-2	-169	2													
16-125-00792	-84.3294	36.9602	792	30940	D&A	1141			557	-35	343	41	39	-5													
16-125-02659	-83.9750	37.1450	2659EF	11468	Gas	1135															-2085	-2155	-12				
16-125-03152	-83.9824	37.1380	3152EF	11467	D&A	1340	621	35	459	78	337	113	-105	57							-2072	-2154	-10				
16-125-03413	-83.9706	37.1462	3413EF	11444	O&G	1198							-117	33							-2063	-2147	-2				
16-125-03973	-83.9719	37.1487	3973EF	11466	Oil	1169															-2061	-2136	6				
16-125-04068	-84.0053	37.1117	4068EF	11452	D&A	1161							-239	-54							-2216	-2244	-42				
16-125-05193	-84.0482	37.0386	5193	30930	D&A	1075			65	-18	-100	-8															
16-125-06725	-83.9652	37.1535	6725	11459	D&A	1180	610	26	440	66	280	55															
16-125-07837	-84.1963	37.1748	7837	11472	D&A	1268	680	-22	595	-15	422	15	56	14													
16-125-13918	-84.0503	37.0918	13918	11453	D&A	1143	547	-28	338	-5	126	-4	-182	-7			-1297	-1297	-1310	2	-2134	-2230	2	-3039			
16-125-14392	-83.9953	37.1206	14392	11470	Oil	1200	566	-7	360	-24	185	-8	-149	20													
16-125-14731	-83.9846	37.1633	14731	11464	D&A	1171	501	-88	240	-113	67	-129	-306	-136													
16-125-14740	-84.0035	37.1176	14740	11451	Oil	1214	532	-29	322	-47	150	-13	-192	-18													
16-125-14748	-83.9664	37.1772	14748	11474	Gas	1034	529	-58	270	-100	111	-99	-261	-113													
16-125-14858	-83.9920	37.1405	14858	11465	Oil	1300	554	-30	265	-101	94	-108	-257	-83													
16-125-14996	-84.2180	37.1091	14996	11447	D&A	1184	847	116	582	6	303	-13	67	29													
16-125-15051	-83.9611	37.1506	15051	11458	Oil	1191	653	70	448	76	249	23	-112	40													
16-125-16615	-84.2865	36.9781	16615	11440	Oil	1142	752	91	477	-4	237	-7	-63	-1													
16-125-18828	-84.2773	36.9845	18828	11438	D&A	1122	532	-106	491	19	227	-7	-94	-13													
16-125-20438	-84.3007	36.9763	20438	11439	D&A	1160	752	50	495	-22	254	-12	-66	-46	-889	-10	-1189	-1189	-1223	-2	-2029	-2077	-20	-3493	-5494	-5707	
16-125-43418	-84.2061	37.0932	43418	11448	D&A	1036			566	43	346	67	29	14													
16-125-75809	-84.0857	36.9884	75809	83116	Gas	1205	218	-111	-23	-116			-299	10													
16-125-75866	-84.1276	36.9930	75866	83305	Gas	1150	425	60	276	108	53	30	-251	-13													
16-125-76132	-84.1079	36.9803	76132	84147	Gas	1254	439	111	204	68	114	63															
16-125-77309	-84.1321	36.9937	77309	88480	Gas	1164	275	-94	46	-130	-64	-76	-253	-21													
16-125-78219	-83.9758	37.1479	78219	90020	O&G	1171	660	73	412	35	255	31	-99	58													
16-125-79706	-84.1345	37.1168	79706	100855	Gas	1219	742	61	448	-24			206	208	-87	283											
16-125-80544	-84.1256	37.1101	80544	102086	Gas	1247	757	76	471	28	228	-3	-43	-21	-245	141						-2173	-34				

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16-125-80596	-84.1214	37.1151	80596	102147	O&G	1295	775	74	492	41	276	37	-21	-1													
16-125-81070	-84.1289	37.1200	81070	102719	Gas	1213	581	-118	453	-21	229	-27	-73	-63	-391	-21					-1991	-2084	30				
16-125-81585	-84.1630	37.1283	81585	103255	Gas	1209	573	-102	493	-11	206	-46	-65	-78	-728	-353	-1178	-1178			-2021	-2105	-10				
16-125-83029	-84.0270	37.0520	83029	105258	O&G	1099	429	-32	248	39	29	30	-271	23	-411	40	-1441	-1441			-2221	-2291	13				
16-127-00000	-82.7103	38.0146		11638	D&A	827							-598	34			-3743										
16-127-19257	-82.6954	38.2534	19257	83567	D&A	674	-384	-61	-433	-30	-581	-26	-1304	-78													
16-127-22889	-82.7339	38.1210	22889	50720	D&A	700			-104	10	-230	16	-878	64													
16-127-24502	-82.7445	38.2266	24502	11665	D&A	865	-262	16	-325	-33	-457	38	-1157	0	-3779	-65	-3914				-4727	-5003	-157	-5475	-6511	-6673	-11641
16-127-34778	-82.8040	37.9940	34778	11508	Gas	812							-304	-29													
16-127-45754	-82.8240	38.0012	45754	11634	D&A	769			419	66	207	12	-263	-29													
16-127-65425	-82.7590	38.0425	65425	46685	Gas	680	-35	-30	-106	-6	-199	-59	-665	-70													
16-127-78437	-82.6976	38.1866	78437	90998	O&G	602	-273	8	-315	-45	-473	29	-1143	4													
16-129-00000	-83.7865	37.6052		11785	D&A	1165							205	-3													
16-129-00000	-83.7683	37.6053		11819	Oil	876							164	-13			-1292				-1999	-2082	-20				
16-129-26670	-83.7135	37.6937	26670	12190	D&A	961			859	3	779	27	271	8													
16-129-30022	-83.8136	37.5270	30022	11679	D&A	877			683	-8	581	16	93	13													
16-129-42700	-83.7793	37.5253	42700	11680	D&A	920			572	-18	477	-18	0	0			-1218		-1245	15		-2040	37				
16-129-46507	-83.7912	37.5989	46507	11828	D&A	1184					801	12	256	55	-870	-4	-1207		-1228	-5	-1904	-2020	-10	-3080			
16-129-60010	-83.7441	37.6898	60010	38871	Gas	1005	1005	12	916	14	796	-11	268	-27	-800	-17	-1143	-1143	-1165	-4	-1830	-1960	-21	-2946	-4382	-4526	-8392
16-129-62870	-83.7630	37.6882	62870	38173	Gas	999			909	-15	836	-3	345	11	-743	-22	-1089		-1105	-4	-1763	-1887	-11	-2836			
16-129-63175	-83.7006	37.6676	63175	38773	D&A	886			795	10	668	10	175	-17	-966	-14	-1320	-1320	-1345	2	-2012	-2128	-20	-3098			
16-129-64270	-83.7931	37.6664	64270	43557	Gas	989					842	-4	351	-13	-697	15	-1021	-1021	-1061	-10	-1716	-1811	-19	-2822			
16-129-64626	-83.7618	37.6737	64626	44616	D&A	937			914	15	803	-7	313	-3	-767	-3	-1115	-1115	-1135	-18	-1795	-1910	-8	-2899			
16-129-73392	-83.5777	37.5911	73392	71237	Gas	1079	386	-61	322	2	230	-11	-295	15													
16-129-73404	-83.5836	37.5918	73404	71249	Gas	876	368	-99	315	-18	219	-28	-303	-8													
16-129-73640	-83.5840	37.5945	73640	72148	D&A	979	407	-60	359	20	260	5	-264	23													
16-129-90487	-83.7423	37.6860	90487	120450	Gas	928					805	10	282	-8	-864	-66	-1085	-1085	-1133	38	-1819	-1915	36				
16-131-00000	-83.4092	37.2658		54107	D&A	1227	-295	-41	-552	-23	-776	-2	-1103	-24													
16-131-02274	-83.4997	36.9968	2274EF	52204	D&A	1298	-720	-1	-1019	7	-1277	2															
16-131-03463	-83.4581	37.2293	3463EF	12343	D&A	1179	-173	15	-454	11	-691	20	-977	43	-2505	-57	-2793	-2793	-2821	-22	-3761	-3843	-46	-4815	-6001	-6143	-8221
16-131-70903	-83.5368	37.1377	70903	64645	Gas	1418	-287	-64	-664	-39	-825	-20	-1188	-62													
16-135-00000	-83.3941	38.4004		12434	D&A	990							720	35			-860					-1456	16				
16-135-00000	-83.3011	38.4635		12439	D&A	670											-1113										
16-135-00000	-83.2159	38.5451		12442	D&A	555							435	-15			-1370	-1395	-1425	35	-1945	-1960	44	-2156	-3062	-3143	-3628
16-135-00000	-83.5513	38.5830		12440	D&A	612											-373										
16-135-02579	-83.2725	38.3639	2579	12435	D&A	903							298	-39	-1098	-48	-1330	-1330	-1352	31	-1871	-1992	-7	-2212	-3126	-3242	-3627
16-135-20314	-83.3964	38.4829	20314	12437	D&A	731									-542	11	-792	-792	-807	24	-1282	-1366	31	-1601			
16-135-20436	-83.2992	38.5424	20436	12441	D&A	874							725	-2	-726	-6	-1065	-1065	-1079	-23	-1581	-1652	50	-1819			
16-135-21132	-83.1304	38.5362	21132	12443	D&A	1102					681	-6	355	12	-1357	-11	-1660	-1660	-1676	32	-2127	-2243	47	-2463	-3335	-3449	-3907
16-135-31428	-83.0983	38.6021	31428	12445	D&A	651							279	-25	-1503	7	-1756	-1756	-1770	15	-2265	-2300	11	-2416			
16-137-00000	-84.7597	37.4251		12454	D&A	932							929	-2			343										
16-137-00000	-84.7645	37.4491		12453	D&A	1030											360				-290	-338	-33				
16-137-00000	-84.7883	37.4612		12452	D&A	1138									729	2	544	544	533	1	-109	-159	86	-1619	-3089	-3275	-4609
16-137-00000	-84.7243	37.4671		12455	D&A	1100											465		450	90	-180	-230	80				
16-137-00000	-84.5822	37.4847		12479	D&A	995													295	37							
16-137-00000	-84.6303	37.4981		12469	D&A	920													223	-47							
16-137-00000	-84.6730	37.5303		12484	D&A	915																-431	-44				
16-137-22948	-84.7004	37.5361	22948	12483	D&A	1018									573	2	355	355	329	-22	-279	-328	-20	-1715	-3301	-3462	
16-137-91708	-84.7347	37.4134	91708	121869	D&A	1142							882	-12	322	-3	97	97	56	-69	-610	-658	-105				
16-147-00000	-84.5573	36.6261		13311	D&A	820	765	-29	665	67			-30	-4			-1010				-1890	-1950	-4				
16-147-00292	-84.5751	36.7066	292E8	13371	D&A	760			660	-49	280	3	97	2			-870		-878	-1	-1717	-1740	-26				
16-147-00440	-84.5229	36.7044	440E8	13370	D&A	1193			501	-3	321	33	-45	-31			-1035		-1040	7	-1895	-1922	-15				
16-147-15519	-84.5215	36.6715	15519	13372	D&A	1270	777	-27	488	9	245	5	-93	-30													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-147-19910	-84.7179	36.6826	19910	13359	D&A	855					444	35	338	10													
16-147-30374	-84.4224	36.7764	30374	13381	D&A	959			450	-15	-15	-11	-116	-26													
16-147-33063	-84.4588	36.7734	33063	13380	D&A	1267			474	-30	198	74	-122	-50													
16-147-37061	-84.4224	36.6318	37061	27165	Oil	1362	327	-35	202	-1	-342	-117	-368	-7													
16-147-37715	-84.4448	36.6319	37715	13318	D&A	1377	477	35	203	-29	-81	43	-348	-19													
16-147-39010	-84.4483	36.6203	39010	13319	D&A	1410	456	-9	223	-17	-292	-126	-330	15													
16-147-39962	-84.4568	36.7896	39962	13377	D&A	1308			568	17	98	-24	28	40													
16-147-40458	-84.6027	36.7432	40458	13364	Oil	920			835	2	368	9	256	39													
16-147-46494	-84.3639	36.6384	46494	13350	Gas	1095	378	2	35	-7	-462	-36	-506	-17													
16-147-46495	-84.3424	36.6601	46495	13344	D&A	1057	358	-4	37	-4	-418	-7	-495	-9													
16-147-48667	-84.3669	36.6367	48667	13349	Gas	1220	368	-13	34	-10	-472	-47	-519	-32													
16-147-48911	-84.3557	36.6384	48911	13351	Gas	1265	369	12	50	22	-453	-12	-500	4													
16-147-52518	-84.6019	36.7858	52518	27528	D&A	870					580	135	270	8													
16-147-60862	-84.6022	36.7856	60862	27014	D&A	870			637	-131	284	-160	266	4													
16-147-62035	-84.5860	36.7850	62035	34334	D&A	1310			810	14	508	81	237	-15													
16-147-62522	-84.5622	36.7332	62522	36508	D&A	845			765	76	225	-27	125	-6													
16-147-64286	-84.5659	36.7096	64286	43559	D&A	1190							70	-17													
16-147-85102	-84.2789	36.6296	85102	108752	Gas	1007	142	-2	-88	38	-570	-31	-671	3	-1413	-88	-1764	-1764	-1771	-6	-2693	-2774	38				
16-147-87833	-84.3234	36.7177	87833	113890	Gas	1226			184	41	-138	78	-372	-2	-1134	-54	-1421	-1421	-1460	-14	-2329	-2374	-45				
16-147-88018	-84.4413	36.6767	88018	114091	Gas	1393			350	12	-1	-33	-251	3	-927	9	-1264	-1269	-1293	-8	-2133	-2185	-37				
16-147-92450	-84.3313	36.6540	92450	123008	D&A	1341															-2509						
16-151-00000	-84.0989	37.5733		12837	D&A	726											-400		-418	-13	-1094	-1154	-58				
16-151-00000	-84.3683	37.5915		12840	D&A	844											233		230	-35		-490	18				
16-151-00000	-84.2183	37.6026		12854	D&A	1032							868	-3													
16-151-00000	-84.2765	37.6384		12841	D&A	980											211				-455	-495	36				
16-151-00000	-84.4325	37.7868		12858	D&A	955											535	535	515	34	2	-45	50	-1026			
16-151-00000	-84.1102	37.7885		12860	D&A	692											-108		-143	-13		-788	-19				
16-151-00000	-84.0933	37.8468		12863	D&A	767											-175		-199	-30		-853	-26				
16-151-00415	-84.1285	37.6044	415	12855	D&A	872											-129		-154	49	-790	-866	18				
16-151-21905	-84.4320	37.7838	21905	12859	D&A	940									731	15	472	472	450	-30	-89	-139	-44	-1053	-2610	-2779	-5411
16-151-33878	-84.3235	37.5835	33878	12842	D&A	987									279	-23	44	44	21	-70	-559	-675	-60	-2001	-3941	-4107	
16-153-00000	-82.9907	37.8048		13151	D&A	1018	468	-34	400	-18	338	-20	-162	-64			-2889				-3990	-4042	-144				
16-153-00000	-83.0138	37.8279		80999	D&A	932	562	-4	520	42	477	79	-75	-49													
16-153-51535	-83.0125	37.8595	51535	13199	D&A	955	662	17	559	33	465	-35	52	-3													
16-153-51850	-82.9995	37.8542	51850	13202	Gas	906	555	-82	526	-30	464	-60	55	-4													
16-159-00870	-82.5219	37.8568	870E8	13288	D&A	647	-225	15	-433	26	-612	58	-1193	50			-4693				-5853	-6013	-66	-6773		-7953	
16-161-03990	-83.6663	38.5474	3990	13297	D&A	764									157	42	-75	-75	-99	5	-581	-642	4	-939	-1961	-2044	-2521
16-165-00000	-83.5086	37.9214		13845	D&A	1075											-1377					-2083	-59				
16-165-00000	-83.6304	38.0054		82458	D&A	774							514	-8			-846										
16-165-00000	-83.5589	38.0512		13853	D&A	890							582	19			-825										
16-165-01270	-83.5112	37.8688	1270	80718	D&A	1052	762	-1	737	-3	662	-17	117	10													
16-165-18101	-83.5129	38.0096	18101	13854	D&A	981					859	18	373	6	-811	1	-1101	-1101	-1114	-29	-1696	-1756	-21	-2279	-3431	-3531	-4801
16-165-29846	-83.5513	37.8736	29846	13843	D&A	1118	915	41	862	20	783	0	207	12	-1005	8	-1319	-1319	-1334	-31	-1945	-2058	-53	-2630	-3799	-3918	-5582
16-173-00000	-83.9759	37.9922		14765	D&A	830											326					-284	157				
16-173-00000	-83.8322	38.0239		14774	D&A	769											-111										
16-173-11507	-83.9556	37.9761	11507	14766	D&A	989									349	42	100	100	87	209	-463	-545	85	-1163	-2463	-2549	-3439
16-175-00000	-83.2726	37.7865		14779	D&A	1040	492	41	435	119	413	111	-225	34			-2255				-3055	-3220	-7				
16-175-00000	-83.2019	37.8560		80971	D&A	790			205	-7	165	1	-530	-127													
16-175-00000	-83.3544	37.8646		81280	Gas	795			448	-22	349	-16	-195	-4													
16-175-00000	-83.0740	37.9141		14796	D&A	926	376	-41			156	-72	-334	-54			-2704										
16-175-00000	-83.2034	37.9181		14806	D&A	910	335	-4	274	-4	185	-8	-371	2													
16-175-21871	-83.3065	38.0445	21871	14812	D&A	778			739	7	620	-32	83	8	-1255	-1	-1614	-1614	-1631	18	-2243	-2310	14	-2865	-3779	-3951	-4750
16-175-24194	-83.0399	37.9876	24194	14808	Oil	811	471	82	411	27	243	5	-287	57	-2315	-1	-2655	-2655	-2678	-43	-3615	-3697	-15	-4040	-5337	-5532	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-175-24393	-83.2560	37.8141	24393	81272	D&A	843			342	-22	311	3	-272	-21													
16-175-26795	-83.3397	37.9363	26795	14801	D&A	928	640	-8	601	7	521	-8	-93	-10	-1491	-33	-1839	-1839	-1859	10	-2494	-2619	-21	-3214			
16-175-27544	-83.4589	37.9223	27544	14799	D&A	986	826	28	750	4	724	4	117	24	-1124	29	-1447	-1447	-1463	-28	-2079	-2144	-32	-2726	-3844	-3946	-5316
16-175-27586	-83.3436	37.7996	27586	81219	Gas	913	435	-8	402	-12	308	-5	-200	6													
16-175-27717	-83.0589	37.9888	27717	14809	D&A	873	417	23	361	-26	217	-13	-305	6													
16-175-28019	-83.3696	37.8644	28019	14790	D&A	806	512	-20	446	-33	357	-25	-228	-42	-1634	23	-1961	-1961	-1976	-24	-2663	-2724	-30	-3331	-4478	-4585	-6639
16-175-39741	-83.1965	37.8802	39741	14791	D&A	875	320	-12	245	-3	183	-1	-396	34													
16-175-39742	-83.1667	37.9808	39742	14803	D&A	815	369	-32	256	-76	206	-50	-381	-51													
16-175-39743	-83.1727	37.9560	39743	14804	Gas	885	395	26	316	38	231	26	-342	26													
16-175-51605	-83.0433	37.9692	51605	14810	D&A	825	443	5	378	6	241	11	-284	26	-2331	-12	-2698	-2698	-2718	-76	-3639	-3740	-12	-4085			
16-175-53341	-83.0198	37.9030	53341	49943	Gas	800							-198	-162													
16-175-74364	-83.2891	37.7447	74364	76553	Gas	1146			161	45	100	30	-468	-22													
16-189-00000	-83.7700	37.3690		80428	D&A	845			295	16	205	51															
16-189-00000	-83.7721	37.4679		16072	D&A	1025			483	26	385	3	-45	42			-1565				-2335	-2455	52				
16-189-20963	-83.7510	37.3965	20963	16068	D&A	928	323	-26	226	3	78	-64															
16-189-21197	-83.7540	37.3929	21197	16069	D&A	876	336	-8	226	-5	61	-79															
16-189-70450	-83.6029	37.3445	70450	62430	Gas	1114																-2081	640				
16-189-82673	-83.6029	37.3445	82673	104776	D&A	1114	61	-4	-164	-50	-367	-36	-722	-8								-3280	-559				
16-189-83137	-83.6238	37.5168	83137	105427	Gas	964	614	21	240	4	144	-10	-362	-8													
16-189-84359	-83.7831	37.3709	84359	107420	D&A	905	405	-2	335	14	205	-8															
16-189-84524	-83.7750	37.3761	84524	107710	Gas	905	325	-58	285	-7	151	-36	-271	-4	-1605	-34			-1811	-62	-2593	-2645	94				
16-189-84662	-83.8017	37.4130	84662	107937	Gas	1002	527	5	379	-2	282	-16	-147	-14													
16-193-00000	-82.5329	37.4381		40948	Gas	840	-255	1	-888	31	-1125	45	-1670	22													
16-193-44492	-83.3242	37.3658	44492	16168	D&A	1209	-269	-7	-499	-2	-745	1	-1131	-11	-2676	-70	-2939	-2939	-2968	-7	-3791	-3839	2	-4720	-5925	-6129	-7999
16-193-76928	-83.0282	37.1826	76928	87818	Gas	1603	-661	-23	-1237	-17	-1527	-45	-1835	-58													
16-195-24577	-82.4630	37.4821	24577	16229	D&A	1170							-1882	-13	-4568	-90	-5078				-5922	-6212	13		-7968	-8038	-11228
16-195-82478	-82.3025	37.6533	82478	104509	Gas	836	-695	-12	-947	10	-1132	52	-1855	8								-6586	-6				
16-195-84130	-82.2840	37.5711	84130	107111	Gas	1310	-620	6	-1028	13	-1319	43	-2042	-8	-5088	-189					-6498	-6784	-193				
16-195-84626	-82.0725	37.5456	84626	107887	Gas	1009	-529	2			-1600	0	-2238	68													
16-195-84653	-82.1853	37.5272	84653	107928	Gas	1261	-651	3	-1251	-8	-1580	-18	-2323	-9													
16-195-87015	-82.0811	37.4691	87015	112421	Gas	1651									-461	-127			-716	-183		-1520	-174	-2470			
16-195-91496	-82.0814	37.5206	91496	121583	Gas	1362					-1671	-41	-2408	-35													
16-197-00000	-83.8710	37.7546		16462	Gas	939							749	33			-551				-1182	-1277	78				
16-197-00000	-83.8621	37.7578		16460	Gas	1201							739	41			-527				-1209						
16-197-00000	-83.8575	37.7596		16461	Gas	1318							736	47			-537										
16-197-00000	-83.8409	37.7638		16456	Gas	1231							601	-54					-707	-50							
16-197-00000	-83.8402	37.7646		16458	Gas	1236							727	73							-1216	-1293	52				
16-197-00000	-83.8376	37.7675		16454	Gas	1387							543	-103								-1281	64				
16-197-00000	-83.8685	37.7675		16452	D&A	779															-1506	-1575	-186				
16-197-00000	-83.8355	37.7675		16455	Gas	1280															-1218						
16-197-00000	-83.8183	37.7701		16470	D&A	1140											-790	-790				-1528	-129				
16-197-00000	-83.8620	37.8020		16451	D&A	800																-1326	62				
16-197-00000	-83.8093	37.8047		16465	D&A	767											-727	-727				-1425	-9				
16-197-00000	-83.9544	37.8077		16449	D&A	755									-148	-8	-351				-929	-1028	60	-1887	-3295	-3470	
16-197-00000	-83.7613	37.8325		16464	D&A	665							495	-11	-588	7	-812	-814	-823	-20	-1447	-1534	-35	-2274			
16-197-00000	-83.8397	37.8523		16547	D&A	638											-602		-602	-12		-1329	8				
16-197-00000	-83.9630	37.8943		16542	D&A	734											-321	-321									
16-197-00000	-83.9026	37.9051		16546	D&A	1025											-350					-1123	-6				
16-197-00000	-83.8992	37.9136		16545	D&A	918							783	24			-402	-402	-419	-37	-970	-1073	22				
16-197-17445	-83.8398	37.7758	17445	16453	D&A	869							678	34	-359	41	-587		-609	19	-1190	-1291	69	-2056			
16-197-87816	-83.9634	37.8130	87816	113873	D&A	747									-155	-36	-350	-346	-388	1	-984	-1055	-7	-1900	-3357	-3453	
16-199-00000	-84.5919	37.0339		16585	D&A	935							410	-29					-549	-117		-1354	31				
16-199-00000	-84.5927	37.0435		16586	D&A	800							507	39			-205										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-199-00000	-84.5803	37.0457		16587	D&A	833			773	2			363	-95					-277	87							
16-199-00000	-84.5293	37.0621		69277	D&A	840							430	2													
16-199-00000	-84.7006	37.0710		16583	D&A	680											-60					-785	-26				
16-199-00000	-84.3896	37.0873		69263	D&A	980					640	37	342	22													
16-199-00000	-84.4814	37.0946		69268	D&A	920			883	3	553	-28	404	-12													
16-199-00000	-84.6076	37.1409		16606	D&A	1092							757	24			-42				-734	-778	12				
16-199-00000	-84.6621	37.2781		16619	D&A	1140							780	-31			-90										
16-199-00195	-84.7162	37.1051	195	69179	D&A	770							763	-21					98	17							
16-199-05680	-84.8017	37.0707	5680	16581	D&A	1060							804	-10			-100				-836	-871	-79				
16-199-06483	-84.4461	37.1571	6483	69849	D&A	840							440	-22													
16-199-07040	-84.3537	36.9660	7040	56414	D&A	1062			694	32	312	-25	100	7													
16-199-09218	-84.6285	36.9521	9218	16578	D&A	905			897	36	522	-16	405	1													
16-199-12362	-84.6217	36.9550	12362	16577	D&A	843			836	-25	536	2															
16-199-22393	-84.5602	37.0874	22393	16609	D&A	946			946	-14	828	-5	538	9	-158	0	-394	-394	-427	-46	-1170	-1200	26	-2168	-4601	-4852	-7875
16-199-22670	-84.6478	37.1225	22670	16607	D&A	1043					1043	6	755	4	179	4	-41	-41	-69	17	-779	-821	21	-2423	-3902	-4147	-5605
16-199-25457	-84.5637	37.0563	25457	69686	D&A	825			696	-128	581	-96	464	0													
16-199-42320	-84.4479	37.1611	42320	16612	D&A	890							440	-29													
16-199-47322	-84.4604	37.1315	47322	16613	D&A	944							449	-2													
16-199-64846	-84.4477	37.1613	64846	45005	D&A	870			840	-15	618	-13	529	60													
16-199-76970	-84.3030	37.1228	76970	87901	Gas	1180	881	12	721	-17	385	-3	172	-2													
16-199-76979	-84.3059	37.1254	76979	87891	D&A	1140			754	5	397	4	196	13													
16-199-77631	-84.3801	37.1328	77631	88942	D&A	1165					485	6	312	-12													
16-199-79838	-84.5502	36.8925	79838	101070	Gas	1087					454	-11	207	3													
16-199-81321	-84.3423	37.1742	81321	102977	D&A	942			892	7	452	-2	307	-8													
16-199-83084	-84.7335	37.0593	83084	105344	Oil	1011					990	-3	804	44					-49	3		-756	-7				
16-199-84315	-84.7378	37.0244	84315	107360	D&A	977							645	6				-202	-235	-31	-934	-998	-82				
16-199-86944	-84.3803	37.0261	86944	112088	D&A	1177	1137	2	800	5	451	5	211	-2								-1674	8				
16-203-00000	-84.3123	37.4001		16625	D&A	905							658	-8			-440	-440									
16-203-00000	-84.4590	37.4510		16628	D&A	890											-147		-164	-30							
16-205-00000	-83.6055	38.1366		72592	D&A	658											-447										
16-205-00000	-83.3192	38.1895		16640	D&A	877											-1248		-1268	144		-1841	17				
16-205-00000	-83.3180	38.1914		16641	D&A	1024											-1224					-1820	38				
16-205-00000	-83.3527	38.1916		16638	D&A	837							399	11	-969	-37	-1159	-1159			-1748	-1833	-7	-2211			
16-205-09123	-83.3208	38.1888	9123	16639	D&A	872							372	10			-1237					-1828	29				
16-205-14647	-83.3044	38.1655	14647	16636	D&A	1194	963	-12	845	-13	787	-19	299	-12	-1017	0	-1338	-1338	-1353	117	-1935			-2362	-3307	-3642	-3768
16-205-18028	-83.3277	38.1716	18028	16642	D&A	901					801	-19	340	-10	-916	55	-1632	-1632	-1647	-249	-1819	-1884	-9	-2323			
16-205-22478	-83.5287	38.1976	22478	16637	D&A	727											-314	-635	-635	30	-1177	-1239	24	-1591	-2613	-2694	-3047
16-205-25356	-83.3473	38.0977	25356	16635	D&A	1231			996	43	965	30	310	7	-971	-2	-1292	-1292	-1307	53	-1845	-1928	23	-2331	-3319	-3409	-3726
16-231-00000	-84.9050	36.6449		17750	D&A	1040							559	25					-192	-9							
16-231-00000	-84.8921	36.7000		17873	D&A	1480			1175	1	584	-52	535	-27													
16-231-00000	-84.8707	36.7980		17942	D&A	1045					807	160	497	-48					-265	-18							
16-231-00000	-84.9461	36.8278		17922	D&A	1000							643	-34					0	16		-852	-7				
16-231-00000	-84.8237	36.8534		18014	D&A	1002													-313	-2							
16-231-00000	-84.8305	36.8648		18015	D&A	1240					476	-124	418	-95			-423				-1160	-1192	-45				
16-231-00000	-84.8487	36.9454		18023	D&A	920							590	-7			-200		-210	-3		-930	47				
16-231-00090	-84.8168	36.8209	90	17959	D&A	974					805	77	527	51													
16-231-04762	-84.9061	36.6446	4762	17751	D&A	1040											-456										
16-231-04882	-84.8646	36.6659	4882	17749	D&A	1142					886	151	524	-11													
16-231-06891	-84.8050	36.7744	6891	17972	D&A	931					531	-11	466	-2													
16-231-08972	-84.8304	36.7401	8972	17881	D&A	1200					661	64	521	23													
16-231-15985	-84.9073	36.7166	15985	17868	D&A	1480							643	48													
16-231-16608	-84.9581	36.7137	16608	17812	D&A	955					611	-56	550	-5													
16-231-17743	-84.8868	36.7490	17743	17859	D&A	1038					643	10	533	-33													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-231-17879	-84.9081	36.6760	17879	17880	D&A	943							517	-15													
16-231-18227	-84.9258	36.7239	18227	17807	D&A	1358					666	-7	548	-27													
16-231-18459	-84.9175	36.7078	18459	17809	Oil	1150					729	49	621	41													
16-231-18907	-84.6033	36.8252	18907	17987	D&A	852							172	-62													
16-231-19302	-84.9588	36.6794	19302	17846	D&A	1042					623	-88	547	-50													
16-231-19487	-84.9892	36.6636	19487	17723	D&A	1078					560	-169	528	-64													
16-231-19776	-84.9077	36.6743	19776	17878	D&A	950					870	108	512	-16													
16-231-23872	-84.6762	36.9604	23872	18026	D&A	892					612	-51	517	17													
16-231-25422	-84.6760	36.7711	25422	17983	D&A	923					300	-48	266	-13	126	55	-638	-638	-664	7	-1375	-1418	20	-2416			
16-231-27205	-84.6979	36.9525	27205	18027	D&A	940					575	-97	520	21													
16-231-32025	-84.6745	36.9436	32025	18028	D&A	1008							468	-6													
16-231-32644	-84.9458	36.6823	32644	17843	D&A	1358					904	173	661	65	234	-58	-12	-12	-37	45	-772	-796	9	-1742			
16-231-33899	-84.8440	36.7947	33899	17941	D&A	1325					555	-97	519	8													
16-231-34896	-84.8220	36.6141	34896	17783	D&A	998					544	-28	504	15													
16-231-36738	-84.8635	36.6831	36738	17877	Oil	1099					599	-76	553	20													
16-231-37978	-84.8532	36.7832	37978	24651	D&A	1055					588	-20	541	13													
16-231-37979	-84.8700	36.7980	37979	24650	Oil	1032					579	-69	516	-28													
16-231-38192	-84.7638	36.8358	38192	18017	Oil	1085					491	13	429	-21													
16-231-38902	-84.7075	36.7170	38902	17906	D&A	828					316	-105	257	-48													
16-231-40338	-84.8589	36.7355	40338	24621	D&A	944							536	4													
16-231-41082	-84.9766	36.7414	41082	17792	D&A	980					707	30	615	22													
16-231-41318	-84.8479	36.6906	41318	17875	D&A	975					590	-41	543	22													
16-231-41480	-84.7354	36.6747	41480	45015	Oil	863					417	-2	382	13													
16-231-41927	-84.9680	36.6575	41927	17722	D&A	1022					718	-11	608	8													
16-231-41982	-84.7515	36.7776	41982	17973	D&A	950							450	37													
16-231-41993	-84.8319	36.8116	41993	45032	D&A	987					827	104	472	-23													
16-231-42028	-84.8145	36.8285	42028	24654	D&A	1050					800	46															
16-231-42081	-84.9897	36.6427	42081	17727	Oil	1181					1035	325	602	-16													
16-231-42317	-84.8586	36.7564	42317	24652	D&A	995					618	-12	537	-10													
16-231-42318	-84.8688	36.7325	42318	17865	D&A	963					661	25	581	38													
16-231-42456	-84.9734	36.7236	42456	17803	D&A	973					698	42	523	-47													
16-231-42481	-84.7135	36.7565	42481	17986	D&A	944					437	30	328	4													
16-231-42707	-84.9909	36.6407	42707	45026	Oil	1176					650	-60	611	-12													
16-231-42841	-84.9710	36.6640	42841	17714	D&A	1066							643	43													
16-231-42865	-84.9879	36.6413	42865	45024	D&A	1337					642	-62	616	-2													
16-231-43190	-84.9092	36.7183	43190	17862	D&A	1450					800	142	724	132													
16-231-43231	-84.9956	36.6442	43231	17724	D&A	1123							580	-35													
16-231-43343	-84.8767	36.7046	43343	24626	D&A	1276			1134	-11	538	-83	496	-50													
16-231-43643	-84.8999	36.7300	43643	17861	D&A	1105					619	-25	549	-38													
16-231-43983	-84.9686	36.7019	43983	92069	D&A	940							546	-23													
16-231-44020	-84.9924	36.6386	44020	17739	D&A	1235					685	-26	628	2													
16-231-44149	-84.9402	36.7051	44149	24611	D&A	902					641	-64	540	-26													
16-231-44250	-84.9675	36.6168	44250	17743	D&A	1746			1201	-30	592	-52	532	-53													
16-231-44337	-84.9836	36.6479	44337	17742	Oil	1127					772	66	721	114													
16-231-44507	-84.8370	36.6506	44507	24590	D&A	1050			946	-39	548	-110	540	22													
16-231-44567	-84.9973	36.6321	44567	17744	D&A	1495			1245	69	945	228	745	115													
16-231-44684	-84.9807	36.7500	44684	17799	D&A	1002					677	-32	623	16													
16-231-45804	-84.7190	36.7191	45804	17898	Oil	896					411	-24	351	23													
16-231-46455	-84.7557	36.9157	46455	18007	D&A	885					700	23	462	-26													
16-231-47166	-84.9076	36.7703	47166	66985	D&A	1058					558	-51	540	-39													
16-231-47774	-84.9653	36.7465	47774	74341	D&A	964							596	10													
16-231-51376	-84.6662	36.7585	51376	17989	D&A	834					386	26	260	-3													
16-231-52546	-84.6971	36.8806	52546	45038	D&A	917					455	-55	396	10													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-231-54065	-84.6953	36.8842	54065	61027	D&A	890					650	134	362	-23													
16-231-56138	-84.8916	36.6925	56138	45267	D&A	1351			1174	10	601	-71	531	-19													
16-231-56934	-84.6331	36.8003	56934	45039	D&A	880					295	-87	255	-10													
16-231-59284	-84.7734	36.6993	59284	45176	D&A	970					475	-4	427	-15													
16-231-59332	-84.6398	36.8015	59332	83260	D&A	856					401	31	276	6													
16-231-61084	-84.7134	36.6949	61084	28855	D&A	890					430	9	320	3													
16-231-62596	-84.6916	36.8383	62596	36870	D&A	849					467	16	365	2													
16-231-66294	-84.7441	36.7037	66294	48320	D&A	1030					605	150	400	17													
16-231-67151	-84.9731	36.6435	67151	50307	D&A	1303					723	35	607	7													
16-231-67450	-84.7983	36.8554	67450	51496	D&A	1048					590	-42	509	32													
16-231-67618	-84.9054	36.7356	67618	51849	D&A	1096					643	-3	586	0													
16-231-67832	-84.9015	36.7641	67832	52925	D&A	1092					706	95	611	36													
16-231-67834	-84.7990	36.8417	67834	52926	D&A	1020			974	-29	612	-45	494	26													
16-231-68324	-84.9506	36.6818	68324	55644	D&A	1544					730	8	688	91													
16-231-69021	-84.9395	36.6873	69021	58363	Oil	1074					727	-8	698	115													
16-231-69446	-84.9338	36.6892	69446	59353	D&A	974					694	-49	639	63													
16-231-69449	-84.9898	36.7446	69449	59351	D&A	1001					612	-136	575	-36													
16-231-69669	-84.9375	36.6918	69669	60122	Oil	959					679	-53	664	87													
16-231-69886	-84.9213	36.6844	69886	60656	D&A	941					616	-123	550	-13													
16-231-69983	-84.7900	36.8613	69983	60954	D&A	1220			1173	93	613	20	539	58													
16-231-70538	-84.9499	36.7480	70538	63001	D&A	970					613	-46	550	-19													
16-231-70539	-84.8272	36.7799	70539	63004	D&A	938					567	-12	482	-10													
16-231-71176	-84.7863	36.8867	71176	65688	D&A	942					566	-57	517	13													
16-231-71252	-84.7904	36.8998	71252	65875	D&A	1047			791	-214	646	-18	545	32													
16-231-71409	-84.8190	36.8058	71409	66248	D&A	937							478	0													
16-231-72575	-84.7747	36.8604	72575	69113	Oil	1067							486	10													
16-231-73691	-84.9452	36.6818	73691	72589	D&A	1311					690	-43	662	66													
16-231-79640	-84.9758	36.7170	79640	100759	D&A	1005					782	136	528	-36	163	-28											
16-231-79876	-85.0050	36.7528	79876	101108	D&A	1019					949	122	644	21													
16-231-80580	-84.6959	36.9663	80580	102122	D&A	942					859	151	532	14													
16-231-81852	-85.0038	36.7554	81852	103572	D&A	1018					823	1	658	31													
16-231-82120	-84.9904	36.6862	82120	104004	Oil	1023					547	-152	516	-61													
16-231-82130	-84.9346	36.8576	82130	104041	Oil	908					864	37	613	-78					-2	33		-872	-26				
16-231-82131	-84.9528	36.8607	82131	104042	D&A	878					835	-14	668	-51					13	8		-802	4				
16-231-82132	-84.9284	36.8595	82132	104043	D&A	822							773	93					-88	-36		-848	12				
16-231-82133	-84.9282	36.8606	82133	104044	D&A	833							787	107					-77	-25							
16-231-82440	-84.9818	36.6907	82440	104463	Oil	988					576	-92	528	-49				-70	-107	-59	-752	-828	-17				
16-231-82441	-84.9880	36.7274	82441	104464	D&A	1098					695	-16	640	56													
16-231-82761	-84.9693	36.7309	82761	104876	Oil	822							502	-73													
16-231-82848	-84.9676	36.6926	82848	105029	Oil	885					559	-107	519	-59													
16-231-82849	-84.9968	36.7012	82849	105030	Gas	1026							546	-23													
16-231-82957	-84.9764	36.6897	82957	105171	Oil	1018							588	9			8	8	-29	23		-742	69				
16-231-83064	-84.9735	36.6892	83064	105317	Oil	1061					646	-14	574	-6					-39	15		-839	-28				
16-231-83140	-84.9764	36.6884	83140	105430	Oil	1117							557	-23					-46	6		-767	46				
16-231-83198	-84.7421	36.9527	83198	105518	D&A	853							534	21													
16-231-83301	-84.9572	36.8594	83301	105672	D&A	1023							768	47					103	94	-602	-697	103				
16-231-83566	-84.9681	36.6889	83566	106217	D&A	943							537	-45				-61	-95	-36	-507	-867	-57				
16-231-83677	-84.8668	36.6348	83677	106422	D&A	980							525	6													
16-231-83868	-84.7257	36.8938	83868	106707	Gas	939					519	5	428	-1													
16-231-84167	-84.7343	36.9190	84167	107147	D&A	885					565	-41	461	-7													
16-231-84346	-84.7499	36.8271	84346	107394	D&A	1250			1025	43	437	-14	390	-38													
16-231-84810	-84.9990	36.6704	84810	108236	D&A	1161							501	-76													
16-231-86473	-84.9573	36.6705	86473	111423	D&A	1280							700	91			44	41									

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
16-231-87498	-84.7170	36.7204	87498	113115	D&A	929							327	3	-276	-122	-496	-496	-511	36	-1263	-1301	33				
16-235-00000	-84.2408	36.7154		50919	D&A	1235	315	14	10	67	-420	-1	-560	-5													
16-235-03211	-84.0168	36.6786	3211EF	18383	D&A	1048	-382	-10	-681	3	-902	-1	-1166	-21			-2312					-3424	-107				
16-235-12837	-84.2936	36.8979	12837	56514	D&A	1136					161	32	-89	-7													
16-235-27503	-84.1614	36.5920	27503	53853	Gas	1083	-203	-347	-535	-87	-872	-10	-1026	-14													
16-235-51360	-84.1407	36.9348	51360	27167	Gas	1176			248	39	4	36	-250	10													
16-235-53298	-84.1603	36.8953	53298	18406	Gas	1165	369	-78	161	15	-132	8	-360	3	-1157	-6	-1475	-1475	-1507	-9	-2384	-2467	-7	-3151			
16-235-64238	-84.2470	36.6464	64238	43469	Gas	972							-721	3													
16-235-71133	-84.2834	36.7564	71133	65455	D&A	985			-155	-59	-249	29	-427	-6													
16-235-72189	-84.2540	36.7525	72189	68221	Gas	925							-547	-40													
16-235-74502	-84.1905	36.8695	74502	77830	Gas	1194	570	-11	86	-30	-193	-4	-424	-24													
16-235-74650	-84.1981	36.8733	74650	79207	Oil	1154	578	-16	110	-23	-161	1	-396	-21													
16-235-75296	-84.1683	36.9011	75296	81499	D&A	1116	594	107	162	3	-74	39	-339	3													
16-235-76115	-84.2141	36.8917	76115	84012	Gas	1162			200	12	-14	52															
16-235-76397	-84.0660	36.5954	76397	85354	Gas	973	-293	-137	-667	-59	-881	11	-1133	-52													
16-235-76430	-84.0970	36.5981	76430	85655	Gas	962	-238	-166	-601	-105	-893	21	-1082	-12													
16-235-76464	-84.0568	36.5957	76464	85800	Gas	1064			-682	-32	-946	-64	-1134	-52													
16-235-77570	-84.2556	36.7564	77570	88863	D&A	943	559	61	-12	2	-350	-24	-529	-28													
16-235-83416	-84.2778	36.7201	83416	105868	O&G	1111	313	-2	-22	-30	-310	3	-375	87	-539	138											
16-235-83659	-84.2868	36.7253	83659	106380	Gas	1160	318	-43	-10	6	-356	-69	-524	-86													
16-235-83971	-84.1073	36.6434	83971	106822	D&A	980			-512	-20	-808	11	-988	-6													
16-235-84000	-84.2747	36.7917	84000	106857	Gas	1155			125	28	-191	0	-375	13													
16-235-84066	-84.2472	36.6496	84066	106981	Gas	980	236	68	-194	32	-530	14	-689	29													
16-235-84067	-84.2598	36.6623	84067	106982	Gas	972	156	-19	-174	-13	-448	23	-678	0													
16-235-88118	-84.1008	36.5927	88118	114197	Gas	964			-532	-44	-871	53	-1060	21	-1990	-380	-2261	-2284	-2305	0							
16-235-90121	-84.1940	36.6654	90121	120090	Gas	1174	178	14	-456	-30	-590	7	-784	2	-1616	-65	-1898	-1898	-1941	-6	-2650						
16-235-90506	-83.9157	36.6818	90506	120468	Gas	1117	-240	14	-834	22	-1096	48	-1351	-1	-2392	37	-2714	-2714	-2747	-11	-3650	-3818	-65	-4918			
16-235-92449	-84.2388	36.6519	92449	123195	Gas	1068	98	-75	-221	44	-569	-10	-713	16	-1561	-69	-1809	-1809			-2732	-2867	-66				
16-237-00000	-83.6595	37.7026		18484	D&A	1185							192	1			-1320	-1320			-2000	-2126	6				
16-237-00000	-83.4642	37.7604		81112	Gas	1041			526	-2	505	34															
16-237-00000	-83.3824	37.7799		18547	D&A	996			510	40	461	126	-113	58			-1989	-1989				-2768	-58	-3414			
16-237-00000	-83.3860	37.7955		18545	D&A	975	635	14	497	17	380	-12	-145	-1			-1835	-1835	-1850	18	-2375	-2622	51				
16-237-00000	-83.3865	37.7978		18546	D&A	998			425	-56	318	-80	-160	-15													
16-237-02748	-83.6331	37.7760	2748	18539	D&A	1275	921	0	869	0	799	22	254	18			-1165	-1165	-1188	40	-1785	-1899	36				
16-237-03292	-83.4880	37.6274	3292EF	18425	Gas	877	389	-9	363	21	266	3	-243	-125			-1943	-1943			-2823	-2924	-21	-3829			
16-237-11761	-83.4941	37.6683	11761	80342	D&A	863			410	-3	255	-17	155	96							-2758	-2822	-38	-3802			
16-237-12152	-83.4614	37.7644	12152	18543	D&A	1082	681	29	520	-7	468	-6	-96	-17	-1434	-18	-1757	-1757	-1769	30	-2454	-2622	23	-3394			
16-237-14190	-83.4586	37.7541	14190	18542	D&A	998	547	-84	473	-31	419	-31	-154	-63													
16-237-17590	-83.4323	37.6884	17590	18530	D&A	943	444	25	377	24	277	11	-289	-18	-1721	-20	-2053	-2053	-2081	49	-2801	-2973	60	-3823			
16-237-17704	-83.4913	37.7651	17704	18544	D&A	1035	706	20	598	-1	515	-5	-34	11	-1276	15	-1592	-1592	-1614	63	-2295	-2504	40	-3266			
16-237-30520	-83.3678	37.7086	30520	18535	D&A	1028	247	-20	177	7	77	7	-473	-15	-2013	15	-2267	-2267	-2281	-42	-3093	-3275	-92	-4251	-5273	-6551	-11188
16-237-43993	-83.6692	37.7364	43993	18429	Oil	1278	990	12	821	-18	744	5	205	-26	-955	3	-1320	-1320	-1343	-1	-1999	-2124	-17	-3073			
16-237-58564	-83.4490	37.7621	58564	30898	D&A	1100							-63	21													
41-001-20002	-84.2031	36.1530	1171		D&A	1137	-701	30	-1249	7	-1761	20	-1993	35													
41-001-20003	-84.2781	36.1203	1191		D&A	1730			-1310	-10	-1926	-65	-2086	-22													
41-001-20004	-84.3316	36.0728	1212		D&A	969	-713	2	-1259	164	-1811	92	-2001	0													
41-001-20005	-84.3298	36.0846	1902		D&A	1011					-1801	70	-1927	57													
41-001-20006	-84.2706	36.1101	3877		D&A	936	-1039	-7	-1334	17	-1869	44	-2032	60													
41-001-20007	-84.1673	36.1679	4662		D&A	891									-3549	-75	-3817		-3819	-176					-7809		-10569
41-001-20008	-84.3319	36.0779	8281		D&A	1019					-1833	51															
41-001-20009	-84.3358	36.0682	8285		D&A	922					-1934	-41	-2046	-46	-2091	6											
41-001-20010	-84.3308	36.0645	8287		D&A	1209					-1939	-12	-2081	-63	-2117	-6											
41-001-20011	-84.3376	36.0718	8294		D&A	1356					-1804	70															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-001-20012	-84.3393	36.0686	8321		D&A	1118																					
41-001-20013	-84.3361	36.0636	8335		D&A	841			-1502	-101																	
41-001-20014	-84.3368	36.0601	8345		D&A	830			-1526	-131																	
41-001-20015	-84.1594	36.1750	8348		D&A	907									-3503	-31	-3798										
41-001-20016	-84.3397	36.0519	8353		D&A	1048															-12	-52	135				
41-001-20017	-84.3283	36.0770	8374		D&A	1139																					
41-001-20019	-84.3323	36.0645	8384		D&A	1038																					
41-001-20020	-84.3358	36.0791	8407		D&A	1079																					
41-001-20022	-84.3374	36.0697	8439		D&A	1115																					
41-001-20024	-84.3331	36.0689	8447		D&A	883																					
41-001-20028	-84.2949	36.0916	8581		D&A	910					-1876	90	-2116	-34	-2160	77											
41-001-20029	-84.2871	36.1041	8592		D&A	988					-1912	3	-2044	34													
41-001-20030	-84.3337	36.0766	8602		D&A	1002					-1802	77	-1932	57													
41-001-20031	-84.3353	36.0704	8608		D&A	1134					-1878	13	-2006	-9													
41-001-20033	-84.2888	36.0782	8682		O&G	872	-1221	-245	-1540	-28	-2084	-60	-2232	-112	-2272	-20											
41-001-20035	-84.1951	36.2331	9691			1053					-1752	-8	-1915	-4													
41-001-20036	-84.2053	36.2265	9697			1270					-1553	176															
41-001-20037	-84.2054	36.2234	9707			1269					-1799	-68	-1934	-22													
41-001-20038	-84.2065	36.2211	9712		D&A	1302					-1774	-44															
41-001-20039	-84.2108	36.2268	9755			1527					-1770	-50	-1928	-34													
41-001-20040	-84.2031	36.2304	9763		O&G	1264					-1778	-47	-1914	-13													
41-007-00001	-85.1911	35.7652			D&A	1662	1275	27	995	1	340	-65	214	-48								-1451	-62				
41-007-00002	-85.0638	35.7324			D&A	940																-234	250				
41-007-00003R1	-85.3071	35.6121			D&A	1777							102	11					-563	84							
41-007-00004	-85.1906	35.6047			D&A	860											162					-825	-1066				
41-007-20001	-85.3019	35.6796	1034		D&A	1867			939	-10	337	-137	169	-6													
41-007-20002	-85.1637	35.5291	3919		D&A	1922	1277	85	987	156			27	65													
41-013-20008	-84.1912	36.5821	946		D&A	1082					-776	55															
41-013-20010	-84.3220	36.4925	1127		D&A	1425	9	-74																			
41-013-20011	-84.3196	36.4953	1270		Oil	1362	-6	-97																			
41-013-20012	-84.3189	36.4926	1443		D&A	1578	125	32																			
41-013-20013	-84.2279	36.2923	1451		O&G	1380	-420	-34	-962	-23																	
41-013-20014	-84.2262	36.2883	1589		D&A	1668			-996	-34	-1522	-8	-1650	43													
41-013-20015	-84.3058	36.3270	1735		Oil	1425					-1069	63	-1229	-29													
41-013-20016	-84.2354	36.2908	1740		D&A	1600	-406	-26			-1419	56	-1585	78													
41-013-20017	-84.2432	36.3136	1752		D&A	1496	-264	18	-756	33	-1300	43	-1424	103	-1478	60											
41-013-20018	-84.2136	36.2691	1770		D&A	1708	-552	-64			-1634	-13	-1778	8													
41-013-20019	-84.3007	36.3295	1799		D&A	1496							-1252	-50													
41-013-20020	-84.1942	36.5853	1976		D&A	1140			-290	108	-740	82	-780	197													
41-013-20021	-84.1810	36.5690	2027		D&A	1050	-155	-172	-420	14	-807	21	-1025	-24													
41-013-20022	-84.2222	36.2945	2117		D&A	1337			-1091	-142	-1681	-187	-1809	-129													
41-013-20024	-84.3146	36.3222	2589		Oil	1460			-652	38	-1140	-15	-1235	-37													
41-013-20025	-84.3213	36.3203	2993		D&A	1305			-615	60	-1111	4	-1219	-29													
41-013-20026	-84.2962	36.3058	3472		Oil	1550			-800	3	-1268	-40	-1340	-37	-1410	81											
41-013-20027	-84.1956	36.3973	3475		D&A	1955			-725	1	-1180	-49	-1255	-4													
41-013-20028	-84.2081	36.3776	3476		D&A	1575			-660	70	-1103	19	-1255	51													
41-013-20029	-84.2680	36.3945	3477		D&A	1562			-393	22	-926	31	-986	39	-1026	30											
41-013-20030	-84.0939	36.5146	3810		D&A	1428			-678	-37			-1362	-187													
41-013-20032	-83.9811	36.5141	4447		D&A	1922			-988	-42			-1630	-129	-2098	-96											
41-013-20033R-1	-84.0180	36.5386	5681		D&A	1526			-800	37	-1338	-151															
41-013-20034	-84.0829	36.4975	4887		D&A	1626					-1324	-39	-1362	21													
41-013-20035	-84.0978	36.5208	4961		D&A	1530					-1094	-117															
41-013-20036	-83.9806	36.4880	5264		D&A	1591			-866	54																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-013-20038	-84.0917	36.5230	5483		D&A	1563					-974	18															
41-013-20039	-84.1005	36.5198	5531		D&A	1551			-575	20	-997	-27															
41-013-20040	-84.0908	36.5204	5574		D&A	1560			-612	6																	
41-013-20041	-84.0032	36.5393	5769		D&A	1152	-548	9	-1013	-148			-1328	-10	-1428	246											
41-013-20042	-84.1083	36.5411	6058		D&A	1471			-189	320	-721	81	-794	168	-1516	191	-2441		-2437	6							
41-013-20043	-84.1089	36.5466	6059		Oil	1542																					
41-013-20044	-84.0106	36.5789	6437		D&A	1470			-175	291																	
41-013-20045	-84.0383	36.5631	6660		D&A	1161			-409	124	-853	126	-1104	91													
41-013-20046	-84.0301	36.4707	6647		D&A	1519			-790	192	-1264	219															
41-013-20047	-84.0048	36.5529	6719		D&A	1437			-716	95	-1108	-43															
41-013-20048	-84.1360	36.4306	6770		D&A	1462	-573	-4			-1156	51															
41-013-20049	-84.0816	36.4601	6920		O&G	1407			-972	-17																	
41-013-20055	-84.0711	36.4486	7143		D&A	1662	-572	126	-818	134	-1454	-10	-1588	-26													
41-013-20056	-83.9833	36.5019	7206		D&A	1864					-1400	4															
41-013-20057	-84.0281	36.4794	7220		D&A	1788	-737	15	-1082	-91																	
41-013-20058	-84.0391	36.4754	7221		D&A	1784	-781	-33	-1101	-85	-1671	-203															
41-013-20059	-84.0561	36.4711	7282		Oil	1558	-842	-106	-1094	-83																	
41-013-20060	-84.1226	36.4819	7298		D&A	1179	-346	141	-666	-14	-1244	-56	-1311	-6													
41-013-20061	-84.0694	36.4737	7411		Oil	1938	-712	-34	-1009	-32	-1402	6															
41-013-20062	-84.0606	36.4689	7479		Oil	1610	-700	18	-1048	-56																	
41-013-20063	-84.1390	36.4828	7496		O&G	1378					-1090	1	-1242	18													
41-013-20064	-84.0592	36.4733	7512		D&A	1943	-838	-116	-1025	-15	-1477	-36															
41-013-20065	-84.0860	36.4518	7580		O&G	1716	-624	29	-969	2																	
41-013-20066	-84.0865	36.4699	7595		D&A	1713	-619	-6	-860	69	-1342	17															
41-013-20067	-84.0713	36.5663	7635		O&G	1218	-22	123	-352	102	-862	94	-1032	127													
41-013-20068	-84.0532	36.4674	7656		Oil	1292	-756	-15	-1075	-72																	
41-013-20070	-84.0545	36.4630	7684		Oil	1317	-795	-54	-1100	-118																	
41-013-20071	-84.0581	36.4659	7695		Oil	1584	-812	-83	-1090	-102																	
41-013-20072	-84.0746	36.4538	7706		Oil	1643	-751	-68	-1091	-133																	
41-013-20073	-84.0564	36.4585	7734		Oil	1326	-674	64	-1104	-141																	
41-013-20074	-84.0631	36.4630	7741		O&G	1774	-722	-10	-894	78																	
41-013-20075	-84.0503	36.4636	7788		Oil	1502	-608	136	-963	22																	
41-013-20076	-84.0486	36.4670	7833		O&G	1382	-708	37	-1113	-114																	
41-013-20080	-84.0616	36.4596	7913		O&G	1700	-910	-191	-1116	-152																	
41-013-20082	-84.1788	36.5471	7969		Gas	1053			-447	-2																	
41-013-20083	-84.1817	36.5424	8004		Gas	1162							-862	109	-788	253											
41-013-20084	-84.1682	36.5473	8038		Gas	991	-134	-328	-439	16	-977	-244	-1089	-113	-1152	14											
41-013-20085	-84.1956	36.5447	8104		D&A	1385			-422	9																	
41-013-20086	-84.1704	36.5442	8119		D&A	988	-12	-180	-447	7																	
41-013-20087	-84.1690	36.5570	8127		Gas	996	-244	-407	-509	-58	-864	-82	-1084	-92	-1164	14											
41-013-20088	-84.3248	36.4759	8220		O&G	1999					-757	-85	-901	6	-959	-11											
41-013-20090	-84.3334	36.4606	8241		Oil	1387					-781	-49	-933	-30	-979	-47											
41-013-20091	-84.3189	36.4974	8246		D&A	1465	-39	-133	-207	-8																	
41-013-20092	-84.1854	36.5408	8268		D&A	1247																					
41-013-20093	-84.1970	36.5336	8277		D&A	1499																					
41-013-20094	-84.1925	36.5331	8289		D&A	1120																					
41-013-20095	-84.3235	36.4900	8344		D&A	1617					-259	363															
41-013-20096	-84.3274	36.4893	8375		D&A	1633	59	-35																			
41-013-20100	-84.1993	36.5765	8556		D&A	1189	-191	-140	-479	-78	-887	-52	-1036	-52													
41-013-20101	-84.2350	36.5312	8600		D&A	1659					-891	-73	-1065	5	-1297	-33	-2201		-2198	-82							
41-013-20102	-84.2274	36.5738	8630		D&A	1255	-65	0	-339	11	-789	0	-940	9			-2089		-2086	25							
41-013-20104	-84.0840	36.6234	8677		Gas	962	-207	-11	-478	47																	
41-013-20105	-84.0874	36.5876	8678		Gas	962	-253	-189	-546	-47	-963	-33	-1098	-6													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-013-20106	-84.0782	36.5862	8679		D&A	962	-296	-206	-569	-46	-995	-74															
41-013-20109	-84.0873	36.5851	8696		D&A	1009	-45	10	-371	123																	
41-013-20110	-84.0980	36.5902	8701		Gas	957	-245	-207	-557	-71	-954	-24										-3585	-636				
41-013-20112	-84.0889	36.5898	8714		Gas	957	-243	-177	-507	-9	-929	-2															
41-013-20113	-84.1044	36.5815	8732		Gas	1050	-50	-77	-470	6	-915	31															
41-013-20114	-84.0946	36.5874	8738		Gas	960	-132	-93	-496	-13	-910	26															
41-013-20116	-84.1688	36.5911	8750		Gas	1198	798	695	-402	39																	
41-013-20117	-84.1643	36.5901	8754		Gas	1237	-164	-294	-433	13	-875	-16	-1009	3													
41-013-20118	-84.1000	36.5833	8757		Gas	1066	270	277	-474	3																	
41-013-20119	-84.1946	36.5877	8758		Gas	1261	-107	-82	-381	13	-858	-41	-973	-2													
41-013-20122	-84.1974	36.5907	8771		D&A	1404	-264	-247	-449	-64	-960	-151	-1076	-117													
41-013-20123	-84.1939	36.5826	8775		D&A	1211	-192	-155	-394	8	-873	-45	-993	-9													
41-013-20124	-84.2027	36.5774	8777		Gas	1193	-91	-40	-416	-22	-900	-69	-1009	-30													
41-013-20125	-84.1309	36.5618	8793		Gas	1348	588	271	-382	102	-969	-128	-1113	-88													
41-013-20126	-84.1001	36.5805	8795		Gas	1144	-50	-49	-506	-32	-944	5	-1111	-5													
41-013-20129	-84.1164	36.5787	8810		D&A	1063					-982	-32	-1111	-18	-1181	346											
41-013-20130	-84.2390	36.5702	8820		Gas	1102					-768	-17	-937	3													
41-013-20132	-84.1035	36.5439	8933		D&A	1471							-792	181	-2106	-367	-2539	-2501	-2536	-73							
41-013-20134	-84.1566	36.5244	8962		D&A	1559					-422	269	-1171	-178													
41-013-20135	-84.1005	36.5472	8969		D&A	1463					-577	290	-773	219													
41-013-20136	-84.1891	36.5778	8989		Gas	1039					-861	-20	-1007	-7	-1077	92											
41-013-20137	-84.1800	36.5752	8992		Gas	1038																					
41-013-20138	-84.1289	36.5363	8999		D&A	1397					-585	59	-721	224													
41-013-20139	-84.1842	36.5746	9009		Gas	1047																					
41-013-20140	-84.1854	36.5766	9010		Gas	1022																					
41-013-20141	-84.1915	36.5780	9012		Gas	1071																					
41-013-20143	-84.1819	36.5770	9016		Gas	1032																					
41-013-20144	-84.2367	36.5653	9018		Gas	1252					-784	-17	-958	5	-1044	217											
41-013-20147	-84.1702	36.5861	9038		D&A	1311					-773	79															
41-013-20150	-84.1816	36.5806	9053		D&A	1141																					
41-013-20151	-84.1769	36.5748	9056		Gas	1086																					
41-013-20152	-84.1255	36.4753	9062		D&A	1198	-518	-14			-1130	46															
41-013-20153	-84.0130	36.5568	9100		Gas	1065					-841	171	-1065	116													
41-013-20155	-84.0940	36.5840	9112		Gas	1123	13	44	-499	-21	-917	26	-1081	17													
41-013-20159	-84.1966	36.5573	9127		D&A	1413					-815	-12															
41-013-20161	-84.2153	36.5603	9148		Gas	1697					-775	48	-908	78													
41-013-20162	-84.1043	36.5774	9153		Gas	1287	265	229	-485	-13																	
41-013-20163	-84.1108	36.5723	9157		D&A	1204	657	556	-406	64	-942	0	-1088	-12								-3103	-481	-4289	-6259		
41-013-20164	-84.1085	36.5803	9164		Gas	984	-135	-194	-487	-12	-925	23	-1077	21													
41-013-20166	-84.3237	36.4732	9179		D&A	1962																					
41-013-20168	-84.0574	36.5367	9232		D&A	1302					-1226	-91	-1530	-84													
41-013-20169	-84.1128	36.5710	9233		D&A	1196							-1138	-68							-320	-438	2136				
41-013-20170	-84.1094	36.5664	9236		D&A	1968					-1043	-128	-1197	-141							-2992	-3067	-319				
41-013-20173	-84.3074	36.4929	9247		D&A	1295	320	189	-125	96	-730	-123															
41-013-20174	-84.2039	36.5400	9253		D&A	1560					-731	58										-4513	-447				
41-013-20175	-84.2860	36.4842	9256		D&A	1289	239	58	-331	-69	-814	-145										-4513	10				
41-013-20176	-84.1361	36.5744	9260		Gas	1324	848	562	-494	-15																	
41-013-20178	-84.1435	36.5744	9274		Gas	961	631	288	-519	-48																	
41-013-20179	-84.1272	36.4861	9283		D&A	1384			-526	84																	
41-013-20183	-84.1015	36.5748	9365		D&A	1762	262	240	-538	-70																	
41-013-20184	-84.0613	36.5306	9411		D&A	1652					-1166	-24	-1422	10													
41-013-20185	-84.2360	36.5767	9415		D&A	1178					-852	-101	-951	-24	-1194	104	-2068		-2065	4							
41-013-20187	-84.1751	36.4849	9434		D&A	1400					-706	38	-1024	65													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-013-20188	-84.2235	36.5528	9555		D&A	1822					-836	-19	-1080	-77	-1798	-503	-2229		-2225	-31							
41-013-20189	-84.0527	36.4601	9592		Oil	1384					-1538	-48															
41-013-20190	-84.0581	36.4626	9668			1415	-583	148	-1099	-123	-1502	-36															
41-015-00001	-86.1441	35.9265			D&A	880													790	-4							
41-015-00002	-86.1428	35.9288			D&A	880													790	-4							
41-015-00007	-86.0601	35.8424			D&A	803													655	-47							
41-015-00008	-86.0623	35.8418			D&A	830													667	-36							
41-015-00009	-85.9327	35.8606			D&A	1230							966	7													
41-015-00010	-85.9481	35.8410			D&A	1140							975	41													
41-015-00012	-86.0051	35.8132			D&A	870													690	-11							
41-015-00013	-86.0748	35.7835			D&A	785															78	71	43				
41-015-00014	-86.1934	35.7362			D&A	856															117	112	35				
41-015-20001	-85.9743	35.8842	3168		D&A	780											496										
41-015-20003	-86.1214	35.7397	9558		D&A	725											707										
41-025-20004	-83.9048	36.5408	3235		D&A	1292									-2678	-75						-4513	-43				
41-025-20005	-83.9093	36.5711	3236		D&A	1215					-1380	54			-2580	-61											
41-025-20006	-83.9355	36.5278	3240		Oil	1421							-1487	6													
41-025-20007	-83.8716	36.5521	3241		D&A	1436																					
41-025-20008	-83.9375	36.5096	3319		D&A	1568					-1498	-6															
41-025-20009	-83.9314	36.5294	4080		Oil	1620					-1470	-42	-1497	-7													
41-025-20010	-83.9313	36.5241	4081		Oil	1637					-1487	-36	-1528	-18													
41-025-20011	-83.9354	36.5236	4082		O&G	1512					-1506	-62	-1538	-29													
41-025-20012	-83.9398	36.5225	4083		O&G	1570					-1485	-46	-1495	16													
41-025-20013	-83.9403	36.5272	4084		O&G	1538					-1428	-7															
41-025-20014	-83.9335	36.5351	4112		Oil	1457			-881	22																	
41-025-20015	-83.9554	36.5140	4144		D&A	1574	-730	-15	-916	4	-1382	44	-1492	45													
41-025-20016R-1	-83.8040	36.5790	5043		D&A	1672					-1701	-4															
41-025-20017R-1	-83.9298	36.5164	5041		Gas	1581	-809	-7	-1017	-128																	
41-025-20018	-83.9436	36.5155	4197		D&A	1650			-680	224	-1250	204	-1541	-4													
41-025-20019R-1	-83.9232	36.5613	5042		D&A	1821																					
41-025-20020R-1	-83.9633	36.4945	5045		D&A	1545																					
41-025-20022R-1	-83.9328	36.5389	5245		O&G	1437																					
41-025-20023R-1	-83.9372	36.5411	5302		Oil	1442																					
41-025-20024R-1	-83.9358	36.5316	5246		Oil	1551					-1352	60	-1389	89													
41-025-20025R-1	-83.9304	36.5318	5247		D&A	1446																					
41-025-20026R-1	-83.9456	36.5284	5255		Oil	1671																					
41-025-20027R-1	-83.9400	36.5193	5256		Oil	1836			-434	460																	
41-025-20028R-1	-83.9339	36.5202	5257		Gas	1703					-1297	164	-1447	76													
41-025-20029R-1	-83.9451	36.5240	5303		Oil	1458							-1486	16													
41-025-20030	-83.9463	36.5312	5248		Oil	1759																					
41-025-20031	-83.9262	36.5324	5249		D&A	1475					-1492	-68	-1560	-78													
41-025-20032	-83.9443	36.5205	5250		Oil	1623					-1339	96	-1487	29													
41-025-20033	-83.9391	36.5357	5254		O&G	1721																					
41-025-20035	-83.9481	36.5414	5259		D&A	1520					-1431	-74															
41-025-20036	-83.9409	36.5300	5260		Oil	1736																					
41-025-20037	-83.9425	36.5467	5261		O&G	1140	-735	-55	-960	-90																	
41-025-20038	-83.9338	36.5460	5262		D&A	1323	-909	-178	-962	-49																	
41-025-20039	-83.9367	36.5543	5263		O&G	1334																					
41-025-20040	-83.9493	36.5241	5267		D&A	1723					-1347	65	-1507	-8													
41-025-20041	-83.8120	36.4578	5346		D&A	1599																		869			
41-025-20042	-83.9736	36.5852	5620		D&A	1587			-433	71																	
41-025-20043R-1	-83.8978	36.4825	6539		D&A	1938							-1224	222													
41-025-20044	-83.9758	36.5774	6394		D&A	1237			-471	73																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-025-20045R-1	-83.9373	36.5486	6540		O&G	1403			-943	-46																	
41-025-20046	-83.9389	36.5445	6413		O&G	1330			-956	-67	-1384	-13															
41-025-20047	-83.9487	36.5468	6414		O&G	1237			-963	-124																	
41-025-20048	-83.9314	36.5430	6415		D&A	1301			-973	-52	-1431	-36															
41-025-20049	-83.9538	36.5481	6416		O&G	1326			-951	-142	-1200	115															
41-025-20050	-83.9406	36.5506	6417		O&G	1383			-949	-72	-1356	-7															
41-025-20051	-83.9282	36.5408	6418		D&A	1186			-997	-68	-1457	-51															
41-025-20052R-1	-83.9320	36.5491	6538		D&A	1471			-949	-23	-1419	-38															
41-025-20053	-83.9045	36.5680	6420		D&A	1237			-1023	-48	-1443	11															
41-025-20054	-83.9410	36.5541	6421		O&G	1378			-882	-9	-1232	106															
41-025-20055	-83.9508	36.5556	6430		D&A	1559			-941	-138																	
41-025-20056	-83.9394	36.5585	6466		O&G	1109			-1061	-183																	
41-025-20058	-83.9322	36.5037	6560		D&A	1425			-1350	-429																	
41-025-20060	-83.9078	36.4966	6621		D&A	1510			-1252	-175	-1678	-56															
41-025-20061	-83.9076	36.4932	6622		D&A	1503			-1152	-63	-1707	-72															
41-025-20064	-83.9158	36.4984	6630		D&A	1474					-1676	-76															
41-025-20065	-83.8201	36.5336	6646		D&A	1619																					
41-025-20067	-83.9587	36.5488	6663		D&A	1293			-976	-197	-1339	-43															
41-025-20068	-83.9612	36.5451	6664		O&G	1403			-913	-128	-1339	-32															
41-025-20069	-83.9588	36.5420	7019		O&G	1409			-933	-123	-1359	-30															
41-025-20070	-83.9653	36.5470	7020		O&G	1413			-860	-106	-1275	10															
41-025-20071	-83.9675	36.5504	7021		D&A	1434			-826	-106																	
41-025-20073	-83.9445	36.5436	7027		O&G	1479			-769	96	-1363	-4															
41-025-20074	-83.9635	36.5418	7028		O&G	1392			-832	-40	-1349	-31															
41-025-20076	-83.9559	36.5393	7030		O&G	1702			-948	-116																	
41-025-20077	-83.9201	36.5818	7106		D&A	1986																					
41-025-20078	-83.9628	36.5499	7122		D&A	1175			-856	-105	-1277	0															
41-025-20079	-83.9432	36.5664	7123		D&A	1335																					
41-025-20080	-83.9599	36.5383	7164		O&G	1695			-961	-137	-1391	-47															
41-025-20081	-83.9476	36.5167	7198		D&A	1630					-1553	-114															
41-025-20082	-83.9567	36.5458	7213		D&A	1693					-1350	-34															
41-025-20083	-83.9543	36.5424	7214		O&G	1712					-1369	-31															
41-025-20084	-83.9400	36.5384	7225		O&G	1711					-1392	-7															
41-025-20085	-83.9412	36.5416	7236		O&G	1684					-1393	-20															
41-025-20086	-83.9543	36.5614	7439		D&A	1770																					
41-025-20089	-83.9624	36.5601	7465		O&G	1386			1486	2184																	
41-025-20091	-83.9676	36.5738	7503		D&A	1858	-457	-116																			
41-025-20094	-83.9619	36.5636	7590		Oil	1140																					
41-025-20095	-83.9596	36.5673	7609		O&G	1270																					
41-025-20096	-83.9571	36.5653	7624		O&G	1340																					
41-025-20098	-83.9496	36.5305	8367		O&G	1932					-1438	-45															
41-025-20099	-83.9799	36.5819	8370		Gas	1623																					
41-025-20100	-83.9421	36.5521	8371		O&G	1387					-1352	-12															
41-025-20101R-1	-83.9666	36.5442	8736		D&A	1522					-1318	-22															
41-025-20102	-83.9570	36.5354	8381		O&G	1895					-1383	-19															
41-025-20103	-83.9513	36.5398	8420		O&G	1897					-1401	-45															
41-025-20104	-83.9639	36.5369	8424		O&G	1856					-1368	-24															
41-025-20105	-83.9250	36.5849	8494		Gas	1829																					
41-025-20106	-83.9266	36.5803	8532		Gas	1633			-731	96																	
41-025-20107	-83.9133	36.5824	8535		Gas	1541																					
41-025-20108	-83.9088	36.5858	8539		D&A	1516																					
41-025-20109	-83.9154	36.5781	8588		Gas	1420																					
41-025-20110	-83.9287	36.5751	8591		D&A	1312																					

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-025-20111	-83.9490	36.5361	8606		O&G	1903					-1366	9															
41-025-20112	-83.9601	36.5310	8654		Oil	2155					-1415	-41	-1466	-2													
41-025-20113	-83.9563	36.5296	8657		Oil	2153					-1443	-59	-1487	-14													
41-025-20114	-83.9595	36.5267	8727		O&G	1853					-1421	-36															
41-025-20115	-83.9253	36.5168	8730		Gas	1554					-1530	-33															
41-025-20116	-83.9329	36.5818	8761		D&A	1448																					
41-025-20117	-83.9618	36.5242	8776		O&G	1604					-1447	-61															
41-025-20118	-83.9309	36.5075	8780		O&G	1715					-1571	-50															
41-025-20119	-83.9659	36.5495	8783		Gas	1436					-1214	55															
41-025-20120	-83.9642	36.5264	8785		D&A	1649							-1425	56													
41-025-20121	-83.9257	36.5091	8789		O&G	1744					-1567	-36															
41-025-20122	-83.9618	36.5214	8791		O&G	1638					-1436	-44															
41-025-20123	-83.9198	36.5081	8794		O&G	1791					-1569	-19															
41-025-20124	-83.9732	36.5512	8797		D&A	1359					-1235	-9															
41-025-20125	-83.9644	36.5195	8800		D&A	1665					-1465	-75															
41-025-20126	-83.9630	36.5333	8827		O&G	2138					-1316	48	-1445	8													
41-025-20128	-83.9218	36.5076	8839		O&G	1684					-1595	-47	-1628	-60													
41-025-20129	-83.9543	36.5376	8845		O&G	1864							-1397	55													
41-025-20130	-83.9456	36.5357	8847		D&A	1860							-1426	35													
41-025-20131	-83.9362	36.5369	8850		O&G	1720							-1180	287													
41-025-20132	-83.9687	36.5353	8853		D&A	1840							-1354	88													
41-025-20133	-83.9215	36.5211	9139		D&A	1878					-1515	-28															
41-025-20137	-83.9677	36.5824	9513		Gas	1655	-53	221	-511	38			-1381	-3													
41-027-00123	-85.3378	36.6138			D&A	620													93	4		-739	-100				
41-027-00210	-85.5054	36.5818	35		Oil	540											143										
41-027-10013	-85.5082	36.4942	363		Oil	554											239		244	25							
41-027-20009	-85.5075	36.4922	929		D&A	555											195										
41-027-20010	-85.5160	36.4898	985		D&A	556											242		236	21							
41-027-20011	-85.5078	36.4864	1002		D&A	875							787	38			239		231	6							
41-027-20012	-85.4878	36.5314	1031		D&A	545													163	-33							
41-027-20013	-85.5166	36.4941	1071		D&A	540													210	-3							
41-027-20014	-85.5119	36.6034	1176		D&A	521											51										
41-027-20017	-85.5063	36.6015	1314		D&A	550													109	-2							
41-027-20019	-85.4690	36.4756	1352		D&A	599													218	9							
41-027-20021	-85.4753	36.4842	1354		D&A	662													289	79		-402	227				
41-027-20024	-85.4582	36.4869	1378		D&A	695									274	-300	215										
41-027-20025	-85.4594	36.4869	1388		D&A	659											218		207	9							
41-027-20026	-85.3248	36.5899	1394		D&A	690							621	16					66	-10		-568	62				
41-027-20028	-85.4658	36.4888	1423		D&A	628											180		168	-34							
41-027-20029	-85.5007	36.6123	1452		D&A	540													7	-88	-530	-554	94				
41-027-20030	-85.5159	36.4926	1500		D&A	542											-99		212	-2		-573	5				
41-027-20031	-85.3516	36.5310	1513		D&A	1052					734	-71	616	-39			62		52	-40							
41-027-20034	-85.3281	36.5289	1585		D&A	1005							624	-27					18	-69		-734	-80				
41-027-20035	-85.3517	36.5334	1706		D&A	1010							688	34	660	43	110		110	19	-721	-862	-179				
41-027-20036	-85.4510	36.5561	1821		Oil	640													179	26		-562	49				
41-027-20037	-85.3561	36.5318	1914		D&A	1025					811	8	601	-54	580	-43	51		53	-40		-590	99				
41-027-20038	-85.4499	36.5574	1944		Oil	650											123				-497	-625	-14				
41-027-20039	-85.4856	36.6087	2097		Oil	559											105					-756	-127				
41-027-20040	-85.4841	36.5361	2146		D&A	540													234	43	-576	-644	-38				
41-027-20041	-85.4897	36.5326	2147		D&A	531											198		184	-14		-661	-60				
41-027-20044	-85.4934	36.5820	2281		D&A	548													93	-46							
41-027-20046	-85.4427	36.6010	2283		Oil	1040							612	-23													
41-027-20047	-85.4516	36.6012	2427		D&A	1123							623	-20			70					-646	-38				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20048	-85.7221	36.5238	2429		D&A	660											222					-590	-79				
41-027-20056	-85.4945	36.5231	2738		D&A	674											160		190	-15							
41-027-20057	-85.5201	36.5136	2824		D&A	645											172		174	-35							
41-027-20058	-85.5114	36.6123	2864		D&A	540													24	-72		-637	7				
41-027-20060	-85.5075	36.5586	2874		D&A	630											147		153	-40		-710	-128				
41-027-20062	-85.5041	36.5700	2905		D&A	535											105		135	-33							
41-027-20064	-85.5493	36.5361	3008		D&A	520									395	-72	154		160	-31		-653	-22				
41-027-20065	-85.5014	36.5650	3032		D&A	560													145	-31							
41-027-20066	-85.5063	36.5916	3096		D&A	519											101		92	-34							
41-027-20067	-85.4949	36.5332	3139		D&A	680											160		190	-13		-795	-197				
41-027-20068	-85.3389	36.5399	3143		Oil	918											68					-621	42				
41-027-20069	-85.3409	36.5344	3144		Oil	942									508	-96	128										
41-027-20073	-85.4818	36.5749	3212		D&A	619											167		173	30							
41-027-20074	-85.3238	36.5396	3217		D&A	892									290	-293	58		90	11		-848	-193				
41-027-20075	-85.5459	36.5216	3224		D&A	640													175	-22		-733	-99				
41-027-20076	-85.2862	36.5595	3255		D&A	867									267	-293	23		53	-11		-379	294				
41-027-20077	-85.5024	36.5965	3294		D&A	621											155		185	67							
41-027-20078	-85.3363	36.5620	3308		Oil	862									280	-296	44		76	-3		-700	-52				
41-027-20080	-85.4151	36.5145	3330		Oil	1029							634	-60					103	-48		-606	57				
41-027-20081	-85.4634	36.5639	3335		D&A	740							708	28			160		163	21		-700	-100				
41-027-20082	-85.3421	36.5303	3381		D&A	936							658	4			80		112	22		-740	-69				
41-027-20083	-85.3405	36.5414	3382		D&A	862									182	-415	-66		-32	-115		-734	-70				
41-027-20084	-85.4173	36.5999	3392		D&A	1033					753	-7	592	-18	579	-25	59					-480	147				
41-027-20085	-85.5023	36.4809	3395		D&A	591													251	23		-601	-31				
41-027-20089	-85.5480	36.5194	3434		D&A	640											143		145	-52		-685	-53				
41-027-20090	-85.4111	36.5870	3435		D&A	1030							639	24	620	12			93	-15							
41-027-20091	-85.5347	36.5311	3469		D&A	530											148		150	-51		-630	3				
41-027-20094	-85.4112	36.5834	3493		D&A	1056					728	-17	680	62			98		138	25		-717	-85				
41-027-20095	-85.4197	36.6154	3495		D&A	1050											26		60	-88							
41-027-20096	-85.4124	36.5985	3557		D&A	960							602	-4	580	-21	47					-756	-125				
41-027-20097	-85.4114	36.6053	3560		D&A	990											54		58	-62		-695	-62				
41-027-20098	-85.4920	36.5377	3561		D&A	612													314	115							
41-027-20099	-85.4180	36.5959	3564		D&A	985							611	-2	591	-16	88										
41-027-20100	-85.4449	36.5915	3595		D&A	1020							614	-25			80					-513	96				
41-027-20103	-85.4157	36.5960	3618		D&A	1012					772	15															
41-027-20104	-85.5663	36.5741	3629		D&A	618																-563	0				
41-027-20105	-85.4714	36.6149	3631		D&A	639									441	-183	55		85	-10		-750	-124				
41-027-20107	-85.4864	36.4910	3679		D&A	730											278					-590	-15				
41-027-20108	-85.3254	36.5774	3681		D&A	698							596	-22					68	-8							
41-027-20111	-85.5184	36.6145	3725		D&A	595											98		100	5							
41-027-20112	-85.4740	36.5510	3728		Oil	560											120		160	-8		-766	-165				
41-027-20114	-85.4632	36.5031	3756		Oil	718											104		106	-89		-539	73				
41-027-20116	-85.5034	36.4907	3769		D&A	562											172										
41-027-20117	-85.5086	36.6055	3775		D&A	520											90					-704	-76				
41-027-20118	-85.5038	36.4526	3776		D&A	592											234					-659	-51				
41-027-20119	-85.4143	36.6033	3813		D&A	980							569	-35	553	-47	40					-679	-50				
41-027-20120	-85.4978	36.5403	3838		D&A	780													207	1							
41-027-20122	-85.4701	36.5494	3848		D&A	535											130		135	-29							
41-027-20123	-85.5450	36.5273	3888		Oil	540											192		200	4		-742	-106				
41-027-20127	-85.4624	36.6126	3926		D&A	964							608	-41	577	-48	46										
41-027-20128	-85.5303	36.4536	3937		D&A	561																-626	-47				
41-027-20129	-85.3400	36.5371	3942		D&A	925							651	1	627	26	71		107	22		-419	247				
41-027-20130	-85.5113	36.4868	3948		D&A	906							691	-60	671	3	27		28	-193		-692	-118				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20133	-85.4141	36.5926	3977		D&A	1051							629	17	609	3	97										
41-027-20134	-85.4427	36.6104	3997		D&A	961							635	2			61					-634	-19				
41-027-20135	-85.5681	36.5391	4011		Oil	731											159		189	10		-573	27				
41-027-20136	-85.4775	36.5505	4047		D&A	627											187					-572	27				
41-027-20137	-85.4246	36.6176	4077		D&A	1118													58	-90	-591	-651	-26				
41-027-20138	-85.4743	36.5728	4094		D&A	737							691	10	668	90			153	12		-655	-70				
41-027-20140	-85.4850	36.4772	4208		Oil	798							684	-63					144	-75							
41-027-20141	-85.4903	36.4766	4211		Oil	641																-634	-27				
41-027-20142	-85.4881	36.4816	4212		Oil	598											268		270	51							
41-027-20143	-85.4706	36.5513	4228		D&A	541													117	-46		-571	32				
41-027-20145	-85.5211	36.5702	4237		D&A	558											128		156	-10							
41-027-20146	-85.5282	36.5703	4238		D&A	629											-41		191	26							
41-027-20147	-85.4663	36.5051	4240		D&A	943											199		231	35		-545	64				
41-027-20148	-85.4618	36.5694	4242		D&A	683													123	-13							
41-027-20149	-85.4419	36.6144	4271		D&A	861							706	75			111					-643	-27				
41-027-20150	-85.4698	36.5394	4284		D&A	619											244		246	74		-520	92				
41-027-20152	-85.5183	36.5836	4309		D&A	810							703	29	673	197	120		122	-20	-130	-396	180				
41-027-20154	-85.4190	36.5145	4313		Oil	943							733	33	708	44	176										
41-027-20155	-85.4732	36.4776	4315		D&A	657											213		215	4							
41-027-20156	-85.4624	36.5369	4316		Oil	767											183		185	18							
41-027-20157	-85.4697	36.5280	4317		D&A	618													343	163	-695						
41-027-20161	-85.4164	36.5140	4332		D&A	1006							721	25	701	34	202		206	53		-712	-48				
41-027-20163	-85.4426	36.5062	4343		D&A	946							746	22					246	71							
41-027-20164	-85.6033	36.5603	4351		D&A	937							697	-10	665	64	21		23	-123	-479	-539	65				
41-027-20165	-85.5520	36.4613	4361		D&A	580											275										
41-027-20166	-85.4208	36.6169	4373		D&A	1120							965	362			370		402	250		-492	134				
41-027-20167	-85.5681	36.5354	4390		O&G	718							708	11			141		143	-38							
41-027-20168	-85.5366	36.5317	4395		Oil	539													169	-30		-598	38				
41-027-20169	-85.4728	36.5404	4399		D&A	576											191		193	18							
41-027-20172	-85.5344	36.5942	4406		D&A	665							655	-18					55	-73							
41-027-20175	-85.4700	36.6133	4411		D&A	662											43		76	-20							
41-027-20181	-85.4909	36.4749	4444		Oil	655											301		303	78							
41-027-20183R-1	-85.4988	36.5320	5050		D&A	719											255	312	259	51	-443	-493	101				
41-027-20184	-85.5536	36.5203	4448		D&A	578											68					-544	83				
41-027-20186	-85.4583	36.5139	4472		D&A	788							761	39	740	98	222		225	41	-652	-667	-47				
41-027-20187	-85.4747	36.5529	4473		D&A	618									318	-319			167	1		-636	-37				
41-027-20188	-85.5096	36.5703	4474		D&A	544									269	-221			131	-38		-562	9				
41-027-20189	-85.4887	36.4746	4478		Oil	685											254		257	34							
41-027-20194	-85.4948	36.5811	4484		D&A	551											43		45	-96		-561	8				
41-027-20196	-85.5053	36.5793	4486		D&A	540											130		132	-18							
41-027-20203	-85.3098	36.6035	4543		D&A	759							509	-60	489	-39						-516	161				
41-027-20204	-85.5539	36.5300	4567		D&A	757									557	83	307					-610	16				
41-027-20212	-85.5667	36.5009	4634		D&A	616																-638	-12				
41-027-20213	-85.2843	36.5419	4661		Oil	947											103		133	63							
41-027-20216	-85.4546	36.5596	4732		D&A	640											147		150	2							
41-027-20217	-85.5345	36.5536	4808		D&A	738											200		202	13		-591	17				
41-027-20219	-85.5092	36.5582	4827		D&A	553											234					-601	-17				
41-027-20221	-85.5162	36.4888	4835		Oil	581											236		239	23							
41-027-20222	-85.5237	36.5000	4869		Oil	542											94	115	97	-111		-634	-36				
41-027-20225	-85.5639	36.5068	4898		D&A	714											214					-534	90				
41-027-20228	-85.5415	36.5649	4917		D&A	642											162		164	-5		-637	-43				
41-027-20230	-85.4799	36.5339	4940		Oil	600																-526	82				
41-027-20231	-85.4752	36.5295	4942		D&A	553											137	161	141	-44		-493	115				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20232R-1	-85.4769	36.5460	6228		Oil	623											159		162	-15							
41-027-20233	-85.5295	36.5091	4989		D&A	909							729	182	459	-88			189	-17		-602	12				
41-027-20234	-85.4700	36.5366	4998		Oil	609											166	188	169	-5		-534	79				
41-027-20235	-85.4973	36.5789	5000		D&A	578											38		40	-106							
41-027-20236	-85.5799	36.4768	5013		D&A	626											196										
41-027-20237	-85.5381	36.5165	5014		D&A	536											176		178	-24							
41-027-20238	-85.5320	36.5114	5019		D&A	683											-7										
41-027-20239	-85.5446	36.4661	5032		D&A	882							757	3								-590	-6				
41-027-20241	-85.5422	36.4632	5077		D&A	627											277		257	84		-576	5				
41-027-20242	-85.4902	36.4934	5084		Oil	937							677	-50			157					-443	121				
41-027-20243	-85.4791	36.5494	5086		D&A	622													186	10		-611	-12				
41-027-20244	-85.5847	36.4920	5116		Oil	536											226		229	9		-682	-50				
41-027-20245	-85.5388	36.5993	5126		Oil	757											-103										
41-027-20246	-85.5413	36.5977	5127		D&A	726											-144		106	-18							
41-027-20247	-85.4668	36.4823	5141		Oil	632											218		221	16		-605	58				
41-027-20248	-85.5298	36.5011	5149		D&A	576											208		210	5		-578	31				
41-027-20251	-85.5002	36.5334	5183		D&A	768											209	279	213	4	-422	-532	65				
41-027-20252	-85.6141	36.5765	5193		D&A	964							684	-10	664	20	130		132	-7	-501	-569	72				
41-027-20253	-85.5297	36.4984	5199		D&A	557											272		274	69							
41-027-20254	-85.5507	36.4773	5204		D&A	539											89		114	-62	-564	-627	-27				
41-027-20255	-85.5390	36.5974	5217		D&A	718											-142										
41-027-20256	-85.5331	36.5608	5231		D&A	594													169	-9		-611	-15				
41-027-20257R-1	-85.5003	36.5307	6758		D&A	682											238		241	32							
41-027-20258	-85.5363	36.5585	5279		D&A	667											155		157	-23							
41-027-20260R-1	-85.6410	36.5073	5745		D&A	542											217				-525	-602	-10				
41-027-20261	-85.4821	36.4951	5282		D&A	958											256		260	52							
41-027-20263	-85.6406	36.5008	5291		D&A	539											231		233	11	-559	-579	7				
41-027-20264	-85.4625	36.5489	5294		D&A	701											201		204	48		-663	-53				
41-027-20266	-85.4519	36.5666	5306		Oil	999											137		139	-2							
41-027-20267	-85.4876	36.4946	5307		Oil	929											245		247	36							
41-027-20269	-85.4570	36.6083	5323		Gas	659											179				-483	-611	-3				
41-027-20270	-85.4626	36.5507	5326		D&A	661											171		181	26							
41-027-20271	-85.3289	36.5643	5330		D&A	863							588	-41	563	-7											
41-027-20272	-85.4617	36.5524	5342		D&A	643											136					-510	98				
41-027-20273	-85.2976	36.5540	5345		D&A	887							623	-2	597	28	73		77	9		-561	110				
41-027-20274R-1	-85.5898	36.4850	5687		D&A	631											291					-675	-68				
41-027-20276	-85.5515	36.6097	5352		D&A	872							645	-31			117										
41-027-20277	-85.4583	36.6054	5358		Gas	838					682	-101	568	-80	432	-192	56					-542	66				
41-027-20284R-1	-85.5905	36.5332	6205		D&A	577											177					-643	-55				
41-027-20285	-85.5334	36.5696	5403		D&A	539											171		173	9		-548	34				
41-027-20286	-85.4594	36.5686	5404		D&A	1405							691	20	669	52	168		168	31		-652	-51				
41-027-20287	-85.4609	36.5048	5406		D&A	941									353	-272	166		203	10		-567	49				
41-027-20288	-85.5031	36.4934	5408		D&A	640											110		240	20		-523	32				
41-027-20289	-85.5108	36.5872	5414		D&A	639											214					-643	-60				
41-027-20290	-85.4485	36.5647	5419		D&A	949											114		116	-27		-629	-21				
41-027-20292	-85.4599	36.5856	5440		D&A	1018					778	-12	664	8	639	25	87		90	-30	-638	-648	-50				
41-027-20293	-85.4866	36.5024	5441		D&A	638											219		221	15	-346	-446	131				
41-027-20294	-85.4542	36.5700	5442		D&A	762							674	9	648	24	146		148	11	-471	-541	63				
41-027-20295	-85.6043	36.5021	5445		Oil	586											224					-623	-11				
41-027-20297	-85.5500	36.6138	5476		D&A	578											128				-634	-644	-13				
41-027-20298	-85.5756	36.5013	4947		D&A	543											183					-686	-62				
41-027-20299	-85.5289	36.4935	5508		D&A	647									507	-83	257		267	63							
41-027-20300	-85.4181	36.5189	5511		D&A	921											132		161	3	-533	-548	102				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20301	-85.4111	36.5393	5512		D&A	1121					846	37	684	8			121		162	5		-684	-67				
41-027-20304	-85.5554	36.5049	5528		D&A	824											262		264	63		-562	65				
41-027-20305	-85.4794	36.4694	5532		D&A	939							799	44	774	52	251		254	34		-621	58				
41-027-20306	-85.5871	36.5370	5543		D&A	637											173					-709	-128				
41-027-20307	-85.5531	36.5380	5546		D&A	538																-478	145				
41-027-20308	-85.4266	36.5884	5549		D&A	1004													72	-39		-612	8				
41-027-20310	-85.4350	36.5718	5560		D&A	866													306	170	-281	-506	108				
41-027-20312	-85.5429	36.5494	5577		D&A	937															-450	-594	25				
41-027-20313	-85.4456	36.5768	5641		D&A	1006							646	1					61	-68							
41-027-20314	-85.4440	36.5844	5647		D&A	1017											35		49	-70	-656	-673	-65				
41-027-20315	-85.5553	36.5296	5649		D&A	638											223										
41-027-20316	-85.5551	36.5460	5650		Gas	609											179					-646	-37				
41-027-20317	-85.4354	36.5744	5653		D&A	951							621	-19					81	-51							
41-027-20322	-85.5236	36.4335	5677		D&A	662													282	36		-547	34				
41-027-20324	-85.4593	36.6026	5716		D&A	1002					842	58	685	35	667	45	175		177	69		-559	48				
41-027-20325	-85.5105	36.4939	5717		D&A	579											254				-699	-707	-137				
41-027-20326	-85.4801	36.4889	5718		D&A	898							759	26	736	56	208		211	1		-559	37				
41-027-20327	-85.4839	36.4859	5719		D&A	942									777	73	250		252	38							
41-027-20329R-1	-85.4453	36.5689	6285		D&A	1002					934	128	658	-1			133		136	-3							
41-027-20330	-85.5965	36.5442	5742		D&A	618											168				-573	-583	8				
41-027-20331	-85.4316	36.5959	5767		D&A	1044							654	29			124		134	19							
41-027-20332	-85.4581	36.5025	5768		D&A	902							782	57			182					-407	213				
41-027-20336	-85.6030	36.5006	5879		D&A	581											223										
41-027-20337	-85.5539	36.5821	5880		D&A	601									158	-302					-495	-509	62				
41-027-20338	-85.4286	36.5956	5888		D&A	1041									691	76	86				-542	-562	58				
41-027-20339	-85.6235	36.5018	5896		D&A	596											220		221	4		-504	98				
41-027-20340	-85.6058	36.5142	5910		D&A	567											151		152	-41		-591	17				
41-027-20341	-85.5926	36.5326	5930		D&A	658											203		204	33							
41-027-20342	-85.6330	36.5123	5937		D&A	577											188		192	-12	-647	-697	-93				
41-027-20343	-85.6218	36.5041	5968		D&A	619											200		201	-12							
41-027-20344	-85.5427	36.4972	5972		D&A	643											271		273	76							
41-027-20345	-85.4937	36.5867	5973		Oil	621													246	115							
41-027-20346	-85.4741	36.4715	5977		Gas	601											232		237	22		-572	121				
41-027-20349	-85.5097	36.5274	5983		Gas	648											182		186	-27							
41-027-20350	-85.5411	36.4906	5990		D&A	632											205		207	13		-661	-39				
41-027-20351	-85.5440	36.4920	5991		D&A	559											157		159	-33	-738	-792	-166				
41-027-20353	-85.5876	36.5288	6006		D&A	561											163		164	-13		-781	-191				
41-027-20354	-85.3529	36.5669	6035		D&A	903											103										
41-027-20355	-85.5866	36.5240	6022		D&A	544											124		125	-57							
41-027-20356	-85.5629	36.5346	6052		D&A	672											240		242	57							
41-027-20357	-85.5923	36.5353	6053		D&A	581											203		206	38		-543	45				
41-027-20358	-85.6003	36.5378	6060		D&A	618											183		185	20							
41-027-20360	-85.4599	36.5484	6074		Oil	569											152		154	-4							
41-027-20361	-85.4531	36.5756	6080		Gas	684							649	-6	629	6	106										
41-027-20362	-85.5078	36.6071	6089		D&A	522											64	81	68	-35							
41-027-20364	-85.5303	36.6082	6091		D&A	611											53		56	-51							
41-027-20366	-85.5009	36.6119	6093		D&A	548											43	62	46	-50							
41-027-20367	-85.5024	36.6073	6094		D&A	539											64	79	66	-36		-775	-141				
41-027-20369	-85.5146	36.5118	6096		D&A	768											276		278	68							
41-027-20370	-85.4831	36.5051	6101		D&A	677											210		211	8							
41-027-20371	-85.4512	36.5773	6102		D&A	719							664	13	639	12	128		129	1							
41-027-20372	-85.4528	36.5737	6110		D&A	694									602	-21	91		93	-40							
41-027-20373	-85.4531	36.5650	6111		Oil	966							630	-42	608	-26	120		124	-18							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20374	-85.4508	36.5680	6112		D&A	997							680	15	662	28	149		152	13							
41-027-20375	-85.4552	36.5761	6113		Gas	652											119		120	-10		-606	-6				
41-027-20376	-85.4592	36.5503	6114		Oil	587											176		178	22		-716	-105				
41-027-20377	-85.3323	36.5598	6119		D&A	811							475	-158			38					-661	-18				
41-027-20379	-85.4897	36.4751	6133		Oil	898							763	15	743	-4	441		443	219							
41-027-20380	-85.4619	36.5471	6136		D&A	567											127		157	-1	-600	-605	7				
41-027-20381	-85.4640	36.5467	6137		D&A	582											106		137	-22	-567	-574	36				
41-027-20382	-85.5163	36.4798	6138		D&A	938							791	42	771	105	227		233	14							
41-027-20384	-85.4538	36.5634	6144		D&A	852					832	30	592	-83	563	-73	77		80	-64		-579	28				
41-027-20385	-85.4681	36.5495	6167		D&A	619											165		167	5	-623	-703	-97				
41-027-20386	-85.4561	36.5654	6176		Oil	754							674	1	654	25			156	15							
41-027-20387	-85.2904	36.5454	6191		D&A	884					834	47	644	16	614	37	59		59	-11		-597	94				
41-027-20389	-85.4994	36.5753	6201		D&A	533											125		128	-26							
41-027-20390	-85.4557	36.5638	6203		D&A	718							668	-7	648	16	153		155	12		-670	-64				
41-027-20391	-85.4623	36.5677	6212		Gas	638											130		133	-5		-647	-48				
41-027-20392	-85.4562	36.5674	6213		Gas	738							679	9	658	33	164										
41-027-20393	-85.4567	36.5888	6214		D&A	992							632	-20	607	-13	42		67	-49							
41-027-20394	-85.4809	36.4767	6218		D&A	596											219		221	4							
41-027-20396	-85.5172	36.4662	6229		D&A	577											-68		-63	-285		-605	-16				
41-027-20397	-85.4355	36.5956	6233		D&A	1020					735	-54	626	-3	604	-16	101		103	-11	-556						
41-027-20399	-85.4961	36.5729	6235		D&A	643											167		171	14		-744	-178				
41-027-20402	-85.4836	36.4813	6251		D&A	638											238		240	24							
41-027-20403	-85.4175	36.5961	6256		Oil	1006							636	23	611	4	94		96	-18							
41-027-20404	-85.5310	36.4712	6262		D&A	633													-97	-294	-602	-682	-91				
41-027-20406	-85.5709	36.5022	6271		D&A	558											182		184	-17	-470						
41-027-20409	-85.4619	36.5344	6297		D&A	776							686	-30	651	-35	132		134	-35	-607	-652	-34				
41-027-20410	-85.5057	36.4905	6298		D&A	559											251										
41-027-20411	-85.4614	36.5549	6308		D&A	680									670	28	-157		-155	-306							
41-027-20412	-85.4580	36.5516	6311		D&A	592													163	8	-536	-571	40				
41-027-20414	-85.4407	36.6026	6323		D&A	996							616	-16	576	-47	16		20	-97							
41-027-20415	-85.4344	36.5985	6324		Oil	1036							631	4	616	-3						-596	21				
41-027-20419	-85.4789	36.5519	6344		D&A	645											185		187	14		-611	-14				
41-027-20420	-85.4377	36.5983	6346		D&A	1018							668	38	653	31	85		87	-29		-687	-72				
41-027-20421	-85.5243	36.5018	6352		D&A	694											214	267	254	46	-564	-614	-14				
41-027-20422	-85.3980	36.5827	6360		Oil	973							643	31	618	20	111		113	7							
41-027-20424	-85.5788	36.4892	6364		Oil	624									577	79	124					-612	11				
41-027-20425	-85.4466	36.5858	6366		D&A	978					893	96	624	-18	603	-26	53		53	-65	-527	-585	22				
41-027-20430	-85.4724	36.5384	6393		D&A	609													180	4	-597	-618	-7				
41-027-20431	-85.4868	36.5330	6440		D&A	556											186		188	-7							
41-027-20432	-85.5570	36.5116	6463		D&A	539											178		178	-20							
41-027-20433	-85.5523	36.5198	6464		D&A	629											194		199	4							
41-027-20435	-85.4043	36.5845	6475		D&A	983							667	54	646	42	124		138	30		-518	125				
41-027-20436	-85.4324	36.5933	6486		D&A	1036					771	-14	656	29	636	17	136		136	24							
41-027-20438	-85.4653	36.5382	6507		D&A	591											164		166	-2							
41-027-20439	-85.4592	36.4956	6525		D&A	676											178		180	-14							
41-027-20441	-85.4901	36.4470	6598		D&A	623											247		251	13							
41-027-20443	-85.4585	36.4931	6653		D&A	658									573	-9	142		173	-22							
41-027-20444	-85.4779	36.6108	6737		D&A	661													81	-17							
41-027-20445	-85.5753	36.5128	6740		D&A	536											201		206	12	-534	-774	-160				
41-027-20446	-85.5765	36.5114	6759		D&A	531									371	-112	166		171	-24							
41-027-20447	-85.4729	36.4736	6760		D&A	602													234	21							
41-027-20448	-85.5727	36.5149	6779		D&A	538											203		208	15							
41-027-20450R-1	-85.5724	36.5131	8060		D&A	527									367	-113	190		192	-2							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20451	-85.5697	36.5133	6825		D&A	534											169		174	-20		-597	20				
41-027-20452	-85.5533	36.5150	6848		D&A	537									528	32	137		155	-42		-631	-4				
41-027-20454	-85.5949	36.5082	6850		D&A	579											244		249	53							
41-027-20455	-85.5328	36.5221	6852		D&A	552							241	-193			152										
41-027-20456	-85.5167	36.5153	6867		D&A	649											176		184	-26	-586						
41-027-20457	-85.5759	36.5145	6868		D&A	607											212		217	25							
41-027-20458	-85.5708	36.5156	6869		D&A	567											142		147	-46		-496	119				
41-027-20459	-85.4739	36.4814	6882		D&A	627											245		247	37							
41-027-20460	-85.5581	36.5207	6902		D&A	617											212		217	24	-577	-662	-39				
41-027-20463	-85.5374	36.5393	6938		D&A	633													188	-10		-650	-18				
41-027-20464	-85.4313	36.5996	6941		D&A	1104					834	53	634	10	604	-12	100		101	-18							
41-027-20465	-85.4779	36.5094	6949		D&A	961							581	-142	561	-126	26		31	-167							
41-027-20466	-85.5730	36.5164	6950		D&A	544									514	35	189		194	2							
41-027-20467	-85.5505	36.5018	6960		D&A	644											183		186	-12	-602						
41-027-20468	-85.5600	36.5151	6961		D&A	581									541	51	193		196	1							
41-027-20469	-85.4670	36.4786	6978		D&A	634											232		233	26		-646	38				
41-027-20471	-85.4496	36.5619	6999		Oil	753							693	19			173		176	29		-583	26				
41-027-20472	-85.4353	36.6019	7001		D&A	1023					733	-52	613	-14	592	-27	73		78	-42		-536	81				
41-027-20473	-85.4168	36.5958	7049		D&A	1012							630	18	610	4	86		92	-21							
41-027-20474	-85.5352	36.5319	7050		D&A	538											148		178	-22							
41-027-20475	-85.5720	36.5179	7053		D&A	585											150		155	-36	-651	-686	-74				
41-027-20476	-85.5728	36.5130	7054		Oil	529											184	249	189	-5							
41-027-20477	-85.4541	36.5549	7060		Oil	688							685	-2	674	25	166		169	16							
41-027-20479	-85.4763	36.5981	7079		D&A	669							638	-30	621	18						-566	41				
41-027-20480	-85.4775	36.5956	7080		D&A	684							646	-24	626	27			112	-2							
41-027-20481	-85.4751	36.6006	7096		D&A	661							653	-12	627	20	140					-560	50				
41-027-20482	-85.5321	36.5232	7112		D&A	564											208		212	9							
41-027-20483	-85.4779	36.6020	7125		D&A	678							647	-20	630	24											
41-027-20485	-85.5750	36.5091	7165		D&A	544													137	-60							
41-027-20486	-85.4354	36.5976	7166		D&A	1049					729	-58	609	-19	587	-33	82		84	-32	-582	-622	-6				
41-027-20487	-85.3406	36.5386	7174		D&A	922							647	-2	631	31	47		52	-33							
41-027-20488	-85.4924	36.5765	7196		D&A	536											111		146	-2	-482	-602	-36				
41-027-20489	-85.5030	36.5346	7199		D&A	759									736	102	234		224	12							
41-027-20493	-85.4852	36.5586	7346		D&A	785							763	84	744	136						-447	140				
41-027-20494	-85.4619	36.5018	7356		Oil	720									719	99	200				-614	-650	-36				
41-027-20495	-85.5627	36.5156	7360		D&A	583					537	-149			165	-322					-620	-660	-40				
41-027-20496	-85.5644	36.5143	7361		D&A	705					675	-13			297	-190											
41-027-20497	-85.5366	36.5298	7366		D&A	531											174	184	178	-22	-706	-766	-131				
41-027-20500	-85.4580	36.4911	7398		D&A	658									638	64	138		169	-26							
41-027-20503	-85.5670	36.5176	7418		D&A	591											136		141	-51	-543	-615	1				
41-027-20504	-85.5427	36.4580	7427		D&A	598											236		238	58							
41-027-20507	-85.5753	36.5191	7477		D&A	560											198		200	11	-500	-585	23				
41-027-20508	-85.5202	36.6150	7504		D&A	623											119		123	28	-521	-598	49				
41-027-20509	-85.4139	36.5938	7506		D&A	1018							644	33	624	18	144		146	37	-508	-587	42				
41-027-20511	-85.3383	36.5344	7509		D&A	940							660	8	640	38	70		80	-6	-517	-590	75				
41-027-20512	-85.3427	36.5335	7510		D&A	959					779	-28	626	-27	600	-7	58		76	-12							
41-027-20513	-85.2962	36.5556	7536		D&A	871							631	8	611	44	8		18	-50							
41-027-20514	-85.3368	36.5387	7538		D&A	945					725	-83	642	-7	621	25	95		113	30							
41-027-20516	-85.5859	36.5049	7611		D&A	580											163		166	-33	-509	-571	47				
41-027-20517	-85.5732	36.5149	7615		D&A	531											204		207	14	-399	-499	114				
41-027-20518	-85.6116	36.5116	7620		D&A	650											220		224	26	-563	-605	4				
41-027-20519	-85.5892	36.5033	7623		D&A	552											185		188	-14	-600	-652	-34				
41-027-20520	-85.5854	36.5010	7627		D&A	568											196		199	-7	-495						

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-027-20521	-85.5836	36.5021	7631		D&A	640											190		192	-11	-643	-707	-85				
41-027-20523	-85.5748	36.5125	7707		D&A	545									505	27	195		200	6							
41-027-20524	-85.4706	36.5519	7708		D&A	559											120		122	-40							
41-027-20525	-85.5581	36.5294	7773		D&A	663									645	170	203		208	19							
41-027-20526	-85.4531	36.5530	7794		Oil	621											200		202	46	-471	-478	134				
41-027-20527	-85.5021	36.4814	7827		Oil	611											255		261	33	-722	-742	-173				
41-027-20528	-85.6245	36.5637	7989		D&A	880							697	-14	622	-51	135		137	-6		-782	-123				
41-027-20529	-85.4033	36.5869	8030		D&A	715							665	55	640	39	116		121	16		-769	-125				
41-027-20530	-85.5225	36.4981	8061		O&G	531											267	286	270	61		-742	-147				
41-027-20531	-85.4546	36.6109	8077		D&A	658							638	-5	618	-10	68		70	-38	-660	-709	-100				
41-027-20532	-85.3422	36.5365	8105		D&A	918							638	-13	615	11	83		88	1	-540	-628	41				
41-027-20533	-85.4666	36.4804	8155		D&A	606											191		196	-10	-661	-702	-27				
41-027-20534	-85.4642	36.4859	8186		D&A	622											154		157	-45							
41-027-20535	-85.5240	36.4959	8206		D&A	579											279		282	74	-576	-646	-51				
41-027-20537	-85.3117	36.5328	8421		D&A	920							628	-18	602	14	68		71	-10	-700	-735	-58				
41-027-20538	-85.3121	36.5513	8445		D&A	716							602	-31	572	-1	29		33	-39	-566	-576	84				
41-027-20539	-85.3123	36.5694	8448		D&A	960							608	-11	586	27	23		25	-45	-712	-743	-101				
41-027-20541	-85.3261	36.5607	8506		D&A	760							640	10	610	39	68		71	-4	-513	-573	66				
41-027-20542	-85.2779	36.5696	8522		D&A	878					728	-14	601	-6	578	30	50	78	54	-5		-563	117				
41-027-20544	-85.4635	36.4889	8577		D&A	640											166		170	-31	-480	-510	123				
41-027-20546	-85.4365	36.5951	8603		Oil	1065							665	35	639	18	150		153	39	-702	-759	-144				
41-027-20547	-85.2853	36.5757	8612		D&A	909							634	28	614	72	64		66	7							
41-027-20549	-85.6310	36.5973	8687		D&A	1014							689	9	658	-22	119		122	-22	-625	-717	-42				
41-027-20550	-85.3213	36.5627	8694		D&A	900							628	1	606	39	75		78	4	-600	-602	40				
41-027-20551	-85.4684	36.5369	8702		D&A	679											186		201	29	-759	-804	-190				
41-027-20552	-85.3279	36.5619	8709		D&A	890							626	-4	604	33	70		74	-2							
41-027-20553	-85.4350	36.5946	8710		D&A	1067							659	31	638	18	142		145	31	-635	-691	-75				
41-027-20554	-85.4697	36.5375	8712		D&A	627											198		202	29							
41-027-20555	-85.4910	36.4909	8720		D&A	890							773	40	752	18	242		244	29	-577	-607	-41				
41-027-20556	-85.3268	36.5625	8733		D&A	920							524	-105	591	21	52		56	-19		-553	85				
41-027-20557	-85.3284	36.5571	8734		D&A	850							612	-22	590	15	78		82	7		-575	64				
41-027-20561	-85.3299	36.5635	8765		D&A	915							640	10	618	47			101	25		-731	-93				
41-027-20563	-85.4367	36.5962	8813		Oil	1050							646	16	628	7	147		150	35							
41-027-20564	-85.4417	36.5979	8846		D&A	1069					767	-25	645	11	623	-2	79	101	83	-32	-325	-365	248				
41-027-20566	-85.4735	36.5591	8872		D&A	865							545	-147	465	-155	97		99	-58							
41-027-20567	-85.4386	36.5953	8946		D&A	1105							671	39	648	25	155		158	44		-343	271				
41-027-20568	-85.5684	36.5380	8976		Oil	862							747	52	727	252	212		214	34		-311	290				
41-027-20570	-85.5013	36.5624	9003		D&A	853							733	118	714	168	180		183	2	-266	-310	265				
41-027-20572	-85.4916	36.4814	9204		D&A	600											256		260	39							
41-027-20573	-85.4872	36.4769	9205		D&A	885							783	36	761	26	244		247	26		-316	302				
41-027-20574	-85.4861	36.4783	9210		D&A	905							778	32	761	33	231		234	14		-349	268				
41-027-20575	-85.3394	36.5346	9294		D&A	940							650	-2	635	32	140	165	142	55		-238	428				
41-031-20001	-85.9231	35.3948	1470		D&A	1059							833	1			477	478	458	3	-325	-397	124		-3996		
41-031-20002	-85.9286	35.5141	2709		Gas	1123							890	30	853	44	537		540	53		-276	45				
41-031-20003	-85.9411	35.5226	2736		Gas	1125					981	-2	869	7	832	26	489					-327	-8				
41-031-20004	-85.9183	35.5243	2737		Gas	1101					981	-3	876	21	841	24	499		501	27							
41-031-20005	-85.9392	35.5042	2750		D&A	1130					1016	27	874	13	834	33	536		540	41		-458	-132				
41-031-20006	-85.9166	35.5055	2751		Gas	1140					1010	24	872	16								-384	-65				
41-031-20007	-85.9126	35.5016	2800		Gas	1084					1014	28	879	25	841	44	536		538	62		-322	30				
41-031-20008	-85.9081	35.5341	2801		Gas	1099					989	11	853	5			487					-336	-91				
41-031-20010	-85.9214	35.5022	2803		Gas	1190					992	5	872	14	838	39						-341	-2				
41-031-20011	-85.9350	35.5335	2805		Gas	1140					970	-13	838	-22	798	-11	453		455	-30		-372	-53				
41-031-20012	-85.9034	35.5041	2806		Gas	1040					980	-5	870	19			534					-275	56				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-031-20013	-85.9416	35.5152	2807		Gas	1133					1017	31	875	13			529		505	9	-279	-313	8				
41-031-20014	-85.9493	35.5269	2809		Gas	1140					1012	24	859	-5			494		468	-31	-323	-367	-50				
41-031-20015	-85.9540	35.5272	2869		Gas	1122							858	-7			502		466	-37		-374	-58				
41-031-20016	-85.9616	35.5357	2870		Gas	1126					972	-29	830	-38			474		458	-52	-299	-347	-37				
41-031-20018	-85.8909	35.4953	2873		Gas	1162					1000	38	848	5			516				-294	-341	132				
41-031-20019	-85.9466	35.5156	2880		Gas	1098					986	-2	858	-4	819	18	508					-355	-34				
41-031-20020	-85.9282	35.4958	2900		Gas	1121					989	-1	847	-10			496		471	-23	-279	-325	41				
41-031-20021	-85.9485	35.5343	2901		Gas	1098					978	-11	843	-21	805	-3	478		454	-43	-173	-260	55				
41-031-20022	-85.9132	35.4942	2921		Gas	1137					1005	18	857	6	767	-19	515		517	38		-315	103				
41-031-20023	-85.9317	35.5252	2926		D&A	1119					1063	80	869	9	830	20	516		521	36		-339	-18				
41-031-20024	-85.9618	35.5055	2963		D&A	1103							844	-19	804	-8	477		481	-28							
41-031-20025	-85.9055	35.5190	2972		Gas	1070					972	-13	839	-10	802	-18	468					-236	43				
41-031-20026	-85.9158	35.5128	2973		D&A	1095							859	4	816	2	499		503	27		-254	55				
41-031-20027	-85.9619	35.4988	2994		D&A	1121					975	-30	862	4	826	12	499		503	-7	-255	-315	24				
41-031-20028	-85.9505	35.5196	2995		Gas	1093							857	-6			499		473	-28		-302	17				
41-031-20031	-85.9722	35.5254	3110		D&A	1069					997	-10	861	-8	825	-4	514		518	1	-346	-396	-95				
41-031-20032	-85.9554	35.4835	3112		D&A	1131					1010	5	872	27	839	28	540		544	35	-177						
41-031-20033	-85.9407	35.4929	3113		Gas	1128					1120	127	848	-6	814	16	535		519	16		-262	107				
41-031-20035	-85.9217	35.5317	3352		D&A	1100					1001	20	869	13	827	16	500	522	504	32	-248	-292	11				
41-031-20036	-85.9773	35.5222	3353		Gas	1085											566		568	48	-240	-266	14				
41-031-20041	-85.9835	35.5303	3364		Gas	1094					1044	25	903	20	869	22	563		566	38	-193	-355	-105				
41-031-20048	-85.9717	35.5501	3554		Gas	1091					1047	31	882	7	845	9	555		558	34	-325						
41-031-20049	-86.0062	35.4659	3556		D&A	1105					1023	-3	901	15	866	7	539				-222	-243	5				
41-031-20050	-85.9783	35.5364	3610		D&A	1078							843	-36					503	-23	-265	-313	-42				
41-031-20051	-85.9737	35.5361	3611		D&A	1084							834	-40	794	-41	534				-235	-354	-65				
41-031-20052	-85.9183	35.5183	3672		D&A	1123							893	38	853	33	523				-165	-268	37				
41-031-20053	-86.0013	35.5097	3819		Gas	1081					1035	-1	909	21	873	3	546		549	19	-265	-329	-163				
41-031-20054	-85.9687	35.5473	3908		D&A	1076					996	-16	886	13	844	12	556				27	-11	290				
41-031-20055	-85.9727	35.5180	3909		Gas	1088							878	10			568				-293						
41-031-20056	-85.9513	35.5130	4056		Gas	1099					985	-7	853	-10	818	19	499		501	-2	-299	-345	-24				
41-031-20057	-85.9702	35.4665	4057		D&A	1101					999	-5	821	-3	783	-45	469				-339	-388	-8				
41-031-20058	-85.9861	35.5221	4095		Gas	1103					1034	17	898	16			567				-200	-329	-89				
41-031-20059	-85.9973	35.5289	4096		Gas	1105					1023	-10	892	-5			533				-326						
41-031-20060R-1	-85.9776	35.5481	5683		Gas	1068					953	-68	860	-22	821	-20	492		495	-35	-260	-387	-118				
41-031-20065R-1	-86.0106	35.5027	4705		Gas	1090					1040	-4	912	22	873	1	547		549	17	143	98	222				
41-031-20066R-1	-86.0321	35.5083	5684		D&A	1116					1056	-7	918	24	882	0	536		538	-12							
41-031-20069	-86.1764	35.6294	5145		D&A	1227											825		807	-21							
41-031-20071	-85.9364	35.4964	5748		D&A	1125					989	-2	845	-12	812	14	507		509	9							
41-031-20072	-86.0185	35.5108	5749		D&A	1068					1018	-35	886	-14	846	-31	501		503	-37							
41-031-20073	-85.9672	35.5283	5759		Gas	1091					970	-34	835	-33	798	-25	468		470	-44							
41-031-20074	-85.9684	35.5212	5760		D&A	1070					992	-11	860	-7	824	2	520		522	8							
41-031-20075	-85.9565	35.5090	5764		Gas	1102					866	-132	830	-33	577	-226	520		520	14							
41-031-20076	-85.9447	35.5299	5765		Gas	1098					973	-11	837	-26	801	-6	460		462	-33							
41-031-20080	-86.2249	35.6443	7147		D&A	918											883										
41-035-00007R-1	-85.0113	35.9840	3771		D&A	1798					214	-5	67	11	40	30											
41-035-20001	-84.9553	36.0106	466		D&A	1795					122	-18	-34	-14													
41-035-20005	-85.0201	36.1142	856		D&A	1845			1023	-15	435	-36	287	-15								-1075	-98				
41-035-20007	-85.1690	36.0945	928		D&A	1943			1315	26	643	32	477	-10													
41-035-20008	-85.1757	35.8297	1032		D&A	2028	1420	-1	1098	14	418	3	244	-16													
41-035-20009	-85.1704	35.9606	1033		D&A	1841			1161	-6	571	-7	375	5													
41-035-20010	-85.0386	35.9585	1065		D&A	1810	1166	0	858	1	230	-36	82	-2													
41-035-20012	-84.9995	36.0088	1085		D&A	1761	1139	-5																			
41-035-20013	-85.1221	35.7814	1105		D&A	1984			752	-50	204	-8	28	-18													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-035-20014	-85.1371	35.8924	1124		D&A	1961			1071	5	469	3	301	-7													
41-035-20015	-85.1441	36.0691	1147		D&A	1940							444	17					-256	24							
41-035-20016	-85.1281	36.1205	1214		D&A	1883	1550	14	1248	-20																	
41-035-20017	-85.0256	35.9877	1447		Gas	1807					297	33	107	11													
41-035-20018	-85.0518	35.9674	1458		D&A	1817			907	18																	
41-035-20019	-85.0293	35.9861	1464		D&A	1761																					
41-035-20020	-84.9658	36.0706	1466		D&A	1677					217	-3	52	-52													
41-035-20021	-85.0140	36.0569	1493		D&A	1775			991	53	407	26	221	3													
41-035-20022	-85.0621	35.8848	1494		D&A	1869			799	-18	175	-36	33	20													
41-035-20023	-85.1303	36.0418	1506		D&A	1885	1462	4	1179	4	577	38	373	6													
41-035-20024	-85.0218	35.9857	1527		Gas	1804					224	-25	76	-8	55	6											
41-035-20025	-85.0207	35.9693	1545		Oil	1785			860	55	227	6	55	9													
41-035-20027	-85.0292	35.9901	1564		D&A	1786																					
41-035-20028	-84.9996	35.7665	1707		D&A	1156																			-6782		-7772
41-035-20029	-84.9049	35.8028	1729		D&A	1765							-185	-6	-219	26											
41-035-20030	-85.1744	35.9604	1736		D&A	1851			1171	-1	575	-6	376	2													
41-035-20031	-85.2119	36.0026	1775		D&A	1940	1580	39	1291	28	696	40	492	52													
41-035-20033	-85.0360	36.0657	2311		D&A	1853			1052	15	513	69	309	33													
41-035-20034	-85.0941	36.0027	2358		D&A	1845			1105	28	569	79	375	19													
41-035-20036	-85.1143	36.0258	2387		D&A	1840	1424	17	1118	-10	504	9	320	-38													
41-035-20038	-85.1432	36.0703	2530		D&A	1940																					
41-035-20040	-84.9983	36.0988	2808		Gas	1838			1340	284	432	46	270	3													
41-035-20041	-84.8199	35.9407	2908		D&A	2338							786	-73	712	-13	-140	-144	-184	-8	-1258	-1312	86	-4612	-5782	-6782	-7744
41-035-20042	-84.8791	35.8121	3470		D&A	1580			192	-54	-448	65	-512	-118													
41-035-20043	-84.9439	35.9622	3542		Oil	1695					45	-5															
41-035-20044	-85.0345	36.0978	3548		O&G	1824	1054	-24			494	23	318	3	266	27	-434		-430	-2							
41-035-20045	-84.9313	35.9372	3599		D&A	1775					-93	-82	-233	-194	-284	-109			-1055	-122							
41-035-20046	-84.8118	35.9393	3622		D&A	2590					1170	142	985	92			-675				-1712	-1764	-378				
41-035-20047	-85.0291	35.9883	3646		Oil	1787			737	-78																	
41-035-20049	-85.0361	35.9221	3717		O&G	1885			785	-36	391	164															
41-035-20051	-85.0294	35.9852	3727		Oil	1758			708	-110																	
41-035-20053	-85.0321	35.9244	3812		Gas	1860			786	-25	160	-62	-2	-7	-30	27											
41-035-20055	-85.0813	35.9450	3858		D&A	1802			927	-46	399	27	250	52	224	25											
41-035-20056	-84.9410	35.9639	3860		Oil	1678			638	25	36	-15															
41-035-20059	-84.9333	35.9671	3885		D&A	1767					407	352															
41-035-20060	-85.0321	35.9980	3889		D&A	1760			820	-13	254	-44	100	-28													
41-035-20063	-84.9522	35.9684	3915		D&A	1818			478	-151	70	-7	-86	13	-128	36	-891	-840	-887	-24							
41-035-20064	-85.0684	35.9333	3916		D&A	1800			918	-9	292	-24	146	20								-986	305				
41-035-20065	-85.0213	35.9289	3936		D&A	1860	978	-33	782	-1												-933	45				
41-035-20067	-84.9194	35.9580	3960		Oil	1780			542	-13												-1667	-188				
41-035-20068	-84.7374	35.9737	2703		D&A	2036	1578	87	1336	306	614	-27	544	462	102	-56	-413	-359	-410	-28							
41-035-20069	-84.9606	35.9629	3988		D&A	1826			616	-16			-85	14													
41-035-20070	-85.0268	35.9680	3992		D&A	1770			828	4																	
41-035-20072	-85.0463	35.9513	4035		D&A	1768			864	-7																	
41-035-20075	-85.1201	35.8789	4111		D&A	1841			1001	-12	464	36	291	33													
41-035-20076	-85.0811	36.0915	4115		D&A	1848			1148	-11	510	-6	352	-3													
41-035-20078	-84.8074	35.9327	4188		D&A	2374					1084	75	914	52			43	31	-8	258	-978	-998	351				
41-035-20079	-84.8066	35.9463	4204		D&A	2277							937	88													
41-035-20081	-85.0296	35.9222	4223		Gas	1843			795	-5	168	-50	13	23	-19	56	-789	-739	-785	-1							
41-035-20082	-85.0810	36.1268	4245		Oil	1841			1193	4	551	8															
41-035-20083	-85.1024	36.1304	4246		Oil	1884			1232	5	582	10	439	-3													
41-035-20084	-84.8313	35.9216	4247		D&A	1835							935	178													
41-035-20085	-84.7725	36.0120	4256		D&A	1756			264	-35	-364	-365	-506	-12	-552	-211											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-035-20089R-1	-85.0266	35.9847	5637		O&G	1792			870	61																	
41-035-20090	-85.0273	36.0292	4348		D&A	1795			943	12																	
41-035-20092	-85.1905	36.0851	4376		D&A	1943					543	-48	477	-27													
41-035-20093	-85.0650	35.9316	4449		Oil	1848			958	42																	
41-035-20094	-84.9662	35.9676	4450		D&A	1792			675	34																	
41-035-20096	-85.0489	36.0049	4497		D&A	1821					375	26	213	7	183	0			-583	-27							
41-035-20097	-85.0321	35.9869	4498		O&G	1764																					
41-035-20098	-85.0291	36.1624	4555		D&A	1768	1368	10	1148	11	616	70															
41-035-20099	-85.0121	36.1569	4557		D&A	1723			898	-206																	
41-035-20100	-85.0324	35.9893	4581		Gas	1781																					
41-035-20101	-85.1198	36.0506	4599		D&A	1983			1161	-8	521	-1	365	-5													
41-035-20102	-85.0308	36.1637	4601		Gas	1778	1364	2	1166	26	557	10	403	24													
41-035-20103	-85.0313	36.1619	4611		Gas	1785	1337	-24	1155	16																	
41-035-20104	-85.0330	36.1638	4612		D&A	1750			1208	66																	
41-035-20105	-84.9518	35.9720	4615		D&A	1796			656	24	68	-18	-84	9	-124	29											
41-035-20106	-85.0319	36.1653	4618		D&A	1674																					
41-035-20107	-85.0376	36.1545	4663		D&A	1750	1366	0	1186	47																	
41-035-20108	-85.0296	36.1608	4666		D&A	1782	1332	-26	1150	13																	
41-035-20109	-84.9536	35.9649	4667		D&A	1813																					
41-035-20110	-85.0337	36.1602	4686		D&A	1764	1344	-18	1162	22																	
41-035-20111	-85.0338	36.1584	4687		D&A	1740			1164	25																	
41-035-20113	-85.0334	36.1620	4689		D&A	1760	1448	85	1183	42												-142	302				
41-035-20114	-84.9541	35.9751	4710		D&A	1782																					
41-035-20115	-84.9563	35.9720	4737		D&A	1798																					
41-035-20119	-85.0397	36.1538	4756		D&A	1742	1384	14	1201	61																	
41-035-20123	-85.0396	36.1554	4817		D&A	1720			1192	49																	
41-035-20124	-85.0287	36.1645	4836		D&A	1747	1347	-13																			
41-035-20125	-85.0378	36.1527	4838		D&A	1775			1187	51																	
41-035-20130	-85.2131	36.0086	4992		D&A	1923	1506	-46	1243	-28	627	-27	479	33													
41-035-20132	-84.9714	35.7910	5157		D&A	1958					1758	404	1610	708											-5664		
41-035-20136R-1	-85.1136	36.0281	6034		Oil	1842	1416	11	1092	-35	440	-50															
41-035-20138	-84.9477	35.9685	5668		Oil	1808			570	-55	28	-44	-128	-23													
41-035-20142	-84.9439	35.9686	5949		Oil	1693			638	17	23	-45															
41-035-20143	-84.9460	35.9706	5950		O&G	1762			652	27																	
41-035-20144	-84.9698	35.9743	5993		D&A	1781			716	68																	
41-035-20146	-84.9359	35.9768	6117		Gas	1798			618	4	40	-44															
41-035-20147	-84.9717	35.9644	6125		D&A	1818	853	-47	688	44																	
41-035-20148	-84.9601	35.9590	6134		Gas	1735	830	-66	670	42	61	-4															
41-035-20149	-84.9332	35.9709	6154		D&A	1791			636	36																	
41-035-20150	-84.9459	35.9587	6155		O&G	1782			632	19																	
41-035-20151	-85.0724	35.9318	6179		D&A	1878	1146	-20	944	4	339	17	181	48	157	15						-1662	-334				
41-035-20153	-84.9487	35.9577	6227		Gas	1782			582	-33																	
41-035-20154	-85.1721	36.0984	6237		Gas	1959			1266	-24	667	41	516	20													
41-035-20155R-1	-84.8268	35.9360	6493		D&A	2470					1060	204	878	75	800	131			-98	159							
41-035-20157	-84.9508	35.9557	6375		Oil	1809			646	31																	
41-035-20158	-85.0339	36.0892	6427		D&A	1819					439	-26	309	-4	204	-28			-441	-6							
41-035-20159	-84.9433	35.9574	6447		D&A	1797			604	-4																	
41-035-20162	-84.9498	35.9763	6534		Oil	1775																					
41-035-20163	-85.0629	35.8243	6552		D&A	1850					130	-7	-50	-164	-210	4	-830	-830	-867	-29		-1662	-79	-3375	-5030		
41-035-20166	-84.9490	35.9787	6650		O&G	1782																					
41-035-20167	-84.9659	35.9713	6657		D&A	1843			515	-128																	
41-035-20171	-84.9557	35.9819	6682		D&A	1781																					
41-035-20172	-84.9263	35.9705	6725		D&A	1764																					

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-035-20173	-84.9481	35.9813	6726		D&A	1770																					
41-035-20174	-85.0766	35.9297	6876		D&A	1858					318	-10															
41-035-20175	-85.0847	35.9300	6951		D&A	1821					367	16															
41-035-20176	-84.8629	36.1175	6970		D&A	1624			719	41	88	10	-52	6							-1178	-1278	-12				
41-035-20177	-84.9435	35.9647	7203		Oil	1749	929	2	649	32												-2066	-688				
41-035-20178	-84.9411	35.9669	7218		Oil	1748	918	-29	658	41												-2006	-607				
41-035-20179	-84.9406	35.9694	7235		Oil	1787	937	-18	667	48																	
41-035-20180	-84.9469	35.9644	7255		D&A	1783	913	1	633	13																	
41-035-20181	-84.9433	35.9712	7279		D&A	1691																					
41-035-20182	-84.9453	35.9665	7315		Oil	1765			623	3											-27	-197	1177				
41-035-20186	-85.2269	35.8330	7785		D&A	1676			1101	2	526	30	331	9	301	4					6	-6	384				
41-035-20187	-85.2258	35.8352	7801		D&A	1629					453	-46	309	-14	273	-23	-348		-344	43							
41-035-20190	-84.9706	35.8861	7912		D&A	1789					-83	-183	-273	-79	-301	-45	-1116		-1113	-21							
41-035-20192	-84.9823	35.8809	7936		D&A	1842					-32	-218	-243	-24	-243	25	-1051		-1048	9							
41-035-20194	-85.1923	36.0093	7941		D&A	1743							308	-117	268	-78	-327		-324	-18							
41-035-20195	-85.1990	36.0163	7985		D&A	1929							462	24	427	72											
41-035-20196	-84.9736	36.0606	8122		D&A	1700	1080	16	686	-16	230	10	95	-22							-1251	-1315	19				
41-041-00002	-85.9706	36.0127			D&A	602													587	-17		-198	-9				
41-041-00008	-85.7486	35.8828			D&A	874							813	6					394	15							
41-041-00009	-85.8998	36.0664			D&A	578																-372	-13				
41-041-00010	-85.7126	36.0747			D&A	1020																-374	10				
41-041-00011	-85.9181	35.9844			D&A	610																-152	10				
41-041-00012	-85.9118	35.9198			D&A	710																-240	-14				
41-041-00013	-85.8009	35.9984			D&A	1060																-358	-3				
41-041-00014	-85.8580	35.8962			D&A	1080																-262	4				
41-041-20001R-1	-85.9034	36.0037	1412		D&A	787											605	603	576	17	-183	-197	-4	-1903	-3211		-4658
41-041-20002	-85.7027	35.9161	2508		D&A	954					872	-40	764	3													
41-049-00001	-85.0338	36.5516			D&A	835							510	-84													
41-049-00069R-1	-84.9143	36.5283	449		D&A	910					647	49															
41-049-10011R-1	-84.7818	36.4870	1462		Oil	1650					416	-29															
41-049-20025	-85.0197	36.4136	697		D&A	937					607	3	451	-16					-260	-3							
41-049-20026	-84.9964	36.3754	699		D&A	855					565	24	405	7	367	17	-374		-371	-9		-1122	-165				
41-049-20027	-85.0267	36.3994	711		D&A	835							430	-8			-265		-288	-14							
41-049-20031	-84.9493	36.1712	749		Oil	1681			991	-5	383	-24	259	2													
41-049-20032R-1	-84.8731	36.2973	1016		D&A	1534							182	-6			-673										
41-049-20033	-85.0982	36.1718	759		D&A	1814			1209	2	582	-20	416	10													
41-049-20039	-85.0794	36.1993	799		D&A	1764			1188	0	534	-49	396	-7													
41-049-20041	-84.9658	36.1794	809		D&A	1775			1055	15	449	-8															
41-049-20043	-84.6820	36.3917	822		Gas	1318			510	-42	6	-1	-140	-8	-194	21											
41-049-20045	-84.9868	36.4408	840		D&A	1010					704	45	528	44			-194		-208	40		-815	175				
41-049-20054	-85.0845	36.1831	869		D&A	1816			1190	-3												-990	-207				
41-049-20055	-84.9381	36.1851	871		D&A	1700			1004	19	398	-4															
41-049-20057	-85.0227	36.1908	879		D&A	1783			1125	-31	523	-45										-1105	-77				
41-049-20058	-84.7510	36.3451	884		Gas	1421			638	-20	72	-34	-63	-27								-1094	144				
41-049-20061	-84.9517	36.1756	893		Oil	1716	1194	-26	1012	7	398	-21	250	-22													
41-049-20062	-84.7464	36.3638	896		D&A	1450			679	-6	126	1	-14	6													
41-049-20064	-84.9207	36.2328	903		O&G	1642			962	-25	372	-52															
41-049-20066	-85.0458	36.4566	913		D&A	975					831	118	621	60			-17		-35	68		-1329	-186				
41-049-20067	-85.0191	36.4165	914		D&A	950							509	36					-191	61		-850	72				
41-049-20069	-84.9901	36.4730	918		D&A	1002					622	-77	543	-18	510	41	-173	-134	-170	-38		-976	56				
41-049-20073	-85.0258	36.4101	927		D&A	784					534	-88	401	-62			-284		-315	-60							
41-049-20075	-84.9846	36.3103	934		D&A	1744			1114	28	538	37	372	1													
41-049-20076	-84.9262	36.3588	935		D&A	1653			1029	11	469	10	263	-42													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20078R-1	-84.9646	36.2984	9213		D&A	1700			1040	-14	480	15	371	27	272	-7											
41-049-20079	-84.9973	36.3347	950		D&A	1741	1323	15	1095	-1	551	22	354	-25			-415	-423	-453	-11		-1329	-85		-4572		-5986
41-049-20080	-84.9776	36.4866	951		D&A	1250							650	104					-13	136		-1010	-5				
41-049-20081	-84.9849	36.4806	959		D&A	990					696	5	564	3	376	-78	-133		-160	-31							
41-049-20082	-85.0947	36.3422	960		D&A	1848			1310	21																	
41-049-20085	-84.9515	36.1844	1004		Oil	1724			984	-31	414	-18															
41-049-20086	-85.0155	36.1926	989		D&A	1795					582	14	382	-12													
41-049-20089	-84.9378	36.1650	994		D&A	1698			941	-28	372	-1	228	7													
41-049-20090	-84.9714	36.2994	995		D&A	1720			1068	6																	
41-049-20091	-84.9648	36.3009	996		D&A	1690			1040	-16																	
41-049-20094	-84.9847	36.4490	1022		D&A	910					682	4	510	14			-200		-210	25							
41-049-20095	-84.9308	36.1773	1024		D&A	1709			961	-4																	
41-049-20097	-84.9476	36.1874	1037		Oil	1736			988	-21	416	-12	270	-6													
41-049-20100	-84.8784	36.3459	1069		D&A	1540			928	-19	380	-14	242	-7													
41-049-20101	-84.8774	36.3410	1072		Gas	1410			908	-31	358	-29	230	-12													
41-049-20103	-84.8136	36.3005	1099		D&A	1520			762	4	230	12	74	1	29	8											
41-049-20104	-84.8801	36.3423	1100		Gas	1410	1294	112	910	-34	387	-8	228	-19													
41-049-20105	-84.8806	36.3536	1101		Gas	1545			958	0	434	28															
41-049-20106	-84.7432	36.3569	1102		D&A	1410			644	-17	96	-8	-42	1													
41-049-20107	-85.0866	36.1894	1108		D&A	1780			1206	9																	
41-049-20108	-84.7425	36.4467	1114		D&A	1487			840	41	309	25	157	24	115	5											
41-049-20109	-84.7384	36.4186	1115		D&A	1456			786	30	260	30	111	36													
41-049-20111	-85.0048	36.1879	1133		D&A	1797	1368	-7	1148	22	569	23															
41-049-20112	-85.0796	36.1973	1141		D&A	1764			1188	0																	
41-049-20113	-84.7180	36.4093	1151		D&A	1460			720	29	163	0	14	6								-1124	11				
41-049-20115	-84.9521	36.1788	1157		Oil	1717			1037	28	423	-2	287	11													
41-049-20116	-84.8767	36.3439	1160		Gas	1548			918	-24																	
41-049-20117	-84.8337	36.3587	1162		D&A	1594					336	16	196	3	157	-1											
41-049-20118	-84.8776	36.3486	1161		Gas	1540			927	-22																	
41-049-20119	-84.9561	36.1749	1179		O&G	1695			1011	-2	399	-29	247	-33													
41-049-20120	-84.8741	36.3410	1180		D&A	1532					412	32															
41-049-20121	-84.8176	36.4016	1199		D&A	1518					440	79	248	20													
41-049-20122	-85.1041	36.1445	1233		D&A	1827			1251	34	605	21	461	27			-219										
41-049-20123	-84.9704	36.3970	1255		D&A	1140			1057	-41	492	-70	328	-84	293	-64	-438										
41-049-20124	-84.8206	36.3068	1294		D&A	1560			794	12	243	2	92	-2													
41-049-20125	-85.0801	36.1896	1302		D&A	1778			1190	2																	
41-049-20126	-84.9607	36.2920	1322		D&A	1670			1010	-36	451	-10	286	-51													
41-049-20128	-84.9564	36.1719	1330		D&A	1715			1010	0	387	-37															
41-049-20129	-85.0919	36.1763	1341		D&A	1820			1220	20																	
41-049-20130	-85.0917	36.1737	1344		D&A	1806			1212	13																	
41-049-20131	-84.7442	36.3388	1356		D&A	1407			613	-12	66	-10	-75	-19	-123	-23						-1517	-202				
41-049-20132	-84.9514	36.1738	1357		D&A	1719			1011	8	395	-21															
41-049-20134	-84.8844	36.3556	1372		Gas	1548			983	19																	
41-049-20135	-84.7464	36.3493	1376		D&A	1370			640	-14																	
41-049-20136	-85.0974	36.1522	1377		D&A	1779			1183	-20																	
41-049-20137	-84.9491	36.1757	1380		Oil	1709			1006	6	395	-18	253	-14													
41-049-20138	-84.7076	36.4196	1392		D&A	1509					147	0	31	35													
41-049-20139	-84.7841	36.4887	1395		Gas	1580	1152	-4	942	-2	389	-65															
41-049-20140	-84.8255	36.4224	1397		D&A	1340					404	-4	238	-22			-580										
41-049-20141	-84.8848	36.3582	1399		Gas	1546			973	6																	
41-049-20142	-84.7469	36.3536	1403		D&A	1425			667	3																	
41-049-20143	-84.7054	36.3766	1404		D&A	1400			598	-2	100	60	-104	-10													
41-049-20144	-85.0944	36.3420	1410		D&A	1850			1326	38	674	31	457	14	423	-7	-100										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20145	-85.0300	36.5544	1422		D&A	850							518	-80			-80					-874	-62				
41-049-20146	-84.7044	36.4196	1424		Gas	1507	947	72	701	28	151	15															
41-049-20147	-84.8816	36.3604	1425		Gas	1580			1004	37																	
41-049-20148	-84.8896	36.3463	1429		D&A	1420			958	-3	376	-43										-1235	-288				
41-049-20149	-84.8728	36.3454	1430		D&A	1530	1156	-16	945	6																	
41-049-20150	-84.9658	36.3753	1431		D&A	840							331	-44													
41-049-20151	-85.1051	36.3424	1433		D&A	1835	1503	80	1315	-5	663	10	465	4													
41-049-20152	-85.0925	36.1548	1436		D&A	1807			1199	3																	
41-049-20155	-85.1170	36.3371	1442		Oil	1803			1303	-23	667	5	495	19	465	30	-54										
41-049-20156	-84.8879	36.3556	1448		Gas	1570			995	28																	
41-049-20157	-84.7105	36.3722	1453		Oil	1370			656	51																	
41-049-20158	-85.0449	36.3022	1456		D&A	1705			1111	-25	559	-6	390	-2	359	-7	-383										
41-049-20159	-84.6985	36.4009	1471		D&A	1360			618	-7	75	-5	-85	-18													
41-049-20160	-85.0673	36.2787	1481		D&A	1740			1175	-4	548	-4	376	-16			-230		-258	20							
41-049-20161	-85.1017	36.3143	1486		D&A	1765			1315	35	659	26	445	4	413	5	-116										
41-049-20162	-84.8845	36.3638	1492		Gas	1563			991	17																	
41-049-20163	-84.7121	36.3798	1504		Gas	1340			662	38																	
41-049-20164	-84.8951	36.2929	1505		D&A	1638			974	37	463	68	279	46													
41-049-20165	-84.7323	36.4188	1507		D&A	1498			716	-25	160	-57	28	-35													
41-049-20166	-84.7693	36.5148	1511		D&A	1560			968	19	436	-16	272	-1													
41-049-20167	-84.8138	36.3986	1516		D&A	1405			893	-26	338	-15	155	-64													
41-049-20168	-84.9534	36.1720	1519		D&A	1666			1014	9	400	-18	264	-5													
41-049-20169	-84.8891	36.3528	1524		D&A	1562			970	5																	
41-049-20170	-84.9085	36.1610	1531		D&A	1621			911	-7	291	-6															
41-049-20171	-84.7442	36.3876	1534		D&A	1460			750	22	190	14	42	15			-810										
41-049-20172	-84.8880	36.3582	1535		Gas	1565			961	-9																	
41-049-20173	-84.8964	36.3700	1538		D&A	1630			920	-72	455	10	280	-10													
41-049-20174	-85.0296	36.3709	1542		D&A	820							310	-91													
41-049-20175	-84.6865	36.3906	1548		Gas	1330			560	-6	12	-6	-126	-5													
41-049-20176	-84.6894	36.3962	1549		D&A	1361			579	-6	58	18	-115	-13													
41-049-20177	-84.7854	36.4826	1551		Gas	1540			928	-10	427	-19										-1095	124				
41-049-20178	-85.0128	36.1874	1560		Oil	1825			1147	8	547	-12	375	-13													
41-049-20179	-84.7464	36.4296	1561		D&A	1460			776	-11	235	-30															
41-049-20180	-85.0289	36.3955	1565		D&A	840							436	3			-210		-232	47							
41-049-20181	-84.9551	36.1804	1573		Oil	1687			985	-33	385	-49	259	-26								-1130	-90				
41-049-20182	-84.8889	36.2797	1574		D&A	1582			892	-22	360	-20	210	1								-1140	-1				
41-049-20183	-84.7023	36.4265	1577		Gas	1517			731	52	199	58															
41-049-20184	-84.9333	36.2044	1580		D&A	1656			891	-101	371	-44	221	-44													
41-049-20185	-85.0245	36.3833	1588		D&A	860					445	-130	325	-91	290	-69	-390										
41-049-20186	-84.8119	36.3076	1590		D&A	1536			756	-2	266	41	64	-13													
41-049-20187	-85.0294	36.3666	1600		D&A	850							400	5													
41-049-20188	-84.9551	36.1831	1603		Oil	1730			1082	61	400	-38	260	-27													
41-049-20189	-85.0131	36.3847	1604		D&A	830					546	-11	410	-3	380	23	-310										
41-049-20190	-85.0148	36.3891	1605		D&A	860					620	57	414	-5			-292										
41-049-20191	-84.8875	36.4910	1607		D&A	1720					562	-5	398	-7													
41-049-20193	-84.8707	36.3423	1617		D&A	1537			970	38																	
41-049-20194	-84.9543	36.1778	1625		O&G	1722	1244	10	994	-19	422	-6	270	-10								-1138	-83				
41-049-20195	-84.9291	36.2041	1627		Gas	1625			953	-28																	
41-049-20196	-84.8662	36.3412	1629		D&A	1512			917	-7																	
41-049-20197	-84.9266	36.2083	1630		D&A	1636			968	-12																	
41-049-20198	-84.8670	36.3370	1637		Oil	1530			918	0																	
41-049-20199	-84.9255	36.1945	1638		D&A	1640			962	-3																	
41-049-20200	-84.9214	36.1989	1641		Gas	1660			962	3	356	-18	216	-19													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20201	-84.7534	36.3761	1642		D&A	1518			760	29	212	39															
41-049-20202	-85.0211	36.3902	1646		D&A	832					431	-143	307	-116	272	-89	-348										
41-049-20203	-84.8624	36.3366	1648		Gas	1508			922	12												-1143	-204				
41-049-20204	-84.9190	36.2022	1649		D&A	1645			915	-41																	
41-049-20205	-84.8711	36.3372	1650		Oil	1543	1153	4	919	-6																	
41-049-20206	-84.7696	36.3686	1653		D&A	1507			753	-10	191	-9															
41-049-20207	-84.9156	36.4076	1656		Oil	1645			1019	-57																	
41-049-20208	-84.9575	36.1854	1657		Oil	1752			972	-57	433	-15										-1138	-135				
41-049-20209	-84.9767	36.2992	1661		D&A	1712			1060	-7																	
41-049-20210	-85.0246	36.3869	1662		Gas	870									320	-41											
41-049-20211	-85.0357	36.3653	1663		D&A	840					570	-2	400	5					-340	-27							
41-049-20212	-84.9173	36.1978	1670		D&A	1667			944	-5																	
41-049-20213	-84.9213	36.2848	1675		D&A	1663			913	-75	375	-50	245	-29	209	-12											
41-049-20214	-84.9164	36.2906	1681		D&A	1656			931	-50	418	3															
41-049-20215	-85.0398	36.3612	1686		D&A	1060							430	37	385	8											
41-049-20216	-85.0315	36.3623	1687		D&A	830					575	12	405	15					-335	-11		-1165	-8				
41-049-20217	-84.8585	36.3386	1691		D&A	1510			895	-12																	
41-049-20218	-84.8828	36.3448	1692		Gas	1538			924	-27																	
41-049-20219	-84.9133	36.4080	1695		Oil	1655			1037	-36	517	15	345	-18								-976	-66				
41-049-20220	-84.9183	36.4087	1696		Gas	1662			1102	19	462	-50	360	-12													
41-049-20221	-84.8976	36.3158	1710		D&A	1642					472	70	264	8	226	8											
41-049-20223	-84.9021	36.2855	1714		D&A	1626			1017	67	382	-19	232	-10													
41-049-20225	-85.0075	36.1601	1724		D&A	1728					496	-24	356	8								-1205	-508				
41-049-20227	-85.0099	36.3801	1727		D&A	880													-330	4		-1143	-173				
41-049-20228	-84.9259	36.2136	1730		D&A	1615			967	-16																	
41-049-20229	-84.9194	36.3518	1737		D&A	1644			1018	14	453	11	288	-4								-908	150				
41-049-20230	-84.9835	36.4751	1739		D&A	1130											-126		-154	3							
41-049-20231	-84.8106	36.3958	1741		D&A	1368	1068	-42	918	8	320	-25	209	3													
41-049-20232	-84.7884	36.4886	1757		Gas	1560			972	20	480	14										-1467	-211				
41-049-20233	-84.7248	36.4255	1762		D&A	1443	936	5	751	19	198	-14	44	-16													
41-049-20234	-84.9949	36.3811	1764		D&A	840					640	91	470	67	443	92	-280										
41-049-20236	-85.0211	36.3796	1796		D&A	840					570	10	398	-12	360	3	-352		-350	-30							
41-049-20238	-85.0272	36.3920	1798		D&A	860							435	7	330	-33											
41-049-20239	-85.0336	36.4515	1802		D&A	970					718	21	560	1			-74		-94	39							
41-049-20240	-84.8779	36.3580	1822		D&A	1570			963	2																	
41-049-20241	-84.8733	36.3580	1823		Gas	1580																					
41-049-20242	-84.8374	36.5234	1824		D&A	1663					513	-31	333	-45	289	-3	-605		-601	-41		-1140	43				
41-049-20243	-85.0143	36.4372	1851		Gas	840					620	-25	510	-4													
41-049-20246	-85.0167	36.4011	1855		D&A	920					638	59	434	-2					-300	-15							
41-049-20248	-84.9501	36.2726	1864		D&A	1697			1037	6	481	22															
41-049-20249	-84.6932	36.4300	1872		D&A	1506			688	27	155	38															
41-049-20250	-84.9514	36.2685	1886		D&A	1711					413	-48	283	-37	249	-26											
41-049-20251	-84.8963	36.3735	1912		D&A	1638			929	-68	465	17										-953	-22				
41-049-20252	-84.6986	36.4219	1917		D&A	1499					203	82	47	74													
41-049-20254	-85.0168	36.3924	1941		D&A	855					590	22	433	9			-225										
41-049-20255	-85.0353	36.4519	1945		D&A	959							571	11													
41-049-20256	-84.7116	36.3835	1946		D&A	1339					59	-17	-81	-18													
41-049-20257	-84.6997	36.4353	1977		D&A	1362					104	-43															
41-049-20259	-85.0769	36.4470	1991		Oil	860							546	-15													
41-049-20260	-84.8656	36.3902	2016		D&A	1594			969	-18	444	39	267	-13	220	-14	-582										
41-049-20261	-85.0832	36.4438	2017		D&A	845					739	-4	543	-18								-984	-89				
41-049-20262	-85.0745	36.4498	2018		Oil	885					758	19	545	-16			-36										
41-049-20263	-84.7609	36.4143	2019		D&A	1501			866	57	301	28	124	9													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20264	-84.9177	36.4128	2038		D&A	1658					528	9															
41-049-20265	-84.8849	36.3608	2042		Gas	1600																					
41-049-20266	-84.8893	36.3668	2043		Gas	1600					432	-2															
41-049-20267	-84.8847	36.3658	2044		Gas	1615																					
41-049-20268	-84.9849	36.4569	2050		D&A	870					710	29	560	47	460	-17						-1132	-88				
41-049-20270	-85.0124	36.4431	2066		D&A	940							530	6			-164		-182	7							
41-049-20271	-84.9915	36.3818	2067		Oil	940											-315		-312	46		-883	17				
41-049-20272	-84.8456	36.3874	2076		Oil	1602			964	9	331	-38	264	14													
41-049-20273	-84.9850	36.3650	2087		D&A	1149					551	28	391	12								-955	36				
41-049-20274	-84.9889	36.4500	2088		D&A	918					708	30	568	63	538	49											
41-049-20275	-84.9977	36.4763	2089		D&A	1223					777	57	600	29			-87		-113	-8							
41-049-20276	-84.9850	36.3859	2090		D&A	1192					600	46	434	31			-356		-392	-20							
41-049-20277	-85.0124	36.3931	2091		D&A	910							406	-17			-280										
41-049-20278	-85.1132	36.3164	2092		D&A	1771			1327	32	626	-15	459	6													
41-049-20279	-85.1208	36.3337	2093		D&A	1743			1325	-1			481	3			-55										
41-049-20280	-84.8840	36.3636	2108		Gas	1600																					
41-049-20281	-84.9830	36.4402	2109		O&G	965							510	31					-255	11							
41-049-20284	-84.6891	36.4278	2118		D&A	1430					117	17															
41-049-20285	-84.8971	36.3634	2122		D&A	1660																					
41-049-20286	-85.0728	36.4510	2127		Oil	920					757	20	545	-17	510	-3											
41-049-20289	-84.8449	36.3953	2142		D&A	1545			970	5	370	-4	265	8													
41-049-20290	-84.8458	36.3844	2143		D&A	1576					334	-33	268	21													
41-049-20291	-84.8488	36.3876	2149		Oil	1562	1192	31	958	-2																	
41-049-20293	-84.8425	36.3868	2166		D&A	1600			976	27																	
41-049-20294	-84.7146	36.4265	2167		D&A	1512					192	10															
41-049-20295	-85.0734	36.4521	2170		D&A	952					758	23	546	-16	511	-4											
41-049-20296	-85.0772	36.4453	2171		D&A	882					788	46	586	26	556	46	28										
41-049-20297	-85.0772	36.4484	2172		D&A	822					722	-19	520	-41	491	-23	-47										
41-049-20305	-84.8764	36.3613	2180		Gas	1605																					
41-049-20306	-84.9163	36.3724	2181		Gas	1640			966	-59			256	-60								-860	122				
41-049-20307	-84.8871	36.3634	2182		Gas	1605																-789	130				
41-049-20310	-84.8487	36.3902	2195		Oil	1549					369	-5	264	7	231	22											
41-049-20311	-85.0739	36.4475	2196		Oil	880					788	47	586	25	556	45	26										
41-049-20312	-84.7173	36.3776	2198		O&G	1418			688	55			-60	0													
41-049-20313	-84.8808	36.3504	2202		Gas	1552																					
41-049-20314	-85.0905	36.3923	2205		Gas	910									232	-214	-70		-103	-16							
41-049-20315	-85.0872	36.3902	2206		Gas	920									220	-222	-80		-110	-21							
41-049-20318	-85.0976	36.3927	2209		Oil	940					601	-114	512	-13			-84										
41-049-20320	-85.0497	36.5511	2226		Oil	951					819	56	615	19	587	14	51		-51	-20							
41-049-20321	-85.0705	36.4498	2227		Oil	938					722	-16	554	-8	520	10											
41-049-20322	-85.0682	36.4484	2228		Oil	861					736	-3	548	-13	520	10											
41-049-20323	-84.9112	36.3682	2229		Gas	1645			915	-96	420	-39	251	-53													
41-049-20324	-84.8704	36.3703	2230		Gas	1630			952	-17												-915	-31				
41-049-20326	-85.0707	36.4451	2244		Oil	840							560	-1													
41-049-20327	-84.7799	36.3431	2251		D&A	1510	993	36	770	35																	
41-049-20328	-84.7748	36.3365	2252		Gas	1490			757	52	202	45															
41-049-20331	-85.0721	36.4437	2257		Oil	865							575	15	547	44											
41-049-20333	-85.0966	36.3902	2259		D&A	955									190	-263	-111		-155	-70							
41-049-20334	-85.0968	36.3878	2260		O&G	990									244	-209	-50										
41-049-20337	-84.8523	36.3851	2264		O&G	1563			967	4																	
41-049-20344	-85.0112	36.5584	2285		Oil	943					722	-74	574	-35	539	-50	-13										
41-049-20345	-84.9153	36.2831	2286		D&A	1635					391	-27	231	-32	203	-8											
41-049-20346	-85.0724	36.4387	2287		Oil	825					722	-21	521	-34	490	-2											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20348	-85.0933	36.3929	2299		D&A	920									232	-218	-54		-100	-14							
41-049-20351	-85.0142	36.5628	2302		Oil	901					795	-11	644	31	607	15	99										
41-049-20352	-85.0697	36.4390	2303		O&G	821					722	-21	521	-34	489	-2											
41-049-20356	-84.8927	36.3680	2315		Gas	1602			921	-65	442	2	278	-7													
41-049-20357	-84.9597	36.1773	2320		D&A	1752			1126	102	440	0	296	5	258	-1	-432										
41-049-20358	-85.0531	36.4543	2321		D&A	924					744	24	594	32	577	58											
41-049-20359	-84.9424	36.5737	2326		D&A	916					797	13	512	-4					-337	9							
41-049-20364	-84.9973	36.1966	2336		Gas	1768			1138	13	583	39	390	9								-778	104				
41-049-20365	-84.9531	36.1929	2337		O&G	1680					438	-11	302	9													
41-049-20366	-84.7029	36.3878	2340		D&A	1371			619	5	74	13	-89	-10													
41-049-20367	-84.8456	36.3901	2342		Gas	1563																-963	-21				
41-049-20368	-84.7805	36.4668	2344		Gas	1609					369	-33	201	-41	144	-35											
41-049-20370	-84.8575	36.3985	2355		Gas	1580					393	-2	275	-3								-841	48				
41-049-20371	-84.9637	36.1757	2357		D&A	1742	1238	-23	1062	32																	
41-049-20372	-84.9402	36.2229	2372		D&A	1685			1043	15	470	23	299	4	271	1											
41-049-20373	-85.0178	36.5482	2373		Gas	870					800	11	610	15	580	5	78										
41-049-20376	-84.8384	36.3953	2382		Gas	1540	1164	10	947	-8	314	-55	246	-2													
41-049-20378	-84.7091	36.4042	2385		D&A	1419			727	67	161	38	5	33													
41-049-20380	-85.1003	36.3674	2395		D&A	1371					599	-65	423	-58	395	-57	-97										
41-049-20382	-85.1116	36.1468	2408		Gas	1842			1242	19																	
41-049-20384	-84.9699	36.5532	2412		D&A	924							606	38	586	38	76										
41-049-20385	-84.8783	36.3658	2424		Gas	1610																-765	134				
41-049-20386	-85.0615	36.3809	2428		D&A	1725	1239	-222	1097	-46	637	-40	477	20	441	26											
41-049-20387	-84.7158	36.3849	2430		Oil	1392			622	-21	62	-30	-68	-19	-98	20											
41-049-20388	-85.0213	36.5581	2440		Oil	981							595	-11	576	-8											
41-049-20389	-84.9481	36.1817	2447		D&A	1676			968	-36	414	-6	266	-5	228	-16											
41-049-20390	-85.0236	36.5563	2461		D&A	950							567	-36	547	-34											
41-049-20392	-84.7779	36.3292	2469		D&A	1420	968	29	737	40																	
41-049-20394	-85.0194	36.5563	2482		D&A	1002							627	23	607	24											
41-049-20395	-85.0203	36.5604	2495		Gas	960							595	-14	580	-7	5					-803	12				
41-049-20396	-85.0716	36.4486	2499		Oil	915							579	18	551	41											
41-049-20397	-84.9591	36.1893	2501		Gas	1730					460	2	310	8													
41-049-20398	-85.0172	36.5540	2516		Gas	941							658	56	633	52											
41-049-20399	-85.0206	36.5540	2528		D&A	938							622	21	597	17											
41-049-20401	-84.9970	36.5470	2439		D&A	847							607	8	587	9						-812	40				
41-049-20402	-84.8051	36.4117	2558		D&A	1394	1094	-27	874	-28	264	-104	211	-1													
41-049-20403	-85.0691	36.4539	2567		Oil	882							522	-40	497	-18											
41-049-20404	-84.9779	36.5536	2569		D&A	917					717	-28	637	54	607	37	23		27	161							
41-049-20409	-85.1044	36.3663	2587		D&A	1455					701	34	525	39	503	50						-1262	-120				
41-049-20410	-85.0745	36.4376	2590		D&A	865									65	-427	-113	-78	-110	-21							
41-049-20411	-84.9993	36.2010	2591		D&A	1790					584	40	405	19													
41-049-20412	-84.9404	36.2256	2592		D&A	1740			1045	13												-824	47				
41-049-20413	-84.9674	36.5291	2605		D&A	1033							645	96	609	107											
41-049-20414	-85.0710	36.4549	2627		D&A	952							532	-30	507	-9											
41-049-20415	-84.9520	36.1997	2637		Oil	1730			854	-175	462	8	318	19								-793	184				
41-049-20417	-85.1069	36.3635	2642		D&A	1428							490	5													
41-049-20418	-85.0228	36.3743	2648		Oil	982							367	-37	329	-27	-382										
41-049-20419	-84.9145	36.2691	2667		D&A	1650					400	-19	254	2	206	-2											
41-049-20421	-84.8411	36.3975	2681		Oil	1529	1179	19	943	-19	326	-47	237	-18													
41-049-20422	-85.0945	36.4177	2689		Gas	901					797	51	577	28			6										
41-049-20423	-85.0648	36.4530	2690		Oil	1002									452	-63											
41-049-20424	-84.9514	36.2071	2704		O&G	1720			1036	7	440	-16	298	-7													
41-049-20425	-85.0935	36.4473	2716		D&A	903					813	69	591	24			19										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20426	-85.0949	36.4198	2717		D&A	934					804	59	562	11													
41-049-20427	-84.8349	36.3970	2721		Oil	1554	1164	14	934	-18	314	-53	226	-20													
41-049-20428	-85.0626	36.4553	2729		D&A	940							565	3	540	22											
41-049-20429	-85.0678	36.4525	2730		Oil	898							518	-44	493	-21											
41-049-20431	-85.0663	36.4544	2746		D&A	1020					764	35	546	-16													
41-049-20432	-85.0628	36.4536	2747		Oil	963					803	74	568	6	513	-3											
41-049-20433	-84.7952	36.4270	2748		D&A	1528			888	3	358	-10	198	-9													
41-049-20434	-85.0698	36.4516	2756		Oil	870							558	-4													
41-049-20437	-84.8688	36.3682	2759		Gas	1630			960	-5																	
41-049-20438	-84.8672	36.3701	2760		Gas	1645			985	19																	
41-049-20439	-85.0688	36.4565	2765		Oil	968							528	-35	503	-14						-975	-55				
41-049-20442	-85.0626	36.4493	2775		Gas	963							591	29	568	55											
41-049-20444	-85.0701	36.4430	2777		D&A	870							590	31	565	66											
41-049-20445	-84.8379	36.3974	2787		D&A	1520	1178	23	943	-14	327	-43	242	-8													
41-049-20446	-85.0741	36.4423	2789		D&A	851							563	4	536	35											
41-049-20447	-85.0453	36.3858	2812		D&A	1262					643	-2	449	10			-234										
41-049-20449	-84.8443	36.3979	2821		Gas	1522					354	-22															
41-049-20450	-84.8408	36.4001	2822		D&A	1503			923	-40	349	-26															
41-049-20451	-85.0259	36.4459	2826		D&A	1175									525	2	-131		-129	32							
41-049-20452	-84.8346	36.3996	2827		D&A	1478					336	-34															
41-049-20453	-85.0925	36.4175	2832		D&A	927					817	71	572	23								-993	-76				
41-049-20454	-85.0969	36.4179	2833		Gas	906					776	31	561	11													
41-049-20455	-84.8765	36.4274	2834		Gas	1659	1271	3	1059	11			340	0													
41-049-20459	-85.0734	36.4571	2849		D&A	980					780	53	535	-28	520	0											
41-049-20460	-85.0967	36.1599	2857		Gas	1816	1446	-45	1228	27																	
41-049-20461	-85.0962	36.1626	2858		D&A	1822	1492	4	1230	29																	
41-049-20462	-84.9204	36.1829	2860		Gas	1720					380	28															
41-049-20463	-84.8418	36.3894	2862		Gas	1572			952	0																	
41-049-20471	-84.8377	36.4000	2910		Oil	1470	1132	-26	930	-28	328	-45	220	-33													
41-049-20473	-84.9575	36.1927	2924		Gas	1690	1260	0	1014	-24																	
41-049-20475	-84.8440	36.4004	2930		Gas	1495	1185	17	949	-19	349	-29	245	-17													
41-049-20477	-84.9517	36.2034	2951		Oil	1761	1281	35	1051	22																	
41-049-20478	-84.8704	36.3491	2952		Gas	1547	1192	18	962	20												-844	72				
41-049-20479	-84.9713	36.2893	2953		Oil	1729			1045	-8																	
41-049-20480	-85.0991	36.1553	2955		Gas	1819	1539	41	1223	21																	
41-049-20481	-85.0960	36.1552	2956		D&A	1784	1499	7	1218	19																	
41-049-20484	-85.1024	36.1545	2959		Gas	1826	1546	41	1230	24																	
41-049-20485	-84.9991	36.5402	2970		Gas	941							601	10	581	13											
41-049-20493	-85.0006	36.5375	3004		D&A	981					779	36	591	4	566	2											
41-049-20494	-84.9972	36.5379	3005		D&A	983							563	-26	528	-37											
41-049-20495	-85.0537	36.4703	3007		D&A	1030							600	39					-70	8							
41-049-20496	-84.8580	36.3907	3019		Gas	1605					401	10	295	23													
41-049-20497	-85.0659	36.4514	3048		Gas	980							578	16	498	-15											
41-049-20498	-85.0012	36.5359	3056		D&A	1084							604	19	584	22											
41-049-20500	-84.9161	36.4109	3065		Oil	1655	1296	-41	1064	-17	537	24															
41-049-20501	-84.7783	36.4816	3068		Gas	1578					430	5	279	15													
41-049-20502	-84.8316	36.3968	3069		Gas	1505					348	-16															
41-049-20503	-84.8319	36.3942	3072		Oil	1485			899	-45	265	-96	201	-37								-1229	-209				
41-049-20504	-84.8653	36.3858	3078		Gas	1640			970	-12	444	43															
41-049-20506	-84.9540	36.1989	3098		Oil	1683			1015	-18																	
41-049-20507	-84.7112	36.3939	3103		D&A	1416			716	68	166	64	6	49													
41-049-20510	-84.9449	36.1992	3129		D&A	1743			997	-15	450	14	302	19	271	16											
41-049-20511	-85.0228	36.1968	3134		Gas	1779					593	21	429	26	387	4			-373	16							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20512	-84.8991	36.2949	3137		Gas	1638			948	1	420	21	278	34													
41-049-20513	-84.9823	36.3823	3138		Gas	1309			1095	6	541	-7	383	-14	341	-7	-377										
41-049-20515	-84.7935	36.4204	3146		D&A	1542			860	-22	332	-23															
41-049-20517	-84.8252	36.3964	3157		D&A	1365	1069	-66	973	36	459	101	257	26													
41-049-20518	-84.6736	36.4082	3158		Oil	1380					-2	-20	-140	-13	-200	0	-1020										
41-049-20519	-84.9537	36.2026	3159		Gas	1740			1040	8																	
41-049-20520	-84.8222	36.3963	3178		Gas	1384			966	34	396	40	274	47													
41-049-20521	-84.8225	36.3938	3179		Oil	1406	1156	29	974	45	392	40	280	56													
41-049-20522	-84.8289	36.3970	3180		Oil	1386			970	27	380	18	274	37													
41-049-20523	-84.9544	36.1953	3191		O&G	1718	1286	35	1039	5																	
41-049-20524	-84.9515	36.2051	3192		Gas	1725			1009	-20																	
41-049-20525	-84.9551	36.1936	3218		Oil	1698																					
41-049-20526	-84.9221	36.4372	3221		Gas	1685							390	-24	352	-24											
41-049-20528	-84.8354	36.3918	3242		D&A	1542	1068	-77	912	-33																	
41-049-20530	-84.9556	36.1919	3244		Oil	1683			1013	-20																	
41-049-20532	-84.9519	36.2013	3249		Oil	1738																					
41-049-20533	-85.0812	36.4255	3264		Oil	920									507	33											
41-049-20535	-84.9491	36.2364	3272		D&A	1717			1017	-18	492	23	342	27	309	11											
41-049-20538	-84.9163	36.4349	3281		Gas	1620							402	-4													
41-049-20539	-85.0398	36.4514	3314		D&A	924							554	-8	529	7											
41-049-20540	-84.8085	36.4030	3315		Gas	1503	1153	36	928	20	400	41	229	18													
41-049-20541	-84.8283	36.3994	3316		Oil	1396			961	18	476	111	267	27													
41-049-20543	-84.9684	36.2971	3328		Oil	1715	1241	-24	1057	0																	
41-049-20548	-84.9592	36.1914	3346		Oil	1684			1062	21																	
41-049-20549	-84.9542	36.1971	3347		Oil	1682			1062	28																	
41-049-20550	-85.1156	36.3408	3360		Oil	1760			1318	-11	683	20	510	32	475	38	8										
41-049-20551	-84.9162	36.4388	3362		Gas	1665																					
41-049-20552	-84.9133	36.4062	3379		D&A	1635			1037	-33	505	6	345	-15	302	-17											
41-049-20553	-84.9149	36.3972	3387		Oil	1656			1064	2	482	-11	330	-20													
41-049-20554	-85.0689	36.4607	3393		D&A	1178					778	59	543	-20	513	-8			-42	26							
41-049-20555	-84.9136	36.4402	3419		Gas	1715			1110	-5																	
41-049-20556	-84.8185	36.3936	3426		Oil	1513			945	23	394	46	260	42													
41-049-20557	-84.8183	36.3910	3438		Oil	1564			911	-6	344	1	225	12													
41-049-20558	-84.8151	36.3908	3439		Oil	1548			902	-8	344	5	209	1													
41-049-20559	-84.9803	36.1810	3457		Gas	1773					513	21	369	31			-407										
41-049-20562	-85.1192	36.3615	3498		D&A	1105									477	21	-213		-77	-1							
41-049-20563	-84.7385	36.3940	3501		O&G	1470					203	25															
41-049-20564	-84.9928	36.1927	3502		Oil	1793			1098	-16	533	1	378	5	345	12											
41-049-20567	-84.8216	36.3913	3511		Oil	1526			936	13	344	-3	239	21													
41-049-20568	-84.8188	36.3884	3512		Oil	1554			898	-15	304	-35	195	-14													
41-049-20569R-1	-85.0091	36.1879	4193		Oil	1780			1183	50	574	21	387	2													
41-049-20572	-84.9496	36.2059	3567		Oil	1464																					
41-049-20573	-85.0020	36.2134	3586		Gas	1765			1037	-60	559	18	383	-14	343	-10											
41-049-20574	-84.7685	36.4589	3589		Gas	1540			850	-20	260	-97	178	-22													
41-049-20575	-84.8089	36.3879	3590		D&A	1523	1097	1	891	-2	306	-20	189	1													
41-049-20578	-84.9129	36.4027	3600		Gas	1662					512	17	364	10	320	6											
41-049-20579	-84.9134	36.3934	3601		Oil	1640	1300	-19	1068	15																	
41-049-20580	-84.7788	36.4859	3603		Oil	1596			876	-55																	
41-049-20583	-84.8245	36.4017	3612		Gas	1524			955	18	432	66	246	9													
41-049-20584	-84.8218	36.3987	3619		Gas	1485			961	28	439	80	261	31													
41-049-20586	-84.6800	36.4142	3647		Oil	1398					0	-48	-112	-14													
41-049-20589	-84.7791	36.4668	3662		D&A	1610			940	36	430	32															
41-049-20590	-84.8124	36.3853	3663		Oil	1529			899	4	336	11	204	11													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20591	-84.7313	36.4036	3670		D&A	1496			784	65	184	-2	39	7													
41-049-20592	-84.7259	36.3981	3671		D&A	1441			695	-2	176	18	22	13	-29	41											
41-049-20593	-84.7556	36.3385	3673		Gas	1424	976	89	702	45	94	-13	-58	-26													
41-049-20595	-84.8379	36.4025	3691		D&A	1506					356	-20															
41-049-20596	-84.8221	36.4034	3696		Gas	1563			963	30	423	56	253	17													
41-049-20597	-84.8801	36.4198	3699		Gas	1578					470	-4	312	-23	266	-27											
41-049-20598	-85.0799	36.4276	3703		Gas	884					814	67	596	45	569	92	-50										
41-049-20599	-84.8155	36.3883	3715		Oil	1499			885	-22	321	-14	195	-9													
41-049-20600	-84.8409	36.4025	3723		D&A	1527	1169	3	971	7	372	-5	263	3													
41-049-20601	-85.0514	36.4725	3729		D&A	990							510	-50	485	-45											
41-049-20602	-85.1093	36.2863	3735		D&A	1586	1527	54	1304	25	624	10	446	14													
41-049-20604	-84.8859	36.4180	3748		Gas	1521					385	-94	315	-25	271	-27											
41-049-20605	-85.0146	36.5258	3758		Gas	1080					710	-60	555	-23	529	-21											
41-049-20606	-84.8095	36.3826	3762		D&A	1535	1065	-25	887	3	301	-15	192	11							-904	-929	138				
41-049-20607	-84.7754	36.3456	3779		D&A	1479	857	-89	721	-7	189	16	27	5													
41-049-20609	-84.9165	36.4325	3814		Gas	1645					570	14	392	-11													
41-049-20610	-84.9020	36.4135	3824		Gas	1688					485	-10	348	-6	302	-11											
41-049-20611	-84.9061	36.4448	3826		Gas	1680					550	-19															
41-049-20612	-85.0325	36.4549	3830		D&A	994							604	47	574	49	4										
41-049-20613	-84.8018	36.3350	3832		D&A	1498	956	-58	750	-23	237	4	87	3													
41-049-20615	-85.0814	36.4293	3843		Oil	856					746	0	566	14													
41-049-20616	-85.0454	36.4609	3844		D&A	1021					774	61	571	11	539	15	-84		-109	-16							
41-049-20617	-84.7796	36.4464	3849		D&A	1580			892	16	405	44	224	22													
41-049-20618	-84.8043	36.4486	3850		D&A	1594			914	-4	404	-17	236	-20													
41-049-20619	-84.7655	36.3429	3861		D&A	1471	953	37	711	17	177	36	11	17													
41-049-20621	-84.9044	36.4426	3863		Gas	1675							375	-33								-896	222				
41-049-20624	-84.8128	36.3828	3878		Oil	1543	1115	18	878	-13	328	8	188	-1													
41-049-20626	-84.8663	36.3826	3899		O&G	1620					384	-17															
41-049-20627	-84.8153	36.3813	3920		Oil	1539	1091	-8	863	-31	274	-47	165	-27													
41-049-20628	-84.9283	36.4412	3945		Gas	1761			1146	11			437	12													
41-049-20629	-84.9114	36.4380	3946		D&A	1678			1133	24	608	47	424	18													
41-049-20630	-84.6746	36.4047	3955		Oil	1380			508	-43																	
41-049-20631	-84.6644	36.3962	3957		D&A	1330			462	-36	-26	10	-150	25								-849	386				
41-049-20632	-85.0380	36.4535	3961		D&A	984							554	-7	524	1	-49		-84	37							
41-049-20633	-84.8155	36.3787	3962		D&A	1538	1092	-4	873	-16	282	-34	178	-10													
41-049-20636	-84.9707	36.2945	3987		D&A	1698			1058	1																	
41-049-20637	-84.7956	36.4787	3990		Gas	1636					466	1															
41-049-20638	-85.0835	36.4228	3991		D&A	910							553	3	523	52											
41-049-20639	-84.7796	36.3493	4012		Gas	1521					202	12	59	20													
41-049-20640R-1	-84.7134	36.3735	5148		O&G	1389																					
41-049-20642	-84.9928	36.5319	4022		Gas	921							541	-45	516	-40	-89		-79	-73		-947	-58				
41-049-20643	-84.8119	36.3804	4028		Oil	1532	1107	15	870	-15	300	-14	174	-9													
41-049-20644	-84.8129	36.3876	4038		Oil	1481	1094	-10	885	-15	316	-14	181	-17													
41-049-20645	-84.8279	36.4020	4040		O&G	1381	1131	-15	944	2	385	16	238	-4													
41-049-20647	-84.7436	36.3712	4042		D&A	1465							-7	3													
41-049-20648R-1	-84.9221	36.2356	4572		D&A	1637			989	-4	397	-33	255	-2													
41-049-20649	-84.8344	36.4023	4046		O&G	1538	1201	45	956	3	376	3	244	-7													
41-049-20650	-84.8668	36.3792	4049		Gas	1614					404	4	269	-2													
41-049-20652	-85.0413	36.4145	4054		D&A	921							531	41	497	81	-90		-88	126							
41-049-20655	-84.8339	36.4051	4062		D&A	1543					371	-5	247	-7	199	-1											
41-049-20656	-84.9246	36.4441	4078		D&A	1720			1120	-14	590	2	410	-15													
41-049-20658	-84.7726	36.3504	4090		D&A	1541			696	-36	158	-16	7	-13													
41-049-20660	-84.7798	36.3519	4092		D&A	1536					216	22	78	36													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20661	-85.0074	36.1724	4093		Oil	1800			1070	-42																	
41-049-20662	-85.0736	36.4311	4099		D&A	900							580	31	545	68	-82	-42									
41-049-20665	-84.6993	36.3749	4121		Gas	1339					-7	-24	-153	-39													
41-049-20666	-84.9012	36.4429	4123		D&A	1742							468	64													
41-049-20667	-85.0708	36.4338	4124		D&A	890							550	0	525	45											
41-049-20668	-84.8091	36.3775	4146		Oil	1531					331	27	193	22													
41-049-20669	-85.0681	36.4367	4147		Gas	881							569	17	536	50											
41-049-20670	-85.0042	36.1722	4151		D&A	1805			1130	25																	
41-049-20671	-84.7272	36.3775	4152		Gas	1412							-52	-17													
41-049-20672	-84.7334	36.3551	4156		D&A	1379							-4	67													
41-049-20673	-85.0126	36.1819	4166		O&G	1815																					
41-049-20674	-85.0119	36.1834	4167		O&G	1816																					
41-049-20675	-84.8684	36.2968	4174		D&A	1510			925	52	324	-15	178	1													
41-049-20676	-84.8252	36.3990	4177		Gas	1520	1086	-52	950	12	364	2	256	21													
41-049-20677	-85.0112	36.1727	4182		D&A	1752			1137	17																	
41-049-20678	-85.0085	36.1795	4187		Oil	1803			1089	-33																	
41-049-20680	-84.8371	36.4050	4194		Gas	1517	1181	18	959	0	389	11	249	-9													
41-049-20681	-84.8092	36.3800	4195		D&A	1497	1101	16	859	-20	297	-13	172	-3													
41-049-20682	-85.0731	36.4346	4200		D&A	840									475	-9											
41-049-20683	-85.0166	36.5645	4207		D&A	1005									575	-18	-23										
41-049-20684	-84.7581	36.3620	4215		D&A	1464			722	6	209	53	60	56													
41-049-20688	-85.0103	36.1814	4241		Oil	1810																					
41-049-20689	-84.8060	36.3773	4248		D&A	1488	1023	-50	873	6	346	48	182	20													
41-049-20690	-84.9571	36.5317	4250		D&A	938							513	-24	478	-2	-332										
41-049-20692	-85.0148	36.1801	4260		D&A	1807			1144	10																	
41-049-20693R-1	-85.0148	36.1783	7622		D&A	1778	1318	-49	1114	-19																	
41-049-20694	-84.8034	36.3687	4262		Oil	1516					274	1	126	-13													
41-049-20695	-85.0049	36.1789	4275		D&A	1802																					
41-049-20696	-85.0162	36.1694	4276		Oil	1720																					
41-049-20697	-85.0725	36.4325	4279		Gas	890									538	60											
41-049-20698	-85.0168	36.1794	4285		D&A	1803																					
41-049-20699	-84.8317	36.3995	4296		Gas	1482	1152	4	950	2	324	-44	250	5													
41-049-20701	-85.0208	36.1739	4307		Oil	1788			1145	5																	
41-049-20702	-84.8121	36.3781	4311		Oil	1533	1103	14	868	-13	289	-21	177	-2													
41-049-20703	-85.0114	36.1801	4319		Oil	1807																					
41-049-20704	-84.8609	36.2936	4340		Oil	1380			878	25	790	469	144	-14													
41-049-20705	-84.8153	36.3860	4344		Oil	1502	1098	-7	888	-14	313	-17	188	-12							-989	-1062	17				
41-049-20706	-84.8112	36.3759	4347		D&A	1543	1095	11	870	-5	302	-2	185	12													
41-049-20707	-84.9313	36.2581	4353		Gas	1656	1254	20	1064	52	446	-1															
41-049-20708	-84.9334	36.1611	4352		Gas	1670	1160	20	968	9	364	6															
41-049-20709	-85.0223	36.1833	4357		D&A	1800																					
41-049-20710	-84.9983	36.1623	4362		O&G	1760			1046	-33																	
41-049-20711	-84.7078	36.3696	4372		Gas	1344			588	-5	28	0	-110	-8													
41-049-20712	-84.8131	36.3725	4379		D&A	1524	1114	30	873	0	303	3	190	18													
41-049-20713	-84.9956	36.4340	4392		D&A	920							60	-423	451	-7	-221		-218	21							
41-049-20714	-84.8707	36.3818	4393		O&G	1636					412	3	284	7													
41-049-20716	-84.8103	36.3736	4398		D&A	1465	1077	-2	857	-12	295	-3	171	4													
41-049-20718R-1	-84.8667	36.2937	6303		O&G	1340																					
41-049-20719	-84.9163	36.1939	4422		O&G	1655	1131	-26	941	-3																	
41-049-20720	-84.9119	36.1715	4423		Gas	1653	1087	-13	953	26	341	24	203	13	161	2											
41-049-20721	-84.9068	36.3458	4433		Gas	1661			1091	108	453	25	307	28	269	10											
41-049-20722	-84.6958	36.4157	4435		Gas	1376	922	73	683	40	172	71	-4	43													
41-049-20723	-84.8081	36.3755	4438		D&A	1493	1065	-11	851	-17	289	-9	175	11													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20725	-84.9980	36.1762	4466		D&A	1800																					
41-049-20726	-84.9923	36.1774	4468		Oil	1773	1463	108	1109	20	598	89	345	-15													
41-049-20728	-85.0226	36.1794	4477		D&A	1788			1140	-6																	
41-049-20730	-85.0182	36.1686	4501		Oil	1755			1163	33																	
41-049-20731	-85.0166	36.1674	4502		D&A	1670																					
41-049-20732	-85.0684	36.1798	4503		D&A	1740					566	10	396	5	353	1	-335		-332	-11							
41-049-20733	-85.0594	36.1838	4504		D&A	1762																					
41-049-20734	-84.9903	36.1680	4509		D&A	1741			1021	-49	559	68															
41-049-20735	-84.8121	36.3720	4510		D&A	1509	1070	-11	849	-21	285	-13	163	-6													
41-049-20736	-85.0269	36.1760	4515		D&A	1798					528	-27	376	-21													
41-049-20737	-84.9913	36.1627	4516		D&A	1617																					
41-049-20738	-84.9319	36.1847	4517		Gas	1698	1186	8	996	24	392	7	246	3													
41-049-20739	-84.8149	36.3724	4519		D&A	1521	1111	24	861	-16	288	-15	185	9													
41-049-20742	-84.9927	36.1740	4526		D&A	1769	1291	-56	1109	24																	
41-049-20747	-85.0092	36.1770	4533		Oil	1792																					
41-049-20749	-84.9297	36.1662	4537		Gas	1700	1130	-9	990	34	386	31	298	89	198	6											
41-049-20750	-84.9515	36.2202	4538		Gas	1756	1294	40	1106	75	518	55	370	51													
41-049-20751	-84.9204	36.1662	4539		Gas	1647	1083	-31	957	17	348	16	197	5													
41-049-20753	-84.8153	36.3838	4544		Oil	1523	1063	-40	867	-31	297	-29	176	-20													
41-049-20754	-84.9415	36.2599	4547		D&A	1729	1261	15	1093	60	485	28	337	36													
41-049-20758	-84.7078	36.3719	4554		D&A	1362																					
41-049-20759	-84.8609	36.3741	4558		Gas	1645					405	19	271	11													
41-049-20761R-1	-85.0068	36.1775	6400		Oil	1805			1165	48																	
41-049-20762	-85.0158	36.1877	4563		D&A	1797			1137	-7	537	-27															
41-049-20763	-84.8189	36.3748	4570		D&A	1546	1082	-15	896	6	294	-21	213	26													
41-049-20764	-85.0040	36.1594	4467		D&A	1742																					
41-049-20765	-84.8254	36.3940	4582		Oil	1537	1157	25	979	46	386	31	285	57													
41-049-20766	-84.8276	36.4084	4583		D&A	1555					365	-14															
41-049-20770	-85.1104	36.3396	4590		D&A	1800	1512	85	1332	10	656	-1	486	18			-38										
41-049-20771	-85.1156	36.3445	4591		D&A	1803	1547	95	1361	27	705	38	527	46	493	53											
41-049-20772	-85.1101	36.3355	4592		D&A	1822	1363	-53	1261	-56	676	23	522	58	328	-100	-238										
41-049-20775	-84.9191	36.1698	4596		Gas	1641	1075	-42	941	2	329	-4															
41-049-20776	-84.9738	36.1850	4598		D&A	1756																					
41-049-20778	-84.9269	36.2587	4619		Gas	1642	1194	-34	1027	25	425	-15	280	8													
41-049-20780	-85.0296	36.5575	4622		Oil	871							543	-59	516	-64											
41-049-20782	-84.8605	36.3819	4630		D&A	1606			861	-112																	
41-049-20783	-84.8485	36.3850	4631		Gas	1616					371	0															
41-049-20785	-84.9134	36.1809	4643		Gas	1705	1115	-5	971	38	375	45	221	15													
41-049-20790	-85.0899	36.3924	4674		Gas	906					728	14	558	36	502	57	10										
41-049-20792	-84.8606	36.3800	4685		D&A	1622			962	-9																	
41-049-20793	-84.7925	36.3519	4690		D&A	1506					224	-2	78	-1													
41-049-20794	-84.7358	36.3781	4708		D&A	1411					141	11	-4	9	-45	12			-883	-1							
41-049-20796	-84.8941	36.3593	4715		D&A	1605			984	8	437	2	283	7													
41-049-20798	-84.8686	36.3827	4721		Oil	1629																					
41-049-20799	-84.7112	36.3882	4727		D&A	1359	951	104	672	35	104	17	-73	-19													
41-049-20800	-84.9018	36.4349	4728		D&A	1730							485	94	445	90											
41-049-20802	-84.8686	36.3845	4738		D&A	1638																					
41-049-20803	-85.0143	36.1765	4739		D&A	1788			1140	10																	
41-049-20804	-85.0010	36.1636	4740		Oil	1771			1071	-16																	
41-049-20805	-84.9153	36.2407	4742		D&A	1649	1214	-14	981	6	413	-9	272	29													
41-049-20807	-85.0007	36.1655	4746		Oil	1760			1060	-29																	
41-049-20808	-85.0208	36.1776	4755		D&A	1812	1382	13	1132	-11																	
41-049-20809	-84.8375	36.3280	4757		Gas	1442	1062	-17	802	-42	256	-33	110	-45													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20811	-84.8258	36.3246	4759		D&A	1583	1072	15	806	-8	294	26	123	-5													
41-049-20815	-84.8962	36.4361	4775		Oil	1608			1076	-10	545	7															
41-049-20816	-84.9231	36.4047	4791		Gas	1701			1075	-12	505	-9															
41-049-20817	-84.8988	36.4311	4793		O&G	1638					554	24	383	3	343	0					-1273	-1448	-395				
41-049-20818	-84.9416	36.2562	4794		D&A	1695	1255	9	1089	54	489	31	333	32													
41-049-20819	-84.8799	36.3761	4798		O&G	1634					448	26	302	21													
41-049-20822	-84.6757	36.4021	4820		Oil	1290	730	-44	508	-41																	
41-049-20823	-84.6743	36.3999	4821		D&A	1330	770	3	548	8	-30	-32	-165	-24								-748	363				
41-049-20824	-84.7963	36.3814	4832		D&A	1534			889	34	312	27															
41-049-20833	-84.8208	36.3731	4884		D&A	1548			896	6	318	3	215	27													
41-049-20834	-84.8180	36.3726	4885		D&A	1544	1128	36	899	15	309	0	204	22													
41-049-20835	-84.8291	36.4407	4893		D&A	1628					472	19	310	26	264	5		-481	-528	31							
41-049-20836	-84.9486	36.1896	4905		Oil	1710			1036	23	423	-10	278	-3													
41-049-20837	-84.7583	36.3351	4909		Gas	1461	869	-23	629	-27																	
41-049-20838	-84.6898	36.3874	4915		D&A	1378			548	-24	38	18	-102	15													
41-049-20840	-84.9441	36.4362	4922		D&A	1758					594	-7	422	-12	392	-1											
41-049-20841	-84.7425	36.4163	4924		D&A	1496					248	13	96	17													
41-049-20844	-84.6951	36.3853	4938		D&A	1357			549	-37	29	-2	-113	-8													
41-049-20846	-85.0148	36.1706	4944		Oil	1648																					
41-049-20848	-84.9449	36.1914	4958		Gas	1685	1203	-14	1033	27	322	-105															
41-049-20850	-84.7488	36.4058	4975		D&A	1512			760	-10	247	15	97	22													
41-049-20851	-84.7503	36.3909	4976		D&A	1494					232	32	84	36													
41-049-20852	-84.8295	36.3722	4978		Oil	1543			895	-10	318	-11	207	4													
41-049-20854	-84.8264	36.3720	4985		Oil	1528					304	-19															
41-049-20855	-84.7102	36.3746	4991		Gas	1440					70	22	-84	1	-134	14											
41-049-20856	-84.7590	36.3376	5007		Gas	1462			662	-2																	
41-049-20857	-84.7409	36.4041	5016		Gas	1480			820	74	205	-4	55	1													
41-049-20858	-84.8333	36.3701	5020		Gas	1571			888	-21	334	1	207	0													
41-049-20859	-85.0025	36.1616	5021		Oil	1763			1048	-40																	
41-049-20860	-84.7051	36.3977	5022		D&A	1362			679	41																	
41-049-20861	-84.8453	36.3791	5027		D&A	1582					426	64	287	47													
41-049-20862	-84.8429	36.3804	5028		D&A	1568			958	17																	
41-049-20864	-84.8477	36.3723	5036		Gas	1597			957	18	399	38	251	14													
41-049-20865	-84.7162	36.3811	5037		Oil	1440																					
41-049-20866	-84.9417	36.2019	5044		D&A	1720	1194	-25	1036	28																	
41-049-20867	-84.8428	36.3833	5048		D&A	1564			1004	59																	
41-049-20868	-84.8432	36.3789	5054		D&A	1571			961	21																	
41-049-20869	-84.6705	36.4074	5064		Oil	1370	650	-111	530	-13																	
41-049-20870	-85.0144	36.1836	5065		D&A	1816																					
41-049-20872	-84.9748	36.4455	5083		D&A	942							562	85	530	66											
41-049-20873	-84.8429	36.3723	5090		Gas	1587			947	17	372	19	251	23													
41-049-20875	-84.8538	36.3589	5095		D&A	1552			962	28			227	-8													
41-049-20876	-84.8234	36.3749	5096		D&A	1563			925	27	377	55	210	14								-1390	-380				
41-049-20878	-84.8623	36.3682	5098		Gas	1606			996	37																	
41-049-20880	-84.8520	36.3733	5102		Gas	1602			962	14	404	34	258	12													
41-049-20881	-84.8481	36.3639	5103		D&A	1582			996	67																	
41-049-20884	-84.8886	36.3264	5106		Gas	1648			958	16	538	138	237	-8													
41-049-20885	-84.8922	36.3289	5107		Gas	1588			1008	57			255	2													
41-049-20886	-84.8469	36.3652	5108		Gas	1579			959	31			254	26													
41-049-20887	-84.8546	36.3612	5109		D&A	1553	1173	29	993	55			228	-11													
41-049-20888	-84.9604	36.4080	5110		D&A	1079					529	-39					-423										
41-049-20889	-84.7025	36.4025	5120		D&A	1340					110	13	-34	18													
41-049-20890	-84.6797	36.4038	5121		O&G	1340			632	66												-1005	-9				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20891	-84.6868	36.4015	5122		Gas	1340			610	24	20	-25										-1270	-210				
41-049-20892	-84.8391	36.3705	5132		D&A	1572			926	6	352	8	236	17													
41-049-20894	-84.7493	36.3810	5140		D&A	1446					216	42	46	21	-4	18											
41-049-20895	-84.9216	36.2076	5143		D&A	1633			991	24																	
41-049-20896	-85.0033	36.1634	5152		Oil	1758																					
41-049-20897	-84.8756	36.3544	5154		Gas	1534	1074	-129	977	23	410	13	270	15													
41-049-20900	-84.9590	36.2704	5167		Oil	1727			1050	16	447	-19															
41-049-20901	-85.0512	36.4690	5171		D&A	945							525	-35	495	-33	-182		-180	-99							
41-049-20902	-84.9403	36.5453	5173		D&A	878							458	-53	433	-26	-389		-386	-8							
41-049-20905	-85.0764	36.1733	5188		D&A	1803																					
41-049-20907	-84.9787	36.3786	5197		D&A	1097					569	27	413	23													
41-049-20908	-84.7429	36.3940	5198		O&G	1439					204	15	54	16								-1346	-183				
41-049-20909	-84.7561	36.3433	5202		Gas	1435	875	-16	645	-24																	
41-049-20910	-84.8649	36.3620	5205		Gas	1612			995	41	384	-1															
41-049-20911	-85.0114	36.1933	5210		Gas	1797			1105	-38																	
41-049-20912	-84.8495	36.3672	5226		Gas	1620			960	24	400	39															
41-049-20913	-84.8481	36.3640	5237		Gas	1583			933	4	383	27	243	14													
41-049-20914	-85.0469	36.4767	5251		Oil	995					615	-95	565	7	545	14											
41-049-20915	-84.8547	36.3227	5253		D&A	1550					312	0															
41-049-20916	-84.9854	36.3926	5268		D&A	871							357	-54													
41-049-20917	-84.6824	36.4022	5269		O&G	1307					-4	-36	-133	-20													
41-049-20918	-84.7619	36.3402	5285		Gas	1438			633	-45																	
41-049-20919	-84.7150	36.3922	5286		Gas	1420					95	-14															
41-049-20920	-84.8642	36.3824	5290		O&G	1639			989	12	400	3															
41-049-20921	-84.8735	36.3929	5292		Gas	1576					402	-19															
41-049-20925	-84.6789	36.4013	5313		O&G	1371	671	-114	606	48																	
41-049-20927	-84.8748	36.3989	5324		D&A	1605			995	-12	409	-18	291	-7													
41-049-20928	-84.7609	36.3426	5328		Gas	1428			628	-53																	
41-049-20929	-84.6776	36.4054	5329		D&A	1369					82	57	-151	-30	-203	-4											
41-049-20932	-84.8722	36.3656	5337		D&A	1624					419	17															
41-049-20933	-84.8506	36.3648	5368		D&A	1603	1133	-7	923	-12																	
41-049-20934	-84.8273	36.4044	5369		Gas	1503	1206	58	997	55	368	-4	248	4													
41-049-20935	-84.9424	36.3433	5375		Oil	1663			1051	15	425	-22															
41-049-20936	-84.7581	36.3414	5377		Gas	1420	890	-5	655	-15																	
41-049-20937	-84.9145	36.4146	5378		D&A	1650			1065	-18	536	19	370	-4													
41-049-20939	-84.7527	36.3394	5384		Gas	1419	869	-11	629	-21																	
41-049-20940	-85.0544	36.4678	5396		D&A	1005													55	134							
41-049-20941	-84.7776	36.4791	5398		Gas	1515			945	27	407	-11															
41-049-20942	-84.7084	36.3913	5409		D&A	1365			610	-25	97	10	-27	29													
41-049-20943	-84.6901	36.3929	5410		O&G	1348			576	-6																	
41-049-20944	-84.8799	36.3284	5411		O&G	1600			980	52																	
41-049-20945	-84.9451	36.1946	5413		D&A	1690					442	10															
41-049-20947	-84.8571	36.3763	5417		Gas	1630			990	29	420	39															
41-049-20948	-84.6738	36.4128	5423		O&G	1346					-11	-38										-813	82				
41-049-20949	-84.7971	36.3627	5428		Oil	1282					-54	-303	-191	-302								-786	238				
41-049-20950	-84.8523	36.3765	5430		Gas	1624	1066	-90	961	8	398	26	266	17													
41-049-20951	-84.7986	36.3516	5432		D&A	1522			820	20	269	28															
41-049-20952	-84.8538	36.3836	5434		D&A	1606	1194	29	964	0																	
41-049-20953	-84.8499	36.3967	5435		Gas	1537	1171	-2	931	-43	341	-39	223	-43													
41-049-20954	-84.6983	36.3813	5438		Gas	1359	878	76	685	96	29	-2	-115	-11													
41-049-20955	-84.9940	36.1672	5446		D&A	1764			1054	-23	469	-29	379	32													
41-049-20956	-85.0415	36.5470	5449		D&A	881											-159					-756	61				
41-049-20957	-85.0468	36.5467	5450		Oil	883											-211		-32	2		-769	50				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-20958	-84.9187	36.1921	5451		Gas	1693			973	24																	
41-049-20959	-84.7954	36.3520	5452		D&A	1524			824	31																	
41-049-20963	-84.7974	36.3421	5470		D&A	1500			790	13	228	0															
41-049-20965	-84.9336	36.2114	5479		Oil	1649			1005	5																	
41-049-20967	-85.0371	36.5456	5493		Oil	897							545	-41	517	-53	-65										
41-049-20968	-84.8146	36.3789	5494		Oil	1539			871	-17	287	-29	181	-6													
41-049-20970	-85.0422	36.5529	5502		D&A	1004											-2										
41-049-20971	-85.0444	36.5511	5503		D&A	953											-167										
41-049-20972	-84.8359	36.3726	5504		D&A	1603	1165	42	919	2	327	-14	233	18								-898	55				
41-049-20973	-84.7405	36.3967	5514		O&G	1459					211	21	63	24													
41-049-20974	-84.6766	36.4139	5515		O&G	1357					-24	-61	-143	-35													
41-049-20975	-84.9213	36.1935	5518		O&G	1674			984	29																	
41-049-20977	-84.7623	36.3825	5522		D&A	1478			760	-11	213	1															
41-049-20978	-84.8988	36.3322	5523		Gas	1610					370	-42															
41-049-20979	-84.6747	36.3992	5529		D&A	1332					-13	-15	-160	-19													
41-049-20982	-84.8569	36.3805	5548		Oil	1595	1199	31	963	-2	361	-22	265	4													
41-049-20983	-85.0452	36.5430	5550		D&A	902											-323										
41-049-20984	-84.6719	36.4106	5558		Oil	1298																					
41-049-20986	-84.8543	36.3797	5565		Oil	1631			973	13	365	-12	277	21													
41-049-20987	-85.0649	36.4491	5576		D&A	914							534	-28	514	2											
41-049-20989	-84.8906	36.3367	5580		Gas	1578	1013	-172	898	-56												-985	-25				
41-049-20990	-84.8953	36.3222	5583		Gas	1637			937	-15	389	-16	235	-20													
41-049-20991	-84.9016	36.3224	5585		Gas	1641			944	-21																	
41-049-20992	-84.8494	36.3768	5590		Gas	1621			948	0	361	-6	251	6													
41-049-20993	-84.7500	36.3426	5596		Gas	1398			588	-62																	
41-049-20994	-85.0529	36.4727	5599		D&A	1010							540	-21	510	-20			-190	-112							
41-049-20996	-84.8469	36.3758	5605		D&A	1621	1087	-58	921	-21	349	-13	254	15													
41-049-20997	-84.8514	36.3789	5606		D&A	1615			963	9																	
41-049-20998	-85.0998	36.3931	5610		D&A	965					725	9	525	-1	505	47	-25										
41-049-20999	-84.8091	36.3778	5614		D&A	1528	1116	34	876	2	321	16	198	27													
41-049-21000	-84.8842	36.3595	5633		Gas	1592					412	-7	292	24													
41-049-21001	-84.8877	36.3571	5634		Gas	1564					444	21															
41-049-21002	-84.8882	36.3541	5635		Gas	1558					434	12															
41-049-21003	-84.8886	36.3640	5636		Gas	1620					440	9	290	14													
41-049-21004	-84.9500	36.2626	5657		D&A	1680																					
41-049-21007	-84.8523	36.3806	5665		Gas	1624			972	14																	
41-049-21008	-84.9227	36.2620	5667		D&A	1612			947	-44	397	-36	262	-2													
41-049-21009	-84.8521	36.3824	5674		O&G	1629	1177	16	970	11																	
41-049-21012	-84.8474	36.3955	5682		Oil	1505					345	-32															
41-049-21013	-84.9141	36.2176	5691		Gas	1623			925	-32																	
41-049-21015	-84.9247	36.1858	5695		O&G	1694			1004	46																	
41-049-21016	-84.7761	36.3514	5699		D&A	1522	1037	83	760	15	142	-42															
41-049-21018	-84.6799	36.3988	5701		Oil	1310			510	-47																	
41-049-21019	-84.9364	36.2687	5704		Gas	1691					451	0	305	12													
41-049-21021	-84.8630	36.4161	5713		D&A	1540			980	-37	455	19															
41-049-21022	-84.8544	36.3814	5715		O&G	1615	1183	19	973	11																	
41-049-21023R-1	-84.9589	36.2065	6049		Gas	1768			1014	-27																	
41-049-21024	-84.9496	36.2083	5722		Gas	1724					639	186															
41-049-21025	-84.9113	36.2500	5725		Gas	1641					417	2	269	31													
41-049-21026	-84.9135	36.2093	5726		Gas	1682			897	-52	362	-7															
41-049-21027	-84.9196	36.2598	5729		D&A	1623			981	-4	405	-23	259	1													
41-049-21029	-84.7400	36.3824	5746		D&A	1444			592	-113	134	-18	10	4	-36	7											
41-049-21030	-84.7293	36.3897	5747		D&A	1503					238	94	93	95													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-21031R-1	-84.8935	36.2539	6438		D&A	1652	1162	-15	878	-41	354	-32	210	10													
41-049-21032	-84.7519	36.3369	5752		Gas	1421			637	-6																	
41-049-21033R-1	-84.7511	36.3344	6255		D&A	1392	862	-11	644	9																	
41-049-21034	-84.7497	36.3497	5761		Gas	1418	896	21	691	27																	
41-049-21035	-84.7503	36.3529	5762		Gas	1420			670	-3																	
41-049-21036	-84.9113	36.2617	5763		D&A	1602					378	-37	222	-20													
41-049-21037	-84.9453	36.2142	5766		Gas	1683			1008	-16																	
41-049-21038	-84.7550	36.3360	5782		Gas	1400			648	-1																	
41-049-21039	-84.7494	36.3400	5783		Gas	1418																					
41-049-21040	-84.9193	36.4112	5800		Oil	1652	1352	12	1112	24	542	24	372	-5													
41-049-21050R-1	-84.9149	36.2592	6161		D&A	1620																					
41-049-21053	-84.9319	36.2703	5858		D&A	1680			986	-24	426	-19															
41-049-21054	-84.8056	36.4386	5859		Gas	1603			901	-2	431	22	273	31													
41-049-21056	-84.7558	36.4265	5861		D&A	1437			725	-81	260	-20	107	-17													
41-049-21060	-84.7336	36.4371	5865		Gas	1414			756	-11	284	33	144	45													
41-049-21067	-84.7610	36.3453	5873		Gas	1442			715	28																	
41-049-21069	-84.9400	36.3448	5891		D&A	1649					439	-7	309	-1													
41-049-21072	-85.0096	36.1833	5900		Gas	1814																					
41-049-21073	-84.8445	36.3763	5901		Gas	1603	1089	-53	923	-15																	
41-049-21074	-84.8500	36.3820	5902		D&A	1596	1097	-60	964	9																	
41-049-21075	-84.9505	36.2347	5903		D&A	1737			1041	7	493	23															
41-049-21077	-85.0167	36.1713	5907		D&A	1700			1115	-14																	
41-049-21079	-84.9253	36.2108	5927		D&A	1612					382	-20	242	-11													
41-049-21080	-84.8502	36.3838	5929		D&A	1625			989	31																	
41-049-21082	-84.9437	36.2089	5939		D&A	1676			1045	27																	
41-049-21082	-84.9437	36.2089	5939		Gas	1676	1175	-52																			
41-049-21084	-84.7889	36.3511	5955		D&A	1518	982	-8	789	13																	
41-049-21085	-84.8785	36.3145	5956		D&A	1561	1161	53	946	36	373	4	243	28													
41-049-21086	-84.7279	36.4300	5957		D&A	1492	896	-44	737	-8	180	-47	52	-23													
41-049-21087	-84.7234	36.4303	5958		Gas	1521	915	-9	717	-18	213	-5	62	-3													
41-049-21088	-84.7869	36.3434	5959		D&A	1503			783	30	211	10	63	10	23	29											
41-049-21089	-84.9421	36.2139	5961		D&A	1698			1028	7																	
41-049-21093	-84.9160	36.2148	5986		Gas	1624					362	-23	222	-13	184	-21	-642		-638	-2							
41-049-21094	-84.7403	36.3553	5989		Gas	1406			636	-13	96	3	-34	19													
41-049-21095	-85.0972	36.3924	5992		O&G	957					717	3	527	3	497	43											
41-049-21099	-84.8178	36.3628	6019		D&A	1542					340	47	176	10													
41-049-21104	-84.9566	36.2175	6050		Gas	1709			1035	1	509	39															
41-049-21105	-84.9449	36.2216	6079		Gas	1722																					
41-049-21106R-1	-84.7291	36.4254	6305		D&A	1528	942	-3	752	10	226	5	92	23													
41-049-21108	-84.7361	36.3521	6084		D&A	1280			608	-23	76	0	-59	7													
41-049-21109	-84.7373	36.3544	6085		Gas	1400			617	-22	85	2	-46	16													
41-049-21110	-84.9469	36.2169	6100		D&A	1730					484	31															
41-049-21111	-84.9371	36.3392	6104		D&A	1643					461	32															
41-049-21112	-84.8303	36.3145	6115		D&A	1546	1042	-12	784	-23																	
41-049-21113	-84.8258	36.3142	6116		D&A	1510	1058	12	794	-3	252	-6	110	-3													
41-049-21114	-84.9426	36.2064	6118		Gas	1725	1213	-11	1022	8																	
41-049-21115	-84.9436	36.2167	6126		Oil	1741			1003	-22																	
41-049-21117	-84.9679	36.4288	6150		D&A	1748					618	-4	439	-10	403	-12	-432		-430	-72							
41-049-21118	-84.9918	36.4134	6151		D&A	1736					596	-3	424	-19	391	4	-385		-374	-76							
41-049-21119	-84.7403	36.3579	6162		Gas	1423	883	34	668	14																	
41-049-21120	-84.7428	36.3593	6163		Gas	1432			654	-11																	
41-049-21121	-84.8366	36.3114	6182		Gas	1589	1093	33	815	-2																	
41-049-21122	-84.8597	36.3847	6188		Gas	1596			926	-49	431	41															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-21123	-84.7980	36.4448	6194		Gas	1618			870	-32	412	11															
41-049-21125	-85.0904	36.3919	6224		O&G	918									512	66	-60		-57	31							
41-049-21130	-84.8702	36.3791	6295		Gas	1621	1281	68	1111	132	417	11	281	7													
41-049-21131	-84.9405	36.3483	6300		D&A	1671			1051	17	464	11															
41-049-21132	-84.7419	36.3631	6302		D&A	1437			487	-183	282	171															
41-049-21133	-84.8178	36.3567	6319		D&A	1560	1066	-7	865	9	313	26	167	11													
41-049-21134	-84.8066	36.3558	6320		D&A	1562	1020	-26	829	1																	
41-049-21135	-84.8687	36.2942	6342		D&A	1375			890	18																	
41-049-21141	-84.8128	36.3464	6392		O&G	1500	944	-111	817	-7	250	-19	102	-28													
41-049-21142	-85.0152	36.1857	6401		D&A	1824			1149	8																	
41-049-21143	-84.8626	36.2984	6404		D&A	1402	1146	58	882	21	324	-2	175	9													
41-049-21144	-84.9129	36.3372	6409		D&A	1664	1238	31	1042	53	408	-10	290	7													
41-049-21145	-84.8776	36.3511	6410		Gas	1547			983	31																	
41-049-21147	-84.9436	36.2247	6435		D&A	1707	1257	19	1063	32																	
41-049-21148	-84.9209	36.2446	6436		Gas	1665			1015	25																	
41-049-21152	-84.8415	36.3151	6477		D&A	1500	1042	-31	794	-36	264	-21	110	-33													
41-049-21154	-84.8965	36.4271	6490		D&A	1605	1338	11	1070	-3	523	6	371	1													
41-049-21155	-85.0180	36.5301	6495		D&A	1157							596	20	568	12	-13		-11	22							
41-049-21156	-84.8296	36.3945	6497		Gas	1528	1258	119	994	53	395	35															
41-049-21157	-84.8321	36.3077	6505		D&A	1573	1055	7	799	-7																	
41-049-21160	-84.8445	36.3928	6517		Gas	1564			980	19	444	72	267	13													
41-049-21161	-84.9286	36.2391	6523		Gas	1663			1023	12	443	-3															
41-049-21162	-84.8459	36.3155	6527		O&G	1566			836	-4	292	0	146	-6													
41-049-21163	-84.8531	36.3959	6528		O&G	1516					371	-14															
41-049-21165	-84.8737	36.4165	6532		D&A	1580	1270	19	1055	25	520	65	349	28													
41-049-21166	-84.8722	36.3878	6535		Gas	1637					399	-16	290	5													
41-049-21167	-84.8410	36.3071	6543		Gas	1604			809	-14	264	-17	112	-19													
41-049-21168	-85.0493	36.4720	6544		D&A	997													-98	-17							
41-049-21170	-85.0852	36.4514	6562		D&A	827					730	-10	581	17	522	-1	-42		-40	18							
41-049-21171	-85.0766	36.4546	6563		D&A	922					743	11	523	-40	470	-50	-134		-132	-66							
41-049-21172	-84.9377	36.1997	6568		D&A	1718	1205	-5	985	-12																	
41-049-21173	-84.8456	36.3113	6573		Gas	1582	1107	32	844	8	297	6	152	8													
41-049-21174	-84.8366	36.3076	6574		Gas	1570			802	-13																	
41-049-21175	-84.9267	36.2728	6578		D&A	1680					420	-17	290	13													
41-049-21176	-84.8411	36.3113	6579		Gas	1580	1082	14	822	-5	274	-9	125	-11													
41-049-21177	-84.8642	36.3753	6584		D&A	1625			940	-29																	
41-049-21178	-84.8563	36.3853	6585		D&A	1556	1242	71	931	-39	331	-54	242	-22													
41-049-21180R-1	-84.8594	36.3873	7032		O&G	1605					331	-60															
41-049-21181	-85.0114	36.1764	6610		Oil	1786			1101	-23																	
41-049-21182	-84.8547	36.3615	6616		D&A	1547	1152	8	936	-3																	
41-049-21185	-84.9199	36.2418	6635		Gas	1638			1013	26	513	83															
41-049-21186	-84.9418	36.2669	6638		Gas	1698					438	-17	298	-5													
41-049-21189	-84.8364	36.3040	6649		Gas	1521			809	-2																	
41-049-21190	-84.8595	36.4158	6656		D&A	1611			1009	-3	459	30	305	4													
41-049-21191	-84.9261	36.2409	6667		Gas	1705			1080	76																	
41-049-21192	-84.8399	36.4071	6668		D&A	1541	1211	42	1017	52																	
41-049-21193	-84.7757	36.3398	6675		Gas	1478	958	16	723	7																	
41-049-21195	-84.9319	36.2391	6720		Gas	1664			1014	-6																	
41-049-21199	-84.8366	36.3186	6730		D&A	1499			827	2	279	0															
41-049-21201	-84.8761	36.3828	6736		D&A	1663					408	-11															
41-049-21202	-84.8514	36.4173	6741		Gas	1611	1116	-78	995	-1	449	30	281	-10													
41-049-21203	-84.8719	36.3729	6743		Gas	1656																					
41-049-21205	-84.8412	36.3187	6754		Gas	1524			808	-26	281	-5															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-21206	-85.0104	36.1785	6755		Oil	1800			1140	15																	
41-049-21208	-84.8371	36.3150	6791		Gas	1551	1007	-58	828	7																	
41-049-21209	-84.8651	36.3182	6800		Gas	1602			902	19																	
41-049-21211	-84.8062	36.4164	6817		Gas	1343			883	-20	393	16	225	5													
41-049-21212	-84.7714	36.4765	6821		D&A	1540			910	9	397	0															
41-049-21215	-84.6906	36.4237	6860		D&A	1425	880	42	665	24			-19	29													
41-049-21216R-1	-84.7666	36.3342	7116		D&A	1420	900	-12	695	18	130	1	-60	-47													
41-049-21218	-85.0731	36.4554	6894		D&A	964					664	-65	537	-26	512	-6											
41-049-21221	-84.8191	36.3964	6901		Oil	1399					387	34	245	22													
41-049-21222	-84.6799	36.3969	6908		Oil	1312			504	-49																	
41-049-21223	-84.6803	36.4055	6909		Gas	1369			554	-18																	
41-049-21226	-85.0463	36.4597	6917		D&A	945					755	42	600	40	578	54	-49		-43	52							
41-049-21227	-84.6738	36.4030	6925		D&A	1350																					
41-049-21230	-84.8500	36.3199	6945		D&A	1602							165	-1													
41-049-21231	-84.6768	36.3944	6946		D&A	1318			558	19																	
41-049-21235	-84.9899	36.3794	6957		D&A	908							373	-26	334	-15											
41-049-21236	-84.9269	36.2432	6975		D&A	1678																					
41-049-21237	-84.8706	36.3343	6984		Oil	1538			907	-13																	
41-049-21238	-84.9939	36.3784	6985		D&A	825					550	5	382	-18													
41-049-21239	-84.7218	36.3781	6993		Gas	1390							-66	-19													
41-049-21240	-84.6799	36.3951	7004		O&G	1280			562	11																	
41-049-21241	-84.7477	36.3514	7011		D&A	1380	893	23	658	-4	140	33	-60	-21													
41-049-21242	-84.7715	36.3362	7012		Gas	1440	920	-7	715	19	154	8	-18	-19													
41-049-21243	-84.9991	36.3814	7035		D&A	915					600	50	438	33													
41-049-21244	-84.6711	36.4134	7036		Oil	1369			534	-23																	
41-049-21245	-84.6806	36.4005	7038		Oil	1300			516	-47																	
41-049-21248	-84.8404	36.4054	7077		D&A	1542			926	-39																	
41-049-21249	-84.6991	36.3722	7090		D&A	1308			496	-79	-32	-42	-172	-53													
41-049-21252	-84.9625	36.3041	7099		Oil	1704					446	-15															
41-049-21253	-84.7214	36.3806	7108		Gas	1422			666	16																	
41-049-21254	-84.9041	36.2252	7110		Gas	1680			968	30	369	-8	227	14	195	10											
41-049-21255	-84.9086	36.2264	7111		D&A	1665			928	-22																	
41-049-21256	-84.8599	36.3820	7117		D&A	1606			936	-36	351	-38															
41-049-21260	-84.6751	36.4112	7141		Oil	1404			549	-17																	
41-049-21261	-84.9272	36.3423	7149		Gas	1702			982	-31	412	-17	303	5													
41-049-21262	-84.7562	36.3537	7169		D&A	1430	910	14	705	13	140	5															
41-049-21263	-84.7031	36.4098	7172		D&A	1400	870	1	610	-43	125	10	-6	30													
41-049-21264	-84.6958	36.4195	7176		D&A	1487	912	62	697	47	151	43	5	45													
41-049-21266	-84.8677	36.3342	7183		Oil	1495	1095	-42	843	-72																	
41-049-21267	-84.6859	36.4194	7187		D&A	1441	856	34	641	24	76	1	-54	17													
41-049-21269	-84.8207	36.4011	7195		Gas	1527							243	11													
41-049-21270	-84.8180	36.3990	7210		Gas	1512							242	16													
41-049-21271	-84.8586	36.3271	7222		D&A	1555	1075	-38	827	-59	333	6	238	43													
41-049-21272	-84.6749	36.4067	7224		Oil	1382			507	-49											-828	-844	65				
41-049-21273	-84.9272	36.3396	7226		D&A	1672	1222	9	970	-43	395	-28	290	-8								-1525	-362				
41-049-21274	-84.9306	36.3423	7242		Gas	1672							292	-9	282	11											
41-049-21275	-84.6870	36.4230	7265		Gas	1382			653	25	97	12	-37	24													
41-049-21276	-84.8735	36.3367	7272		Oil	1530																					
41-049-21277	-84.7562	36.3510	7281		D&A	1425	905	10	700	14	135	4	-25	-5													
41-049-21278	-84.8725	36.3331	7286		Oil	1550	1100	-43	878	-43																	
41-049-21279	-84.8789	36.3309	7292		D&A	1580			930	1																	
41-049-21280	-85.0564	36.5216	7296		D&A	978							586	8	504	-53	34		-61	-11							
41-049-21281	-84.7639	36.3920	7303		D&A	1490					230	-7	90	8	60	30	-510										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-21282	-84.6726	36.4145	7305		Oil	1396			538	-27																	
41-049-21283	-84.8711	36.3318	7321		Oil	1523	1123	-15	897	-20																	
41-049-21284	-84.9245	36.3408	7337		Gas	1682	1182	-35	957	-52																	
41-049-21286	-84.7493	36.4432	7359		D&A	1499	1074	52	824	16	301	9	142	2													
41-049-21287	-84.7490	36.4407	7365		D&A	1498	1098	79	850	46	317	29	166	31													
41-049-21288	-84.9150	36.1867	7372		D&A	1700			958	20																	
41-049-21289	-84.9170	36.1845	7388		D&A	1718			964	22											-769	-834	130				
41-049-21290	-84.7851	36.4781	7400		D&A	1600					432	-4	258	-19													
41-049-21291	-84.7503	36.3559	7402		Gas	1430			677	-3																	
41-049-21292	-84.9644	36.4034	7421		O&G	1120					590	25	438	19	405	40	-356										
41-049-21293	-84.8761	36.3344	7423		D&A	1554	1144	-8	934	5																	
41-049-21294	-84.7921	36.3546	7429		Gas	1507	984	-19	791	0																	
41-049-21295	-85.0086	36.1848	7434		Oil	1822																					
41-049-21296	-84.7804	36.4180	7436		D&A	1508					329	7															
41-049-21297	-85.0327	36.5343	7437		D&A	948							613	40	583	22	6		10	56							
41-049-21298	-84.9347	36.3412	7444		D&A	1648			998	-26																	
41-049-21299	-85.0094	36.3883	7448		D&A	880					596	35	424	8	385	28											
41-049-21300	-84.7866	36.4907	7458		D&A	1595					458	-7															
41-049-21301	-85.0112	36.1872	7460		Oil	1793																					
41-049-21302	-84.7474	36.3583	7471		D&A	1423			673	-3																	
41-049-21303	-85.0899	36.1800	7473		Gas	1812	1392	-71	1152	-47												-1305	-578				
41-049-21304	-84.6765	36.4080	7476		Oil	1389																					
41-049-21305	-85.0079	36.1866	7484		Oil	1813																					
41-049-21306	-84.8884	36.5453	7500		D&A	1636					562	-24	394	-22	308	-43											
41-049-21307	-84.8763	36.3367	7502		D&A	1528																					
41-049-21309	-84.7828	36.4730	7513		D&A	1600					412	-8	244	-16	196	3											
41-049-21310	-84.7907	36.4795	7514		D&A	1610					460	7	294	-1	222	4											
41-049-21312	-84.9438	36.2644	7542		D&A	1688					528	71	318	12	288	20											
41-049-21313	-84.9919	36.3773	7554		Gas	845					465	-78	365	-33	317	-32	-471										
41-049-21314	-84.6669	36.4137	7565		D&A	1350					-5	-13															
41-049-21315	-84.7640	36.3426	7570		D&A	1462			922	233	164	27	12	22	-36	28											
41-049-21316	-85.1053	36.3938	7576		D&A	1090					750	34	559	30	532	67	-17										
41-049-21317	-84.6922	36.4182	7578		Gas	1472	892	53	669	34	124	30	-20	34													
41-049-21318	-85.0131	36.1853	7585		Oil	1820			1140	3																	
41-049-21319	-85.1023	36.3945	7586		D&A	1123					783	64	598	69	569	108	13										
41-049-21320	-85.0603	36.2992	7594		D&A	1746					566	-5	396	-5													
41-049-21322	-84.9327	36.2848	7610		D&A	1712					432	-7	280	-13													
41-049-21324	-84.9890	36.3903	7632		Gas	858					616	55	456	46	262	-90	-286		-387	-36							
41-049-21325	-85.0075	36.1895	7636		Oil	1810			1172	39																	
41-049-21327	-84.8182	36.3456	7642		O&G	1499	1011	-52	811	-25																	
41-049-21328	-84.7176	36.4222	7645		Gas	1513			753	43	193	9															
41-049-21330	-84.8734	36.3348	7673		Oil	1543	1131	-17	887	-38																	
41-049-21333	-84.8746	36.3322	7678		Oil	1577	1137	-7	892	-31												-975	-17				
41-049-21334	-84.8759	36.3307	7680		D&A	1600	1137	-5	936	13																	
41-049-21335	-84.8038	36.4819	7681		D&A	1655	1180	4	975	4	430	-63	265	-73													
41-049-21337R-1	-84.8041	36.4891	7797		D&A	1884					660	150	475	118													
41-049-21339	-85.0121	36.1899	7699		D&A	1780																					
41-049-21340	-84.8690	36.3351	7739		Oil	1533	1119	-22	909	-9											-705	-783	165				
41-049-21341	-84.9823	36.3932	7744		Oil	860					580	16	432	22	396	44	-376		-373	-5							
41-049-21342	-84.9789	36.3952	7775		D&A	895					595	29	425	13	387	33	-376		-373	4		-745	84				
41-049-21345	-84.8529	36.3244	7809		O&G	1530																					
41-049-21346	-84.8893	36.5478	7816		D&A	1637					590	0	404	-15													
41-049-21351	-84.8956	36.3393	7845		D&A	1540							265	1	228	-11											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-049-21355	-85.0974	36.3993	7948		D&A	1130					720	-9	567	30	537	81	6		9	90							
41-049-21363	-84.9911	36.2520	8059		D&A	1738			1038	0	468	-38															
41-049-21366	-85.0889	36.4638	8083		D&A	1285							620	51	600	65	-11		-9	34							
41-049-21376	-84.8036	36.4365	8346		D&A	1582					409	8	249	13	228	31											
41-049-21378	-84.7629	36.4356	8366		D&A	1518					324	16	175	22	131	25						-977	50				
41-049-21379	-84.7629	36.4326	8372		D&A	1548					310	6	154	6	102	2											
41-049-21386	-84.8380	36.3782	8438		Oil	1580			1240	310																	
41-049-21390	-84.9189	36.4124	8485		Oil	1656	1356	14	1116	28											-768	-803	128				
41-049-21393	-85.0007	36.1617	8507		Oil	1785															-833	-870	-72				
41-049-21395	-84.9214	36.4116	8518		D&A	1665	1365	23	1125	33																	
41-049-21399	-85.0064	36.1845	8557		Oil	1818																					
41-049-21402	-85.1109	36.3683	8644		D&A	1048							483	-15	443	-14	-161		-159	-72	-961						
41-049-21404	-85.0942	36.4003	8669		D&A	963							543	5	518	67	-47		-42	41							
41-049-21405	-85.1115	36.3665	8672		D&A	1108							460	-37	430	-26	-161		-158	-72							
41-049-21407	-85.1104	36.3688	8697		D&A	1039							469	-29	439	-18	-171		-170	-82							
41-049-21408	-85.0558	36.4856	8700		D&A	1742							602	41	579	40	-40		-37	33							
41-049-21409	-85.1014	36.3722	8707		D&A	1079											-17		-15	77							
41-049-21411	-85.1109	36.3683	8766		D&A	1048							483	-15	423	-34	-205		-190	-103							
41-049-21414	-84.8999	36.5226	8890		O&G	915					565	-15	415	-2	365	1						-1035	-34				
41-049-21415	-84.9870	36.4425	8906		Oil	959					693	30	545	58	506	27	-186		-184	59		-900	104				
41-049-21422	-84.9185	36.5241	8963		D&A	905					555	-45															
41-049-21429	-84.9127	36.5272	9037		D&A	915					565	-31										-872	79				
41-049-21430	-84.8981	36.5184	9057		O&G	940					610	33									-909	-984	41				
41-049-21431	-84.9273	36.5209	9066		D&A	904					598	-9										-783	164				
41-049-21432	-84.9266	36.5227	9067		D&A	898					592	-16										-899	42				
41-049-21433	-84.9303	36.5180	9080		D&A	920					600	-8									-849	-916	38				
41-049-21435	-84.9901	36.4459	9101		D&A	915							545	48	515	22	-147		-145	76		-1374	-324				
41-049-21436	-85.1094	36.3726	9128		D&A	1050							517	15	487	28	-62		-59	31		-1091	7				
41-049-21437	-84.9130	36.5307	9151		D&A	950					600	2	458	14	422	35	-413	-366	-409	-6		-858	76				
41-049-21438	-85.0982	36.3891	9211		Oil	992					695	-12	556	38	527	72	-39		-36	49	-768	-922	97				
41-049-21440	-85.1122	36.3682	9235		D&A	1059					653	-30	485	-15	453	-5	-134	-93	-132	-45	-832	-912	209				
41-049-21441	-85.0885	36.3966	9277		D&A	1082					788	64	648	117	618	175	52		55	143	-847	-927	69				
41-049-21442	-85.0990	36.3873	9280		D&A	1096					701	-3	558	43	530	75	-20		-17	69							
41-049-21443	-85.0981	36.3943	9281		D&A	969					666	-52	522	-6	489	33	-63	-27	-60	23	-872	-932	57				
41-049-21444	-84.9480	36.3346	9342		D&A	1676					376	-67	286	-33	256	-15						-1348	-29				
41-049-21445	-85.0286	36.4025	9353		D&A	859							444	-2													
41-049-21447	-85.1119	36.3658	9522		D&A	1062							482	-15	452	-4	-130	-88	-128	-43		-1330	-194				
41-049-21448	-85.0955	36.4493	9543		D&A	817					679	-65	551	-17	523	-6	-27	10	-24	24	-901	-951	-73				
41-049-21449	-85.0721	36.4377	9573		D&A	858					678	-66	553	-1	528	39	-90	-57	-87	7							
41-049-21450	-85.0708	36.4384	9616		D&A	853					653	-90	536	-18	506	17	-101	-65	-98	-2	-868	-958	-33				
41-049-21451	-85.0740	36.4367	9638		Oil	861							447	-107	423	-66	-112	-88	-109	-18							
41-049-21452	-85.0755	36.4367	9677		D&A	868							523	-31	493	2	-117	-92	-113	-25	-598	-658	258				
41-049-21453	-84.9774	36.3358	9708		D&A	1741					481	-22	328	-30	291	-17	-494	-427	-491	-3							
41-049-21454	-84.9378	36.4842	9715		D&A	1715					579	-15	416	-14	379	-9						-1049	10				
41-049-21455	-84.9760	36.3363	9719		D&A	1740					499	-3	343	-14	307	0	-458		-455	35							
41-049-21457	-85.0731	36.4355	9761		Oil	859							514	-38	489	4	-126	-88	-123	-29							
41-049-21458	-85.0746	36.4358	9800		D&A	857							507	-46	473	-15	-143	-108	-140	-49							
41-049-21459	-85.0741	36.4349	9804		D&A	857							507	-46	477	-9	-140	-103	-138	-45							
41-051-00001R-1	-86.0631	35.2581	3563		D&A	1021					879	-7	798	15	772	-17	342		345	-26		-510	-25				
41-051-00002	-86.2370	35.0970			D&A	890							745	-3													
41-051-00003	-86.2348	35.0912			D&A	900							740	-1					225	-2							
41-051-00005	-86.1143	35.2350			D&A	950							821	8													
41-051-00006	-86.0878	35.2069			D&A	990							793	21													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-051-00007	-86.1357	35.1999			D&A	885							809	-4					446	-31							
41-051-00009	-86.1143	35.1835			Gas	970							780	1					360	23							
41-051-00012	-86.1049	35.1810			D&A	990							739	-30					230	-61							
41-051-00013	-86.0715	35.2157			Gas	990							739	-21													
41-051-00014	-86.0820	35.1903			D&A	975							740	-27													
41-051-00015	-86.0515	35.1690			D&A	980							760	14					343	11		-470	48				
41-051-00016	-86.0556	35.1745			D&A	990							780	29				361	354	9							
41-051-00017	-86.0054	35.1570			D&A	1004							716	11					263	-15		-736	-9				
41-051-20001	-86.2150	35.0483	1052		D&A	940							682	4			195		178	-35							
41-051-20002	-86.2153	35.0481	1074		D&A	940							682	4													
41-051-20003	-85.8773	35.0105	1092		D&A	761							371	-6			-169		-189	-29							
41-051-20005	-86.1126	35.2423	3695		D&A	932							815	1								-359	116				
41-051-20006	-86.1165	35.2440	3709		D&A	935							811	-9	801	-16											
41-051-20008R-1	-86.1147	35.2429	6124		Oil	931							821	4	811	-4											
41-051-20009	-86.1133	35.2369	3837		Gas	947							829	16	812	3					-538	-607	-130				
41-051-20010	-86.0718	35.1948	4141		Gas	965					871	5	759	-4	747	-7	335				-554	-638	-67				
41-051-20012	-86.1129	35.2337	4850		D&A	950							820	9													
41-051-20013	-86.1153	35.2324	4901		D&A	950							793	-20	783	-24											
41-051-20014	-86.1109	35.2317	4902		D&A	952							815	9	806	3											
41-051-20015	-86.1308	35.2508	4929		D&A	895							859	21	842	4	420		425	-80							
41-051-20016	-86.1169	35.2366	5480		O&G	944							804	-14	794	-18											
41-051-20017	-86.1168	35.2290	5481		D&A	939							784	-29	774	-32											
41-051-20019	-86.1094	35.2371	5694		D&A	934							826	19	816	10	617		619	56							
41-061-20006	-85.6110	35.4029	1050		D&A	1862					512	2	386	-12													
41-061-20007	-85.6268	35.3814	1135		D&A	1877			1209	-2	517	-6	391	-12	364	94	-133										
41-061-20008	-85.6545	35.3623	1136		D&A	1887			1207	-23	597	40	421	-3			-101										
41-061-20010	-85.6462	35.3716	1568		D&A	1842					544	-5	420	-1			-88										
41-061-20011	-85.6584	35.3684	1587		D&A	1900			1274	34	585	24	456	21													
41-061-20012	-85.6690	35.3773	1610		D&A	1872					591	19	466	19													
41-061-20013	-85.6828	35.3629	1664		D&A	1865					584	9	460	8			-67										
41-061-20014	-85.7154	35.3567	1751		D&A	1898			1250	3	592	-14	458	-36			-54										
41-061-20015	-85.7040	35.3451	1758		D&A	1885			1246	10	607	21	475	4													
41-061-20016	-85.6253	35.3679	1759		Gas	1860					530	12	404	11			-104										
41-061-20017	-85.6335	35.3665	1765		D&A	1900					532	2	406	4			-102										
41-061-20018	-85.6646	35.3888	1785		D&A	1867			1257	-4	580	9	426	-21	426	158											
41-061-20020	-85.6846	35.3534	1787		D&A	1890					576	7	450	1													
41-061-20021	-85.5978	35.3249	1788		D&A	2240					438	-30	316	-35													
41-061-20022	-85.6875	35.3601	1803		D&A	1920					576	0	450	-5	342	69	-62										
41-061-20023	-85.6247	35.3625	1804		D&A	1880					522	6	390	3													
41-061-20024	-85.6657	35.3942	1807		D&A	1845					545	-30	421	-29													
41-061-20027	-85.7224	35.4399	1815		D&A	1880					738	41	618	39			136										
41-061-20028	-85.6313	35.3574	1816		D&A	1900					515	-11	392	2													
41-061-20029	-85.7060	35.3703	1826		D&A	1860					556	-53	428	-48			-82										
41-061-20030	-85.7352	35.3708	1827		D&A	1844					626	-25	504	-36			13										
41-061-20031	-85.7180	35.4437	1836		D&A	1758					670	-22	547	-31													
41-061-20033	-85.6782	35.4518	1848		D&A	1840					632	2	506	-13			20										
41-061-20034	-85.6859	35.3855	1849		D&A	1840					600	4	476	8			-44										
41-061-20035	-85.7554	35.3761	1850		D&A	1918					743	55	624	44			148										
41-061-20036	-85.6734	35.3884	1857		D&A	1840					570	-12	446	-10			-74										
41-061-20037	-85.6653	35.4430	1858		D&A	1835					611	6	484	-2													
41-061-20038	-85.6658	35.3814	1876		D&A	1840					560	-11	430	-16	314	56											
41-061-20041	-85.6278	35.3526	1897		D&A	1961					515	-3	383	2	15	-57											
41-061-20042	-85.6516	35.3681	1903		Gas	1858					594	38	450	24	348	118											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-061-20043	-85.6641	35.3734	1904		Gas	1852					635	69	512	70	412	158											
41-061-20044	-85.6543	35.3804	1905		D&A	1862					484	-74	457	23			-48										
41-061-20046	-85.6810	35.3836	1907		D&A	1802					570	-19	448	-14													
41-061-20048	-85.6320	35.4110	1909		D&A	1884							444	19													
41-061-20054	-85.6599	35.3479	2073		D&A	1840					554	0	432	17	76	-142											
41-061-20055	-85.6939	35.3767	2074		D&A	1862					601	3	480	11													
41-061-20056	-85.6384	35.3788	2075		Gas	1862					540	2	410	-5													
41-061-20061	-85.7007	35.3776	2132		D&A	1858					588	-21	458	-18	94	-97											
41-061-20062	-85.6806	35.3886	2245		Gas	1840					594	2	468	4	16	-189											
41-061-20063	-85.6775	35.3915	2248		Gas	1805					593	4	465	3	357	144											
41-061-20069	-85.8295	35.4877	3196		D&A	1960			1524	-5	918	23	796	3	757	2	382					-2720	-43	-4294	-7395		
41-061-20070	-85.5441	35.3840	4051		D&A	1797			1097	11			377	52	227	-5						-3066	-33				
41-061-20071	-85.7825	35.3978	4377		Gas	1936			1344	-6	734	-33	610	-10	580	17						-2980	-81				
41-061-20072	-85.6971	35.3032	4378		D&A	2021			1157	-28	579	14	459	16	414	0											
41-061-20073	-85.5720	35.4012	4456		D&A	1847			1047	-45	447	3	314	-14	289	-7						-2695	118				
41-061-20074	-85.7055	35.2335	4457		D&A	1877			1190	3	573	57	441	1	429	-3											
41-061-20075	-85.7547	35.3654	4494		D&A	1904			1243	-7	704	37	584	10	560	50					-1876	-2966	-127				
41-061-20079	-85.6688	35.5290	9227		D&A	927							582	-2	557	11	84		87	5		-2837	122				
41-065-20001	-85.1254	35.4484	3380		D&A	1775	265	-50	145	-22	-595	16	-735	2			-444				-1487	-2143	-149				
41-077-00002	-85.0638	35.7324			D&A	940																-234	250				
41-087-10002	-85.6201	36.4468	289		D&A	568											298										
41-087-20001	-85.5668	36.4621	634		D&A	648													248	35							
41-087-20002	-85.5682	36.4645	660		D&A	662											237		232	16		-494	70				
41-087-20004	-85.5660	36.4597	823		D&A	700													202	-13	-538	-562	-7				
41-087-20006	-85.5721	36.4601	902		D&A	820							718	-52					225	-8							
41-087-20009	-85.5660	36.4706	1089		D&A	656													131	-77		-537	43				
41-087-20010	-85.6915	36.4191	1634		D&A	715													385	28		-255	198				
41-087-20011	-85.5969	36.4493	1683		D&A	642													354	55							
41-087-20012	-85.5886	36.4470	1768		D&A	543													275	-21		-432	75				
41-087-20015	-85.7163	36.3669	2519		D&A	596													311	-34							
41-087-20016	-85.6059	36.4530	2536		D&A	580											225					-357	146				
41-087-20020	-85.5458	36.3530	2691		Oil	535											380		363	61							
41-087-20022	-85.5949	36.4720	2696		D&A	550											270										
41-087-20024	-85.6865	36.3194	2755		D&A	781											521										
41-087-20025	-85.5896	36.4706	2792		D&A	534									393	-254	216				-540	-590	-24				
41-087-20027	-85.5992	36.3564	2920		D&A	538											248					-547	-89				
41-087-20029	-85.4989	36.3504	2988		D&A	660									535	-99	340					-458	76				
41-087-20031	-85.7621	36.2793	3271		D&A	568											388		418	-5	-322	-408	-18				
41-087-20034	-85.5389	36.3371	3841		D&A	557											307		312	0							
41-087-20035	-85.5894	36.4486	3959		Oil	589											299		301	5		-428	78				
41-087-20036	-85.5757	36.4633	4346		D&A	605													263	23	-517	-527	29				
41-087-20041	-85.6874	36.4748	4678		D&A	590													255	8							
41-087-20046	-85.7136	36.5139	4910		D&A	655											293										
41-087-20047	-85.5617	36.4011	4946		D&A	638													252	-48	-274	-302	214				
41-087-20051	-85.5798	36.4310	5332		Oil	662											412		415	120	-385	-519	-3				
41-087-20052	-85.7177	36.5206	5370		D&A	680											240					-481	27				
41-087-20053	-85.6601	36.3728	5477		Gas	772											367										
41-087-20056	-85.5826	36.4179	5774		D&A	878							738	-36	725	-33	269					-508	7				
41-087-20058	-85.5071	36.3851	5932		D&A	944					929	7	784	-32	759	21	297		299	10	-480	-526	52				
41-087-20059	-85.5788	36.4294	5940		Oil	708											328		332	36		-341	176				
41-087-20060	-85.6626	36.2798	5967		D&A	603											450		454	-36		-473	-9				
41-087-20061	-85.5944	36.4756	6014		D&A	559											274		276	15							
41-087-20063	-85.5870	36.4282	6097		D&A	924					888	-72	756	-9	737	-21	256		259	-53							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-087-20064	-85.5736	36.4186	6129		Oil	998											309		338	35							
41-087-20065	-85.5881	36.4344	6142		D&A	517											252		254	-53	-289	-363	146				
41-087-20071	-85.6469	36.4335	6600		D&A	612											290		293	-6	-294	-364	123				
41-087-20074	-85.5663	36.4199	6794		D&A	1059					999	42			834	65	349		349	57		-371	152				
41-087-20076	-85.5013	36.2844	7055		D&A	931							805	18	767	7	312		344	-14	-322	-342	137				
41-087-20077	-85.6432	36.4386	7249		D&A	587													322	34	-77	-123	365				
41-087-20078	-85.6424	36.4362	7250		D&A	708											338		343	52		-563	-76				
41-087-20079	-85.6412	36.4377	7252		D&A	560											318		322	34	-509	-569	-82				
41-087-20080	-85.6193	36.3318	7347		D&A	1001							861	27			41		422	-3							
41-087-20081	-85.6190	36.3456	7353		D&A	618													413	2							
41-087-20083	-85.5711	36.3799	7717		D&A	979							829	28	807	28	359		363	27	-550						
41-087-20084	-85.6618	36.3165	8264		D&A	694											430		433	-34		-2110	-1685		-5065		
41-087-20085	-85.6524	36.3123	8267		D&A	1093											545		548	75							
41-087-20086	-85.5633	36.4358	8284		D&A	941							776	24	761	7	254		256	1							
41-087-20089	-85.5429	36.3525	9109		D&A	541											291		294	-9							
41-087-20091	-85.5159	36.3779	9124		D&A	963					908	-11	773	-53	753	8	300		303	10							
41-087-20093	-85.5573	36.3799	9565		D&A	945							780	-29	758	-34	298		301	-5							
41-087-20097	-85.5458	36.3545	9130		D&A	550											265		269	-32							
41-111-10004	-85.9398	36.5405	48		D&A	752																					-4132
41-115-20001	-85.5992	35.2878	1209		D&A	1828			1048	-5	400	-42	264	-66	248	-95											
41-115-20002	-85.7768	35.0590	3967		D&A	653					503	2	373	-23													
41-115-20003	-85.6456	35.1989	4052		D&A	1733					1068	120	333	-34	208	-86											
41-115-20005	-85.7200	35.1986	4626		D&A	1650	1505	-17											-130	-24							
41-115-20008	-85.7373	35.1514	5058		D&A	1796			1034	-10	524	20	402	-8	392	2			-160	6							
41-129-00084R-2	-84.7949	36.1402	750		Gas	1413			511	-4																	
41-129-10019	-84.6580	36.2972	63		Oil	1495	576	-10	337	-12	-276	-46	-362	-29													
41-129-10024	-84.7825	36.1794	686		D&A	1409					-27	-16															
41-129-10038R-1	-84.7936	36.1619	383		Gas	1450			579	27	-23	1															
41-129-10039R-1	-84.7916	36.1431	228		Gas	1418			475	-38	-130	-68	-262	-53													
41-129-10041	-84.7932	36.1126	533		O&G	1420			516	60																	
41-129-10047R1	-84.7527	36.2861	380		Oil	1475			670	62	48	11	-36	31											-4965		
41-129-20011	-84.8305	36.2430	538		Oil	1557			783	27																	
41-129-20017	-84.7378	36.2974	578		D&A	1541			605	32	39	28	-70	21	-110	32											
41-129-20033	-84.7946	36.1742	645		Gas	1440			631	55	23	21	-120	17													
41-129-20034	-84.7552	36.2881	644		Gas	1440	820	-31	618	6	2	-42	-40	21													
41-129-20065	-84.7005	36.3167	707		Oil	1450			498	-10	-90	-22															
41-129-20066	-84.6922	36.1377	709		D&A	1392					-258	87															
41-129-20071R-1	-84.6966	36.3066	716		D&A	1434			492	10	-93	-3	-190	6													
41-129-20080	-84.7497	36.2191	728		Oil	1625			583	16																	
41-129-20089	-84.7923	36.1894	742		Gas	1526			586	-12	31	3															
41-129-20094	-84.7076	36.2993	747		Gas	1424			498	1	-72	-4	-189	-19	-232	-14											
41-129-20098	-84.7804	36.2893	754		D&A	1557					109	-2															
41-129-20099	-84.7022	36.3289	755		Oil	1482			546	22	-32	16															
41-129-20105R-1	-84.8744	36.1826	8012		D&A	1639							109	9													
41-129-20116	-84.7817	36.1611	783		D&A	1402			511	-13																	
41-129-20119R-1	-84.7569	36.2442	1272		Gas	1475			657	50	0	-44	-57	31													
41-129-20128	-84.6911	36.2303	797		Gas	1447			445	78																	
41-129-20129R-1	-84.6936	36.3314	1043		D&A	1464					-44	22															
41-129-20135R-1	-84.6970	36.2501	2365		Gas	1485																					
41-129-20139	-84.7114	36.1687	820		D&A	1455			361	-8	-245	-11															
41-129-20140	-84.7066	36.3343	821		D&A	1343			526	-13	-45	-15															
41-129-20145	-84.7854	36.2738	830		D&A	1504			664	-2	79	-33	-38	-33													
41-129-20146	-84.8751	36.1712	831		D&A	1707			870	49	238	22															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20150	-84.8774	36.1693	835		D&A	1708			843	16	208	-13															
41-129-20157	-84.7119	36.2587	850		Gas	1526			488	14	-78	10															
41-129-20158	-84.7658	36.2973	851		Oil	1488					15	-64															
41-129-20160	-84.7539	36.2933	854		Oil	1540			622	14	27	-19															
41-129-20161	-84.7529	36.2834	855		Oil	1479			635	26	67	32															
41-129-20163	-84.6347	36.2648	858		Gas	1563			187	-29	-383	-43	-501	-33													
41-129-20168	-84.6643	36.1517	872		D&A	1400			210	-1	-380	39	-476	48													
41-129-20169R-1	-84.5925	36.2612	874		Oil	1502			116	13	-448	7	-575	29													
41-129-20171	-84.7540	36.2808	877		D&A	1411			619	8	49	14															
41-129-20172	-84.7571	36.2954	878		D&A	1519					11	-46															
41-129-20173	-84.7646	36.2910	881		Oil	1547			634	5	27	-43															
41-129-20175	-84.7588	36.2978	885		Oil	1439			605	-13	39	-23															
41-129-20179	-84.5927	36.2586	895		D&A	1502			104	0	-446	7	-586	24													
41-129-20180	-84.7688	36.2980	898		Oil	1511			607	-32	53	-35															
41-129-20181	-84.5904	36.2646	900		Gas	1506					-464	-2															
41-129-20184	-84.7830	36.2877	906		D&A	1566			663	-3	96	-21	-26	-21													
41-129-20185	-84.7682	36.2927	907		Oil	1477			617	-20	41	-40															
41-129-20189	-84.7537	36.2216	919		Oil	1555			485	-94																	
41-129-20190	-84.7783	36.2069	920		Gas	1520					44	9															
41-129-20191	-84.6588	36.3040	923		D&A	1534			361	-2	-207	6															
41-129-20193	-84.7166	36.3563	931		D&A	1438			562	-29	10	-18															
41-129-20196	-84.7708	36.2831	938		D&A	1588			676	37	108	30															
41-129-20197	-84.6684	36.2792	940		D&A	1403			347	0	-241	-16	-349	-17													
41-129-20202R-1	-84.7128	36.3604	8066		O&G	1376			590	1	10	-13															
41-129-20203	-84.7491	36.2977	952		Oil	1550			562	-35	30	-9															
41-129-20204	-84.7711	36.2926	953		Oil	1502			621	-21	56	-33															
41-129-20205	-84.7169	36.3271	954		Oil	1375			569	22	-15	-1	-129	-7													
41-129-20207	-84.6798	36.2742	957		D&A	1442			422	47	-188	-3	-306	-3													
41-129-20214R-1	-84.7650	36.2939	968		Oil	1569			633	3	45	-28															
41-129-20216	-84.7334	36.2739	970		Gas	1396			605	38	4	19	-144	-28													
41-129-20221	-84.6542	36.3087	978		D&A	1445			337	-16	-243	-25	-327	-3													
41-129-20222	-84.7630	36.2827	979		D&A	1540			640	14	74	17															
41-129-20223	-84.7599	36.2825	980		Oil	1455			630	9	61	11															
41-129-20224	-84.7273	36.3419	981		D&A	1427			569	-23	7	-28	-137	-47													
41-129-20225	-84.7182	36.3588	982		D&A	1432			624	24	30	-6															
41-129-20228	-84.7094	36.3601	991		D&A	1424			570	-10	2	-12															
41-129-20230	-84.7372	36.2032	993		D&A	1562			562	44	-42	41	-173	41													
41-129-20232	-84.7769	36.2901	1001		D&A	1524					94	-8															
41-129-20233	-84.7330	36.3091	1003		Gas	1441			541	-16	-9	-18															
41-129-20235	-84.7776	36.2956	1006		D&A	1461			647	-9	76	-35	-50	-35													
41-129-20236	-84.7226	36.3113	1007		Oil	1497					-9	6	-99	11													
41-129-20237	-84.7118	36.3630	1011		Oil	1402			590	-1	0	-25															
41-129-20238	-84.6745	36.2694	1012		D&A	1457					-211	-3															
41-129-20239	-84.7202	36.3132	1013		D&A	1507			631	96	-5	15															
41-129-20240	-84.8071	36.1913	1015		D&A	1538			560	-63	58	-2	-87	-11													
41-129-20244	-84.7629	36.2959	1025		Oil	1530			474	-152	50	-20															
41-129-20245	-84.7061	36.3649	1028		D&A	1396			618	38	26	15															
41-129-20246	-84.7718	36.3258	1035		D&A	1489			681	9	125	-4	-5	5													
41-129-20248	-84.6694	36.2816	1039		Oil	1306			360	5	-232	-14															
41-129-20249	-84.7793	36.1745	1047		Oil	1451			531	-16	-35	-8	-163	9													
41-129-20250	-84.7505	36.2953	1051		Oil	1590					45	5															
41-129-20251	-84.6741	36.3248	1053		D&A	1328			456	15	-100	26	-230	15													
41-129-20252	-84.6653	36.3283	1054		D&A	1358			386	-33	-144	4	-266	1													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20253	-84.6734	36.1114	1059		D&A	1360			82	-56	-470	-29	-610	-60													
41-129-20254	-84.7920	36.2843	1060		D&A	1512			668	-21	112	-25	-22	-33													
41-129-20255	-84.7717	36.2877	1062		Oil	1584					84	-1															
41-129-20256	-84.6436	36.3041	1064		D&A	1423			265	-32	-379	-114	-393	-28													
41-129-20257	-84.7681	36.2888	1080		D&A	1557					70	-6															
41-129-20258	-84.7036	36.2131	1083		D&A	1581	759	98	431	45	-137	47															
41-129-20260	-84.6537	36.3045	1091		D&A	1462	608	22	340	-3	-269	-40															
41-129-20261	-84.7744	36.1778	1094		Oil	1478			556	13	-58	-28	-194	-18													
41-129-20262	-84.8431	36.2048	1098		D&A	1539			719	-29	171	1	55	23													
41-129-20263	-84.7368	36.3434	1106		D&A	1460			612	-3	62	-2	-102	-33													
41-129-20264	-84.6534	36.3141	1110		D&A	1445			327	-32	-245	-36	-358	-39													
41-129-20265	-84.8247	36.1722	1113		D&A	1582			646	5	102	30	-52	12													
41-129-20266	-84.7663	36.3025	1184		Oil	1461			597	-37	79	-7															
41-129-20267	-84.7697	36.2857	1185		Oil	1561			653	15	59	-19															
41-129-20268	-84.6681	36.2711	1119		D&A	1385			335	0	-231	-1															
41-129-20270	-84.7512	36.2154	1122		D&A	1599			571	6	-39	-22	-153	-7													
41-129-20271	-84.7976	36.1486	1123		D&A	1453			531	-6	-71	-31	-209	-23													
41-129-20272	-84.7303	36.3076	1126		D&A	1537					13	12															
41-129-20274	-84.7396	36.3456	1145		D&A	1415	875	29	635	8	77	2	-70	-8													
41-129-20275	-84.7061	36.3172	1148		Gas	1438			506	-11																	
41-129-20276	-84.7069	36.1778	1150		Gas	1444			366	4	-238	-4	-368	-11													
41-129-20277	-84.6581	36.3012	1166		D&A	1441	581	-11	331	-25	-249	-28	-346	-20													
41-129-20278	-84.7589	36.2853	1173		D&A	1462	914	60	628	9	22	-28															
41-129-20279	-84.7613	36.2926	1186		Oil	1504	900	36	606	-17	2	-61															
41-129-20280	-84.3892	36.0534	1192		D&A	942			-1178	2	-1772	36	-1922	-18													
41-129-20281	-84.7471	36.2952	1195		Oil	1561			595	1	59	27															
41-129-20283	-84.6398	36.0967	1202		D&A	1309			53	68	-489	30	-639	18													
41-129-20284	-84.7922	36.2399	1208		D&A	1543			677	3	127	14															
41-129-20285	-84.7534	36.2022	1218		D&A	1566			548	-3	-60	-25															
41-129-20286	-84.7058	36.1706	1219		D&A	1354			440	85	-170	79	-297	75													
41-129-20287	-84.8166	36.2449	1223		D&A	1498			686	-43	130	-36	-14	-30													
41-129-20288	-84.7793	36.1708	1230		D&A	1375			527	-12																	
41-129-20289	-84.7762	36.1708	1239		Oil	1386			544	12																	
41-129-20290	-84.7807	36.1986	1241		Gas	1477			557	-41	8	-17	-128	-14													
41-129-20291	-84.7714	36.1783	1243		Oil	1471			557	19	0	35															
41-129-20292	-84.6956	36.2332	1244		Gas	1384			388	1																	
41-129-20293	-84.7596	36.2413	1249		D&A	1481			641	30	73	21															
41-129-20294	-84.7739	36.2384	1250		D&A	1625			638	1	103	19	-43	12													
41-129-20295	-84.7687	36.1749	1269		Oil	1482			494	-30																	
41-129-20296	-84.8237	36.2628	1271		D&A	1521			753	-4	199	-3															
41-129-20298	-84.8207	36.2654	1276		D&A	1480			726	-27	159	-37															
41-129-20299	-84.7637	36.2461	1291		D&A	1500	892	41	690	70	114	51	-20	47													
41-129-20300	-84.6883	36.2261	1292		D&A	1406			398	47	-160	56															
41-129-20301	-84.6705	36.1538	1315		D&A	1401			229	-8	-339	51	-451	50	-521	5											
41-129-20302	-84.7876	36.1686	1346		D&A	1375			525	-26																	
41-129-20303	-84.8458	36.2029	1347		D&A	1510					223	50	87	51													
41-129-20304	-84.6498	36.0959	1351		D&A	1320			56	28	-482	13															
41-129-20306	-84.6425	36.2213	1398		D&A	1550			230	5	-316	20	-454	18													
41-129-20307	-84.7608	36.1807	1406		D&A	1510			500	-20	-45	11															
41-129-20308	-84.7833	36.1642	1414		Oil	1408			488	-45																	
41-129-20309	-84.7738	36.1193	1428		D&A	1471			501	65	-139	1															
41-129-20311	-84.7564	36.2295	1508		D&A	1599					-1	-27															
41-129-20312	-84.7670	36.1388	1497		D&A	1429			459	8	-116	5	-249	13													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20313	-84.6736	36.3131	1510		D&A	1413			483	59	-133	14	-253	7													
41-129-20314	-84.7938	36.1329	1515		Gas	1476	766	-6	536	37	-92	-17	-234	-7													
41-129-20315	-84.7779	36.1777	1528		D&A	1468			534	-16																	
41-129-20316	-84.7685	36.1548	1530		O&G	1473			536	57	-91	-1															
41-129-20317	-84.7959	36.2145	1539		D&A	1507			709	64	115	36															
41-129-20318	-84.6273	36.0786	1541		D&A	1280	128	25	-110	-24	-680	-38	-826	-106	-878	-76											
41-129-20319	-84.7749	36.1731	1543		Oil	1465	795	45	535	1												-2125	-76				
41-129-20320	-84.5136	35.9972	1547		D&A	940	-520	3	-910	-39	-1372	28	-1578	-31													
41-129-20322	-84.7228	36.1634	1566		D&A	1462			312	-78	-214	-5	-334	-4													
41-129-20323	-84.6949	36.1686	1571		Oil	1428			328	4	-282	4	-404	3													
41-129-20324	-84.7574	36.1748	1578		Oil	1563			530	31																	
41-129-20325	-84.7832	36.3233	1581		D&A	1485			727	30	178	16	27	9													
41-129-20326	-84.8012	36.2119	1582		D&A	1524			640	-9	84	1	-54	-6													
41-129-20328R-1	-84.7495	36.1324	7290		Gas	1381			402	0	-129	57	-300	10	-346	73	-1298										
41-129-20329	-84.7643	36.1526	1594		O&G	1449			455	-10	-106	-2															
41-129-20330	-84.7027	36.2019	1596		D&A	1510			360	-3	-204	6	-340	-20													
41-129-20331	-84.9063	36.1883	1599		D&A	1685			877	-44																	
41-129-20332	-84.7377	36.1809	1601		Oil	1385			480	10	-125	2															
41-129-20333	-84.5993	36.2654	1602		Gas	1570																					
41-129-20334	-84.7733	36.3097	1612		D&A	1547	927	19	641	-11	99	-15	-43	-19													
41-129-20335	-84.6041	36.1259	1619		D&A	1026			-174	-48	-714	-31	-826	-42													
41-129-20336	-84.7697	36.3249	1622		D&A	1456	920	8	668	4	126	5	-20	-3													
41-129-20337	-84.6867	36.3494	1623		D&A	1307			517	13	-81	-19	-209	-23	-251	-3											
41-129-20338	-84.7488	36.1437	1624		D&A	1412					-13	155	-288	7													
41-129-20339	-84.8080	36.1286	1631		Gas	1478			558	40	-62	-9	-195	16													
41-129-20340	-84.7752	36.1549	1632		Gas	1464			514	19	-82	-6	-245	-28													
41-129-20341	-84.8531	36.2612	1639		Oil	1605					261	-20	123	8													
41-129-20342	-84.7804	36.1665	1640		Oil	1445					-63	-22	-195	-11													
41-129-20344	-84.6929	36.2248	1652		Gas	1461					-99	102															
41-129-20345	-84.7783	36.1651	1654		Oil	1448	782	31	498	-26	-66	-17	-187	5													
41-129-20346	-84.7811	36.2101	1655		D&A	1555					99	54	-41	46	-210	-67											
41-129-20347	-84.8089	36.1756	1658		D&A	1470			606	1	62	28	-100	0													
41-129-20348	-84.7285	36.1372	1659		D&A	1300			316	-43	-164	79	-378	-29													
41-129-20349	-84.7561	36.2093	1669		D&A	1578			537	-29	-20	-7	-167	-20													
41-129-20350	-84.7126	36.2966	1671		D&A	1400			574	67	-58	-2	-164	-8													
41-129-20351	-84.7953	36.2377	1673		D&A	1548			670	-10	122	6	-22	2													
41-129-20352	-84.8454	36.1544	1674		Gas	1621			679	-14	119	10	-15	26													
41-129-20353	-84.7442	36.2001	1676		D&A	1578			561	30																	
41-129-20354	-84.8056	36.1543	1679		D&A	1550			620	52	4	18															
41-129-20355	-84.7750	36.2874	1680		Oil	1510					72	-22															
41-129-20356	-84.7301	36.2705	1544		Gas	1422			568	16	14	39	-126	0	-176	-4											
41-129-20357	-84.7813	36.1884	1682		D&A	1516					6	1	-144	-8													
41-129-20358	-84.8071	36.2777	1688		D&A	1530					175	5	32	-1													
41-129-20359	-84.8069	36.2850	1689		D&A	1515					187	8	41	0													
41-129-20362	-84.6936	36.1439	1719		D&A	1420			318	31	-370	-42															
41-129-20363	-84.7078	36.2055	1721		D&A	1575			483	91	-116	67	-207	89													
41-129-20364	-84.7048	36.2899	1725		D&A	1380			452	-25	-85	1	-200	-9													
41-129-20366	-84.6134	36.2344	1744		D&A	1517					-425	-30	-557	24													
41-129-20368	-84.7259	36.3627	1749		D&A	1470			650	23	68	5	-80	-8													
41-129-20369	-84.7042	36.1926	1750		D&A	1330			390	31	-176	45	-306	28													
41-129-20371	-84.7345	36.3224	1779		Gas	1395					35	11	-90	-7													
41-129-20372	-84.6985	36.1362	1789		D&A	1395			245	-37	-311	20	-411	30													
41-129-20373	-84.7478	36.2626	1800		D&A	1585			625	28	72	53	-57	31													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20374	-84.7939	36.1063	1810		Gas	1456			519	81	-122	-1	-250	16													
41-129-20375	-84.7512	36.1759	1811		Oil	1498	701	-9																			
41-129-20376	-84.8507	36.2208	1817		D&A	1585					183	-35	57	-9													
41-129-20377	-84.7334	36.1423	1818		D&A	1397			384	6	-283	-65	-338	-7													
41-129-20378	-84.7894	36.1022	1819		Gas	1482			496	78	-163	-23															
41-129-20379	-84.7762	36.1749	1825		Oil	1422																					
41-129-20380	-84.7008	36.3056	1834		Gas	1420					-82	-2	-162	22													
41-129-20381	-84.6959	36.3268	1835		D&A	1449	755	25	518	10																	
41-129-20382	-84.8810	36.2158	1839		D&A	1597			834	-34	297	0	163	20													
41-129-20383	-84.7101	36.1930	1841		D&A	1435			357	-27	-209	-11	-336	-20													
41-129-20384	-84.7601	36.1743	1843		Oil	1578			480	-24																	
41-129-20385	-84.7636	36.3038	1844		D&A	1460			632	4	78	-2															
41-129-20386	-84.8316	36.2656	1862		Gas	1520	950	-61	824	50	223	-4	84	14													
41-129-20387	-84.7593	36.1717	1865		Oil	1559	699	-20	519	24																	
41-129-20388	-84.8762	36.2146	1879		Oil	1600			844	-10	272	-9															
41-129-20389	-84.8772	36.2117	1880		Oil	1570			876	20	266	-11															
41-129-20390	-84.7343	36.1493	1889		D&A	1470					-216	-14	-318	2													
41-129-20391	-84.8068	36.1726	1891		Gas	1510			645	48	58	35	-94	18													
41-129-20393	-84.6679	36.1575	1916		D&A	1380			211	-24	-398	-2	-462	39													
41-129-20394	-84.8131	36.1726	1922		Gas	1528			665	55	124	84	-74	24													
41-129-20395R-1	-84.6957	36.2192	8257		Gas	1494					-37	165															
41-129-20399	-84.7534	36.2661	1928		D&A	1455					95	62	-49	21													
41-129-20400	-84.7343	36.3261	1930		D&A	1410			525	-51	-4	-33	-140	-58													
41-129-20401	-84.5231	36.0000	1943		D&A	1205			-791	40	-1365	-6	-1521	2													
41-129-20402	-84.8700	36.2100	1968		D&A	1628			908	72	246	-7															
41-129-20404	-84.8799	36.2109	1970		Oil	1530			880	17																	
41-129-20405	-84.7625	36.1742	1992		D&A	1580	739	12	493	-16																	
41-129-20409	-84.8796	36.2134	2009		D&A	1568																					
41-129-20412	-84.7650	36.2421	2014		D&A	1510			634	13	52	-16	-72	-4													
41-129-20415	-84.8488	36.2168	2032		D&A	1557			767	-9	175	-30	53	-5													
41-129-20416	-84.7228	36.3528	2039		D&A	1459			579	-22	17	-22															
41-129-20417	-84.6894	36.2939	2040		Gas	1360			590	153	-125	3															
41-129-20418R-1	-84.7391	36.3216	7453		D&A	1369					9	-26	-116	-40													
41-129-20419	-84.7823	36.1418	2054		D&A	1455			525	35	-95	-11	-225	4													
41-129-20420	-84.7621	36.1698	2062		D&A	1530			508	11																	
41-129-20421	-84.7156	36.3672	2063		Oil	1450			610	1																	
41-129-20422	-84.7896	36.1354	2064		Gas	1521			459	-36	-85	-5	-228	1													
41-129-20423	-84.8732	36.2181	2068		D&A	1622			820	-27																	
41-129-20424	-84.7370	36.1781	2069		Gas	1377	767	78	466	5																	
41-129-20425	-84.7150	36.3694	2070		D&A	1390			610	-2																	
41-129-20426	-84.7689	36.2291	2072		D&A	1537			689	71	107	48	-28	46													
41-129-20427	-84.8725	36.2114	2081		D&A	1586			850	7																	
41-129-20428	-84.7125	36.3682	2082		Oil	1385			597	-6																	
41-129-20429	-84.8446	36.2227	2083		D&A	1597			777	8																	
41-129-20430	-84.7182	36.3667	2107		D&A	1438			606	-9																	
41-129-20431	-84.8776	36.2054	2121		D&A	1541			837	-18																	
41-129-20432	-84.7102	36.3668	2123		D&A	1346			612	18																	
41-129-20433	-84.6328	36.1792	2124		D&A	1390			80	-73	-610	-128	-620	-75													
41-129-20434	-84.7653	36.3059	2125		D&A	1455			627	-5	57	-29															
41-129-20435	-84.7800	36.1193	2126		Oil	1400	710	-24			-117	10	-305	-34	-960	-495						-1899	53				
41-129-20436	-84.7601	36.2951	2135		D&A	1510			650	30	55	-8															
41-129-20437	-84.7449	36.2586	2141		D&A	1530			624	33	80	70															
41-129-20438	-84.7718	36.1587	2152		O&G	1494			497	3	-62	13	-214	3													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20439	-84.7699	36.1645	2197		Oil	1515					-55	12	-197	14													
41-129-20440	-84.6456	36.2774	2211		D&A	1570			220	-40	-330	-17	-450	-41													
41-129-20441	-84.7646	36.1632	2212		D&A	1529					-97	-16	-217	9			-1079										
41-129-20442	-84.7522	36.2355	2214		Gas	1576					45	21	-104	8			-560		-560	163							
41-129-20443	-84.6585	36.3083	2219		Gas	1450			406	36	-162	43	-232	80													
41-129-20444	-84.7386	36.1944	2220		D&A	1582			564	55	6	102	-183	47			-1090										
41-129-20445	-84.6848	36.2807	2224		Oil	1296			309	-91																	
41-129-20446	-84.6486	36.2777	2234		D&A	1569			229	-44	-331	-29	-421	-23													
41-129-20447	-84.6436	36.2794	2235		D&A	1562			42	-213	-332	-10															
41-129-20448	-84.6962	36.1723	2236		Oil	1452			352	24	-263	14															
41-129-20449	-84.8067	36.1674	2239		Gas	1520					50	37	-96	28													
41-129-20450	-84.7384	36.1473	2241		O&G	1410			390	-6	-189	4	-305	8	-370	49	-1221										
41-129-20451	-84.7774	36.1584	2242		D&A	1431			499	-9	-63	1	-205	1													
41-129-20452	-84.7778	36.1617	2246		D&A	1430			465	-51	-75	-19	-210	-11	-265	-7											
41-129-20454	-84.7906	36.1722	2249		Oil	1460					-38	-28	-176	-26			-1106										
41-129-20455	-84.7784	36.1781	2250		O&G	1518			570	17	18	39	-116	50	-167	48											
41-129-20456	-84.7512	36.3061	2261		D&A	1445					55	3	-71	-7	-121	4											
41-129-20457	-84.7248	36.2893	2267		Gas	1460							-30	92								-2192	-184				
41-129-20458	-84.6821	36.1738	2270		Oil	1452					-298	23	-418	19													
41-129-20459	-84.8073	36.2208	2273		Gas	1522			704	28	134	26	-20	2			-880										
41-129-20462	-84.6901	36.2877	2291		D&A	1420					-146	-12															
41-129-20463	-84.7628	36.2273	2292		Gas	1521					77	36															
41-129-20464	-84.8866	36.2287	2295		D&A	1680			920	30	329	-13															
41-129-20465	-84.8131	36.1457	2296		D&A	1455			555	-12	-5	3															
41-129-20466	-84.7505	36.1540	2297		D&A	1444			452	19	-112	32	-270	5			-1182										
41-129-20468	-84.6691	36.3016	2310		Gas	1546			376	-14	-194	-11	-304	-13	-357	-23											
41-129-20470	-84.7388	36.1383	2319		Gas	1375			405	19	-285	-76															
41-129-20471	-84.6955	36.2693	2324		D&A	1490	520	-153	460	41	-110	26	-240	12	-280	6											
41-129-20472	-84.7732	36.1551	2328		O&G	1413																					
41-129-20475	-84.8293	36.2823	2349		D&A	1556	796	-217	766	-15	256	19	96	13													
41-129-20476	-84.7625	36.3066	2353		Gas	1440					44	-36															
41-129-20477	-84.8266	36.1323	2360		Oil	1564			535	-40	10	4	-126	26													
41-129-20478	-84.8199	36.1353	2363		D&A	1527			425	-133			-100	67	-148	36	-1045										
41-129-20479	-84.7707	36.2242	2366		Gas	1500			624	9	68	15															
41-129-20480	-84.7762	36.2417	2367		D&A	1520			672	30	120	32															
41-129-20481	-84.6476	36.2754	2368		D&A	1584			292	26	-318	-13	-434	-28													
41-129-20482	-84.6974	36.2612	2369		D&A	1490	520	-158	470	51	-110	26	-230	24													
41-129-20483	-84.7594	36.2412	2370		O&G	1500							-45	40													
41-129-20484	-84.5966	36.2346	2378		Gas	1700					-484	-37	-616	38													
41-129-20485	-84.7738	36.1514	2388		D&A	1446			457	-29																	
41-129-20486	-84.6802	36.2871	2389		Oil	1310			392	-5																	
41-129-20487	-84.6979	36.2011	2396		Gas	1440			258	-83	-197	33															
41-129-20488	-84.6990	36.1608	2397		Gas	1425			315	-21	-307	-23															
41-129-20489	-84.7690	36.1612	2398		O&G	1471					99	175	-242	-23													
41-129-20490	-84.8068	36.1624	2399		D&A	1472			551	-32																	
41-129-20491	-84.6467	36.2797	2401		Oil	1557			267	-2	-343	-33	-433	-32													
41-129-20492	-84.8268	36.1299	2413		D&A	1558																					
41-129-20493	-84.7921	36.1276	2416		O&G	1415			420	-65	-89	-1	-255	-16													
41-129-20494	-84.7894	36.1304	2417		O&G	1420			420	-65																	
41-129-20495	-84.7871	36.2022	2418		D&A	1420			565	-47	50	8	-99	-5													
41-129-20496	-84.7665	36.1434	2419		Gas	1441					-107	7	-241	14								-2014	3				
41-129-20497	-84.6820	36.2854	2420		Oil	1300			337	-63																	
41-129-20498	-84.7724	36.1623	2359		Gas	1450							-205	5	-244	30	-1133		-1131	-27							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20499	-84.6778	36.1451	2402		D&A	1215	255	-129	245	8	-355	19	-485	8													
41-129-20501	-84.6582	36.2623	2425		D&A	1523			313	20	-327	-62															
41-129-20502	-84.6849	36.2835	2438		O&G	1308			418	13																	
41-129-20503	-84.7436	36.1588	2442		Gas	1500					-102	53	-248	37	-284	98	-1135										
41-129-20504	-84.7904	36.1768	2446		D&A	1536					18	19	-76	65	-126	67	-964										
41-129-20505	-84.8337	36.1532	2450		Gas	1575					115	46	-45	36													
41-129-20506	-84.8189	36.1561	2454		O&G	1482			509	-95	-60	-88	-148	-27													
41-129-20507	-84.8000	36.1617	2455		D&A	1501			541	-26	13	24	-131	21													
41-129-20508	-84.7978	36.1577	2457		Oil	1480					-18	6	-156	10													
41-129-20509	-84.8129	36.1778	2458		Gas	1495					90	41	-60	27													
41-129-20511	-84.6838	36.1761	2463		Oil	1482	482	-23	222	-70	-298	16	-418	11													
41-129-20512	-84.6734	36.1614	2473		D&A	1385			255	0	-350	17															
41-129-20513R-1	-84.8507	36.2631	3827		Gas	1606			836	26	281	4	130	18													
41-129-20514	-84.7122	36.3578	2477		Oil	1364			568	-14	8	-10															
41-129-20515	-84.7986	36.1066	2479		D&A	1420					-120	-10	-271	-14													
41-129-20516	-84.7014	36.2466	2486		O&G	1371			355	-68	-139	-5															
41-129-20517	-84.7818	36.1598	2487		Gas	1422					-84	-32	-220	-26													
41-129-20518	-84.7768	36.1486	2497		O&G	1395			561	72	-71	13	-195	31													
41-129-20519	-84.7789	36.2303	2498		Gas	1523			647	9	109	32															
41-129-20520	-84.7131	36.3552	2503		D&A	1318			552	-29	-18	-35															
41-129-20521	-84.8446	36.1434	2520		D&A	1604	956	60	694	28	154	72	-32	35													
41-129-20522	-84.7443	36.1800	2529		D&A	1428			528	45																	
41-129-20523R-1	-84.7679	36.2586	2537		O&G	1483			603	-27																	
41-129-20524	-84.7856	36.0994	2540		Oil	1475			471	67																	
41-129-20525	-84.7521	36.3220	2542		Oil	1455					61	-8	-85	-33													
41-129-20526	-84.7706	36.2445	2551		Gas	1457					139	61	-13	39													
41-129-20527	-84.8008	36.1466	2552		Gas	1405			468	-73	-55	-18	-192	-8													
41-129-20529	-84.6569	36.2822	2560		Oil	1332	565	1	320	3	-292	-26	-387	-24													
41-129-20530	-84.8241	36.1567	2568		D&A	1465			561	-61	33	-13	-115	-13	-155	-35											
41-129-20531R-1	-84.7191	36.3612	4401		Gas	1404			589	-18	74	32	53	144													
41-129-20532	-84.7696	36.2551	2577		O&G	1618																					
41-129-20533	-84.7134	36.3110	2581		Gas	1490	740	-36	610	88			95	234													
41-129-20534	-84.7167	36.3501	2598		D&A	1451	581	-205	531	-51	-49	-68	-159	-46													
41-129-20535	-84.7117	36.3552	2606		Oil	1323			553	-24																	
41-129-20538	-84.8068	36.2037	2610		Gas	1450			635	-8	77	-3	-57	-3	-107	15											
41-129-20539	-84.8024	36.1969	2611		Gas	1520					85	24	-38	37													
41-129-20541	-84.7001	36.2601	2621		Gas	1490			390	-37	-90	38	-240	6													
41-129-20542	-84.6792	36.2895	2626		D&A	1282					-172	-5															
41-129-20543	-84.6804	36.2785	2632		Oil	1400	660	45	406	23																	
41-129-20544	-84.6809	36.2816	2633		Oil	1285	630	9	405	15																	
41-129-20545	-84.7187	36.3067	2634		Gas	1412			592	63	2	32	-58	68													
41-129-20546	-84.7545	36.3239	2615		D&A	1432			532	-89	72	-6	-68	-22													
41-129-20547	-84.5751	36.2608	2635		D&A	1540			76	16	-499	4															
41-129-20550	-84.6595	36.3169	2657		Gas	1530					-190	-6	-310	-13													
41-129-20551	-84.6639	36.3036	2658		Gas	1470					-186	11	-290	14													
41-129-20553	-84.6754	36.2970	2675		Gas	1431					-249	-80	-371	-92													
41-129-20554	-84.8363	36.1579	2687		D&A	1573					101	16	-36	26													
41-129-20555	-84.6646	36.1627	2699		Gas	1210					-430	-30	-465	34	-532	1											
41-129-20556	-84.7866	36.1620	2700		Gas	1370			440	-96	-110	-72	-240	-60	-294	-62											
41-129-20557	-84.7422	36.2456	2707		D&A	1441			591	10	21	20	-109	17													
41-129-20559	-84.7971	36.1323	2735		O&G	1419			519	15	-15	55	-201	22													
41-129-20561	-84.7952	36.1459	2740		D&A	1340					-120	-70	-258	-62	-312	-64			-1136	-145							
41-129-20562	-84.8029	36.1427	2741		D&A	1421					-82	-42	-209	-20	-266	-35											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20563	-84.8037	36.1510	2744		Gas	1540					-10	14	-145	24													
41-129-20564	-84.8076	36.1496	2749		Gas	1490			615	53	-46	-28	-176	-11													
41-129-20565	-84.7228	36.3586	2753		Oil	1418			548	-63	38	-10	-92	-4	-132	-12											
41-129-20566	-84.6986	36.2854	2778		Gas	1392			662	212	92	203	-93	125													
41-129-20570	-84.7698	36.3126	2782		D&A	1535	885	-16	635	-9	90	-17	-49	-18													
41-129-20573	-84.8423	36.2164	2788		Oil	1560	982	-32	716	-41	168	-20	-10	-53													
41-129-20574	-84.6935	36.3169	2798		Gas	1440			454	-36	-104	-19	-200	-4													
41-129-20575	-84.6959	36.3224	2799		Gas	1440			470	-33	-90	-18	-200	-16													
41-129-20576	-84.6923	36.3221	2804		D&A	1295	795	80	570	78	5	86	-95	100	-135	99											
41-129-20577	-84.6568	36.2471	2818		Oil	1380			280	11																	
41-129-20579	-84.6839	36.2780	2820		Oil	1398	766	137	493	101																	
41-129-20580	-84.7711	36.3037	2823		Gas	1490			650	5	50	-51	-70	-40	-122	-24											
41-129-20581	-84.7726	36.1964	2829		D&A	1543					-17	-23	-159	-24	-207	-22											
41-129-20582	-84.8393	36.2196	2839		Oil	1578	1010	-11	758	7																	
41-129-20583	-84.8365	36.2224	2840		Oil	1563	1015	-12	777	30																	
41-129-20584	-84.6784	36.2802	2842		D&A	1297	643	34	412	32																	
41-129-20585	-84.6484	36.1770	2843		O&G	1322			202	11	-512	-85	-525	-23													
41-129-20591	-84.7654	36.2532	2866		D&A	1625					99	32															
41-129-20592	-84.5871	36.2203	2884		Gas	1380					-270	282	-745	-18													
41-129-20593	-84.7704	36.1497	2890		Gas	1425	675	-45	455	-20	-77	18	-227	9													
41-129-20595	-84.6786	36.2836	2897		Oil	1400	676	62	420	34																	
41-129-20597	-84.6443	36.2448	2899		O&G	1480					-330	-30	-463	-13													
41-129-20598	-84.7150	36.2901	2903		Gas	1421			551	43	-39	16	-137	18													
41-129-20599	-84.5956	36.2548	2904		Oil	1515			101	-12	-447	-5	-575	35	-611	20											
41-129-20603	-84.8825	36.2116	2935		D&A	1555																					
41-129-20605	-84.7153	36.1665	2937		D&A	1339	627	12	380	3																	
41-129-20606	-84.7548	36.3205	2940		O&G	1483					59	-15															
41-129-20607	-84.8366	36.2383	2941		O&G	1563	1023	-15	769	4																	
41-129-20608	-84.7293	36.3065	2943		Gas	1543					71	73	-82	18													
41-129-20609R-1	-84.8393	36.2165	8128		D&A	1564			742	-6	123	-58	12	-25													
41-129-20610	-84.8089	36.1989	2945		D&A	1488					22	-55	-112	-54	-162	-33											
41-129-20612	-84.7007	36.2870	2950		Oil	1346					-66	36	-191	18													
41-129-20614	-84.6265	36.2817	2966		Gas	1535			151	-35	-371	2	-490	-28													
41-129-20615	-84.6467	36.2823	2971		Oil	1468			268	-5																	
41-129-20616	-84.8238	36.1604	2980		Gas	1541	869	14	639	14	35	-15	-69	26													
41-129-20617	-84.8320	36.2419	2981		Oil	1553			773	14	203	-1	49	1													
41-129-20621	-84.6967	36.2980	2997		D&A	1462					-90	11	-194	14	-258	-9											
41-129-20622	-84.7925	36.1650	2998		Gas	1315					-5	15	-199	-38	-257	-48											
41-129-20624	-84.6806	36.1580	3006		D&A	1420					-297	44	-377	88													
41-129-20625	-84.6881	36.2800	3009		Gas	1320																					
41-129-20626	-84.7254	36.3569	3013		O&G	1455					45	-8															
41-129-20627	-84.7978	36.2677	3020		D&A	1524			654	-43	102	-37	-46	-56													
41-129-20628	-84.6968	36.2754	3021		Gas	1425					-105	22	-225	13	-285	-12											
41-129-20629	-84.6434	36.2869	3029		D&A	1440					-425	-117															
41-129-20630	-84.6891	36.3445	3030		O&G	1291			531	25	-91	-30															
41-129-20631	-84.8089	36.2518	3037		Gas	1558					133	-18	-12	-22	-58	-25	-880										
41-129-20632	-84.6881	36.2768	3039		Oil	1425			455	52																	
41-129-20633	-84.7269	36.1701	3067		D&A	1364																					
41-129-20634	-84.7850	36.2103	3075		Gas	1509					197	144	75	155					-921	5							
41-129-20635	-84.7869	36.2070	3076		Gas	1490					59	9	-80	4	-128	13											
41-129-20636	-84.7683	36.2025	3077		Gas	1542					0	-9	-130	-1	-184	5											
41-129-20637	-84.7081	36.1847	3082		Gas	1442																					
41-129-20638	-84.7833	36.1252	3087		D&A	1385																					

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20639	-84.6806	36.3448	3088		Gas	1279			657	175	-37	47	-163	43	-225	44											
41-129-20640	-84.7551	36.3169	3102		D&A	1435																					
41-129-20641	-84.7252	36.1445	3105		D&A	1330			255	-108	-312	-73	-425	-78													
41-129-20642	-84.6413	36.2840	3106		D&A	1384																					
41-129-20643	-84.6522	36.2833	3111		Oil	1400			386	87																	
41-129-20644	-84.8458	36.2142	3130		D&A	1580					178	-15	50	1													
41-129-20645	-84.8377	36.1687	3131		D&A	1624							-14	19	-62	6	-870	-847	-867	-36							
41-129-20646	-84.8343	36.2411	3135		Oil	1551			746	-17																	
41-129-20647	-84.7796	36.1923	3142		Gas	1500					20	10	-128	3	-180	-2											
41-129-20648	-84.7348	36.3189	3152		Gas	1410					50	29	-75	10													
41-129-20649	-84.7569	36.2497	3165		Gas	1494			639	30	71	28	-66	15													
41-129-20651	-84.7589	36.3221	3222		Gas	1502			602	-27																	
41-129-20652	-84.7408	36.2960	3231		Gas	1460							-50	37													
41-129-20653	-84.7333	36.2931	3233		Gas	1520							-90	13													
41-129-20654	-84.7414	36.3507	3234		D&A	1402			677	34	84	-5	-53	2													
41-129-20655R-1	-84.6810	36.2525	5461		D&A	1299					-226	-24	-351	-27													
41-129-20656	-84.7411	36.2719	3247		Gas	1450					24	21															
41-129-20658	-84.6772	36.2932	3252		Gas	1420			426	27																	
41-129-20659	-84.6772	36.2859	3253		Gas	1350			370	-16																	
41-129-20660R-1	-84.6864	36.2908	7589		Gas	1404			424	1																	
41-129-20661	-84.6899	36.3055	3258		Gas	1404					-110	0															
41-129-20662	-84.6893	36.2752	3259		D&A	1443			403	-2																	
41-129-20663	-84.6922	36.2774	3260		Gas	1380	710	45	455	38																	
41-129-20664	-84.7066	36.2780	3268		Oil	1318			478	11	-57	35	-168	31													
41-129-20665	-84.6932	36.1715	3270		Oil	1437																					
41-129-20666	-84.6501	36.2855	3283		Oil	1410																					
41-129-20667	-84.8315	36.2448	3285		Oil	1534			754	-5																	
41-129-20669	-84.7538	36.3133	3290		Gas	1443			573	-31																	
41-129-20670	-84.7955	36.2058	3292		Oil	1480			600	-30																	
41-129-20671	-84.7910	36.2103	3296		D&A	1520					54	-9	-68	1	-122	7	-942										
41-129-20672	-84.7376	36.3490	3297		D&A	1380			630	1	86	11	-74	-10													
41-129-20673	-84.7329	36.3488	3298		Gas	1380			640	23	50	-11	-76	-1													
41-129-20674	-84.7278	36.3486	3299		D&A	1421			631	26	21	-26	-99	-12													
41-129-20675	-84.6814	36.2763	3303		Oil	1336																					
41-129-20676	-84.8327	36.2397	3304		Oil	1559			760	1																	
41-129-20677	-84.7983	36.1702	3309		D&A	1442	812	15	572	-4	14	12															
41-129-20678	-84.8289	36.2440	3310		Oil	1550			760	6																	
41-129-20679	-84.7041	36.2806	3313		Gas	1393					-77	22	-187	18													
41-129-20680	-84.8139	36.1676	3318		Gas	1557					87	53	-83	25													
41-129-20682	-84.6728	36.2748	3322		Oil	1387																					
41-129-20683	-84.7603	36.3253	3323		D&A	1561					199	104															
41-129-20684	-84.7381	36.1497	3325		Gas	1405					-202	-12	-303	7													
41-129-20685	-84.8340	36.1282	3326		Gas	1536			674	81																	
41-129-20686	-84.6578	36.2844	3327		O&G	1373	548	-21	303	-22	-299	-41	-372	-15													
41-129-20687	-84.6989	36.2716	3348		Gas	1451																					
41-129-20688	-84.6817	36.2920	3349		Gas	1428			398	-13																	
41-129-20689	-84.5953	36.2718	3358		Gas	1650					-468	-13	-596	-19													
41-129-20690	-84.6623	36.2479	3361		Oil	1375			239	-48	-303	-48	-425	-36													
41-129-20692	-84.7379	36.3399	3367		Gas	1418			648	37	88	27	-77	-9													
41-129-20693	-84.7371	36.3363	3368		Gas	1374			634	32	64	11	-66	6													
41-129-20696	-84.6478	36.2869	3371		D&A	1528			272	-14																	
41-129-20698	-84.8430	36.2255	3390		Gas	1531	1061	21	821	54																	
41-129-20699	-84.7847	36.2910	3391		Oil	1493			608	-65	99	-27	-35	-35	-85	-28	-914		-910	-2							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20700	-84.6911	36.2689	3403		Oil	1439			469	64																	
41-129-20701	-84.8464	36.2266	3405		D&A	1569	1063	19	818	41																	
41-129-20702	-84.7154	36.2991	3410		Gas	1407			545	29																	
41-129-20703	-84.6180	36.1355	3414		Gas	1452			-48	-24	-621	-13	-736	-9													
41-129-20704	-84.6755	36.2377	3417		Gas	1457					-219	11															
41-129-20705	-84.8259	36.2511	3421		Gas	1536	986	-31																			
41-129-20706	-84.6779	36.2761	3422		Gas	1419																					
41-129-20707	-84.8889	36.2258	3425		Oil	1659			884	-11	339	-4	174	2													
41-129-20708	-84.8500	36.2287	3430		Gas	1618	1081	33	832	45	258	28	114	41	12	2											
41-129-20709	-84.6762	36.2880	3432		Gas	1320			310	-77																	
41-129-20710	-84.7492	36.2898	3433		Gas	1548			516	-84	53	21															
41-129-20711	-84.7393	36.1224	3436		O&G	1362					-226	10	-342	7	-400	27											
41-129-20712	-84.7589	36.2727	3440		D&A	1458			553	-65	78	32															
41-129-20713	-84.7585	36.2222	3443		Gas	1518			578	-10	-9	-27															
41-129-20714	-84.8889	36.2310	3448		D&A	1660			900	2	360	5	180	4													
41-129-20715	-84.6850	36.2749	3449		Oil	1415																					
41-129-20716	-84.6699	36.2760	3450		D&A	1344			304	-42																	
41-129-20717	-84.6799	36.2957	3451		Gas	1518	698	60	464	52																	
41-129-20718	-84.8782	36.2308	3465		D&A	1615					303	-18	158	11													
41-129-20720	-84.8800	36.2282	3467		Gas	1626	1262	113	834	-36	257	-64	150	0													
41-129-20721	-84.7793	36.1329	3480		Oil	1384			464	-5	-146	-41															
41-129-20722	-84.8404	36.2359	3481		Gas	1583	1018	-23	769	-3																	
41-129-20723	-84.6677	36.1426	3485		Gas	1248			123	-74	-404	11	-514	18													
41-129-20724	-84.6929	36.2722	3486		D&A	1463			373	-40																	
41-129-20728	-84.7789	36.1238	3499		Oil	1420																					
41-129-20729	-84.6721	36.2544	3506		Oil	1424					-360	-134	-386	-34													
41-129-20730	-84.6865	36.2725	3510		Oil	1423																					
41-129-20731	-84.6944	36.1201	3515		D&A	1282	482	58	242	16	-404	-28	-503	-28													
41-129-20732	-84.8773	36.1785	3520		O&G	1673							123	17													
41-129-20733	-84.6655	36.2487	3524		Oil	1310			142	-157	-310	-64	-436	-58													
41-129-20735	-84.6929	36.2669	3528		Oil	1464																					
41-129-20736	-84.6983	36.2669	3529		Gas	1503			396	-30																	
41-129-20737	-84.7513	36.1228	3530		D&A	1380					-180	17	-316	6	-376	65											
41-129-20738	-84.6758	36.2742	3534		Gas	1419			359	-3																	
41-129-20739	-84.6837	36.2711	3535		D&A	1404																					
41-129-20740	-84.6861	36.2694	3536		Oil	1405			351	-38																	
41-129-20741	-84.6882	36.2675	3537		Oil	1372			332	-62																	
41-129-20743	-84.8909	36.1568	3539		Oil	1705					265	14	119	18	85	-5											
41-129-20744	-84.7592	36.1194	3549		D&A	1360			406	0	-196	-19	-334	-24	-392	71											
41-129-20745	-84.6932	36.2959	3552		Gas	1422							-268	-45													
41-129-20746	-84.6547	36.1836	3555		D&A	1483					-472	-80	-492	-11	-563	-16											
41-129-20748	-84.6602	36.2732	3568		D&A	1564	519	-40	334	21																	
41-129-20750	-84.7727	36.3294	3570		Gas	1483			698	15	168	30	13	17													
41-129-20751	-84.7685	36.3311	3571		Gas	1462			692	17	152	23	-8	5													
41-129-20752R-1	-84.6606	36.2436	4170		Oil	1308																					
41-129-20753	-84.6320	36.2461	3574		Gas	1548	476	2	237	20																	
41-129-20754	-84.6541	36.2456	3575		D&A	1420					182	458															
41-129-20755	-84.7141	36.1724	3577		D&A	1462	607	-13	467	87	-196	23	-355	-11													
41-129-20759	-84.8432	36.2292	3592		Gas	1593			795	24																	
41-129-20760	-84.6827	36.2886	3604		Gas	1310			340	-68																	
41-129-20761	-84.6843	36.2946	3605		Gas	1360			357	-66																	
41-129-20763	-84.7828	36.2820	3616		Gas	1430			910	247	130	21	-10	-3													
41-129-20764	-84.8248	36.2559	3617		Oil	1540	1008	-3	736	-18																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20765	-84.8491	36.2237	3620		O&G	1613	1063	25	818	36																	
41-129-20767	-84.6377	36.2429	3628		D&A	1468					-280	35	-400	73													
41-129-20768R-1	-84.6623	36.2547	3633		Oil	1544			226	-70	-318	-64	-430	-46													
41-129-20769	-84.6904	36.2656	3636		Oil	1390			400	0																	
41-129-20770	-84.6929	36.2626	3637		Oil	1473			413	8																	
41-129-20771	-84.6806	36.2177	3640		Gas	1557					-201	60	-321	36	-375	53											
41-129-20773	-84.6611	36.2826	3643		Oil	1358			343	12	-247	2	-337	12													
41-129-20774	-84.7577	36.2521	3644		D&A	1461			901	290	83	38	-54	22													
41-129-20775	-84.6872	36.2413	3648		D&A	1435			410	43	-187	4	-312	0													
41-129-20777R-1	-84.6561	36.2727	5696		D&A	1423					-302	-29															
41-129-20778	-84.7617	36.2510	3653		Gas	1581			616	-1	71	14	-64	2													
41-129-20779R-1	-84.7756	36.3262	4657		Gas	1484	934	4	664	-19	164	22	9	8													
41-129-20781	-84.6997	36.2639	3658		Gas	1481	471	-219	411	-18																	
41-129-20782	-84.6855	36.2708	3461		Oil	1422																					
41-129-20784	-84.6821	36.2679	3676		O&G	1380			330	-45																	
41-129-20785	-84.7584	36.2912	3680		Gas	1480			602	-15	8	-47	-28	26													
41-129-20786	-84.6702	36.2497	3690		D&A	1398	538	-28	288	-29	-287	-53	-412	-50													
41-129-20788	-84.8532	36.2156	3701		Gas	1593	1045	21	798	9																	
41-129-20791	-84.7289	36.2427	3716		Oil	1375																					
41-129-20792	-84.6778	36.2669	3718		Gas	1459																					
41-129-20793	-84.6541	36.1932	3719		O&G	1378			184	-39	-362	8	-472	-2	-542	5											
41-129-20794	-84.6659	36.2850	3720		Oil	1333			298	-52	-271	-45															
41-129-20795	-84.6741	36.2649	3722		Oil	1600			350	3																	
41-129-20796	-84.7210	36.3566	3733		Gas	1462			589	-13	24	-16	-108	-11													
41-129-20797	-84.8284	36.2414	3746		Oil	1571			751	0																	
41-129-20798	-84.8279	36.2398	3749		Oil	1539			730	-18																	
41-129-20799	-84.8360	36.2420	3750		D&A	1532			752	-15																	
41-129-20800	-84.7998	36.2268	3751		D&A	1500			648	-25	105	0															
41-129-20801	-84.8328	36.2374	3753		Oil	1562	1036	0	746	-11																	
41-129-20802	-84.7769	36.1262	3754		Oil	1438			508	55																	
41-129-20803	-84.7306	36.3338	3757		Gas	1419					19	-12	-156	-70													
41-129-20804	-84.7789	36.1358	3767		Oil	1440			490	17	-103	-2															
41-129-20805	-84.7951	36.2204	3768		Oil	1515			611	-42	95	8															
41-129-20806R-1	-84.6646	36.2825	5288		Gas	1300			335	-7	-265	-30															
41-129-20807R-1	-84.6492	36.2680	4784		D&A	1401			216	-52	-349	-53	-464	-50	-505	-51											
41-129-20808	-84.6649	36.2799	3786		D&A	1373			318	-20	-267	-29	-360	-18													
41-129-20809	-84.7192	36.1169	3787		Gas	1285			289	-8	-345	-35	-435	-29													
41-129-20810	-84.8614	36.1929	3795		Gas	1590	1040	39	820	14	215	16	64	-4													
41-129-20811	-84.6643	36.2419	3797		Oil	1383			273	-14	-317	-65															
41-129-20813	-84.6039	36.1343	3799		Oil	1230	166	17	-80	20	-664	9	-774	3													
41-129-20815	-84.7347	36.1466	3807		Oil	1358			411	24	-203	3	-307	16													
41-129-20817R-1	-84.8547	36.2190	5420		D&A	1609	1049	17	760	-35																	
41-129-20819	-84.6608	36.2324	3821		D&A	1582	602	69	240	-25																	
41-129-20821	-84.7821	36.1361	3828		Gas	1380			470	-10	-133	-39															
41-129-20822	-84.6964	36.2427	3842		Gas	1470	648	-17	420	20																	
41-129-20823	-84.8449	36.2191	3845		O&G	1578	1005	-19	758	-9																	
41-129-20824	-84.6699	36.1649	3851		Gas	1408			261	15	-350	26	-457	24													
41-129-20825	-84.5878	36.2117	3859		Gas	1260			-28	-36	-638	-47	-755	-3	-835	-26											
41-129-20826	-84.8551	36.1828	3864		Gas	1628			868	99	248	78	88	47													
41-129-20827	-84.8673	36.2847	3871		Oil	1544			766	-96	336	2	180	14													
41-129-20828	-84.8414	36.1350	3872		Gas	1597			595	-40	-22	-76	-101	-5													
41-129-20830	-84.4963	36.0277	3879		Oil	1283			-869	5	-1448	39	-1589	22													
41-129-20831	-84.6541	36.1955	3884		Gas	1279			257	32	-333	32	-461	6													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20832	-84.6664	36.3166	3887		Gas	1256			432	23	-154	9	-279	-2													
41-129-20833	-84.8302	36.2405	3890		Oil	1558			732	-22																	
41-129-20834	-84.6851	36.2670	3891		O&G	1292			369	-15																	
41-129-20835	-84.6511	36.1956	3900		O&G	1284			254	34	-329	43	-466	8													
41-129-20836	-84.6510	36.1930	3901		Oil	1418	462	-16	242	25	-390	-12	-485	-7													
41-129-20837	-84.6796	36.2635	3902		Oil	1380			380	17																	
41-129-20838	-84.7334	36.2558	3903		Gas	1576																					
41-129-20840	-84.6867	36.2648	3906		D&A	1295					-173	-3															
41-129-20841	-84.8640	36.2644	3912		Gas	1590			750	-90	290	-23	150	7													
41-129-20842	-84.7436	36.3094	3913		Gas	1490					52	16	-79	-4	-129	7											
41-129-20843	-84.8262	36.2572	3927		Oil	1541	1003	-8	735	-23																	
41-129-20844	-84.8679	36.2820	3928		Oil	1505			829	-32																	
41-129-20845	-84.5724	36.2093	3935		D&A	1370			-161	-81	-696	-51	-776	34													
41-129-20846	-84.8191	36.1102	3939		Oil	1443			458	-32	-82	-27	-227	-18													
41-129-20847	-84.6338	36.1112	3940		D&A	1320			-36	-10	-525	-2	-672	11													
41-129-20848	-84.6618	36.2798	3941		Oil	1449	609	37	394	65	-258	-8	-351	1													
41-129-20849	-84.7632	36.1168	3947		Gas	1433	653	-28	385	-25	-187	-18	-325	-19													
41-129-20851	-84.7835	36.2933	3951		Oil	1479	919	1	584	-86	109	-16	-31	-29													
41-129-20852	-84.6816	36.1850	3921		Gas	1360			180	-109	-320	-7	-440	-22	-510	-16											
41-129-20853	-84.6485	36.1958	3954		Oil	1323			233	18	-357	20	-485	-4													
41-129-20854	-84.8231	36.2566	3963		Oil	1507	1005	-3	729	-22																	
41-129-20855	-84.7946	36.2105	3972		D&A	1460	1054	153	695	58																	
41-129-20856	-84.7897	36.2151	3973		D&A	1525			687	51																	
41-129-20858	-84.7444	36.3192	3978		D&A	1394					31	-15															
41-129-20859	-84.6483	36.1986	3980		Oil	1365					-352	19	-464	14													
41-129-20860	-84.6452	36.1986	3981		D&A	1328	464	-9	190	-22	-238	139	-475	11													
41-129-20861	-84.7194	36.1937	3982		Gas	1560			476	51	-122	39	-250	35													
41-129-20862	-84.7255	36.1997	3983		Gas	1565			435	-26	-111	16	-230	24													
41-129-20863	-84.7770	36.2006	3989		Gas	1463	769	-45			-27	-48	-163	-46			-165		-975	-8							
41-129-20864	-84.7480	36.3258	3998		D&A	1502					42	-22	-94	-37	-146	-25											
41-129-20865	-84.7396	36.3047	3999		Gas	1430					90	68	-50	34													
41-129-20866	-84.7224	36.3620	4000		D&A	1408					36	-16	-88	-6	-133	-16											
41-129-20867	-84.8384	36.2265	4002		D&A	1545			775	18	266	70															
41-129-20868	-84.6708	36.2673	4003		Oil	1494	574	-4	362	23																	
41-129-20869R-1	-84.8414	36.1614	4508		D&A	1521	907	4	685	-5																	
41-129-20872	-84.7388	36.1285	4021		O&G	1342			373	-1																	
41-129-20873	-84.7369	36.1245	4025		O&G	1363			393	29	-237	3	-337	13	-392	32											
41-129-20874	-84.6794	36.2590	4030		Gas	1423			323	-35																	
41-129-20875	-84.7662	36.1156	4031		D&A	1409			319	-95	-188	-26	-307	-6													
41-129-20876	-84.7371	36.3138	4033		Gas	1430					58	35	-66	17	-122	22											
41-129-20878	-84.6449	36.1935	4037		Oil	1327	465	-4	234	28	-367	24	-485	7													
41-129-20879	-84.7088	36.2806	4055		Oil	1437			527	49	-76	7	-182	6													
41-129-20880	-84.6959	36.2292	4061		Gas	1426																					
41-129-20881	-84.6808	36.2611	4063		Gas	1388			328	-37																	
41-129-20882	-84.6665	36.1877	4067		Oil	1350					-311	40	-429	19													
41-129-20883	-84.7629	36.2880	4068		Gas	1535			645	19			70	115	-105	-6											
41-129-20884	-84.7694	36.1138	4069		Gas	1484			174	-243	-286	-128															
41-129-20885	-84.6694	36.3332	4071		D&A	1424			450	14	-53	77															
41-129-20886	-84.6543	36.1904	4079		D&A	1332	472	-9	257	36	-414	-37	-475	-2													
41-129-20887	-84.7771	36.3064	4088		D&A	1488			726	66	104	-18	-41	-26													
41-129-20888	-84.7835	36.2959	4102		Gas	1422	897	-24	602	-70			-39	-38													
41-129-20889	-84.6493	36.2402	4104		Gas	1314					-324	-38	-454	-17													
41-129-20890	-84.7328	36.1448	4107		D&A	1312	634	-3	398	18	-256	-41	-342	-13													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20892	-84.6851	36.3242	4119		Gas	1358			468	-5	11	108	-194	20													
41-129-20893	-84.6748	36.3359	4127		Gas	1350			410	-45	-50	61	-170	61	-220	68											
41-129-20894	-84.6503	36.2442	4130		D&A	1395																					
41-129-20895	-84.8636	36.2854	4131		Oil	1594			862	9	316	-10	162	4													
41-129-20896	-84.6662	36.2397	4136		Oil	1400																					
41-129-20897	-84.6671	36.3128	4138		Gas	1428			376	-28	-247	-79															
41-129-20898	-84.8497	36.1440	4139		D&A	1581					153	54	-27	22													
41-129-20900	-84.6779	36.2613	4155		D&A	1419			319	-36																	
41-129-20901	-84.7547	36.3072	4157		Gas	1445					57	-4	-71	-13													
41-129-20902	-84.7196	36.2151	4158		D&A	1500			490	32	-104	14															
41-129-20903	-84.8056	36.1044	4162		D&A	1499			486	36	4	101															
41-129-20905	-84.6595	36.2459	4168		Oil	1376			238	-37																	
41-129-20906R-2	-84.6604	36.2706	6652		O&G	1452			366	55																	
41-129-20907	-84.6578	36.2516	4175		Oil	1409			314	37																	
41-129-20908	-84.6752	36.3379	4176		D&A	1290					-89	18	-185	43	-248	38											
41-129-20909	-84.6892	36.3292	4184		Gas	1400			530	40	-55	25	-147	51													
41-129-20910	-84.6686	36.2633	4201		Gas	1468																					
41-129-20911	-84.6574	36.1926	4206		Oil	1303					-359	5	-467	-5													
41-129-20912R-1	-84.6748	36.2614	6843		Gas	1454			396	51																	
41-129-20913R-1	-84.6714	36.2621	6813		Gas	1519																					
41-129-20914	-84.6599	36.1911	4213		Oil	1361	477	-13	239	5	-371	-10	-475	-16													
41-129-20915	-84.7246	36.1397	4214		D&A	1284			324	-30	-339	-89	-416	-62													
41-129-20916	-84.6480	36.1932	4217		O&G	1378					-374	11	-462	23													
41-129-20917	-84.6756	36.3343	4218		D&A	1280					-97	13	-206	25	-270	15											
41-129-20918	-84.7125	36.1361	4219		D&A	1346	558	12	322	5	-292	-1	-412	-15													
41-129-20920	-84.7779	36.1213	4231		Oil	1400																					
41-129-20921	-84.8599	36.2858	4243		D&A	1582			672	-172	97	-220	4	-146													
41-129-20922	-84.7725	36.3330	4244		Gas	1421	931	4	706	15	176	32	6	6													
41-129-20923	-84.8602	36.2832	4249		D&A	1583					281	-37	135	-14													
41-129-20925R-1	-84.6684	36.2658	6651		Gas	1532			394	64																	
41-129-20926	-84.7363	36.3464	4257		Gas	1401					76	9	-67	2													
41-129-20927	-84.8666	36.2830	4263		Oil	1540			874	15	324	-8	173	10													
41-129-20928	-84.8662	36.2870	4264		Oil	1532					348	16	167	2													
41-129-20929R-2	-84.6724	36.2715	6842		Gas	1428																					
41-129-20930	-84.6524	36.2879	4267		O&G	1370					-415	-144	-460	-92	-500	-83											
41-129-20932	-84.8327	36.2777	4269		Oil	1512			802	18	237	-5	102	17													
41-129-20933	-84.7266	36.2389	4272		D&A	1384			473	-48	-94	-46															
41-129-20934	-84.6457	36.1959	4278		D&A	1344			136	-74	-380	2	-512	-24													
41-129-20935	-84.8599	36.2886	4280		Oil	1581			898	52																	
41-129-20936	-84.6574	36.1954	4302		Oil	1269			247	16	-349	9															
41-129-20937	-84.8257	36.2887	4304		D&A	1506			816	37	276	43	130	47													
41-129-20938	-84.6587	36.2791	4305		D&A	1438			300	-18	-284	-21															
41-129-20940	-84.8697	36.2829	4329		Oil	1448					288	-51	136	-34	95	-34											
41-129-20941	-84.6653	36.1689	4330		Gas	1380					-385	2	-464	20													
41-129-20943	-84.7611	36.1442	4335		D&A	1477	657	-38	415	-30	-123	5															
41-129-20944	-84.8190	36.2646	4336		Oil	1460			674	-74	110	-81	-20	-60													
41-129-20945	-84.6573	36.1903	4337		Oil	1407			241	14	-395	-26	-475	-9													
41-129-20946	-84.7481	36.3158	4338		Oil	1438			599	10	33	-20	-90	-26													
41-129-20947	-84.6429	36.1951	4345		Oil	1439	469	2	239	35	-345	46	-479	16													
41-129-20948	-84.8387	36.2024	4349		D&A	1547			753	23	195	40	31	13													
41-129-20949R-1	-84.7156	36.2520	7829		D&A	1400					-98	-19	-147	50													
41-129-20950	-84.6757	36.2507	4354		D&A	1300			310	-27	-245	-27															
41-129-20951	-84.6605	36.1937	4374		Oil	1231			237	0	-371	-16	-489	-35													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-20952	-84.7723	36.2087	4375		Gas	1504	824	0	648	52	32	5	-102	4													
41-129-20953R-1	-84.7459	36.2872	5397		Gas	1480					30	8	-45	36													
41-129-20954	-84.6391	36.1929	4383		Oil	1626	472	12	231	38	-364	44	-489	18													
41-129-20955	-84.6699	36.1685	4384		Gas	1380					-404	-33	-505	-31													
41-129-20956	-84.7495	36.3180	4389		Oil	1420			592	-3																	
41-129-20957	-84.6670	36.1825	4394		D&A	1344			187	-60	-373	-15	-452	3													
41-129-20958	-84.7271	36.3371	4397		Oil	1423	1173	360	773	190	-27	-54	-167	-75													
41-129-20959	-84.7725	36.1704	4400		Oil	1467			537	15																	
41-129-20961	-84.8246	36.2626	4403		D&A	1522																					
41-129-20962	-84.7624	36.2193	4408		Gas	1527			587	-5	26	1															
41-129-20963	-84.6872	36.2977	4412		Gas	1345					-115	14	-228	12	-272	6											
41-129-20964	-84.7738	36.1253	4413		Oil	1400					166	296															
41-129-20965	-84.7759	36.1231	4414		Oil	1438					-114	15															
41-129-20966	-84.7506	36.0763	4421		D&A	1508	708	-6	348	7	-302	-20	-394	20													
41-129-20968	-84.6576	36.1981	4425		D&A	1291			248	15	-355	-3															
41-129-20969	-84.7401	36.3255	4426		D&A	1386			582	-4	16	-27	-108	-36													
41-129-20970	-84.8561	36.2396	4427		Oil	1608					258	-10	123	25													
41-129-20972	-84.8568	36.2630	4437		Gas	1580			820	-2	290	-3	146	20													
41-129-20973	-84.6419	36.1929	4439		D&A	1502					-360	40	-457	43													
41-129-20974	-84.7665	36.2209	4440		Gas	1543			585	-17	-41	-81															
41-129-20975	-84.6689	36.3059	4459		O&G	1491			340	-57	-218	-43	-329	-45													
41-129-20976	-84.6818	36.2984	4460		Gas	1428			406	-16																	
41-129-20977	-84.6753	36.2456	4464		D&A	1378			346	16																	
41-129-20978	-84.6404	36.1909	4465		Oil	1540	384	-77	148	-45	-504	-94	-574	-69													
41-129-20979	-84.7469	36.2534	4476		D&A	1542			567	-25																	
41-129-20980	-84.8696	36.2743	4487		D&A	1570																					
41-129-20981	-84.7981	36.2434	4492		Oil	1643			735	47	137	12															
41-129-20982	-84.8133	36.2597	4493		O&G	1540					165	-6	20	-3													
41-129-20983	-84.7936	36.1681	4507		Gas	1422			552	-11	-2	10	-147	5													
41-129-20984	-84.6856	36.3009	4518		Gas	1320					-140	-11	-240	0	-310	-31											
41-129-20985	-84.6786	36.1769	4520		D&A	1380			225	-52	-330	0	-455	-14	-518	-15											
41-129-20986	-84.8446	36.1958	4523		Gas	1463			743	-3	168	10	13	-12													
41-129-20987	-84.6373	36.1952	4531		D&A	1628	510	52	236	42	-322	89	-448	61													
41-129-20989	-84.8551	36.2657	4535		Gas	1627			792	-28	267	-24	127	3													
41-129-20990	-84.7343	36.0933	4542		Gas	1438	318	-233	278	-60	-347	-64	-458	-47													
41-129-20991	-84.6777	36.2998	4463		Gas	1420																					
41-129-20992	-84.7496	36.3132	4552		Oil	1426					60	6	-77	-14													
41-129-20993	-84.6740	36.3304	4556		Gas	1310			440	-7	-100	20	-212	28	-314	-24											
41-129-20996	-84.8403	36.1730	4564		D&A	1602			690	-10																	
41-129-20997	-84.6742	36.2851	4573		Gas	1413			356	-20																	
41-129-20998	-84.6811	36.3023	4574		Gas	1442			342	-85																	
41-129-20999	-84.7090	36.3097	4578		Gas	1402			522	10	-91	-38	-158	-5	-214	-8											
41-129-21000	-84.8262	36.2407	4604		Oil	1492			722	-24																	
41-129-21001	-84.7725	36.1229	4605		D&A	1415			407	-32																	
41-129-21002	-84.6732	36.3063	4607		Gas	1401			439	28																	
41-129-21003	-84.8258	36.2393	4608		Oil	1517			747	3	207	23	48	17													
41-129-21004	-84.7512	36.2737	4610		D&A	1500			695	88	49	21															
41-129-21005	-84.6731	36.1711	4613		D&A	1426			248	-11	-239	116	-442	21													
41-129-21006	-84.8350	36.2789	4640		Oil	1531					237	-13															
41-129-21008	-84.6742	36.3025	4647		Gas	1560			422	15	-168	-5															
41-129-21009	-84.6334	36.1930	4653		Oil	1705	499	49	265	82	-325	115	-468	61													
41-129-21010	-84.6714	36.2282	4654		Gas	1463			363	65	-221	38	-349	26													
41-129-21011	-84.7884	36.2292	4656		D&A	1517			639	-16	102	11															

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41-129-21012	-84.7641	36.3275	4658		D&A	1400	880	-20	630	-25	95	-14	-55	-30													
41-129-21013R-1	-84.7698	36.3206	5788		Oil	1483					109	-6															
41-129-21014	-84.7732	36.3229	4660		D&A	1477	927	7	672	3	127	-2	-23	-13													
41-129-21015	-84.6731	36.2876	4665		O&G	1413			368	-9																	
41-129-21018	-84.6333	36.1890	4694		D&A	1943	513	65	253	79	-441	11	-523	10													
41-129-21019	-84.6716	36.2986	4698		D&A	1499			367	-25																	
41-129-21020	-84.7772	36.1003	4699		Gas	1464	689	-33	444	49	-186	-12	-296	8	-326	232			-678	193							
41-129-21021	-84.6319	36.1911	4700		O&G	1812					-381	73															
41-129-21022	-84.6804	36.3238	4701		Gas	1281	736	56	476	18	-79	30	-204	24													
41-129-21023	-84.6774	36.3210	4702		D&A	1378	678	11	428	-19	-132	-10	-252	-12													
41-129-21024	-84.6811	36.3048	4703		Gas	1402																					
41-129-21025R-1	-84.6804	36.3183	5078		Gas	1329	719	47	474	22																	
41-129-21027	-84.8020	36.2303	4720		Oil	1526					99	-15															
41-129-21028	-84.7554	36.0964	4723		Gas	1440					-266	-30	-348	8													
41-129-21029	-84.8429	36.2329	4729		Gas	1602	1037	-7	788	14																	
41-129-21030	-84.8287	36.2471	4730		Oil	1527			757	2																	
41-129-21031	-84.7709	36.1202	4731		D&A	1384					-149	-5															
41-129-21032	-84.8493	36.2399	4734		Gas	1576			794	1																	
41-129-21033	-84.8454	36.2398	4745		D&A	1532			757	-27	339	102															
41-129-21034R-1	-84.6777	36.3045	4763		D&A	1522			382	-39																	
41-129-21035	-84.6701	36.2870	4764		D&A	1422			364	-3																	
41-129-21036R-1	-84.6761	36.3171	5394		D&A	1407	667	9	422	-17	-123	9	-258	-10													
41-129-21039	-84.8388	36.2071	4768		D&A	1543			694	-41	126	-38															
41-129-21047R-1	-84.7920	36.2534	5892		Gas	1603			660	-18	118	-1	-12	0													
41-129-21051	-84.6596	36.1885	4792		O&G	1361					-397	-30	-462	1													
41-129-21054	-84.6734	36.2419	4806		Gas	1357																					
41-129-21055	-84.6292	36.1916	4812		Oil	2018			124	-47	-436	32	-566	-9													
41-129-21056	-84.7066	36.3521	4814		Oil	1342			532	-29																	
41-129-21057	-84.8408	36.2228	4829		Oil	1551			725	-34																	
41-129-21058	-84.7717	36.1672	4840		Oil	1558			542	29																	
41-129-21061	-84.7478	36.3109	4853		Oil	1441					55	7	-70	-2	-119	12											
41-129-21062	-84.6385	36.2360	4852		Gas	1396			261	30	-346	-32	-487	-13													
41-129-21063	-84.7927	36.2007	4860		D&A	1466																					
41-129-21064	-84.6275	36.1897	4864		Oil	2176	396	-29	138	-25	-483	-1	-596	-26													
41-129-21065	-84.7585	36.3055	4877		Oil	1417			642	26	63	-6															
41-129-21066	-84.8394	36.2334	4883		Gas	1594	1004	-38	770	3																	
41-129-21068	-84.6630	36.2398	4896		O&G	1395			275	-5																	
41-129-21069	-84.7422	36.1216	4903		Gas	1323			373	0																	
41-129-21070	-84.8345	36.2850	4904		Oil	1540			738	-55	272	19	122	25													
41-129-21071	-84.6307	36.1870	4911		D&A	2182	390	-47	108	-56	-498	-26	-574	-22													
41-129-21073	-84.7419	36.1499	4919		D&A	1518					-220	-42	-324	-23	-922	-515											
41-129-21075	-84.6628	36.1895	4928		Oil	1250					-376	-19															
41-129-21076	-84.8054	36.2289	4939		D&A	1526			696	9	120	2															
41-129-21077	-84.8364	36.2344	4950		Gas	1591	970	-70	743	-18																	
41-129-21078	-84.6362	36.1930	4959		Oil	1641					-374	50															
41-129-21079	-84.8083	36.1792	4960		Gas	1508			558	-51																	
41-129-21080	-84.7473	36.3134	4966		D&A	1420					50	1															
41-129-21081	-84.7406	36.3193	4973		D&A	1399			654	80																	
41-129-21082	-84.8099	36.1698	4987		Gas	1579			679	79																	
41-129-21083	-84.7575	36.2296	4988		Gas	1587					61	32															
41-129-21084	-84.7655	36.2593	4990		O&G	1470							-30	16	-70	37											
41-129-21085	-84.6666	36.2436	4995		Oil	1326			309	12																	
41-129-21087	-84.6641	36.1851	5001		D&A	1240					-432	-70	-502	-44													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21088	-84.7515	36.2317	5005		Gas	1448					44	29															
41-129-21089	-84.7559	36.2329	5010		Gas	1555					54	23															
41-129-21090	-84.7531	36.2281	5026		D&A	1523																					
41-129-21091	-84.7494	36.1498	5029		Gas	1490			450	25	-158	-3	-254	30													
41-129-21092	-84.7556	36.1509	5030		D&A	1452			455	14	-116	18															
41-129-21094	-84.6850	36.3189	5057		Gas	1294	719	31	469	2	-91	13	-201	18													
41-129-21095	-84.8558	36.2309	5063		D&A	1611																					
41-129-21096	-84.8515	36.2322	5075		D&A	1597			829	36																	
41-129-21097	-84.7481	36.3012	5076		D&A	1490					54	14	-66	5	-110	18											
41-129-21098	-84.6554	36.2768	5079		Oil	1341			329	28	-321	-46															
41-129-21099	-84.8071	36.2023	5080		Oil	1512			460	-181	66	-13	-66	-10													
41-129-21100	-84.8370	36.1983	5082		D&A	1543			737	18	103	-41	8	-1													
41-129-21101R-1	-84.8337	36.2759	5484		D&A	1540			810	25																	
41-129-21102	-84.8160	36.1753	5088		D&A	1522					90	37															
41-129-21104	-84.6622	36.1784	5111		Gas	1338	478	10	230	-1	-442	-62	-478	-6													
41-129-21105	-84.6888	36.3178	5130		Gas	1419	754	55	494	17	-71	25	-181	28													
41-129-21106	-84.8040	36.2518	5155		D&A	1580	956	-19	666	-39																	
41-129-21107	-84.8085	36.2554	5156		Gas	1564							4	-9													
41-129-21108	-84.8541	36.2121	5164		Gas	1597																					
41-129-21109R-1	-84.6889	36.3267	5999		Gas	1422			555	68																	
41-129-21110	-84.8096	36.2484	5170		Oil	1570	956	-42	742	26																	
41-129-21111	-84.6680	36.2420	5172		D&A	1365																					
41-129-21112	-84.6645	36.3239	5179		Oil	1342			390	-21	-129	27	-256	18													
41-129-21113	-84.8565	36.2018	5185		Gas	1546					201	2	56	-5													
41-129-21114	-84.8278	36.2799	5186		Gas	1542			822	45	252	21	112	35													
41-129-21115	-84.8089	36.2594	5192		Gas	1560			748	28	251	93															
41-129-21116	-84.4914	36.0325	5201		D&A	1325					-1537	-42	-1641	-12	-1675	-16											
41-129-21117	-84.6674	36.3323	5206		D&A	1379			433	4	-111	26															
41-129-21118	-84.8210	36.2559	5207		D&A	1529	1017	11	744	-2	209	21	49	12													
41-129-21119	-84.7451	36.1290	5211		Oil	1342			422	34	-233	-28	-303	22													
41-129-21120	-84.8066	36.2386	5222		Gas	1560			697	-7	141	6															
41-129-21121	-84.9048	36.2120	5238		Oil	1635			905	-25																	
41-129-21122	-84.8269	36.2442	5239		Oil	1555			755	5																	
41-129-21123	-84.7665	36.1865	5244		Oil	1600			560	14	-7	20															
41-129-21124	-84.6684	36.3306	5252		D&A	1400			450	20	-104	32															
41-129-21125	-84.6587	36.2873	5265		Oil	1439			311	-22	-211	38	-362	-13								-1261	344				
41-129-21126	-84.6610	36.2849	5287		Oil	1364	554	-23	319	-16	-286	-41	-358	-12													
41-129-21128	-84.6956	36.3599	5293		Gas	1340			508	-35																	
41-129-21129	-84.6702	36.3361	5295		D&A	1373			428	-14	-125	-1															
41-129-21130	-84.6918	36.3514	5310		Gas	1286					-54	-8															
41-129-21131	-84.6930	36.3488	5311		Gas	1282			512	-10	-48	-2	-178	-7													
41-129-21132	-84.6561	36.2424	5314		D&A	1305	515	-13	230	-32	-320	-49	-443	-30													
41-129-21133	-84.8506	36.2050	5315		Oil	1363							69	19	23	23	-767		-766	22							
41-129-21134	-84.8254	36.2599	5316		Gas	1534	1022	15	749	-9																	
41-129-21136	-84.6422	36.2385	5321		D&A	1339	477	-15	211	-26	-337	-36	-471	-10													
41-129-21138	-84.6577	36.2438	5325		Oil	1311			239	-28																	
41-129-21139	-84.8599	36.2403	5340		D&A	1613	1033	-30	788	-26																	
41-129-21140	-84.7797	36.3095	5353		D&A	1483					108	-26															
41-129-21141	-84.8643	36.1980	5355		Gas	1559	980	-40	739	-79	199	-14	72	-9													
41-129-21143	-84.6706	36.1890	5359		Gas	1467					-318	20	-437	0													
41-129-21144	-84.9050	36.2081	5361		D&A	1630																					
41-129-21146	-84.6306	36.1935	5385		D&A	1697			192	14	-397	58	-517	29													
41-129-21147	-84.7444	36.1314	5389		O&G	1361			366	-24	-279	-76															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21148	-84.7488	36.1311	5390		O&G	1375					-130	60	-300	14	-350	72											
41-129-21149	-84.6601	36.2409	5412		O&G	1335																					
41-129-21151	-84.7369	36.2390	5433		D&A	1400			552	-12	-5	12															
41-129-21152	-84.6488	36.2286	5436		D&A	1428					-337	-30															
41-129-21153	-84.6895	36.3093	5453		Gas	1422			472	7																	
41-129-21155	-84.6840	36.2497	5462		D&A	1412					-186	9															
41-129-21156	-84.8387	36.2307	5473		O&G	1560																					
41-129-21157	-84.7311	36.3417	5474		Gas	1456	836	13	644	44	8	-37	-125	-43													
41-129-21158	-84.7250	36.3395	5475		D&A	1439			615	32	-15	-40	-141	-45													
41-129-21159	-84.7500	36.2219	5482		Oil	1520			510	-62	-42	-34															
41-129-21160	-84.7021	36.1581	5496		D&A	1492					-313	-35															
41-129-21161	-84.8106	36.2019	5519		O&G	1481					52	-34	-79	-29													
41-129-21162	-84.7685	36.1839	5533		Gas	1481			471	-73	-124	-96															
41-129-21163	-84.7611	36.2587	5534		Gas	1572					92	38	-56	2	-108	10											
41-129-21164	-84.6671	36.3095	5536		Gas	1462			452	54																	
41-129-21165	-84.6585	36.2765	5538		Oil	1441					-324	-60															
41-129-21166	-84.8675	36.2015	5554		Gas	1527	962	-76	819	-8	192	-37	57	-36													
41-129-21167R-1	-84.8238	36.2401	6310		D&A	1508			708	-33																	
41-129-21168	-84.7770	36.2686	5557		D&A	1508			713	67	108	17	-12	7													
41-129-21169	-84.8673	36.1448	5566		D&A	1612			754	0	138	-17	-8	-14													
41-129-21170	-84.8494	36.1967	5575		Gas	1556			776	11																	
41-129-21171	-84.8575	36.2362	5578		Gas	1620	1075	20	785	-22																	
41-129-21172R-1	-84.8275	36.2381	6231		Oil	1537			837	90																	
41-129-21173R-1	-84.8242	36.2418	6247		D&A	1533			787	44																	
41-129-21174R-1	-84.8264	36.2426	6236		Oil	1497			796	48																	
41-129-21176	-84.8489	36.2431	5602		Gas	1609			802	8	251	1	109	23													
41-129-21177	-84.8652	36.2545	5603		Gas	1639			813	-25	291	-17	147	11													
41-129-21180	-84.7965	36.2501	5619		D&A	1584			684	-3	106	-20															
41-129-21181R-1	-84.8223	36.2192	6123		D&A	1496			701	-1	84	-59	-4	-8													
41-129-21182	-84.7329	36.1951	5623		Gas	1468					-77	36	-207	37													
41-129-21183	-84.6572	36.2743	5627		Oil	1442			292	-13																	
41-129-21184	-84.8195	36.2941	5640		Gas	1496			736	-34	192	-32															
41-129-21187R-1	-84.8376	36.2439	6248		D&A	1534			789	18																	
41-129-21188	-84.8381	36.2411	5652		Oil	1553																					
41-129-21189	-84.8308	36.2387	5654		D&A	1548			798	44																	
41-129-21190	-84.8413	36.1989	5661		Gas	1484																					
41-129-21191	-84.6835	36.3105	5662		Gas	1292																					
41-129-21193	-84.8304	36.2768	5690		D&A	1543			753	-26																	
41-129-21194	-84.7359	36.1193	5693		O&G	1271					-253	0	-367	-6	-401	21											
41-129-21195	-84.8598	36.2658	5706		Gas	1582			862	32	286	-17	144	9	102	18											
41-129-21196	-84.8622	36.2611	5707		Gas	1628			878	45	308	3	156	21	116	35											
41-129-21197	-84.6741	36.2258	5709		Gas	1365					-353	-95	-485	-117			-1395										
41-129-21198	-84.7557	36.1872	5714		Gas	1471					-29	29															
41-129-21199	-84.7932	36.2169	5723		Gas	1502			687	43																	
41-129-21200	-84.7604	36.1395	5724		D&A	1438			473	36	-135	4															
41-129-21202	-84.9092	36.2123	5728		Gas	1673			925	-16	355	-9	213	-5													
41-129-21203	-84.7339	36.1210	5736		Oil	1339			327	-23	-256	0	-370	-7	-405	14											
41-129-21204	-84.7466	36.1331	5737		O&G	1358					-218	-25	-347	-32	-384	35											
41-129-21205	-84.8703	36.2547	5750		Gas	1618	1048	-50	812	-41	286	-37	148	1													
41-129-21206	-84.8096	36.2044	5754		Gas	1421					56	-31	-79	-32													
41-129-21208	-84.8530	36.2422	5758		Oil	1613	1081	33	815	13																	
41-129-21210	-84.7795	36.2528	5775		D&A	1559	719	-176	639	-10	129	34	-11	19													
41-129-21211	-84.8477	36.2467	5776		D&A	1598	1076	33	813	19	250	0	112	25													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21212	-84.8701	36.2309	5777		D&A	1616	1106	0	856	14																	
41-129-21217	-84.8038	36.1781	5786		D&A	1410					50	22	-96	11													
41-129-21219	-84.7679	36.3280	5789		D&A	1463					112	-9															
41-129-21220	-84.6616	36.2766	5793		D&A	1463					-266	-14	-340	18													
41-129-21223	-84.6995	36.2183	5802		Gas	1599					-108	81															
41-129-21233	-84.8623	36.1406	5823		Gas	1619	952	17	698	-27	139	9															
41-129-21253	-84.7648	36.3134	5876		Oil	1545			587	-45																	
41-129-21254	-84.8301	36.2021	5886		D&A	1520			760	62	156	22	28	31	-118	-49											
41-129-21256	-84.7455	36.1366	5890		Oil	1421			411	12	-147	43	-342	-29													
41-129-21257	-84.6901	36.2178	5897		Gas	1538			452	107	-150	76	-284	43													
41-129-21258	-84.7037	36.2751	5905		Gas	1417			481	28	-81	23	-198	15													
41-129-21260	-84.8408	36.1306	5908		Oil	1584	888	0	642	19	10	-33	-92	16													
41-129-21261	-84.7399	36.1261	5914		Oil	1356			396	23																	
41-129-21262R-1	-84.8290	36.2454	6246		Oil	1547			790	35																	
41-129-21264	-84.6766	36.2291	5946		Gas	1461			341	25	-234	11	-361	-3													
41-129-21265	-84.6764	36.2203	5947		Gas	1648	516	-42	412	106	-198	67	-327	39													
41-129-21266	-84.6901	36.3011	5965		Gas	1440					-110	6	-227	-2	-282	-18											
41-129-21267	-84.7666	36.3256	5975		Oil	1442			647	-11																	
41-129-21269	-84.6721	36.2309	5978		Gas	1506			300	-3	-232	19	-360	11													
41-129-21270	-84.8581	36.2596	5979		Gas	1588			878	56	266	-27	103	-22	88	19											
41-129-21272	-84.7041	36.2656	5987		Gas	1497			465	17																	
41-129-21273	-84.6368	36.2385	5988		Gas	1324			264	35	-326	-12	-476	2													
41-129-21276	-84.7682	36.3227	5998		Gas	1422			632	-23	82	-30															
41-129-21278	-84.7569	36.2599	6003		Gas	1471					101	59	-43	25	-91	35											
41-129-21279	-84.7917	36.2499	6009		D&A	1510			671	-5	112	-5	-23	-7	-74	-9											
41-129-21280R-1	-84.7299	36.2990	6286		Gas	1531	797	-21	600	47																	
41-129-21281	-84.6904	36.3243	6033		Gas	1345			505	16	-60	23	-177	22													
41-129-21282	-84.7410	36.3480	6036		Gas	1390																					
41-129-21283	-84.7405	36.3432	6037		Gas	1410																					
41-129-21284	-84.7306	36.2958	6041		Gas	1516	694	-123	560	5																	
41-129-21285	-84.7411	36.2825	6044		D&A	1502			657	68																	
41-129-21286	-84.8142	36.2673	6055		Gas	1519			731	-7	184	4															
41-129-21288	-84.6981	36.1007	6062		Gas	1299			231	2	-396	-21	-516	-24													
41-129-21289	-84.7052	36.1846	6063		Gas	1416			316	-43	-403	-174	-520	-172													
41-129-21290	-84.6265	36.2480	6066		Gas	1540			245	41	-366	-16	-502	8													
41-129-21291	-84.7040	36.3086	6071		D&A	1416					-64	4	-132	38	-186	34											
41-129-21292	-84.7038	36.3192	6077		Gas	1478			513	-2	-53	4															
41-129-21293	-84.8536	36.1994	6086		Gas	1552			790	7																	
41-129-21294	-84.6807	36.2281	6098		D&A	1435																					
41-129-21295	-84.6961	36.1082	6105		Gas	1262			159	-61	-440	-55	-533	-46	-578	-13											
41-129-21296	-84.7033	36.3029	6121		D&A	1436					-84	-8	-169	11													
41-129-21297	-84.7893	36.1187	6122		D&A	1424																					
41-129-21298	-84.7255	36.1277	6130		D&A	1347			346	10	-342	-72	-391	-22													
41-129-21299	-84.7439	36.2816	6139		Gas	1475	789	-41	603	9																	
41-129-21302	-84.7021	36.2991	6152		D&A	1420					-80	4	-183	5	-240	-7											
41-129-21303	-84.7815	36.1490	6153		Oil	1428			528	27	-53	20															
41-129-21304	-84.6922	36.3194	6178		D&A	1330			498	9																	
41-129-21305	-84.6605	36.2386	6180		O&G	1425			330	61																	
41-129-21306	-84.6577	36.2387	6181		Oil	1440																					
41-129-21307	-84.8773	36.2136	6204		Gas	1575			905	48																	
41-129-21308	-84.8877	36.2105	6208		D&A	1553			943	59																	
41-129-21309	-84.8833	36.2052	6209		D&A	1643			923	53																	
41-129-21310	-84.7383	36.2552	6210		Oil	1580	840	26	590	12	30	38	-108	15													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21311	-84.8685	36.2645	6215		D&A	1584					304	-20	140	-12	102	-1											
41-129-21312	-84.8666	36.2612	6216		Gas	1601			866	20	299	-18	152	7	109	16											
41-129-21313	-84.7081	36.2700	6219		D&A	1417			481	14	-77	16															
41-129-21314	-84.6483	36.3010	6221		D&A	1442			304	-9	-346	-90	-360	-3													
41-129-21316	-84.7292	36.2452	6240		O&G	1401			551	16																	
41-129-21317	-84.7478	36.1333	6264		O&G	1392			402	2																	
41-129-21320	-84.8188	36.1499	6275		Oil	1580			625	36	46	29	-104	32													
41-129-21321	-84.7715	36.2137	6276		D&A	1489			629	27	17	-18															
41-129-21322	-84.7886	36.1923	6277		D&A	1512			602	4	24	-3															
41-129-21323	-84.8150	36.2387	6278		D&A	1581			686	-35	145	-11															
41-129-21324	-84.8308	36.1422	6279		Oil	1597			677	64	65	27															
41-129-21325	-84.8163	36.2717	6280		D&A	1468			733	-13	154	-36															
41-129-21326	-84.8219	36.2748	6281		Oil	1524			764	2	210	1															
41-129-21327	-84.7963	36.1977	6282		D&A	1466			656	38	64	12															
41-129-21329	-84.7725	36.2749	6292		Gas	1558	908	39	748	108	228	148	-42	-17													
41-129-21330	-84.7409	36.1328	6301		Oil	1363			363	-21	-321	-109	-355	-27													
41-129-21331	-84.7091	36.2917	6307		Gas	1437	697	-51	459	-33	-78	-7															
41-129-21332	-84.6998	36.0973	6326		D&A	1321			221	-14	-395	-27	-523	-31													
41-129-21333	-84.7906	36.1166	6332		D&A	1460					-95	15	-254	3													
41-129-21334	-84.7590	36.3185	6335		Gas	1401	891	8	611	-10																	
41-129-21335	-84.7588	36.3149	6336		D&A	1455	847	-33	605	-11																	
41-129-21336	-84.6540	36.3058	6341		O&G	1461			321	-26	-253	-28	-319	11													
41-129-21338	-84.6273	36.2430	6347		Gas	1566			239	28	-330	14	-467	45													
41-129-21339	-84.8302	36.2171	6350		Gas	1504			738	17	134	-25															
41-129-21340	-84.6991	36.3013	6354		Gas	1379					-86	4	-205	-10	-247	-8											
41-129-21341	-84.6304	36.2606	6355		O&G	1627					-298	51	-425	59													
41-129-21342	-84.7571	36.3278	6356		D&A	1461	896	12	651	14																	
41-129-21344	-84.8537	36.2574	6359		Oil	1601	1051	3	803	-9	257	-22	121	9													
41-129-21345	-84.6568	36.2493	6365		D&A	1422			222	-50																	
41-129-21346	-84.7418	36.2881	6374		D&A	1451	877	46	594	7																	
41-129-21347	-84.8873	36.2227	6376		D&A	1660					630	299															
41-129-21348	-84.7633	36.1777	6377		Gas	1591			561	42	-23	32															
41-129-21349	-84.7527	36.3269	6388		D&A	1395	841	-33	620	-3																	
41-129-21350	-84.8673	36.2802	6391		D&A	1550			840	-18																	
41-129-21351	-84.7840	36.1204	6397		Oil	1445			315	-142	-105	12															
41-129-21352	-84.7544	36.3308	6399		D&A	1449	899	19	649	13																	
41-129-21354	-84.6896	36.3045	6403		Gas	1368					-132	-20	-237	-15													
41-129-21355	-84.6972	36.3174	6405		Gas	1337					-96	-20	-188	-3													
41-129-21357	-84.7398	36.2791	6433		Gas	1478	854	31	583	-6																	
41-129-21358	-84.6628	36.2372	6434		O&G	1380			305	29																	
41-129-21359	-84.6598	36.2968	6448		Oil	1449					-251	-27	-348	-20													
41-129-21360	-84.6990	36.3478	6451		O&G	1241			371	-167	-165	-134	-314	-156	-361	-152											
41-129-21361	-84.8330	36.2357	6458		Oil	1552			731	-25																	
41-129-21362	-84.7609	36.3123	6462		D&A	1482			541	-81																	
41-129-21363	-84.7636	36.2857	6468		D&A	1562	827	-35	727	100	162	100	-18	26	-38	58											
41-129-21367	-84.8055	36.1119	6474		Gas	1460			510	36	-130	-43	-245	-7													
41-129-21368	-84.8311	36.2464	6476		D&A	1519			711	-49																	
41-129-21369	-84.8055	36.1145	6479		Gas	1465							-265	-30													
41-129-21370	-84.6553	36.3043	6482		O&G	1447					-263	-39	-331	-2													
41-129-21371	-84.6835	36.2647	6483		D&A	1312			324	-53	-172	9															
41-129-21372	-84.6512	36.3098	6484		O&G	1425					-263	-37	-344	-12													
41-129-21373	-84.7747	36.1346	6491		D&A	1423			533	71	-115	-3	-247	8													
41-129-21374	-84.6566	36.0881	6503		D&A	1381			51	4	-429	56	-499	114													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21375	-84.6590	36.3008	6509		D&A	1436					-231	-12	-344	-20													
41-129-21376	-84.7765	36.1316	6512		Oil	1364			463	2	-144	-31															
41-129-21377	-84.7787	36.1302	6513		Oil	1404			474	10	-116	-5															
41-129-21378	-84.7548	36.3333	6519		Gas	1391	881	-1	603	-40																	
41-129-21379	-84.8439	36.1278	6520		Oil	1551	852	-45	641	13	19	-27	-77	25													
41-129-21380	-84.7732	36.1325	6530		D&A	1369					-133	-14															
41-129-21381	-84.6872	36.1688	6533		D&A	1278			288	-12	-316	-6															
41-129-21382	-84.8537	36.1278	6537		D&A	1572	909	-10	696	32	78	4	-60	9													
41-129-21383	-84.6774	36.3211	6541		D&A	1378			453	6																	
41-129-21384	-84.6927	36.3419	6545		Gas	1278			468	-46	-110	-55	-223	-45	-264	-34											
41-129-21385	-84.7305	36.1514	6559		Oil	1498			428	43	-212	-2	-322	4													
41-129-21386	-84.6176	36.2626	6566		D&A	1538					-387	-1	-507	16													
41-129-21388	-84.7680	36.1701	6586		Gas	1440			470	-42	-170	-111															
41-129-21389	-84.7680	36.3077	6589		Gas	1521			656	17																	
41-129-21390R-1	-84.7258	36.2466	7104		D&A	1399																					
41-129-21391	-84.7575	36.3309	6602		Gas	1420	890	3	620	-25																	
41-129-21392	-84.8133	36.1111	6608		Oil	1484			522	38	-91	-22	-236	-10													
41-129-21393	-84.8254	36.1043	6614		D&A	1513			393	-99	-42	2	-215	-18	-252	-1											
41-129-21394	-84.7486	36.3235	6625		Oil	1460			665	60																	
41-129-21395	-84.8125	36.1181	6629		D&A	1458			513	10	-92	-33	-234	-16													
41-129-21396	-84.6908	36.3436	6631		O&G	1287			599	89	-81	-23															
41-129-21397	-84.8707	36.1669	6633		D&A	1682			822	20																	
41-129-21399	-84.7411	36.0947	6644		Gas	1385			433	79	-309	-41															
41-129-21400	-84.8369	36.2811	6648		O&G	1558			820	25	260	3	115	17													
41-129-21401	-84.8068	36.0950	6655		Gas	1387					-123	-15	-271	-12													
41-129-21402	-84.6884	36.3462	6658		O&G	1290																					
41-129-21403	-84.8097	36.1143	6669		Gas	1458			438	-50	-82	-9	-244	-16	-297	11											
41-129-21405	-84.7928	36.1195	6699		Oil	1396			494	23																	
41-129-21407	-84.7799	36.1278	6708		Oil	1426			506	44																	
41-129-21408	-84.6420	36.2354	6721		Gas	1420	425	-64	145	-90	-420	-113	-545	-81													
41-129-21409	-84.6449	36.2367	6728		D&A	1415			219	-21	-332	-34	-469	-15													
41-129-21410	-84.6331	36.2324	6729		O&G	1510			214	-7	-340	0	-480	17													
41-129-21411	-84.6874	36.3436	6733		D&A	1300					-75	-8															
41-129-21412	-84.7700	36.1722	6742		Oil	1468			538	17	-67	-17															
41-129-21413	-84.8816	36.2141	6761		D&A	1605			877	8																	
41-129-21415	-84.6816	36.3473	6768		Gas	1366			491	4	101	179															
41-129-21418	-84.6591	36.2362	6775		O&G	1486			85	-176																	
41-129-21419	-84.6616	36.2981	6777		D&A	1471					-205	10	-323	-3	-364	1											
41-129-21422	-84.8592	36.2547	6783		O&G	1600					272	-19	122	0													
41-129-21426	-84.6303	36.2642	6799		D&A	1537					-378	-26	-515	-33													
41-129-21427	-84.6508	36.3138	6804		O&G	1398					-257	-39	-389	-61													
41-129-21428	-84.7530	36.2578	6805		Gas	1469					89	57															
41-129-21429	-84.6358	36.2338	6812		D&A	1520			270	44	-328	0	-468	16													
41-129-21430	-84.7489	36.3259	6837		O&G	1486			631	21	39	-28															
41-129-21431	-84.6449	36.2341	6846		D&A	1500			262	24	-290	14	-476	-21													
41-129-21432	-84.6829	36.3267	6847		D&A	1405	673	-19	473	4	-88	11															
41-129-21433	-84.6522	36.3123	6861		O&G	1450					-190	27															
41-129-21434	-84.8321	36.2482	6864		Oil	1538	1130	104	714	-49																	
41-129-21435	-84.6866	36.3322	6886		Gas	1423	741	31	458	-28	-81	2	-204	-2													
41-129-21436	-84.6852	36.3292	6887		Gas	1420	694	-8	494	16	-87	3	-185	24													
41-129-21437	-84.6766	36.2717	6892		Gas	1402																					
41-129-21438	-84.6352	36.2363	6897		D&A	1360			186	-41																	
41-129-21439	-84.6627	36.2920	6899		D&A	1364					-228	-4															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21440	-84.6626	36.1872	6910		Oil	1222			152	-86	-316	46	-493	-35													
41-129-21441	-84.6466	36.2432	6913		O&G	1390	488	-18	216	-30																	
41-129-21442	-84.7499	36.1334	6923		Oil	1399	664	5	389	-16												-2055	-7				
41-129-21443	-84.6395	36.2336	6931		D&A	1510			274	43																	
41-129-21444	-84.6623	36.2957	6932		D&A	1463	163	-431			-197	21	-325	-3	-363	4											
41-129-21445	-84.6531	36.3107	6937		O&G	1464					-204	13															
41-129-21446	-84.6461	36.2393	6952		O&G	1340			222	-21																	
41-129-21447	-84.6567	36.3093	6958		Gas	1456					-194	15															
41-129-21449	-84.8246	36.2378	6964		Oil	1484	1122	92	714	-27																	
41-129-21450R-1	-84.7747	36.1370	8425		D&A	1419			461	-5	-135	-27	-265	-14	-303	79	-1148		-1145	-107							
41-129-21451	-84.6427	36.2320	6966		D&A	1520			279	45												-1948	-8				
41-129-21452	-84.7380	36.0942	6974		Gas	1470			412	62	-316	-41															
41-129-21453	-84.6599	36.3069	6976		Gas	1493					-186	18															
41-129-21455	-84.6323	36.2350	6997		Gas	1398					-325	10	-464	34													
41-129-21456	-84.6386	36.2308	6998		D&A	1481			230	3																	
41-129-21457	-84.7469	36.3275	7003		Gas	1307			537	-72	-36	-100															
41-129-21458	-84.8350	36.1128	7008		D&A	1509			599	42	-6	4															
41-129-21460	-84.7300	36.3224	7033		D&A	1398	756	-68	556	-5	28	16	-98	-6	-161	-10											
41-129-21461	-84.7228	36.3270	7043		D&A	1412	764	-42	564	6	2	2	-125	-20													
41-129-21462	-84.6650	36.2364	7044		Gas	1550																					
41-129-21463	-84.8393	36.2428	7048		D&A	1536	1158	122	738	-36																	
41-129-21464	-84.8379	36.1543	7057		Oil	1582					102	17	-23	42	-40	35											
41-129-21465R-1	-84.7714	36.2618	7291		Gas	1476			640	4	78	0	-36	-6	-86	5											
41-129-21466	-84.7639	36.2746	7063		D&A	1540	854	3	654	27																	
41-129-21467	-84.6184	36.2569	7065		D&A	1522					-403	-23	-528	0	-572	-24											
41-129-21468	-84.7709	36.1751	7075		Oil	1513			553	24																	
41-129-21469	-84.6299	36.2333	7084		Gas	1432			199	-18	-346	1	-483	27													
41-129-21470	-84.7208	36.1216	7083		D&A	1280			455	144	-200	96	-300	93	-430	30											
41-129-21471	-84.6311	36.2379	7101		O&G	1410			199	-22																	
41-129-21473	-84.7322	36.1558	7126		Gas	1360			402	7	-148	48	-344	-28													
41-129-21476	-84.6867	36.3366	7134		D&A	1383	691	-25	491	0	-65	12	-169	29													
41-129-21478	-84.7162	36.3428	7140		O&G	1443					-15	-22	-143	-26													
41-129-21479	-84.6316	36.2298	7144		Gas	1518			228	12	-341	10	-482	24													
41-129-21480	-84.8354	36.2458	7151		Oil	1544	986	-46	736	-32																	
41-129-21481	-84.6936	36.3393	7152		D&A	1405					-68	-12	-185	-7	-221	7											
41-129-21482	-84.7419	36.1241	7157		Oil	1351	641	15	386	11	-239	-15	-327	13													
41-129-21483	-84.7224	36.1316	7160		D&A	1280			352	18	-311	-39	-380	-9	-423	30											
41-129-21484	-84.4219	36.0863	7175		D&A	1647			-1103	-70																	
41-129-21485	-84.8612	36.2682	7182		Gas	1569					291	-18	139	-1	99	8											
41-129-21487	-84.8614	36.2587	7193		Gas	1620					288	-13	150	19	116	41											
41-129-21488	-84.8644	36.2593	7194		D&A	1624																					
41-129-21490	-84.8541	36.2636	7205		D&A	1580			860	43																	
41-129-21492	-84.7876	36.1400	7251		Gas	1452			498	-1	-108	-32															
41-129-21493	-84.7186	36.2829	7260		D&A	1455					-26	24	-140	10													
41-129-21494	-84.8539	36.2741	7264		D&A	1567					265	-32	121	-7	87	1											
41-129-21495	-84.7575	36.1319	7266		D&A	1404																					
41-129-21497	-84.6833	36.3219	7275		Gas	1296			476	11																	
41-129-21498	-84.6769	36.3078	7276		D&A	1389			436	11	-132	13	-252	4													
41-129-21499	-84.6867	36.3402	7278		D&A	1330			466	-28	-80	-7	-190	5													
41-129-21500	-84.6967	36.3400	7280		O&G	1344					-48	-1	-156	13	-191	28											
41-129-21501	-84.6811	36.3316	7284		D&A	1335			487	18	-81	17	-197	21	-239	29											
41-129-21503	-84.6601	36.1712	7293		Gas	1243	539	99	213	-7	-477	-75	-501	-11													
41-129-21504	-84.7369	36.1306	7308		Gas	1377			388	17	-295	-66	-338	2													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21505	-84.7401	36.3314	7313		Gas	1307			562	-36	12	-41	-183	-115													
41-129-21506	-84.7001	36.3441	7316		O&G	1374					-46	-13	-166	-9													
41-129-21507	-84.6996	36.3388	7329		O&G	1405					-66	-25	-175	-13													
41-129-21508R-1	-84.6994	36.3415	7605		O&G	1287					-80	-41	-193	-32													
41-129-21509	-84.7021	36.3404	7331		Oil	1343					-77	-44	-195	-40													
41-129-21510	-84.7017	36.3463	7332		Gas	1364					-54	-28	-182	-30													
41-129-21511	-84.8569	36.2464	7333		D&A	1632					277	0	138	31													
41-129-21515	-84.6854	36.1793	7350		Gas	1502			314	17	-293	12	-415	3	-443	46											
41-129-21516	-84.6936	36.2917	7352		D&A	1467			417	-29																	
41-129-21517	-84.7439	36.1039	7391		Gas	1422	612	11	367	6	-248	3	-368	2													
41-129-21518	-84.6960	36.3374	7413		O&G	1392					-48	5															
41-129-21519	-84.7521	36.1041	7414		Gas	1376			277	-95																	
41-129-21520	-84.7582	36.1293	7424		D&A	1378			367	-50																	
41-129-21521	-84.7011	36.2522	7426		D&A	1359			293	-133																	
41-129-21522	-84.8301	36.2489	7430		O&G	1526	1130	106	856	96																	
41-129-21523	-84.7366	36.1073	7431		Gas	1335			312	-37	-329	-61	-416	-35													
41-129-21524	-84.7405	36.1081	7432		Oil	1388	618	23																			
41-129-21525	-84.7564	36.1059	7441		D&A	1414	664	15	399	18																	
41-129-21527	-84.7051	36.3418	7443		D&A	1411					-67	-44	-183	-37													
41-129-21528	-84.7061	36.3401	7428		Oil	1379					-77	-54	-189	-44	-231	-39											
41-129-21529	-84.7527	36.1066	7455		Gas	1360					-260	-38															
41-129-21530	-84.7540	36.1090	7456		O&G	1378			389	8																	
41-129-21531	-84.7140	36.3281	7466		Gas	1465	953	172	569	25																	
41-129-21532	-84.7148	36.3259	7467		Gas	1418	956	172	570	28																	
41-129-21533	-84.7168	36.3243	7468		Gas	1462	982	193	554	11																	
41-129-21534	-84.8603	36.2711	7483		Gas	1601			836	2	292	-17	142	2													
41-129-21535	-84.7106	36.3272	7488		Gas	1448																					
41-129-21536	-84.7512	36.1016	7493		Gas	1397																					
41-129-21537	-84.7586	36.0981	7498		O&G	1386	656	5	396	24																	
41-129-21539	-84.8034	36.1334	7501		D&A	1376			512	-7	-102	-47	-245	-35													
41-129-21541	-84.7950	36.2253	7528		D&A	1522			672	11	112	17															
41-129-21542	-84.7593	36.1006	7540		D&A	1407			405	29																	
41-129-21543	-84.7339	36.1903	7557		D&A	1596			480	1																	
41-129-21544	-84.8641	36.2731	7562		D&A	1583					286	-34	147	-3													
41-129-21545	-84.7489	36.1071	7568		Oil	1423			396	25																	
41-129-21546	-84.5433	36.0134	7569		D&A	1400	-570	-24	-770	-71	-1350	-45	-1460	-9	-1490	-134											
41-129-21548	-84.7033	36.3441	7625		D&A	1417					-65	-40	-186	-37	-228	-30											
41-129-21549	-84.7362	36.1338	7644		D&A	1389			381	8																	
41-129-21550	-84.7040	36.3374	7651		Oil	1321			497	-40	-77	-45															
41-129-21551	-84.7931	36.2886	7657		D&A	1476			686	-8	125	-21	-10	-26													
41-129-21552	-84.6966	36.1785	7671		O&G	1307					-263	5	-387	-1													
41-129-21553	-84.7069	36.3384	7672		D&A	1424					-42	-19	-156	-13	-198	-7											
41-129-21555	-84.7165	36.2948	7692		D&A	1444					-21	25	-126	19	-166	30											
41-129-21556	-84.6969	36.3434	7700		Oil	1309					-41	1															
41-129-21557	-84.8184	36.2415	7772		D&A	1552					220	53	103	86													
41-129-21559	-84.7871	36.2255	7838		Gas	1520			685	38																	
41-129-21560	-84.7903	36.2227	7848		Oil	1524			634	-15																	
41-129-21561	-84.8246	36.2806	7854		Gas	1525					205	-17															
41-129-21563	-84.7570	36.1306	7861		D&A	1342	779	106	363	-53	-192	-27	-305	-8													
41-129-21564	-84.7313	36.2431	7862		O&G	1389			509	-34																	
41-129-21565	-84.7827	36.2253	7881		Gas	1503					89	14	-47	9													
41-129-21566	-84.7810	36.2219	7882		D&A	1462			596	-35	76	10	-69	-6	-106	15											
41-129-21567	-84.7888	36.2205	7888		D&A	1518			648	6																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-129-21568	-84.7531	36.1341	7896		Gas	1421			373	-40	-197	-26	-301	-1													
41-129-21569	-84.7920	36.2205	7942		Oil	1539			669	21																	
41-129-21570	-84.7936	36.2228	7945		Gas	1539			522	-133												-2087	-203				
41-129-21571	-84.7278	36.3324	7947		D&A	1372	789	-27	600	24	-4	-26	-153	-61	-197	-56											
41-129-21572	-84.7372	36.1273	7956		D&A	1357			399	31	-213	21	-335	10													
41-129-21573	-84.7279	36.3294	7967		D&A	1382	334	-483	-191	-762																	
41-129-21574	-84.7344	36.2426	7981		O&G	1408																					
41-129-21576	-84.8278	36.2153	8027		Gas	1494			714	3	175	25	20	10													
41-129-21577	-84.7432	36.1262	8029		O&G	1270			355	-26	-270	-53	-360	-26													
41-129-21578	-84.7875	36.1333	8034		D&A	1461					-117	-29	-255	-19	-311	35	-1154		-1151	-157							
41-129-21579	-84.8285	36.2194	8037		Gas	1440			685	-35	118	-41	26	8													
41-129-21580	-84.8262	36.2175	8050		Gas	1449			714	4	92	-58	1	-9													
41-129-21582	-84.7911	36.2254	8129		O&G	1521			666	12																	
41-129-21583	-84.8318	36.2196	8147		Gas	1494			722	-8	128	-39	29	4													
41-129-21584	-84.7623	36.1723	8168		Gas	1574	694	-31	514	10	-76	-7	-211	6	-251	32	-1136										
41-129-21585	-84.7019	36.3387	8169		Oil	1319					-66	-30															
41-129-21587	-84.7312	36.1483	8219		D&A	1484					-201	12	-316	12	-363	74											
41-129-21588	-84.7000	36.3368	8223		O&G	1438					92	135															
41-129-21589	-84.7021	36.3367	8224		Oil	1382																					
41-129-21590	-84.6586	36.2807	8270		O&G	1422					-281	-18															
41-129-21591	-84.6942	36.3441	8276		D&A	1304					-74	-25															
41-129-21592	-84.7807	36.1213	8295		Oil	1437	723	-13	485	32																	
41-129-21594	-84.7823	36.1249	8319		Oil	1351	735	-6	491	29											-2084	-2106	-175				
41-129-21595	-84.7898	36.2210	8336		D&A	1534			635	-10																	
41-129-21596	-84.7606	36.2274	8389		D&A	1510			612	12	75	40															
41-129-21597	-84.6874	36.2863	8398		D&A	1405			397	-21	-147	-2	-261	-4	-281	11											
41-129-21598	-84.6887	36.2817	8403		D&A	1403			403	-10	-137	10	-261	-2	-304	-11											
41-129-21601	-84.7750	36.1456	8414		O&G	1434			437	-43	-106	-14	-249	-14													
41-129-21602	-84.6908	36.2866	8416		Gas	1375					-105	29	-243	1	-301	-22											
41-129-21603	-84.7783	36.1442	8417		D&A	1446					-100	-12	-238	-7	-276	49	-1121		-1118	-51							
41-129-21607	-84.8278	36.2236	8503		D&A	1506			741	16	113	-51	4	-17	-34	8											
41-129-21608	-84.8243	36.2151	8531		D&A	1491	911	-80	711	11	91	-50	9	7	-24	41											
41-129-21610	-84.6585	36.2459	8546		Oil	1364																					
41-129-21611	-84.4732	36.0318	8607		D&A	1077					-1581	-18	-1703	-4													
41-129-21612	-84.4761	36.0303	8610		D&A	1209					-1557	-1	-1701	-11	-1737	4											
41-129-21613	-84.4749	36.0282	8611		D&A	1212					-1574	-8	-1736	-37													
41-129-21614	-84.4704	36.0341	8614		D&A	1099					-1597	-30	-1737	-33													
41-129-21616	-84.4736	36.0350	8619		D&A	1153					-1567	-13	-1707	-16	-1745	0											
41-129-21617	-84.3736	36.0389	8622		D&A	859					-1922	-31	-2043	-53	-2083	-23											
41-129-21621	-84.4761	36.0337	8626		D&A	1168					-1560	-12	-1700	-16	-1737	-2											
41-129-21628	-84.5020	36.1708	8660		D&A	1252	-236	13	-468	-22	-1088	-4	-1208	8													
41-129-21632	-84.4517	35.9899	8809		D&A	965					-1748	19	-1895	-14	-2030	-75											
41-129-21633	-84.4394	36.0904	8849		O&G	1651					-1531	-25	-1673	-6	-1715	43											
41-129-21634	-84.4418	36.0860	8934		Gas	1674					-1519	-12	-1659	17								-4036	-1336				
41-129-21635	-84.4246	36.0890	9017		O&G	1679					-1531	21															
41-129-21636	-84.4320	36.0901	9022		Gas	1692																					
41-129-21637	-84.4534	36.0755	9028		O&G	1295					-1489	9															
41-129-21638	-84.4884	36.0665	9132		Gas	1325	-480	8	-845	10																	
41-129-21642	-84.5798	36.1578	9570		Gas	1314	74	-51	-164	-10	-752	-5	-884	8													
41-129-21644	-84.5752	36.2628	9700		D&A	1508					-497	5	-620	11	-694	5						-830	253				
41-129-21647	-84.4117	36.0927	9736		O&G	1500	-680	-2	-1009	47	-1554	41	-1726	-9	-1762	45					-1812	-1844	366				
41-133-00008	-85.3116	36.5067			D&A	1060							652	6	637	29	104		107	11							
41-133-10003	-85.3993	36.4336	232		D&A	1232					762	-65										-686	35				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-10017	-85.3980	36.4329	267		D&A	1167					759	-65										-746	-24				
41-133-10035	-85.3298	36.4130	372		D&A	1111									611	12						-818	-80				
41-133-10047R-1	-85.2240	36.3256	1077		D&A	1152							466	-71					-28	-27		-762	3				
41-133-10052R-1	-85.2190	36.3248	1090		Oil	916					756	61	516	-18			6										
41-133-20001R-1	-85.3257	36.4179	4416		Oil	1363											98										
41-133-20008	-85.0959	36.1817	829		D&A	1836			1220	13												-680	46				
41-133-20010	-85.2969	36.4639	983		D&A	1222					813	45	650	25	622	22	132	164	135	30		-807	-65				
41-133-20011	-85.2068	36.3296	998		D&A	1274							556	26			38					-798	-14				
41-133-20012	-85.2248	36.3339	1076		D&A	956							522	-18					-19	-17		-758	17				
41-133-20013	-85.2090	36.3244	1078		D&A	918							543	14			48		22	43	-757	-783	-3				
41-133-20014	-85.3272	36.3505	1146		D&A	950											152		133	16		-757	-18				
41-133-20016	-85.0847	36.1941	1169		D&A	1775			1215	20												-818	75				
41-133-20017	-85.2963	36.3829	1174		D&A	1055							585	-18						33	-17						
41-133-20018	-85.2864	36.3078	1175		Oil	1326							561	-20			76		54	0							
41-133-20019	-85.2873	36.3471	1182		D&A	1151					765	13	562	-29			45		33	-15		-775	-47				
41-133-20020	-85.2479	36.3938	1183		D&A	1007							562	-10	512	-28	-15	66	31	-15		-640	157				
41-133-20021	-85.2718	36.3938	1193		D&A	1307					813	78	581	-1			71		59	12							
41-133-20024	-85.2185	36.3209	1432		Oil	1137							531	-2	501	23	31		20	27							
41-133-20025	-85.1428	36.3206	1621		D&A	1820			1356	20	649	-12	497	13	464	10	-37	-2	-34	17							
41-133-20026	-85.1369	36.3227	1685		Oil	1846			1346	14	696	37	496	15					-28	24		-727	112				
41-133-20027	-85.3794	36.3874	1699		D&A	1070							704	29								-386	354				
41-133-20029	-85.1434	36.3241	1702		Oil	1830					658	-7	475	-12			-24		-36	13							
41-133-20031	-85.3694	36.3953	1747		D&A	1085					814	-6	660	3			140		118	-25							
41-133-20032	-85.4765	36.3346	1766		D&A	1018							822	11			358		352	46		-610	-50				
41-133-20033	-85.4733	36.3373	1767		Oil	918													272	-28							
41-133-20036	-85.1575	36.3219	1795		Oil	1800			1326	-18	652	-20	456	-41	424	-42						-599	99				
41-133-20037	-85.3706	36.3910	1837		D&A	1065					767	-56	652	-7	626	-9	85	112	88	-58		-607	128				
41-133-20038	-85.3976	36.4048	1842		D&A	980							688	-17			184		170	9							
41-133-20039	-85.3214	36.3447	1845		D&A	1055											-163										
41-133-20040	-85.3960	36.4106	1868		D&A	960					731	-124	699	-6			210		187	24		-668	73				
41-133-20041	-85.3705	36.3875	1869		D&A	1030							654	-5			166		144	-4		-630	105				
41-133-20042	-85.3959	36.4148	1884		D&A	1065					829	-20	715	8			227		205	40		-653	84				
41-133-20043	-85.4129	36.4064	1885		D&A	940					775	-131	731	10			227		205	33		-675	77				
41-133-20044	-85.3878	36.4043	1899		D&A	915					852	5	725	33			232		211	57		-607	135				
41-133-20045	-85.4000	36.4148	1931		Gas	1030							690	-21					167	-2		-666	73				
41-133-20046	-85.3894	36.4003	1932		Gas	965							672	-21					115	-39		-605	138				
41-133-20047	-85.4037	36.4141	1947		D&A	990											168		153	-20		-665	76				
41-133-20048	-85.3924	36.3948	1948		D&A	975					817	-40	711	13			222		199	45		-726	20				
41-133-20049	-85.3904	36.4077	1949		D&A	980							682	-15			190		166	9							
41-133-20050	-85.3867	36.4047	1959		D&A	940					853	8	715	25			212		188	34							
41-133-20051	-85.3744	36.3953	1967		D&A	1140							668	2			153		129	-19		-801	-65				
41-133-20052	-85.3854	36.3990	1978		D&A	1040							682	-4			198					-850	-109				
41-133-20053	-85.3807	36.3978	1981		Gas	1070													145	-6		-690	49				
41-133-20055	-85.3566	36.3854	2028		D&A	1035					757	-48	652	16			148		119	-17							
41-133-20058	-85.2568	36.2109	2114		D&A	1395					845	47	681	-20	644	-5	90		92	8		-865	-121				
41-133-20059	-85.2238	36.2594	2140		D&A	915					717	0	557	-3	520	-22	-55		-53	-40		-615	70				
41-133-20060	-85.3572	36.3819	2148		Gas	1030							620	-18					114	-25							
41-133-20061	-85.1830	36.3121	2150		D&A	905							537	26					1	32		-636	128				
41-133-20062	-85.1804	36.3097	2184		Oil	860					625	-70	502	-7			-6										
41-133-20064	-85.3949	36.4022	2201		D&A	980							640	-62					40	-118							
41-133-20065	-85.3987	36.4000	2203		Gas	910							707	2								-952	-204				
41-133-20066	-85.1857	36.3077	2215		D&A	900							515	4							-740						
41-133-20067	-85.4069	36.4109	2225		Gas	975							745	28					171	-2							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20068	-85.1772	36.3090	2231		Gas	836							491	-16								-758	3				
41-133-20069	-85.3631	36.3574	2237		D&A	994					864	39	649	-2			136		139	-18		-763	-23				
41-133-20074	-85.2866	36.3937	2316		D&A	1300							532	-62					-5	-51		-778	-36				
41-133-20075	-85.1826	36.3297	2322		Oil	893					667	-25	507	-10	475	24	22					-1317	-553				
41-133-20077	-85.2791	36.3969	2325		D&A	1190							590	1	480	-69	120		50	2							
41-133-20079	-85.2847	36.3897	2343		D&A	1302							560	-32													
41-133-20080	-85.2868	36.3979	2345		D&A	1118							620	26			60		86	38	-774	-794	-48				
41-133-20081	-85.2915	36.3901	2346		Oil	1127							607	9					75	30		-765	-26				
41-133-20083	-85.2740	36.4030	2356		D&A	1282							596	8	570	22	72					-774	-11				
41-133-20084	-85.2969	36.3807	2375		Oil	1058							593	-11													
41-133-20085	-85.1813	36.3230	2377		Gas	820							520	6					-5	29		-910	-159				
41-133-20086	-85.2726	36.3976	2379		Oil	1305							581	-3	555	8	50		52	3		-590	173				
41-133-20087	-85.2756	36.3993	2380		D&A	1205																-560	200				
41-133-20089	-85.2803	36.4003	2393		D&A	1056							603	13	566	16	66				-734	-774	-20				
41-133-20090	-85.2728	36.4066	2403		D&A	1335									485	-65	75		65	12		-643	123				
41-133-20091	-85.2769	36.3796	2409		Gas	1112											-14		-42	-82		-910	-163				
41-133-20093	-85.1626	36.4170	2414		D&A	864					689	-15			526	-1	-43				-619						
41-133-20094	-85.1376	36.3071	2415		D&A	1888					657	12	490	22	454	17	-81	-41	-78	-12		-720	115				
41-133-20095	-85.3896	36.3872	2431		O&G	1000									538	-116	230										
41-133-20096	-85.3856	36.3873	2432		O&G	990							716	31	540	-110						-909	-165				
41-133-20098	-85.2326	36.3844	2435		D&A	936							586	21	556	24	56		46	14		-763	41				
41-133-20100	-85.3648	36.2737	2443		D&A	1132					924	-1	782	5			197										
41-133-20102	-85.2401	36.3823	2452		D&A	1268											50		53	18							
41-133-20103	-85.2427	36.3846	2456		D&A	1266											59		61	24		-924	-113				
41-133-20104	-85.2467	36.3881	2464		D&A	1080									450	-88	100		70	29		-874	-72				
41-133-20105	-85.1778	36.3437	2467		Oil	842							502	-17	472	2						-877	-91				
41-133-20106	-85.1861	36.3989	2468		Gas	865							555	-8			-91		-43	-38							
41-133-20107	-85.2389	36.3890	2474		D&A	989					744	29	584	16			73					-755	50				
41-133-20108	-85.1759	36.3799	2480		D&A	877							479	-64	460	-46						-799	14				
41-133-20109	-85.1783	36.3796	2481		D&A	960					760	55	558	14	524	17											
41-133-20110	-85.2899	36.3945	2483		D&A	1130					710	-33	466	-130	435	-119	-124		-78	-124		-796	-54				
41-133-20114	-85.1713	36.3813	2492		Gas	838							536	-6	504	0	10		-16	4							
41-133-20116	-85.1906	36.4092	2502		Gas	952					780	68	550	-18	515	-17	-35		-31	-25		-782	-10				
41-133-20117	-85.2793	36.3769	2507		Oil	1055									115	-432			25	-14							
41-133-20118	-85.2423	36.3894	2509		D&A	985											80		82	43		-1227	-420				
41-133-20119	-85.2365	36.3952	2510		Oil	981									575	38	41										
41-133-20120	-85.0898	36.1975	2512		Oil	1625					583	-23	383	-23													
41-133-20121	-85.2413	36.4044	2513		Oil	904											44		24	-22							
41-133-20122	-85.0901	36.2001	2514		D&A	1595			1159	-46	582	-24	418	10	379	8	-259										
41-133-20123	-85.2228	36.3221	2515		Gas	918					648	-46	543	8					-2	-1		-740	22				
41-133-20125	-85.1714	36.3786	2526		Oil	875					680	-28	507	-33	471	-31											
41-133-20127	-85.1874	36.1828	2532		D&A	1653							510	-30			-181		-173	-39		-892	-107				
41-133-20128	-85.2797	36.3742	2534		Oil	1155									557	10	25					-826	-88				
41-133-20129	-85.1806	36.3169	2541		Gas	828					708	16	518	6	258	-181	-2		-4	29		-900	-148				
41-133-20130	-85.2785	36.3717	2544		Oil	1265											25		15	-25							
41-133-20131	-85.2634	36.3828	2546		D&A	1333					910	183	563	-8	533	-9			33	-7		-742	32				
41-133-20132	-85.2452	36.3904	2547		D&A	960											40		60	18	-712	-752	51				
41-133-20134	-85.2691	36.3869	2550		D&A	1350					758	27	565	-13			17										
41-133-20136	-85.2426	36.4018	2564		D&A	1118									508	-32	28		78	32		-860	-62				
41-133-20138	-85.2424	36.3584	2572		D&A	1262					712	-7	552	2	522	-7	24	55	27	-2		-849	-35				
41-133-20139	-85.1800	36.3072	2594		D&A	922					628	-67	518	10	483	45	-27	8	-24	7		-732	36				
41-133-20142	-85.2762	36.3764	2597		D&A	1065									145	-401	45		65	27		-799	-52				
41-133-20143	-85.2391	36.3989	2599		D&A	1113											98		100	59							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20144	-85.2453	36.4006	2600		D&A	1218											88		118	70							
41-133-20145	-85.0926	36.1947	2601		Oil	1750					530	-81	400	-7													
41-133-20146	-85.1803	36.3385	2602		Oil	890											-30		-50	-16							
41-133-20147	-85.1767	36.3413	2603		Oil	909							497	-20	467	-1	-19										
41-133-20148	-85.2841	36.4144	2604		D&A	1018							618	19	590	29	128					-763	-8				
41-133-20153	-85.2633	36.3893	2628		Gas	1270					800	71	555	-19			60										
41-133-20155	-85.2710	36.3751	2630		D&A	1082					830	102	592	16	562	18			81	44							
41-133-20165	-85.1804	36.3466	2670		D&A	901					679	-17	531	10	131	-343											
41-133-20166	-85.1340	36.2256	2672		Oil	1788			1190	-66	617	-8	418	-15	382	-25	-163										
41-133-20167	-85.1353	36.2222	2673		Oil	1781			1283	27	617	-2	443	9	401	-9	-137					-568	115				
41-133-20169	-85.1756	36.3552	2683		D&A	860					635	-66	535	14	510	28	-65	-15	-65	-38	-852	-934	-123				
41-133-20170	-85.2828	36.3706	2693		D&A	1322							578	-10	552	6	27		67	26		-714	15				
41-133-20171	-85.1838	36.3313	2694		D&A	855					795	102	657	139	627	175											
41-133-20172	-85.1718	36.3555	2695		D&A	843					708	4	523	3			-145										
41-133-20173	-85.2764	36.3810	2698		D&A	1241					731	-2	617	34	589	43						-858	-109				
41-133-20174	-85.2774	36.3794	2705		D&A	1083					683	-50	603	19	563	16					-805	-909	-163				
41-133-20176	-85.3814	36.3771	2711		Oil	980																-694	49				
41-133-20177	-85.1854	36.3374	2714		D&A	880											-2	32	1	34		-465	314				
41-133-20178	-85.1975	36.2921	2715		Gas	970					798	81	628	113	598	164	80		82	96							
41-133-20179	-85.1843	36.3226	2720		O&G	856							516	1					-134	-101		-815	-59				
41-133-20180	-85.1849	36.3465	2723		D&A	950					725	30	540	16	510	35	58		60	86							
41-133-20182R-1	-85.1772	36.3463	4722		D&A	862									424	-49			-18	13		-792	-1				
41-133-20183	-85.1815	36.3449	2727		D&A	905											23		25	54	-864	-1028	-239				
41-133-20186	-85.3673	36.4804	2761		Oil	1078					868	40	678	1			126					-668	46				
41-133-20187	-85.4322	36.2763	2767		D&A	947							892	47	862	21	359		362	41	-293	-315	342				
41-133-20188	-85.1767	36.2024	2785		Gas	1675					675	14	504	-9			-33		-31	33							
41-133-20189	-85.1823	36.3202	2790		Oil	860													2	35	-776	-804	-54				
41-133-20191R-1	-85.1689	36.3737	5067		Oil	863					613	-97	523	-11	503	8											
41-133-20192	-85.2520	36.3436	2811		D&A	1504					780	60	579	29			61										
41-133-20193	-85.1568	36.2639	2814		D&A	1860	1484	-29	1254	-13	617	-42	458	-9	422	-6	-151	-104	-148	-33	-820	-850	-52				
41-133-20194	-85.3006	36.4007	2815		O&G	1192							634	30					152	94		-280	464				
41-133-20199	-85.1690	36.3162	2875		Oil	1806					750	69	565	60	535	85	21										
41-133-20200	-85.3417	36.4017	2877		D&A	1155					729	-50	539	-78	504	-100						-920	-184				
41-133-20201	-85.2397	36.4065	2894		D&A	950											38		40	-5							
41-133-20202	-85.1818	36.3322	2902		Oil	880					676	-16	516	-1	483	28						-865	-98				
41-133-20203	-85.1054	36.1819	2906		D&A	1692			1222	4	562	-54	422	8													
41-133-20209	-85.2973	36.4051	2942		D&A	1050					758	11	560	-43			-26					-648	100				
41-133-20210	-85.4947	36.3498	2946		D&A	640											285										
41-133-20211	-85.1850	36.3329	2960		D&A	854					674	-19	504	-15	104	-350											
41-133-20212	-85.1803	36.3335	2967		Gas	910					700	8	495	-22	160	-297	-20										
41-133-20215	-85.1853	36.3292	2975		D&A	862					677	-16	508	-10	102	-346											
41-133-20217	-85.1481	36.4290	3010		D&A	930											50										
41-133-20218	-85.1513	36.4013	3011		D&A	960											-5		0	31							
41-133-20219	-85.2911	36.3994	3017		D&A	1240					778	34	638	41	620	62	120		122	74	-796	-847	-101				
41-133-20220	-85.4140	36.3715	3027		D&A	851							701	-7	666	6	451				-767	-769	-1				
41-133-20221	-85.3407	36.3934	3033		D&A	1210					741	-41	564	-53	531	-64											
41-133-20222	-85.3381	36.4005	3034		D&A	1075					717	-59	541	-74	505	-95											
41-133-20223	-85.3349	36.3985	3035		D&A	1065					710	-64	534	-80	504	-90											
41-133-20224	-85.3333	36.4006	3036		D&A	1040					699	-73	525	-89	492	-103											
41-133-20228	-85.1085	36.1718	3093		Gas	1723			1153	-64												-841	-249				
41-133-20234	-85.2332	36.4166	3150		D&A	1076											2		5	-32							
41-133-20238	-85.2703	36.4323	3171		D&A	965									521	-52	35										
41-133-20239	-85.2859	36.3846	3189		D&A	1099					831	91	551	-42	521	-28	-51										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20241	-85.1178	36.1543	3195		D&A	1865			1275	51																	
41-133-20246	-85.1776	36.1586	3282		D&A	1730					608	-31	460	-67	419	-50	-244		-240	-16		-732	97				
41-133-20249	-85.1085	36.1769	3306		D&A	1672			1222	3																	
41-133-20250	-85.1429	36.3616	3307		D&A	1787			1412	45	764	36	581	63	546	82	87										
41-133-20251	-85.1054	36.1793	03327-A		D&A	1655			1165	-52																	
41-133-20252	-85.1085	36.1692	3341		Gas	1824			1204	-13																	
41-133-20253	-85.1054	36.1692	3342		D&A	1835			1235	21																	
41-133-20254	-85.1085	36.1794	3343		D&A	1721			1171	-49												-760	-99				
41-133-20257	-85.2806	36.4155	3398		D&A	1043							609	11	578	18	118		88	32		-864	-107				
41-133-20259	-85.1023	36.1819	3400		D&A	1657			1239	24																	
41-133-20260	-85.2554	36.3573	3401		Gas	1828			1391	-5	800	78	566	15			56				-702	-750	35				
41-133-20261	-85.4868	36.3386	3404		Oil	964											266		300	-8							
41-133-20262	-85.1058	36.1847	3409		D&A	1648			1208	-11											-559						
41-133-20263	-85.1023	36.1844	3424		D&A	1675			1175	-41																	
41-133-20264	-85.2774	36.4160	3444		D&A	1063									273	-287	43		93	36							
41-133-20267	-85.1770	36.4515	3471		Oil	920							572	-1	558	17	40		42	28							
41-133-20269	-85.1024	36.1729	3483		Gas	1701																					
41-133-20274R-1	-85.3517	36.3736	4232		O&G	978							605	-26	579	-23	98					-763	-26				
41-133-20275	-85.3680	36.4227	3516		D&A	1038					888	70	656	-13	633	-10	120					-1082	-356				
41-133-20280	-85.3587	36.3654	3541		Gas	1033							658	15	633	14	157		169	20	-730	-749	-12				
41-133-20281	-85.1117	36.1718	3545		D&A	1708			1088	-133																	
41-133-20282	-85.1238	36.3455	3566		D&A	1760	1514	40	1310	-35	648	-30	474	-23	442	-5	-34										
41-133-20283	-85.1507	36.4030	3634		D&A	925							550	-1	522	3	-21	17	-18	12							
41-133-20284	-85.1536	36.4025	3635		D&A	900											-70		-60	-33							
41-133-20286	-85.2883	36.3968	3674		D&A	1226							616	21			82										
41-133-20295	-85.1643	36.2120	3802		D&A	1843					606	-37	443	-44			-157										
41-133-20296	-85.3032	36.3367	3806		Gas	1005					833	46	621	14	290	-160											
41-133-20297	-85.1788	36.1549	3917		D&A	1834					679	40	524	-8	486	20	-116					-934	-101				
41-133-20298	-85.1479	36.4401	3929		Oil	865					625	-97	575	2					-50	-46		-544	240				
41-133-20300	-85.2465	36.4183	3971		D&A	1310					810	90	584	-2	562	5	62		65	3	-619	-656	121				
41-133-20302	-85.1408	36.4002	3985		D&A	1019									499	-7	31					-900	-50				
41-133-20307	-85.1604	36.2167	4023		D&A	1885	1517	-26			617	-24	459	-21	417	-35	-110										
41-133-20308	-85.1933	36.4687	4027		Oil	991									491	-61	41										
41-133-20310	-85.1515	36.4086	4076		D&A	918							543	-11					-87	-62		-536	270				
41-133-20311	-85.1949	36.2906	4110		D&A	891					701	-16	501	-11	471	39	-73		-69	-52							
41-133-20312	-85.4224	36.2698	4122		D&A	903							848	1	820	1	263		297	-23							
41-133-20314	-85.3670	36.3584	4143		Gas	963							687	30	661	49	254		194	34		-787	-48				
41-133-20317	-85.1951	36.4674	4274		D&A	986									516	-36	-94		-92	-111	-711	-741	7				
41-133-20319	-85.4029	36.2353	4298		D&A	1000					986	55	815	15							-690	-705	-51				
41-133-20320	-85.4008	36.2348	4299		D&A	1018					988	57										-665	-8				
41-133-20321	-85.3980	36.2378	4300		Oil	1020							800	0	772	-4	74		76	-104							
41-133-20322	-85.2845	36.3938	4325		D&A	1328					832	91	571	-21													
41-133-20323	-85.3831	36.2331	4364		Oil	955							786	8	760	10											
41-133-20328	-85.3039	36.4057	3151		Gas	1343					755	7	603	-4	577	4	112				-735						
41-133-20329	-85.3247	36.4121	4430		Gas	1359					844	79	639	20			99				-729	-767	-27				
41-133-20330	-85.3225	36.4183	4431		Oil	1355					840	74	625	4			103					-657	86				
41-133-20332	-85.4738	36.4047	4568		D&A	1080					970	34	816	39	790	30	248		252	13							
41-133-20338	-85.1799	36.3881	4637		O&G	949					774	68	557	5	517	2											
41-133-20339	-85.1833	36.4752	4639		D&A	979					731	2	549	-28							-726	-751	14				
41-133-20344	-85.1827	36.3870	4673		D&A	937							577	25	555	40			-83	-77		-761	37				
41-133-20346	-85.2899	36.3405	4711		Gas	1037					787	25	592	0	567	69	44		90	39		-679	54				
41-133-20347	-85.2925	36.3428	4716		O&G	1021					819	56	588	-8	307	-189	92					53	785				
41-133-20354	-85.4333	36.2684	4781		D&A	898							856	-3	828	-1	283		285	-25	-714	-745	-80				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20355	-85.1915	36.1691	4783		D&A	1882			1278	19	670	1	522	-30													
41-133-20356	-85.1683	36.3793	4797		Gas	820							493	-46	465	-35	78		88	112		-777	45				
41-133-20357	-85.3568	36.3281	4823		D&A	939					769	-33	621	-37	314	-58	99										
41-133-20364	-85.3106	36.4047	4843		Oil	1037					812	62	605	-4	579	0	53					-553	190				
41-133-20365	-85.2932	36.5208	4846		D&A	881					856	55	606	-30	591	-7			-29	-111	-682	-758	-49				
41-133-20366	-85.1716	36.4715	4847		D&A	998					951	229	573	4	558	10											
41-133-20369	-85.2888	36.3379	4875		Oil	1122											112					-670	65				
41-133-20370	-85.1753	36.3859	4882		Oil	931							511	-37	471	-40	-35		1	15							
41-133-20373	-85.2870	36.3809	4921		D&A	1043							583	-11	558	10	65										
41-133-20376	-85.1770	36.3847	4936		O&G	892							536	-11	498	-13	-88		-58	-46	-728						
41-133-20377	-85.4749	36.4063	4967		Gas	1097							772	-7			245		247	8	-603						
41-133-20379	-85.3330	36.4134	4972		D&A	1118							648	24	620	18	72	105	76	-9							
41-133-20381	-85.1808	36.3858	4979		D&A	940							560	10	540	26											
41-133-20382	-85.2987	36.4524	4983		Gas	890							642	21	617	24			130	36							
41-133-20383	-85.2026	36.4597	4986		Oil	1002					722	-1	552	-35	532	-22						-675	65				
41-133-20384	-85.2573	36.5270	4993		Gas	810							575	-40	527	-57	-119		-117	-195							
41-133-20385	-85.3088	36.5142	4994		O&G	984							616	-29	592	-10	74		76	-14		-751	-62				
41-133-20386	-85.1830	36.3896	5004		D&A	963					804	98	587	33	251	-267	-81		-31	-25							
41-133-20387	-85.1914	36.3343	5006		D&A	965					685	-10			515	61											
41-133-20389	-85.2823	36.3522	5012		Oil	1318											24		26	-19							
41-133-20392	-85.1833	36.3807	5033		D&A	940											-15		-10	-5							
41-133-20393	-85.1796	36.4492	5034		D&A	940							585	11	570	28	60		80	68	-684	-708	35				
41-133-20394	-85.1823	36.4522	5035		D&A	948					618	-93	603	28	578	34	43		68	54		-713	31				
41-133-20395	-85.1889	36.4888	5038		D&A	1022							620	39							-926	-956	-188				
41-133-20397	-85.1827	36.4796	5047		D&A	968							544	-32	522	-31											
41-133-20399	-85.2070	36.4571	5051		D&A	998							628	40	608	51	25		56	41							
41-133-20404	-85.1818	36.3910	5068		O&G	946					771	65	554	-1	208	-310	-44		-18	-11							
41-133-20405	-85.1896	36.4809	5070		D&A	960							510	-71	490	-64											
41-133-20407	-85.3204	36.4243	5073		Oil	1342					859	92	652	28	630	39	116										
41-133-20408	-85.3149	36.4216	5074		D&A	1141					801	42	667	48	625	38	112	145	115	46							
41-133-20409	-85.1442	36.3139	5099		D&A	1814					629	-26	448	-32	428	-23			-81	-26							
41-133-20410	-85.1884	36.4780	5117		Oil	992							581	1	556	3						-765	-4				
41-133-20411	-85.1888	36.4733	5118		D&A	1062							562	-18	537	-15						-895	-138				
41-133-20412	-85.1867	36.4731	5119		Oil	993							540	-39								-751	8				
41-133-20413	-85.2255	36.4548	5125		D&A	918							648	53													
41-133-20414	-85.2843	36.3877	5131		D&A	1258							560	-32			-27		-24	-68							
41-133-20416	-85.1865	36.4773	05143-A		Oil	999							574	-5	550	-3											
41-133-20417	-85.2847	36.3454	5144		D&A	1061							821	234	781	262	256		261	213	-728	-738	-8				
41-133-20418	-85.3046	36.5182	5147		D&A	915							500	-143	460	-139	-65										
41-133-20419	-85.2088	36.4661	5151		D&A	979																-596	145				
41-133-20420	-85.3623	36.3389	5139		D&A	962							621	-39	314	-143	96										
41-133-20421	-85.2497	36.2104	5161		D&A	1362							694	9								-729	20				
41-133-20423	-85.2394	36.3554	5163		D&A	1299					715	-3	559	11	527	-1	39		41	15							
41-133-20424	-85.3224	36.4529	5166		D&A	1398					873	85	663	23	638	38	128										
41-133-20425	-85.3650	36.4694	5168		D&A	1136							661	-16	278	-354	69		68	-39							
41-133-20426	-85.1640	36.3984	5178		Gas	899							559	5	519	0			59	78		-793	10				
41-133-20428	-85.3748	36.3880	5184		Oil	1018					818	-13					159		190	39	-565	-753	-16				
41-133-20430R-1	-85.2090	36.4453	7393		D&A	950							544	-43			-22		10	1							
41-133-20435	-85.2644	36.5303	5225		Gas	881											56		58	-18		-723	36				
41-133-20436	-85.2592	36.5178	5228		D&A	990													385	299	-609	-717	39				
41-133-20440	-85.3332	36.4224	5235		D&A	1382							662	32	642	38			92	12							
41-133-20443	-85.1908	36.4687	5270		D&A	978							553	-28	533	-19			38	19							
41-133-20446	-85.2840	36.3852	5276		D&A	1122											-48										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20448	-85.1629	36.4109	5299		D&A	985							587	28	355	-171	-25		50	63							
41-133-20450	-85.1418	36.3867	5341		D&A	1347							647	111					44	98							
41-133-20451	-85.3208	36.4216	5343		Oil	1351					785	19	635	13	609	18	91		131	58		-544	201				
41-133-20452	-85.3170	36.5039	5360		D&A	1039											98		123	24		-709	-27				
41-133-20453	-85.2854	36.3901	5362		D&A	1239							541	-52	515	-35	-28					-743	-4				
41-133-20455	-85.1881	36.4686	5365		D&A	963							543	-36					12	-7		-726	28				
41-133-20458	-85.1831	36.3353	5374		D&A	855					705	12										-830	-56				
41-133-20459	-85.3935	36.4346	5379		D&A	1195					695	-124	670	-39	646	-41	139		141	-15							
41-133-20460	-85.3911	36.4272	5380		D&A	1120							715	11			185		190	33	-811						
41-133-20461	-85.4055	36.3052	5383		Oil	1002					904	-33	742	-16			194					-826	-111				
41-133-20462	-85.2809	36.4893	5387		D&A	992											102		104	13		-721	15				
41-133-20463	-85.3176	36.4256	5391		Oil	1237					797	33	621	-2	593	3	77		107	34		-506	241				
41-133-20464	-85.3295	36.4267	5416		D&A	1399					797	17	647	16	617	16	72		76	-3							
41-133-20466	-85.2058	36.4355	5437		Gas	980							598	16	564	13	50		52	52							
41-133-20468	-85.3777	36.3852	5444		Oil	1012					812	-25	632	-40	612	-31											
41-133-20470	-85.1869	36.3925	5465		D&A	961							589	31	563	42			11	14							
41-133-20472	-85.2211	36.4683	5471		D&A	924							579	-18	549	-9	-1										
41-133-20474	-85.3201	36.4306	5506		Oil	1271					786	16	636	9	613	21	127										
41-133-20476	-85.2443	36.3827	5517		D&A	1310					738	19	561	-4	527	-9	-233										
41-133-20483	-85.2016	36.4358	5563		D&A	1002							597	17	572	24						-665	82				
41-133-20484	-85.1948	36.4339	5582		Oil	1028					808	97	617	40	569	26	25		27	27		-793	-43				
41-133-20485	-85.2011	36.4374	5584		D&A	1020					885	173	754	173	703	154											
41-133-20486	-85.2000	36.4339	5586		D&A	995							578	-1													
41-133-20489	-85.1953	36.4342	5612		D&A	1024					621	-90															
41-133-20490	-85.2760	36.3528	5613		D&A	1322					742	8	587	11	557	22	74		76	33	-506	-570	172				
41-133-20494	-85.1967	36.4384	5622		Oil	1029					747	36	639	60								-772	-26				
41-133-20502	-85.3216	36.4419	5660		D&A	1105							665	30			105		107	25							
41-133-20504	-85.1983	36.4816	5675		D&A	922							577	-11			49				-666	-778	-27				
41-133-20505	-85.1967	36.4300	5688		Oil	942							574	-3	548	6											
41-133-20510	-85.1976	36.4324	5712		O&G	982					677	-34	596	18	561	17											
41-133-20513	-85.2149	36.4741	5739		D&A	981							681	84	651	97	171		176	153							
41-133-20514	-85.4044	36.3975	5770		Gas	956							731	22	704	28	192		194	36							
41-133-20517	-85.3191	36.4451	5778		Gas	1042							622	-12	596	2	98										
41-133-20518	-85.3216	36.4384	5779		O&G	1198							682	49	650	56						-623	127				
41-133-20520	-85.3241	36.4211	5814		Oil	1370					788	18	628	4	604	10			86	12		-677	66				
41-133-20523	-85.1594	36.4566	5877		Gas	980					720	-2	560	-12	532	-4						-566	195				
41-133-20524	-85.1978	36.4358	5878		D&A	962					748	37	562	-17	536	-10											
41-133-20525	-85.1597	36.4607	5884		D&A	918					718	-3	570	-2							-486	-536	231				
41-133-20526	-85.2000	36.4368	5885		Oil	1003					753	41	587	7	551	3						-744	2				
41-133-20527	-85.3091	36.3827	5893		D&A	1046													186	113		-738	-3				
41-133-20528	-85.3850	36.3576	5911		D&A	997					897	39	697	14	662	39	124		127	-46	-693	-705	47				
41-133-20529	-85.2168	36.4820	5912		D&A	923													63	36							
41-133-20531	-85.4759	36.4147	5923		D&A	1084					784	-155	759	-21	739	-25	212		214	-25							
41-133-20533	-85.2687	36.5378	5924		Oil	720							622	1	600	16	-21		4	-66	-607	-757	-8				
41-133-20536	-85.4828	36.4046	5933		D&A	964					961	33	789	4	764	-1	253		258	10		-727	-83				
41-133-20537	-85.3180	36.4297	5934		D&A	1357					839	72	617	-8	593	2	86										
41-133-20539	-85.2833	36.4180	5941		D&A	1012							612	11	577	13	-213		62	6	-707	-776	-21				
41-133-20540	-85.3213	36.4358	5951		D&A	1267							611	-20	589	-4	59		63	-16		-905	-155				
41-133-20541	-85.2075	36.4717	5952		D&A	984									634	80	81		84	67		-528	215				
41-133-20542	-85.3637	36.2896	5954		D&A	1114							714	-19	674	106					-590	-636	34				
41-133-20543	-85.2010	36.4226	5963		Oil	943											39		45	53							
41-133-20544R-1	-85.3177	36.4229	6200		Oil	1160							620	-1	590	0	112										
41-133-20545	-85.2039	36.4376	5984		Gas	990					692	-21															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20547	-85.3259	36.5200	6010		D&A	1015							628	-24	605	5	59		62	-30		-571	90				
41-133-20548	-85.2058	36.3959	6011		D&A	900							579	11	550	21	51		53	43		-700	78				
41-133-20549	-85.3406	36.5019	6012		D&A	1108					798	-24	688	24	658	41			168	66							
41-133-20550	-85.2640	36.5333	6021		D&A	776							664	44	642	55	74		92	19		-874	-112				
41-133-20551	-85.1889	36.3350	6023		D&A	920							510	-12	479	23											
41-133-20554	-85.1781	36.4614	6038		D&A	1001							589	16					31	10							
41-133-20555	-85.1944	36.4395	6039		D&A	1035					705	-5	585	6								-758	-12				
41-133-20556	-85.3891	36.3876	6042		D&A	1004													314	162							
41-133-20557	-85.3315	36.4974	6043		D&A	1082					898	77	698	39	671	51			150	49							
41-133-20562	-85.2415	36.4813	6072		D&A	922					774	25	607	4	587	36	82		84	31		-561	167				
41-133-20563	-85.1986	36.3976	6087		D&A	920							568	1	559	31	30		32	28							
41-133-20564	-85.1989	36.4339	6099		D&A	981					703	-8	591	12								-752	-3				
41-133-20565	-85.2033	36.4331	6103		D&A	975					691	-21	591	11								-821	-72				
41-133-20567	-85.2704	36.3283	6145		D&A	1318							597	31	564	50	112					-968	-223				
41-133-20571	-85.2526	36.4431	6164		D&A	972					684	-43	600	-3	482	-100						-922	-173				
41-133-20574	-85.1898	36.4189	6172		D&A	903							513	-58			-77		-74	-65							
41-133-20575	-85.4891	36.3999	6173		D&A	939					899	-28	771	-18	748	-2	237		239	-18		-679	-48				
41-133-20576	-85.1743	36.3641	6189		D&A	890					650	-57	520	-8	490	0	-3		0	23							
41-133-20578	-85.1974	36.4696	6193		D&A	988							598	13													
41-133-20580	-85.2758	36.3624	6196		D&A	1513					713	-16	567	-11	453	-91	51										
41-133-20581	-85.2123	36.3126	6197		D&A	1300					620	-82	457	-69	424	-40	-70										
41-133-20582	-85.2088	36.2641	6198		D&A	1128					686	-35	524	-2	228	-271	-22										
41-133-20583	-85.2830	36.3783	6202		D&A	1057							601	12	573	26	31		33	-7							
41-133-20585	-85.2759	36.3271	6217		D&A	1112					757	10	608	36	376	-135	125										
41-133-20589	-85.2224	36.4342	6259		D&A	1019					689	-28	584	-4	559	-3	47		49	29							
41-133-20590	-85.2262	36.4355	6260		D&A	1039					711	-7	571	-18	547	-18											
41-133-20591	-85.1920	36.4650	6270		D&A	967							602	21													
41-133-20593	-85.1936	36.4816	6290		D&A	960							595	11	565	10						-614	143				
41-133-20595	-85.1784	36.4643	6331		D&A	991							583	10	546	-1											
41-133-20596	-85.1788	36.4669	6334		D&A	979							594	20	556	8	29										
41-133-20597	-85.4411	36.4364	6339		D&A	1127					907	-38	747	-26	727	-15			142	-63							
41-133-20598	-85.4364	36.4336	6340		D&A	1138					918	-21	758	-11	738	2			148	-55							
41-133-20599	-85.2202	36.4355	6348		D&A	1072					684	-33	582	-6	556	-5											
41-133-20600	-85.1829	36.4716	6369		D&A	999							584	8	555	4											
41-133-20601	-85.2510	36.4162	6378		D&A	1336					686	-37	616	30	591	36	56					-741	36				
41-133-20602	-85.2265	36.4185	6387		D&A	1053							608	26	574	24	97	97	64	38							
41-133-20603	-85.1748	36.4402	6390		Oil	822					632	-80	482	-89	187	-349											
41-133-20604	-85.1818	36.4502	6395		D&A	949					639	-71															
41-133-20606	-85.3324	36.4958	6425		D&A	941							581	-79	561	-60	-4		1	-100							
41-133-20608	-85.2262	36.4351	6441		D&A	1020					720	2	600	11	570	5			50	25							
41-133-20609	-85.1776	36.4406	6442		D&A	912							587	15	562	24	47		52	46							
41-133-20610	-85.2270	36.4276	6446		D&A	1079							584	-2													
41-133-20611	-85.3306	36.4992	6452		D&A	1042							682	24	662	43	97		102	0							
41-133-20612	-85.2469	36.4426	6454		D&A	986					706	-21	601	1	571	-11					-439	-694	54				
41-133-20613	-85.2422	36.4445	6455		D&A	1000					720	-6	590	-9							-605	-625	120				
41-133-20614	-85.2022	36.4323	6456		D&A	959					699	-13	594	14	574	27											
41-133-20615	-85.1758	36.4417	6471		D&A	841							541	-31	521	-16	-14		-9	-16							
41-133-20616	-85.2298	36.4371	6480		D&A	1030							565	-26	535	-34	33		35	6							
41-133-20619	-85.1488	36.4535	6508		D&A	914							569	-6	544	10					-662	-682	95				
41-133-20620	-85.1714	36.4516	6510		D&A	942					686	-31	572	2								-659	89				
41-133-20621	-85.2200	36.4272	6536		D&A	1036							646	62			-11										
41-133-20622	-85.3394	36.4675	6547		D&A	1120							685	25	660	39	150		155	66							
41-133-20623	-85.1951	36.4197	6553		Oil	882																					

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20624	-85.1973	36.4203	6561		D&A	863					598	-112	523	-51							-662	-676	84				
41-133-20625	-85.4965	36.3483	6580		D&A	638											318		328	21	-590	-738	-202				
41-133-20626	-85.3312	36.4074	6592		O&G	1128					802	34	652	34	628	29	97		100	10	-446	-758	-22				
41-133-20628	-85.3728	36.4800	6612		D&A	941							649	-30	633	4	92		98	-7							
41-133-20629	-85.1943	36.4201	6618		D&A	904					641	-70	530	-43	489	-48					-537	-597	164				
41-133-20630	-85.1867	36.4393	6620		D&A	1159							734	159	714	172											
41-133-20631	-85.1886	36.4395	6632		D&A	1118							673	97	658	115											
41-133-20633	-85.3223	36.4324	6679		Oil	1368					798	24	628	-2	604	10	85		88	10		-692	56				
41-133-20634	-85.3294	36.4484	6704		Oil	1364					791	-5	636	-9	609	3	79	112	83	0	-659	-694	59				
41-133-20635	-85.3328	36.4043	6707		D&A	1034					798	28	656	39	636	37	116		118	23	-667	-732	4				
41-133-20636	-85.1900	36.4376	6710		Oil	1022							607	31	587	44						-823	-73				
41-133-20637	-85.4544	36.4392	6712		D&A	1163					913	-33	763	-16	738	-17	203										
41-133-20638	-85.1850	36.4791	6714		D&A	984							529	-49								-754	12				
41-133-20639	-85.1959	36.4588	6715		D&A	944									274	-277		19	6	-11		-580	162				
41-133-20640	-85.3266	36.4320	6717		D&A	1328											108					-780	-33				
41-133-20641	-85.2344	36.3769	6727		Gas	1046					801	84	606	45	556	26	-334		-244	-276							
41-133-20642	-85.2873	36.4118	6738		Oil	1043							623	23	593	31	63		68	15							
41-133-20643	-85.1682	36.4481	6745		D&A	940															-732	-752	-4				
41-133-20644	-85.1850	36.4343	6746		D&A	967							586	13			15		17	16							
41-133-20646	-85.3122	36.4259	6756		Oil	1052							618	-1													
41-133-20647	-85.3137	36.2515	6757		D&A	1065							693	-26	663	-23											
41-133-20649	-85.3302	36.4042	6772		D&A	1092							552	-64					-2	-94	-572	-608	128				
41-133-20650	-85.1940	36.2054	6774		D&A	1277							577	22	557	13					-681	-691	54				
41-133-20651	-85.2253	36.4324	6795		D&A	1038							608	20					38	14		-727	29				
41-133-20652	-85.1765	36.4311	6796		D&A	878							573	4	543	8	20		23	23	-580	-608	153				
41-133-20653	-85.1806	36.4410	6797		D&A	948							528	-45													
41-133-20655	-85.2754	36.3993	6806		D&A	1200					950	211										-736	24				
41-133-20657	-85.1950	36.4218	6814		D&A	938					656	-55	560	-13													
41-133-20658	-85.4024	36.4076	6820		O&G	952							732	21	710	30	222										
41-133-20660	-85.3220	36.4348	6827		D&A	1363							623	-8					77	-2	-573	-599	150				
41-133-20661	-85.2686	36.4501	6836		D&A	908									590	4	8		8	-56							
41-133-20663	-85.3960	36.3908	6845		O&G	938							716	15	693	31	218					-688	61				
41-133-20664	-85.2491	36.4489	6851		D&A	996					756	28	611	9	584	0											
41-133-20665	-85.3164	36.4276	6857		D&A	1338							630	7	608	18	88		92	18		-737	11				
41-133-20667	-85.2244	36.4379	6866		D&A	1138							539	-51	523	-43											
41-133-20668	-85.1736	36.4370	6871		O&G	879							564	-5	534	-1	11		14	10							
41-133-20671	-85.4267	36.4158	6883		D&A	969							741	-1	719	1	215										
41-133-20673	-85.2469	36.4494	6893		D&A	998					762	34	613	11								-757	-17				
41-133-20674	-85.3493	36.4636	6898		D&A	1402							652	-15					82	-14		-692	28				
41-133-20675	-85.1856	36.4573	6904		Oil	996							586	9	568	21	61		70	53							
41-133-20676R-1	-85.3293	36.4221	7119		D&A	1367							617	-11	592	-8	57		59	-19							
41-133-20677	-85.2980	36.4142	6907		D&A	1322							600	-7	577	5	47		47	-10							
41-133-20679	-85.3314	36.4974	6918		D&A	1001							601	-58	581	-39											
41-133-20680	-85.1820	36.3877	6922		D&A	941					701	-4	596	44	546	30	-24										
41-133-20682	-85.3148	36.4243	6933		D&A	1065					760	0	611	-9	586	-2	69		71	0							
41-133-20683	-85.3224	36.4452	6936		Oil	1036							636	-1					82	-1							
41-133-20684	-85.4307	36.4203	6940		D&A	993							753	3	733	8	214	238	217	11							
41-133-20685	-85.3036	36.4200	6944		D&A	1338					764	12	601	-11	576	-3			42	-19							
41-133-20686	-85.1777	36.3888	6959		D&A	939							573	22	543	28	-29		-25	-14							
41-133-20687	-85.2486	36.4245	6963		D&A	1064							605	15					49	-13							
41-133-20688	-85.2509	36.4263	6967		D&A	1022													44	-18		-664	102				
41-133-20689	-85.1963	36.4268	6971		Oil	915					625	-86	520	-56	490	-51						-686	69				
41-133-20690	-85.3930	36.4872	6973		D&A	1043							658	-22	636	-6	123		128	5							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20691	-85.1642	36.4719	6980		D&A	955							615	45							-685	-720	61				
41-133-20692	-85.4832	36.3562	6981		D&A	622									617	12	322										
41-133-20694	-85.1701	36.4192	6994		D&A	904					799	92	694	131	669	139	112		114	122							
41-133-20697	-85.1736	36.3671	7006		D&A	882							552	21	516	24	26										
41-133-20698	-85.3272	36.4202	7014		Oil	1320							638	13	616	19	290										
41-133-20699	-85.3260	36.4454	7015		D&A	1020							640	-1					81	-2		-729	24				
41-133-20700	-85.2088	36.4828	7016		D&A	938							588	-8	560	8											
41-133-20701	-85.2393	36.4939	7017		D&A	960					790	36	620	14	599	54	20		26	-40	-711	-773	-44				
41-133-20702	-85.2024	36.4294	7018		D&A	907							557	-22	537	-8					-725	-760	-8				
41-133-20705	-85.2201	36.4310	7039		D&A	1005							715	129	695	138					-722	-753	3				
41-133-20706	-85.2114	36.4203	7041		D&A	983							548	-31	523	-22											
41-133-20707	-85.2099	36.4324	7047		D&A	965							561	-22	537	-15											
41-133-20708	-85.3120	36.4231	7056		Oil	1107							641	23	619	33	101		103	34							
41-133-20712	-85.2097	36.4813	7066		D&A	948							598	2	578	26	93		98	79							
41-133-20713	-85.2356	36.4979	7067		D&A	1012					757	5	609	2	527	-21	52										
41-133-20714	-85.2406	36.4925	7068		D&A	920					765	10	603	-2	580	34	26		41	-25							
41-133-20716	-85.2299	36.4920	7074		D&A	980					741	-10	585	-19	568	23	22		23	-26		-746	-13				
41-133-20717	-85.2200	36.4336	7087		D&A	995							600	13								-738	15				
41-133-20718	-85.1821	36.4502	7091		D&A	949					689	-21	556	-19	534	-9	45		49	37							
41-133-20719	-85.1820	36.4562	7092		D&A	1004							609	34	581	36	70		76	59		-849	-101				
41-133-20720	-85.1811	36.3445	7103		D&A	903					703	8	553	32	503	31	-52		-27	3	-789	-889	-101				
41-133-20722	-85.2289	36.4323	7114		D&A	1033							598	9	573	9											
41-133-20723	-85.1739	36.4274	7115		D&A	888							558	-9	535	2			-27	-24							
41-133-20724	-85.3088	36.4235	7118		Oil	1104							659	43	634	50	101										
41-133-20725	-85.2789	36.3296	7124		D&A	1337							591	15	563	51	95		99	51							
41-133-20726	-85.2234	36.4324	7128		D&A	1024							634	47	614	53											
41-133-20727	-85.3090	36.4261	7130		D&A	899							535	-82	511	-74	-21		-19	-89							
41-133-20728	-85.1816	36.3894	7131		D&A	936					736	30	572	19	541	24	-34		-29	-22							
41-133-20729	-85.1711	36.4273	7135		D&A	876							558	-8	533	1	-74		-71	-68							
41-133-20730	-85.2168	36.4323	7136		D&A	972							562	-23	538	-18					-575	-620	134				
41-133-20731	-85.2054	36.4693	7137		D&A	1004							594	4	572	17			4	-13							
41-133-20735	-85.2161	36.4539	7155		D&A	988							512	-80	487	-76											
41-133-20736	-85.2119	36.4323	7156		D&A	947							560	-24	535	-18											
41-133-20737	-85.2046	36.4774	7162		Oil	948							568	-23	548	-6					-737	-743	2				
41-133-20738	-85.2189	36.4794	7163		D&A	934											10		17	-11		-683	56				
41-133-20739	-85.2156	36.4610	7168		D&A	952							572	-22	548	-12											
41-133-20742	-85.4224	36.5019	7178		D&A	980					830	2	700	-6	680	47	147		150	-8							
41-133-20743	-85.2169	36.4734	7184		D&A	931							587	-10	566	11	63		68	44							
41-133-20746	-85.1873	36.4580	7190		D&A	984							566	-12	551	3											
41-133-20747	-85.2201	36.4464	7191		D&A	974							614	23	593	23						-664	76				
41-133-20748	-85.2008	36.4916	7197		D&A	957							607	14	587	32	50		52	37		-691	61				
41-133-20749	-85.2868	36.4097	7201		Gas	1019					769	25	619	20	589	29	114										
41-133-20750	-85.2094	36.4853	7211		D&A	928							598	1	581	29					-772	-840	-95				
41-133-20751	-85.2116	36.4840	7212		Oil	940							615	17	595	44					-650	-670	74				
41-133-20752	-85.2114	36.4341	7215		D&A	966					606	-108	545	-39	523	-31			-23	-28							
41-133-20753	-85.2109	36.4559	7227		D&A	987					737	13	585	-5	565	6	59		62	46							
41-133-20754	-85.3625	36.3588	7228		D&A	986					971	147	667	17	641	35	157		162	6							
41-133-20755	-85.3637	36.3563	7229		D&A	962					825	0	645	-7					140	-18							
41-133-20756	-85.2166	36.4497	7238		D&A	951							591	0	571	6						-862	-125				
41-133-20757	-85.1784	36.3869	7254		D&A	910											-32		-28	-18							
41-133-20758	-85.3141	36.3907	7256		Oil	1140							632	21					102	23	-694	-718	20				
41-133-20759	-85.2233	36.4265	7258		D&A	1061							593	8	565	9											
41-133-20760	-85.2221	36.4299	7267		D&A	1028							618	32	594	36											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20761	-85.1637	36.4156	7268		D&A	928							565	4	538	11	-29		-25	-15							
41-133-20762	-85.2327	36.4368	7269		D&A	1062							577	-15	552	-19											
41-133-20763	-85.2839	36.3877	7287		D&A	1267							569	-22	537	-12	-11		-11	-55							
41-133-20764	-85.1989	36.4761	7297		D&A	986							566	-21	561	7	46										
41-133-20766	-85.3136	36.4179	7317		D&A	1366							624	8	602	16	74										
41-133-20767	-85.1985	36.4778	7320		D&A	982							589	2	584	30	59				-558	-653	96				
41-133-20768	-85.2578	36.4478	7345		D&A	998							621	15	603	18	66		68	16	-556	-580	166				
41-133-20769	-85.1864	36.3839	7349		Oil	944							517	-34	485	-30	-52		-51	-50		-805	-8				
41-133-20770	-85.2797	36.3982	7362		D&A	1105							595	6	580	31											
41-133-20771	-85.1737	36.3871	7363		D&A	884							594	46	572	61	-16		-1	14							
41-133-20772	-85.1941	36.4188	7367		D&A	906					671	-40	539	-33													
41-133-20774	-85.2441	36.4879	7374		D&A	942					792	38	598	-6	587	39	76		78	13							
41-133-20775	-85.3430	36.3972	7375		D&A	1142							657	41	637	35	92					-720	16				
41-133-20776	-85.4246	36.4243	7380		Gas	1124							750	4	730	11	192		220	20							
41-133-20777	-85.2037	36.4871	7382		D&A	900							720	127	582	29	10				-758	-782	-33				
41-133-20779	-85.1834	36.4608	7387		D&A	998							596	20	568	21											
41-133-20780	-85.2811	36.4544	7390		D&A	978									558	-31					-590	-620	131				
41-133-20781	-85.2806	36.4391	7392		D&A	948							638	28	608	29											
41-133-20784	-85.1660	36.3851	7395		D&A	865							565	22	540	35	3		5	29							
41-133-20785	-85.2859	36.4071	7396		O&G	990					740	-4	620	23	575	18	55		55	4							
41-133-20786	-85.3498	36.4019	7407		D&A	1039							609	-14	584	-28	85		86	-31							
41-133-20787	-85.2745	36.4139	7409		Oil	1325					603	-136	575	-19	551	-6	26		69	12	-721	-741	21				
41-133-20788	-85.1544	36.3971	7410		D&A	941							560	12					-11	19							
41-133-20790	-85.3476	36.3649	7433		D&A	980					756	-50	660	33	634	47	156		160	20							
41-133-20792	-85.2796	36.4416	7445		D&A	962					837	99	642	31	612	30					-737	-762	-8				
41-133-20793	-85.2629	36.4463	7450		D&A	910							555	-52	532	-54	53		55	-3							
41-133-20794	-85.2317	36.4964	7451		D&A	975					800	49	557	-50	550	2											
41-133-20795	-85.2744	36.4165	7452		Oil	1320							590	-5	560	1											
41-133-20797	-85.2783	36.4131	7457		Oil	1122							617	21	592	35	73										
41-133-20798	-85.2328	36.4107	7459		D&A	1186							572	-8	559	14	49		51	15							
41-133-20799	-85.1495	36.3986	7469		D&A	929					889	190	625	78	601	89	-12		-9	26							
41-133-20801	-85.2460	36.4131	7478		D&A	1257											73		76	19							
41-133-20802	-85.2116	36.4927	7485		Oil	907							579	-23	565	13					-695	-705	41				
41-133-20804	-85.2816	36.4043	7494		D&A	1042							592	-1	567	16	39		42	-9							
41-133-20806	-85.2862	36.5206	7511		O&G	944							619	-13	595	-3	80		84	2							
41-133-20807	-85.4048	36.2395	7515		D&A	979					859	-73										-721	-77				
41-133-20808	-85.4078	36.2410	7516		Oil	955					825	-108										-666	-28				
41-133-20809	-85.4068	36.2429	7517		D&A	977					857	-76															
41-133-20810	-85.2898	36.3906	7518		D&A	1389					789	47	659	63	634	82	116		119	74							
41-133-20811	-85.3561	36.3679	7520		D&A	1025							650	11	620	8	135		145	-1		-833	-96				
41-133-20812	-85.2119	36.4778	7526		O&G	960							617	20	597	44	33		37	16							
41-133-20813	-85.2886	36.4499	7527		O&G	1004							627	11	603	14											
41-133-20816	-85.2908	36.4476	7544		O&G	1000							622	6	592	3	95		99	11		-768	-13				
41-133-20817	-85.2838	36.4089	7546		Oil	999					765	22	611	14	587	30	109		109	57							
41-133-20818	-85.2123	36.4687	7549		D&A	932					732	-1	572	-22	552	-4	7		12	-8							
41-133-20819	-85.2103	36.4826	7550		D&A	962					722	-21	582	-15	560	8			-33	-53		-707	37				
41-133-20820	-85.2820	36.3887	7552		D&A	1342							632	42	612	63	87		92	48							
41-133-20822	-85.2080	36.4698	7560		D&A	1006					706	-27	566	-26	546	-9					-704	-724	18				
41-133-20823	-85.1806	36.3471	7561		O&G	892					627	-69	527	6	497	22	-55					-682	110				
41-133-20824	-85.3186	36.4339	7563		D&A	1362							617	-11			72		75	-3							
41-133-20825	-85.1872	36.3958	7564		D&A	862							562	1	536	12	-35		-33	-30		-745	41				
41-133-20826	-85.2933	36.4425	7572		D&A	1063							634	19	612	26											
41-133-20827	-85.3528	36.3678	7574		D&A	988					748	-63	643	9	623	20	120		123	-20		-690	47				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20828	-85.2850	36.4113	7575		D&A	996					746	3	596	-2	571	11	93		96	43							
41-133-20829	-85.3166	36.4408	7579		D&A	1376					826	56	641	11	89	-504			91	10	-697	-715	37				
41-133-20830	-85.2942	36.4458	7581		O&G	1118							653	36	633	45	136		141	54		-667	87				
41-133-20831	-85.2857	36.3522	7582		D&A	1343							585	-5	555	28	61		64	18							
41-133-20832	-85.2874	36.4463	7583		Gas	1009							629	14	605	18	109		115	32							
41-133-20833	-85.4080	36.2443	7587		D&A	954					944	11	833	18	809	17											
41-133-20834	-85.3476	36.3623	7591		O&G	966							656	28	630	44	92		142	1							
41-133-20836	-85.2408	36.4432	7596		Gas	1002							592	-6	570	-12	88		90	51		-505	241				
41-133-20837	-85.2902	36.4446	7601		O&G	1019							624	9	602	15	99		104	20							
41-133-20838	-85.2816	36.4107	7602		O&G	1018					757	15	600	4	575	19	118		118	65							
41-133-20839	-85.1887	36.4233	7603		D&A	946							593	22	567	30											
41-133-20841	-85.4106	36.2539	7606		D&A	949					939	3	839	8	819	22	319		319	75	-608	-618	-11				
41-133-20842	-85.4218	36.4215	7612		D&A	1068							746	6	723	9											
41-133-20843	-85.4214	36.4279	7613		O&G	1121							751	7	728	11											
41-133-20844	-85.4171	36.4278	7614		D&A	1219							770	32	744	32	215		245	54							
41-133-20847	-85.1905	36.3939	7629		Oil	883							583	22	556	33											
41-133-20848	-85.2767	36.4490	7633		Gas	912					752	18	612	0	580	-6	-1		87	13							
41-133-20849	-85.3852	36.4813	7637		D&A	1064							659	-22	632	-9						-654	63				
41-133-20851	-85.2996	36.4358	7646		Gas	1342			1252	-5			594	-21	572	-12	42		46	-30							
41-133-20852	-85.1915	36.3960	7648		D&A	866							560	-3	534	9	-2		1	1							
41-133-20853	-85.1854	36.3944	7649		D&A	884							581	22	556	34	-2		0	4	-635	-710	79				
41-133-20854	-85.4200	36.4192	7658		Gas	1079							734	-2	714	3											
41-133-20855	-85.4210	36.4251	7659		O&G	1117							747	5	717	2											
41-133-20856	-85.2880	36.4055	7662		D&A	1024					694	-50	594	-4	571	13	48		51	1							
41-133-20858	-85.4288	36.4238	7675		Gas	1118							748	-2	731	7	214		218	15							
41-133-20859	-85.1890	36.3927	7687		D&A	919							597	38	579	57											
41-133-20860	-85.1913	36.3915	7690		Oil	906							588	29	563	41	53		56	55							
41-133-20861	-85.2976	36.4499	7693		Gas	1090					910	156	647	27	630	38	85		92	0							
41-133-20862	-85.2134	36.3255	7694		Oil	932							532	0	509	38	10		13	29		-781	-5				
41-133-20864	-85.2961	36.4079	7698		Gas	1046							556	-47	530	-37	-25		-24	-78							
41-133-20865	-85.1850	36.3902	7702		D&A	918							555	0	528	9	-32										
41-133-20866	-85.2907	36.4298	7703		O&G	986							630	21	606	29											
41-133-20867	-85.1883	36.3909	7709		D&A	890							532	-25	510	-11	-43		-40	-39		-666	123				
41-133-20868	-85.2898	36.4272	7714		D&A	900							572	-36	551	-24											
41-133-20869	-85.2000	36.4358	7720		Oil	994					674	-38															
41-133-20870	-85.2715	36.4919	7722		D&A	869							611	-5	582	-8											
41-133-20871	-85.1745	36.3792	7723		D&A	900					860	154	492	-50	465	-39											
41-133-20872	-85.1976	36.4362	7727		Oil	977					672	-39										-797	-50				
41-133-20873	-85.1928	36.4448	7730		D&A	942							547	-32	522	-25	-2		1	-7	-630	-706	37				
41-133-20874	-85.2867	36.4478	7731		Gas	1004							669	54	640	52	148		154	70							
41-133-20875	-85.2407	36.5314	7736		D&A	893							603	-17	585	7	26	48	28	-37	-672	-722	84				
41-133-20876	-85.4364	36.4258	7737		D&A	1088					998	49	772	10	753	19	257	273	258	51	-585	-681	76				
41-133-20877	-85.3532	36.4226	7745		D&A	1035					810	4	660	13	640	14	96	160	97	-9		-693	39				
41-133-20878	-85.3587	36.4203	7746		D&A	1015					855	47	640	-13	615	-15											
41-133-20879	-85.2863	36.4314	7748		O&G	875					757	14	617	9	589	13	63		67	-1							
41-133-20880	-85.2765	36.4726	7750		D&A	960							610	-6	585	-8	65		67	-16		-797	-56				
41-133-20882	-85.3035	36.4366	7760		D&A	1317							577	-40	509	-77	-1		24	-53	-778	-814	-62				
41-133-20885	-85.2879	36.4055	7764		D&A	1028					708	-36	589	-9	564	6	53		53	3							
41-133-20887	-85.2935	36.5063	7770		D&A	1057					832	36	629	-6	609	5	81		85	-4							
41-133-20888	-85.2711	36.4570	7779		D&A	977							632	21	607	20	107		127	58	-616						
41-133-20889	-85.3977	36.3881	7780		Gas	950					850	-17	690	-11	665	3											
41-133-20892	-85.2828	36.4336	7786		Gas	994							602	-6	580	4	74		79	11	-611	-752	3				
41-133-20893	-85.2914	36.4278	7792		Gas	852							597	-12	575	-1	31		33	-31	-665	-680	73				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20894	-85.2926	36.4300	7798		Gas	971							620	10	597	19	57		61	-7	-694	-729	24				
41-133-20895	-85.2940	36.4954	7807		Gas	1021					829	36	600	-34	581	-28					-699	-729	-8				
41-133-20896	-85.3045	36.4901	7808		D&A	1034					849	46	636	-5	617	0					-743	-788	-79				
41-133-20897	-85.3066	36.4934	7811		O&G	1072					821	14	637	-6	614	-2	572		126	30							
41-133-20898	-85.2891	36.4204	7813		Gas	995							630	25	595	26					-712	-757	-4				
41-133-20899	-85.3113	36.4865	7814		Gas	1037					792	-15	621	-24	599	-22	83		87	-10	-667	-699	5				
41-133-20900	-85.2120	36.3254	7818		D&A	940							520	-11	510	42	7		10	28	-724	-769	8				
41-133-20901	-85.2861	36.4259	7820		O&G	1036											58		76	14	-756	-796	-42				
41-133-20902	-85.2846	36.4415	7823		D&A	921							626	14	603	20	105		107	31							
41-133-20903	-85.2874	36.4298	7830		Gas	887							589	-19	562	-13	37		41	-25		-769	-15				
41-133-20904	-85.3547	36.4208	7836		D&A	1119					839	33	649	1	625	-2	124		128	19							
41-133-20905	-85.2918	36.4323	7839		Gas	1038											96		98	28							
41-133-20907	-85.2919	36.4551	7843		D&A	998											85		87	-12							
41-133-20908	-85.2923	36.4226	7849		O&G	921											55		57	-1							
41-133-20909	-85.2935	36.4241	7857		Oil	999							580	-28	549	-26	19		21	-39	-626	-658	94				
41-133-20910	-85.3227	36.4874	7858		D&A	1096											69		72	-25	-599	-624	63				
41-133-20911	-85.2914	36.4494	7872		D&A	956					636	-112	514	-103	492	-98	11		15	-76							
41-133-20912	-85.2993	36.4945	7874		Gas	1061							646	9	637	25	135		137	42							
41-133-20913	-85.1930	36.3943	7880		Oil	785							600	38	577	52						-683	99				
41-133-20915	-85.3050	36.4875	7891		Gas	1022					762	-39	632	-8	613	-5	123		125	28							
41-133-20916	-85.1962	36.3952	7907		O&G	882							572	8	556	30	-28				-610	-645	133				
41-133-20917	-85.3075	36.4908	7918		Gas	1049							647	4	629	10	108		110	13							
41-133-20919	-85.3032	36.4926	7922		D&A	1061					816	13	646	6	628	13	130		131	35							
41-133-20920	-85.1895	36.3966	7935		D&A	874							471	-91	445	-80	-50		-48	-46							
41-133-20921	-85.1934	36.3876	7937		D&A	927							567	10	539	18	45	76	47	42							
41-133-20922	-85.3000	36.5136	7944		D&A	1029							659	19	635	33	117		125	37							
41-133-20923	-85.3140	36.5114	7953		D&A	1003							643	-4	621	16											
41-133-20924	-85.2916	36.5009	7955		Oil	1040							642	10	621	15	90		92	1							
41-133-20925	-85.1935	36.4232	7960		D&A	914					647	-64															
41-133-20926	-85.1903	36.4256	7961		D&A	894							564	-9	536	-2											
41-133-20927R-1	-85.1948	36.4441	9262		D&A	981							496	-84			-2		1	-6							
41-133-20928	-85.2077	36.3942	7980		D&A	892							537	-31	510	-19											
41-133-20929	-85.1953	36.3934	7984		D&A	872							591	29	566	41	60		62	58							
41-133-20931	-85.2950	36.5004	8019		D&A	1060							633	-2	614	7	85		87	-5		-692	25				
41-133-20932	-85.2939	36.4981	8020		D&A	1018							638	4	620	12	93		94	1		-689	31				
41-133-20933	-85.1564	36.4004	8026		Gas	884							559	7			-9		-6	20	-698	-728	81				
41-133-20934	-85.3711	36.4797	8040		D&A	998							668	-10	649	21			118	13		-638	78				
41-133-20936	-85.1894	36.3951	8062		D&A	778							568	7	543	19	-15		-12	-10							
41-133-20937	-85.1943	36.3946	8063		Oil	780							594	31	567	42	34	55	35	33							
41-133-20938	-85.1857	36.3803	8064		D&A	956					716	14	544	-4	516	4	8		11	13		-689	112				
41-133-20939	-85.2891	36.4051	8072		D&A	993							588	-10	564	5	40		43	-7		-592	159				
41-133-20940	-85.2884	36.4066	8073		D&A	996							591	-7	566	7	45		48	-3							
41-133-20941	-85.2856	36.4061	8074		D&A	1002					772	28	582	-14	557	1	52		55	4							
41-133-20942	-85.2879	36.4076	8079		D&A	1012					767	23	612	14	590	31	61		62	11							
41-133-20945	-85.2823	36.3534	8082		Oil	1340							561	-25	532	-2	37		40	-5							
41-133-20946	-85.1955	36.4351	8092		D&A	1004					704	-7	596	18	570	26			24	23							
41-133-20947	-85.2873	36.4088	8093		D&A	1021							571	-28	546	-14	18		21	-31	-519	-552	201				
41-133-20948	-85.4026	36.3878	8095		Gas	908					873	-4	683	-22	658	-9	30		33	-116							
41-133-20949	-85.3970	36.3894	8096		D&A	940					915	50	715	14	695	33	12		15	-136							
41-133-20950	-85.3991	36.3881	8097		D&A	904							669	-33	654	-10											
41-133-20951	-85.4046	36.3920	8098		Gas	962					812	-69	637	-71	612	-60						-771	-17				
41-133-20952	-85.1986	36.4355	8115		D&A	1005							573	-6													
41-133-20953	-85.2092	36.4837	8116		D&A	932					732	-11	582	-14			25		27	9							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-20955	-85.3419	36.2534	8120		D&A	1193					935	16	778	22	758	61	218		223	72							
41-133-20956	-85.1840	36.4722	8124		D&A	998							576	-1	549	-2	46		49	29							
41-133-20957	-85.1596	36.3785	8126		Gas	852							500	-36	466	-28	-61		-58	-22		-896	-62				
41-133-20958	-85.1903	36.3939	8139		D&A	886							584	24	556	33						-883	-98				
41-133-20960	-85.3095	36.4375	8174		D&A	1354							607	-15	585	-4	51		54	-25	-741	-781	-29				
41-133-20961	-85.2828	36.3545	8178		D&A	1417							567	-20	538	3	56		58	13							
41-133-20964	-85.2077	36.4831	8184		D&A	938							518	-77	514	-39	3		8	-9							
41-133-20965	-85.2130	36.3265	8185		Gas	984							584	52	569	97	26		30	47							
41-133-20966	-85.3590	36.4212	8191		D&A	1036					792	-18	632	-23	606	-26					-648	-715	15				
41-133-20967	-85.1760	36.3926	8192		Gas	876							552	-2	522	5	-36		-33	-21	-686	-735	64				
41-133-20968	-85.1760	36.3960	8193		O&G	880							562	5	535	15	-22		-19	-7							
41-133-20969	-85.3187	36.4236	8196		O&G	1217					734	-31	603	-19	582	-8	65		68	-5	-701	-747	-1				
41-133-20970	-85.3519	36.4230	8200		D&A	1043					817	12	639	-7	611	-14	90		93	-12							
41-133-20971	-85.2976	36.4071	8202		D&A	1035							565	-39	535	-33	-47		-45	-101	-828	-890	-141				
41-133-20972	-85.3508	36.2537	8203		D&A	1148					938	15	828	60	753	54	207		213	81		-779	-111				
41-133-20973	-85.3055	36.4686	8204		D&A	1340					748	-33	618	-14	594	-12	100		103	3							
41-133-20974	-85.2924	36.5036	8208		Gas	1064					791	-3	638	5	616	11	92		95	5							
41-133-20976	-85.3554	36.4226	8210		D&A	1034					831	22	650	-1	620	-9	97		100	-10							
41-133-20977	-85.3050	36.4956	8211		D&A	1063					712	-93	619	-23	597	-17	88	115	91	-5	-723	-778	-74				
41-133-20979	-85.3311	36.2668	8216		D&A	1038					904	-6	725	-18	707	16	101		103	-53							
41-133-20980	-85.1926	36.4671	8221		D&A	990							536	-46	509	-43	-52	-16	-49	-68							
41-133-20981	-85.2545	36.3948	8227		D&A	1021					677	-47	559	-14	531	-11	3		5	-43							
41-133-20982	-85.1881	36.4749	8228		Oil	1043					683	-48	540	-40	518	-34											
41-133-20983	-85.3554	36.4237	8230		D&A	1061					922	112															
41-133-20984	-85.1867	36.4747	8231		D&A	1025							550	-29	527	-25											
41-133-20985	-85.3079	36.4938	8233		D&A	1050					748	-60	636	-8	614	-3	116		119	23	-624	-655	45				
41-133-20986	-85.1894	36.4750	8236		D&A	1016					666	-66	543	-38	518	-35					-792	-832	-74				
41-133-20988	-85.2194	36.4338	8243		D&A	1022							590	3													
41-133-20989	-85.1873	36.4759	8244		Oil	1017							548	-31	532	-21											
41-133-20990	-85.1859	36.4758	8247		Oil	1008							558	-20	533	-19						-797	-35				
41-133-20992	-85.3558	36.4201	8249		D&A	1080					930	124	646	-3	618	-10	109		111	0							
41-133-20994	-85.3540	36.4238	8251		D&A	1046					788	-21	640	-10	614	-14											
41-133-20995	-85.3073	36.4948	8252		Oil	1046							630	-13	610	-6	108		110	14							
41-133-20996	-85.2867	36.3938	8254		D&A	1294							542	-52	516	-36	1		5	-41	-729	-772	-30				
41-133-20997	-85.2816	36.3514	8255		D&A	1314									534	1	29		31	-14							
41-133-20998	-85.2058	36.4759	8256		D&A	984							599	7	573	19	-81		-79	-95							
41-133-20999	-85.2708	36.4125	8258		D&A	1323					713	-25	569	-22	534	-21	40		43	-14							
41-133-21000	-85.2838	36.3816	8260		Gas	1044							584	-7	559	11	-1		0	-41	-666	-698	37				
41-133-21001	-85.3567	36.4236	8261		D&A	1038							632	-21	606	-25											
41-133-21002	-85.3570	36.4213	8263		D&A	1036							640	-12	616	-14											
41-133-21004	-85.1753	36.4774	8266		D&A	996					618	-108	577	6	556	5	13		16	-5							
41-133-21005	-85.2725	36.3546	8272		D&A	1316					698	-31	526	-45	498	-38	-28		-25	-66	-722	-754	-6				
41-133-21006	-85.1949	36.4706	8273		Oil	986							580	-4	491	-62	21		26	8							
41-133-21008	-85.2815	36.3842	8280		O&G	1092							517	-72	497	-51	-67	-43	-66	-108	-673	-720	21				
41-133-21009	-85.3030	36.5137	8290		O&G	912							634	-8	621	19	124		126	37							
41-133-21010	-85.1880	36.4769	8296		Oil	1004							564	-16	534	-19						-697	64				
41-133-21011	-85.1889	36.4761	8298		D&A	1010							550	-30	522	-31					-533	-583	176				
41-133-21012	-85.2790	36.3724	8300		D&A	1312					692	-40	562	-22	536	-10	-19		-16	-56	-667	-757	-19				
41-133-21013	-85.2786	36.3871	8301		D&A	1271					661	-75	588	2	557	9	21		24	-19							
41-133-21014	-85.1858	36.4747	8303		Oil	996							556	-22	526	-26											
41-133-21015	-85.2954	36.5225	8306		Gas	725							613	-25	601	4	75		76	-6	-626	-684	21				
41-133-21016	-85.1925	36.4656	8307		D&A	978							528	-54	508	-43											
41-133-21017	-85.2874	36.5233	8308		D&A	848							588	-45	570	-27			80	-1	-628	-670	47				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21018	-85.3032	36.5151	8310		O&G	957							712	70	692	91	192		194	106							
41-133-21019	-85.2667	36.5470	8312		D&A	693							638	23	615	38	38		40	-23	-730	-740	2				
41-133-21020	-85.2560	36.4510	8314		D&A	943							593	-12	570	-13	28	58	30	-19	-721	-756	-13				
41-133-21021	-85.2825	36.3241	8315		Gas	1048							580	2	550	52	95		98	47	-652	-699	45				
41-133-21022	-85.2875	36.5093	8317		Gas	1000							650	19	630	28	116		119	31							
41-133-21023	-85.1841	36.3101	8320		Gas	906							531	20	501	66					-639	-705	64				
41-133-21024	-85.3040	36.5143	8322		D&A	982							647	4	632	30	115		117	28							
41-133-21025	-85.2834	36.3223	8326		Gas	1043							593	14	583	91											
41-133-21026	-85.2560	36.4490	8327		Oil	960							612	7	588	4	53		55	5	-768	-788	-44				
41-133-21027	-85.3567	36.4247	8329		D&A	1054					792	-20	636	-18	608	-23	60		63	-48	-608	-615	115				
41-133-21028	-85.2921	36.5092	8331		D&A	1003							653	19	633	30	111		113	26	-634	-673	44				
41-133-21029	-85.0850	36.1983	8337		D&A	1763					833	238									-610	-667	222				
41-133-21030	-85.2968	36.5201	8338		O&G	859							619	-20	609	11	91		94	11	-630	-693	12				
41-133-21031	-85.2850	36.3241	8339		Gas	1040							575	-6	550	63	62		65	13	-644	-691	53				
41-133-21032	-85.1941	36.4651	8341		D&A	958							548	-35	527	-25		13			-720	-720	27				
41-133-21034	-85.2970	36.3413	8343		D&A	1002							587	-15	560	80	58		62	1	-687	-782	-48				
41-133-21035	-85.2961	36.5191	8347		O&G	900							660	22	646	47	129		132	48	-650	-696	10				
41-133-21036	-85.2972	36.5212	8350		Gas	788							648	9	636	38	114		115	32	-629	-701	2				
41-133-21037	-85.3019	36.5143	8351		O&G	881							648	7	631	29	119		120	32							
41-133-21038	-85.3590	36.4191	8354		D&A	1010							655	2	630	0	119		122	6	-694	-744	-13				
41-133-21039	-85.3018	36.5158	8355		O&G	904							654	13	632	31	111		112	25							
41-133-21041	-85.3003	36.5164	8358		O&G	860							618	-23	595	-5	87	114	90	4	-700	-757	-56				
41-133-21042	-85.2255	36.5107	8360		D&A	1008					670	-76	576	-37	556	-3	5		8	-43	-620	-675	98				
41-133-21043	-85.3011	36.5133	8361		Gas	860							660	19	640	38	124	142	126	38	-619	-699	2				
41-133-21044	-85.3013	36.5044	8363		D&A	1055							647	7	626	19	117		120	27	-635	-697	8				
41-133-21045	-85.2113	36.4933	8364		D&A	908							678	76	523	-29	-107		-104	-126	-645	-707	40				
41-133-21046	-85.2806	36.4974	8368		D&A	937							605	-19	585	-18	60		62	-29		-663	70				
41-133-21047	-85.2681	36.3464	8369		D&A	1114							569	5	544	15											
41-133-21048	-85.2890	36.5066	8373		D&A	1022					811	19	632	1	610	7	91		94	5							
41-133-21049	-85.2958	36.5181	8380		O&G	915							595	-43	590	-9	119		120	36	-676	-734	-27				
41-133-21050	-85.2954	36.5201	8382		D&A	921							621	-17	615	17	98		101	18	-665	-697	10				
41-133-21051	-85.2821	36.3219	8383		Gas	1024					726	-37	586	9	548	51	74		78	27	-753	-765	-20				
41-133-21052	-85.2959	36.5214	8385		O&G	825							637	-1	615	17	94		97	15							
41-133-21053	-85.2771	36.3248	8386		Gas	1087							587	14	551	43	94		97	49	-742	-782	-38				
41-133-21054	-85.2799	36.3246	8387		Gas	1065									165	-341	-635				-714	-742	2				
41-133-21055	-85.2859	36.3233	8388		Gas	1040							598	17	570	88					-622	-664	81				
41-133-21056	-85.2944	36.5211	8390		Gas	840							594	-43	590	-8	79		82	0	-757	-817	-109				
41-133-21057	-85.2947	36.5174	8391		O&G	961							647	10	629	30	111		113	29	-624	-663	46				
41-133-21058	-85.2600	36.5007	8392		D&A	935							610	0	587	10	58		61	-31	-631	-685	52				
41-133-21060	-85.2999	36.3318	8395		Gas	1020							555	-45	520	74	31				-670	-713	26				
41-133-21061	-85.2578	36.4850	8397		Oil	928					774	18	612	6			61		64	-9							
41-133-21062	-85.2919	36.5058	8399		D&A	1004					805	11	624	-9	603	-1	80		83	-6	-670	-700	19				
41-133-21064	-85.3078	36.4959	8401		D&A	1048							632	-12	616	1	106		108	12	-678	-734	-35				
41-133-21067	-85.2783	36.3741	8405		D&A	1093					723	-9	588	4	564	18	23		28	-11	-695	-766	-25				
41-133-21068	-85.3064	36.4956	8410		D&A	1072							632	-11	619	4	106		107	11	-660	-723	-21				
41-133-21069	-85.3603	36.4185	8413		D&A	1020											137		141	23	-658	-698	33				
41-133-21070	-85.2901	36.5271	8418		Gas	905							597	-38	558	-38	84		86	7							
41-133-21071	-85.1917	36.4513	8430		D&A	1000							545	-35	523	-25		0			-661	-692	48				
41-133-21072	-85.2981	36.5172	8433		O&G	900							642	3	618	18	108		111	26	-664	-696	8				
41-133-21074	-85.3023	36.5177	8436		D&A	900							630	-12	610	10	98		102	16							
41-133-21075	-85.2567	36.4842	8441		D&A	930							620	14	599	30	69		70	-2	-668	-688	43				
41-133-21076	-85.3011	36.5183	8451		D&A	865							615	-26	597	-2	82				-660	-724	-25				
41-133-21079	-85.3001	36.5175	8457		O&G	756							644	3	622	22	111		114	28	-672	-706	-5				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21080	-85.1856	36.4768	8458		D&A	995							573	-5	552	-1	36		40	21							
41-133-21081	-85.2983	36.5183	8460		D&A	910							646	7	622	23	110		114	29	-678	-714	-11				
41-133-21083	-85.2978	36.5194	8463		D&A	860							616	-23	609	10	96		99	15	-671	-713	-10				
41-133-21086	-85.2989	36.5163	8467		O&G	814							604	-36	600	0					-631	-665	38				
41-133-21087	-85.3001	36.5191	8469		O&G	764							640	-1	616	17	105		108	23	-704	-748	-48				
41-133-21088	-85.2969	36.5176	8471		D&A	886							620	-18	600	1	86		88	3	-711	-755	-49				
41-133-21089	-85.3002	36.5153	8473		D&A	920							644	4	620	19	109		112	25							
41-133-21091	-85.3018	36.5113	8475		Gas	951							640	-1	620	17	74	103	77	-13		-707	-6				
41-133-21092	-85.3041	36.5168	8477		D&A	882							630	-13	605	5	94		98	11	-559	-607	88				
41-133-21093	-85.2996	36.5201	8479		O&G	791							623	-18	601	3	87		91	7							
41-133-21094	-85.2976	36.5163	8481		D&A	945							680	41	660	60	143		146	60	-321	-707	-2				
41-133-21096	-85.2987	36.5152	8483		O&G	790							608	-31	588	-13	73		76	-10		-653	51				
41-133-21098	-85.2920	36.5286	8491		Gas	707							667	30	624	29	91		94	16							
41-133-21099	-85.1953	36.4616	8500		D&A	980							545	-38	528	-23					-538	-608	136				
41-133-21100	-85.2952	36.3608	8501		Gas	1043							613	8	588	57	95		98	46	-679	-727	-4				
41-133-21101	-85.2997	36.5131	8502		D&A	966							656	16	637	35	116	141	117	29							
41-133-21103	-85.4522	36.4879	8505		D&A	650									560	20	174		178	-13		-874	-212				
41-133-21104	-85.3017	36.5229	8511		D&A	904							613	-29	595	-1	79		81	-2		-604	92				
41-133-21105	-85.4520	36.4857	8513		D&A	653									563	13	197		200	8	-623	-685	-9				
41-133-21106	-85.2823	36.3740	8514		Oil	1313					718	-17	579	-9	553	6	-30		-27	-67	-488	-568	164				
41-133-21108	-85.3831	36.3858	8517		D&A	1042							712	31	690	42	170		173	20	-776	-824	-81				
41-133-21109	-85.3198	36.4256	8519		D&A	1371					871	104	631	7	609	18	92		95	21							
41-133-21110	-85.2657	36.3451	8526		D&A	1122					742	14									-575	-620	136				
41-133-21111	-85.2996	36.3503	8527		O&G	1026											-267				-736	-788	-58				
41-133-21114	-85.4544	36.4901	8533		D&A	644									559	5	175		180	-12	-846	-872	-228				
41-133-21116	-85.3036	36.5212	8536		Oil	980							629	-14	608	11	93		97	12		-818	-124				
41-133-21117	-85.3873	36.3960	8537		D&A	992							702	13	680	26	209		212	59							
41-133-21118	-85.2844	36.3770	8538		D&A	1258					693	-44	574	-17	548	1	-7		-4	-44							
41-133-21119	-85.4510	36.4890	8540		D&A	660									561	28	160		164	-26							
41-133-21120	-85.4002	36.3974	8548		D&A	900							710	5	688	17	124				-782	-818	-68				
41-133-21121	-85.2748	36.3751	8549		Oil	1076											63		65	27							
41-133-21122	-85.2816	36.3831	8550		D&A	1114					712	-25	568	-21	543	-5	-60	-30	-57	-99		-776	-36				
41-133-21123	-85.2804	36.3712	8551		D&A	1062							585	-1	562	15	2		5	-35							
41-133-21124	-85.2793	36.3713	8552		Oil	1312							562	-22	532	-14	-22		-18	-58							
41-133-21126	-85.2827	36.3750	8560		Oil	1238					700	-35	588	-1	560	13	-5		-2	-42							
41-133-21127	-85.2821	36.3812	8561		D&A	1046							586	-3	559	11	-23		-20	-61	-540	-580	158				
41-133-21129	-85.2800	36.3851	8563		D&A	1234					728	-8	580	-7	556	8	3		6	-36							
41-133-21130	-85.2810	36.3737	8564		Oil	1300							575	-12	518	-29	-25		-22	-62	-455	-465	270				
41-133-21131	-85.2798	36.3698	8565		D&A	1324							589	4	564	18	49		52	12	-441	-514	221				
41-133-21132	-85.2828	36.3762	8566		D&A	1131					721	-15	591	2	566	19	15		17	-22							
41-133-21134	-85.3505	36.4228	8568		D&A	1060					830	27	640	-3	614	-9	85										
41-133-21135	-85.4179	36.4279	8569		D&A	1220					1130	239	766	27	746	33	243		245	53	-707	-754	-19				
41-133-21137	-85.3811	36.3891	8572		D&A	1060							710	32	688	42	175		178	25	-722	-762	-21				
41-133-21138	-85.3501	36.4128	8573		D&A	1415							675	42	650	32	155	185	158	50	-719	-766	-32				
41-133-21140	-85.4145	36.4309	8576		D&A	1150					874	-3	732	-5	710	-1	200		202	16							
41-133-21141	-85.2689	36.3675	8578		D&A	1343									828	286	329	359	332	294	-623	-692	68				
41-133-21142	-85.2845	36.3752	8579		Oil	1099					719	-18	584	-7	557	11	1		3	-37	-713	-757	-28				
41-133-21143	-85.2677	36.3729	8582		D&A	1309					760	34	581	10	559	17	-13		-11	-48							
41-133-21144	-85.2742	36.3713	8583		D&A	1235					723	-5	587	9	561	17	53		56	17	-590	-650	99				
41-133-21145	-85.2754	36.3739	8584		D&A	1120					712	-18	572	-8	546	1	40		43	4		-801	-54				
41-133-21146	-85.2731	36.3720	8585		D&A	1275					711	-17	575	-2	549	5	40		43	5							
41-133-21148	-85.2816	36.3757	8587		Oil	1148					718	-17	594	6	567	20	10		13	-26							
41-133-21150	-85.3061	36.5210	8593		D&A	998							628	-16	607	9	90	118	94	8	-691	-743	-53				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21152	-85.2649	36.3689	8595		D&A	1373							595	29	568	28	87		90	53	-510	-520	250				
41-133-21153	-85.2806	36.3689	8596		D&A	1336											41		46	5							
41-133-21154	-85.3791	36.3865	8597		D&A	1000							666	-8	645	1	138		141	-13	-735	-740	0				
41-133-21155	-85.2798	36.3735	8599		D&A	1214							579	-6	554	7	-16		-12	-51	-830	-879	-141				
41-133-21156	-85.2845	36.3741	8601		D&A	1173					840	103	576	-15	548	2	-12		-9	-49		-850	-122				
41-133-21157	-85.3794	36.3887	8604		D&A	1022							676	1	648	3	156		158	4		-961	-221				
41-133-21158	-85.2866	36.3748	8605		D&A	1274					858	120	720	127	692	146	163		166	126	-740	-779	-53				
41-133-21159	-85.4219	36.4308	8609		D&A	1095							742	-5	719	0	225		227	32	-625	-722	20				
41-133-21160	-85.4173	36.4254	8621		D&A	1332					932	39	732	-5	709	-2	210		212	20		-1046	-311				
41-133-21161	-85.2077	36.4834	8627		D&A	940							505	-90	488	-64	0		3	-14							
41-133-21164	-85.1786	36.3454	8647		D&A	860											-85	-70	-82	-51							
41-133-21165	-85.1956	36.3325	8648		D&A	940											-348		-345	-313	-630	-693	91				
41-133-21166	-85.1838	36.3862	8656		D&A	919							524	-28	491	-24	-121		-116	-111		-910	-112				
41-133-21168	-85.2746	36.3759	8661		O&G	1081							593	13	571	26	41		71	33	-680	-729	21				
41-133-21169	-85.2582	36.4683	8664		D&A	925							619	13	586	9	83		87	33		-803	-66				
41-133-21170	-85.1758	36.3478	8665		D&A	819							524	5	494	19	-18	14	-17	14		-933	-139				
41-133-21172	-85.2852	36.3762	8674		D&A	1082					707	-30	588	-4	562	16	31		33	-7		-711	17				
41-133-21176	-85.2781	36.4854	8684		D&A	1041							858	238							-658	-716	20				
41-133-21178	-85.2879	36.4433	8688		D&A	1020							609	-5	590	5	94		96	15							
41-133-21179	-85.1769	36.3621	8690		D&A	900							538	10	507	16											
41-133-21181	-85.3082	36.5152	8699		D&A	919							583	-62	562	-40	70		72	-18		-947	-257				
41-133-21182	-85.2821	36.3716	8703		Oil	1332							582	-6	554	8	20		22	-18							
41-133-21183	-85.2471	36.3947	8705		D&A	957							577	5	568	28	7		10	-36							
41-133-21184	-85.3320	36.2797	8717		D&A	978									696	28	143		146	-6							
41-133-21185	-85.3219	36.4243	8722		Oil	1368					774	5	639	14	616	24	102		105	31	-704	-758	-13				
41-133-21187	-85.2973	36.3516	8728		D&A	1067							797	190	768	262	-6		-3	-61		-677	52				
41-133-21188	-85.2974	36.3502	8729		D&A	1163											-13		-9	-68	-708	-738	-9				
41-133-21190	-85.2051	36.2613	8737		Gas	875							495	-30	465	-32	-89		-88	-35	-650	-728	19				
41-133-21192	-85.3246	36.4238	8745		O&G	1368							622	-4	598	3	83		86	10		-726	18				
41-133-21193	-85.2838	36.3763	8755		Oil	1078					715	-22	584	-6	553	6	19		22	-17							
41-133-21194	-85.3241	36.4226	8756		Oil	1364							634	9	602	8	68		70	-5	-717	-803	-59				
41-133-21195	-85.3185	36.4288	8759		D&A	1360					768	1	618	-7	596	5	80	120	84	9	-652	-702	46				
41-133-21196	-85.3247	36.4254	8763		D&A	1373							613	-14	573	-22	77				-692	-721	24				
41-133-21198	-85.3228	36.4278	8773		D&A	1360					743	-29	621	-6	592	-1	81		81	5		-685	61				
41-133-21199	-85.3217	36.4265	8781		D&A	1360					774	4	626	0	602	9	87	119	90	15	-695	-751	-5				
41-133-21201	-85.3239	36.4312	8787		D&A	1364							616	-14	602	7	52		56	-22							
41-133-21202	-85.3245	36.4301	8788		D&A	1368							606	-24	596	0											
41-133-21203	-85.3274	36.4244	8792		Oil	1383					761	-15	649	21	625	27	103		106	29		-920	-176				
41-133-21204	-85.3224	36.4223	8796		Oil	1365							623	-1	602	10	85		88	14	-726	-766	-22				
41-133-21205	-85.3221	36.4254	8798		D&A	1376					786	16	636	11	612	19	96	128	100	25	-700	-736	10				
41-133-21206	-85.2952	36.4468	8806		D&A	1155							653	35	633	44	125	133	128	39		-766	-12				
41-133-21207	-85.3414	36.4341	8814		D&A	1365							655	9	631	14	108		111	22		-860	-121				
41-133-21208	-85.3248	36.4286	8822		Oil	1362							623	-6	601	5	76				-666	-721	25				
41-133-21209	-85.2998	36.3518	8823		D&A	980					722	-41	580	-31	552	50	13		16	-47		-752	-23				
41-133-21210	-85.2982	36.3493	8836		D&A	1160							555	-52	530	32	15		19	-42		-807	-77				
41-133-21211	-85.3265	36.4273	8837		D&A	1380					764	-13	628	-2	607	9	75		78	0		-723	22				
41-133-21212	-85.3196	36.4333	8838		D&A	1360					802	31	632	4	608	16	87		90	12	-650	-708	41				
41-133-21214	-85.3116	36.4371	8842		D&A	1360					751	-11	616	-8	590	0	62		64	-15		-705	46				
41-133-21215	-85.2960	36.3506	8843		D&A	1164							559	-46	537	31	-16		-11	-67		-742	-13				
41-133-21216	-85.3173	36.4158	8848		Oil	1350							628	11	604	16	95		97	26	-719	-770	-26				
41-133-21217	-85.3258	36.4296	8854		D&A	1368							610	-21	590	-7	58		60	-18		-740	6				
41-133-21218	-85.3072	36.4413	8859		D&A	1358							610	-11	586	-4	46		50	-32	-695	-720	33				
41-133-21219	-85.3246	36.4262	8865		D&A	1367							617	-11	572	-23	62		67	-9	-615	-667	78				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21220	-85.2973	36.5186	8867		D&A	890											48		50	-34	-761	-818	-113				
41-133-21223	-85.3307	36.4396	8871		D&A	1385							651	10	627	22	87	110	90	9	-774	-824	-76				
41-133-21224	-85.3345	36.4228	8874		D&A	1418							638	6	606	0	-2		1	-79	-742	-794	-54				
41-133-21226	-85.3280	36.4287	8876		D&A	1401							645	13	620	20	69		72	-7		-740	6				
41-133-21227	-85.3272	36.4298	8877		D&A	1376					766	-14	638	6	614	15	72		75	-4		-730	16				
41-133-21228	-85.1869	36.4872	8878		D&A	980							600	20	570	14	4		7	-11	-652	-716	54				
41-133-21234	-85.2586	36.4712	8888		Oil	970							615	9	588	12	94		96	38	-676	-712	24				
41-133-21235	-85.3107	36.4340	8889		D&A	1335							589	-33	565	-24	32		35	-41	-632	-687	64				
41-133-21236	-85.3278	36.4523	8891		D&A	1340							612	-33	588	-18	36		39	-46	-711	-757	-8				
41-133-21238	-85.3163	36.4318	8897		D&A	1350					768	2	624	-1	602	11	80		83	7	-580	-640	109				
41-133-21240R-1	-85.3262	36.4287	8943		Oil	1370							620	-10	588	-9	62		66	-12	-655	-710	36				
41-133-21241R-1	-85.3235	36.4287	8938		D&A	1370							620	-8	592	-2	76		80	3	-998	-1038	-291				
41-133-21242	-85.3164	36.4169	8902		D&A	1302					798	39	642	25	618	31	131		134	64		-459	285				
41-133-21243	-85.3635	36.4380	8900		D&A	1412							646	-28	623	-25	111		113	-4		-776	-54				
41-133-21245	-85.3046	36.5226	8911		Oil	973							618	-26	593	-4	83		86	2	-686	-730	-38				
41-133-21246	-85.3182	36.4679	8913		D&A	1275					799	4	637	-5	613	2	112		115	21		-989	-264				
41-133-21247	-85.3293	36.4662	8915		D&A	1220											15		17	-71	-790	-852	-131				
41-133-21248	-85.2822	36.4437	8917		D&A	820							605	-8	580	-4	90		92	16		-655	99				
41-133-21249	-85.2547	36.4766	8920		D&A	502							227	-378	202	-368	-297		-295	-355	-640	-715	18				
41-133-21250	-85.4968	36.3795	8923		D&A	941											288		291	12	-805						
41-133-21251	-85.3714	36.4400	8924		D&A	1090							662	-22	640	-20	145		147	22							
41-133-21252	-85.2628	36.4719	8925		D&A	920							615	7	580	0	67		69	5		-690	47				
41-133-21255	-85.1967	36.2132	8932		D&A	1296							556	-5					-134	-71		-689	43				
41-133-21256	-85.1821	36.3631	8937		D&A	952					642	-57	531	-1	502	5	-3		-2	14	-740	-766	53				
41-133-21257	-85.3595	36.3794	8939		D&A	1040							652	10	630	9	142		145	2	-640	-720	16				
41-133-21258	-85.2579	36.4725	8942		D&A	960							620	14	595	20	90		92	33	-728	-768	-32				
41-133-21259	-85.1796	36.3566	8945		D&A	979							542	17	511	24	-12		-9	14		-877	-67				
41-133-21260	-85.2075	36.2855	8949		D&A	918							501	-22	469	6	-60		-59	-45		-859	-94				
41-133-21261	-85.3097	36.4575	8950		D&A	1180							595	-36	575	-25	68		71	-23		-799	-55				
41-133-21262	-85.3254	36.4296	8953		Oil	1371							641	11	593	-4	66		71	-7		-784	-37				
41-133-21263	-85.3140	36.4240	8954		D&A	1020					678	-81	606	-13	580	-7	61	94	64	-6		-889	-142				
41-133-21267	-85.2561	36.4713	8968		D&A	940							620	15	595	21	90		92	37		-939	-204				
41-133-21268	-85.3135	36.4071	8973		Oil	1322							602	-9	582	-1						-961	-219				
41-133-21269	-85.2093	36.2546	8974		D&A	904							559	19	525	4	-35		-31	22		-908	-184				
41-133-21271	-85.2783	36.3700	8977		D&A	1325							585	2	559	13	49		52	12		-770	-31				
41-133-21272	-85.2783	36.3689	8980		D&A	1340							584	1	553	7	48		42	2							
41-133-21273	-85.2734	36.3696	8982		D&A	1328							578	1	550	6	41		44	5							
41-133-21274	-85.2011	36.2265	8984		D&A	1283							595	32	560	8	-32		-29	40	-618	-678	37				
41-133-21276	-85.1921	36.2269	8987		D&A	1161					724	13	577	34	541	8	-62		-59	16	-683	-703	14				
41-133-21278	-85.1954	36.2269	9004		Gas	1163					713	2	565	15	529	-13	-91		-88	-15		-757	-41				
41-133-21281	-85.1969	36.2246	9008		D&A	1208							604	48	566	20	-26		-23	48	-289	-499	220				
41-133-21282	-85.3238	36.4298	9013		D&A	1360							618	-11	595	0	-220				-622	-642	105				
41-133-21284	-85.3265	36.4297	9019		D&A	1380							637	6	615	17	80		83	5	-495	-530	216				
41-133-21286	-85.3214	36.4557	9021		Oil	1335							613	-27	590	-12	14		17	-71		-752	-8				
41-133-21287	-85.3759	36.4796	9023		D&A	1082							682	2	664	31	147		150	44		-790	-74				
41-133-21288	-85.3662	36.4795	9025		D&A	1057							723	46	707	84	129		135	32	-605	-635	78				
41-133-21289	-85.3289	36.4291	9029		D&A	1378							625	-8	603	2	43		46	-33		-776	-31				
41-133-21290	-85.3565	36.4783	9030		D&A	1401							666	-8	649	26	115		126	26		-778	-69				
41-133-21291	-85.3673	36.4816	9034		D&A	1058							718	41	700	78	118		124	22		-753	-39				
41-133-21292	-85.3202	36.4569	9035		D&A	1355							595	-45	575	-28	24		30	-59		-772	-30				
41-133-21293	-85.3250	36.4280	9036		D&A	1360					784	9	622	-7	596	0	69		72	-5	-596	-646	100				
41-133-21294	-85.2793	36.3913	9039		D&A	1336					724	-14	578	-10	550	2	48		51	6		-591	159				
41-133-21295	-85.3197	36.4547	9040		D&A	1295							600	-38	580	-21	60		65	-23		-773	-27				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21296	-85.2821	36.3917	9042		D&A	1342					748	9	600	10	571	22	62		65	20							
41-133-21297	-85.3254	36.4263	9043		D&A	1370					791	16	626	-2	600	4	76		79	2		-760	-15				
41-133-21298	-85.3264	36.4294	9044		D&A	1373					765	-13	624	-7	599	1	65		68	-10		-761	-15				
41-133-21299	-85.3237	36.4295	9045		D&A	1360					767	-8	622	-7	598	3	74		76	-1		-758	-11				
41-133-21300	-85.3197	36.4558	9046		D&A	1304							628	-11	608	6	-72		-66	-155	-683	-775	-31				
41-133-21301	-85.3224	36.4567	9049		D&A	1359							609	-33	583	-20	-217					-843	-101				
41-133-21302	-85.3237	36.4307	9050		D&A	1355					791	16	623	-7	599	4	77		81	3		-788	-41				
41-133-21303	-85.3200	36.4567	9052		D&A	1335							623	-17	612	9	23		26	-63	-692	-752	-9				
41-133-21304	-85.3278	36.4295	9054		D&A	1372							628	-4	604	5	55	87	58	-21	-655	-725	21				
41-133-21305	-85.3247	36.4254	9058		D&A	1373					766	-7	629	2	607	12	84		87	11							
41-133-21306	-85.3171	36.4375	9059		D&A	1380					764	-5	638	10	612	20	88		91	11		-696	55				
41-133-21307	-85.3049	36.4178	9060		Oil	1365					779	27	637	25	613	34	117		119	57	-679	-739	9				
41-133-21310	-85.3047	36.4174	9070		D&A	1345					731	-20	577	-34	553	-26	17		20	-42	-578	-658	90				
41-133-21311	-85.2866	36.3937	9071		D&A	1280					674	-68	531	-63	504	-48	-14		-11	-57	-581	-681	61				
41-133-21312	-85.3773	36.4796	9072		D&A	1098							678	-2	656	21	141		144	37		-683	33				
41-133-21313	-85.3752	36.4812	9073		D&A	1045							635	-44	625	-6	105		110	5		-727	-11				
41-133-21314	-85.3234	36.4604	9074		D&A	1340							700	56	648	41	97		100	11	-844	-888	-153				
41-133-21315	-85.3282	36.4325	9075		D&A	1380					782	-1	644	10	620	20	74		77	-3	-692	-755	-8				
41-133-21316	-85.3783	36.4816	9076		D&A	1021							621	-59	603	-31	88		95	-11		-757	-41				
41-133-21317	-85.3791	36.4791	9077		D&A	1122							707	26	694	57	172		176	67	-698	-752	-36				
41-133-21318	-85.3818	36.4866	9078		Oil	979							579	-99	561	-70	45		49	-58	-758	-806	-88				
41-133-21319	-85.3105	36.4184	9081		Oil	1325					775	21	647	32	621	37	121		124	59	-738	-796	-49				
41-133-21321	-85.3278	36.4265	9084		D&A	1385					785	7	643	13	619	20	83		86	8	-800	-834	-89				
41-133-21322	-85.2866	36.3936	9085		D&A	1280					660	-82	528	-66	502	-50	-21		-18	-64							
41-133-21323	-85.3238	36.4298	9086		D&A	1360					785	10	622	-7	597	2	73		76	-1							
41-133-21326	-85.2950	36.3797	9092		D&A	1104							704	102	674	127	74					-870	-138				
41-133-21327	-85.3116	36.4168	9094		D&A	1360					770	16	640	25	614	30	119		122	55		-761	-15				
41-133-21328	-85.2740	36.3899	9095		D&A	1340					710	-25	586	3	558	11	56		58	14		-750	7				
41-133-21329	-85.2713	36.3938	9097		D&A	1310					743	8	592	10	566	20	71		74	27		-856	-93				
41-133-21330	-85.2852	36.3924	9098		D&A	1320					706	-35	568	-25	540	-11	19		22	-24		-789	-47				
41-133-21331	-85.3218	36.4428	9103		O&G	1075							663	28	640	46	120		123	41		-948	-196				
41-133-21332	-85.3224	36.4374	9105		D&A	1151							731	98	711	117	159		163	83							
41-133-21335	-85.1977	36.4702	9118		D&A	998					694	-35	578	-7	554	1	-28	8	-24	-42	-537	-587	160				
41-133-21340	-85.3107	36.4171	9129		D&A	1345					771	17	635	21	612	29	115		118	52	-688	-751	-5				
41-133-21342	-85.3233	36.4392	9133		O&G	1108							632	-3	608	13	75		78	-3		-827	-76				
41-133-21343	-85.3157	36.4189	9134		D&A	1300					791	32	633	15	611	24	100		103	34							
41-133-21344	-85.2632	36.4189	9135		D&A	1355					842	110	627	36	603	43	98		100	37							
41-133-21345	-85.3048	36.4213	9137		D&A	1320					736	-17	584	-29	560	-21	25		27	-36		-756	-7				
41-133-21346	-85.3235	36.4381	9140		Oil	1120					690	-90	628	-6	594	-1											
41-133-21348	-85.3221	36.4550	9143		D&A	1363							687	46	667	65	-10		-7	-95		-781	-36				
41-133-21349	-85.1866	36.4858	9144		D&A	1004							594	15	569	14	35	72	39	21		-784	-15				
41-133-21352	-85.2081	36.3320	9152		D&A	1263							535	4	505	36	-2		1	28		-736	48				
41-133-21353	-85.3252	36.4388	9154		O&G	1282					752	-31										-737	13				
41-133-21357	-85.3244	36.4361	9161		Oil	1158					683	-97	623	-11							-664	-734	15				
41-133-21359	-85.3266	36.4405	9163		D&A	1259					762	-24	629	-9	606	6	64		64	-17		-769	-18				
41-133-21360	-85.3303	36.4408	9165		D&A	1341					781	-11	611	-31	588	-17	53		56	-26		-759	-10				
41-133-21361	-85.3273	36.4418	9168		Gas	1173					764	-24	620	-20	594	-7	43		46	-36		-838	-87				
41-133-21362	-85.3286	36.4421	9169		D&A	1201					772	-18	629	-12	597	-6	45		48	-34							
41-133-21363	-85.3248	36.4351	9171		D&A	1219					787	7	639	6	615	18	83		86	6		-756	-7				
41-133-21365	-85.3251	36.4412	9174		D&A	1201					753	-31	646	9	623	25	86		89	7							
41-133-21367	-85.2632	36.3668	9178		D&A	1516							596	33	571	32	92		94	57							
41-133-21368	-85.3288	36.4433	9181		D&A	1168					788	-4	634	-8	613	10	61		64	-18	-630	-684	67				
41-133-21369	-85.3278	36.4407	9182		D&A	1255							632	-8	607	6	61		64	-18		-749	2				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21373	-85.3288	36.4399	9187		D&A	1360					752	-38	644	4	622	19	80	108	83	1	-658	-753	-3				
41-133-21374	-85.2485	36.3927	9188		O&G	960							538	-33	511	-29	-8		-5	-51		-752	44				
41-133-21375	-85.3270	36.4380	9189		D&A	1360					768	-17	642	5	619	19	83		86	5		-782	-32				
41-133-21376	-85.3231	36.4366	9191		D&A	1175					645	-133	621	-12	597	2	58		61	-19	-706	-796	-46				
41-133-21377	-85.3239	36.4478	9193		D&A	1019					794	8									-554	-654	100				
41-133-21378	-85.3301	36.4506	9194		D&A	1318					802	3	642	-4	618	10	99		102	18							
41-133-21380	-85.3218	36.4372	9198		D&A	1227							605	-27	582	-12	51		54	-26							
41-133-21381	-85.3192	36.4477	9199		D&A	977					712	-66	632	-3	609	14	74		77	-8							
41-133-21382	-85.3395	36.4399	9200		D&A	1320					808	2	656	7	632	15	83		86	-1		-932	-191				
41-133-21384	-85.3397	36.4409	9202		D&A	1340					784	-23	636	-14	613	-5	55		58	-29		-730	11				
41-133-21385	-85.2847	36.3087	9203		D&A	1304					724	-65	579	1	479	-45	59		64	10		-776	-60				
41-133-21386	-85.3698	36.4397	9206		D&A	1171							673	-9	651	-7	151		153	29	-571	-641	76				
41-133-21387	-85.3711	36.4396	9207		D&A	1108					802	-21	670	-14								-717	-2				
41-133-21389	-85.3243	36.4372	9209		Oil	1175							591	-43								-798	-48				
41-133-21391	-85.3200	36.4442	9217		Gas	1067							637	2	625	31	89		92	9		-810	-57				
41-133-21393	-85.3176	36.4476	9220		D&A	948							624	-10	603	8	25		28	-57		-856	-102				
41-133-21394	-85.2701	36.3541	9222		D&A	1322					707	-20	582	15	554	19	66	98	68	27		-787	-34				
41-133-21395	-85.3337	36.4234	9223		D&A	1396					754	-29	627	-4	604	-1	40		43	-37							
41-133-21396	-85.3317	36.4498	9224		D&A	1319					799	-2	643	-4	619	10	112	139	115	32							
41-133-21397	-85.3255	36.4342	9225		D&A	1269					789	9	649	16	627	30	96		99	20							
41-133-21398	-85.3330	36.4255	9226		D&A	1405					798	14	623	-10	599	-6	21		24	-56							
41-133-21399	-85.3335	36.4266	9228		D&A	1420					804	18	614	-20	590	-16	4		7	-73		-734	8				
41-133-21400	-85.2579	36.5270	9229		D&A	858							624	9	603	19	-41		-38	-116							
41-133-21401	-85.3297	36.4293	9230		D&A	1397					786	3	628	-5			30		32	-47		-780	-35				
41-133-21403	-85.2706	36.3555	9238		D&A	1343							533	-36	503	-33	39		41	0							
41-133-21404	-85.2963	36.4068	9239		Oil	1030					718	-28	556	-47								-772	-23				
41-133-21405	-85.3336	36.4277	9240		Oil	1421					790	3	622	-13	599	-7	0		3	-77		-584	158				
41-133-21407	-85.2844	36.3501	9246		D&A	1253							540	-48	514	-12	-16		-11	-57		-624	104				
41-133-21408	-85.2717	36.3548	9248		D&A	1324					724	-4	560	-10	534	-2	41		44	3							
41-133-21409	-85.2958	36.4058	9252		Oil	1017					547	-199										-805	-56				
41-133-21410	-85.3350	36.4274	9254		D&A	1418					792	4	629	-6	606	-2	34	65	37	-44	-817	-869	-128				
41-133-21411	-85.2957	36.4046	9257		D&A	1020					726	-20	572	-30	547	-18	-16		-13	-66							
41-133-21413	-85.3364	36.4276	9263		D&A	1440					797	7	636	-1	613	4	63		66	-17	-657	-730	11				
41-133-21414	-85.4594	36.4355	9264		D&A	1064					966	18	787	9	766	8	245		248	30	-739	-851	-26				
41-133-21415	-85.4602	36.4304	9265		D&A	1043					898	-51	755	-21	735	-23	190		193	-28		-1001	-208				
41-133-21416	-85.2944	36.4042	9266		Oil	1039							580	-21													
41-133-21417	-85.3338	36.4266	9267		D&A	1431					791	5	629	-5	605	-1	24		27	-53	-530	-578	164				
41-133-21418	-85.1600	36.4220	9268		D&A	923					713	7	567	4	538	11	-11	21	-8	1		-691	88				
41-133-21419	-85.1986	36.4485	9269		D&A	935							523	-60	493	-58	-30	-12	-27	-37		-630	108				
41-133-21420	-85.3377	36.4275	9272		D&A	1480					820	28	654	17	629	18	105	94	69	-16	-657	-730	10				
41-133-21421	-85.1592	36.4207	9273		D&A	929							565	3	537	10	-4		-1	9		-852	-71				
41-133-21422	-85.3405	36.4274	9275		D&A	1141					517	-278	371	-268	347	-267	-178		-175	-263		-703	35				
41-133-21423	-85.2614	36.3968	9276		D&A	1082							592	16	656	112	54	92	57	8		-722	55				
41-133-21424	-85.3820	36.3830	9279		D&A	1020							699	20	677	31	200		203	49							
41-133-21426	-85.3435	36.4246	9285		D&A	1419					815	18	655	16	632	16	118	149	120	27							
41-133-21428	-85.3856	36.3806	9287		D&A	970							696	11	673	24	192		195	43		-695	50				
41-133-21429	-85.2956	36.4078	9288		D&A	1045							545	-58	520	-47	-38		-35	-89							
41-133-21432	-85.3324	36.4296	9292		D&A	1392					794	8	638	3	44	-561	13		16	-64							
41-133-21433	-85.3456	36.4310	9293		D&A	1401					805	-1	685	39	662	41	147	175	150	55		-706	30				
41-133-21434	-85.3368	36.4309	9295		D&A	1392					803	9	657	17	634	23	86		89	6		-746	-5				
41-133-21435	-85.2956	36.4678	9297		Oil	1213					731	-39										-759	-19				
41-133-21436	-85.2718	36.3553	9298		Oil	1354					694	-34	567	-3	538	2	32	65	35	-6		-764	-14				
41-133-21437	-85.3497	36.4273	9299		D&A	1129					796	-12	645	-2	623	-2	99	125	101	0		-641	93				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21438	-85.3483	36.4272	9301		D&A	1185					791	-15	659	14	636	13	118	145	120	21	-775	-855	-121				
41-133-21439	-85.2953	36.4667	9302		Oil	1220					710	-59															
41-133-21440	-85.3396	36.4284	9303		D&A	1438					812	17	657	17	632	19	104		107	20		-700	39				
41-133-21443	-85.3293	36.4260	9306		D&A	1391					793	13	642	11	617	16	75		78	0		-722	22				
41-133-21444	-85.3551	36.4245	9307		D&A	1086					774	-37	633	-19	609	-20	57		60	-49		-682	49				
41-133-21445	-85.2953	36.4036	9308		D&A	1044							664	63	624	60	36		42	-10	-806	-836	-88				
41-133-21446	-85.3446	36.4211	9309		D&A	1411					803	9	657	21	633	17	117		119	24		-789	-53				
41-133-21447	-85.1753	36.4044	9310		D&A	865							540	-21	512	-15	-26	0	-23	-12							
41-133-21448	-85.3708	36.4407	9312		D&A	1105							705	21								-729	-14				
41-133-21449	-85.3541	36.4191	9313		D&A	1100					803	0	660	14	637	12	122		125	16		-781	-48				
41-133-21451	-85.3471	36.4193	9316		D&A	1402					790	-5	641	5	616	-2	92	118	95	-3		-838	-103				
41-133-21452	-85.3437	36.4289	9317		Oil	1384					822	21	658	15	635	17	118		121	28							
41-133-21453	-85.1614	36.4193	9318		D&A	944							564	2	537	10	-9		-6	4	-637	-737	44				
41-133-21454	-85.3336	36.4288	9319		D&A	1411					794	7	633	-3	611	5	15	42	18	-63		-732	11				
41-133-21455	-85.2943	36.4675	9320		D&A	1224							749	124	729	128	184		187	82		-766	-25				
41-133-21456	-85.3095	36.4661	9321		D&A	1368					763	-20	637	3	614	8	122		125	27							
41-133-21457	-85.3349	36.4285	9322		D&A	1415					813	24	641	5	615	7	37	69	40	-41							
41-133-21458	-85.3153	36.4630	9323		D&A	1365					779	-7	619	-19	597	-9	70	96	73	-22		-776	-42				
41-133-21460	-85.2475	36.3935	9325		D&A	992							571	-1	546	7	44	71	47	2							
41-133-21461	-85.3317	36.4658	9326		D&A	1083					743	-67	609	-44	586	-30	74		77	-10		-744	-22				
41-133-21462	-85.3020	36.4719	9327		D&A	1114					750	-31	616	-15	594	-13	93		96	-5		-811	-79				
41-133-21463	-85.2901	36.4648	9328		D&A	1089					708	-54	584	-38	560	-37	61		65	-39		-711	34				
41-133-21464	-85.2959	36.4699	9330		Oil	1195					655	-118									-675	-760	-22				
41-133-21465	-85.2953	36.4655	9331		D&A	1192					662	-106										-744	-2				
41-133-21466	-85.1908	36.3835	9332		Oil	920					686	-18	556	3	528	11	36		39	35		-883	-91				
41-133-21467	-85.2946	36.4703	9333		D&A	1191							731	105	706	104	138		141	37		-721	18				
41-133-21468	-85.2969	36.4616	9334		D&A	1133					757	-8	611	-13	587	-11	93		96	-9							
41-133-21469	-85.1892	36.3832	9335		Oil	939					685	-18	544	-8	514	-2	5		8	6	-709	-781	13				
41-133-21470	-85.2983	36.4616	9336		D&A	1183					779	12	619	-6	595	-4	103		106	2	-725	-795	-51				
41-133-21472	-85.1965	36.3838	9339		D&A	975							570	15	540	19	48		51	41		-764	22				
41-133-21474	-85.2769	36.4733	9341		D&A	980					774	18	623	6	598	4	87		90	6							
41-133-21475	-85.1874	36.3834	9343		D&A	941					671	-32	527	-24	498	-17	-39		-36	-36		-721	75				
41-133-21476	-85.2960	36.4730	9344		D&A	1091					811	35	625	-3	603	-1	111	139	114	12	-702	-767	-32				
41-133-21477	-85.1824	36.3864	9345		D&A	940					704	-1	540	-11	511	-4	-85		-82	-76		-707	92				
41-133-21479	-85.1977	36.3802	9347		D&A	1022					746	42	583	30	553	34	65		68	54		-742	45				
41-133-21480	-85.1895	36.3822	9348		D&A	955							543	-8	517	1	20	55	23	20							
41-133-21481	-85.1919	36.3831	9349		D&A	936							556	4	526	8	32	66	36	31	-735	-797	-6				
41-133-21482	-85.1893	36.3846	9350		D&A	912							531	-22	500	-17	-16	18	-13	-15							
41-133-21483	-85.2845	36.4598	9352		D&A	1027					752	1	621	3	599	6	103		106	13		-711	39				
41-133-21484	-85.1963	36.3785	9354		D&A	1118							574	23	548	30	61	94	63	50		-739	51				
41-133-21485	-85.2969	36.4605	9355		D&A	1105					763	-1	626	2	604	6	108		111	7							
41-133-21486	-85.2913	36.4607	9356		D&A	1041					769	10	603	-18	579	-17	74		77	-28		-701	47				
41-133-21487	-85.1878	36.4021	9357		D&A	951							555	-10	531	3	-3		1	6		-855	-75				
41-133-21488	-85.1887	36.3822	9358		D&A	945							550	-1	519	4	18		20	18		-726	70				
41-133-21489	-85.1915	36.3842	9359		D&A	975					711	7	567	13	536	17	39	73	42	37							
41-133-21490	-85.2973	36.4731	9360		D&A	1097					767	-10	623	-6	601	-4	106		109	7		-625	109				
41-133-21491	-85.2793	36.4680	9362		D&A	947					761	7	619	2	595	1	80		81	-5	-780	-855	-111				
41-133-21493	-85.1541	36.3993	9363		D&A	898							553	3	528	11											
41-133-21494	-85.2734	36.4623	9364		D&A	999					797	55	633	20	612	24	114		117	43	-802	-842	-97				
41-133-21495	-85.2989	36.4072	9366		D&A	1095					725	-22	573	-32	547	-22	-21	12	-19	-76		-807	-59				
41-133-21496	-85.2765	36.4654	9367		D&A	988					780	32	632	17	607	16	102		105	24							
41-133-21497	-85.2975	36.4071	9368		D&A	1038					590	-157									-671						
41-133-21498	-85.2926	36.4577	9369		D&A	1082					849	92	711	90	689	94	194		197	94							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21500	-85.1865	36.3825	9371		D&A	960					720	18	528	-22	500	-14			-20	-19							
41-133-21501	-85.1492	36.4294	9372		Oil	909							529	-37	504	-21						-863	-72				
41-133-21503	-85.1678	36.3932	9374		D&A	878							569	18	538	23	16	49	19	38		-814	-8				
41-133-21504	-85.2936	36.4071	9375		D&A	1003					731	-15	667	65	560	-5	-62		24	-28		-840	-89				
41-133-21505	-85.2434	36.3577	9378		D&A	1280							557	7	531	2	33	65	36	6	-738	-801	11				
41-133-21507	-85.1947	36.3935	9380		D&A	859							589	27	563	38	50	84	52	49							
41-133-21509	-85.1905	36.3855	9384		D&A	933							553	-1	513	-6	-24		-20	-23	-664	-704	87				
41-133-21511	-85.1492	36.4283	9386		D&A	901							521	-45	491	-34	-77		-75	-63	-744	-829	-37				
41-133-21512	-85.1503	36.4289	9387		D&A	902							522	-44	492	-33	-62		-58	-48	-710	-795	-6				
41-133-21513	-85.1470	36.4309	9388		D&A	921							566	-1	541	16	0	36	3	14							
41-133-21515	-85.2118	36.3951	9390		D&A	886					681	-25	556	-13	528	-2	-35	-2	-32	-48		-834	-51				
41-133-21516	-85.1492	36.4309	9392		D&A	897							552	-15	529	4	-6		-3	7		-832	-42				
41-133-21518	-85.1527	36.4057	9394		Oil	972					676	-18	560	7	529	7					-740	-800	8				
41-133-21519	-85.3059	36.4814	9396		O&G	1157							643	5	619	4	115	142	118	20		-811	-94				
41-133-21520	-85.1480	36.4300	9399		D&A	931							549	-18	528	3	-9		-6	5							
41-133-21522	-85.1585	36.4036	9403		D&A	970							585	31	560	36	35	67	38	59		-785	16				
41-133-21523	-85.1709	36.3983	9410		O&G	899							583	26	566	45						-831	-33				
41-133-21524	-85.2981	36.4052	9413		D&A	1072							574	-30	548	-19	-9		-6	-62							
41-133-21525	-85.2966	36.4049	9414		D&A	1040					729	-17	570	-33	542	-24	-18	9	-15	-69		-812	-64				
41-133-21526	-85.1558	36.4035	9416		D&A	920							575	22	548	24	17	48	20	44		-820	-14				
41-133-21528	-85.2936	36.4061	9420		D&A	1016					732	-14	582	-19	555	-9	23	58	26	-25		-861	-111				
41-133-21529	-85.1518	36.4064	9423		Oil	926					698	5	523	-30	493	-29	-94	-58	-91	-65		-823	-15				
41-133-21530	-85.1584	36.4016	9425		D&A	920							580	27	553	31	34	55	37	60	-729	-794	9				
41-133-21531	-85.1669	36.3977	9427		D&A	885					730	26	571	17	543	24	16	49	19	37		-797	5				
41-133-21533	-85.1504	36.4274	9431		D&A	914							533	-32	507	-18	-54	-21	-51	-39	-752	-829	-38				
41-133-21534	-85.2975	36.4041	9432		D&A	1063					752	5	592	-11	566	-1	20	53	23	-33		-875	-128				
41-133-21535	-85.1660	36.3986	9433		D&A	906					746	43	580	26	553	34	30	63	33	51		-853	-51				
41-133-21536	-85.2970	36.4091	9435		D&A	1081					727	-20	571	-34	546	-23	-16	17	-13	-69		-876	-127				
41-133-21537	-85.2996	36.4056	9436		Oil	1119					752	4	593	-12	568	-1	12	41	15	-43		-824	-77				
41-133-21538	-85.1571	36.4043	9437		D&A	956							581	27	554	29	28	63	30	52							
41-133-21540	-85.2928	36.4080	9439		D&A	1030					740	-5	594	-7	567	3	40	70	43	-8		-860	-110				
41-133-21541	-85.1478	36.4284	9443		D&A	938					676	-34	553	-12	525	1	-9	24	-6	7		-943	-147				
41-133-21543	-85.1509	36.4073	9446		D&A	942					650	-42	544	-9	517	-4	-41	-10	-39	-12	-783	-880	-71				
41-133-21544	-85.1303	36.4079	9449		D&A	939					693	-14	561	14	532	30	-2	31	1	46		-734	114				
41-133-21545	-85.1515	36.4052	9450		D&A	916					654	-40	540	-13	511	-10	-55	-22	-52	-25							
41-133-21546	-85.1451	36.4064	9452		D&A	985					685	-3	574	23	546	31	23	55	26	59	-658	-768	53				
41-133-21547	-85.1464	36.4065	9453		D&A	955							545	-6	515	-1	-18		-15	16	-757	-852	-34				
41-133-21548	-85.1518	36.4088	9454		D&A	916					690	-4	564	9	517	-5	-10	22	-7	17	-773	-837	-31				
41-133-21549	-85.1532	36.4069	9455		D&A	958					652	-41	538	-16	508	-15	-59	-27	-57	-32	-762	-810	-5				
41-133-21550	-85.1564	36.3722	9456		D&A	855							518	-11	485	1	-29	-5	-26	16		-777	74				
41-133-21551	-85.3245	36.4423	9457		Oil	1155					761	-23	631	-7	608	10	69	98	72	-11	-754	-796	-45				
41-133-21553	-85.1503	36.4059	9459		D&A	925							538	-14	505	-15	-27		-25	3	-802	-862	-49				
41-133-21556	-85.2728	36.3836	9474		D&A	1342					626	-106	592	12	568	23	66	96	69	28	-794	-839	-83				
41-133-21557	-85.1702	36.3961	9475		Oil	873					695	-10	572	17	543	24	12	46	15	31							
41-133-21558	-85.1542	36.4008	9476		D&A	923							548	-2	521	2	-14	16	-12	16		-839	-25				
41-133-21560	-85.1514	36.4306	9481		D&A	898							558	-9	533	7	2	31	4	12							
41-133-21561	-85.1581	36.3787	9483		D&A	868							508	-27	485	-8	-94	-23	-91	-52		-811	25				
41-133-21562	-85.1717	36.3908	9484		D&A	844							566	15	535	21	8	42	11	27		-733	72				
41-133-21563	-85.1506	36.4043	9485		D&A	913							536	-15	509	-11	-41	-11	-39	-10	-778	-833	-18				
41-133-21565	-85.1523	36.4044	9487		D&A	916							545	-7	520	-2	-21	8	-19	8							
41-133-21566	-85.1929	36.4366	9488		Oil	1056							542	-35	517	-26	-80	-49	-77	-79	-697	-757	-8				
41-133-21569	-85.1471	36.4100	9491		D&A	959					702	9	585	31	556	37	23	55	26	53	-770	-847	-33				
41-133-21570	-85.2022	36.3794	9492		D&A	1075							615	60	585	64					-803	-873	-87				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21572	-85.1657	36.4001	9496		D&A	912					709	7	580	25	553	32	29	62	32	50		-808	-8				
41-133-21573	-85.2656	36.4543	9498		D&A	902							627	18	607	22	94	121	97	36	-675	-770	-25				
41-133-21574	-85.1529	36.4014	9509		O&G	942							554	3	526	7	-14	19	-11	18		-720	96				
41-133-21575	-85.2492	36.3936	9500		D&A	965					678	-42	508	-64	480	-60	-56	-23	-53	-100	-796	-871	-76				
41-133-21579	-85.1542	36.4130	9504		Oil	923							588	31	563	39	43	75	45	65	-787	-900	-103				
41-133-21580	-85.2156	36.4082	9507		D&A	958					704	-1	580	3	552	14	1	32	4	-8		-773	3				
41-133-21582	-85.1735	36.3952	9514		D&A	837							543	-12	516	-2	-34	-1	-31	-17		-770	29				
41-133-21583	-85.1925	36.4355	9515		D&A	997							562	-14	537	-5	-37		-35	-36							
41-133-21584	-85.2309	36.3979	9516		D&A	900					643	-63	594	20	576	40	52	84	55	23	-773	-840	-47				
41-133-21586	-85.2238	36.4343	9521		D&A	1018					741	24	621	33	604	42	88	118	91	70	-787	-832	-78				
41-133-21587	-85.1664	36.3934	9523		D&A	819							521	-29	491	-23	-59	0	-31	-11							
41-133-21588	-85.1694	36.4058	9524		D&A	855					693	-10	546	-13	515	-12	-50	-7	-47	-34							
41-133-21590	-85.2265	36.4347	9526		D&A	1019					737	19	603	14	578	14	64	99	67	42	-772	-799	-45				
41-133-21592	-85.2241	36.4316	9528		D&A	1046					746	30	608	21	582	22	70	106	73	51		-761	-4				
41-133-21594	-85.2188	36.4276	9535		D&A	1027					677	-36	550	-34	522	-32	-60		-57	-70		-732	27				
41-133-21597	-85.1701	36.3941	9539		Oil	862					687	-19	559	6	531	15	3	36	6	23							
41-133-21599	-85.1727	36.3969	9542		D&A	763							587	31	560	40	20	58	23	37							
41-133-21600	-85.1493	36.4412	9556		Oil	749							545	-29	519	-9					-701	-731	49				
41-133-21601	-85.2502	36.4762	9547		D&A	941					656	-91	481	-123	456	-109	-77	-49	-74	-128	-629	-693	39				
41-133-21602	-85.1540	36.4429	9559		D&A	881							584	11	557	30	31	66	32	30		-743	23				
41-133-21603	-85.2625	36.4549	9560		O&G	887							612	5	589	6	69		72	16		-792	-48				
41-133-21604	-85.2419	36.3956	9562		D&A	1067					744	29	621	48	594	56	109	145	112	70							
41-133-21605	-85.2165	36.4265	9563		D&A	993					695	-17	568	-15	540	-12	-29	6	-26	-36	-797	-819	-60				
41-133-21607	-85.2810	36.3494	9568		D&A	1175					785	43	588	6	562	30	27	58	28	-17	-750	-835	-101				
41-133-21608	-85.2005	36.3941	9572		D&A	919							524	-41	495	-32	-7	27	-5	-13		-787	-11				
41-133-21609	-85.3030	36.5199	9574		O&G	942					790	-19	639	-4	617	19	106	134	109	24		-782	-87				
41-133-21611	-85.2433	36.3977	9571		D&A	1170					762	46	616	42	589	49	100	136	103	58							
41-133-21614	-85.2282	36.4276	9580		D&A	1106					706	-8	591	5	564	5	51	82	54	26		-740	22				
41-133-21615	-85.2194	36.4266	9581		Oil	1037							558	-26	528	-26	-41	-4	-38	-53							
41-133-21616	-85.1651	36.4104	9583		D&A	888							585	26	558	31	22	50	24	36		-777	11				
41-133-21617	-85.1639	36.3959	9584		D&A	855							552	0	529	13	16		18	39		-751	55				
41-133-21618	-85.2249	36.4277	9586		D&A	1054					698	-16	591	5	565	7	50	80	53	30							
41-133-21619	-85.1761	36.4284	9588		D&A	1066					713	3	588	20	561	27	46	75	49	51							
41-133-21620	-85.2202	36.4278	9590		D&A	1034							584	-1	564	9	22		24	8		-705	54				
41-133-21621	-85.2990	36.4023	9591		D&A	1198					743	-4	632	28	609	42	90	119	93	36	-862	-887	-141				
41-133-21623	-85.2177	36.4271	9595		Oil	1011					677	-36	549	-35	522	-31	-49	-17	-46	-58							
41-133-21624	-85.2225	36.4246	9597		D&A	1095					725	13	600	16	575	21	64	101	67	48	-735	-814	-51				
41-133-21625	-85.2973	36.4012	9598		D&A	1139					775	28	632	30	606	42	95	128	98	43		-730	15				
41-133-21626	-85.1877	36.4154	9599		D&A	907							562	-7	532	-1	13	37	17	25		-845	-76				
41-133-21627	-85.2661	36.3939	9600		Oil	975					695	-37	512	-66	484	-61	-47	-27	-43	-90							
41-133-21628	-85.3028	36.3995	9602		D&A	1141					783	34	647	42	621	54	122	151	125	63							
41-133-21629	-85.1676	36.4353	9607		Oil	853							565	-2	538	6	-29	5	-28	-31		-823	-62				
41-133-21630	-85.1860	36.3819	9608		D&A	1000					718	16	583	34	552	38	65	65	35	36							
41-133-21631	-85.1840	36.3782	9609		D&A	1100					709	7	560	15	530	20	40	74	43	46		-814	-9				
41-133-21632	-85.2992	36.4009	9606		D&A	1211					781	34	632	29	607	41	106	135	109	52	-817	-847	-103				
41-133-21633	-85.2176	36.4283	9615		D&A	1025					701	-12	571	-13	544	-10	-17	19	-14	-26	-763	-866	-108				
41-133-21634	-85.1915	36.4370	9617		Oil	1036							510	-67	465	-78						-863	-114				
41-133-21635	-85.1667	36.4414	9611		Oil	818							662	93	634	101											
41-133-21636	-85.2201	36.4257	9619		D&A	1038					694	-18	579	-5	553	0	14	51	17	2							
41-133-21637	-85.2165	36.4277	9620		D&A	1015							675	92	641	89						-811	-53				
41-133-21638	-85.2208	36.4266	9621		D&A	1052							582	-2	555	1	19	55	22	6							
41-133-21640	-85.1505	36.4515	9623		D&A	893							563	-12	538	5	-35	-2	-33	-40							
41-133-21641	-85.1503	36.4004	9624		D&A	922					727	30	559	10	530	15	-37	29	-34	-1							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21642	-85.2153	36.4259	9626		D&A	1010							566	-17	538	-13	-21	11	-18	-26							
41-133-21643	-85.2623	36.3770	9627		D&A	1321							557	-10	533	-8	35	66	36	0		-889	-113				
41-133-21644	-85.2190	36.4251	9629		Oil	1028					678	-34	549	-34	524	-28	-57	-28	-55	-68							
41-133-21645	-85.2193	36.4238	9632		D&A	1031							575	-8	547	-5	15	45	18	4	-789	-812	-49				
41-133-21646	-85.1911	36.4356	9634		D&A	988							562	-15	537	-6	-88	-53	-86	-87		-844	-93				
41-133-21649	-85.2030	36.3955	9637		D&A	978							583	16	554	26	52	86	54	46		-843	-66				
41-133-21650	-85.1942	36.4243	9639		D&A	946							159	-415	536	-2											
41-133-21651	-85.1523	36.4063	9604		D&A	951							531	-22	506	-16	-49										
41-133-21652	-85.2155	36.4248	9641		Oil	990					669	-42	547	-35	520	-30	-54	-18	-51	-58		-768	-8				
41-133-21655	-85.1906	36.4362	9644		Oil	977					687	-22	557	-19	529	-13	-106	-69	-103	-105							
41-133-21656	-85.1735	36.3989	9645		O&G	894					794	88	604	46	568	46	-57										
41-133-21657	-85.2170	36.4316	9646		D&A	986					685	-29	577	-8			6	43	9	-3							
41-133-21658	-85.1451	36.4033	9648		D&A	1041					734	42	570	21	541	28	16	49	19	54	-816	-891	-61				
41-133-21659	-85.2508	36.3950	9650		Oil	987					710	-11	524	-49	496	-45	-45	-18	-41	-89							
41-133-21660	-85.3249	36.4292	9651		D&A	1374					734	-42	621	-9	597	1	67	99	70	-8							
41-133-21661	-85.1862	36.4189	9656		D&A	902							570	1	549	15	40	70	42	51							
41-133-21662	-85.1969	36.4194	9658		D&A	842							532	-42	507	-31											
41-133-21663	-85.1566	36.3968	9659		O&G	878					603	-99	541	-8	519	4	-25	8	-22	6	-811	-884	-70				
41-133-21664	-85.1852	36.4312	9660		D&A	894							574	2	545	7	-53	-21	-51	-50		-867	-110				
41-133-21666	-85.1965	36.4205	9662		D&A	861					653	-57	516	-58	484	-54	-58	-27	-55	-46							
41-133-21667	-85.1668	36.4316	9664		Oil	905							535	-31	510	-21	-75		-72	-73							
41-133-21669	-85.1700	36.4361	9667		D&A	865							563	-5	537	4	-30	3	-27	-31							
41-133-21670	-85.1946	36.4546	9669		D&A	916							506	-75	481	-69	-36	-4	-34	-48							
41-133-21671	-85.1692	36.4235	9670		Oil	885					685	-23	561	-3	534	4	-42	-10	-39	-34							
41-133-21672	-85.1454	36.4012	9671		Oil	963							485	-62	466	-45	-139		-137	-100	-825	-855	-21				
41-133-21675	-85.1646	36.4386	9674		D&A	839							571	2	547	16	11	45	12	6	-787	-862	-102				
41-133-21677	-85.1697	36.4372	9678		Oil	835					667	-46	537	-31	509	-25	-65	-31	-61	-66							
41-133-21678	-85.2168	36.4254	9679		D&A	1002							582	-1	567	16	27		30	20	-774	-844	-84				
41-133-21681	-85.1975	36.4199	9682		D&A	852							427	-147	417	-121	-176		-173	-163							
41-133-21682	-85.1683	36.4401	9683		D&A	788							485	-84	460	-73	-112	-81	-111	-118		-858	-102				
41-133-21683	-85.1748	36.3993	9685			885					745	39	570	11			0	35	5	17							
41-133-21686	-85.1809	36.4259	9689		D&A	848					688	-21	551	-18	523	-12	-59	-29	-56	-51		-818	-54				
41-133-21687	-85.2487	36.3928	9690		Oil	959							514	-57	494	-46	-11	23	-8	-54		-812	-16				
41-133-21688	-85.1480	36.4006	9692		D&A	941							554	6	529	16	-9	23	-7	28							
41-133-21689	-85.2003	36.3951	9695		Oil	907							532	-33	502	-25											
41-133-21690	-85.1979	36.4184	9694		D&A	911					712	2	539	-35	511	-26	-27	4	-24	-15							
41-133-21693	-85.1500	36.3990	9701		D&A	920							548	0	522	9	-14	13	-12	22							
41-133-21694	-85.1979	36.4218	9702		D&A	864					680	-31	554	-21	527	-12	15	51	18	26	-803	-863	-105				
41-133-21696	-85.1999	36.4215	9704		D&A	898					714	4	569	-6	541	1	30	68	33	42	-787	-862	-104				
41-133-21698	-85.2055	36.3809	9710		D&A	1051					691	-16	586	29	556	34	94		96	73	-774	-859	-71				
41-133-21701	-85.1711	36.4357	9714		Oil	797							564	-4	539	5		12				-763	-4				
41-133-21702	-85.1657	36.4240	9718		D&A	862							532	-32	506	-23	-91	-54	-88	-83							
41-133-21704	-85.1700	36.4270	9722		D&A	863							543	-22	513	-18	-59		-57	-54							
41-133-21705	-85.1646	36.4219	9723		D&A	927							552	-11	525	-3	-51	-17	-48	-42		-811	-35				
41-133-21709	-85.1543	36.4265	9732		D&A	934							547	-18	519	-7	-34	2	-32	-22							
41-133-21713	-85.1698	36.4225	9738		D&A	876							556	-7	528	-2	-29	5	-26	-20	-689	-714	59				
41-133-21714	-85.1911	36.4380	9739		D&A	1042							515	-62	480	-63	-141	-106	-139	-142	-788	-838	-89				
41-133-21715	-85.1728	36.4304	9742		D&A	870							540	-28	520	-14	-79		-77	-76	-766	-824	-60				
41-133-21716	-85.2477	36.3908	9743		D&A	958					738	18	563	-7	541	2											
41-133-21717	-85.1631	36.4373	9744		D&A	889					735	20	585	16	558	27	4		7	2	-795	-855	-93				
41-133-21718	-85.1405	36.4218	9745		Oil	992					711	4	552	-8	524	5	-37	3	-34	-11	-839	-874	-57				
41-133-21719	-85.1775	36.4132	9746		D&A	881							564	0	540	10	49		51	60	-825	-850	-73				
41-133-21721	-85.1685	36.4226	9753		D&A	887							564	0	536	6	-32	-97	-30	-24	-798	-858	-84				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-133-21723	-85.1632	36.4001	9759		D&A	926					726	24	591	36	563	42	25	85	48	67							
41-133-21725	-85.2086	36.4855	9764		Oil	925					722	-22	600	4	574	23	-24	7	-21	-38		-772	-26				
41-133-21726	-85.1405	36.4206	9766		D&A	985							551	-8	522	4	-32	-2	-30	-6		-821	-3				
41-133-21727	-85.2016	36.4781	9769		D&A	941							557	-32	529	-25	-84	-53	-82	-99	-770	-830	-83				
41-133-21729	-85.1400	36.4227	9771		D&A	1050							575	13	545	25	-31	0	-30	-8	-743	-788	29				
41-133-21730	-85.1398	36.4187	9772		D&A	987							540	-18	512	-5	-37	-18	-33	-7		-763	58				
41-133-21733	-85.1414	36.4186	9777		D&A	983					658	-45	598	40	515	-3	-11	205	-8	17		-600	218				
41-133-21738	-85.2938	36.5263	9783		D&A	828							612	-25	581	-14	59	84	62	-17							
41-133-21739	-85.2980	36.5238	9784		D&A	926					749	-57	613	-27	589	-8	61	89	64	-18							
41-133-21740	-85.1420	36.4232	9785		D&A	980							566	4	540	20	-5	15	-3	18	-600	-705	108				
41-133-21746	-85.1646	36.4290	9794		D&A	932							592	26	557	27	25	60	26	27		-577	192				
41-133-21750	-85.2956	36.5260	9806		D&A	883					737	-68	605	-34	583	-12	40	67	43	-37	-616	-626	77				
41-133-21752	-85.4298	36.4195	9811		D&A	995							745	-3	722	-2	202	226	205	-1	-625	-810	-70				
41-137-00119R-2	-85.2153	36.5613	8464		D&A	878							629	-8	608	16	38		41	0							
41-137-00166	-85.0418	36.5711			D&A	894							640	24	456	-132	50	42	14	33		-699	116		-3629		-4030
41-137-10001	-85.1586	36.5741	551		D&A	955							620	-8								-860	-70				
41-137-20000	-85.1548	36.6049	8770		D&A	985							605	10	582	9	6		9	4	-759	-779	26				
41-137-20011	-85.1078	36.5074	806		D&A	924							584	0	559	-1											
41-137-20012	-84.8272	36.5820	904		D&A	1657					618	29	459	18													
41-137-20014	-85.0845	36.6096	956		Oil	750							602	25			-64		-84	-43		-698	129				
41-137-20016	-85.1526	36.5703	999		D&A	1041							641	20			37					-780	14				
41-137-20017	-85.1701	36.5773	1010		D&A	1005							645	6					43	15							
41-137-20018	-85.1766	36.5601	1008		D&A	972													26	3		-694	113				
41-137-20020	-85.1514	36.5781	1019		D&A	984													-5	-18	-686	-822	-31				
41-137-20021	-85.1701	36.5845	1020		D&A	1068							626	-8			46		33	1							
41-137-20022	-85.1742	36.5576	1026		D&A	958							618	-16													
41-137-20025	-85.2139	36.5628	1068		D&A	886											85		67	27		-841	-33				
41-137-20028	-84.9905	36.5861	1130		D&A	930					826	50	628	-9								-708	86				
41-137-20029	-85.0612	36.6000	1207		D&A	978					788	21	567	-33			-50					-693	123				
41-137-20030	-85.0731	36.6080	1215		D&A	973							555	-31					-43	-4		-872	-43				
41-137-20031	-85.0321	36.6093	1246		Oil	1058											78		61	83		-720	42				
41-137-20032	-85.2153	36.5616	1261		D&A	878							629	-8					41	0		-766	42				
41-137-20034	-85.0342	36.6073	1259		Oil	1055					768	-16	642	33					93	113		-840	-71				
41-137-20035	-85.0713	36.6001	1262		D&A	939											-35		-53	-21		-716	113				
41-137-20036	-85.0187	36.6114	1274		D&A	1240							610	-11			26		-2	19		-806	-42				
41-137-20038	-85.0376	36.6081	1282		Oil	1052											92		66	88		-772	1				
41-137-20041	-85.0512	36.6085	1293		D&A	1000					760	-10	574	-24			-20					-880	-85				
41-137-20043	-85.0403	36.6026	1312		D&A	1042							614	6					47	65		-751	33				
41-137-20044	-85.0464	36.6048	1321		Oil	1000											54		27	50	-754	-806	-15				
41-137-20045	-85.0663	36.5913	1342		D&A	1015							582	-23	558	-17			-15	8							
41-137-20046	-85.1062	36.5139	1367		D&A	970							566	-20					-24	0		-676	143				
41-137-20047	-85.1459	36.5927	1369		D&A	1020							606	6	582	4	38		25	17		-854	-53				
41-137-20048	-85.1582	36.5951	1385		D&A	1002							602	-8	584	-2	-8		-20	-41		-709	89				
41-137-20049	-85.1546	36.5971	1409		Oil	1005													41	27							
41-137-20050	-85.0413	36.6084	1416		D&A	1094											88		66	90	-730	-755	24				
41-137-20051	-84.9918	36.6119	1421		Oil	1158									643	13			-72	-53							
41-137-20052	-85.1542	36.5994	1435		D&A	1021					836	112	633	32	611	32	79		65	54							
41-137-20053	-84.7666	36.5257	1445		D&A	1582			957	11	480	18	278	1													
41-137-20054	-85.1204	36.6050	1465		D&A	720							564	2					-40	-4	-822	-850	-33				
41-137-20057	-84.9510	36.6079	1482		D&A	1709			1306	51	735	28	546	6			-37										
41-137-20059	-85.0377	36.6179	1665		D&A	1006					700	-73	576	-23			-41		-66	-33							
41-137-20063	-85.1490	36.5880	1742		D&A	1030					750	54	633	24	607	20	37		45	31							
41-137-20064	-85.1303	36.4650	1748		Oil	910							570	-10			-10		-6	-8		-706	110				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20065	-84.9986	36.5985	1756		D&A	920							610	-29	575	-45						-853	-65				
41-137-20066	-85.1769	36.5754	1761		D&A	980											62		64	35		-735	63				
41-137-20068	-84.9965	36.5762	1846		D&A	950							744	109								-774	27				
41-137-20069	-85.0294	36.6088	2102		Oil	1132							652	40	617	27	120					-718	41				
41-137-20070	-85.0523	36.5531	2255		D&A	887					823	60	615	16	585	11	55					-912	-91				
41-137-20071	-84.9978	36.6119	2272		D&A	995							691	51			15		43	59		-844	-62				
41-137-20073	-85.1435	36.5896	2352		D&A	940							638	37	607	28	38		41	34		-787	14				
41-137-20074	-85.1519	36.5908	2362		D&A	1000							622	14	594	7	20		24	6		-805	-7				
41-137-20075	-85.1029	36.4581	2406		D&A	920											11		13	43	-808	-836	25				
41-137-20078	-85.0563	36.5361	2441		Oil	990					787	50	580	-6	550	-15	-67		-65	-26		-858	-35				
41-137-20080	-85.1405	36.5941	2505		D&A	945											2		5	6							
41-137-20082	-85.0250	36.5730	2579		Oil	1041					839	21	646	23			34					-731	76				
41-137-20083	-85.0915	36.5355	2580		Gas	954					669	-35	584	-14	556	-9	-22		-19	9		-772	55				
41-137-20084	-85.0329	36.5556	2583		Oil	892							518	-81	492	-86	-100		-86	-56							
41-137-20085	-85.0632	36.6145	2647		D&A	950					760	4	555	-30			-82										
41-137-20086	-85.0383	36.5640	2655		Gas	1005					827	35	665	57			55										
41-137-20087	-85.1349	36.5258	2671		Oil	1040											-20		10	17		-827	-11				
41-137-20088	-85.1357	36.4770	2697		D&A	900							550	-28			-90		-70	-74							
41-137-20092	-85.1303	36.5239	2784		D&A	1000							507	-82			-70		-40	-30		-756	60				
41-137-20093	-85.1122	36.6202	2816		D&A	930							590	44			-40		0	48							
41-137-20095	-85.1372	36.5237	2888		D&A	1005											-67		-35	-30		-752	63				
41-137-20098	-85.1392	36.5382	3059		D&A	1010							590	-10					-35	-26	-779	-799	16				
41-137-20099	-85.1444	36.5992	3091		D&A	980							616	26	590	21	12		42	43		-847	-41				
41-137-20101	-85.0998	36.4411	3265		Oil	996					896	151	678	111	651	128						-945	-63				
41-137-20102	-85.1515	36.6055	3288		Oil	922							628	37			19		50	50		-882	-75				
41-137-20103	-85.1739	36.5165	3397		D&A	931					831	94	594	-11	571	1	7					-777	33				
41-137-20105	-85.1272	36.4566	3488		D&A	905					795	63	585	4	540	-2	-11										
41-137-20106	-85.2772	36.5437	3558		D&A	897							647	25	613	34	62		65	-3							
41-137-20107	-85.1549	36.5861	3588		D&A	980							627	10	596	1	18		20	-1		-818	-24				
41-137-20108	-85.1574	36.6028	3766		D&A	986											-16		16	5	-746						
41-137-20109	-85.2644	36.5660	3789		Oil	875							605	0	581	18	19		25	-31		-1031	-308				
41-137-20110	-85.1447	36.4395	3834		D&A	939					747	25	595	22	565	37	1		3	9	-610	-810	-17				
41-137-20111	-85.2321	36.5227	3893		Gas	982			962	-8	727	-19	612	-6	584	16	22										
41-137-20112	-85.1561	36.6054	3996		D&A	979							614	18			-16					-820	-15				
41-137-20113	-85.1359	36.5980	4109		D&A	690									558	-3	-30		-5	6		-799	9				
41-137-20116	-85.1419	36.4409	4321		D&A	900											-90		-50	-43							
41-137-20117	-84.8976	36.5901	4355		D&A	1705	1521	57	1295	2	657	-23	460	-18	387	24											
41-137-20118	-85.0064	36.5680	4402		D&A	890							620	-2							-696	-806	7				
41-137-20119	-85.1333	36.4940	4429		Gas	865											-85		-45	-46		-763	45				
41-137-20120	-84.8826	36.6052	4546		O&G	1075					729	39	545	48								-105	498				
41-137-20121	-84.9898	36.6096	4551		D&A	1061							677	36	649	17					-509	-719	71				
41-137-20122	-85.1404	36.5950	4586		D&A	904					550	-151					-38		-6	-4							
41-137-20123	-85.2730	36.5396	4809		Oil	679							549	-73			15		47	-23							
41-137-20124	-85.2554	36.5291	4845		Oil	880													490	414		-802	-27				
41-137-20126	-85.2376	36.5898	4865		Oil	741					731	-58					41		75	35	-507	-707	62				
41-137-20127	-85.0614	36.5703	4867		D&A	1060							575	-38	554	-28			-20	3		-784	42				
41-137-20128	-85.1806	36.6248	4868		D&A	860							560	-42					-30	-23	-426	-626	150				
41-137-20131	-85.2412	36.6207	4941		Gas	728							548	-54	528	-21	23					-758	-4				
41-137-20132	-85.2290	36.5953	5008		Oil	883					873	62	763	141					63	29	-815	-843	-73				
41-137-20133	-85.1863	36.4943	5055		Oil	952							624	39								-912	-135				
41-137-20134	-85.2263	36.6011	5059		D&A	974					874	57	774	153	754	173	104		129	99		-833	-66				
41-137-20138	-85.2557	36.6106	5087		D&A	922											30		32	-9		-754	10				
41-137-20139	-85.1174	36.4522	5112		Oil	863							559	-19	517	-26	33				-775	-825	28				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20141	-85.1408	36.6234	5135		D&A	915							555	1	475	-7	-35		-32	-1		-829	-10				
41-137-20144	-85.0451	36.5830	5189		D&A	1035							616	-4					-33	-21		-801	10				
41-137-20145	-85.2672	36.6193	5218		D&A	962											14		46	1	-623	-843	-54				
41-137-20147	-85.1656	36.5580	5227		D&A	1005							630	0					-15	-32		-725	77				
41-137-20155	-85.1589	36.5422	5327		Gas	968													-6	-13		-832	-26				
41-137-20157	-85.0428	36.5791	5386		D&A	1043							631	7	605	17	13		15	29	-615	-815	-1				
41-137-20162	-85.1945	36.6016	5501		O&G	927							609	-16	577	-20	45		49	29		-838	-59				
41-137-20163	-85.1970	36.6001	5525		O&G	925							607	-20	575	-24	15		-57	-79	-682	-809	-30				
41-137-20164	-85.0779	36.5594	5551		D&A	883							566	-41					-79	-55		-816	12				
41-137-20165	-85.1026	36.6207	5561		D&A	935					635	-78					-18		-15	33		-757	69				
41-137-20166	-85.0199	36.6147	5587		Oil	1080							627	8							-763	-777	-19				
41-137-20167	-85.0117	36.6130	5588		Oil	1088							655	28	625	16	19		21	42		-781	-13				
41-137-20170R-1	-85.1234	36.4550	7241		Oil	864													-4	4		-910	-74				
41-137-20171	-85.2205	36.5942	5646		D&A	933									393	-195	21		23	-9	-738	-763	12				
41-137-20173	-85.1847	36.6093	5686		D&A	893							643	28	583	-3	43		46	35							
41-137-20175	-85.1469	36.6209	5799		D&A	719							544	-22	519	14											
41-137-20178	-85.1751	36.4910	5931		D&A	957									507	-50	-53					-908	-117				
41-137-20179	-85.1765	36.4866	5936		D&A	946					596	-136							46	26		-760	24				
41-137-20180	-85.1765	36.4988	5964		D&A	1002					802	67	582	-2	562	1					-746	-856	-60				
41-137-20181	-85.2368	36.6084	6008		Oil	870							562	-48	540	-33	-25		-22	-53							
41-137-20184	-85.1321	36.5868	6078		D&A	942							600	7	577	7	2		5	14		-832	-28				
41-137-20186	-85.0605	36.5759	6165		Oil	960							614	-3	586	4	-7		-5	17	-720	-740	86				
41-137-20187	-85.0594	36.6194	6168		D&A	1010							560	-23	530	-18	-41		-38	4							
41-137-20190	-85.1493	36.6178	6190		D&A	798							423	-150	398	-135											
41-137-20193	-85.1347	36.5286	6258		Oil	990							592	-1			-60		-25	-16	-805	-807	9				
41-137-20194	-85.1599	36.5455	6321		Gas	940							660	39	620	23	15										
41-137-20195	-85.1769	36.5075	6351		D&A	1021							606	11	576	11	49		51	32		-843	-41				
41-137-20197	-85.2102	36.5109	6385		D&A	901							506	-106	476	-82					-799	-839	-55				
41-137-20198	-84.9896	36.6045	6426		D&A	1100							654	15	619	-11	-43		-40	-12							
41-137-20199	-84.8817	36.6063	6449		D&A	1055					684	-7	504	6			-345		-342	-29		-797	-195				
41-137-20200	-85.1384	36.5268	6487		D&A	1015											-47		-17	-12	-799	-812	3				
41-137-20201	-85.0821	36.5609	6526		D&A	871									633	61	-8		-5	19							
41-137-20202	-85.1793	36.4939	6555		D&A	1004							524	-56	504	-54					-812	-830	-42				
41-137-20203	-85.1325	36.5191	6575		Oil	928							618	29			-22		6	12	-775	-800	15				
41-137-20207	-85.0692	36.6100	6703		Oil	984							558	-28	538	-29	-62		-32	6							
41-137-20209	-85.1265	36.4592	6739		Oil	723							609	28	588	45	123		130	133	-820						
41-137-20210	-85.1036	36.5802	6752		O&G	796							600	-3	571	12	-5	32	-2	24							
41-137-20211	-85.0639	36.6113	6778		Oil	980					730	-27	580	-8	530	-40	-64		-62	-25							
41-137-20213	-85.0976	36.5734	6834		Oil	820							570	-36	160	-408	-59		-53	-27	-778	-828	-9				
41-137-20214	-85.0959	36.5786	6835		Oil	830									230	-335	-76		-71	-44							
41-137-20215	-85.1636	36.5007	6839		D&A	978							607	24	578	13											
41-137-20216	-85.1688	36.4845	6900		D&A	963							583	16	570	16						-759	34				
41-137-20217	-85.0971	36.5926	6921		D&A	962									312	-241	-68		-58	-29							
41-137-20218	-85.2038	36.6051	6955		D&A	916							555	-71			39		42	25							
41-137-20220	-85.0602	36.5941	6986		Oil	1125							735	130					95	116	-638	-779	38				
41-137-20222	-85.1156	36.6175	6988		D&A	901							521	-26					6	52		-756	68				
41-137-20223	-85.0673	36.5937	6991		D&A	1300					970	208	830	227	791	217	360					-865	-39				
41-137-20224	-85.1843	36.4938	7002		D&A	938											8		13	-5	-755	-820	-40				
41-137-20225	-85.0459	36.6088	7010		Oil	1062							606	5	569	-12	1		7	34							
41-137-20230	-85.0974	36.5685	7105		Oil	739					716	8	647	42	624	56	49		54	80		-273	547				
41-137-20231	-85.0944	36.5806	7107		D&A	960											-105		-95	-68		-862	-42				
41-137-20232	-85.0252	36.6179	7129		D&A	1040					751	-31	591	-21	562	-17	-35		-22	7		-304	445				
41-137-20234	-85.0564	36.6104	7150		Oil	965							580	-13	561	-14					-698	-738	64				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20235	-85.1635	36.5075	7154		D&A	960							638	47	617	48	63		64	43							
41-137-20236	-85.0780	36.5661	7161		D&A	728					716	-26	568	-42	546	-29	-84		-80	-55	-765	-795	34				
41-137-20237	-85.1670	36.4914	7171		D&A	936							591	20	571	13	-2		0	-22		-830	-26				
41-137-20238	-85.1820	36.5530	7173		D&A	942							612	-21	592	-1	31		34	10		-815	0				
41-137-20239	-85.0795	36.5823	7217		Oil	958							597	-13	570	-1	-76		-72	-44	-760	-790	38				
41-137-20242	-85.1137	36.4986	7248		D&A	965							585	3	569	9	-50		-45	-30		-868	-65				
41-137-20245	-85.0643	36.5806	7273		D&A	885							590	-26	568	-12											
41-137-20247	-85.0854	36.5810	7310		Oil	972					759	25	612	3	588	19	1					-806	19				
41-137-20248	-85.0850	36.5843	7311		Oil	1002					774	40	636	31	618	51	44					-851	-26				
41-137-20250	-85.0595	36.6155	7344		D&A	990							540	-47	510	-59	-68		-66	-28							
41-137-20251	-85.0946	36.5496	7355		Gas	965							605	5			-28		2	27							
41-137-20252	-85.1378	36.5555	7370		D&A	1010											-64		-34	-22		-892	-85				
41-137-20254	-85.0981	36.5456	7386		D&A	959											-65		-36	-11	-704	-732	93				
41-137-20256	-84.9964	36.5940	7399		Oil	1065					863	99										-761	30				
41-137-20257	-85.1857	36.4954	7462		D&A	966							596	10	586	28			-19	-37							
41-137-20259	-85.1004	36.5795	7492		D&A	858					640	-65	558	-47	501	-61	-102		-102	-75							
41-137-20260	-85.0203	36.6178	7497		D&A	1071					811	26	641	24	611	26	37		39	66							
41-137-20261	-85.0947	36.6139	7524		O&G	939							562	-4	539	0	-27		-26	18		-898	-72				
41-137-20262	-85.0138	36.6003	7532		D&A	969							604	-24	576	-30	-33										
41-137-20263	-85.0973	36.5884	7533		D&A	983							609	14	588	32	-60		-58	-31							
41-137-20264	-85.0978	36.5854	7534		Gas	917							528	-71	509	-49	-90		-87	-60							
41-137-20265	-85.0979	36.5902	7535		Gas	990							590	-3	557	3	-84		-83	-56							
41-137-20269	-84.9974	36.5923	7577		D&A	967					887	117	690	51													
41-137-20270	-85.0753	36.5533	7592		D&A	900							630	25	605	34						-750	78				
41-137-20272	-84.9977	36.5905	7626		D&A	991					848	72	684	46													
41-137-20273	-85.0965	36.5828	7639		D&A	1044							602	-1	598	37						-891	-72				
41-137-20274	-85.1483	36.5829	7652		D&A	1020							633	19	611	19						-748	47				
41-137-20275	-85.0459	36.5945	7661		Oil	1080							625	14	599	15	19		19	32		-839	-39				
41-137-20276	-85.1005	36.5945	7664		Gas	892							582	-4	554	5						-794	26				
41-137-20277	-85.1051	36.5925	7665		D&A	882							548	-39	523	-24	-83		-78	-50		-847	-29				
41-137-20278	-85.0445	36.5959	7669		Oil	1092							607	-4	581	-3	-3		-3	10	-729	-789	8				
41-137-20279	-85.1149	36.5984	7670		D&A	791					719	12	561	-13	539	0	-33		-30	1							
41-137-20280	-85.0935	36.5697	7688		Oil	723							638	32	615	45	21		23	49		-696	126				
41-137-20281	-85.0905	36.5699	7701		D&A	739							619	11	593	22	-18		-14	12							
41-137-20282	-85.1226	36.5999	7704		D&A	701							581	13	560	15	-11		-7	22							
41-137-20283	-85.0941	36.5461	7705		Gas	967					842	136	577	-23	557	-9											
41-137-20285	-85.1208	36.5227	7716		D&A	1159							621	35	597	29	15		19	36							
41-137-20286	-85.2427	36.5281	7718		D&A	895					855	99	625	7	605	28	49	75	50	-19							
41-137-20287	-85.0941	36.5523	7728		O&G	921							601	0	577	10					-836	-876	-52				
41-137-20289	-85.2388	36.5306	7732		D&A	878					708	-44	598	-23	578	0	32	88	33	-31							
41-137-20290R-1	-85.1001	36.6161	8017		D&A	1019							479	-80	452	-73	-129		-126	-81	-878	-903	-78				
41-137-20291	-85.2411	36.5295	7738		D&A	895					695	-59	615	-4	595	18	49	75	50	-17	-768	-915	-113				
41-137-20292	-85.1017	36.6010	7740		D&A	859							547	-31	531	-12	-92	-57	-89	-55							
41-137-20293	-85.0966	36.5589	7742		D&A	915							640	38	615	48						-816	6				
41-137-20294	-85.0596	36.5524	7743		D&A	862							604	4	584	11	-18		-15	12							
41-137-20295	-85.0884	36.5779	7749		D&A	883					687	-41	580	-30	553	-16	-85		-79	-52	-678	-832	-9				
41-137-20296	-85.0960	36.5352	7751		Gas	1141							666	70	646	82											
41-137-20297	-85.0994	36.5664	7754		D&A	1002							622	18	598	31	16		20	46		-895	-75				
41-137-20298	-85.1022	36.5714	7755		D&A	899							579	-25	557	-9					-741	-848	-31				
41-137-20299	-85.0864	36.5680	7757		D&A	903					746	18	631	23	605	33	5		11	37		-741	84				
41-137-20300	-85.1002	36.5406	7761		Gas	1004							611	15	587	22	35		36	62	-694	-714	112				
41-137-20301	-85.1057	36.5735	7766		D&A	900					658	-39	554	-49	528	-36	-60		-56	-30		-765	50				
41-137-20302	-85.0878	36.5838	7768		D&A	1022							627	22	602	36	-18		-14	14							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20303	-85.0970	36.5380	7771		D&A	1044							605	8	584	19	-80		-76	-49							
41-137-20305	-85.0660	36.5733	7778		D&A	1021							631	17	604	22	-11		-7	17	-702	-828	1				
41-137-20306	-85.0764	36.5858	7787		D&A	1015					815	66	580	-27	545	-27	-85										
41-137-20307	-85.1064	36.5420	7790		D&A	1269							599	4	574	10	-38		-35	-9	-722	-862	-37				
41-137-20309	-85.0936	36.5332	7795		Gas	1041							613	17	585	21					-707	-846	-19				
41-137-20311	-85.1091	36.5771	7799		D&A	898					702	7	582	-21	556	-3	-19		-15	11	-736	-853	-41				
41-137-20312	-85.0971	36.5427	7800		Gas	997							585	-13	560	-5											
41-137-20313	-85.1188	36.5762	7802		D&A	881							575	-25	549	-17	-45		-42	-16							
41-137-20314	-85.1228	36.5805	7803		D&A	919					718	29	618	22	575	9	-27		-22	1		-707	98				
41-137-20315	-85.1097	36.5635	7804		Oil	968					695	-1	558	-41	532	-31	-48		-43	-16							
41-137-20316	-85.1141	36.5383	7805		D&A	1306							636	45	613	48					-706	-849	-23				
41-137-20319	-85.1079	36.5465	7815		D&A	1341							645	50	621	57											
41-137-20320	-85.0921	36.5641	7817		D&A	943							665	60	642	73	80		83	109	-723	-863	-40				
41-137-20321	-85.1185	36.5607	7821		Gas	977							605	9	585	16					-722	-868	-54				
41-137-20322	-85.1102	36.5743	7824		D&A	966					698	4	580	-22	558	-3	-19		-16	10	-771	-908	-96				
41-137-20323	-85.1018	36.5690	7825		D&A	1001							626	23	491	-75	33		36	62	-718	-858	-40				
41-137-20324	-85.1152	36.5706	7826		D&A	869					699	8	591	-8	557	-8	-39		-35	-9							
41-137-20325	-85.1023	36.5668	7832		D&A	918					726	27	586	-17	562	-4	-30		-26	0							
41-137-20326	-85.1061	36.5708	7834		D&A	961					655	-42	559	-44	533	-32	-55		-50	-24	-765	-865	-49				
41-137-20328	-85.1062	36.5669	7841		D&A	880					678	-19	572	-29	547	-18	-32		-27	-1	-815	-887	-70				
41-137-20329	-85.1048	36.5537	7844		D&A	1001					606	-91	596	-2	573	8						-718	103				
41-137-20330	-85.0994	36.5589	7846		Gas	999							674	72	649	83	74		76	102							
41-137-20331	-85.1126	36.5645	7850		D&A	969					687	-7	585	-14	558	-5	-44		-39	-12	-771	-909	-94				
41-137-20332	-85.1065	36.5641	7851		D&A	919					708	11	543	-58	516	-48	-61		-57	-31							
41-137-20333	-85.0897	36.5663	7853		Oil	940					779	58	658	51	633	62	61		65	91							
41-137-20334	-85.0869	36.5491	7856		Gas	992							612	9	587	19	-13		-10	13							
41-137-20335	-85.1160	36.5728	7859		D&A	869							553	-47	527	-39	-78		-73	-47							
41-137-20336	-85.0899	36.6022	7860		Gas	739							600	17	576	24					-679	-797	28				
41-137-20337	-85.0921	36.5551	7865		O&G	892							602	-1	517	-51					-695	-830	-6				
41-137-20338	-85.0896	36.5634	7866		Oil	946							666	60	631	61	51		54	79		-804	20				
41-137-20339	-85.0770	36.5520	7867		D&A	903							607	2	583	12	-79		-77	-54		-847	-19				
41-137-20340	-85.1200	36.5388	7869		Oil	1293					707	2	599	9	572	2	-21		-17	8	-706						
41-137-20341	-85.1243	36.5376	7870		D&A	1138					734	26	584	-4	555	-18	-24		-20	2	-682	-816	6				
41-137-20343	-85.0868	36.5617	7877		D&A	846							624	18	601	30	-47		-44	-19	-721	-838	-13				
41-137-20346	-85.0722	36.5842	7883		D&A	958									558	-17			-47	-21							
41-137-20347	-85.0918	36.5656	7886		D&A	919					679	-38	662	56	638	68	49	73	51	77							
41-137-20348	-85.1425	36.5355	7889		D&A	948					706	-16	600	-3	574	-12	-19		-15	-10	-183	-783	32				
41-137-20349	-85.1030	36.5602	7890		D&A	998					744	46	582	-19	558	-7	-36		-33	-7							
41-137-20350	-85.0943	36.5574	7892		Gas	879							621	18	597	29	-26		-22	3	-754	-863	-40				
41-137-20351	-85.0976	36.5518	7895		Gas	942							592	-8	567	1											
41-137-20352	-85.1151	36.5649	7898		D&A	919					707	14	579	-19	553	-12	-67		-63	-36	-740	-862	-48				
41-137-20353	-85.1106	36.5561	7899		Gas	1061							601	4	574	11					-848	-962	-143				
41-137-20354	-85.1065	36.5591	7900		D&A	979					688	-9	597	-2	571	7	-25		-22	5							
41-137-20355	-85.0936	36.5954	7901		D&A	933					473	-247									-791	-828	-5				
41-137-20356	-85.1109	36.5610	7902		D&A	996					743	47	591	-7	566	3	-45		-41	-14	-733	-854	-37				
41-137-20357	-85.1052	36.5259	7903		D&A	1232					656	-43	528	-62	502	-61	-134		-130	-105							
41-137-20360	-85.0901	36.5416	7906		Gas	984							581	-19	556	-10					-735	-827	-1				
41-137-20361	-85.1093	36.5676	7909		D&A	965					711	16	575	-26	551	-12	-18		-14	12							
41-137-20362	-85.1029	36.5639	7910		D&A	970					747	49	581	-21	555	-11	-38		-34	-8							
41-137-20364	-85.1415	36.5802	7915		Oil	968							620	9	595	7	2		4	3	-457	-526	270				
41-137-20366	-85.1202	36.5309	7917		D&A	1023					718	10	607	19	579	10	-3		1	22							
41-137-20367	-85.0602	36.5626	7920		D&A	931							592	-16	561	-17					-744	-847	-22				
41-137-20368	-85.0566	36.5612	7921		O&G	982					695	-75	619	13	582	4					-779	-866	-43				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20369	-85.1100	36.5393	7925		Gas	1338							643	50	618	54	-217		-212	-186	-848	-887	-62				
41-137-20370	-85.1201	36.5899	7926		D&A	923							547	-37	525	-28	-72		-69	-45	-799	-869	-58				
41-137-20371	-85.0998	36.5641	7927		D&A	983					737	34	605	2	579	12	-21		-17	9	-829	-865	-45				
41-137-20372	-85.1155	36.5780	7928		D&A	867					642	-49	555	-46	529	-31	-47		-43	-17	-819	-917	-109				
41-137-20373	-85.1156	36.5599	7929		D&A	1006									412	-154	-55		-52	-25	-743	-787	29				
41-137-20374	-85.1248	36.5564	7930		D&A	1241					689	-6	569	-24	547	-28	-44		-41	-17							
41-137-20375	-85.1245	36.5590	7931		D&A	1019							587	-6	565	-10	-36		-32	-8							
41-137-20376	-85.1073	36.5333	7932		D&A	1361							578	-14	554	-10	-72		-68	-43		-771	55				
41-137-20377	-85.0848	36.5709	7938		D&A	755							679	69	651	77	51		55	81							
41-137-20378	-85.0073	36.5700	7939		D&A	859							749	125	722	117											
41-137-20379	-85.0909	36.5963	7943		D&A	945					705	-19	635	46	615	60						-715	109				
41-137-20380	-85.0984	36.5136	7946		Gas	779							673	86	628	68	16		19	49	-761	-785	39				
41-137-20381	-85.0908	36.5943	7949		D&A	941							651	60	621	64						-863	-39				
41-137-20382	-85.0569	36.5561	7950		D&A	1017					757	-6	659	57	633	58	-24		-22	5							
41-137-20383	-85.0736	36.5503	7951		Gas	935							645	42	621	50	-5		-2	21	-720	-805	24				
41-137-20385	-85.1174	36.5295	7954		Oil	979					605	-101	555	-33	530	-37	-53		-49	-27	-746	-846	-24				
41-137-20386	-85.1857	36.5031	7958		D&A	962							572	-22	547	-13			-100	-117							
41-137-20388	-85.0736	36.5835	7962		D&A	998							638	28	613	39											
41-137-20391	-85.1232	36.5300	7971		D&A	907					742	32	615	28	591	20	13		16	35	-737	-823	-3				
41-137-20392	-85.1214	36.5412	7972		D&A	1202					682	-22	580	-10	559	-12	-31		-28	-2	-751	-839	-18				
41-137-20393	-85.0904	36.5216	7975		Gas	1077							611	19	585	23					-763	-856	-27				
41-137-20394	-85.1894	36.5035	7976		D&A	941							561	-36	531	-28	39		41	24	-785	-876	-90				
41-137-20395	-85.0861	36.5246	7977		D&A	1061							599	5	571	9	-15		-12	22							
41-137-20396	-85.0870	36.5344	7978		D&A	1001					675	-33	575	-24	555	-10	-22		-19	10		-706	121				
41-137-20397	-85.0796	36.5399	7979		D&A	992					728	9	609	8	583	17	-31		-28	-1							
41-137-20398	-85.0796	36.5307	7982		D&A	1051					722	11	605	7	579	15	-52		-49	-16	-737	-826	4				
41-137-20399	-85.1446	36.5821	7983		Gas	985							622	11	598	9											
41-137-20401	-85.1452	36.5691	7993		O&G	1059											-11		-8	-9	-711	-761	37				
41-137-20402	-85.1619	36.5574	7994		Gas	1040							612	-14	590	-13											
41-137-20403	-85.1089	36.5711	7995		D&A	969					677	-18	587	-15	565	2	-10		-7	19							
41-137-20404	-85.1148	36.5043	7996		Gas	903					723	16	586	3	563	2											
41-137-20405	-85.0886	36.5377	7999		D&A	939															-749	-792	35				
41-137-20406	-85.1218	36.5172	8000		D&A	1061					786	79	598	13	573	7						-797	17				
41-137-20407	-85.1056	36.6018	8001		D&A	925							573	-1	547	9	-65		-64	-29							
41-137-20408	-85.0983	36.5558	8002		Gas	921											3		6	32							
41-137-20409	-85.1309	36.5281	8003		D&A	1043							599	9	575	-1	-33		-27	-15							
41-137-20410	-85.0979	36.5174	8005		D&A	978							606	18	583	22	1		3	33		-715	110				
41-137-20411	-85.1084	36.5074	8006		Gas	941							587	3	569	9											
41-137-20412	-85.0928	36.5993	8007		Gas	870							770	186	745	193					-742	-915	-91				
41-137-20413	-85.0651	36.5698	8008		D&A	942							566	-46	540	-41					-784	-874	-46				
41-137-20415	-85.1399	36.5336	8011		D&A	1085					709	-13	561	-39	535	-49	-87		-84	-77	-700	-806	10				
41-137-20416	-85.1271	36.5338	8010		D&A	953					694	-19	582	-6	559	-16	-26		-23	-6	-829	-938	-117				
41-137-20417	-85.1143	36.5682	8016		D&A	880							566	-33	544	-20	-53		-50	-23	-755	-849	-36				
41-137-20418	-85.1867	36.4953	8015		D&A	958					720	-26	628	42	588	30	43	68	46	28	-719	-825	-47				
41-137-20419	-85.1190	36.5361	8018		D&A	1062					750	45	662	73	640	71	29		32	56	-812	-860	-35				
41-137-20420	-85.0506	36.5314	8023		D&A	920							562	-17	536	-25	-99		-97	-52		-867	-32				
41-137-20421	-85.1041	36.5586	8024		D&A	1001					721	24	595	-5	571	6			-25	1	-745	-838	-18				
41-137-20422	-85.1028	36.5613	8025		D&A	1001					711	13	591	-10	571	5	-20		-17	9	-714	-714	106				
41-137-20423	-85.0705	36.5494	8028		Gas	940					786	48	642	41	617	46	-13		-10	14							
41-137-20424	-85.1116	36.5311	8031		D&A	1269											-47		-43	-19		-887	-63				
41-137-20425	-85.1399	36.5336	8032		D&A	951					701	-21	591	-9	571	-13	-28		-25	-18		-927	-112				
41-137-20426	-85.1102	36.5611	8033		D&A	1042					746	50	643	44	622	59	22		25	52							
41-137-20427	-85.0659	36.5571	8035		O&G	841							604	-1	578	3	-12		-9	16		-842	-15				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20428	-85.0745	36.5831	8036		D&A	923							559	-51	533	-41	-94		-91	-64		-797	34				
41-137-20430	-85.0713	36.5268	8041		D&A	1063					718	6	563	-27	537	-25	-83		-81	-42		-804	31				
41-137-20432	-85.1334	36.5837	8043		D&A	983							601	3	577	3											
41-137-20433	-85.0735	36.5822	8044		D&A	888							586	-26	559	-16	-57		-54	-28							
41-137-20434	-85.0778	36.5854	8045		D&A	1038							586	-21	562	-9	-60		-57	-28							
41-137-20435	-85.0737	36.5878	8046		D&A	1036							586	-20	561	-12	-59		-54	-27							
41-137-20436	-85.1472	36.5786	8047		D&A	1020							633	15	609	13						-808	-15				
41-137-20437	-85.1601	36.5781	8048		D&A	983							614	-16	592	-14					-887	-983	-194				
41-137-20438	-85.1292	36.5470	8049		O&G	1061							551	-42	528	-50					-839	-845	-30				
41-137-20439	-85.1564	36.5098	8052		D&A	939							619	27	596	22					-735	-823	-7				
41-137-20440	-85.0982	36.5724	8055		Gas	717							637	31	615	47	-46		-43	-17		-857	-38				
41-137-20441	-85.0592	36.5393	8056		D&A	959					680	-59	555	-35	529	-37	-89		-86	-51							
41-137-20442	-85.0861	36.5365	8057		D&A	1001					678	-32	577	-22	551	-14	-30		-27	1							
41-137-20443	-85.0867	36.5219	8058		D&A	1107							601	9	577	16	-22		-19	16		-843	-12				
41-137-20444	-85.0989	36.6161	8065		D&A	943							543	-17	520	-7	-51		-48	-3	-829	-899	-73				
41-137-20447	-85.1250	36.4879	8076		Oil	902							582	0	557	0											
41-137-20448	-85.1246	36.4850	8078		D&A	859					584	-125	524	-57	504	-52						-767	42				
41-137-20452	-85.0856	36.6114	8089		D&A	937							602	28	575	25	-16		-16	27		-856	-29				
41-137-20453	-85.0644	36.5488	8090		D&A	905					777	32	601	2	575	4	-49		-46	-19							
41-137-20454	-85.1160	36.4514	8099		Oil	857							597	20	573	30					-825	-860	-3				
41-137-20455	-85.0739	36.5844	8100		D&A	933							623	14	598	24	-20		-17	10		-832	-1				
41-137-20456	-85.0759	36.5838	8101		D&A	969							602	-7	577	4	-149		-36	-8		-934	-104				
41-137-20459	-85.1019	36.4891	8106		Gas	1028							598	20	573	17						-711	111				
41-137-20460	-85.0781	36.5746	8107		D&A	910							615	2	592	16	-10		-5	22							
41-137-20461	-85.1019	36.6093	8108		Oil	916							550	-17	526	-9	-47		-44	-4							
41-137-20462	-85.0973	36.5857	8109		Gas	1021							586	-13	559	1	-64		-61	-34	-785	-785	35				
41-137-20463	-85.0840	36.5863	8110		D&A	1029							649	45	619	52	24	51	26	55	-767	-827	-1				
41-137-20464	-85.1030	36.5773	8094		D&A	846					804	104	546	-59	526	-36					-837	-867	-52				
41-137-20465	-85.0724	36.5699	8112		Oil	960							597	-15	570	-8	-10		-7	18							
41-137-20466	-85.1384	36.5809	8113		D&A	980					650	-29	612	5	589	6	-15		-15	-12		-836	-38				
41-137-20467	-85.0748	36.5568	8117		D&A	933							788	182	563	-10	-57		-57	-33							
41-137-20468	-85.0713	36.5676	8121		D&A	981							588	-23	563	-15	-43		-39	-14	-715	-812	19				
41-137-20469	-85.0704	36.5374	8123		D&A	984					689	-36	589	-6	569	3	-38		-36	-4	-729	-820	7				
41-137-20470	-85.0867	36.5969	8125		Gas	940					731	1	606	16	582	24	0		3	36	-902	-967	-141				
41-137-20471	-85.1190	36.5131	8131		D&A	911					611	-96	520	-65	495	-69											
41-137-20473	-85.1228	36.5766	8133		D&A	898							617	19	596	26	-3		0	23							
41-137-20474	-85.0903	36.5245	8134		D&A	1203					719	16	629	36	603	41	-6		-3	29	-728	-728	101				
41-137-20475	-85.0779	36.5248	8135		D&A	1105					703	-4	571	-22	545	-17	-111		-107	-69							
41-137-20476	-85.1168	36.5156	8136		D&A	976							653	67	630	66					-672	-753	60				
41-137-20477	-85.0782	36.5274	8140		Oil	1043							571	-24	549	-14	-93		-90	-54	-691	-792	40				
41-137-20478	-85.0882	36.5267	8141		D&A	1051					745	41	604	10	577	14	-11		-8	24		-750	79				
41-137-20479	-85.1925	36.5508	8142		D&A	1021							646	13	621	34						-817	7				
41-137-20480	-85.1952	36.5438	8143		D&A	982							622	-8	600	23	39		41	10	-693	-773	58				
41-137-20481	-85.2010	36.5519	8144		D&A	876					708	-42	614	-19	592	6	11		14	-22	-916	-1019	-192				
41-137-20485	-85.0711	36.5708	8149		D&A	961							603	-9	579	0	-18		-15	10		-760	71				
41-137-20486	-85.0724	36.5718	8150		D&A	1009							599	-14	577	-2	-22		-19	6							
41-137-20487	-85.1404	36.5812	8151		Oil	975							633	25	621	36	13		19	19							
41-137-20488	-85.0748	36.5247	8152		D&A	1109					721	13	580	-11	557	-5	-100		-98	-59							
41-137-20491	-85.0708	36.5856	8156		O&G	960							591	-18	563	-12	-36		-33	-8		-841	-10				
41-137-20493	-85.1309	36.5438	8160		D&A	929							461	-133	442	-137						-827	-11				
41-137-20494	-85.1313	36.5451	8161		D&A	969							459	-136	438	-142					-787	-817	-2				
41-137-20495	-85.1326	36.5476	8162		O&G	1026							621	24	601	20						-826	-12				
41-137-20496	-85.0687	36.5699	8163		D&A	959							596	-16	573	-7	-25		-22	2		-744	86				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20497	-85.1349	36.5272	8164		D&A	1041							603	10	589	11	-14		-11	-3	-721	-781	35				
41-137-20498	-85.1444	36.5794	8165		D&A	963							643	28	621	29	12		15	11	-880	-926	-132				
41-137-20499	-85.1313	36.5497	8166		Oil	1079							617	21	592	12	-26		-23	-3	-832	-874	-61				
41-137-20500	-85.1578	36.6019	8167		D&A	981											-6		-3	-15							
41-137-20501	-85.1892	36.5591	8170		Oil	993							645	10	622	24	40		43	14							
41-137-20502	-85.0754	36.5287	8171		D&A	1042					701	-11	570	-24	544	-19	-108		-105	-69	-747	-805	27				
41-137-20503	-85.0813	36.5262	8172		D&A	1036					726	19	600	4	574	12	-41		-38	-3							
41-137-20504	-85.0720	36.5741	8173		Gas	976							616	2	590	11	-9		-4	21							
41-137-20506	-85.0514	36.5443	8176		D&A	840							565	-26	545	-24	-16		-12	22		-867	-46				
41-137-20507	-85.1901	36.5522	8177		D&A	943					735	-11	619	-14	600	10	33		36	7							
41-137-20508	-85.1333	36.5489	8181		Oil	1108							543	-55	523	-59					-768	-836	-23				
41-137-20509	-85.1265	36.4887	8182		Oil	902							582	1	562	4						-893	-86				
41-137-20510	-85.1356	36.5510	8183		D&A	1260							585	-15	565	-19	-43		-40	-25	-779	-812	-1				
41-137-20512	-85.0820	36.5697	8190		Oil	720							637	27	615	41	20		28	54	-805	-820	7				
41-137-20514	-85.1208	36.6143	8195		D&A	922							553	5	531	3	-60		-56	-13		-803	18				
41-137-20515	-85.0981	36.5767	8197		O&G	817							577	-30	552	-13	-68		-65	-38	-847	-897	-79				
41-137-20516	-85.0891	36.5675	8199		Oil	897							634	27	614	43	25		36	62		-820	4				
41-137-20517	-85.0833	36.5686	8201		D&A	880							613	3	589	15	-14		-11	15	-861						
41-137-20518	-85.0877	36.5682	8205		D&A	902							631	23	608	36	-92		-89	-63							
41-137-20519	-85.0729	36.5686	8212		D&A	978							594	-17	570	-8	-51		-48	-23							
41-137-20520	-85.0456	36.6191	8213		D&A	1035							568	-25	541	-18	-44		-41	-4	-693	-728	47				
41-137-20521	-85.0712	36.5255	8215		D&A	1088					720	9	568	-21	540	-22	-81		-78	-38							
41-137-20522	-85.1041	36.6096	8229		D&A	857							527	-38	503	-30	-108		-105	-65		-683	140				
41-137-20523	-85.1696	36.5005	8271		D&A	964					814	85	644	62	614	51	0		4	-17	-759	-799	6				
41-137-20524	-85.1532	36.4799	8275		D&A	902					647	-65	576	3	557	7	24		27	11	-724	-804	-2				
41-137-20525	-85.0913	36.5619	8279		Oil	911							640	35	619	50	68		71	96							
41-137-20527	-85.0891	36.5646	8283		Oil	965							670	64	648	78	84		87	113	-743	-793	31				
41-137-20528	-85.1231	36.5682	8288		D&A	821					631	-57	601	5	578	4	-32		-29	-5							
41-137-20529	-85.1184	36.5694	8291		D&A	916							616	18	588	19	-16		-14	13	-739	-801	9				
41-137-20530	-85.1255	36.5673	8299		D&A	890							590	-5	565	-12	-45		-41	-19	-595	-680	128				
41-137-20531	-85.1174	36.5858	8305		D&A	682					617	-79	552	-39	532	-22	-38		-33	-8	-660	-720	90				
41-137-20532	-85.1214	36.5838	8318		D&A	854					614	-79	589	-3	569	8	-36		-31	-7	-685	-778	29				
41-137-20540	-85.0891	36.5596	8340		D&A	820							645	40	620	51	-42		-39	-14	-743	-827	-2				
41-137-20542	-85.1403	36.5900	8365		D&A	770					688	-5	658	61	636	61	67		71	68							
41-137-20543	-85.1415	36.5818	8396		D&A	870							668	59	665	79	41		45	43	-792	-822	-25				
41-137-20544	-85.0948	36.5688	8409		D&A	738							651	45	624	55	42		48	74		-866	-45				
41-137-20545	-85.0527	36.5955	8422		D&A	998							612	4	589	9	-43		-40	-22	-821	-871	-63				
41-137-20546	-85.1202	36.4882	8454		D&A	868							607	26	582	24	-16		-13	-6							
41-137-20547	-85.1296	36.6216	8476		D&A	918					568	-163	518	-23	494	5	-76		-74	-34		-807	15				
41-137-20548	-85.1241	36.4969	8489		Oil	942					734	29	238	-344	562	1	-21	18	-18	-13	-769	-819	-14				
41-137-20549	-85.1053	36.4880	8492		Oil	979					731	17	583	5	556	-1	-25		-23	1	-709	-775	43				
41-137-20550	-85.1037	36.4918	8493		Oil	1058							632	53	608	51	34		36	62		-752	63				
41-137-20552	-85.1040	36.4855	8496		Oil	1011					721	4	601	23	575	20	1		4	29	-708	-739	84				
41-137-20553	-85.1096	36.4870	8512		D&A	939							603	24	576	19	18		21	40							
41-137-20554	-85.0935	36.5682	8515		D&A	799							648	42			42		45	71	-808	-834	-12				
41-137-20556	-85.1200	36.4768	8524		Oil	1043							606	26	582	29	32		35	41	-838	-858	-40				
41-137-20557	-85.1228	36.4849	8525		Oil	980							609	28	584	28	23		26	31	-738	-788	21				
41-137-20558	-85.1186	36.4594	8580		Oil	879							589	10	559	14	3		4	13		-721	120				
41-137-20561	-85.1185	36.4613	8617		Oil	930							580	1	554	8	-3	32	-1	7	-704	-790	49				
41-137-20564	-85.1309	36.6206	8631		D&A	922							537	-7	522	26	-72		-70	-32	-733	-778	43				
41-137-20566	-85.1646	36.5471	8633		D&A	1030					800	75	690	64	650	55	34		38	28		-793	14				
41-137-20569	-84.9910	36.6078	8641		D&A	1059							691	48	665	35	21		24	45	-695	-755	34				
41-137-20570	-84.9906	36.6063	8642		D&A	980							683	41	658	28	-8		-3	20		-848	-58				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20571	-84.9910	36.6051	8645		D&A	1042							672	29	647	18	14		17	37		-753	37				
41-137-20572	-85.1274	36.6139	8649		Oil	902							552	3	539	4	-13		-10	26		-800	19				
41-137-20574	-84.9888	36.6094	8651		D&A	1130							680	42	646	13	-21		-17	17		-801	-10				
41-137-20575	-85.1265	36.6213	8653		D&A	942							552	15	517	28	-33	-33	-58	-15		-844	-21				
41-137-20576	-85.1268	36.4859	8659		Oil	899							602	21	587	31	11		14	16		-813	-5				
41-137-20577	-85.1281	36.6019	8666		Oil	882							570	3	552	3	-20		-7	17	-779	-829	-16				
41-137-20578	-85.0176	36.5718	8667		Oil	1050							606	-17	579	-21	-21										
41-137-20579	-85.1290	36.6011	8670		D&A	856							556	-13	535	-16	-52		-59	-37	-645	-738	74				
41-137-20580	-85.1267	36.6017	8673		Oil	836							536	-29	522	-25	-22		-20	6	-790	-810	3				
41-137-20581	-85.1305	36.6094	8675		D&A	771							518	-41	496	-47	-123				-770	-798	18				
41-137-20582	-85.0801	36.5770	8685		Oil	881							472	-141	442	-132	-219					-911	-83				
41-137-20584	-85.0770	36.6158	8695		D&A	860							580	5	557	4	-3		1	46		-790	38				
41-137-20585	-85.0818	36.6127	8704		D&A	800							600	25	570	16	-25										
41-137-20586	-85.1276	36.6008	8711		D&A	830							558	-10	447	-102	-20	-10	-16	8	-871	-905	-92				
41-137-20587	-85.0562	36.6127	8715		D&A	889							489	-102	464	-110	-134		-131	-96		-789	12				
41-137-20588	-85.1253	36.6038	8718		D&A	885							565	4	540	-4	-17		-13	16		-759	56				
41-137-20591	-85.1641	36.5459	8725		D&A	1005							665	40	639	44	16		19	9		-810	-2				
41-137-20592	-85.1278	36.6197	8739		D&A	919							523	-18	498	-3	-79		-76	-36		-874	-52				
41-137-20593	-85.1334	36.6022	8741		D&A	819											-5		-2	16	-847	-926	-115				
41-137-20594	-85.1344	36.6007	8746		D&A	841							581	5	552	-5	18		21	36	-770	-785	25				
41-137-20595	-85.1301	36.6022	8749		D&A	890							530	-39	508	-42	18		22	44		-794	18				
41-137-20596	-85.0938	36.5624	8751		D&A	851							571	-33	550	-19	-42		-39	-13	-677	-747	76				
41-137-20597	-85.0794	36.5277	8753		D&A	1035					721	12	599	3	569	6	-67		-64	-29	-855	-903	-72				
41-137-20598	-85.1251	36.6087	8768		D&A	875							545	-9	525	-13	-39		-37	-3	-800	-825	-8				
41-137-20599	-85.1231	36.6090	8769		D&A	896							549	-6	511	-25	-20		-18	18	-742	-817	1				
41-137-20601	-85.0779	36.6181	8772		D&A	918							607	35	582	43			36	83		-718	110				
41-137-20603	-85.0779	36.5278	8786		D&A	1023							595	0	571	8	-70		-67	-31		-801	31				
41-137-20604	-85.0763	36.6021	8790		D&A	900					700	-45	587	-3			-20		-18	18	-710	-780	49				
41-137-20605	-85.0561	36.6154	8799		D&A	1003							552	-37	530	-41	-54		-52	-15	-836	-865	-66				
41-137-20606	-84.9898	36.6054	8801		D&A	1062							691	51	657	27	22		25	53	-752	-822	-32				
41-137-20607	-85.1272	36.6037	8804		D&A	897							545	-18	527	-19	-11		-7	20	-824	-856	-42				
41-137-20608	-85.1959	36.5401	8807		D&A	982											22		25	-5		-800	35				
41-137-20609	-85.0771	36.5265	8808		D&A	1062					730	21	597	3	566	4	-83		-79	-42		-828	5				
41-137-20610	-85.0534	36.5355	8811		D&A	968					713	-26	590	6	563	-1	-52		-46	-6	-720	-800	22				
41-137-20611	-85.0742	36.5789	8812		D&A	851							586	-29	561	-15	-57		-54	-28	-800	-860	-29				
41-137-20612	-85.1251	36.6098	8815		D&A	900							563	11	543	6	-46		-43	-8	-782	-816	2				
41-137-20613	-85.1242	36.6108	8816		D&A	882					662	-58	532	-19	509	-26	-53		-50	-13	-678	-738	81				
41-137-20615	-85.0939	36.5661	8818		Oil	900							624	19	602	33	37		40	66							
41-137-20616	-85.0595	36.5272	8819		D&A	1050							574	-9	562	1	-5		0	44		-799	44				
41-137-20617	-85.1243	36.4868	8821		Oil	922							608	27	582	25	18		21	25							
41-137-20618	-85.1240	36.4888	8825		D&A	862							572	-9	552	-6	8		12	16		-759	47				
41-137-20619	-85.1251	36.4889	8826		Oil	901					717	11	611	29	587	29					-751	-785	21				
41-137-20620	-85.0929	36.5673	8829		Oil	901							500	-106	471	-99	-399				-759	-859	-37				
41-137-20621	-85.1261	36.4896	8831		Oil	901					705	0	609	27	585	27	0		13	16	-777	-830	-24				
41-137-20623	-85.1264	36.4874	8833		Oil	921							626	45	606	49	41		45	48							
41-137-20624	-85.0512	36.5539	8834		D&A	900							611	12	580	5	-31		-27	2	-755	-791	30				
41-137-20627	-85.1277	36.4879	8851		D&A	841					641	-64	536	-45	511	-46	-69		-67	-65							
41-137-20630	-85.0548	36.5431	8857		D&A	843							572	-19	549	-19	-74		-72	-38	-769	-814	8				
41-137-20631	-85.0551	36.6102	8860		D&A	996							571	-23	546	-30	-42		-39	-7		-771	29				
41-137-20633	-85.0189	36.5723	8862		Oil	1065							611	-13	590	-10	-10				-756	-801	7				
41-137-20634	-85.0322	36.5616	8863		D&A	840							637	30	604	21											
41-137-20635	-85.0561	36.6178	8864		D&A	1002											-43		-40	-1	-783	-857	-60				
41-137-20636	-85.0971	36.5645	8866		Oil	979											54		56	82	-833	-888	-67				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20638	-85.0883	36.6172	8879		D&A	944							558	-8	542	10	-34		-31	15	-769	-801	26				
41-137-20640	-85.0547	36.6114	8881		D&A	1012							659	66	633	58	-47		-43	-10		-812	-13				
41-137-20642	-85.0497	36.6035	8892		D&A	1007							595	-8	564	-16	-4		-1	22		-757	40				
41-137-20643	-85.0539	36.6123	8893		D&A	1024							578	-15	551	-25	-42		-39	-5		-883	-86				
41-137-20645	-85.0952	36.5642	8905		D&A	901							623	19	603	35	26		29	55		-848	-26				
41-137-20646	-85.0210	36.5992	8909		D&A	1100							650	27	622	23	44		47	57		-779	-2				
41-137-20647	-85.0293	36.5959	8910		D&A	1155							639	20	611	20	42		45	52		-710	69				
41-137-20648	-85.0536	36.6107	8912		D&A	1018							572	-23	548	-28	-43		-40	-8	-747	-772	25				
41-137-20650	-85.0562	36.6144	8916		D&A	977							569	-21	542	-32	-50		-47	-11	-697	-812	-13				
41-137-20652	-85.0344	36.5657	8921		D&A	920							650	39	621	35	47		51	73	-795	-855	-43				
41-137-20654	-85.0385	36.5681	8926		D&A	860							651	38	623	36	59		63	84		-883	-70				
41-137-20657	-85.0504	36.5887	8940		D&A	1153							608	-6	583	0	-7	32	-5	7	-799	-888	-77				
41-137-20658	-85.1094	36.5810	8951		D&A	705							565	-35			-40		-34	-8	-719	-804	8				
41-137-20661	-85.0518	36.5931	8972		D&A	1025							575	-35	550	-31	-54		-52	-37							
41-137-20662	-85.0982	36.6209	8983		D&A	917							509	-46	485	-14	-88		-85	-37	-711	-803	24				
41-137-20664	-85.1199	36.6188	8988		D&A	922							532	-11	507	6	-79		-76	-30	-796	-823	1				
41-137-20665	-85.0461	36.6052	8997		D&A	1016							601	-2	575	-7	18		21	44		-810	-20				
41-137-20666	-85.1034	36.6208	9000		D&A	921							524	-27	500	7	-60		-57	-9	-785	-865	-39				
41-137-20667	-85.0954	36.5697	9026		Oil	704							638	32	615	46	19		22	48	-738	-819	2				
41-137-20669	-85.0774	36.5657	9033		D&A	761							582	-28	559	-16	-164		-161	-136		-779	50				
41-137-20670	-85.1090	36.4975	9047		D&A	972							604	23	582	23	-11		-8	12		-853	-45				
41-137-20671	-85.1056	36.5761	9055		Oil	720							563	-41	535	-27	-45		-41	-15		-871	-57				
41-137-20674	-85.0877	36.5711	9088		Oil	699							611	2	588	16	-22		-18	8		-853	-29				
41-137-20676	-85.1542	36.6039	9093		Oil	983							611	15	588	14	17	47	20	15		-927	-122				
41-137-20683	-85.0877	36.5099	9166		D&A	1295					709	11	607	21	583	25	-41	-3	-38	2		-840	-6				
41-137-20684	-85.0797	36.5233	9167		D&A	1131					759	53	615	22	589	28	-38		-35	3		-829	5				
41-137-20685	-85.0708	36.5363	9170		Oil	1023					750	26	603	8	582	16	-14		-11	22		-821	6				
41-137-20686	-85.0657	36.5286	9175		D&A	1141					727	9	576	-12	553	-9	-26		-24	16		-838	-2				
41-137-20688	-85.0694	36.5366	9180		D&A	1007					761	35	607	13	581	15	-20	19	-17	16		-817	9				
41-137-20689	-85.0683	36.5359	9192		D&A	1035					767	41	621	28	595	29	-1		2	36		-864	-38				
41-137-20690	-85.0697	36.5355	9197		D&A	1012					805	81	620	26	594	29			10	44		-865	-39				
41-137-20691	-85.0718	36.5374	9212		D&A	1020					762	38	602	6	574	8	-32		-29	2		-902	-75				
41-137-20692	-85.0692	36.5348	9214		D&A	1040					736	12	610	17	585	20	0		2	36							
41-137-20693	-85.0714	36.5354	9218		D&A	994					771	49	614	19	580	15	-13		-10	23		-861	-34				
41-137-20695	-85.0731	36.5364	9244		D&A	1009					756	34	599	3	573	7	-24		-21	11	-716	-781	46				
41-137-20696	-85.0776	36.5346	9249		Oil	986					726	10	594	-4	568	3	-38	0	-35	-4		-967	-140				
41-137-20697	-85.0828	36.5606	9250		D&A	882							610	3	588	16	-34		-30	-6		-815	12				
41-137-20698	-85.0731	36.5343	9259		Oil	989					759	39	591	-4	567	2	-25		-22	11		-888	-60				
41-137-20700	-85.0929	36.5971	9296		D&A	919							644	57	369	-184	36	52	39	72	-726	-801	22				
41-137-20701	-85.0799	36.5244	9376		D&A	1078					761	55	602	8	580	18	-41		-38	-1	-733	-778	55				
41-137-20702	-85.1456	36.4394	9377		D&A	925							610	37	585	57	-4		-2	4	-731	-791	0				
41-137-20703	-85.0783	36.5231	9381		D&A	1174					746	40	622	30	594	33	-51		-48	-9		-837	-2				
41-137-20704	-85.1379	36.4431	9395		D&A	924							589	12	564	33	22	54	25	33		-868	-61				
41-137-20705	-85.1083	36.4460	9397		Oil	892							607	34	583	45	8		10	44	-694	-744	126				
41-137-20706	-85.1384	36.4456	9398		D&A	910							590	11	564	31	25	60	28	33	-694	-754	50				
41-137-20707	-85.1282	36.4431	9401		D&A	880					726	-7	588	9	560	27	-1	32	1	16		-869	-37				
41-137-20708	-85.1271	36.4339	9402		D&A	917					714	-14	579	8	553	28	-11	23	-8	15	-734	-809	30				
41-137-20709	-85.1099	36.4463	9404		D&A	886							617	43	591	51	18	44	20	51		-855	14				
41-137-20710	-85.1088	36.4471	9405		D&A	912							615	41	588	48	18	43	20	52		-869	0				
41-137-20712	-85.1142	36.4307	9407		D&A	874					704	-32	562	-2	534	14	-25	9	-22	17		-872	-1				
41-137-20713	-85.1315	36.4438	9408		D&A	891							581	1	559	25	19	36	21	33		-834	-11				
41-137-20714	-85.1180	36.4303	9409		D&A	868					726	-7	590	25	560	40	8	43	11	45		-900	-38				
41-137-20717	-85.1127	36.4324	9442		D&A	871					723	-15	581	16	554	32	-1	34	2	42							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-137-20718	-85.1291	36.4403	9444		Oil	869					688	-43	559	-18	530	0	-37	-1	-34	-17							
41-137-20719	-85.1171	36.4342	9447		D&A	900					704	-31	574	6	545	20	-18	17	-15	17							
41-137-20720	-85.1259	36.4406	9462		D&A	878					706	-27	572	-6	547	15		-4	-36	-18		-876	-38				
41-137-20721	-85.1280	36.4396	9463		Oil	849							561	-15	541	11											
41-137-20722	-85.1282	36.4413	9464		D&A	878					692	-41	574	-5	545	13	-22	13	-19	-3							
41-137-20724	-85.1300	36.4968	9467		D&A	865					681	-22	552	-30	525	-36	-34	1	-31	-30		-868	-61				
41-137-20725	-85.1293	36.4387	9469		D&A	868					679	-52	548	-28	520	-10	-51	-116	-48	-31	-702	-767	65				
41-137-20726	-85.1236	36.4413	9470		D&A	904					722	-13	592	14	564	31	-31	4	-30	-10		-834	9				
41-137-20726R-1	-85.1236	36.4413	9750		D&A	904					722	-13	592	14	564	31	-31	4	-30	-10		-896	-52				
41-137-20727	-85.1280	36.4386	9471		D&A	860					684	-47	568	-8	540	10	-29	6	-26	-8		-899	-65				
41-137-20728	-85.1081	36.4449	9472		D&A	894							618	44	592	55	22	55	25	59							
41-137-20729	-85.1296	36.4413	9473		D&A	888					712	-20	582	4	544	12	0	35	3	18		-860	-32				
41-137-20730	-85.1235	36.4402	9477		D&A	928					720	-14	590	13	561	30	-29	7	-26	-6		-906	-61				
41-137-20731	-85.1299	36.4366	9479		D&A	869					667	-62	554	-20	526	-2	-43	-8	-40	-21		-889	-58				
41-137-20732	-85.1217	36.4429	9482		D&A	902							600	21	582	47	0		4	23		-876	-28				
41-137-20733	-85.1273	36.4421	9497		D&A	873					704	-30	574	-5	552	19	-21	14	-18	-2		-918	-84				
41-137-20734	-85.1301	36.4378	9505		D&A	894							556	-18	534	6	-114		-110	-92		-871	-41				
41-137-20735	-85.1338	36.4353	9506		D&A	922					692	-33	560	-11	531	5	-23	11	-20	-3							
41-137-20736	-85.1276	36.4410	9499		D&A	860					706	-27	576	-2	548	16	-22	17	-19	-2		-841	-7				
41-137-20737	-85.1256	36.4443	9502		D&A	825					692	-44	561	-21	533	-3	-69	-32	-66	-51							
41-137-20738	-85.1336	36.4364	9508		D&A	935					721	-5	561	-12	534	7	-16	18	-13	4		-898	-76				
41-137-20740	-85.1256	36.4394	9519		D&A	895							606	30	543	13	-17		-15	5		-862	-22				
41-137-20743R-1	-85.1241	36.4420	9751		D&A	1859					709	-26	559	-19	521	-12	12		16	34	-822	-880	-37				
41-137-20744	-85.1113	36.4293	9532		D&A	881					694	-44	553	-9	524	8	-40	0	-36	8		-852	23				
41-137-20746	-85.1272	36.4387	9534		D&A	904					710	-21	574	-2	547	18	-23	12	-20	-1		-911	-74				
41-137-20747	-85.1151	36.4201	9537		D&A	859							539	-17	509	3	-68	-27	-66	-19	-857	-911	-39				
41-137-20748	-85.1127	36.4267	9546		D&A	880							566	6	537	23	-58	-28	-55	-10		-851	23				
41-137-20750	-85.1282	36.4449	9549		D&A	856					708	-27	598	17	559	24	-4	31	-1	13		-938	-107				
41-137-20751	-85.1225	36.4418	9550		D&A	909					723	-12	591	14	562	29	-36	-1	-33	-13	-813	-883	-37				
41-137-20752	-85.1064	36.4313	9551		D&A	905					705	-37	561	-1	532	19	-43	-6	-40	9	-843	-916	-35				
41-137-20753	-85.1112	36.4265	9554		D&A	897					701	-36	587	27	558	46	3	38	6	53							
41-137-20754	-85.1144	36.4274	9557		D&A	878					684	-51	549	-13	519	3	-66	-31	-63	-21		-932	-61				
41-137-20755	-85.0978	36.4411	9561		D&A	887							567	1	537	16	-68		-65	-13	-882	-907	-23				
41-137-20756	-85.1054	36.4327	9575		D&A	979							572	9	544	29	-33	3	-29	20	-780	-855	27				
41-137-20757	-85.1247	36.4454	9576		D&A	823							565	-16	535	-1	-82	-44	-79	-63		-872	-33				
41-137-20759	-85.1272	36.4422	9582		D&A	872					710	-24	575	-4	549	16	-126	20	-123	-107	-715	-790	44				
41-137-20761	-85.1434	36.4428	9589		D&A	723							549	-27	524	-6	-63	-29	-61	-56							
41-137-20764	-85.0534	36.4309	9603		D&A	1000					740	12	585	48	557	86	-40										
41-137-20765	-85.1274	36.4419	9613		D&A	870					703	-30	571	-8	545	12	-26	9	-23	-7	-802	-827	7				
41-137-20771	-85.1313	36.4417	9657		D&A	935							589	11	564	32	24	57	28	42							
41-137-20772	-85.1229	36.4198	9666		D&A	940							550	-7	524	15	-33	1	-30	8		-885	-29				
41-137-20773	-85.1246	36.4221	9688		D&A	884							556	-3	531	19	-31	2	-28	7		-832	19				
41-137-20775	-85.1397	36.4762	9709		D&A	913							598	21	573	23	17	49	18	11							
41-137-20777	-85.1279	36.4396	9729		Oil	846					693	-38	561	-15	534	4	-53	-10	-51	-33							
41-137-20778	-85.1293	36.4392	9740		D&A	848					678	-52	544	-32	515	-14	-54	-14	-51	-34							
41-137-20779	-85.1300	36.4412	9741		D&A	902					708	-24	579	1	551	19	1	51	4	19							
41-137-20782	-85.1123	36.4477	9778		D&A	736							576	1	561	19											
41-141-20003	-85.1162	36.1317	1070		D&A	1863			1251	8												-399	28				
41-141-20004	-85.5328	36.1723	1325		D&A	1056					953	0	810	0	780	1	283		284	-34							
41-141-20005	-85.3701	36.1665	1335		D&A	1137							715	18			189		171	20							
41-141-20008	-85.4078	36.1476	1901		D&A	980							714	-5	685	2	142		148	-14							
41-141-20011	-85.5656	36.1719	1935		D&A	1025							841	-2	805	3	384		388	28							
41-141-20029	-85.4280	36.1304	1987		D&A	1010							750	7			196		199	21							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-141-20031	-85.4219	36.1479	1998		Gas	950													150	-19							
41-141-20036	-85.4177	36.1303	2020		D&A	1018							720	-9			216					-618	99				
41-141-20037	-85.4264	36.1278	2021		D&A	1042					834	-10	751	13			235		213	35							
41-141-20039	-85.3964	36.1522	2024		Gas	1020							740	34					207	50		-688	3				
41-141-20052	-85.4231	36.1295	2085		O&G	995					805	-38	703	-33	677	9						-740	-28				
41-141-20055	-85.4303	36.1286	2113		Gas	1032					886	40	732	-12					200	20							
41-141-20057	-85.4224	36.1268	2131		D&A	1060							772	40			268										
41-141-20059	-85.3915	36.1772	2193		D&A	1424					871	-8	709	0	676	-9	166		169	-7		-1002	-347				
41-141-20060	-85.3855	36.1751	2194		D&A	1408					857	-10	695	-10	655	-24	118		122	-49	-512	-569	89				
41-141-20063	-85.1153	36.1353	2350		Gas	1840	1540	9	1340	102																	
41-141-20065	-85.4231	36.1368	2383		D&A	1010											153		140	-33		-727	-26				
41-141-20066	-85.1599	36.1074	2421		D&A	1930			1328	42	644	5	493	-1	464	8											
41-141-20067	-85.4573	36.2402	2444		D&A	1076					961	42	806	-4	776	4	259		264	-9							
41-141-20069	-85.3194	36.1800	2466		Gas	1415					841	-36	687	-54			111										
41-141-20070	-85.3328	36.2034	2470		Gas	1405					831	-46	695	-26					137	-1							
41-141-20071	-85.1617	36.1095	2674		Gas	1940	1618	15	1322	36																	
41-141-20073	-85.3197	36.1826	3045		Gas	1380																					
41-141-20074	-85.3787	36.2244	3060		Oil	960					950	36	765	4	735	6	250										
41-141-20075	-85.3791	36.2227	3061		Oil	965					950	38	765	6	735	8	215										
41-141-20077	-85.3810	36.2245	3063		Oil	990					951	35	772	8													
41-141-20079	-85.3968	36.2213	3156		D&A	1084					919	-8	775	-3					256	58							
41-141-20080	-85.3996	36.2308	3166		D&A	1014					895	-35	781	-11													
41-141-20083	-85.3948	36.2255	3184		D&A	1082					922	-4	788	6													
41-141-20084	-85.3965	36.2196	3186		D&A	1135					895	-31	761	-14													
41-141-20086	-85.3798	36.2263	3188		D&A	956					950	33	768	3													
41-141-20087	-85.3239	36.1813	3278		Gas	1403					865	-7	713	-21	673	-105											
41-141-20089	-85.4158	36.2303	3933		D&A	1051					943	13	819	18	783	8	225		263	11							
41-141-20090	-85.3849	36.2163	4358		Oil	1021					926	15															
41-141-20091	-85.3826	36.2163	4359		Oil	975					893	-16	730	-26	703	-18						-572	82				
41-141-20093	-85.3873	36.2202	4363		Oil	1194					974	57	765	-2	737	3					-617	-697	-41				
41-141-20095	-85.3817	36.2181	4382		Oil	977					882	-28															
41-141-20096	-85.3858	36.2086	4695		Oil	1032					970	64	794	45													
41-141-20099	-85.4718	36.2974	4782		D&A	922					868	-35	758	-33	732	-23	277		279	-35	-763	-778	-150				
41-141-20102	-85.3625	36.2024	5191		D&A	1011					853	-5	711	-8	682	-3	153		155	-21		-571	79				
41-141-20103	-85.3620	36.2043	6109		D&A	994					825	-36	702	-18	662	-26						-503	150				
41-141-20104	-85.1636	36.1128	6283		D&A	1921			1221	-65	649	-8	511	6								-482	86				
41-141-20109	-85.3629	36.2071	6677		D&A	1000					875	7	718	-6	689	-1	129					-474	181				
41-141-20112	-85.4861	36.2743	6870		D&A	979							829	43	815	31	309		347	20		-621	-44				
41-141-20113	-85.4791	36.2743	6877		D&A	904											322		325	9							
41-141-20114	-85.4869	36.2718	6878		D&A	998											313		350	23							
41-141-20115	-85.4785	36.2774	6942		D&A	946											304		338	21							
41-141-20117	-85.3221	36.1508	7263		D&A	1300					870	20	718	17	686	0	123										
41-141-20118	-85.3176	36.1788	7283		D&A	1583					1133	254	983	239	943	179											
41-141-20119	-85.4089	36.2320	7531		D&A	986					866	-64	806	7	801	19											
41-141-20121	-85.3163	36.1811	7567		O&G	1435					835	-48															
41-141-20124	-85.3776	36.2194	7884		Oil	958					868	-39															
41-141-20125	-85.3779	36.2175	7887		Oil	959					869	-36															
41-143-10001	-84.8874	35.6711	300		D&A	891			-379	-178	-1074	-208	-1190	2													
41-143-10002	-84.8850	35.6821	356		D&A	896					-960	17	-1110	152													
41-143-20001	-84.9258	35.6212	936		D&A	2006	1430	151	976	305	136	170	8	572													
41-143-20002	-84.9779	35.5366	1046		D&A	714			-230	-32																	
41-143-20004	-84.9845	35.5321	1132		Oil	720			-184	33	-940	-51	-1082	-2													
41-143-20005	-84.9813	35.5348	1163		D&A	728					-998	-129	-1142	-64								-617	1365				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-143-20006	-84.9838	35.5364	1164		D&A	771			-199	13	-931	-76															
41-143-20007	-84.8891	35.6700	1217		D&A	918	762	-198	10	189	-1066	-222															
41-143-20008	-85.0096	35.5864	1220		D&A	1894	368	37	-16	-39	-747	-94	-907	4	-1329	116											
41-143-20009	-84.8239	35.5902	1501		D&A	733											383										
41-143-20010	-85.0237	35.5762	1514		D&A	1857			-41	39	-679	-39	-858	71								-820	185				
41-143-20011	-84.9859	35.5310			D&A	720			-233	-15												-2643	-569				
41-143-20012	-85.0003	35.5098			D&A	700			-236	-2	-955	38	-1062	16								-2728	-310				
41-143-20013	-85.0010	35.5148			D&A	705			-185	45												-2765	-475				
41-143-20014	-84.8195	35.5902			D&A	740											196										
41-143-20015	-85.0835	35.4855	2426		D&A	1167									-1060	-254	-1713				-1223	-1243	428				
41-143-20022	-84.7804	35.7338	6990		D&A	852											-1523				168	40	92				
41-143-20023	-84.8746	35.7663	7616		D&A	1589			-261	-143	-771	116	-921	-180			-1816		-1813	-145							
41-151-00057	-84.3743	36.5664			D&A	1169	255	-29			-401	10	-590	17			-1601	-1614	-1628	54	-2601	-2615	155	-3283	-5551		
41-151-10018	-84.5823	36.5197	10		D&A	1306			498	-15	-19	4	-174	-10													
41-151-10027	-84.4743	36.5467	125		D&A	1641			255	-17	-251	-3	-387	-2													
41-151-10053	-84.5867	36.4826	146		D&A	1560					-41	39															
41-151-10084	-84.5946	36.4652	54		D&A	1250			386	-43	-165	-68	-289	-62													
41-151-10138	-84.5599	36.4705	335		D&A	1478			370	24	-166	5															
41-151-20005	-84.6623	36.3811	472		D&A	1345			441	-31	-85	-10	-231	-27													
41-151-20008	-84.6546	36.3864	487		D&A	1348			326	-128	-188	-102															
41-151-20010R-1	-84.5568	36.4358	1537		Oil	1393	485	-23	255	-2	-272	-5	-367	16													
41-151-20016	-84.6581	36.3484	590		D&A	1379			429	9	-121	22															
41-151-20018	-84.6505	36.3434	595		D&A	1363			387	1	-231	-60	-293	-3													
41-151-20020	-84.6637	36.3452	606		D&A	1400			458	25	-113	18															
41-151-20031	-84.6061	36.4678	700		Oil	1356					-54	3															
41-151-20033	-84.6381	36.5544	702		D&A	1354			736	24	198	31	44	39													
41-151-20035	-84.6568	36.3500	733		D&A	1358			436	19	-166	-21															
41-151-20036	-84.6618	36.3434	737		D&A	1363					-158	-19															
41-151-20041	-84.5782	36.4654	796		D&A	1520			397	7	-133	5															
41-151-20042	-84.6092	36.4671	801		D&A	1292			402	-65	-70	-21	-216	-32													
41-151-20047	-84.5832	36.4705	825		D&A	1505					-135	-21															
41-151-20050	-84.5618	36.3069	865		D&A	1293			43	-22	-516	-17	-623	-3													
41-151-20051	-84.6614	36.3489	867		Gas	1387			435	5	-143	-10															
41-151-20054	-84.6502	36.3697	886		D&A	1328			396	-23	-158	-24															
41-151-20055	-84.6373	36.4213	916		D&A	1541			468	-4	-97	-35	-229	-35													
41-151-20056	-84.5361	36.4979	917		D&A	1419			386	56	-159	10															
41-151-20057	-84.6184	36.2990	942		D&A	1281			199	21	-385	-23	-473	-15													
41-151-20058R-1	-84.5660	36.4431	6811		D&A	1558			282	-15	-240	-16	-358	-15													
41-151-20059	-84.6793	36.3719	966		D&A	1401			553	40	-55	-8															
41-151-20060	-84.5631	36.4308	976		D&A	1390			260	-7	-278	-17	-391	-13													
41-151-20061	-84.6774	36.3772	977		D&A	1462			532	17	-76	-36															
41-151-20063	-84.6231	36.4422	1027		D&A	1522			482	6	-82	-25	-228	-43													
41-151-20064	-84.6523	36.4405	1036		D&A	1488			645	88	104	82	-32	81													
41-151-20065	-84.6468	36.5778	1042		Gas	857			745	-8	217	-17	35	-15													
41-151-20069	-84.5499	36.4591	1057		Oil	1495			325	36	-237	-10															
41-151-20070	-84.5473	36.4534	1058		D&A	1471			281	12	-259	-10															
41-151-20071	-84.5525	36.4492	1061		D&A	1459			207	-68	-291	-44															
41-151-20072	-84.5023	36.5649	1066		D&A	1185			309	-9	-149	-1															
41-151-20073	-84.5691	36.4058	1075		D&A	1489					-288	14	-401	16													
41-151-20074	-84.5728	36.4130	1086		D&A	1410			256	-18	-263	12	-398	-7													
41-151-20075	-84.6752	36.3431	1087		D&A	1355			511	47	-53	48	-171	51													
41-151-20076	-84.6616	36.3412	1088		D&A	1367			403	-19	-203	-61															
41-151-20077	-84.5458	36.4493	1093		D&A	1464			294	37	-284	-20	-388	-8													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20078	-84.5602	36.4587	1097		Oil	1571					-190	11															
41-151-20080	-84.5863	36.4152	1111		D&A	1457			289	-25	-235	-5															
41-151-20081	-84.5579	36.4563	1112		D&A	1520			320	13	-218	-5															
41-151-20082	-84.5830	36.4198	1134		D&A	1474			290	-21	-240	-11	-358	-9													
41-151-20083	-84.5571	36.4601	1137		D&A	1517	585	30	347	34	-177	28															
41-151-20084	-84.6632	36.3438	1138		Oil	1376			438	8																	
41-151-20085	-84.6654	36.3438	1139		Oil	1394			450	14	-124	4															
41-151-20086	-84.5656	36.4561	1140		Gas	1507	579	12	337	8	-203	-10															
41-151-20087	-84.5615	36.4608	1143		D&A	1611	585	19	349	21	-197	-5															
41-151-20088	-84.6018	36.3698	1144		D&A	1210			256	-17	-270	5	-404	-7													
41-151-20089	-84.5739	36.4651	1149		Oil	1500			378	1	-146	4															
41-151-20090	-84.6177	36.3959	1154		D&A	1278			376	23	-156	21	-290	16													
41-151-20091	-84.5235	36.5595	1155		D&A	1450					-100	-2	-245	-21													
41-151-20092	-84.5895	36.4150	1158		Oil	1243	531	-23	395	73	-221	0															
41-151-20093	-84.5136	36.5571	1159		D&A	1460					-118	17	-263	-6													
41-151-20094	-84.6646	36.3423	1165		Oil	1386	736	72	438	6																	
41-151-20096	-84.5766	36.4170	1168		D&A	1477	517	-10	279	-10	-243	11															
41-151-20097	-84.5899	36.4127	1170		Oil	1159			308	-12	-209	16															
41-151-20098	-84.6090	36.4034	1172		D&A	1362			324	-26	-176	12	-308	6													
41-151-20099	-84.5908	36.4018	1177		Oil	1198	570	46	308	2	-240	5															
41-151-20100	-84.5901	36.4101	1178		Oil	1125	545	0	309	-8	-215	16															
41-151-20101	-84.5068	36.4127	1181		D&A	1477			80	-31	-435	-10	-575	-15													
41-151-20102	-84.5930	36.4102	1187		Oil	1128			316	-8	-217	5															
41-151-20103	-84.5953	36.4019	1189		Oil	1321					-231	1	-285	68													
41-151-20104	-84.5899	36.4076	1190		Oil	1185	580	41	311	-2	-201	36															
41-151-20105	-84.5934	36.4077	1194		Oil	1191			319	-2	-203	23															
41-151-20107	-84.5868	36.4099	1197		D&A	1344			300	-8	-242	-1															
41-151-20108	-84.5986	36.4016	1198		D&A	1475	555	13	315	-8	-235	-12	-350	-5													
41-151-20109	-84.5811	36.4606	1203		D&A	1525			392	7	-141	0	-261	9													
41-151-20110	-84.5708	36.5683	1204		D&A	1306	776	64	536	-20	35	-28	-104	-5													
41-151-20111	-84.6687	36.3404	1205		Oil	1336			444	2	-122	1															
41-151-20113	-84.5305	36.3858	1211		Oil	1150			94	-18	-420	3															
41-151-20114	-84.5903	36.4051	1213		Oil	1258			316	6	-206	35															
41-151-20115	-84.6437	36.4098	1216		D&A	1458			482	18	-96	-26	-234	-29													
41-151-20117	-84.6304	36.4112	1222		D&A	1403			489	61	-95	12	-227	11													
41-151-20118	-84.5872	36.4048	1224		Oil	1442	532	6	332	30	-242	8															
41-151-20119	-84.4974	36.3678	1225		D&A	1245			37	31	-537	-7	-675	-22	-785	-44											
41-151-20120	-84.5937	36.4001	1226		Oil	1198	496	-30	291	-19	-222	18															
41-151-20121	-84.5901	36.4601	1227		D&A	1504			412	5	-124	-5	-254	-5													
41-151-20123	-84.6202	36.3785	1229		D&A	1278					-174	29	-298	29	-376	-9											
41-151-20124	-84.6071	36.4291	1231		Oil	1346			427	26	-138	-2															
41-151-20125	-84.5302	36.3829	1232		D&A	1246					-419	10	-520	38													
41-151-20126	-84.5873	36.4071	1234		Oil	1223			312	7	-217	29	-355	9													
41-151-20127	-84.5927	36.4126	1235		Oil	1336			316	-11	-204	14															
41-151-20129	-84.5152	36.3668	1237		D&A	1407			113	70	-431	59	-537	78													
41-151-20130	-84.5335	36.3968	1238		D&A	1452	384	1	152	14	-412	-13															
41-151-20131	-84.5980	36.4054	1240		D&A	1278			312	-16	-219	-1	-339	0													
41-151-20132	-84.5274	36.3909	1242		D&A	1290			86	-30	-434	-12															
41-151-20133	-84.5431	36.3448	1245		D&A	1174	364	50	32	-35	-474	4	-609	-8													
41-151-20135	-84.5253	36.3799	1248		Oil	1240					-450	-6	-550	23	-648	-25											
41-151-20136	-84.5930	36.3973	1251		Oil	1414			324	20	-250	-3															
41-151-20137	-84.5259	36.3878	1252		Oil	1178			108	1	-410	20															
41-151-20138	-84.6784	36.4198	1253		D&A	1480			572	-22	20	-32	-113	-21													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20139	-84.5869	36.4126	1254		Oil	1395	525	-18	289	-23	-233	2															
41-151-20140	-84.6051	36.3888	1256		D&A	1453			293	-21	-223	5															
41-151-20141	-84.5929	36.4034	1257		Oil	1137			366	53	-204	32															
41-151-20142	-84.5739	36.4674	1264		D&A	1508			380	-3	-166	-22															
41-151-20143	-84.5218	36.3814	1265		D&A	1271			131	45	-473	-24	-573	5													
41-151-20144	-84.5919	36.4254	1266		D&A	1470					-190	1	-313	1													
41-151-20145	-84.5843	36.4046	1267		Oil	1497	525	6	292	-3	-231	28															
41-151-20147	-84.5966	36.3996	1273		Oil	1419					-229	4															
41-151-20148	-84.5179	36.3748	1275		D&A	1721					-269	201	-561	36													
41-151-20149	-84.5347	36.3558	1277		D&A	1254	394	95	74	9	-450	21															
41-151-20150	-84.6813	36.4228	1278		Gas	1430			602	-7	60	-6	-78	1													
41-151-20151	-84.5926	36.4149	1279		Oil	1482			337	6	-222	-10	-364	-30													
41-151-20152	-84.6100	36.4268	1280		D&A	1359	629	3	457	52	-61	72	-272	-13													
41-151-20154	-84.5883	36.4029	1284		Oil	1124			292	-10	-224	27															
41-151-20156	-84.5190	36.3967	1287		D&A	1361			74	-38	-420	9	-563	-5													
41-151-20157	-84.4978	36.4014	1289		D&A	1325			15	-66	-473	-9	-635	-33													
41-151-20158	-84.5963	36.3971	1290		Oil	1459			301	-9	-227	11															
41-151-20159	-84.5357	36.3913	1295		D&A	1348	372	-4	144	12	-422	-19	-548	-17													
41-151-20163	-84.5203	36.3897	1299		D&A	1155			123	23	-451	-13	-585	-18													
41-151-20165	-84.6038	36.4295	1301		D&A	1198			410	19	-156	-10															
41-151-20166	-84.5998	36.3874	1304		D&A	1380	572	65	279	-21	-230	16	-375	-6													
41-151-20167	-84.5276	36.3860	1305		Oil	1138	378	37	122	15	-412	17															
41-151-20168	-84.5351	36.3588	1306		Oil	1225			125	54	-457	5															
41-151-20169	-84.6759	36.4261	1308		Oil	1475			675	76	57	1	-75	12													
41-151-20170	-84.5927	36.4056	1309		Oil	1109			299	-17	-217	16															
41-151-20172	-84.5173	36.3880	1310		D&A	1284			185	94	-396	52	-534	42													
41-151-20173	-84.5187	36.3828	1311		Oil	1362			56	-27	-490	-36	-594	-12													
41-151-20174	-84.5336	36.3865	1313		Oil	1128			172	53	-386	30															
41-151-20175	-84.5893	36.4178	1317		Gas	1459			311	-15			-342	-5													
41-151-20176	-84.5613	36.3734	1318		D&A	1562	427	42	173	1	-330	42	-476	26													
41-151-20177	-84.6034	36.4315	1319		Oil	1264	505	-116	394	1	-68	75															
41-151-20180	-84.5312	36.3884	1324		Oil	1151			116	-2	-397	21															
41-151-20181	-84.5295	36.3774	1326		Oil	1288			112	18	-490	-51															
41-151-20182	-84.5796	36.4177	1327		D&A	1453	491	-45	265	-33	-261	-17															
41-151-20183	-84.6720	36.3468	1329		D&A	1412			582	123																	
41-151-20184	-84.5789	36.2806	1331		D&A	1507			75	-9	-483	6	-601	1													
41-151-20185	-84.6041	36.4266	1332		D&A	1359			433	47	-145	6															
41-151-20186	-84.6007	36.4296	1333		D&A	1244			404	23	-164	-9															
41-151-20188	-84.4718	36.5393	1337		D&A	1508			274	15	-274	-7	-417	-15													
41-151-20189	-84.5262	36.4091	1338		D&A	1461	491	100	101	-42	-433	-40	-553	-34													
41-151-20190	-84.5293	36.3590	1339		D&A	1118	308	22	86	28	-505	-30															
41-151-20191	-84.5321	36.3579	1340		Oil	1178			44	-19	-500	-29	-624	-27													
41-151-20192	-84.6780	36.4283	1343		Oil	1465			657	47	31	-35															
41-151-20193	-84.5814	36.4046	1345		D&A	1472			275	-13	-252	16															
41-151-20194	-84.5499	36.4560	1348		D&A	1490			306	23	-246	-11															
41-151-20195	-84.6316	36.4982	1350		D&A	915			665	45	105	27	-45	38	-94	30											
41-151-20196	-84.5279	36.3938	1355		D&A	1395					-455	-39															
41-151-20197	-84.5347	36.3613	1360		Oil	1184			82	7	-440	17															
41-151-20198	-84.5943	36.3957	1362		Oil	1421			261	-42	-265	-18															
41-151-20199	-84.5844	36.4023	1363		Oil	1440			332	40	-260	3	-384	-2													
41-151-20200	-84.5845	36.4069	1364		D&A	1455			337	39	-253	1	-369	3													
41-151-20201	-84.5268	36.3834	1365		Oil	1248			158	58	-434	1															
41-151-20202	-84.5376	36.3569	1366		D&A	1250			184	110	-393	68															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20203	-84.5639	36.3320	1370		D&A	1467			135	32	-403	57	-543	29													
41-151-20204	-84.6672	36.4324	1371		Oil	1500	804	21	617	32	64	20															
41-151-20205	-84.6204	36.2973	1373		D&A	1420			226	42	-360	-1	-452	2													
41-151-20206	-84.5316	36.3606	1374		Oil	1162	222	-71	52	-15	-470	-4															
41-151-20207	-84.4350	36.5366	1375		D&A	1378			138	-6	-407	-14															
41-151-20208	-84.5313	36.3648	1379		Oil	1250			124	50	-424	32	-540	47													
41-151-20209	-84.4864	36.3973	1382		D&A	1385			35	-1	-485	11	-649	-5													
41-151-20210	-84.5913	36.3988	1383		D&A	1290			290	-12	-266	-17	-370	0													
41-151-20211	-84.5203	36.4316	1384		D&A	1604			176	13	-376	-13	-592	-100													
41-151-20212	-84.5377	36.3599	1386		D&A	1294			128	48	-466	-13															
41-151-20213	-84.5594	36.2735	1387		Gas	1320			40	7	-540	-10	-660	-15													
41-151-20214	-84.5724	36.3097	1389		D&A	1292					-462	11															
41-151-20215	-84.5332	36.3839	1390		D&A	1208			112	-2	-416	5	-536	14													
41-151-20216	-84.5958	36.4067	1391		Oil	1131	567	18	332	7	-195	27															
41-151-20217	-84.6031	36.3263	1393		D&A	1410			202	11	-367	2															
41-151-20218	-84.6163	36.4918	1396		D&A	1335			581	26	0	-23	-147	-20													
41-151-20219	-84.5224	36.3886	1400		Oil	1179	343	9	155	53	-439	-3															
41-151-20220	-84.5354	36.3888	1401		D&A	1078			62	-65	-454	-46															
41-151-20221	-84.5320	36.3551	1402		D&A	1138			105	48	-516	-37															
41-151-20222	-84.5264	36.3774	1405		Oil	1300			110	22	-480	-34															
41-151-20223	-84.6033	36.4350	1407		D&A	1300			448	48	-124	11	-250	11													
41-151-20224	-84.5298	36.3625	1408		Oil	1246			66	0	-458	7	-558	36													
41-151-20225	-84.5070	36.3969	1411		D&A	1670			10	-82	-490	-36	-634	-50													
41-151-20226	-84.5236	36.3785	1413		Gas	1283			111	27	-524	-74															
41-151-20227	-84.6007	36.4522	1415		D&A	1504			484	63	-83	22	-227	8													
41-151-20228	-84.5453	36.3379	1418		D&A	1405			99	38	-491	0	-627	-17													
41-151-20229	-84.5058	36.4333	1419		D&A	1372	507	137	164	31	-370	21	-530	0													
41-151-20230	-84.5951	36.3930	1420		D&A	1222			280	-20	-228	21															
41-151-20231	-84.5854	36.3392	1426		Gas	1460	438	36	178	5	-376	13	-484	18													
41-151-20232	-84.6285	36.4418	1427		D&A	1415			472	-19	-61	-20	-203	-34													
41-151-20233	-84.6306	36.4091	1434		D&A	1380			412	-11	-112	-1															
41-151-20234	-84.5901	36.3880	1441		D&A	1466					-266	6															
41-151-20235	-84.5282	36.4467	1444		D&A	1532	449	2			-218	97	-436	3													
41-151-20236	-84.4443	36.4591	1446		D&A	1480			44	20	-428	55	-586	28													
41-151-20237	-84.6656	36.4353	1449		Oil	1370	725	-58	534	-53	22	-24	-126	-33													
41-151-20238	-84.5329	36.3764	1450		D&A	1398			96	-3	-425	8															
41-151-20239	-84.5321	36.3790	1454		Oil	1233			67	-35	-425	6															
41-151-20240	-84.6145	36.2976	1455		Gas	1444			172	5	-395	-17	-506	-32													
41-151-20241	-84.6921	36.5040	1457		D&A	1546			762	2	294	1	82	-11													
41-151-20243	-84.5958	36.4361	1460		D&A	1364							-306	-25													
41-151-20244	-84.5259	36.3584	1461		D&A	1156	274	-3	58	8	-528	-43	-588	20													
41-151-20245	-84.5576	36.4372	1463		Oil	1401	501	-11	301	40	-289	-27	-396	-19													
41-151-20246	-84.5369	36.3542	1467		D&A	1333			109	42	-417	53															
41-151-20248	-84.6195	36.4916	1469		D&A	1300			594	31	60	27															
41-151-20249	-84.6805	36.4265	1475		D&A	1395	820	8	600	-14	125	55	-69	5													
41-151-20250	-84.5403	36.3494	1476		D&A	1120			40	-28	-488	-14	-612	-14													
41-151-20251	-84.6024	36.4049	1477		D&A	1483					-247	-42															
41-151-20252	-84.5217	36.3843	1479		Oil	1267					-457	-12															
41-151-20253	-84.5877	36.4342	1480		D&A	1294							-266	42													
41-151-20254	-84.3720	36.3716	1483		Gas	1464	-226	-139	-320	15	-838	67	-968	-16													
41-151-20255	-84.6122	36.2959	1484		Oil	1446			136	-24	-406	-17															
41-151-20256	-84.6190	36.3141	1485		D&A	1420			205	1	-470	-140															
41-151-20257	-84.6711	36.4325	1487		Oil	1528	818	25	600	2	83	28	-68	18													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20258	-84.7150	36.5588	1488		D&A	1480			872	4	390	-1	198	7													
41-151-20260	-84.5381	36.3622	1490		D&A	1256			103	18	-429	18	-558	20													
41-151-20261	-84.5442	36.3796	1491		Gas	1225			113	-21	-423	-20	-544	-9													
41-151-20262	-84.5639	36.3748	1495		D&A	1457			179	-3	-338	26	-485	7													
41-151-20263	-84.5286	36.3807	1496		Oil	1262			110	11	-408	28															
41-151-20264	-84.5297	36.3566	1498		D&A	1151			45	-10	-519	-38															
41-151-20265	-84.4618	36.4200	1499		D&A	1420			110	114	-409	104	-559	108													
41-151-20268	-84.6644	36.4336	1509		Oil	1400			546	-34	15	-24	-130	-30													
41-151-20269	-84.5747	36.4442	1517		D&A	1490					-164	33	-290	29													
41-151-20270	-84.5242	36.3825	1518		Oil	1218			254	161	-458	-16															
41-151-20271	-84.5289	36.3733	1521		Oil	1422	322	8	42	-43	-510	-63															
41-151-20272	-84.6629	36.4314	1522		Oil	1495	799	29	567	-3	23	-8	-110	-2													
41-151-20273	-84.4856	36.4929	1523		Gas	1380			266	69	-234	76	-418	31													
41-151-20274	-84.6640	36.3496	1525		Oil	1405			474	35	-95	30	-218	27													
41-151-20275	-84.6114	36.3006	1529		D&A	1328			168	3	-462	-79	-501	-22													
41-151-20276	-84.5197	36.3864	1532		Oil	1258	354	33	112	19	-428	17															
41-151-20277	-84.5430	36.3506	1536		D&A	1230			-23	-100	-560	-96	-683	-93													
41-151-20278	-84.4397	36.3971	1540		D&A	1525	135	31	-122	-1	-639	-2	-765	7								-1853	11				
41-151-20279	-84.5327	36.3908	1550		Oil	1262			102	-23	-415	-4															
41-151-20280	-84.5264	36.3717	1552		Oil	1474	313	10	68	-9	-488	-32															
41-151-20281	-84.5990	36.5768	1553		D&A	845	795	-32	595	-48	230	70															
41-151-20283	-84.5539	36.4402	1559		Gas	1500			220	-39	-287	-23	-404	-24													
41-151-20285	-84.6651	36.4380	1563		D&A	1430			620	29	43	-7	-75	14													
41-151-20286	-84.5343	36.3533	1567		D&A	1143			79	20	-446	32															
41-151-20287	-84.5090	36.3862	1570		D&A	1717			68	-4	-439	30	-561	35													
41-151-20288	-84.5264	36.3751	1572		Oil	1372	305	-6	59	-24	-499	-49															
41-151-20289	-84.6918	36.3641	1575		D&A	1413			513	-26	-33	-4	-163	-10													
41-151-20291	-84.4276	36.4175	1579		D&A	1578	18	-87	-178	-66	-759	-129	-786	-34													
41-151-20292	-84.6260	36.3981	1583		D&A	1272					-138	10															
41-151-20293	-84.4175	36.3848	1584		D&A	1230			-166	28	-716	14	-828	8													
41-151-20294	-84.5328	36.3738	1586		D&A	1343			105	11	-418	20	-543	25													
41-151-20295	-84.6616	36.4339	1591		Oil	1383			553	-19	1	-32	-77	29													
41-151-20296	-84.5267	36.3692	1595		Oil	1497			73	0	-473	-14															
41-151-20297	-84.5394	36.3416	1597		D&A	1156			30	-21	-496	-1	-636	-22													
41-151-20298	-84.4481	36.4594	1598		O&G	1455					-431	41															
41-151-20299	-84.6167	36.2868	1606		Gas	1393			147	-7	-391	0	-507	-22													
41-151-20300	-84.5908	36.4862	1609		Gas	1547																					
41-151-20301	-84.5236	36.3739	1611		Gas	1569			70	-5	-525	-67	-583	3													
41-151-20302	-84.6259	36.2968	1613		D&A	1460			210	3	-386	-44	-456	-19													
41-151-20303	-84.6149	36.2923	1614		Oil	1411					-432	-45	-533	-52													
41-151-20304	-84.5036	36.3838	1615		D&A	1288			92	36	-412	74	-544	68													
41-151-20305	-84.5293	36.3707	1616		Oil	1509	332	23	89	8	-451	0															
41-151-20306	-84.6687	36.4344	1618		Oil	1405			558	-37	165	113															
41-151-20307	-84.5594	36.5070	1620		D&A	1510			418	0	-105	-20															
41-151-20308	-84.5230	36.3714	1626		D&A	1732			72	3	-530	-66	-574	18													
41-151-20309	-84.4332	36.4227	1628		D&A	1584			-116	-31	-692	-92	-766	-38													
41-151-20310	-84.5304	36.3748	1633		D&A	1366			36	-55	-486	-45															
41-151-20311	-84.6684	36.3751	1635		D&A	1462			422	-62	-94	-23	-228	-32													
41-151-20313	-84.5298	36.3684	1643		Oil	1380	322	18	63	-14	-445	8															
41-151-20314	-84.4085	36.4571	1645		D&A	1281			-27	51	-556	7	-705	-3													
41-151-20316	-84.5362	36.3846	1660		Oil	1223			133	12	-387	26															
41-151-20317	-84.5957	36.3283	1666		Oil	1470			144	-34	-414	-24	-540	-51													
41-151-20318	-84.4338	36.3953	1667		D&A	1585			-113	25	-615	45	-788	-2													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20319	-84.5243	36.3858	1668		Oil	1136			100	0	-424	13															
41-151-20320	-84.6218	36.2874	1672		Gas	1503			143	-32	-397	-22	-517	-50													
41-151-20321	-84.6748	36.4384	1677		D&A	1461	837	28	617	-3	91	16	-64	2													
41-151-20322	-84.6058	36.4698	1678		Oil	1398			370	-93	-52	2															
41-151-20323	-84.5316	36.3816	1684		Oil	1269			117	11	-405	23															
41-151-20324	-84.5391	36.3855	1694		Oil	1123			119	-11	-393	12															
41-151-20325	-84.6594	36.3248	1700		Gas	1265			435	38	-165	4															
41-151-20328	-84.5259	36.3601	1715		Oil	1360			166	113	-335	146															
41-151-20329	-84.4339	36.4244	1718		D&A	1582			-130	-51	-682	-89	-762	-40													
41-151-20330	-84.3873	36.4097	1723		O&G	1312	72	27	-218	11	-681	56	-862	-7													
41-151-20331	-84.5769	36.3920	1728		Oil	1162			342	84	-286	16															
41-151-20332	-84.4281	36.4228	1732		D&A	1605			-133	-33	-701	-86	-759	-20													
41-151-20333	-84.4837	36.3609	1733		D&A	1665	199	21	-51	-6	-367	213	-705	-2													
41-151-20334	-84.5237	36.3905	1734		D&A	1238			99	-9	-428	2															
41-151-20335	-84.4674	36.3534	1743		D&A	1652	230	93	-91	12	-639	2															
41-151-20336	-84.4431	36.4176	1745		D&A	1440	168	16	-92	-26	-622	-42	-738	-21													
41-151-20337	-84.4474	36.4176	1753		D&A	1538	173	8	-84	-31	-594	-28	-716	-9													
41-151-20338	-84.5396	36.3834	1755		Oil	1137			135	7	-387	21															
41-151-20339	-84.4514	36.3942	1760		D&A	1178	166	26	-52	44	-602	1	-736	16													
41-151-20340	-84.5395	36.3552	1763		D&A	1360			85	9	-440	21															
41-151-20341	-84.5176	36.4653	1769		D&A	1410			218	7	-294	4	-428	1													
41-151-20342	-84.6762	36.4213	1771		Oil	1407			617	27	15	-34															
41-151-20343	-84.6753	36.4237	1772		D&A	1408	758	-37	570	-22	32	-18															
41-151-20344	-84.6352	36.4029	1773		Gas	1357			364	-58	-35	76	-255	-9													
41-151-20345	-84.4514	36.4590	1774		D&A	1452			56	12	-412	52															
41-151-20346	-84.6422	36.4326	1776		D&A	1340	730	11	500	-13	-32	-11	-169	-14													
41-151-20347	-84.6035	36.3418	1777		Oil	1400			148	-76	-420	-89	-454	-13													
41-151-20348	-84.6746	36.4302	1778		Oil	1548	840	40	606	2	163	103															
41-151-20349	-84.6030	36.5234	1782		D&A	1395					55	34															
41-151-20350	-84.4416	36.4090	1783		D&A	1510	106	-18	-142	-52	-662	-56	-764	-23													
41-151-20351	-84.5181	36.3776	1784		D&A	1730			74	3	-490	-26	-570	22								-2156	-65				
41-151-20353	-84.4413	36.4261	1801		D&A	1514			-60	-8	-572	-6	-712	-11													
41-151-20354	-84.5383	36.3880	1805		Oil	1182			122	-11	-388	15															
41-151-20355	-84.6189	36.3864	1806		D&A	1150			376	34	-156	36															
41-151-20355R-1	-84.6202	36.3891	7712		D&A	1158					-142	41	-274	36	-320	22	-1183		-1180	16							
41-151-20356	-84.5483	36.3873	1812		D&A	1135	407	10	155	-6	-379	4	-505	6													
41-151-20357	-84.5860	36.5212	1814		D&A	1364	674	44	594	63	1	15	-111	44													
41-151-20358	-84.6036	36.3249	1820		D&A	1435	437	-28	185	-4	-391	-21	-510	-42													
41-151-20359	-84.5138	36.3763	1828		D&A	1681			43	-17	-499	-23	-602	0													
41-151-20360	-84.5309	36.3486	1829		Oil	1720			20	-23	-518	-20	-640	-24													
41-151-20361	-84.6296	36.3971	1830		D&A	1266					-170	-31															
41-151-20362	-84.5139	36.3713	1840		D&A	1385			11	-38	-563	-78	-624	-14													
41-151-20363	-84.5317	36.3464	1847		D&A	1560			-8	-49	-553	-51	-664	-45													
41-151-20364	-84.5423	36.3899	1859		D&A	1407	395	5	139	-9	-391	1	-515	5													
41-151-20365	-84.6444	36.3468	1860		Oil	1355			405	36	-205	-21	-273	29													
41-151-20366	-84.6408	36.3486	1861		D&A	1345					-191	1	-283	26													
41-151-20367	-84.4769	36.3749	1866		D&A	1229			-81	-42	-523	41	-664	40													
41-151-20368	-84.5304	36.3515	1867		D&A	1370			52	5	-502	-10															
41-151-20369	-84.6653	36.3377	1875		D&A	1366			425	-4	-164	-28	-240	16													
41-151-20370R-1	-84.6262	36.3787	3667		Gas	1281			321	-33	-169	16	-309	0													
41-151-20371	-84.5283	36.3475	1887		D&A	1706	286	6	20	-15	-512	-5	-630	-7													
41-151-20373	-84.5089	36.3749	1890		Oil	1630			58	11	-454	36															
41-151-20374	-84.6321	36.3276	1893		Gas	1450			280	-8			-375	-9													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20376	-84.6058	36.2949	1900		Oil	1479					-433	-22															
41-151-20377	-84.6554	36.3238	1913		D&A	1262					53	235															
41-151-20378	-84.5538	36.2784	1918		Gas	1512	412	113			-538	1	-659	-6													
41-151-20379	-84.5774	36.3946	1919		Oil	1380			280	14	-290	6															
41-151-20380	-84.5749	36.3895	1920		O&G	1262			207	-40	-330	-19															
41-151-20381	-84.5419	36.3874	1921		Oil	1393			141	-1	-373	23															
41-151-20382	-84.5281	36.3499	1923		D&A	1386	272	-8	28	-11	-510	-9															
41-151-20383	-84.5551	36.4437	1936		Gas	1549			249	-21	-253	0															
41-151-20384	-84.4058	36.4287	1937		D&A	1243			-165	-15	-735	-92	-770	9													
41-151-20385	-84.5185	36.3840	1938		Oil	1280			49	-36	-480	-28															
41-151-20386	-84.5427	36.3848	1942		Oil	1240			134	-6	-386	13															
41-151-20387	-84.6429	36.3514	1950		D&A	1345			405	34	-185	-3	-295	5													
41-151-20388	-84.6810	36.4390	1951		D&A	1450			650	10	132	40	-14	36													
41-151-20389	-84.5070	36.3733	1952		D&A	1440	245	-10	5	-34	-512	-15															
41-151-20390	-84.5072	36.3708	1961		Oil	1320	205	-45	-22	-56	-540	-39	-664	-40													
41-151-20393	-84.6665	36.3388	1986		D&A	1284			366	-68	-189	-58															
41-151-20394	-84.5051	36.3750	1988		D&A	1435	235	-19	-5	-44	-535	-36	-637	-15													
41-151-20396	-84.5786	36.3900	1990		D&A	1225			325	67	-265	36	-383	40													
41-151-20397	-84.6459	36.3426	1994		Gas	1400			370	2	-255	-70	-295	9													
41-151-20398	-84.6651	36.4290	1997		Oil	1415	785	12	575	3	23	-9	-117	-9													
41-151-20399	-84.6175	36.3474	2007		Oil	1420																					
41-151-20400	-84.4724	36.4269	2011		Oil	1520					-442	26	-593	30													
41-151-20402	-84.4299	36.5847	2025		D&A	1356			187	9	-284	26	-444	5													
41-151-20403	-84.5070	36.3683	2026		D&A	1421			-3	-31	-519	-13	-629	0													
41-151-20404	-84.6876	36.4394	2037		D&A	1420			650	-10	162	48	-9	20													
41-151-20405	-84.5042	36.3663	2041		D&A	1738	213	-18	-18	-35	-566	-49	-670	-33													
41-151-20406	-84.5847	36.5186	2045		Gas	1300	575	-55	495	-27	-90	-69	-155	6	-255	-33											
41-151-20407	-84.6374	36.3485	2047		Oil	1255			355	8																	
41-151-20408	-84.5816	36.3907	2048		Oil	1130					-280	11															
41-151-20409	-84.6071	36.3506	2053		Gas	1442					-258	42	-378	37													
41-151-20410	-84.6197	36.3345	2071		D&A	1463			253	1			-397	0	-450	5											
41-151-20412	-84.6344	36.3473	2080		Oil	1370					-220	-5															
41-151-20413	-84.6038	36.3505	2084		D&A	1425					-295	16	-415	11													
41-151-20414	-84.5809	36.3884	2095		D&A	1228					-332	-35	-462	-43													
41-151-20415	-84.5744	36.3934	2096		Gas	1385							-445	-18													
41-151-20416	-84.5101	36.3727	2098		D&A	1440			15	-30	-530	-39	-626	-11													
41-151-20417	-84.6125	36.3486	2099		Oil	1406			286	23			-394	6													
41-151-20418	-84.6314	36.3460	2100		Oil	1389																					
41-151-20419	-84.6179	36.3183	2101		D&A	1265			203	-4	-335	-9	-455	-27	-501	-12											
41-151-20420	-84.6285	36.3445	2115		Oil	1434					-286	-47	-356	-3													
41-151-20421	-84.6383	36.3353	2116		Gas	1395					-325	-107	-339	-4													
41-151-20422	-84.6010	36.3474	2128		Oil	1400					-312	15															
41-151-20426	-84.5844	36.3907	2145		Gas	1330			280	8	-300	-17															
41-151-20427	-84.6133	36.3516	2154		Oil	1264			284	13	-276	1															
41-151-20428	-84.5770	36.3978	2155		D&A	1160					-302	-10															
41-151-20429	-84.5808	36.3973	2156		Oil	1248			264	-14	-277	5															
41-151-20432	-84.4898	36.4339	2161		Gas	1585					-435	-14	-573	-6	-626	11											
41-151-20433	-84.6285	36.3473	2162		Oil	1320			340	27	-230	4															
41-151-20434	-84.6485	36.3821	2163		D&A	1300			410	-19	-120	-7	-250	-9													
41-151-20438	-84.6252	36.3488	2187		D&A	1323			333	29	-247	-4	-357	1													
41-151-20439	-84.5875	36.3906	2188		Gas	1330			200	-79	-300	-25	-430	-33													
41-151-20440	-84.6881	36.4451	2190		Gas	1340			676	8	156	31	14	30													
41-151-20441	-84.6372	36.3459	2191		D&A	1280					-250	-43	-317	6													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20442	-84.6227	36.3507	2213		D&A	1265					-305	-57	-385	-22	-425	-3											
41-151-20443	-84.6314	36.3486	2221		D&A	1343					-249	-26	-363	-26													
41-151-20445	-84.5735	36.3909	2233		Gas	1377			197	-49	-333	-20	-443	-8													
41-151-20446	-84.6256	36.3464	2238		Oil	1315			335	35	-225	21															
41-151-20447	-84.4331	36.3653	2240		Gas	1432			-153	25																	
41-151-20448	-84.4892	36.4019	2254		D&A	1265	275	4			-454	27	-615	12													
41-151-20449	-84.6376	36.3513	2265		O&G	1342					-78	120															
41-151-20450	-84.3967	36.3739	2266		D&A	1475	-220	-191	-280	-15	-820	4	-965	-67													
41-151-20451	-84.6483	36.3872	2269		D&A	1239			399	-36	-61	42	-249	-15													
41-151-20452	-84.4381	36.5426	2280		D&A	1460			92	-71	-429	-59	-523	-34													
41-151-20454	-84.6221	36.3475	2294		D&A	1420			310	20																	
41-151-20456	-84.6344	36.3499	2308		Oil	1228					-196	15															
41-151-20457	-84.6569	36.4021	2317		Oil	1306	726	20	496	11																	
41-151-20458	-84.6476	36.3475	2318		D&A	1340	640	22	380	-2																	
41-151-20459	-84.6102	36.2978	2339		O&G	1430																					
41-151-20460	-84.6319	36.3511	2341		Gas	1214					-204	13	-318	14													
41-151-20461	-84.4834	36.4967	2247		Gas	1402			215	12	-198	111	-424	24													
41-151-20462	-84.6827	36.4429	2361		Gas	1475			753	104	277	174	83	121													
41-151-20463	-84.6277	36.3571	2371		Gas	1204					-186	35															
41-151-20464	-84.3962	36.3948	2381		Gas	1537			-193	43																	
41-151-20466	-84.4272	36.5632	2391		D&A	1359			74	-52	-437	-82	-543	-53													
41-151-20467	-84.6069	36.2840	2405		D&A	1470					-464	-39	-580	-59													
41-151-20468	-84.4376	36.3689	2407		Gas	1400			-135	25	-710	-12															
41-151-20469	-84.6077	36.2970	2436		D&A	1457			171	18	-393	8	-495	3													
41-151-20470	-84.4908	36.4869	2445		Gas	1610					-332	-22	-470	-21													
41-151-20471	-84.3928	36.3927	2462		D&A	1805			-259	-11			-859	15													
41-151-20472	-84.6729	36.4280	2472		Oil	1500			608	14	100	48	-75	15	-180	-23											
41-151-20473	-84.5646	36.2746	2475		O&G	1350	388	58	128	81	-488	30	-617	17													
41-151-20474	-84.3546	36.3448	2491		Gas	1452			-490	-26																	
41-151-20476	-84.6085	36.3448	2506		D&A	1422			201	-42	-361	-53	-471	-52													
41-151-20477	-84.6149	36.3539	2511		Oil	1408	578	75	298	17	-250	17	-356	28													
41-151-20478	-84.6209	36.3576	2517		Gas	1449					-211	30	-341	17	-369	45											
41-151-20479	-84.6342	36.3448	2518		Gas	1382			322	-6	-278	-59	-332	2													
41-151-20480	-84.3820	36.4041	2521		D&A	1440			-260	-5	-760	10	-860	17	-900	7											
41-151-20481	-84.6173	36.3432	2524		D&A	1458			692	429	122	402															
41-151-20482R-1	-84.6173	36.3403	4259		Gas	1450			250	-6	-202	84	-382	15	-438	14											
41-151-20483	-84.6290	36.3504	2533		D&A	1395					-235	-7	-345	-2													
41-151-20484	-84.5971	36.3235	2539		Oil	1421	451	6	167	-5	-391	8															
41-151-20487	-84.6051	36.3600	2554		D&A	1410			260	-5	-290	-5															
41-151-20488	-84.5796	36.3186	2556		Oil	1320	353	-44	142	16	-409	39	-545	8													
41-151-20490	-84.6020	36.2926	2561		Oil	1475																					
41-151-20491	-84.6602	36.4374	2593		D&A	1422			597	22	14	-22	-84	18	-142	6											
41-151-20492	-84.6489	36.3492	2612		Oil	1336			384	-4	-189	-21															
41-151-20495	-84.3949	36.3899	2617		D&A	1960			-250	-4			-870	4													
41-151-20497	-84.6254	36.3431	2624		Gas	1412					-318	-66	-348	17	-388	39											
41-151-20499	-84.5942	36.3587	2641		Gas	1405			231	-1	-335	-15	-449	-7													
41-151-20500	-84.6721	36.4229	2644		D&A	1420	760	-25	545	-36	5	-35	-130	-28													
41-151-20501	-84.4906	36.4567	2654		Gas	1308	398	20	163	32																	
41-151-20504	-84.6656	36.4301	2676		Oil	1455			576	0	29	-7	-101	3													
41-151-20505	-84.4731	36.4326	2677		O&G	1563			38	-16	-449	7															
41-151-20506R-2	-84.4788	36.4301	4191		Gas	1600			74	10	-398	51															
41-151-20508	-84.6136	36.2994	2688		D&A	1340			134	-34																	
41-151-20509	-84.6609	36.4215	2706		Oil	1399	759	10	546	4			-132	1	-182	5											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20511	-84.6131	36.3649	2722		D&A	1452			322	27	-258	-7	-378	-7													
41-151-20512	-84.5963	36.3518	2742		Gas	1220			200	-24	-349	-17	-450	-1													
41-151-20513	-84.5557	36.2710	2743		Oil	1530			232	212	-315	226	-458	195													
41-151-20514	-84.6045	36.3491	2752		Oil	1424					-316	-4	-436	-10													
41-151-20515	-84.6732	36.4203	2754		Gas	1440	775	-10	528	-51																	
41-151-20516	-84.4733	36.4300	2769		O&G	1561			25	-24	-460	1															
41-151-20517	-84.5947	36.3504	2791		Oil	1362			200	-17	-340	-1															
41-151-20518	-84.4858	36.4610	2793		Gas	1620					-378	-2															
41-151-20519	-84.6505	36.3503	2794		Oil	1328			397	1	-174	-12															
41-151-20520	-84.6093	36.5103	2797		Gas	1455					17	-5	-132	-14													
41-151-20521	-84.4953	36.4566	2810		Gas	1500	380	-8	155	14	-370	-4	-524	-15													
41-151-20522	-84.5998	36.3228	2828		Oil	1290			172	-5																	
41-151-20523	-84.5918	36.3508	2830		Oil	1390			202	-8	-328	17															
41-151-20524	-84.5947	36.3478	2831		Oil	1300			230	17	-345	0															
41-151-20525	-84.5638	36.2679	2836		O&G	1340			40	4	-520	7	-650	-9													
41-151-20526	-84.4705	36.4312	2838		O&G	1512			26	-18	-464	1															
41-151-20527	-84.3725	36.3919	2845		Gas	2154			-336	-34	-786	52	-930	-13													
41-151-20528	-84.4694	36.4288	2850		O&G	1533			216	179	-467	5															
41-151-20529	-84.6802	36.4460	2856		D&A	1421			601	-45	56	-45	-67	-28													
41-151-20530	-84.5568	36.4826	2863		Gas	1446					-130	16															
41-151-20531	-84.5861	36.3537	2865		Gas	1393			157	-42	-344	8	-467	9													
41-151-20532	-84.5701	36.2604	2871		D&A	1618			87	43	-414	103	-655	-7													
41-151-20533	-84.3817	36.3989	2879		D&A	1544					-786	2	-886	1	-954	-31											
41-151-20534	-84.5157	36.3081	2909		Gas	1145	225	20	-45	25	-663	-20	-715	4													
41-151-20535	-84.4248	36.4120	2922		D&A	1594	46	-33	-196	-66																	
41-151-20536	-84.4597	36.4280	2923		D&A	1250	252	26	-4	-13	-528	-24	-658	-6													
41-151-20537	-84.4918	36.5053	2931		D&A	1642					-263	13	-394	17	-474	2			-1348	-6							
41-151-20538	-84.5981	36.3261	2933		D&A	1420			188	8																	
41-151-20539	-84.5944	36.3262	2934		Oil	1485			173	2																	
41-151-20540	-84.6265	36.3339	2898		Gas	1410			262	-16	-388	-124	-398	-23													
41-151-20541	-84.5761	36.3439	2947		Gas	1553			233	77	-377	23	-499	19													
41-151-20542	-84.4532	36.3612	2948		D&A	1435			-45	79	-607	57	-751	39													
41-151-20543	-84.4761	36.4261	2961		O&G	1667			44	-5	-453	9															
41-151-20544	-84.4789	36.4276	2962		Oil	1620	305	21			-439	15															
41-151-20545	-84.5971	36.3473	2969		Oil	1235			235	17	-305	36															
41-151-20546	-84.5978	36.3211	2977		Oil	1360																					
41-151-20547	-84.6008	36.3206	2978		Oil	1460																					
41-151-20548	-84.5827	36.3954	2979		Oil	1235			213	-65	-311	-31	-425	-24													
41-151-20549	-84.4932	36.4294	2989		O&G	1583			119	19	-387	36	-566	2													
41-151-20550	-84.4796	36.4422	2990		Gas	1502					-578	-152	-730	-157	-781	-122											
41-151-20551	-84.5350	36.4648	3022		D&A	1479					-283	-31	-367	13	-441	-13											
41-151-20552	-84.5884	36.3490	3024		D&A	1410			192	-6	-328	30															
41-151-20553	-84.5861	36.3508	3025		D&A	1380	432	35	167	-27	-353	6										-1934	-146				
41-151-20554	-84.6466	36.3509	3026		Gas	1360					-146	26	-272	19													
41-151-20556	-84.4379	36.3722	3031		Gas	1280	46	-35	-168	-13	-732	-41	-812	-1													
41-151-20557	-84.5834	36.3496	3038		D&A	1600			191	6	-336	33	-475	15													
41-151-20558	-84.6177	36.5609	3046		D&A	1265			653	-6	133	-12	-31	-4	-95	-16	-978	-931	-975	-27							
41-151-20559	-84.5879	36.3608	3049		D&A	1390			185	-33	-310	20	-435	21	-508	-17											
41-151-20560	-84.5283	36.3659	3050		D&A	1210	330	36	74	5	-490	-29	-574	17													
41-151-20562	-84.6010	36.3521	3055		D&A	1329			233	-5	-309	7															
41-151-20563	-84.6260	36.3393	3073		O&G	1442			294	7	-352	-95	-370	-1													
41-151-20564	-84.5933	36.3318	3074		D&A	1404			140	-39	-376	12	-500	-9													
41-151-20565	-84.4943	36.4461	3089		Gas	1588			188	64	-342	48	-499	36													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20566	-84.4903	36.4143	3090		Gas	1380			90	17	-463	-8	-624	-22													
41-151-20568	-84.4761	36.4339	3116		O&G	1619			42	-22	-417	31	-590	9													
41-151-20569R-1	-84.4761	36.4288	4192		O&G	1622			5	-49	-498	-41															
41-151-20571	-84.6801	36.3470	3120		Gas	1381			533	51	-90	-8															
41-151-20572	-84.6511	36.3523	3121		D&A	1340			428	28	-155	3															
41-151-20573	-84.6451	36.3489	3122		Gas	1340			365	-10	-187	-8															
41-151-20576	-84.4684	36.4331	3125		Oil	1535			0	-43	-481	-14	-535	83													
41-151-20579	-84.6494	36.3470	3141		Oil	1600			634	247	61	231															
41-151-20580	-84.4673	36.4860	3145		D&A	1572					-379	-11	-503	3	-580	-1											
41-151-20581	-84.6113	36.3113	3148		Oil	1498			170	-11	-492	-128	-500	-38													
41-151-20582	-84.5689	36.2654	3154		D&A	1550			41	-5	-471	46	-621	13													
41-151-20583	-84.5466	36.3090	3155		D&A	1461	221	-77	1	-22	-557	-17	-657	4													
41-151-20584	-84.4760	36.4468	3169		Gas	1339			229	145	-379	45	-553	18													
41-151-20585	-84.4856	36.4848	3170		Gas	1520					-390	-64	-510	-44													
41-151-20586	-84.6723	36.3612	3173		O&G	1245	545	-171	415	-62	-103	-16	-233	-26	-293	4											
41-151-20587	-84.6793	36.3492	3174		Gas	1372			449	-33	-91	-9	-213	-8													
41-151-20588	-84.5330	36.3668	3177		Gas	1208			94	13	-421	28	-562	18													
41-151-20589	-84.6542	36.3570	3181		D&A	1335					-150	-7	-271	-9													
41-151-20590	-84.4544	36.4408	3185		Gas	1280			-34	-58	-488	5															
41-151-20591	-84.5922	36.3448	3197		Oil	1395			185	-15	-368	-9															
41-151-20605	-84.5857	36.3477	3211		Oil	1460			110	-78	-375	-8	-511	-24	-565	-40											
41-151-20608	-84.6529	36.3460	3215		D&A	1355			415	16	-165	-4	-260	20													
41-151-20609	-84.6471	36.3480	3216		Oil	1345			371	-9	-202	-27															
41-151-20610	-84.5916	36.3541	3219		D&A	1403			176	-40	-351	-14	-452	8													
41-151-20611	-84.5234	36.3074	3223		Gas	1355	247	21	-25	22	-675	-56	-697	9													
41-151-20612	-84.6767	36.3519	3229		D&A	1295			445	-33																	
41-151-20613	-84.5979	36.3498	3237		Oil	1340			192	-33	-348	-16	-477	-31													
41-151-20614	-84.3680	36.3859	3246		D&A	1519			-351	-29	-861	9	-971	-35													
41-151-20615	-84.4769	36.4416	3250		Gas	1276			-18	-96	-512	-80	-604	-23													
41-151-20616	-84.6197	36.3456	3251		D&A	1422			257	-20	-351	-84	-406	-25													
41-151-20619	-84.5145	36.3215	3262		Gas	1139					-692	-84	-705	-10													
41-151-20621	-84.5898	36.3470	3274		Oil	1355			205	7	-310	49	-451	26													
41-151-20622	-84.6044	36.3474	3275		Oil	1402			202	-36			-446	-17													
41-151-20624	-84.6738	36.3528	3291		Gas	1324			434	-36	-96	-3	-256	-41													
41-151-20625	-84.6519	36.3489	3295		Oil	1335			369	-30	-164	-4															
41-151-20626	-84.5484	36.3110	3300		Gas	1514	304	-1	34	4	-512	20	-637	17													
41-151-20627	-84.4859	36.4238	3302		D&A	1651	351	53			-377	70	-544	52													
41-151-20629	-84.5619	36.3444	3324		Gas	1448			132	14	-392	42	-522	33	-586	13											
41-151-20630	-84.6599	36.3593	3329		D&A	1360			394	-44																	
41-151-20631	-84.6478	36.3390	3331		Gas	1414			404	34																	
41-151-20632	-84.6762	36.3545	3332		D&A	1278			450	-29																	
41-151-20633	-84.6337	36.3404	3333		Oil	1313																					
41-151-20634	-84.5643	36.3285	3336		D&A	1448			178	79																	
41-151-20636	-84.5655	36.3479	3339		Oil	1514			164	31	-402	15															
41-151-20637	-84.6760	36.3493	3350		Gas	1289			469	-4	-179	-88	-209	4													
41-151-20638R-1	-84.6532	36.3504	3668		Oil	1355					-165	-11															
41-151-20639	-84.6697	36.3511	3365		Gas	1362					-48	59	-208	20													
41-151-20640	-84.4755	36.4510	3384		Gas	1249			89	0	-371	46	-539	24	-591	53											
41-151-20641	-84.5484	36.3136	3386		Gas	1509	295	-12	34	3	-519	11	-645	4													
41-151-20642	-84.6096	36.3133	3394		Oil	1475	415	-65	155	-25																	
41-151-20644	-84.5009	36.4120	3402		Gas	1359			79	-19	-421	17	-573	2													
41-151-20645	-84.4613	36.5135	3407		Gas	1666			194	6	-334	8	-449	23													
41-151-20646	-84.4701	36.3953	3411		Oil	1500	128	-70	-102	-72																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20647	-84.5711	36.5091	3412		D&A	1552					-38	22	-175	26													
41-151-20648	-84.5719	36.5121	3413		D&A	1542			488	25	-48	5	-166	29													
41-151-20651	-84.5434	36.3154	3418		D&A	1323	198	-97	7	-10	-513	29	-657	-1													
41-151-20652	-84.6633	36.3612	3429		D&A	1308					-88	24	-218	13	-684	-357	-1134										
41-151-20653	-84.6728	36.3503	3431		O&G	1308			488	23	-48	51	-182	39													
41-151-20655	-84.4335	36.3723	3441		D&A	1485			-190	-22	-747	-42	-835	-14													
41-151-20657R-1	-84.5058	36.4369	5296		Gas	1571			79	-59	-385	-1															
41-151-20659	-84.6361	36.3927	3454		Gas	1214			350	-54	-154	-26															
41-151-20660	-84.6134	36.3396	3455		Oil	1435			275	30	-371	-70	-388	23													
41-151-20663	-84.3986	36.3978	3474		O&G	1304			-162	63	-616	131	-788	65	-858	37											
41-151-20664	-84.5367	36.3207	3479		Gas	1276			21	16	-509	44	-651	7													
41-151-20665	-84.4891	36.4181	3487		D&A	1429	341	42	74	0	-471	-20	-596	2													
41-151-20667	-84.4419	36.3581	3503		D&A	1400																					
41-151-20669	-84.6644	36.3526	3505		O&G	1385					-85	35	-213	28	-260	63											
41-151-20670	-84.4998	36.4450	3517		Gas	1620			120	-16	-360	22	-510	17													
41-151-20672	-84.4547	36.5103	3519		Gas	1534			160	-1	-361	6	-481	12													
41-151-20674	-84.6048	36.2971	3522		Oil	1445			77	-71																	
41-151-20675	-84.4994	36.4149	3523		Gas	1342			72	-27	-438	-2	-583	-8													
41-151-20676	-84.4032	36.2901	3531		Gas	1683			-442	-1	-959	-26	-1095	-33	-1147	-26											
41-151-20677	-84.5506	36.4614	3543		Oil	1522			256	-40	-94	125	-364	-21	-464	-62											
41-151-20678	-84.5160	36.4054	3544		Gas	1376			126	7	-414	6	-547	3													
41-151-20680	-84.6060	36.5208	3553		Gas	1310					14	-12	-152	-40													
41-151-20683	-84.5008	36.4486	3576		O&G	1622					-338	35															
41-151-20689	-84.4947	36.2683	3594		D&A	1245	-70	15	-265	8	-813	-2	-912	3	-1015	-9											
41-151-20690	-84.6263	36.3813	3596		Gas	1343			353	-5	-168	12	-320	-15								-3060	-1292				
41-151-20692	-84.6201	36.3269	3602		D&A	1427					-403	-102															
41-151-20694	-84.5080	36.4294	3621		O&G	1375					-387	6															
41-151-20695	-84.5251	36.3312	3623		Gas	1125					-645	-88															
41-151-20696	-84.4315	36.3246	3624		D&A	1215					-773	6	-903	19			-1950										
41-151-20697	-84.6296	36.3734	3625		O&G	1384					-168	18															
41-151-20698	-84.6320	36.3924	3626		Gas	1258					-152	-11	-280	-7													
41-151-20699	-84.5500	36.4668	3630		Oil	1508					-204	2	-310	24													
41-151-20700	-84.6677	36.3531	3638		D&A	1402			442	-11																	
41-151-20701	-84.6683	36.3556	3639		Oil	1379			379	-79	-121	-16	-251	-25													
41-151-20703	-84.6422	36.3145	3652		Gas	1483					-140	103	-352	0	-401	1											
41-151-20704	-84.6179	36.3471	3656		D&A	1390					-305	-34	-405	-21													
41-151-20705	-84.6708	36.3539	3660		O&G	1378			442	-21																	
41-151-20706	-84.4643	36.3894	3661		Gas	1328			-45	14	-536	33	-714	10	-764	37											
41-151-20707	-84.5440	36.2781	3664		D&A	1552	222	-43	-28	-32	-608	-21	-716	-38													
41-151-20708	-84.6731	36.3556	3665		Gas	1272	622	-88																			
41-151-20709	-84.6708	36.3573	3666		Gas	1357			407	-60																	
41-151-20710	-84.3762	36.4348	3669		Gas	1682			-193	2	-633	66	-796	39													
41-151-20711	-84.4907	36.4469	3683		Gas	1607					-361	35	-519	22													
41-151-20712	-84.4922	36.4492	3684		Gas	1610					-380	9	-430	103													
41-151-20713	-84.4980	36.4504	3685		Gas	1521					-381	-6	-545	-28													
41-151-20715	-84.4955	36.4486	3687		Gas	1481					-451	-67	-609	-82													
41-151-20717	-84.4855	36.4401	3693		Gas	1667			217	122	-403	15	-563	2	-618	25											
41-151-20718	-84.4253	36.4425	3694		D&A	1614					-666	-98	-706	-3													
41-151-20719	-84.5585	36.4683	3702		Oil	1490					-186	-6															
41-151-20720	-84.6144	36.3720	3714		D&A	1382					-224	9	-348	7													
41-151-20724	-84.6366	36.3104	3734		Oil	1390			215	-62	-400	-127	-420	-45													
41-151-20725	-84.5611	36.3310	3740		Gas	1418					-432	37	-569	12	-632	-13											
41-151-20726	-84.5656	36.3462	3741		Gas	1472			212	81	-383	38															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20729	-84.5317	36.3262	3759		Gas	1278	315	36	-17	-20	-549	4	-696	-40													
41-151-20730	-84.5913	36.3055	3760		D&A	1580			72	-62	-442	-5	-550	-9													
41-151-20731	-84.5491	36.4644	3761		Oil	1476			322	24	-223	-8	-334	7	-374	26											
41-151-20732R-1	-84.6026	36.3796	4070		D&A	1241			297	5	-229	24	-355	21	-405	-5											
41-151-20735	-84.5424	36.3824	3777		O&G	1125					-397	6															
41-151-20738	-84.5103	36.4326	3790		O&G	1375			147	5	-391	-8	-545	-27													
41-151-20739	-84.4625	36.4418	3791		Oil	1254			-34	-79	-438	30	-602	8	-671	7											
41-151-20740	-84.6711	36.3401	3793		Oil	1328			428	-21	-96	20															
41-151-20741	-84.6306	36.3109	3794		O&G	1467			355	104	-269	25															
41-151-20742	-84.4548	36.4533	3805		D&A	1340			22	-23	-416	50	-576	26													
41-151-20744	-84.5171	36.4450	3809		O&G	1541					-313	33	-449	27													
41-151-20745	-84.4810	36.3731	3815		Gas	1160	118	-75	-30	-1	-565	-7	-716	-22													
41-151-20746	-84.6471	36.3458	3816		Oil	1362			380	3	-219	-41															
41-151-20747	-84.5133	36.4066	3818		Oil	1358	378	25	96	-19																	
41-151-20748	-84.5039	36.3278	3822		Gas	1204			-96	-37	-724	-106	-738	-35													
41-151-20749	-84.4960	36.4363	3825		Gas	1544					-376	29	-546	3													
41-151-20750	-84.5420	36.3335	3829		Gas	1210					-475	35	-610	14													
41-151-20751	-84.5544	36.4698	3831		D&A	1468					-190	-4															
41-151-20752	-84.5665	36.4587	3833		Oil	1578			348	10																	
41-151-20753	-84.4456	36.3513	3846		Gas	1116	9	-68	-189	-19																	
41-151-20754	-84.4410	36.3515	3847		Gas	1216	60	-3	-194	-11	-619	99	-728	108													
41-151-20756	-84.5602	36.2682	3854		Oil	1370			-21	-48	-517	18	-653	-7													
41-151-20757	-84.5466	36.3806	3856		D&A	1310					-410	-13	-500	28													
41-151-20758	-84.5553	36.4678	3865		Oil	1489					-211	-22	-315	4													
41-151-20759	-84.5508	36.4784	3866		D&A	1464	575	-21	320	-14	-170	3	-288	20	-342	32											
41-151-20760	-84.6354	36.4298	3868		Gas	1330	680	-13	484	-3	-45	3	-178	0													
41-151-20761	-84.5500	36.4691	3869		Oil	1530					-173	27	-298	31													
41-151-20763	-84.6085	36.4526	3876		D&A	1428					-80	0	-222	-11													
41-151-20764	-84.5634	36.3648	3883		D&A	1535			67	-92	-365	15	-494	19	-570	-3	-1445		-1442	-49							
41-151-20765	-84.5994	36.4661	3886		Gas	1271			442	0	-97	-15	-222	-9													
41-151-20766	-84.5771	36.3416	3892		Gas	1580	416	32	176	21	-363	41															
41-151-20767	-84.6160	36.3460	3897		D&A	1440			240	-26	-372	-93	-484	-92													
41-151-20770	-84.3986	36.4039	3911		Gas	1400							-800	42	-858	19											
41-151-20772	-84.3759	36.2855	3918		Gas	1962			-510	-3	-978	37	-1142	-24													
41-151-20774	-84.6068	36.3149	3925		Oil	1276			149	-28																	
41-151-20775	-84.6172	36.4799	3932		D&A	1562					5	2															
41-151-20776	-84.5633	36.2642	3934		D&A	1342			-50	-79	-580	-48	-681	-35													
41-151-20777	-84.5104	36.4369	3943		Gas	1378	318	-69	138	-10	-382	-7	-447	64													
41-151-20778R-1	-84.5104	36.4405	5338		Gas	1498			107	-47	-364	5										-1897	19				
41-151-20780	-84.5933	36.3492	3952		O&G	1342			202	-9	-300	45															
41-151-20781	-84.6564	36.3907	3953		D&A	1330					-70	2	-190	16													
41-151-20782	-84.6003	36.5722	3964		Oil	872					146	-4	-19	20	-83	28	-949		-943	33							
41-151-20783	-84.4718	36.3933	3969		Oil	1383	118	-83	-67	-40	-581	-45	-714	-18													
41-151-20784	-84.6535	36.3549	3974		Gas	1325			420	8	-135	13	-265	2													
41-151-20785	-84.5038	36.4459	3979		D&A	1602			114	-32	-379	-7	-520	-5													
41-151-20786	-84.6640	36.4256	3984		Oil	1406	803	38	535	-26	-4	-26	-124	-7													
41-151-20787	-84.4989	36.4426	3986		Gas	1562					-398	-10	-557	-24													
41-151-20788	-84.6697	36.3773	4001		D&A	1390			442	-49	-107	-45	-228	-39													
41-151-20789	-84.4340	36.1936	4004		Oil	1644	-386	22	-768	-50	-1288	-6	-1417	-79													
41-151-20790	-84.6106	36.3094	4007		D&A	1502			161	-16																	
41-151-20791	-84.6138	36.3109	4008		Oil	1424	349	-141	96	-89																	
41-151-20795	-84.5633	36.4590	4015		O&G	1582					-204	-12	-322	-5													
41-151-20796	-84.5265	36.4241	4016		Gas	1617			127	-39	-393	-30	-523	-34													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20797	-84.5574	36.5571	4024		O&G	1282					8	0	-136	5													
41-151-20798	-84.5520	36.4704	4026		D&A	1509					-176	15															
41-151-20799	-84.5267	36.4713	4029		D&A	1624			304	58	-276	-17	-392	-3													
41-151-20800	-84.5013	36.4366	4032		Gas	1504			64	-63	-409	-15	-569	-32													
41-151-20801	-84.5314	36.3289	4039		Oil	1171	341	62	13	5	-523	24	-663	-11													
41-151-20802	-84.5356	36.4421	4048		D&A	1408			164	-51	-284	21	-426	0													
41-151-20803	-84.4930	36.4213	4060		Oil	1490			140	50	-430	7	-580	2													
41-151-20804	-84.6107	36.3108	4065		D&A	1501	426	-56	173	-6																	
41-151-20805	-84.6013	36.3732	4066		D&A	1196			236	-42	-269	0	-392	0	-444	-26											
41-151-20808	-84.6113	36.3399	4074		Oil	1444																					
41-151-20809	-84.6123	36.3380	4075		D&A	1418			318	80																	
41-151-20810	-84.4700	36.4373	4086		Oil	1565	285	8	5	-51	-447	8	-605	0													
41-151-20811	-84.5359	36.4722	4087		Gas	1504			314	41	-208	23															
41-151-20814	-84.5953	36.3462	4100		D&A	1390			199	-12	-344	4	-455	6	-500	-1											
41-151-20817	-84.4042	36.3810	4113		D&A	1516			-304	-69	-771	9	-900	-30													
41-151-20818	-84.4677	36.4307	4114		O&G	1530			70	34	-440	34	-602	24													
41-151-20822	-84.4288	36.4288	4125		D&A	1576			-139	-52	-649	-51	-740	-16													
41-151-20823	-84.5959	36.3486	4126		Oil	1300			200	-17	-322	18															
41-151-20824	-84.6408	36.3688	4128		D&A	1312					-172	-10	-293	-12													
41-151-20825	-84.5150	36.4781	4129		D&A	1605			273	47	-290	-16	-423	-16	-470	-6											
41-151-20827	-84.5233	36.3277	4148		D&A	1200			-5	9	-622	-52	-681	-12													
41-151-20828	-84.5021	36.4172	4149		Gas	1368					-406	21	-566	-2													
41-151-20829	-84.6097	36.3175	4150		Gas	1270					-460	-101	-496	-38	-560	-38											
41-151-20831	-84.5788	36.3494	4154		D&A	1570			132	-40	-382	-2	-518	-16													
41-151-20834	-84.3641	36.3681	4164		D&A	1499					-966	-29															
41-151-20835	-84.5267	36.4673	4165		D&A	1519			199	-40	-381	-112	-497	-99													
41-151-20836	-84.5988	36.3423	4169		Oil	1379					-421	-74															
41-151-20837	-84.5073	36.4148	4171		D&A	1490			146	32	-358	62	-483	72													
41-151-20838	-84.6697	36.3380	4172		D&A	1343					-141	-18	-239	4													
41-151-20839	-84.5902	36.3486	4179		D&A	1385			205	3	-303	51															
41-151-20840	-84.4963	36.4242	4183		O&G	1470			-50	-153	-500	-74	-675	-106													
41-151-20842	-84.5922	36.3477	4189		D&A	1382			226	21	-286	66															
41-151-20845	-84.5857	36.4538	4252		O&G	1496					-156	-12															
41-151-20848	-84.4468	36.3812	4265		O&G	1467			-193	-72	-628	16	-765	14													
41-151-20851	-84.3762	36.4503	4283		D&A	1550							-860	-61													
41-151-20852	-84.6682	36.3399	4286		Oil	1218			300	-140	-230	-105															
41-151-20853	-84.4374	36.3656	4295		Gas	1637	119	44	-119	46	-725	-20	-827	-6													
41-151-20855	-84.5283	36.3289	4312		Oil	1371	193	-80	-10	-10	-547	8	-694	-37													
41-151-20857	-84.5432	36.4617	4327		D&A	1485			285	10																	
41-151-20858	-84.5877	36.3476	4342		Oil	1400			170	-23	-332	31															
41-151-20859	-84.6127	36.3439	4356		Oil	1451			231	-21																	
41-151-20860	-84.5891	36.3512	4180		Oil	1348			194	-9	-313	37	-451	21													
41-151-20862	-84.5626	36.4562	4369		D&A	1540	595	36	333	13	-205	-4															
41-151-20864	-84.5278	36.3316	4371		Oil	1231	277	4	23	19	-519	30	-648	5													
41-151-20865	-84.5284	36.3261	4386		Oil	1262	260	-12	-8	-3	-539	23	-686	-24													
41-151-20867	-84.5827	36.3533	4417		D&A	1440			132	-57	-378	-17	-508	-23													
41-151-20868	-84.5862	36.3489	4418		D&A	1510			192	1	-322	41	-461	22													
41-151-20869	-84.4922	36.3793	4419		D&A	1262			62	44	-590	-70	-735	-83													
41-151-20870	-84.5047	36.4674	4420		Gas	1360					-330	-7															
41-151-20871	-84.6264	36.3751	4434		Gas	1314					-181	11	-310	4													
41-151-20872	-84.6094	36.3763	4451		D&A	1246					-240	-1	-366	-4	-416	-29											
41-151-20876	-84.5161	36.4741	4458		Gas	1615					-280	1	-394	19													
41-151-20878	-84.5551	36.3320	4475		D&A	1422			-50	-128	-631	-150															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20880	-84.5816	36.3516	4500		D&A	1435			161	-22	-361	7															
41-151-20882	-84.5236	36.3356	4506		Oil	1311	255	-10	11	9	-549	0	-657	-3													
41-151-20883	-84.5236	36.3383	4511		Oil	1478	266	0	22	15	-526	16	-646	3													
41-151-20884	-84.5607	36.4084	4522		D&A	1520	432	-43	256	23	-320	1	-436	-2													
41-151-20886	-84.6072	36.3406	4545		O&G	1282	222	-252	-43	-274	-580	-259	-696	-266													
41-151-20887	-84.6675	36.3374	4565		D&A	1401			459	24	-131	-1															
41-151-20888	-84.5212	36.3395	4569		Oil	1300			-27	-30	-593	-48	-691	-40													
41-151-20889	-84.4017	36.4006	4575		Gas	1235							-815	27	-860	23											
41-151-20892	-84.5779	36.3517	4585		D&A	1690			152	-21	-338	39	-475	25													
41-151-20893	-84.5457	36.3117	4594		Oil	1501			-1	-23	-535	5	-663	-4													
41-151-20894	-84.5857	36.3658	4600		D&A	1418			203	-19	-347	-23	-463	-11													
41-151-20896	-84.5261	36.3275	4620		Oil	1463			21	28	-583	-19	-705	-41													
41-151-20899	-84.5027	36.5665	4629		D&A	1205	533	-53																			
41-151-20900	-84.5211	36.3372	4641		Gas	1553			1	2	-571	-20	-663	-8													
41-151-20901	-84.6683	36.3356	4648		D&A	1468			462	26	-112	18															
41-151-20902	-84.6657	36.3359	4649		D&A	1364			426	-2	-165	-28															
41-151-20905	-84.6590	36.4489	4652		D&A	1453					83	27	-62	20	-102	21											
41-151-20906	-84.4594	36.3983	4664		Gas	1434					-602	-35	-740	-11													
41-151-20908	-84.5350	36.3191	4680		Gas	1505			10	12	-540	20	-659	5													
41-151-20909	-84.5434	36.3131	4681		Oil	1418			-12	-28	-552	-7	-678	-18													
41-151-20910	-84.5758	36.4688	4682		Oil	1263					-162	-26	-258	9	-322	8											
41-151-20911	-84.4430	36.4047	4693		Gas	1221					-604	6	-741	8													
41-151-20913	-84.5878	36.3090	4718		D&A	1422	384	-34																			
41-151-20914	-84.6075	36.3482	4725		Oil	1435					-291	12															
41-151-20915	-84.4469	36.5534	4735		D&A	1292			192	-28	-336	-17	-448	3													
41-151-20916	-84.5379	36.3184	4736		Gas	1281			19	15	-517	37	-649	11													
41-151-20917	-84.4686	36.4262	4744		Oil	1400			210	181	-440	40	-587	47													
41-151-20918	-84.6257	36.5414	4747		D&A	1470					132	21	-32	5													
41-151-20920	-84.5459	36.2989	4795		Oil	1557			9	-8	-537	17	-663	2													
41-151-20922	-84.5520	36.3074	4810		Gas	1504	304	-9	34	-4	-511	13	-634	13													
41-151-20929	-84.6566	36.4363	4848		D&A	1424			548	-14	-79	-103	-106	6													
41-151-20932	-84.5588	36.5096	4862		O&G	1561			401	-20	-101	-20	-246	-22													
41-151-20933	-84.5215	36.3418	4863		Oil	1352	272	10	18	10	-540	-2	-646	0													
41-151-20934	-84.5455	36.2964	4876		Gas	1581			15	0	-539	19	-659	8													
41-151-20936	-84.5788	36.3123	4886		Oil	1280					-450	6															
41-151-20938	-84.5229	36.3445	4889		Oil	1503			-3	-20	-567	-39	-663	-24													
41-151-20939	-84.6566	36.4399	4892		D&A	1522			556	-12	38	6	-103	2													
41-151-20942	-84.5433	36.2978	4913		Oil	1581	308	30	29	19	-553	12	-653	19													
41-151-20944	-84.4374	36.4067	4931		D&A	1499	49	-55			-599	27															
41-151-20945	-84.5429	36.2956	4932		Oil	1746	249	-26	8	0	-556	13	-679	-5													
41-151-20946	-84.5145	36.4845	4934		D&A	1528					-179	81	-402	-9													
41-151-20948	-84.5350	36.2902	4962		Gas	1362	242	14	-28	-11	-602	8	-718	-15													
41-151-20949	-84.5379	36.2902	4963		Oil	1403	231	-12	-15	-9	-591	7	-705	-12													
41-151-20953	-84.6024	36.3628	4996		D&A	1220					-262	25															
41-151-20954	-84.3401	36.5417	4997		D&A	1104					-581	-22	-728	-12													
41-151-20955	-84.6705	36.4508	5002		D&A	1446					106	17	-29	23	-86	23											
41-151-20956	-84.6627	36.3363	5003		O&G	1370					-155	-10															
41-151-20957	-84.6583	36.3363	5011		Gas	1375					-195	-37															
41-151-20958	-84.6578	36.3344	5017		O&G	1410					-148	14															
41-151-20959	-84.6595	36.3333	5018		Oil	1445					-127	31															
41-151-20960	-84.5349	36.2878	5024		Gas	1395	219	-4	-55	-36	-643	-28	-751	-45													
41-151-20962	-84.4440	36.4022	5053		Gas	1292	227	105	-58	41	-544	68															
41-151-20963	-84.6641	36.3300	5062		Oil	1377					-115	34	-229	39													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-20966	-84.6555	36.3339	5113		O&G	1410					-155	14															
41-151-20967	-84.6575	36.3326	5114		O&G	1410					-110	55															
41-151-20968	-84.6546	36.3990	5115		Oil	1358			604	133	41	101															
41-151-20969	-84.5289	36.2933	5136		D&A	1360	200	-5	-72	-29	-655	-25	-760	-42													
41-151-20970	-84.6534	36.3344	5137		O&G	1370					-164	10															
41-151-20971	-84.6538	36.3327	5138		O&G	1322					-164	11															
41-151-20972	-84.5900	36.3444	5142		Oil	1388			188	-6	-335	30															
41-151-20974	-84.5856	36.3435	5174		D&A	1398			258	77	-337	41	-462	32													
41-151-20975	-84.5966	36.5682	5175		Gas	1239	849	67	631	8	120	-11	-36	17													
41-151-20976	-84.6314	36.5683	5187		Gas	1482			748	42	187	1	26	19	-40	7	-832										
41-151-20978	-84.6666	36.3341	5200		D&A	1468			452	23	-92	45															
41-151-20979	-84.4860	36.4570	5208		Gas	1462			142	21	-373	11	-524	4													
41-151-20980	-84.5536	36.4662	5212		D&A	1472					-242	-44	-334	-8													
41-151-20981R-1	-84.5554	36.4651	5213		Oil	1478					-202	-6	-316	8													
41-151-20982	-84.5522	36.4648	5214		Oil	1519					-202	4	-310	22													
41-151-20984	-84.5922	36.3426	5216		Oil	1440			140	-56	-448	-84	-537	-60													
41-151-20985	-84.4606	36.4439	5220		Gas	1451					-463	6	-586	22													
41-151-20986	-84.5892	36.4064	5229		Oil	1210	434	-101	226	-83	-140	101	-372	-12													
41-151-20989R-1	-84.5267	36.3329	5510		Oil	1140			-20	-24	-594	-46															
41-151-20990	-84.5570	36.4664	5266		D&A	1516					-194	-5	-304	13													
41-151-20991	-84.5586	36.5004	5283		Gas	1488					-116	-16															
41-151-20992	-84.5612	36.5235	5320		D&A	1547			487	35	-13	35	-153	39													
41-151-20993	-84.4936	36.4601	5344		Gas	1578	378	-19	140	-2	-400	-38	-534	-30													
41-151-20994	-84.6584	36.3306	5349		D&A	1345			515	114	-133	32	-257	27													
41-151-20997	-84.5638	36.3850	5354		Gas	1391					-319	30	-462	11	-504	25											
41-151-20998R-1	-84.4639	36.4090	5698		D&A	1518					-518	10	-665	24													
41-151-20999	-84.6016	36.4760	5376		Gas	1540					-42	13	-175	14													
41-151-21000	-84.5145	36.4346	5382		Gas	1422			190	36	-331	40															
41-151-21001	-84.5796	36.2998	5395		D&A	1483	418	29	143	38	-347	121	-462	117	-572	48											
41-151-21002	-84.5146	36.4384	5399		Gas	1487					-385	-21															
41-151-21003	-84.4561	36.3847	5400		Gas	1197			-213	-120	-739	-133	-891	-137													
41-151-21004	-84.5632	36.5082	5405		D&A	1517	679	39	423	-8	-75	1	-215	4													
41-151-21005	-84.6529	36.3313	5418		Oil	1305					-177	3															
41-151-21006	-84.5673	36.3868	5422		Gas	1405			205	-13	-331	5	-461	-1													
41-151-21007	-84.5941	36.4812	5424		Oil	1542							-188	9													
41-151-21008	-84.6660	36.3371	5426		D&A	1334					-171	-36															
41-151-21008	-84.6660	36.3371	5426		D&A	1334																					
41-151-21009	-84.4268	36.5058	5427		Gas	1999							-556	0													
41-151-21010	-84.6382	36.3431	5431		Gas	1309			327	-13	-273	-66	-309	15													
41-151-21012	-84.6561	36.3358	5448		Gas	1432					-223	-58	-265	19													
41-151-21013	-84.4395	36.4031	5456		D&A	1508	328	221	128	237	-662	-36	-742	18													
41-151-21014	-84.4849	36.5278	5464		D&A	1489					-241	15	-361	26													
41-151-21017	-84.4526	36.5476	5485		Oil	1302	752	50	512	274	-302	11	-416	27													
41-151-21018	-84.5585	36.5095	5486		D&A	1546			440	20	-67	15															
41-151-21019	-84.6513	36.3327	5487		Gas	1321					-214	-31	-285	17													
41-151-21020	-84.6428	36.3358	5488		Gas	1401			353	7	-289	-86	-302	20													
41-151-21021	-84.6631	36.3327	5489		Gas	1375					-85	64															
41-151-21022	-84.6615	36.3337	5490		O&G	1396					-112	40															
41-151-21023	-84.6636	36.3346	5491		O&G	1389					-111	34										-2010	98				
41-151-21024	-84.6453	36.3808	5495		Gas	1270			390	-28	-150	-25	-271	-19	-332	-7	-1175		-1172	-2							
41-151-21025	-84.6622	36.3637	5498		D&A	1344					-117	-5	-240	-10													
41-151-21026	-84.6415	36.3426	5499		O&G	1358					-271	-73	-314	2													
41-151-21028	-84.6537	36.3293	5521		D&A	1266					-209	-29															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21029	-84.5885	36.4823	5526		O&G	1532			542	88	-53	23	-194	15													
41-151-21030	-84.4738	36.4888	5535		D&A	1638					-422	-77	-523	-38	-578	-20											
41-151-21031	-84.6656	36.3355	5537		D&A	1397																					
41-151-21033	-84.6353	36.3345	5541		D&A	1368					-182	48	-342	3													
41-151-21034	-84.6571	36.3610	5559		O&G	1324					-167	-37	-298	-50													
41-151-21035	-84.6063	36.3317	5567		Oil	1395			212	2	-411	-67															
41-151-21036	-84.5858	36.4966	5540		D&A	1577					-19	35	-153	38													
41-151-21042	-84.6676	36.3369	5581		D&A	1421			454	19																	
41-151-21044	-84.5878	36.3214	5609		Oil	1438					-381	44	-514	11													
41-151-21045	-84.4540	36.3676	5625		Oil	1195	180	54	-142	-27	-617	32	-762	18													
41-151-21046	-84.5874	36.4839	5626		Gas	1529			441	-14	-49	26	-182	26	-249	30											
41-151-21049	-84.5557	36.5038	5702		D&A	1538					-104	-5	-228	14													
41-151-21050	-84.6008	36.4707	5733		Gas	1508					-64	4	-200	0													
41-151-21052	-84.5892	36.4846	5735		D&A	1526	680	59	470	10	-53	17	-186	17													
41-151-21053	-84.5888	36.4863	5743		D&A	1549	617	-3	475	11	-43	24	-177	23													
41-151-21055	-84.6082	36.3093	5755		D&A	1506			233	61																	
41-151-21056	-84.4320	36.3830	5757		Gas	1544	79	9	-191	-33	-760	-70	-820	-12													
41-151-21058R-1	-84.4553	36.4024	6266		Gas	1484			-43	26	-575	-3	-718	12													
41-151-21061	-84.5478	36.4803	5815		Oil	1524			292	-36	-191	-14	-318	-7	-388	-10											
41-151-21068	-84.6343	36.4261	5875		D&A	1372			490	15	-43	17															
41-151-21069	-84.5550	36.4729	5881		D&A	1492					-174	3	-280	29													
41-151-21070	-84.6491	36.3194	5889		O&G	1296					96	306	-274	51													
41-151-21071	-84.4458	36.3289	5898		D&A	1371	13	-21	-269	-19	-767	-21	-907	-28													
41-151-21072R-1	-84.4976	36.4595	6325		Gas	1442			88	-62	-416	-61	-556	-59													
41-151-21075	-84.5904	36.3178	5916		Oil	1387					-413	10	-533	-9	-571	0											
41-151-21076	-84.6523	36.3202	5918		Gas	1301					-222	-24	-331	-16	-372	-16											
41-151-21078	-84.5550	36.4711	5942		D&A	1458			360	28	-165	16	-285	28													
41-151-21079	-84.4034	36.4463	5943		D&A	1412			-38	78	-473	123	-628	120	-686	8											
41-151-21080	-84.6510	36.3189	5944		Oil	1293			338	-17	-220	-15	-336	-16	-381	-19											
41-151-21082	-84.6079	36.3304	5953		D&A	1424			209	-2	-426	-85	-468	-24													
41-151-21083	-84.6050	36.4804	5960		D&A	1562			512	29	-40	-4	-168	4													
41-151-21085	-84.6125	36.5274	5966		D&A	1403					59	8															
41-151-21086	-84.6480	36.3254	5969		O&G	1402					-86	116															
41-151-21087	-84.6470	36.3236	6000		O&G	1445			303	-42	-148	59															
41-151-21088	-84.6500	36.3262	6001		Oil	1439	721	119	461	100	-91	104	-211	103													
41-151-21089	-84.5524	36.4375	6007		D&A	1458	358	-141	203	-46	-305	-31	-422	-32													
41-151-21090	-84.6481	36.3270	6016		O&G	1326					-192	7															
41-151-21091	-84.5911	36.3217	6024		Gas	1442					-383	34	-502	14	-560	3											
41-151-21092	-84.6453	36.3167	6025		Oil	1342					-326	-98	-385	-45	-436	-50											
41-151-21093R-1	-84.6449	36.3186	6317		Oil	1280					-307	-82	-348	-9	-396	-11											
41-151-21094	-84.6521	36.3219	6027		D&A	1285					-197	-2	-306	7	-357	0											
41-151-21095	-84.6509	36.3202	6028		D&A	1292					-192	11	-311	8	-358	3											
41-151-21098	-84.6244	36.5199	6056		Oil	1441					86	11	-69	0													
41-151-21101	-84.6485	36.3220	6070		O&G	1290					-187	18															
41-151-21102	-84.5496	36.4368	6075		D&A	1416	336	-154	186	-54	-319	-36	-439	-41													
41-151-21104	-84.6473	36.3203	6083		Oil	1294	554	-35	364	23	-239	-26	-334	-4													
41-151-21105	-84.6470	36.3184	6088		O&G	1399					-109	109	-245	88	-294	83											
41-151-21106	-84.6444	36.4324	6107		D&A	1304					132	148	-19	131													
41-151-21107	-84.6303	36.5283	6108		D&A	1470					90	-8	-39	4													
41-151-21108	-84.6485	36.3288	6120		O&G	1346					-212	-16															
41-151-21109	-84.6493	36.3238	6132		O&G	1304					-186	14	-326	-7	-372	-6											
41-151-21110	-84.6504	36.3297	6147		O&G	1382					-200	-11															
41-151-21111	-84.6504	36.3279	6148		O&G	1416					-171	21	-304	6													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21112	-84.6607	36.3309	6157		D&A	1340			335	-73	-160	-2	-260	17													
41-151-21113	-84.6586	36.3288	6158		D&A	1320			365	-34	-158	9															
41-151-21114	-84.6576	36.3273	6159		D&A	1264			284	-110	-116	56															
41-151-21115	-84.4181	36.3288	6160		D&A	1667	-77	-30	-347	-25	-815	-2	-963	-20													
41-151-21116	-84.6597	36.4318	6169		D&A	1430	820	57	556	-5	2	-21															
41-151-21117	-84.5042	36.4438	6175		D&A	1620			135	-9	-346	29	-487	31													
41-151-21118	-84.6228	36.5176	6183		O&G	1418					82	13	-70	6	-118	-1											
41-151-21119	-84.5583	36.4970	6184		D&A	1501			418	23	-79	29	-215	36													
41-151-21122	-84.4513	36.3475	6187		D&A	1405			-69	99	-683	15	-817	3													
41-151-21123	-84.6453	36.4195	6211		D&A	1532			467	-24	-56	-13	-186	-8	-237	-20											
41-151-21124	-84.6461	36.3263	6220		Gas	1338					-257	-51	-329	-4													
41-151-21125	-84.6514	36.3247	6230		D&A	1325					-206	-13															
41-151-21126	-84.5985	36.4796	6243		Oil	1340	575	-74	470	3	-87	-29	-229	-39													
41-151-21127	-84.6524	36.3288	6250		O&G	1331					-164	21															
41-151-21129	-84.4473	36.3459	6288		Gas	1381			-108	77	-699	12	-837	-3													
41-151-21130	-84.4500	36.3430	6289		D&A	1190	186	112	-146	42	-700	10	-832	3													
41-151-21131	-84.3775	36.3714	6304		D&A	1367			-343	-24	-953	-63	-971	-30	-1033	-18											
41-151-21132	-84.4070	36.4377	6306		D&A	1540	172	42	-126	5	-625	-11	-764	-5													
41-151-21133	-84.4559	36.3808	6309		Gas	1240			-127	-30	-632	-17	-779	-20													
41-151-21134	-84.6052	36.3224	6313		Gas	1460					-345	24	-445	21													
41-151-21139	-84.5768	36.4714	6327		Oil	1502	667	59	422	19	-173	-45															
41-151-21140	-84.6501	36.3476	6333		Oil	1328			363	-27	-207	-40															
41-151-21141	-84.6546	36.3286	6337		Oil	1275			389	6	-161	18	-277	20													
41-151-21142	-84.4464	36.3637	6349		D&A	1220			-175	-34	-660	20															
41-151-21144	-84.5684	36.3524	6384		D&A	1503			143	-5	-403	-5	-516	8	-547	24											
41-151-21145	-84.6608	36.3510	6389		D&A	1397	622	-41	427	-4	-146	-14															
41-151-21146	-84.4640	36.3984	6396		D&A	1404			-61	-14	-562	-11	-711	3													
41-151-21149	-84.5606	36.3030	6422		D&A	1285					-515	-11	-632	-6													
41-151-21151	-84.6065	36.4316	6439		Oil	1280	518	-111	408	4	-140	-7	-272	-13													
41-151-21155	-84.6095	36.4318	6459		Oil	1280	743	106	432	17	-170	-47	-264	-15													
41-151-21156	-84.6187	36.2931	6473		O&G	1390			265	95	-350	23	-450	17	-490	20											
41-151-21158	-84.4473	36.3673	6494		Gas	1280			-120	14	-678	-7	-804	-8													
41-151-21159	-84.6523	36.3269	6496		Oil	1367					-196	-9	-320	-14													
41-151-21160	-84.4523	36.3829	6498		D&A	1280			-100	5	-560	63	-765	0													
41-151-21162R-1	-84.6119	36.4300	6891		D&A	1285	737	99	450	31	-121	-1															
41-151-21163	-84.5471	36.4436	6511		Oil	1541	481	-11	241	-7	-271	2	-387	2													
41-151-21164	-84.6438	36.3200	6514		Gas	1260			360	35	-182	42	-334	6	-392	-5											
41-151-21165	-84.4468	36.3992	6521		Gas	1460			367	466	-612	-4	-741	14													
41-151-21166	-84.4521	36.3988	6524		Gas	1177			-93	-6	-603	-12	-738	7													
41-151-21167	-84.5916	36.3401	6546		D&A	1466			152	-38	-400	-29	-495	-12													
41-151-21168	-84.4167	36.3730	6551		Oil	1338	138	122	-114	99			-757	101													
41-151-21170	-84.5856	36.3409	6558		D&A	1465					-375	9	-481	17													
41-151-21171	-84.6508	36.3221	6564		O&G	1277					-181	17															
41-151-21172	-84.5535	36.3021	6565		D&A	1297					-503	19	-629	15	-675	13											
41-151-21173	-84.6075	36.4009	6567		D&A	1512			332	-10	-175	22	-305	18													
41-151-21174	-84.4864	36.4164	6569		Gas	1540			59	-4	-398	61	-558	51													
41-151-21175	-84.6118	36.3417	6570		D&A	1459			259	14	-381	-78	-411	2													
41-151-21176	-84.5959	36.3833	6571		D&A	1482	508	24	272	-11	-256	9	-389	-1													
41-151-21179	-84.6779	36.3486	6581		O&G	1350					-50	37	-198	11	-232	46											
41-151-21180	-84.5028	36.4564	6588		D&A	1410			232	73	-321	31	-408	85													
41-151-21181	-84.4793	36.4937	6590		Oil	1589			137	-47	-385	-61	-507	-44													
41-151-21183	-84.5025	36.4538	6596		D&A	1495					-315	43	-453	47													
41-151-21190	-84.6564	36.3310	6636		D&A	1343					-147	23	-275	14													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21191	-84.4916	36.4164	6637		Gas	1608			156	77	-427	22	-557	37													
41-151-21193	-84.6652	36.4314	6641		Oil	1495					45	8	-17	85													
41-151-21195	-84.5403	36.4462	6659		D&A	1406			251	16	-283	2	-391	13													
41-151-21196	-84.5312	36.4726	6661		D&A	1548	472	-62	272	11	-276	-33															
41-151-21197	-84.4023	36.3748	6662		Gas	1419			-281	-32			-896	-11													
41-151-21199	-84.4037	36.3716	6670		D&A	1460			-273	-23	-954	-147	-960	-73													
41-151-21200	-84.5996	36.3157	6671		Oil	1274					-416	-15	-516	-20	-566	-15											
41-151-21201	-84.6564	36.4076	6674		D&A	1318			453	-43	-48	-12	-186	-10													
41-151-21219	-84.6504	36.3156	6700		O&G	1403					-247	-32															
41-151-21221	-84.5667	36.4351	6709		D&A	1403					-395	-154	-405	-46													
41-151-21223	-84.5558	36.3048	6716		D&A	1330					-503	10	-627	10													
41-151-21224	-84.6217	36.2939	6718		D&A	1500			84	-101	-392	-30	-495	-39	-540	-40											
41-151-21225R-1	-84.6647	36.4188	7257		D&A	1458	738	-19	498	-50	-41	-52	-154	-25	-272	-84											
41-151-21226	-84.5611	36.4895	6732		D&A	1523			395	5	-112	7															
41-151-21228	-84.6639	36.4304	6744		Oil	1455					35	3	-111	-4													
41-151-21233	-84.6608	36.3291	6762		D&A	1290			475	69	0	160															
41-151-21235	-84.4160	36.3773	6765		D&A	1310	20	4	-220	-11																	
41-151-21237	-84.6752	36.4346	6769		O&G	1524	824	18	584	-31	44	-25	-81	-9													
41-151-21240	-84.6614	36.4187	6787		D&A	1396	826	80	486	-51	-30	-32															
41-151-21241	-84.5957	36.3036	6788		Oil	1594	484	47	154	14	-446	-16	-556	-27													
41-151-21243	-84.6008	36.2992	6790		Oil	1587	484	36	152	8	-479	-58	-548	-30													
41-151-21244	-84.3774	36.3678	6801		O&G	1421	-177	-88	-361	-37	-909	-6	-948	-1	-1029	-2											
41-151-21248	-84.6141	36.4348	6810		Oil	1395	745	90	405	-32	-117	-15															
41-151-21253	-84.4143	36.3760	6831		O&G	1520			-266	-51																	
41-151-21254	-84.4966	36.4631	6832		Gas	1520	300	-113	50	-103	-460	-110	-588	-97													
41-151-21256	-84.6514	36.3172	6838		Oil	1309					-237	-29	-357	-36													
41-151-21259	-84.6587	36.3313	6859		D&A	1398					-163	0															
41-151-21260	-84.4872	36.4129	6862		Gas	1371					-449	15	-609	4													
41-151-21261	-84.3886	36.3711	6863		D&A	1436	-102	-50	-376	-86																	
41-151-21263	-84.6662	36.4311	6880		Oil	1501					63	24	-77	23													
41-151-21264	-84.6926	36.3716	6881		Gas	1334					4	14	-131	6													
41-151-21265	-84.4631	36.3783	6884		D&A	1190			-210	-133	-685	-88	-836	-94													
41-151-21266	-84.4351	36.3857	6888		D&A	1620			-121	26																	
41-151-21270	-84.5993	36.2967	6915		Oil	1575	375	-67	85	-53	-540	-111	-635	-109													
41-151-21272	-84.6794	36.3688	6924		D&A	1386	746	-1	496	-13	-50	4	-182	-6													
41-151-21274	-84.4772	36.3185	6934		D&A	1825	85	-42	-181	-7	-735	-23	-857	-48													
41-151-21278	-84.6112	36.4358	6969		D&A	1310	738	88	422	-8	-144	-35	-260	-24													
41-151-21279	-84.5755	36.4302	6972		D&A	1531			261	-38	-263	-36	-387	-40													
41-151-21282	-84.5479	36.4680	6992		Oil	1529			301	-1	-189	20	-308	28	-360	37											
41-151-21283	-84.5982	36.3024	6995		Oil	1772	517	74	177	34	-468	-43	-558	-36													
41-151-21284	-84.6697	36.4208	7000		D&A	1482			555	-13	2	-27	-118	-5													
41-151-21285	-84.6156	36.4323	7007		D&A	1310	762	109	482	45	-105	-2	-232	-2													
41-151-21286	-84.6162	36.3926	7013		D&A	1300	618	53	388	44	-143	45	-280	35													
41-151-21287	-84.5975	36.3453	7042		D&A	1258					-364	-20															
41-151-21288	-84.6020	36.3154	7045		D&A	1270			130	-38	-425	-33															
41-151-21289	-84.6853	36.3739	7046		D&A	1322					-17	8															
41-151-21290	-84.4462	36.4082	7076		D&A	1194	35	-101	-282	-203																	
41-151-21293	-84.5943	36.3169	7085		Oil	1433			163	9	-392	23															
41-151-21294	-84.5726	36.3068	7086		D&A	1283					-475	0															
41-151-21295	-84.6731	36.3778	7089		D&A	1443					-78	-27															
41-151-21296	-84.5453	36.2896	7097		D&A	1760	252	-28	2	-10	-574	-7	-682	-13													
41-151-21297	-84.4125	36.3794	7098		D&A	1493			-194	21	-874	-116	-879	-23													
41-151-21298	-84.4890	36.4100	7100		D&A	1322			292	229	-573	-107	-618	-5													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21300	-84.4714	36.3962	7153		Oil	1405	209	5																			
41-151-21301	-84.5969	36.3094	7158		Gas	1391							-493	23													
41-151-21303	-84.5818	36.4316	7181		D&A	1536					-200	6	-324	4	-384	-10											
41-151-21304	-84.6509	36.3392	7188		D&A	1402					-253	-78	-283	11	-328	37											
41-151-21305	-84.6494	36.3183	7200		Oil	1266			371	24	-204	8															
41-151-21306	-84.5526	36.3112	7202		D&A	1445	225	-92	14	-28	-527	-8	-653	-12													
41-151-21307	-84.3361	36.3259	7207		D&A	1288			-680	-77	-1061	7	-1162	-29							-1796	-1844	114				
41-151-21308	-84.6939	36.3677	7208		D&A	1368					-22	-6	-144	-3	-194	21	-1022		-1020	-23		-2024	-214				
41-151-21309R-1	-84.6813	36.3639	8292		D&A	1374					-52	7	-180	-1	-236	26	-1059		-1056	-25							
41-151-21311	-84.4875	36.3913	7223		D&A	1322	183	-61	-17	-45	-510	-4	-658	-9													
41-151-21312	-84.5356	36.3149	7230		O&G	1480	320	42	2	8	-570	-4	-660	11													
41-151-21313	-84.6448	36.3398	7231		D&A	1404					-272	-80	-296	15	-338	44											
41-151-21314	-84.5394	36.3149	7232		D&A	1340	290	4	-45	-50	-586	-31	-716	-52													
41-151-21316	-84.6336	36.3385	7234		Gas	1337					-183	48	-327	18	-369	43											
41-151-21317	-84.6644	36.3480	7239		D&A	1396					-104	22	-224	22	-266	56											
41-151-21318	-84.5477	36.3027	7243		Gas	1425	357	60	-5	-29	-550	-7	-665	-5													
41-151-21319	-84.5478	36.3056	7246		Oil	1523	353	54	9	-16	-533	7	-660	-1													
41-151-21320	-84.5401	36.3126	7259		O&G	1325	270	-14	-75	-81	-618	-62	-733	-66													
41-151-21321	-84.6391	36.3380	7271		Gas	1369					-295	-84	-307	22	-357	40											
41-151-21322	-84.5489	36.3078	7274		D&A	1488	348	44	8	-22	-542	-8	-660	-5													
41-151-21323	-84.5632	36.4403	7277		D&A	1562			324	41	-240	-2	-348	8													
41-151-21324	-84.5371	36.3129	7288		O&G	1508	343	65	8	10	-557	8	-662	10													
41-151-21325	-84.5506	36.2948	7299		O&G	1581			39	11	-499	40	-633	21													
41-151-21326	-84.5445	36.3021	7300		Gas	1487	339	52	-9	-24	-561	-6	-673	-6													
41-151-21327	-84.3976	36.4112	7304		Oil	1318			-217	-16	-823	-113	-833	-2													
41-151-21328	-84.4939	36.3351	7306		D&A	1905			-95	-24	-685	-61	-719	0	-731	18											
41-151-21329	-84.5535	36.2727	7307		O&G	1580			2	-16	-580	-31	-700	-44													
41-151-21330	-84.5937	36.3094	7309		D&A	1323	323	-111	93	-50	-442	-16	-546	-19	-577	-6											
41-151-21331	-84.5996	36.3139	7314		O&G	1269					-423	-19	-525	-26													
41-151-21332	-84.6591	36.3621	7318		Oil	1322	857	185	436	-3																	
41-151-21333	-84.5318	36.3229	7319		Gas	1384	310	33	-16	-13	-560	2	-700	-38													
41-151-21334	-84.5270	36.3361	7322		O&G	1275	283	10	45	35	-473	67	-607	40													
41-151-21335	-84.4483	36.4110	7328		Gas	1274	221	70	-96	-30																	
41-151-21339	-84.5553	36.2850	7327		D&A	1602			54	20	-516	10	-643	4													
41-151-21341	-84.5556	36.2758	7339		Gas	1506			16	-12	-568	-33	-684	-33													
41-151-21344	-84.6333	36.3366	7342		Gas	1401					-212	23	-339	10	-384	30											
41-151-21345	-84.5510	36.4019	7348		D&A	1435	570	131	185	-11	-361	-5	-460	15													
41-151-21346	-84.5628	36.4356	7351		Oil	1505			285	13	-269	-18	-387	-19													
41-151-21348	-84.5318	36.3206	7357		O&G	1320	285	9	-40	-33	-592	-26	-710	-43													
41-151-21349	-84.5291	36.3215	7358		D&A	1461	321	49	-14	-2	-574	-3	-679	-9													
41-151-21350	-84.6754	36.3717	7364		D&A	1471			461	-40																	
41-151-21351	-84.5318	36.3183	7371		Gas	1412	327	52	2	13	-573	-2	-668	3													
41-151-21352	-84.5276	36.3339	7373		O&G	1143	323	50	-7	-15	-537	7	-661	-12													
41-151-21353	-84.6610	36.3608	7376		Oil	1320	842	165	420	-23												-1962	346				
41-151-21354	-84.6878	36.3795	7381		D&A	1318					-4	1	-138	-2	-186	33	-1008		-1005	30							
41-151-21355	-84.4743	36.3949	7384		Oil	1410	142	-69	-80	-65																	
41-151-21356	-84.5722	36.2839	7385		D&A	1502			56	-17	-506	-9	-633	-21													
41-151-21357	-84.5402	36.2951	7397		O&G	1600	337	76	12	11	-538	43	-664	18													
41-151-21358	-84.4857	36.3268	7408		D&A	1870			-40	79	-664	2	-760	3													
41-151-21359	-84.4481	36.4064	7415		Gas	1385	215	77	-111	-33	-600	-11	-743	-9													
41-151-21360	-84.6504	36.3366	7416		O&G	1326					-244	-64	-274	25	-326	40											
41-151-21361	-84.4411	36.4353	7417		D&A	1552	252	56	-70	-38	-518	26	-690	-11													
41-151-21362	-84.6044	36.3199	7419		D&A	1278	378	-90	160	-21	-428	-52	-538	-65	-570	-34											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21363	-84.6536	36.3379	7422		Gas	1416					-240	-71	-279	9													
41-151-21364	-84.5518	36.3994	7425		D&A	1482			172	-23	-368	-10	-470	8													
41-151-21365	-84.5976	36.2999	7438		Oil	1860	491	51	138	-1	-510	-79	-578	-50													
41-151-21366	-84.6473	36.3365	7449		D&A	1327					-271	-82	-293	15													
41-151-21367	-84.5563	36.4307	7461		D&A	1420	570	71	225	-24	-282	-1	-402	-7													
41-151-21368	-84.3631	36.3717	7470		D&A	1423	-17	82	-233	130																	
41-151-21370	-84.6057	36.3056	7475		Oil	1512	482	18	194	32	-474	-80	-506	-15													
41-151-21371	-84.5153	36.5171	7482		Oil	1470	550	-55	335	-3	-198	2	-332	-8													
41-151-21372	-84.6035	36.3122	7486		Gas	1277					-461	-69	-517	-29													
41-151-21373	-84.4451	36.4106	7487		Gas	1273	87	-52	-119	-43																	
41-151-21374	-84.5986	36.4771	7491		Oil	1348	588	-62	473	13	-52	11	-250	-56	-257	3											
41-151-21375	-84.5354	36.3361	7505		D&A	1178	311	20	34	4	-512	7	-632	0													
41-151-21376	-84.6709	36.3462	7525		D&A	1420			515	60	-62	47															
41-151-21377	-84.5948	36.3011	7545		Oil	1762	402	-31	112	-23	-458	-23	-566	-31													
41-151-21378	-84.6117	36.3794	7547		Gas	1181					-179	48	-309	41	-339	38											
41-151-21379	-84.4493	36.4087	7555		Gas	1454	138	-10	-126	-57																	
41-151-21380	-84.6484	36.3539	7571		D&A	1404			392	-1	-141	22	-220	62													
41-151-21381	-84.5538	36.5090	7573		D&A	1516					-84	9															
41-151-21382	-84.5798	36.3032	7600		O&G	1344			80	-29	-470	-6	-588	-13	-636	-21											
41-151-21383	-84.5298	36.4674	7621		Oil	1596					-236	24															
41-151-21386	-84.4226	36.5855	7640		D&A	1404			144	-10	-258	66	-478	-14	-526	131											
41-151-21387	-84.4523	36.4089	7641		Gas	1412	153	-5	-100	-39	-604	-35	-738	-19													
41-151-21388	-84.6123	36.3835	7653		Gas	1259					-197	20	-323	18													
41-151-21389	-84.6346	36.3530	7654		O&G	1333			396	51	-187	19	-307	13													
41-151-21390	-84.6405	36.3530	7655		Gas	1363			397	32	-171	16	-271	33													
41-151-21391	-84.6156	36.3789	7667		Gas	1261					-209	7	-333	7													
41-151-21392	-84.5670	36.5553	7679		D&A	1414			543	22	40	15	-124	4	-234	0											
41-151-21393	-84.6453	36.3532	7691		D&A	1413			363	-19	-173	0	-282	9													
41-151-21394	-84.4962	36.5037	7711		D&A	1581					-265	3	-395	9													
41-151-21395	-84.4844	36.4893	7724		Gas	1343					-351	-31	-455	4													
41-151-21396	-84.5939	36.5064	7765		D&A	1582			491	-41	-1	23	-146	14													
41-151-21397	-84.5873	36.3188	7767		O&G	1440					-388	41															
41-151-21398	-84.5256	36.4687	7781		D&A	1520			130	-108	-288	-20	-402	-4	-456	-13											
41-151-21399	-84.5371	36.4548	7782		D&A	1562	500	11	260	17	-256	16	-376	19													
41-151-21402	-84.5204	36.5019	7970		D&A	1425			295	-11	-199	10	-335	5	-388	18											
41-151-21403	-84.5859	36.3202	8021		O&G	1403					-395	36															
41-151-21404	-84.6340	36.3585	8187		D&A	1418	623	40	389	37	-172	27	-294	21	-334	61											
41-151-21405	-84.6377	36.3540	8234		Oil	1321					-209	-15	-325	-15	-367	25											
41-151-21406	-84.6136	36.4174	8237		D&A	1505	601	-10	395	1	-134	10	-281	-11													
41-151-21407	-84.2886	36.5653	8259		D&A	1242					-644	-5	-824	-18	-893	7											
41-151-21408	-84.2766	36.5286	8262		D&A	1905					-791	-47	-957	-42	-1029	-13											
41-151-21409	-84.6697	36.4314	8297		Oil	1490					52	3															
41-151-21410	-84.4614	36.4394	8313		O&G	1255	257	0	-69	-108	-471	5															
41-151-21411	-84.4648	36.4408	8349		O&G	1251					-429	34															
41-151-21412	-84.4629	36.4458	8359		O&G	1375					-415	43															
41-151-21413	-84.6154	36.4644	8408		D&A	1330					-58	-24	-180	-8	-232	-12											
41-151-21414	-84.5977	36.3222	8419		Oil	1463					-397	2															
41-151-21416	-84.6107	36.4671	8427		D&A	1290			470	0	-44	0	-184	-3	-247	-14											
41-151-21418	-84.6718	36.4344	8437		Oil	1434					64	4															
41-151-21421	-84.4643	36.4306	8480		Oil	1470					-530	-45	-660	-26	-710	-6											
41-151-21422	-84.4613	36.4367	8484		Gas	1321					-457	24	-627	-2													
41-151-21423	-84.4789	36.4326	8490		Gas	1622					-404	41	-576	19	-624	55											
41-151-21424	-84.6783	36.4333	8541		Oil	1386					36	-39															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-151-21425	-84.6031	36.3261	8544		D&A	1402	467	4	214	23																	
41-151-21430	-84.2827	36.5532	8721		D&A	1201	18	-33	-248	2	-669	11	-859	-11	-925	18											
41-151-21432	-84.2874	36.5538	8767		D&A	1271	98	39	-237	3	-649	18	-835	-2	-897	30											
41-151-21434	-84.5622	36.4837	8824		D&A	1503	695	81	441	59	-125	6	-245	24	-301	36											
41-151-21437	-84.5420	36.5292	8904		D&A	1501					-49	41	-199	17													
41-151-21438	-84.5618	36.4817	8907		D&A	1512	695	85	436	59	-138	0	-258	16	-310	32						-2143	-122				
41-151-21439	-84.5382	36.5298	8919		D&A	1477					-103	-2	-254	-27	-311	-4	-1238		-1235	-12							
41-151-21440	-84.5594	36.5143	8967		D&A	1540					-56	14	-200	14	-258	36											
41-151-21444	-84.6495	36.3484	9024		D&A	1330	490	-134	360	-29																	
41-151-21445	-84.4433	36.3749	9096		Oil	1078					-749	-81	-876	-81	-928	-35											
41-151-21446	-84.5930	36.4708	9117		Oil	1506					-88	2	-216	4	-266	15											
41-151-21447	-84.2801	36.5813	9120		D&A	1311					-619	2	-799	-3	-961	40											
41-151-21448	-84.5934	36.4771	9121		Oil	1490					-74	2															
41-151-21450	-84.2915	36.5788	9138		D&A	1125					-596	12	-775	-4	-845	92											
41-151-21451	-84.3646	36.5733	9145		D&A	1254					-352	64	-574	40													
41-151-21452	-84.3624	36.5094	9155		Oil	2055					-545	12	-680	28													
41-151-21453	-84.3488	36.5533	9255		D&A	1302					-529	-26	-690	-10							-2594	-2724	174				
41-151-21456	-84.3543	36.5793	9422		D&A	1187					-496	-60	-658	-35	-800	37	-1718	-1660	-1713	1		-3167	-114				
41-151-21457	-84.3828	36.5312	9426		D&A	1176					-476	-23	-665	-17	-858	-16	-1733	-1689	-1730	-74		-2728	7				
41-151-21458	-84.3950	36.5508	9440		D&A	1988					-368	35	-579	9													
41-151-21459	-84.3544	36.4998	9587		D&A	1680					-573	22	-705	39													
41-153-10001	-85.3389	35.4357	37		D&A	765											-803	-810	-841	-39		-1755	-954		-4988		
41-153-20001	-85.3557	35.4354	3968		D&A	758					120	-18	-11	-86	-196	-178						-1693	-446				
41-159-20001	-85.8214	36.1434	470		D&A	556																			-3239		
41-175-00001	-85.5258	35.7451			D&A	890							555	16					78	0		-780	-61				
41-175-00002	-85.4955	35.5697			D&A	1798							368	-33			-137				-1023	-1052	254	-2372			
41-175-20002	-85.4748	35.7525	1125		D&A	1800			1330	3	626	-17	464	-37													
41-175-20003	-85.3343	35.7153	1708		D&A	1825			1136	14	455	18	280	10													
41-175-20004	-85.4342	35.7309	1709		D&A	1743			1297	19	623	-4	457	2													
41-175-20005	-85.4689	35.5934	1731		D&A	1892					544	5			32	-122											
41-175-20006	-85.4507	35.5931	2478		D&A	1857	1378	-8	1158	8	498	-10	356	-4													
41-175-20007	-85.4796	35.7841	2531		Gas	1058					688	2	532	22	496	1	72										
41-175-20009	-85.4076	35.7854	2565		Gas	863					647	13	481	17	443	3	-29										
41-175-20010	-85.4699	35.5636	2582		D&A	1876	1376	2	1156	-3			354	6	318	24											
41-175-20011	-85.5411	35.6587	2622		D&A	1830			1393	-8	689	27	540	19	501	7											
41-175-20012	-85.4546	35.6811	2636		D&A	1795	1568	-4	1329	19	635	20	487	8													
41-175-20013	-85.5207	35.5623	2653		D&A	1876			1284	12	584	2	456	9	412	15											
41-175-20014	-85.5773	35.6513	3383		Oil	1035					691	11	543	4													
41-175-20015	-85.5725	35.6493	3721		D&A	1018					691	13	550	15													
41-177-20003	-85.7973	35.6107	2223		D&A	1095					863	-13	733	5	688	-5	373										
41-177-20005	-85.6314	35.7439	2523		Gas	980					774	8	628	12	586	4											
41-177-20006	-85.6967	35.6656	2538		Gas	945					821	16	679	11	638	12	319										
41-177-20007	-85.7375	35.6598	2650		Gas	1024					856	7	718	4	677	-1	366					-546	67				
41-177-20008	-85.6924	35.6692	2651		D&A	909					793	-9	653	-10	613	-6	275					-671	51				
41-177-20009	-85.6994	35.6714	2663		Gas	926					802	-11	671	-4	632	2	314										
41-177-20010	-85.7043	35.6630	2664		Gas	975					823	11	687	9	645	8	321					-606	128				
41-177-20011	-85.7002	35.6615	2665		Gas	934					816	10	682	11	640	9	324				-576	-622	141				
41-177-20012	-85.7424	35.6538	2682		Gas	1019					849	1	709	-7	671	-10	361					-554	53				
41-177-20013	-85.8137	35.5619	2684		Gas	1137					931	19	790	22	763	18	443				-429	-461	-94				
41-177-20014	-85.8079	35.5831	2686		Gas	1095					879	-16	740	-6	703	-16	328				-561						
41-177-20015	-85.6911	35.6638	2732		Gas	907					791	-5	661	2	624	7	287										
41-177-20016	-85.7063	35.6584	2733		Gas	960					830	20	690	12	653	14	318										
41-177-20017	-85.6879	35.6638	2762		Gas	912					800	9	659	4	624	12	284										

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-177-20018	-85.7070	35.6462	2763		Gas	950					855	53	711	38	674	34	344										
41-177-20019	-85.6633	35.7287	02769-A		Gas	955					799	-11	650	0	605	3	168	204	172	-9							
41-177-20020	-85.6913	35.7246	2770		Gas	995					765	-96	643	-48	607	-11	247										
41-177-20021	-85.6954	35.6497	2771		Gas	895					805	14	655	-5	620	-3	295										
41-177-20022	-85.6608	35.6953	2772		Gas	1000					776	1	624	-3	586	1	248										
41-177-20023	-85.7232	35.7056	2773		Gas	858							688	-31	648	-16	312				-592	-618	-23				
41-177-20024	-85.7099	35.6577	2837		Gas	971					826	12	681	-1	645	1	294										
41-177-20025	-85.7093	35.6532	2841		D&A	983					820	11	678	-1	641	-2	220		223	-27							
41-177-20026	-85.6899	35.6613	2878		Gas	887					804	12	665	8	629	14	293										
41-177-20027	-85.7091	35.6508	2887		Gas	982					836	29	695	18	659	17	312										
41-177-20028	-85.7218	35.6729	2913		Gas	960					840	-3	702	-1	665	4	327										
41-177-20029	-85.7218	35.6766	2914		Gas	920					855	8	712	7	671	10	370										
41-177-20030	-85.7408	35.6504	2915		D&A	1116					872	30	730	18	692	14	322		326	31							
41-177-20032	-85.8657	35.6336	2987		D&A	1073					1019	65	845	43	805	42											
41-177-20033	-85.7024	35.6408	2999		D&A	900					793	0	652	-13	614	-19	270										
41-177-20034	-85.6985	35.6390	3014		D&A	906					748	-40	685	26													
41-177-20035	-85.8739	35.6421	3015		D&A	1016					960	-13	820	11	780	4	512										
41-177-20036	-85.9000	35.6167	3016		D&A	1045					907	-40	763	-71	725	-36	392		395	-24							
41-177-20037	-85.9038	35.6259	3018		D&A	1061					961	-8	825	-12	787	6	504										
41-177-20038	-85.8791	35.6278	3040		D&A	1050					930	-25	766	-51	730	-36	442				-440	-486	-156				
41-177-20039	-85.8828	35.6259	3041		D&A	1060					952	-2	798	-23	764	-3	502										
41-177-20040	-85.8811	35.6350	3043		D&A	1038					962	-6	816	-2	779	3	458		461	25							
41-177-20041	-85.8773	35.6369	3044		D&A	1044					968	0	816	2	778	3	514										
41-177-20042	-85.6571	35.6626	3047		D&A	1278					744	4	602	-10	564	-2	145					-724	197				
41-177-20043	-85.8801	35.6315	3052		D&A	1050					970	8	818	0	776	5											
41-177-20044	-85.8847	35.6331	3053		D&A	1050					971	3	824	2	786	9	474		477	42		-350	29				
41-177-20046	-85.7215	35.6792	3085		Gas	910					830	-19	690	-16	654	-7	360										
41-177-20047	-85.7253	35.6756	3086		Gas	903					873	22	723	14	687	21	378										
41-177-20048	-85.8763	35.6331	3099		D&A	1053					976	15	847	34	761	-9	498										
41-177-20049	-85.8741	35.6396	3100		D&A	1038					984	15			834	60	528										
41-177-20050	-85.8837	35.6294	3042		D&A	1053					966	5	807	-14	773	1	528										
41-177-20051	-85.7300	35.6877	3104		Gas	936					870	0	722	2	683	7	366				-534						
41-177-20052	-85.8333	35.5612	3127		D&A	1070					956	39	820	25	782	9	418				-480	-524	-153				
41-177-20054	-85.8338	35.5575	3149		D&A	1063					945	31	811	13	773	-1	411					-489	-82				
41-177-20056	-85.7263	35.6701	3182		Gas	975					837	-9	697	-10	655	-11	333										
41-177-20057	-85.7226	35.6626	3190		Gas	950					838	4			704	44	324										
41-177-20059	-85.7153	35.6598	3267		Gas	980					820	-3	677	-12	636	-14	260										
41-177-20063	-85.7185	35.6669	3613		D&A	963					802	-31	660	-36	619	-36	243										
41-177-20066	-85.7201	35.6859	3698		Oil	940					865	11	710	2	672	12	308					-530	60				
41-177-20067	-85.7170	35.6884	3700		D&A	920					835	-17	694	-11	657	1	287		290	4		-578	20				
41-177-20068	-85.8747	35.5431	3708		D&A	1020											368		368	-39							
41-177-20070	-85.8714	35.5426	3745		D&A	1061					921	3	811	-16	761	-21	431		441	38							
41-177-20071	-85.8749	35.5467	3788		D&A	1019					919	-7			769	-12	439				-181						
41-177-20072	-85.7098	35.6689	3800		Gas	923					798	-26	657	-30	615	-29	285				-619	-664	2				
41-177-20073	-85.7246	35.6737	3817		D&A	940					858	10	710	3	673	8	364					-550	45				
41-177-20074	-85.7187	35.6768	3835		Gas	907					815	-28	675	-27	633	-24	337										
41-177-20076	-85.8952	35.6412	7237		D&A	1047					987	-4	849	20	823	22	533				-273	-309	74				
41-185-20001	-85.2289	35.8683	1104		D&A	1688			1150	-9	546	-11	354	-7													
41-185-20002	-85.4867	36.0399	1533		D&A	1004					750	-58	620	-30	582	-28											
41-185-20004	-85.4876	35.9994	1555		D&A	1026					794	11															
41-185-20005	-85.5060	35.9952	1556		Gas	1050					789	12	622	-10													
41-185-20006	-85.2371	35.8694	1690		D&A	1700			1198	32	580	16	392	16													
41-185-20007	-85.5129	35.9766	1697		D&A	1100					706	-66															

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-185-20008	-85.5009	36.0004	1698		D&A	1030					792	9															
41-185-20009	-85.5153	35.9888	1712		D&A	989					755	-15															
41-185-20013	-85.4902	36.0204	1833		Gas	1041					777	-24	643	6	591	-6											
41-185-20015	-85.4912	36.0500	1863		Gas	1017					797	-15	651	-15	617	-2											
41-185-20017	-85.4845	36.0211	1871		Gas	1042					822	21	636	2	598	8											
41-185-20019	-85.4794	35.9716	1874		D&A	994							593	-13													
41-185-20020	-85.4837	36.0370	1882		D&A	1021					737	-70	625	-21	588	-16	136		139	2							
41-185-20022	-85.4798	36.0205	1892		Gas	1045					945	146															
41-185-20024	-85.4997	35.9865	1896		D&A	992					788	18	620	-4													
41-185-20025	-85.5086	35.9920	1929		D&A	997							625	-8			136										
41-185-20026	-85.4630	35.9364	2023		D&A	937					757	-23	596	29													
41-185-20028	-85.4576	35.9762	2103		D&A	1018					768	-4	616	26													
41-185-20029	-85.4596	35.9854	2120		D&A	992					812	41															
41-185-20031	-85.4568	35.9794	2138		Gas	1003					808	36			463	8											
41-185-20032	-85.4536	35.9819	2139		Oil	1053					753	-18	603	10	453	1	83					-667	23				
41-185-20034	-85.4559	35.9679	2158		Gas	1001					781	7	581	-1	545	95											
41-185-20035	-85.4617	35.9804	2159		Gas	981					781	9	575	-21	356	-106											
41-185-20042	-85.5214	35.8933	2449		D&A	941					787	-7	561	-11			71					-814	-39				
41-185-20043	-85.4754	36.0194	2494		Gas	1140															-767	-780	-62				
41-185-20044	-85.3992	35.8237	2566		Gas	904					648	2	482	9	444	1	-2										
41-185-20048	-85.3899	35.9556	3388		Gas	955											-30		-25	-22		-775	54				
41-185-20049	-85.4174	35.9624	3427		D&A	902											56		58	-13		-830	-35				
41-185-20050	-85.4184	35.9402	3428		D&A	911											71		73	16		-809	-46				
41-185-20051	-85.4108	35.9314	3803		D&A	895							546	18			73		79	55		-713	51				
41-185-20052	-85.5368	35.9674	4202		D&A	982											104		107	10							
41-185-20053	-85.5304	35.9661	4203		D&A	965									501	-25	-67		-63	-156							
41-185-20055	-85.5518	35.9657	4227		D&A	970									564	-2	117		119	21		-658	13				
41-185-20056	-85.3028	35.9857	4303		D&A	1878			1353	-1	748	-9	538	4	500	-1											
41-185-20057	-85.3667	35.9747	4314		D&A	1275					755	6	545	5								-915	-1	-2095			
41-185-20059	-85.2982	35.8983	4339		D&A	1977							417	-12								-1103	-19				
41-185-20060	-85.5523	35.9748	4638		D&A	1004							614	-31	574	0	150		152	33							
41-185-20065	-85.4806	36.0228	5129		Gas	1076					822	21	692	59	654	66											
41-Cok-00001	-85.1368	35.6380				Surface																851	177				
41-Cok-00002	-85.3656	35.3550				Surface																742	-203				
41-Cok-00003	-85.2231	35.5726				Surface																811	325				
41-Cok-00004	-85.2542	35.5054				Surface																800	0				
41-Cok-00005	-85.5303	35.1283				Surface																653	3				
41-Cok-00006	-85.6209	35.0327				Surface																608	-6				
41-Cok-00007	-85.3337	35.4052				Surface																746	966				
41-Cok-00008	-85.2905	35.4988				Surface																833	182				
41-Cok-00009	-85.5034	35.1654				Surface																688	17				
41-Cok-00010	-85.3904	35.3615				Surface																808	354				
41-Cok-00011	-85.2265	35.5395				Surface																801	253				
41-Cok-00012	-85.5728	35.0790				Surface																623	-2				
41-Cok-00013	-85.4497	35.2442				Surface																699	-27				
41-Cok-00014	-85.4244	35.2794				Surface																689	60				
41-Cok-00015	-85.4692	35.2120				Surface																736	25				
41-Cok-00016	-85.2677	35.5289				Surface																915	59				
41-Cok-00017	-85.4788	35.2423				Surface																696	-16				
41-Cok-00018	-85.5144	35.2043				Surface																705	111				
41-Cok-00019	-85.1934	35.5735				Surface																899	814				
41-Mfp-00001	-85.2124	36.5904				Surface					801	13	604	-33													
41-Mfp-00002	-85.8140	36.6155				Surface					860	-9	663	-27													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-Mfp-00003	-86.2202	35.1972				Surface					938	-35	742	-41													
41-Mfp-00004	-85.3815	36.2357				Surface					945	17	748	-32													
41-Mfp-00005	-85.4413	36.3581				Surface					915	-18	719	-6													
41-Mfp-00006	-85.5912	36.5715				Surface					840	30	643	-26													
41-Mfp-00007	-86.0235	35.4854				Surface					1050	1	853	-41													
41-Mfp-00008	-86.0839	35.5462				Surface					1056	-13	860	-40													
41-Mfp-00009	-85.7770	35.6733				Surface					899	-6	702	-31													
41-Mfp-00010	-85.8829	35.6756				Surface					997	-16	801	-9													
41-Mfp-00011	-85.4429	36.3137				Surface					1001	14	804	18													
41-Mfp-00012	-85.5648	36.2210				Surface					1001	-25	804	-4													
41-Mfp-00013	-85.3543	36.5615				Surface					804	-12	607	-29													
41-Mfp-00014	-85.4024	36.4696				Surface					863	48	666	-38													
41-Mfp-00015	-85.6227	36.2244				Surface					997	-25	801	2													
41-Mfp-00016	-85.5512	35.0737				Surface					915	-56	719	-16													
41-Mfp-00017	-85.8399	36.6000				Surface					906	-27	709	-23													
41-Mfp-00018	-85.6883	36.5359				Surface					938	12	742	-3													
41-Mfp-00019	-85.6644	36.5008				Surface					912	3	715	4													
41-Mfp-00020	-85.9692	35.8483				Surface					1112	-34	915	-13													
41-Mfp-00021	-85.8209	35.9359				Surface					1050	-13	853	-27													
41-Mfp-00022	-86.2317	35.4303				Surface					1060	-16	863	11													
41-Mfp-00023	-85.1310	35.6183				Surface					1247	104	1050	303													
41-Mfp-00024	-86.0622	35.6885				Surface					1152	-6	955	5													
41-Mfp-00025	-85.6694	36.1303				Surface					1050	6	853	2													
41-Mfp-00026	-85.5620	36.1379				Surface					1001	8	804	-5													
41-Mfp-00027	-85.4536	36.5737				Surface					840	41	643	-16													
41-Mfp-00028	-85.8374	35.8150				Surface					1024	-1	827	-1													
41-Mfp-00029	-85.6847	35.9603				Surface					965	4	768	4													
41-Mfp-00030	-85.7021	36.5952				Surface					850	15	653	12													
41-Mfp-00031	-85.6773	36.0495				Surface					1001	-16	804	4													
41-Mfp-00032	-86.1148	35.5958				Surface					1099	-5	902	10													
41-Mfp-00033	-85.7383	35.8956				Surface					997	2	801	-1													
41-Mfp-00034	-85.5849	36.0350				Surface					899	8	702	3													
41-Mfp-00035	-85.4774	35.1665				Surface					1168	26	971	28													
41-Mfp-00036	-85.5844	36.2974				Surface					997	27	801	-4													
41-Mfp-00037	-86.1602	35.4273				Surface					1034	-1	837	17													
41-Mfp-00038	-85.6367	35.9909				Surface					925	3	728	4													
41-Mfp-00039	-86.1184	35.4090				Surface					997	4	801	4													
41-Mfp-00040	-86.0634	35.4515				Surface					1050	4	853	3													
41-Mfp-00041	-85.6978	35.7492				Surface					1001	122	804	98													
41-Mfp-00042	-85.4420	35.2254				Surface					1161	5	965	11													
41-Mfp-00043	-85.9021	35.8825				Surface					1198	6	1001	40													
41-Mfp-00044	-86.2387	35.2340				Surface					997	3	801	0													
41-Mfp-00045	-85.3713	36.3351				Surface					869	30	673	-4													
41-Mfp-00046	-86.2162	35.3126				Surface					1001	8	804	12													
41-Mfp-00047	-85.3763	35.3103				Surface					1168	123	971	94													
41-Mfp-00048	-86.2115	35.3585				Surface					1050	15	853	27													
41-Mfp-00049	-85.4821	36.4044				Surface					1020	92	824	39													
41-Mfp-00050	-85.2532	35.4838				Surface					1207	90	1011	204													
41-Mfp-00051	-85.0867	35.6551				Surface					1139	232	942	-45													
41-Mfp-00052	-85.4908	36.4602				Surface					997	78	801	42													
41-Mfp-00053	-85.3644	36.5156				Surface					906	90	709	46													
41-Mp-00001	-85.0886	36.4083				Surface	1499	-43																			
41-Mp-00002	-85.4579	35.3325				Surface	1536	-82																			

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-Mp-00003	-85.9179	35.1807				Surface	1552	-10																			
41-Mp-00004	-85.9820	35.0815				Surface	1490	-47																			
41-Mp-00005	-84.6808	36.5309				Surface	938	-9																			
41-Mp-00006	-85.6339	35.4409				Surface	1575	6																			
41-Mp-00007	-85.3382	35.8367				Surface	1411	-49																			
41-Mp-00008	-84.8696	36.4936				Surface	1234	-35																			
41-Mp-00009	-85.5996	35.6954				Surface	1631	-15																			
41-Mp-00010	-84.7419	36.6005				Surface	1221	-44																			
41-Mp-00011	-84.8241	35.9229				Surface	2031	117																			
41-Mp-00012	-85.7924	35.5101				Surface	1755	-9																			
41-Mp-00013	-84.8530	36.6059				Surface	1444	-18																			
41-Mp-00014	-85.2258	35.8806				Surface	1499	-21																			
41-Mp-00015	-85.8493	35.3860				Surface	1759	-20																			
41-Mp-00016	-84.9799	36.3819				Surface	1270	-41																			
41-Mp-00017	-84.9571	36.6015				Surface	1434	-42																			
41-Mp-00018	-85.3918	35.7809				Surface	1293	-5																			
41-Mp-00019	-85.1648	35.6600				Surface	1001	4																			
41-Mp-00020	-84.8157	36.6041				Surface	1388	-29																			
41-Mp-00021	-84.7004	36.5425				Surface	994	-35																			
41-Mp-00022	-85.0220	36.6040				Surface	1595	4																			
41-Mp-00023	-85.6117	35.5737				Surface	1552	-58																			
41-Mp-00024	-85.8220	35.4055				Surface	1742	-8																			
41-Mp-00025	-85.3343	36.1526				Surface	1693	-74																			
41-Mp-00026	-85.0013	36.5073				Surface	1496	-12																			
41-Mp-00027	-85.3430	35.8987				Surface	1650	30																			
41-Mp-00028	-85.8130	35.3095				Surface	1755	-21																			
41-Mp-00029	-85.5928	35.1624				Surface	1499	-53																			
41-Mp-00030	-85.7502	35.1584				Surface	1614	6																			
41-Mp-00031	-85.9859	35.1436				Surface	1670	-1																			
41-Mp-00032	-84.5972	36.5760				Surface	830	13																			
41-Mp-00033	-85.3734	36.1027				Surface	1798	-5																			
41-Mp-00034	-85.7048	35.0338				Surface	1135	-97																			
41-Mp-00035	-85.9042	35.2592				Surface	1801	-27																			
41-Mp-00036	-84.6751	36.5981				Surface	1099	-14																			
41-Mp-00037	-85.4238	35.2345				Surface	1880	-17																			
41-Mp-00038	-84.8593	36.5507				Surface	1299	-34																			
41-Mp-00039	-85.6028	35.5320				Surface	1490	-14																			
41-Mp-00040	-84.8967	35.8870				Surface	1801	88																			
41-Mp-00041	-85.6685	35.3039				Surface	1513	-10																			
41-Mp-00042	-85.0904	36.2626				Surface	1499	-12																			
41-Mp-00043	-85.4356	35.7868				Surface	1434	-1																			
41-Mp-00044	-84.6426	36.5779				Surface	1027	19																			
41-Mp-00045	-85.4168	36.0401				Surface	1700	-40																			
41-Mp-00046	-86.0746	35.0246				Surface	1581	-25																			
41-Mp-00047	-85.9163	35.0888				Surface	1529	-1																			
41-Mp-00048	-85.9132	35.4325				Surface	1900	-11																			
41-Mp-00049	-85.2948	36.0974				Surface	1834	9																			
41-Mp-00050	-85.6451	35.6483				Surface	1798	-6																			
41-Mp-00051	-85.4891	35.1264				Surface	1696	-4																			
41-Mp-00052	-85.6588	35.6320				Surface	1798	-10																			
41-Mp-00053	-84.8236	36.5887				Surface	1401	-11																			
41-Mp-00054	-84.6662	36.4656				Surface	883	64																			
41-Mp-00055	-85.7954	35.2700				Surface	1723	22																			

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-Mp-00056	-85.9845	35.2181				Surface	1782	-41																			
41-Mp-00057	-84.9759	36.5299				Surface	1499	-19																			
41-Mp-00058	-85.3401	36.1742				Surface	1768	-31																			
41-Mp-00059	-85.1536	36.1862				Surface	1549	-3																			
41-Mp-00060	-85.6587	35.5514				Surface	1595	1																			
41-Mp-00061	-85.3437	35.9434				Surface	1709	12																			
41-Mp-00062	-85.0541	36.2376				Surface	1467	-3																			
41-Mp-00063	-85.2591	36.3217				Surface	1663	-2																			
41-Mp-00064	-85.3214	35.1326				Surface	1453	-75																			
41-Mp-00065	-85.8942	35.4064				Surface	1890	10																			
41-Mp-00066	-84.9443	35.7789				Surface	1910	32																			
41-Mp-00067	-85.4156	36.0768				Surface	1759	-15																			
41-Mp-00068	-85.3734	35.2920				Surface	1988	55																			
41-Mp-00069	-84.7742	36.5864				Surface	1299	-11																			
41-Mp-00070	-85.4816	35.7112				Surface	1608	3																			
41-Mp-00071	-85.3083	35.9861				Surface	1768	9																			
41-Mp-00072	-85.2069	36.1838				Surface	1719	17																			
41-Mp-00073	-85.2568	36.3649				Surface	1693	-1																			
41-Mp-00074	-84.8958	36.5537				Surface	1385	-14																			
41-Mp-00075	-85.7829	35.2312				Surface	1627	10																			
41-Mp-00076	-85.6058	35.6543				Surface	1791	23																			
41-Mp-00077	-86.2361	35.0227				Surface	1591	0																			
41-Mp-00078	-85.0449	36.3439				Surface	1516	69																			
41-Mp-00079	-86.1753	35.0604				Surface	1772	5																			
41-Mp-00080	-84.9826	36.5925				Surface	1493	-1																			
41-Mp-00081	-85.2449	35.8478				Surface	1562	15																			
41-Mp-00082	-84.9212	36.5900				Surface	1421	-41																			
41-Mp-00083	-85.5146	35.0972				Surface	1680	17																			
41-Mp-00084	-85.3903	35.9212				Surface	1690	-3																			
41-Mp-00085	-85.3630	36.1345				Surface	1795	34																			
41-Mp-00086	-85.7556	35.4718				Surface	1818	11																			
41-Mp-00087	-85.3960	35.4434				Surface	1211	18																			
41-Mp-00088	-85.8312	35.4863				Surface	1910	29																			
41-Mp-00089	-86.1268	35.0914				Surface	1824	28																			
41-Mp-00090	-85.6066	35.6317				Surface	1801	34																			
41-Mp-00091	-85.2580	36.2018				Surface	1729	21																			
41-Mp-00092	-85.3060	36.0489				Surface	1801	3																			
41-Mp-00093	-85.8857	35.4686				Surface	1969	7																			
41-Mp-00094	-85.0715	36.3907				Surface	1509	42																			
41-Mp-00095	-85.1241	36.4057				Surface	1660	2																			
41-Mp-00096	-85.3987	35.8163				Surface	1375	3																			
41-Mp-00097	-84.8413	36.5874				Surface	1450	18																			
41-Mp-00098	-85.3630	35.4460				Surface	1191	18																			
41-Mp-00099	-85.6472	35.6102				Surface	1808	11																			
41-Mp-00100	-85.8156	35.3484				Surface	1798	34																			
41-Mp-00101	-84.7175	36.5888				Surface	1211	13																			
41-Mp-00102	-85.2911	36.0025				Surface	1801	39																			
41-Mp-00103	-84.9448	36.5227				Surface	1536	-4																			
41-Mp-00104	-85.1532	36.3599				Surface	1598	18																			
41-Mp-00105	-84.9396	36.5896				Surface	1437	-21																			
41-Mp-00106	-85.8522	35.2495				Surface	1818	13																			
41-Mp-00107	-85.3511	36.1142				Surface	1831	47																			
41-Mp-00108	-85.7001	35.1302				Surface	1627	31																			

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-Mp-00109	-85.4229	35.7432				Surface	1542	50																			
41-Mp-00110	-86.0783	35.0597				Surface	1709	14																			
41-Mp-00111	-85.0224	36.2807				Surface	1391	13																			
41-Mp-00112	-85.5439	35.7085				Surface	1693	36																			
41-Mp-00113	-85.4707	35.7524				Surface	1608	38																			
41-Mp-00114	-85.4649	35.0397				Surface	1552	-23																			
41-Mp-00115	-85.4453	35.7037				Surface	1624	43																			
41-Mp-00116	-85.6984	35.0748				Surface	1490	-20																			
41-Mp-00117	-84.9625	36.4411				Surface	1480	36																			
41-Mp-00118	-84.9588	36.5093				Surface	1555	30																			
41-Mp-00119	-85.0316	36.5902				Surface	1663	44																			
41-Mp-00120	-85.1107	36.2219				Surface	1578	17																			
41-Mp-00121	-85.7665	35.0860				Surface	1618	20																			
41-Mp-00122	-85.3227	35.8517				Surface	1608	80																			
41-Mp-00123	-84.7920	36.6002				Surface	1408	41																			
41-Mp-00124	-85.2125	36.3363				Surface	1601	-19																			
41-Mp-00125	-85.7278	35.5127				Surface	1700	9																			
41-Mp-00126	-85.3437	36.1927				Surface	1864	50																			
41-Mp-00127	-84.9250	36.5646				Surface	1480	17																			
41-Mp-00128	-85.0728	36.3738				Surface	1499	77																			
41-On-00001	-85.0715	35.7367				Surface									997	106											
41-On-00002	-85.7929	36.0628				Surface									807	-10											
41-On-00003	-86.1887	35.4581				Surface									902	-17											
41-On-00004	-85.6982	36.0306				Surface									699	-19											
41-On-00005	-86.1977	35.9822				Surface									1099	-35											
41-On-00006	-86.0994	35.7814				Surface									1060	34											
41-On-00007	-85.5876	36.4008				Surface									742	-21											
41-On-00008	-86.0348	35.8136				Surface									929	-10											
41-On-00009	-85.6814	36.2137				Surface									784	-44											
41-On-00010	-85.7466	36.1923				Surface									801	-2											
41-On-00011	-86.0576	35.9371				Surface									1007	8											
41-On-00012	-85.8714	36.0651				Surface									860	-3											
41-On-00013	-85.6826	36.4127				Surface									787	9											
41-On-00014	-86.1955	35.5844				Surface									1001	-88											
41-On-00015	-86.1391	36.5070				Surface									794	-60											
41-On-00016	-85.9981	36.0396				Surface									1001	-19											
41-On-00017	-85.9387	35.9465				Surface									1011	-36											
41-On-00018	-85.7341	36.1084				Surface									863	-13											
41-On-00019	-86.1918	36.0377				Surface									1184	-19											
41-On-00020	-85.6109	35.0122				Surface									663	-9											
41-On-00021	-86.1050	35.9593				Surface									1060	-18											
41-On-00022	-85.5362	36.4499				Surface									709	13											
41-On-00023	-85.2000	35.5397				Surface									945	30											
41-On-00024	-85.5589	35.0718				Surface									696	6											
41-On-00025	-85.8558	36.4131				Surface									791	-22											
41-On-00026	-86.1377	36.2910				Surface									1007	5											
41-On-00027	-85.8519	36.4594				Surface									801	-16											
41-On-00028	-85.8281	36.1292				Surface									787	-17											
41-On-00029	-85.4846	35.1594				Surface									794	-43											
41-On-00030	-85.6373	36.4567				Surface									787	46											
41-On-00031	-85.6775	35.9464				Surface									702	25											
41-On-00032	-85.5299	35.0943				Surface									705	-7											
41-On-00033	-85.6944	36.5092				Surface									699	-15											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-On-00034	-85.1685	35.6382				Surface									899	17											
41-On-00035	-86.1259	35.8790				Surface									971	-27											
41-On-00036	-85.7533	35.9427				Surface									699	-19											
41-On-00037	-86.1290	35.6703				Surface									1096	-14											
41-On-00038	-85.7416	35.9939				Surface									719	-11											
41-On-00039	-86.1011	36.0694				Surface									1093	0											
41-On-00040	-86.1125	36.5932				Surface									689	-39											
41-On-00041	-85.3103	35.4092				Surface									1001	137											
41-On-00042	-85.4707	35.1866				Surface									856	-24											
41-On-00043	-85.8230	36.2860				Surface									846	-2											
41-On-00044	-86.0292	36.4128				Surface									781	-38											
41-On-00045	-86.1907	35.7017				Surface									1201	15											
41-On-00046	-85.8260	36.4787				Surface									807	-10											
41-On-00047	-85.4441	35.2290				Surface									873	0											
41-On-00048	-85.9125	36.0331				Surface									961	18											
41-On-00049	-86.1836	36.0636				Surface									1198	6											
41-On-00050	-85.7225	36.4736				Surface									705	-13											
41-On-00051	-85.9607	36.6164				Surface									679	0											
41-On-00052	-86.0802	36.0257				Surface									1099	2											
41-On-00053	-85.9390	36.4921				Surface									846	10											
41-On-00054	-86.0306	35.7794				Surface									1011	9											
41-On-00055	-86.2471	35.5876				Surface									997	-38											
41-On-00056	-85.8632	36.2674				Surface									807	-34											
41-On-00057	-86.1938	35.2401				Surface									899	6											
41-On-00058	-86.1553	35.7466				Surface									1152	38											
41-On-00059	-85.9172	36.1241				Surface									869	-11											
41-On-00060	-85.1665	35.5796				Surface									958	31											
41-On-00061	-86.1164	36.6225				Surface									712	-32											
41-On-00062	-85.9738	36.2908				Surface									843	-22											
41-On-00063	-86.0794	35.7493				Surface									1001	-42											
41-On-00064	-86.0188	36.4967				Surface									846	-9											
41-On-00065	-85.8799	36.6120				Surface									699	8											
41-On-00066	-86.1201	35.4871				Surface									902	-16											
41-On-00067	-85.4040	35.2797				Surface									945	77											
41-On-00068	-86.1508	36.0246				Surface									1201	1											
41-On-00069	-85.9980	36.5372				Surface									797	11											
41-On-00070	-85.8300	35.9811				Surface									942	-1											
41-On-00071	-85.8267	36.2440				Surface									883	9											
41-On-00072	-85.9474	36.0474				Surface									945	-33											
41-On-00073	-85.3830	35.3067				Surface									919	76											
41-On-00074	-86.1586	35.6029				Surface									1066	-18											
41-On-00075	-85.7396	36.1439				Surface									899	-3											
41-On-00076	-85.8860	35.9954				Surface									1017	28											
41-On-00077	-86.0298	36.4600				Surface									899	9											
41-On-00078	-86.1598	35.2004				Surface									860	7											
41-On-00079	-86.1301	35.8933				Surface									1024	14											
41-On-00080	-86.2466	35.6628				Surface									1201	14											
41-On-00081	-85.7137	36.4547				Surface									702	-1											
41-On-00082	-86.1691	35.2738				Surface									899	10											
41-On-00083	-85.7693	36.4924				Surface									787	4											
41-On-00084	-85.4819	36.4420				Surface									774	-5											
41-On-00085	-86.1865	35.5029				Surface									1070	40											
41-On-00086	-85.8134	36.1761				Surface									883	23											

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-On-00087	-85.2910	35.4362				Surface									906	95											
41-On-00088	-86.0524	36.2000				Surface									1070	28											
41-On-00089	-86.0059	35.8089				Surface									1001	20											
41-On-00090	-85.9935	36.2177				Surface									974	-27											
41-On-00091	-85.8330	36.2040				Surface									869	-15											
41-On-00092	-85.7719	36.4341				Surface									797	-12											
41-On-00093	-85.6227	36.2148				Surface									801	-20											
41-On-00094	-86.2490	35.2841				Surface									1001	48											
41-On-00095	-86.2229	35.2086				Surface									899	-7											
41-On-00096	-85.6994	35.8828				Surface									732	-6											
41-On-00097	-85.9221	36.5052				Surface									824	23											
41-On-00098	-86.1555	35.6211				Surface									1099	-13											
41-On-00099	-85.1231	35.6308				Surface									1011	145											
41-On-00100	-85.9485	36.4640				Surface									909	27											
41-On-00101	-85.8339	36.0292				Surface									981	28											
41-On-00102	-86.0859	36.4738				Surface									902	13											
41-On-00103	-86.0687	36.4178				Surface									879	5											
41-On-00104	-85.6201	36.5023				Surface									755	35											
41-On-00105	-85.9679	36.1567				Surface									997	2											
41-On-00106	-85.4221	35.2550				Surface									899	18											
41-On-00107	-85.8670	36.5584				Surface									745	-22											
41-On-00108	-85.6343	36.0411				Surface									801	6											
41-On-00109	-86.1084	36.5351				Surface									869	-7											
41-On-00110	-86.0389	35.8523				Surface									997	4											
41-On-00111	-85.5148	36.4126				Surface									856	45											
41-On-00112	-86.2482	35.7497				Surface									1165	73											
41-On-00113	-86.1635	36.4699				Surface									899	-25											
41-On-00114	-85.9850	36.0910				Surface									1011	1											
41-On-00115	-86.0667	36.5517				Surface									801	-54											
41-On-00116	-86.1313	35.2398				Surface									846	16											
41-On-00117	-86.2196	35.6280				Surface									1129	35											
41-On-00118	-85.8757	36.1770				Surface									899	12											
41-On-00119	-85.9262	36.5802				Surface									764	40											
41-On-00120	-85.9563	35.9784				Surface									1096	9											
41-On-00121	-85.7192	36.2625				Surface									889	23											
41-On-00122	-85.6001	36.0429				Surface									801	21											
41-On-00123	-86.1711	35.9986				Surface									1230	25											
41-On-00124	-86.0300	35.8882				Surface									1017	-10											
41-On-00125	-86.2437	35.5513				Surface									1066	-8											
41-On-00126	-85.9329	36.4145				Surface									883	22											
41-On-00127	-86.1555	35.9319				Surface									1175	29											
41-On-00128	-86.1419	35.4221				Surface									925	25											
41-On-00129	-85.7517	36.2275				Surface									869	16											
41-On-00130	-86.1800	35.4097				Surface									919	31											
41-On-00131	-86.1836	35.6527				Surface									1198	41											
41-On-00132	-85.6701	36.1676				Surface									919	38											
41-On-00133	-85.6649	36.1388				Surface									942	35											
41-On-00134	-85.9954	36.0359				Surface									1056	37											
41-On-00135	-85.8880	35.9512				Surface									1093	44											
41-On-00136	-85.8987	36.2229				Surface									899	-16											
41-On-00137	-85.9130	35.8858				Surface									1066	3											
41-On-00138	-85.9404	36.2625				Surface									889	2											
41-On-00139	-86.1557	36.4246				Surface									1001	44											

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41-On-00140	-85.2727	35.4602				Surface									948	11											
41-On-00141	-85.7678	36.0288				Surface									892	42											
41-On-00142	-86.1882	35.5437				Surface									1125	9											
41-On-00143	-86.0940	35.7152				Surface									1135	67											
41-On-00144	-85.5062	35.1261				Surface									801	49											
41-On-00145	-85.3412	35.3620				Surface									896	128											
41-On-00146	-85.4877	36.4975				Surface									758	40											
41-Osr-00001	-86.0917	36.0957				Surface											810	801	778	-41							
41-Osr-00002	-86.1057	36.3388				Surface											525	515	492	-7							
41-Osr-00003	-86.2309	36.2322				Surface											699	689	666	-55							
41-Osr-00004	-85.4871	35.1682				Surface											725	715	692	15							
41-Osr-00005	-86.3168	35.8701				Surface											709	699	676	-52							
41-Osr-00006	-86.1161	36.2878				Surface											600	591	568	-32							
41-Osr-00007	-86.1737	35.9266				Surface											791	781	758	-48							
41-Osr-00008	-86.1347	35.8082				Surface											735	725	702	-38							
41-Osr-00009	-86.2145	35.7209				Surface											919	909	886	-11							
41-Osr-00010	-86.1985	35.8767				Surface											801	791	768	7							
41-Osr-00011	-85.9845	36.2694				Surface											449	440	417	-34							
41-Osr-00012	-86.3126	35.6693				Surface											830	820	797	-6							
41-Osr-00013	-86.3101	36.3957				Surface											499	489	466	-59							
41-Osr-00014	-86.1448	36.2214				Surface											699	689	666	-14							
41-Osr-00015	-86.1451	35.7439				Surface											892	883	860	17							
41-Osr-00016	-86.1590	36.2284				Surface											699	689	666	-18							
41-Osr-00017	-86.0580	35.9936				Surface											735	725	702	-2							
41-Osr-00018	-86.1466	36.0429				Surface											801	791	768	1							
41-Osr-00019	-86.1891	35.7568				Surface											899	889	866	53							
41-Osr-00020	-86.2281	35.7834				Surface											801	791	768	-13							
41-Osr-00021	-85.2332	35.5186				Surface											899	889	866	-42							
41-Osr-00022	-85.0786	35.7176				Surface											902	892	869	-107							
41-Osr-00023	-86.2845	35.4733				Surface											787	778	755	-4							
41-Osr-00024	-86.0328	36.3001				Surface											591	581	558	-19							
41-Osr-00025	-86.1203	36.2180				Surface											699	689	666	12							
41-Osr-00026	-85.9847	36.1892				Surface											600	591	568	-51							
41-Osr-00027	-86.2435	35.6200				Surface											866	856	833	3							
41-Osr-00028	-85.9370	36.0733				Surface											584	574	551	-8							
41-Osr-00029	-86.0645	35.9447				Surface											699	689	666	-8							
41-Osr-00030	-86.0744	35.7845				Surface											801	791	768	17							
41-Osr-00031	-86.1484	36.2591				Surface											692	682	659	13							
41-Osr-00032	-86.0992	36.3091				Surface											594	584	561	-2							
41-Osr-00033	-85.8899	36.0947				Surface											574	564	541	-1							
41-Osr-00034	-86.0753	36.2025				Surface											659	650	627	-6							
41-Osr-00035	-86.2005	35.8059				Surface											778	768	745	-24							
41-Osr-00036	-86.1470	36.1909				Surface											758	748	725	6							
41-Osr-00037	-86.2477	36.3604				Surface											554	545	522	-9							
41-Osr-00038	-86.2457	36.1082				Surface											696	686	663	-28							
41-Osr-00039	-86.2377	35.8920				Surface											673	663	640	-43							
41-Osr-00040	-86.2015	36.3035				Surface											653	643	620	21							
41-Osr-00041	-86.2456	36.2956				Surface											600	591	568	10							
41-Osr-00042	-86.1247	35.9779				Surface											801	791	768	-11							
41-Osr-00043	-86.2649	35.6904				Surface											899	889	866	-24							
41-Osr-00044	-85.9293	36.0311				Surface											600	591	568	-4							
41-Osr-00045	-86.0574	36.1029				Surface											899	889	866	8							
41-Osr-00046	-85.0778	35.6726				Surface											1132	1122	1099	26							

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
41-Osr-00047	-86.2869	36.3231				Surface											597	587	564	3							
41-Osr-00048	-86.1560	36.0656				Surface											801	791	768	6							
41-Osr-00049	-85.1167	35.6449				Surface											978	968	945	-18							
41-Osr-00050	-86.2554	36.3358				Surface											581	571	548	0							
41-Osr-00051	-86.2127	36.1851				Surface											758	748	725	-1							
41-Osr-00052	-86.0938	36.0054				Surface											810	801	778	12							
41-Osr-00053	-86.3198	35.5658				Surface											899	889	866	0							
41-Osr-00054	-86.2565	36.3193				Surface											594	584	561	6							
41-Osr-00055	-85.0468	35.7089				Surface											997	988	965	98							
41-Osr-00056	-85.9102	36.1599				Surface											587	577	554	-5							
41-Osr-00057	-86.2389	35.5743				Surface											869	860	837	10							
41-Osr-00058	-86.1127	35.9029				Surface											830	820	797	11							
41-Osr-00059	-86.1729	36.2926				Surface											699	689	666	39							
41-Osr-00060	-86.0163	36.2470				Surface											600	591	568	7							
41-Osr-00061	-85.1928	35.5616				Surface											965	955	932	-43							
41-Osr-00062	-86.0121	36.0620				Surface											801	791	768	23							
41-Osr-00063	-86.2484	36.3928				Surface											564	554	532	-20							
41-Osr-00064	-86.2745	35.7399				Surface											824	814	791	-5							
41-Osr-00065	-86.2795	36.1434				Surface											801	791	768	32							
41-Osr-00066	-86.0495	36.3242				Surface											682	673	650	9							
41-Osr-00067	-86.0412	36.1525				Surface											801	791	768	-10							
41-Osr-00068	-86.1601	36.1501				Surface											801	791	768	17							
41-Osr-00069	-86.0423	35.8099				Surface											801	791	768	52							
41-Osr-00070	-86.2488	35.6354				Surface											906	896	873	30							
41-Osr-00071	-85.4196	35.2668				Surface											774	764	742	-1							
41-Osr-00072	-85.4510	35.2248				Surface											794	784	761	-2							
41-Osr-00073	-86.2967	36.0040				Surface											794	784	761	46							
41-Osr-00074	-86.0773	36.0521				Surface											873	863	840	25							
41-Osr-00075	-86.2688	36.3823				Surface											584	574	551	-4							
41-Osr-00076	-85.3439	35.3686				Surface											797	787	764	359							
41-Osr-00077	-86.2510	36.0631				Surface											801	791	768	25							
41-Osr-00078	-86.1016	36.2718				Surface											682	673	650	44							
41-Osr-00079	-86.2009	36.0778				Surface											787	778	755	9							
41-Osr-00080	-86.2235	36.2410				Surface											764	755	732	18							
41-Osr-00081	-86.3127	35.8525				Surface											801	791	768	32							
41-Osr-00082	-85.9251	36.2498				Surface											532	522	499	17							
41-Osr-00083	-85.5274	35.1180				Surface											620	610	587	132							
41-Osr-00084	-86.2186	35.8300				Surface											899	889	866	52							
41-Osr-00085	-86.1857	35.9039				Surface											876	866	843	40							
41-Osr-00086	-86.2824	35.9689				Surface											899	889	866	80							
41-Osr-00087	-85.1524	35.6101				Surface											978	968	945	-13							
45-027-19889	-81.9700	37.1600	207	BU018A	Gas	1799	47	46	-1358	73			-2702	37													
45-027-19890	-81.9700	37.2400	216	BU019A	Gas	1726			-1536	-75																	
45-027-19893	-81.9500	37.3700	243	BU022A	D&A	1263	-155	-22	-1011	57			-2346	76													
45-027-19894	-82.1900	37.1600	254	BU023A	D&A	1373	-265	7	-1479	3			-2767	22													
45-027-19895	-82.0400	37.3300	261	BU024A	D&A	2076	-259	-67	-1656	-171																	
45-027-19896	-81.9500	37.2400	272	BU025A	D&A	2258	-215	-146	-1520	6																	
45-027-19897	-81.9600	37.2400	282	BU026A	Gas	1619	378	440																			
45-027-19899	-81.9700	37.2400	295	BU028A	D&A	2253	-148	-82	-1470	-9			-2748	13													
45-027-19902	-82.0300	37.1600	323	BU031A	Gas	1751	-199	15	-1464	-2			-2874	33													
45-027-19903	-81.9600	37.2300	334	BU032A	Gas	1674	-204	-94	-1528	-9																	
45-027-19904	-81.9600	37.2300	343	BU033A	Gas	1753	-145	-35																			
45-027-19905	-81.9700	37.2200	354	BU034A	Gas	1826	-256	-95	-1558	-48																	

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
45-027-19910	-82.0300	37.3400	406	BU039A	Gas	1987	-242	-7	-1288	195																	
45-027-19912	-81.9300	37.2500	422	BU041A	Gas	2123	-49	4	-1407	46																	
45-027-19913	-82.0500	37.2800	430	BU042A	Gas	1509	-81	-12	-1112	108																	
45-027-19977	-82.0200	37.4800	28	BU-0063	Gas	1234	-350	26	-1358	-8			-2356	22													
45-027-20314	-82.0600	37.4000	194	BU-0178	Gas	1163	-253	36	-1428	-18			-2517	-49													
45-027-20410	-82.0800	37.3800	212	BU-0196	Gas	1510	-222	2	-1355	50			-2340	72													
45-027-20412	-82.2400	37.3300	213	BU-0197	Gas	1327	-386	-38	-1441	-14			-2624	-39													
45-027-20414	-82.0600	37.3900	215	BU-0199	Gas	1318	-273	-9	-1388	26			-2483	-3													
45-027-20433	-82.0300	37.3800	222	BU-0206	Gas	1175	-471	-116	-1471	-15			-2605	-25													
45-027-20436	-82.0200	37.5000	223	BU-0207	Gas	1242	-335	84	-1356	-11			-2388	-11													
45-027-20441	-82.2100	37.2600	224	BU-0208	Gas	1917	-428	-81	-1608	33			-2804	10													
45-027-21144	-82.2300	37.2700	252	BU-0238	Gas	1868	-492	-67	-1547	37			-2792	-69													
45-027-22282	-82.0400	37.4300	639	BU-0671	Gas	1261	-298	89	-1410	1			-2439	25													
45-027-22283	-82.0600	37.4300	640	BU-0672	Gas	1313	-386	-21	-1430	-28			-2459	-25													
45-027-22566	-82.2100	37.3000	710	BU-0754	Gas	1820	-389	-63	-1494	20			-2643	36													
45-027-23807	-82.2200	37.1900	1278	BU-1379	Gas	1946	-202	15	-1874	-75			-3007	-63													
45-027-23808	-82.2200	37.2000	1279	BU-1380	Gas	1881	-219	-23	-1835	27			-3007	-47													
45-027-23828	-81.8300	37.2600	1286	BU-1387	Gas	1975	-417	-10	-1703	-37			-3035	-12													
45-027-23915	-82.2000	37.2500	1333	BU-1436	Gas	1984	-198	84	-1736	-45			-2858	16													
45-027-23917	-82.2100	37.2000	1334	BU-1437	Gas	1982	-185	2	-2016	-138			-2982	-27													
45-027-23937	-82.2300	37.2100	1346	BU-1451	Gas	1849	-205	-16	-1865	-44			-2963	-9													
45-027-24151	-82.2000	37.2600	3301	BU-1592	Gas	1753	-291	7	-1725	-82			-2863	-24													
45-027-24189	-82.2000	37.2000	3307	BU-1613	Gas	2092	-112	65	-1917	-22			-2948	2													
45-027-24373	-82.0600	37.4200	3385	BU-1719	Gas	1078	-462	-122	-1432	-27			-2465	-19													
45-027-24510	-82.2000	37.2100	3427	BU-1806	Gas	1921	-137	14	-1743	118			-2955	5													
45-027-24631	-82.2000	37.2400	3632	BU-1880	Gas	1606	-158	91	-1764	-25			-2945	-50													
45-027-24701	-82.1300	37.3400	3654	BU-1919	Gas	1744	-204	-22	-1510	9			-2642	-38													
45-051-19623	-82.3400	37.0600	1734	DI021A	Gas	1524	-210	73	-1472	282																	
45-051-19804	-82.3700	37.1500	1642	DI012A	Gas	1431	-275	-11	-1297	153			-2466	76													
45-051-19805	-82.3500	37.0800	1653	DI013A	Gas	1504	-164	82	-1399	155																	
45-051-19811	-82.3500	37.0700	1717	DI019A	Gas	1521	-162	87	-1401	216			-2679	278													
45-051-19812	-82.3500	37.0600	1725	DI020A	Gas	1525	-189	64	-1456	225																	
45-051-19832	-82.3600	37.0100	1523	DI-0020	D&A	2118	-242	13	-2022	-68			-2622	128													
45-051-20214	-82.3100	37.2600	1581	DI-0073	Gas	1579	-301	2	-1052	339																	
45-051-20238	-82.2600	37.2800	1655	DI-0141	D&A	1519	-136	147	-1357	20			-2565	51	-5721	-72	-6302	-6323	-6359	-159	-7622	-7662	-203				
45-051-20281	-82.3300	37.1400	1666	DI-0151	Gas	1728	-230	78																			
45-051-20530	-82.2700	37.0800	1733	DI-0219	Gas	1730			-2085	-29			-3294	-32													
45-051-20633	-82.2700	37.1200	1740	DI-0225	Gas	1725	-341	56	-1855	-5			-3065	48													
45-051-20733	-82.2700	37.0900	1746	DI-0230	Gas	1934	-448	-16	-2046	-42			-3252	-29													
45-051-20738	-82.3300	37.1100	1747	DI-0231	Gas	2168	-327	-34	-1846	-122			-2998	-13													
45-051-20774	-82.2600	37.0600	1748	DI-0232	Gas	2016	-480	-56	-2144	-120			-3409	-172													
45-051-20813	-82.3500	37.0900	1759	DI-0242	Gas	2057	-331	-84	-1863	-320			-3031	-126													
45-051-20815	-82.3300	37.0600	1762	DI-0245	Gas	1819	-473	-160	-2026	-199			-3213	-134													
45-051-20816	-82.3100	37.1000	1761	DI-0244	Gas	2295	-359	-11	-1837	69			-3089	32													
45-051-20837	-82.2800	37.1000	1766	DI-0249	Gas	1886	-484	-69	-2028	-72			-3216	-28													
45-051-20843	-82.3200	37.1500	1771	DI-0253	Gas	1739	-361	-24	-1795	-48			-2957	9													
45-051-20848	-82.2600	37.1400	1776	DI-0258	Gas	2038	-395	-42	-1866	-69			-3044	-5													
45-051-20868	-82.3900	37.1600	1786	DI-0268	Gas	1767	-359	-54	-1659	-57			-2669	-99													
45-051-21149	-82.2600	37.2300	1914	DI-0426	Gas	1841	-294	18	-1579	133			-2839	15													
45-051-22297	-82.3400	37.2600	2109	DI-0680	Gas	1522							-2438	65													
45-051-23707	-82.3000	37.2500	2295	DI-0888	Gas	1476	-498	-170	-1526	-48			-2672	46													
45-051-23829	-82.3000	37.2400	2311	DI-0904	Gas	1578	-212	137	-1730	-190			-2728	7													
45-051-23881	-82.2700	37.2200	2323	DI-0916	Gas	1901	-231	75	-1737	-12			-2885	-30													

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
45-051-24194	-82.2700	37.2300	3455	DI-0949	Gas	1750	-382	-69	-1772	-80			-2884	-39													
45-051-24396	-82.2800	37.2200	3492	DI-0991	Gas	2066	-336	-7	-1776	-80			-2800	33													
45-051-24584	-82.3000	37.2300	3695	DI-1022	Gas	1695	-499	-128	-1647	-67			-2749	5													
45-051-24687	-82.2700	37.2800	3698	DI-1039	Gas	1954	-192	49	-1242	76			-2398	196													
45-195-19627	-82.6500	37.0000	2870	WS003A	Gas	2230	179	104	-740	48																	
Core-1-44-1	-85.8659	36.4193				680															-342	-423	-28				
Core-1-45-1	-85.7777	36.4197				710															-313	-389	32				
Core-1-45-2	-85.7793	36.4612				610															-436	-531	-36				
Core-1-46-1	-85.7069	36.4186				590															-288	-376	62				
Core-1-46-2	-85.6976	36.4891				580															-443	-541	-52				
Core-1-46-3	-85.6920	36.4192				680															-353	-444	9				
Core-1-46-4	-85.6716	36.4192				540															-387	-472	0				
Core-1-46-5	-85.7117	36.4532				580															-396	-469	1				
Core-1-46-6	-85.6752	36.4450				520															-445	-537	-31				
Core-1-47-1	-85.6473	36.4207				570															-353	-447	33				
Core-1-47-10	-85.6079	36.4221				535															-466	-555	-58				
Core-1-47-11	-85.6020	36.4886				585															-524	-587	19				
Core-1-47-12	-85.6487	36.4897				595															-469	-540	24				
Core-1-47-13	-85.5862	36.4767				610															-507	-591	-4				
Core-1-47-14	-85.6085	36.4710				520															-491	-570	-19				
Core-1-47-15	-85.6636	36.4564				580															-409	-501	18				
Core-1-47-16	-85.5988	36.4447				545															-427	-505	-5				
Core-1-47-17	-85.5922	36.4386				520															-467	-557	-51				
Core-1-47-18	-85.6317	36.4560				550															-434	-498	-1				
Core-1-47-19	-85.5957	36.4388				535															-434	-503	0				
Core-1-47-2	-85.5842	36.4468				530															-457	-562	-51				
Core-1-47-20	-85.5852	36.4381				650															-442	-513	-2				
Core-1-47-21	-85.5890	36.4385				585															-456	-495	13				
Core-1-47-22	-85.5884	36.4462				540															-439	-526	-19				
Core-1-47-23	-85.6373	36.4203				565															-389	-460	22				
Core-1-47-24	-85.5898	36.4438				530															-449	-542	-35				
Core-1-47-25	-85.6046	36.4426				535															-408	-454	42				
Core-1-47-26	-85.5968	36.4431				540															-411	-457	45				
Core-1-47-27	-85.5969	36.4491				640															-394	-468	33				
Core-1-47-28	-85.6077	36.4474				640															-438	-499	-6				
Core-1-47-3	-85.6263	36.4910				530															-474	-558	31				
Core-1-47-4	-85.6028	36.4315				705															-411	-468	31				
Core-1-47-5	-85.6352	36.4342				520															-435	-527	-43				
Core-1-47-6	-85.6204	36.4469				580															-380	-453	30				
Core-1-47-7	-85.6039	36.4217				520															-454	-541	-41				
Core-1-47-702	-85.5975	36.4273				931																-536	-33				
Core-1-47-704	-85.5978	36.4278				930																-545	-42				
Core-1-47-705	-85.5978	36.4268				924																-519	-16				
Core-1-47-707	-85.5968	36.4273				879																-528	-24				
Core-1-47-709	-85.6002	36.4256				883																-497	5				
Core-1-47-711	-85.5948	36.4249				935																-501	5				
Core-1-47-712	-85.5963	36.4214				550																-463	42				
Core-1-47-713	-85.5922	36.4259				945																-534	-27				
Core-1-47-714	-85.6040	36.4253				680																-520	-21				
Core-1-47-715	-85.5863	36.4272				944																-530	-19				
Core-1-47-717	-85.5866	36.4256				950																-517	-6				
Core-1-47-718	-85.5867	36.4280				934																-507	4				
Core-1-47-719	-85.5875	36.4267				902																-517	-6				

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Core-1-47-720	-85.5853	36.4272				928																-527	-15				
Core-1-47-721	-85.5857	36.4279				930																-539	-27				
Core-1-47-722	-85.5984	36.4260				900																-468	35				
Core-1-47-723	-85.5840	36.4271				700																-522	-9				
Core-1-47-724	-85.5858	36.4261				858																-520	-8				
Core-1-47-725	-85.5844	36.4261				744																-511	2				
Core-1-47-726	-85.5986	36.4249				670																-492	11				
Core-1-47-727	-85.5844	36.4280				812																-554	-41				
Core-1-47-728	-85.5852	36.4251				898																-498	14				
Core-1-47-729	-85.6000	36.4264				710																-494	8				
Core-1-47-731	-85.5962	36.4264				710																-512	-8				
Core-1-47-732	-85.5899	36.4263				922																-536	-27				
Core-1-47-733	-85.5872	36.4312				588																-551	-41				
Core-1-47-735	-85.5881	36.4346				527																-520	-11				
Core-1-47-736	-85.5888	36.4234				906															-533	-552	-42				
Core-1-47-737	-85.6039	36.4230				534															-506	-531	-31				
Core-1-47-738	-85.5897	36.4190				605															-526	-546	-36				
Core-1-47-739	-85.5904	36.4298				923																-515	-7				
Core-1-47-740	-85.5946	36.4181				631																-518	-11				
Core-1-47-741	-85.5847	36.4330				531																-547	-35				
Core-1-47-742	-85.5871	36.4172				672																-549	-37				
Core-1-47-743	-85.5924	36.4219				585																-520	-12				
Core-1-47-745	-85.5489	36.4384				957																-542	3				
Core-1-47-747	-85.5888	36.4328				873																-533	-24				
Core-1-47-748	-85.5850	36.4298				920																-523	-11				
Core-1-47-749	-85.5884	36.4253				925																-525	-15				
Core-1-47-750	-85.5892	36.4208				632																-490	20				
Core-1-47-752	-85.5847	36.4167				928																-483	31				
Core-1-47-753	-85.5910	36.4238				629																-535	-27				
Core-1-47-754	-85.5867	36.4326				570																-556	-46				
Core-1-47-755	-85.5898	36.4170				890																-545	-35				
Core-1-47-756	-85.5911	36.4283				926																-512	-4				
Core-1-47-757	-85.5851	36.4235				930																-515	-2				
Core-1-47-759	-85.5891	36.4314				876																-541	-32				
Core-1-47-760	-85.5919	36.4192				880																-547	-39				
Core-1-47-762	-85.5989	36.4207				530																-460	43				
Core-1-47-764	-85.5857	36.4359				915																-498	13				
Core-1-47-8	-85.5926	36.4325				680															-441	-529	-23				
Core-1-47-825	-85.5857	36.4199				891															-439	-530	-17				
Core-1-47-826	-85.5967	36.4342				952																-432	71				
Core-1-47-833	-85.5857	36.4275				947																-534	-22				
Core-1-47-834	-85.5848	36.4287				935																-509	3				
Core-1-47-835	-85.5849	36.4276				899																-537	-25				
Core-1-47-836	-85.5852	36.4265				911																-524	-12				
Core-1-47-837	-85.5857	36.4267				918																-530	-18				
Core-1-47-838	-85.5872	36.4238				907																-525	-14				
Core-1-47-840	-85.5857	36.4307				873																-535	-24				
Core-1-47-841	-85.5887	36.4277				939																-535	-25				
Core-1-47-843	-85.5867	36.4293				914																-548	-37				
Core-1-47-845	-85.5872	36.4293				932																-559	-49				
Core-1-47-846	-85.5846	36.4305				885																-507	5				
Core-1-47-847	-85.5847	36.4295				940																-531	-19				
Core-1-47-848	-85.5884	36.4260				912																-525	-15				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-1-47-849	-85.5877	36.4305				638																-550	-40				
Core-1-47-850	-85.5876	36.4318				650																-553	-43				
Core-1-47-851	-85.5861	36.4319				635																-543	-32				
Core-1-47-852	-85.5867	36.4306				656																-539	-28				
Core-1-47-853	-85.5847	36.4287				935																-518	-6				
Core-1-47-854	-85.5856	36.4286				874																-546	-34				
Core-1-47-855	-85.5865	36.4266				899																-522	-11				
Core-1-47-856	-85.5855	36.4292				887																-518	-6				
Core-1-47-859	-85.5848	36.4314				692																-520	-8				
Core-1-47-860	-85.5900	36.4218				833																-537	-28				
Core-1-47-863	-85.5887	36.4238				909																-561	-51				
Core-1-47-864	-85.5859	36.4332				525																-559	-48				
Core-1-47-865	-85.5880	36.4236				910																-534	-23				
Core-1-47-867	-85.5889	36.4237				909																-547	-37				
Core-1-47-871	-85.5887	36.4232				904																-576	-66				
Core-1-47-9	-85.5926	36.4353				650															-433	-517	-11				
Core-1-48-1	-85.5805	36.4314				550															-410	-472	43				
Core-1-48-10	-85.5666	36.4295				670															-405	-496	30				
Core-1-48-11	-85.5784	36.4400				600															-454	-519	-2				
Core-1-48-12	-85.5774	36.4373				655															-429	-510	8				
Core-1-48-13	-85.5659	36.4335				870															-454	-547	-19				
Core-1-48-14	-85.5703	36.4335				650															-476	-568	-44				
Core-1-48-15	-85.5704	36.4204				760															-311	-364	157				
Core-1-48-16	-85.5724	36.4226				730															-340	-435	85				
Core-1-48-17	-85.5695	36.4191				770															-323	-387	134				
Core-1-48-18	-85.5831	36.4931				560															-516	-580	53				
Core-1-48-19	-85.5425	36.4583				595															-454	-539	35				
Core-1-48-2	-85.5791	36.4424				560															-484	-556	-39				
Core-1-48-20	-85.5095	36.4950				555															-452	-491	78				
Core-1-48-21	-85.5813	36.4443				520															-472	-552	-38				
Core-1-48-22	-85.5799	36.4296				570															-394	-450	66				
Core-1-48-23	-85.5717	36.4444				540															-450	-521	4				
Core-1-48-24	-85.5830	36.4375				720															-424	-488	25				
Core-1-48-25	-85.5622	36.4334				960															-425	-518	13				
Core-1-48-26	-85.5335	36.4202				970															-456	-538	17				
Core-1-48-27	-85.5586	36.4338				965															-451	-546	-12				
Core-1-48-28	-85.5586	36.4361				990															-402	-490	45				
Core-1-48-29	-85.5628	36.4360				950															-462	-556	-25				
Core-1-48-3	-85.5709	36.4473				530															-442	-515	11				
Core-1-48-30	-85.5662	36.4362				935															-455	-529	-1				
Core-1-48-31	-85.5692	36.4367				940															-439	-507	19				
Core-1-48-32	-85.5744	36.4360				895															-404	-482	39				
Core-1-48-33	-85.5723	36.4395				900															-416	-480	43				
Core-1-48-34	-85.5773	36.4343				965															-386	-473	45				
Core-1-48-35	-85.5625	36.4314				985															-422	-521	9				
Core-1-48-36	-85.5637	36.4387				920															-470	-559	-28				
Core-1-48-37	-85.5666	36.4312				960															-461	-557	-31				
Core-1-48-38	-85.5642	36.4433				580															-486	-583	-51				
Core-1-48-39	-85.5700	36.4283				660															-448	-542	-19				
Core-1-48-4	-85.5334	36.4725				560															-447	-473	120				
Core-1-48-40	-85.5730	36.4362				930															-445	-510	12				
Core-1-48-41	-85.5630	36.4407				970															-483	-586	-53				
Core-1-48-5	-85.5168	36.4642				555															-485	-548	42				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-1-48-6	-85.5770	36.4311				570															-413	-499	19				
Core-1-48-7	-85.5734	36.4309				590															-459	-551	-30				
Core-1-48-706	-85.5814	36.4230				952																-509	6				
Core-1-48-708	-85.5505	36.4282				1019																-603	-66				
Core-1-48-734	-85.5823	36.4322				540																-521	-7				
Core-1-48-744	-85.5825	36.4175				940																-454	61				
Core-1-48-751	-85.5877	36.4293				897																-540	-30				
Core-1-48-761	-85.5808	36.4282				645																-528	-13				
Core-1-48-763	-85.5791	36.4232				937																-539	-23				
Core-1-48-765	-85.5725	36.4262				990																-517	4				
Core-1-48-766	-85.5798	36.4206				964																-461	55				
Core-1-48-767	-85.5777	36.4215				990																-522	-5				
Core-1-48-768	-85.5813	36.4344				926																-444	71				
Core-1-48-769	-85.5742	36.4282				952																-524	-4				
Core-1-48-772	-85.5692	36.4238				980																-489	34				
Core-1-48-776	-85.5547	36.4311				952																-538	-2				
Core-1-48-777	-85.5580	36.4312				960																-501	32				
Core-1-48-779	-85.5514	36.4459				957																-554	-7				
Core-1-48-782	-85.5593	36.4279				970																-509	22				
Core-1-48-785	-85.5635	36.4286				694																-501	27				
Core-1-48-786	-85.5564	36.4234				1020																-563	-32				
Core-1-48-792	-85.5650	36.4263				980																-486	40				
Core-1-48-794	-85.5549	36.4263				948																-560	-27				
Core-1-48-796	-85.5546	36.4363				960																-570	-31				
Core-1-48-797	-85.5517	36.4327				985																-557	-18				
Core-1-48-798	-85.5529	36.4287				1000																-555	-19				
Core-1-48-8	-85.5734	36.4336				620															-489	-581	-60				
Core-1-48-800	-85.5639	36.4243				988															-409	-496	30				
Core-1-48-801	-85.5693	36.4259				851															-446	-538	-15				
Core-1-48-802	-85.5554	36.4383				934																-546	-7				
Core-1-48-803	-85.5558	36.4411				700																-547	-7				
Core-1-48-804	-85.5586	36.4493				938																-576	-35				
Core-1-48-823	-85.5814	36.4250				948																-525	-10				
Core-1-48-824	-85.5823	36.4213				941																-497	17				
Core-1-48-827	-85.5802	36.4266				929																-518	-2				
Core-1-48-830	-85.5742	36.4252				974																-440	80				
Core-1-48-839	-85.5827	36.4258				949																-545	-31				
Core-1-48-842	-85.5834	36.4295				648																-539	-26				
Core-1-48-857	-85.5816	36.4300				831																-433	81				
Core-1-48-858	-85.5805	36.4218				945																-526	-10				
Core-1-48-861	-85.5780	36.4240				826																-546	-29				
Core-1-48-862	-85.5816	36.4316				468																-627	-113				
Core-1-48-866	-85.5778	36.4232				866																-586	-69				
Core-1-48-868	-85.5811	36.4320				542																-536	-21				
Core-1-48-869	-85.5811	36.4320				542																-489	26				
Core-1-48-870	-85.5844	36.4316				590																-476	36				
Core-1-48-9	-85.5705	36.4298				615															-467	-559	-36				
Core-2-41-1	-86.1319	36.3514				512															-111	-211	33				
Core-2-41-2	-86.1297	36.3531				581															-151	-258	-9				
Core-2-41-3	-86.1283	36.3516				563															-146	-253	-4				
Core-2-41-4	-86.1185	36.3490				462															-136	-238	18				
Core-2-41-5	-86.1276	36.3454				454															-139	-242	-2				
Core-2-41-6	-86.1247	36.3450				459															-144	-235	8				

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Core-2-41-7	-86.1265	36.3584				625															-115	-215	46				
Core-2-41-717	-86.1317	36.3558				530																-246	4				
Core-2-41-8	-86.1227	36.3581				565															-194	-298	-32				
Core-2-41-9	-86.1152	36.3582				497															-189	-287	-11				
Core-2-42-1	-86.0518	36.3678				500															-270	-363	4				
Core-2-42-2	-86.0378	36.3342				490															-215	-317	16				
Core-2-42-3	-86.0317	36.3394				520															-231	-323	25				
Core-2-43-1	-85.9455	36.4008				720															-244	-319	96				
Core-2-43-2	-85.9670	36.3532				570															-378	-462	-34				
Core-2-43-3	-85.9244	36.3534				675															-349	-440	-9				
Core-2-43-4	-85.9177	36.4138				760															-323	-417	-28				
Core-2-43-5	-85.9595	36.4156				630															-362	-452	-11				
Core-2-44-1	-85.8831	36.3768				550															-350	-450	-37				
Core-2-44-2	-85.8489	36.3589				640															-237	-316	18				
Core-2-44-3	-85.8792	36.4134				710															-331	-415	-8				
Core-2-44-4	-85.8781	36.3540				620															-291	-386	2				
Core-2-45-1	-85.7792	36.3775				590															-300	-385	-5				
Core-2-45-10	-85.7611	36.3942				570															-348	-430	-43				
Core-2-45-11	-85.7790	36.3693				575															-260	-344	33				
Core-2-45-12	-85.7828	36.3572				540															-284	-371	-10				
Core-2-45-13	-85.7507	36.3872				530															-335	-410	-21				
Core-2-45-2	-85.7574	36.3536				520															-256	-322	51				
Core-2-45-3	-85.7963	36.3775				620															-363	-454	-75				
Core-2-45-4	-85.7950	36.3661				580															-267	-352	24				
Core-2-45-5	-85.7616	36.3794				600															-337	-408	-27				
Core-2-45-6	-85.8095	36.4012				560															-346	-436	-65				
Core-2-45-7	-85.7797	36.3915				660															-279	-364	20				
Core-2-45-700	-85.7790	36.3803				600																-411	-31				
Core-2-45-8	-85.8320	36.3863				640															-264	-350	-11				
Core-2-45-9	-85.7598	36.3681				525															-291	-348	29				
Core-2-46-1	-85.7080	36.3460				480															-384	-475	-69				
Core-2-46-10	-85.6711	36.3782				620															-416	-513	-73				
Core-2-46-11	-85.6709	36.3642				670															-363	-452	-19				
Core-2-46-12	-85.7089	36.4057				620															-378	-471	-49				
Core-2-46-13	-85.7089	36.3761				600															-373	-465	-31				
Core-2-46-14	-85.7035	36.3642				680															-343	-433	5				
Core-2-46-15	-85.7220	36.3785				595															-349	-419	2				
Core-2-46-16	-85.7427	36.3799				690															-336	-423	-26				
Core-2-46-17	-85.7241	36.3920				650															-374	-461	-46				
Core-2-46-18	-85.7484	36.4059				630															-341	-420	-24				
Core-2-46-19	-85.7450	36.3945				640															-260	-342	54				
Core-2-46-2	-85.7241	36.4054				505															-357	-450	-39				
Core-2-46-20	-85.7229	36.3531				550															-325	-416	-8				
Core-2-46-21	-85.7251	36.4054				660															-379	-461	-50				
Core-2-46-22	-85.6891	36.3477				620															-409	-501	-83				
Core-2-46-23	-85.6711	36.3752				520															-409	-507	-68				
Core-2-46-24	-85.6809	36.3763				540															-375	-466	-28				
Core-2-46-25	-85.6908	36.3478				510																-444	-26				
Core-2-46-26	-85.6847	36.4004				560															-343	-440	1				
Core-2-46-27	-85.6790	36.3906				590															-399	-496	-54				
Core-2-46-28	-85.6920	36.3339				590															-311	-398	3				
Core-2-46-29	-85.6685	36.3779				510															-402	-500	-59				
Core-2-46-3	-85.7070	36.3916				520															-330	-409	19				

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Core-2-46-30	-85.6708	36.3808				530															-374	-461	-20				
Core-2-46-31	-85.6780	36.3785				580															-373	-463	-24				
Core-2-46-32	-85.6867	36.4056				520															-341	-433	8				
Core-2-46-33	-85.6674	36.3433				630															-282	-322	105				
Core-2-46-34	-85.6896	36.4025				520															-346	-443	-5				
Core-2-46-35	-85.7002	36.3762				505															-371	-462	-27				
Core-2-46-36	-85.7107	36.3787				615															-348	-415	17				
Core-2-46-37	-85.7070	36.3737				590															-382	-470	-35				
Core-2-46-38	-85.7163	36.3754				625															-329	-404	25				
Core-2-46-39	-85.6673	36.3387				660															-285	-372	54				
Core-2-46-4	-85.6757	36.4053				500															-404	-486	-36				
Core-2-46-40	-85.6746	36.3390				650															-309	-398	24				
Core-2-46-41	-85.6781	36.3432				630															-293	-382	39				
Core-2-46-42	-85.6737	36.3434				780															-328	-392	32				
Core-2-46-43	-85.6744	36.3501				850															-302	-355	72				
Core-2-46-44	-85.6903	36.3581				515															-300	-360	69				
Core-2-46-45	-85.7336	36.3748				565															-306	-409	-1				
Core-2-46-46	-85.7314	36.3890				665															-327	-418	-9				
Core-2-46-47	-85.9091	36.3352				590															-309	-403	-24				
Core-2-46-48	-85.7336	36.3351				655															-234	-319	59				
Core-2-46-49	-85.6802	36.3599				620															-345	-438	-7				
Core-2-46-5	-85.6730	36.3936				540															-370	-465	-18				
Core-2-46-50	-85.7382	36.3511				500															-304	-363	28				
Core-2-46-51	-85.6825	36.3541				750															-364	-456	-29				
Core-2-46-52	-85.6704	36.3574				910															-241	-356	75				
Core-2-46-53	-85.6733	36.3868				565															-370	-456	-13				
Core-2-46-54	-85.6675	36.4064				570															-366	-429	28				
Core-2-46-55	-85.6905	36.4112				550															-353	-441	2				
Core-2-46-56	-85.6729	36.3992				520															-327	-418	31				
Core-2-46-57	-85.6767	36.3572				775															-316	-414	16				
Core-2-46-58	-85.6847	36.3812				575															-417	-510	-72				
Core-2-46-59	-85.6776	36.3537				835															-334	-424	4				
Core-2-46-6	-85.7236	36.3648				510															-373	-444	-21				
Core-2-46-60	-85.6752	36.3596				580															-306	-395	36				
Core-2-46-62	-85.6976	36.3603				520															-341	-438	-6				
Core-2-46-7	-85.6901	36.3916				610															-316	-403	34				
Core-2-46-700	-85.7183	36.3984				540																-252	166				
Core-2-46-701	-85.7158	36.3859				700																-429	-4				
Core-2-46-8	-85.6893	36.3777				540															-361	-457	-20				
Core-2-46-9	-85.7443	36.3637				550															-326	-416	-24				
Core-2-47-1	-85.6319	36.3755				500															-328	-363	88				
Core-2-47-10	-85.6169	36.4136				790															-321	-386	107				
Core-2-47-11	-85.6658	36.3513				750															-285	-367	63				
Core-2-47-12	-85.6169	36.4049				620															-444	-525	-33				
Core-2-47-13	-85.5887	36.4034				575															-478	-566	-57				
Core-2-47-14	-85.5885	36.4008				620															-444	-534	-28				
Core-2-47-15	-85.6176	36.3963				585															-434	-529	-47				
Core-2-47-16	-85.5839	36.4087				565															-444	-536	-21				
Core-2-47-17	-85.6538	36.3945				580															-433	-526	-68				
Core-2-47-18	-85.6611	36.3918				540															-421	-518	-66				
Core-2-47-19	-85.6154	36.3826				605															-397	-485	-17				
Core-2-47-2	-85.6047	36.3572				500															-445	-519	-65				
Core-2-47-20	-85.5840	36.4060				555															-427	-496	18				

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Core-2-47-21	-85.6643	36.3911				515															-434	-526	-76				
Core-2-47-22	-85.5942	36.3783				570															-419	-506	-28				
Core-2-47-23	-85.5917	36.4115				555															-393	-486	24				
Core-2-47-24	-85.6574	36.3900				630															-415	-512	-59				
Core-2-47-25	-85.6416	36.3534				575															-344	-435	-2				
Core-2-47-26	-85.6131	36.4046				645															-430	-529	-35				
Core-2-47-27	-85.6479	36.3462				670															-306	-351	79				
Core-2-47-28	-85.6168	36.4073				670															-422	-511	-17				
Core-2-47-29	-85.5863	36.3696				615															-376	-403	71				
Core-2-47-3	-85.6597	36.3682				500															-370	-446	-9				
Core-2-47-30	-85.6002	36.4162				530															-391	-463	40				
Core-2-47-31	-85.6341	36.3614				606															-315	-404	33				
Core-2-47-32	-85.5954	36.4143				535															-406	-502	5				
Core-2-47-33	-85.6589	36.4019				530															-279	-356	104				
Core-2-47-34	-85.6482	36.3615				575															-346	-438	-3				
Core-2-47-35	-85.6626	36.3832				540															-363	-452	-6				
Core-2-47-36	-85.5963	36.3914				915															-455	-540	-49				
Core-2-47-37	-85.6630	36.3678				610															-330	-369	67				
Core-2-47-38	-85.6498	36.4015				715															-386	-484	-18				
Core-2-47-39	-85.6584	36.3608				765															-333	-425	9				
Core-2-47-4	-85.6576	36.3787				520															-346	-438	7				
Core-2-47-40	-85.6473	36.3828				575															-365	-459	-7				
Core-2-47-41	-85.6549	36.4016				685															-409	-491	-28				
Core-2-47-42	-85.6645	36.4003				515															-390	-465	-9				
Core-2-47-43	-85.6373	36.4129				520															-374	-465	16				
Core-2-47-44	-85.6597	36.3972				701															-383	-470	-13				
Core-2-47-45	-85.6615	36.4069				510															-358	-388	74				
Core-2-47-46	-85.6634	36.3620				600															-319	-403	30				
Core-2-47-48	-85.5934	36.3717				870															-464	-558	-86				
Core-2-47-49	-85.5840	36.3635				900															-449	-547	-77				
Core-2-47-5	-85.6571	36.3928				680															-430	-521	-66				
Core-2-47-50	-85.5855	36.3820				960															-430	-529	-41				
Core-2-47-52	-85.6611	36.3886				570															-421	-518	-68				
Core-2-47-53	-85.6590	36.4051				570															-371	-457	5				
Core-2-47-6	-85.6541	36.4057				680															-427	-519	-53				
Core-2-47-7	-85.5874	36.4096				570															-425	-517	-4				
Core-2-47-700	-85.6336	36.3490				660																-454	-21				
Core-2-47-701	-85.6380	36.3485				620																-439	-7				
Core-2-47-702	-85.6360	36.3511				620																-469	-36				
Core-2-47-758	-85.5864	36.4155				890																-517	-4				
Core-2-47-8	-85.6655	36.3466				590															-325	-417	11				
Core-2-47-821	-85.5912	36.4150				929															-430	-533	-24				
Core-2-47-822	-85.5884	36.4129				920															-451	-548	-36				
Core-2-47-828	-85.5893	36.4103				565															-417	-512	-1				
Core-2-47-829	-85.5853	36.4088				562															-427	-493	21				
Core-2-47-831	-85.5903	36.4062				918																-552	-41				
Core-2-47-9	-85.5875	36.4061				560															-435	-527	-15				
Core-2-48-1	-85.5621	36.4011				620															-484	-586	-71				
Core-2-48-10	-85.5760	36.3805				960															-428	-510	-19				
Core-2-48-11	-85.5668	36.3649				925															-400	-496	-17				
Core-2-48-12	-85.5475	36.4049				995															-411	-502	21				
Core-2-48-13	-85.5570	36.3726				635															-393	-472	19				
Core-2-48-14	-85.5712	36.3764				940															-369	-456	32				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-2-48-15	-85.5717	36.3687				575															-419	-457	24				
Core-2-48-16	-85.5598	36.3663				910															-352	-396	88				
Core-2-48-17	-85.5658	36.3808				710															-390	-466	29				
Core-2-48-18	-85.5610	36.3762				940															-382	-469	24				
Core-2-48-19	-85.5518	36.3796				955															-446	-527	-27				
Core-2-48-2	-85.5267	36.3423				590															-369	-461	46				
Core-2-48-20	-85.5587	36.3824				975															-394	-483	16				
Core-2-48-21	-85.5829	36.3752				965															-381	-466	16				
Core-2-48-22	-85.5730	36.3866				980															-379	-432	66				
Core-2-48-23	-85.5786	36.3709				940															-373	-467	13				
Core-2-48-24	-85.5457	36.3626				600															-481	-567	-78				
Core-2-48-25	-85.5508	36.3761				990															-393	-480	17				
Core-2-48-26	-85.5639	36.3746				635															-403	-488	2				
Core-2-48-27	-85.5579	36.3692				995															-327	-376	111				
Core-2-48-28	-85.5413	36.3670				960															-403	-472	22				
Core-2-48-29	-85.5518	36.3715				1000															-385	-465	27				
Core-2-48-3	-85.5759	36.4031				580															-454	-548	-35				
Core-2-48-30	-85.5366	36.3770				970															-412	-470	41				
Core-2-48-31	-85.5643	36.3783				680															-396	-487	6				
Core-2-48-32	-85.5380	36.3726				970															-420	-506	-1				
Core-2-48-33	-85.5611	36.3716				595															-362	-400	88				
Core-2-48-34	-85.5502	36.3593				900															-406	-493	-5				
Core-2-48-35	-85.5642	36.3699				590															-379	-443	42				
Core-2-48-36	-85.5692	36.3710				590															-452	-515	-31				
Core-2-48-37	-85.5689	36.3746				950															-367	-435	53				
Core-2-48-38	-85.5547	36.3773				665															-429	-470	26				
Core-2-48-39	-85.5677	36.3612				585															-391	-476	2				
Core-2-48-4	-85.5662	36.3729				615															-410	-497	-10				
Core-2-48-40	-85.5552	36.3748				640															-417	-501	-7				
Core-2-48-41	-85.5609	36.3801				970															-387	-476	20				
Core-2-48-42	-85.5572	36.3751				690															-410	-452	41				
Core-2-48-43	-85.5668	36.3682				575															-360	-388	94				
Core-2-48-44	-85.5599	36.3744				940															-395	-469	22				
Core-2-48-45	-85.5720	36.3726				910															-381	-465	19				
Core-2-48-46	-85.5407	36.3542				560															-366	-499	-3				
Core-2-48-47	-85.5570	36.3801				950															-418	-494	4				
Core-2-48-48	-85.5713	36.3805				980															-346	-400	92				
Core-2-48-49	-85.5331	36.3623				580															-368	-455	48				
Core-2-48-5	-85.5731	36.3586				535															-365	-428	48				
Core-2-48-50	-85.5810	36.3481				560															-364	-461	12				
Core-2-48-51	-85.5592	36.3483				540															-413	-514	-28				
Core-2-48-52	-85.5185	36.3967				1000															-426	-516	56				
Core-2-48-53	-85.5753	36.3555				520															-368	-451	24				
Core-2-48-54	-85.5798	36.3597				580															-380	-476	-4				
Core-2-48-55	-85.5835	36.3867				990															-421	-474	20				
Core-2-48-56	-85.5438	36.3854				1020															-408	-464	44				
Core-2-48-57	-85.5647	36.3893				980															-390	-479	24				
Core-2-48-58	-85.5495	36.3822				970															-443	-520	-17				
Core-2-48-59	-85.5723	36.3938				975															-417	-480	25				
Core-2-48-6	-85.5730	36.4026				585															-439	-536	-22				
Core-2-48-60	-85.5773	36.3909				1000															-252	-271	230				
Core-2-48-61	-85.5629	36.3731				945															-415	-466	23				
Core-2-48-62	-85.5745	36.3920				960															-406	-498	5				

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Core-2-48-63	-85.5745	36.3767				650															-373	-465	22				
Core-2-48-64	-85.5462	36.3799				970															-425	-509	-7				
Core-2-48-65	-85.5733	36.3709				590															-416	-515	-33				
Core-2-48-66	-85.5549	36.3703				750															-365	-448	42				
Core-2-48-67	-85.5677	36.3774				770															-331	-415	76				
Core-2-48-68	-85.5525	36.3684				950															-384	-430	59				
Core-2-48-69	-85.5668	36.3705				770															-422	-506	-21				
Core-2-48-7	-85.5571	36.3887				990															-383	-477	29				
Core-2-48-70	-85.5792	36.3885				930															-379	-457	40				
Core-2-48-700	-85.5130	36.3604				950																-474	56				
Core-2-48-71	-85.5717	36.3647				560															-384	-469	8				
Core-2-48-72	-85.5755	36.3885				980															-352	-391	108				
Core-2-48-73	-85.5666	36.3382				530															-446	-529	-45				
Core-2-48-74	-85.5462	36.3475				540															-370	-461	33				
Core-2-48-75	-85.5594	36.3566				620															-434	-525	-41				
Core-2-48-76	-85.5560	36.3737				635															-417	-497	-4				
Core-2-48-77	-85.5698	36.3676				720															-378	-420	60				
Core-2-48-79	-85.5742	36.3686				660															-466	-559	-80				
Core-2-48-8	-85.5489	36.3975				750															-498	-597	-81				
Core-2-48-80	-85.5628	36.3621				715															-381	-448	33				
Core-2-48-809	-85.5576	36.4148				926																-519	7				
Core-2-48-811	-85.5705	36.4159				947																-530	-10				
Core-2-48-832	-85.5799	36.4129				633																-568	-52				
Core-2-48-9	-85.5446	36.4131				930															-462	-559	-29				
Core-3-40-700	-86.1739	36.2791				550															-38	-141	-11				
Core-3-40-701	-86.1792	36.3004				610															-18	-108	8				
Core-3-40-702	-86.2010	36.2843				500															-53						
Core-3-40-703	-86.1948	36.2743				530															1	-97	26				
Core-3-40-704	-86.1892	36.2607				515															-38	-137	-24				
Core-3-40-705	-86.2176	36.2726				540															-33	-135	-13				
Core-3-40-706	-86.2321	36.3138				530															-118	-210	-14				
Core-3-41-1	-86.1291	36.2871				690															-54	-177	-19				
Core-3-41-10	-86.1053	36.2568				515															-29	-126	-5				
Core-3-41-11	-86.1002	36.2715				570															36	-41	90				
Core-3-41-12	-86.0929	36.2740				470															3	-47	96				
Core-3-41-13	-86.1141	36.2632				570															-47	-137	-13				
Core-3-41-14	-86.1245	36.2823				710															-63	-184	-34				
Core-3-41-2	-86.0982	36.2799				460															-92	-184	-46				
Core-3-41-3	-86.1052	36.2958				530															-91	-176	-8				
Core-3-41-4	-86.0984	36.3120				630															-118	-217	-18				
Core-3-41-5	-86.1017	36.2628				525															-41	-112	14				
Core-3-41-6	-86.1111	36.2694				620															-32	-75	55				
Core-3-41-7	-86.0912	36.2552				470															-61	-133	2				
Core-3-41-700	-86.1545	36.2768				590															-24	-94	45				
Core-3-41-8	-86.0931	36.2710				560															-4	-57	84				
Core-3-41-9	-86.0919	36.2640				530															-47	-145	-6				
Core-3-42-1	-86.0466	36.2871				555															-186	-268	-2				
Core-3-42-10	-86.0203	36.2876				510															-235	-331	-32				
Core-3-42-11	-86.0237	36.2740				630															-219	-322	-47				
Core-3-42-12	-86.0000	36.2742				525															-266	-376	-78				
Core-3-42-13	-86.0171	36.2683				648															-180	-267	3				
Core-3-42-14	-86.0112	36.2631				605															-204	-303	-38				
Core-3-42-15	-86.0173	36.2631				670															-160	-274	-15				

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Core-3-42-16	-86.0137	36.2776				568															-134	-229	65				
Core-3-42-17	-86.0210	36.2730				669															-199	-299	-23				
Core-3-42-18	-86.0231	36.2629				500															-220	-318	-66				
Core-3-42-19	-86.0475	36.2748				530															-154	-241	8				
Core-3-42-2	-86.0636	36.3144				545															-321	-326	-61				
Core-3-42-20	-86.0645	36.3016				465															-188	-286	-37				
Core-3-42-21	-86.0577	36.3013				570															-197	-297	-34				
Core-3-42-22	-86.0509	36.2794				470															-162	-261	-8				
Core-3-42-23	-86.0504	36.2961				480															-180	-286	-16				
Core-3-42-24	-86.0509	36.2905				570															-200	-294	-30				
Core-3-42-25	-86.0439	36.2796				565															-131	-209	52				
Core-3-42-3	-86.0175	36.2730				590															-298	-307	-27				
Core-3-42-4	-86.0468	36.3137				565															-163	-253	39				
Core-3-42-5	-86.0298	36.2866				470															-233	-332	-46				
Core-3-42-53	-86.0573	36.2742				490															-122	-176	57				
Core-3-42-54	-86.0372	36.2794				690															-186	-281	-12				
Core-3-42-55	-86.0239	36.2634				740															-177	-271	-19				
Core-3-42-56	-86.0799	36.3227				525															-118	-220	29				
Core-3-42-57	-86.0472	36.3251				495															-175	-266	40				
Core-3-42-58	-86.0608	36.3311				470															-197	-285	11				
Core-3-42-59	-86.0819	36.2722				540															-100	-197	-28				
Core-3-42-6	-86.0323	36.2714				659															-205	-303	-43				
Core-3-42-60	-86.0699	36.2560				510															-98	-200	-23				
Core-3-42-61	-86.0804	36.2607				540															-66	-160	1				
Core-3-42-7	-86.0160	36.2571				720															-83	-189	58				
Core-3-42-9	-86.0006	36.2601				480															-177	-279	-11				
Core-3-43-1	-85.9864	36.3099				470															-278	-379	-42				
Core-3-43-10	-85.9318	36.3239				700															-225	-302	54				
Core-3-43-11	-85.9626	36.2825				660															-238	-336	-13				
Core-3-43-12	-85.9796	36.2821				690															-274	-366	-43				
Core-3-43-13	-85.9829	36.2950				545															-283	-377	-48				
Core-3-43-14	-85.9671	36.2945				640															-250	-341	-9				
Core-3-43-15	-85.9660	36.3077				660															-212	-300	36				
Core-3-43-16	-85.9725	36.2824				625															-290	-389	-61				
Core-3-43-17	-85.9796	36.2766				615															-252	-353	-35				
Core-3-43-18	-85.9868	36.2766				600															-236	-339	-26				
Core-3-43-19	-85.9959	36.2522				640															-149	-243	12				
Core-3-43-2	-85.9422	36.2655				660															-284	-403	-108				
Core-3-43-20	-85.9732	36.2876				680															-263	-332	-3				
Core-3-43-21	-85.9523	36.2868				605															-255	-357	-41				
Core-3-43-22	-85.9450	36.2825				558															-277	-374	-69				
Core-3-43-23	-85.9419	36.2792				592															-298	-391	-93				
Core-3-43-24	-85.9385	36.2765				477															-295	-402	-109				
Core-3-43-25	-85.9847	36.2876				570															-214	-304	19				
Core-3-43-26	-85.9729	36.2645				460															-225	-364	-64				
Core-3-43-27	-85.9715	36.2715				490															-227	-376	-61				
Core-3-43-28	-85.9873	36.2706				490															-311	-417	-117				
Core-3-43-29	-85.9937	36.2718				560															-208	-321	-23				
Core-3-43-3	-85.9647	36.2516				535															-250	-348	-67				
Core-3-43-30	-85.9174	36.2767				700															-234	-305	-8				
Core-3-43-31	-85.9235	36.2752				520															-274	-365	-78				
Core-3-43-32	-85.9729	36.2610				475															-255	-353	-60				
Core-3-43-33	-85.9669	36.2698				490															-206	-295	17				

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Core-3-43-34	-85.9420	36.2685				550															-249	-325	-30				
Core-3-43-35	-85.9383	36.2684				520															-226	-318	-25				
Core-3-43-36	-85.9344	36.2682				520															-176	-252	39				
Core-3-43-37	-85.9310	36.2680				550															-188	-248	41				
Core-3-43-38	-85.9287	36.2535				487															-195	-290	8				
Core-3-43-39	-85.9268	36.2525				474															-217	-313	-14				
Core-3-43-4	-85.9277	36.2674				478															-161	-199	89				
Core-3-43-40	-85.9322	36.2546				479															-181	-276	20				
Core-3-43-41	-85.9354	36.2558				485															-197	-283	12				
Core-3-43-42	-85.9298	36.2542				481															-181	-276	21				
Core-3-43-43	-85.9234	36.2587				470															-190	-285	15				
Core-3-43-44	-85.9234	36.2615				485															-188	-283	15				
Core-3-43-45	-85.9231	36.2641				486															-199	-294	2				
Core-3-43-46	-85.9231	36.2555				486															-194	-290	13				
Core-3-43-47	-85.9327	36.2507				466															-212	-315	-17				
Core-3-43-48	-85.9298	36.2733				472															-230	-318	-33				
Core-3-43-49	-85.9455	36.2736				618															-209	-288	11				
Core-3-43-5	-85.9611	36.2662				430															-278	-373	-70				
Core-3-43-50	-85.9173	36.2506				668															-302	-333	-16				
Core-3-43-51	-85.9194	36.2527				695															-234	-328	-17				
Core-3-43-52	-85.9225	36.2538				531															-199	-293	12				
Core-3-43-53	-85.9226	36.2513				571															-223	-324	-17				
Core-3-43-54	-85.9182	36.2565				586															-238	-335	-24				
Core-3-43-55	-85.9166	36.2600				580															-216	-296	15				
Core-3-43-56	-85.9202	36.2595				512															-194	-271	34				
Core-3-43-57	-85.9204	36.2623				472															-198	-268	34				
Core-3-43-58	-85.9207	36.2653				645															-252	-341	-42				
Core-3-43-59	-85.9244	36.2503				656															-231	-328	-23				
Core-3-43-6	-85.9790	36.2658				485															-195	-303	-6				
Core-3-43-60	-85.9218	36.2508				582															-235	-333	-24				
Core-3-43-61	-85.9216	36.2535				557															-208	-304	3				
Core-3-43-62	-85.9178	36.2532				635															-264	-357	-43				
Core-3-43-63	-85.9214	36.2520				546															-223	-323	-14				
Core-3-43-64	-85.9338	36.2545				486															-194	-285	11				
Core-3-43-65	-85.9303	36.2531				478															-179	-271	26				
Core-3-43-66	-85.9360	36.2516				480															-234	-311	-16				
Core-3-43-67	-85.9388	36.2521				586															-188	-260	34				
Core-3-43-68	-85.9402	36.2543				540															-166	-245	48				
Core-3-43-69	-85.9350	36.2531				481															-224	-322	-26				
Core-3-43-7	-85.9773	36.2509				570															-209	-324	-54				
Core-3-43-70	-85.9305	36.2519				480															-191	-265	33				
Core-3-43-71	-85.9322	36.2519				467															-200	-299	-2				
Core-3-43-72	-85.9360	36.2547				496															-205	-302	-7				
Core-3-43-74	-85.9292	36.2530				485															485	-290	9				
Core-3-43-75	-85.9314	36.2505				477															-205	-306	-7				
Core-3-43-76	-85.9284	36.2520				479															-195	-254	45				
Core-3-43-77	-85.9317	36.2531				468															-161	-274	23				
Core-3-43-78	-85.9301	36.2499				480															-166	-250	50				
Core-3-43-79	-85.9347	36.2613				552															-165	-223	71				
Core-3-43-8	-85.9667	36.3218				540															-169	-340	4				
Core-3-43-9	-85.9488	36.2814				560															-282	-382	-74				
Core-3-44-1	-85.6976	36.4891				580															-332	-408	81				
Core-3-44-10	-85.8565	36.2554				580															-330	-439	-54				

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Core-3-44-11	-85.9043	36.2755				560															-253	-323	-2				
Core-3-44-12	-85.9128	36.2506				625															-283	-374	-50				
Core-3-44-13	-85.9146	36.2527				673															-295	-388	-68				
Core-3-44-14	-85.9156	36.2540				605															-289	-385	-68				
Core-3-44-15	-85.9163	36.2515				607															-267	-358	-40				
Core-3-44-16	-85.8946	36.2511				570															-279	-381	-26				
Core-3-44-17	-85.8916	36.2512				627															-236	-335	25				
Core-3-44-18	-85.8886	36.2511				599															-244	-346	19				
Core-3-44-19	-85.8983	36.2511				629															-266	-360	-11				
Core-3-44-2	-85.9179	36.2780				550															-248	-354	-59				
Core-3-44-20	-85.8986	36.2545				581															-261	-356	-10				
Core-3-44-21	-85.9015	36.2563				586															-275	-388	-48				
Core-3-44-22	-85.8965	36.2511				621															-285	-381	-29				
Core-3-44-23	-85.8970	36.2549				567															-259	-354	-6				
Core-3-44-24	-85.8991	36.2564				686															-241	-320	24				
Core-3-44-25	-85.8854	36.2507				596															-239	-340	31				
Core-3-44-3	-85.9043	36.2858				560															-257	-347	-22				
Core-3-44-4	-85.9128	36.2659				580															-289	-383	-70				
Core-3-44-5	-85.8691	36.2631				680															-220	-304	70				
Core-3-44-6	-85.8552	36.2654				615															-285	-390	-8				
Core-3-44-7	-85.8401	36.2672				545															-318	-420	-32				
Core-3-44-8	-85.8925	36.2671				525															-343	-425	-77				
Core-3-44-9	-85.8392	36.2528				610															-178	-280	111				
Core-3-45-1	-85.7622	36.2775				550															-334	-427	-37				
Core-3-45-2	-85.8320	36.2867				520															-258	-352	0				
Core-3-45-3	-85.8307	36.3152				630															-199	-290	-11				
Core-3-45-4	-85.7568	36.3146				520															-270	-356	17				
Core-3-45-5	-85.7631	36.3017				540															-286	-372	-6				
Core-3-45-6	-85.7761	36.3190				520															-321	-407	-101				
Core-3-45-7	-85.7989	36.3079				555															-202	-232	26				
Core-3-45-700	-85.7513	36.2706				550															-289	-382	-1				
Core-3-46-1	-85.7134	36.3119				560															-276	-358	-2				
Core-3-46-2	-85.7036	36.2638				680															-313	-400	-25				
Core-3-46-3	-85.7404	36.3077				540															-271	-355	18				
Core-3-46-4	-85.7126	36.2878				600															-253	-346	19				
Core-3-46-5	-85.7395	36.2777				620															-277	-376	13				
Core-3-46-6	-85.7445	36.2957				650															-296	-375	8				
Core-3-46-7	-85.7176	36.3060				580															-302	-397	-36				
Core-3-46-700	-85.7351	36.2702				640															-264	-482	-110				
Core-3-46-701	-85.7442	36.2614				640															-322	-426	-69				
Core-3-46-703	-85.6741	36.3278				700																-323	94				
Core-3-46-704	-85.6728	36.3097				760																-359	68				
Core-3-46-705	-85.6820	36.3118				660																-372	37				
Core-3-46-706	-85.6862	36.3084				880																-321	84				
Core-3-46-707	-85.7201	36.3326				530																-375	1				
Core-3-46-708	-85.7250	36.3203				630																-419	-60				
Core-3-46-709	-85.6938	36.3279				620																-380	12				
Core-3-46-710	-85.6668	36.3245				810																-346	75				
Core-3-46-711	-85.6707	36.3185				790																-370	52				
Core-3-46-712	-85.6932	36.3349				860																-244	157				
Core-3-46-713	-85.6901	36.3277				670																-407	-11				
Core-3-46-714	-85.6975	36.3258				600																-302	82				
Core-3-47-2	-85.6600	36.3237				620															-274	-365	57				

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Core-3-47-3	-85.6097	36.2995				620															-407	-505	-48				
Core-3-47-4	-85.5988	36.3199				590															-374	-467	-10				
Core-3-47-700	-85.6581	36.3316				590																-336	88				
Core-3-47-701	-85.6460	36.3055				1000																-342	95				
Core-3-47-702	-85.6642	36.3306				680																-429	-6				
Core-3-47-703	-85.5873	36.2854				959																-431	45				
Core-3-47-704	-85.6448	36.3173				1000																-375	50				
Core-3-47-705	-85.6343	36.2702				680																-457	9				
Core-3-47-706	-85.5995	36.2856				989																-490	-19				
Core-3-47-707	-85.6536	36.3212				720																-427	-6				
Core-3-47-708	-85.6568	36.3226				630																-364	57				
Core-3-47-709	-85.6609	36.3172				680																-342	82				
Core-3-47-710	-85.6490	36.3206				1020																-398	24				
Core-3-47-711	-85.6633	36.3124				760																-336	93				
Core-3-47-712	-85.6564	36.3279				820																-315	108				
Core-3-47-713	-85.6581	36.3271				620																-362	61				
Core-3-47-714	-85.6588	36.3252				620																-379	43				
Core-3-47-715	-85.6559	36.3253				690																-339	83				
Core-3-47-716	-85.6534	36.3294				800																-326	98				
Core-3-47-717	-85.6576	36.3279				600																-372	51				
Core-3-47-718	-85.6614	36.3264				740																-327	95				
Core-3-47-719	-85.6638	36.3242				970																-360	61				
Core-3-47-720	-85.6622	36.3288				990																-376	47				
Core-3-47-721	-85.6634	36.3262				950																-363	59				
Core-3-47-722	-85.5869	36.2975				995																-508	-34				
Core-3-47-723	-85.5866	36.2740				860																-493	-16				
Core-3-47-724	-85.5996	36.2734				966																-436	38				
Core-3-47-725	-85.6085	36.2906				670																-485	-22				
Core-3-47-726	-85.6076	36.3026				654																-492	-35				
Core-3-47-727	-85.5934	36.2792				1010																-414	61				
Core-3-48-1	-85.5776	36.2623				670																-378	99				
Core-3-48-1	-85.5776	36.2623				670															-330						
Core-3-48-2	-85.5628	36.3162				560																-466	24				
Core-3-48-2	-85.5628	36.3162				560															-372						
Core-3-48-700	-85.5415	36.2832				967																-508	-20				
Core-3-48-701	-85.5604	36.2992				844																-476	11				
Core-3-48-702	-85.5638	36.3033				609																-518	-32				
Core-3-48-703	-85.5412	36.3030				980																-466	32				
Core-3-48-704	-85.5647	36.3008				594																-525	-39				
Core-3-48-705	-85.5624	36.3050				583																-495	-7				
Core-3-48-706	-85.5621	36.3075				922																-563	-75				
Core-3-48-707	-85.5596	36.2966				865																-458	29				
Core-3-48-708	-85.5590	36.0280				588																-436	17				
Core-3-48-709	-85.5543	36.3068				610																-456	37				
Core-3-48-710	-85.5745	36.2980				895																-523	-43				
Core-3-48-711	-85.5670	36.2911				600																-495	-12				
Core-3-48-712	-85.5622	36.2706				640																-461	19				
Core-3-48-713	-85.5740	36.2962				936																-462	19				
Core-3-48-714	-85.5616	36.3130				885																-466	24				
Core-3-48-715	-85.5559	36.2821				962																-450	34				
Core-3-48-716	-85.5518	36.3097				599																-469	26				
Core-3-48-717	-85.5721	36.2994				919																-535	-53				
Core-3-48-718	-85.5700	36.3064				914																-337	146				

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Core-3-48-719	-85.5702	36.3007				889																-552	-69				
Core-3-48-720	-85.5460	36.2984				647																-419	75				
Core-3-48-721	-85.5420	36.3061				960																-508	-8				
Core-3-48-722	-85.5752	36.3061				956																-524	-44				
Core-3-48-723	-85.5693	36.3034				925																-508	-24				
Core-3-48-724	-85.5767	36.3023				968																-364	116				
Core-3-48-725	-85.5744	36.2908				974																-444	36				
Core-3-48-726	-85.5955	36.2950				930																-491	-22				
Core-3-48-727	-85.5666	36.2981				823																-559	-75				
Core-3-48-728	-85.5681	36.2956				915																-515	-32				
Core-3-48-729	-85.5710	36.2924				943																-436	46				
Core-3-48-730	-85.5787	36.2981				950																-439	40				
Core-3-48-731	-85.5622	36.3059				689																-504	-16				
Core-3-48-732	-85.5586	36.3097				597																-574	-83				
Core-3-48-733	-85.5528	36.2926				602																-522	-33				
Core-3-48-734	-85.5708	36.2965				928																-485	-3				
Core-3-48-735	-85.5580	36.2992				610																-487	1				
Core-3-48-736	-85.5609	36.3032				622																-492	-4				
Core-3-48-737	-85.5598	36.3045				581																-486	3				
Core-3-48-738	-85.5654	36.3049				590																-519	-33				
Core-3-48-739	-85.5614	36.3057				652																-492	-4				
Core-3-48-740	-85.5572	36.3049				579																-471	19				
Core-3-48-741	-85.5580	36.3071				592																-536	-45				
Core-3-48-742	-85.5600	36.3058				617																-526	-37				
Core-3-48-743	-85.5606	36.3064				687																-547	-58				
Core-3-48-744	-85.5650	36.3081				911																-458	29				
Core-3-48-745	-85.5567	36.2929				969																-423	64				
Core-3-48-746	-85.5564	36.3135				576																-491	3				
Core-3-48-747	-85.5636	36.2973				596																-523	-38				
Core-3-48-748	-85.5674	36.2887				602																-532	-50				
Core-3-48-749	-85.5768	36.3002				974																-433	46				
Core-3-48-750	-85.5697	36.2992				916																-542	-59				
Core-3-48-751	-85.5717	36.2948				912																-453	29				
Core-3-48-752	-85.5687	36.2990				930																-566	-83				
Core-3-48-753	-85.5671	36.2995				876																-578	-94				
Core-3-48-754	-85.5727	36.3040				822																-533	-51				
Core-3-48-755	-85.5814	36.2957				971																-435	42				
Core-3-49-700	-85.4663	36.3290				1020																-545	34				
Core-3-50-700	-85.3932	36.2530				935															-460	-545	87				
Core-3-54-700	-85.0440	36.2726				920															-1288	-1341	-80				
Core-4-40-2	-86.2423	36.1992				560															10	-98	-6				
Core-4-41-1	-86.0893	36.1986				520															3	-60	7				
Core-4-41-10	-86.0888	36.2330				480															-25	-124	-2				
Core-4-41-11	-86.1069	36.2234				535															-28	-122	-29				
Core-4-41-12	-86.1024	36.2332				540															45	-67	39				
Core-4-41-2	-86.1322	36.2351				630															35	-69	2				
Core-4-41-3	-86.1041	36.2427				535															-39	-136	-25				
Core-4-41-4	-86.0895	36.2401				520															-51	-142	-14				
Core-4-41-5	-86.1017	36.2131				520															39	-53	32				
Core-4-41-6	-86.1528	36.2022				580															10	-77	14				
Core-4-41-7	-86.0990	36.2498				550															14	-78	42				
Core-4-41-8	-86.0926	36.2254				480															-7	-119	-13				
Core-4-41-9	-86.0872	36.2486				460															-32	-116	21				

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Core-4-42-1	-86.0369	36.2151				685															-94	-179	-28				
Core-4-42-10	-86.0772	36.2495				515															-39	-131	24				
Core-4-42-11	-86.0748	36.2404				570															-58	-145	3				
Core-4-42-12	-86.0749	36.2324				625															-4	-90	46				
Core-4-42-13	-86.0641	36.2495				660															-120	-209	-31				
Core-4-42-14	-86.0480	36.2489				525															-168	-272	-73				
Core-4-42-15	-86.0815	36.2349				530															-33	-128	5				
Core-4-42-16	-86.0748	36.2349				515															-5	-105	37				
Core-4-42-17	-86.0554	36.2148				775															-21	-102	6				
Core-4-42-18	-86.0680	36.2349				750															-71	-164	-14				
Core-4-42-19	-86.0748	36.2459				600															-25	-102	53				
Core-4-42-2	-86.0257	36.1718				770															-74	-176	-39				
Core-4-42-20	-86.0680	36.2404				980															-94	-180	-22				
Core-4-42-21	-86.0680	36.2459				710															-92	-190	-24				
Core-4-42-3	-86.0622	36.2382				720															-67	-147	15				
Core-4-42-4	-86.0449	36.2375				580															-39	-146	33				
Core-4-42-5	-86.0279	36.2382				750															-65	-107	88				
Core-4-42-6	-86.0102	36.2217				710															-160	-238	-30				
Core-4-42-7	-86.0169	36.2052				680															-147	-244	-47				
Core-4-42-700	-86.0576	36.2287				690																-144	1				
Core-4-42-8	-86.0169	36.1887				580															-106	-202	-11				
Core-4-42-9	-86.0462	36.1906				710															-3	-53	25				
Core-4-43-1	-85.9517	36.1836				533															-114	-215	23				
Core-4-43-10	-85.9227	36.2183				560															-155	-246	61				
Core-4-43-100	-85.9586	36.1987				590															-180	-286	-52				
Core-4-43-101	-85.9288	36.2238				688															-139	-233	68				
Core-4-43-102	-85.9559	36.2271				530															-140	-219	42				
Core-4-43-103	-85.9322	36.1777				640															-227	-340	-69				
Core-4-43-104	-85.9259	36.1769				550															-284	-389	-106				
Core-4-43-105	-85.9732	36.2380				660															-193	-275	-27				
Core-4-43-106	-85.9183	36.1768				555															-252	-347	-48				
Core-4-43-107	-85.9662	36.2161				536															-211	-316	-80				
Core-4-43-108	-85.9661	36.2108				508															-117	-231	1				
Core-4-43-109	-85.9661	36.2188				601															-182	-289	-50				
Core-4-43-11	-85.9321	36.2432				483															-199	-306	-5				
Core-4-43-110	-85.9657	36.2295				704															-235	-321	-73				
Core-4-43-111	-85.9653	36.2355				706															-176	-236	17				
Core-4-43-112	-85.9594	36.2188				523															-160	-249	0				
Core-4-43-113	-85.9466	36.2292				635															-150	-245	32				
Core-4-43-114	-85.9429	36.2293				686															-149	-219	64				
Core-4-43-115	-85.9461	36.2266				555															-152	-249	27				
Core-4-43-116	-85.9391	36.2154				559															-129	-209	69				
Core-4-43-117	-85.9435	36.2126				530															-128	-209	60				
Core-4-43-118	-85.9356	36.2077				568															-112	-217	60				
Core-4-43-119	-85.9430	36.2184				547															-133	-213	61				
Core-4-43-12	-85.9226	36.2129				493															-174	-274	29				
Core-4-43-120	-85.9460	36.2132				508															-131	-226	39				
Core-4-43-121	-85.9467	36.2106				512															-116	-192	70				
Core-4-43-122	-85.9323	36.2212				495															-199	-302	-9				
Core-4-43-123	-85.9565	36.2192				544															-161	-248	6				
Core-4-43-124	-85.9257	36.2239				539															-147	-199	107				
Core-4-43-125	-85.9599	36.2212				578															-155	-253	-3				
Core-4-43-126	-85.9494	36.2137				501															-140	-241	19				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-43-127	-85.9253	36.2162				497															-223	-323	-23				
Core-4-43-128	-85.9562	36.2236				526															-183	-283	-25				
Core-4-43-129	-85.9365	36.1883				570															-133	-203	60				
Core-4-43-13	-85.9641	36.2241				629															-129	-234	12				
Core-4-43-130	-85.9328	36.2237				478															-212	-305	-11				
Core-4-43-131	-85.9461	36.2159				490															-136	-231	36				
Core-4-43-132	-85.9324	36.1907				501															-171	-272	-3				
Core-4-43-133	-85.9325	36.2155				521															-124	-216	72				
Core-4-43-134	-85.9327	36.1961				495															-152	-254	18				
Core-4-43-135	-85.9363	36.2237				483															-277	-377	-88				
Core-4-43-136	-85.9628	36.2191				542															-146	-247	-3				
Core-4-43-137	-85.9358	36.1909				533															-146	-231	33				
Core-4-43-138	-85.9291	36.2154				501															-158	-260	33				
Core-4-43-139	-85.9395	36.2233				491															-178	-281	3				
Core-4-43-14	-85.9192	36.2269				808															-177	-278	42				
Core-4-43-140	-85.9260	36.2132				467															-172	-279	18				
Core-4-43-141	-85.9335	36.2257				473															-229	-318	-23				
Core-4-43-142	-85.9400	36.2210				567															-158	-249	32				
Core-4-43-143	-85.9327	36.2103				754															-113	-206	78				
Core-4-43-145	-85.9402	36.2183				549															-141	-238	40				
Core-4-43-146	-85.9289	36.2102				565															-128	-225	64				
Core-4-43-147	-85.9372	36.2183				522															-144	-236	47				
Core-4-43-148	-85.9396	36.2263				474															-168	-253	33				
Core-4-43-149	-85.9338	36.2195				484															-157	-257	32				
Core-4-43-15	-85.9629	36.2103				551															-77	-175	62				
Core-4-43-151	-85.9329	36.2130				799															-120	-220	65				
Core-4-43-152	-85.9389	36.2078				607															-114	-197	75				
Core-4-43-153	-85.9458	36.1908				557															-128	-216	32				
Core-4-43-154	-85.9258	36.2081				773															-129	-227	66				
Core-4-43-155	-85.9324	36.2018				479															-136	-234	43				
Core-4-43-156	-85.9495	36.1879				550															-104	-167	75				
Core-4-43-157	-85.9257	36.1992				492															-169	-275	11				
Core-4-43-158	-85.9453	36.1859				554															-105	-165	84				
Core-4-43-159	-85.9322	36.2070				747															-127	-226	56				
Core-4-43-16	-85.9196	36.2245				576															-186	-285	32				
Core-4-43-160	-85.9224	36.2020				546															-178	-271	24				
Core-4-43-161	-85.9328	36.1854				538															-150	-216	53				
Core-4-43-162	-85.9325	36.2039				507															-125	-224	54				
Core-4-43-163	-85.9467	36.2187				478															-125	-208	61				
Core-4-43-164	-85.9356	36.2015				479															-140	-239	33				
Core-4-43-165	-85.9183	36.2011				498															-193	-296	6				
Core-4-43-166	-85.9395	36.2125				568															-98	-178	97				
Core-4-43-167	-85.9391	36.2018				492															-145	-253	14				
Core-4-43-168	-85.9626	36.2138				489															-191	-291	-51				
Core-4-43-169	-85.9426	36.1881				673															-121	-183	70				
Core-4-43-17	-85.9630	36.1961				549															-144	-247	-22				
Core-4-43-170	-85.9423	36.2074				511															-122	-207	59				
Core-4-43-171	-85.9359	36.1963				590															-140	-240	27				
Core-4-43-172	-85.9691	36.2195				650															-144	-265	-31				
Core-4-43-173	-85.9225	36.1935				548															-220	-320	-32				
Core-4-43-174	-85.9360	36.1937				560															-138	-240	25				
Core-4-43-175	-85.9325	36.2308				710															-233	-313	-12				
Core-4-43-176	-85.9292	36.1910				554															-234	-344	-70				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-43-177	-85.9431	36.1966				478															-132	-222	34				
Core-4-43-178	-85.9350	36.2317				812															-229	-325	-27				
Core-4-43-179	-85.9350	36.2297				794															-196	-286	10				
Core-4-43-18	-85.9644	36.1816				500															-159	-250	-34				
Core-4-43-180	-85.9431	36.1940				557															-148	-253	1				
Core-4-43-181	-85.9290	36.2273				853															-170	-234	69				
Core-4-43-182	-85.9426	36.1913				620															-127	-187	66				
Core-4-43-183	-85.9290	36.2293				804															-194	-272	33				
Core-4-43-184	-85.9396	36.1968				548															-140	-244	18				
Core-4-43-185	-85.9251	36.2276				770															-175	-272	38				
Core-4-43-186	-85.9390	36.1908				634															-148	-248	11				
Core-4-43-187	-85.9320	36.2352				665															-187	-281	24				
Core-4-43-188	-85.9394	36.1995				510															-160	-266	-2				
Core-4-43-189	-85.9248	36.2298				673															-218	-302	10				
Core-4-43-19	-85.9634	36.1705				850															-70	-143	71				
Core-4-43-190	-85.9256	36.1963				476															-212	-316	-33				
Core-4-43-191	-85.9249	36.2323				568															-241	-339	-25				
Core-4-43-192	-85.9259	36.1907				551															-279	-389	-110				
Core-4-43-193	-85.9253	36.2351				541															-264	-368	-52				
Core-4-43-194	-85.9253	36.2377				538															-272	-370	-57				
Core-4-43-195	-85.9218	36.2299				673															-194	-294	23				
Core-4-43-196	-85.9220	36.1961				486															-191	-273	18				
Core-4-43-197	-85.9219	36.1882				587															-287	-392	-103				
Core-4-43-198	-85.9186	36.2348				556															-220	-320	6				
Core-4-43-199	-85.9287	36.2353				600															-261	-362	-52				
Core-4-43-2	-85.9204	36.2455				488															-284	-377	-62				
Core-4-43-20	-85.9451	36.1687				615															-135	-206	42				
Core-4-43-200	-85.9221	36.1910				621															-287	-391	-103				
Core-4-43-201	-85.9217	36.2352				580															-222	-321	0				
Core-4-43-202	-85.9193	36.2429				475															-295	-385	-66				
Core-4-43-203	-85.9190	36.1908				547															-255	-361	-67				
Core-4-43-204	-85.9222	36.2406				476															-291	-391	-75				
Core-4-43-205	-85.9186	36.2402				537															-266	-365	-42				
Core-4-43-206	-85.9359	36.1854				554															-90	-203	61				
Core-4-43-207	-85.9185	36.2379				589															-230	-314	10				
Core-4-43-208	-85.9349	36.1965				557															-149	-251	18				
Core-4-43-209	-85.9393	36.1854				639															-134	-228	31				
Core-4-43-21	-85.9598	36.2386				607															-167	-231	35				
Core-4-43-210	-85.9286	36.1859				589															-285	-299	-23				
Core-4-43-211	-85.9259	36.1854				696															-246	-344	-63				
Core-4-43-213	-85.9427	36.2275				549															-160	-252	30				
Core-4-43-214	-85.9287	36.1975				520															-195	-312	-33				
Core-4-43-215	-85.9288	36.1882				552															-206	-317	-42				
Core-4-43-216	-85.9522	36.2234				524															-127	-209	55				
Core-4-43-217	-85.9527	36.2200				579															-125	-183	77				
Core-4-43-218	-85.9527	36.2138				470															-154	-253	2				
Core-4-43-219	-85.9499	36.2114				487															-133	-235	23				
Core-4-43-22	-85.9190	36.2075				818															-177	-282	24				
Core-4-43-220	-85.9522	36.2120				515															-129	-232	23				
Core-4-43-221	-85.9362	36.2129				669															-115	-210	70				
Core-4-43-222	-85.9474	36.1957				505															-150	-237	12				
Core-4-43-223	-85.9271	36.2257				719															-147	-170	135				
Core-4-43-224	-85.9494	36.2145				494															-138	-236	25				

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Core-4-43-225	-85.9500	36.2131				488															-140	-244	15				
Core-4-43-226	-85.9452	36.2083				512															-119	-213	50				
Core-4-43-227	-85.9480	36.2096				494															-121	-212	47				
Core-4-43-228	-85.9186	36.2040				609															-206	-306	-2				
Core-4-43-229	-85.9192	36.2051				627															-186	-286	17				
Core-4-43-23	-85.9184	36.2103				864															-198	-303	6				
Core-4-43-230	-85.9190	36.2097				840															-179	-281	26				
Core-4-43-231	-85.9184	36.2113				868															-191	-294	16				
Core-4-43-232	-85.9184	36.2063				713															-195	-290	16				
Core-4-43-233	-85.9204	36.2043				677															-169	-270	30				
Core-4-43-234	-85.9200	36.2057				668															-172	-275	27				
Core-4-43-235	-85.9176	36.2063				727															-203	-293	14				
Core-4-43-236	-85.9175	36.2076				823															-199	-269	40				
Core-4-43-237	-85.9197	36.2037				627															-183	-278	23				
Core-4-43-238	-85.9545	36.2144				481															-125	-175	78				
Core-4-43-239	-85.9517	36.2153				550															-135	-229	29				
Core-4-43-24	-85.9810	36.1959				880															-38	-144	72				
Core-4-43-240	-85.9526	36.2163				586															-142	-237	21				
Core-4-43-241	-85.9547	36.2178				495															-137	-239	16				
Core-4-43-242	-85.9528	36.2184				501															-139	-233	26				
Core-4-43-243	-85.9507	36.2141				480															-136	-237	22				
Core-4-43-244	-85.9480	36.2139				508															-138	-240	23				
Core-4-43-245	-85.9448	36.1987				564															-123	-230	25				
Core-4-43-246	-85.9445	36.1963				479															-136	-223	31				
Core-4-43-247	-85.9490	36.1934				477															-131	-224	21				
Core-4-43-248	-85.9446	36.1922				505															-148	-245	5				
Core-4-43-249	-85.9398	36.1918				678															-149	-251	6				
Core-4-43-25	-85.9194	36.2137				466															-197	-298	11				
Core-4-43-250	-85.9169	36.2324				544															-215	-317	11				
Core-4-43-251	-85.9459	36.1891				583															-122	-215	33				
Core-4-43-252	-85.9180	36.2305				698															-209	-323	1				
Core-4-43-253	-85.9206	36.2309				617															-194	-295	25				
Core-4-43-254	-85.9476	36.1877				555															-112	-208	37				
Core-4-43-255	-85.9489	36.1906				553															-120	-223	20				
Core-4-43-256	-85.9219	36.2326				627															-223	-324	-5				
Core-4-43-257	-85.9443	36.2015				539															-125	-230	28				
Core-4-43-258	-85.9501	36.1978				780															-154	-223	23				
Core-4-43-259	-85.9492	36.2050				517															-120	-220	34				
Core-4-43-26	-85.9814	36.1816				585															-69	-169	35				
Core-4-43-260	-85.9372	36.1830				553															-147	-240	22				
Core-4-43-261	-85.9494	36.2028				534															-127	-227	25				
Core-4-43-262	-85.9524	36.1955				644															-136	-240	1				
Core-4-43-263	-85.9546	36.1934				520															-122	-217	19				
Core-4-43-264	-85.9494	36.1998				653															-145	-253	-4				
Core-4-43-265	-85.9408	36.1823				585															-1	-23	233				
Core-4-43-266	-85.9526	36.2025				527															-147	-247	-1				
Core-4-43-267	-85.9473	36.2035				497															-128	-228	27				
Core-4-43-268	-85.9525	36.1997				563															-152	-259	-15				
Core-4-43-269	-85.9395	36.1836				587															-95	-135	123				
Core-4-43-27	-85.9282	36.2322				666															-265	-357	-48				
Core-4-43-270	-85.9525	36.2050				541															-134	-231	18				
Core-4-43-271	-85.9202	36.2014				515															-177	-278	21				
Core-4-43-272	-85.9169	36.2002				575															-224	-327	-22				

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Core-4-43-273	-85.9524	36.2081				541															-114	-194	57				
Core-4-43-274	-85.9528	36.2104				532															-124	-220	32				
Core-4-43-275	-85.9186	36.1969				481															-199	-294	4				
Core-4-43-276	-85.9559	36.2052				617															-116	-182	61				
Core-4-43-277	-85.9593	36.2052				704															-160	-240	-2				
Core-4-43-278	-85.9559	36.2079				562															-119	-186	60				
Core-4-43-279	-85.9196	36.1915				554															-251	-355	-62				
Core-4-43-28	-85.9277	36.1704				580															-277	-377	-96				
Core-4-43-280	-85.9559	36.2024				587															-178	-280	-39				
Core-4-43-281	-85.9243	36.1992				491															-193	-299	-11				
Core-4-43-282	-85.9169	36.1923				502															-237	-335	-36				
Core-4-43-283	-85.9498	36.2225				487															-107	-151	116				
Core-4-43-284	-85.9484	36.2199				479															-115	-161	106				
Core-4-43-285	-85.9462	36.2218				483															-131	-224	48				
Core-4-43-286	-85.9335	36.2155				530															-123	-217	70				
Core-4-43-287	-85.9395	36.2132				606															-104	-162	113				
Core-4-43-289	-85.9618	36.2283				597															-223	-328	-75				
Core-4-43-29	-85.9228	36.2104				703															-153	-255	45				
Core-4-43-290	-85.9690	36.2249				648															-162	-263	-24				
Core-4-43-291	-85.9639	36.2364				698															-183	-272	-15				
Core-4-43-292	-85.9198	36.2496				712															-228	-324	-11				
Core-4-43-293	-85.9664	36.2359				626															-182	-273	-21				
Core-4-43-294	-85.9176	36.2486				656															-236	-331	-13				
Core-4-43-295	-85.9207	36.2477				530															-257	-351	-38				
Core-4-43-296	-85.9226	36.2493				695															-249	-349	-40				
Core-4-43-297	-85.9244	36.2420				481															-299	-397	-85				
Core-4-43-298	-85.9250	36.2403				481															-282	-381	-69				
Core-4-43-299	-85.9223	36.2434				482															-309	-415	-101				
Core-4-43-3	-85.9340	36.2030				482															-91	-131	144				
Core-4-43-30	-85.9785	36.1687				615															-15	-103	92				
Core-4-43-300	-85.9246	36.2020				507															-156	-261	29				
Core-4-43-301	-85.9512	36.2075				514															-121	-219	34				
Core-4-43-302	-85.9244	36.2004				498															-162	-266	23				
Core-4-43-303	-85.9508	36.1997				644															-148	-254	-7				
Core-4-43-304	-85.9211	36.2495				644															-239	-333	-22				
Core-4-43-305	-85.9204	36.2023				523															-175	-261	38				
Core-4-43-306	-85.9522	36.2016				503															-145	-250	-4				
Core-4-43-307	-85.9227	36.1980				465															-193	-301	-10				
Core-4-43-308	-85.9280	36.2443				508															-258	-362	-57				
Core-4-43-309	-85.9193	36.1953				486															-192	-284	12				
Core-4-43-31	-85.9220	36.2377				552															-249	-342	-23				
Core-4-43-310	-85.9182	36.2477				572															-233	-328	-11				
Core-4-43-311	-85.9193	36.1924				486															-223	-325	-31				
Core-4-43-312	-85.9187	36.2435				477															-293	-388	-68				
Core-4-43-313	-85.9176	36.2412				498															-266	-351	-28				
Core-4-43-314	-85.9207	36.2427				478															-303	-390	-73				
Core-4-43-315	-85.9333	36.1840				564															-165	-238	30				
Core-4-43-316	-85.9239	36.2393				469															-282	-384	-69				
Core-4-43-317	-85.9363	36.1842				558															-137	-201	62				
Core-4-43-318	-85.9268	36.1880				574															-225	-332	-54				
Core-4-43-319	-85.9223	36.1866				601															-241	-339	-51				
Core-4-43-32	-85.9225	36.2044				648															-149	-255	41				
Core-4-43-320	-85.9301	36.2474				485															-203	-299	2				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-43-321	-85.9384	36.1818				577															-110	-164	96				
Core-4-43-322	-85.9184	36.1846				628															-219	-322	-25				
Core-4-43-323	-85.9346	36.2481				483															-219	-329	-32				
Core-4-43-324	-85.9467	36.1737				603															-170	-266	-21				
Core-4-43-325	-85.9513	36.1743				607															-148	-236	1				
Core-4-43-326	-85.9244	36.2464				662															-289	-394	-86				
Core-4-43-328	-85.9498	36.1802				585															-108	-188	53				
Core-4-43-329	-85.9455	36.1797				586															-125	-216	32				
Core-4-43-33	-85.9220	36.2268				678															-167	-250	65				
Core-4-43-330	-85.9494	36.1822				523															-108	-190	52				
Core-4-43-331	-85.9424	36.1791				613															-155	-249	4				
Core-4-43-332	-85.9509	36.1854				503															-111	-186	54				
Core-4-43-333	-85.9390	36.1794				555															-174	-252	7				
Core-4-43-334	-85.9548	36.1836				639															-115	-220	13				
Core-4-43-335	-85.9352	36.1815				631															-193	-293	-27				
Core-4-43-336	-85.9526	36.1818				587															-104	-199	37				
Core-4-43-337	-85.9290	36.1846				584															-197	-303	-28				
Core-4-43-338	-85.9524	36.1861				518															-122	-197	40				
Core-4-43-339	-85.9302	36.1835				570															-199	-304	-30				
Core-4-43-34	-85.9368	36.2106				543															-107	-167	110				
Core-4-43-340	-85.9391	36.1875				590															-125	-179	80				
Core-4-43-341	-85.9406	36.1899				714															-147	-247	9				
Core-4-43-342	-85.9285	36.1811				630															-227	-330	-53				
Core-4-43-343	-85.9432	36.1930				559															-146	-242	11				
Core-4-43-344	-85.9431	36.1807				640															-124	-178	74				
Core-4-43-345	-85.9492	36.1890				574															-117	-217	26				
Core-4-43-346	-85.9405	36.1802				591															-139	-207	50				
Core-4-43-347	-85.9458	36.1953				480															-139	-245	6				
Core-4-43-348	-85.9354	36.1796				569															-206	-320	-55				
Core-4-43-349	-85.9525	36.1911				475															-120	-189	49				
Core-4-43-35	-85.9353	36.2216				511															-224	-326	-37				
Core-4-43-350	-85.9275	36.1787				556															-293	-423	-144				
Core-4-43-351	-85.9508	36.1942				517															-131	-238	4				
Core-4-43-352	-85.9243	36.1788				627															-269	-377	-91				
Core-4-43-353	-85.9560	36.1904				485															-136	-216	16				
Core-4-43-354	-85.9207	36.1994				539															-173	-276	20				
Core-4-43-355	-85.9183	36.1990				499															-192	-296	5				
Core-4-43-356	-85.9207	36.1971				466															-199	-292	2				
Core-4-43-357	-85.9179	36.2025				501															-215	-319	-15				
Core-4-43-358	-85.9573	36.1995				609															-169	-273	-36				
Core-4-43-359	-85.9576	36.2023				614															-202	-287	-48				
Core-4-43-36	-85.9808	36.2369				510															-192	-289	-51				
Core-4-43-360	-85.9551	36.1997				585															-149	-256	-16				
Core-4-43-361	-85.9170	36.1959				472															-204	-299	2				
Core-4-43-362	-85.9537	36.2037				506															-147	-244	2				
Core-4-43-363	-85.9547	36.2063				604															-125	-212	34				
Core-4-43-364	-85.9477	36.1945				480															-138	-204	43				
Core-4-43-365	-85.9573	36.2061				672															-138	-221	21				
Core-4-43-366	-85.9380	36.1853				605															-127	-211	49				
Core-4-43-367	-85.9320	36.1839				587															-174	-272	-2				
Core-4-43-368	-85.9379	36.1839				588															-128	-205	56				
Core-4-43-369	-85.9348	36.1839				538															-160	-263	3				
Core-4-43-37	-85.9290	36.2077				796															-115	-217	70				

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Core-4-43-370	-85.9393	36.1828				585															-85	-114	145				
Core-4-43-371	-85.9398	36.1819				584															-19	-89	169				
Core-4-43-372	-85.9441	36.1798				636															-135	-229	21				
Core-4-43-373	-85.9417	36.1831				627															-103	-151	104				
Core-4-43-374	-85.9405	36.1790				567															-174	-274	-18				
Core-4-43-375	-85.9250	36.1871				682															-256	-362	-80				
Core-4-43-376	-85.9441	36.1809				640															-122	-198	53				
Core-4-43-377	-85.9242	36.1853				649															-236	-338	-53				
Core-4-43-378	-85.9367	36.1817				538															-156	-237	26				
Core-4-43-379	-85.9426	36.1823				619															-118	-205	48				
Core-4-43-38	-85.9287	36.2003				491															-165	-260	21				
Core-4-43-380	-85.9431	36.1800				640															-131	-199	53				
Core-4-43-381	-85.9264	36.1864				677															-217	-325	-45				
Core-4-43-382	-85.9251	36.1844				679															-228	-335	-53				
Core-4-43-383	-85.9186	36.1838				600															-219	-305	-8				
Core-4-43-39	-85.9810	36.2237				670															-144	-248	-19				
Core-4-43-4	-85.9261	36.2047				599															-135	-238	51				
Core-4-43-40	-85.9358	36.2043				485															-113	-142	132				
Core-4-43-41	-85.9290	36.2128				526															-140	-242	49				
Core-4-43-42	-85.9286	36.2042				504															-121	-216	69				
Core-4-43-43	-85.9256	36.2020				497															-157	-263	25				
Core-4-43-44	-85.9222	36.1992				496															-175	-278	15				
Core-4-43-45	-85.9428	36.2214				494															-147	-238	39				
Core-4-43-46	-85.9425	36.2157				511															-134	-212	61				
Core-4-43-47	-85.9424	36.2100				500															-115	-210	58				
Core-4-43-48	-85.9791	36.2073				550															-149	-266	-44				
Core-4-43-49	-85.9362	36.1994				498															-168	-274	-5				
Core-4-43-5	-85.9186	36.2046				601															-205	-304	0				
Core-4-43-50	-85.9966	36.1695				665															-46	-143	38				
Core-4-43-51	-85.9253	36.1935				526															-279	-372	-90				
Core-4-43-52	-85.9426	36.1993				470															-135	-241	18				
Core-4-43-53	-85.9966	36.1970				550															-157	-260	-44				
Core-4-43-54	-85.9249	36.1876				681															-245	-352	-70				
Core-4-43-55	-85.9396	36.1933				593															-146	-245	14				
Core-4-43-56	-85.9966	36.2382				680															-131	-231	-6				
Core-4-43-57	-85.9328	36.1823				603															-194	-300	-31				
Core-4-43-58	-85.9459	36.1937				481															-145	-229	20				
Core-4-43-59	-85.9958	36.2245				755															-123	-226	-8				
Core-4-43-6	-85.9190	36.2184				485															-153	-250	64				
Core-4-43-60	-85.9480	36.2218				465															-91	-119	150				
Core-4-43-61	-85.9186	36.1825				594															-212	-311	-14				
Core-4-43-62	-85.9493	36.2267				538															-146	-241	30				
Core-4-43-63	-85.9325	36.1991				490															-162	-268	7				
Core-4-43-64	-85.9961	36.1862				645															-108	-215	-8				
Core-4-43-65	-85.9426	36.2266				500															-179	-275	7				
Core-4-43-66	-85.9328	36.1934				491															-166	-265	4				
Core-4-43-67	-85.9359	36.2264				600															-118	-212	80				
Core-4-43-68	-85.9410	36.1874				600															-123	-217	39				
Core-4-43-69	-85.9317	36.2379				450															-233	-338	-34				
Core-4-43-7	-85.9188	36.2211				566															-160	-263	53				
Core-4-43-70	-85.9188	36.1933				505															-184	-280	15				
Core-4-43-71	-85.9391	36.1823				607															-25	-63	196				
Core-4-43-72	-85.9188	36.1881				607															-292	-399	-104				

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Core-4-43-73	-85.9388	36.2373				524															-220	-317	-23				
Core-4-43-74	-85.9458	36.1879				585															-93	-169	79				
Core-4-43-75	-85.9326	36.1881				568															-152	-249	20				
Core-4-43-76	-85.9254	36.2484				755															-258	-354	-49				
Core-4-43-77	-85.9460	36.1824				563															-104	-182	65				
Core-4-43-78	-85.9255	36.1832				737															-214	-319	-37				
Core-4-43-79	-85.9585	36.1935				505															-147	-262	-32				
Core-4-43-8	-85.9189	36.2155				487															-173	-271	41				
Core-4-43-80	-85.9512	36.1772				620															-134	-245	-7				
Core-4-43-81	-85.9256	36.2430				481															-306	-417	-108				
Core-4-43-82	-85.9371	36.2314				845															-201	-279	15				
Core-4-43-83	-85.9586	36.1880				493															-155	-260	-32				
Core-4-43-84	-85.9541	36.1978				547															-146	-253	-13				
Core-4-43-85	-85.9576	36.1770				645															-97	-199	27				
Core-4-43-86	-85.9320	36.2320				819															-241	-349	-46				
Core-4-43-87	-85.9520	36.1933				504															-115	-197	43				
Core-4-43-88	-85.9626	36.2159				497															-198	-302	-60				
Core-4-43-89	-85.9558	36.2210				518															-178	-277	-21				
Core-4-43-9	-85.9227	36.2158				508															-182	-241	64				
Core-4-43-90	-85.9600	36.2316				656															-202	-290	-32				
Core-4-43-91	-85.9196	36.2320				591															-207	-313	10				
Core-4-43-92	-85.9526	36.1883				503															-123	-207	30				
Core-4-43-93	-85.9257	36.2204				564															-118	-179	124				
Core-4-43-94	-85.9474	36.1981				706															-142	-246	5				
Core-4-43-95	-85.9459	36.2320				580															-91	-165	116				
Core-4-43-96	-85.9564	36.2100				742															-146	-247	0				
Core-4-43-97	-85.9457	36.2377				600															-162	-251	34				
Core-4-43-98	-85.9226	36.2209				551															-131	-216	93				
Core-4-43-99	-85.9495	36.2163				473															-136	-227	35				
Core-4-44-1	-85.8891	36.2181				572															-377	-476	-108				
Core-4-44-10	-85.9089	36.2185				493															-205	-301	31				
Core-4-44-100	-85.8945	36.2131				741															-297	-417	-61				
Core-4-44-101	-85.8988	36.2134				897															-221	-322	26				
Core-4-44-102	-85.8883	36.2075				742															-287	-397	-31				
Core-4-44-103	-85.8882	36.2047				619															-299	-405	-40				
Core-4-44-104	-85.8918	36.2255				834															-283	-386	-20				
Core-4-44-105	-85.8631	36.1697				560															-276	-380	-7				
Core-4-44-106	-85.8952	36.2291				852															-232	-336	26				
Core-4-44-107	-85.8919	36.2240				678															-338	-443	-78				
Core-4-44-108	-85.8975	36.2314				559															-254	-355	4				
Core-4-44-109	-85.8886	36.2209				649															-348	-445	-75				
Core-4-44-11	-85.9154	36.2045				558															-251	-358	-48				
Core-4-44-110	-85.8565	36.2427				560															-380	-485	-96				
Core-4-44-111	-85.8945	36.2244				666															-329	-418	-57				
Core-4-44-112	-85.8884	36.2238				635															-316	-422	-51				
Core-4-44-113	-85.8584	36.2126				700															-245	-348	34				
Core-4-44-114	-85.8747	36.2086				645															-257	-357	20				
Core-4-44-115	-85.9118	36.2047				671															-258	-342	-24				
Core-4-44-116	-85.8597	36.1913				690															-250	-344	28				
Core-4-44-117	-85.8819	36.2160				620															-310	-376	2				
Core-4-44-118	-85.9084	36.1990				725															-213	-287	34				
Core-4-44-119	-85.9020	36.1830				537															-218	-309	23				
Core-4-44-12	-85.9089	36.2210				571															-207	-302	32				

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Core-4-44-120	-85.8756	36.2166				532															-273	-361	18				
Core-4-44-121	-85.9156	36.1996				564															-281	-378	-71				
Core-4-44-122	-85.8579	36.2239				690															-313	-404	-17				
Core-4-44-123	-85.8818	36.2046				702															-286	-391	-17				
Core-4-44-124	-85.9030	36.1979				552															-230	-297	35				
Core-4-44-125	-85.9016	36.1935				612															-251	-300	32				
Core-4-44-126	-85.8949	36.1938				503															-287	-386	-39				
Core-4-44-127	-85.8549	36.2348				700															-296	-399	-6				
Core-4-44-128	-85.9083	36.1935				494															-206	-244	74				
Core-4-44-129	-85.8882	36.1939				584															-243	-343	18				
Core-4-44-13	-85.9089	36.2156				501															-200	-302	28				
Core-4-44-130	-85.9051	36.1882				474															-337	-440	-115				
Core-4-44-131	-85.8580	36.2016				700															-237	-334	43				
Core-4-44-132	-85.8818	36.1934				768															-220	-316	55				
Core-4-44-133	-85.9117	36.1878				530															-316	-421	-110				
Core-4-44-134	-85.8981	36.1882				496															-271	-338	2				
Core-4-44-135	-85.8836	36.1881				545															-224	-325	46				
Core-4-44-136	-85.9117	36.1826				529															-291	-368	-56				
Core-4-44-137	-85.8913	36.1880				557															-235	-327	28				
Core-4-44-138	-85.8677	36.2051				751															-276	-379	-2				
Core-4-44-139	-85.8856	36.1831				654															-242	-347	21				
Core-4-44-14	-85.8985	36.2046				579															-306	-403	-59				
Core-4-44-140	-85.8921	36.1830				629															-204	-270	84				
Core-4-44-141	-85.8810	36.2123				842															-271	-378	-1				
Core-4-44-142	-85.8785	36.1883				567															-234	-332	39				
Core-4-44-143	-85.8848	36.1771				700															-211	-311	59				
Core-4-44-144	-85.8779	36.1837				800															-261	-335	37				
Core-4-44-145	-85.8916	36.1771				771															-236	-329	27				
Core-4-44-146	-85.8752	36.2126				565															-282	-367	11				
Core-4-44-147	-85.8981	36.1767				642															-198	-303	39				
Core-4-44-148	-85.8638	36.2271				880															-216						
Core-4-44-149	-85.9055	36.1773				506															-186	-280	46				
Core-4-44-15	-85.8817	36.2265				540															-312	-411	-30				
Core-4-44-150	-85.8782	36.2317				567															-317	-418	-34				
Core-4-44-151	-85.9052	36.2484				600															-254	-343	-4				
Core-4-44-152	-85.8917	36.2485				703															-242	-336	25				
Core-4-44-153	-85.8981	36.2483				691															-279	-368	-17				
Core-4-44-154	-85.8840	36.2376				577															-308	-408	-27				
Core-4-44-155	-85.8915	36.2366				520															-335	-434	-65				
Core-4-44-156	-85.9032	36.2427				485															-249	-348	-2				
Core-4-44-157	-85.9002	36.2207				773															-229	-332	17				
Core-4-44-158	-85.8976	36.2428				497															-242	-340	15				
Core-4-44-159	-85.8715	36.2430				560															-367	-468	-85				
Core-4-44-16	-85.9053	36.2208				564															-212	-301	39				
Core-4-44-160	-85.8987	36.2197				727															-235	-339	12				
Core-4-44-161	-85.9088	36.2212				573															-207	-304	30				
Core-4-44-162	-85.8720	36.1891				625															-295	-330	41				
Core-4-44-163	-85.8823	36.1852				637															-240	-346	25				
Core-4-44-164	-85.8883	36.1850				556															-230	-308	54				
Core-4-44-165	-85.8469	36.2018				740															-328	-410	-32				
Core-4-44-166	-85.8346	36.2018				980															-356	-455	-43				
Core-4-44-167	-85.8466	36.1933				800															-292	-395	-21				
Core-4-44-168	-85.8568	36.2075				640															-339	-341	38				

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Core-4-44-169	-85.8729	36.1767				660															-375	-507	-134				
Core-4-44-17	-85.9058	36.2156				643															-198	-294	42				
Core-4-44-170	-85.8648	36.1984				989															-260	-355	19				
Core-4-44-171	-85.8634	36.2101				590															-251	-361	18				
Core-4-44-172	-85.9078	36.1969				563															-211	-284	37				
Core-4-44-173	-85.8558	36.1968				1000															-172	-224	151				
Core-4-44-174	-85.8791	36.2069				639															-342	-443	-68				
Core-4-44-175	-85.9045	36.1937				647															-175	-332	-6				
Core-4-44-176	-85.8720	36.1851				845															-258	-352	20				
Core-4-44-177	-85.8511	36.1759				660															-302	-410	-37				
Core-4-44-178	-85.9153	36.1937				496															-216	-313	-10				
Core-4-44-179	-85.9118	36.1937				496															-231	-327	-16				
Core-4-44-18	-85.8851	36.1992				597															-266	-363	7				
Core-4-44-180	-85.9123	36.1903				502															-255	-365	-56				
Core-4-44-181	-85.9084	36.1908				509															-247	-328	-11				
Core-4-44-182	-85.8994	36.1911				485															-296	-389	-52				
Core-4-44-183	-85.9024	36.1910				494															-282	-352	-22				
Core-4-44-184	-85.9085	36.1877				522															-318	-422	-104				
Core-4-44-185	-85.9054	36.1910				492															-281	-381	-57				
Core-4-44-186	-85.8953	36.1991				799															-301	-399	-51				
Core-4-44-187	-85.8948	36.1964				655															-298	-392	-44				
Core-4-44-188	-85.8983	36.1963				748															-289	-373	-32				
Core-4-44-189	-85.8983	36.1937				564															-294	-390	-50				
Core-4-44-19	-85.8889	36.2262				735															-264	-362	9				
Core-4-44-190	-85.8989	36.1995				704															-274	-352	-11				
Core-4-44-191	-85.9016	36.1965				671															-242	-301	33				
Core-4-44-192	-85.8892	36.1908				717															-231	-323	36				
Core-4-44-193	-85.8926	36.1906				606															-257	-349	3				
Core-4-44-194	-85.9048	36.1968				477															-217	-278	49				
Core-4-44-195	-85.8912	36.1857				556															-211	-283	72				
Core-4-44-196	-85.8875	36.1882				567															-242	-346	17				
Core-4-44-197	-85.8947	36.1880				492															-226	-286	61				
Core-4-44-198	-85.8882	36.1996				549															-273	-366	-3				
Core-4-44-199	-85.9048	36.1861				473															-320	-424	-98				
Core-4-44-2	-85.8915	36.1953				531															-269	-366	-11				
Core-4-44-20	-85.9021	36.2210				644															-229	-323	23				
Core-4-44-200	-85.8880	36.1969				740															-272	-369	-6				
Core-4-44-201	-85.8957	36.1908				625															-265	-340	5				
Core-4-44-202	-85.8854	36.1963				880															-237	-338	30				
Core-4-44-203	-85.9019	36.1883				480															-317	-377	-45				
Core-4-44-204	-85.8915	36.1968				540															-281	-362	-6				
Core-4-44-205	-85.9024	36.2000				538															-250	-348	-14				
Core-4-44-206	-85.9109	36.2018				785															-279	-383	-65				
Core-4-44-207	-85.9122	36.1964				556															-269	-353	-41				
Core-4-44-208	-85.9083	36.2018				650															-220	-323	0				
Core-4-44-209	-85.9155	36.1965				482															-223	-266	39				
Core-4-44-21	-85.8779	36.2106				618															-279	-381	-4				
Core-4-44-210	-85.8920	36.2023				821															-315	-416	-59				
Core-4-44-211	-85.8883	36.2020				625															-296	-396	-32				
Core-4-44-212	-85.9018	36.1855				515															-278	-355	-22				
Core-4-44-213	-85.8983	36.1854				630															-225	-285	55				
Core-4-44-214	-85.9087	36.2040				613															-227	-330	-6				
Core-4-44-215	-85.8981	36.2015				549															-315	-418	-74				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-44-216	-85.9155	36.1909				497															-254	-356	-54				
Core-4-44-217	-85.8951	36.2018				727															-306	-408	-58				
Core-4-44-218	-85.9082	36.1856				528															-329	-437	-118				
Core-4-44-219	-85.9150	36.1877				568															-269	-369	-65				
Core-4-44-22	-85.8915	36.1994				622															-286	-383	-27				
Core-4-44-220	-85.9052	36.1827				496															-285	-388	-62				
Core-4-44-221	-85.9151	36.1851				651															-257	-363	-59				
Core-4-44-222	-85.9087	36.1827				538															-315	-375	-57				
Core-4-44-223	-85.8973	36.1824				591															-211	-305	38				
Core-4-44-224	-85.9150	36.1831				641															-249	-348	-43				
Core-4-44-225	-85.8946	36.1825				585															-216	-309	39				
Core-4-44-226	-85.8949	36.1852				590															-222	-319	28				
Core-4-44-227	-85.9118	36.1798				569															-277	-369	-57				
Core-4-44-228	-85.9154	36.1798				567															-262	-353	-49				
Core-4-44-229	-85.8930	36.2089				690															-300	-406	-49				
Core-4-44-23	-85.9018	36.2155				623															-206	-306	37				
Core-4-44-230	-85.8917	36.1929				650															-264	-354	-1				
Core-4-44-231	-85.9141	36.2227				463															-195	-295	30				
Core-4-44-232	-85.9013	36.2288				553															-268	-365	-14				
Core-4-44-233	-85.9088	36.2105				899															-199	-299	28				
Core-4-44-234	-85.8981	36.2237				982															-287	-390	-36				
Core-4-44-235	-85.9164	36.2100				765															-215	-319	-7				
Core-4-44-236	-85.9152	36.2092				665															-247	-350	-36				
Core-4-44-237	-85.9146	36.2107				756															-232	-335	-19				
Core-4-44-238	-85.9153	36.2277				516															-184	-279	48				
Core-4-44-239	-85.8963	36.1979				809															-288	-379	-33				
Core-4-44-24	-85.9088	36.2242				513															-223	-323	13				
Core-4-44-240	-85.8985	36.1950				649															-290	-372	-32				
Core-4-44-241	-85.9001	36.1961				663															-272	-366	-29				
Core-4-44-242	-85.8940	36.2000				799															-298	-362	-11				
Core-4-44-243	-85.8946	36.1979				701															-294	-362	-13				
Core-4-44-244	-85.8979	36.1979				888															-284	-377	-35				
Core-4-44-245	-85.9060	36.1923				494															-252	-349	-27				
Core-4-44-246	-85.9026	36.1891				485															-318	-412	-82				
Core-4-44-247	-85.8962	36.1963				672															-297	-398	-53				
Core-4-44-248	-85.8958	36.2098				769															-287	-374	-22				
Core-4-44-249	-85.8942	36.2104				743															-324	-431	-75				
Core-4-44-25	-85.9121	36.2130				657															-213	-316	7				
Core-4-44-250	-85.8953	36.2107				834															-291	-390	-37				
Core-4-44-251	-85.9078	36.2350				496															-228	-300	44				
Core-4-44-252	-85.9083	36.2361				481															-247	-342	0				
Core-4-44-253	-85.9083	36.2375				478															-281	-380	-39				
Core-4-44-254	-85.9066	36.2401				481															-344	-455	-113				
Core-4-44-255	-85.8985	36.1998				690															-284	-376	-34				
Core-4-44-256	-85.8930	36.1974				575															-305	-388	-36				
Core-4-44-257	-85.8927	36.1998				722															-304	-369	-15				
Core-4-44-258	-85.9093	36.2051				634															-202	-299	24				
Core-4-44-259	-85.8996	36.1935				530															-261	-334	3				
Core-4-44-26	-85.8954	36.2264				875															-303	-407	-47				
Core-4-44-260	-85.9031	36.1951				598															-222	-284	46				
Core-4-44-261	-85.9100	36.2073				701															-214	-309	14				
Core-4-44-262	-85.8977	36.1906				536															-284	-355	-14				
Core-4-44-263	-85.8974	36.2166				617															-236	-343	9				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-44-264	-85.8973	36.2147				779															-233	-342	9				
Core-4-44-265	-85.8991	36.2147				748															-216	-319	29				
Core-4-44-266	-85.9145	36.2315				505															-222	-324	7				
Core-4-44-267	-85.8968	36.2131				864															-237	-339	13				
Core-4-44-268	-85.9032	36.1858				496															-301	-385	-56				
Core-4-44-269	-85.8941	36.1896				593															-255	-348	0				
Core-4-44-27	-85.8985	36.2210				880															-258	-360	-8				
Core-4-44-270	-85.8904	36.1909				629															-238	-337	19				
Core-4-44-271	-85.8896	36.1948				588															-248	-348	11				
Core-4-44-272	-85.9153	36.1948				495															-209	-269	35				
Core-4-44-273	-85.8899	36.1982				638															-241	-324	35				
Core-4-44-274	-85.8900	36.2018				645															-287	-392	-32				
Core-4-44-275	-85.8856	36.2323				495															-324	-428	-49				
Core-4-44-276	-85.8875	36.2346				505															-321	-423	-46				
Core-4-44-277	-85.8950	36.2321				583															-247	-349	14				
Core-4-44-278	-85.8848	36.2303				551															-347	-455	-75				
Core-4-44-279	-85.8908	36.2340				482															-288	-390	-19				
Core-4-44-28	-85.9086	36.2129				708															-207	-312	17				
Core-4-44-280	-85.8979	36.2341				477															-266	-370	-10				
Core-4-44-281	-85.8940	36.2354				477															-279	-362	4				
Core-4-44-282	-85.9029	36.2468				584															-258	-355	-11				
Core-4-44-283	-85.8948	36.2485				618															-266	-360	-4				
Core-4-44-284	-85.9133	36.2070				575															-252	-351	-35				
Core-4-44-285	-85.9038	36.2465				566															-263	-355	-13				
Core-4-44-286	-85.9041	36.2478				664															-250	-335	6				
Core-4-44-287	-85.9011	36.2471				599															-250	-349	-3				
Core-4-44-288	-85.9024	36.2455				544															-260	-359	-14				
Core-4-44-289	-85.9035	36.2448				477															-264	-365	-21				
Core-4-44-29	-85.9119	36.2102				674															-232	-331	-10				
Core-4-44-290	-85.9128	36.2489				595															-280	-371	-45				
Core-4-44-291	-85.9157	36.2477				480															-246	-338	-16				
Core-4-44-292	-85.9109	36.2047				685															-246	-342	-22				
Core-4-44-293	-85.9057	36.2428				462															-306	-400	-58				
Core-4-44-294	-85.9036	36.2019				634															-241	-346	-13				
Core-4-44-295	-85.9048	36.2442				462															-281	-381	-39				
Core-4-44-296	-85.9047	36.2455				462															-279	-376	-34				
Core-4-44-297	-85.9044	36.2426				480															-275	-373	-29				
Core-4-44-298	-85.8966	36.2046				577															-318	-399	-51				
Core-4-44-299	-85.8933	36.2021				922															-308	-409	-55				
Core-4-44-3	-85.8894	36.2182				569															-380	-479	-111				
Core-4-44-30	-85.9054	36.2241				573															-216	-300	42				
Core-4-44-300	-85.8957	36.2131				805															-263	-373	-19				
Core-4-44-301	-85.8970	36.2101				757															-261	-361	-11				
Core-4-44-302	-85.8959	36.2167				641															-257	-367	-12				
Core-4-44-303	-85.9025	36.2479				651															-246	-326	18				
Core-4-44-304	-85.8974	36.2157				707															-235	-345	7				
Core-4-44-305	-85.9014	36.2461				569															-250	-347	0				
Core-4-44-306	-85.9069	36.2482				469															-303	-397	-61				
Core-4-44-307	-85.9052	36.2475				633															-269	-351	-12				
Core-4-44-308	-85.9166	36.2490				666															-245	-338	-19				
Core-4-44-309	-85.8900	36.1900				711											425		300	-92	-247	-304	53	-1985	-3017		-4292
Core-4-44-309	-85.8900	36.1900				711											425		300	-92	-247	-304	53	-1985	-3017		-4292
Core-4-44-31	-85.8993	36.2162				643															-222	-323	26				

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Core-4-44-310	-85.9030	36.2391				468															-257	-354	-5				
Core-4-44-311	-85.9021	36.2499				601															-248	-341	2				
Core-4-44-312	-85.8913	36.2454				760															-267	-366	-2				
Core-4-44-313	-85.8959	36.2455				580															-282	-371	-15				
Core-4-44-314	-85.9006	36.2429				708															-226	-327	23				
Core-4-44-315	-85.8889	36.2485				638															-237	-341	25				
Core-4-44-316	-85.8877	36.2448				614															-246	-344	26				
Core-4-44-317	-85.8987	36.2459				635															-252	-345	6				
Core-4-44-318	-85.8939	36.2429				696															-267	-350	11				
Core-4-44-319	-85.8928	36.2497				588															-245	-336	23				
Core-4-44-32	-85.9121	36.2156				515															-187	-286	38				
Core-4-44-320	-85.8954	36.2471				583															-282	-376	-20				
Core-4-44-321	-85.8964	36.2484				605															-290	-390	-36				
Core-4-44-322	-85.8932	36.2473				639															-266	-342	18				
Core-4-44-323	-85.8908	36.2475				722															-237	-338	26				
Core-4-44-324	-85.9007	36.2420				626															-242	-347	4				
Core-4-44-325	-85.8998	36.2451				654															-242	-338	12				
Core-4-44-326	-85.8922	36.2464				753															-263	-358	4				
Core-4-44-327	-85.9005	36.2383				468															-255	-359	-5				
Core-4-44-328	-85.8990	36.1924				500															-291	-392	-54				
Core-4-44-329	-85.9004	36.2005				521															-276	-340	-1				
Core-4-44-33	-85.9120	36.2076				641															-237	-335	-16				
Core-4-44-330	-85.9027	36.2376				467															-271	-372	-22				
Core-4-44-331	-85.8855	36.2486				642															-245	-345	27				
Core-4-44-332	-85.9007	36.1951				611															-256	-333	2				
Core-4-44-333	-85.9046	36.2402				480															-287	-391	-45				
Core-4-44-334	-85.8998	36.2401				474															-248	-351	3				
Core-4-44-335	-85.8980	36.2404				558															-257	-360	-4				
Core-4-44-336	-85.8822	36.2485				639															-328	-437	-62				
Core-4-44-337	-85.8826	36.2457				715															-258	-359	18				
Core-4-44-338	-85.9040	36.2034				756															-220	-286	47				
Core-4-44-339	-85.8947	36.2391				800															-257	-333	30				
Core-4-44-34	-85.9018	36.2184				533															-199	-239	106				
Core-4-44-340	-85.9023	36.2490				628															-239	-336	7				
Core-4-44-341	-85.8857	36.2435				568															-250	-344	30				
Core-4-44-342	-85.8860	36.2458				641															-242	-339	34				
Core-4-44-343	-85.9022	36.2353				510															-288	-391	-38				
Core-4-44-344	-85.8879	36.2474				614															-246	-344	25				
Core-4-44-345	-85.8964	36.2398				683															-258	-356	3				
Core-4-44-346	-85.8915	36.2407				662															-328	-425	-58				
Core-4-44-347	-85.8820	36.2433				774															-281	-384	-5				
Core-4-44-348	-85.8800	36.2452				863															-322	-428	-50				
Core-4-44-349	-85.8815	36.2371				717															-309	-403	-21				
Core-4-44-35	-85.9152	36.2155				685															-174	-276	43				
Core-4-44-350	-85.8846	36.2403				556															-286	-383	-5				
Core-4-44-351	-85.8867	36.2374				524															-328	-423	-46				
Core-4-44-352	-85.8996	36.2367				470															-270	-373	-17				
Core-4-44-353	-85.8858	36.2471				720															-248	-343	29				
Core-4-44-354	-85.9021	36.2413				492															-244	-346	3				
Core-4-44-355	-85.9118	36.1950				471															-232	-281	31				
Core-4-44-356	-85.9143	36.1922				494															-237	-338	-34				
Core-4-44-36	-85.8949	36.2153				679															-275	-379	-23				
Core-4-44-37	-85.9053	36.2128				671															-203	-306	30				

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Core-4-44-38	-85.8951	36.2209				795															-343	-450	-92				
Core-4-44-39	-85.9019	36.2239				884															-237	-337	11				
Core-4-44-4	-85.8623	36.1851				689															-250	-325	47				
Core-4-44-40	-85.9086	36.2076				732															-215	-308	18				
Core-4-44-41	-85.9152	36.2129				832															-191	-293	24				
Core-4-44-42	-85.8982	36.2184				609															-234	-339	13				
Core-4-44-43	-85.8952	36.2183				790															-286	-398	-41				
Core-4-44-44	-85.9049	36.2100				819															-200	-290	45				
Core-4-44-45	-85.9018	36.2129				847															-200	-302	40				
Core-4-44-46	-85.8946	36.2046				622															-298	-392	-40				
Core-4-44-47	-85.9017	36.2263				707															-257	-356	-7				
Core-4-44-48	-85.9153	36.2101				753															-236	-333	-18				
Core-4-44-49	-85.9154	36.2211				490															-170	-271	51				
Core-4-44-5	-85.8384	36.2259				650															-310	-413	-19				
Core-4-44-50	-85.9155	36.2295				608															-207	-306	22				
Core-4-44-51	-85.8984	36.2293				606															-265	-364	-8				
Core-4-44-52	-85.9154	36.2074				672															-258	-354	-41				
Core-4-44-53	-85.9154	36.2239				494															-176	-276	48				
Core-4-44-54	-85.8985	36.2265				648															-283	-393	-38				
Core-4-44-55	-85.8883	36.2321				493															-288	-394	-20				
Core-4-44-56	-85.8999	36.2186				576															-204	-282	67				
Core-4-44-57	-85.9121	36.2239				485															-180	-276	54				
Core-4-44-58	-85.9150	36.2184				459															-166	-267	54				
Core-4-44-59	-85.9053	36.2265				571															-231	-323	20				
Core-4-44-6	-85.9117	36.2296				487															-215	-309	25				
Core-4-44-60	-85.9045	36.2292				511															-255	-347	-1				
Core-4-44-61	-85.9121	36.2265				479															-186	-271	61				
Core-4-44-62	-85.8883	36.2294				540															-258	-359	15				
Core-4-44-63	-85.9119	36.2187				475															-187	-287	40				
Core-4-44-64	-85.9088	36.2265				462															-221	-320	17				
Core-4-44-65	-85.9054	36.2021				637															-225	-323	6				
Core-4-44-66	-85.9078	36.2294				494															-225	-318	23				
Core-4-44-67	-85.9048	36.2379				465															-305	-410	-63				
Core-4-44-68	-85.9156	36.2267				538															-178	-268	58				
Core-4-44-69	-85.9052	36.1993				567															-222	-319	9				
Core-4-44-7	-85.9067	36.2047				637															-212	-308	20				
Core-4-44-70	-85.8917	36.2319				625															-252	-352	17				
Core-4-44-71	-85.9122	36.2209				461															-187	-288	40				
Core-4-44-72	-85.9016	36.2019				658															-290	-372	-35				
Core-4-44-73	-85.8982	36.2376				481															-281	-388	-30				
Core-4-44-74	-85.9121	36.1988				641															-283	-379	-66				
Core-4-44-75	-85.8917	36.2183				667															-380	-486	-123				
Core-4-44-76	-85.8918	36.2295				681															-240	-343	25				
Core-4-44-77	-85.9052	36.2075				777															-231	-315	18				
Core-4-44-78	-85.8407	36.2110				740															-290	-395	-9				
Core-4-44-79	-85.9018	36.2075				714															-257	-357	-18				
Core-4-44-8	-85.8732	36.2346				561															-343	-410	-24				
Core-4-44-80	-85.8916	36.2158				743															-362	-470	-107				
Core-4-44-81	-85.8406	36.1691				555															-328	-345	29				
Core-4-44-82	-85.8919	36.2067				826															-288	-392	-34				
Core-4-44-83	-85.9017	36.2104				824															-218	-319	22				
Core-4-44-84	-85.8414	36.1971				815															-254	-359	18				
Core-4-44-85	-85.8988	36.2076				764															-287	-381	-36				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-4-44-86	-85.8888	36.2149				812															-321	-423	-55				
Core-4-44-87	-85.9023	36.2047				806															-240	-298	39				
Core-4-44-88	-85.8921	36.2049				822															-290	-379	-22				
Core-4-44-89	-85.8916	36.1691				475															-227	-317	40				
Core-4-44-9	-85.9055	36.2183				507															-211	-306	32				
Core-4-44-90	-85.8916	36.2105				751															-314	-420	-59				
Core-4-44-91	-85.8414	36.1826				655															-280	-372	1				
Core-4-44-92	-85.8886	36.2131				886															-305	-410	-43				
Core-4-44-93	-85.8950	36.2102				776															-305	-399	-45				
Core-4-44-94	-85.8762	36.1689				570															-267	-359	14				
Core-4-44-95	-85.8983	36.2105				763															-246	-345	3				
Core-4-44-96	-85.8919	36.2127				793															-353	-463	-102				
Core-4-44-97	-85.8403	36.2413				675															-190	-292	103				
Core-4-44-98	-85.8883	36.2102				830															-282	-389	-22				
Core-4-44-99	-85.8948	36.2067				597															-277	-332	21				
Core-4-45-16	-85.7730	36.1843				710															-154	-202	214				
Core-4-45-17	-85.8073	36.2243				840															-296	-400	24				
Core-4-45-18	-85.7895	36.2243				560															-248	-314	87				
Core-4-45-19	-85.7560	36.1868				710															-185	-273	5				
Core-4-45-25	-85.8092	36.2011				680															-875	-962	-416				
Core-4-45-26	-85.8080	36.1901				710															-257	-353	238				
Core-4-45-27	-85.7679	36.1748				700															-198	-293	83				
Core-4-45-28	-85.7757	36.1715				650															-158	-239	174				
Core-4-47-700	-85.6208	36.1876				1040																-496	-11				
Core-4-48-700	-85.5595	36.2376				900																-448	22				
Core-5-39-1	-86.2845	36.1484				658															105	-7	-16				
Core-5-39-11	-86.2572	36.0896				745															133	35	17				
Core-5-39-12	-86.2731	36.0989				730															124	28	4				
Core-5-39-13	-86.2751	36.1071				720															141	40	18				
Core-5-39-14	-86.2499	36.0844				750															56	-40	-55				
Core-5-39-15	-86.2741	36.1118				745															147	30	10				
Core-5-39-16	-86.2644	36.1180				670															49	-56	-66				
Core-5-39-17	-86.2526	36.0955				685															87	-31	-45				
Core-5-39-18	-86.2845	36.1168				775															155	60	38				
Core-5-39-19	-86.2499	36.1016				665															113	19	9				
Core-5-39-2	-86.2554	36.1118				650															26	-74	-80				
Core-5-39-20	-86.2638	36.1020				710															121	12	-7				
Core-5-39-21	-86.2827	36.1344				710															100	6	-8				
Core-5-39-22	-86.2842	36.1005				795															144	76	49				
Core-5-39-23	-86.2636	36.0908				815															105	6	-16				
Core-5-39-24	-86.2612	36.0956				760															101	1	-18				
Core-5-39-25	-86.2680	36.0989				715															111	2	-21				
Core-5-39-26	-86.2579	36.0979				790															153	69	53				
Core-5-39-27	-86.2732	36.1015				705															122	20	-3				
Core-5-39-28	-86.2728	36.0898				725															88	-8	-35				
Core-5-39-29	-86.2653	36.0987				725															98	-8	-29				
Core-5-39-3	-86.2704	36.0860				715															107	-11	-38				
Core-5-39-30	-86.2556	36.1093				670															105	20	11				
Core-5-39-31	-86.2652	36.0960				805															77	-26	-48				
Core-5-39-32	-86.2677	36.1018				745															122	23	2				
Core-5-39-33	-86.2580	36.0953				740															148	65	48				
Core-5-39-34	-86.2687	36.0956				725															92	-23	-47				
Core-5-39-35	-86.2610	36.1007				760															169	113	96				

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Core-5-39-36	-86.2597	36.0928				785															137	52	33				
Core-5-39-37	-86.2572	36.1001				725															153	60	45				
Core-5-39-38	-86.2550	36.0853				740															64	-45	-63				
Core-5-39-39	-86.2559	36.0928				745															157	68	51				
Core-5-39-4	-86.3111	36.0982				718															120	32	-2				
Core-5-39-40	-86.2535	36.0904				715															120	1	-15				
Core-5-39-41	-86.2537	36.0905				715															115	-8	-24				
Core-5-39-42	-86.2540	36.1387				630															109	-5	24				
Core-5-39-43	-86.2679	36.1409				680															109	3	2				
Core-5-39-5	-86.2517	36.1103				646															34	-22	-26				
Core-5-39-6	-86.2595	36.1099				663															95	-13	-24				
Core-5-39-7	-86.2546	36.1154				665															26	-80	-81				
Core-5-39-8	-86.2611	36.0982				770															125	31	13				
Core-5-39-9	-86.2501	36.0896				760															90	-6	-20				
Core-5-40-1	-86.2070	36.0983				745															106	0	1				
Core-5-40-10	-86.2105	36.0998				775															96	-10	-9				
Core-5-40-11	-86.2254	36.0984				690															179	68	73				
Core-5-40-12	-86.2091	36.0856				740															83	-41	-38				
Core-5-40-13	-86.1902	36.0976				770															82	-12	-15				
Core-5-40-14	-86.1898	36.0861				800															67	-49	-45				
Core-5-40-15	-86.2072	36.1098				720															85	0	8				
Core-5-40-16	-86.1732	36.1129				715															113	24	38				
Core-5-40-17	-86.1729	36.1258				820															122	27	59				
Core-5-40-18	-86.1733	36.0856				730															125	3	15				
Core-5-40-19	-86.1901	36.1110				780															56	-42	-40				
Core-5-40-2	-86.2145	36.1348				650															62	-60	12				
Core-5-40-20	-86.2067	36.1274				700															67	-26	22				
Core-5-40-21	-86.2417	36.1125				660															0	-109	-101				
Core-5-40-22	-86.2049	36.1023				740															100	19	18				
Core-5-40-23	-86.2082	36.1026				740															85	-25	-25				
Core-5-40-24	-86.2398	36.1004				660															20	-72	-76				
Core-5-40-25	-86.2227	36.1083				685															121	0	11				
Core-5-40-26	-86.2313	36.0851				695															59	-33	-35				
Core-5-40-27	-86.2455	36.0934				735															146	50	41				
Core-5-40-28	-86.2433	36.0907				740															84	-62	-71				
Core-5-40-29	-86.2491	36.0940				685															114	16	4				
Core-5-40-3	-86.2372	36.0899				720															134	86	81				
Core-5-40-30	-86.2444	36.1036				655															57	-36	-42				
Core-5-40-31	-86.2447	36.0973				700															156	55	47				
Core-5-40-32	-86.2467	36.0910				785															88	-41	-52				
Core-5-40-33	-86.2431	36.0859				760															81	-15	-25				
Core-5-40-34	-86.2352	36.0959				655															158	44	42				
Core-5-40-35	-86.2100	36.0967				770															108	-6	-4				
Core-5-40-36	-86.2034	36.0965				840															123	35	35				
Core-5-40-37	-86.2408	36.1454				600															-18	-133	-63				
Core-5-40-4	-86.2287	36.1168				655															47	-46	-15				
Core-5-40-5	-86.1702	36.0964				715															164	87	98				
Core-5-40-6	-86.2424	36.1305				615															-58	-156	-116				
Core-5-40-7	-86.2071	36.0949				760															114	1	2				
Core-5-40-8	-86.1896	36.1237				825															141	37	65				
Core-5-40-9	-86.2032	36.0995				735															116	13	13				
Core-5-41-3	-86.1046	36.1093				670															112	3	14				
Core-5-42-1	-86.0776	36.1505				700															62	19	37				

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Core-5-42-2	-86.0330	36.1519				650															-17	-124	-20				
Core-5-42-3	-86.0437	36.1194				700															74	-24	27				
Core-5-42-4	-86.0037	36.1231				590															-46	-137	-27				
Core-5-42-5	-86.0674	36.1276				710															65	-35	-6				
Core-5-42-6	-86.0123	36.0897				615															49	-30	57				
Core-5-42-7	-86.0687	36.0954				750															110	32	50				
Core-5-43-1	-85.9831	36.1211				580															-30	-91	50				
Core-5-43-2	-85.9308	36.1422				495															-181	-266	17				
Core-5-43-3	-85.9297	36.1556				630															-273	-385	-105				
Core-5-43-4	-85.9437	36.1407				510															-133	-243	8				
Core-5-43-5	-85.9597	36.1420				565															-236	-331	-121				
Core-5-43-6	-85.9629	36.0933				700															-91	-191	-8				
Core-5-43-701	-85.9218	36.1118				630																-329	-9				
Core-5-44-1	-85.8626	36.1429				495															-296	-395	-33				
Core-5-44-10	-85.8744	36.1420				480															-359	-454	-91				
Core-5-44-11	-85.8782	36.1020				495															-142	-173	141				
Core-5-44-12	-85.8432	36.1283				640															-308	-407	-80				
Core-5-44-13	-85.9154	36.0931				500															-159	-252	74				
Core-5-44-2	-85.9104	36.1662				510															-158	-262	56				
Core-5-44-3	-85.8906	36.1050				510															-227	-338	-24				
Core-5-44-4	-85.8438	36.1554				525															-247	-350	21				
Core-5-44-5	-85.8601	36.1554				590															-288	-400	-27				
Core-5-44-6	-85.8777	36.1562				505															-289	-394	-19				
Core-5-44-7	-85.8438	36.1416				540															-247	-358	-3				
Core-5-44-702	-85.9072	36.1181				690																-358	-37				
Core-5-44-703	-85.8528	36.0859				770																-243	73				
Core-5-44-704	-85.8543	36.0904				950																-287	24				
Core-5-44-705	-85.9092	36.1662				775																-360	-40				
Core-5-44-706	-85.9109	36.1452				890																-219	101				
Core-5-44-707	-85.9074	36.1200				680																-325	-4				
Core-5-44-708	-85.9065	36.1175				680																-422	-101				
Core-5-44-709	-85.9048	36.1195				780																-363	-41				
Core-5-44-710	-85.9145	36.1516				880																-265	47				
Core-5-44-711	-85.9103	36.1192				700																-346	-26				
Core-5-44-8	-85.8612	36.1279				520															-265	-363	-29				
Core-5-44-9	-85.8761	36.1257				495															-266	-342	-5				
Core-5-45-1	-85.7799	36.1135				605															-264	-374	-4				
Core-5-45-10	-85.8041	36.1440				480															-265	-367	-9				
Core-5-45-11	-85.7590	36.1638				710															-187	-282	67				
Core-5-45-2	-85.8254	36.1560				520															-288	-401	-17				
Core-5-45-3	-85.8267	36.1416				525															-288	-397	-42				
Core-5-45-4	-85.8272	36.1281				640															-237	-326	10				
Core-5-45-5	-85.7916	36.1547				520															-205	-295	97				
Core-5-45-6	-85.8104	36.1294				495															-300	-405	-56				
Core-5-45-7	-85.8272	36.1144				550															-244	-303	13				
Core-5-45-8	-85.7585	36.1541				660															-357	-465	-97				
Core-5-45-9	-85.7743	36.1594				580															-233	-338	49				
Core-5-46-1	-85.6961	36.1661				680															-357	-456	-64				
Core-5-46-2	-85.7442	36.1371				560															-283	-391	-3				
Core-5-46-3	-85.7346	36.1530				605															-330	-423	-40				
Core-5-46-4	-85.7139	36.1521				580															-305	-365	34				
Core-6-39-1	-86.2610	36.0713				715															119	14	-13				
Core-6-39-10	-86.2827	36.0618				720															230	131	98				

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Core-6-39-2	-86.2865	36.0123				635															210	118	85				
Core-6-39-4	-86.2687	36.0486				715															151	34	7				
Core-6-39-5	-86.2581	36.0554				735															217	93	67				
Core-6-39-6	-86.2582	36.0172				655															113	-11	-33				
Core-6-39-7	-86.2582	36.0305				670															60	-69	-91				
Core-6-39-8	-86.2645	36.0713				720															133	-10	-39				
Core-6-39-9	-86.2551	36.0802				800															73	-10	-30				
Core-6-40-1	-86.2467	36.0334				655															124	6	-19				
Core-6-40-10	-86.2236	36.0428				705															46	-61	-81				
Core-6-40-11	-86.2443	36.0812				720															76	-46	-58				
Core-6-40-12	-86.1862	36.0258				860															117	2	-9				
Core-6-40-13	-86.1995	36.0334				780															158	46	33				
Core-6-40-14	-86.2156	36.0281				715															81	-23	-51				
Core-6-40-15	-86.1980	36.0384				820															174	56	48				
Core-6-40-16	-86.2070	36.0328				785															220	151	132				
Core-6-40-17	-86.1985	36.0258				820															183	75	56				
Core-6-40-18	-86.2315	36.0496				710															136	24	7				
Core-6-40-19	-86.2092	36.0495				740															109	-10	-16				
Core-6-40-2	-86.2026	36.0588				870															127	22	28				
Core-6-40-20	-86.1944	36.0303				900															151	52	39				
Core-6-40-21	-86.1971	36.0199				755															132	18	-5				
Core-6-40-3	-86.2380	36.0547				810															165	47	30				
Core-6-40-4	-86.2121	36.0399				800															150	30	14				
Core-6-40-5	-86.1790	36.0092				840															117	-5	-30				
Core-6-40-6	-86.1905	36.0696				1060															85	-14	-1				
Core-6-40-7	-86.2042	36.0693				755															104	-16	-9				
Core-6-40-8	-86.2411	36.0704				860															178	62	49				
Core-6-40-9	-86.2238	36.0562				720															124	28	19				
Core-6-41-1	-86.1499	36.0752				750															89	-6	19				
Core-6-41-2	-86.1011	36.0038				710															150	41	54				
Core-6-41-3	-86.1086	36.0601				875															-19	-129	-108				
Core-6-41-4	-86.1366	36.0271				740															44	-69	-39				
Core-6-41-5	-86.1366	36.0105				740															100	-2	16				
Core-6-41-6	-86.1185	36.0177				710															90	-27	-10				
Core-6-41-7	-86.1588	36.0309				800															106	-16	-1				
Core-6-41-8	-86.1628	36.0047				820															41	-77	-91				
Core-6-42-1	-86.0778	36.0555				780															143	72	99				
Core-6-44-1	-85.9017	36.0666				578															-262	-372	-16				
Core-7-39-1	-86.3092	35.9245				545															239	121	2				
Core-7-39-3	-86.2572	35.9970				750															197	71	37				
Core-7-39-4	-86.2533	35.9817				760															153	15	-25				
Core-7-39-5	-86.2564	35.9496				655															171	45	3				
Core-7-40-1	-86.1377	35.9757				720															129	3	-22				
Core-7-40-2	-86.2465	35.9668				690															147	15	-21				
Core-7-40-3	-86.2077	35.9957				735															140	36	-3				
Core-7-40-4	-86.1736	35.9945				955															186	73	32				
Core-7-41-1	-86.0927	35.9386				698															28	-100	2				
Core-7-41-2	-86.1187	35.9249				800															11	-109	-38				
Core-7-41-3	-86.1533	35.9963				820															185	77	60				
Core-7-42-1	-86.0395	35.9363				740															16	-104	11				
Core-7-43-1	-85.9180	35.9845				610															-56	-152	10				
Core-7-43-2	-85.9959	35.9533				630															-56	-175	-12				
Core-9-39-1	-86.2575	35.7514				838															188	67	-25				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-9-39-2	-86.2894	35.8146				682															161	14	-48				
Core-9-39-3	-86.2993	35.7727				690															322	234	57				
Core-BB-1	-86.0841	36.3023				482															-170	-207	1				
Core-BB-2	-86.0845	36.2858				519															-147	-152	29				
Core-BB-3	-86.0848	36.2919				555															-70	-149	41				
Core-BB-4	-86.0913	36.2935				488																-178	-1				
Core-BB-5	-86.0881	36.2930				496																-201	-17				
Core-BR-1	-85.5841	36.4542				542																-528	-4				
Core-BR-2	-85.5936	36.4641				598																-552	-8				
Core-BR-4	-85.6167	36.4279				888																-490	0				
Core-BR-5	-85.5916	36.4614				890																-558	-20				
Core-BR-6	-85.5814	36.4528				531																-562	-39				
Core-BR-7	-85.5987	36.4618				905																-557	-24				
Core-BR-9	-85.6283	36.4686				930															-493	-585	-57				
Core-CR-1	-85.9871	36.4277				690																-430	35				
Core-CR-10	-86.1250	36.3661				635																-284	-11				
Core-CR-11	-86.1246	36.3690				600																-277	-1				
Core-CR-12	-86.1217	36.3697				730																-291	-10				
Core-CR-13	-86.1178	36.3669				675																-307	-22				
Core-CR-14	-86.1226	36.3727				640																-355	-72				
Core-CR-15	-86.0112	36.4149				580																-400	26				
Core-CR-16	-86.1250	36.3720				635																-304	-26				
Core-CR-17	-86.1182	36.3734				840																-299	-9				
Core-CR-18	-86.1226	36.3749				540																-310	-25				
Core-CR-19	-86.1175	36.3704				805																-278	10				
Core-CR-2	-86.0784	36.3618				530																-317	13				
Core-CR-20	-86.1150	36.3755				800																-259	38				
Core-CR-21	-86.1253	36.3631				810																-260	10				
Core-CR-22	-86.1153	36.3727				720																-278	16				
Core-CR-3	-86.1217	36.3672				640																-303	-24				
Core-CR-4	-86.0041	36.4322				660																-536	-63				
Core-CR-5	-86.1124	36.3807				535																-377	-72				
Core-CR-6	-86.1053	36.3679				520																-325	-21				
Core-CR-7	-86.0788	36.4134				610																-320	56				
Core-CR-8	-86.1155	36.3992				470																-385	-68				
Core-CR-9	-86.1217	36.3635				660																-307	-31				
Core-CU-1	-85.9259	36.2654				481															-179	-254	36				
Core-CU-10	-85.9500	36.2611				537															-262	-321	-26				
Core-CU-100	-85.9425	36.2543				565															-114	-177	116				
Core-CU-101	-85.9332	36.2654				522															-179	-272	20				
Core-CU-102	-85.9520	36.2617				538															-240	-325	-30				
Core-CU-103	-85.9548	36.2607				486															-197	-334	-39				
Core-CU-104	-85.9524	36.2597				529															-250	-327	-33				
Core-CU-105	-85.9570	36.2581				484															-237	-334	-42				
Core-CU-106	-85.9422	36.2419				480															-212	-302	-12				
Core-CU-107	-85.9507	36.2405				479															-164	-262	18				
Core-CU-108	-85.9600	36.2435				608															-235	-294	-22				
Core-CU-109	-85.9476	36.2470				472															-237	-339	-52				
Core-CU-11	-85.9612	36.2585				461															-181	-285	7				
Core-CU-110	-85.9489	36.2558				539															-220	-339	-48				
Core-CU-111	-85.9496	36.2496				530															-249	-282	5				
Core-CU-112	-85.9524	36.2559				505															-249	-355	-64				
Core-CU-113	-85.9479	36.2584				536															-226	-311	-18				

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Core-CU-114	-85.9451	36.2483				557															-225	-323	-33				
Core-CU-115	-85.9403	36.2497				574															-193	-276	17				
Core-CU-116	-85.9393	36.2476				486															-204	-288	6				
Core-CU-117	-85.9468	36.2451				469															-236	-338	-51				
Core-CU-118	-85.9470	36.2504				492															-229	-315	-26				
Core-CU-12	-85.9406	36.2557				553															-158	-234	59				
Core-CU-13	-85.9562	36.2523				484															-245	-341	-55				
Core-CU-14	-85.9416	36.2471				522															-202	-300	-8				
Core-CU-15	-85.9698	36.2667				480															-242	-338	-31				
Core-CU-16	-85.9507	36.2521				497															-271	-363	-75				
Core-CU-17	-85.9460	36.2598				568															-209	-294	0				
Core-CU-18	-85.9536	36.2576				489															-265	-358	-66				
Core-CU-19	-85.9330	36.2564				490															-180	-280	15				
Core-CU-2	-85.9311	36.2604				490															-164	-254	39				
Core-CU-20	-85.9430	36.2645				677															-261	-347	-52				
Core-CU-21	-85.9316	36.2631				490															-179	-219	73				
Core-CU-22	-85.9460	36.2656				767															-178	-316	-20				
Core-CU-23	-85.9458	36.2629				700															-250	-341	-46				
Core-CU-24	-85.9334	36.2586				513															-178	-269	25				
Core-CU-25	-85.9339	36.2613				534															-167	-238	55				
Core-CU-26	-85.9490	36.2667				813															-228	-306	-8				
Core-CU-27	-85.9425	36.2620				693															-207	-298	-4				
Core-CU-28	-85.9284	36.2647				501															-179	-267	23				
Core-CU-29	-85.9526	36.2669				787															-206	-300	0				
Core-CU-3	-85.9439	36.2515				521															-196	-254	37				
Core-CU-30	-85.9302	36.2576				475															-166	-257	38				
Core-CU-31	-85.9423	36.2591				628															-199	-293	1				
Core-CU-32	-85.9280	36.2619				491															-179	-252	40				
Core-CU-33	-85.9521	36.2642				652															-213	-285	12				
Core-CU-34	-85.9407	36.2631				891															-178	-235	59				
Core-CU-35	-85.9272	36.2564				481															-192	-269	27				
Core-CU-36	-85.9276	36.2591				489															-156	-247	47				
Core-CU-37	-85.9395	36.2604				724															-182	-277	17				
Core-CU-38	-85.9370	36.2639				775															-184	-277	16				
Core-CU-39	-85.9301	36.2554				477															-178	-279	17				
Core-CU-4	-85.9319	36.2653				497															-173	-230	61				
Core-CU-40	-85.9255	36.2610				490															-169	-261	33				
Core-CU-41	-85.9391	36.2581				571															-184	-278	16				
Core-CU-42	-85.9368	36.2624				649															-216	-259	34				
Core-CU-43	-85.9345	36.2639				627															-173	-256	36				
Core-CU-44	-85.9253	36.2581				492															-179	-282	15				
Core-CU-45	-85.9252	36.2637				482															-172	-264	29				
Core-CU-46	-85.9444	36.2583				537															-198	-287	6				
Core-CU-47	-85.9361	36.2569				504															-201	-293	1				
Core-CU-48	-85.9342	36.2663				551															-181	-272	20				
Core-CU-49	-85.9445	36.2549				512															-177	-225	67				
Core-CU-5	-85.9366	36.2590				534															-187	-286	8				
Core-CU-50	-85.9254	36.2555				489															-182	-275	24				
Core-CU-51	-85.9283	36.2660				505															-197	-286	3				
Core-CU-52	-85.9314	36.2618				496															-160	-227	66				
Core-CU-53	-85.9295	36.2611				482															-137	-167	126				
Core-CU-54	-85.9294	36.2598				480															-156	-244	50				
Core-CU-55	-85.9307	36.2590				479															-163	-256	38				

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Core-CU-56	-85.9298	36.2625				487															-159	-213	79				
Core-CU-57	-85.9318	36.2581				492															-170	-264	30				
Core-CU-58	-85.9278	36.2605				490															-96	-208	85				
Core-CU-59	-85.9327	36.2622				516															-187	-261	32				
Core-CU-6	-85.9640	36.2631				468															-236	-321	-22				
Core-CU-60	-85.9289	36.2584				488															-159	-235	60				
Core-CU-61	-85.9324	36.2595				551															-175	-269	25				
Core-CU-62	-85.9337	36.2600				514															-176	-261	33				
Core-CU-63	-85.9325	36.2608				505															-164	-242	51				
Core-CU-64	-85.9300	36.2639				491															-213	-270	21				
Core-CU-65	-85.9317	36.2642				501															-166	-227	65				
Core-CU-66	-85.9331	36.2634				532															-172	-246	46				
Core-CU-67	-85.9301	36.2650				503															-186	-268	23				
Core-CU-68	-85.9333	36.2645				548															-172	-261	31				
Core-CU-69	-85.9275	36.2578				487															-166	-260	35				
Core-CU-7	-85.9272	36.2547				481															-179	-290	8				
Core-CU-70	-85.9341	36.2627				568															-172	-265	28				
Core-CU-71	-85.9356	36.2630				681															-177	-268	25				
Core-CU-72	-85.9354	36.2618				588															-175	-265	28				
Core-CU-73	-85.9282	36.2633				491															-169	-261	30				
Core-CU-74	-85.9254	36.2568				490															-184	-280	18				
Core-CU-75	-85.9346	36.2577				536															-189	-284	10				
Core-CU-76	-85.9257	36.2541				490															-193	-291	9				
Core-CU-77	-85.9327	36.2664				497															-183	-274	17				
Core-CU-78	-85.9287	36.2548				488															-185	-282	15				
Core-CU-79	-85.9303	36.2662				548															-199	-289	1				
Core-CU-8	-85.9388	36.2422				487															-133	-230	64				
Core-CU-80	-85.9287	36.2570				484															-152	-238	58				
Core-CU-81	-85.9313	36.2564				484															-176	-268	27				
Core-CU-82	-85.9350	36.2590				524															-186	-276	18				
Core-CU-83	-85.9362	36.2584				539															-190	-284	10				
Core-CU-84	-85.9271	36.2650				483															-174	-256	34				
Core-CU-85	-85.9263	36.2624				480															-171	-261	31				
Core-CU-86	-85.9260	36.2597				484															-170	-266	29				
Core-CU-87	-85.9347	36.2652				611															-186	-268	24				
Core-CU-88	-85.9352	36.2604				529															-166	-226	68				
Core-CU-89	-85.9368	36.2609				596															-183	-277	17				
Core-CU-9	-85.9566	36.2621				480															-199	-278	18				
Core-CU-90	-85.9359	36.2645				740															-187	-281	12				
Core-CU-91	-85.9322	36.2615				539															-165	-227	66				
Core-CU-92	-85.9445	36.2440				482															-218	-320	-32				
Core-CU-93	-85.9380	36.2488				485															-216	-316	-21				
Core-CU-94	-85.9383	36.2460				484															-165	-259	36				
Core-CU-95	-85.9344	36.2460				486															-199	-306	-8				
Core-CU-96	-85.9377	36.2558				507															-182	-280	14				
Core-CU-97	-85.9480	36.2606				602															-234	-323	-29				
Core-CU-98	-85.9387	36.2567				516															-181	-278	16				
Core-CU-99	-85.9374	36.2576				533															-187	-286	8				
Core-CZ-1	-85.9102	36.2319				479															-211	-293	45				
Core-CZ-10	-85.9101	36.2360				469															-216	-299	41				
Core-CZ-11	-85.9089	36.2406				512															-328	-424	-86				
Core-CZ-12	-85.9107	36.2443				532															-363	-453	-120				
Core-CZ-13	-85.9105	36.2478				480															-330	-422	-92				

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Core-CZ-14	-85.9155	36.2394				522															-240	-340	-12				
Core-CZ-15	-85.9180	36.2441				477															-305	-395	-74				
Core-CZ-16	-85.9163	36.2344				525															-205	-295	35				
Core-CZ-17	-85.9079	36.2460				485															-365	-465	-129				
Core-CZ-18	-85.9168	36.2419				486															-274	-360	-36				
Core-CZ-19	-85.9126	36.2377				555															-225	-305	29				
Core-CZ-2	-85.9130	36.2333				508															-212	-304	31				
Core-CZ-20	-85.9109	36.2421				522															-298	-396	-62				
Core-CZ-21	-85.9142	36.2458				488															-283	-377	-52				
Core-CZ-22	-85.9108	36.2328				474															-176	-284	54				
Core-CZ-23	-85.9113	36.2370				546															-234	-324	13				
Core-CZ-24	-85.9126	36.2387				540															-274	-320	14				
Core-CZ-25	-85.9104	36.2394				519															-321	-385	-48				
Core-CZ-26	-85.9109	36.2361				507															-223	-306	32				
Core-CZ-27	-85.9086	36.2457				491															-375	-472	-137				
Core-CZ-28	-85.9106	36.2352				479															-176	-274	65				
Core-CZ-29	-85.9066	36.2461				481															-337	-433	-95				
Core-CZ-3	-85.9116	36.2356				558															-182	-274	63				
Core-CZ-30	-85.9129	36.2356				575															-215	-301	34				
Core-CZ-31	-85.9167	36.2395				541															-244	-344	-18				
Core-CZ-32	-85.9111	36.2314				476															-236	-300	36				
Core-CZ-33	-85.9149	36.2401				505															-255	-354	-25				
Core-CZ-34	-85.9122	36.2356				566															-212	-304	32				
Core-CZ-35	-85.9093	36.2475				481															-327	-423	-91				
Core-CZ-36	-85.9079	36.2439				489															-356	-443	-106				
Core-CZ-37	-85.9120	36.2353				535															-205	-301	36				
Core-CZ-38	-85.9158	36.2410				492															-268	-366	-40				
Core-CZ-39	-85.9115	36.2474				479															-303	-381	-52				
Core-CZ-4	-85.9121	36.2398				560															-270	-367	-33				
Core-CZ-40	-85.9091	36.2481				625															-318	-369	-37				
Core-CZ-41	-85.9080	36.2557				693															-313	-404	-75				
Core-CZ-42	-85.9115	36.2456				491															-345	-435	-105				
Core-CZ-43	-85.9098	36.2531				641															-314	-407	-79				
Core-CZ-44	-85.9174	36.2374				602															-228	-314	13				
Core-CZ-45	-85.9132	36.2443				497															-309	-404	-76				
Core-CZ-46	-85.9116	36.2551				639															-321	-422	-99				
Core-CZ-47	-85.9082	36.2541				578															-319	-417	-87				
Core-CZ-48	-85.9158	36.2443				485															-305	-371	-47				
Core-CZ-49	-85.9153	36.2382				565															-220	-318	12				
Core-CZ-5	-85.9147	36.2432				504															-286	-374	-47				
Core-CZ-50	-85.9079	36.2522				585															-294	-361	-30				
Core-CZ-51	-85.9106	36.2520				743															-302	-397	-70				
Core-CZ-52	-85.9088	36.2422				530															-336	-433	-96				
Core-CZ-53	-85.9110	36.2408				529															-311	-390	-55				
Core-CZ-54	-85.9062	36.2445				486															-322	-423	-83				
Core-CZ-55	-85.9133	36.2412				556															-287	-376	-46				
Core-CZ-56	-85.9082	36.2531				585															-307	-388	-58				
Core-CZ-57	-85.9131	36.2471				478															-277	-365	-39				
Core-CZ-58	-85.9143	36.2344				540															-203	-276	57				
Core-CZ-59	-85.9104	36.2493				614															-311	-403	-74				
Core-CZ-6	-85.9148	36.2368				584															-196	-289	42				
Core-CZ-60	-85.9163	36.2455				478															-261	-359	-37				
Core-CZ-61	-85.9086	36.2555				689															-321	-407	-79				

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Core-CZ-62	-85.9154	36.2353				580															-210	-309	23				
Core-CZ-63	-85.9124	36.2345				515															-203	-297	39				
Core-CZ-64	-85.9100	36.2432				540															-365	-442	-108				
Core-CZ-65	-85.9099	36.2543				598															-317	-408	-82				
Core-CZ-66	-85.9102	36.2464				481															-358	-455	-123				
Core-CZ-67	-85.9140	36.2625				567															-229	-319	-6				
Core-CZ-68	-85.9090	36.2610				730															-239	-334	-11				
Core-CZ-69	-85.9098	36.2580				877															-265	-356	-32				
Core-CZ-7	-85.9109	36.2341				488															-172	-260	78				
Core-CZ-70	-85.9052	36.2514				506															-303	-396	-59				
Core-CZ-71	-85.9049	36.2564				603															-304	-400	-66				
Core-CZ-72	-85.9020	36.2529				618															-290	-383	-42				
Core-CZ-73	-85.9072	36.2587				807															-278	-369	-41				
Core-CZ-74	-85.9080	36.2331				485															-212	-277	66				
Core-CZ-75	-85.9068	36.2306				477															-232	-310	33				
Core-CZ-76	-85.9119	36.2600				668															-235	-325	-6				
Core-CZ-77	-85.9034	36.2302				479															-280	-362	-14				
Core-CZ-78	-85.9014	36.2324				516															-280	-382	-29				
Core-CZ-79	-85.9047	36.2327				493															-298	-394	-46				
Core-CZ-8	-85.9076	36.2432				497															-353	-443	-104				
Core-CZ-9	-85.9101	36.2381				472															-272	-371	-33				
Core-MT-7	-86.2693	36.3483				525															-85	-178	-1				
Core-P-1	-86.1455	36.3163				567															-84	-172	10				
Core-P-10	-86.1321	36.3440				471															-149	-234	0				
Core-P-11	-86.1305	36.3412				504															-143	-241	-9				
Core-P-12	-86.1049	36.2881				587															-9	-74	80				
Core-P-13	-86.1169	36.2925				662															-109	-208	-44				
Core-P-14	-86.1053	36.3082				584															-64	-139	51				
Core-P-15	-86.1191	36.3060				616															-108	-165	20				
Core-P-2	-86.1253	36.3440				476															-164	-245	-4				
Core-P-3	-86.1357	36.3301				492															-138	-210	3				
Core-P-4	-86.1120	36.3378				541															-154	-247	-5				
Core-P-5	-86.1233	36.3324				535															-105	-204	20				
Core-P-6	-86.1152	36.3251				615															-165	-259	-42				
Core-P-7	-86.1231	36.3410				550															-170	-257	-19				
Core-P-8	-86.1240	36.3459				452															-148	-242	3				
Core-P-9	-86.1287	36.3440				470															-150	-237	0				
Core-RN-1	-86.0576	36.2287				690																-144	1				
Core-RN-2	-86.1008	36.2247				480															-4	-110	-12				
Core-RR-280	-85.5607	36.3386				550															-395	-459	29				
Core-RR-281	-85.5555	36.3456				535															-403	-505	-16				
Core-RR-282	-85.5628	36.3459				530															-378	-475	10				
Core-RR-283	-85.5568	36.3514				580															-408	-498	-11				
Core-RR-284	-85.9436	36.3440				540															-381	-472	-66				
Core-RR-285	-85.5538	36.3577				960															-378	-462	25				
Core-RR-286	-85.5466	36.3572				580															-438	-523	-32				
Core-RR-287	-85.5572	36.3502				560															-418	-517	-30				
Core-RR-288	-85.5563	36.3555				640															-336	-424	62				
Core-RR-289	-85.5483	36.3550				590															-422	-500	-10				
Core-S-25	-86.1325	36.3756				470															-142	-229	41				
Core-SW-1	-86.0906	36.1622				675															183	75	80				
Core-SW-2	-86.0990	36.1303				600															70	-11	-27				
Core-SW-3	-86.1270	36.1227				640															87	-13	17				

API #	D. Long.	D. Lat.	Permit	Record	Result	Elv.	Mp	Mp R.	Mb	Mb R.	Mfp	Mfp R.	MDch	MDch R.	On	On R.	Osr	Om	Od	Od R.	Owc	OCk	OCk R.	Ccr	Cc	Cr	Pc
Core-SW-4	-86.0518	36.1442				755															19	-89	-14				
Core-SW-5	-86.0262	36.1531				655															8	-74	40				
Core-SW-6	-86.0588	36.1688				800															39	-63	-5				
Core-SW-7	-86.1327	36.0950				650															0	-111	-73				

Appendix B. Uninterpreted Maps

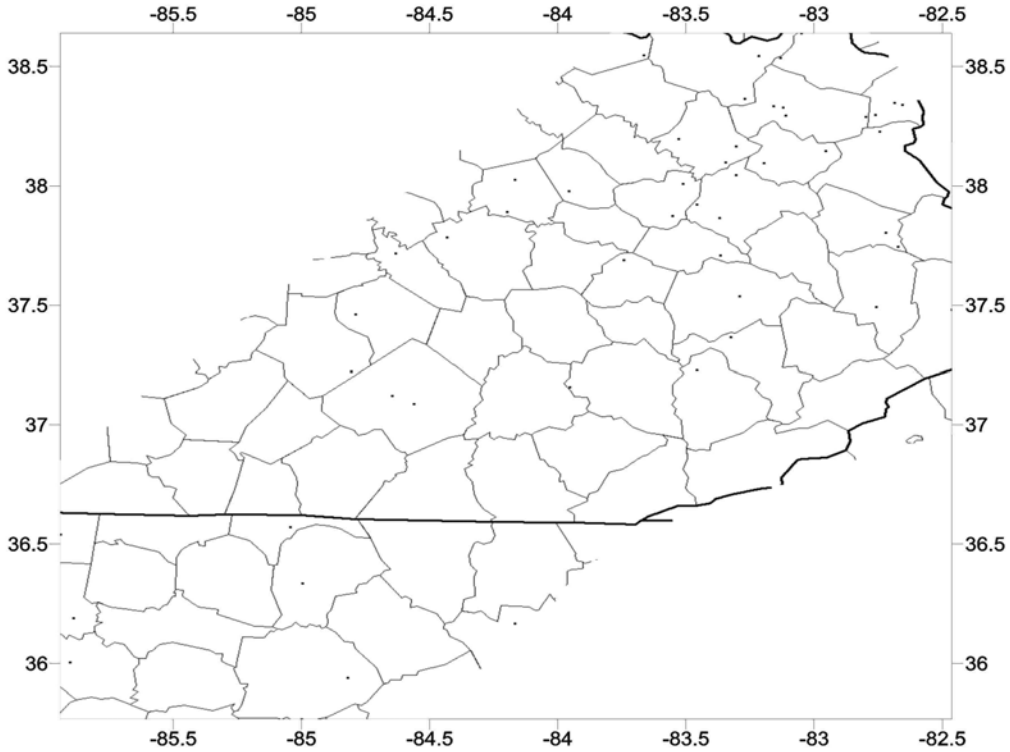


Figure B-1. Locations of wells penetrating the Precambrian basement.

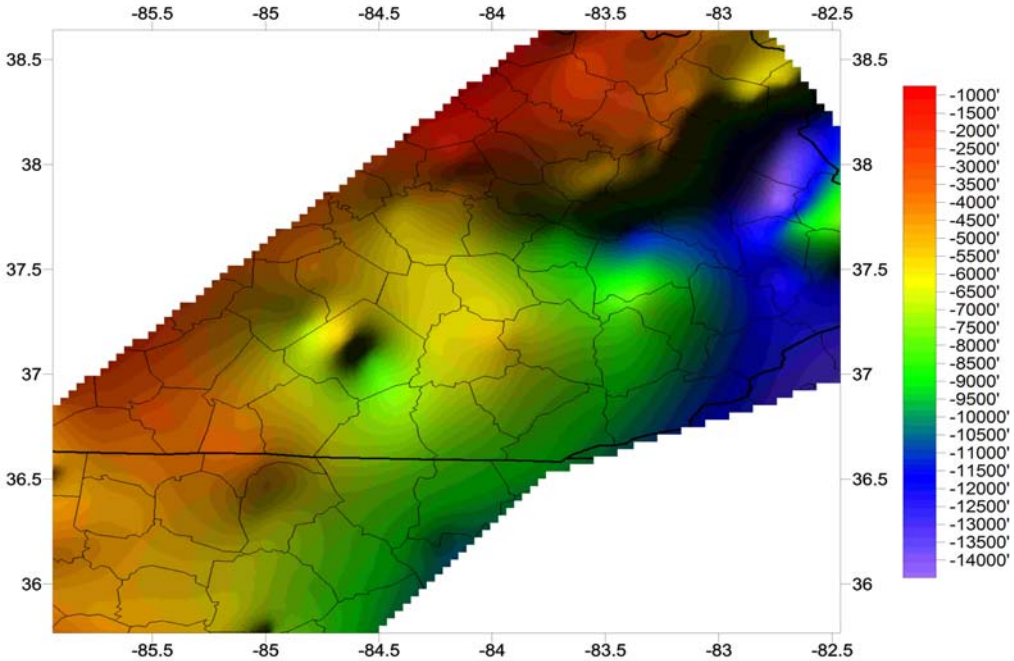


Figure B-2. Structure contour map on the top of the Precambrian basement.

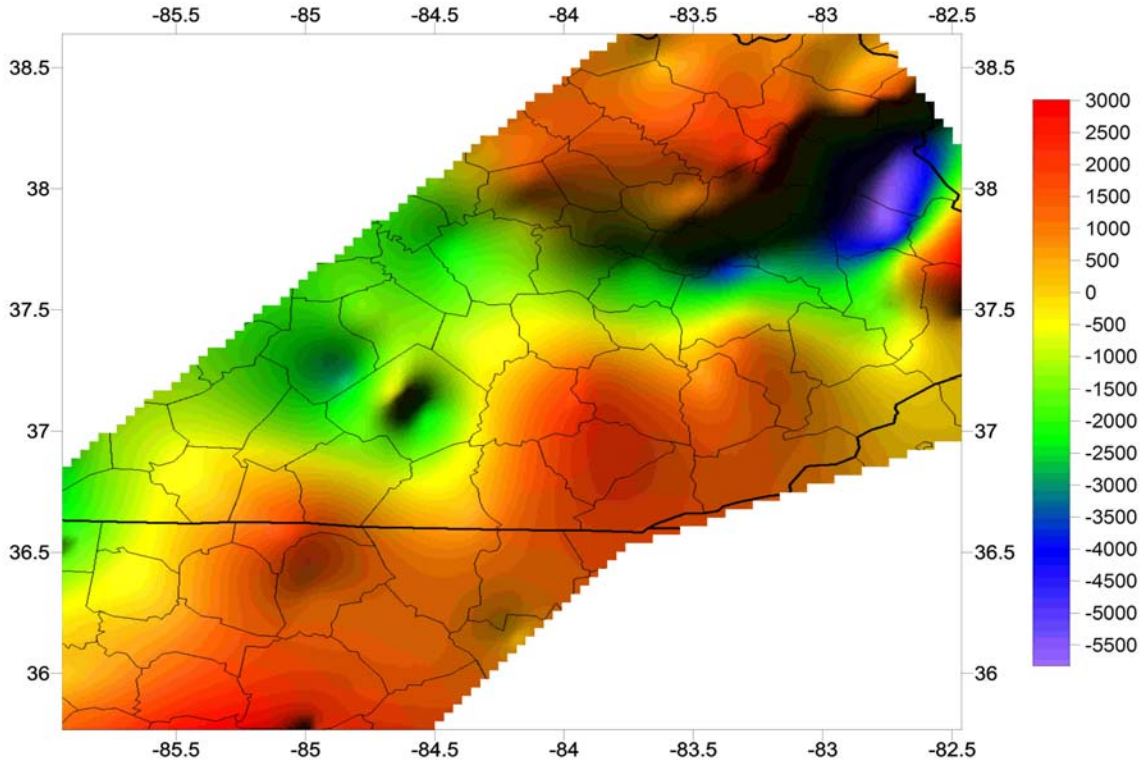


Figure B-3. Trend surface residual anomaly map on the top of the Precambrian basement.

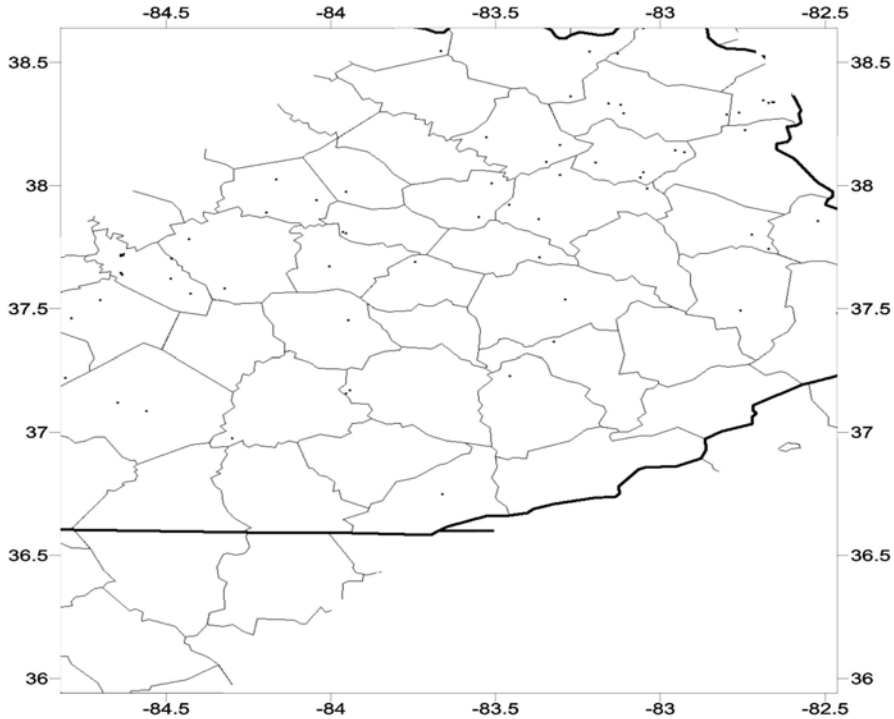


Figure B-4. Locations of wells penetrating the Rome Formation.

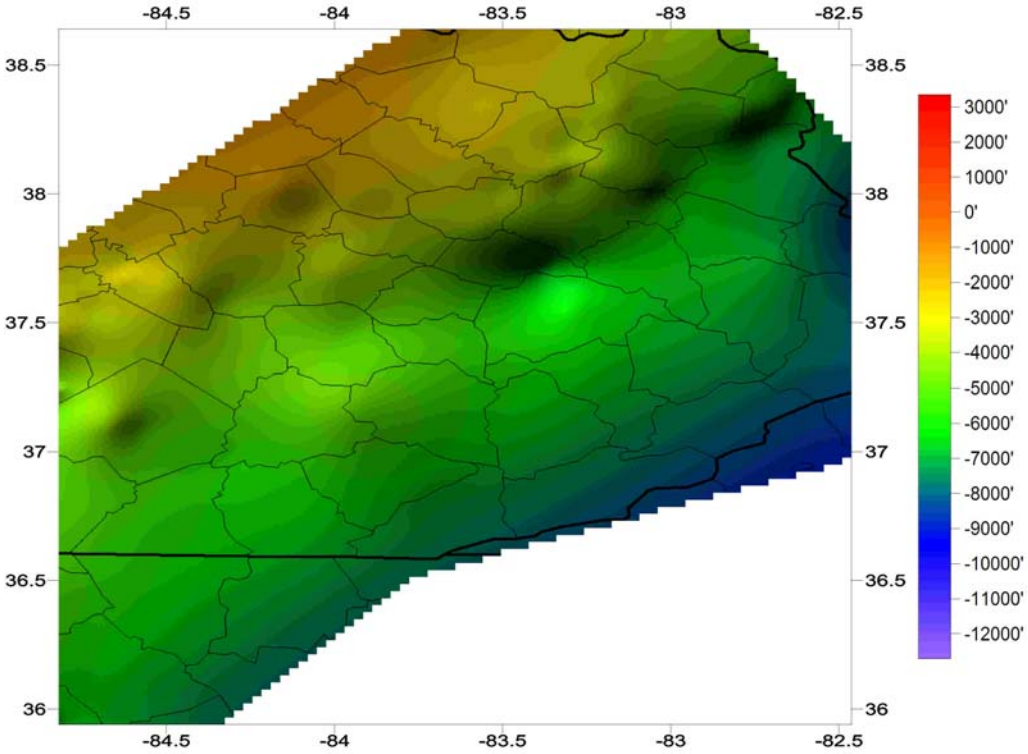


Figure B-5. Structure contour map on the top of the Rome Formation.

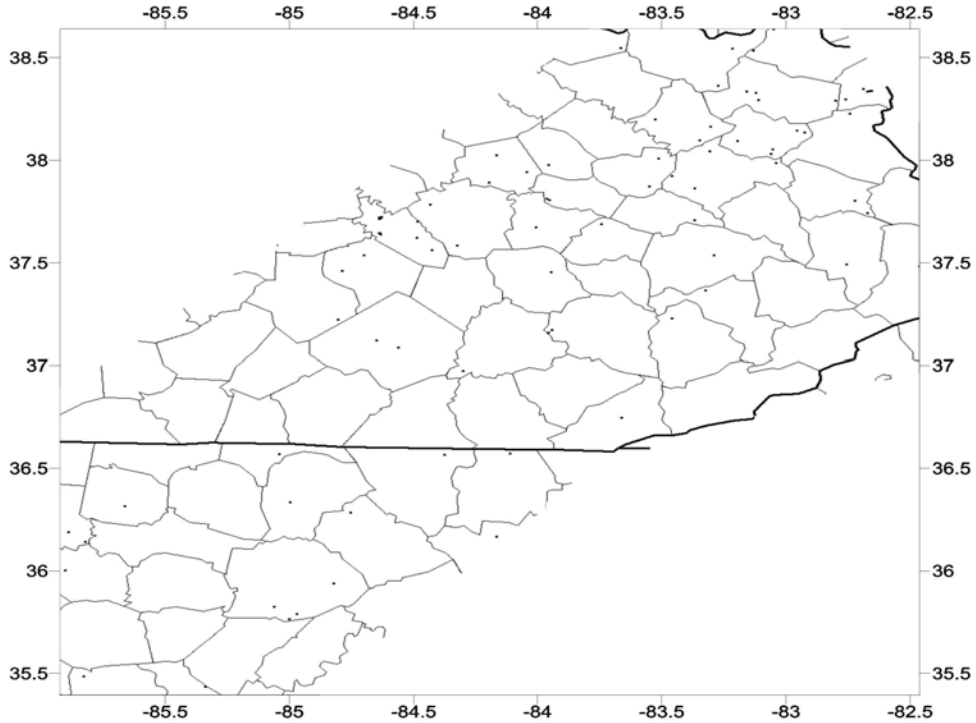


Figure B-6. Locations of wells penetrating the Conasauga Group.

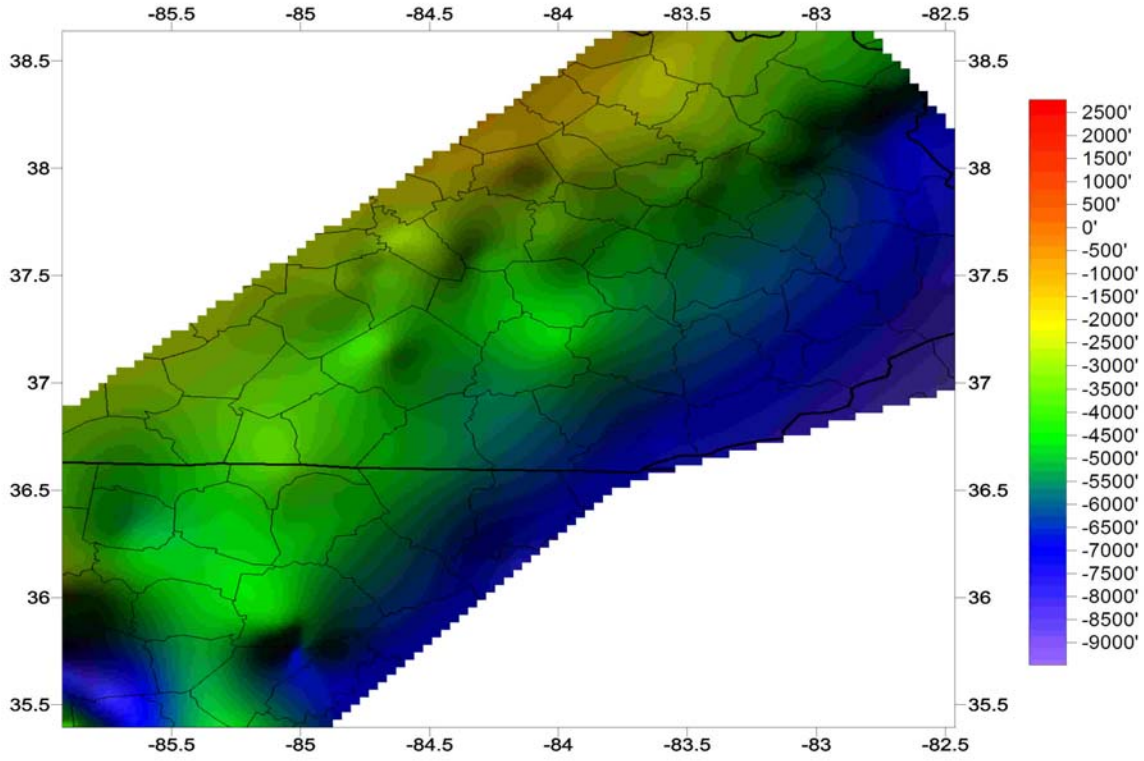


Figure B-7. Structure contour map on the top of the Conasauga Group.

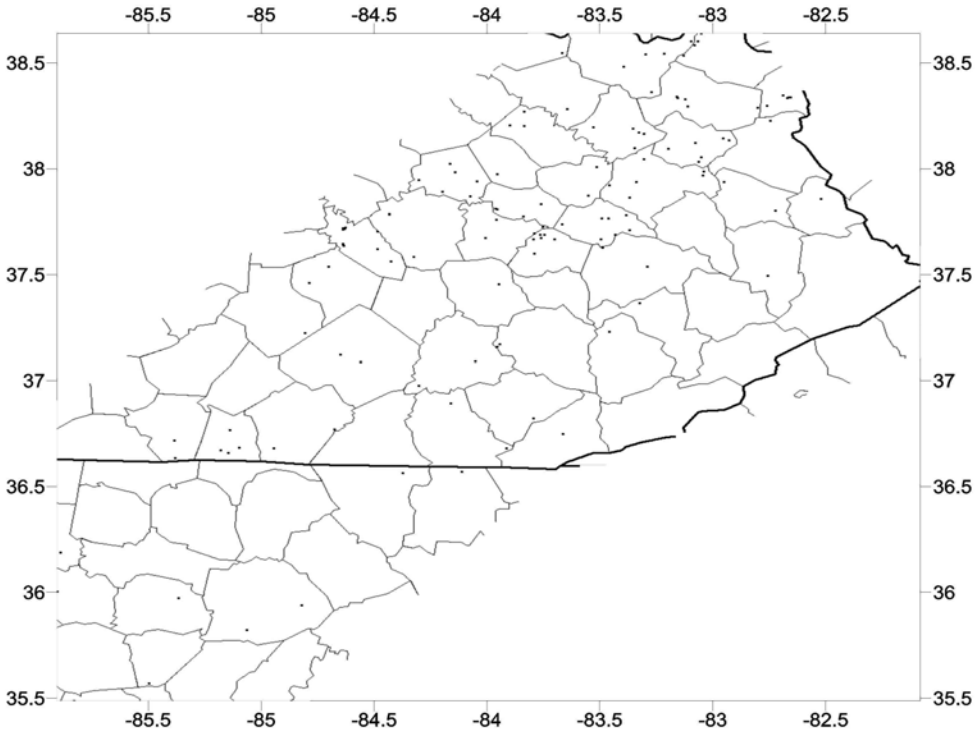


Figure B-8. Locations of wells penetrating the Copper Ridge Dolomite.

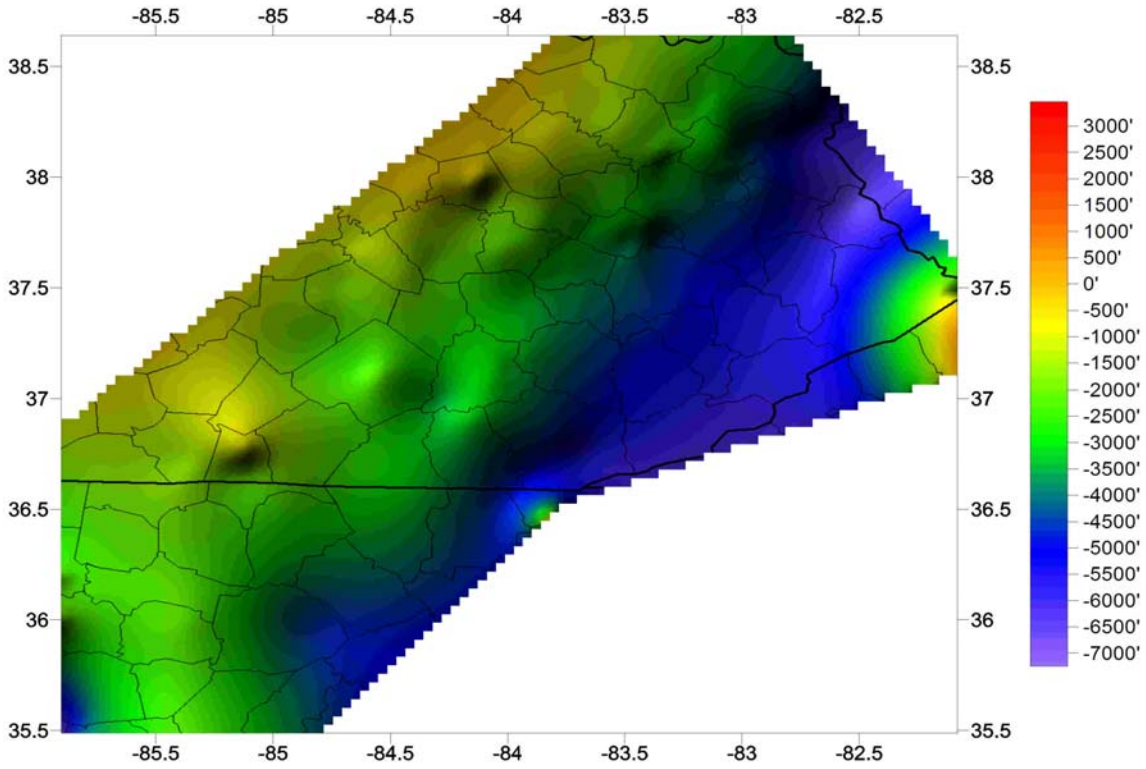


Figure B-9. Structure contour map on the top of the Copper Ridge Dolomite.

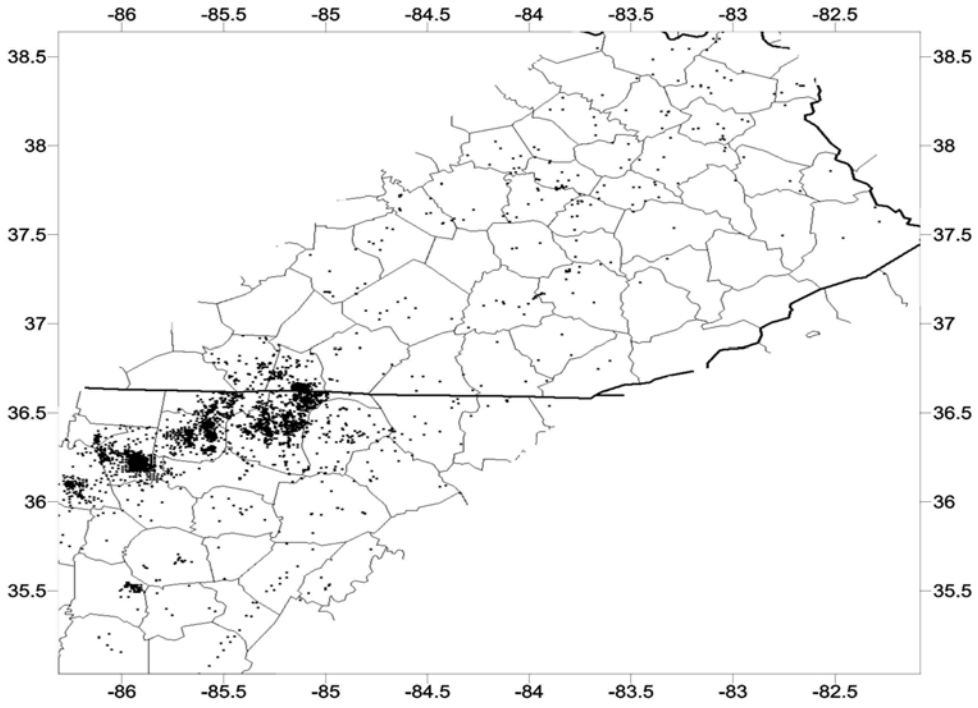


Figure B-10. Locations of wells penetrating the Knox Group.

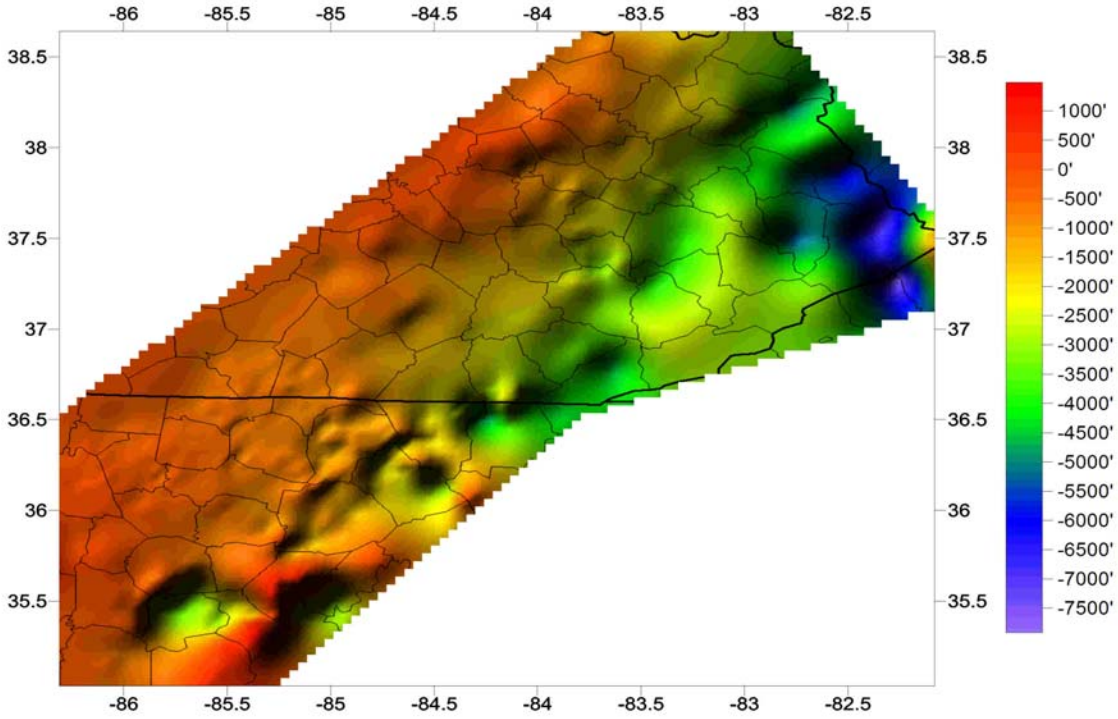


Figure B-11. Structure contour map on the top of the Knox Group.

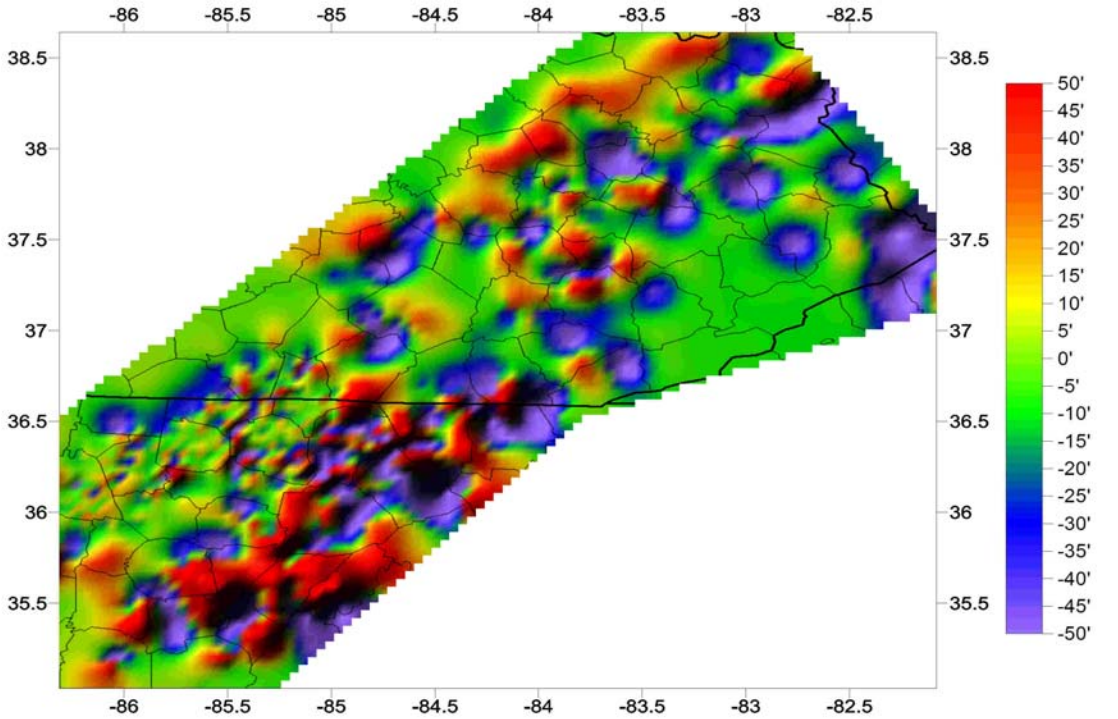


Figure B-12. Trend surface residual anomaly map on the top of the Knox Group.

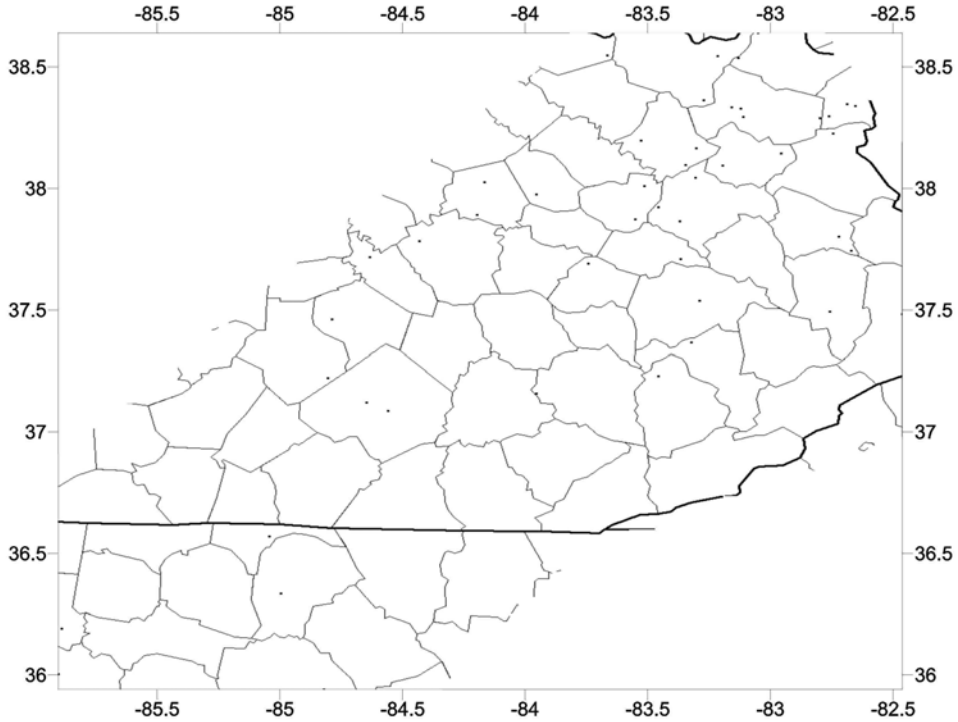


Figure B-13. Locations of wells used in the Precambrian basement to the top of the Knox Group isopach map.

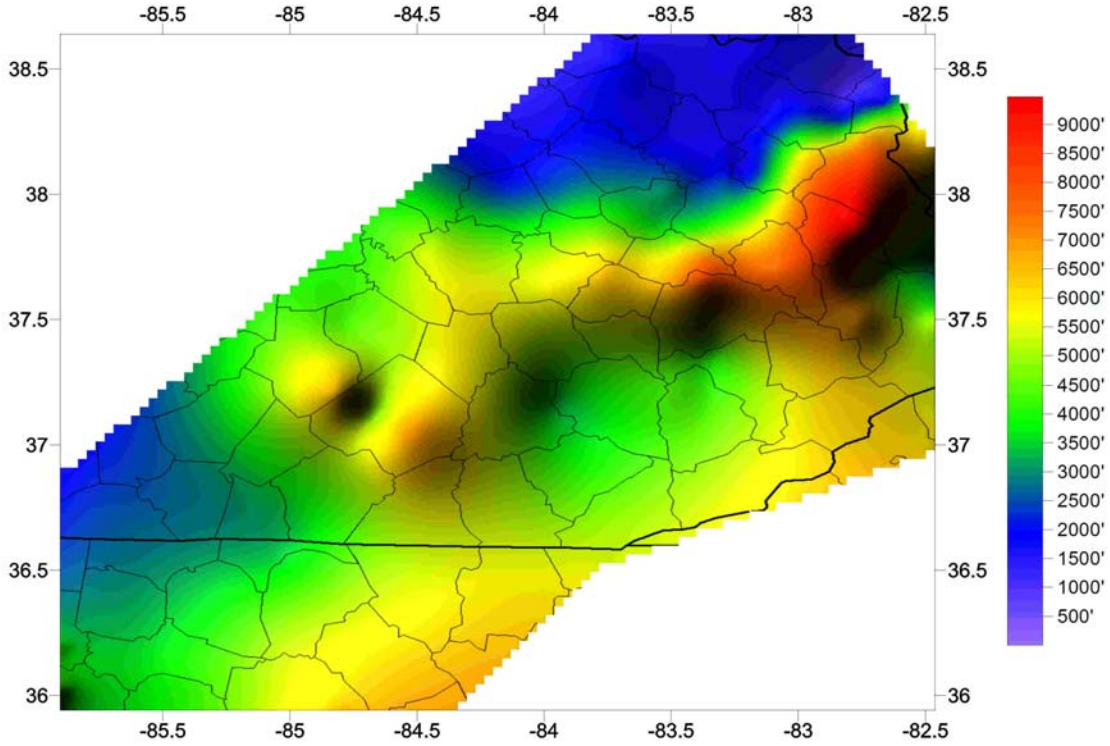


Figure B-14. Isopach map of the Precambrian basement to the top of the Knox Group.

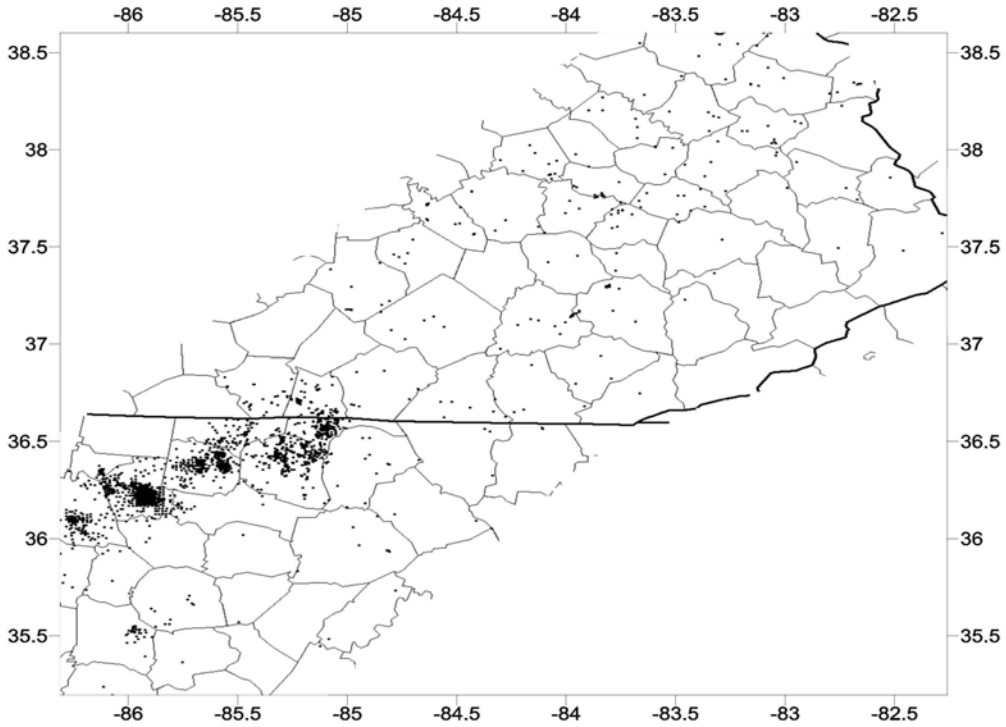


Figure B-15. Locations of wells penetrating the Wells Creek Formation.

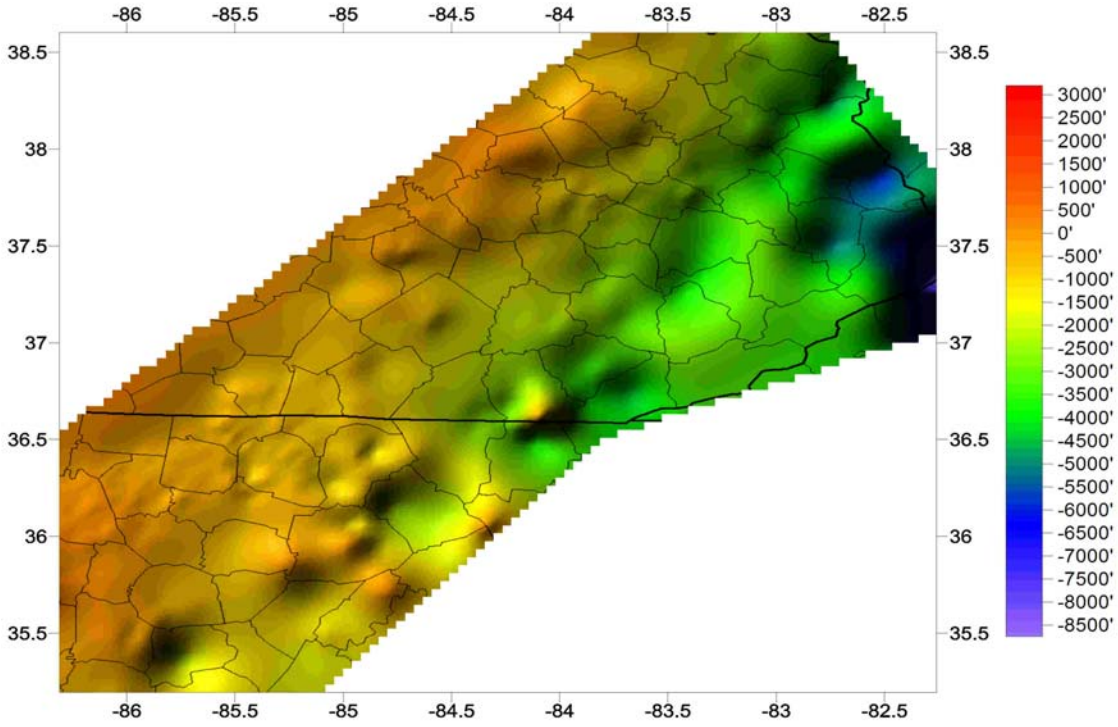


Figure B-16. Structure contour map on the top of the Wells Creek Formation.

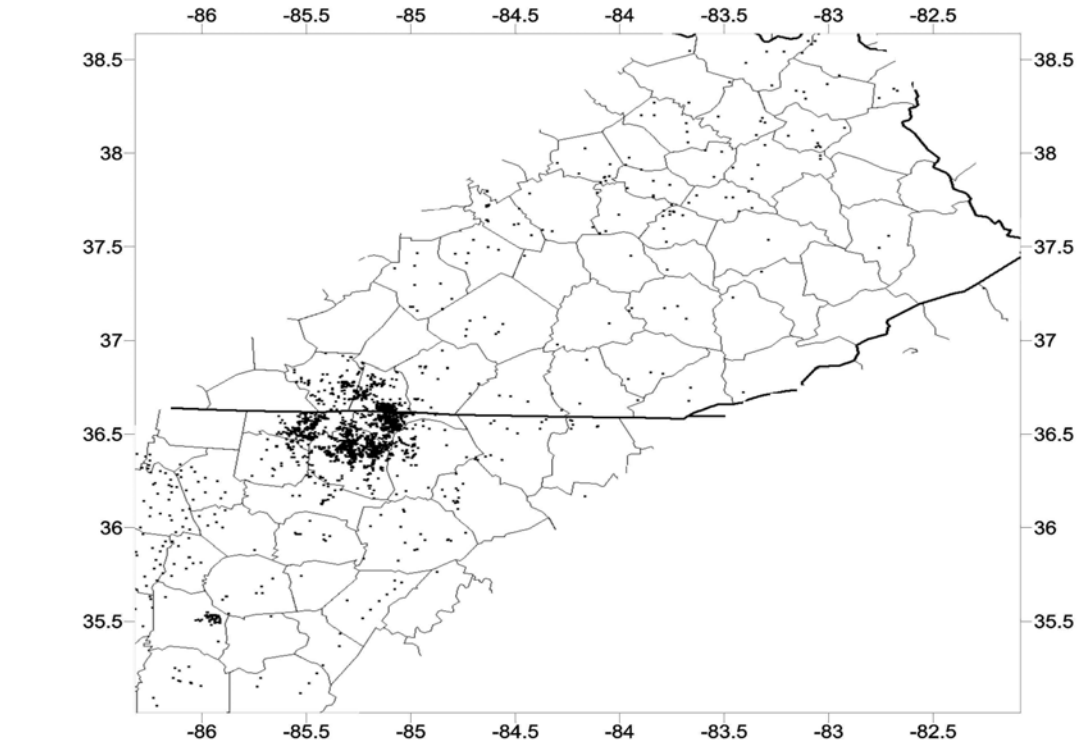


Figure B-17. Locations of wells penetrating the Deicke (pencil cave) bentonite.

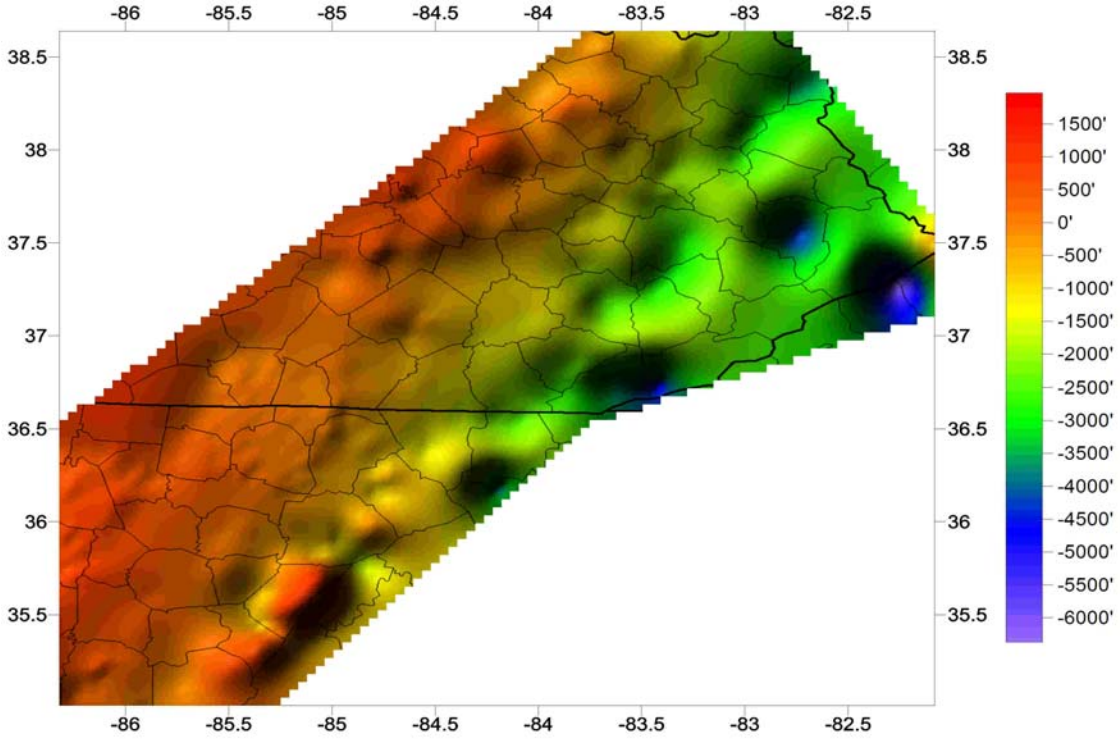


Figure B-18. Structure contour map on the top of the Deicke (pencil cave) bentonite.

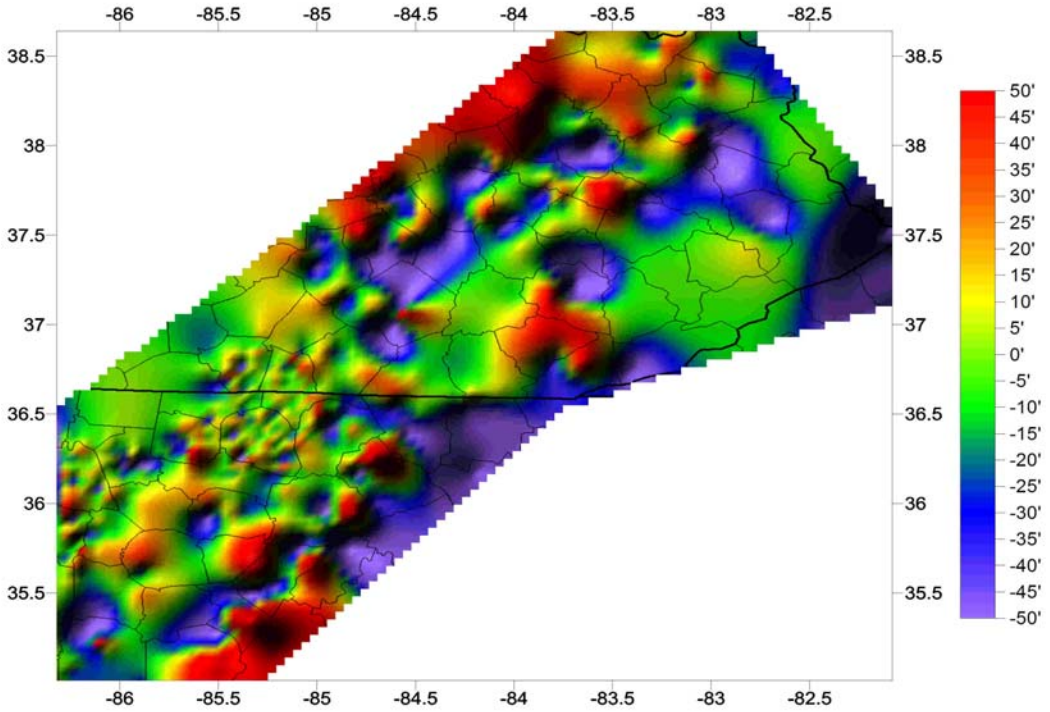


Figure B-19. Trend surface residual anomaly map on the top of the Deicke (pencil cave) bentonite.

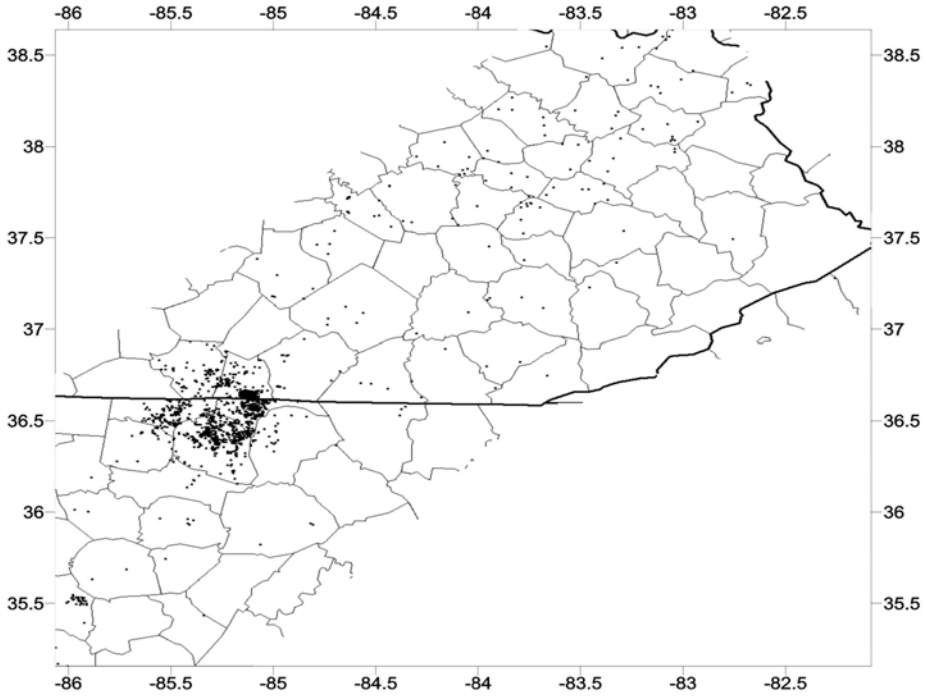


Figure B-20. Locations of wells used in the Knox Group to the Deicke (pencil cave) bentonite isopach map.

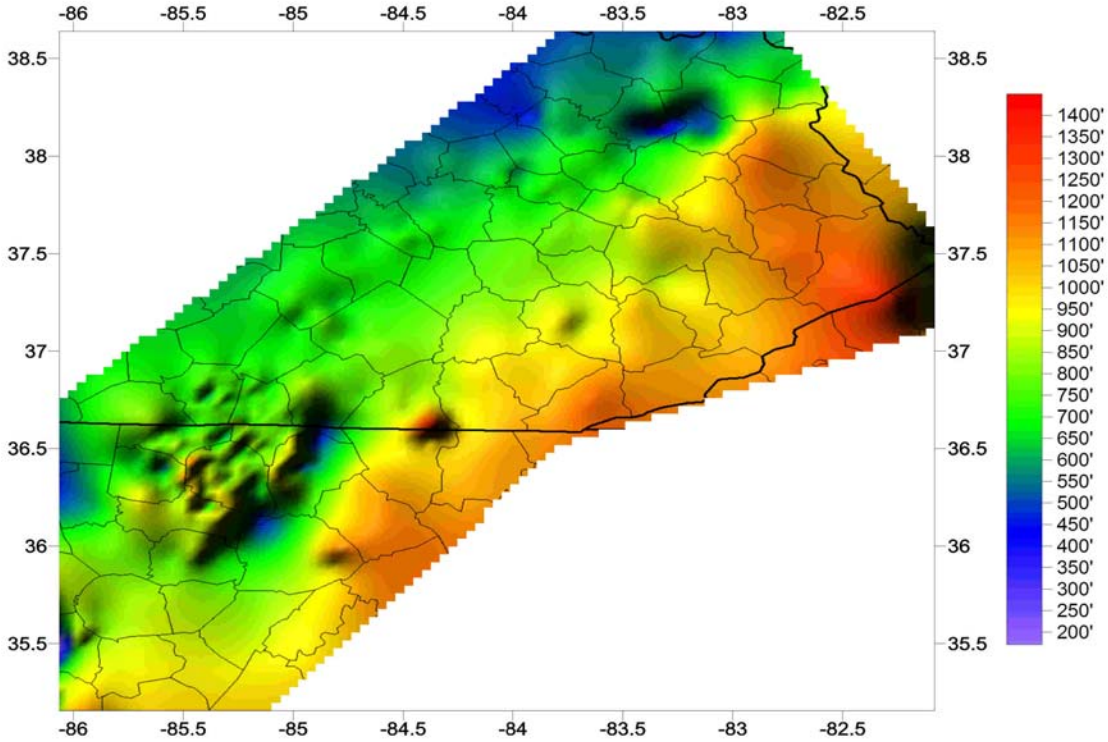


Figure B-21. Isopach map of the top of the Knox Group to the Deicke (pencil cave) bentonite.

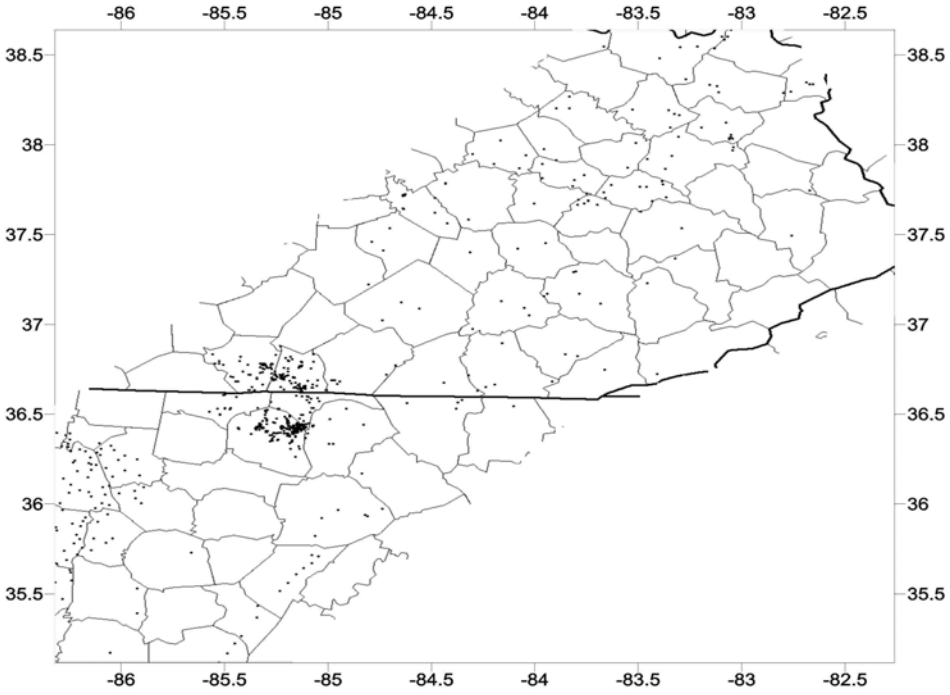


Figure B-22. Locations of wells penetrating the Millbrig (mud cave) bentonite.

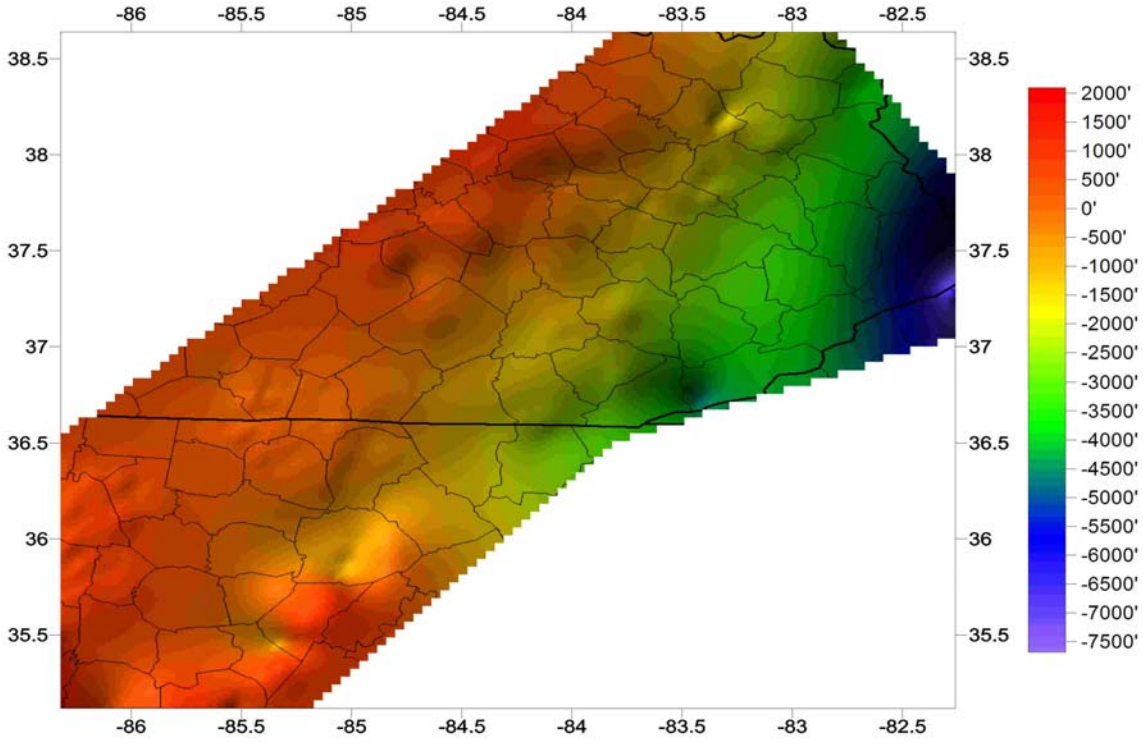


Figure B-23. Structure contour map on the top of the Millbrig (mud cave) bentonite.

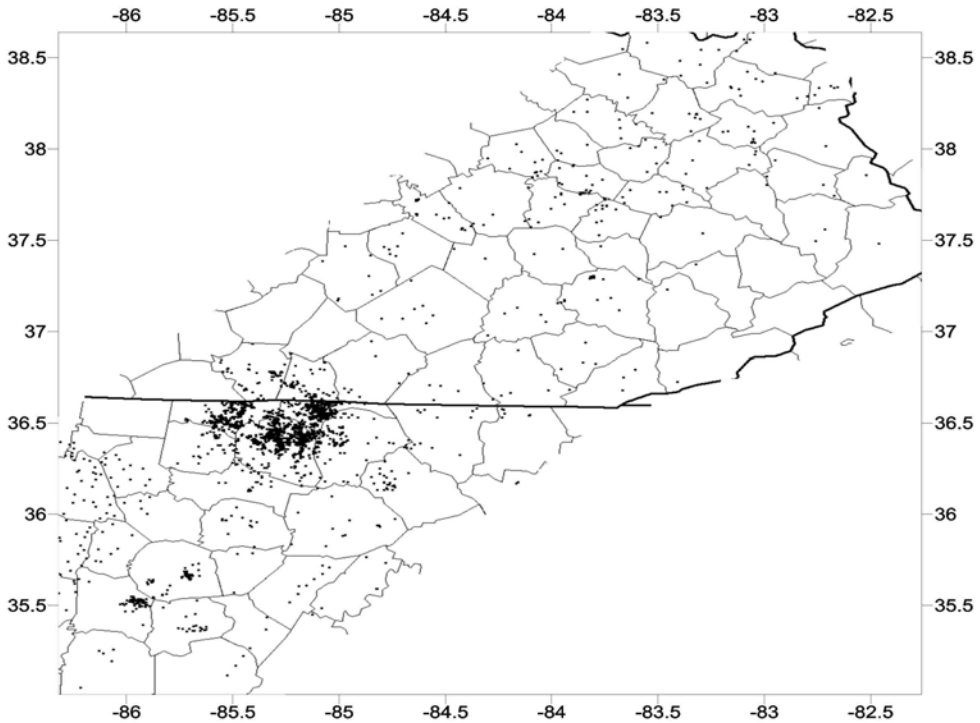


Figure B-24. Locations of wells penetrating the Stones River Group.

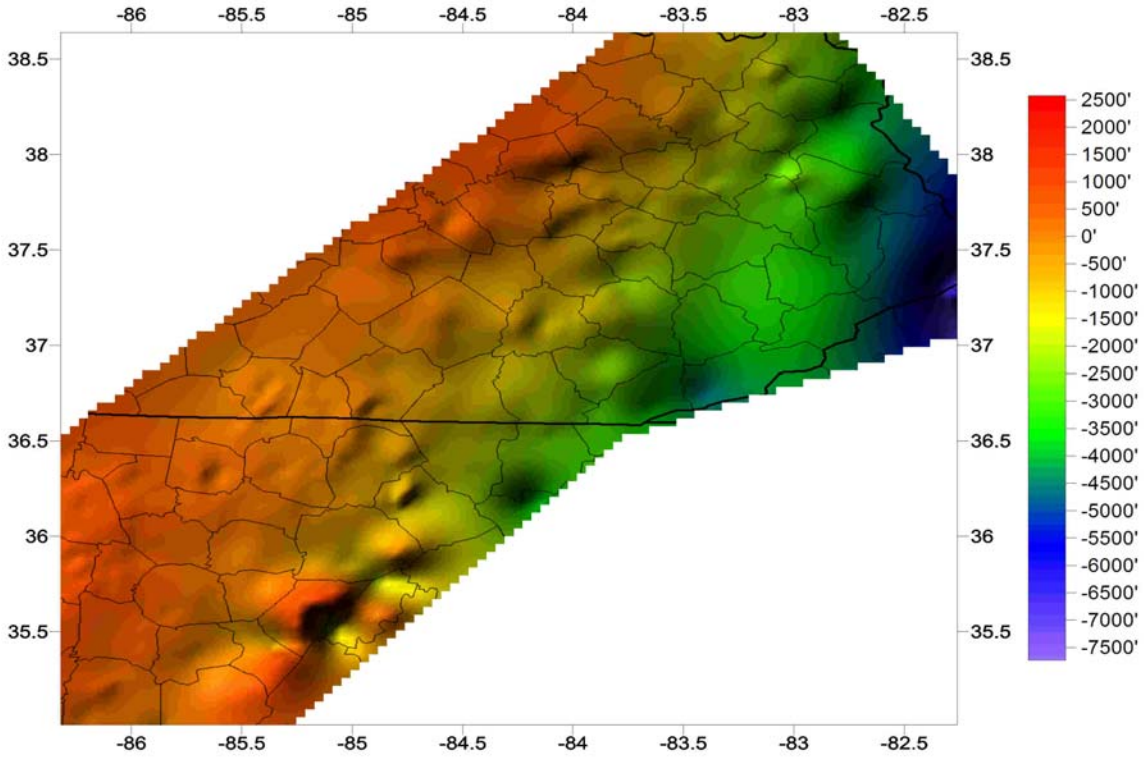


Figure B-25. Structure contour map on the top of the Stones River Group.

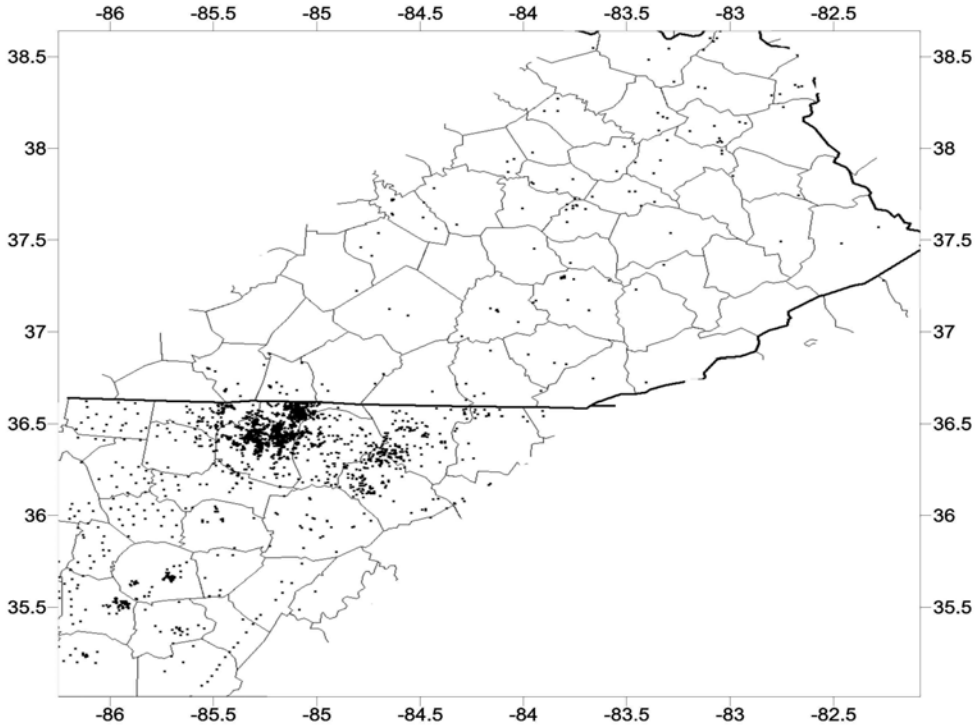


Figure B-26. Locations of wells penetrating the Nashville Group.

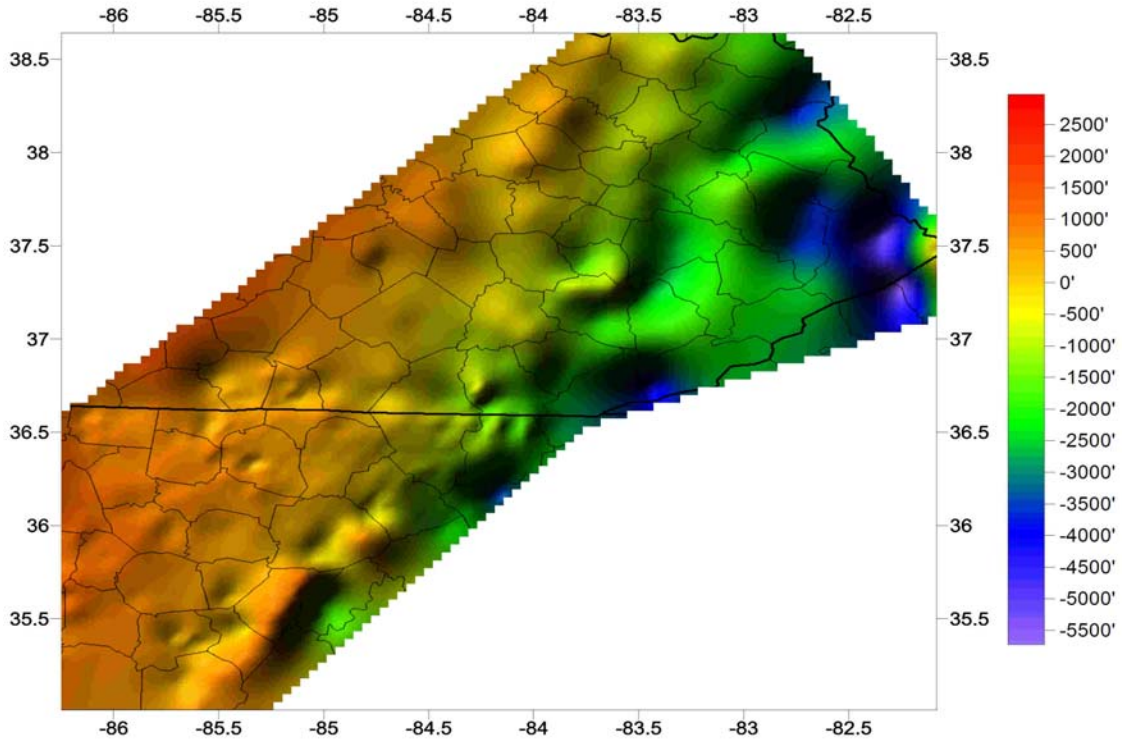


Figure B-27. Structure contour map on the top of the Nashville Group.

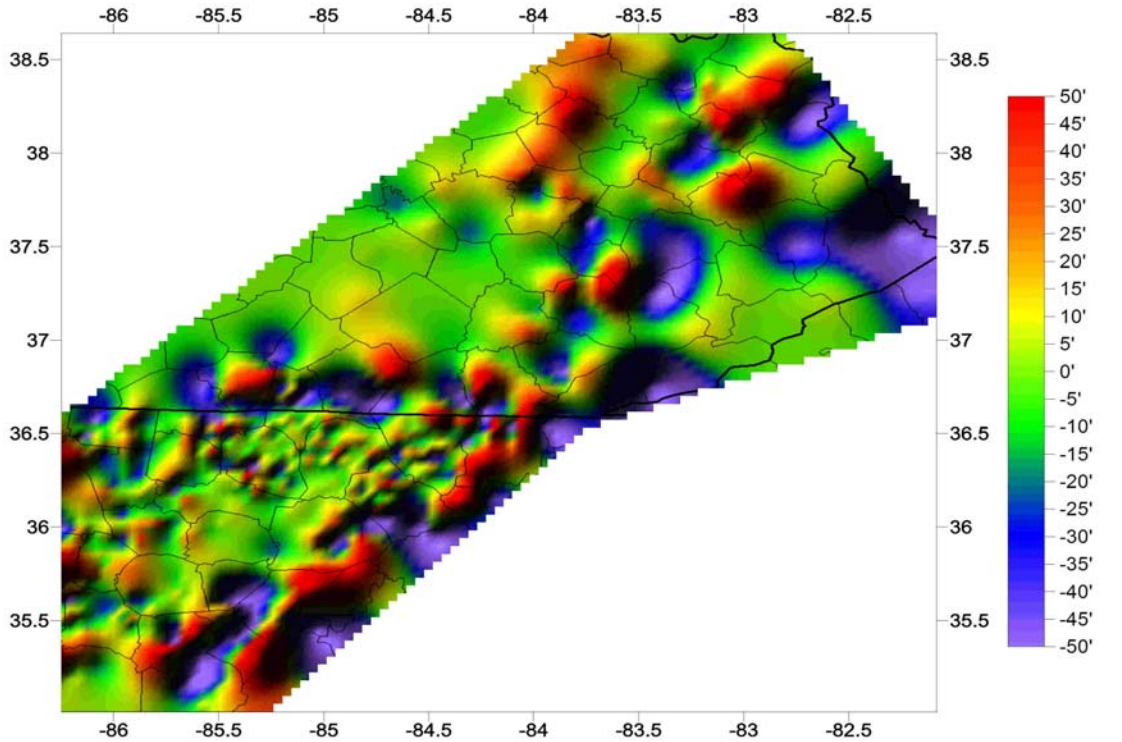


Figure B-28. Trend surface residual anomaly map on the top of the Nashville Group.

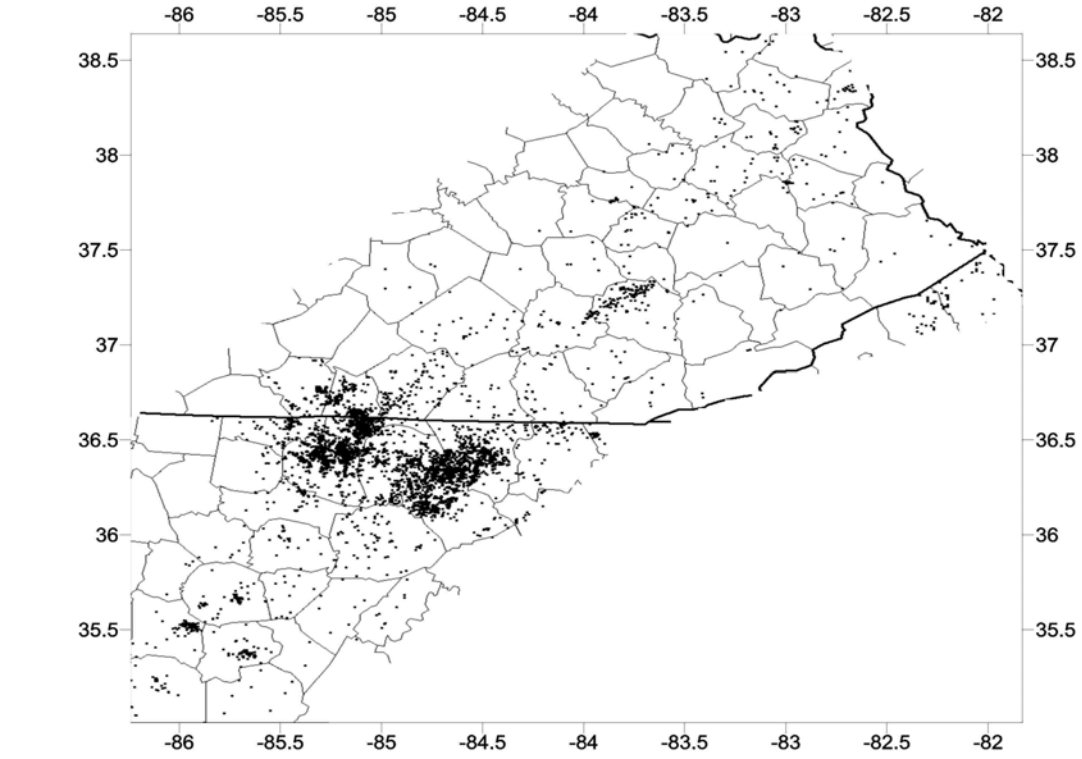


Figure B-29. Locations of wells penetrating the Chattanooga Shale.

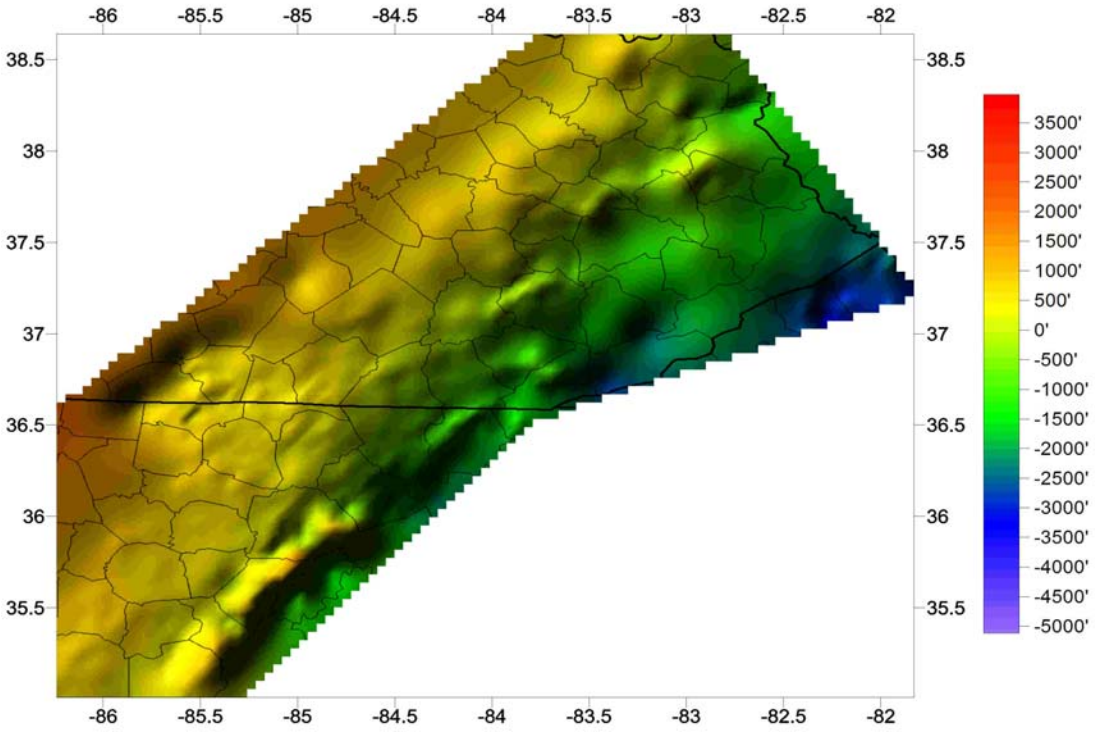


Figure B-30. Structure contour map on the top of the Chattanooga Shale.

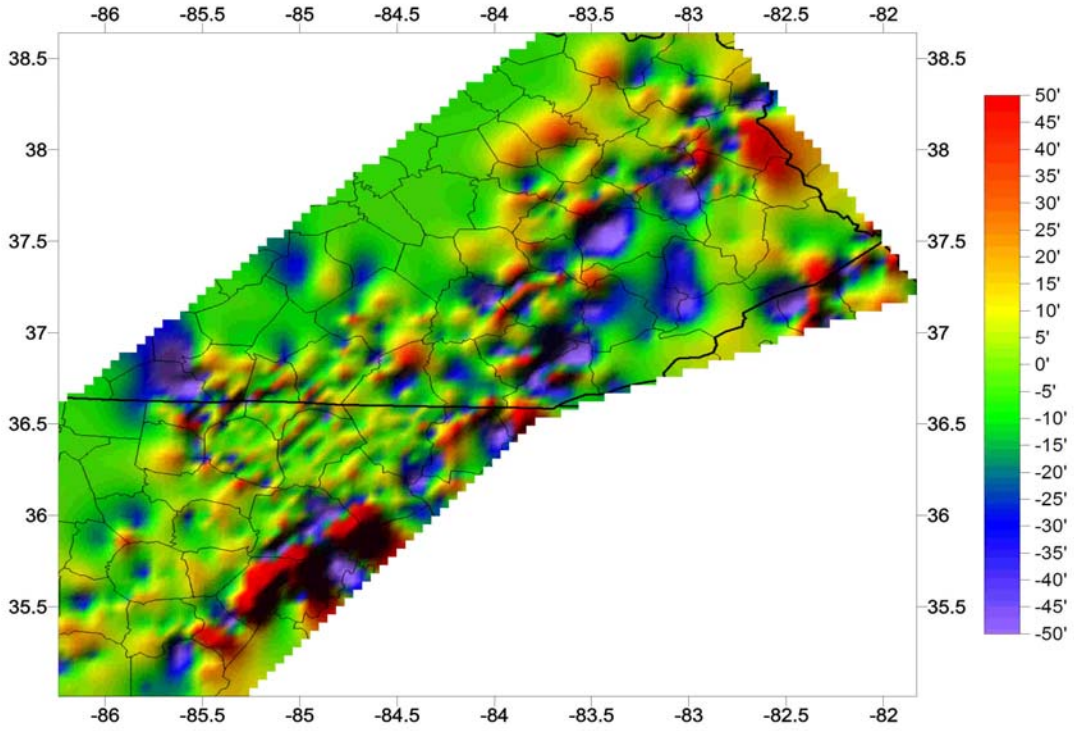


Figure B-31. Trend surface residual anomaly map on the top of the Chattanooga Shale.

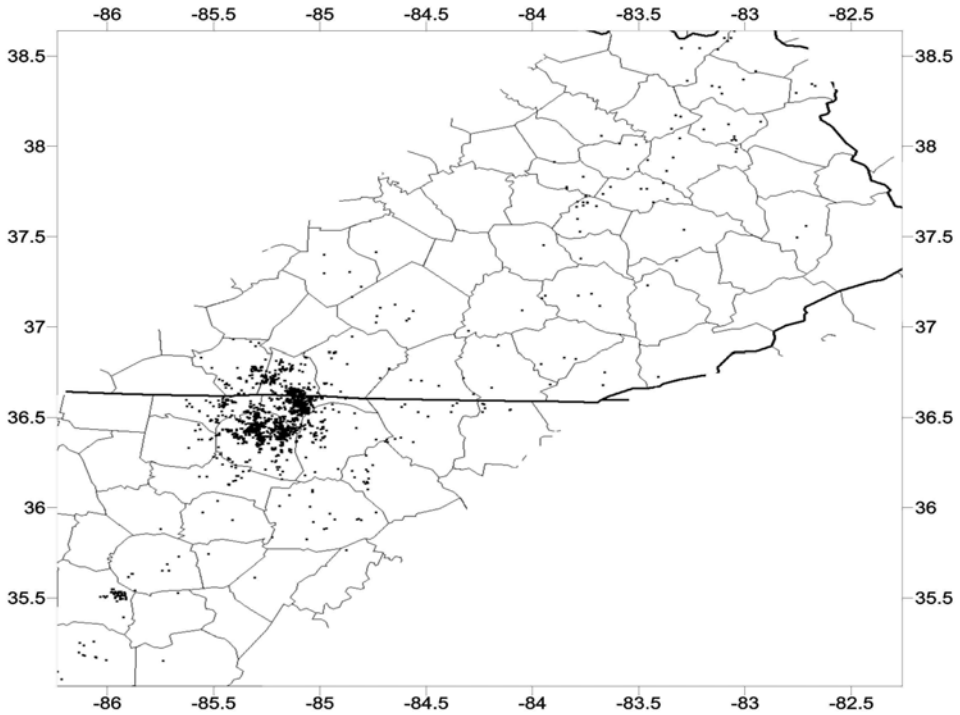


Figure B-32. Locations of wells used in the Deicke bentonite to the top of the Chattanooga Shale isopach map.

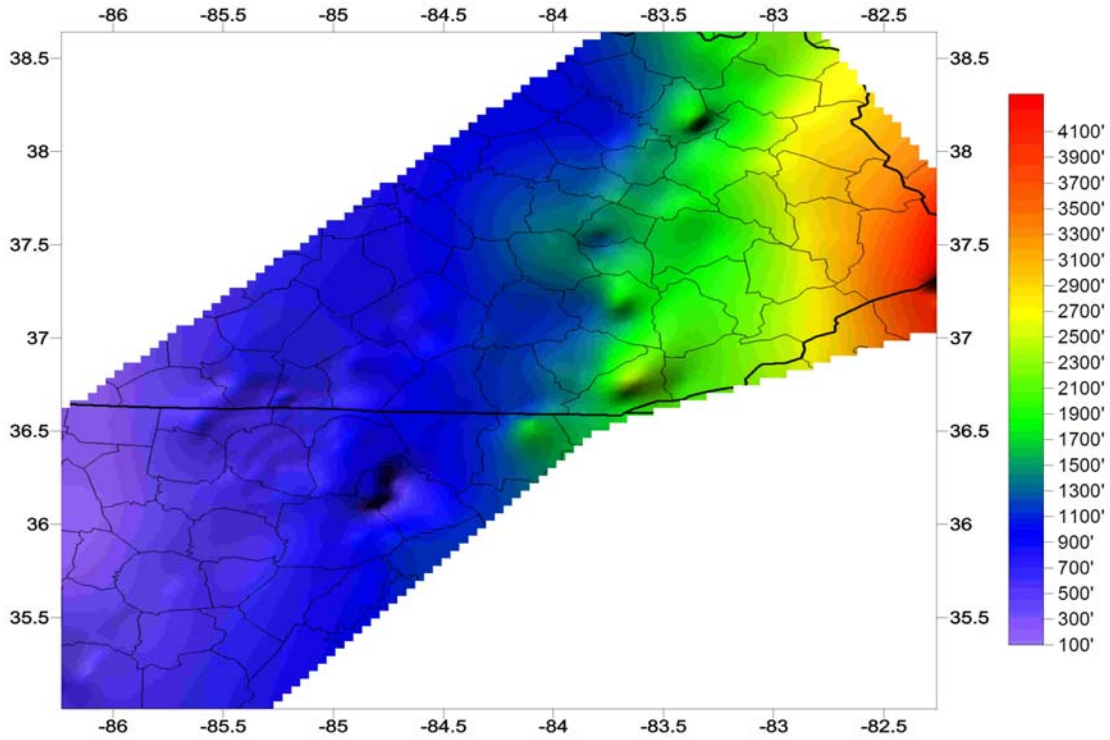


Figure B-33. Isopach map of the Deicke bentonite to the top of the Chattanooga Shale.

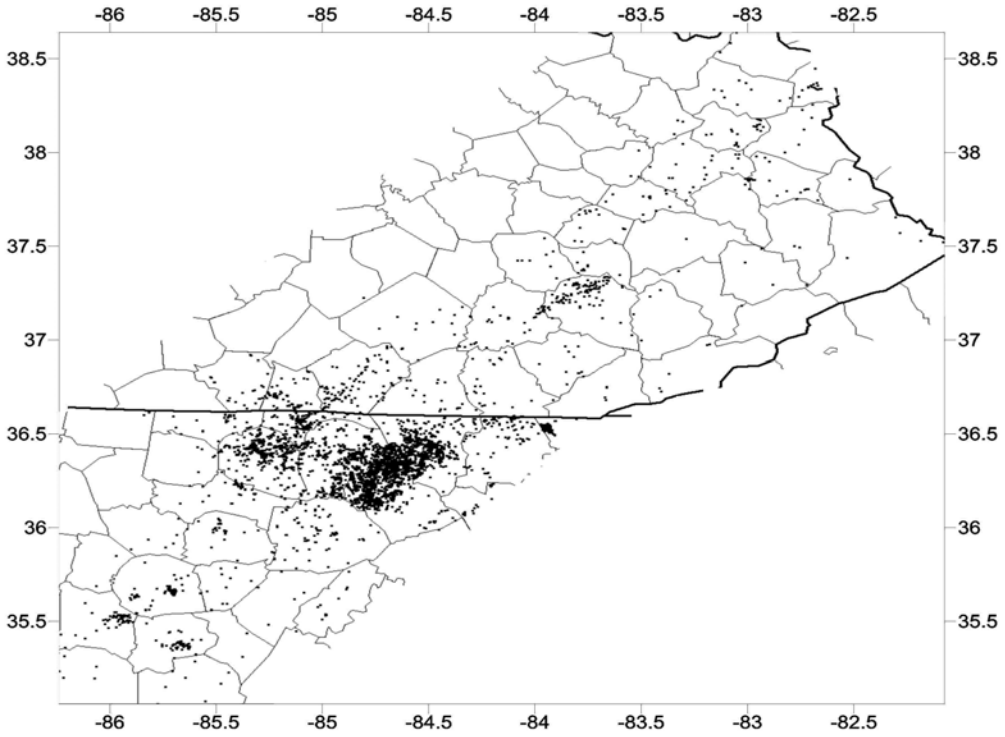


Figure B-34. Locations of wells penetrating the Fort Payne Formation.

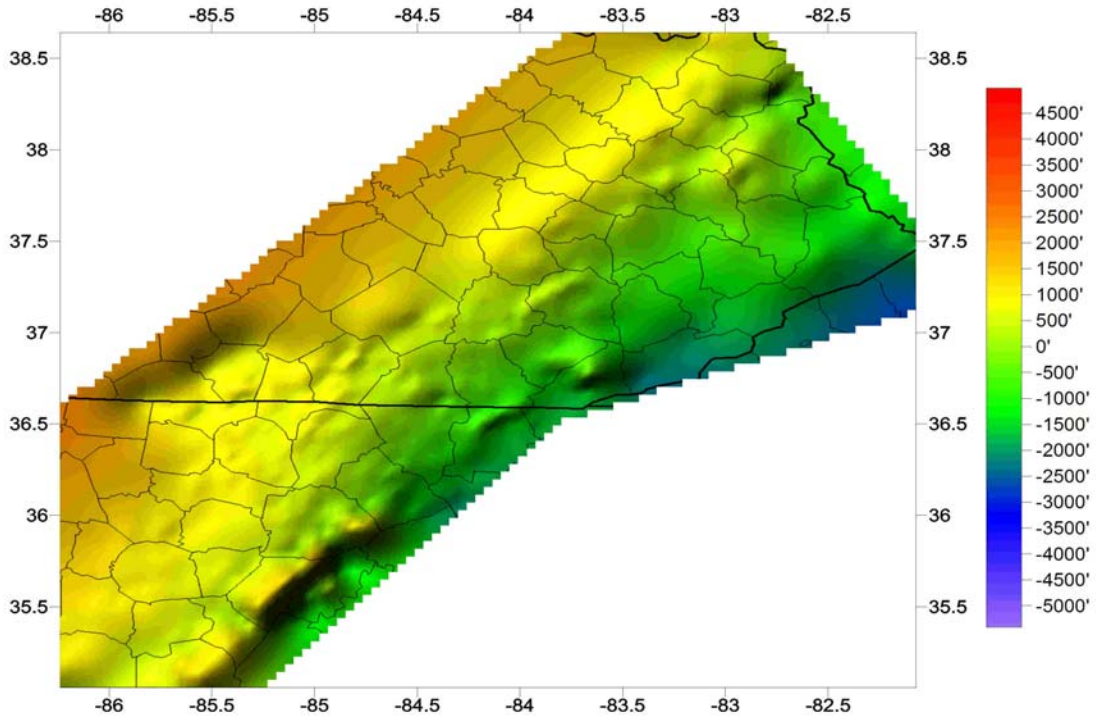


Figure B-35. Structure contour map on the top of the Fort Payne Formation.

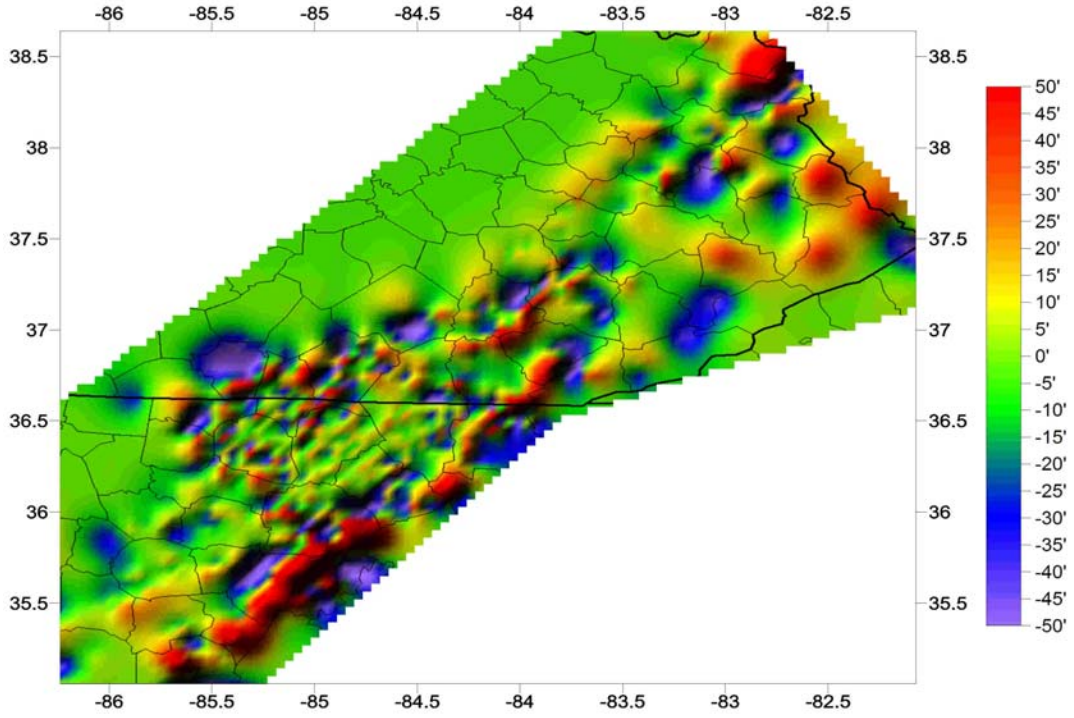


Figure B-36. Trend surface residual anomaly map on the top of the Fort Payne Formation.

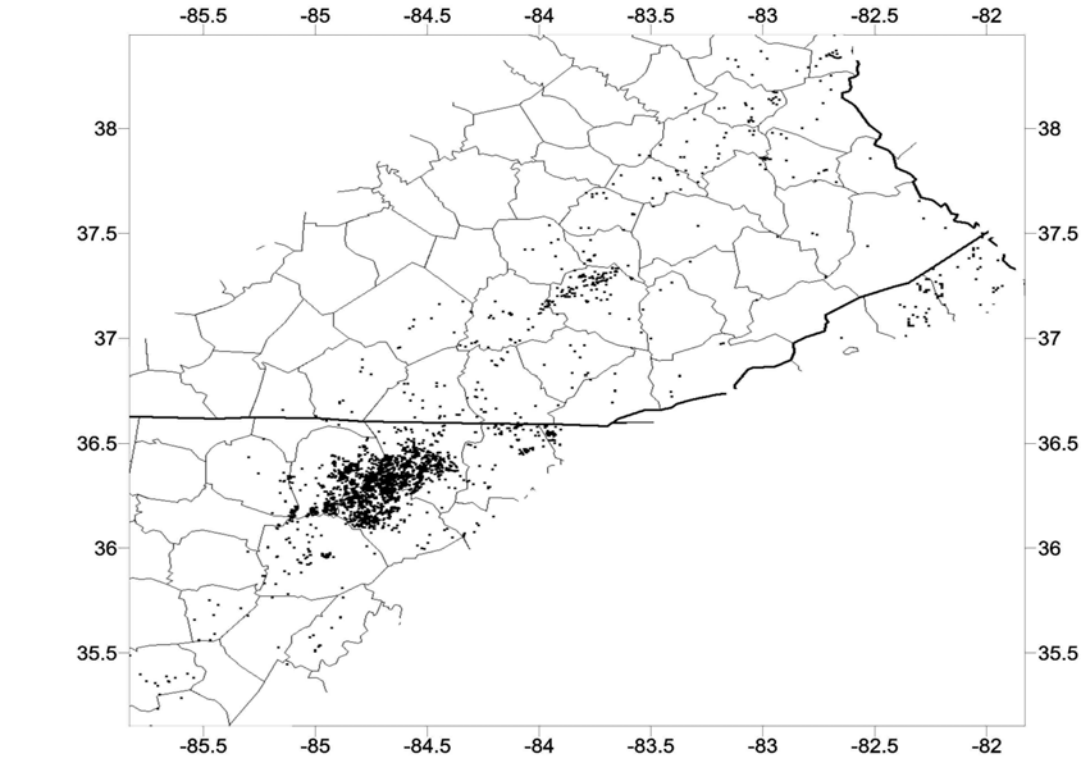


Figure B-37. Locations of wells penetrating the Bangor Limestone.

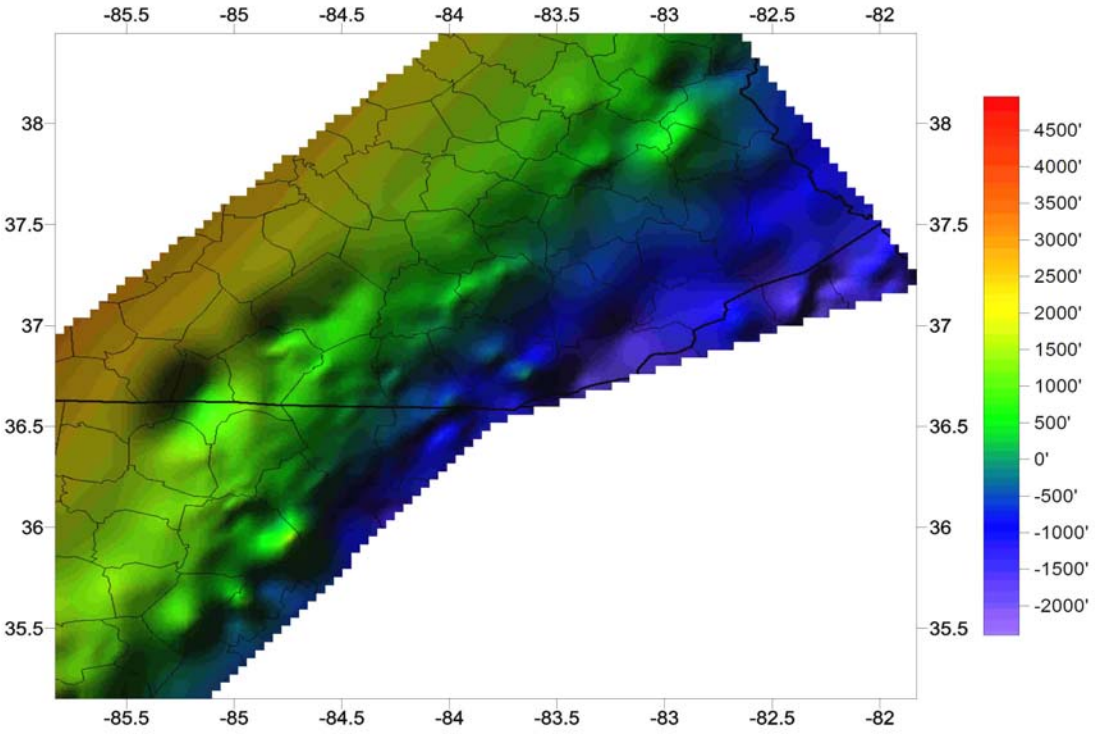


Figure B-38. Structure contour map on the top of the Bangor Limestone.

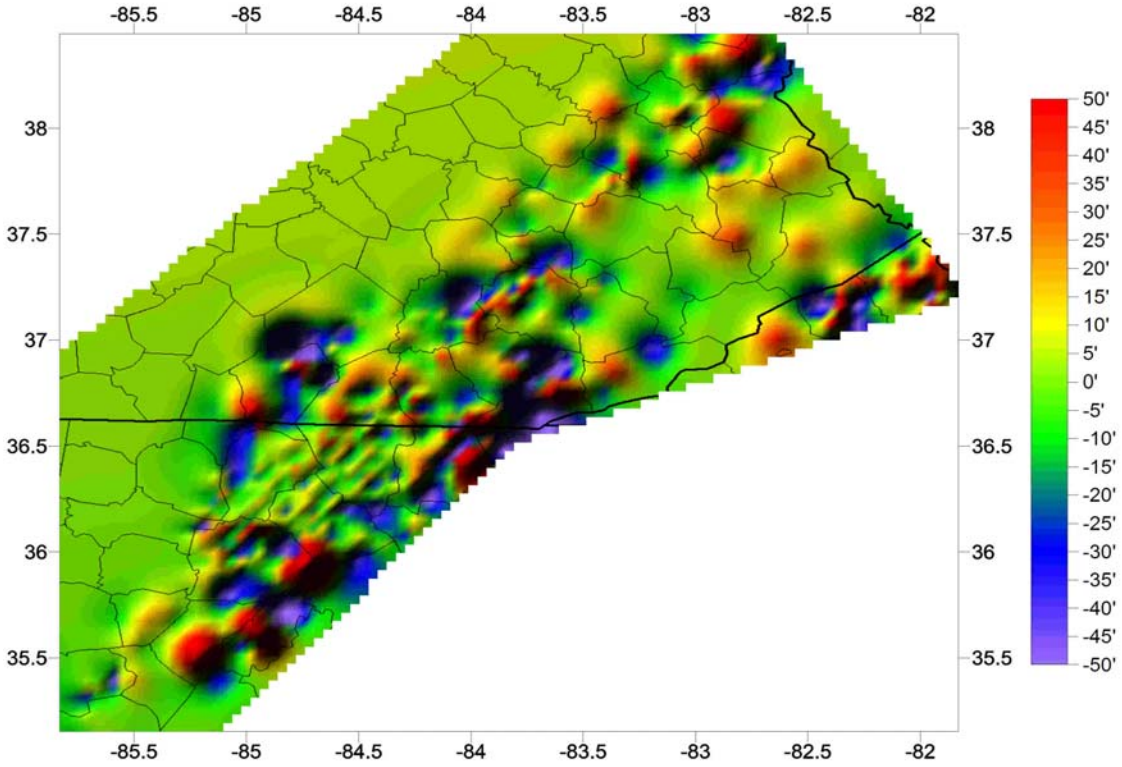


Figure B-39. Trend surface residual anomaly map on the top of the Bangor Limestone.

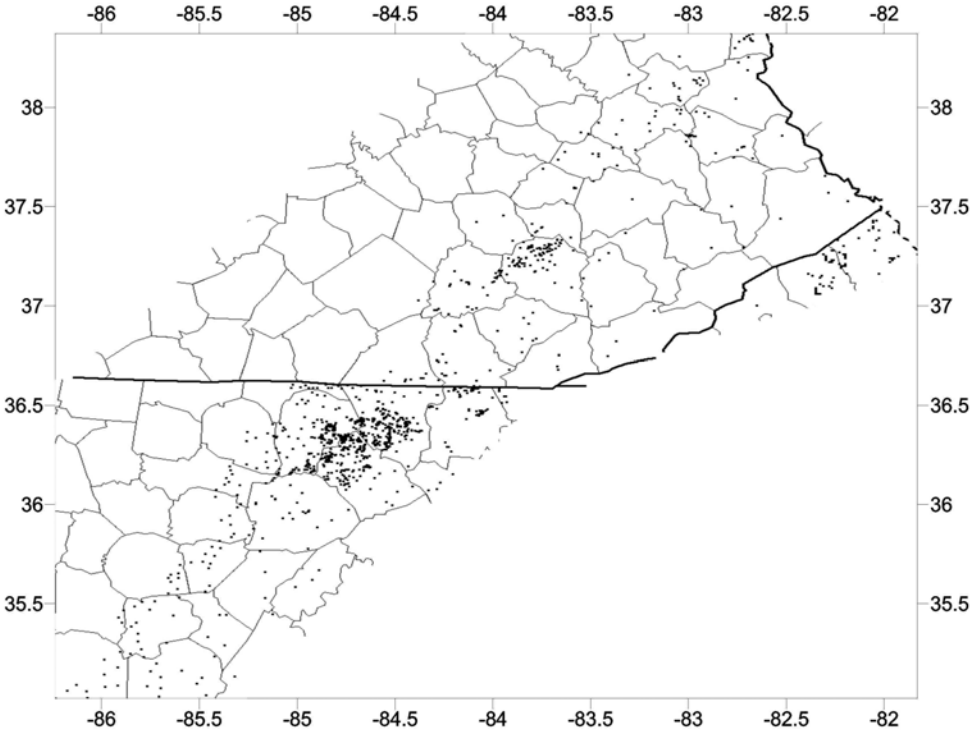


Figure B-40. Locations of wells penetrating the Pennington Formation.

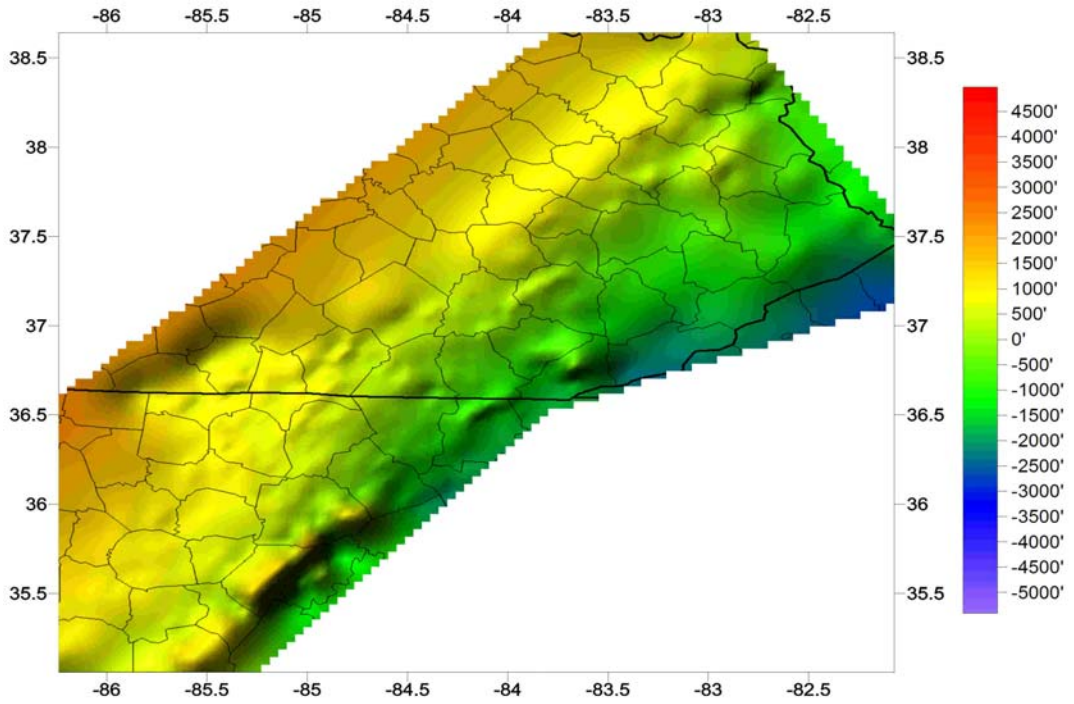


Figure B-41. Structure contour map on the top of the Pennington Formation.

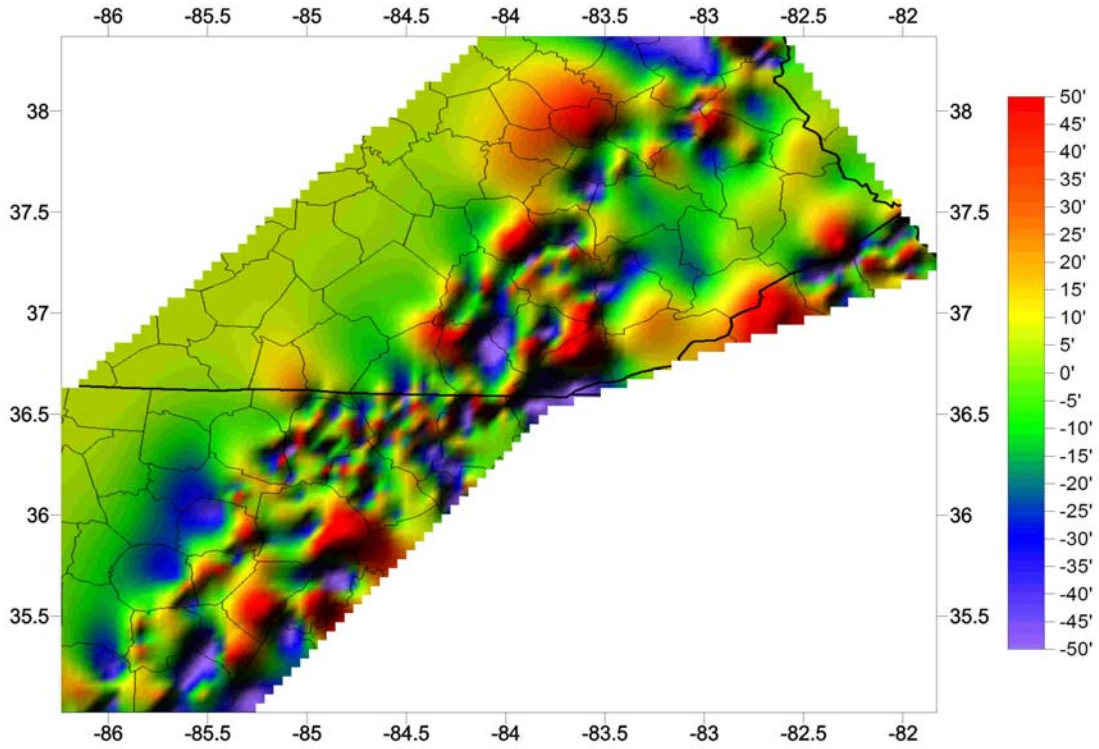


Figure B-42. Trend surface residual anomaly map on the top of the Pennington Formation.

Appendix C. Flynn Creek Impact Structure Field Data, Notes, and Guidebook

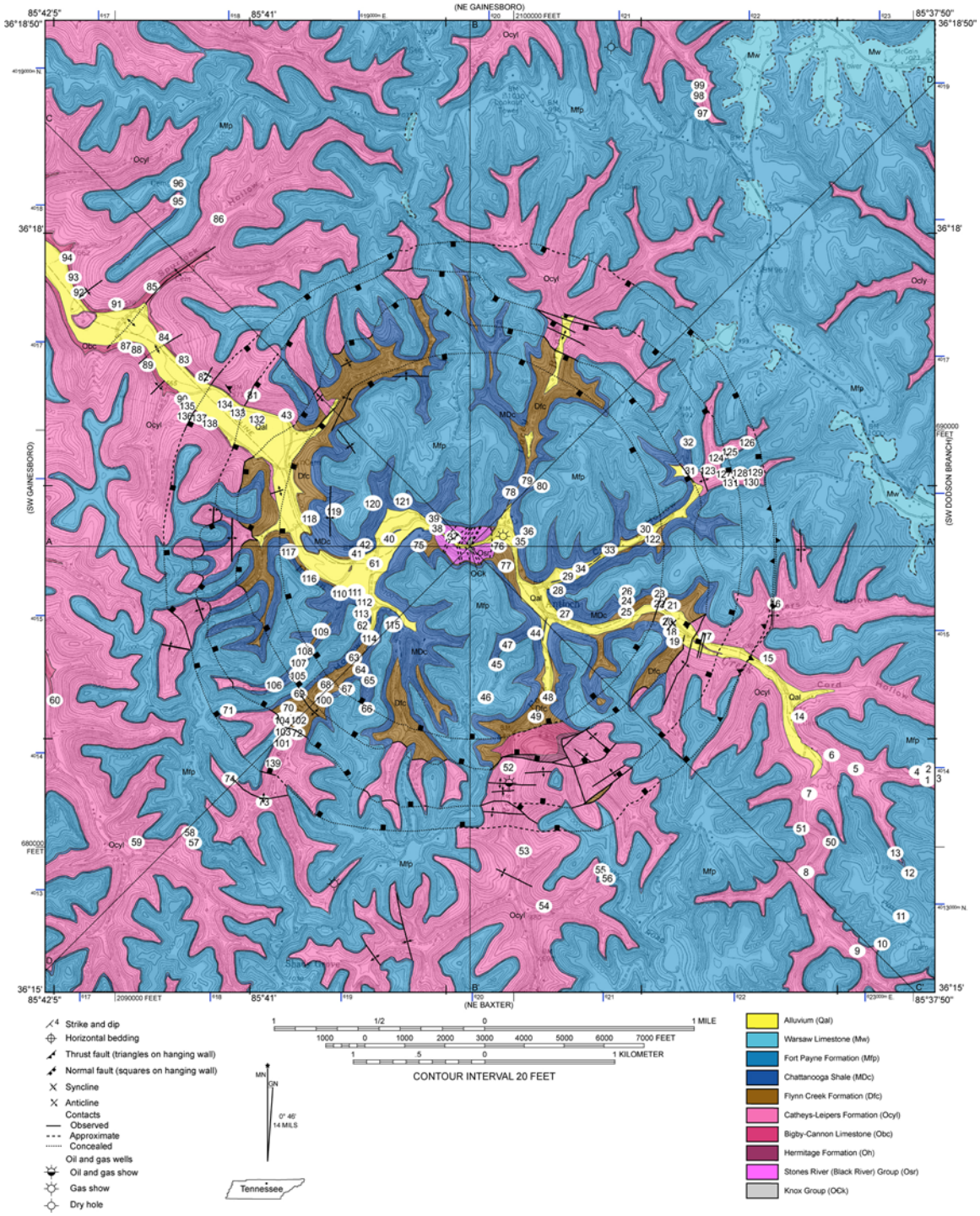


Figure C-1. Field station location map

Station #	Lithology	Strike	Dip	Notes
1	MDch	N40W	2NE	Fissile shale, around 20' thick
2	Mfp	N42W	6NE	Gently fold, east limb in the Fort Payne, but unclear if slump related
3	Mfp	N49E	5SE	Gently fold, west limb in the Fort Payne, but unclear if slump related
4	Olcy	N61E	2SE	Upper contact with MDch appears disconformable
5	Olcy	N40E	3SE	Thick-bedded limestone, minor calcite noted
6	Olcy	N53E	5SE	Possibly minor cross bedding on weathered section, irregular but not nodular bedding
7	Olcy	N61E	3SE	Bedding more irregular, thin- to medium-bedding, blocky weathered surface
8	Olcy	N50E	10SE	Increasing dip, should walk ravine to SW later
9	Olcy	N44E	4SE	Similar to early exposure near Flynn Creek Rd.
10	MDch	N62E	1SE	MDch-Mfp contact, prominent ledge near contact
11	Mfp	N19E	3SE	Top of ridge, white-yellow chert float
12	MDch	N43E	5SE	Lower contact difficult to locate on map, but controlled by spur
13	Olcy	N48E	2SE	Dark gray limestone with irregular bedding
14	Olcy	N20W	3NE	Change in strike
15	Olcy	N12E	4SW	Continued NW trend in strike
16	Olcy	N5W	29NE	Wave cave, hanging wall drag fold, eastern limb turns almost vertical, fault dies up-section
17	Olcy	N21E	9SE	Near Birdwell cave and crater rim, hydrothermal dolomite and dewatering structures present
18	Dfc	N70E		Trend of syncline, minor plunge, possibly ejecta
19	Dfc	N65E	40NW	East of tight syncline fault concealed or breccia and not Olcy, possibly ejecta
20	Dfc	N65E	45NW	West of tight syncline in unknown strata across deep stream, need to come from other side
21	Dfc	N23E	44NW	Normal faults verge east, min displacement, bedded breccia, looks like tuff, but isn't
22	Dfc	N29E	20NW	Second fault block, bedded breccia, ejecta
23	Dfc			No cohesive bedding, fine- to coarse-grained limestone dominated breccia, calcite and dead oil
24	MDch	N62E	1SE	Black shale, dip is minimal
25	Dfc	N10E	25SE	Fine-grained and locally cross-bedded dolomite, med gray-tan color, around 10' thick
26	Mfp	N26E	5SE	Fort Payne bedding is very irregular
27	MDch	N14E	2SE	Large cave in ridge
28	MDch	N30E	6SE	Antioch church, slope is steep with little in place exposures
29	MDch	N89E	2SE	Outcrop in creek
30	MDch	N71E	4NW	Road outcrop could be slump
31	Olcy	N58E	6SE	Near MDch contact, cave to NE, inferred sinkhole to SW, near crater rim
32	Mfp	N73E	6SE	Lower contact near curve in road, but not clearly exposed
33	Dfc	N52E	15SE	Bedding may be possible foliation due to internal flow, little exposure to work with
34	MDch	N21E	4SE	In stream bed near breccia block contact to North
35	MDch	N70E	4SE	Black shale, orange staining
36	Mfp	N29E	8SE	Nodular, green shale near base, chert rubble on top
37	Osr	N5W	47SW	Stones River, unclear unit, thickness too large to be complete package, need to traverse
38	Dfc	N33E	29NW	Bedding unclear, traces across road, need to traverse suppose block of Knox, not likely Knox
39	MDch	N58E	13NW	MDch appears to tilt off breccia and Osr, implies post impact rebound or adjustment
40	MDch	N39E	4NE	MDch in stream with a more constant strike, possibly fault between central uplift
41	Dfc	N9W	11NE	Bedded dolomitic breccia with tilted vesicles indicating post impact adjustment
42	MDch	N88E	3NW	Reading difficult, possible slump near outcrop, limited exposure
43	Olcy	N57E	6SE	Past inferred rim, numerous cave collapses, possible related to impact or uplift
44	MDch	N42E	4SE	Black fissile shale, new outcrop, joint analysis station
45	Mfp	N36E	9SE	Base of Mfp is nodular with minor shale, localized slumps
46	Mfp	N39E	11SE	Nodular, gray chert horizons
47	MDch	N52E	3SE	Black fissile shale, new outcrop, near contact with Mfp near bend in road
48	Olcy	N45E	8SE	Near Dfc contact, but possible breccia dykes present making lithologies difficult
49	Dfc?			Unclear bedding and relationship with Olcy, need to discriminate matrix
50	MDch	N15W	2NE	MDch-Mfp contact, prominent ledge near contact
51	MDch	N11E	6SE	MDch-Mfp contact, prominent ledge near contact
52	Olcy	N48E	20NW	Cross inferred bounding fault, need to get permission to look at exposures east of here
53	Olcy	N85E	1SE	Outside the crater, thicker bedded Olcy that use to seeing, similar color and composition
54	Olcy	N31W	4NE	Thinner bedded limestone, more typical Olcy than previous stop
55	MDch	N36E	2SE	Black shale with numerous fracture sets, future joint station, no bentonite identified
56	Mfp	N42E	4SW	Minimal outcrop surrounded by chert rubble, minor amount of Maury Shale, yellow-red soil
57	MDch	N9W	2NE	Black shale with numerous fracture sets, future joint station, no bentonite identified
58	Olcy	N29E	4SE	Grayish-yellow limestone, told permission needed to cross northern boundary
59	Olcy	N31E	6SE	Grayish-yellow limestone, told permission needed to cross northern boundary
60	Olcy?	N49E	15SE	Near church, thicker bedded Olcy perhaps Obg, not sandy, but definitely not good Olcy
61	Dfc	N19W	30NE	Dfc, steep dip for inferred location in crater, large outcrop south of stream, medium size Ls clasts
62	Mfp	N13W	3NE	Chert rubble, minor amount of possible Maury Shale
63	Dfc	N3W	5NE	Breccia, brown small clasts, bedding difficult to resolve
64	Dfc	N8W	5NE	Breccia, yellowish brown, clast size decreasing, bedding also difficult to resolve
65	MDch	N13W	3NE	Black fissile shale, calcareous shale outcrop north of stream
66	Mfp	N26W	2NE	Mfp contact, no Maury Shale exposed, chert rubble everywhere, with minimal outcrop
67	Mfp	N30W	5NE	Limestone rubble with minor outcropping, unclear if in place
68	Dfc	N24W	7NE	Limestone breccia, small to large clast with dolomitic matrix
69	Dfc	N40W	30NE	Dolomite, fine-grained, no Harden SS above
70	MDch			Harden Sandstone float with large, dime size, angular clasts of MDch, outcrop concealed
71	Mfp	N36E	5NW	Prominent ledge with MDch float below, inferred contact, minimal outcrop, yellow chert rubble above
72	Dfc	N24W	30NE	Breccia, brown small clasts, slight smell of hydrocarbons when fresh
73	Olcy	N48E	3SW	Grayish-yellow limestone, exposure near streams, need permission to go further
74	Olcy	N83W	2SW	Grayish-yellow limestone, exposure near streams, need permission to go further
75	MDch	N85E	3SE	Black shale, excellent exposure, nearby exposure NOT Knox, but breccia need to traverse
76	Osr	N55W	9SW	Central uplift flank dip should have rotated, fault trending north in stream?, unclear unit
77	Osr	N46E	27SE	Central uplift flank dip rotated, but very far east, asymmetric fold or fault controlled, unclear unit
78	MDch	N71E	4SE	Black shale in creek, fractures and stream may blind fault zone
79	MDch	N38E	1SE	Black shale in creek, fractures and stream may blind fault zone, need traverse to north in daytime

Station #	Lithology	Strike	Dip	Notes
80	Mfp	N40E	4SE	Mfp contact at steep topography, upper MDch is pseudo massive bedded, but fissile
81	Olcy	N22E	3SE	North of cave collapse, unclear fold or fracture origin grayish yellow thin-bedded limestone
82	Obg?	N5W	4NE	Contact with Olcy unclear, bedding thickness increased but lithology is similar to Olcy
83	Obg	N40E	2NW	Thick-bedded limestone, minor calcite noted, occasional sandy sections
84	Obg	N42E	5SE	Thick-bedded limestone, occasional sandy sections, gray limestone, but not Dove Member
85	Obg	N43E	3NW	Slumped block of thick-bedded gray limestone, possible structure/fracture system
86	Olcy	N57E	12NW	Thin bedded, limited outcrop lumber company present
87	Obg	N56E	6SE	Lots of dogs, numerous caves, near inferred contact with Olcy
88	Obg	N32E	10SE	Caves appear to be along strike, possible folds across area or blind faults/fractures
89	Obg	N34E	3NW	Pattern consistent across the floodplain, possible series of gently folds
90	Olcy	N50E	2SE	Thinner bedded limestone, Olcy, gray limestone weather yellow-gray
91	Olcy	N51E	8NW	Crossed fence, outcrops may be slumps near road, may be Obg
92	Obg	0	0	Flat readings, calcite, but no HTD or obvious destructive fabric
93	Obg	N31E	2SE	Massively bedded Obg contact with Olcy in cow pasture
94	Obg	N68E	9NW	Massively bedded Obg contact with Olcy in cow pasture
95	MDch	N37E	2SE	Black shale with numerous fracture sets, future joint station, no bentonite identified
96	Mfp	N49E	3SE	Minimal outcrop surrounded by chert rubble, yellow-red soil, crinoidal
97	Mfp	N52W	2SW	Hwy 56, steep section, good exposure of Maury Shale, weathered green-gray-yellow
98	MDch	N29W	2SW	Hwy 56, steep section, appears slightly thicker than station 95
99	Olcy	N35W	5SW	Hwy 56, steep section, nodular section, gray-yellow, good future joint section
100	Dfc	N51W	16SE	Breccia, brown small clasts, slight smell of hydrocarbons when fresh
101	Olcy	N46W	20NE	Limestone, gray, tilted near bounding fault
102	Olcy	N41W	29NE	In stream bed near breccia block contact to South
103	Olcy	N34W	24NE	Limestone, brecciated at fault contact, listric normal fault, unclear if modification
104	Dfc	N36W	15NE	Dolomite, fine-grained, no Harden SS above
105	MDch	N64E	4SE	Topo break, top of unit is less fissile that usual
106	MDch	N26E	2SE	Fissile shale, black typical MDch
107	Dfc			MDch-Dfc contact, sharp contact with no basal sandstone
108	Dfc	N24W	7NE	Limestone breccia, with possible flow features, but limited bedding
109	Dfc			Prominent fractures trending N19W possibly related to later faulting
110	Dfc	N19W	19SW	Strike same as station 109 indicating faulting and lack of bedding elsewhere
111	MDch	N32W	4NE	Typical black shale is stream bed, near breccia, irregular contact
112	Dfc			Limestone dominated clasts breccia, no bedding
113	MDch	N26E	7SE	Fissile bedding, upper contact concealed
114	MDch	N30E	4SE	Shale near contact with breccia near turn in road
115	MDch	N42W	2NE	Shale, fissile, middle on unit
116	Dfc	N36W	7NE	Bedding undulating
117	MDch	N20E	3SE	MDch may have some carbonate or silt in it, weathers a bit differently
118	MDch	N13W	3NE	MDch contact with fine-grained dolomite unit, could be minor slumping to east
119	Mfp	N9E	2NW	Contact with MDch
120	Mfp	N5W	2NE	Contact with MDch
121	MDch	N31W	4NE	Contact with Mfp
122	Dfc	N20E	33NW	Fine-grained dolomite, smells of oil, near HTD and unknown mineral in shatter cone morphology
123	Olcy	N29W	7NE	Limestone exposed near cave, measurement taken in stream bed
124	Olcy	N21W	2NE	A lot of float on slope that is not in place, in place near turn in road and bamboo
125	Olcy	N31E	6NE	A little finer limestone than usual, limited outcrop
126	Olcy	N72W	3SW	Outcrop is limited, eastern section does not visually look like outcrop seen near cave, faulting?
127	Olcy	N78E	7SE	More nodular near top of section, overgrown veg and slumping or heaving possible
128	Olcy	N46W	3NE	Measurement taken 20 ft above possible vertical Olcy block, unclear if faulted or float
129	Olcy	N13E	3SW	Grayish-yellow limestone, no exposure in stream
130	Olcy	N81W	4NE	Grayish-yellow limestone, thinner bedded and finer grained than near cave
131	Olcy	N18E	5NW	Limestone, typical Olcy
132	Olcy			Travertine section on western rim and inferred normal faults
133	Olcy			Travertine section on western rim and inferred normal faults
134	Olcy			Travertine section on western rim and inferred normal faults
135	Obg	N38E	4SE	Thick-bedded, east of cave system, medium-grained, gray limestone
136	Olcy	N31E	6NW	Thin- to medium-bedded approaching inferred fault and paired anticline, brownish-yellow limestone
137	Olcy	N23E	32NE	Medium- to thick-bedded, but Olcy, normal fault and slumping
138	Obg	N33E	8SE	Thick-bedded and tilting not constant, coarse-grained brownish-yellow limestone
139	Olcy	N41W	13NE	Thin-bedded gray limestone similar to exposed in stream bed, fault inferred to south

Field Guide to the Flynn Creek Impact Structure

This section is a revised version of a chapter in a field guide published by the Field Impact Studies Group in 2005 edited by Keith A. Milam, Jonathan C. Evenick, and Bill Deane for the 69th Annual Meteoritical Society Meeting:

Evenick, J. C., Lee, P., Deane, B., and Milam, K. A., 2005, The Flynn Creek impact structure, *in* Milam, K. A., Evenick, J. C., and Deane, B., eds., Field Guide to the Middlesboro and Flynn Creek Impact Structures: Field Impact Studies Group, No. 1, p. 24-29.

My major contributions to this field guide include: 1) being lead author of the Flynn Creek impact structure section; 2) editing the field guide; 3) creating a revised geologic map of the Flynn Creek impact structure; and 4) creating various illustrations.

Introduction

The Flynn Creek impact structure (Fig. C-2) is located in Jackson County, Tennessee, USA (36°17' N, 85°40' W) in the Eastern Highland Rim physiographic province. The structure was first noted as a disturbance by Stafford (1869), and later mapped and interpreted as a pre-Chattanooga sinkhole by Lusk (1927, 1935). Later mapping by Wilson and Born (1936) led the authors to refute this hypothesis and favor a cryptovolcanic mechanism instead and propose the asymmetric crater had a diameter of 3.2 km (2 mi). Detailed surface and subsurface research by Roddy (1964, 1968, 1977a, 1977b, 1979) and Wilson and Roddy (1990) described the crater as a 3.8 km diameter complex impact crater, with a central uplift and terraced (collapsed) crater rim. Putting aside morphology as circumstantial evidence, confirmation of an impact origin came with the discovery of shatter cones in Knox Group (Fig. C-3) exposed in the central uplift (Roddy, 1977b). Planar features in quartz and enhanced micro-deformation in calcite have also been reported (Roddy, 1977b), but no detailed petrographic information has been published (Koeberl and Anderson, 1996).

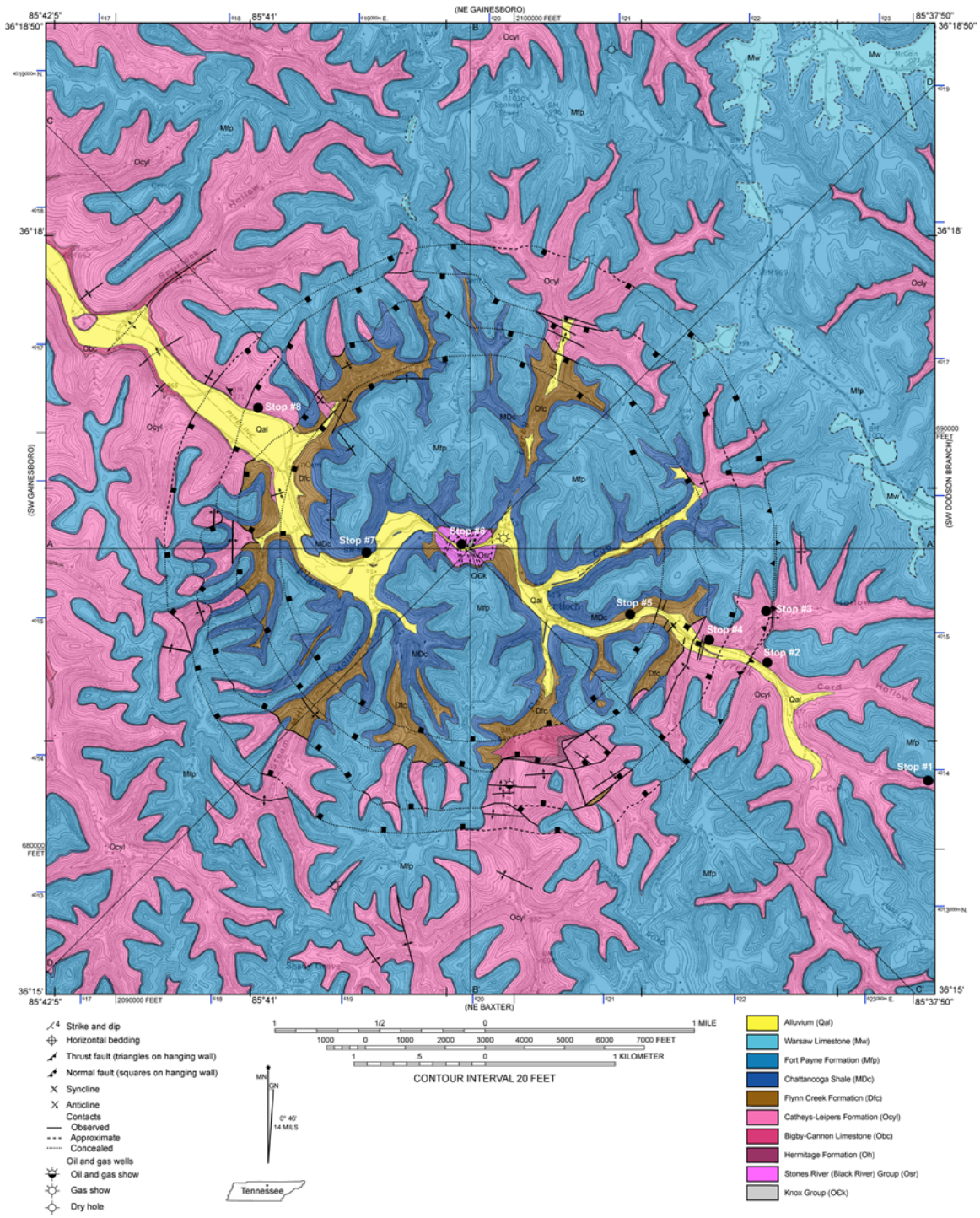


Figure C-2. Geologic map of the Flynn Creek impact structure with stop locations.

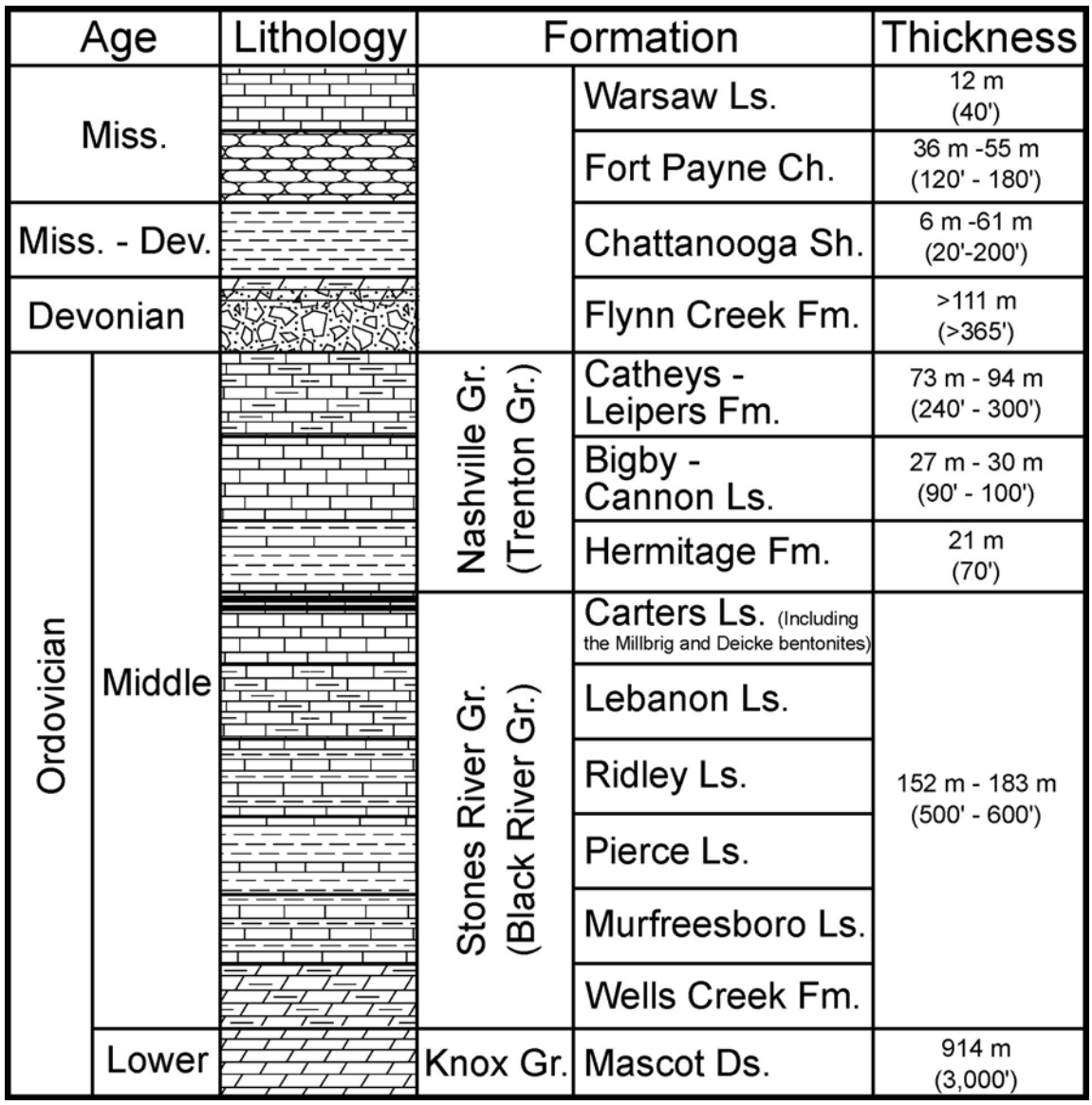


Figure C-3. Stratigraphic column of the rocks exposed in the Gainesboro quadrangle. (Adapted from Wilson and Roddy, 1990).

The crater fill was categorized by Wilson and Roddy (1990), but their descriptions do not collaborate well with current field exposures. Therefore, the crater fill has been separated into four categories (called the Flynn Creek Formation): non-bedded breccia, bedded breccia, coarse-grained dolomitic sandstone, and fine-grained dolomite. The Formation is only found within the crater and the overall thickness is unknown, but drilling data estimate it is over 111 m (365 ft) thick (Roddy 1964, 1977b, 1979; Wilson and Roddy, 1990).

Non-bedded breccia is the basal breccia unit found in the impact structure and it is predominantly composed of angular and unsorted limestone with minor dolomite and chert clasts up to 0.3 m (1 ft) in diameter. It is typically light- to dark-gray, and has a fine- to coarse-grained carbonate matrix. The lower unexposed sections of the unit should have larger clasts sizes, but no larger clasts have been found in outcrop. Brecciated outcrops were not considered to be breccia and may have been called mega-breccia by Wilson and Roddy (1990).

Overlying the non-bedded breccia is the bedded breccia. It is an angular and unsorted breccia composed of limestone, minor dolomite, chert, and shale clasts that are up to 0.1 m (0.3 ft) in diameter. The unit is light-brown to dark-gray in color and has a fine- to coarse-grained, carbonate matrix (Wilson and Roddy, 1990). Calcite, bitumen, quartz, barite, sphalerite, minor gypsum, and hydrothermal dolomite have been found in sections of breccia where bedding is less apparent or possibly fragmented by hydrothermal fluid. The breccia is locally crossbedded inferring a marine depositional environment. Total thickness is unknown. This unit is inferred to represent the crater

infilling soon after impact. A localized disconformity can be found at the top of the unit, but is not always very pronounced.

Coarse-grained dolomitic sandstone is composed of reworked and sorted dolomite and carbonate breccia that are light-brown or yellow to dark-gray. It is fine- to coarse-grained, locally crossbedded, and medium- to thick-bedded. Weather exposures occasionally look vesicular due to the weathering of carbonate clasts. This vesicular weathering pattern, which is parallel to the Chattanooga Shale and Fort Payne Formation, is commonly tilted and confirms post-Fort Payne crater modification. The unit is commonly ~3-6 m (10-20 ft) thick and has a sharp upper contact with the fine-grained dolomite.

Fine-grained dolomite is light-brown to medium-gray, laminated to thin-bedded dolomite. It is locally conformable with the Chattanooga Shale and is up to 3 m (10 ft) thick. The gradational contact also indicates the impact was Late Devonian. Coarse-grained dolomitic sandstone and fine-grained dolomite are interpreted as fallback and ejecta that was washed into the crater following impact. The large proportion of dolomite in the upper section of the Flynn Creek Formation suggests that it was fallback and ejecta because the target was carbonate-dominated and the minor amount of dolomite in the Nashville and Stones River Groups would not as readily vaporize near the boundary of the initial impact. Also, the limited spatial and inferred temporal position of the two non-breccia units with respect to the Chattanooga Shale and the underlying breccia units indicates these units were not deposited as a result of regional or tectonic forces.

The Flynn Creek impact occurred around 382 Ma, which corresponds with the initial deposition of the Chattanooga Shale (Schieber and Over, 2005). Field mapping of

the crater has also recognized: 1) fracture patterns in the Flynn Creek Formation are similar to Devonian fracture sets; 2) a gradational contact between the basal Chattanooga Shale and the uppermost unit in the Flynn Creek Formation (fine-grained dolomite); 3) hydrothermal dolomite in the crater rim and fill; 4) Chattanooga Shale clasts reworked into the basal member of the Chattanooga Shale near the modified crater rim; and 5) rare impact breccia clasts with possible Chattanooga Shale affinity. This new information, along with the previously confirmed thickened Chattanooga Shale sequence and Devonian conodonts within the basal impact breccias, strongly constrains the impact age to the Late Devonian.

Target rocks in this probable marine impact are Ordovician carbonates and older rocks. The confirmed target rocks range from the Knox Group through Catheys-Leipers Formation. Almost all rim exposures consist of Catheys-Leipers Formation, while central uplift exposures are primarily Knox and Stones River Groups. Although there is limited rock outcrop in the area, there are exposed surface faults, folds, and large outcrops of impact breccia within the crater.

Following impact in the Late Devonian, Flynn Creek crater was filled with dark marine mud that later became the Chattanooga Shale. In this region, the Chattanooga Shale is typically ~6 m (20 ft) thick, but in the Flynn Creek structure it is over ~60 m (200 ft). The shale was subsequently overlain by the lower Mississippian Fort Payne and upper Mississippian Warsaw Limestone (Wilson and Roddy, 1990), which now cap the ridges in the Flynn Creek area. Later, this area was uplifted during the late Paleozoic and led to the partial exposure of the buried structure.

Take I-40W for 142 km (88 mi) from Knoxville, TN to exit 280 (West of Cookeville, TN) and turn right (North) on Route 56. Continue 12.6 km (7.8 mi) and turn left (West) on Flynn Creek Road. Proceed 2.3 km (1.4 mi) to stop 1. Pull off on right side and be cautious of traffic.

Stop 1. Devonian-Mississippian Section outside the Crater

Here one can view exposures and contact of Upper Devonian Chattanooga Shale and lower Mississippian Fort Payne Formation in the undisturbed strata outside of the crater (Fig. C-4). The Fort Payne Formation (Fig. C-5) consists of interbedded siltstone, shale, limestone, and dolomite, with lenses of chert (the Fort Payne Formation is often locally referred to as the Fort Payne Chert). At the base of the Fort Payne is a greenish-gray to buff colored shale, the Maury Shale. The Chattanooga Shale is a dark gray to black, fissile, pyritic shale that contains a thin bentonite layer near the middle of the unit. Outside the crater, the Chattanooga Shale is ~6 m thick; however, the post-impact deposition of Chattanooga Shale resulted in thicknesses of over 60 m inside the Flynn Creek impact structure.

Proceed 2.1 km (1.3 mi) on Flynn Creek Road to stop 2. Pull off on right side.

Stop 2. Ordovician Section outside the Crater

Here we view an exposure of Middle-Upper Ordovician Catheys-Leipers Formation (Upper Nashville/Trenton Group). Note that the Leipers and Catheys Formations were mapped in the area as one unit because they are lithologically identical.

Proceed ~0.3 km (0.2 mi) on Flynn Creek Road. Turn right onto Peters Hollow Road and travel for ~0.2 km (0.1 mi) down a gravel road to a gate. Approximately 40-50 m (131-164 ft) ahead on the left is an old chimney. Park and walk north about 50 m (164 ft) toward the hillside to the entrance of Wave Cave. Note: Wave Cave is on private property and permission must be obtained from the landowner prior to entry.



Figure C-4. Outcrop of the Chattanooga Shale outside the crater.



Figure C-5. Outcrop of the Fort Payne Chert (top) and Maury Shale (bottom). Both units are included in the Fort Payne Formation.

Stop 3. Modified Crater Rim and Wave Cave

Wave Cave (Fig. C-6) lies in the Catheys-Leipers Formation and is located in the outermost concentric fault that defines the modified crater. The cave formed in a west-verging anticline, with a north-south axial trend. Bedding along the western and eastern limbs are oriented approximately N6°E, 61°NW and N4°W, 28°NE, respectively. Approximately 43 m (140 ft) of passageway has formed along the axis of the anticline, due to preferential weathering of axial extensional fractures. Near the end of the cave, two side crawls lead into a large (~6 x 12 m [20 x 40 ft]) room that has developed parallel to the strike of bedding on the western limb of the anticline. An unusual inverted breakout dome is forming on the western side of this room due to gravitational collapse along bedding planes.

The proximity of this anticline to the Flynn Creek structure and the lack of tectonic deformation in the vicinity argue that this fold was formed as a result of impact. Roddy (1979) suggested that this anticline was the manifestation of a normal listric fault at depth just beneath the surface, along which the transient crater wall collapsed, but the cave is clearly related to a small-displacement thrust (Fig. C-7).

Return to Flynn Creek Road. Turn right, heading north for ~0.3 km (0.2 mi) to Stop 4. Pull off on the left side of the road. Carefully cross the road to an ephemeral stream bed. Follow the stream bed for ~10 m to the entrance of Birdwell cave. Note: Birdwell cave is on private property and permission must be obtained from the landowner prior to entry.

Stop 4. Eastern Modified Crater Rim and Birdwell Cave

Now we are standing in the modified eastern rim where hydrothermal dolomite has been identified for the first time in Tennessee within the Nashville Group. Minor faults and possible diagenetic or hydrothermal features (Fig. C-8) are also present in the

a)



b)



Figure C-6. a) Entrance to Wave Cave, along the eastern modified crater rim. b) The cave has formed in the core of a west-vergent buckle fold that is broken by a small-displacement thrust fault. Caves are commonly found in the modified crater rim.

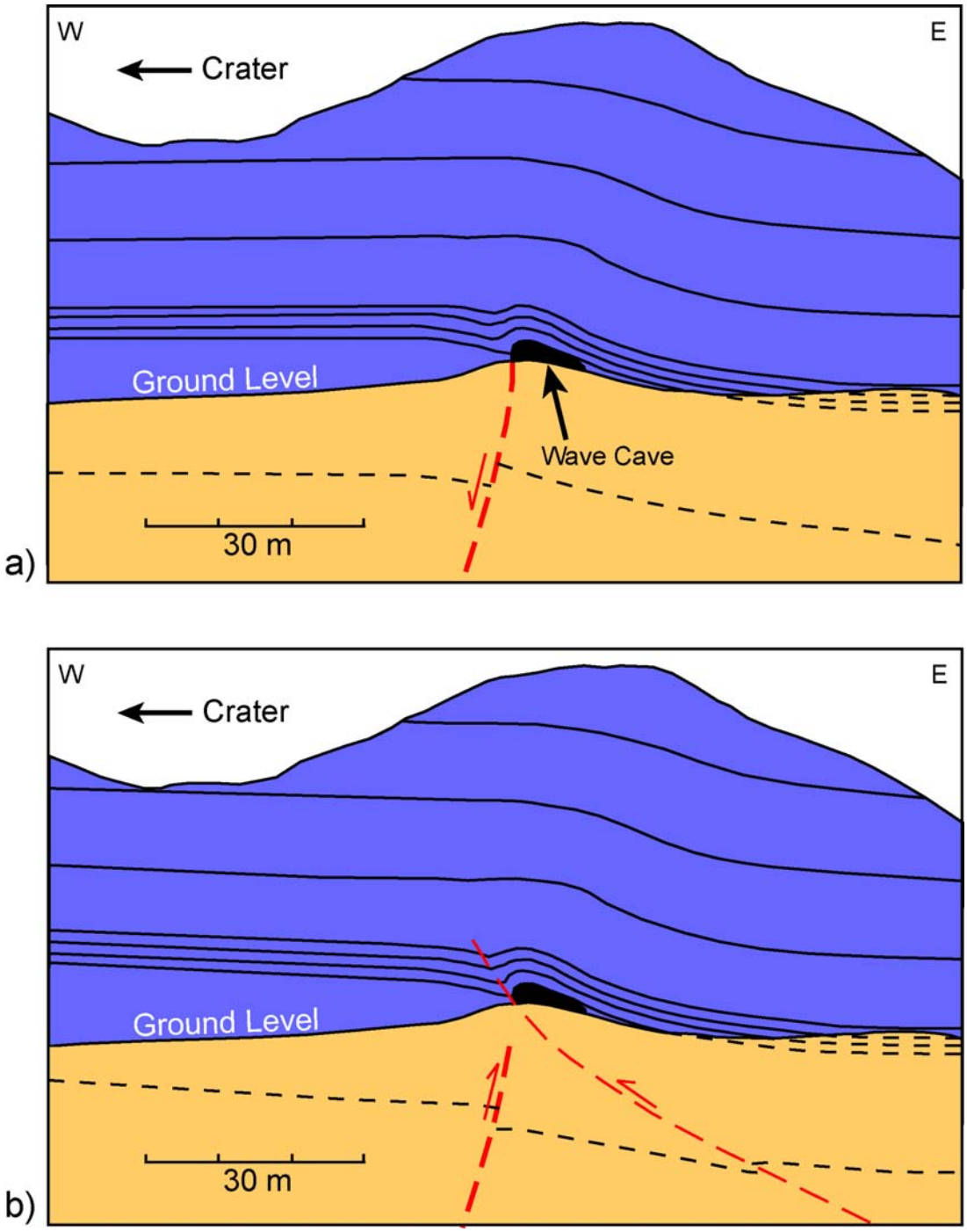


Figure C-7. Structural models for Wave Cave. A) Normal fault model from Roddy (1979). Note that the model does not balance nor take asymmetry into account. B) A new interpretation of Wave Cave. Most normal faults that define the crater's modified crater rim are associated with a breached anticline, suggesting the region beyond the transient crater was first uplifted via thrusting during the initial excavation phase and later inverted during final crater development and modification phases.



Figure C-8. Exposure of the Catheys-Leipers Formation displaying boudinage.

outcrop. Like many other caves found in the Catheys-Leipers Formation, Birdwell cave (Fig. C-9) has formed parallel to a modified crater fault. Like Wave Cave, Birdwell cave is oriented almost approximately north-south, perpendicular to the center of impact structure and likely perpendicular to the maximum stress. As you enter Birdwell, notice the development of the box-shaped cross section was made by the dissolution and subsequent collapse along bedding intersections. A small cobble-filled crawlway leads from the left-hand side of the cave near the rear for tens of meters to the north.

Proceed 0.8 km (0.5 mi) on Flynn Creek Road to stop 5. Pull off on left side and be cautious of traffic around the curve in the road. While driving, take note of a syncline in a cut bank exposed across a small field to the left, and two faults on the right side of the road near the bend in the road. You have just entered the transient crater.

Stop 5. Impact Breccia and Transient Crater

Here we will view bedded- and non-bedded breccias within the transient crater. The breccia contains mainly carbonate clasts derived from the Nashville Group, but rare shale and dolomite clasts can also be found in the breccias along with minor calcite and bitumen (Figs. C-10-12). In some places, calcite veins, hydrothermal dolomite, slickensides, and bedding transposition are visible.

Wilson and Roddy (1990) recognized three major types of breccia (bedded, non-bedded and mega-) in the crater, with several subtypes. The breccias are typically poorly sorted and contain angular limestone and dolomite clasts derived from the Nashville, Stones River, and Knox Groups. Some of the breccias, however, contain minor black shale clasts that are probably of Chattanooga Shale affinity (Evenick et al., 2004).

Thin sections from bedded and non-bedded breccia have revealed minor linear inclusion planes (LIPs) sets, possible minor spot melt at grain boundaries, rare flow



Figure C-9. Entrance to Birdwell Cave along the eastern modified crater rim.

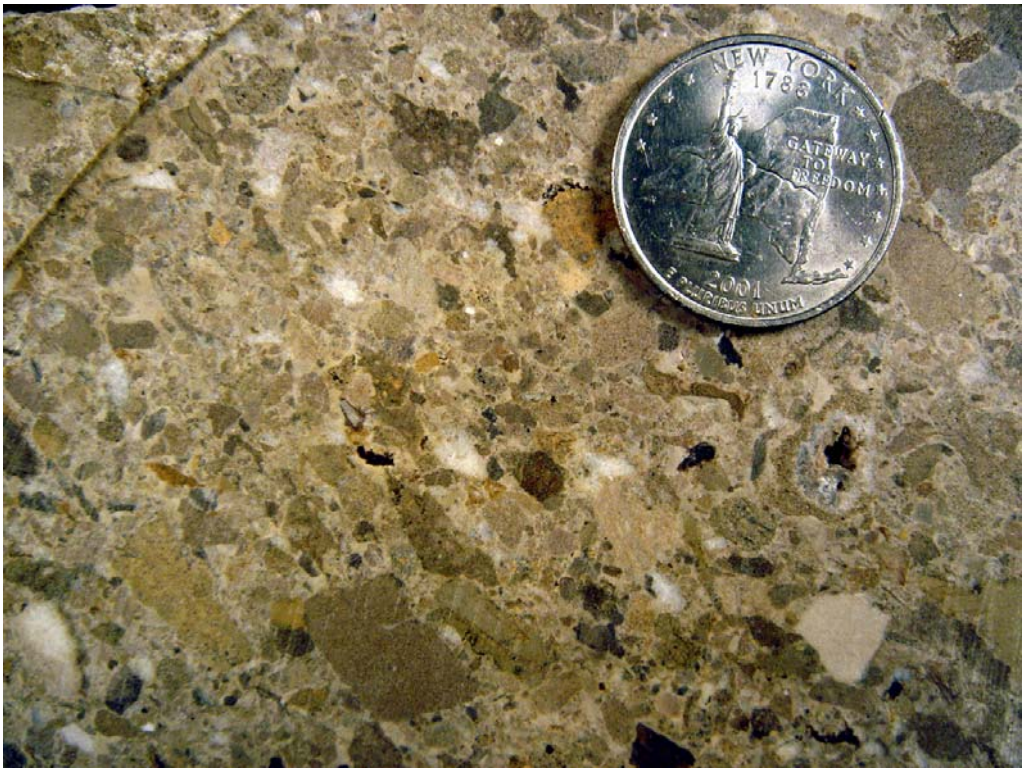


Figure C-10. Typical non-bedded impact breccia with carbonate and dolomitic clasts.

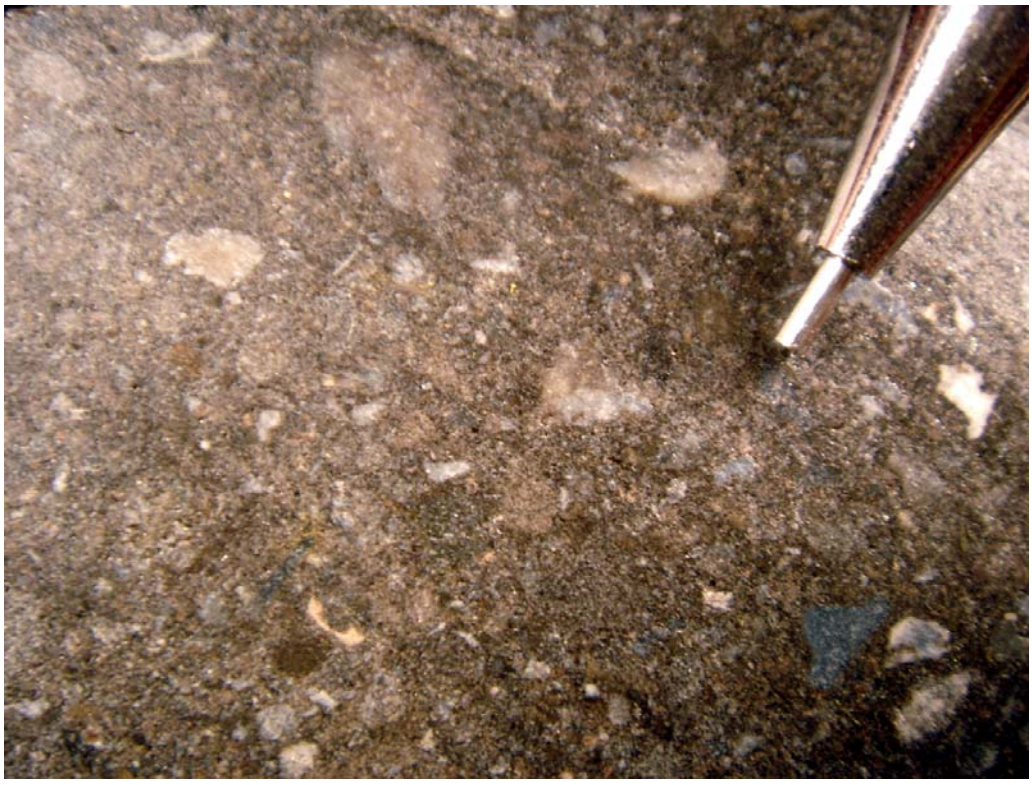


Figure C-11. Impact breccia with non-calcareous matrix and various types of clasts.



Figure C-12. Impact breccia showing argillaceous and micritic clasts.

textures, pre-impact stylolites, and subgrain development (Evenick et al., 2004). The LIPs and subgrain development may be related to post-impact deformation or hydrothermal interaction.

Proceed ~1.0 km (0.6 mi) on Flynn Creek Road to stop 6. Pull off on left side and be cautious of traffic especially near the eastern side of the roadcut.

Stop 6. Central Uplift

At this stop, we examine exposures along the northern flank of the Flynn Creek central uplift (Fig. C-13). Here, exposures of Stones River and Knox Groups have been structurally uplifted by as much as 450 m above their normal stratigraphic positions. Net movement of the central uplift was inward and upward as the central jet (Fig. C-14) developed. Roadcut exposures and stream bank outcrops along the northern flank are dominated by westward-dipping Stones River Group limestones with minor interbedded shales (Roddy, 1968; 1977b). Farther east, what has been described as a "chaotic breccia zone" (Roddy, 1968) separates westward-dipping from eastward-dipping strata. These exposures, in addition to drilling data (Roddy, 1977b) suggest that the central uplift is asymmetric, with overall movement from west to east along major thrust faults. Exposed megablocks are separated by sharp fault contacts and monomictic breccias (Fig. C-15). Additional work in Hawkins Impact cave, the only known cave in a central uplift in the world, suggests that the central uplift is significantly different in character to the south. A larger number of megablocks with more variable displacements occur closer to the core of the central uplift.

Proceed 1 km (0.6 mi) on Flynn Creek Road to stop 7. Pull off on left side near the intersection.



Figure C-13. Photo mosaic of the Stone River Group exposed along Flynn Creek Road on the western part of the central uplift. The azimuth of the center of the mosaic is roughly north. (Mosaic made by Keith Milam).

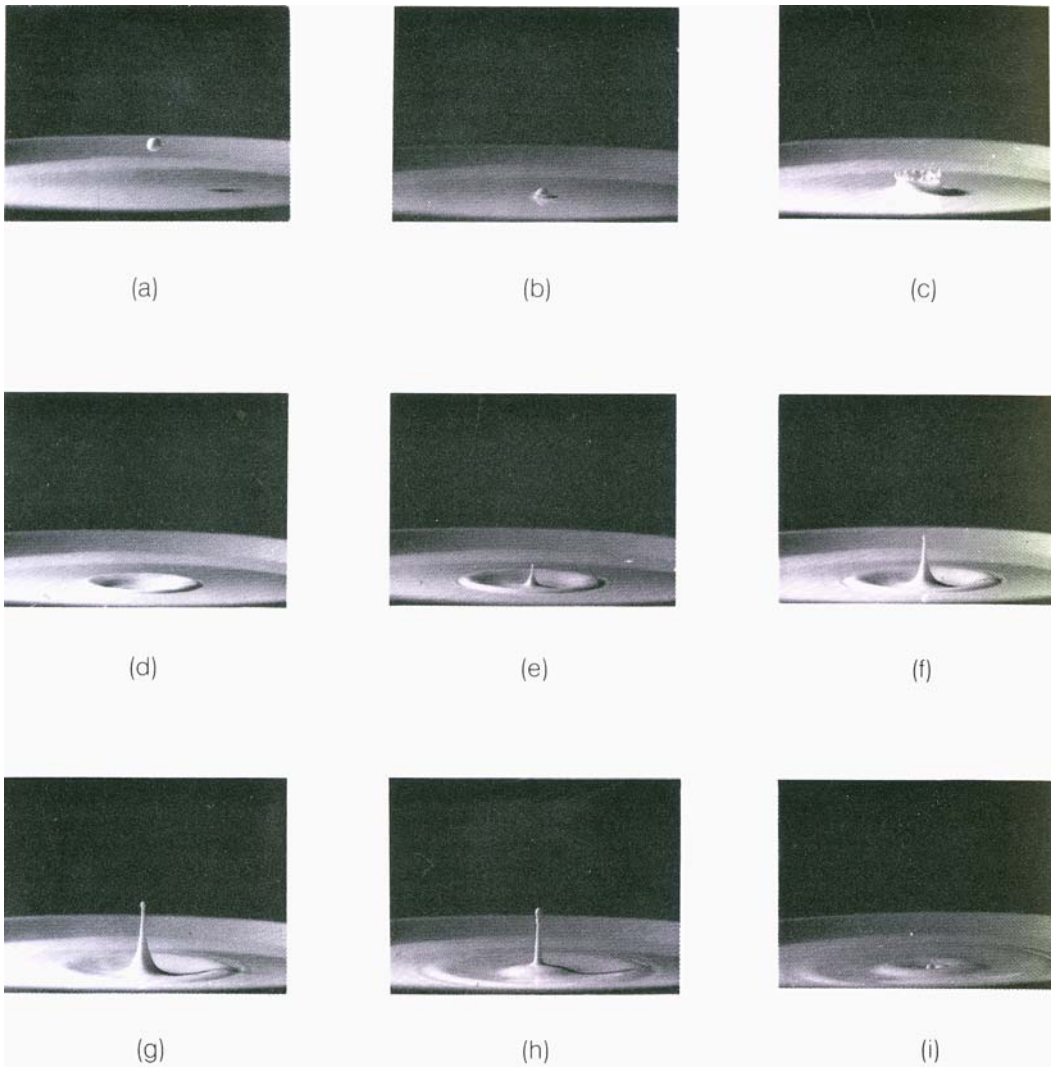


Figure C-14. Model of central uplift formation illustrated by the central jet of water rising upward (e-g) following impact (a-d) and the subsequently destabilizing (h) and collapse of the central jet creating an inner ring (i). (Photo sequence by R. B. Baldwin, from Melosh, 1989).



Figure C-15. Impact (fault-related) breccia exposed on the northern flank of the central uplift. Photo width is approximately 0.3 m (1 ft). (Picture taken by Keith Milam).

Stop 7. Impact Breccia/Chattanooga Shale Contact

On the northern side of the road lies more impact breccia that is similar to that viewed at Stop 5; however, this bedded breccia appears to be locally vesicular due to the weathering of carbonate clasts. Here, bedded-breccia is overlain disconformably by dolomitic sandstone and fine-grained dolomitic units that are in gradation contact with the Chattanooga Shale (Figs. C-16 and C-17).

Proceed 1.8 km (1.1 mi) on Flynn Creek Road to stop 8. Pull off on right side.

Stop 8. Northwestern Modified Crater Rim

This stop lies along the northwestern modified crater rim of the Flynn Creek impact structure. As with the crater rim elsewhere, this roadcut is extensively faulted and contains collapsed caves which can be identified by the associated travertine and speleothems (Fig. C-18). Following these exposures farther to the northwest, we notice that the westward-dipping strata are again flat-lying.



Figure C-16. Disconformity between a dolomitic bedded breccia that contains dolomitic and limestone clasts (bottom) and a localized dolomitic sandstone (top).



Figure C-17. Gradational contact between a fine-grained dolomite (bottom) and the Chattanooga Shale (top). Picture is taken 30 m (100 ft) west of Figure C-17.



Figure C-18. Collapse cave along Flynn Creek Road indicating fault or fracture systems associated with the western modified crater rim.

Vita

Jonathan Charles Evenick was born in Buffalo, New York, on September 26, 1978. He attended Annunciation Elementary and Iroquois High Schools. After graduating from high school he took a year and a half off from school to pursue personal ambitions. He then enrolled at Buffalo State College in the fall of 1997 and transferred to Fredonia State College in the fall of 1998, and graduated in the fall of 2000 with a B.S. degree in Geology. He earned a M.S. degree in Geology from the University of Buffalo in the summer of 2002 and a Ph.D. in Geology from the University of Tennessee in the summer of 2006.