

**PAROWAN OIL PROSPECT
CENTRAL UTAH THRUST BELT
IRON COUNTY
UTAH, USA**

**PARTICIPATION IN A WILD CAT
OIL AND GAS EXPLORATION PROGRAM**

BRADLEY C. PEEK, CPG

**CONSULTING GEOLOGIST
PO BOX 905
NEWCASTLE, COLORADO
USA - 61647**

OCTOBER 10, 2013

AUTHOR QUALIFICATIONS

I, Bradley C. Peek, of P. O. Box 905, New Castle, Colorado, USA, hereby certify that:

I am a geologist residing at New Castle, Colorado, USA.

The report to which this certificate applies is entitled:

Parowan Oil Prospect, Iron County, Utah, USA.

I am a graduate of the University of Nebraska, 1970, with a Bachelor of Science Degree in Geology, the University of Alaska, 1975, with a Master of Science Degree, in Geology, and the Colorado School of Mines, 1990, in Hazardous Waste Management. I have practiced my profession since 1970.

From 1970 through 1976 I was employed by Cominco American Inc. as an Exploration Geologist in the eastern United States, western United States, and Alaska, USA.

From 1976 through 1982 I was employed by Houston Oil and Minerals Corporation, and by Houston International Minerals Corporation, as Exploration Geologist, Minerals, in Texas, Missouri, and Denver, Colorado, USA.

From 1982 through 1989 I was Senior Geologist with Crown Resource Corporation involved in minerals and oil and gas exploration in Colorado, Oklahoma, Arizona, and Washington, USA. I managed a waterflood oilfield in Oklahoma, and directed a major gold exploration program in northern Washington State.

From 1989 to 1998 I was involved as a Consulting Geologist with several mining and exploration companies, with activities in many areas of the world, including Canada, Myanmar, Chile, French Guiana, Peru, Surinam, The Philippines, and Zambia, as well as the USA.

From 1998 to 2007 I was employed as Geologist, Technician, and Water Systems Operator with Zancanella and Associates, Inc., of Colorado involved in all aspects of aquifers, water wells, water systems, permitting and operations.

From 2007 to 2011, I acted as Consulting Geologist in copper production and exploration at the Lisbon Valley copper mine, Utah, USA and in barite and gold exploration in northern Washington State, USA.

From April 2011 to present I have been project manager, Andover Mining Corp, managing the Sun and Smucker volcanogenic massive sulphide exploration programs in the Ambler Mining District, Brooks Range, Alaska, USA.

I am a member of the American Institute of Professional Geologists – Certified Professional Geologist, CPG, 11299.

I am a Member of the Society of Economic Geologists and a Member of the Society of Mining, Metallurgy and Exploration of AIME.

As a result of my experience and qualifications I am a Qualified Person as defined in National Instrument 43-101 of Canada.

I am responsible for the content of this report.

I have not visited the subject properties, but am familiar with working conditions in the area of the Project.

I am independent of the property owners, and the property vendors, and my compensation is strictly on a professional fee basis.

Bradley C. Peek, CPG, 11299

Dated at New Castle, Colorado, USA
October 10, 2013.

EXECUTIVE SUMMARY

The Parowan Oil Prospect in Iron County, Utah, USA, offers an excellent structural and stratigraphic combination for large scale oil and gas discovery. A large anticlinal structure lying 110 miles to the north of the Parowan Prospect along the overthrust belt holds the spectacular Covenant Oil Field, discovered in 1982. Potential for the discovery of a similar field within this southern portion of the overthrust belt is suggested by structural interpretation of a large seismically- mapped 4-way structural closure.

For the Parowan Prospect the prospective 1200-foot thick Triassic Navajo Sandstone lies at a depth of 8000-12000 feet. Other deeper sandstone and carbonate horizons extending to 30,000 feet in depth, offer thick reservoir units with the potential for large reserves of hydrocarbons. The Covenant field exhibits closure over approximately 11,000 acres with about 400 feet of pay in the Navajo thus allowing a projection of nearly one billion barrels of oil within that field. A similar structure lies on the Parowan Prospect Iron County leases, with a potential for an oilfield of similar order of magnitude, particularly when multiple prospective horizons are considered.

If 75% of the 9,000 acres of closure on the 36,000 acre Parowan prospect were to contain reserves, a potential oil target in the order of one billion barrels of oil may be present. A target of this size is possible when one considers the vertical closure of 1,000 feet on the Parowan structure compared with a 400 -foot pay in the Covenant Field.

The Parowan Prospect offers an attractive possibility for oil discovery within the Triassic Navajo sandstone and the overlying Twin Creek and Kaibob Formations over the mapped and projected 4-way structural closure in a prolific oil-generating basin. The closest test well was drilled by Delta Petroleum in 2008 about 8 miles east of the Parowan Prospect. Favorable indications for oil were obtained, but were not of commercial quantity.

Both Pennsylvanian and Permian carbonate horizons, and the deeper Devonian Guillemette carbonates are all relatively untested in this region.

They hold additional upside “wildcat” potential within karsted and fractured carbonates. Also, within the deeper Devonian sequence there are lithologic units similar in nature and potential to the productive Bakken “shale” exploited elsewhere making this unit also a target.

When combined with the main Navajo and Twin Creek targets the total potential for the Parowan Prospect is substantially larger, and could double the proposed potential of one billion barrels of oil for the Parowan Prospect to the two billion barrel level.

Cost of a completed well on the Parowan lease block is estimated at \$3 million, plus \$1 million completion cost or \$4 million total. Additional geological mapping and some gravity surveying may also be required. **An overall budget for a completed well is thus \$4.5 million.**

I recommend participation in the Parowan Prospect as a high reward, overthrust belt wildcat hydrocarbon play.

INTRODUCTION

The Parowan Oil Prospect located in Iron County, Utah, USA, offers an excellent structural and stratigraphic combination for large scale oil and gas discovery. The prospect lies 110 miles south of the spectacular Covenant Oil Field discovered in 1982. Relatively little exploration has been conducted further south in the vicinity of the Parowan Prospect. Potential is excellent for a field of similar nature to the Covenant Field and other large fields further north on the overthrust belt that extends through Utah, Wyoming, and ultimately into Canada.

LOCATION, ACCESS, AND MARKETS

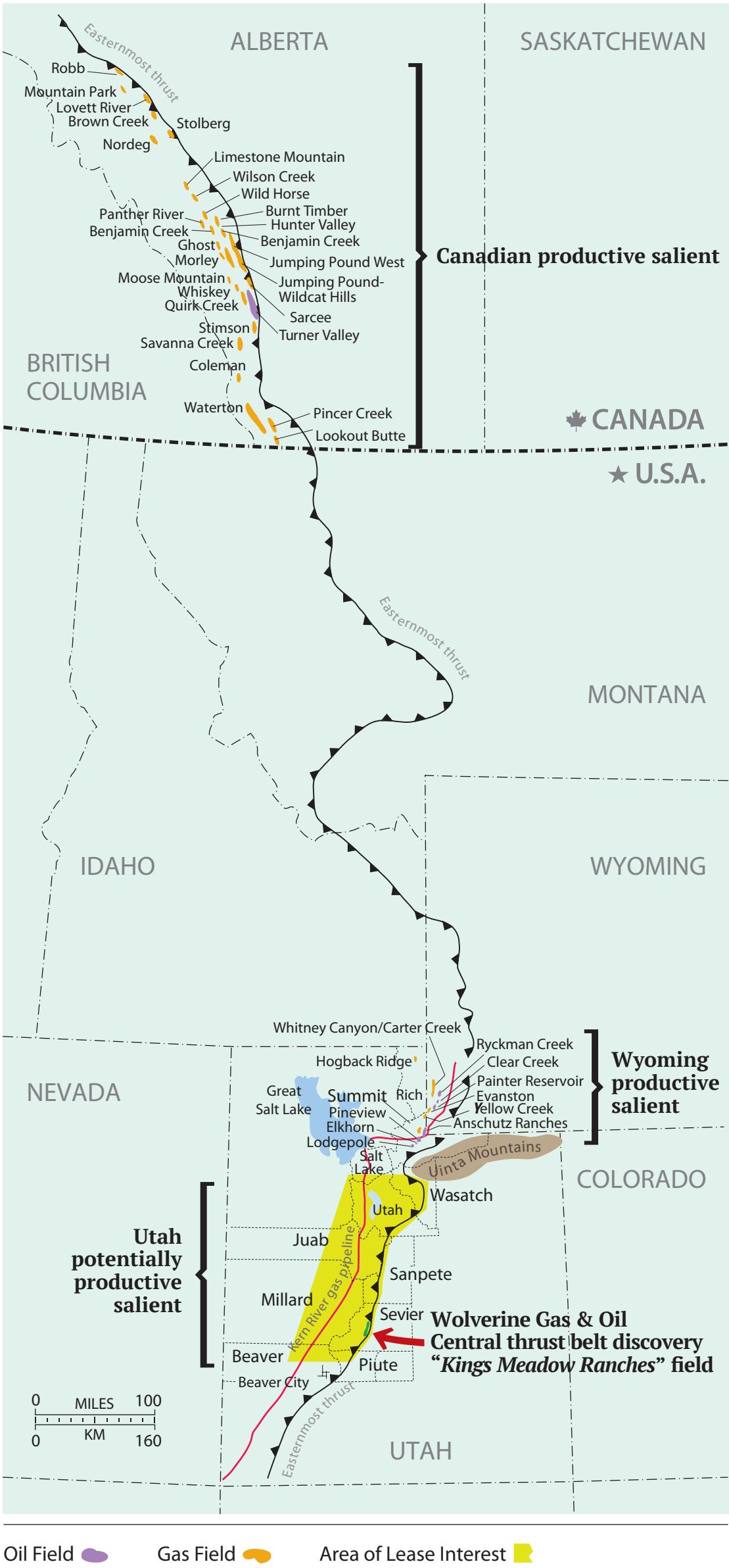
The Parowan prospect is located in southwestern Utah, on the west side of the Hurricane Fault, in Cedar Valley; about 7 miles north of Cedar City, Utah (see Figs 1& 2). It lies on the west side of the leading edge of the Sevier orogenic belt and is in the transition zone between the Basin and Range to the west and the Colorado Plateau province to the east. The southern extent of the Marysvale volcanic field extends to just south of the prospect area. These young volcanics cap much of the area to the north and obscure all surface outcrops of the older rocks, requiring geophysical mapping and interpretation through these rocks.

Access to the area is via Interstate Hwy from Salt Lake City to the north, and from Cedar City 7 miles to the south. The major reference point from recent oil discoveries is that it lies 110 miles south of the spectacular Covenant Oil Field discovered by Wolverine Petroleum in 1982.

Markets for the oil lie in the Salt Lake City area to the north, and in some evolving refinery capacity nearer to the Covenant Field. Trucking to the west to California refineries is also a possibility depending on markets. Rail transport is evolving rapidly for crude oil and various possibilities lie on rail.

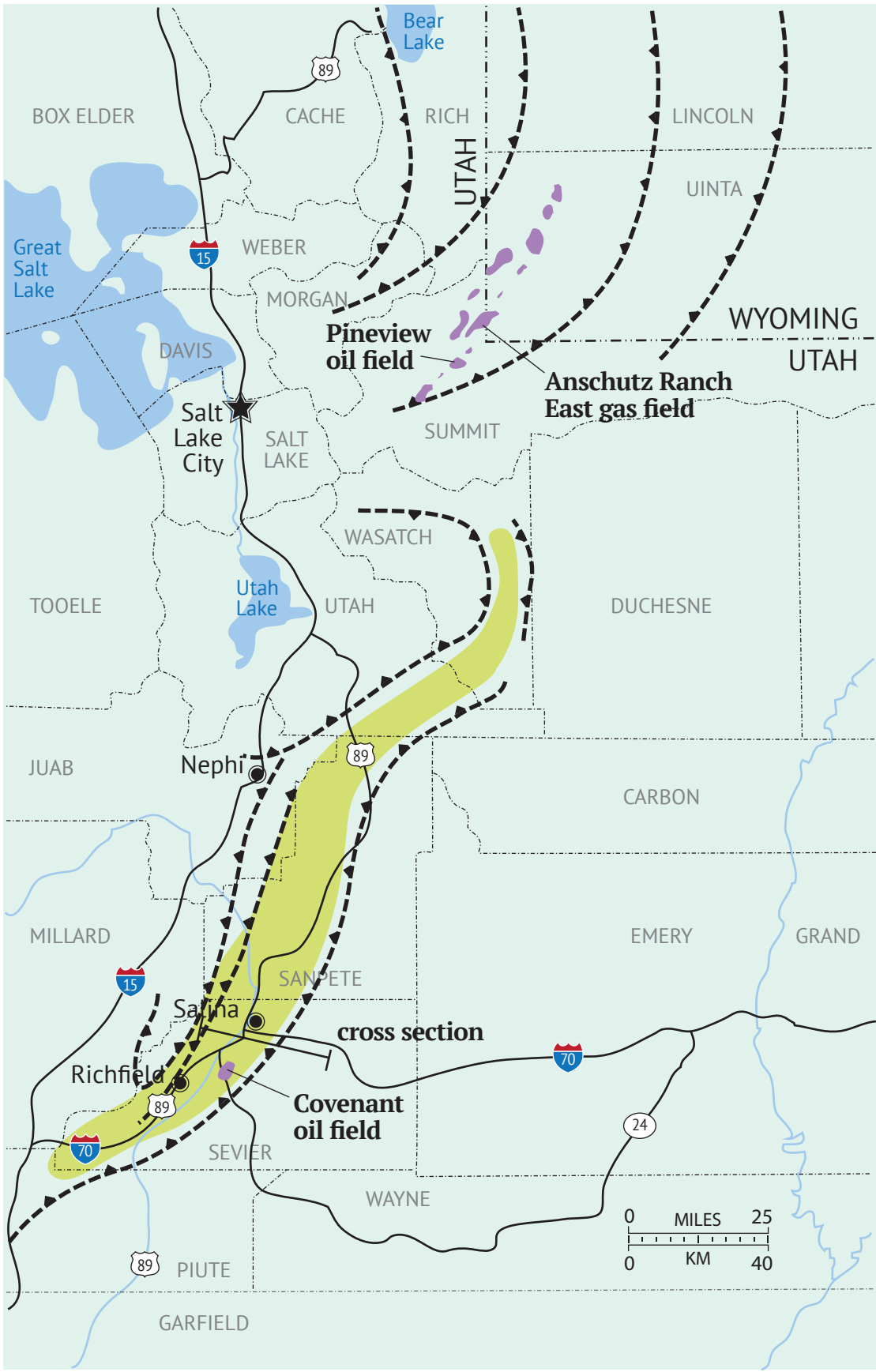
The property consists of 36,000 acres of leases; located 7 miles north of Cedar City, Utah (See Figure 3).

FIG.1 Thrust Belt Trend of Western North America



Source: Moulton and Pinnell (2005)

FIG.2 Central Utah Thrust Belt



Oil / Gas Field Thrust fault

Map courtesy of Utah Geological Society (2005)

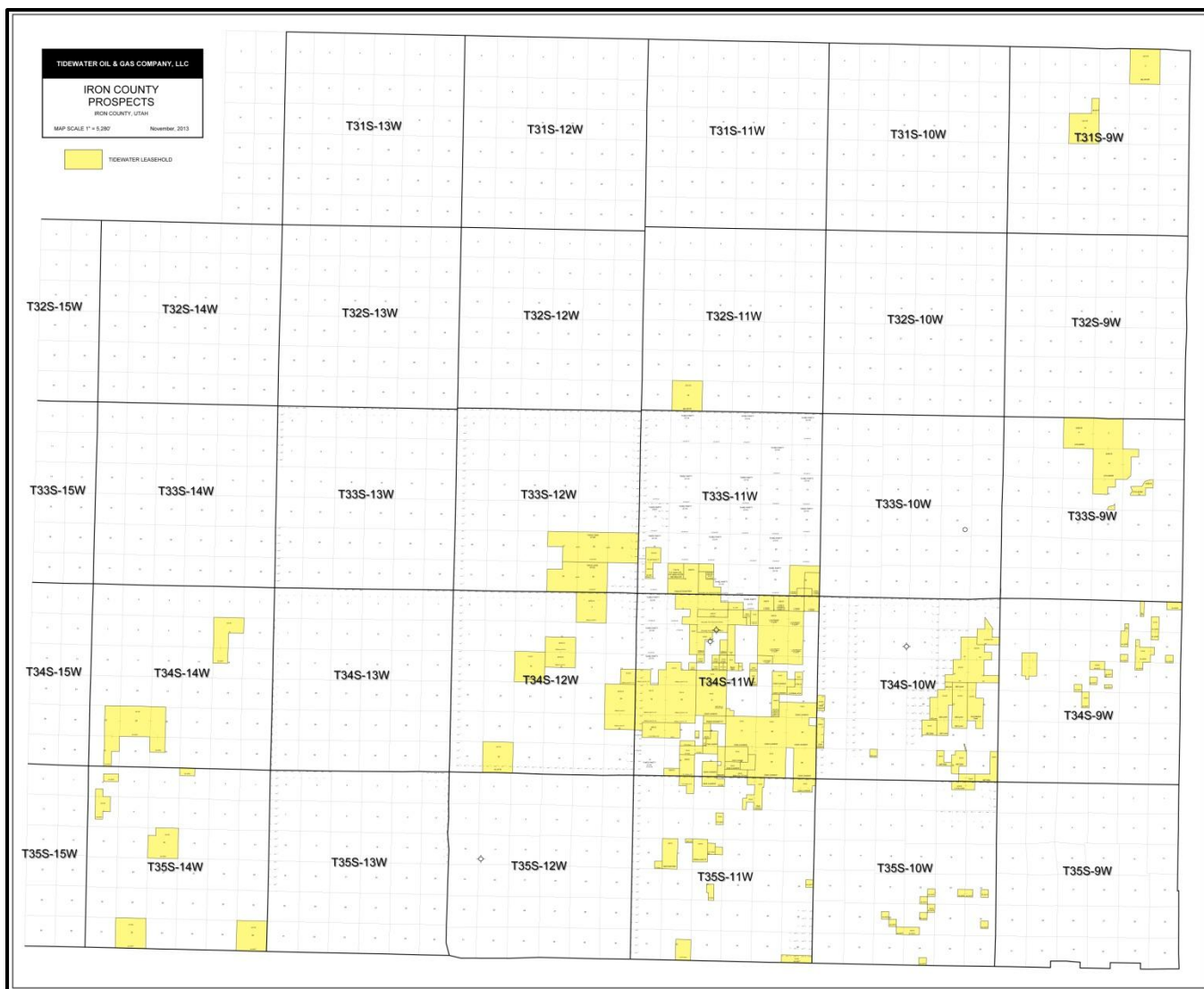
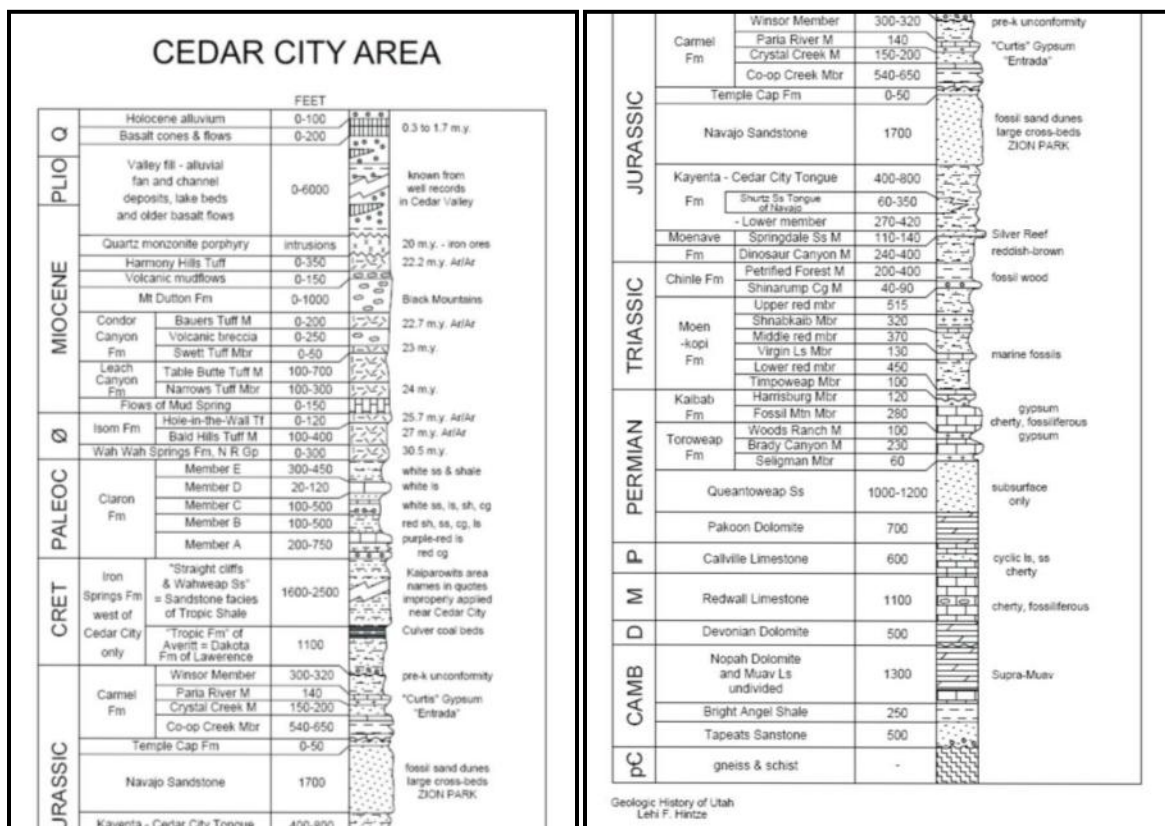


FIGURE 3: LOCATION OF THE PAROWAN PROSPECT, 36,000 ACRE LEASE TRACT, IRON COUNTY, UTAH

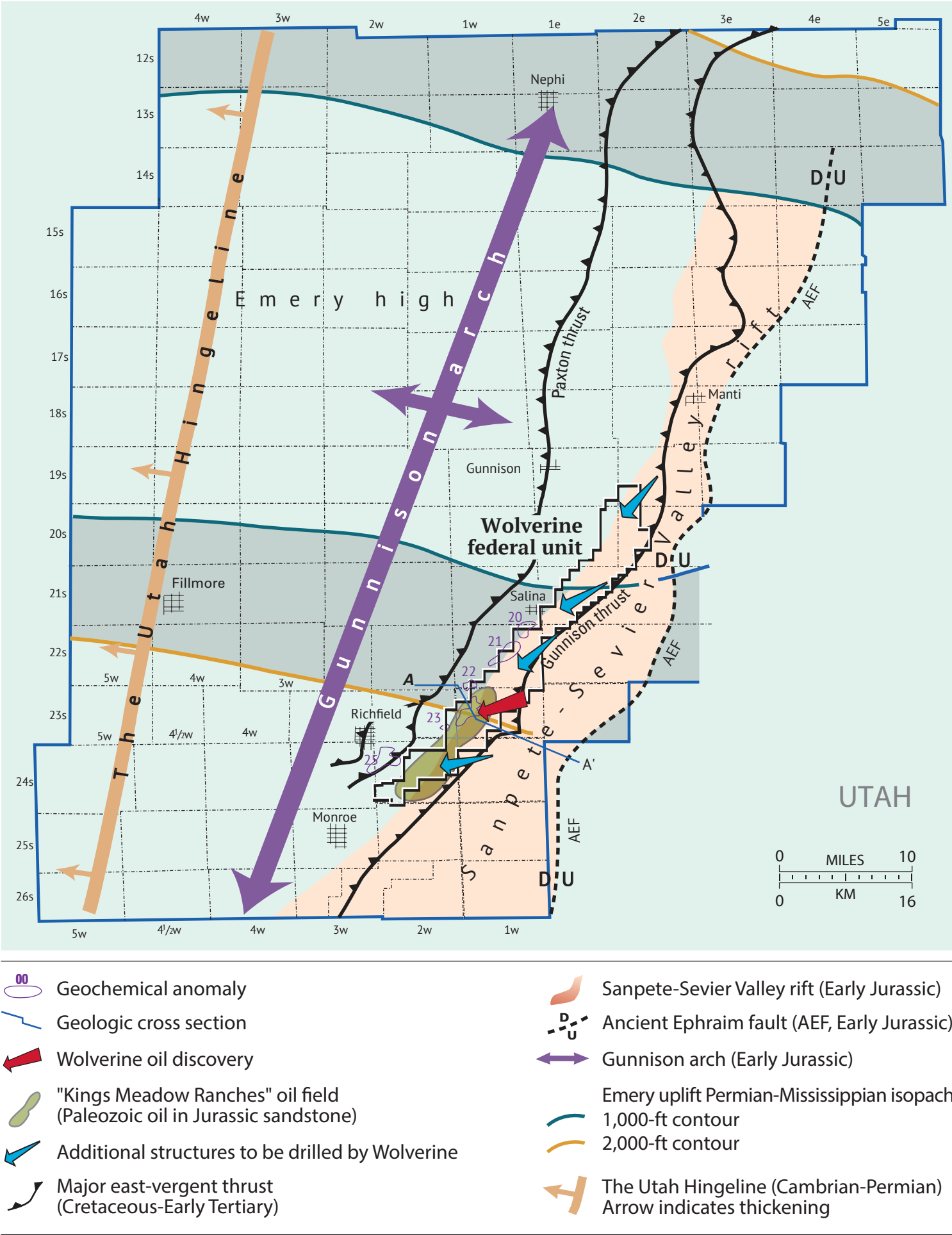
GEOLOGY AND GEOPHYSICS

The Parowan Prospect lies along the southward extension of an extensive fold belt extending clear from central Canada, and which contains major discoveries in many locations. These include the Covenant and Providence discoveries of Wolverine Petroleum in the vicinity of Richfield, Utah (Figures 1 & 2), the Anschutz Ranch East and Anschutz Ranch and Pinedale fields of northern Utah-southern Wyoming (Figure 2), as well as the long known Turner Valley field in Alberta, Canada (Fig. 1). All of these fields have resources in the order of a billion barrels or more, representing the backbone of overthrust production, and providing strong incentive for wildcat testing of potential structures on the southern extension of this belt outstanding productive unit is the Navajo Sandstone, an aeolian sandstone of Jurassic age which blankets the whole region as shown on a thickness contour map (See Figure 5). Throughout the area the thickness exceeds 1200 feet in this area.



**FIGURE 4: STRATIGRAPHIC COLUMN FOR CEDAR CITY AREA, UTAH
(AFTER HINTZE, 1998)**

FIG.5 **Location Beaver Prospect, Beaver & Sevier County, Central Utah, showing position relative to the Covenant Oil Field**



Source: Geology by Floyd Moulton

PROSPECTIVE PRODUCTIVE UNITS

The Jurassic Navajo Sandstone constitutes the major target in the area but the Twin Creek and Kaibab formations overlying the Navajo are prospective as well (Figure 4). These units are all productive at the Covenant field.

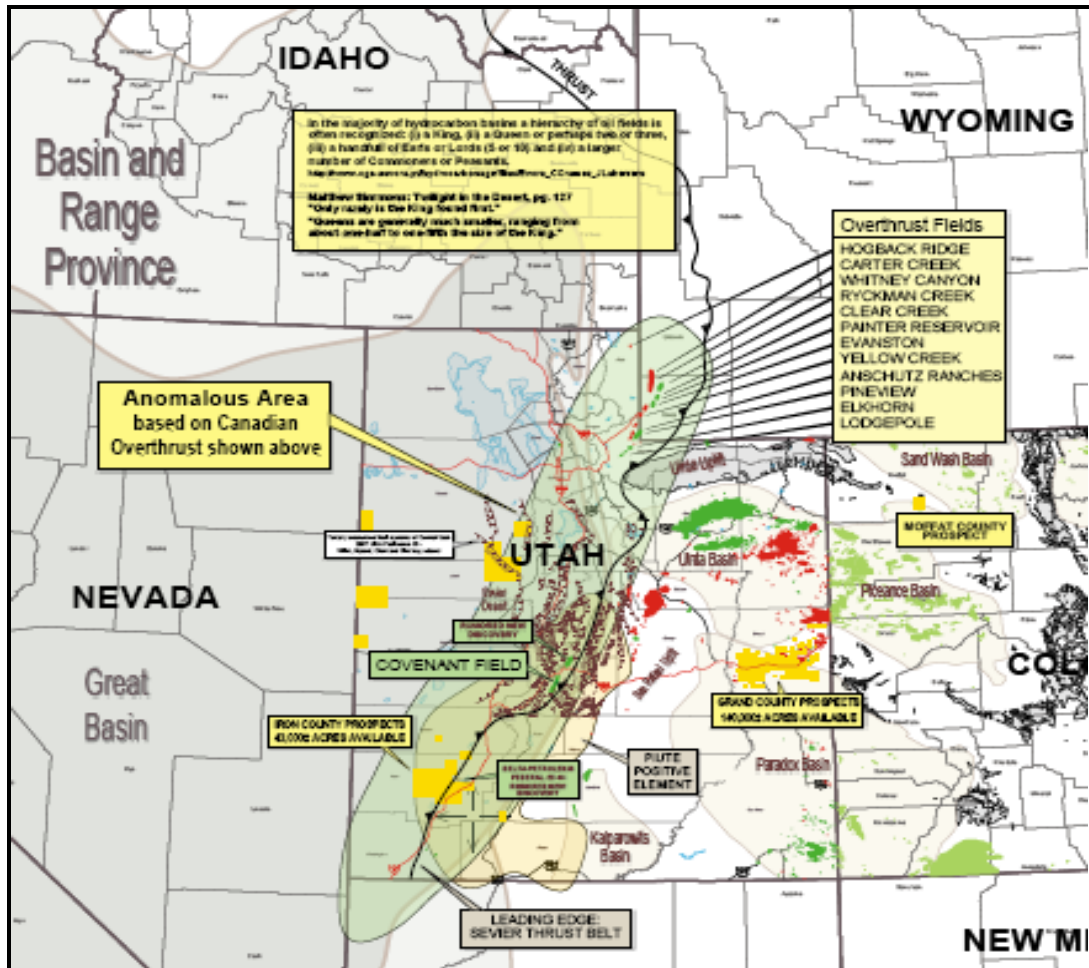
Additionally the Diamond Creek Sandstone is rumored to be productive in the Providence field north of the Covenant field. The Shurtz Tongue of the Navajo Formation is a “sleeper” objective in the Parowan prospect. This unit locally developed in the Kayenta red bed shale’s holds more than 300 feet of Navajo-like porosity and permeability and represents a “wildcat” target.

Deeper horizons that remain as targets throughout this area are Permian, Pennsylvanian, Mississippian and Devonian carbonates which have not been penetrated (Figure 4). These units are prolific producers elsewhere and warrant testing, particularly for karsted dolomites which have a widespread distribution in Utah and Nevada, and which are very productive in Railroad Valley, Nevada. Salt solution features may also be present at depth since the stratigraphy is little known, and these may present secondary complex porosity development as in the Paradox basin to the southeast of this region in southeastern Utah.

The total section as shown in the cross section for Covenant Ranch reaches 30,000 feet in thickness (Figure 12). The deeper portion of the section in this area is relatively unexplored.

STRUCTURAL GEOLOGY

The Parowan Prospect is located on the west side of the Hurricane Fault, in Cedar Valley about 7 miles north of Cedar City, Utah. This area is a portion of a complex overthrust and underthrust array of stratigraphic units (See Figures 6, 7 & 8). The detailed structures as defined by geology and geophysics are shown as Figures 9 & 10. In general the Parowan Prospect lies southwest along the complex structural front within which the Covenant Oil Field is developed (Figures 9 & 10).



**FIGURE 6: MAP OF UTAH SHOWING PROSPECTIVE AREAS
ALONG THE OVERTHRUST FRONT**

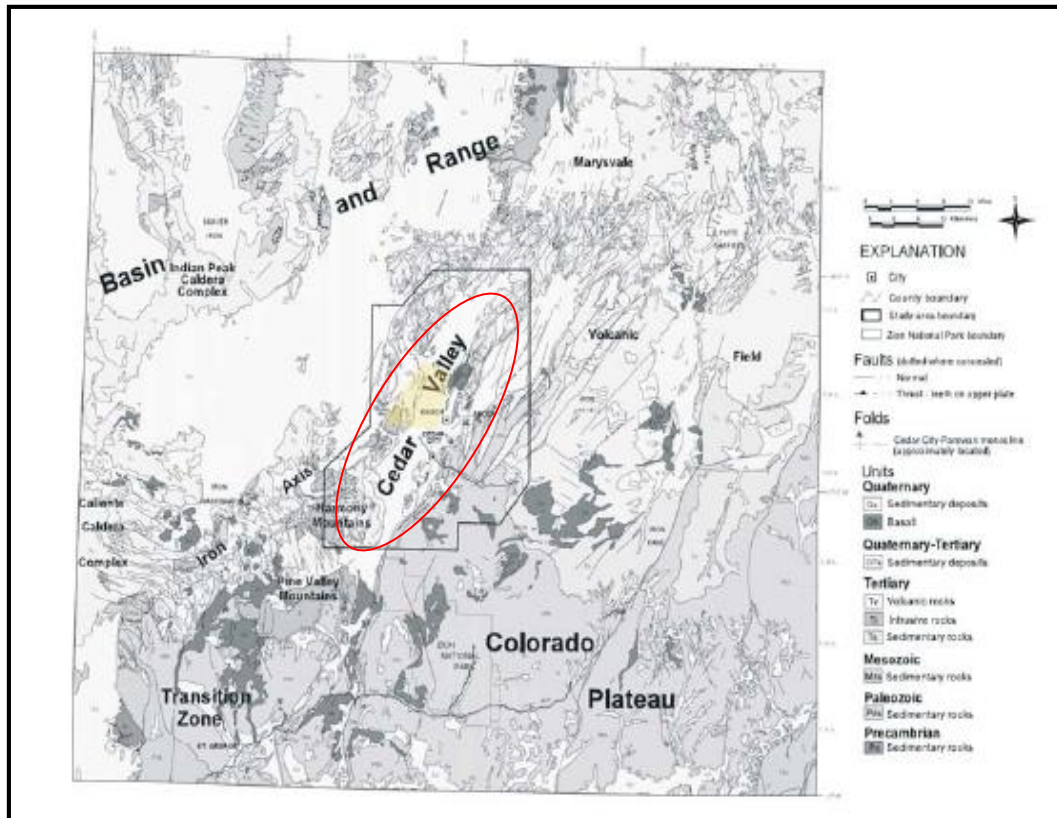


FIGURE 7: CEDAR VALLEY AREA, PAROWAN PROSPECT LOCATION

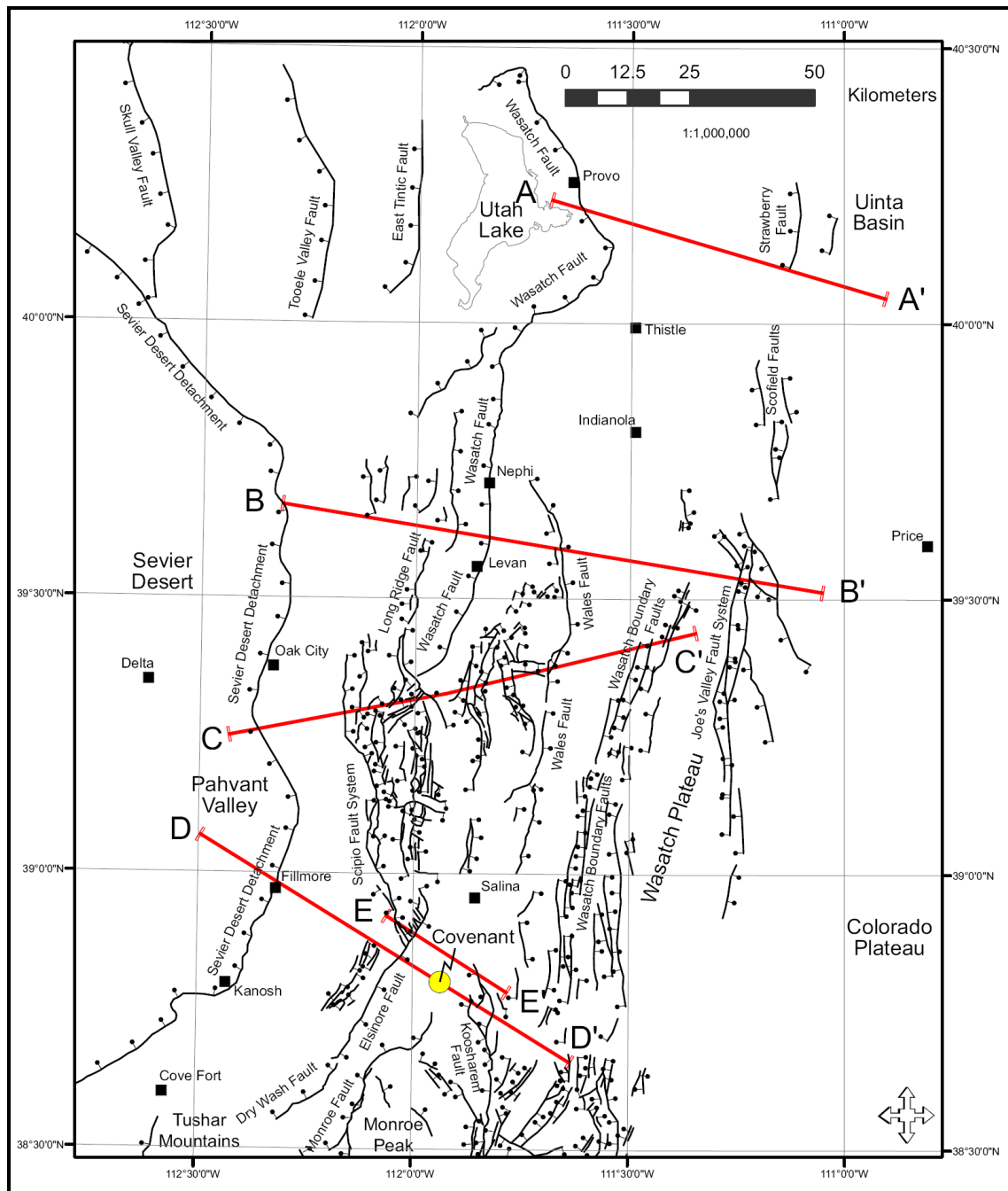


FIGURE 8: MAP SHOWING COMPLEX THRUST FAULTING IN THE VICINITY OF THE COVENANT FIELD, UTAH

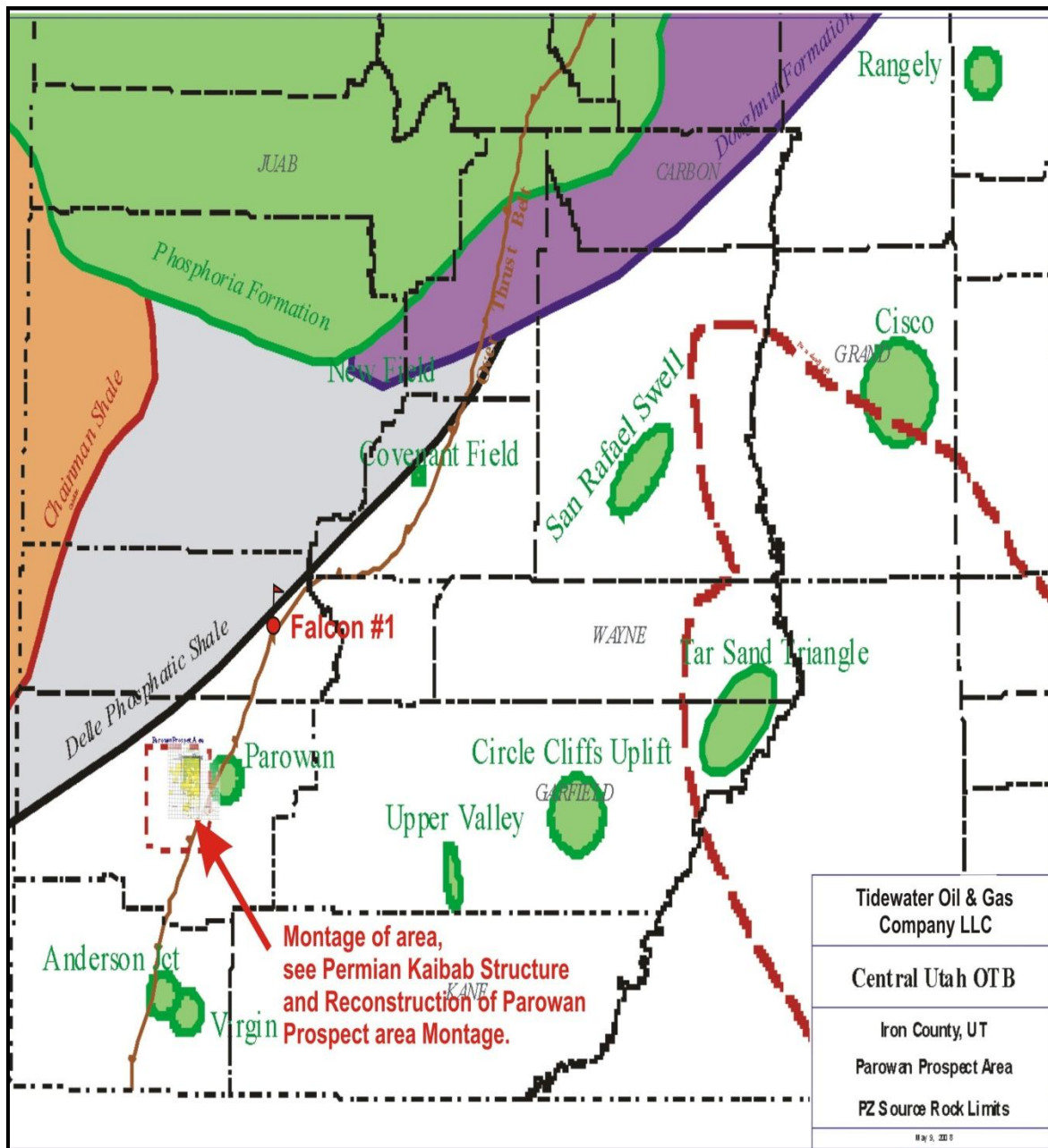


FIGURE 9: LOCATION OF PAROWAN PROSPECT RELATIVE TO FALCON #1 AND COVENANT FIELD

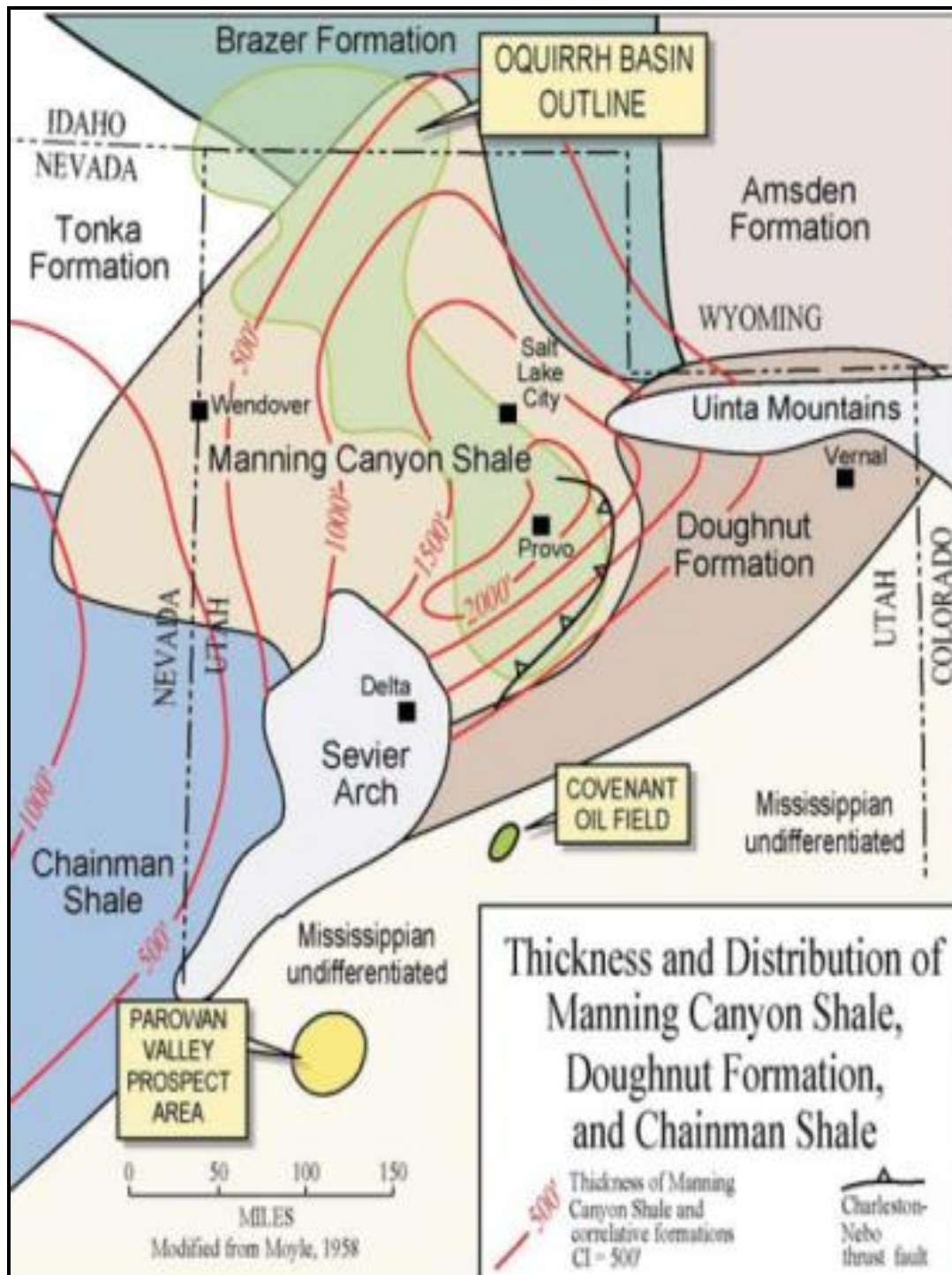


FIGURE 10: LOCATION OF PAROWAN PROSPECT RELATIVE TO CHAINMAN SHALE SOURCE ROCK

GEOCHEMISTRY AND ADJACENT WELL SHOWINGS

Figure 11 outlines the Parowan Prospect and locates five nearby wells four of which contain oil shows and oil productivity. Hydrocarbon anomaly map showing ethane/propane soil gases (from Van Kooten, 1988) show an active hydrocarbon system surrounding the Parowan prospect.

To the east the Delta Parowan #23-44 Twin Creek Discovery did not result in an economic unit. The Permian appeared prospective but lost circulation during drilling and inability to run pipe through the interval resulted in no test. To the south the Odessa Cedar City # 1 returned good oil show samples in the Kaibab, and drill stem tested wet. The Arco Three Peaks #1 to the southeast returned 12-18% oil saturation in the Kaibab fractures in core. To the west the Hunt Table Butte No 1 has no show information available.

The Falcon Well recently drilled as a tight hole lies 9 miles to the north. See figure 9.

Parowan Regional Activity – insert figure

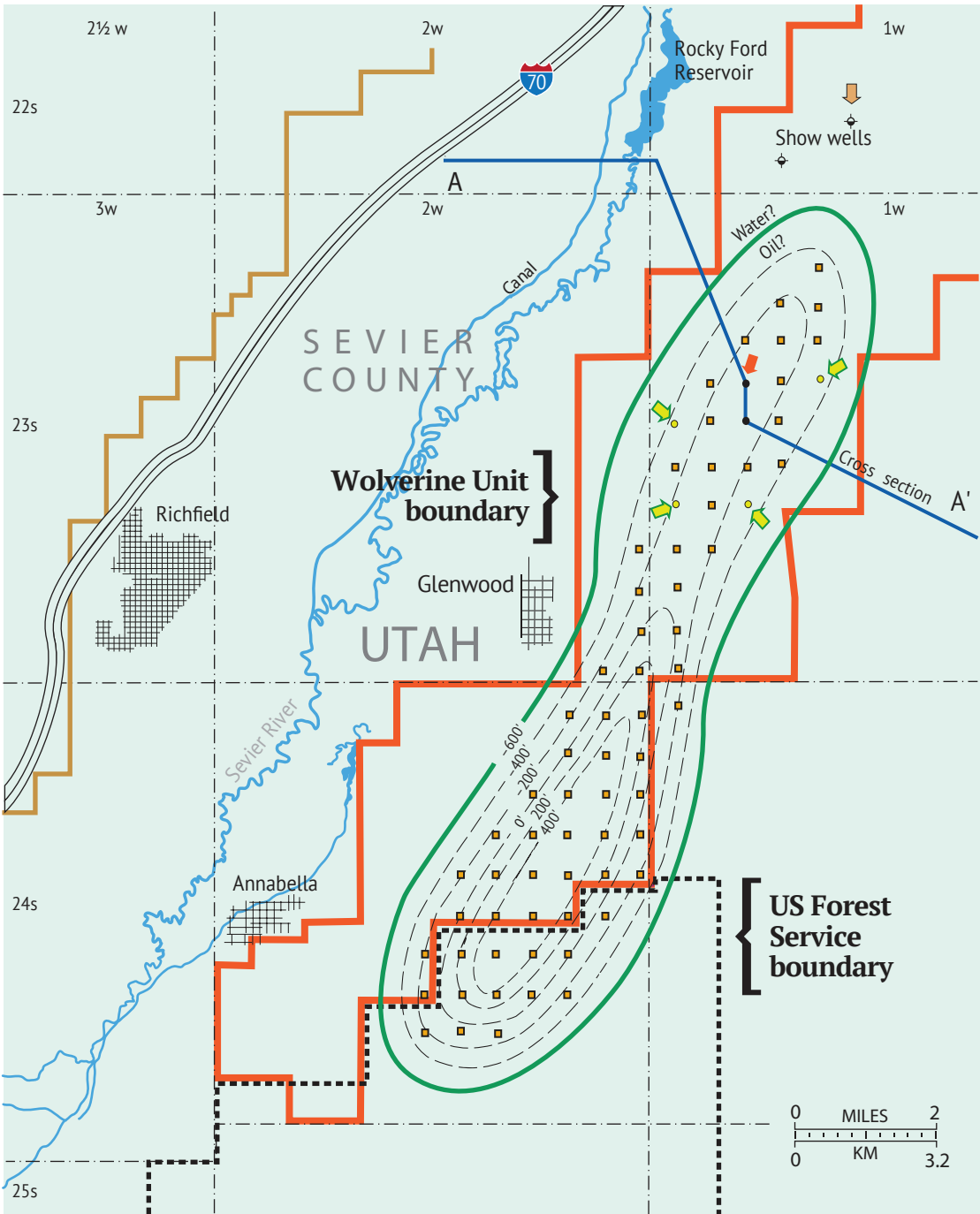
On a more regional basis several current plays are proceeding. Ten miles to the north of the Covenant Field, the Wolverine Fisheye State 32-1 Well Location has been permitted, but has not yet been drilled.

On the west and southwest flanks of the Covenant Field the multi-component West Flank Project is being currently marketed with targets originally located on Chevron's geological-geophysical maps created before their farm out of their acreage to Wolverine Gas and Oil. The Covenant Field was discovered by Wolverine as part of their successful testing of the Chevron Acreage.

To the south of this West Flank Project the Falcon Exploration 12,000 foot Navajo test has recently been completed as a tight hole with no information yet released. All of these active plays reflect favorably on the potential for the Parowan Project.

FIG.9

Structure on Jurassic Navajo Sandstone,
Covenant Oil Field, Central Utah.



Wolverine discovery well

Well location on 160-acre spacing

Proposed bottomhole location, directional well

Contour interval 200 ft

Source: Moulton and Pinnell (2005)

Source: Wolverine handout at NAPE Prospect Expo; Utah Division of Oil, Gas & Mining, and IHS Energy 10-18-2004. Base map from US Geological Survey. Map and geology by Floyd Moulton.

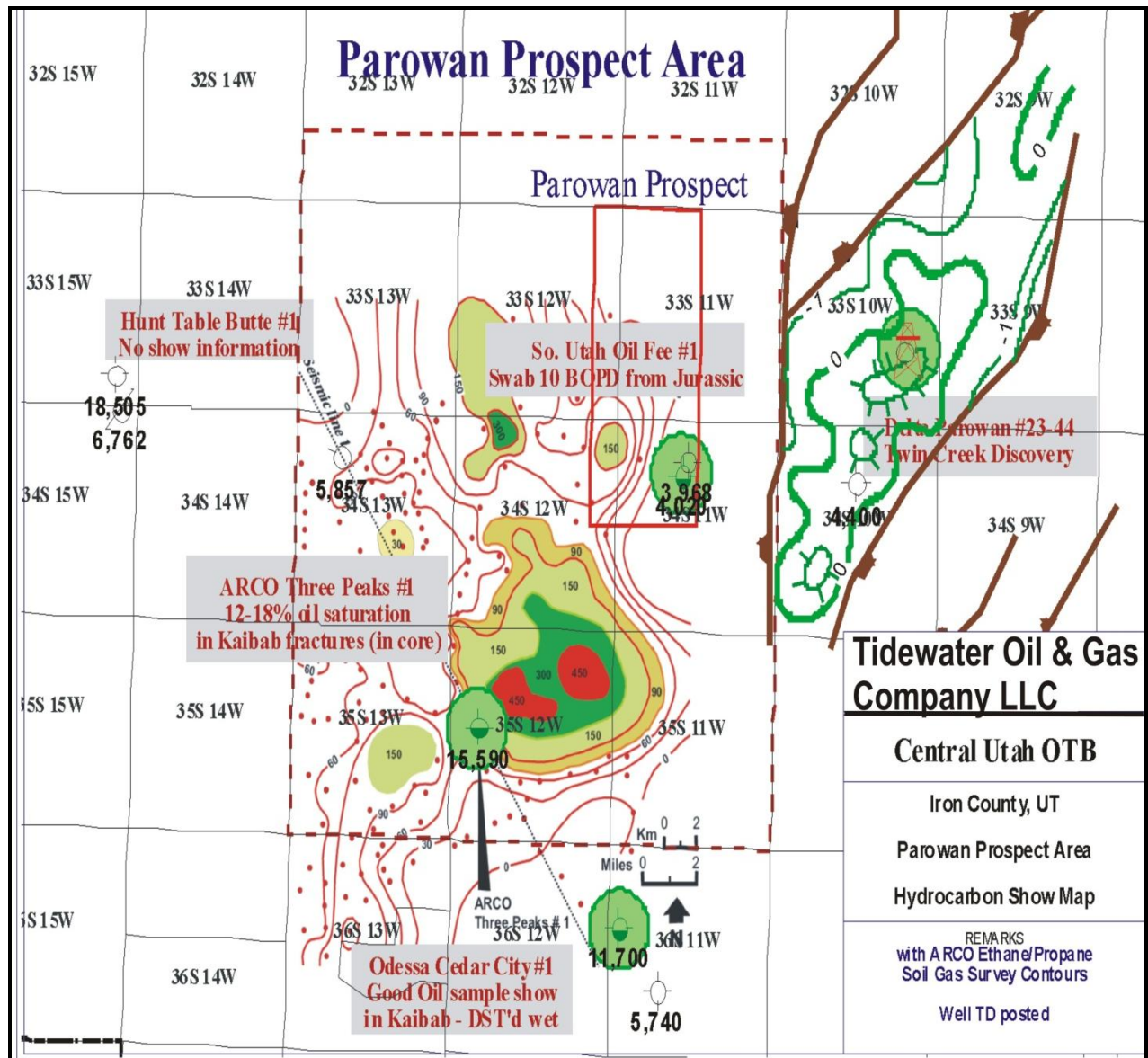


FIGURE 11: COMBINED HYDROCARBON SHOW MAP AND ETHANE/PROPANE SOIL GAS MAP RELATIVE TO PAROWAN PROSPECT

PROPOSED DRILL TEST

To evaluate the Navajo, Kaibab, and Permian Queantoweap Sandstones a 12,000 foot test is needed. This test is proposed for a large seismically mapped 4-way structural closure. All of the other test wells in the region appear to be off-structure but still had significant oil shows.

The deeper carbonate horizons, the Permian, Pennsylvanian, Mississippian and Devonian will require a deeper well penetration to evaluate the potential for these horizons. Figure 12 illustrates the nature of the Covenant Field and the much deeper untested horizons which extend throughout the extent of this overthrust belt.

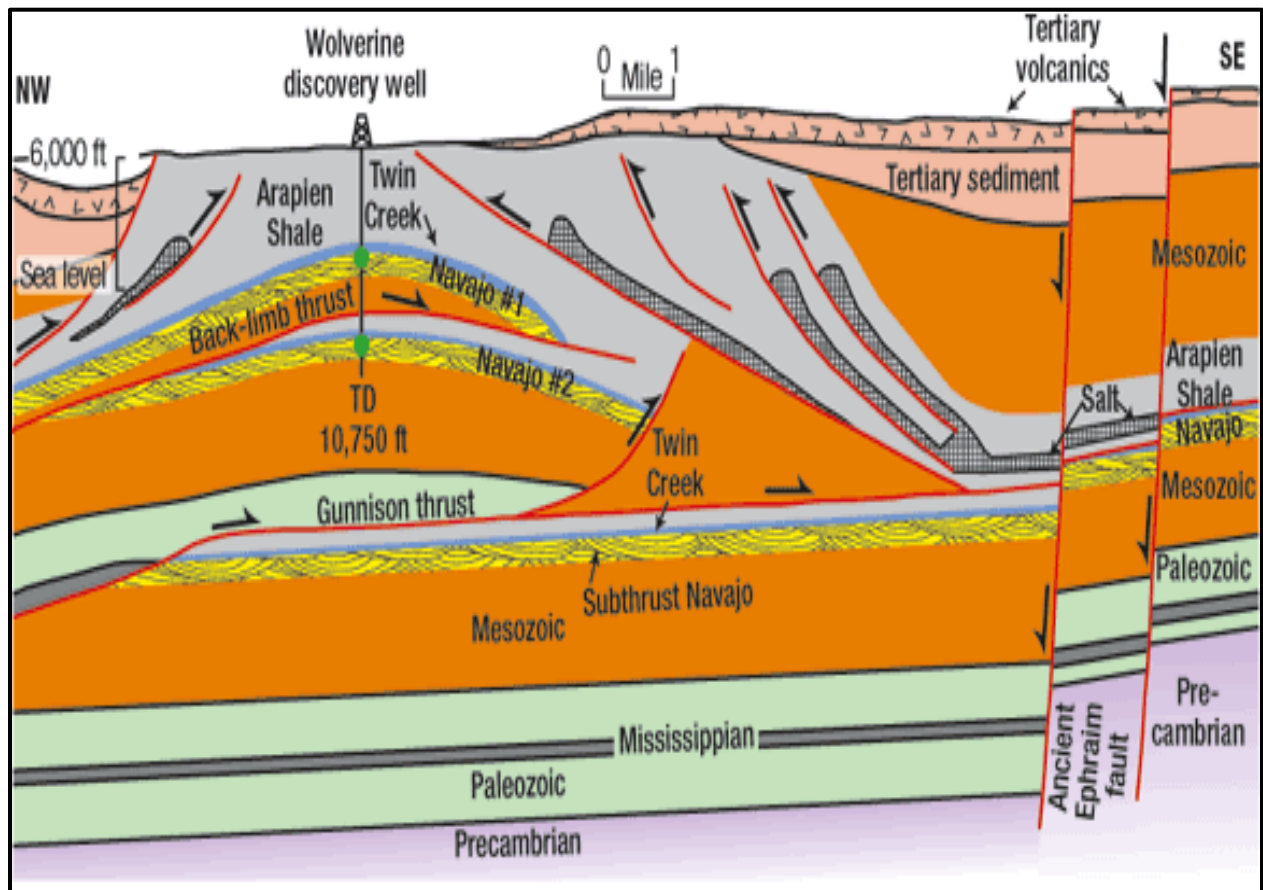


FIGURE 12: COVENANT FIELD SHOWING 30,000 FEET OF STRATIGRAPHY ABOVE BASEMENT

POTENTIAL RESERVES

The Parowan prospect is structurally analogous to the Covenant Field in many ways. The structure identified by Tidewater as a 4-way closed structure on a back-thrusted splay of a larger Sevier age fault bend fold. The end result is a 1000 feet of vertical closure extending over 9000 acres.

The Navajo alone in this area is projected to have 1200 feet of thickness. Extrapolating from the Covenant which contains 200 barrels per acre-foot and extending over 1000 feet in thickness in the Parowan area, and over an aerial extent of 9,000 acres generates a potential of 1.8 billion barrels of oil for the Navajo alone within the Parowan Prospect. The possible configuration of a reservoir of this nature is illustrated in Figure 13, a contour map of the Covenant field.

Additional possible reserves may be discovered in the overlying sandstones, and in the deeper Permian Kaibab sands, and in the deeper Pennsylvanian, Mississippian and Devonian carbonates. When the potential for these deeper units is considered then the potential total exceeds 2 billion barrels, and could possibly be much larger.

BUDGETS

The cost of penetrating the Jurassic Navajo and Permian Kaibab units is estimated at \$ Million.

Deeper testing of the underlying Pennsylvanian, Mississippian, and Devonian carbonates will add an additional \$ Million.

SUMMARY

The Parowan prospect holds potential for in excess of 2 billion barrels of oil and oil equivalent. This represents a highly rewarding wildcat drilling opportunity. I recommend participation in this project to drill at least to the Jurassic Navajo and Permian Kaibab units. Consideration should be given to deeper drill testing, perhaps following success in the initial target horizons.

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