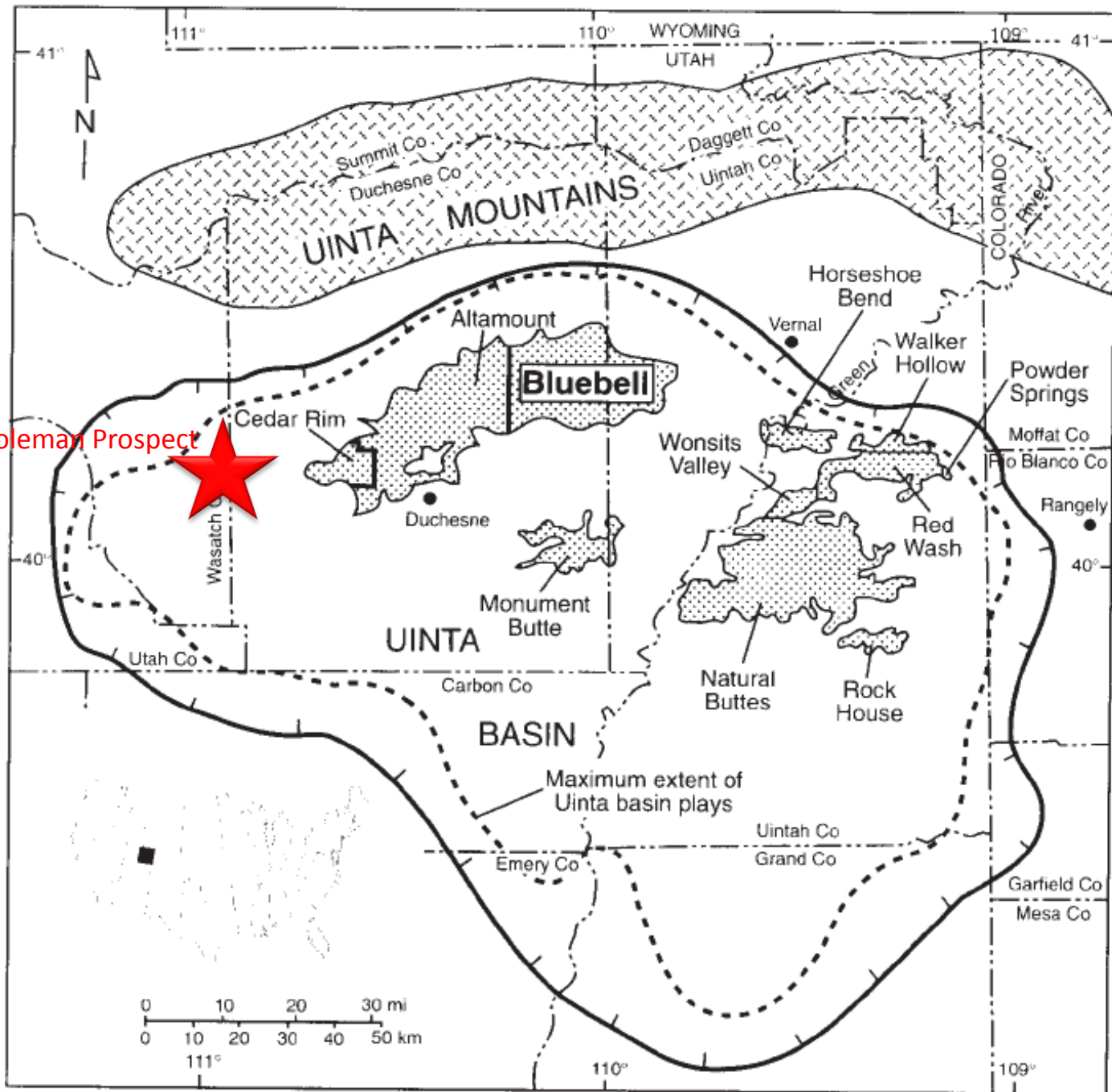


# Coleman Lease Evaluation

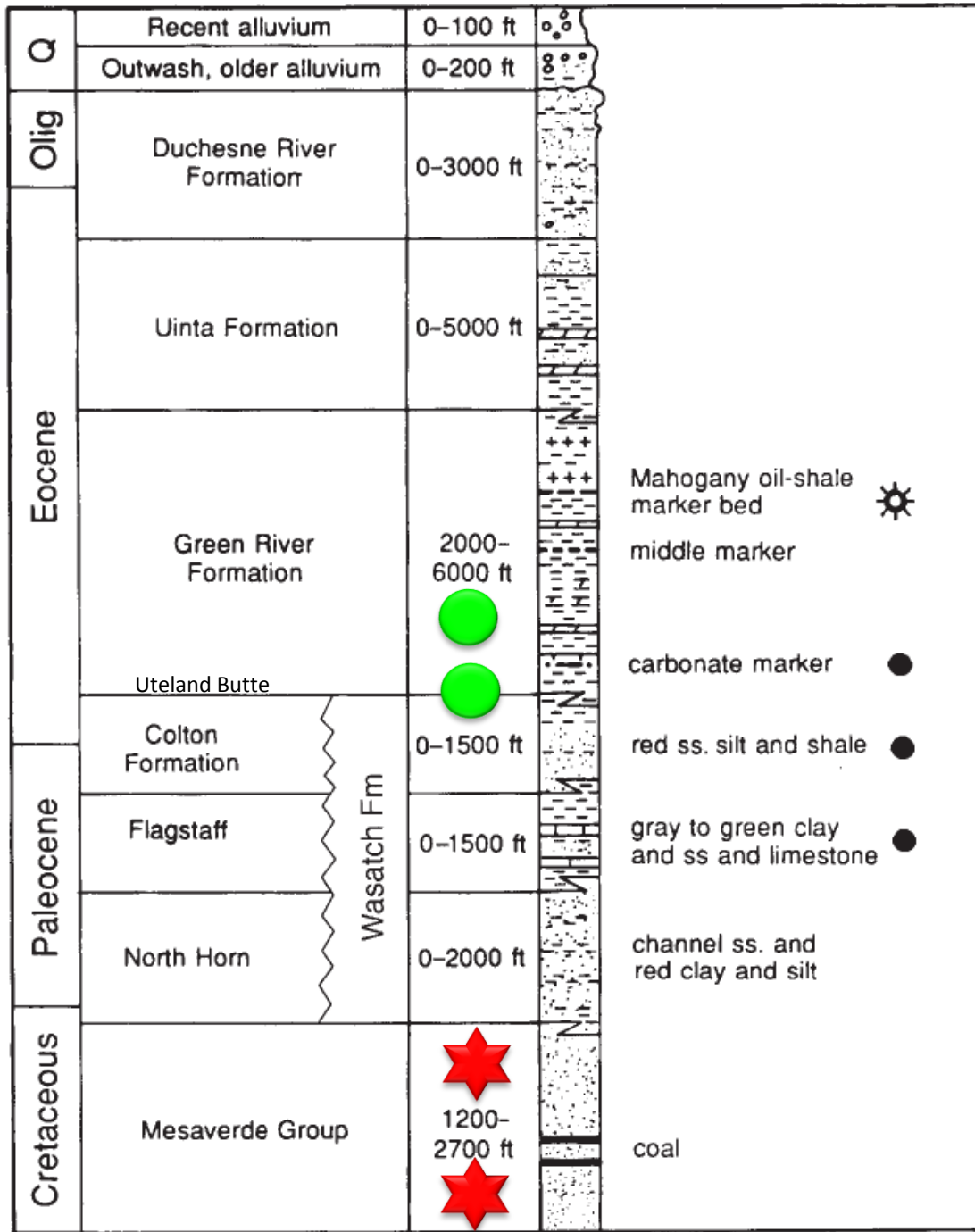
## Key Slides



Pioneer Oil and Gas  
1206 W. South Jordan Parkway  
Unit B  
South Jordan, UT 84095  
(801) 566-3000  
Full Report at [www.piol.com](http://www.piol.com)



Uinta Basin Major Fields



Uinta Basin Stratigraphic Column

## **Horizontal Drilling – Western Edge Altamont-Bluebell Field Near the Coleman Prospect**

Fouch, et al (1994) have stated that in the Uinta basin “*oil-bearing reservoir rocks commonly extend beyond field limits.*” This statement is supported by the current high level of drilling activity along the western edge of the Altamont-Bluebell trend. Bill Barrett is very active in this area.

The various well symbols shown in Slides 4, 5 and 6 represent the status of wells along the western edge of the Altamont-Bluebell field as reported by the state of Utah on December 5, 2011. Open red circles are proposed drilling locations with an approved drilling permit. The red circles with right-angle bent lines extending from the top and bottom are wells that have been approved and are currently drilling. Red circles with a horizontal line are new drilling permits not yet approved. Most of these proposed locations are operated by Bill Barrett Corporation.

Bill Barrett Corporation has drilled four horizontal wells in the area enclosed by the red box in slide 4. Slide 5 shows this area in more detail. The Bill Barrett Corporation horizontal wells are highlighted with green circles and the estimated horizontal extent of laterals is shown by green lines. Directional surveys are not available and an approximate bottom-hole location was reported for only one to the four wells. These wells are all located in Township 4 South Range 6 West and each have a single lateral ranging from 3100 to 3400 feet in length drilled in the Lower Green River Uteland Butte interval. All four wells were stimulated with a 15-stage fracture treatment (IHS, Energy News, 2011, Nov 29<sup>th</sup>).

The first well drilled by Bill Barrett Corporation, the 13H-20-46 Lake Canyon-Tribal in section 20 had an initial peak rate of 1300 BOE (barrels of oil equivalent) per day and averaged 717 BOE per day for the first 30 days of production. The second well drilled by Bill Barrett Corporation, the 12H-32-46 Lake Canyon-Fee in section 32 had an initial peak rate of 738 BOE (barrels of oil equivalent) per day and averaged 329 BOE per day for the first 30 days of production.

The third horizontal well, the 12H-28-46 Lake Canyon-Tribal in section 28 had an initial peak rate of 1330 BOE (barrels of oil equivalent) per day and averaged 707 BOE per day for the first 30 days of production. The fourth horizontal well, the 13H-21-46 Lake Canyon-Tribal in section 21 had an initial peak rate of 863 BOE (barrels of oil equivalent) per day and averaged 596 BOE per day for the first 21 days of production.

It is too early to estimate EUR (estimated ultimate production) for any of these wells but Bill Barrett Corporation is “very pleased” with results to date and wells are producing “better than expected” (IHS, Energy News, 2011, Nov 29<sup>th</sup>). Bill Barrett Corporation has 400 proposed locations in the area. The closest of these are located 2 to 8 miles east of Coleman tracts.

Horizontal drilling offers tremendous potential for improved recovery of oil and gas from the thick high TOC Green River-Wasatch interval and should extend production to the west along trend. In fact, the cross section shown in Slides 6 (in blue) and 7 show that the potential Uteland Butte reservoir over the Coleman lease may actually be better than in the area of Barrett’s horizontal wells.

# Green River - Wasatch Drilling Activity

**PIONEER OIL & GAS**

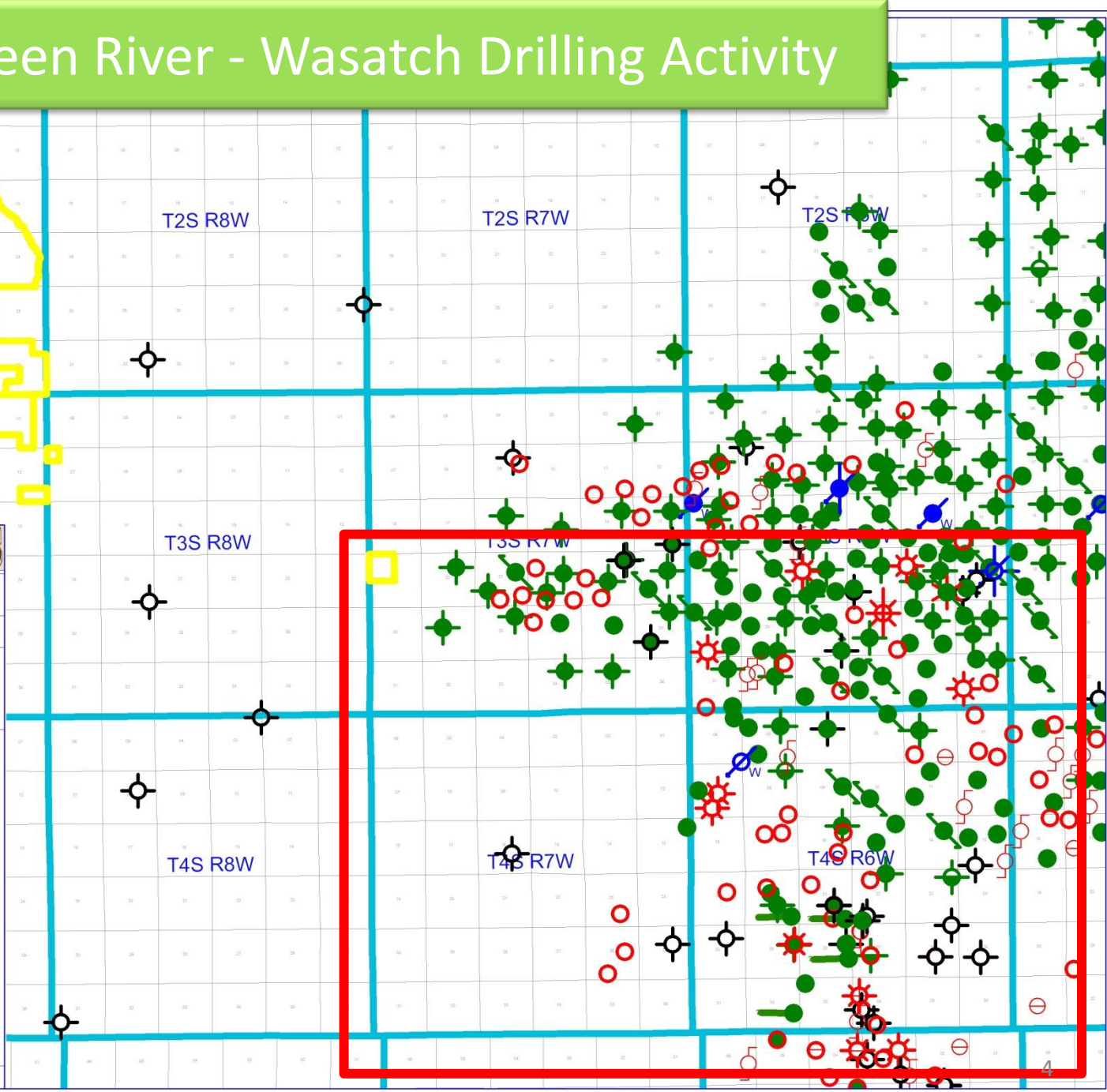
Coleman Prospect

Activity Map



- WELL SYMBOLS**
- Permit Approved
  - New Permit not yet approved
  - Drilling
  - APD not approved
  - Shut in water injector
  - Oil Well
  - Gas Well
  - Dry Hole
  - Drilled Water-Input Well
  - Converted Water-Input Well
  - Dry Hole, With Show of Oil
  - Suspended Undesignated
  - Abandoned Water Injector
  - Abandoned GAS Well
  - Shut In Oil Well
  - Shut In Gas Well
  - Abandoned oil well

By: David Keller



# Green River Horizontal Wells

**PIONEER OIL & GAS**

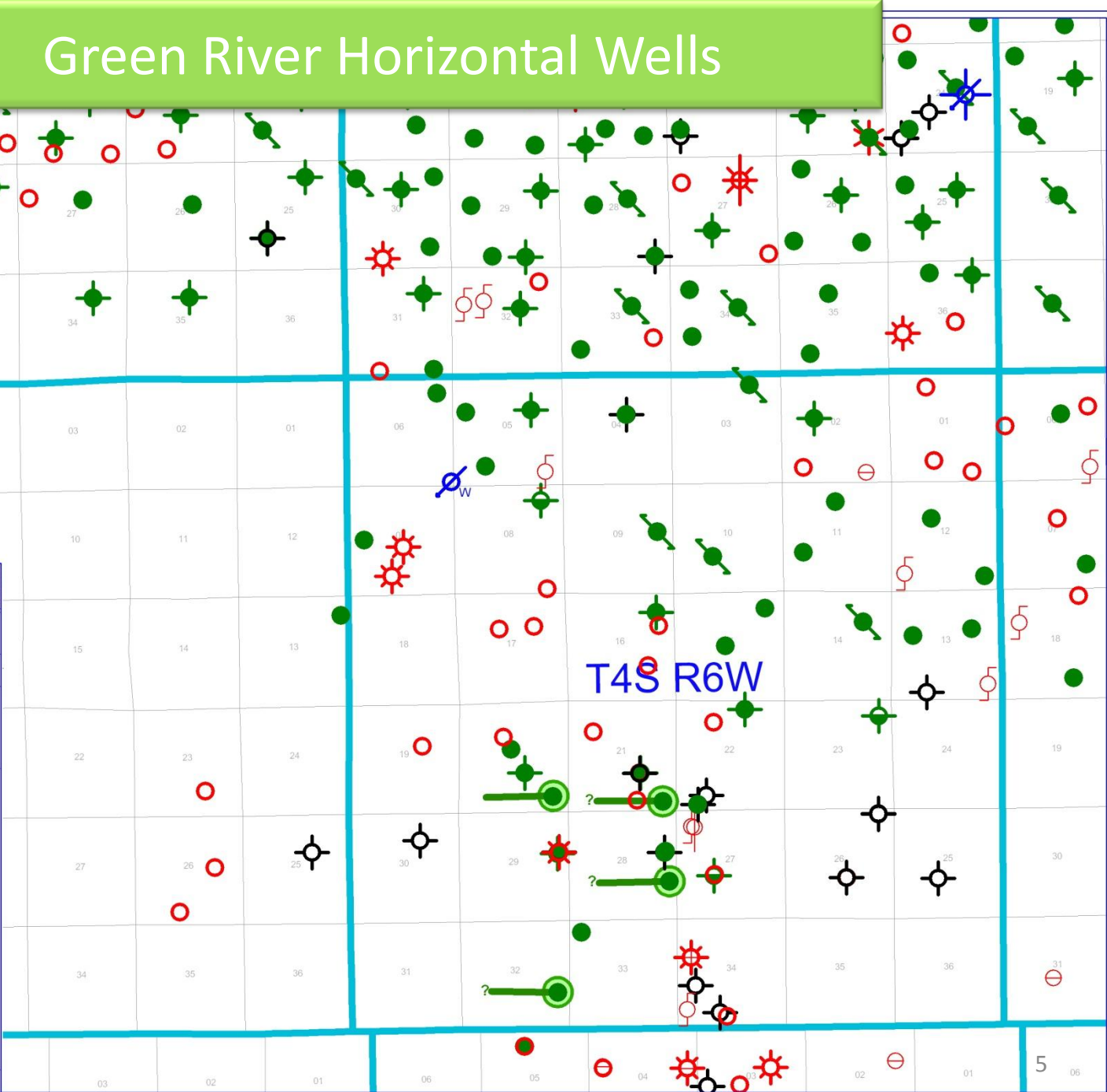
Coleman Prospect

Bill Barrett Corp Horizontal Wells

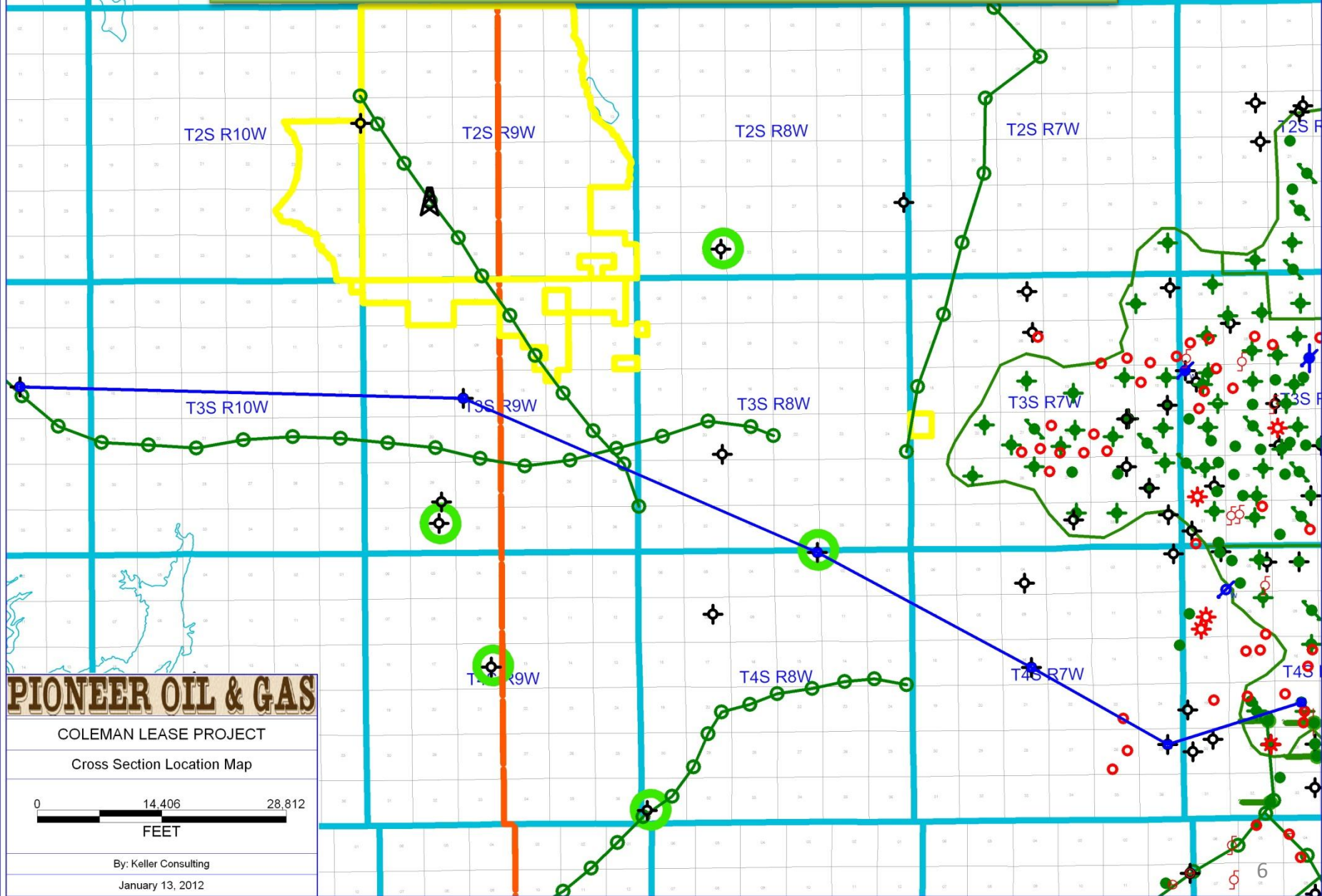


- WELL SYMBOLS**
- Permit Approved
  - New Permit not yet approved
  - Drilling
  - APD not approved
  - Oil Well
  - Gas Well
  - Dry Hole
  - Drilled Water-Input Well
  - Dry Hole, With Show of Oil
  - Suspended Undesignated
  - Abandoned Water Injector
  - Abandoned GAS Well
  - Shut In Oil Well
  - Shut In Gas Well
  - Abandoned oil well

By: David Keller



# Green River Horizontal Wells



**PIONEER OIL & GAS**

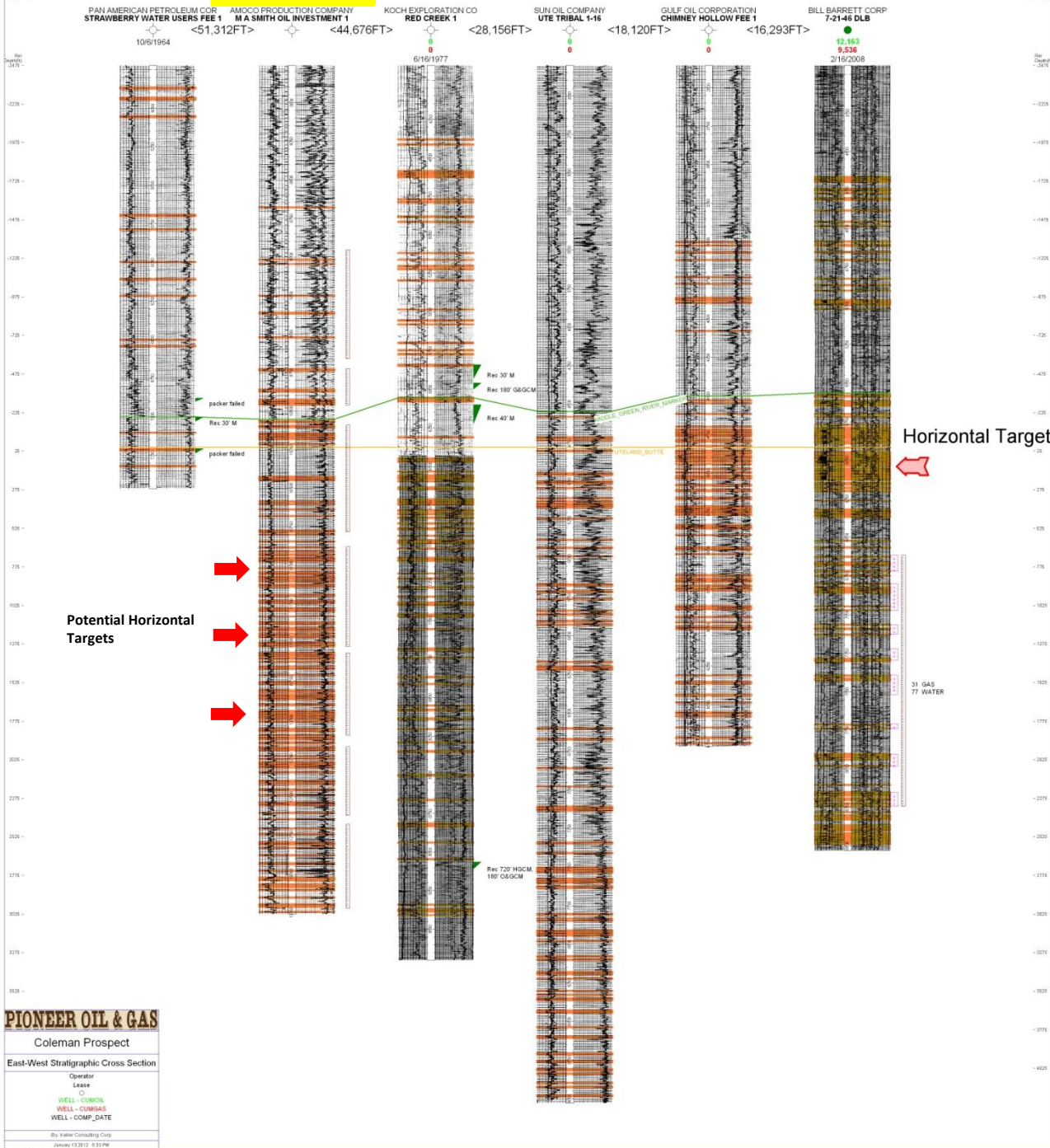
COLEMAN LEASE PROJECT

Cross Section Location Map



By: Keller Consulting

January 13, 2012



Uteland Butte Stratigraphic Cross Section

**PIONEER OIL & GAS**

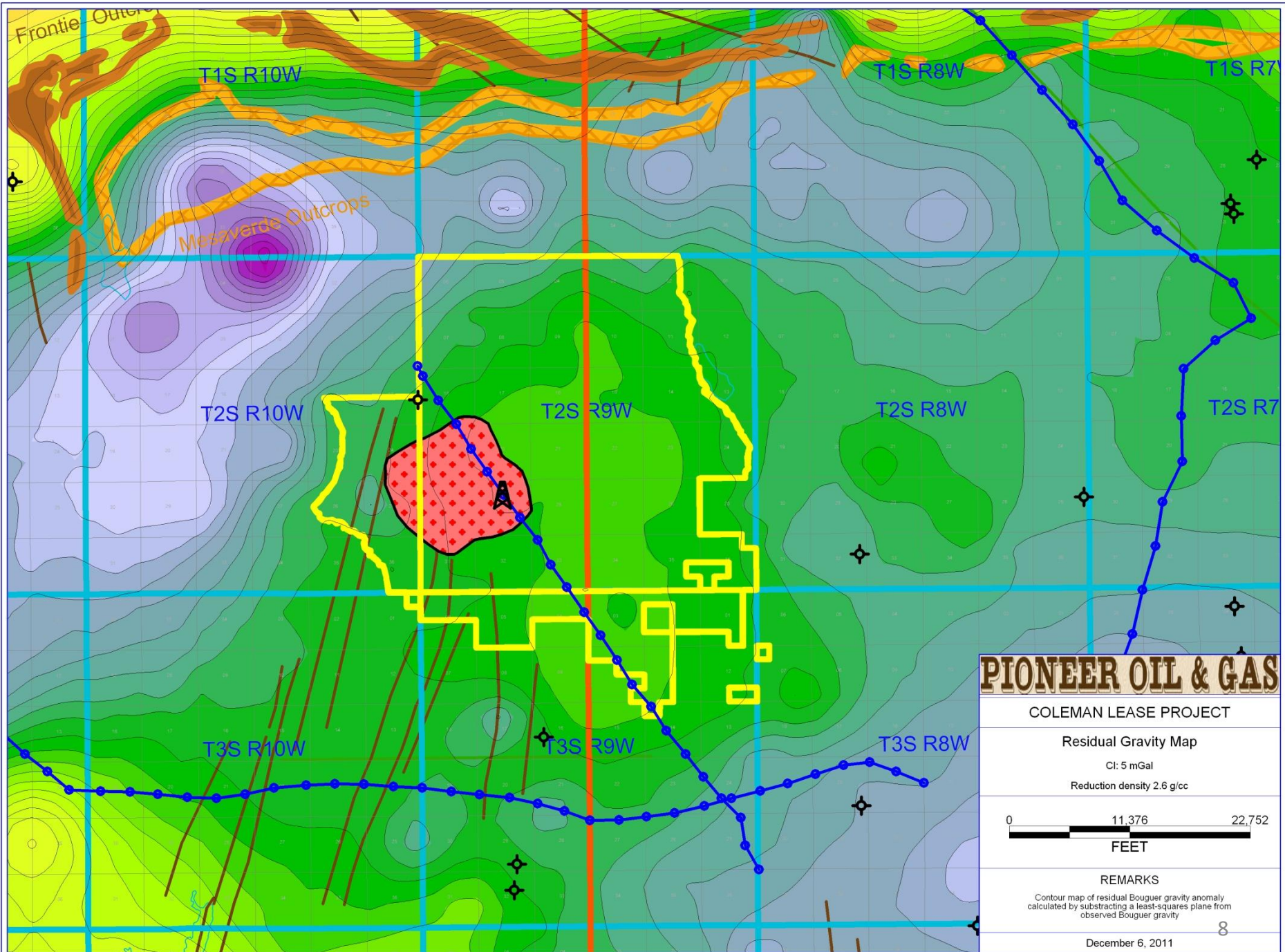
Coleman Prospect

East-West Stratigraphic Cross Section

Operator  
Lease

WELL - CUMGDM  
WELL - CUMGAS  
WELL - COMP\_DATE

By Keller Consulting Corp  
January 13, 2012 8:33 PM



**PIONEER OIL & GAS**

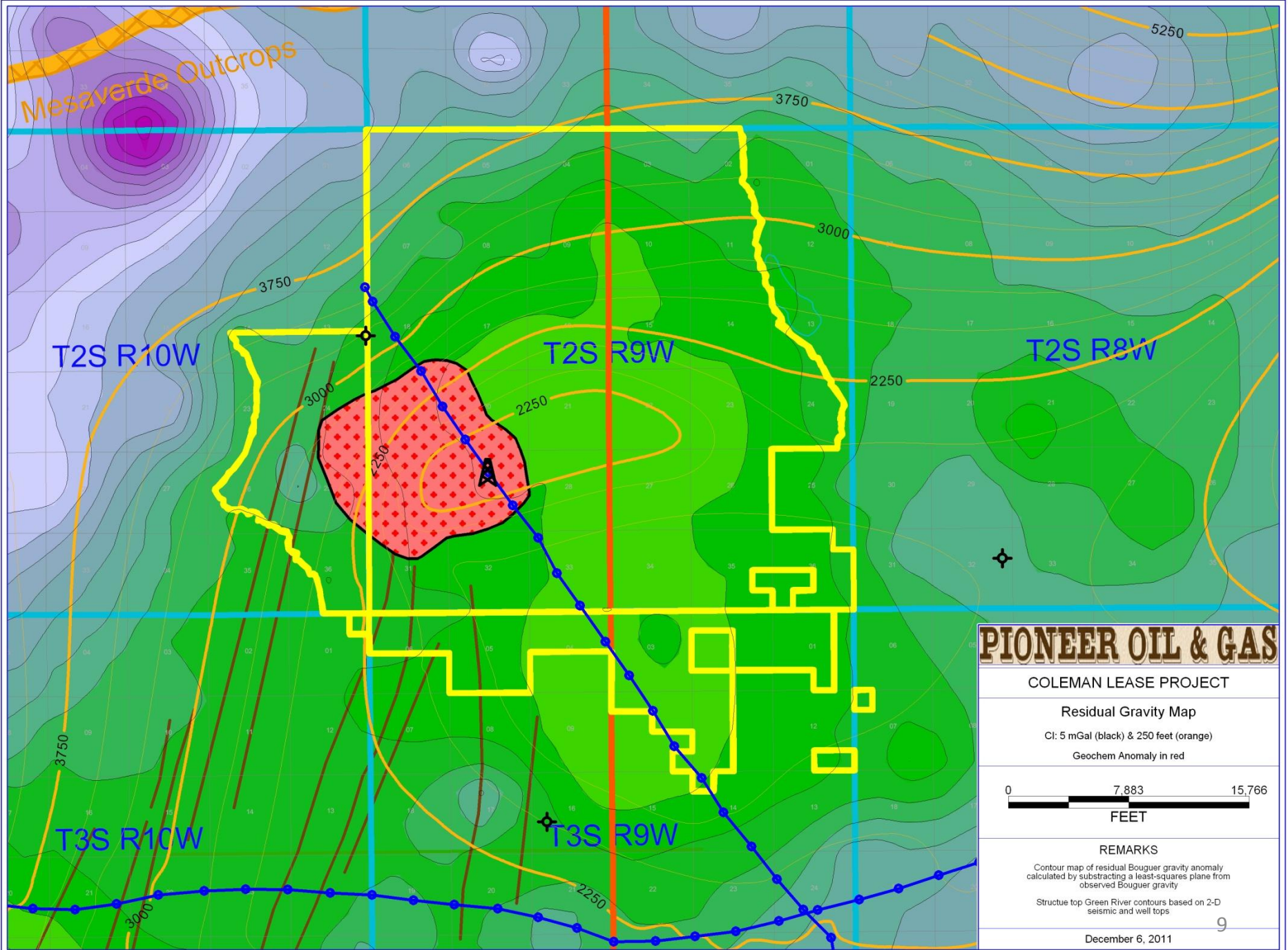
**COLEMAN LEASE PROJECT**

Residual Gravity Map  
 CI: 5 mGal  
 Reduction density 2.6 g/cc

0 11,376 22,752  
 FEET

REMARKS  
 Contour map of residual Bouguer gravity anomaly  
 calculated by subtracting a least-squares plane from  
 observed Bouguer gravity

December 6, 2011



<b>PIONEER OIL &amp; GAS</b>	
COLEMAN LEASE PROJECT	
Residual Gravity Map	
CI: 5 mGal (black) & 250 feet (orange)	
Geochem Anomaly in red	
REMARKS	
Contour map of residual Bouguer gravity anomaly calculated by subtracting a least-squares plane from observed Bouguer gravity	
Structure top Green River contours based on 2-D seismic and well tops	
9	
December 6, 2011	