

**APPENDIX A:
REGIONAL PARADOX FORMATION
CROSS SECTIONS, BLANDING
SUB-BASIN, UTAH**



Southwest

Northeast

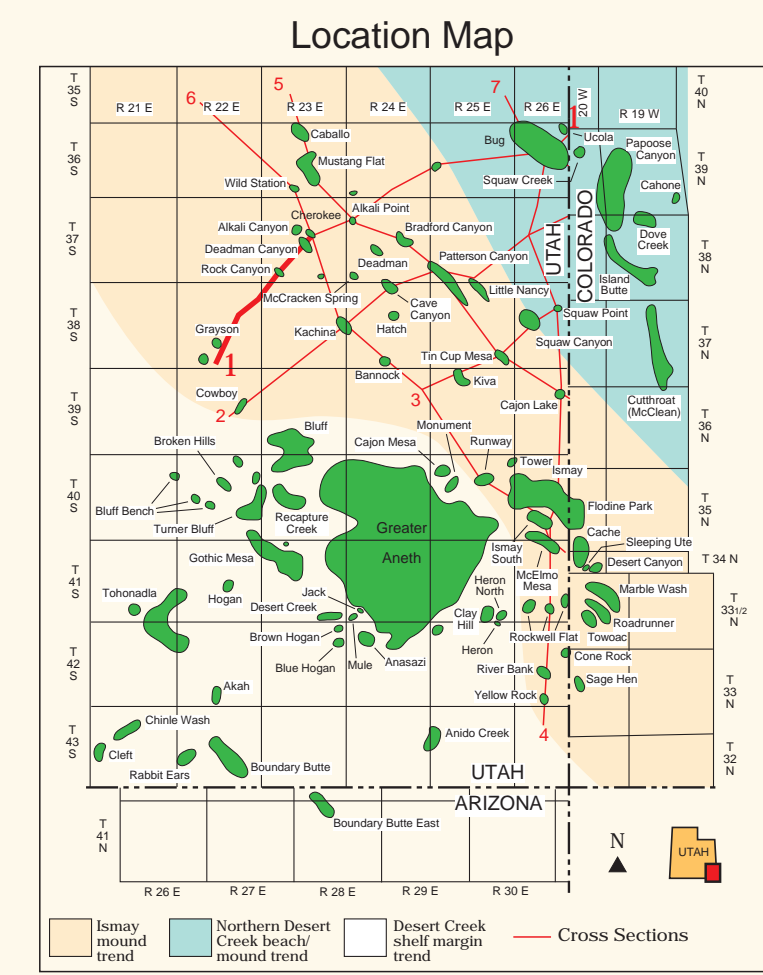
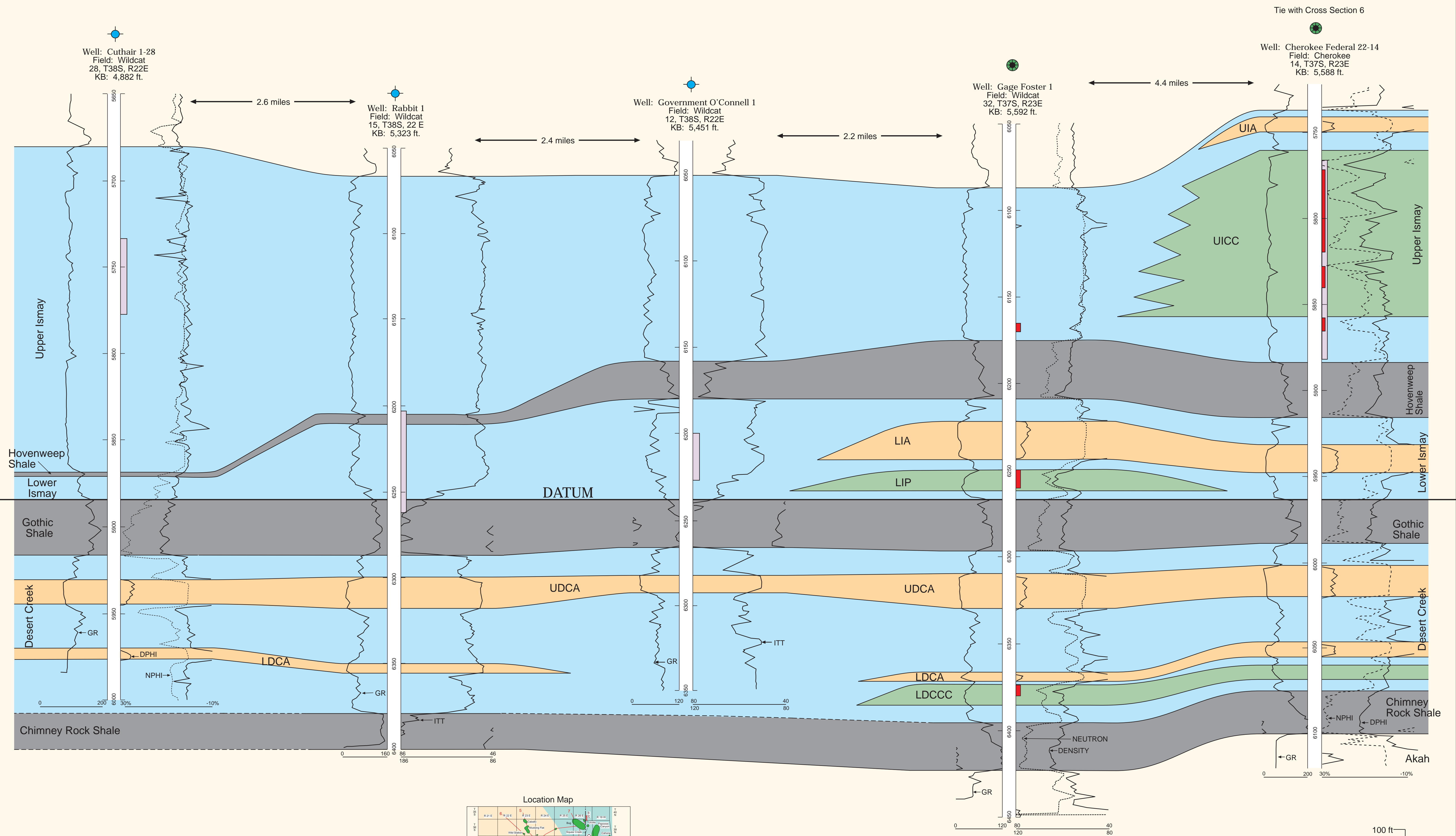


Plate A1-A
Regional Paradox Formation
Cross Section 1 (Southwest Part)

- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - GR = Gamma Ray
 - DPHI = Density-Porosity
 - ITT = Interval Transit Time
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Producing
 - NPHI = Neutron-Density
- UIA - Upper Ismay Anhydrite
 UIA2 - Upper Ismay Anhydrite 2
 UICC - Upper Ismay Clean Carbonate
 LIA - Lower Ismay Anhydrite
 LIP - Lower Ismay Porosity
 UDCA - Upper Desert Creek Anhydrite
 LDCA - Lower Desert Creek Anhydrite
 LDCCC - Lower Desert Creek Clean Carbonate

Horizontal Scale: none

Vertical Scale
100 ft
50 ft
0

Southwest

Northeast

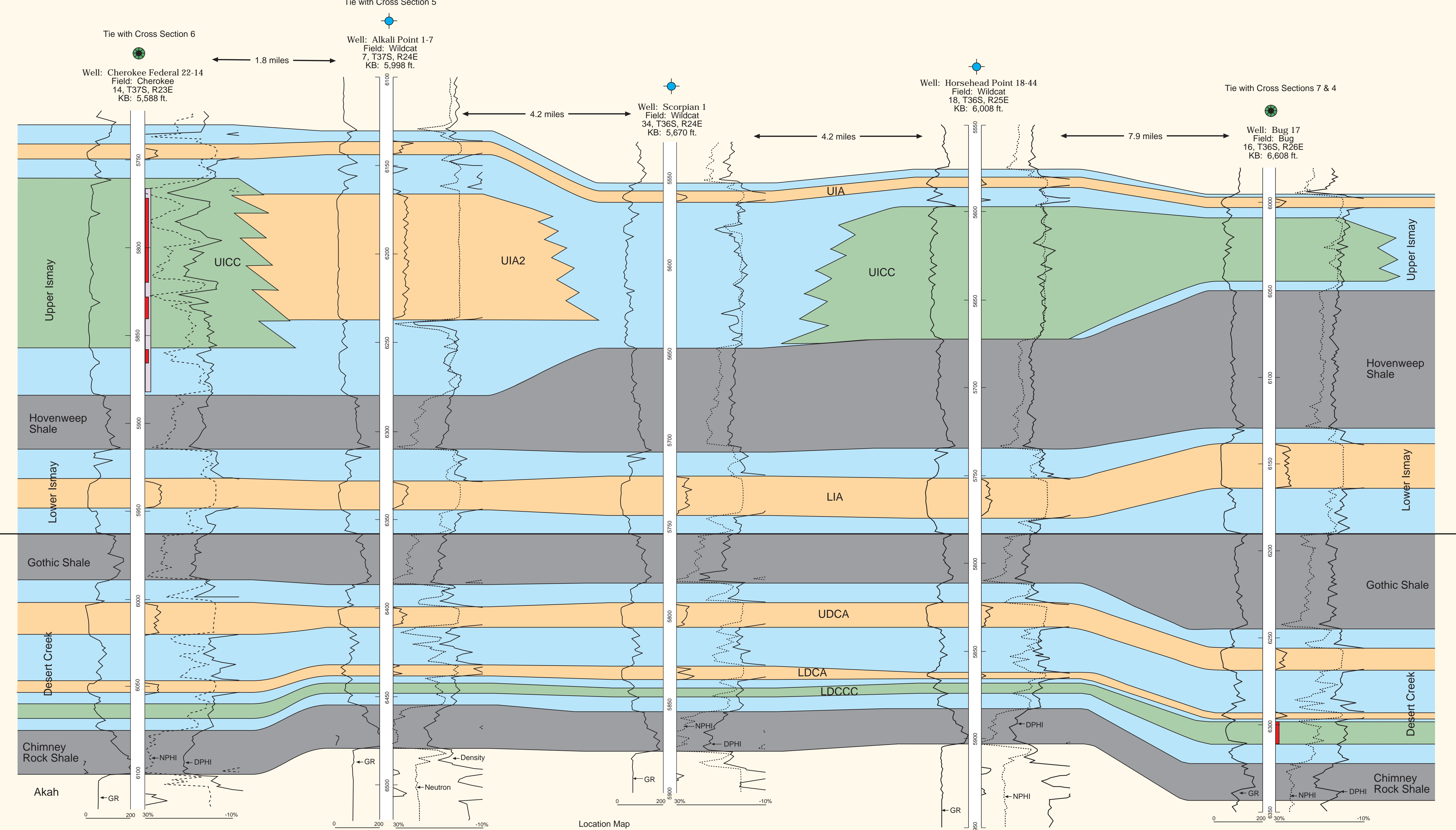
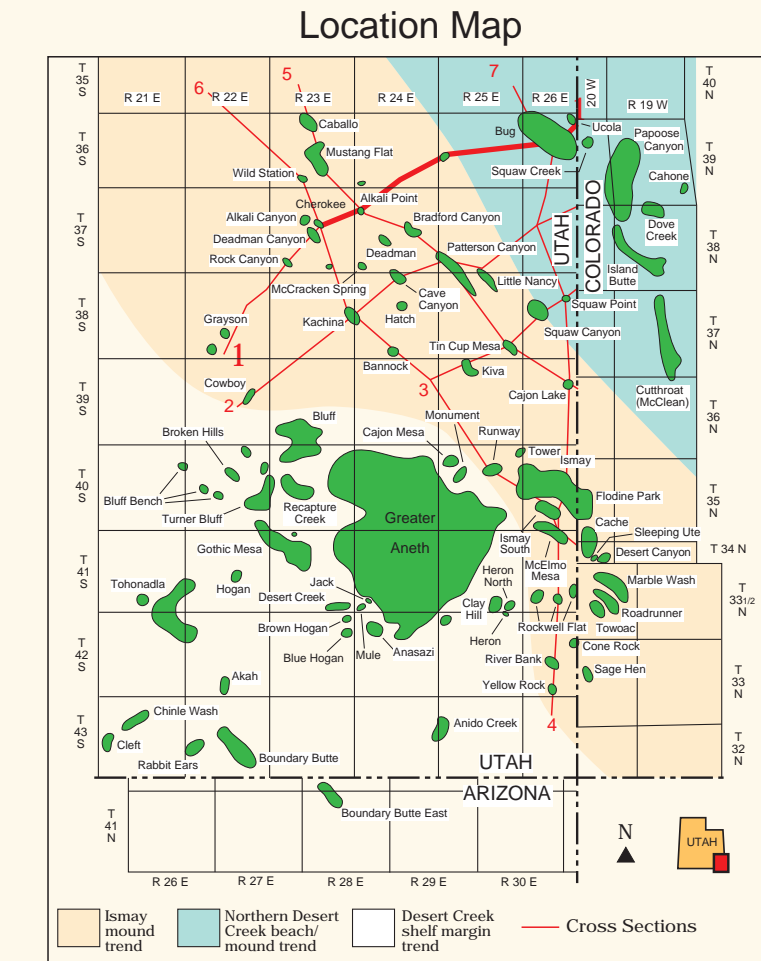


Plate A1-B
Regional Paradox Formation
Cross Section 1 (Northeast Part)



Explanation

- Black Shales
- Anhydrite
- Off Mound/Mound Flank
- Clean Carbonate Unit
- GR = Gamma Ray
- DPHI = Density-Porosity
- NPHI = Neutron-Density
- ITT = Interval Transit Time
- Core
- Perforated interval
- Plugged & Abandoned
- Producing

Vertical Scale: 100 ft, 50 ft, 0

Horizontal Scale: none

Southwest

Northeast

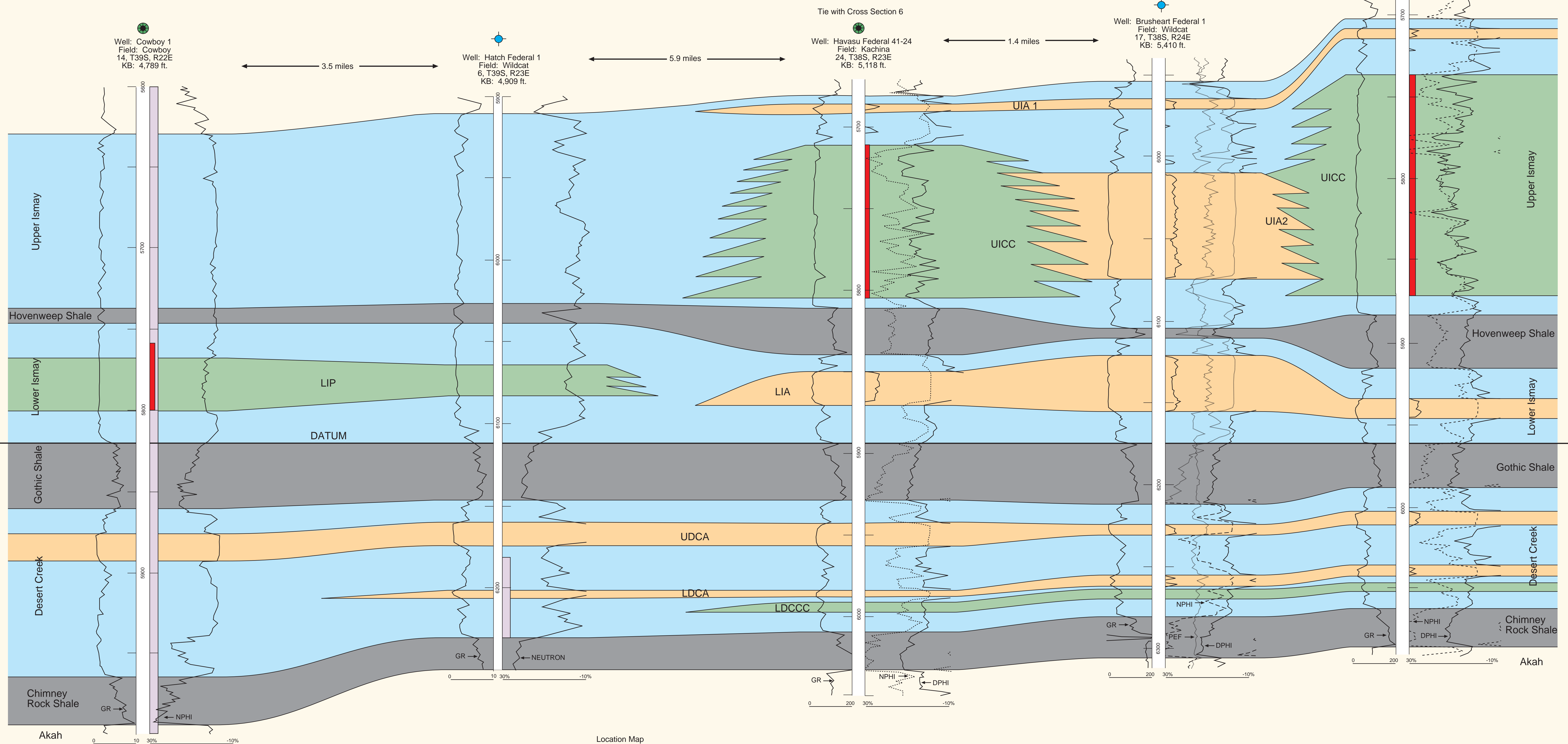
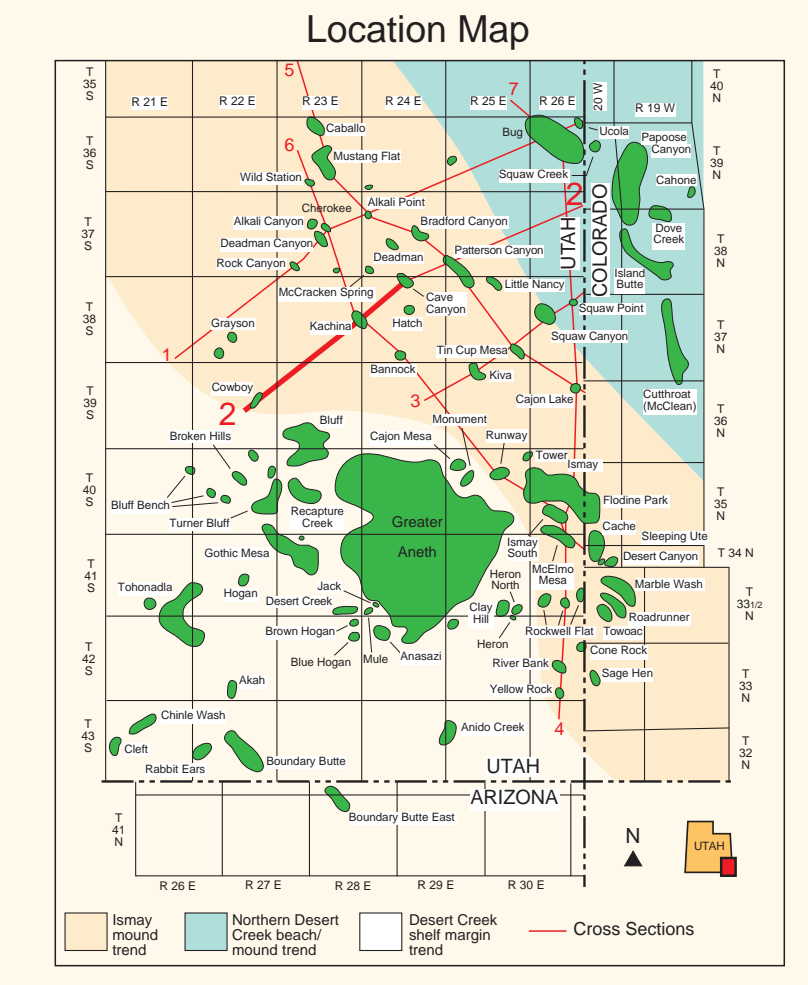


Plate A2-A
 Regional Paradox Formation
 Cross Section 2 (Southwest Part)



Explanation

- Black Shales
- Anhydrite
- Off Mound/Mound Flank
- Clean Carbonate Unit
- GR = Gamma Ray
- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UICC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate
- Core
- Perforated interval
- Plugged & Abandoned
- Producing
- DPHI = Density-Porosity
- NPHI = Neutron-Density

Vertical Scale: 0, 50 ft, 100 ft
 Horizontal Scale: none

Southwest

Northeast

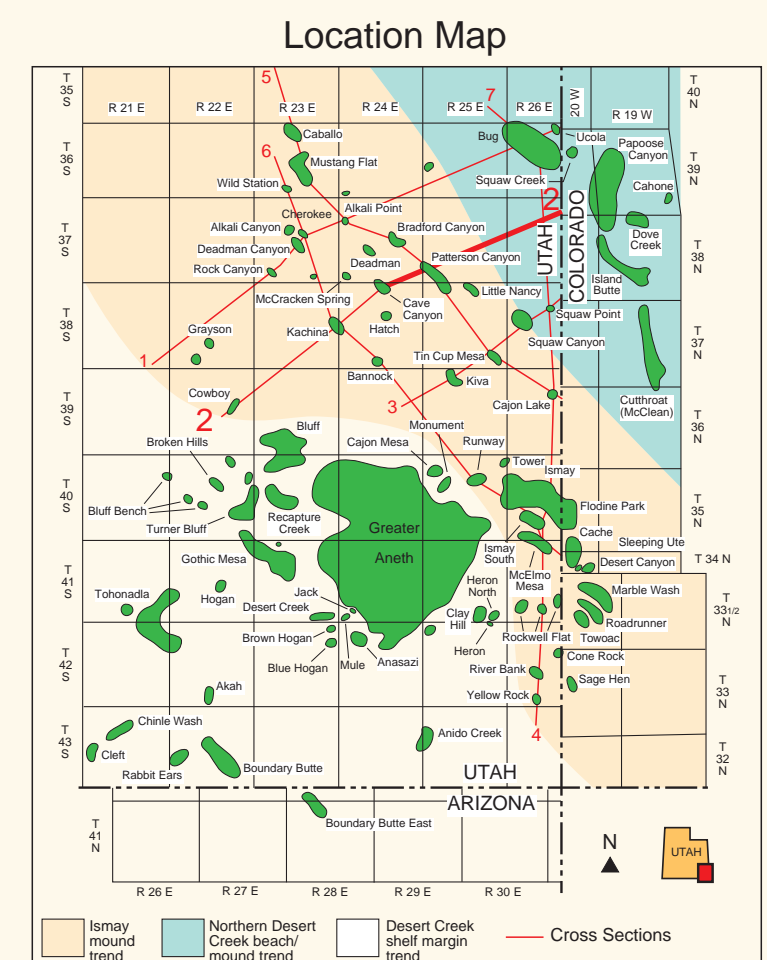
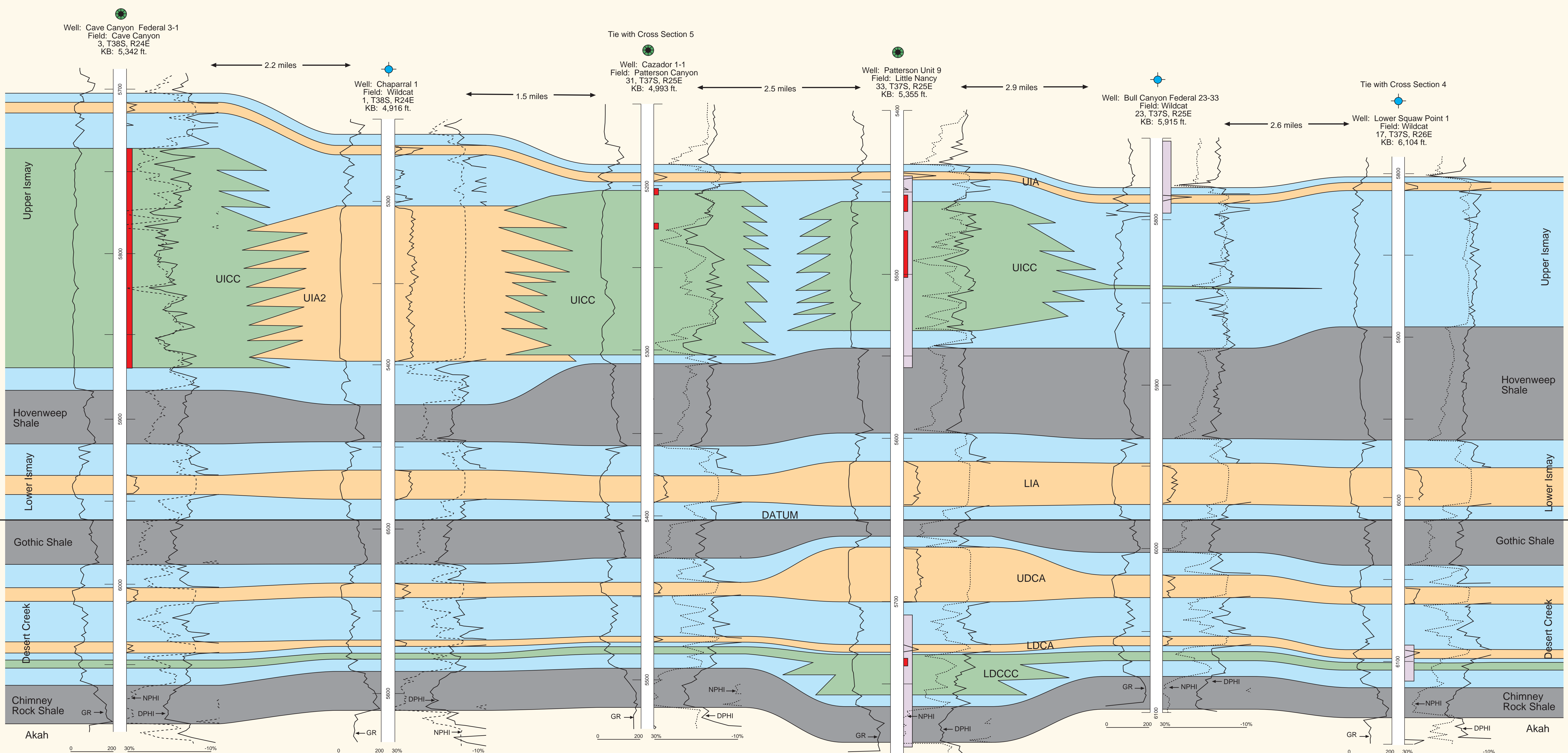


Plate A2-B
Regional Paradox Formation
Cross Section (Northeast Part)

Explanation

- Black Shales
- Anhydrite
- Off Mound/Mound Flank
- Clean Carbonate Unit
- GR = Gamma Ray
- UIC - Upper Ismay Anhydrite
- UIC2 - Upper Ismay Anhydrite 2
- UIC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate
- Core
- Perforated interval
- Plugged & Abandoned
- Producing
- DPHI = Density-Porosity
- NPHI = Neutron-Density

Vertical Scale: 0, 50 ft, 100 ft
Horizontal Scale: none

Southwest

Northeast

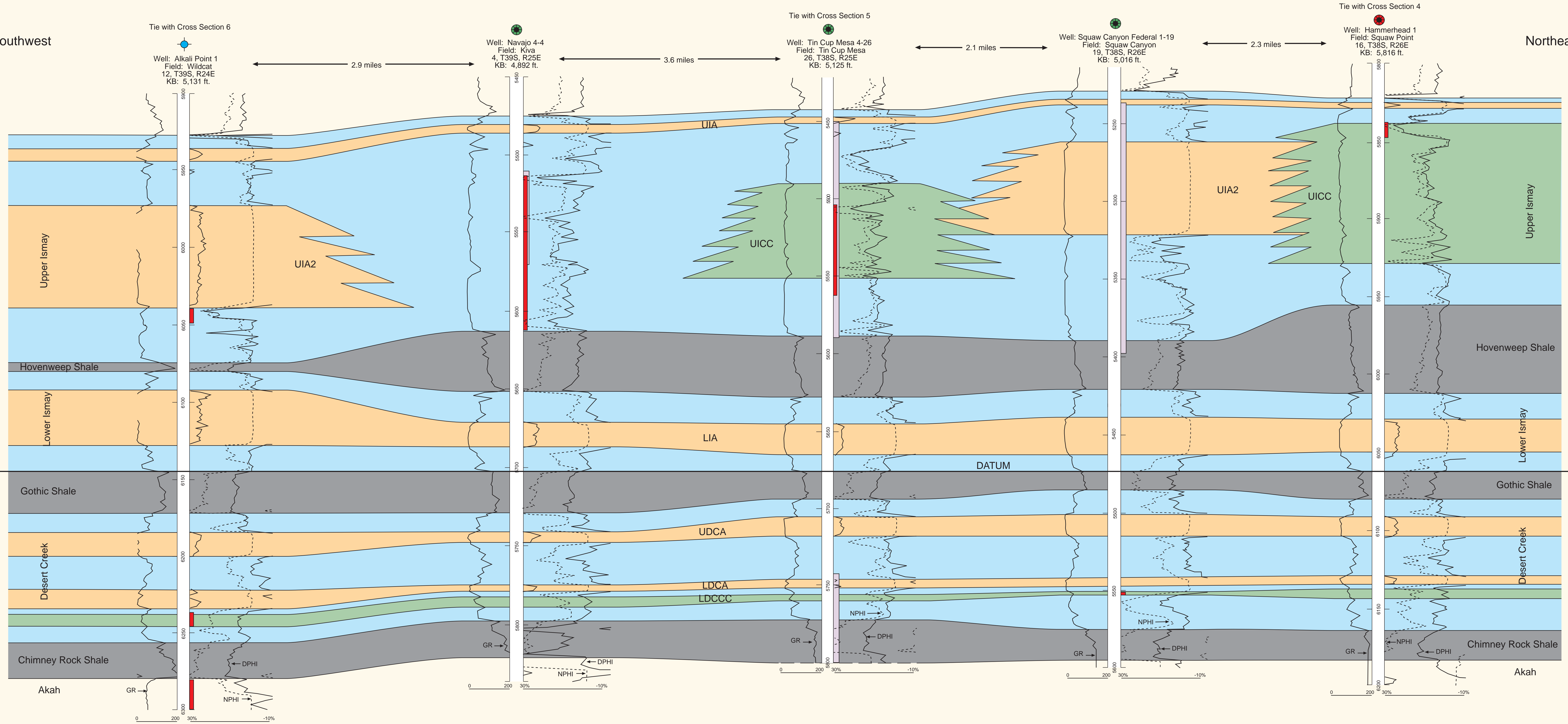
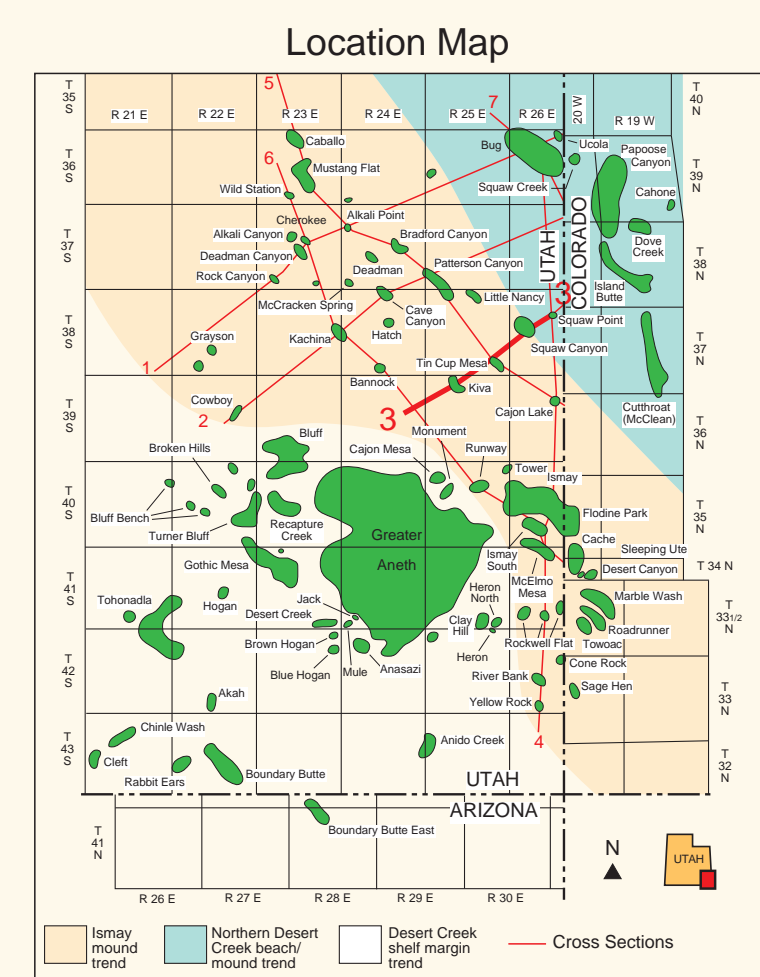
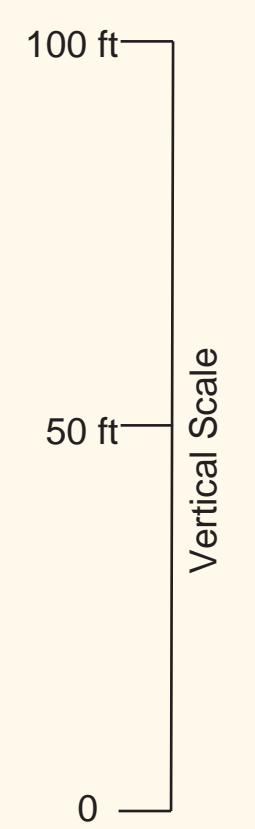


Plate A3
Regional Paradox Formation
Cross Section 3



- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - GR = Gamma Ray
 - DPHI = Density-Porosity
 - NPHI = Neutron-Density
 - ITT = Interval Transit Time
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Oil Producing
 - Gas Producing



Horizontal Scale: none

North

South

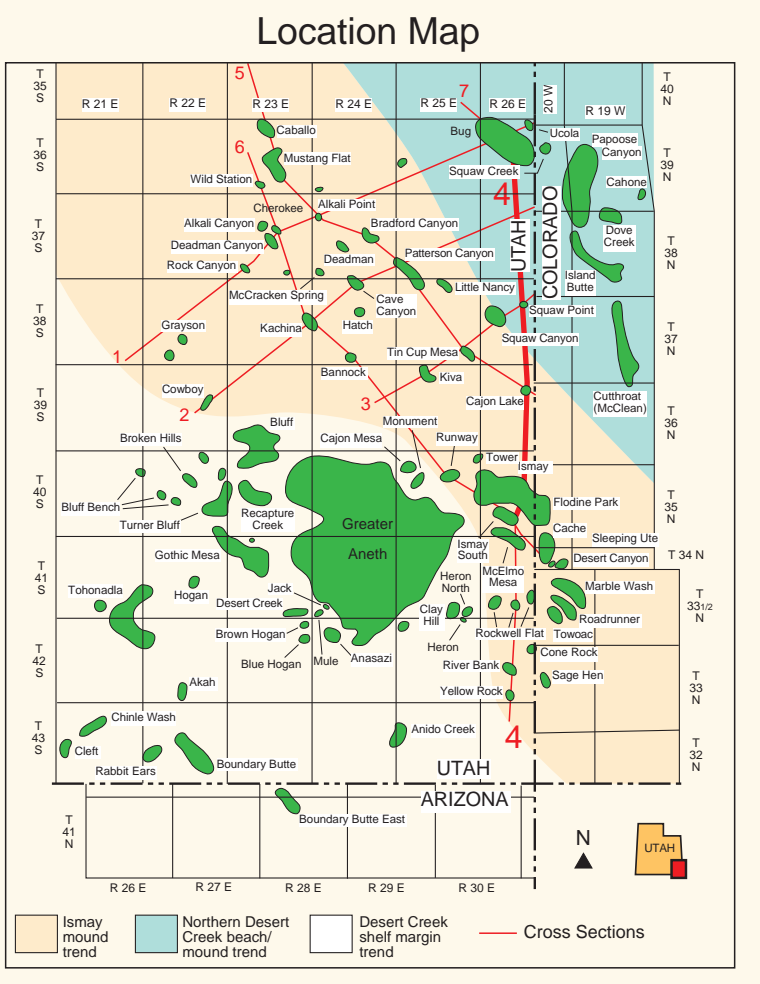
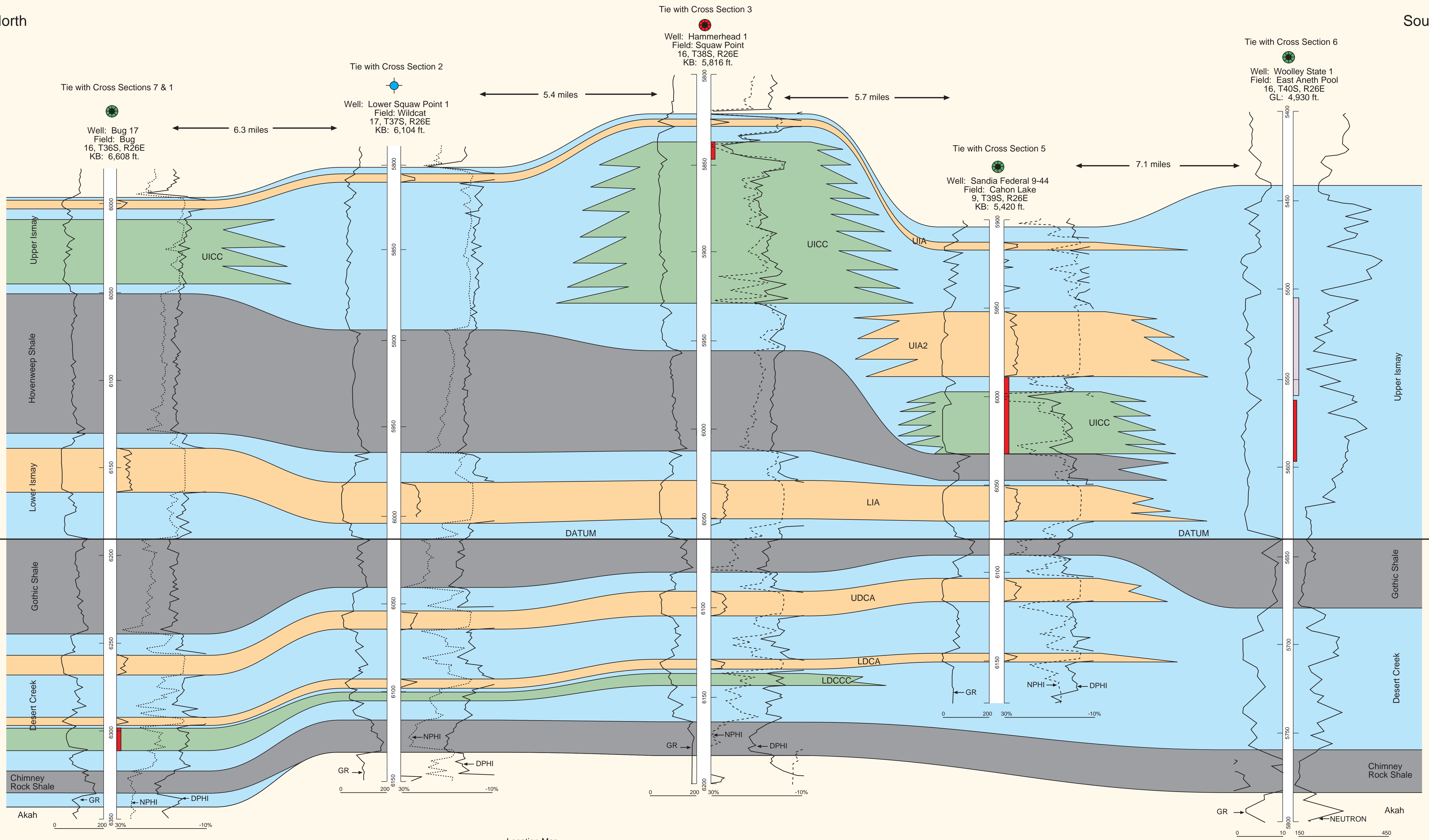
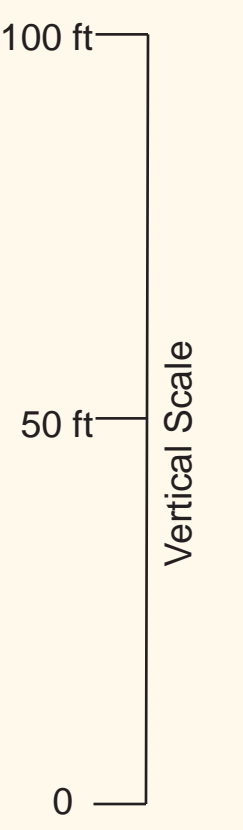


Plate A4-A
Regional Paradox Formation
Cross Section 4 (North Part)

- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UICC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate

- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - GR = Gamma Ray
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Oil Producing
 - Gas Producing
 - DPHI = Density-Porosity
 - NPHI = Neutron-Density

Horizontal Scale: none



North

South

Tie with Cross Section 6

Well: Woolley State 1
Field: East Aneth Pool
16, T40S, R26E
GL: 4,930 ft.

3.8 miles

Well: South Ismay 3
Field: South Ismay
5, T41S, R26E
KB: 5,148 ft.

3.7 miles

Well: East Aneth 30-41 1
Field: Rockwell Flat
30, T41S, R26E
KB: 5,144.5 ft.

3.9 miles

Well: Kendiilidii 18-31
Field: Wildcat
18, T42S, R26E
KB: 4,498.8 ft.

4.2 miles

Well: Yellow Rock Point 6-11
Field: Wildcat
6, T43S, R26E
KB: 4,814 ft.

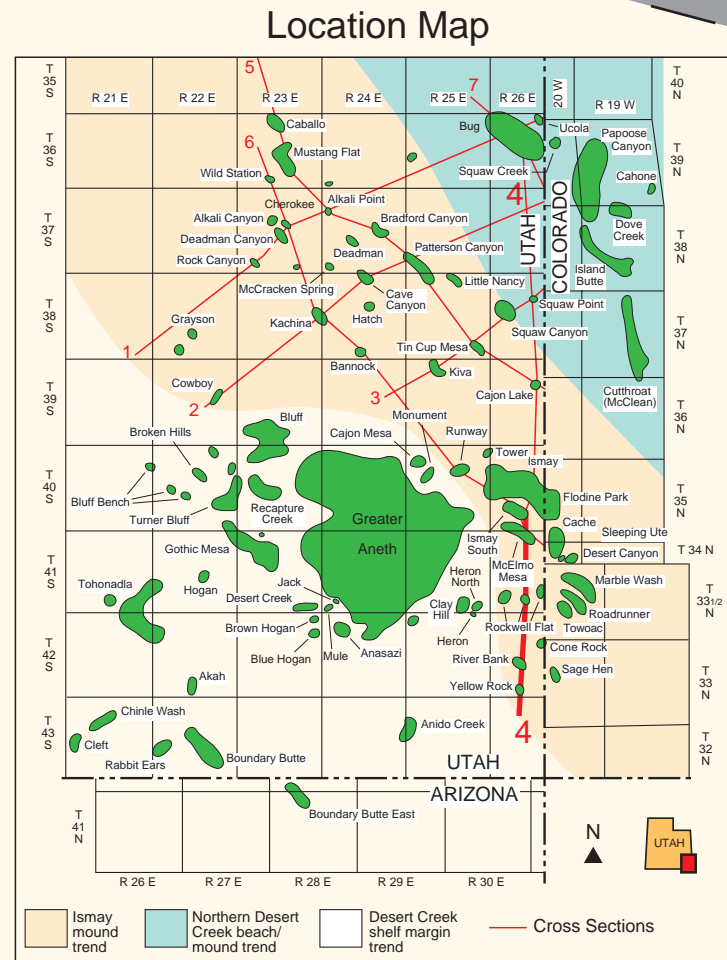
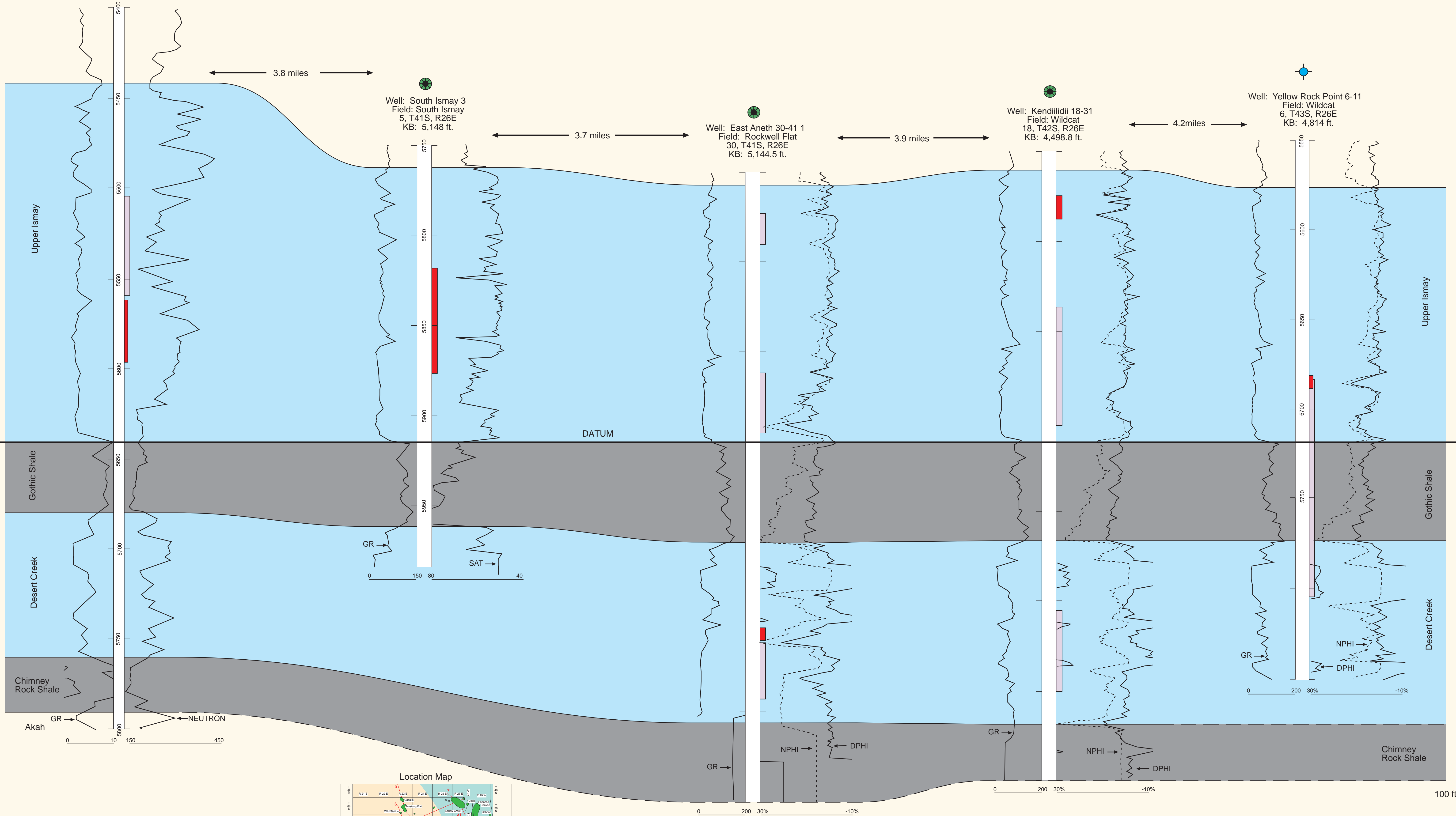


Plate A4-B

Regional Paradox Formation

Cross Section 4 (South Part)

- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Producing
 - GR = Gamma Ray
 - DPHI = Density-Porosity
 - NPHI = Neutron-Density
 - SAT = Specific Acoustic Time (microseconds/foot)
- UIA - Upper Ismay Anhydrite
 UIA2 - Upper Ismay Anhydrite 2
 UICC - Upper Ismay Clean Carbonate
 LIA - Lower Ismay Anhydrite
 LIP - Lower Ismay Porosity
 UDCA - Upper Desert Creek Anhydrite
 LDCA - Lower Desert Creek Anhydrite
 LDCC - Lower Desert Creek Clean Carbonate
- Horizontal Scale: none
- Vertical Scale: 0, 50 ft, 100 ft

Northwest

Southeast

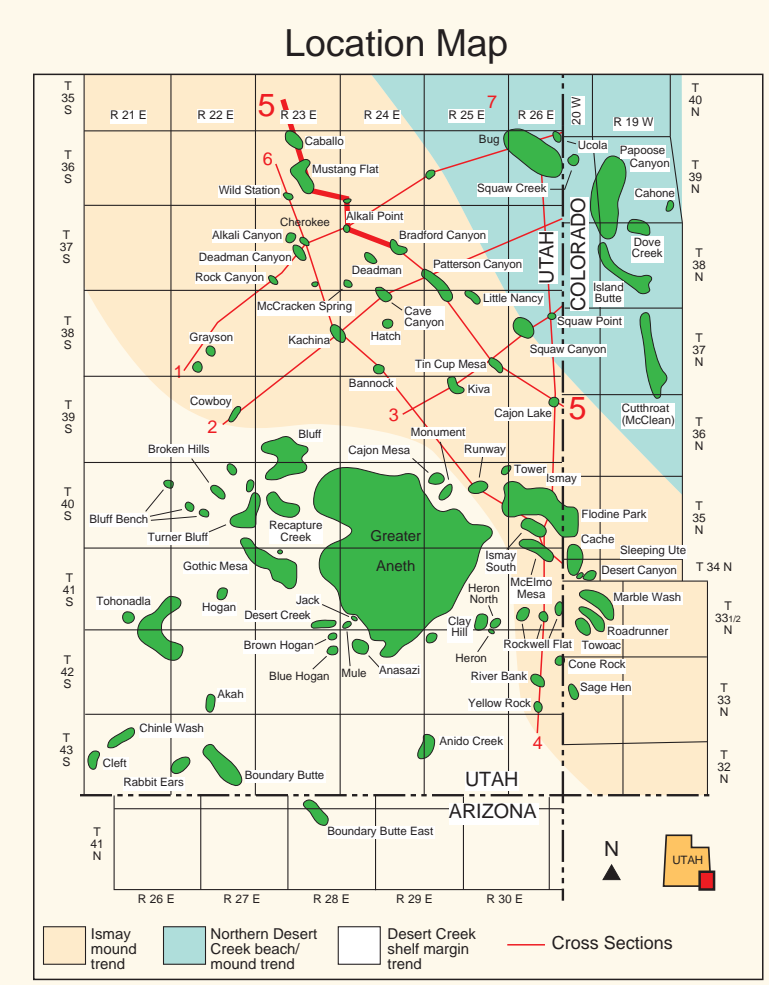
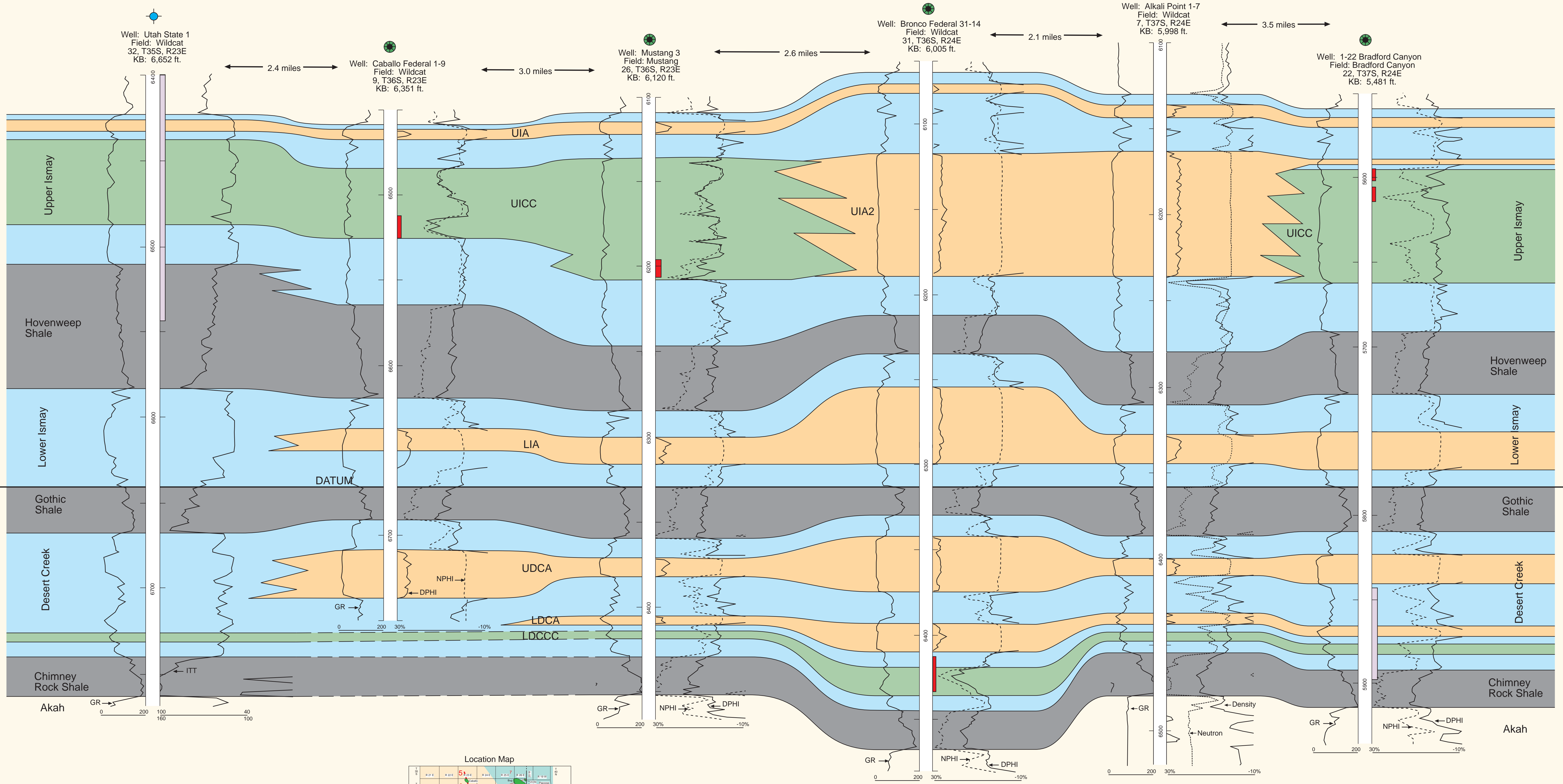
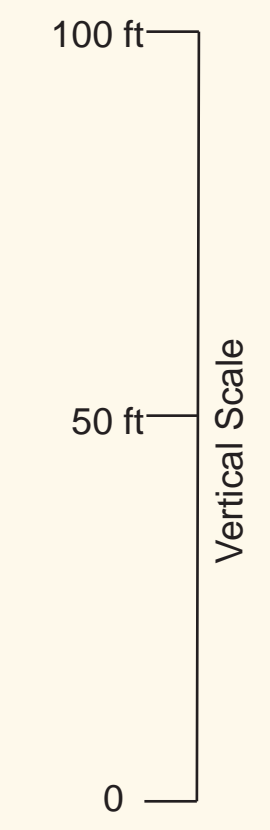


Plate A5-A
Regional Paradox Formation
Cross Section 5 (Northwest Part)

- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Producing
 - GR = Gamma Ray
 - DPHI = Density-Porosity
 - NPHI = Neutron-Density
 - ITT = Interval Transit Time (microseconds/foot)



Horizontal Scale: none

Northwest

Southeast

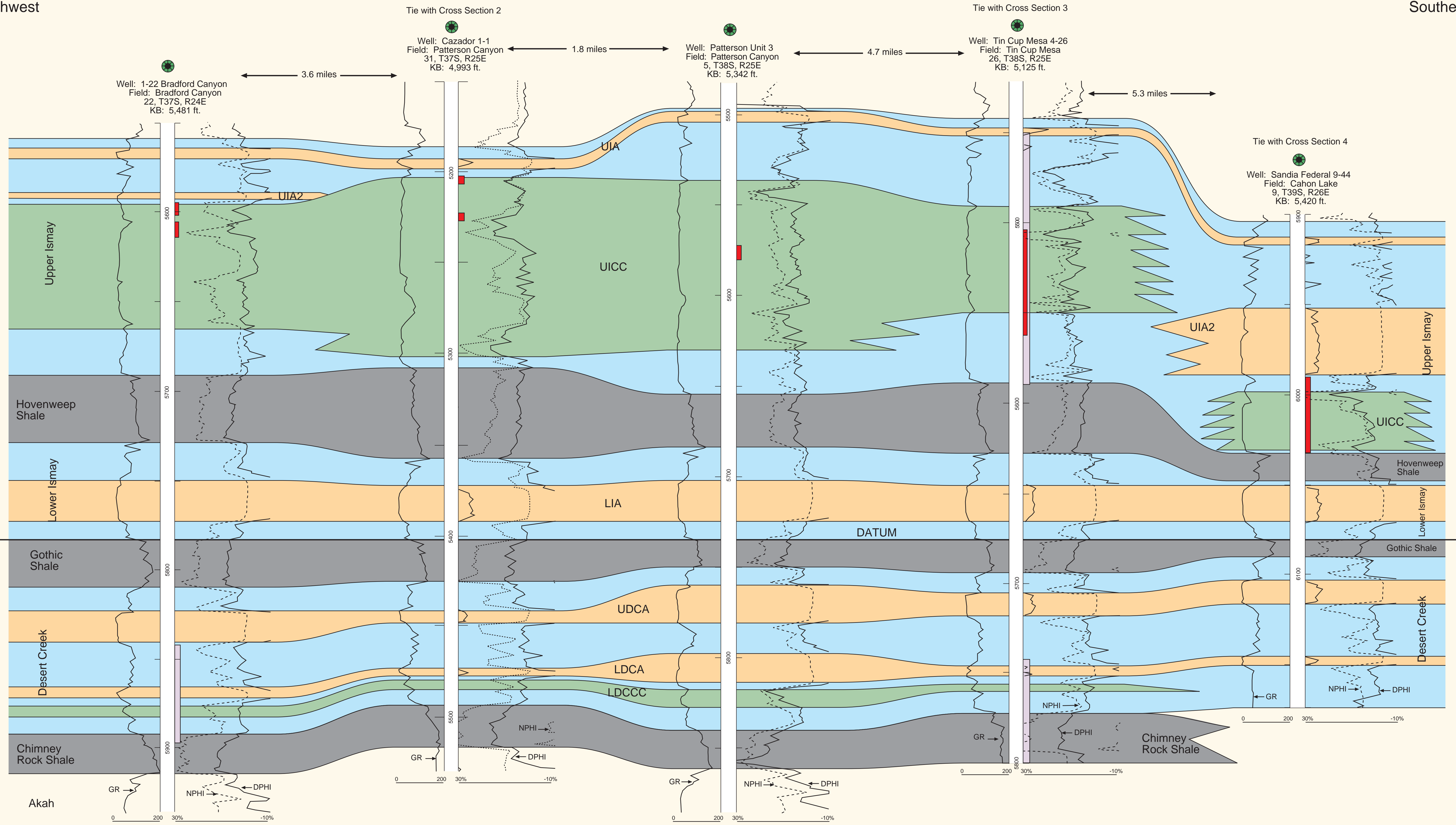
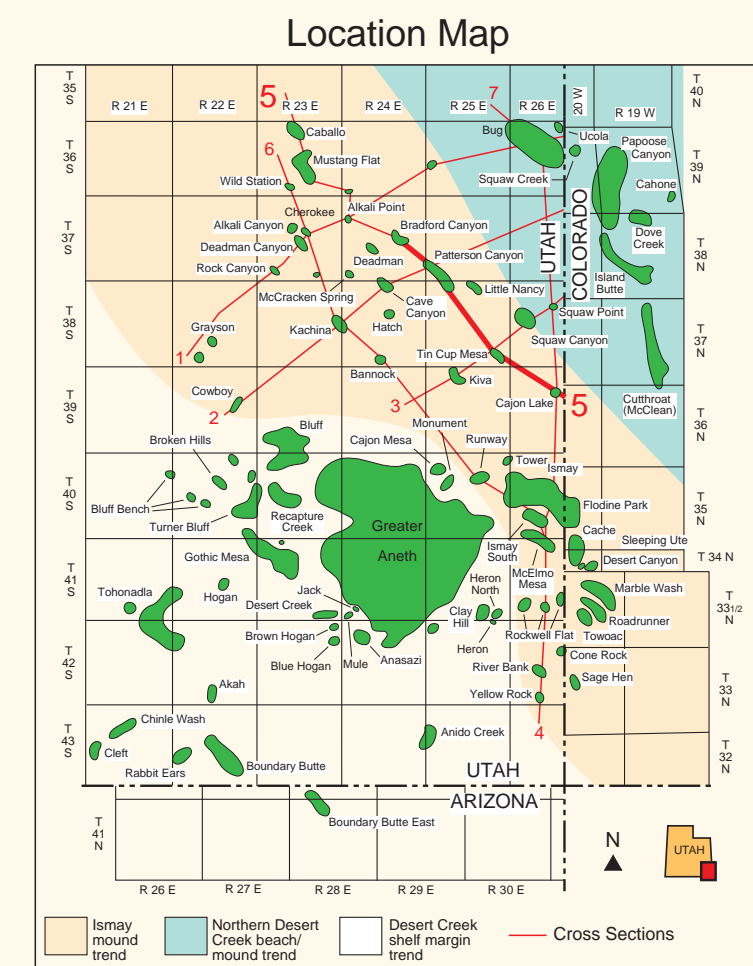


Plate A5-B
Regional Paradox Formation
Cross Section 5 (Southeast Part)



- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UICC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate

Explanation

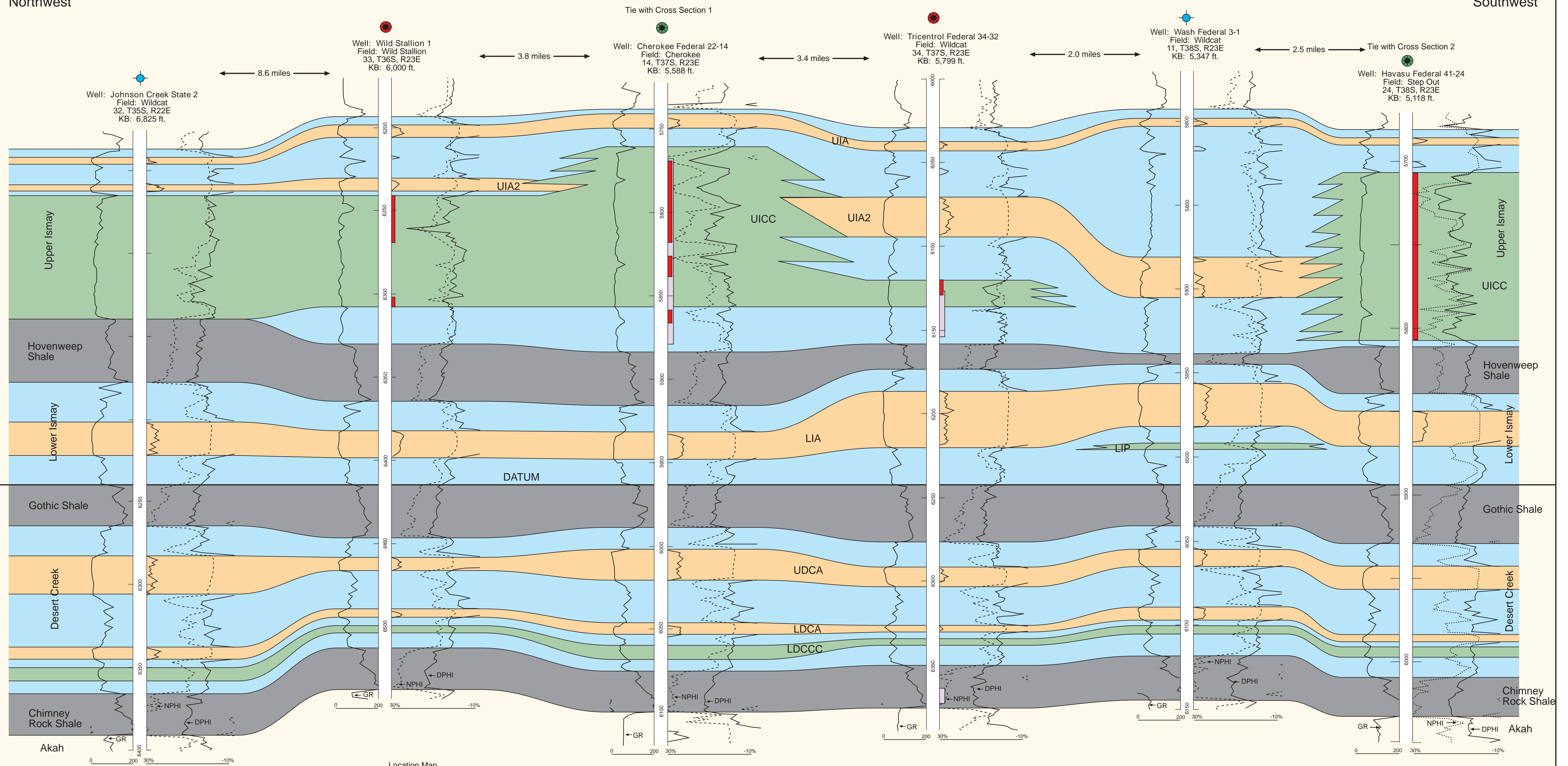
- Black Shales
- Anhydrite
- Off Mound/Mound Flank
- Clean Carbonate Unit
- Core
- Perforated interval
- Plugged & Abandoned
- Producing
- GR = Gamma Ray
- DPHI = Density-Porosity
- NPHI = Neutron-Density

Horizontal Scale: none

Vertical Scale
 100 ft
 50 ft
 0

Northwest

Southwest



Location Map

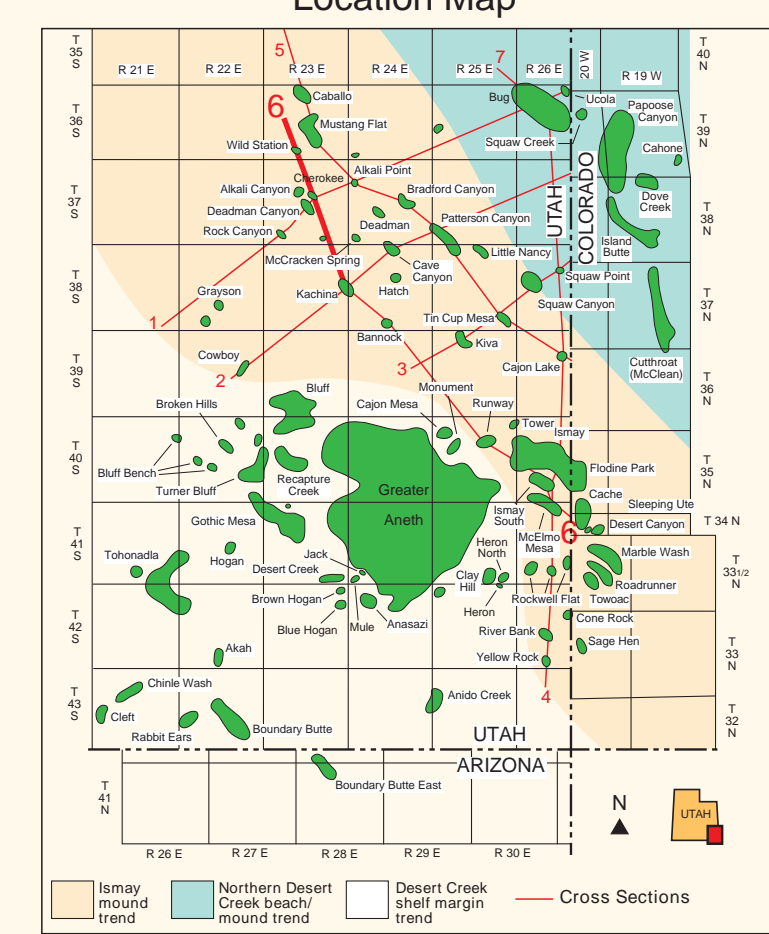


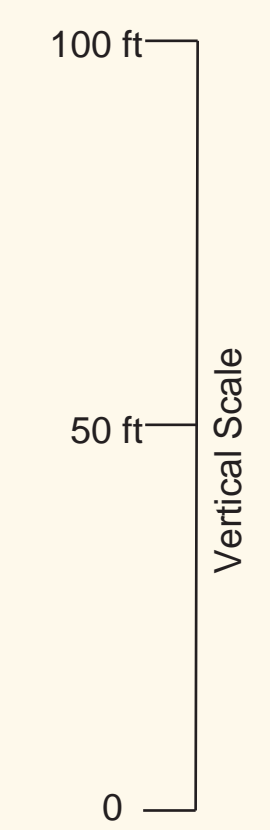
Plate A6-A

Regional Paradox Formation

Cross Section 6 (Northwest Part)

- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UICC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate

- Explanation**
- Black Shales
 - Anhydrite
 - Off Mound/Mound Flank
 - Clean Carbonate Unit
 - GR = Gamma Ray
 - DPHI = Density-Porosity
 - ITT = Interval Transit Time
 - Core
 - Perforated interval
 - Plugged & Abandoned
 - Oil Producing
 - Gas Producing
 - NPHI = Neutron-Density



Horizontal Scale: none

Northwest

Southwest

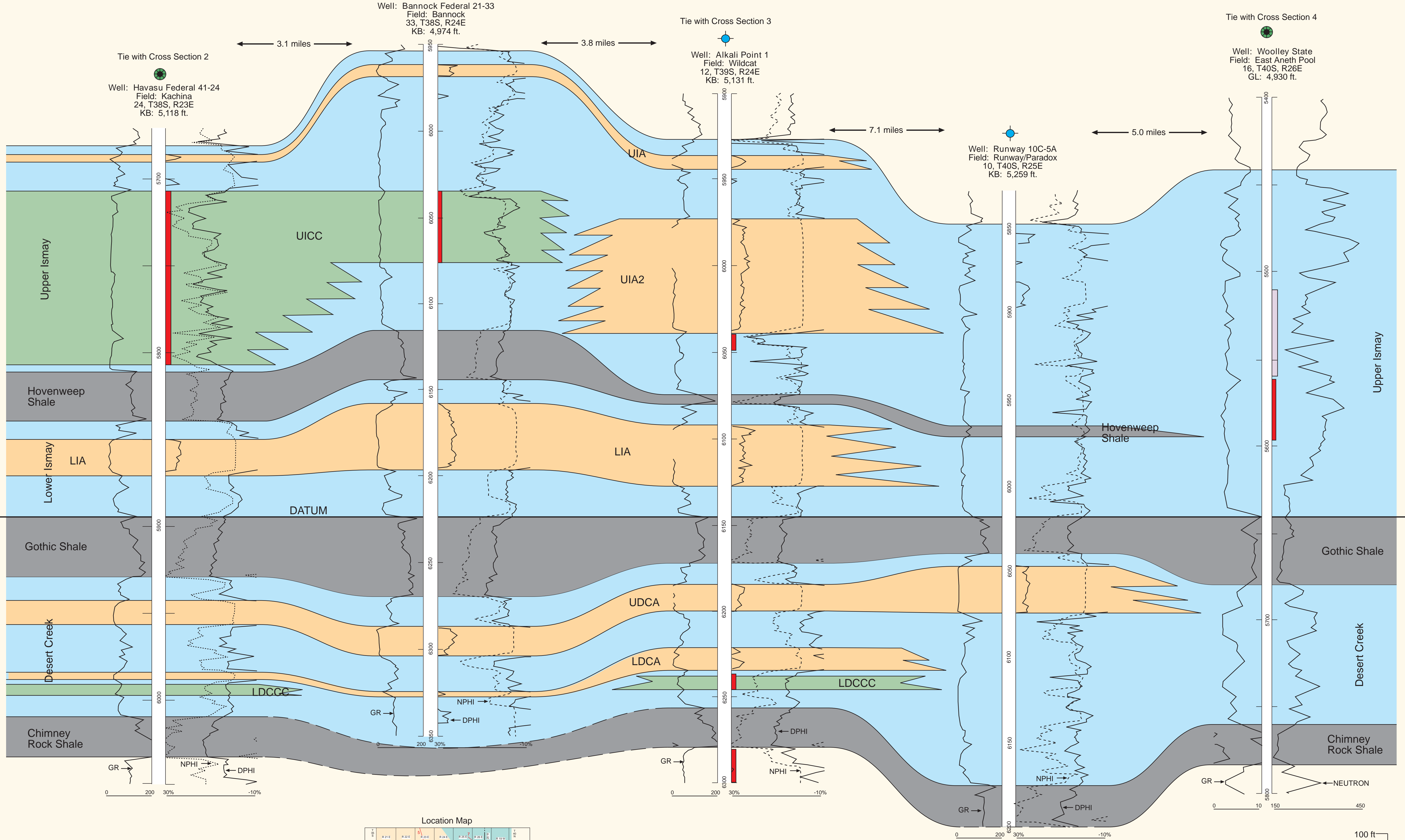
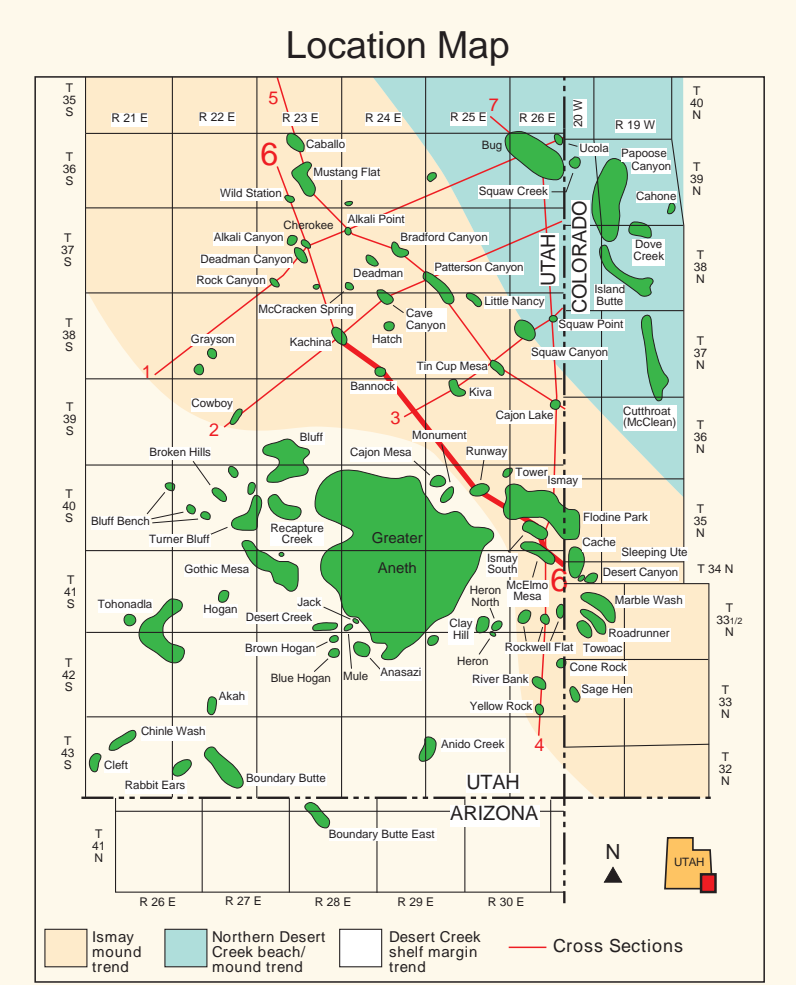


Plate A6-B
Regional Paradox Formation
Cross Section 6 (Southeast Part)



Explanation

- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UIC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- LIP - Lower Ismay Porosity
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate
- Black Shales
- Anhydrite
- Off Mound/Mound Flank
- Clean Carbonate Unit
- Core
- Perforated interval
- GR = Gamma Ray
- DPHI = Density-Porosity
- ITT = Interval Transit Time
- Plugged & Abandoned
- Producing
- NPHI = Neutron-Density
- Horizontal Scale: none
- Vertical Scale: 100 ft, 50 ft, 0

Northwest

Southeast

Well: Cedar Point Federal 16-25
Field: Wildcat
25, T35S, R25E
KB: 6,687 ft.

Well: May-Bug 2
Field: Bug
7, T36S, R26E
KB: 6,603 ft.

Tie with Cross Sections 1 & 4

Well: Bug 17
Field: Bug
16, T36S, R26E
KB: 6,608 ft.

Well: Bug 10
Field: Bug
22, T36S, R26E
KB: 6,623 ft.

2.3 miles

2.7 miles

0.7 miles

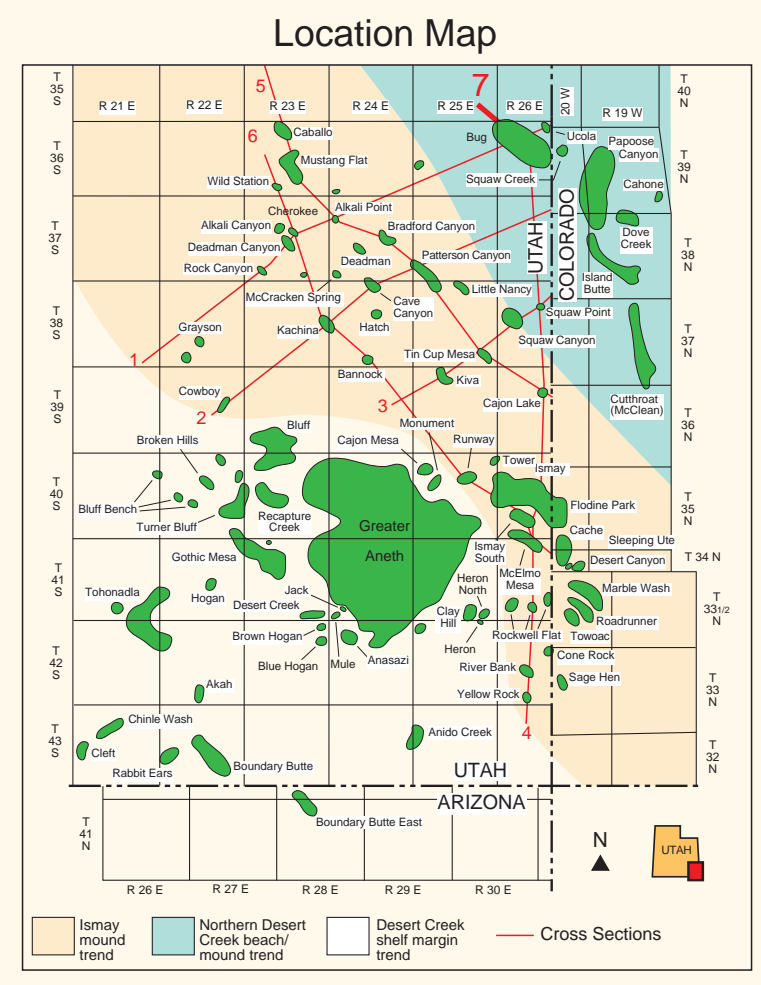
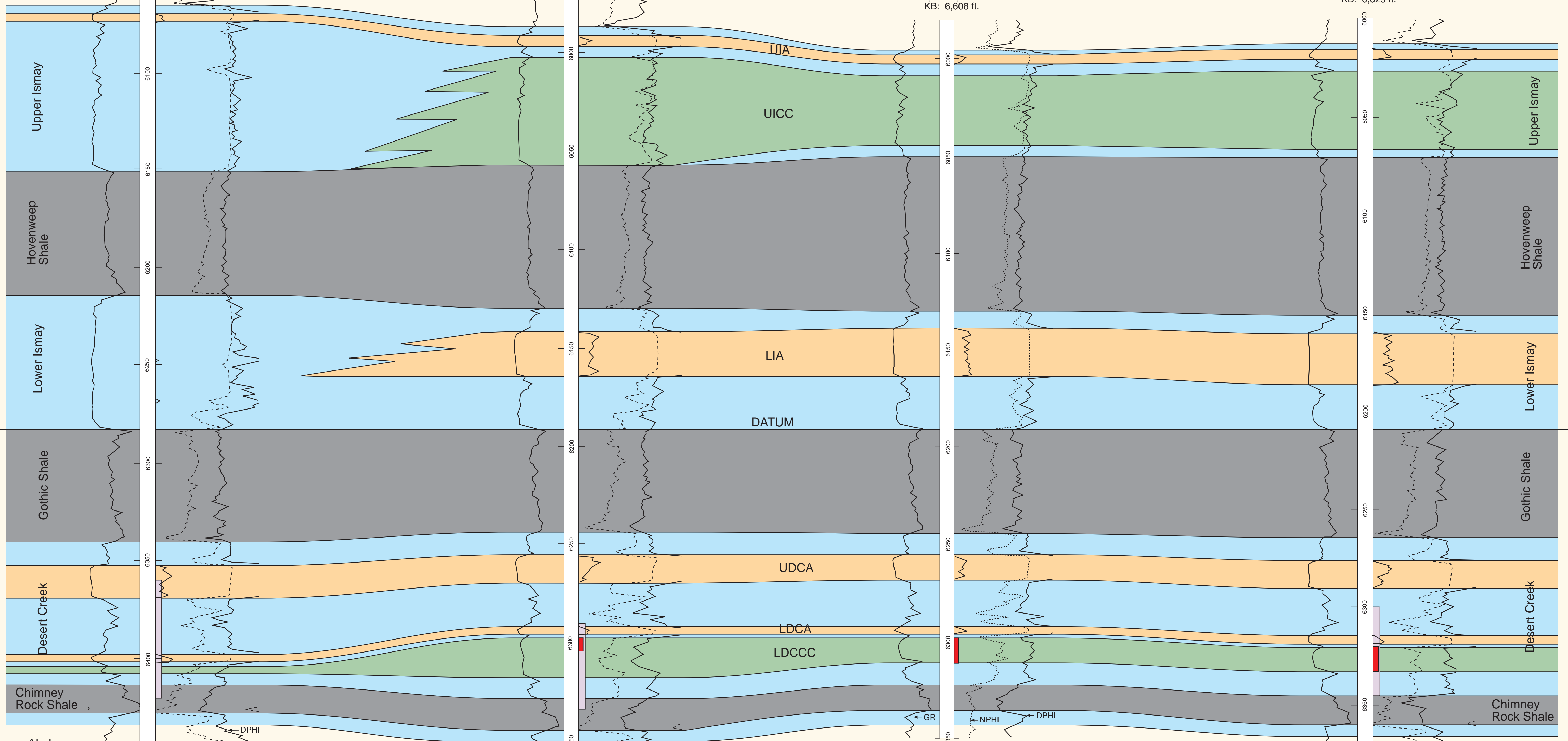


Plate A7

Regional Paradox Formation

Cross Section 7

- UIA - Upper Ismay Anhydrite
- UIA2 - Upper Ismay Anhydrite 2
- UICC - Upper Ismay Clean Carbonate
- LIA - Lower Ismay Anhydrite
- UDCA - Upper Desert Creek Anhydrite
- LDCA - Lower Desert Creek Anhydrite
- LDCCC - Lower Desert Creek Clean Carbonate

Explanation

Black Shales	Core	Plugged & Abandoned
Anhydrite	Perforated interval	Producing
Off Mound/Mound Flank	GR = Gamma Ray	DPHI = Density-Porosity
Clean Carbonate Unit	NPHI = Neutron-Density	ITT = Interval Transit Time

Horizontal Scale: none

Vertical Scale: 0, 50 ft, 100 ft