

Proj #1986



## River Ridge Ranch and La Veta Pines Property Owners Information Meeting

July 21, 2007

Colorado Oil and Gas Conservation Commission

<http://oil-gas.state.co.us/>  
303-894-2100

Dave Shelton  
John Duran  
Debbie Baldwin  
Peter Gintautas

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- Background
  - Coal Mining & Oil and Gas Activities
  - Geology
- Ground Seeps
  - Seep Surveys
- Coal Formation and Gas Generation
- Venting Wells
  - Well Surveys
- Plugged & Abandoned
  - Lively 10-02
  - Dick Realty 1

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- Petroglyph wells shut in
  - Voluntary 30 day minimum period
  - Monitor pressures and fluid levels during shut down
  - Monitor gas flows and water levels in selected water wells
  - Continue water well screening on regular basis

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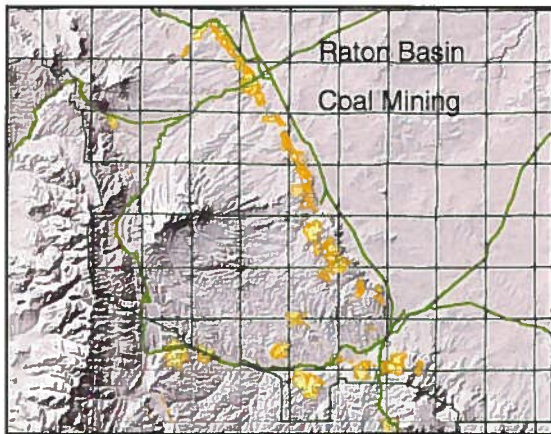
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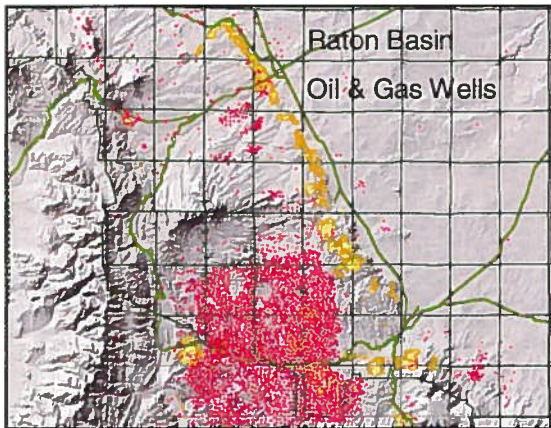
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### Raton Basin Geology

- Location
- Rocks and Structure
- Coal
  - Formation
  - Gas Generation

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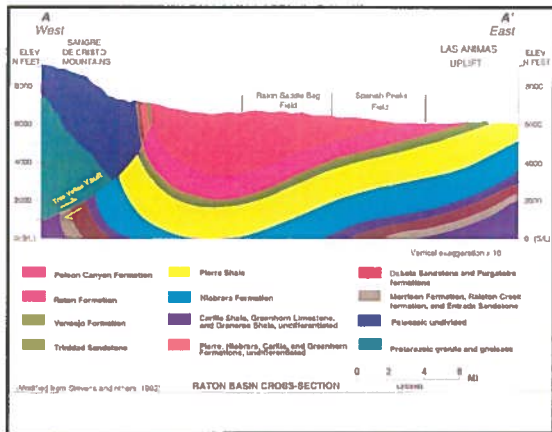
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### Phase II Raton Basin Methane Seep Mapping Project

- April 20, 2007 to May 4, 2007
- Prior Survey (FY 2000-2001)

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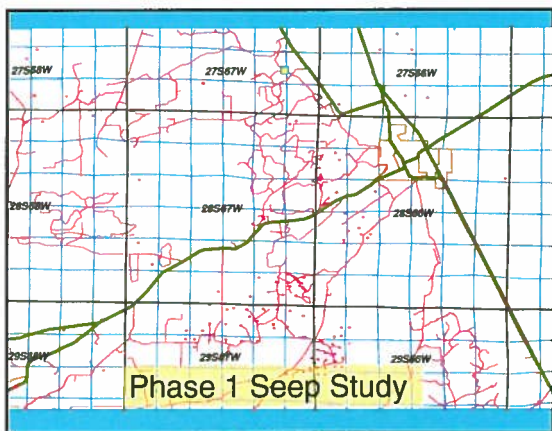
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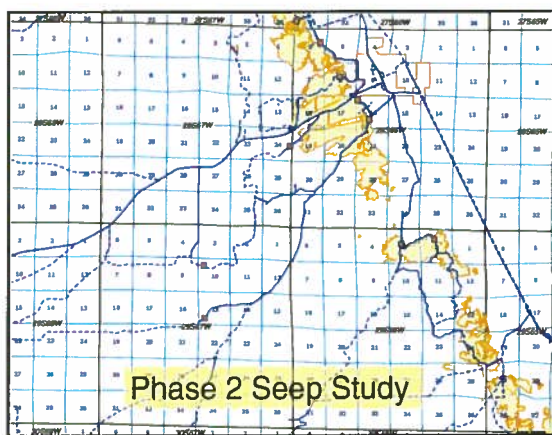
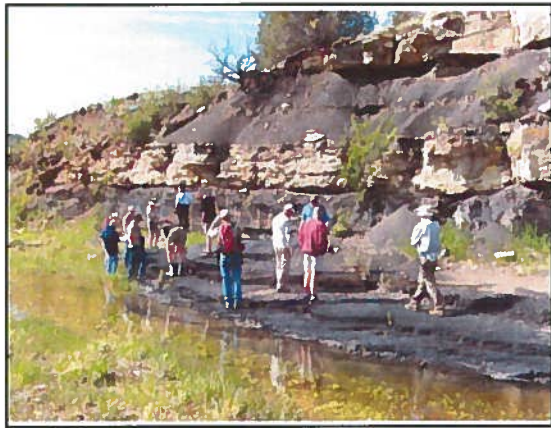
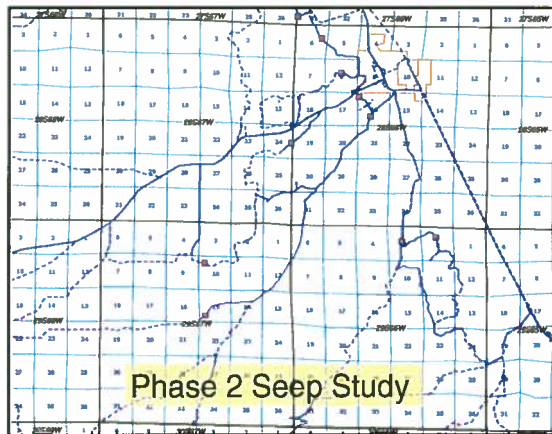
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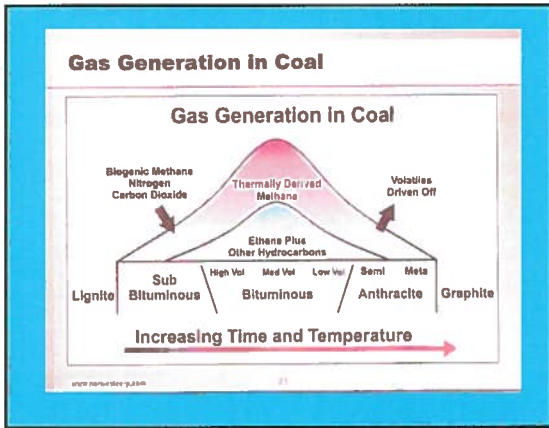
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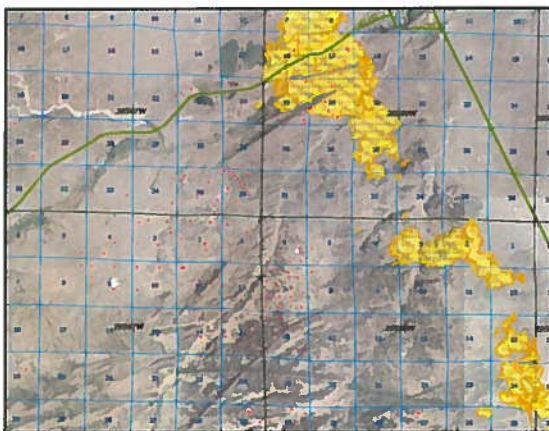
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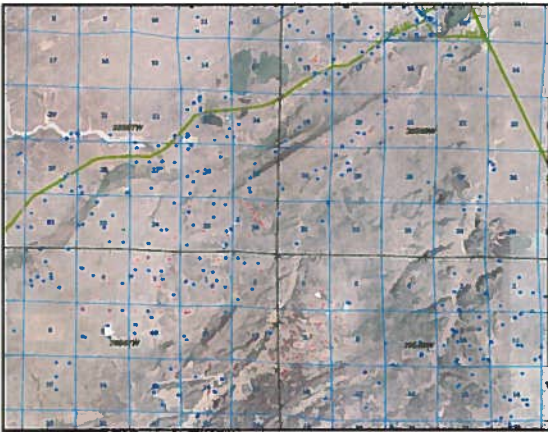
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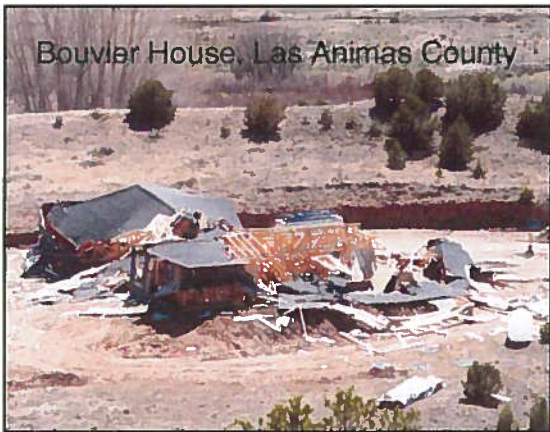
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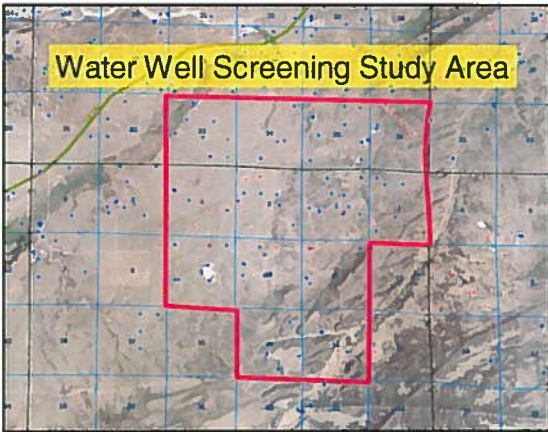
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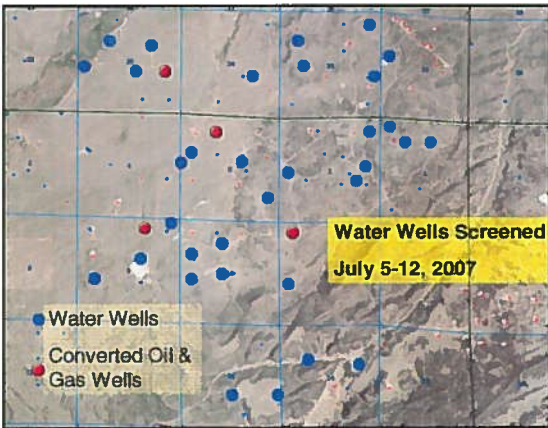
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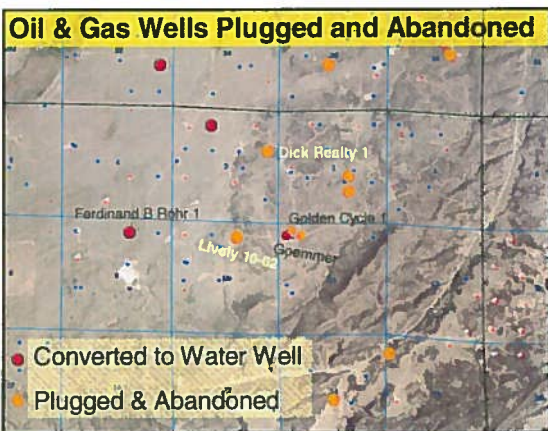
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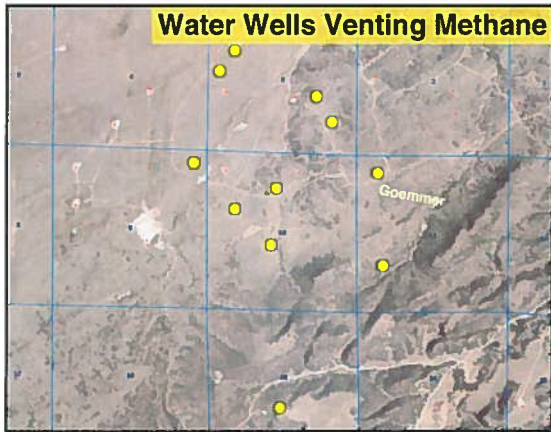
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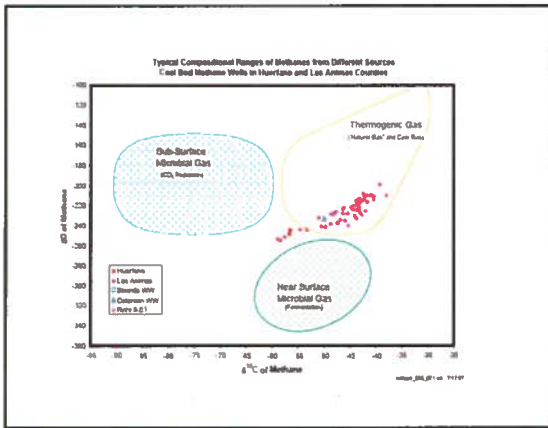
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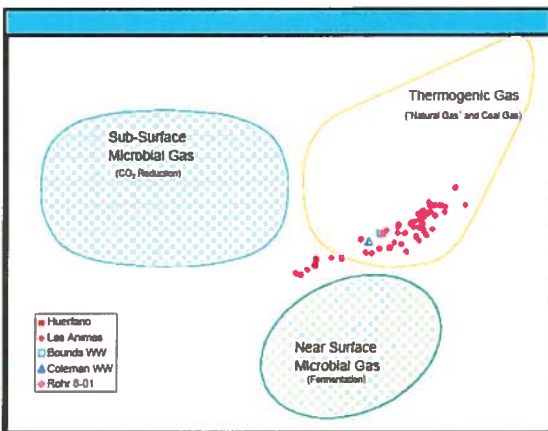
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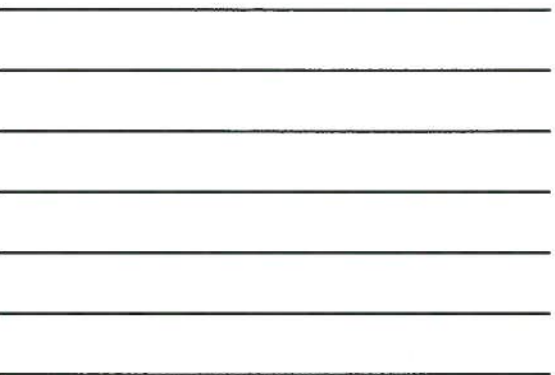
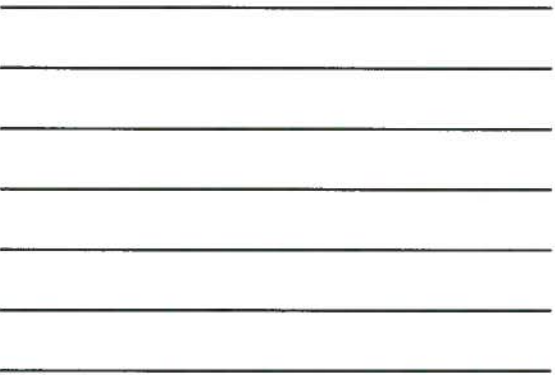
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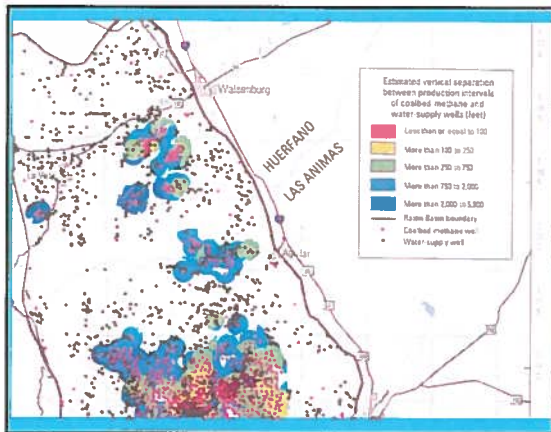
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## How Can Methane Enter Water Wells

- Water Wells Completed in Coal
- Water Wells Completed in Sandstones or Fractured Zones near Coal
- Migration of Methane into Aquifers
  - Along Fractures
  - Along Dikes
  - From Improperly or Never Plugged Oil & Gas Wells

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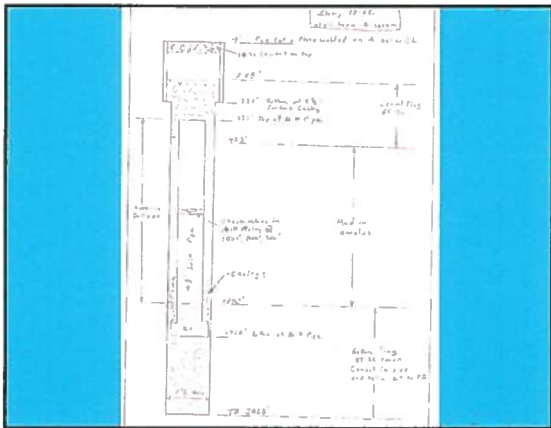
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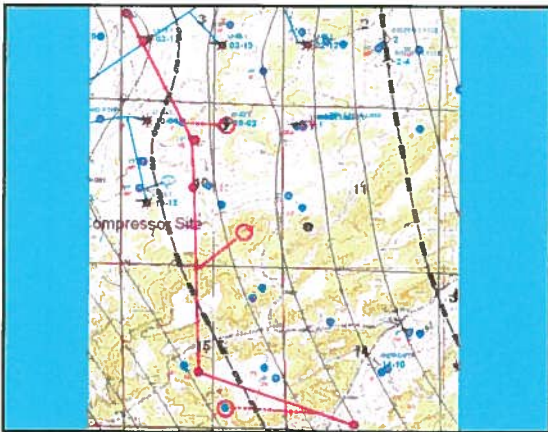
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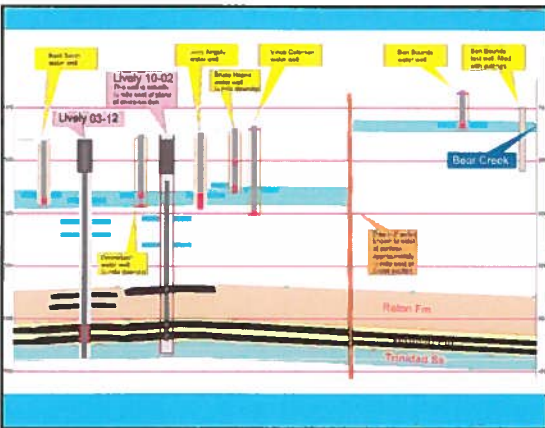
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## Methane and Your Waterwell

- Methane is colorless and odorless
- Methane is lighter than air
- Methane is flammable
- LEL is 5% in air
- Ignition sources might include
  - Electric switches, pump relays, heat from light bulbs, space heaters

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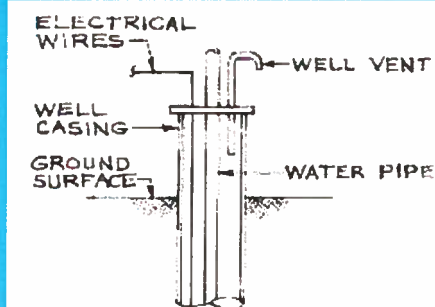
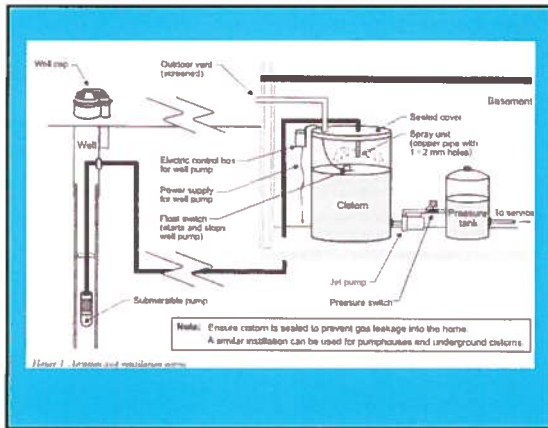
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## Methane and Your Water Well

- Vented well cap
- Vented cistern
  - If indoors vent to outside building above roof line
  - Vent above snow line and with J and screen
- Aeration and venting
- Indoor combustible gas alarms
- Licensed well and pump professional





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Thanks

- River Ridge Ranch Property Owners
- Community Center
- Jim Conley

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