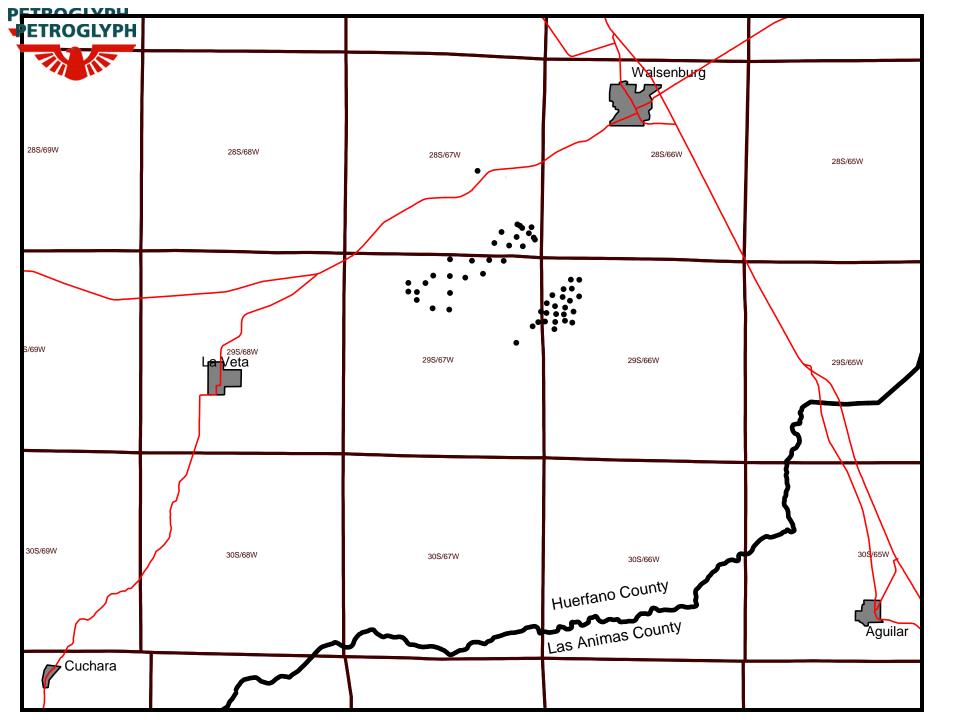


# **Colorado Oil & Gas Conservation Commission**

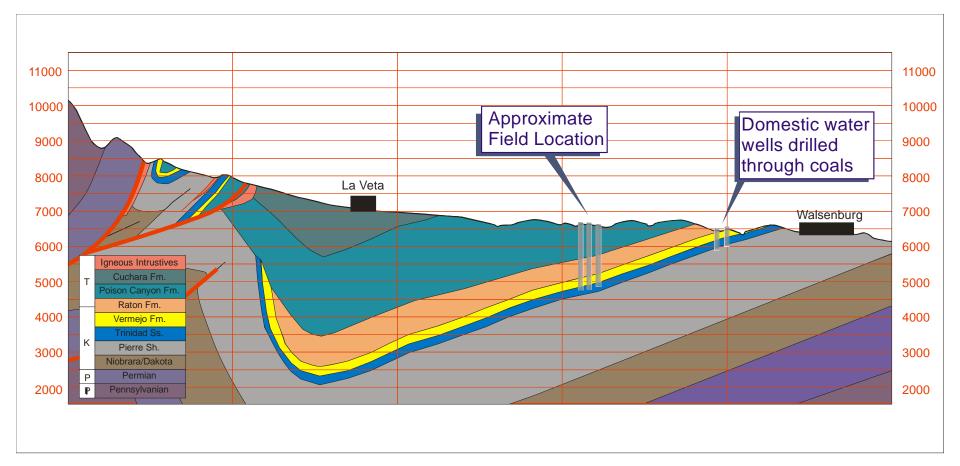
# Termination of CBM Operations Northern Raton Basin, Huerfano County, CO

June 26, 2011





# East-West Cross Section Northern Raton Basin





# **Petroglyph Timeline**

- Mar 1998 First CBM wells drilled
- Jul 2007 Field shut-in at request of COGCC
- Jan 2008 Order 1C-6 approves MIMMP
- Mar 2008 Recovery wells begin passive venting methane from the Poison Canyon aquifers
- Dec 2008 Approval to activate Recovery/Injection system
- Jul 2010 Phase 1 complete and approval to begin Phase 2
- Apr 2011 Petroglyph decides to terminate CBM operations
- Jun 2011 Begin removal of surface and down hole equipment
- Sep 2011 All CBM wells should be plugged and Phase 2 hydraulic barrier and methane removal system shutdown
- Sep 2012 Follow up monitoring and reporting should be complete



# Order 1C-6 MIMMP

### Phase 1

- Public safety, investigation and monitoring activities
- Data acquisition and characterization of the Poison Canyon aquifers
- Initiation and testing of the methane removal system for the Poison Canyon aquifers

### • Phase 2

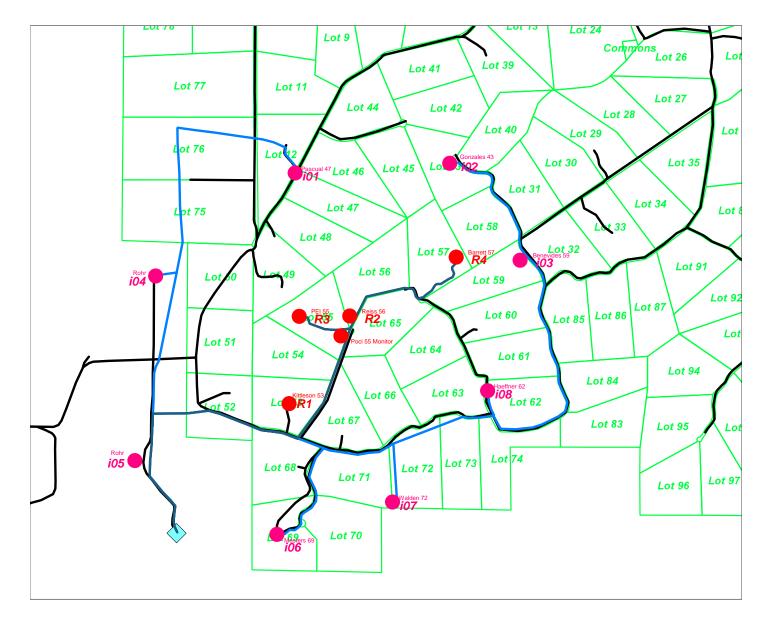
- Initiation of hydraulic barrier and full operation of the methane removal system
- Public safety, investigation and monitoring activities

### • Phase 3

- Reactivation of all 52 CBM wells
- Public safety, investigation and monitoring activities
- Upon identification of a methane migration pathway, submit a plan for closure if technically feasible and economically practicable

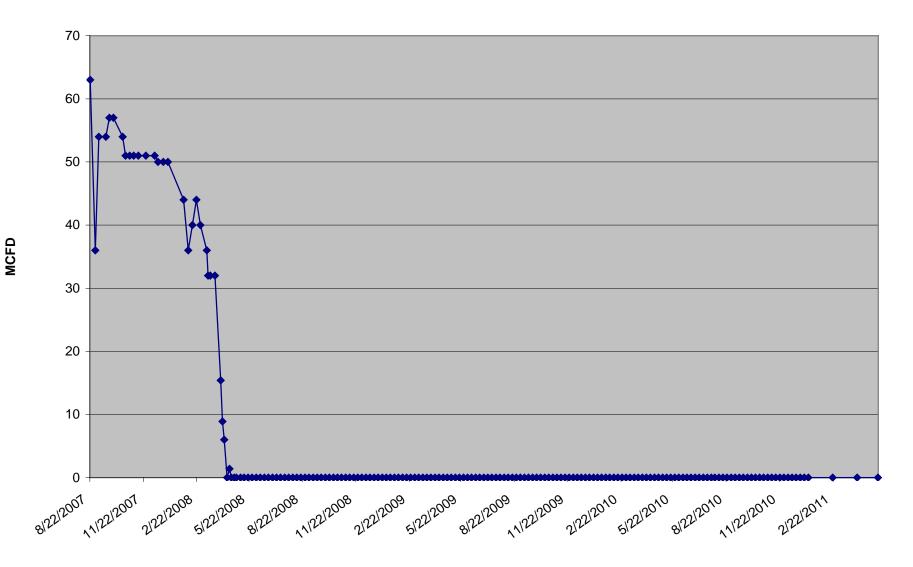


## **Recovery/Injection System Map**



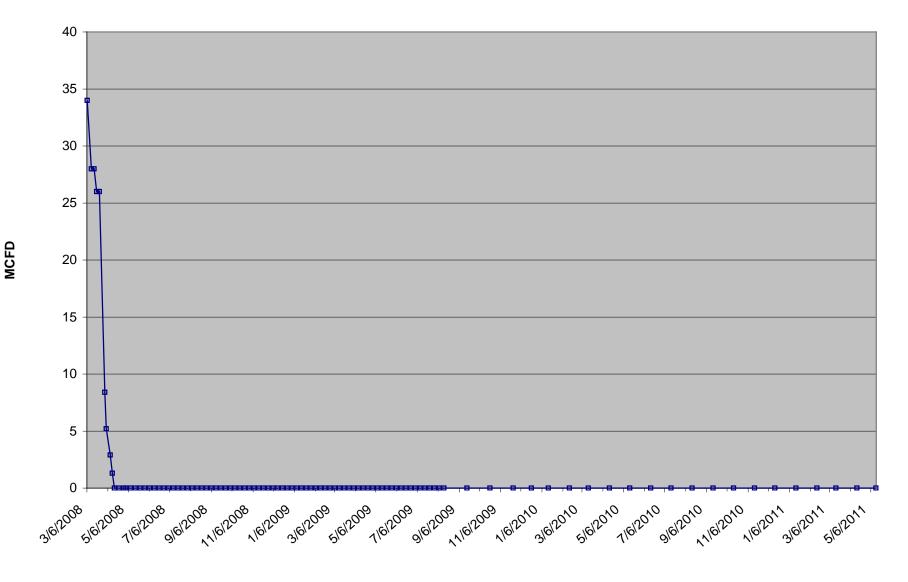


#### Smith WW # 239657 Measured Gas Flow from 8/22/07 to 5/10/11



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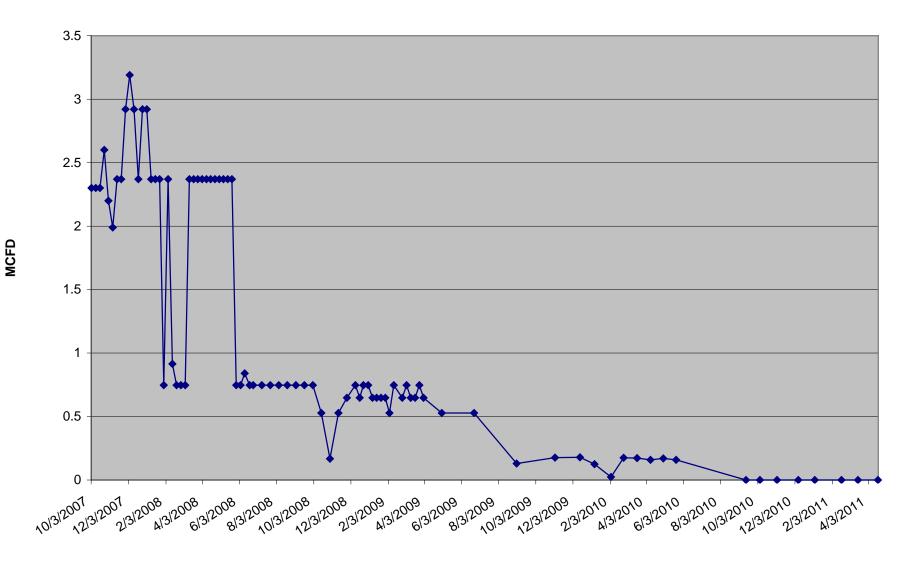




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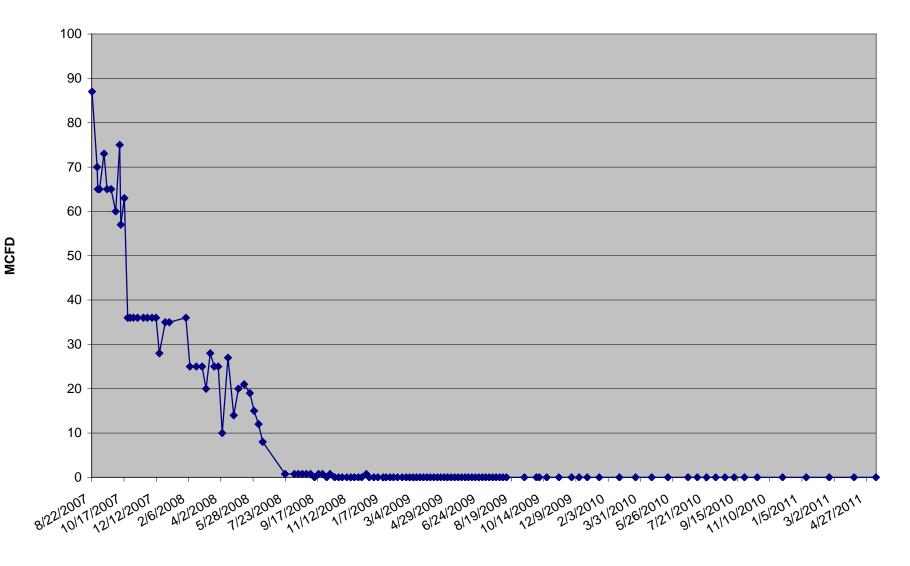


#### Bounds WW #181278 Measured Gas Flow from 10/3/07 to 4/18/11



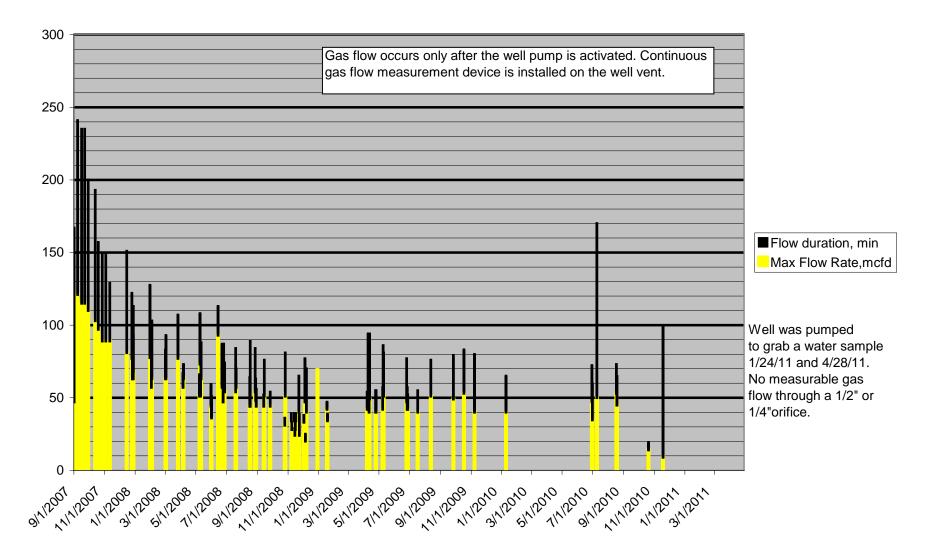


#### Bruington WW # 210526 Measured Gas Flow from 8/22/07 to 5/13/11



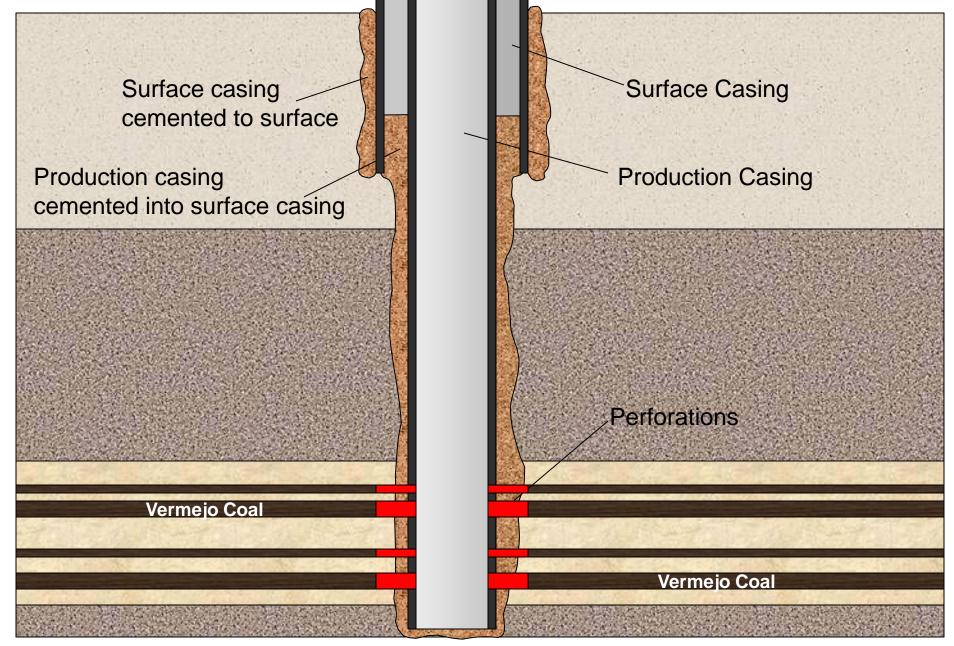


#### Coleman WW #267294 Measured Gas Flow from 9/1/07 to 4/28/11



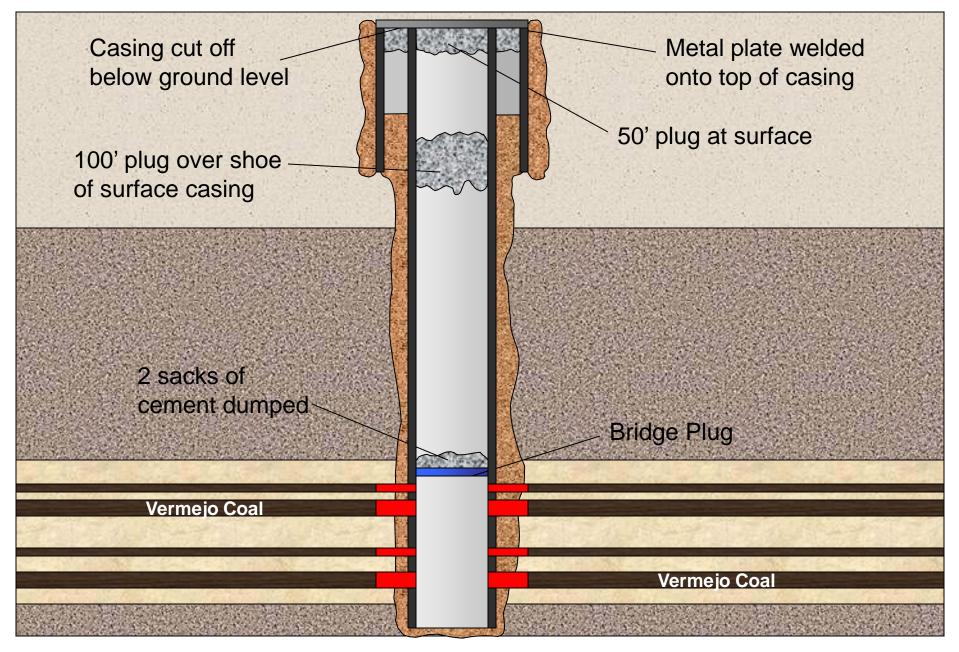


### **Current Wellbore**





## **COGCC** minimum plugging requirement





## **Petroglyph Abandonment Plan**

