

Water Resources Review Committee September 28, 2005 Denver, Colorado



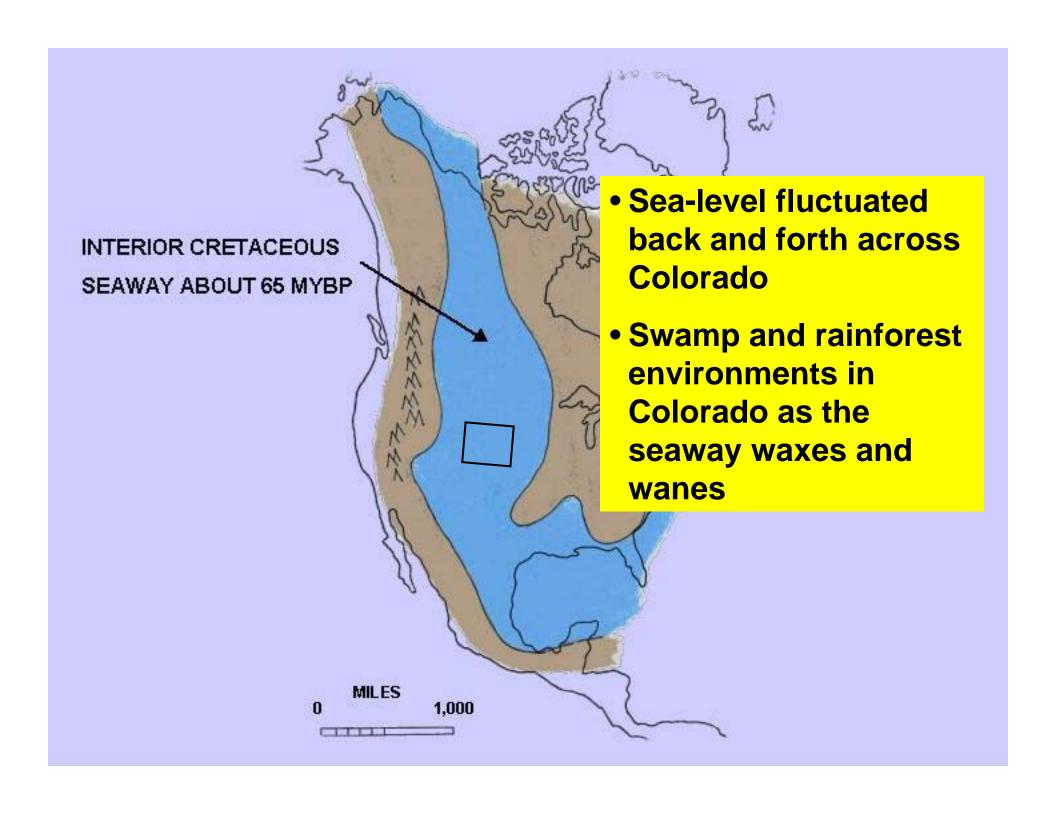
Colorado Oil and Gas
Conservation Commission

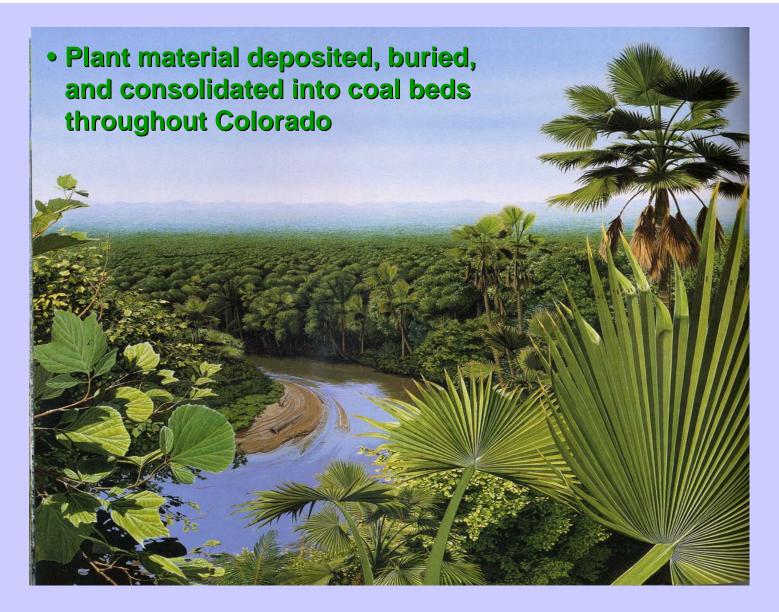






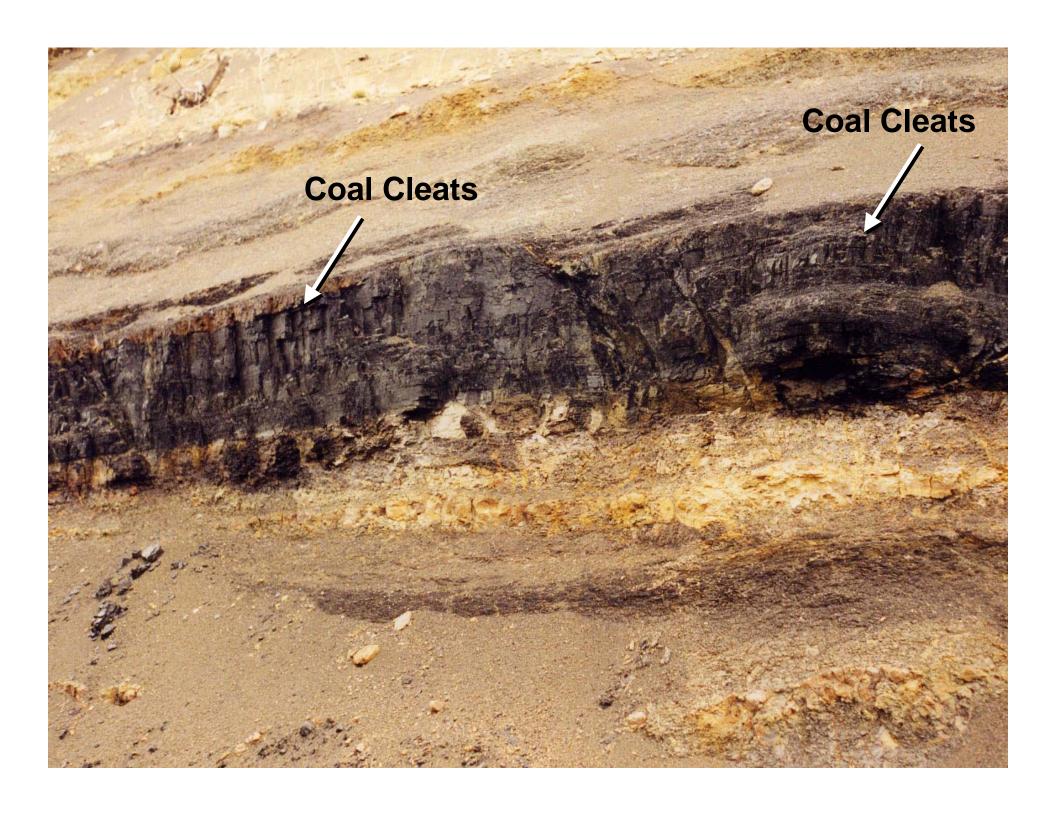




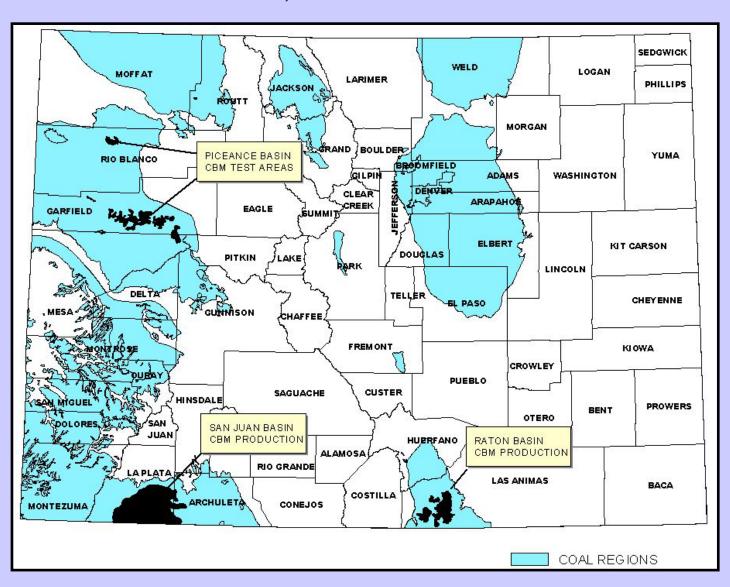


FRONT RANGE OF COLORADO 65 MYBP

DENVER MUSEUM OF NATURE AND SCIENCE AND DIANE BRAGINETZ WITH PERMISSION



COALBED GAS IN COLORADO 3,855 WELLS



How is Coalbed Methane Extracted?

- Methane gas is trapped in the coal beds by the pressure of water in the cleats (fractures)
- To release methane gas, water pressure is reduced by removing water from coal-bearing intervals
- Coal-bearing intervals can be interbedded with known aquifers, may be aquifers themselves, or are connected with surface water systems

SIMPLIFIED COLORADO STRATIGRAPHIC NOMENCLATURE CHART CRETACEOUS AND YOUNGER ROCKS WITH CBM POTENTIAL

	I		YEARS	1				DICEANCE	DATON	DENI/ED	SAND WASH	NODTH DADY
ERA	PERIOD		BEFORE PRESENT	SAN JUAN BASIN		PICEANCE CREEK BASIN		RATON BASIN	DENVER BASIN	BASIN	NORTH PARK BASIN	
CENEZOIC	PLIOCENE		11M							BROWNS PARK		
	MIOCENE									FM.	NO. PARK FM.	
			25M				₿.					
	OLIGOCENE		40M	TERTIARY VOLCANICS						CASTLE ROCK CONGL.		RABBIT EARS VOLCANICS
	EOCENE PALEOCENE		40101	-								• • • • • • • • • • • • • • • • • • •
			60M	SAN JOSE FORMATION			UINTA FM EEN RIVER FM		DAWSON FM.	GREEN RIVER FM		
							WASATCH FM		POISON CYN		WASATCH FM.	
			65M				FT UNION FM OHIO CK CONGL.			TON FM. DENVER FM.	FT. UNION FM	COALMONT FM.
MIDDLE AND UPPER MESOZOIC	CRETACEOUS	UPPER		ANIMAS FORMATION					RATON FM. VERMEJO		OHIO CK. CONGL.	F-100.
						****		FM TRINIDAD	ARAPAHOE FM.	LANCE FM.		
				KIRKLAND SHALE			GP.		TAULT LANGE	LARAMIE FM. LARAMIE-FOX	FOX HILLS FM.	
				FRUITLAND			FM.	HILLS	LEWIS SHALE			
				FORMATION PICTURED CLIFFS		VERDE	111111111111		7.11.2.2	B WILLIAMS		
						> 	1		(1)			
						STONE	MESA	ILES FM.	PIERRE SHALE	PIERRE SHALE	TROUT CREEK SS. ILES FM. TOW CREEK	PIERRE SHALE
				JU P	CREVASSE CYN MENEFEE	LEWIS SH		0500.00				
				GRC		CLIFF HOUSE PT LOOKOUT		SEGO SS STLEGATE SS.				
				MESA VERDE GROUP		MANCOS	CAS	STEEGATE 33.		NIOBRARA		
				SA VE	CREVA	SH			NIOBRARA	FM.		NIOBRARA
				ME	GALLUP SANDSTONI		MANCOS SHALE		FM		MANCOS SHALE	FM.
				LOWER MANCOS								CARLISLE SH.
₩				SHALE					CODELL SS.	CODELL SS.		FRONTIER SS.
				DAKOTA SANDSTONE			MOWRY SH.		COLO. GP.	COLO. GP.		MOWRY SH.
							DAKOTA SS.		DAKOTA SS.	DAKOTA GP.	DAKOTA GP.	MUDDY SS.
		LOWER										DAKOTA GP.
			135M									
			TOOW	10000000			,,,,,,,,	***************************************				

TYPICAL CBM WELL COMPLETION

