

General Questionnaire Results

STATE COMPARISONS

		AL	AR	CO	IL	IN	KS	KY	LA	MI	NE	NM	NY	ND	OH	OK	SD	TN	TX	VA	WV	WY	
1	Do you have any guidance or experience on plugging horizontal wells?	N	Y	Y	N	N	N	N	N	N	N	N	N	Y	N	N	Y	N	Y	Y	N	Y	
2	What material used to plug horizontal?	LO	Mud	LO	LO	C	NA	NA	NA	NA	LO	C	C	LO	NA	N	LO	NA	Mud	W	NA	C	
3	Do you prescribe a bridge plug type?	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y	Y	
4	If so, have there been any issues such as cast iron bridge plugs rusting?	NA	N	N	N	NA	N	NA	N	NA	N	NA	NA	N	Y	N	N	N	N	NA	NA	NA	
5	What type of fill material is approved for placement above the plug?	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	NP	NP
6	Is there a prescribed thickness (in Feet) of the fill material?	200	50			200	50		10			50	15+				50	50		50	20	100	
	Above		50			50	50					50	15+				50	50		50	20	100	
	Below		50	V	V	50	50	V		V	k	50	15+	k	V	I	50	50	V	50	20	100	
7	How do you plug coal bed methane wells?	I	I	C	I	I	I	I	NA	NA	NA	NA	NA	NA	I	I	NA	I	NA	W	I	NA	
	Above																						
	Below	I	I	C	I	I	I	I	NA	NA	NA	NA	NA	NA	I	I	NA	I	NA	W	I	NA	
8	Any venting for methane & how is it done?	N	N	N	N	NA	NA	N	NA	NA	N	N	NA	N	NA	N	NA	N	N	N	N	N	
9	Is the annular space left open?	NA	N	V	N	NA	NA	N	N	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
OTHER QUESTIONS																							
10	Any coal bed methane well issues?	N	N	N	N	N	N	Y	N	N	N	N	N	N	Y	Y	N	one	N	Y	Y	N	
11	Any stray gas migration issues?	N	DD	Y	N	N	N	N	N	N	N	NA	NA	N	Y	Y	N	N	N	N	N	NR	
12	Notes from conversation:	a		h	b,c	c	c	d		g		m	c	l	e	c,i	c	c, n		j	f		

LEGEND:

- C = Cement
- DD = During Drilling
- I = Isolate the zone
- LO = Left Open
- M = Mechanical
- N = No
- NA = Not Applicable/Aware
- NP = Non-porous
- O = Other
- V = Various/Varies
- W = Water
- Y = Yes

NOTES:

- (a) Alabama only has 3 orphan wells! First well drilled 1944, Regs in 1945, Bond required for every hole
- (b) Illinois has 100 Ft above in coal and 50 Ft above in noncoal
- (c) New regs/rules as of 2011 or underway for 7 of 21 states interviewed
- (d) Kentucky is currently revising regs, wants to keep in touch
- (e) Ohio has only 10 horizontal wells to date, prescribe horizontal vaults for venting
- (f) West Virginia has 20 Ft above 20-100 Ft below in coal
- (g) Michigan has Utica wells 10-12k feet below
- (h) Colorado plugs zones to include salvaged steel, gas, oil, salt, fresh water, base of surface casing
- (i) Oklahoma may allow fly ash for shallow wells
- (j) Virginia has no Marcellus yet & no evidence of fracturing fluids getting into freshwater yet
- (k) NE goes with 5 sacks, ND goes with 5-25 sacks depending on formation, WY prescribes 10 sacks/ 100 feet
- (l) North Dakota has new rules for fracturing & pits. Not much shallow gas
- (m) New Mexico goes by performance based terminology
- (n) TN has 98 horiz wells, none plugged yet