

## STATE OIL AND GAS BOARD OF ALABAMA

## **Unit Reserve Calculation**

Founded 1946			0	1	
Form OGB-23, Rev. (File in duplicate		Permit Number Initial	Annual		API Number
Name of Operator					
Address		City		State	Zip
Well name and nur	mber				2. County
Well Location (surface)	(give footage from neare	st section or offshore trac	t lines)		Section-Township-Range or Tract
4. Field (If wildcat, so	state)			5. Pool	
6. Present allowable			Mcf/d		
		DATA & CAI	CULATIONS		
Orig. Reservoir Press	ure (P <sub>o</sub> )	_ psia Orig. Reservoir Te	mperature (T <sub>o</sub> )	°F	Gas Sp. Gr
Gas Compressibility F	actor (Z <sub>o</sub> ) at Original Pre	essure (P <sub>o</sub> ) and Temperate	ure (T <sub>o</sub> )		
Original Reservoir (Pc	, / Z <sub>o</sub> )				
Slope of Straight Line	Material Balance (Absolu	ute Value): m =		<del></del>	
Well Initial (P <sub>i</sub> / Z <sub>i</sub> )					
Initial Gas in Place (IC	m	=			
Original Gas in Place	Adjustment Factor = f	$= \frac{P_0/Z_0}{P_i/Z_i} = -$			
		00) x 600 Mcf/d =			Mcf Mcf/d
Person to contact		Phone numl			
regarding this form		Fax number			
		E-mail addre	ess		
Remarks:					
* Mcf=1,000 cubic fee	t				
Executed this the	day of	, 20		Sign	nature
whose name is subscribe he/she has knowledge of	the facts stated therein, and	who being by me duly sworn of that said report is true and c	orrect.	<del>-</del>	known to me to be the person d to make the above report and that
	perore me this da	ay of	, 20	Noton: Disk!	o in and for
SEAL My commission expires				Notary Publi	c in and for

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## Calculation Sheet

Date	Pressure psia	Temp.	Comp. factor		Cumulative production Mcf		
	Р		Z	P/Z	N	(P/Z)(N)	$(N)(N) = N^2$
		SUMI	$MATION = \sum$				
				$(\sum N)^2 =$			

= _	points	data	of	number	=	n
= _	points	data	of	number	=	n

$$m = \frac{n\sum[(P/Z)(N)] - [\sum(P/Z)] [\sum(N)]}{n\sum(N^2) - [\sum(N)]^2} = \underline{\hspace{1cm}}$$

$$P_i/Z_i = \frac{\sum (P/Z) - m \left[\sum(N)\right]}{n} = \underline{\hspace{1cm}}$$

$$IGIP = \frac{P_i/Z_i}{m} = \underline{\qquad} Mcf$$

## Instructions

- 1. The maximum shut-in time prior to obtaining bottom hole pressure shall be 72 hours.
- 2. List all historical bottom hole pressures and corresponding cumulative productions above.
- 3. Submit current bottom hole pressure report or calculation with this form.
- 4. Report compressibility factors to three (3) significant figures.
- 5. Do not include original static bottom hole pressure prior to production in curve fit calculation.