

Sheet1

Calculates BHP from surface pressure and creates BHP/Z-vs-Cum plot

WELL NAME:  
GAS GRAVITY:  
CONDENSATE (YES=1):  
RESERVOIR TEMP:  
SURFACE TEMP:  
DEPTH OF ZONE:

ABAND. PRESSURE:

Enter BHP if known	CUM GAS mcf
0	0
3,500	6,500,000
0	4,500,000
0	3,482,278
	GIP 13,066,184
	REC 10,632,985

INSTRUCTIONS:

- 1) PRESS [ALT][I] TO INSERT BLANK LINES.
- 2) PRESS [ALT][D] TO DELETE LINES.
- 3) IT IS BEST TO INSERT AS MANY BLANK LINES AS YOU WILL REQUIRE BEFORE ENTERING ANY DATA POINTS.
- 4) ENTER THE SHUT-IN TUBING PRESSURES.
- 5) ENTER MEASURED BHP IN COLUMN A IF KNOWN
- 6) PRESS [ALT][C] TO CALCULATE THE BHP AND Z-FACTORS
- 7) TO PRINT, PRESS [ALT][P].
- 8) PRESS [F10] TO GET A PLOT OF THE RESULTS.

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--BHPCUM--

GAS Ghc = 0.64  
Tchc = 370.88

TEST WELL  
 0.64  
 0  
 230 'F  
 80 'F  
 15,420 feet  
 1,500 psia

Written by  
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Version 1.0  
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% N2: 0.00  
 % CO2: 0.00  
 % H2S: 0.00  
 Pc = 671.24  
 Tc = 370.88

Pchc = 671.24  
 CWA = 0.00  
 Tavg = 614.67  
 Tc' = 370.88  
 Pc' = 671.24

SURFACE PRES	BHP	Z	BHP/Z	Pr	G	pro	f(pr)	f(pr)'
psia	psia							
10,800	Err:522	Err:522	Err:522	16.090	4.344	Err:522	Err:522	Err:522
	3,500	Err:522	Err:522	0.000	0.000	Err:522	Err:522	Err:522
4,600	Err:522	Err:522	Err:522	6.853	1.850	Err:522	Err:522	Err:522
5,300	Err:522	Err:522	Err:522	7.896	2.132	Err:522	Err:522	Err:522

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	BHT	SURFT
A =	0.0642	0.0642
B =	0.3831	0.1666
C =	-0.6280	-0.8613
D =	1.860	1.455
E =	0.1971	0.3219
F =	0.6845	0.6845
Tr =	1.860	1.455

-----ONE-----

pro'	Z		Pr	G	pro	f(pr)	f(pr)'
Err:522	Err:522	14963	22.292	6.019	Err:522	Err:522	Err:522
Err:522	Err:522	0	0.000	0.000	Err:522	Err:522	Err:522
Err:522	Err:522	6373	9.495	2.564	Err:522	Err:522	Err:522
Err:522	Err:522	7343	10.940	2.954	Err:522	Err:522	Err:522

\C

\P

\I

\D

pro'	Z	PRESS
Err:522	Err:522	Err:522
Err:522	Err:522	Err:522
Err:522	Err:522	Err:522
Err:522	Err:522	Err:522

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```
/WGPD{GOTO}E14~  
{GOTO}C14~/RF,0~{RIGHT}{END}{DOWN}~{GOTO}A14~/RU{RIGHT 3}{END}{DOWN}~  
{GOTO}AH15~1~/C~.{END}{DOWN}~{GOTO}AP15~1~/C~.{END}{DOWN}~{CALC}  
{GOTO}AH14~/C~.{END}{DOWN}~{GOTO}AP14~/C~.{END}{DOWN}~{HOME}{CALC}{CALC}/DRG{CALC}{UP}/WGPE  
  
{HOME}/PPR{BS}PRINT~AGPQ  
  
/WGPD{GOTO}A15~/WIR~{GOTO}E14~/C.{END}{RIGHT}~{DOWN}~/WGPE{GOTO}A15~/RU.{RIGHT 3}~{GOTO}A15~/RF,  
  
/WGPD{GOTO}A15~/WDR~/WGPE  
  
-----TWO-----
```

-----THREE-----

G	pro	f(pr)	f(pr)'	pro'	Z	PRESS	Pr
6.019	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522
0.000	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522
2.564	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522
2.954	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522

-----FOUR-----

G	pro	f(pr)	f(pr)'	pro'	Z	PRESS	Pr
Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522
Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	3,500	5.214
Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522
Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522

Regression Output:

Constant  
 Std Err of Y Est  
 R Squared  
 No. of Observations  
 Degrees of Freedom  
  
 X Coefficient(s)  
 Std Err of Coef.

	G	pro	f(pr)	f(pr)'	pro'	Z	PRESS	Y BHP/Z	X CUM
	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	0
	1.408	Err:522	Err:522	Err:522	Err:522	Err:522	3,500	Err:522	6,500,000
	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	4,500,000
	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	Err:522	3,482,278
								0	13,066,184
									10,632,985



8054.94155859399  
367.119239718232  
0.969029077207867  
4  
2

-0.000616472386537  
0.000077930470563

YCACL  
8,055  
4,048  
5,281  
5,908  
0  
1,500                    1,500