



Andrews, David

045-18824

From: Caplis, Chris [Chris.Caplis@Williams.com]
Sent: Friday, October 01, 2010 2:47 PM
To: Andrews, David
Subject: FW: SP 522-14 pressure build up test
Attachments: SP 522-14 Pressure Build Up_10-1-2010.xlsx; SP 522-14 Echometer Results.xlsx

Mr. Andrews,

Below is the email I sent to the BLM along with attachments.

If he concurs then we will test casing and I will send you the results.

Regards,

Chris Caplis
Completions Engineer
Williams Production Co.
Ofc: 303-606-4041
Cell: 303-601-4884
chris.caplis@williams.com

From: Caplis, Chris
Sent: Friday, October 01, 2010 2:46 PM
To: 'Dane_Geyer@blm.gov'
Cc: Conger, Jeremy; Caplis, Chris
Subject: SP 522-14 pressure build up test

Dane,

We shut in the SP 522-14 for 48 hours and shot a fluid level per your request to obtain estimated reservoir pressure. Attached are files showing the pressure build up on an hourly basis and the results from the echometer.

If we take the surface pressure at the time of the echometer shot (9:00 am MST 10-1-2010) and calculate an estimated reservoir pressure, we get the following:

Surface Pressure: 950 psi
Fluid Level: 4,622'
Gas Gradient: 0.15 psi/ft
Produced fluid Gradient: 8.6 lb/gal X 0.052 = 0.447 psi/ft
Bottom Perf: 8,155'

Therefore:

Estimate Reservoir Pressure = Surface pressure + gas hydrostatic + fluid hydrostatic to bottom perf

ERP = 950 psi + (4,622' X 0.15 psi/ft) + (3,533' X 0.447 psi/ft) = 3,223 psi

Finally, we will plan to test the SP 522-14 production casing to 3,300 psi. If it holds acceptable pressure for 15 minutes we will drill out plugs and put the well to final sales. If it does not hold, we will remediate as needed. Please advise if this plan is acceptable.

Regards,

Chris Caplis

Completions Engineer

Williams Production Co.

Ofc: 303-606-4041

Cell: 303-601-4884

chris.caplis@williams.com

Well SP 522-14 Actual Date 09/29/2010											Total bbl load	31767	
											BLWR prior day	17055	
											BLWTR prior day	14712	
Time	PSI TBG	PSI CSG	CK	BLS Hr	BLWR	BLWTR	NO2 TBG	NO2 CSG	OIL	MCF	Comments	I BLWR\Stage	
6:00 AM		600	20	4	17059	14708					Flowing well to separator--Gas to sales--Water to tank		
7:00 AM		600	20	5	17064	14703							
8:00 AM		575	20	5	17069	14698							
9:00 AM		400	20	5	17074	14693							
10:00 AM		400	20	5	17079	14688					Light sand		
11:00 AM		380	20	3	17082	14685							
12:00 PM		360	20	4	17086	14681							
1:00 PM		400	20		17086	14681					Shut in to build pressure		
2:00 PM		500	20		17086	14681					Braden head at 0 psi		
3:00 PM		540	20		17086	14681							
4:00 PM		560	20		17086	14681							
5:00 PM		600	20		17086	14681							
6:00 PM		625	20		17086	14681							
7:00 PM		650	20		17086	14681					Braden head at 0 psi		
8:00 PM		680	20		17086	14681							
9:00 PM		690	20		17086	14681							
10:00 PM		700	20		17086	14681							
11:00 PM		720	20		17086	14681							
12:00 AM		730	20		17086	14681					Braden head at 0 psi		
1:00 AM		750	20		17086	14681							
2:00 AM		750	20	0	17086	14681					Braden head at 0 psi		
3:00 AM		790	20	0	17086	14681							
4:00 AM		800	20	0	17086	14681							
5:00 AM		800	20	0	17086	14681					Gas sold for day, mcf/day= 984		
Total BLWR/Day				31							BBL load water/day	0	This sums the load. This number is above in cell Q1

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Well SP 522-14	Actual Date 09/30/2010	Total bbl load	31767
		BLWR prior day	17086
		BLWTR prior day	14681

Time	PSI TBG	PSI CSG	CK	BLS Hr	BLWR	BLWTR	NO2 TBG	NO2 CSG	OIL	MCF	Comments	BLWR\Stage		
6:00 AM		800	20	0	17086	14681					Well shut in to monitor braden head pressure and shut in pressure			
7:00 AM		800	20	0	17086	14681					Braden head at 0 psi			
8:00 AM		800	20	0	17086	14681								
9:00 AM		825	20	0	17086	14681								
10:00 AM		825	20	0	17086	14681								
11:00 AM		850	20	0	17086	14681					Braden head at 0 psi			
12:00 PM		850	20	0	17086	14681								
1:00 PM		850	20	0	17086	14681					Braden head at 0 psi			
2:00 PM		850	20	0	17086	14681								
3:00 PM		850	20	0	17086	14681								
4:00 PM		850	20	0	17086	14681								
5:00 PM		850	20	0	17086	14681								
6:00 PM		850	20	0	17086	14681					Braden head at 0 psi			
7:00 PM		900	20	0	17086	14681								
8:00 PM		900	20	0	17086	14681								
9:00 PM		900	20	0	17086	14681								
10:00 PM		900	20	0	17086	14681								
11:00 PM		910	20	0	17086	14681								
12:00 AM		920	20	0	17086	14681								
1:00 AM		920	20	0	17086	14681								
2:00 AM		920	20	0	17086	14681								
3:00 AM		920	20	0	17086	14681								
4:00 AM		900	20	0	17086	14681					Braden head at 0 psi			
5:00 AM		900	20	0	17086	14681					Gas sold for day, mcf/day= 387			
Total BLWR/Day				0								BBL load water/day	0	This sums the load. This number is above in cell Q1

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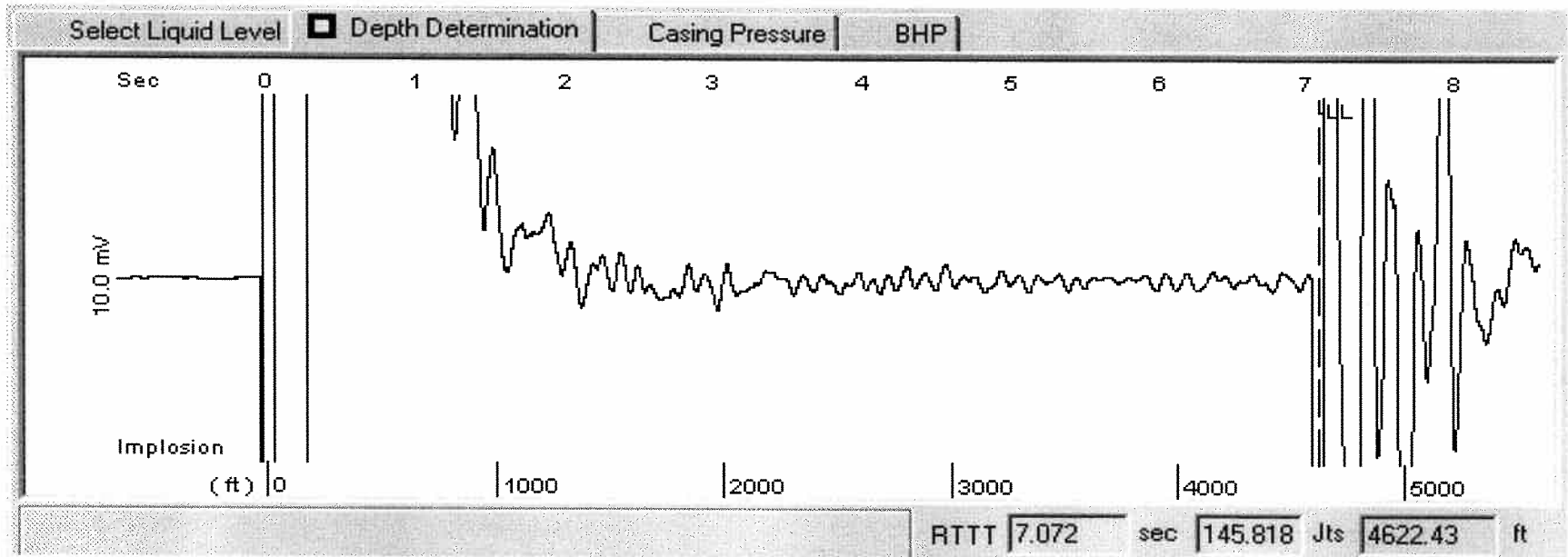
Well SP 522-14	Actual Date 10/01/2010	Total bbl load	31767
		BLWR prior day	17086
		BLWTR prior day	14681

Time	PSI TBG	PSI CSG	CK	BLS Hr	BLWR	BLWTR	NO2 TBG	NO2 CSG	OIL	MCF	Comments	f BLWR/Stage	
6:00 AM		950	20	0	17086	14681					Well shut in to monitor braden head pressure and shut in pressure		
7:00 AM		950	20	0	17086	14681					Braden head at 0 psi		
8:00 AM		950	20	0	17086	14681							
9:00 AM		950	20	0	17086	14681					Shot fluid level with Echometer		
10:00 AM		950	20	0	17086	14681							
11:00 AM		900	20	0	17086	14681					Braden head at 0 psi		
12:00 PM		900	20	0	17086	14681							
1:00 PM		1000	20	0	17086	14681					Braden head at 0 psi - 48 hrs shut in		
2:00 PM		1000	20	0	17086	14681							
3:00 PM			20	0	17086	14681							
4:00 PM			20	0	17086	14681							
5:00 PM			20	0	17086	14681							
6:00 PM			20	0	17086	14681							
7:00 PM			20	0	17086	14681							
8:00 PM			20	0	17086	14681							
9:00 PM			20	0	17086	14681							
10:00 PM			20	0	17086	14681							
11:00 PM			20	0	17086	14681							
12:00 AM			20	0	17086	14681							
1:00 AM			20	0	17086	14681							
2:00 AM			20	0	17086	14681							
3:00 AM			20	0	17086	14681							
4:00 AM			20	0	17086	14681							
5:00 AM			20	0	17086	14681					Gas sold for day, mcf/day=		
Total BLWR/Day				0								BBL load water/day	0

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This sums the load.
 This number is above in cell Q1

SG 522-14



Fluid level appears to be at 4622' using a field average SG of .63. The depth can be off by +/- 200' (this varies with types of shots, wellbore configuration, wellhead configuration).

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