



Well History

Well Name: Baker #42-5

API/UWI 05123212960000	Surface Legal Location SENE 5-4N-63W	Field Name Wattenberg	State/Prov CO	Well Configuration Type
Ground Elevation (ft) 4,620.00	Original KB Elevation (ft) 4,632.00	KB-Ground Distance (ft) 12.00	Spud Date 2/4/2003 00:00	Rig Release Date 2/19/2003 00:00
On Production Date 3/13/2003 00:00				

Daily Operations		
Start Date	Summary	End Date
2/8/2003	MIRU PSI and ran Comp Density/Comp Neutron/Dual Induction log. LTD @ 7252' KB. RU casing crew. Ran Topco Auto Fill Guide Shoe, 14.6' shoe joint, 166 joints of 10.5 #/ft, M-65, 4 1/2" casing with 1 joint of 11.6 #/ft, N-80 on top of casing string. Casing set @ 7199' KB. PBDT @ 7185' KB. RU Halliburton and pumped 10 bbl mud flush, 10 bbl spacer and 58 bbl (200 sx) 50/50 poz + additives. Released wiper plug and displaced with 114 bbl treated water. Plug down OK @ 9:55 am. ECT @ 5900' KB. Released rig @ 11:00 am.	
2/17/2003	MIRU Nuex Wireline. Ran GR/VDL/CBL finding a PBDT of 7188' KB and a CT @ 5870' KB. Perforated the J Sand from 7080' to 7092' KB with 36, .34 diameter holes, 3 spf, 120 deg phasing.	
2/19/2003	MIRU BJ Services. Frac'd the J Sand with 2235 bbl Vistar 20# fluid system, 205460# of 20/40 mesh sand and 8000# 20/40 mesh Super LC resin coated sand. MTP - 1655 psig; ATP - 1016 psig; ATP - 15.5 bpm; 4 ppa sand; ISIP - 1363 psig; Flushed with 112 bbl. Open well to tank on 12/64 choke.	
10/24/2012	STP 300 psi, SCP 300 psi, on blow down through production equipment, SSCP 0 psi, MIRU Bayou 008, blew well down to rig tank, control well w/40 bbls Claytreat/Biocide water, ND WH, NU BOP, PU tag jts, TIH w/ 2 jts, tagged @ 7,093.45' w/2, LD tag jts, TOOH standing back w/ 226 jts 2 3/8" J-55 EUE 8rd tbg, 2-10' subs sn/nc, tbg was landed at 7,061.46' KB), tag depth of 7,093.45' KB., isolated well, drained lines, prepare for next days operations, SDFN.	10/24/2012
10/25/2012	SCP 0, SSCP 0 psi, RU Pick Testers, PU RMOR's 3 7/8" blade git - 4 1/2" csg scraper, TIH w/production tbg to derrick testing to 6000 psi, found 1jt with hole, 13 jts would not test due to scale, all other jts tested good, RD tester, (TIH w/ 226 jts 2 3/8" J-55 EUE 8rd tbg, circulated down to 7,093.45' KB (1' below J-Sand) and tools w/227 jts, rolled hole clean, POOH LD w/ 226 jts, ND BOP, remove tbg head, install PDC's 4 1/2" 5K frac valve, MIRU Nabors Wireline, TIH w/ wireline set cast iron plug, correlated with logs, set cast iron plug @ 7,010', TOOH LD setting tool, TIH w/ dump bailer and two sacks of cement, spotted cement on top of plug abandoning J-Sand formation, TOOH w/wireline, RD moved wireline off of location, MIRU Pick Testers, pressured tested csg/RBP to 5000 psi using Pick Testers, held 20 minutes, test good, released tester, isolate well, prepare for next days operations, SDFN	10/25/2012
10/26/2012	SCP 0, SSCP 0 psi, removed frac valve, un-pack csg head, un-land csg (90 K), NU annular flanges, TIH picking up tallying WS #311 1.660" 3.02# N-80 CSHD workstring to 3,127.75 w/ 100 jts, RU circulation equipment on jt 100, break circulation and conditioned hole for 5 hours @ 3,127.75' w/100 jts, LD 10 jts, isolated well, drained lines, prepared for next day, SDFWE.	10/26/2012
10/29/2012	STP 0 psi, SCP 0 psi, SSCP 0 psi, TIH picking up tallying WS #311 1.660" 3.02# N-80 CSHD workstring, broke circulations every 50 jts tripped in, rolling hole 45min. to 1 hour each circulation, tagged original cmt top at 5,865.33' KB half way in on jt 188, LD jt 188, RU circulation equipment on jt 187, break circulation and conditioned hole all night utilizing night crew, total circulation time of 18 hours @ 5,845.80' w/187 jts.	10/29/2012
10/30/2012	0 psi @ WH, Circulate and condition hole @1,500 psi @1 .25 BPM throughout the night. Shut rig pump down, MI&RU Halliburton Cement Services to 1 1/4" 3.02# CSHD, hold JSA and procedure meeting. Pressure test lines to 3,500 psi Preflush: Pumped 10 bbl clay treat, 12 bbl Mud flush III and 10 bbl clay treat spacer 1st stage:EOT set @ 5,845.80' w/187 jts,mix, batch, and pump 213 sks (reciprocate pipe) Extendacem 11.5 ppg 2.32 yield (88 bbls) Displace 1.5 Bbls Est. TOC @ 4,354.64', lay down 44 jts. 2nd stage:EOT set @ 4,471.08' w/143 jts, mix, batch and pump 212 sks (reciprocate pipe) of Extendacem 11.5 ppg 2.32 yield (87 bbls) displace 1.0 bbls, Est. TOC @ 2,880.42', lay down 47 jts. 3rd stage:EOT set @3,002.74' w/96 jts, mix, batch and pump 163 sks (reciprocate pipe) of Varicem (63 bbls), bringing cement top to surface, returned 9 bbls cement to tank, Displace 1.0 Bbls, RD and release Halliburton, TOOH laying down remaining 97 jts 1 1/4" work string. Change equipment over to 4 1/2", unland annular flanges and re-land casing in slips @ 60 K lbs, ND flanges and pack off casing head. NU tubing head and BOP, load casing with clay treat for logging, SI well and secure, SDFN.	10/30/2012
10/31/2012	0 psi at WH, open well, RU Superior Wireline, ran GR/CCL/CBL/VDL log from 5900' to surface, had acceptable bonding on 11.5.0 ppg Extendacem cmt from original cmt top to 3000' and acceptable bonding on 12.0 ppg Varicem cmt from 3000' to surface, RIH w/3 1/8" slickgun, correlated cased/open logs getting on correct depth, re-perforated Codell 6569'-6577', 3 spf (24 new holes), 120 degree phasing, 19 gram charges, .41" entry holes w/21.28" penetration, all shots fired, RD e-line, SI and isolate well, drained lines, RDMOL	10/31/2012

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2263681	Quote #:	Sales Order #: 9928254
Customer: PDC ENERGY EBUS		Customer Rep: Sailors, Chad	
Well Name: Baker	Well #: 42-5	API/UWI #:	
Field: Wattenberg	City (SAP): UNKNOWN	County/Parish: Weld	State: Colorado
Contractor: Basic	Rig/Platform Name/Num: 1548		
Job Purpose: Recement Service			
Well Type: Development Well		Job Type: Recement Service	
Sales Person: AARON, WESLEY	Srvc Supervisor: SANFORD, DALE	MBU ID Emp #: 219527	

Job Personnel

HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #	HES Emp Name	Exp Hrs	Emp #
CHISLUM, DENNIS	7.0	512130	DIRKS, RICHARD E	7.0	485940	HINKLE, BRADLEY Dean	7.0	512123
RICHEY, JESSICA L	7.0	525703	SANFORD, DALE A	7.0	219527			

Equipment

HES Unit #	Distance-1 way						

Job Hours

Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours	Date	On Location Hours	Operating Hours
10-30-12	7	3						
TOTAL			<i>Total is the sum of each column separately</i>					

Job

Job Times

Formation Name	Formation Depth (MD) Top	Bottom	Called Out	Date	Time	Time Zone
				30 - Oct - 2012	03:00	MST
Form Type	BHST		On Location	30 - Oct - 2012	06:00	MST
Job depth MD	5900. ft	Job Depth TVD	Job Started	30 - Oct - 2012	07:00	MST
Water Depth		Wk Ht Above Floor	Job Completed	30 - Oct - 2012	12:00	MST
Perforation Depth (MD) From		To	Departed Loc	30 - Oct - 2012	13:00	MST

Well Data

Description	New / Used	Max pressure psig	Size in	ID in	Weight lbm/ft	Thread	Grade	Top MD ft	Bottom MD ft	Top TVD ft	Bottom TVD ft
Production Casing	Unknown		4.5	4.	11.6			.	6250.	.	6250.
Tubing	Unknown		1.25	.824	2.4			.	5877.	.	5850.

Tools and Accessories

Type	Size	Qty	Make	Depth	Type	Size	Qty	Make	Depth	Type	Size	Qty	Make
Guide Shoe					Packer					Top Plug			
Float Shoe					Bridge Plug					Bottom Plug			
Float Collar					Retainer					SSR plug set			
Insert Float										Plug Container			
Stage Tool										Centralizers			

Miscellaneous Materials

Gelling Agt	Conc	Surfactant	Conc	Acid Type	Qty	Conc	%
Treatment Fld	Conc	Inhibitor	Conc	Sand Type	Size	Qty	

Fluid Data

Stage/Plug #: 1										
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk	

Stage/Plug #: 1

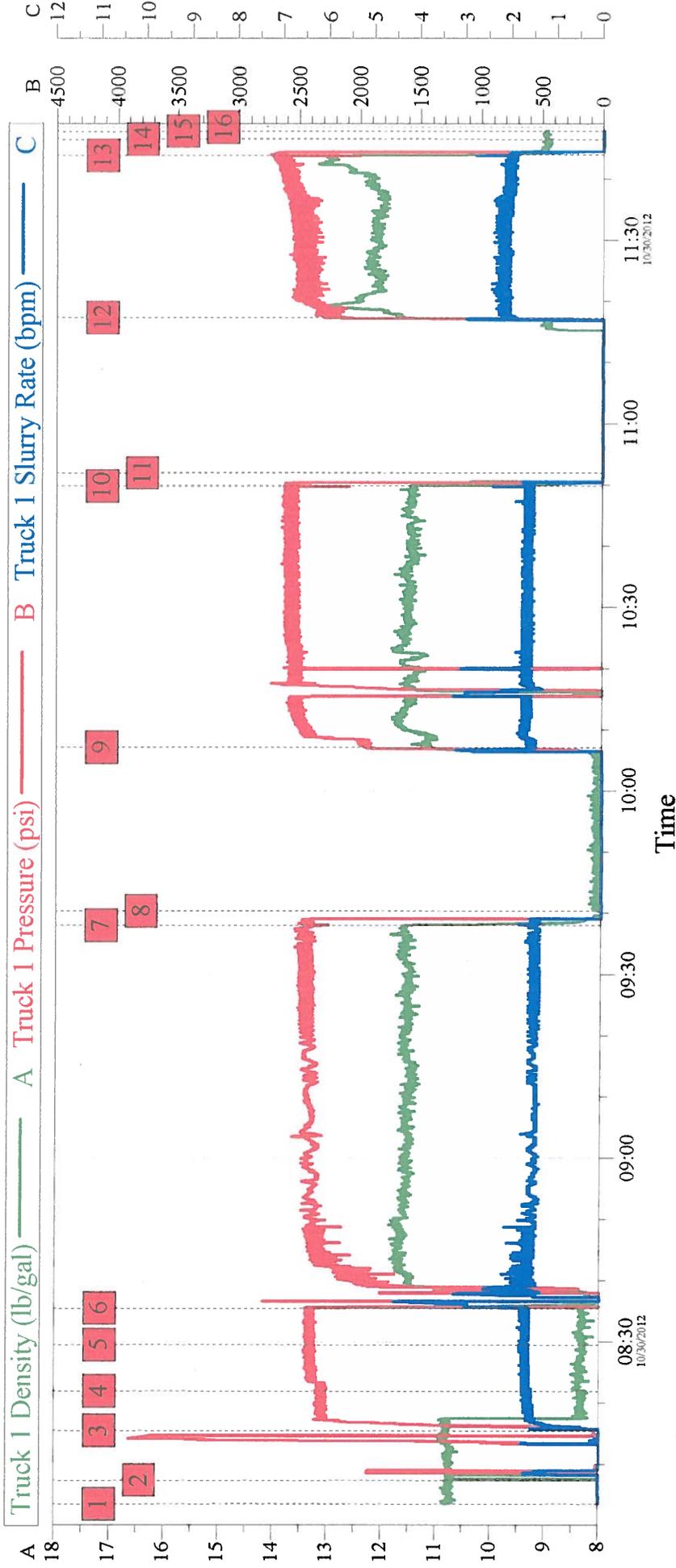
Stage/Plug #: 1									
Fluid #	Stage Type	Fluid Name	Qty	Qty uom	Mixing Density lbm/gal	Yield ft3/sk	Mix Fluid Gal/sk	Rate bbl/min	Total Mix Fluid Gal/sk
1	ClayWeb Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
2	MUD FLUSH III	MUD FLUSH III - SBM (528788)	12.00	bbl	8.4	.0	.0	2.0	
3	ClayWeb Water Spacer		10.00	bbl	8.33	.0	.0	2.0	
59.525 gal/Mgal		CLA-WEB - TOTE (101985045)							
4	EXTENDACEM B1	EXTENDACEM (TM) SYSTEM (452981)	425.0	sacks	11.5	2.3	12.97		12.97
12.97 Gal		FRESH WATER							
5	Surface Varicem 12#	VARICEM (TM) CEMENT (452009)	163.0	sacks	12.	2.18	12.3		12.3
12.3 Gal		FRESH WATER							
Calculated Values		Pressures			Volumes				
Displacement		Shut In: Instant		Lost Returns		Cement Slurry	238	Pad	
Top Of Cement		5 Min		Cement Returns	9	Actual Displacement	3.5	Treatment	
Frac Gradient		15 Min		Spacers		Load and Breakdown		Total Job	
Rates									
Circulating	2	Mixing	2	Displacement	2	Avg. Job	2		
Cement Left In Pipe	Amount	0 ft	Reason	Shoe Joint					
Frac Ring # 1 @	ID	Frac ring # 2 @	ID	Frac Ring # 3 @	ID	Frac Ring # 4 @	ID		
The Information Stated Herein Is Correct				Customer Representative Signature					

The Road to Excellence Starts with Safety

Sold To #: 304535	Ship To #: 2263681	Quote #:	Sales Order #: 9928254
Customer: PDC ENERGY EBUS		Customer Rep: Sailors, Chad	
Well Name: Baker	Well #: 42-5	API/UWI #:	
Field: Wattenberg	City (SAP): UNKNOWN	County/Parish: Weld	State: Colorado
Legal Description:			
Lat:		Long:	
Contractor: Basic		Rig/Platform Name/Num: 1548	
Job Purpose: Recement Service			Ticket Amount:
Well Type: Development Well		Job Type: Recement Service	
Sales Person: AARON, WESLEY		Srv Supervisor: SANFORD, DALE	MBU ID Emp #: 219527

Activity Description	Date/Time	Cht #	Rate bbl/min	Volume bbl		Pressure psig		Comments
				Stage	Total	Tubing	Casing	
Test Lines	10/30/2012 08:07		0.5		0.5	3500. 0		
Pump Spacer 1	10/30/2012 08:15		1.7		10	2400. 0		Claty Web Water
Pump Spacer 2	10/30/2012 08:21		1.7		12	2400. 0		Mud Flush
Pump Spacer 1	10/30/2012 08:29		1.7		10	2400. 0		Clay Web Water
Pump Lead Cement	10/30/2012 08:35		1.7		87	2400. 0		212 SKS @ 11.5 # Extendacem
Pump Displacement	10/30/2012 09:38		1.7			2400. 0		Water
Pause	10/30/2012 09:40							POOH 44 Jts
Pump Lead Cement	10/30/2012 10:07		2		86	2400. 0		213 Sks Extendacem @ 11.5#
Pump Displacement	10/30/2012 10:49		2		1			Water
Pause	10/30/2012 10:51							POOH 47 jts
Pump Tail Cement	10/30/2012 11:17		2		63	2400. 0		163 Sks Varicem @ 12#
Pump Displacement	10/30/2012 11:43		2		1			Circ. 9 Bbl cmt to pit
End Job	10/30/2012 11:46							

PDC Baker 42-5 Ann Fill



Global Event Log

Intersection	TIP	Intersection	TIP	Intersection	TIP
1 Starting Job	08:03:30 -23.27	2 Test Lines	08:07:23 -0.970	3 Pump CW Water	08:15:29 41.69
4 Pump Mud Flush	08:21:56 2262	5 Pump CW Water	08:29:29 2350	6 Pump Lead Cement	08:35:29 2403
7 Pump Displace	09:38:03 2386	8 POOH	09:40:23 -64.56	9 Pump Lead Cmt	10:07:06 1880
10 Pump Displace	10:49:49 2502	11 POOH	10:51:56 -94.43	12 Pump Cement	11:17:19 2244
13 Pump Displace	11:43:47 2467	14 End Job	11:46:27 -18.42	15 Ending Job	11:47:49 -19.39
16 POOH	11:48:26 -19.39				

Customer:	Job Date: 30-Oct-2012	Sales Order #: 9928254
Well Description:	UWI:	