

PDC ENERGY EBUS
DO NOT MAIL - BOX 26
BRIDGEPORT, WV 26330

Wells Ranch 44-2

Interval 1
Weld County, Colorado

Sales Order: 8550594

Post Job Report

For: Kelly Lewis
Date: Saturday, October 15, 2011

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HALLIBURTON

1.0 EXECUTIVE SUMMARY

Kelly Lewis
PDC ENERGY EBUS
DO NOT MAIL - BOX 26
BRIDGEPORT, WV 26330

Dear Kelly Lewis,

Halliburton appreciates the opportunity to perform the stimulation treatment on the Wells Ranch 44-2. A pre-job safety meeting was held where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined. Pump time was 100.32 min.

The proposed treatment for Wells Ranch 44-2 Codell Refrac Stage consisted of:

- 5000 gal of Codell Active Fluid Pad.
- 25000 gal of pHaserFrac w/ Clayfix 3.
- 81000 gal of pHaserFrac w/ Clayfix 3 carrying 2170.00 100*lb of SAND - PREMIUM - 20/40, BULK, SK (100003678).
- 2000 gal of pHaserFrac w/ Clayfix 3 carrying 80.00 100*lb of SAND-CRC-20/40, BULK (101357947).
- 5420 gal of Clayfix 3 flush.

The treatment actually pumped consisted of:

- 5022 gal of Codell Active Fluid Pad.
- 24955 gal of pHaserFrac w/ Clayfix 3.
- 80152 gal of pHaserFrac w/ Clayfix 3 carrying 2133.80 100*lb of SAND - PREMIUM - 20/40, BULK, SK (100003678).
- 3484 gal of pHaserFrac w/ Clayfix 3 carrying 102.82 100*lb of SAND-CRC-20/40, BULK (101357947).
- 4282 gal of Clayfix 3 flush.

The average BH treating rate was 31.3 bpm and average WH pressure was 3777 psi.
The total liquid load to recover is 117895 gal.

Halliburton is strongly committed to quality control on location. Before and after each job all chemicals, proppants, and fluid volumes are measured to assure the highest level of quality control. Tank fluid analysis, crosslink time, and break tests are performed before each job in order to optimize the performance of the treatment fluids.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

MIKE CARTER

2.0 WELL INFORMATION

2.1 Customer Information

Customer	PDC ENERGY EBUS
Sales Order	8550594
Well Name	Wells Ranch
Interval	1
Well Number	44-2
Job Date	15-Oct-2011
County	Weld
State	Colorado
UWI/API	05-123-23171
Country	United States of America
H2S Present	Unknown
Customer Representative	Kelly Lewis
Customer Telephone Number	303-883-5279
Halliburton Representative	MIKE CARTER

2.2 Initial Fluid Position Pressures

Expected Bottom Hole Pressure	5300	psi
Reservoir Pressure	2879	psi
Closed-In WHP	0	psi
Fluid Free to Flow into Formation	Yes	
Surface Lines Full	No	
Fluid in Tubing	Brine	
Top of Fluid Depth	0.00	ft

2.3 Temperature Profile Information

Ambient Temperature	65.0	°F
Injected Fluid	65.0	°F
Proppant	65.0	°F
Earth Surface	60.0	°F
BH Static	230.0	°F
Gradient	2.1250	°F/(100*ft)

3.0 PUMPING SCHEDULE

3.1 Designed Pumping Schedule

Stage Number	Description	Flow Path	Fluid System	Clean Volume gal	Slurry Volume gal	Prop Conc Start lb/gal	Prop Conc End lb/gal
1	Pre-Pad	In	Codell Active Fluid Pad	5000	5106	0.00	0.00
2	Pad	In	pHaserFrac w/ Clayfix 3	25000	25209	0.00	0.00
3	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	8000	8430	1.00	1.00
4	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	22000	24185	2.00	2.00
5	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	25000	28644	3.00	3.00
6	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	14000	16060	3.00	3.00
7	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	12000	14313	4.00	4.00
8	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3	2000	2389	4.00	4.00
9	Flush	In	Clayfix 3 flush	5420	5435	0.00	0.00
Total				118420	129771		

3.2 Designed Pumping Schedule (continued)

Stage Number	Description	Prop Type	Prop Mass 100*lb	Rate Stage Start bpm	Rate Stage End bpm	Stage Time min
1	Pre-Pad			10.0	10.0	12.16
2	Pad			27.0	27.0	22.23
3	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	80.00	27.0	27.0	7.43
4	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	440.00	27.0	27.0	21.33
5	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	750.00	27.0	27.0	25.26
6	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	420.00	27.0	27.0	14.16
7	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	480.00	27.0	27.0	12.62
8	Proppant Laden Fluid	SAND-CRC-20/40, BULK (101357947)	80.00	27.0	27.0	2.11
9	Flush			27.0	27.0	4.79
Total			2250.00			122.09

4.0 PERFORMANCE HIGHLIGHTS

4.1 Job Summary

Start Time	15-Oct-11 06:17:19	
End Time	15-Oct-11 08:40:08	
Pump Time	100.32	min
Start Averaging Time	15-Oct-11 06:58:58	
End Averaging Time	15-Oct-11 08:33:31	
Max Treating Pressure	4843	psi
Max Slurry Rate	52.0	bpm
Max Wellhead Rate	52.0	bpm
Max Gel Rate	52.0	bpm
Max Prop Conc	4.26	lb/gal
Max Slurry Prop Conc	4.26	lb/gal
Avg Treating Pressure	3777	psi
Avg Clean Rate	28.4	bpm
Avg Slurry Rate	31.0	bpm
Avg Wellhead Rate	31.0	bpm
Avg Gel Rate	28.4	bpm
Avg Prop Conc	2.68	lb/gal
Avg Slurry Prop Conc	2.68	lb/gal
Avg Hydraulic Horsepower	2869	hp
Clean Volume	117895	gal
Slurry Volume	128087	gal
Wellhead Volume	128087	gal
Gel Volume	117895	gal
Prop Mass	2246.04	100*lb
BH Max Treating Pressure	7588	psi
BH Avg Treating Pressure	6382	psi
BH Max Rate	32.9	bpm
BH Avg Rate	31.3	bpm
BH Max Proppant Concentration	4.29	lb/gal
BH Avg Proppant Concentration	2.09	lb/gal
Proppant in Wellbore	5.78	100*lb
Load to Recover	117895	gal

Disclaimer: The average and maximum values (except volumes and bottom hole values) are based on the start and end averaging times.

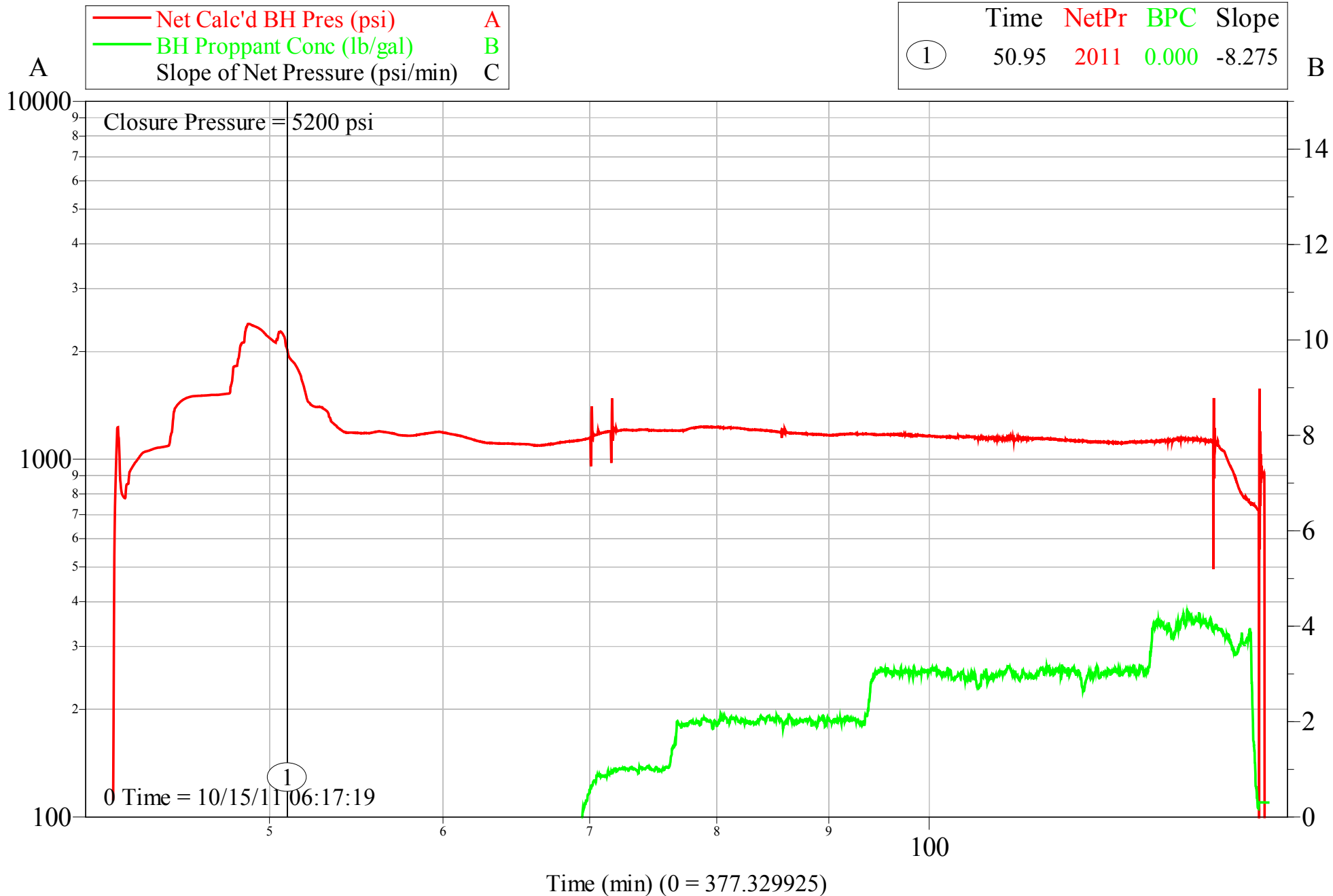
4.2 Job Stage Log

Time	Description	Comment
15-Oct-11 06:58:22	Stage 1	Pre-Pad
07:05:55	Stage 2	Pad
07:24:20	Stage 3	Proppant Laden Fluid
07:30:32	Stage 4	Proppant Laden Fluid
07:48:05	Stage 5	Proppant Laden Fluid
08:08:51	Stage 6	Proppant Laden Fluid
08:20:41	Stage 7	Proppant Laden Fluid
08:30:14	Stage 8	Proppant Laden Fluid
08:33:42	Stage 9	Flush

4.3 Job Event Log

Stage Number	Event Number	Time	Description	Comment
	1	15-Oct-11 06:17:19	Start Job	Starting Job
1		06:58:22	Stage 1	Pre-Pad
		06:58:58	Start Averaging	Start Avg Trt 1
2		07:05:55	Stage 2	Pad
3		07:24:20	Stage 3	Proppant Laden Fluid
4		07:30:32	Stage 4	Proppant Laden Fluid
5		07:48:05	Stage 5	Proppant Laden Fluid
6		08:08:51	Stage 6	Proppant Laden Fluid
7		08:20:41	Stage 7	Proppant Laden Fluid
8		08:30:14	Stage 8	Proppant Laden Fluid
		08:33:31	End Averaging	End Avg Trt 1
9		08:33:42	Stage 9	Flush
	2	08:40:11	End Job	Ending Job

Net Pressure Plot



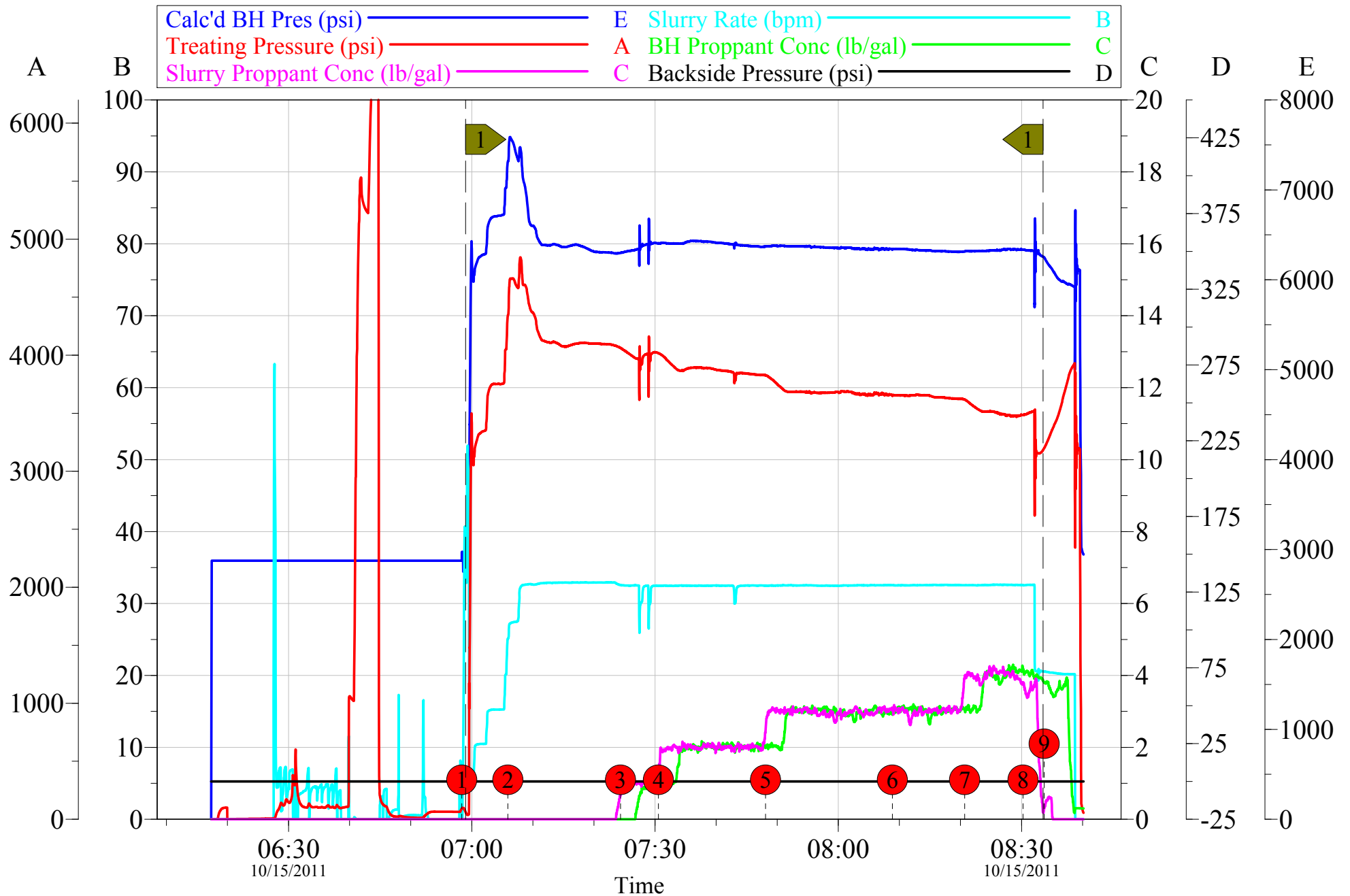
Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550594

INSITE for Stimulation v4.1.3
15-Oct-11 08:53

Treatment Plot Wells Ranch 44-2 Codell Refrac



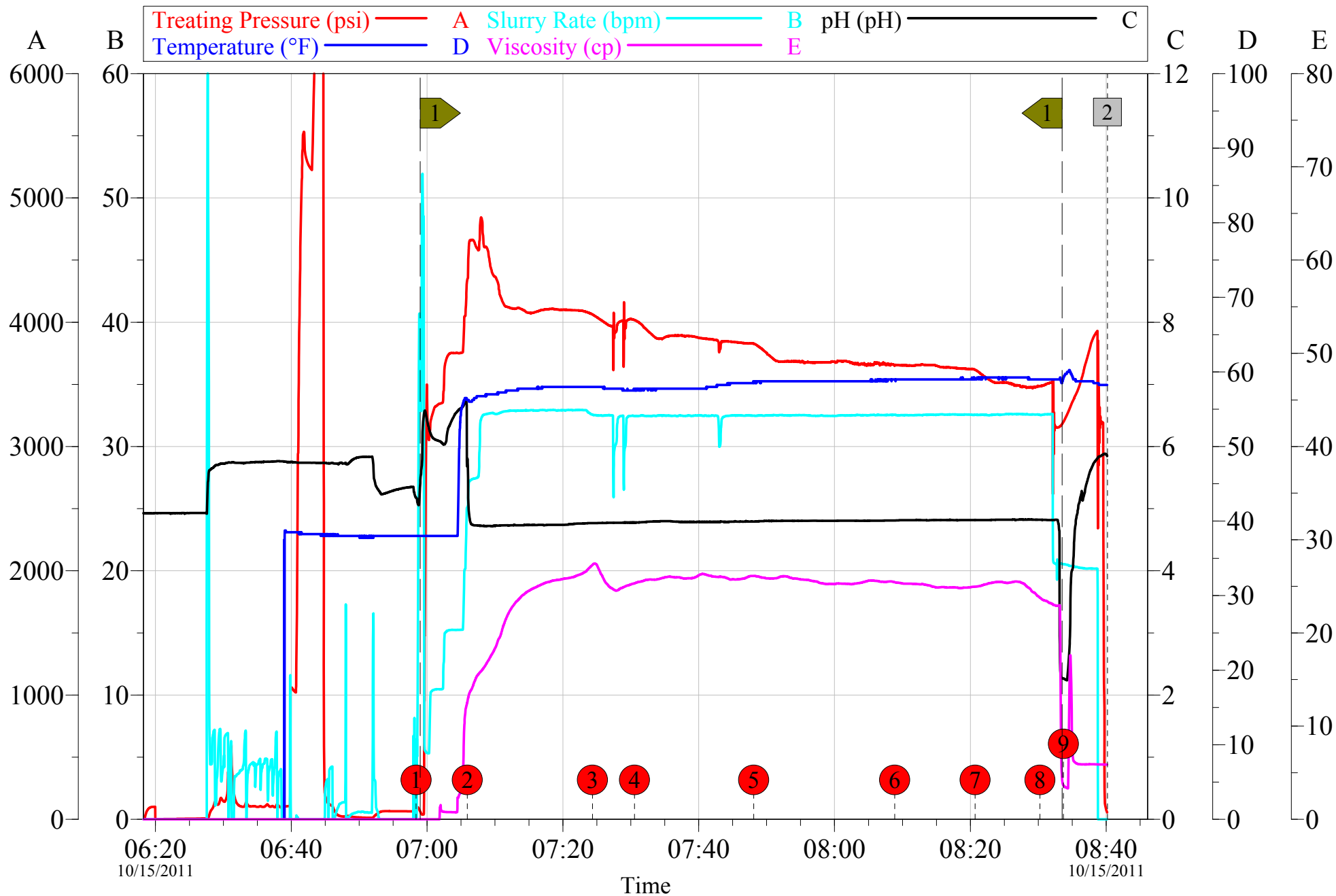
Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550594

INSITE for Stimulation v4.1.3
15-Oct-11 08:50

QC Plot Wells Ranch 44-2 Codell Refrac



Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550594

INSITE for Stimulation v4.1.3
15-Oct-11 08:51

HALLIBURTON				JOB SUMMARY				TICKET # 8550594	
COUNTRY UNITED STATES				LOCATION BRIGHTON, COLORADO		BDA ROCKIES NWA		TICKET DATE 15-Oct-2011	
H.E.S. EMPLOYEE NAME M. CARTER				MBU ID N/A		EMP NO. 414697		SUB PSL PRODUCTION ENHANCEMENT	
CUSTOMER REP DOMINIC GARDELLA				COMPANY PDC		JOB PURPOSE CODE 15321			
WELL NAME WELLS RANCH		WELL NO. 44-2		APIUWI# 05-123-23171		COUNTRY WELD		JOB CLASSIFICATION pHaser	
WELL LOCATION GILL, CO				SEC / TWP / RNG SEC 2 / T5N / R63W		DEPARTMENT NO. 5005		FORMATION CODELL REFRAC	

H.E.S. EMP NAME / EMP # / (EXPOSURE HOURS)		HRS		HRS		HRS		HRS	
22 H.E.S. EMPLOYEES		4.0		SEE ATTCH. SHEET					

H.E.S. UNIT #S / (R / T MILES)		R / T MILES		R / T MILES		R / T MILES		R / T MILES	
18 FRAC. UNITS		90		SEE ATTCH. SHEET					
2 PICKUPS		90							

Form. Name **CODELL REFRAC** Type: **SAND**

Form. Thickness **8** From **6,626** to **6,634**

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

	Called Out	On Location	Job Started	Job Completed
Date	10/15/2011	10/15/2011	10/15/2011	10/15/2011
Time	0200	0500	0658	0839

Tools and Accessories			Well Data						
Type and Size	Qty	Make	New/Used	Weight	Size	Grade	From	To	Max. Allow
Float Collar			Casing	NEW	10.5	4 1/2	0	8,000	5,000
Float Shoe			Casing						
Centralizers			Liner						
Top Plug			Tubing						
Packer			Tubing						
DV Tool			Open Hole						PERFS
Insert Float			Perforations			Codell	6,626	6,634	24
Guide Shoe			Perforations						
Other			Perforations						

Materials				Hours On Location		Operating Hours		Description of Job	
Fluid Type	pHaser	Density	26#	Date	Hours	Date	Hours	SEE JOB LOG DESCRIPTION	
Disp. Fluid	H2O	Density	8.34	10/15	4.0	10/15	2.0		
Prop. Type	OTTAWA	Size	20/40						
Prop. Type	SB Excel	Size	20/40						
Crosslinker	CL-23	Gal.	62						
Crosslinker		Gal.							
Surfactant	GasPerm	Gal.	222						
Surfactant	LOSURF-300	Gal.	124						
Buffer	BA-20	Gal.	90						
Claycontrol	CLAYFIX III	Gal.	154						
Gelling Agent	WG-18	Lb	3,500						
Breaker	VICON NF	Gal.	455						
Breaker	CAT-3	Gal.	30						
Breaker		Gal.							
Breaker		Lb							
Stabilizer		Lb							
Acid	15%HCL	Gal.	1000						
Other	HAI-404	Gal.	6						
Other	BE-3	Lb	18						
Other	FE-1A	Gal.	0						
Other	FR-66	Gal.							
Perfpac Balls									

Total		88.0	Total		2.0
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Ordered 11000		Hydraulic Horsepower Avail. 11000		Used 2998	
Treating 32.5		Average Rates in BPM Disp. 32.5		Overall 32.9	

PRESSURES		VOLUMES		GALS		BBLS	
Breakdown	3498PSI @5.4 bpm	Active Pad :	Gal - BBI	5040		120	
Displacement	4550	Pad:	Gal - BBI	24948		594	
Maximum	4550	Treatment:	Gal - BBI	83575		1,990	
Average	3764	Pipe Volume	Gal - BBI	4438		106	
Shut In: Instant	3299	Flush Volume	Gal - BBI	4332		103	
5 Min.	N/A	Total Volume	Gal - BBI	117895		2,807	
10 Min.	N/A						
15 Min.	N/A						

Customer Signature: _____

[illegible]

Field Ticket

Field Ticket Number:	8550594	Field Ticket Date:	Saturday, October 15, 2011
Bill To: PDC ENERGY EBUS DO NOT MAIL - BOX 26 BRIDGEPORT, WV 26330		Job Name: Wells Ranch 44-2 Codell Refrac Stage Order Type: Streamline Order (ZOH) Well Name: Wells Ranch 44-2 Company Code: 1100 Customer PO No.: NA Shipping Point: Brighton, CO, USA Sales Office: Rocky Mountains BD Well Type: Gas Well Category: Workover	
Ship To: PDC WELLS RANCH 44-2,WELD WELLS RANCH 44-2 2491242 KERSEY, CO 80644			

Material	Description	QTY	UOM	Base Amt	Unit Amt	Gross Amount	Discount	Net Amount
342341	PE BOM-GELLED WATER FRAC - CONVENTIONA	1	JOB	0.00	0.00	0.00		0.00
224400	MOBILIZATION CHGS FRAC SOL SVC CH	35	MI	0.00	247.00	8,645.00	87%	1,123.85
	BARRELS/CUBIC METRES (BBL/CUM)		BBL					
	RATE PER BBL\CUM	27						
	PRESSURE UNITS (PSI/MPA/BAR)		PSI					
	PRESSURE	4500						
224401	FRACTURING -SOLUTION SERVICE CHARG	1	JOB	0.00	119,323.00	119,323.00	87%	15,511.99
	BARRELS/CUBIC METRES (BBL/CUM)		BBL					
	RATE PER BBL\CUM	27						
	PRESSURE UNITS (PSI/MPA/BAR)		PSI					
	PRESSURE	4500						
101583425	CLAYFIX 3	154	GAL	0.00	94.85	14,606.90	87%	1,898.90
437542	PHASERFRAC SBM	107573	GAL		2,404.00	258,605.49	87%	33,618.71
	Vis	26						
100003833	CL-23	62	GAL		0.00	0.00		0.00
100003706	BA-20	90	GAL		0.00	0.00		0.00
101770760	GASPERM 1100	222	GAL	0.00	245.92	54,594.24	87%	7,097.25
100003707	WG-18	3500	LB		0.00	0.00		0.00
100003852	VICON NF BREAKER	455	GAL	0.00	82.59	37,578.45	87%	4,885.20
101244422	CAT-3	30	GAL	0.00	149.27	4,478.10	87%	582.15
101783480	LOSURF-300D	124	GAL	0.00	113.64	14,091.36	87%	1,831.88

PDC ENERGY EBUS
DO NOT MAIL - BOX 26
BRIDGEPORT, WV 26330

Wells Ranch 44-2

Interval 1
Weld County, Colorado

Sales Order: 8550665

Post Job Report

For: DOMINIC GARDELLA
Date: Saturday, October 15, 2011

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HALLIBURTON

1.0 EXECUTIVE SUMMARY

DOMINIC GARDELLA
PDC ENERGY EBUS
DO NOT MAIL - BOX 26
BRIDGEPORT , WV 26330

Dear DOMINIC GARDELLA,

Halliburton appreciates the opportunity to perform the stimulation treatment on the Wells Ranch 44-2. A pre-job safety meeting was held where details of the job were discussed, potential safety hazards were reviewed, and environmental compliance procedures were outlined. Pump time was 90.00 min.

The proposed treatment for Wells Ranch 44-2 Niobrara Stage consisted of:

- 5000 gal of FR66 Water W FE1A.
- 65000 gal of FR - 66 WATER.
- 6000 gal of pHaserFrac w/ Clayfix 3 1.
- 90000 gal of pHaserFrac w/ Clayfix 3 1 carrying 2380.00 100*lb of SAND - PREMIUM - 20/40, BULK, SK (100003678).
- 3000 gal of pHaserFrac w/ Clayfix 3 1 carrying 120.00 100*lb of SAND-CRC-20/40, BULK (101357947).
- 5000 gal of clayfix 3 flush 1.

The treatment actually pumped consisted of:

- 4984 gal of FR66 Water W FE1A.
- 64999 gal of FR - 66 WATER.
- 5941 gal of pHaserFrac w/ Clayfix 3 1.
- 89688 gal of pHaserFrac w/ Clayfix 3 1 carrying 2347.31 100*lb of SAND - PREMIUM - 20/40, BULK, SK (100003678).
- 3672 gal of pHaserFrac w/ Clayfix 3 1 carrying 130.64 100*lb of SAND-CRC-20/40, BULK (101357947).
- 4213 gal of clayfix 3 flush 1.

The average BH treating rate was 51.4 bpm and average WH pressure was 4314 psi.

The total liquid load to recover is 173498 gal.

Halliburton is strongly committed to quality control on location. Before and after each job all chemicals, proppants, and fluid volumes are measured to assure the highest level of quality control. Tank fluid analysis, crosslink time, and break tests are performed before each job in order to optimize the performance of the treatment fluids.

Halliburton maintains a continuous quality improvement process and appreciates any comments or suggestions that you may have. Halliburton again thanks you for the opportunity to perform service work on this well. We hope to be your solutions provider for future projects.

Respectfully,

MIKE CARTER

2.0 WELL INFORMATION

2.1 Customer Information

Customer	PDC ENERGY EBUS
Sales Order	8550665
Well Name	Wells Ranch
Interval	1
Well Number	44-2
Job Date	15-Oct-2011
County	Weld
State	Colorado
UWI/API	05-123-23171
Country	United States of America
H2S Present	Unknown
Customer Representative	DOMINIC GARDELLA
Customer Telephone Number	303-883-5279
Halliburton Representative	MIKE CARTER

2.2 Initial Fluid Position Pressures

Expected Bottom Hole Pressure	5728	psi
Reservoir Pressure	2809	psi
Closed-In WHP	0	psi
Fluid Free to Flow into Formation	Yes	

2.3 Temperature Profile Information

Ambient Temperature	65.0	°F
Injected Fluid	65.0	°F
Proppant	65.0	°F
Earth Surface	60.0	°F
BH Static	230.0	°F
Gradient	2.1250	°F/(100*ft)

3.0 PUMPING SCHEDULE

3.1 Designed Pumping Schedule

Stage Number	Description	Flow Path	Fluid System	Clean Volume gal	Slurry Volume gal	Prop Conc Start lb/gal	Prop Conc End lb/gal
1	Pad	In	FR66 Water W FE1A	5000	0	0.00	0.00
2	Pad	In	FR - 66 WATER	65000	65000	0.00	0.00
3	Pad	In	pHaserFrac w/ Clayfix 3 1	6000	6000	0.00	0.00
4	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	7000	7317	1.00	1.00
5	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	33000	35993	2.00	2.00
6	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	22000	24993	3.00	3.00
7	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	13000	14769	3.00	3.00
8	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	15000	17721	4.00	4.00
9	Proppant Laden Fluid	In	pHaserFrac w/ Clayfix 3 1	3000	3550	4.00	4.00
10	Flush	In	clayfix 3 flush 1	5000	5000	0.00	0.00
Total				174000	180344		

3.2 Designed Pumping Schedule (continued)

Stage Number	Description	Prop Type	Prop Mass 100*lb	Rate Stage Start bpm	Rate Stage End bpm	Stage Time min
1	Pad					0.00
2	Pad			50.0	50.0	30.95
3	Pad			50.0	50.0	2.86
4	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	70.00	50.0	50.0	3.48
5	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	660.00	50.0	50.0	17.14
6	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	660.00	50.0	50.0	11.90
7	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	390.00	50.0	50.0	7.03
8	Proppant Laden Fluid	SAND - PREMIUM - 20/40, BULK, SK (100003678)	600.00	50.0	50.0	8.44
9	Proppant Laden Fluid	SAND-CRC-20/40, BULK (101357947)	120.00	50.0	50.0	1.69
10	Flush			50.0	50.0	2.38
Total			2500.00			85.88

4.0 PERFORMANCE HIGHLIGHTS

4.1 Job Summary

Start Time	15-Oct-11 09:37:04	
End Time	15-Oct-11 11:28:44	
Pump Time	90.00	min
Start Averaging Time	15-Oct-11 09:55:44	
End Averaging Time	15-Oct-11 11:28:44	
Max Treating Pressure	5167	psi
Max Slurry Rate	54.3	bpm
Max Wellhead Rate	54.3	bpm
Max Gel Rate	54.3	bpm
Max Prop Conc	4.12	lb/gal
Max Slurry Prop Conc	4.12	lb/gal
Avg Treating Pressure	4314	psi
Avg Clean Rate	45.9	bpm
Avg Slurry Rate	48.9	bpm
Avg Wellhead Rate	48.9	bpm
Avg Gel Rate	45.9	bpm
Avg Prop Conc	2.63	lb/gal
Avg Slurry Prop Conc	2.63	lb/gal
Avg Hydraulic Horsepower	5171	hp
Clean Volume	173498	gal
Slurry Volume	184868	gal
Wellhead Volume	184868	gal
Gel Volume	173498	gal
Prop Mass	2505.17	100*lb
BH Max Treating Pressure	7582	psi
BH Avg Treating Pressure	6202	psi
BH Max Rate	54.2	bpm
BH Avg Rate	51.4	bpm
BH Max Proppant Concentration	4.13	lb/gal
BH Avg Proppant Concentration	1.52	lb/gal
Proppant in Wellbore	22.27	100*lb
Load to Recover	173498	gal

Disclaimer: The average and maximum values (except volumes and bottom hole values) are based on the start and end averaging times.

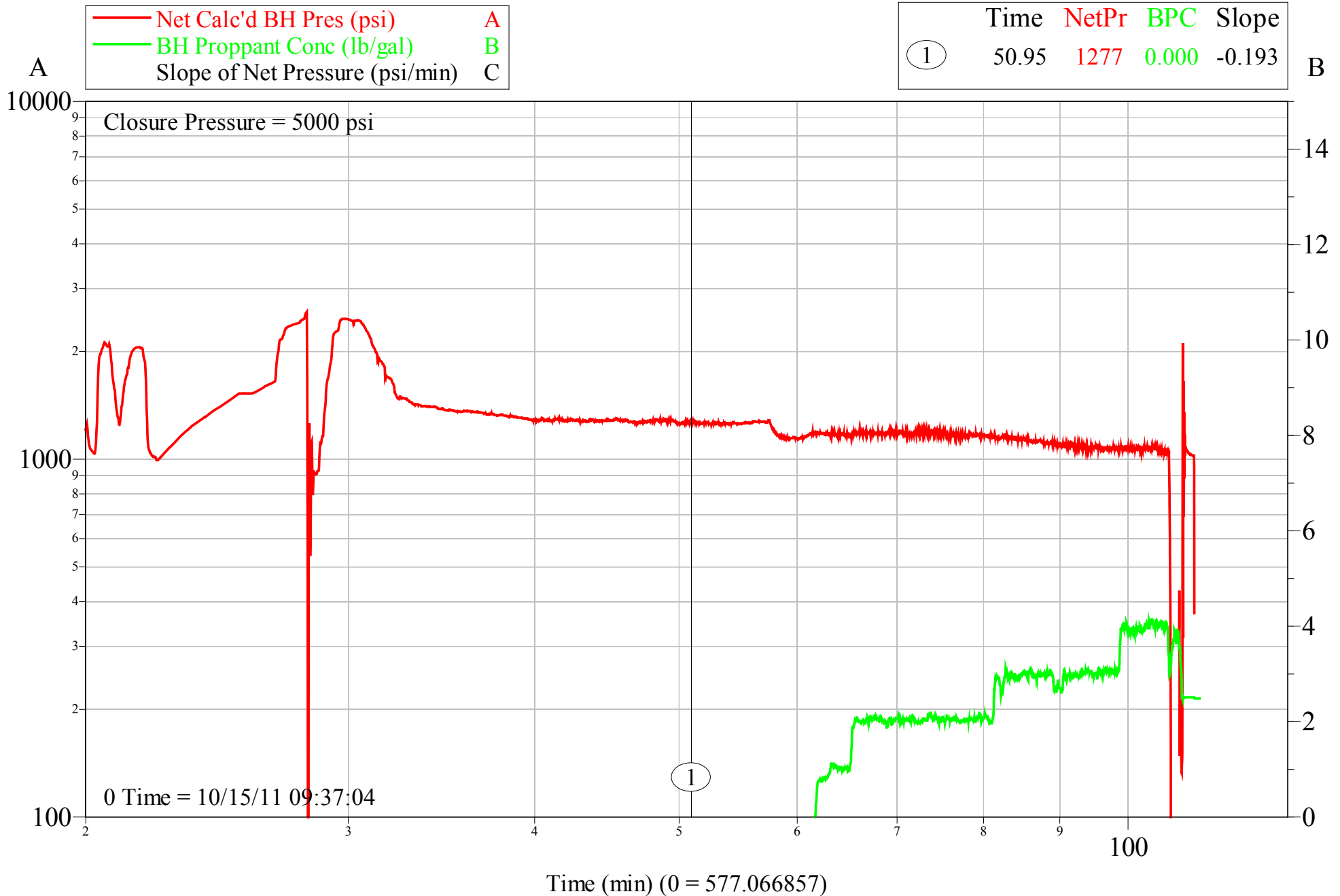
4.2 Job Stage Log

Time	Description	Comment
15-Oct-11 09:55:43	Stage 1	Pad
10:03:20	Stage 2	Pad
10:34:33	Stage 3	Pad
10:37:10	Stage 4	Proppant Laden Fluid
10:40:25	Stage 5	Proppant Laden Fluid
10:56:24	Stage 6	Proppant Laden Fluid
11:07:25	Stage 7	Proppant Laden Fluid
11:13:57	Stage 8	Proppant Laden Fluid
11:21:40	Stage 9	Proppant Laden Fluid
11:23:35	Stage 10	Flush

4.3 Job Event Log

Stage Number	Event Number	Time	Description	Comment
	1	15-Oct-11 09:37:04	Start Job	Starting Job
1		09:55:43	Stage 1	Pad
		09:55:44	Start Averaging	Start Avg Trt 1
2		10:03:20	Stage 2	Pad
3		10:34:33	Stage 3	Pad
4		10:37:10	Stage 4	Proppant Laden Fluid
5		10:40:25	Stage 5	Proppant Laden Fluid
6		10:56:24	Stage 6	Proppant Laden Fluid
7		11:07:25	Stage 7	Proppant Laden Fluid
8		11:13:57	Stage 8	Proppant Laden Fluid
9		11:21:40	Stage 9	Proppant Laden Fluid
10		11:23:35	Stage 10	Flush
		11:28:44	End Averaging	End Avg Trt 1
	2	11:28:46	End Job	Ending Job

Net Pressure Plot



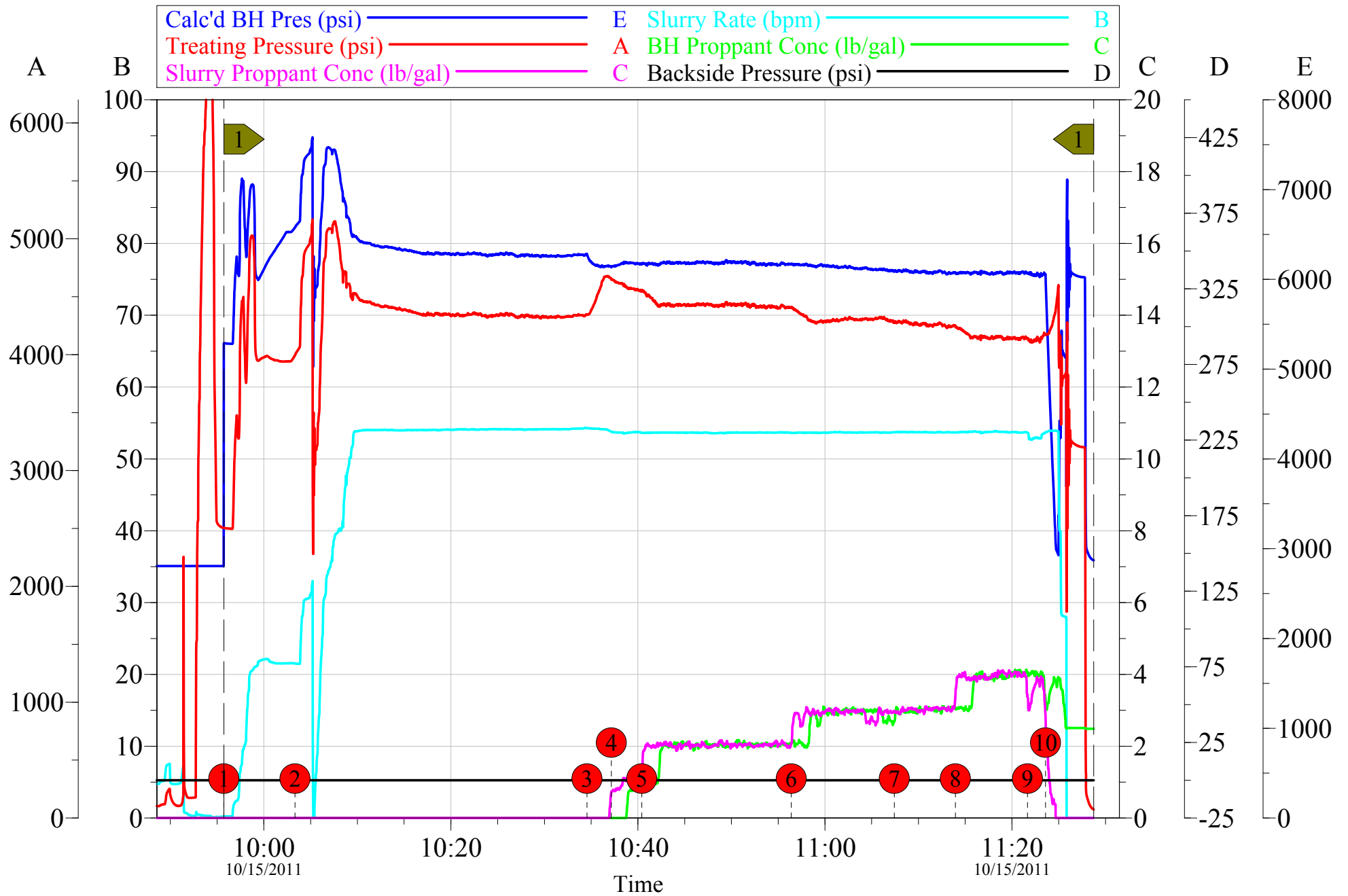
Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550665

INSITE for Stimulation v4.1.3
15-Oct-11 11:32

Treatment Plot Wells Ranch 44-2 Codell Refrac



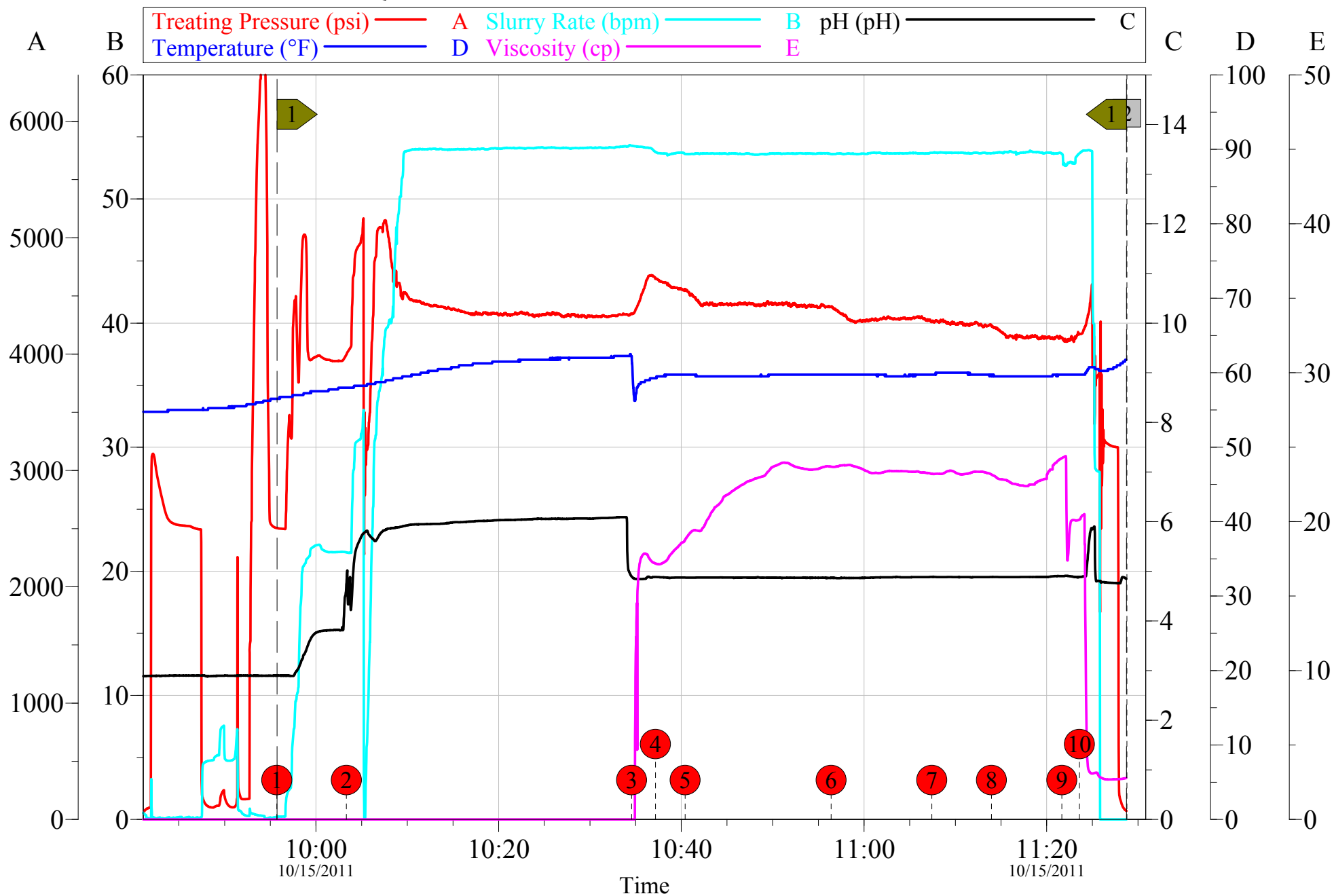
Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550665

INSITE for Stimulation v4.1.3
15-Oct-11 11:29

QC Plot Wells Ranch 44-2 Codell Refrac



Customer: PDC ENERGY EBUS
Well Description: Wells Ranch 44-2

Job Date: 15-Oct-2011
UWI: 05-123-23171

Sales Order #: 8550665

INSITE for Stimulation v4.1.3
15-Oct-11 11:31

HALLIBURTON				JOB SUMMARY				TICKET # 8550665	
COUNTRY UNITED STATES				LOCATION BRIGHTON, COLORADO		BDA ROCKIES NWA		TICKET DATE 15-Oct-2011	
H.E.S. EMPLOYEE NAME M. CARTER				MBU ID N/A		EMP NO. 414697		SUB PSL PRODUCTION ENHANCEMENT	
CUSTOMER REP DOMINIC GARDELLA				COMPANY PDC		JOB PURPOSE CODE 15321			
WELL NAME WELLS RANCH		WELL NO. 44-2		APIUWI# 05-123-23171		COUNTRY WELD		JOB CLASSIFICATION pHaser	
WELL LOCATION GILL, CO				SEC / TWP / RNG SEC 2 / T5N / R63W		DEPARTMENT NO. 5005		FORMATION NIOBRARA	

H.E.S. EMP NAME / EMP # / (EXPOSURE HOURS)		HRS		HRS		HRS		HRS	
22 H.E.S. EMPLOYEES		4.0		SEE ATTCH. SHEET					

H.E.S. UNIT #S / (R / T MILES)		R / T MILES		R / T MILES		R / T MILES		R / T MILES	
18 FRAC. UNITS		90		SEE ATTCH. SHEET					
2 PICKUPS		90							

Form. Name **NIOBRARA** Type: **SAND**

Form. Thickness **10** From **6,365** to **6,468**

Packer Type _____ Set At _____

Bottom Hole Temp. _____ Pressure _____

Retainer Depth _____ Total Depth _____

	Called Out	On Location	Job Started	Job Completed
Date	10/15/2011	10/15/2011	10/15/2011	10/15/2011
Time	0200	0900	0955	01125

Tools and Accessories			Well Data						
Type and Size	Qty	Make	New/Used	Weight	Size	Grade	From	To	Max. Allow
Float Collar			Casing	NEW	10.5	4 1/2	0	8,000	5,000
Float Shoe			Casing						
Centralizers			Liner						
Top Plug			Tubing						
Packer			Tubing						
DV Tool			Open Hole						PERFS
Insert Float			Perforations			NIO A	6,365	6,367	12
Guide Shoe			Perforations			NIO B	6,460	6,468	12
Other			Perforations						

Materials				Hours On Location		Operating Hours		Description of Job	
Fluid Type	pHaser	Density	26#	Date	Hours	Date	Hours	SEE JOB LOG DESCRIPTION	
Disp. Fluid	H2O	Density	8.34	10/15	4.0	10/15	2.0		
Prop. Type	OTTAWA	Size	20/40						
Prop. Type	SB Excel	Size	20/40						
Crosslinker	CL-23	Gal.	61						
Crosslinker		Gal.							
Surfactant	GasPerm	Gal.	300						
Surfactant	LOSURF-300	Gal.	165						
Buffer	BA-20	Gal.	73						
Claycontrol	CLAYFIX III	Gal.	219						
Gelling Agent	WG-18	Lb	2,709						
Breaker	VICON NF	Gal.	225						
Breaker	CAT-3	Gal.	20						
Breaker		Gal.							
Breaker		Lb							
Stabilizer		Lb							
Acid	15%HCL	Gal.							
Other	HAI-404	Gal.							
Other	BE-3	Lb	27						
Other	FE-1A	Gal.	100						
Other	FR-66	Gal.	128						
Perfpac Balls									

Total		88.0	Total		2.0
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Ordered 11000		Hydraulic Horsepower Avail. 11000		Used 2998	
Treating 32.5		Average Rates in BPM Disp. 32.5		Overall 32.9	

PRESSURES		VOLUMES		GALS		BBLs	
Breakdown	3477PSI @2.4bpm	Active AND FR Pad :	Gal - BBI	69972		1,666	
Displacement	4550	Pad:	Gal - BBI	5964		142	
Maximum	4550	Treatment:	Gal - BBI	93236		2,220	
Average	3764	Pipe Volume	Gal - BBI	4263		102	
Shut In: Instant	3299	Flush Volume	Gal - BBI	4326		103	
5 Min.	N/A	Total Volume	Gal - BBI	173498		4,131	
10 Min.	N/A						
15 Min.	N/A						

Customer Signature: _____

HALLIBURTON										JOB LOG										8550665								
COUNTRY UNITED STATES										LOCATION BRIGHTON, COLORADO										BDA ROCKIES NWA				TICKET DATE 15-Oct-2011				
H.E.S. EMPLOYEE NAME M. CARTER										MBU ID N/A					EMP NO. 414697					SUB PSL PRODUCTION ENHANCEMENT								
CUSTOMER REP. / PHONE DOMINIC GARDELLA										COMPANY PDC										JOB PURPOSE CODE 15321								
WELL NAME WELLS RANCH					WELL NO. 44-2					API/UWI # 05-123-23171										COUNTRY WELD				JOB CLASSIFICATION pHaser				
WELL LOCATION GILL, CO										SEC / TWP / RNG SEC 2 / T5N / R63W										DEPARTMENT NO. 5005				FORMATION NIOBRARA				
Chart No.	Time	Rate (BPM)	Volume (BBL)(GAL)	Pmps		Press.(PSI)		Job Description / Remarks																				
				T	C	Tbg	Csg																					
	0300							CALLED OUT																				
	0330							YARD SAFETY MEETING																				
	0500							ON LOCATION																				
	0515							PRE - RIGUP SAFETY MEETING																				
	0630							PRE - JOB SAFETY MEETING																				
	0640							PRIME UP TRUCKS																				
	0645							TEST LINES TO 6544# MAX PRESSURE AT 5500#																				
								POP OFFS AT 5500#																				
								BACKSIDE AT N/A																				
								BACKSIDE MAX AT N/A																				
	0955	2.2	0		2		2505	START ACTIVE FLUID PAD																				
								0bbl to LOAD																				
	0956	2.4	1		1		3477	FORMATION BREAK at 3477 psi @ 2.4 BPM																				
	01003	21.5	119		7		3996	START FR PAD																				
	01034	54.3	1667		7		4349	START CROSSLINK PAD																				
					7																							
	01037	53.8	1809		7		4647	START 1 PPG SAND STAGE																				
	01038	53.6	1894		7		4583	1 PPG SAND ON FORMATION																				
	01040	53.6	1975		7		4544	START 2 PPG SAND STAGE																				
	01042	53.6	2063		7		4422	2 PPG SAND ON FORMATION																				
	01056	53.7	2760		7		44406	START 3 PPG SAND STAGE																				
	01058	53.7	2848		7		4298	3 PPG SAND ON FORMATION																				
	01107	53.7	3284		7		4278	CONTINUE 3PPG STAGE																				
	01113	53.7	3592		7		4246	START 4 PPG SAND STAGE																				
	01115	53.7	3592		7		4246	4 PPG SAND ON FORMATION																				
	01121	53.6	3944		7		4137	START 4 PPG SAND STAGE SB EXCEL 20/40																				
	01123	53.7	4031		7		4176	START FLUSH																				
					7																							
	01125		4131		7		3431	END FLUSH																				
								THANKS, BRAVO CREW!!!!																				
								AVERAGES :				SHUTIN PRESSURES :																
								PRESSURE	3764	INSTANT	3299																	
								RATE	32.5	5 MIN	N/A																	
								TEMP	55.1	10 MIN	N/A																	
								VIS.	27	15 MIN	N/A																	
								MAX :				TOTAL VOLUME		101.5														
								PRESSURE	4550	FLUSH VOLUME		103.0																
								RATE	32.9																			