



Well History

Well Name: Heinze-Herbers Unit B 1

API 05123106250000	Surface Legal Location SESE 20 1N 67W	Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 5,060.00	Original KB Elevation (ft) 5,075.00	KB-Ground Distance (ft) 15.00	Spud Date 4/19/1982 00:00	Rig Release Date 4/29/1982 00:00
			On Production Date 6/16/1982	

Job

Drilling - original, 4/19/1982 00:00

Job Category Drilling	Primary Job Type Drilling - original	Start Date 4/19/1982	End Date 4/19/1982	Objective
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Daily Operations

Start Date	Summary	End Date

Initial Completion, 4/20/1982 00:00

Job Category Completion/Workover	Primary Job Type Initial Completion	Start Date 4/20/1982	End Date 4/29/1982	Objective
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Daily Operations

Start Date	Summary	End Date

Workover, 2/29/2008 00:00

Job Category Completion/Workover	Primary Job Type Workover	Start Date 2/29/2008	End Date	Objective Clean out wellbore and replace bad tubing
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Daily Operations

Start Date	Summary	End Date
2/28/2008	SCP-150#,STP-150#:MIRU Pu tank & rig pump.Blow down & kill well w/ 30 bbls 2% KCL.ND WH & NU x-over flange & BOPs,PU & tag fill w/ 40'LD tag jts,Drain pump & hard lines & SDFWE.	2/29/2008
3/2/2008	POOH w/ 250 jts 2 3/8" tbg,NU Precision hydro bailer,& RIH,work up & down pump 20 bbls 2%,quit making hole, POOH w/ 125 jts & SWIFN.	3/3/2008
3/3/2008	RU PRS FTOH w/67 jts,LD Bailer & C/O,NU bailer,PU tbg off trailer & RIH w/ 47 jts 2 3/8" tbg SDON.due to high winds.	3/4/2008
3/4/2008	FTIH w/ bailer & Tag fill w/ 216 jts,to solid to bail,POOH,NU bit & bulldog bailer,RIH w 100 stands,SWIFN to work on rig.	3/5/2008
3/5/2008	FTIH w/ 60 stds,started to bail,hard.RU power swievel,start to mill,for 3 hrs,make about one ft.RD swievel,POOH w/ 45 stds SDON.	3/6/2008
3/6/2008	FTOH,ND Hyrdostatic Bailer,NU Bulldog bailer & blade bit & RIH,tag up start milling,make about 2',could'nt make any more hole,POOH w/130 stds,LD bailer,w/ shale & sand,SWIFN.	3/7/2008
3/9/2008	SCP-30#:NU Blade bit & Turbo bailer,RIH w/ 130 stds,NU power swievel & start to mill.Drill for 2 hrs,making no hole RD swievel, POOH w/ bailer & tbg.NU 3 7/8" X 2 3/8" cut shoe,RIH w/ 130 stds,tag fill,NU sweivel,start drilling,made 2',could'nt make any more hole (8208')	3/10/2008
3/10/2008	FTOH w/127 stands,NU bit & burn shoe,RIH,tag,NU swievel,& start to mill,Made 2' in 3 hrs-8210',RD swievel,POOH w/ shoe & bit,NU NC & SNRU H&S Testers,RIH hydrotesting to 7000# (found no leaks)Land tbg as follows, NC@8154.24' SN@8153.14', 259 jts 2 3/8" 4.7# J-55 tbg to surface.RD testers,drain pump & hard lines & SWIFN.	3/11/2008
3/17/2008	STP-200#,SCP-40#,SFL-7500'.100% water,start to swab,csg starting to build by midday.Drop SV & Plg,chase to bottom,NU to swab,sand on bottom cups.SI for 1 hr.FL @ 6000' no sand,csg up to 360 psi,well broke around,let clean up & SI one hr.275/360,open tbg, fluid in 5 mins,plg up in 18.Drop plg & SWI.ETP-200#.ECP-280# EFL-plg up made 9 runs,swabbed back 33 bbls,flowed back 4.	3/18/2008
3/18/2008	STP-380#,SCP-360#,SFL-Plg up: RU & blow well to production tank,Plg up in 10 mins 180/310.Drop plg & SWI. RD.ETP-180#,ECP-310#,FFL-plg up,Flowed back 2 bbls.	3/19/2008

Swab, 2/6/2013 00:00

Job Category LOE	Primary Job Type Swab	Start Date 2/6/2013	End Date	Objective
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Daily Operations

Start Date	Summary	End Date
2/6/2013	STP 400#; SCP 430#; ETP 0#., ECP 430#; SFL 0'; EFL 0'; 1 Runs, Swabbed up 0 bbls Fluid. Shut in. Hole Dry fished plunger up.	2/6/2013

Mechanical Integrity Test, 3/12/2015 06:00

Job Category Completion/Workover	Primary Job Type Mechanical Integrity Test	Start Date 3/12/2015	End Date	Objective Test tubing, Set RBP on casing, Test casing for State, pull RBP and run production pipe back in and land well.
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Daily Operations

Start Date	Summary	End Date
3/12/2015	ITP 150 psi, ICP 150 psi, ISCP 0 psi, well was shut in, MIRU Ensign Rig 339, pressure tested pump and lines up to 1500 psi, no leaks, blow down well to work tank, function test BOP, control well with 60 BBL, ND production tree and master valve, NU BOP, picked up tag jts, tagged at 8208.31 with 261 jts, LD tag jts, pulled 40 jts to derrick and tubing started pulling wet, RU swab lubricator, PU 2" swab cups, swabbed well dry, ran the 40 jts back in the hole, drain pump and lines, SI and secure well, SD.	3/12/2015



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Daily Operations

Start Date	Summary	End Date
3/13/2015	ITP 0 psi, ICP 0 psi, ISCP 0 psi, open the well, MIRU Pick testers, POOH 2 3/8 production pipe to derrick, testing out, RD the tester, all pipe tested good, tubing was landed at 8161.31 KB with 259 jts and NC/SN, PU STS's 3 7/8 blade bit and 4 1/2 scraper, RIH with production pipe, ran 259 jts down to 8152.71, TOOH to derrick, LD bit and scraper, PU STS's 4 1/2 TC RBP dressed for 11.6 casing, RIH with production pipe, set RBP at 8154.21 KB with 259 jts, LD 1 jt, circulated oil and gas out, pressure tested casing and plug up to 500 psi, held good, drain pump and lines, SI and secure well, SD.	3/13/2015
3/16/2015	ITP 0 psi, ICP 0 psi, ISCP 0 psi, open the well, MIRU Pick testers, pressure tested casing up to 500 psi, recorded the test for 15 min and witnessed the test by a State guy, had a 3 psi loss in 15 minutes, POOH with production pipe to derrick loading the hole, MIRU Nabors wire line, PU logging tool, RIH with wire line, logged from 8150 up to surface, found cement top at 6955, RD wire line, PU retrieving head, RIH with production pipe from derrick, ran 258 jts down to 8118.51, RU swab lubricator, PU 2" swab cups, made 8 swab runs, recovered 90 bbl, final fluid level at 5900 ft, LD swab lubricator, SI and secure well, drain pump and lines, SD.	3/16/2015
3/17/2015	ITP 0 psi, ICP 0 psi, open well, RU swab lubricator, continue swabbing, swabbed the well dry, recovered 42 bbl of water, LD swab lubricator, PU 1 jt, latched on to plug with 259 jts at 8154, released the plug, POOH with production pipe to derrick, LD RBP, PU 2 3/8 NC/SN, RIH with production pipe, landed tubing at 8184.31 KB with 259 jts 1-8', 1-6' subs and NC/SN, (15.69' above perms), RU swab lubricator, made a broach run down to SN, LD broach and Swab lubricator, ND BOP, Installed 5K top flange and master valve, SI and secure well, rack pump and tank, RDMOL, SD. Tubing details KB 12.00 Sub 2 3/8 J-55 8rd 8.00 Sub 2 3/8 J-55 8rd 6.00 259 jts 2 3/8 J-55 4.7 8rd 8146.71 NC/SN 1.60 Total 8174.31	3/17/2015



State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109



FOR OGCC USE ONLY

MECHANICAL INTEGRITY TEST

Fill out Part II of this form if well tested is a permitted or pending injection well. Send original plus one copy.

1. Duration of the pressure test must be a minimum of 15 minutes.
2. A pressure chart must accompany this report if this test was not witnessed by a OGCC representative.
3. For production wells, test pressures must be at a minimum of 300 psig.
4. For injection wells, test pressures must be at 300 psig or minimum injection pressure, whichever is greater.
5. A minimum 300 psi differential pressure must be maintained between the tubing and tubing/casing annulus pressure.
6. Do not use the form if submitting under provisions of Rule 326 a. (1) B. or C.
7. OGCC notification must be provided prior to the test.
8. Packers or bridge plugs, etc., must be set within 250 feet of the perforated interval to be considered a valid test.

OGCC Operator Number: 69175

Name of Operator: PDC Energy Inc.

Address: 3801 Carson Ave.

City: Evans State: CO Zip: 80620

Contact Name and Telephone

Travis Yenne

No: 970-506-9272

Fax: 970-506-9276

API Number: 85-123-10625 OGCC Field Name:

Field Number:

Well Name: Heinz Herbers

Number: Unit B1

Location (QtrQtr, Sec, Twp, Rng, Meridian):

Complete the
Attachment Checklist

OGCC

	OGCC
Pressure Chart	
Cement Bond Log	
Tracer Survey	
Temperature Survey	

☐ SHUT-IN PRODUCTION WELL

☐ INJECTION WELL

Facility No.: _____

Part I Pressure Test

☐ 5-Year UIC Test

☐ Test to Maintain SI/TA Status

☐ Reset Packer

☐ Verification of Repairs

☐ Tubing/Packer Leak

☐ Casing Leak

☐ Other (Describe) _____

Describe Repairs: _____

NA - Not Applicable

Wellbore Data at Time Test

Injection/Producing Zone(s)

Perforated Interval:

☐ NA

Open Hole Interval:

☐ NA

8190-8204

Casing Test

☐ NA

Use when perforations or open hole is isolated by bridge plug or cement plug
Bridge Plug or Cement Plug Depth

Tubing Casing/Annulus Test

☐ NA

Tubing Size:

2 3/8

Tubing Depth:

Top Packer Depth:

Multiple Packers?

☐ YES

☐ NO

Test Data

Test Date

3-16-15

Well Status During Test

Date of Last Approved MIT

Casing Pressure Before Test

Initial Tubing Pressure

Final Tubing Pressure

Starting Casing Test Pressure

523 psi

Casing Pressure - 5 Min.

522 psi

Casing Pressure - 10 Min.

521 psi

Final Casing Test Pressure

Pressure Loss or Gain During Test

520 psi

3 psi loss

Test Witnessed by State Representative?

☒ YES

☐ NO

OGCC Field Representative:

Tom Peterson

Part II Wellbore Channel Test

Complete only if well is or will be an injection well.

Indicate method used for cement integrity test, attach appropriate records, charts, or logs unless previously submitted.

☐ Tracer Survey

☐ CBL or Equivalent

☐ Temperature Survey

Run Date: _____

Run Date: _____

Run Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Eduardo Chavez

Signed: Eduardo Chavez

Title: Rig Supervisor

Date: 3-16-15

OGCC Approval: _____

Title: Field Inspector

Date: 3/16/15

Conditions of Approval, if any:

Pick Testers
Sterling,CO 80751

Sean Reynolds
970-580-8899

PDC Energy
 Heize-Herber
 EWS #339
 MIT Casing Test

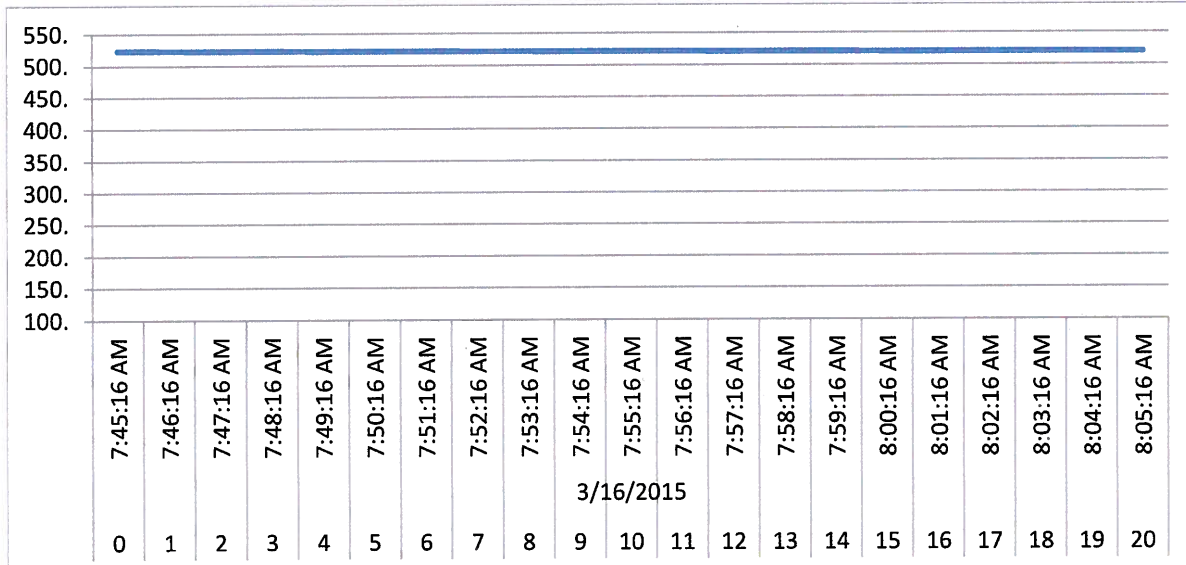
Bernie Chavez
 SE SE SEC. 20-T1N-R67W

0 PSI on Braden Head

Interval:

60 Seconds

DataPoint	LogDate	LogTime	1-P PSI
0	3/16/2015	7:45:16 AM	523.44
1		7:46:16 AM	523.08
2		7:47:16 AM	522.79
3		7:48:16 AM	522.61
4		7:49:16 AM	522.28
5		7:50:16 AM	522.04
6		7:51:16 AM	521.96
7		7:52:16 AM	521.73
8		7:53:16 AM	521.53
9		7:54:16 AM	521.2
10		7:55:16 AM	521.27
11		7:56:16 AM	521.03
12		7:57:16 AM	520.76
13		7:58:16 AM	520.82
14		7:59:16 AM	520.73
15		8:00:16 AM	520.33
16		8:01:16 AM	520.17
17		8:02:16 AM	520.04
18		8:03:16 AM	520.02
19		8:04:16 AM	519.84
20		8:05:16 AM	519.66





Field Ticket #

13860

Date

3/16/2015

Nº 13860

Sater Tools and Services LLC, 19708 CR 50, 5, LaSalle CO 80645 Office 970-301-2028 Fax 970-284-7898

Bill To Customer:		P D C		PO#	Lease Name:		Heinze Herber		Well #:	B Unit # 1
Address:		3801 Carson Ave			County:		CO		Invoice Ref. #:	
City:		Evans		Field:	Job Type:				OCSG #:	
State: CO		Zip: 80620		Legal Description:	Casing Sz & Wt:		4-1/2 11.6#			
Ordered By:		Eduardo Chavez			Service Man:		MERCED TERRAZAS			
NO.	RENTALS/SALES	QTY	PRICE	DSC	TOTAL					
1	Rental of 4-1/2 casing scraper	1	605.00	30%	\$423.50					
2	Rental of 2-3/8 reg box x 2-3/8 8rd box	1	125.00	30%	87.50					
3	Rental of 3-7/8 blade bit	1	125.00	30%	87.50					
4					0.00					
5	Rental of 4-1/2 TS retrievable bridge plug set with 259 js @ 8154.21	1	1,670.00	30%	1,169.00					
6	Minimum 1st to 5 days rental on bridge plug	1	210.00	30%	147.00					
7					0.00					
8					0.00					
9					0.00					
10					0.00					
11					0.00					
12					0.00					
13					0.00					
14					0.00					
Subtotal Taxable Charges						\$1,914.50				
SERVICE MANS TIME										
	Service mans time	1	\$850.00			\$850.00				
	Service mans time	1	\$850.00			850.00				
						0.00				
						0.00				
Subtotal Non-Taxable Charges						\$1,700.00				
MILEAGE										
	Mileage	35	\$2.95			\$103.25				
	Mileage	35	2.95			103.25				
						0.00				
						0.00				
Subtotal Non-Taxable Charges						\$206.50				
Terms: Net 30 Days										
Total Service & Material:						\$3,821.00				
Tax:						\$55.52				
TOTAL CHARGES:						\$3,876.52				

Authorized Agent: \$

Date:

P.O. BOX 341
STERLING, CO 80751
970-522-8387

PICK TESTERS HYDRO

TICKET
NO. DH - 7726

Customer Name <u>DDC</u>				On Location: <u>7:00</u>
Address <u></u>				On Stand By: <u></u>
City <u></u>	State <u></u>	Zip <u></u>	Customer Order No. <u></u>	Off Stand By: <u></u>
				Off Location: <u>8:00</u>

Purpose of Work MIT Pressure Used 100#

Date 7-16-16 Lease Hydro-Hydro Well No 8 well #1

Field County WILL State CO Location

Casing Size & Wt. 11 Tubing Size & Wt.

Contractor & # FWS # 731 Round Trip Miles From Geeky

Directions: CD 17 - CDC - W 7/2 N 1/4

QUANTITY	DESCRIPTION	PRICE	AMOUNT
	Joints		
	Mileage		
	Test Cups		
	Hours		
	Methanol <u>Network Sample</u>	<u>5.00</u>	<u>-1.00</u>
<u>1</u>	Casing Test <u>MIT</u>	<u>1.50</u>	<u>-1.50</u>
<u>1</u>	Computer Pressure Log	<u>5.00</u>	<u>5.00</u>
		Sub Total	<u>4.50</u>
		Sales Tax	
		Labor	

REPRESENTATIVE BY: <u>Tom Hall</u>	TOTAL CHARGES	Subject to Correction in accordance with Latest Published Price Schedules ▶	<u>\$ 175.00</u>
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Holes	
Rod Cuts	
Bad Pins	
Collar Leaks	
Split Joints	

Remarks: 11.16.16 - 15 min. Casing Test

Thank you for service

Tom Hall

I certify that the above material and/or services has been delivered and/or used: that the basis for charges are correctly stated: and that I am authorized to sign this agreement as agent of customer.

Company By Date

P.O. BOX 341
STERLING, CO 80751
970-522-8387

PICK TESTERS HYDRO

TICKET
NO. DH - 7808

Customer Name				On Location:
Address				On Stand By:
City	State	Zip	Customer Order No.	Off Stand By:
				Off Location:

Purpose of Work	Pressure Used		
Date	Lease	Well No	
Field	County	State	Location
Casing Size & Wt.	Tubing Size & Wt.		
Contractor & #	Round Trip Miles From		

Directions:

QUANTITY	DESCRIPTION	PRICE	AMOUNT
259	Joints		
	Mileage		
1	Test Cups	30.00	
	Hours		
	Methanol		
✓	Casing Test	5.00	
	Computer Pressure Log		
		Sub Total	1256.00
		Sales Tax	
		Labor	

REPRESENTATIVE BY:	TOTAL CHARGES	Subject to Correction in accordance with Latest Published Price Schedules
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Holes
Rod Cuts
Bad Pins
Collar Leaks
Split Joints

Remarks:

I certify that the above material and/or services has been delivered and/or used: that the basis for charges are correctly stated: and that I am authorized to sign this agreement as agent of customer.

Company By Date