

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1230613

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15		
Name:	Spot Description:		
Address 1:	SecTwpS. R 🗌 East 🗌 West		
Address 2:	Feet from		
City: State: Zip:+	Feet from _ East / _ West Line of Section		
Contact Person:	Footages Calculated from Nearest Outside Section Corner:		
Phone: ()	□NE □NW □SE □SW		
CONTRACTOR: License #	GPS Location: Lat:, Long:		
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)		
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84		
Purchaser:	County:		
Designate Type of Completion:	Lease Name: Well #:		
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:		
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.): If Workover/Re-entry: Old Well Info as follows:	Producing Formation: Elevation: Ground: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feet		
Operator:	If Alternate II completion, cement circulated from:		
Well Name:	feet depth to:w/sx cmt.		
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Plug Back Conv. to GSW Conv. to Producer Commingled Permit #: Dual Completion Permit #: SWD Permit #:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite:		
☐ ENHR Permit #: ☐ GSW Permit #:	Operator Name:		
Connection Connection	Lease Name: License #:		
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	Quarter Sec. Twp. S. R. East West County: Permit #:		

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY					
Confidentiality Requested					
Date:					
Confidential Release Date:					
Wireline Log Received					
Geologist Report Received					
UIC Distribution					
ALT I II Approved by: Date:					

Page Two



Operator Name:				_ Lease I	Name: _			Well #:		
Sec Twp	S. R	East	West	County	:					
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in presson surface test, along	sures, whether with final chart	shut-in pre (s). Attach	ssure reac extra shee	hed stati t if more	c level, hydrosta space is neede	tic pressures, bot d.	tom hole temp	erature, fluid	recovery,
Final Radioactivity Lo- files must be submitte						ogs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital elec	tronic log
Drill Stem Tests Taker (Attach Additional S		Yes	No				on (Top), Depth ar		Sam	
Samples Sent to Geo	logical Survey	Yes	☐ No		Nam	e		Тор	Datu	m
Cores Taken Electric Log Run		Yes Yes	☐ No ☐ No							
List All E. Logs Run:										
				RECORD	Ne					
	0	· ·				ermediate, product		T "0 1	I	
Purpose of String	Size Hole Drilled	Size Ca Set (In 0		Weig Lbs.		Setting Depth	Type of Cement	# Sacks Used	Type and I Additiv	
		Al	DDITIONAL	CEMENTI	NG / SQL	JEEZE RECORD				
Purpose:	Depth Top Bottom	Type of C	ement	# Sacks	Used	Type and Percent Additives				
Perforate Protect Casing	Top Bottom									
Plug Back TD Plug Off Zone										
r lug on zone										
Did you perform a hydrau	ulic fracturing treatment	on this well?				Yes	No (If No, ski	p questions 2 ar	nd 3)	
Does the volume of the to								p question 3)		
Was the hydraulic fractur	ing treatment information	on submitted to th	ne chemical o	disclosure re	gistry?	Yes	No (If No, fill	out Page Three	of the ACO-1)	
Shots Per Foot		ON RECORD -				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth				
	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Osed)				Берит		
TUBING RECORD:	Size:	Set At:		Packer A	+-	Liner Run:				
TOBING FILEGORIS.	0.20	001711.		r donor 7	••	[Yes No			
Date of First, Resumed	Production, SWD or EN	NHR. Pro	oducing Meth		a \Box	Coo Lift 0	Other (Evelein)			
Estimated Dradustics	0.11	Dhla	Flowing	Pumpin			Other (Explain)	Nee Oil D-#-		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wat	eı B	bls. C	Gas-Oil Ratio	G	iravity
	ON OF GAS:	Open		METHOD OF Perf.			nmingled	PRODUCTION	ON INTERVAL:	
Vented Sold	Used on Lease bmit ACO-18.)		(Specify)	_ 1 011.	(Submit		mit ACO-4)			



269698

LOCATION O + Lawa KS
FOREMAN Fred Mader

PO Box 884, Chanute, KS 66720 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT CEMENT

						l l	COUNTY
1.9.14	6370	Sauver	, ¥,7	5W 29	14	22	Jo.
STOMER		, 1		######################################			
Hex re		echno log	es Lec	TRUCK#	DRIVER	TRUCK#	DRIVER
	W 47 42 3	c.J C.J	412		Fre Mad		
700 (SY SY e Istate	IZIP CODE	666	Ki Car		
	al.	Mos	1.	675	Ken Det	44	
Kanso			57/8 HOLE	DEPTH 7/0	Mikfon Tro CASING SIZE & W	Nor 7/6	EUE
B TYPE	7/ - /	HOLE SIZE		•			K 0[-
ASING DEPTH			TUBI	R gal/sk	CEMENT LEFT in	OTHER	"Dle
URRY WEIGH		SLURRY VOL_ OISPLACEMEN			RATE 48P		1
SPLACEMENT				stablish pum			الله د م
MARKS: H		Satata	• •				_
<u>621</u>		Mix + Pa		و و مس	mix 270		Flo
رجومرا			Surfaces	Flushpum		lean. Di	splace
	Rubber	- ,	o casing		UVE TO BO		
<u>Ra lea</u>	es pres	15018 X	o sex type	A Value. S	hoyin (asily.	
							
			ب		-P Ma	0	
Evas	us Enev	gy Dev.	Juc Tra	iuls.	Tex VI	odu	
ACCOUNT CODE	QUANITY	or UNITS	DESCRIP	TION of SERVICES or PR	ODUCT	UNIT PRICE	TOTAL
5401		1	PUMP CHARGE		666		10850
3.6							700
540 6		30 mi	MILEAGE		660		12600
		30 m; 890	MILEAGE Cosing f	contage			/26 [©]
540 6	Minim	890		cotage les			126ee N/c 368e
540 6 5402 5407	Minim	890	Casing f	,	660		126ee N/c 368e
5406	Minim	890 wm	Casing f	les	660		12600
540 6 5402 5407	Minim	890 wm	Casing f	les	660		126°C N/c 368°
540 6 5402 5407 5502C	Minim	890 Lum 2hrs 148Ks	Casing f Ton Mi 80 BBL	les	660 503 675	13/100	126ee N/c 368e
540 6 5402 5407 5502C	Minim	890 Lum 2hrs 148Ks	Casing to Tom Mi 80 BBL	les Vac Truck z Mix Cemen	660 503 675	1311 00 1311 00	126ee N/c 368e
540 6 5407 5407 5502C	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL	les Vac Truck - Mix Cemen n Gel	660 503 675	64 24	126ee N/c 368e
540 6 540 7 540 7 5502C	Minim	890 Lum 2hrs 148Ks	Casing to Tom Mi 80 BBL	les Vac Truck - Mix Cemen Lul	660 503 675	64 ²⁴	126ee N/c 368e
540 6 5407 5407 5502C	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL	Vac Truck Mix Cemen Gul Q Material	660 503 675	64 24	126ee N/c 368e
540 6 5407 5502C	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL	les Vac Truck Mix Cemen Luck Maxerias Less	660 503 675 \$ 1 30%	64 ²⁴	126°C N/C 368° 200°C
540 6 5407 5502C /124 /125 /107	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	64 ²⁴	1012 25 200 25
540 6 5407 5407 5502C	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	64 ²⁴	126°C N/C 368°C 200°C
540 6 5407 5502C //24 //27	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	64 ²⁴	1012 25 260 25
540 6 5407 5502C //24 //27	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	64 ²⁴	1012 2 N/C 200 2
540 6 5407 5502C /124 /125 /107	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	71 63 1446 84 -43402	126°C
540 6 5407 5502C /124 /125 /107	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 4	6424 7163 144684 -43405	1012 20 20 20 20 20 20 20 20 20 20 20 20 20
540 6 5407 5502C /124 /125 /107	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 \$ 1 30%	6424 7163 144684 -43405	1012 2 N/C 200 2
540 6 5407 5407 5502C /124 /127 /107	Minim	890 2hrs 145Ks	Casing for Ton Mi 80 BBL 50/50 Por Premium Flo Sea	les Vac Truck Mix Cemen u Gel Q Maxerias Less:	660 503 675 4	6424 7163 144684 -43405 336425 SALES TAX	1012 23 200 2

account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

TERMS

In consideration of the prices to be charged for Consolidated Oil Well Services, LLC (COWS) services, equipment and products and for the performance of services and supplying of materials, Customer agrees to the following terms and conditions.

Terms. Cash in advance unless satisfactory credit is established. On credit sales, invoices are payable within 30 days of the invoice date. On all invoices not paid within 30 days, Customer agrees to pay COWS interest at the rate of 18% per annum or the maximum rate allowed by law, whichever is higher. In the event COWS retains an attorney to pursue collection of any account, Customer agrees to pay all collection costs and attorney's fees incurred by COWS.

Any applicable federal, state or local sales, use occupation, consumer's or emergency taxes shall be added to the quoted price. All process license fees required to be paid to others will be added to the scheduled prices.

All COWS' prices are subject to change without notice.

SERVICE CONDITIONS

Customer warrants that the well is in proper condition to receive the services, equipment, products and materials to be supplied by COWS. The Customer shall at all time have complete care, custody, and control of the well, the drilling and production equipment at the well, and the premises about the well. A responsible representative of the Customer shall be present to specify depths, pressures, or materials used for any service which is to be performed.

- (a) COWS shall not be responsible for any claim, cause of action or demand (hereinafter referred to as a 'claim') for damage to property, or injury to or death of employees and representatives, of Customer or the well owner (if different from Customer), unless such damage, injury or death is caused by the willful misconduct or gross negligence of COWS, including but not limited to sub-surface damage and surface damage arising from sub-surface damage.
- (b) Unless a claim is the result of the sole willful misconduct or gross negligence of COWS, Customer shall be responsible for and indemnify and hold COWS harmless from any claim for: (1) reservoir loss or damage, or property damage resulting from sub-surface pressure, losing control of the well and/or a well blowout; (2) damages as a result of a subsurface trespass, or an action in the nature thereof, arising from a service operation performed by COWS; (3) injury to or death of persons, other than employees of COWS, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole: and (4) well damage or reservoir damage caused by (i) loss of circulation, cement invasion, cement misplacement, pumping cement or cement plugs on wells with loss of circulation, including the failure to displace plug to proper depth, (ii) subsurface pressure and resulting failure to complete pumping of cement or cement plug, including dehydration of cement slurry or flashing, plugged float shoe, annulus bridging or plugging, or (iii) down hole tools being lost or left in the well, or becoming stuck in the well for any reason and by any cause. COWS may furnish down hole tools and may supply supervision for the running and placement of such tools but will not be liable for any damage, loss or result caused by the use of such tools.

Furthermore. Customer will be responsible for the cost to replace such tools if they are lost or left in the well.

- (c) COWS makes no guarantee of the effectiveness of any COWS products, supplies or materials, or the results of any COWS treatment or services.
- (d) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, COWS is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by COWS. COWS' personnel will use their best efforts in gathering such information and their best judgement in interpreting it, but Customer agrees that COWS shall not be responsible for any damage arising from the use of such information except where due to COWS' gross negligence or willful misconduct in the preparation or furnishing of it.
- (e) COWS may buy and re-sell to Customer down hole equipment, including but not limited to float equipment, DV tools, port collars, type A & B packers, and Customer agrees that COWS is not an agent or dealer for the companies who manufacture such items, and further agrees that Customer shall be solely responsible for and indemnify COWS against any claim with regard to the effectiveness, malfunction of, or functionality of such items.

WARRANTIES - LIMITATION OF LIABILITY

COWS warrants title to the products, supplies and materials, and that the same are free from defects in workmanship and materials. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, NOR ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE, WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. COWS's hability and Customer's exclusive remedy in any claim (whether in contract, tort, breach of warranty or otherwise,) arising out of the sale or use of any COWS' products, supplies, materials or services is expressly limited to the replacement of such products, supplies, materials or services or their return to COWS or, at COWS' option, an allowance to Customer of credit for the cost of such items.

Customer waives and releases all claims against COWS for any special, incidental, indirect, consequential or punitive damages.



Oil & Gas Well Drilling Water Wells Geo-Loop Installation

Phone: 913-557-9083

Fax: 913-557-9084

WELL LOG

Paola, KS 66071

Petroleum Technologies, Inc. Sawyer #17 API #15-091-24,320 July 7 - July 9, 2014

Thickness of Strata	<u>Formation</u>	<u>Total</u>
14	soil & clay	14
25	shale	39
26	lime	65
10	shale	75
8	lime	83
7	shale	90
21	lime	111
19	shale	130
22	lime	152
6	shale	158
10	lime	168
2	shale	170
41	lime	211
18	shale	229
8	lime	237
21	shale	258
6	lime	264
6	shale	270
7	lime	277
43	shale	320
27	lime	347
9	shale	356
22	lime	378
4	shale	382
14	lime	396 base of the Kansas City
170	shale	566
4	lime	370
2	shale	372
5	lime	377
3	shale	580
9	lime	589
14	shale	603
4	lime	607
6	shale	613
10	lime	623
27	shale	650
3	lime	653
70	shale	723
11	broken sand	734 brown & grey, light bleeding

Sawyer #1 /		Page 2
17	shale	751
3	lime	754
77	shale	831
2	sand	833
11	shale	844
7	limey sand	851
1	limey sand	852
3	limey sand	855
11	silty shale	866
49	shale	915 TD

Drilled a 9 7/8" hole to 21.6' Drilled a 5 5/8" hole to 915'

Set 21.6' of 7" casing cemented with 5 sacks cement.

Set 885.6' of 2 7/8" 8 round upset tubing including 3 centralizers, 1 float shoe, and 1 clamp.