

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

Form ACO-1  
September 1999  
Form must be Typed

**ORIGINAL**

Operator: License # 33209  
 Name: Penn Virginia Oil & Gas Corporation  
 Address: 2550 E. Stone Dr., Suite 110  
 City/State/Zip: Kingsport, TN 37660  
 Purchaser: \_\_\_\_\_  
 Operator Contact Person: Richard Waddell, Operations Manager  
 Phone: 423-723-0281  
 Contractor: Name: Gulick Drilling Co., Inc.  
 License: 32854  
 Wellsite Geologist: None  
 Designate Type of Completion:

New Well     Re-Entry     Workover  
 Oil     SWD     SIOW     Temp. Abd.  
 Gas     ENH     SIGW  
 Dry     Other (Core, WSW, Expl., Cathodic, etc.)

If Workover/Re-entry: Old Well Info as follows: **RECEIVED**

Operator: \_\_\_\_\_  
 Well Name: \_\_\_\_\_ **NOV 20 2003**  
 Original Comp Date \_\_\_\_\_ Original Total Depth \_\_\_\_\_  
 Deepening     Re-Perf.     Conv. to Enhr./SWD  
 Plug Back     Plug Back Total Dept \_\_\_\_\_  
 Commingle    Docket No. \_\_\_\_\_  
 Dual Completion    Docket No. \_\_\_\_\_  
 Other (SWD or Enhr.?)    Docket No. \_\_\_\_\_

06/30/2003	07/14/2003	10/17/2003
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 1501720840 -00-00  
 County: Chase  
 NW 1/4, SW 1/ Sec. 23 Twp. 21S R: 06E  East  West  
 \_\_\_\_\_ 1980' feet from  N /  S Line of Section  
 \_\_\_\_\_ 660' feet from  E /  W Line of Section

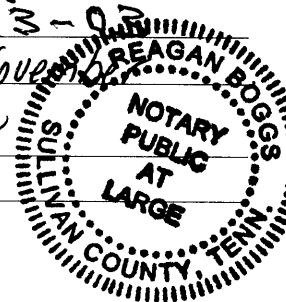
Footages Calculated from Nearest Outside Section Corner:  
 (Circle one) NE SE NW **SW**  
 Lease Name: ODLE 23-12 Well #: 1  
 Field Name: \_\_\_\_\_  
 Producing Formation: Pennsylvanian Coals  
 Elevation: 1384.1 Kelly Bushing: 1392.8  
 Total Depth: 3410 Plug Back Total Depth 3304  
 Amount of Surface Pipe Set and Cemented at 210  Feet  
 Multiple Stage Cementing Collar Used?  Yes  No  
 If yes, show depth set \_\_\_\_\_ Feet  
 If Alternate II completion, cement circulated from \_\_\_\_\_  
 from depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmrt.

**Drilling Fluid Management Plan** *(Data must be collected from the reserve pit)*  
 Chloride content \_\_\_\_\_ ppm. Fluid volume \_\_\_\_\_ bbls  
 Dewatering method used Will dispose of drilling fluid in Mercer 26-4-4 (API No. 15-017-20953) upon approval of KCC to inject.  
 Location of fluid disposal if hauled offsite: \_\_\_\_\_  
 Operator Name: \_\_\_\_\_  
 Lease Name: \_\_\_\_\_ License No: \_\_\_\_\_  
 Quarter: \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S R.  East  West  
 County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: Richard Waddell  
 Title Operations Manager Date: 11-13-03  
 Subscribed and sworn before me this 13<sup>th</sup> day of November  
 2003.  
 Notary Public: [Signature]  
 Date Commission Expires: 2-28-2006



KCC Office Use ONLY	
<input type="checkbox"/> Letter of Confidentiality Attached	
<input type="checkbox"/> If Denied, Yes <input type="checkbox"/> Date: _____	
<input checked="" type="checkbox"/> Wireline Log Received	
<input type="checkbox"/> Geologist Report Received	
<input type="checkbox"/> UIC Distribution	

Operator Name: Penn Virginia Oil & Gas Corporation Lease Name: ODLE 23-12 Well #: 1  
 Sec. 23 Twp. 21S R 06E  East  West County: Chase **API# 15-017-20840-00-00**

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken  Yes  No  
 (Attach Additional Sheets)  
 Samples Sent To Geological Survey  Yes  No  
 Cores Taken  Yes  No  
 Electric Logs Run  Yes  No  
 (Submit Copy)

List All E. Logs Run: CBL, GR, CCL ✓  
*Induction ✓*

<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Name	Top Datum
Lansing	2051' -660'
Base Kansas City	2486' -1095'
Cherokee	2788' -1397'
Basal Penn. Ss.	3354' -1963'

RECEIVED  
 KANSAS CORPORATION COMMISSION  
 NOV 20 2003  
 CONSERVATION DIVISION  
 WICHITA, KS

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D)	Weight Lbs./Ft	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	23	210	CI A	150	3% CaCl2
Intermediate							
Production	7 7/8"	5 1/2"	15.5	3391	CI A	180	4% gel, 8#/sk CalSeal, 2% CaCl2, 4#/sk KolSeal

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	3298-3303, 3272-75, 3265-69, 3255-59	250 gal. 15% HCL acid, 300 BW, 280 MSCF N2, 30000 lbs 16/30 sand	
3	3212-16, 3218-22	250 gal. 15% HCL acid, 215 BW, 225 MSCF N2, 21000 lbs 16/30 sand	

TUBING RECORD Size 2 3/8" Set At 3100 Packer At \_\_\_\_\_ Liner Run  Yes  No

Date of first, Resumerd Production, SWD or Enhr. 10/09/2003 Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls	Gas Mcf	Water Bbls 340	Gas-Oil Ratio	Gravity
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Disposition of Gas  Vented  Sold  Used on Lease (If Vented, Submit ACO-18) METHOD OF COMPLETION  Open Hole  Perf.  Dually Comp.  Commingled  Other (Specify) \_\_\_\_\_

API # 15-017-20840-00-00

ORIGINAL  
No. 4735

**BLUE STAR  
ACID SERVICE, INC.**

PO Box 103  
Eureka, Kansas 67045

Cementing Ticket  
and Invoice Number

Date	Customer Order No.	Sect	Twp.	Range	Truck Called Out	On Location	Job Began	Job Completed
7-14-03		23	21	6	1:30 p.m.	3:00 p.m.	5:30 p.m.	6:10 p.m.
Owner	Contractor		Charge To					
Penn-Virginia Oil & Gas Corp.	Gulick Dtg.		Penn-Virginia Oil & Gas Corp.					
Mailing Address	City		State					
2550 E. Stone Dr., Suite 110	Kingsport		TN		37660			
Well No. & Form	Place	County		State				
ODLE 23-12-1		Chase		Kansas				
Depth of Well	Depth of Job	Casing	(New) Size	Size of Hole	Amt. and Kind of Cement	Cement Left in casing by	Request	
3410	3391	(Used)	5 1/2"	7 7/8"	180 sks		Necessity	0 feet
Kind of Job	Dripline		Tubing		Cable		Truck No.	
Longstring							# 25	

Price Reference No. \_\_\_\_\_  
 Price of Job 665.00  
 Second Stage \_\_\_\_\_  
 Mileage 112.50  
 Other Charges \_\_\_\_\_  
 Total Charges 777.50

Remarks Safety Meeting: Rig up to 5 1/2" casing, Break circulation with 20 Bbl. fresh water. Mixed 180 sks Thickset cement w/ 4" P/B of KOL-SEAL mixed w/ 5 lbs. P/B. Shut down washout Pump & lines. Release Plug. Displace Plug with 80 3/4 Bbl. fresh water. Final Pumping at 600 PSI - Bumped Plug to 1000 PSI. Wait 2 min - Release Pressure to check float - float held. Close casing in with 0 PSI.

6:00 PM  
P. Dan

Job complete - Tear down

Cementor Brad Butler  
 Helper Pick-Troy-Jim District Eureka State Kansas  
 The above job was done under supervision of the owner, operator, or his agent whose signature appears below.

"Thank you"

*[Signature]*  
Agent of contractor or operator

Sales Ticket for Materials Only

Quantity Sacks	BRAND AND TYPE	PRICE	TOTAL
180	sk. Thickset Cement	10.75	1935.00
720	lbs. KOL-SEAL 4lbs. P/B sk	.30	216.00
RECEIVED KANSAS CORPORATION COMMISSION			
5	Hrs. 80 Bbl. VAC Truck #13	60.00	300.00
1	Load City water	20.00	20.00
NOV 20 2003 CONSERVATION DIVISION WICHITA, KS			
6	5 1/2" Centralizers	28.00	168.00
2	5 1/2" Cement Baskets	106.00	212.00
1	5 1/2" AFU Float shoe	160.00	160.00
1	5 1/2" Top Rubber Plug	40.00	40.00
Plugs		180 sks. Handling & Dumping	.50
		9.9 Ton Mileage 50	.80
		Sub Total	4314.50
Delivered by Truck No. #16		Discount	
Delivered from Eureka		Sales Tax	6.3%
Signature of operator <u>Brad Butler</u>		Total	271.81
			4586.31

**BLUE STAR  
ACID SERVICE, INC.**

API # 15-017-20846-05-00  
API # 15-017-20846-00-00  
PO Box 103  
Eureka, Kansas 67045

Cementing Ticket  
and Invoice Number

**ORIGINAL**  
No. 4839

Date <b>B-14-03</b>	Customer Order No.	Sect.	Twp.	Range	Truck Called Out Am <b>7.00</b>	On Location Am <b>9.00</b>	Job Began Am <b>9.10</b>	Job Completed Am <b>9.30</b>
Owner <b>Penn Virginia Oil + Gas</b>			Contractor <b>NONE</b>			Charge To <b>Penn Virginia Oil + Gas</b>		
Mailing Address <b>2550 E. Stone Dr. Suite 110</b>			City <b>Kingsport</b>			State <b>TN</b>		
Well No. & Form <b>ODLE 23-12-1</b>		Place <b>16 N.E MATFIELD</b>		County <b>CHASE</b>		State <b>KANSAS</b>		
Depth of Well	Depth of Job	Casing <input checked="" type="checkbox"/> New <input type="checkbox"/> Used	Size <b>5 1/2</b>	Weight	Size of Hole Amt. and Kind of Cement	Cement Left in casing by	Request Necessity _____ feet	
Kind of Job <b>Pump Rental</b>					Drillpipe	Rotary Cable		
					Tubing	Truck No. <b># 19</b>		

Price Reference No. **# 1**

Price of Job **350.00**

Second Stage \_\_\_\_\_

Mileage **50** **112.50**

Other Charges \_\_\_\_\_

Total Charges **462.50**

Remarks **Safety meeting, Rig up to 5 1/2 casing**  
**Pump 3.5 Bbl to head casing, Break Down at**  
**750 PSI, Flush 10 Bbl water at 4 BPM**  
**700 PSI. ISIP 500\***  
**5 min Test 250 PSI**  
**10 min Test 100 PSI**  
**Flow well back 1/2 Bbl 0 PSI.**  
**Close well in. Job complete, Tear Down. ✓**

Cementor **Russell Mcclay**

Helper **Steve Mead**

District **EUREKA**

State **KANSAS**

The above job was done under supervision of the owner, operator, or his agent whose signature appears below.

**Thank you**

*[Signature]* Agent of contractor or operator

**Sales Ticket for Materials Only**

Quantity Sacks	BRAND AND TYPE	PRICE	TOTAL
			<b>RECEIVED</b>
			<b>KANSAS CORPORATION COMMISSION</b>
			<b>NOV 20 2003</b>
			<b>CONSERVATION DIVISION</b>
			<b>WICHITA, KS</b>
	Handling & Dumping		
	Mileage		
	Sub Total		<b>462.50</b>
	Discount		
	Delivered by Truck No. <b># 19</b>		
	Delivered from <b>Eureka</b>	<b>6.3%</b>	<b>29.14</b>
	Signature of operator <b>Russell Mcclay</b>		<b>491.64</b>
	Total		