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



DPERATOR: License #3842	API No. 15 - 101-22165-00-00			
lame: LARSON ENGINEERING, INC.	Spot Description:			
Address 1: 562 WEST STATE ROAD 4	NW - NW - SW - NE Sec. 27 Twp. 17 S. R. 30 ☐ East ☑ Wes			
Address 2:	1584feet from NORTH Line of Section			
City: OLMITZ State: KS Zip: 67564 + 8561	2498feet from EAST Line of Section			
Contact Person: TOM LARSON	Footages Calculated from Nearest Outside Section Comer:			
Phone: (620) 653-7368	⊠ NE □ NW □ SE □ SW			
CONTRACTOR: License # 33935 4 0 0000	County: LANE			
Name: H.D. DRILLING, LLC SEP 1 0 2005	CLease Name: PENKA Well #: 1-27			
Vellsite Geologist: ROBERT LEWELLYN CONFIDENT	Field Name: WILDCAT			
Purchaser:	Producing Formation:			
Designate Type of Completion:	Elevation: Ground: 2854' Kelly Bushing: 2864'			
X New Well Re-Entry Workover	Total Depth: 4639' Plug Back Total Depth:			
Oil SWD SIOW	Amount of Surface Pipe Set and Cemented at:264Fee			
Gas ENHR SIGW	Multiple State Cementing Collar Used?			
CM (Coal Bed Methane) Temp. Abd.	If yes, show depth set: Fee			
X Dry Other	If Alternate II completion, cement circulated from:			
(Core, WSW, Expl., Cathodic, etc.)	feet depth to: w/ sx cm			
f Workover/Re-entry: Old Well Info as follows:	00.4/2 12 20 00			
Operator:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)			
Vell Name:	(Date most be concerted from the Nessipe 7 h)			
Original Comp. Date: Original Total Depth:	Chloride content: 8200 ppm Fluid volume: 1280 bbl			
Deepening Re-perf Conv. to Enhr./SWD	Dewatering method used: ALLOWED TO DRY			
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:			
Commingled Docket No.	Operator Name:			
Dual Completion Docket No.	Lease Name: License No.:			
Other (SWD or Enhr.?) Docket No.	Quarter Sec. Twp. S. R. East Wes			
5/11/2009 5/23/2009 5/23/09	County: Docket No.:			
Spud Date or Date Reached TD Completion Date or Recompletion Date				

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 on 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.

$\bigcap_{i \in \mathcal{O}} \mathcal{O}_{i}$	
Signature: and law law	
Title: SECRETARY/TREASURER	Date: 9/10/09
Subscribed and sworn to before me this 10TH	day of <u>SEPTEMBER</u> ,
20 <u>09</u> .	
Notary Public: Alebia	- Sudwy
Date Commission Expires: MAY 5, 2012	<i>y</i>)

KCC Office Use ON	LY
Letter of Confidentiality Received	
If Denied, Yes 🗆 Date:	
Wireline Log Received	
✓ Geologist Report Received	RECEIVED
UIC Distribution	SEP 1 1 2009

DEBRA J. LUDWIG Notary Public - State of Kansas

Side Two

Sec. 27 Twp. 17 S. R. 30	Operator Name: <u>LA</u>	RSON ENG	SINEERING, I	NC.		Leas	e Name:	PENK	<u> </u>		Well #:	1-27
NSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cross. Report all final copes of drill stem tests playing interval lesson are tool open and cubes, driving and study. In pressure, whether shishin pressure, are ached static level, hydrostatic pressure, bottom hole temperature, fluid ecovery, and flour rists if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wirelane Logs unreyed. Attach final pendiquite well life report. Dill Stem Tests Taken					West	Cour	ntv:	LANE				
Name	NSTRUCTIONS: S me tool open and clo ecovery, and flow rate	Show imporosed, flowing tes if gas to	tant tops and g and shut-in surface test, a	base of t pressure along wit	formations es, whethe	penetrated	l. Detail a	ached sta	tic level, hy	drostatic pre	ssures, bottom hole t	temperature, fluid
Samples Sent to Geological Survey			⊠	Yes	□ No		×	Log	Formation	on (Top), Dej	oth and Datum	☐ Sample
Yes	,	•	/ey ⊠	Yes	□ No						•	
Electric Log Run (Submit Capy) STARK SHALE 4206 -1342	Cores Taken			Yes	⊠ No		HE	EBNER	SHALE		3899	-1035
STATE Companies Size Casing C	=		⊠	Yes	□ No		ST	ARK SH			4206	-1342
CASING RECORD	,	DUAL	COMP PORO				PAWNEE 4399 FORT SCOTT 4447 CHEROKEE 4471			-1535 -1583 -1607		
Purpose of string Size Hole Size Casing Melght Setting Type of Cement # Sacks Type and Percent Additives SURFACE 12-1/4* 8-5/8* 20# 284* CLASS A 180 2% GEL, 3% CC ADDITIONAL CEMENTING/SQUEEZE RECORD Foreign F						····					SEP 1 0 2	009
Purpose of string Size Hole Set (in O.D.) Set (in O.D.) Cement C			Report	all string							CONFIDE	HTIAL
ADDITIONAL CEMENTING/SQUEEZE RECORD Purpose: Depth	Purpose of string		Size Casin	g V	/eight	Setting		Type of	Ī	# Sacks		
Purpose: Perforate Perforate Protect Casing Plug Back TD Plug Off Zone Plug Sel-Type Acid. Fracture, Shot, Cement, Squeeze Record (Amount and Kind of Material Used) Depth	SURFACE	12-1/4"	8-5/8"		20#	264'	CLASS A		180	2% GEL, 3% CC		
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone Purpose Purp												
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone										<u> </u>		
Perforate Protect Casing Plug Back TD Plug Off Zone PERFORATION RECORD - Bridge Plugs Set/Type Shots per Foot Perforate Protect Casing Plug Back TD Plug Off Zone Perforate Specify Footage of Each Interval Perforated RECEIVE SEP 1 2 KCC WICH TUBING RECORD: Size: Set At: Packer At: Liner Run: Date of First, Resumed Production, SWD or Enhr. Producing Method: Producing Method: Production Per 24 Hours DISPOSITION OF GAS: METHOD OF COMPLETION: PRODUCTION INTERVAL:		.,	Dooth		ADDITIO	NAL CEME	NTING/S	QUEEZE	RECORD			
Protect Casing Plug Back TD Plug Off Zone Shots per Foot PERFORATION RECORD – Bridge Plugs Set/Type Specify Footage of Each Interval Perforated (Amount and Kind of Material Used) Depth RECEIVE SEP 1 1 2 **CC WICH** TUBING RECORD: Size: Set At: Packer At: Liner Run: Yes No Date of First, Resumed Production, SWD or Enhr. Producing Method: Plowing Pumping Gas Lift Other (Explain) Estimated Production Oil Bbls. Gas Mcf Water Bbls. Gas-Oil Ratio Gravity DISPOSITION OF GAS: METHOD OF COMPLETION: PRODUCTION INTERVAL:	•			1		Тур	e of Ceme	ent 			type and Pe	rcent Additives
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ALLIED CEMENTING CO., LLC. 036297

REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665

SERVICE POINT:

NEDS CITY KY

DATE	5-12-09	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
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	NG SIZE	-	DEF		2% 641		W COMMON	
DRILL	PIPE		DEF	TH				
TOOL			DEF		_			
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ALLIED CEMENTING CO., LLC. 035056

REMIT TO		X 31 LL, KANS	AS 6766	55		SER	VICE POINT	<i>y M</i>
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DATE 5/8	3/09		WP.	RANGE 30	CALLED OUT	ON LOCATION 4380 Am	JOB START	JOB FINISH
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PRINTED N	IAME							
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SIGNATUR	E							

Robert C. Lewellyn

Consulting Petroleum Geologist

P. O. Box 375

Kechi, KS 67067-0609
Office 316-744-2567
Cell 316-518-0495
Fax 209-396-2988
bobbwallyn@yahoo.com

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GEOLOGICAL REPORT

Larson Engineering, Inc.

Penka No. 1-27

1584' FNL & 2498' FEL Sec. 27-17S-30W

Lane County, Kansas

CONTRACTOR:

H D Drilling, LLC

SPUDDED:

May 11, 2009

DRILLING COMPLETED:

May 22, 2009

SURFACE CASING:

8 5/8" @ 264 KBM/180 sx,

ELECTRIC LOGS:

Log-Tech DIL CNL/CDL MEL

ELEVATIONS:

2864 KB 2854 GL

FORMATION TOPS (Electric Log):

Anhydrite	2192 (+ 672)
Base Anhydrite	2249 (+ 615)
Heebner Shale	3899 (-1035)
Lansing-Kansas City Group	3935 (-1071)
Muncie Creek Shale	4106 (-1242)
Stark Shale	4206 (-1342)
Hushpuckney shale	4240 (-1376)
Base Kansas City	4280 (-1416)
Altamont "A"	4344 (-1480)
Pawnee	4399 (-1535)
Myrick Station	4424 (-1560)
Fort Scott	4447 (-1583)
Cherokee	4471 (-1607)
Mississippian	4542 (-1678)
Electric Log Total Depth	4639 (-1775)

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a complete lithologic description of all formations, refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

3939-3946 (A Zone)

Limestone, cream to buff, finely crystalline and chalky, zone is mostly tight with no shows of oil.

3970-3983 (B Zone)

Limestone, cream, finely crystalline and chalky, slightly fossiliferous, zone is mostly tight with no shows of oil.

3936-4017 (C/D Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, zone is mostly tight, some light gray, fresh, opaque chert.

4019-4036 (E Zone)

Limestone, cream to buff, dense, slightly onlitic, zone is mostly tight with no shows of oil.

4038-4049 (F Zone)

Limestone, buff to tan, dense to finely crystalline, trace of poor scattered intercolitic porosity, no shows of oil.

4051-4055 (G Zone)

Limestone, cream to buff, dense to finely crystalline and partly oolitic, scattered poor ooliticastic porosity, no shows of oil.

4117-4119 (H Zone)

Limestone, buff to tan, some brown, dense to finely crystalline, some fossiliferous, scattered poor to fair intercrystalline and interfossil porosity, poor spotted stain, fair show of free oil, fair to good odor, poor fluorescence, fair cut.

Drill Stem Test No. 1

4100-4128

15-30-15-30; weak surface blow, died in four minutes of first flow, did not return on second flow. Recovered five feet of mud with oil spots. ISIP 113# FSIP 72# IFP 36-34# FFP 33-34# IHP 2050# FHP 1977# BHT 111 degrees

4159-4161 (I Zone)

Limestone, cream to buff, finely crystalline and partly oolitic, fair to good vugular, intercrystalline, and intercolitic porosity, fair to good spotted stain, fair to good show of oil, good odor, poor to fair fluorescence, fair to good cut.

4181-4184 & 4189-4192 (J Zone)

Limestone, cream to buff, dense to finely crystalline and chalky, partly oolitic, scattered very poor intercrystalline and intercolitic porosity, scattered poor spotted stain, very slight show of free oil, faint odor, no odor, no cut.

Drill Stem Test No. 2

4140-4200

15-30-30-60; quarter-inch blow built to four inches on first flow period, no blowback; quarter-inch blow built to eight inches on second flow, weak surface blowback, did not build. Recovered 40 feet of gassy oil (10% gas, 90% oil), 62 feet of mud cut oil (60% oil, 40% mud), 124 feet of mud cut gassy oil (30% gas, 30% oil, 40% mud). ISIP 959# FSIP 947# IFP 23-67# FFP 75-104# IHP 2051# FHP 2018# BHT 115 degrees.

4220-4225 (K Zone)

Limestone, cream to buff, some tan, dense to finely crystalline, some chalky, scattered poor intercrystalline porosity, rare trace of poor spotted stain, no free oil, no odor, no fluorescence, no cut.

4245-4249 (Middle Creek Zone)

Limestone, buff to tan, dense to finely crystalline, zone is mostly tight with no show of oil.

4263-4267 (L Zone)

Limestone, buff to tan, some brown, dense to finely crystalline, trace of poor scattered intercrystalline porosity, one or two pieces with poor spotted stain, no free oil, no odor, no fluorescence, no cut, zone warrants no further evaluation.

4288-4294 (Pleasanton Zone)

Limestone, buff to tan, some brown, dense to finely crystalline and partly sucrosic, fair intercrystalline and intergranular porosity, fair spotted stain, fair show of free oil, good odor, fair fluorescence, fair cut.

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Drill Stem Test No. 3

4292-4300

15-30-30-60; surface blow, built to quarter-inch on first flow, no blowback, surface blow, built to ½ inch on second flow, no blowback. Recovered 72 feet of water cut mud (5% water, 95% mud). ISIP 1077# FSIP 1071# IFP 23-32# FFP 37-57# IHP 2128# FHP 2095# BHT 116 degrees

4332-4339 (Marmaton Zone)

Limestone, tan to brown, dense to finely crystalline, trace of poor intercrystalline porosity with poor spotted stain, very slight show of free oil, faint fleeting odor, no fluorescence, no cut.

4344-4373 (Altamont "A" Zone)

Limestone, cream to buff, finely crystalline and partly chalky, partly fossiliferous and oolitic, scattered fair intercrystalline with some pinpoint porosity, poor spotted stain, very slight show of free oil, faint odor, poor fluorescence, poor cut.

4377-4396 (Altamont "B" Zone)

Limestone, cream to buff, some tan, finely crystalline and oolitic, slightly fossiliferous, fair intercrystalline and intercolitic porosity, trace of fair interfossil porosity, fair spotted stain, fair show of free oil, fair fleeting odor, no fluorescence, fair cut.

Drill Stem Test No. 4

4300-4394

15-30-15-30; quarter-inch blow died in 10 minutes. Recovered 10 feet of mud with oil spots. ISIP 374# FSIP 140# IFP 24-23# FFP 26-25# IHP 2208# FHP 2118# BHT 108 degrees.

4399-4422 (Pawnee Zone)

Limestone, cream to buff, dense to finely crystalline, slightly fossiliferous, scattered poor to fair intercrystalline and vugular porosity, poor to fair spotted stain, slight show of free oil, faint odor, no fluorescence, poor cut, scattered light gray, opaque, fresh chert.

4424-4443 (Myrick Station Zone)

Limestone, buff to tan, dense to finely crystalline, zone is mostly tight with no shows of oil.

4447-4471 (Fort Scott Zone)

Limestone, tan to brown, dense to finely crystalline, somewhat pyritic, scattered poor intercrystalline porosity, very slight show of free oil, poor scattered stain, no odor, poor fluorescence, poor cut. Lower portion is partly oolitic with poor interoolitic and

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intercrystalline porosity, trace of poor spotted stain, very slight show of free oil, faint odor, no fluorescence, poor cut. Some tan oolitic limestone with black oolites.

4511-4529 (Johnson Zone)

Limestone, buff to tan to brown, dense to finely crystalline, slightly fossiliferous, fair intercrystalline and vugular porosity, poor to fair spotted stain, fair show of free oil, fair to good odor, fair fluorescence, fair cut.

Drill Stem Test No. 5

4397-4536

15-30-30-60; one-inch blow built to five-inch blow on first flow, no blowback, quarter inch blow built to five-inch bow on second flow, no blowback. Recovered 72 feet of mud with oil spots (100% mud), 186 feet of water cut mud with oil spots (5% water, 95% mud). ISIP 1092# FSIP 1008# IFP 42-103# FFP 109-142# IHP 2244# FHP 2160# BHT 116 degrees.

4542-4554 (Mississippian Zone)

Limestone, cream to buff, dense to finely crystalline, brittle, some chalky, mostly tight, no show of oil, some very fine grained sand, tight, well cemented, no show of oil in limestone or sand.

4554-4560

Limestone, buff, dense to finely crystalline with some oolitic, scattered poor intercrystalline and intercolitic porosity, no shows of oil.

4560-4616

Limestone, dense to finely crystalline with cream chalky, flaky and brittle, with some tan lithographic limestone, zone is tight with no shows of oil.

4616-4640

Dolomite, tan to brown, finely crystalline, slightly fossiliferous, slightly oolitic, rare trace of poor spotted stain in one or two pieces, very slight show of free oil, faint fleeting odor, no fluorescence, no cut. Zone warrants no further evaluation.

4640

Rotary Total Depth

Conclusions and Recommendations:

Sample examination, drill stem testing, and electric logging revealed no zones of probable commercial production. The "I" zone tested some oil, but was only one foot thick, and was deemed too thin to produce sufficient oil to warrant the expense of setting

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pipe and putting the well on the pump. Therefore it was decided by all parties concerned that the No. 1-27 Penka should be plugged and abandoned.

The Pleasanton zone exhibited porosity from 4288-4294 on the electric log. The drilling break in the Pleasanton by driller's depths was from 4289-4297. It is a moot question because the Pleasanton porosity had only 2 ½ ohms of resistivity, but from the driller's depths it appears that Drill Stem Test No. 3 sufficiently covered the Pleasanton Porosity. Refer to the attached sample log for an illustration of this.

Respectfully submitted,

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RCL:me









