

COPY

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 6234Name: Petroleum Production Management, Inc.Address 209 E. William, Suite 200City/State/Zip Wichita, KS 67202Purchaser: Pawnee Pipeline & Marketing, Inc.Operator Contact Person: Frank E. Novy, Sr. V.P.Phone (316) 265-4651Contractor: Name: Murfin Drilling CompanyLicense: 30606Wellsite Geologist: Joe Baker

Designate Type of Completion

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

If Workover:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

☐ Deepening ☐ Re-perf. ☐ Conv. to Inj/SWD☐ Plug Back ☐ PBDT☐ Commingled ☐ Docket No. _____☐ Dual Completion ☐ Docket No. _____☐ Other (SWD or Inj?) ☐ Docket No. _____10-10-94 10-14-94 10-15-94
Spud Date Date Reached TD Completion DateAPI NO. 15- 055-21335County Finney- - C - SW Sec. 15 Twp. 21S Rge. 34W X E W1320 Feet from SYN (circle one) Line of Section1320 Feet from EW (circle one) Line of SectionFootages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)Lease Name Lang Well # 5Field Name HugotonProducing Formation ChaseElevation: Ground 2969' KB 2974'Total Depth 2760' PBDT _____Amount of Surface Pipe Set and Cemented at 8 jts. @ 356 FeetMultiple Stage Cementing Collar Used? _____ Yes X No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from 2759'feet depth to surface w/ 720 sx cmt.Drilling Fluid Management Plan ALT 2 27 8-11-95
(Data must be collected from the Reserve Pit)Chloride content 51.000 ppm Fluid volume 4200 bblsDewatering method used allowed to dry naturally

Location of fluid disposal if hauled offsite: _____

Operator Name _____

Lease Name _____ License No. _____

Quarter Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, 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 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.

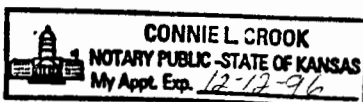
All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Frank E. NovyTitle Senior Vice President Date 5-18-95Subscribed and sworn to before me this 18th day of May 19 95.Notary Public Connie L. CrookDate Commission Expires 12-12-96

AMENDED TO ADD TP, CORRECT ALT II INFO

K.C.C. OFFICE USE ONLY		
F	☒	Letter of Confidentiality Attached
C	☒	Wireline Log Received
C	☒	Geologist Report Received
Distribution		
KCC	☒	SWD/Rep
KGS	☒	Plug
		NGPA
		Other (Specify)
KANSAS CORPORATION COMMISSION		

MAY 22 1995 Form ACO-1 (7-91)

CONSERVATION DIVISION
WICHITA, KS

MAY 22 1995

SIDE TWO

Operator Name Petroleum Production Management, Inc. Lease Name Lang Well # 5

Sec. 15 Twp. 21S Rge. 34W ☐ East ☒ West County Finney

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem 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 during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken ☒ Yes ☐ No
(Attach Additional Sheets.)

Samples Sent to Geological Survey ☒ Yes ☐ No

Cores Taken ☐ Yes ☒ No

Electric Log Run ☒ Yes ☐ No
(Submit Copy.)

List All E.Logs Run:

DLL-MSFL
CNCD-GR-caliper
Cement Bond-MSG-CCL

☒ Log Formation (Top), Depth and Datums ☐ Sample

Name	Top	Datum
B/Stone Corral	2079'	+895
Herrington	2516'	+458
Krider	2553'	+421
Winfield	2591'	+383
Towanda	2639'	+324
Fort Riley	2704'	+270

CASING RECORD

☐ New ☒ 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#	356'	60/40 poz.	220	3% CC, 2% gel
Production	7 7/8"	4 1/2"	9 1/2#	2759'	HLC	500	2% CC, 10# gil/sx
					pre. EA 2	100	5% calseal, .6%

ADDITIONAL CEMENTING/SQUEEZE RECORD

Halad 322, 15% salt, circ. 22 sx. to pit

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
☐ Perforate				
☐ Protect Casing				
☐ Plug Back TD				
☐ 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
4	2660-80' - Towanda	2000 gal. 15% FE acid each zone. (total	
4	2642-46', 2614-20', 2589-2601' - Winfield	6000 gal.) frac perms w/953 bbl.	
4	2554-64' - Krider	Boragel & 127,000# 10-20 mesh sand	

TUBING RECORD	Size 2 3/8"	Set At 2513'	Packer At	Liner Run ☐ Yes ☒ No
Date of First, Resumed Production, SWD or Inj. 2-25-95	Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls. 0	Gas Mcf 73	Water Bbls. 25	Gas-Oil Ratio NA Gravity

Disposition of Gas:

METHOD OF COMPLETION

Production Interval

☐ Vented ☒ Sold ☐ Used on Lease ☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled
(If vented, submit ACO-18.) ☐ Other (Specify) _____

DAILY WELL RECORD

ORIGINAL

POOL HugotonAPI NO. 15-055-21335

WC _____

AFE NO. _____

LEASE: Lang Gas Unit #5 Sec. 15 Twp. 21S Rge. 34W Spot C SWLOCATION: 1320 FSL, 1320 FWL Sec. 15-21S-34WELEVATION: 2969 GR 2974 KB County Finney State KansasOPERATOR: Petroleum Production Management, Inc. Phone (316) 265-4651CONTRACTOR: Murfin Drilling Co. - Rig #3 Phone (316) 267-3241CORRELATION WELL Lang #6

FORMATION TOPS	SAMPLE TOPS	LOG TOPS	MIRT 10-10-94
B/Stone Corral	2082 +892 (-15)	2079 +895	SPUD 2:30 p.m. 10-10-94
Herrington	2520 +454 (-12)	2516 +458	SURFACE 8 jts. 8 5/8" @ 356
Krider	2558 +416 (-13)	2553 +421	w/220 sx. 60/40 poz. 3%
Winfield	2595 +379 (-12)	2591 +383	CaCl 2% gel.
Towanda	2657 +317 (-12)	2661 +313	REMARKS RECEIVED KANSAS CORPORATION COMMISSION
Fort Riley	2710 +264 (-10)	2704 +270	
RTD	2760 +214	2758 +216	DEC 22 1994

DATE REPORT

10-10-94 MIRT. Spud w/12 1/4" bit @ 2:30 p.m. Set 8 jts. 8 5/8" @ 356' w/220 sx. 60/40 poz. 3% CaCl 2% gel. Circ. cmt. to surface. Plug dn. @ 7:30 p.m. 10-10-94. Drilled out @ 7:30 a.m. 10-11-94.

10-11-94 Dev. 1/4° @ 356'. Drilling ahead.

10-12-94 Dev. 1/2° @ 815', 1/2° @ 1432'. MW - 8.9.
8:00 a.m. Drilling @ 2015'.

10-13-94 Dev. 1/2° @ 2575'. MW - 9.1. Viscosity 51. Wtr. loss 11.2 cc. Chlorides 51,000.
8:00 a.m. Running DST #1 - 2524-75' (Krider)
DST #1 - 2524-75' (Krider) Open 90, SI 60, Open 60, SI 60. 1st open - strong blow immediately. GTS 60 min. 90 min. - 9.2 MCF thru 1/4" choke. 2nd open - stab. @ 53.3 MCF thru 3/4" choke. IFP-40-50. ISIP 400#. FFP-70-70. FSIP 400#. Temp. 107°.
1:30 p.m. Starting back in hole to resume drilling.
DST #2 - 2598-2640' (Winfield) Open 90, SI 60, Open 90, SI 90. 1st open - weak 4" blow thruout. 2nd open - strong blow. Rec. 810' gas in pipe, 90' VSGCM. IFP-60-60. ISIP 250#. FFP-70-70. FSIP 460#. Temp. 110°.

10-14-94 MW - 9.4. Viscosity 49. Wtr. loss 12.8 cc. Chlorides 44,000.
9:00 a.m. Preparing for DST #3 - 2662-95' (Towanda)

CONSERVATION DIVISION
WICHITA, KS

ORIGINAL

Page 2

Petroleum Production Management, Inc. - Lang #5

10-14-94

4:00 p.m.

DST #3 - 2662-95' (Towanda) Open 90, SI 60, Open 60, SI 90. 1st open - strong blow off btm. of bucket in 5 min. GTS in 18 min. of 1st SI = 108 min. 2nd open - GTS immediately. Stab @ 5.3 MCF thru 1/4" choke. Rec. 70' GCM - 5% gas. IFP-40-50. ISIP 400#. FFP-70-70. FISP 400#. Temp. 110°.

6:00 p.m.

TIH to continue drilling.

8:00 p.m.

RTD 2760'. Conditioning hole to log.

9:00 p.m.

POOH to log.

11:00 p.m.

RU Halliburton Wireline & ran DLL-GR-Caliper & CNCD-GR-Caliper openhole logs. LTD 2758'.

10-15-95

4:00 a.m.

Logging complete. RD HLS. TIH w/drill pipe to condition hole for production csg.

5:30 a.m.

Start laying dn. drill pipe. Took 2 hrs. to remove BOP.

10:00 a.m.

PU 4 1/2" csg. shoe jt. Installed centralizer 5' up & install float valve in 1st collar @ 2715' & TIH w/85 jts. 4 1/2" - 9 1/2# used - tested to 4000# - 8 RD csg.

11:15 a.m.

Tagged btm. - lacking 1 jt. csg. according to pipe tally. Pumped on csg. & circ. attempting to wash material but csg. felt to be on solid btm. @ RTD. Set csg. 1' off btm. @ 2759'. Must have not tallied 1 jt. of csg. or numbered 2 jts. same #.

12:00 p.m.

RU Halliburton. Mix & pump 40 bbl. - 3% salt wtr. Pump 500 gal. mud flush - mix 2 sx. gel & mix & pump 500 sx. HLC w/2% Cal - 10#gil/sx. Tail in w/100 sx. premium EA-2 cmt. containing 5% calcium seal, .6% Halad - 322 - 15% salt. Pump cmt. in turbulent flow @ 6 BPM while reciprocating csg. Max. pumping cmt. press. 750#. Had full circulation thruout job. Circ. 22 sx. cmt. to pit. Pumped 3/4 bbl. overdisplacement but did not bump float w/plug. SD Halliburton pump @ 750# press. Release press. Float holding ok. Job complete @ 1:30 p.m. 10-15-94. Zero point = 7' ABH. Release rig.

RECEIVED
KANSAS CORPORATION COMMISSION

DEC 22 1994

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