KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

CONFIDENTIAL

KCC

JAN 27 2000

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COPY

Operator: License # 8490
Name: Keen Oil Company
Address: #1 Tam-O-Shanter Ct.
City/State/Zip: Winfield, Kansas 67156
Purchaser: Cooperative Refining L.L.C.
Operator Contact Person: Lenore M. Keen
Phone: (316) 221-6267
Contractor: Name: MOKAT Drilling, Inc.
License: 5831
Wellsite Geologist: None

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Designate Type of Completion:
X New Well ___ Re-Entry ___ Workover
X Oil ___ SWD ___ SIOW ___ Temp. Abd.
___ Gas ___ ENHR ___ SIGW
___ Dry ___ Other (Core, WSW, Expl., Cathodic, etc)

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If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: ___ Original Total Depth: ___
___ Deepening ___ Re-perf. ___ Conv. to Enhr./SWD
___ Plug Back ___ Plug Back Total Depth
___ Commingled Docket No.
___ Dual Completion Docket No.
___ Other (SWD or Enhr.?) Docket No.

9-22-00	9-25-00	10-20-00
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 019-265340000
County: Chautauqua
NW - SE - SE - NE Sec. 19 Twp. 33 S. R. 12 X East ☐ West
3200 feet from (S) N (circle one) Line of Section
540 feet from E W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW SW
Lease Name: Harrold Well #: 12
Field Name: Peru-Sedan
Producing Formation: Mississippi
Elevation: Ground: 840 Kelly Bushing:
Total Depth: 1733 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at 43 Feet
Multiple Stage Cementing Collar Used? ☐ Yes X No
If yes, show depth set ___ Feet
If Alternate II completion, cement circulated from 1615
feet depth to surface w/ 190 sx cmt.

Drilling Fluid Management Plan Alt I 4/24/01 AB
(Data must be collected from the Reserve Pit) Drilling fluid field tested by KCC personnel
Chloride content -0- ppm Fluid volume 200 bbls
Dewatering method used see pit closure form
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: Lenore M. Keen
Title: Operator Date: 12-26-00
Subscribed and sworn to before me this 26 day of December, 2000
Notary Public: Jenni R Flower
Date Commission Expires: 5-3-2004

JENNI R. FLOWER
Notary Public - State of Kansas
My Appt. Expires 5-3-2004

KCC Office Use ONLY
✓ Letter of Confidentiality Attached
If Denied, Yes ☐ Date:
___ Wireline Log Received
Geologist Report Received
UIC Distribution

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Operator Name: Keen Oil Company Lease Name: Harrold Well #: 12

Sec. 19 Twp. 33 S. R. 12 ☒ East ☐ West County: Chautauqua

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 (Attach Additional Sheets)	☐ Yes	☒ No
Samples Sent to Geological Survey	☐ Yes	☒ No
Cores Taken	☐ Yes	☒ No
Electric Log Run (Submit Copy)	☐ Yes	☒ No

List All E. Logs Run:

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

Name	Top	Datum
Layton	629	(211)
Redd	806	(34)
Peru	974	(-134)
Oswego	1245	(-405)
Mississippi	1621	(-781)
T.D.	1733	(-893)

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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 3/4"	8 5/8"	24#	43'	Portland	14	3% calcium chloride
Oil String	6 3/4"	4 1/2"	10 1/2#	1615'	50/50 ~~Pozmix~~	190	2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

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 Plug Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
N/A	open hole completion	1000 gal 15% HCL acid	1615 to 1733

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TUBING RECORD	Size	Set At	Packer At	Liner Run
	2 3/8	1590'	N/A	☐ Yes ☒ No

Date of First, Resumerd Production, SWD or Enhr.	Producing Method				
10-20-00	☐ Flowing	☒ Pumping	☐ Gas Lift	☐ Other (Explain)	

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	4	-	25		

Disposition of Gas: ☐ Vented ☐ Sold ☒ Used on Lease (If vented, Sumit ACO-18.)

METHOD OF COMPLETION: ☒ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled ☐ Other (Specify)

Production Interval: 1615-1733

Air Drilling Specialist
Oil and Gas Wells

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MOKAT DRILLING

Office Phone: (316) 879-5377

ORIGINAL

P.O. Box 590
Caney, KS 67333

Operator	Well No.	Lease	Loc.	¼	¼	¼	Sec.	Twp.	Rge.
KEEN OIL CO.	#12	Harrold		SE	NE		19	33S	12E

County	State	Type/Well	Depth	Hours	Date Started	Date Completed
Chautauqua	KS		1733'			

Job No.	Casing Used	Bit Record					Coring Record					
	43' 8 5/8"	Bit No.	Type	Size	From	To	Bit No.	Type	Size	From	To	% Rec.
Driller	Cement Used			6 3/4"								
Driller	Rig No.											
Driller	Hammer No.											

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Formation Record

From	To	Formation	From	To	Formation	From	To	Formation	From	To	Formation
0	18	overburden	806	840	red sand	1380	1382	lime			
18	22	shale	840	845	sandy shale	1382	1397	shale			
22	27	lime	845	965	shale	1397	1398	lime			
27	90	shale	965	972	lime	1398	1420	shale			
90	154	sandy shale	972	974	limey shale	1420	1440	sandy shale			
154	158	lime	974	996	sand	1440	1450	shale			
158	175	sand	996	1031	sandy shale	1450	1458	sandy shale			
175	385	sandy shale	1031	1042	lime	1458	1460	lime			
385	390	limw	1042	1047	blk shale	1460	1512	sandy shale			
390	392	blk shale, or coal	1047	1061	lime	1512	1514	lime			
392	400	sandy shale	1061	1063	limey shale	1514	1598	shale			
400	420	sand (water)	1063	1072	sandy shale						
420	469	shale	1072	1102	sand	1598	1600	lime			
469	471	lime	1102	1162	sandy shale	1600	1603	limey shale			
471	473	shale	1162	1185	lime	1603	1615	lime			
473	475	lime	1185	1200	shale	1615	1621	shale			
475	500	shale	1200	1245	sandy shale	1621	1633	MISS Chat			
500	510	limey shale	1245	1274	lime	1633	1733	lime			
510	629	shale	1274	1280	blk shale						
629	652	sand	1280	1295	lime						
652	670	sandy shale	1295	1303	blk shale						
670	780	shale	1303	1313	lime			T.D. 1733'			
780	785	limey shale	1313	1340	shale						
785	800	lime	1340	1343	lime						
800	806	shale	1343	1350	limey shale						
			1350	1370	sandy shale						
			1370	1380	shale						

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