Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1259410

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 # 5682
Name: Hughes Drilling Co, a General Partnership
Address 1: 122 MAIN
Address 2:
City: WELLSVILLE State: KS Zip: 66092 + 8522
Contact Person: Clay Hughes
Phone: (785) 883-2235
CONTRACTOR: License # 5682
Name: Hughes Drilling Co, a General Partnership
Wellsite Geologist: NA
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover

☑ 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:
Operator:
Well Name:
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 #:
☐ ENHR Permit #:
☐ GSW Permit #:

6/2/1987	6/8/1987	6/8/1987
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-059-24220-00-00
Spot Description:
_ NW _ SW _ SE Sec. 2 Twp. 16 S. R. 20 ☑ East ☐ West
1236 Feet from ☐ North / ☑ South Line of Section
2446 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Franklin
Lease Name: NORTH MCMILLEN Well #: 4
Field Name:
Producing Formation: Squirrel
Elevation: Ground: 955 Kelly Bushing: 0
Total Vertical Depth: 784 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 20 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 1500 ppm Fluid volume: 80 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
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 ☐ III **Approved by:** NAOMI JAMES **Date:** 11/30/2015

1259410

Operator Name: Hughes Drilling Co, a General Partnership Lease Name: NORTH MCMILLEN Well #: 4

Sec. 2 Twp. 16 S. R. 20 ☑ East ☐ West County: Franklin

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

List All E. Logs Run:

GammaRayNeutronCCL

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

Name	Top	Datum
GammaRay	20	GL

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	6.5	16	20	Portland	5	50/50 POZ
Production	5.500	2.8750	7	780	Portland	91	50/50 POZ

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	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

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	730-736	2" DML RTG	6

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 6/8/1987

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

CONTRACTOR

HUGHES DRILLING COMPANY
122 NORTH MAIN
WELLSVILLE, KANSAS 66092

June 2-8. 1987

LOG
NORTH McMILLEN
WELL NO. 4
FRANKLIN CO., KS.

OPERATOR

Hughes Drilling Company
122 North Main
Wellsville, Kansas

API # 15-059-24,220
1236' from S. line
2446' from E. line of Section

NW SW SE SEC. 2, TWP. 16S, RNG. 20E

STRATA THICKNESS	FORMATION DRILLED	T.D.
1	Soil	1
17	Clay	18
16	Shale (Limebreak 20-20.5)	34
23	Lime (Bkn. w/shale 38-44)	57
6	Shale (Dark) (Slate 62-63)	63
12	Lime	75
6	Shale	81
18	Lime	99
9	Shale	108
6	Sand	114
6	Shale (Sdy.)	120
8	Sand	128
11	Shale (Sdy.)	139
34	Lime	173
60	Shale (Sdy. lime shale 188-192)	233
23	Lime	256
17	Shale (Sdy.)	273
6	Lime	279
28	Shale	307
11	Lime	318
23	Shale (Bkn. 318-323) (Lime 323-324)	341
25	Lime 30' (Shale Brk. 351-352)	366
8	Shale (Bkn.) (Slate 371-372)	374
25	Lime 20' (Slight oil show 391-392)	399
2	Shale (Slate 400-401)	401
4	Lime	405
2	Shale (Broken)	407
7	Lime "HERTHA"	414
7	Shale (Bkn. 418-421)	421
9	White Shale (Very Sandy)	430
97	Shale (Limebreak 526-527)	527
3	White Shale (Sdy.)	530
5	Sand "PERU" Gas (Some Shale)	535
27	Shale (Very Sdy. 535-542) (Slate 558-559)	562
6	Lime (Broken)	568
3	Shale (Broken)	571
6	Sand "WAYSIDE" (Hard)(Bleeding oil) (Oil show) (Very Hard 574-575) (Slight oil show) (Good Bleeding oil 575-577)	577
6	Shale	583
9	Lime	592
7	Shale (Dark)	599
8	Lime	607
6	Shale	613
9	Lime	622
12	Shale	634
3	Lime (Hard)	637
8	Shale	645
7	Lime (Bkn. w/white shale)	652
22	Shale (Slate 665-666) (Slate 671-[illegible])	674

CONTRACTOR

HUGHES DRILLING COMPANY
122 NORTH MAIN
WELLSVILLE, KANSAS 66092

OPERATOR

LOG

NORTH McMILLEN

WELL NO. 4

API #

cont.

STRATA THICKNESS	FORMATION DRILLED	T.D.	STRATA THICKNESS	FORMATION DRILLED	T.D.
4	Gray Sand (Bkn. w/some lime)	678			
1.5	White Shale (Limebreak 679.5)	679.5			
13.5	Sand #1 SQUIRREL	692			
36.5	Shale (Bkn. 726-728.5)	728.5			
9.5	Sand #2 SQUIRREL	738			
46	Shale	784T.D.			

6-2-87 to 6-8-87
Drilled 784 ft. of 5 1/8" hole.
6-2-87
Set 20.25 ft. of used 6¼" surface pipe.
Cemented in with 5 sacks cement.
6-4-87 Cored #1 SQUIRREL 680'-695'.
6-8-87 Cored #2 SQUIRREL 730'-742'.
6-8-87 Set 780.5 ft. of 2½" 10 rd. reg pipe.
Seating nipple at 726 ft.
Used 4 centralizers.

O

HUGHES DRILLING CO.

Wellsville, Kansas 66092

Roger 913-883-2235
Darrel 913-883-4027

Ron 913-883-4655
Clay 913-883-4383

CORE TIME

LEASE NORTH McMILLEN #4

FORMATION 1st SQUIRREL

DATE: JUNE 4, 1987 (RPM _____)

FEET FROM	TO	TIME	MINUTES	REMARKS
679.5	680	Chip Sample	Lamin	SAND w/Shale
680	681	2:54:20-2:54:50	:30	SAND Slightly Lamin w/Shale (Good Bleeding oil) (Core Back 680.5)
681	682	2:54:50-2:55:55	1:05	Lamin. SAND w/Shale
682	683	2:55:55-2:56:25	:30	Solid Sand (Bleeding oil)
683	684	2:56:25-2:57:00	:35	
684	685	2:57:00-2:57:45	:45	Lamin SAND w/Shale (Good) 684'-685.5'
685	686	2:57:45-2:58:50	1:05	Slightly Lamin SAND w/Shale (685.5-686.5) (Bleeding oil)
686	687	2:58:50-3:00:05	1:15	
687	688	3:00:05-3:02:05	2:00	
688	689	3:02:05-3:03:45	1:40	Very Lamin SAND w/Shale (Heavy oil)
689	690	3:03:45-3:04:50	1:05	Some bleeding oil)
690	691	3:04:50-3:06:45	1:55	
691	692	3:06:45-3:08:40	1:55	
692	693	3:08:40-3:11:25	2:45	Sly Shale
693	694	3:11:25-3:14:15	2:50	
694	695	3:14:15-3:17:50	3:00	
				BEST PERF ZONE 679.5 686.5 (7')

HUGHES DRILLING CO.

Wellsville, Kansas 66092

Roger 913-883-2235
Darrel 913-883-4027

Ron 913-883-4655
Clay 913-883-4383

CORE TIME

LEASE K. MCMILLEN NO. 4

FORMATION 2ND SQUIRREL

DATE: 6-8-87 (RPM)

	FEET FROM	TO	TIME	MINUTES	REMARKS
	728.5	730	(cut w/ tooth bit		SOLID SAND GOOD BLEEDING OIL
1	730	731	10:19:15 - 10:19:55	:40	
2	731	732	10:19:55 - 10:21:05	1:10	SAND SLIGHTLY LAMINATED WITH SHALE & MICA
3	732	733	10:21:05 - 10:22:05	1:00	GOOD BLEEDING OIL
4	733	734	10:22:05 - 10:23:35	1:30	SAND LAMINATED W/ SHALE
5	734	735	10:23:35 - 10:25:15	1:40	BLEEDING OIL MICA
6	735	736	10:25:15 - 10:27:05	1:50	SAND STRIPS VERY LAMINATED WITH
7	736	737	10:27:05 - 10:29:30	2:25	SHALE SOME BLEEDING OIL
8	737	738	10:29:30 - 10:30:55	1:25	SAND LAMINATED WITH SHALE BLEEDING OIL
9	738	739	10:30:55 - 10:33:05	2:10	
10	739	740	10:33:05 - 10:35:25	2:20	SANDY SHALE SLIGHT SHOW AT 741 - 741.7
11	740	741	10:35:25 - 10:38:10	2:45	
12	741	742	10:38:10 - 10:39:45	1:35	SHALE

BEST PERF ZONE

729 - 735

DRY

STATION _____ OPERATOR _____

CONSOLIDATED OIL WELL SERVICES, INC.

P.O. Box 884
Chanute, Kansas 66720
Phone (316) 431-9210

Ticket 3811

Date	Customer's Acct No	Sec	Twp.	Range	Well No & Farm	Place or Destination

Charge To	Owner	County
Mailing Address	**Contractor**	**State**
City & State	**Well Owner Operator Contractor**	

CEMENTING SERVICE DATA

TYPE OF JOB		CASING		HOLE DATA		PLUGS AND HEAD		PRESSURE		CEMENT LEFT IN CASING	
Surface		New		Bore Size		Bottom		Circulating		Requested	
Production		Used		Total Depth		Top		Minimum		Necessity	
Squeeze		Size				Head		Maximum		Measured	
Pumping		Weight		Cable Tool		FLOAT EQUIPMENT		Sacks Cement			
Other		Depth		Rotary				Type & Brand			
		Type						Additives			

FRACTURING - ACIDIZING SERVICE DATA

Type of Job _____ At Intervals of _____

Bbls Fracturing Fluid _____ Breakdown Pressure from _____ psi to _____ psi

Treating Pressures Maximum _____ psi Minimum _____ psi Avg. Pump Rate _____ GPM/BPM Close In _____ psi

Sand _____ Gals. Treating Acid _____ Type _____ Open Hole Diameter _____

Well Treating Through Tubing _____ Casing _____ Annulus _____ Size _____ Weight _____

Remarks _____

No. Perforations _____ Pay Formation Name _____ Depth of Job _____ Ft

INVOICE SECTION

CEMENTING

Pumping Charge		Office Use	$
Pumping Charge	@		$
Sacks Bulk Cement	@		
Ton Mileage on Bulk Cement	@		
Premium Gel	@		
Flo-Seal	@		
Calcium Chloride	@		
Plug	@		
	@		
Equipment	@		
	@		
	@		
	@		
	@		
	@		
Granulated Salt	@		
Transport Truck (Hrs.)	@		
Vac Truck (Hrs.)	@		
Fuel Surcharge	@		
		Tax	
		Total	$

A Finance Charge computed at 1½% per month (annual percentage rate of 21%) will be added to balance over 30 days.

FRACTURING - ACIDIZING

Pumping Charge		Office Use	$
Pumping Charge	@		$
12x30 Sand	@		
10x20 Sand	@		
x Sand	@		
Ton Mileage	@		
Gals., Acid	@		
Chemicals	@		
	@		
	@		
	@		
	@		
	@		
Potassium Chloride	@		
Rock Salt	@		
Water Gel	@		
Transport Truck (Hrs.)	@		
Vac Truck (Hrs.)	@		
Fuel Surcharge	@		
		Tax	
		Total	$

NSCO-*8936