Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1207189

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 # 34592
Name: Kansas Resource Exploration & Development, LLC
Address 1: 9393 W 110TH ST, STE 500
Address 2:
City: OVERLAND PARK State: KS Zip: 66210 + __ __ __ __
Contact Person: Bradley Kramer
Phone: (913) 451-6758
CONTRACTOR: License # 34223
Name: Utah Oil LLC
Wellsite Geologist: Bradley Kramer
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 #:

5/5/2014	5/6/2014	5/23/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-121-29904-00-00
Spot Description:
SE - NE - SE - NE Sec. 6 Twp. 17 S. R. 22 ☑ East ☐ West
3465 Feet from ☐ North / ☑ South Line of Section
165 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: Miami
Lease Name: Harbison Well #: KR-48
Field Name:
Producing Formation: Squirrel
Elevation: Ground: 1104 Kelly Bushing: 1104
Total Vertical Depth: 790 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 23 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 790
feet depth to: 0 w/ 111 sx cmt.

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

Chloride content: 0 ppm Fluid volume: 200 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:** Deanna Garrison **Date:** 05/28/2014

[redacted] 1207189

Operator Name: Kansas Resource Exploration & Development, LLC Lease Name: Harbison Well #: KR-48

Sec. 6 Twp. 17 S. R. 22 ☑ East ☐ West County: Miami

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:

Gamma Ray/Neutron/CCL

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

Name	Top	Datum
Squirrel	696	-408

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	9.875	7	14	22.75	Portland	5	
Longstring	5.875	2.875	6.5	777.70	50/50 POZ	111	

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
3	696-726		

TUBING RECORD: Size: 1 Set At: 777.7 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 5/23/2014

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:
696
726

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

CONSOLIDATED
Oil Well Services, LLC

268005

TICKET NUMBER 47162
LOCATION Ottawa KS
FOREMAN Fred Mader

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
5-7-14	4448	Harbison #KR-48	NE 6	17	22	Mi

CUSTOMER: Kansas Resources Expl+Dev
MAILING ADDRESS: 9393 W 110th ST.
CITY: Overland Park | STATE: KS | ZIP CODE: 66210

TRUCK #	DRIVER	TRUCK #	DRIVER
712	FreMad		
495	HarBar		
370	JasRic		
503	KeiCar		

JOB TYPE Longstring | HOLE SIZE 5 7/8 | HOLE DEPTH 790' | CASING SIZE & WEIGHT 2 7/8 EUE
CASING DEPTH 777.70 | DRILL PIPE [illegible] | TUBING | OTHER
SLURRY WEIGHT | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING 2½" Plug
DISPLACEMENT 4.52 BBL | DISPLACEMENT PSI | MIX PSI | RATE 5BPM

REMARKS: Held crew safety meeting. Establish Circulation. Mix+Pump 100# Gel flush. Mix+Pump 111 Sks 50/50 Poz Mix Cement 2% Gel ½# Phenoseal/sk. Cement to Surface. Flush pump + lines clean. Displace 2-2½" Rubber plugs to casing TD. Pressure to 800# PSI. Release pressure to set float valve. Shut in Casing.

Utah Drilling - Ron Howard.

Fred Mader

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT		UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	495		1085.00
5406	20mi	MILEAGE	495		84.00
5402	777.70	Casing footage			NC
5407	Minimum	Ton Miles	503		368.00
5502C	2 hrs	80 BBL Vac Truck	370		200.00
1124	111 Sks	50/50 Poz Mix Cement		12.75	
1118B	287#	Premium Gel		.63	
1107A	56#	Phenoseal		.75	
		Material		1415.25	
		Less 30%		-424.57	
		Total Material			990.67
4402	2	2½" Rubber Plugs		59.00	
					completed
				3324.01	
			7.65%	SALES TAX	80.39
				ESTIMATED TOTAL	2886.96

Revin 3737

AUTHORIZTION Tracy TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

LEASE NAME: Harbison OPERATOR: KRED START DATE: 5 May 14
WELL #: KR48 LOCATION: Miami API #:
SURFACE PIPE: 7' Ft 22' 8 Cement(#bags) 5
PRODUCTION: PIPE: USED SIZE: 2 7/8 #FT 777.70

Thickness	Formation	Comment	Depth	Thickness	Formation	Comment	Depth
11	Soil		11	1	Red Bed		380
10	Lime		21	110	Shale		490
2	Coal		23	2	Broken Sand	Little Smell	492
3	Shale		26	25	Shale		517
10	Lime		36	1	Lime		518
13	Shale		49	20	Shale		538
1	Lime		50	2	Lime		540
1	Shale		51	6	Shale		546
18	Lime		69	8	Lime		554
2	Shale		71	4	Shale		558
4	Lime		75	2	Lime		560
3	Shale		78	24	Shale		584
18	Lime		96	9	Lime	Soft	593
26	Shale		122	15	Shale		608
1	Lime		123	3	Lime		611
63	Shale		186	2	Coal		613
1	Lime		187	4	Shale		617
1	Shale		188	3	Lime		620
15	Lime		203	4	Shale		624
25	Shale		228	2	Lime		626
2	Red Bed		230	2	Shale		628
6	Shale		236	4	Lime		632
5	Lime		241	2	Shale		634
34	Shale		275	2	Lime		636
15	Lime		290	1	Red Bed		637
15	Shale		305	6	Shale		643
11	Lime		316	2	Lime		646
2	Shale		318	1	Shale		647
14	Lime		332	3	Lime		650
2	Coal		334	2	Coal		652
4	Shale		338	3	Lime		655
22	Lime		360	5	Shale		660
5	Shale		365	4	Lime		664
13	Lime	KC Base	378	12	Shale		676
1	Coal		379	3	Broken Sand	* Little Bleed	681

Core point

LEASE NAME: OPERATOR: START DATE:

WELL #: LOCATION: API #:

SURFACE PIPE: Ft Cement(#bags)

PRODUCTION: PIPE: SIZE: #FT

Thickness	Formation	Comment	Depth	Thickness	Formation	Comment
3	oil Sand		684			
2	Lime		686			
2	oil Sand		688			
1	Broken		689			
3	oil Sand		692			
1	Broken		693			
6	oil Sand		699			
21	oil Sand	Heavy Bleed	720			
10	Shale		730			
4	Lime	Soft	734			
20	Shale		754			
4	Lime	Soft	758			
32	Shale	TD	792			
	*	699-722 was Chipped	*			
	*	1 core	*			
		No Baffle				
		Ronnie				