

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1218453

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 #	API No. 15			
Name:	Spot Description:			
Address 1:	SecTwpS. R 🗌 East 🗌 West			
Address 2:	Feet from			
City: State: Zip:+	Feet from _ East / _ West Line of Section			
Contact Person:	Footages Calculated from Nearest Outside Section Corner:			
Phone: ()	□NE □NW □SE □SW			
CONTRACTOR: License #	GPS Location: Lat:, Long:			
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)			
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84			
Purchaser:	County:			
Designate Type of Completion:	Lease Name: Well #:			
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:			
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:	Producing Formation: Elevation: Ground: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used? Yes No If yes, show depth set: Feet			
Operator:	If Alternate II completion, cement circulated from:			
Well Name:	feet depth to:w/sx cmt.			
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 #:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) Chloride content: ppm Fluid volume: bbls Dewatering method used: Location of fluid disposal if hauled offsite:			
☐ ENHR Permit #: ☐ GSW Permit #:	Operator Name:			
	Lease Name: License #:			
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	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: Date:				



Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ring and shut-in pressu	ormations penetrated. Cures, whether shut-in prediction of the pre	essure reached stat	ic level, hydrosta	tic pressures, bot		
		otain Geophysical Data a or newer AND an image		ogs must be ema	illed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taken (Attach Additional S		Yes No			on (Top), Depth ar		Sample
Samples Sent to Geol	logical Survey	Yes No	Nam	ie		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING	RECORD N	ew Used			
		Report all strings set-			ion, 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
		ADDITIONAL	. CEMENTING / SQI	JEEZE RECORD	I	1	
Purpose: Depth Top Bottom		Type of Cement	# Sacks Used	Type and Percent Additives			
Protect Casing Plug Back TD Plug Off Zone							
	ulic fracturing treatment or	n this well? aulic fracturing treatment ex	sceed 350 000 gallons	Yes		p questions 2 ar	nd 3)
		submitted to the chemical of	=	Yes	= ' '	out Page Three	of the ACO-1)
Shots Per Foot		N RECORD - Bridge Plug ootage of Each Interval Per			cture, Shot, Cement		d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:			
TODING RECORD.	OILG.	Jet At.	i aunei Al.		Yes No		
Date of First, Resumed	Production, SWD or ENF	Producing Meth	nod:	Gas Lift C	Other (Explain)		
Estimated Production Per 24 Hours	Oil B	Bbls. Gas	Mcf Wat	er B	bls.	as-Oil Ratio	Gravity
DISPOSITION Vented Sold	ON OF GAS:	N Open Hole	METHOD OF COMPLI		mmingled	PRODUCTIO	DN INTERVAL:
	bmit ACO-18.)	Other (Specify)	(Submit		mit ACO-4)		

Form	ACO1 - Well Completion		
Operator	DK Operating Inc.		
Well Name	Whitley 1-13		
Doc ID	1218453		

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.250	8.6250	28	208	Class A	2% gel 3% CC
Production	7.875	5.5	15.5	4309	EA-2	10% salt 3 % gel

Geological Report

DK Operating, Inc.
Whitley #1-13
1537' FSL & 2305' FEL
Sec. 13 T20s R23w
Ness County, Kansas



DK Operating, Inc.

General Data

Well Data:

DK Operating, Inc.

Whitley #1-13

1537' FSL & 2305' FEL Sec. 13 T20s R23w Ness County, Kansas API # 15-135-25780-0000

Drilling Contractor:

Pickrell Drilling Rig #1

Geologist:

Jason T Alm

Spud Date:

June 10, 2014

Completion Date:

June 18, 2014

Elevation:

2202' Ground Level

2209' Kelly Bushing

Directions:

Bazine KS, South 6 mi. to 70 Rd. West 6 mi. to Y

Rd. South 3 ½ mi. West into location.

Casing:

210' 8 5/8" surface casing

4309' 5 1/2" production casing

Samples:

10' wet and dry, 4000' to RTD

Drilling Time:

3500' to RTD

Electric Logs:

None

Drillstem Tests:

Two, Trilobite Testing, Inc. "Brett Dickinson"

Problems:

Cedar Hills flowed about 200 bbls of water while

the rig was making a bit trip @ 3450'.

Remarks:

None

Formation Tops

	DK Operating, Inc.
	Whitley #1-13
	Sec. 13 T20s R23w
Formation	1537' FSL & 2305' FEL
Anhydrite	1400', +809
Base	1434', +775
Heebner	3636', -1427
Lansing	3684', -1475
BKc	4011', -1802
Pawnee	4128', -1919
Fort Scott	4198', -1989
Cherokee	4223', -2014
Mississippian	4287', -2078
Osage	4297', -2088
RTD	4310', -2101

Sample Zone Descriptions

Fort Scott

(4198', -1989):

Covered in DST #1

Ls – Fine crystalline with scattered poor inter-crystalline porosity, light to fair oil stain and saturation, slight show of free oil when broken, light odor, good yellow fluorescents.

Mississippian Osage (4297', -2088):

Covered in DST #2

 Δ – Dolo – Fine sucrosic crystalline with poor inter-crystalline porosity, very heavy chert, mostly fresh with scattered good vuggy porosity, light to fair oil stain in porosity, fair show of free oil, good odor, bright yellow fluorescents.

Drill Stem Tests

Trilobite Testing, Inc. "Brett Dickinson"

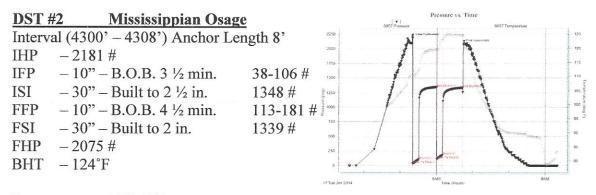
DST #	#1 Fort Scott			Pressure vs	Tume	
Interv	al (4172' - 4230') Anchor L	ength 58'	2000	In the matter value	The Hydro-sale	
IHP	-2136#		1750			
IFP	-45" – Built to 6 ½ in.	19-43 #	1500			- 1
ISI	- 45" - Dead	751 #	75 1250 8	- + # +		1
FFP	-45" – Built to 6 ½ in.	44-64 #	1000			- 9
FSI	- 45" - Dead	732 #	750		and Description	- 84
FHP	-2067 #		250	1		- 51
BHT	– 117°F				(I) STATE OF THE S	
			16 Mon Jun 2014	12PM Tyro (Hou	3PU (PI	M

Recovery:

180' GIP

105' GVSOWCM

5% Oil, 10% Water



Recovery:

195' GIP

385' GCO

60' GVSOWCM

5% Oil, 25% Water

Structural Comparison

	DK Operating, Inc.	Mull Drilling		Shell Oil Co.	
	Whitley #1-13	Whitley #2	Maranville #1-13		
	Sec. 13 T20s R23w	Sec. 13 T20s R23w	Sec. 13 T20s R23w		
Formation	1537' FSL & 2305' FEL	C NW SE		C NE SW	
Anhydrite	1400', +809	1406', +810	(-1)	1408', +803	(+6)
Base	1434', +775	1443', +773	(+2)	NA	NA
Heebner	3636', -1427	3646', -1430	(+3)	3644', -1433	(+6)
Lansing	3684', -1475	3690', -1474	(-1)	3693', -1482	(+7)
BKc	4011', -1802	NA	NA	NA	NA
Pawnee	4128', -1919	NA	NA	4140', -1929	(+10)
Fort Scott	4198', -1989	NA	NA	4210', -1999	(+10)
Cherokee	4223', -2014	NA	NA	NA	NA
Mississippian	4287', -2078	4294', -2078	FL	4302', -2091	(+13)
Osage	4297', -2088	4311', -2095	(+7)	4310', -2099	(+11)

Summary

The location for the Whitley #1-13 was found via 3-D seismic survey. The new well ran structurally as expected via the survey. Two Drill Stem Tests were conducted one of which recovered commercial amounts of oil from the Mississippian Osage Formation. After all gathered data had been examined the decision was made to run 5 ½ inch production casing to further evaluate the Whitley #1-13 well.

Recommended Perforations

TO					
\mathbf{P}	Toll !	m	9	Poll	70
			43		

Mississippian Osage

(4297' - 4307')

DST #2

Before Abandonment:

Fort Scott

(4215' - 4220')

DST #1

Respectfully Submitted,

Jason T Alm

Hard Rock Consulting, Inc.

JOB TYPE comment long string TICKET NO. 26346 SWIFT Services, Inc. JOB LOG CUSTOMEDK Operating LEASE Whitley WELL NO. 1-13 PRESSURE (PSI)
TUBING CASING PUMPS T C RATE (BPM) VOLUME (BBL) (GAL) CHART NO. 175 sk EAZ coment w/ 4 + Flocele 52 0/5.5# casing TD = 4310' Contral (202 1, 2, 3,4 Poet coller 1800 on loc TRK 114 Start 52" 15.5 casing in well Drop ball - circulate 2044 Pump 200gal mutflush Pump 20661 KCL flush 2145 12 20 Mix 2A-2 cement 1453 @ 15,3ppg 2156 35 Drop latch down plugs wash out pump ? line 2218 600 2245 Release pressure to truck - died up uash truck 2250 2320

ALLIED OIL & GAS SERVICES, LLC 062948

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999 SERVICE PQINT: SOUTHLAKE, TEXAS 76092 Gress TWP ON LOCATION JOB FINISH 830 Pm RANGE CALLED OUT JOB START COUNTY LEASE Whitky LOCATION ALSS CITU WELL# OLD OR NEW (Circle one) winto CONTRACTOR OWNER TYPE OF JOB HOLE SIZE CEMENT 160 SKG Colass DEPTH 209.9 CASING SIZE **TUBING SIZE** DEPTH DRILL PIPE DEPTH TOOL **DEPTH** @17.90 2.864100 PRES. MAX 160 MINIMUM COMMON MEAS. LINE SHOE JOINT **POZMIX** @ CEMENT LEFT IN CSG. 300 **GEL** @ 1.05 CHLORIDE 451 @1.10 bbl fresh your DISPLACEMENT ASC @ EQUIPMENT @ 3.675,6 Total PUMPTRUCK # 399 CEMENTER VOIL SALL Vie. 918.78 HELPER () 554 FILLS **BULK TRUCK** @ #609239 Service BULK TRUCK DRIVER @ 2.48 HANDLING / 73 Y FIX MILEAGE 7.89 X 12 X 2.75=2637= 380.00 REMARKS: Brak circulans Class 43% 60 5Ks DEPTH OF JOB 208 17.09 661 Fresh water 1512.35 PUMP TRUCK CHARGE **EXTRA FOOTAGE** Circlase @ 7.70 92.40 MILEAGE HVM @ MANIFOLD. LVM @ 4.40 CHARGE TO: 2.466.49 STREET CITY_ STATE_ ZIP. PLUG & FLOAT EQUIPMENT 0 @ @ To: Allied Oil & Gas Services, LLC. @ You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was (0%) TOTAL done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL SALES TAX (If Any) -TERMS AND CONDITIONS" listed on the reverse side. TOTAL CHARGES 6.141. (25/25/0) IF RAID IN 30 DAYS 1.535.40 PRINTED NAME DISCOUNT .606.19