

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

# ORIGINAL:

Form ACO-1
October 2008
Form Must Be Typed

7/23/11

### WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

Notary Public	RECEIVED				
Date Commission Expires:	JUL 2 7 2009				
Notary Poblic:	1 1				
20 09	Geologist Report Received KANSAS CORPORATION COMMISSION				
200000000000000000000000000000000000000	Witness on Beechmd				
Subscribed and sworn to before me this 23cd day of July	if Denied, Yes Date:				
Title: Grun Ogist Date: 7.23.09	Letter of Confidentiality Received				
Signature:	KCC Office Use ONLY				
are complete and correct to the best of my knowledge.					
	he oil and gas industry have been fully complied with and the statements herein				
CENT THORSE OF WORK OF WHICH WITH BIRD BY WEILS, GUITH OF 111 ION	m mu an composatily abandoned wells.				
tiality in excess of 12 months). One copy of all wireline logs and geologist well BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 for	Il report shall be attached with this form. ALL CEMENTING TICKETS MUST				
cansas 67202, within 120 days of the spud date, recompletion, workover or co of side two of this form will be held confidential for a period of 12 months if requ	priversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information uested in writing and submitted with the form (see rule 82-3-107 for confiden-				
INSTRUCTIONS: An original and two copies of this form shall be filed with					
Recompletion Date Recomplation Date					
Spud Date or Date Reached TD Completion Date or	County: Docket No.:				
7/6/2009 7/7/2009 7/20/2009	Quarter Sec Twp S. R				
Other (SWD or Enhr.?) Docket No.:	Lease Name: License No.:				
Dual Completion Docket No.:	Operator Name:				
Commingled Docket No.:	Location of fluid disposal if hauled offsite:				
Plug Back:Plug Back Total Depth	-				
Deepening Re-perf Conv. to Enhr Conv. to SWD	Dewatering method used:				
Original Comp. Date: Original Total Depth:	Chloride content:ppm Fluid volume:bbls				
Veil Name:	Ortilling Fluid Management Plan AH II NJ 8-2707 (Data must be collected from the Reserve Pit)				
Operator:	MI TILLIA				
If Workover/Re-entry: Old Well Info as follows:	feet depth to: Surface w/ 100 sx cmt.				
Dry Other(Core, WSW, Expl., Cathodic, etc.)	If Alternate II completion, cement circulated from: 657.51				
CM (Coal Bed Methane) Temp. Abd.	If yes, show depth set:Feet				
✓ Gas ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No				
Oil SWD SIOW	Amount of Surface Pipe Set and Cemented at: 24' Feet				
New Well Re-Entry Workover	Total Depth: 703 Piug Back Total Depth:				
Designate Type of Completion:	Elevation: Ground: 994 Kelly Bushing:				
Purchaser: Akawa Natural Gas, L.L.C.	Producing Formation: Marmaton				
Wellsite Geologist: Curstin Hamblin	Field Name: Louisburg				
Name: Osborn Energy, L.L.C.	Lease Name: Markle Well #: 1-21				
CONTRACTOR: License # 32294	County: Miami				
Phone: ( 913 ) 533-9900	□NE □NW ☑SE □SW				
Contact Person: Curstin Hamblin	Footages Calculated from Nearest Outside Section Corner:				
City: Bucyrus State: KS zip: 66013 +	920 Feet from 🔀 East / 🗍 West Line of Section				
Address 2:	2310 Feet from North / South Line of Section				
Address 1: 24850 Farley	E2 _NW _NE _SE _Sec. 21 _Twp. 16 _S. R. 25/ East West				
Name: Osborn Energy, L.L.C.	Spot Description: SE/4 Sec. 21 T16S R25E				
OPERATOR: License #_32294	API No. 15 - 121-28/12-0000				

My Commission Expires .

#### Side Two

Operator Name: Osborn Sec. 21 Twp. 16  INSTRUCTIONS: Show it time tool open and closed recovery, and flow rates if surveyed. Attach final ged  Drill Stem Tests Taken (Attach Additional Sheet Samples Sent to Geologic Cores Taken Electric Log Run (Submit Copy)	S. R. 25 Important tops and shut gas to surface to ological well site	East End base of for ut-in pressure est, along with	mations peni s, whether sh	County: etrated. De nut-in press	Miam tail all caure reac	il ores. Report all ched static level,	hydrostatic pres	sures, bottom	giving interval
time tool open and closed recovery, and flow rates if surveyed. Attach final ged Drill Stem Tests Taken (Attach Additional Sheet Samples Sent to Geologic Cores Taken Electric Log Run	I, flowing and shu gas to surface to ological well site	ut-in pressure: est, along with report.	s, whether sh n final chart(s	nut-in press	ure read	hed static level.	hydrostatic pres	sures, bottom	hole temperati
(Attach Additional Shee Samples Sent to Geologic Cores Taken Electric Log Run	•	☐ Yes							
Samples Sent to Geologic Cores Taken Electric Log Run	•				□Lo	og Formatio	n (Top), Depth ar	nd Datum	☐ Sam
Electric Log Run		☐ Yes	<b></b> ✓ No		Nam	е		Тор	Datu
		☐ Yes ☐ Yes	☑ No				•		
List All E. Logs Run:									
		Penort	CASING I		Ne	w Used	ion ata	<u> </u>	
Purpose of String	Size Hole Drilled	Size C Set (In	asing	Weigh	ht	Setting Depth	Type of Cement	# Sacks Used	Type and F Additiv
Surface	12 1/4"	8 5/8"	· · ·			24	portland	4	water
Production	6 3/4"	4 1/2"				657.51	owc	100	150# gel
		<u> </u>	ADDITIONAL	CEMENTIN	G/SQU	EEZE RECORD			
Purpose:  —— Perforate  —— Protect Casing	Depth Top Bottom	Type of	Cement	#Sacks (	Jsed		Type and	Percent Additives	5
Plug Back TD Plug Off Zone	-,								
Shots Per Foot		ON RECORD Footage of Eac					cture, Shot, Cemen mount and Kind of M		rd (
								KANSAS	CORPORATION
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Date of First, Resumed Proc	Size:	Set At:		Packer At:	:	Liner Run:	Yes No	<u> </u>	
Date of First, Resumed Proc	duction, SWD or En	ihr. P	roducing Meth	od: <b>W</b> /	Flowing	Pumpi	ng 🔲 Gas Li	ft Oth	ner (Explain)
Estimated Production Per 24 Hours	Oil	Biblis.	Gas 6	Mcf	Wate	er B	bis.	Gas-Oil Ratio	G
DISPOSITION C	OF GAS:			ETHOD OF	COMPLE	TION:		PRODUCTI	ON INTERVAL:



TICKET WUMBER FOREMAN A

#### FIELD TICKET & TREATMENT REPORT

20-431- <b>92</b> 10 o	r 800-467-8676	CEM	ENT			
DATE		L NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-20-04		18 -	(5E)		25	M.
<u>Osborn</u>			TRUCK#	DRIVER	TRUCK#	DRIVER
ALING ADDRE	98		Alan M	516		
24832	Farley STATE	ZIP CODE	H95	Caseyk		
A	₽ e	66013	5/0	Belen	<b></b>	
DB TYPE LO	ME COTYLINHOLE BIZE	MOLE DE	PTH 6772 C	ASING SIZE & W	EIGHT 4	<u></u>
ASING DEPTH	657 DRILL PIPE	TUBING			OTHER	
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ACCOUNT	QUANITY or UNITS	DESCRIPTIO	N of SERVICES or PROD		UNIT PROCE	TOTAL
5401	1	PUMP CHARGE				870.0
3706		MREAGE				079.1
5102	657'	Casins y	footage			
5407	188	Tren mil	95			218.0
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III8B	150	(50)				24.00
1126	1017	DUC		•		1600,00
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6n 373/	1	+020 HBC	<u> </u>	φ,υυ	SALES TAX ESTIMATED	109.19
	WOT	+230 489	7		TOTAL	2864.
UTHORIZMON					DATE	

#### Geological Report

#### Markle # 1-21

2310 FSL, 920 FEL **Section:** 21-T16S-R25E

Miami Co., Kansas

**API#:** 15-121-28712-0000

Elevation: 994' GL

Drilling Contractor: Osborn Energy, L.L.C (Lic. # 32294)

Spud: 7/6/2009
Production Bore Hole: 6 34"

Rotary Total Depth: 703 on 7/7/2009

Drilling Fluid: air

Surface Csg.: 8 5/8" @ 24' with 4 sx in a 12 4" hole

Production Csg.: 4 ½" set at 657.51'
Geologist: Curstin Hamblin
Brian Schwab

Formation Dr	riller Log Tops	Datum
Stark Shale	118-120'	876
Hushpuckney Shale	150-153 <b>′</b>	844
Base Kansas City	166'	828
Knobtown Sand	No call	
Carbonaceous Zone in Tacket Fm.	No call	
"Big Lake" Sand	No call	
South Mound Zone	331'	663
Hepler (Wayside) Sand	No call	
"Upper" Mulberry Zone	No call	
Mulberry Zone	No call	
Weiser Sand	No call	
Myrick Station	402-404'	592
Anna Shale (Lexington Coal Zone)	405-408'	589
Peru Sand	No call	
Summit Shale Zone	445-447'	549
Mulky Coal/Shale Zone	468-473 <b>'</b>	526
Squirrel Sand	480′	514
Bevier Zone	536	458
Croweburg Zone	5 <b>4</b> 5′	449
Fleming Zone	No Call	
Mineral Zone	No Call	
Cattleman Sand	597'	397
Scammon Zone	597' No call KANSAS CORPORATION COMMISSION	

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### CONFIDENTIAL

JUL 2 3 2009

Tebo Zone	615-624'	379	KCC
Bartlesville A Sand	644'	350	
Un Named Zone	No call		
Bartlesville B Sand	687'	307	
Dry Wood Zone	No call		
Bartlesville C Sand	698′	296	
Rotary Total Depth	703′		

Drilling at 120' in the Kansas City on 7/7/2009 at 7:00am Background Gas (BG)7.2 units

STARK FORMATION driller called @ 118-120', gas kick of 0 units over BG Stark made some water

118-120: black shale, no gas in samples

120-129: SH: black, LS: white, nodule, SH: grey, gummy

130-139: LS: white/grey, cherty

140-149: LS: white, cherty, SH: grey, dk grey

HUSHPUCKNEY SHALE Geologist called @150-153', gas kick of 0 units over BG
\*\*GAS TEST @179', 0 MCF\*\*

150: SH: black, poor gas in samples

150-159: SH: grey, dk gry, limey, SH: lt grey, gummy, LS: lt grey

160-169: LS: It grey, SS: It grey, well cemented, slight oil stain on samples,

SH: dk grey/black

BKC: 166: SH: dk grey/black, limey, poor gas in samples

170-179: SS: It grey, small grained, gummy matrix, some oil staining, LS: It

grey, very little

180-189: Siltstone: grey, gummy

190-199: Siltstone: grey, gummy, oil odor

200-209: SS: grey, silty, small grained,

200-204: SS: grey, small grained, lots of oil on samples, in samples, in pit, heavy oil odor

210-219: Siltstone: grey, gummy, no oil, some Pyrite

220-229: Siltstone: grey

230-239: SH: grey, gummy, pyrite

240-249: Siltstone: grey

250-259: Siltstone, limey, grey

260-269: Siltstone: grey, limey

270-279: SH: grey, partially gummy

280-289: SS: small to medium grained, bleeding lots of tan oil

284-287: SS: grey, bleeding oil, odor, heavy bleeding-gas kick of 15 units

290-299: SH: grey, SS: grey, small grained, oil stained

300-309: Siltstone: sandy, soft, some is gummy

310-319: Siltstone: grey, shaley

320-329: SH: grey, silty

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SOUTH MOUND ZONE Geologist called @331', gas kick of 40 units over BG \*\*GAS TEST @339',0 MCF Total\*\*

331: dk grey/black- very, very good gas in samples 330-339: SH: grey, gummy, silty, some black Connection gas kick of 720 units

JUL 2 3 2009

340-349: SH: grey, gummy, Coal: 1%

350-359: SH: grey, gummy, LS; white

KCC

360-369: SH: grey, LS: tan, angular, nodular

370-379: LS: pinkish/white, SH: grey 20%, LS: tan (379) heavy oil odor, oil staining

CG: 300 units

380-389: SS: grey, medium grained, greasy, bleeding oil, LS: 10%, lt grey 384-386: SS: lt grey, medium grained, greasy, bleeding heavy oil, oil in

samples- gas kick of 30 units

390-399: Siltstone: grey, gummy, Pyrite

CG: 300 units

### LEXINGTON COAL ZONE Geologist called @405-408', gas kick of 160 units over BG \*\*GAS TEST @419', 16 MCF Total\*\*

Lexington gave up a normal amount of water

406: SH: dk grey and black-black has very, very good gas in samples

400-409: LS: brown, nodular, SH: black, dk grey, Coal

410-419: SS: grey, small to medium grained, some oil staining, LS: It brown,

tubular fossil-looks like a column sticking out of the LS

420-429: SS: grey, fine grained, limey, Crinoid fossils, SH: grey

430-439: LS: grey, SH: grey, Pyrite

#### SUMMIT SHALE ZONE Geologist called @445-447', gas kick of 30 units over BG \*\*GAS TEST @459', 0 MCF 16 MCF Total \*\*

445: SH: dk grey and black, fair amount of gas in samples

446: SH: black, fair to good gas in samples

440-449: LS: brown and grey, SH: black

450-459: SS: well cemented, limey

CG: over 1000 units

### MULKY COAL/SHALE ZONE Geologist called @468-473', gas kick of 100 units over BG \*\*GAS TEST @479',13 MCF, 29 MCF Total \*\*

Mulky gave up a normal amount of water

469: SH: dk grey, black- very, very, very good gas in samples

473: Coal: excellent gas in samples

460-469: SH: grey, dk grey, black

470-479: Coal, SH: grey, sandy

#### SQUIRREL SAND Geologist called @480', no gas kick

480-489: SS: grey, medium grained, oil seeping from samples. Small amount of

490-499: SS: medium to large grained, tan, no oil breakout

500-509: SS: medium to large grained, tan, no oil

510-519: SS: large grained, grey

520-529: SS: white and black speckled, bleeding poor to fair amount of oil, quite a bit of breakout oil, oil on samples

523-535: oil sand, description above. Heaviest oil was bottom 7'- the oil above shows above at 200, 284, 384 are the best.

## BEVIER ZONE - Geologist called at 536', gas kick of 0 units over bg 530-539: SS: grey/white, bleeding oil, good breakout oil, Pyrite, SH: dk grey/black, Coal

CROWEBURG ZONE Geologist called at 545', gas kick of 0 units over bg

540-549: SH: grey, 1% black

550-559: SH: grey, gummy, Coal

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560-569: SH: grey, some surfaces are red, LS: <1%, white
570-579: SH: grey, dk grey, red, SS: lt grey, medium grained
580-589: SS: grey, small grained, Coal, SH: grey
582: Coal, good gas in samples

FLEMING ZONE Geologist- No call

MINERAL ZONE Geologist- No call

CATTLEMAN SAND Geologist Geologist called at 597', gas kick of 0 units over bg \*\*GAS TEST @ 599', 0 MCF, 16 MCF open flow \*\*

590-599: SS: lt grey, medium grained, slight oil stains, SH: dk grey 600-609: SS: grey, shale like matrix, SH: 10%, grey

SCAMMON ZONE Geologist-No call

TEBO ZONE Geologist called at 615-624', gas kick of 0 units over bg \*\*GAS TEST @639 '0 MCF, 16 open flow \*\*

610-619: SH: grey, sandy, SH: dk grey
619: SH: dk grey, no gas in samples
620-629: SH: grey, dk grey, black, Coal
621-624: Coal: best gas in samples I have ever seen
630-639: SH: grey

BARTELSVILLE A Geologist called at 644', gas kick of 15 units over bg

640-649: SS: grey/white, small grained, banded

650-659: SH: grey, banded with white sand, LS: dk brown

CG: 870 units

10

660-669: SH: grey, SS: It grey, small grained

670-679: SH: dk grey, LS: 10% dk brown, Pyrite, Coal: 1%

CG: 700 units

UN NAMED ZONE Geologist- No call

**EARTLESVILLE B** Geologist called at 687-691', gas kick of 6 units over bg \*\*GAS TEST @ 699', 0 MCF, 16 MCF open flow \*\*
680-689: SH: dk grey, limey, SS: white, small grained

DRYWOOD ZONE Geologist- No Call

BARTELSVILLE C Geologist called at 698', gas kick of 0 units over bg 690-699: SH: grey, SS: white, small grained

Total Rotary Depth, 703 on 7/7/2009
\*\*GAS TEST @ 699', 0 MCF, 16 MCF open flow \*\*

Summary:

Stark: 0 MCF
Hushpuckney: 0 MCF
South Mound: 0 MCF
Lexington: 16 MCF
Summit: 0 MCF
Mulky: 12 MCF

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