

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
October 2008
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

7/23/11

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OPERATOR: License # 32294
Name: Osborn Energy, L.L.C. JUL 23 2009
Address 1: 24850 Farley
Address 2: KCC
City: Bucyrus State: KS Zip: 66013 +
Contact Person: Curstin Hamblin
Phone: (913) 533-9900
CONTRACTOR: License # 32294
Name: Osborn Energy, L.L.C.
Wellsite Geologist: Curstin Hamblin
Purchaser: Akawa Natural Gas, L.L.C.
Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SIOW
 Gas ENHR SIGW
 CM (Coal Bed Methane) Temp. Abd.
 Dry Other
(Core, WSW, Expl., Cathodic, 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: Plug Back Total Depth
Commingled Docket No.:
Dual Completion Docket No.:
Other (SWD or Enhr.?) Docket No.:
7/8/2009 7/9/2009 7/20/2009
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - 121-28714-0000
Spot Description: SE/4 Sec. 21 T16S R25E
SE SW NE SE Sec. 21 Twp. 16 S. R. 25 East West
1430 Feet from North / South Line of Section
920 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Miami
Lease Name: Markle Well #: 3-21
Field Name: Louisburg
Producing Formation: Marmaton
Elevation: Ground: 1001 Kelly Bushing:
Total Depth: 559 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 25.20 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 544.47
feet depth to: Surface w/ 72 sx cmt.

Drilling Fluid Management Plan *AAAS 8/24/09*
(Data must be collected from the Reserve Pit)
Chloride content: ppm Fluid volume: bbls
Dewatering method used:
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: *Curstin Hamblin*
Title: Geologist Date: 7-23-09
Subscribed and sworn to before me this 23rd day of July
20 09
Notary Public: *Jane Brewer*
Date Commission Expires

Jane Brewer
Notary Public
State of Kansas
My Commission Expires 3-23-11

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

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JUL 23 2009

Operator Name: Osborn Energy, L.L.C.

Lease Name: Markle

Well #: 3-21

Sec. 21 Twp. 16 S. R. 25 East West

County: Miami

KCC

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Electric Log Run <i>(Submit Copy)</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
List All E. Logs Run:			

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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 1/4"	8 5/8"		25.20	portland	5	water
Production	6 3/4"	4 1/2"		544.47	OWC	72	150# 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 Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	
		Amount	Depth

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TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or Enhr.	Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

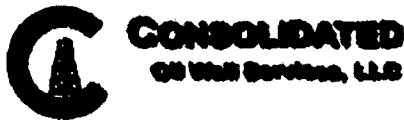
Perforation on 8 5/8" KCC

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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TICKET NUMBER 20105



KCC

LOCATION Ottawa

FOREMAN Alan Mader

PO Box 884, Chanute, KS 66720
620-451-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT

CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-20-09	6073	Mackla #3	SE 21	16	25	MI
CUSTOMER <u>Osborn Energy</u>			TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>24850 Farley</u>			<u>516</u>	<u>Alan M</u>		
CITY <u>Bucyrus</u>			<u>495</u>	<u>Casey K</u>		
STATE <u>KS</u>			<u>310</u>	<u>Alan M</u>		
ZIP CODE <u>66013</u>						

JOB TYPE log string HOLE SIZE 6 3/4 HOLE DEPTH 360 CASING SIZE & WEIGHT 4 1/2
 CASING DEPTH 544 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/ok _____ CEMENT LEFT IN CASING yes
 DISPLACEMENT 8 1/2 DISPLACEMENT PSI _____ MIX PSI _____ RATE 5 bpm

REMARKS: Checked casing depth. Mixed & pumped 150 gal gel to flush hole followed by 3 1/2 bbl dye. Mixed and pumped 72 sq DWL cement. Circulated dye. Flushed pump. Pumped plug to casing TD. Well held 800 AST. Set float. Circulated cement to surface.

Customer's water

Alan Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		87.00
5406	-	MILEAGE		-
5409	544'	Casing Footage		-
5407	135.36	Ton miles		157.02
118B	150	gel		24.00
112B	72	DWL		1152.00
440A	1	4 1/2 plug		43.00
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<u>J.C. Bulley</u>				
<u>6.83</u>				

Rev 3737

SALES TAX 79.85
ESTIMATE TOTAL 2325.8
TOTAL 2325.87

AUTHORIZATION _____

TITLE _____

DATE _____

WD 230488

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Geological Report

KCC

Markle # 3-21

1430 FSL, 920 FEL

Section: 21-T16S-R25E

Miami Co., Kansas

API#: 15-121-28714-0000

Elevation: 1001' GL

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

Spud: 7/8/2009

Production Bore Hole: 6 3/4"

Rotary Total Depth: 559 on 7/9/2009

Drilling Fluid: air

Surface Csg.: 8 5/8" @ 25.20' with 5 sx in 12 1/4" hole

Production Csg.: 4 1/2" set at 544.47'

Geologist: Curstin Hamblin

Driller: Brian Schwab

<u>Formation</u>	<u>Driller Log Tops</u>	<u>Datum</u>
Stark Shale	128-131'	873
Hushpuckney Shale	158-160'	843
Base Kansas City	177'	824
Knobtown Sand	204-219'	797
Carbonaceous Zone in Tacket Fm.	No call	
"Big Lake" Sand	297-307'	704
South Mound Zone	349-350'	652
Hepler (Wayside) Sand	No call	
"Upper" Mulberry Zone	376-377'	625
Mulberry Zone	No call	
Weiser Sand	389-394'	612
Myrick Station	408-410'	593
Anna Shale (Lexington Coal Zone)	411-412'	590
Peru Sand	414'	587
Summit Shale Zone	452-454'	549
Mulky Coal/Shale Zone	475-479'	526
Squirrel Sand	496'	505
Bevier Zone	No Call	
Rotary Total Depth	539'	

Drilling at 100' in the Kansas City on 7/9/2009 at 7:00am
Background Gas (BG)17 units

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100-109: LS: grey
110-119: LS: white/lt grey
120-129: LS: white/grey, SH: grey

STARK FORMATION driller called @ 128-131', gas kick of 0 units over BG
130: SH: black, no gas in samples
130-139: SH: black, dk grey, LS: white/lt grey
137-139: oil sand

Stark made water

140-149: LS: white/lt grey
150-159: LS: lt grey/white, SH: dk grey, black

HUSHPUCKNEY SHALE Geologist called @158-160', gas kick of 0 units over BG
160-169: LS: lt grey, SH: dk grey, black, lots of calcitic inclusions in both
160: SH: black, dk grey, limey, lots of calcite, no gas in samples
170-179: LS: lt grey, SH: black, grey

BKC: 177: SH: black, no gas
CG: 0 units
180-189: LS: lt grey/brown, SS: silty, green, fine grained, gummy
190-199: Siltstone: grey, gummy, soft, fine grained

KNOBTOWN SAND Geologist called at 204-219, gas kick of 23 units, another gas kick of 14 units
200-209: SS: small grained, medium firmness, good show of oil in pit, on samples and bleeding from samples. Also breakout oil
204-219: bleeding oil, good oil sand, it is fine grained, lots of oil on samples, in samples, and in pit. Strong odor. Oil is tan to black. It is greasy, fairly thick and seeps from the samples. The oil in the pit is not a lot, I would compare it to the amount on the morrisey well.

210-219: SS: grey, fine grained, medium firmness, lots of break out oil and oil on samples. These samples have a lot more "black" breakout.
220-229: Siltstone: no more bleeding oil, samples are greasy
230-239: Siltstone: grey, shaley, gummy
240-249: SH: grey, gummy
250-259: Siltstone: grey, gummy
260-269: Siltstone: grey, shaley
270-279: Siltstone: grey, gummy
280-289: SH: grey, some silty

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BIG LAKE SAND Geologist called at 297-307, gas kick of 17 units over bg
290-299: SH: grey, SS: grey, bleeding oil in pit, on samples, breakout
297-307: bleeding oil, some soft, some medium firmness. The knobtown had more oil shows/heavier, but the big lake sand looked better in places. It was better developed and not so shaley. The 10' above is not a "good" continuous sand. There was a good odor. Samples bled back some after washing, but not as much as the knobtown.

300-309: SS: grey, bleeding oil, some soft, some medium firmness. Lots of breakout oil, very little pit oil, occ. Pyrite
310-319: Siltstone: grey, shaley
320-329: Siltstone: grey, shaley
330-339: Siltstone: grey, shaley
340-349: SH: grey, black

SOUTH MOUND ZONE Geologist called @349-350', gas kick of 11 units over BG

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****GAS TEST @359', too small to measure****

349: SH: black, very good gas in samples
350-359: SH: grey, black, some coal
360-369: Siltstone: grey, shaley

MULBERRY ZONE Geologist called at 376-377, gas kick of 608 units

****GAS TEST @379', 92 MCF Total**--Not mulberry gas, see below**

370-379: SH: grey, striated, Black, striated, SS: very fine grained, soft, shaley, LS: white, slight oil show

376: Gas kick of 608 units

378-379-very little oil show

376: SH: very striated, good gas in samples

The gas kick came at the same time as the mulberry, but there is a slight oil show below the mulberry that I believe released the gas. It has a limestone bedrock. The oil show was only 3-4' thick. I didn't see much sand. The ls was bleeding oil and I could see the gas in the samples.

**adjusted the chromatograph flow from .6 to .2, the air from .2 to 1.0. BG running at 120 units

380-389: SS: limey, looks like limestone, bleeding oil, SS: 389: medium grained, some bleeding oil, LS: white/grey

382-386: SS/LS: very firm, behaves like limestone, bleeding lots of oil and lots of gas bubbles visible in oil and in samples. I think there was a 1-2' limestone that was not bleeding oil between the 378-379 and 382-386 beds.

WEISER SAND Geologist called at 389-394, no gas kick

****GAS TEST @', MCF Total****

390-399: SS: bleeding oil, greasy, good sheen, medium grained, some breakout oil, shale below the sand

400-409: SH: grey, LS: brown

LEXINGTON COAL ZONE Geologist called @411-412', gas kick of 130 units over BG

****GAS TEST @419', 23 MCF, 115 open flow, 115 total****

411-412: SH: Coal: black, good to very good gas in samples

410-419: LS: brown, SH: black, dk grey, SS: grey, medium grained

Switched the attenuation to x4. bg at 50 units

420-429: LS: grey, lots of calcitic inclusions

430-439: SH: grey, limey in places

440-449: LS: lt grey, SH: dk grey, black

447: SH: black

SUMMIT SHALE ZONE Geologist called @452-454', gas kick of 40 units over BG

****GAS TEST @459', 17 MCF, 132 open flow, 132 Total ****

453: SH: black, to dk grey, good to very good gas in samples

450-459: SH: black, LS: lt grey

CG of 1200 units

460-469: LS: lt grey, SH: black

MULKY COAL/SHALE ZONE Geologist called @475-479', gas kick of 60 units over BG

****GAS TEST @479', 0 MCF, 132 open flow, 132 Total ****

Diller noted an increase in water

477: SH: dk grey, black, very very good gas in samples

470-479: LS: lt grey, SH: black, Coal

480-489: LS: grey, sandy, SS: grey

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SQUIRREL SAND Geologist called @496'

490-499: SS: grey and tan, medium grained, very little oil on the samples

500-509: SS: grey, medium grained, little to no oil in samples

510-519: SS: grey, medium grained, little to no oil in samples

520-529: SS: medium grained, no oil

530-539: SS: grey, medium grained, no oil

540-549: SH: grey, Coal, Pyrite, SS: grey, medium grained

550-559: LS: lt grey/brown, SH: grey

Total Rotary Depth, 579 on 7/9/2009 at 4:30pm

****GAS TEST @579', 0 MCF, 132 mcf open flow****

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