

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1095409

Form ACO-1 June 2009 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:	
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from Tast / West Line of Section
Contact Person:	
Phone: ()	
CONTRACTOR: License #	
Name:	Lease Name: Well #:
Wellsite Geologist:	
Purchaser:	
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:
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:	Amount of Surface Pipe Set and Cemented at: 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.
Operator:	
Well Name:	Drilling Fluid Management Plan
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SW	Chloride content: ppm Fluid volume: bbls Dewatering method used:
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:
	Operator Name:
SWD Permit #:	Lease Name: License #:
ENHR Permit #:	Quarter Sec TwpS. R East West
GSW Permit #:	County: Permit #:
Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date	_

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
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II Approved by: Date:

	Side Two	
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

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 complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes No	L	-	n (Top), Depth an	d Datum Top	Sample Datum
Samples Sent to Geolog	gical Survey	Yes No	Indif			юр	Datum
Cores Taken Electric Log Run Electric Log Submitted E (If no, Submit Copy)	Electronically	<pre> Yes □ No Yes □ No Yes □ No Yes □ No</pre>					
List All E. Logs Run:							
		CASING		ew Used			
		Report all strings set-	-conductor, surface, inte	ermediate, product	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 / SQUEEZE RECORD

Purpose: —— Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					ement Squeeze Record I of Material Used)	Depth			
TUBING RECORD:	Si	ze:	Set At:		Packe	r At:	Liner R	un:	No	
Date of First, Resumed F	Product	ion, SWD or ENH	۲.	Producing N		ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
			1						1	
DISPOSITIO	N OF (GAS:			METHOD	OF COMPLE	TION:		PRODUCTION INTE	RVAL:
Vented Sold		Used on Lease		Open Hole	Perf.	Dually (Submit)	, Comp. 4 <i>CO-5)</i>	Commingled (Submit ACO-4)		
(If vented, Subi	mit ACC)-18.)		Other (Specify))					

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

Form	ACO1 - Well Completion
Operator	Neal LaFon Realty Inc. dba Meridian Energy Inc.
Well Name	Kortan 1
Doc ID	1095409

Tops

Name	Тор	Datum
Anh	1796	+530
Topeka	3238	-912
Heebner	3495	-1169
Kansas City	3533	-1207
Base KC	3768	-1442
Marmaton	3780	-1454
Cong	3768	-1442
Arbuckle	3847	-1521

Well: Meridian Energy Inc. #1 Kortan NW SE SW NE Section 20 2215' FNL x 1915' FEL T. 9 S., R. 21 W. Graham County, Kansas

Elevation: GL 2319 KB 2326

Total Depth: Driller 3900 Logger 3897

Date spudded: 3/23/12

Date completed: 3/30/12

Drill Stem Test: F-G zones and Arbuckle

Results: Ran pipe to test further

Drilling Contractor: Royal Rig 2

Mud Contractor: Andy's Mud

Logs Run: DIL/CNL/FDC Microlog

Wellsite Geologist: Neal LaFon- Franktown, Colorado

FORMATION TOPS

Anhydrite	1796	+530
Topeka	3238	-912
Heebner	3495	-1169
Kansas City A	3533	-1207
Base KC	3768	-1442
Marmaton	3780	-1454
Cong	3768	-1442
Arbuckle	3847	-1521

TD 3900

SAMPLE DESCRIPTIONS Not lagged

3000-3030 Ls, gray, vvf xtln, hd, tt, no 3030-3060 Ls, a/a some wt, ns 3060-3090 Ls, a/a gray, some brn, foss, m-c xtln, hd tt, no 3090-3110 Ls, drk gray-blk, vf xtln, hd, tt, ns, ls brn m xtln, foss hd, tt, no 3110-3120 Ls, brn a/a tr ss, vvf grn, well rnded/sorted, hard, glauc, poor p, ns 3120-3130 Ls, drk gray,-blk, hd tt, micro xtln, hd, tt, ns, some brn, f-m xtln, foss, hd tt, ns

3130-3140 Ss, gray, vf grn, carbonaceous, well rnded/sorted, glauc, sl fri poor p and p, ns. Ls, brn, m xtln, hd, tt ns.

3140-3150 Ss, a/a exc siltier, finer grned, ns

3150-3160 Ls, brn, f-m xtln, foss, tt, no tr Ss a/a.

3160-3170 Ls, wt, a/a finer grned, f xtln to micro xtln, foss, tt, ns, one grn oolitic

w/ooclastic por, fair por, barren

3170-3180 Ls, a/a

3180-3190 a/a few pieces chalky

3190-3200 Ls, wt-br, foss, most f xtln, hd, tt, ns tr chalky, ls soft, ns

3200-3210 Ls, buff, vvf xtln, finer than above, foss, hd, tt, no some micro xtln, ns

3210-3220 Ls, gran peletoidal shaly, tt ns

Ls, st-buff micro xtln, hd, tt, ns

Ls, f xtln, foss tt, ns

Ls, wt chalky

3220-3230 Ls, buff, f xtln, tt, no

Ls, gray argillaceous, tt, ns

3230-3240 Ls, a/a

3240-3250, Ls, vf xtln, soft ns, some ls, gray, vf xtln, tt, ns

SAMPLES LAGGED

Topeka

3238- 3251 Ls, buff, f xtln, foss, tt, ns
3251-3280 Ls, gray, argillaceous, tt, ns
3284- 3300 Ls, buff, f-m xtln some med grnstn, very tt, ns
3300-3310 Ls, wt, sucrosic, vf grn, sl soft to hard, ns
3314-3330 Ls, buff, vvf grn sucrosic, most hard, ns
3330-3338 Ls, gray, micro xtln dirty, ns
3338-3345 Ls, wt, chalky soft, ns
3360-3374 Ls, buff, vf grn hd, tt, ns
3374-3400 Ls, mix, gray micro xtln, chalky, buff vf xtln soft, buff med xtln hd, ns
3400-3408 Ls, f-m xtln, tt, ns
3408-3416 Ls, wt, chalky, soft, ns
3438- 3450 Ls, buff, f xtln, tt, ns tr chalky
3438- 3450 Ls, buff, f-m grn stn w/vug por, barren, ns

Toronto

3516-3268 Ls, wt, vf xtln-micro xtln, hd, tt, ns

Kansas City

A zone

3532-3595 Ls, wt, f xtln, hd, tt, ns

B zone

3595-3560 Ls, wt, micro xtln, hd, tt, tr chalky

C zone

3573-3583 Ls, wt, micro xtln, tt, ns trace ls, wt, med grn stn, foss, tr vug por, foss/ooclastic por, w /drk dead oil stn, NSFO tr por, one grn very tt, when broken, por in foram w/ FO.

D zone

3590-3600 Ls, wt, micro xtln, a/a, w/dead oil bitumen, in very scant por, NSFO

E-F Zone

3600-3613 Ls, wt, micro xtln, tt, ns some grn med grn stn, cemented up, tr vug por, dk stn NSFO

G Zone

3615- 3624 Ls, wt, med-coar grn stn, inter gran vug por, gd blk stn,, tr tarry, rest gd live oil, gd oil scum on cups, f-gd por, GSFO. (2-3 foot drilling break- DSTed.)

3628-3650 Ls, wt, micro xtln, hd, tt, ns

H zone

3666-3683 Ls, wt, micro xtln, hd, tt, ns,

I zone

3690-3716 Ls, wt-gray, micro xtln, hd, tt, ns (log shows perm at 3706- didn't see any por or show in here)

J-K Zone

3721-3750 Ls, wt, vf xtln, hd, tt, ns

K zone

3738- 3604 Ss, clear, f grn, well rnded/sorted very soft, about 1/2 w /dead bitumen

Marmaton

3780-3793 Ls, wt, vvf grn sucrosic, hd, tt, ns lots of black bitumen, dead, NSFO some patchy, some fully saturated

3800-3819 Ls, a/a, w tr dead bitumen.

3826-3834 Chert, orange, ls, a/a

Arbuckle zone

3847-3855 (CFS) 40" sample @ 3855

Dolo, brn, vvf xtln, sucrosic, drk stn, tr FO when crushed, p-f SFO.

60" sample Gd slug sample Dolo, sucrosic, vf xtln, gd scum oil on cups, gd odor, one grn with small vug GSFO.

- 3855-3869 Mainly, sh, green Dolo, clear, granular, gd por, gd stn some oil scum on cups, gd odor, poor samples.
- 3870-3877 Dolo, f xtln, glassey, all cemented, blocky, hd, tt, ns, some pink dolo, m xtln, hd, tt, ns.
- 3877-3900 98% Dolo, pink/wt m xtln, hd, tt ns. Trace w/ dead oil stn/bitumen in vug & inter gran por.

MUD RECORD

3/26/12 @2900	MW 8.6	VIS 52	WL 7.6	MC 1/32
3/27/12 @3511	MW 9.1	VIS 59	WL 8.0	MC 1/32
3/28/12 @3682	MW 9.2	VIS 60	WL 8.0	MC 1/32
3/29/12 @ 3872	MW 9.3	VIS 60	WL 8.8	MC 1/32

DEVIATION SURVEYS

3/23/12 @211 1 degree	3/25/12 @1913 1/2 degree
3/27/12 @ 3642 1 degree	3/29/12 @ 3900 1 1/4 degree

DRILL STEM TESTS

Dst #1 3607-3642 F-G zones

OP2 SI 45 OP 60 SI 90

FP 16-16 16-23 SIP 639-621 REC: 15 ' M Dst #2 3834-3855 Arbuckle

OP2 SI 45 OP 60 SI 90

FP 38-54 58-508 SIP 1126-1125 REC: 154 ' GO (15% G, 85% O) 372' GWO (10% G, 60% O, 30% W) 620' MW (90% W, 10% M) Grav 23 degree, RW .1521 @ 58 degrees 54,000 ppm

COMMENTS

The well came in pretty high on the Arbuckle as expected. The DST recovered a significant amount of water, suggesting some drainage has occurred from the field to the north. All significant shows in the Kansas City were tested and proved negative.

Neal La Fon Geologist Franktown, CO 4/6/12

PO Box 884, Cl 620-431-9210	ONSOLID Oli Well Service hanute, KS 6672 or 800-467-8676	n LLC 20 FIELI	DICKE			TICKET NUME LOCATION FOREMAN DRT	Dakley	461 Ks ihar inkel
DATE	CUSTOMER #	WELL N	AME & NUM	BER	SECTION	TOWNSHIP	RANGE	COUNTY
4-11-12 CUSTOMER	5665	Kortor	<u>_</u> #		20	93	210	Erahum
	ESS	STATE Z	IP CODE	Walconor n to R.L E to 350 2N to J	TRUCK # 456-T118 528-T127	DRIVER Damon H Cody R	TRUCK#	DRIVER
JOB TYPE_PC CASING DEPTH SLURRY WEIGH		HOLE SIZE DRILL PIPE SLURRY VOL		3/46.55 HOLE DEPTH TUBING	7/8	CASING SIZE & W	OTHER P.C	1763 '
DISPLACEMENT REMARKS: 5 Den To Displa Clean	Safety Me 201, estato 100 9 BBL		251 <u>7</u> 127 127 127 127 127 127 127 127 127 127	MIX PSI	Pressure sks 6440 pros clasing Ta	RATE Test Cas 8%/06et+	ing to loc	41
ACCOUNT	QUANITY	or UNITS	DE	SCRIPTION of	しん SERVICES or PRC		Yur +C.Ye UNIT PRICE	TOTAL
5401 5406 1121	50	м	UMP CHARG				1,32500	1,325 <u>0</u> 2.50 <u>00</u>
111813 1107 5407A	1896	# # 3	Cel Flo-Se	~/ ~/	eliver		15 <u></u> ,25 ,25 ,282	47400 19458

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						7.38402
			1-555	10% Disc.		23841
			_			6,645-67
			24897			202.6
			24111	0	SALES TAX	327.59
Ravin 3737	AT A KEDDA	$\left(\right)$			ESTIMATED TOTAL	6973.26
AUTHORIZTION	(Krep Aubel	<u> た'</u>	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.

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Home Office P.O. Box 32 Russell, KS 67665

_{No.} 265

Phone 785-483-2025 Cell 785-324-1041

	00-024-1041				· .					
	3/23/12	Sec.	Twp.	Range	2	County	State	On Location	Finish	
Date		20	9	21	G	saham	<u> </u>		10:00 FM	
Lease	- Kortan		Vell No.	1	Locati	ontako,	Rolling, Wto	350 Fd,21	015E12120	
Contrac	tor Royal	Dr:ili	ng #	Sig #1		Owner	<u></u>	· · · ·		
Type Job Sufface						To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish				
Hole Size 12 14" T.D. 211						cementer and helper to assist owner or contractor to do work as listed.				
Csg.	85/81	· .	Depth	211'		Charge To	neridian E	Energy		
Tbg. Siz	ze		Depth			Street		<u>حا / ا</u>		
Tool			Depth			City		State		
Cement	Left in Csg.	15'	Shoe J	oint		The above wa	as done to satisfaction a	nd supervision of owne	r agent or contractor.	
Meas Li	ne		Displac	e 12/2	BbK.	Cement Amo	ount Ordered)six(om 3%)	(c) 2% 421	
	a Alexandra de Carlos	EQUIPM	IENT			A.,		-	.0 -	
Pumptrk	No. Ceme	r (int			Common	50			
Bulktrk	in No. Driver		xt+			Poz. Mix	,			
Bulktrk	FUNO. Driver		uin			Gel. 3				
1. a	JOB SE	RVICES	& REMA	RKS		Calcium				
Remark	s:				. 1	Hulls				
Rat Hole	Э боло са се с					Salt				
Mouse I	Hole					Flowseal				
Centrali	zers					Kol-Seal				
Baskets			·			Mud CLR 48				
D/V or Port Collar						CFL-117 or CD110 CAF 38				
Es	t. Cor			· · · ·		Sand				
Mix ISDex						Handling 38				
$-\mathcal{D}$:	splace					Mileage				
Compat Circulatert						FLOAT EQUIPMENT				
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