



**Oil & Gas Well Drilling  
Water Wells  
Geo-Loop Installation**

**11 Lewis Drive**

**Paola, KS 66071**

Phone: 913-557-9083

Fax: 913-557-9084

**WELL LOG**

A & L Energy Operations, LLC

Thoren #129

API #15-045-22,048

March 18 - March 21, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
17	soil & clay	17
47	shale	64
32	lime	96
8	shale	104
7	lime	111
10	shale	121
17	lime	138
33	shale	171
16	lime	187
47	shale	234
9	lime	243
12	shale	255
18	lime	273
20	shale	293
11	lime	304
20	shale	324
13	lime	337
4	shale	341
34	lime	375
5	shale	380
23	lime	403
3	shale	406
16	lime	422 base of the Kansas City
167	shale	589
4	lime	593
37	shale	630
5	lime	635
8	shale	643
3	lime	646
41	shale	687
4	broken oil sand	691 brown & green, good bleeding
2	oil sand	693 brown, good bleeding
3	broken sand	696 brown & green, good bleeding
24	shale	720 TD

Drilled a 12 1/4" hole to 45.4'

Drilled a 7 7/8" hole to 720'

Set 45.4' of 8 5/8" casing threaded and coupled cemented with 12 sacks of cement.

Set 686' of 5 1/2" tubing with 3 centralizers and 1 clamp.



**CONSOLIDATED**  
Oil Well Services, LLC

266874

TICKET NUMBER 42696  
LOCATION Ottawa, KS  
FOREMAN Casey Kennedy

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
3/19/14	3898	Thoren # 129	NE 1/4	14	21	DG
CUSTOMER A+L Energy Operations			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 575 Madison Ave 22nd Fl			729	Car Ken	✓	Safety Meeting
CITY STATE ZIP CODE New York NY 10022			1060	Kei Car	✓	
			510	Der Has	✓	
			370	Jas Ric	✓	

JOB TYPE long string HOLE SIZE 7 7/8" HOLE DEPTH 687' CASING SIZE & WEIGHT 5 1/2" 14#  
 CASING DEPTH 1086' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING 20'  
 DISPLACEMENT 16.25 bbl DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE 5 bpm

REMARKS: held safety meeting, established circulation, mixed & pumped 200 # Premium Gel followed by 10 bbls fresh water, mixed & pumped 10' bbls dye marker, mixed & pumped 111' sks OWC cement w/ 1/4 # Floreal per sk, dye marker to surface, displaced cement w/ 16.25 bbls fresh water, shut in casing.

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		1085.00
5406	30 mi	MILEAGE		126.00
5402	1086'	casing footage		
5407	<del>minimum</del> ton	ton mileage		368.00
5502C	4 hrs	SD Vac		400.00
1126	111 SKS	OWC cement	2192.25	
1107	28 #	Floreal	69.16	
1118B	386 #	Premium Gel	84.92	
		materials subtotal	2346.33	
		- 30%	- 703.90	
		subtotal		1642.43
			4305.33	
			- 703.90	3601.43
			7.15%	117.43
		SALES TAX		117.43
		ESTIMATED TOTAL		3738.86

Ravin 3737

AUTHORIZATION \_\_\_\_\_

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.