



**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  
Alma #5  
API #15-059-26,680  
May 29 - May 30, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
1	soil & clay	1
2	lime	3
7	shale	10
24	lime	34
25	shale	59
25	lime	84
83	shale	167
21	lime	188
26	shale	214
6	lime	220
31	shale	251
8	lime	259
2	shale	261
2	lime	263
17	shale	280
23	lime	303
8	shale	311
23	lime	334
4	shale	338
12	lime	350 base of the Kansas City
150	shale	500
4	lime	504
42	shale	546
1	coal	547
13	shale	560
2	lime	562
11	shale	573
3	lime	576
27	shale	603
5	lime	608 ok bleeding
8	shale	616
2.5	oil sand	618.5 brown, no bleeding
3.5	broken sand	622 brown & green 90% bleeding
1	oil sand	623 brown 100% bleeding
7	broken sand	630 brown & green 60% bleeding
52	shale	682 TD

Alma #5

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Drilled a 9 7/8" hole to 22.4'

Drilled a 5 5/8" hole to 682'

Set 22.4' of 9 7/8" casing threaded and coupled cemented with 5 sacks of cement.

Set 672' of 2 7/8" 8 round upset 3 centralizers, 1 float shoe, 1 clamp.

Core Sample	<u>Minutes</u>	<u>Second</u>
617		30
618		22
619		27
620		34
621		31
622		35
623		25
624		31
625		29
626		34
627		33
628		34
629		35
630		35
631	1	21
632		31
633		38
634		41
635		39
636		41
637		32
638		47
639		54
640		30
641		31
642		23
643		32
644		31
645		35
646		36
647		44
648		38
649		35
650		40
651		50
652		34
653		32
654		36
655		32
656		33



**CONSOLIDATED**  
Oil Well Services, LLC

268592

TICKET NUMBER 47209

LOCATION Ottawa, ks

FOREMAN Carey 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
5/30/14	3898	Alma # 5	SE 20	16	21	FR
CUSTOMER						
At L Energy						
MAILING ADDRESS						
575 Madison Ave						
CITY	STATE	ZIP CODE	TRUCK #			
New York	NY	10022	729	Cas Ken	✓	Safety Meeting
			6666	Gar Moo	✓	
			510	Fre Mad	✓	
			637	Joe Kao	✓	

JOB TYPE long string HOLE SIZE 5 5/8" HOLE DEPTH 682' CASING SIZE & WEIGHT 2 7/8" EUE  
CASING DEPTH 672' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
SLURRY WEIGHT \_\_\_\_\_ SLURRY VOL \_\_\_\_\_ WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
DISPLACEMENT 3.89 bbls 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 89 bbls 50/50 Poemix cement w/ 2% gal per sk, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to casing TD w/ 3.89 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

*Handwritten signature: R + G*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		
5406	1.5 mi	MILEAGE		1685.00
5402	672'	casing footage		63.00
5407	minimum	ton mileage		
5502C	2 hrs	80 Vac		368.00
				200.00
1124	89 bbls	50/50 Poemix cement	1023.50	
118B	350 #	Premium Gel	77.00	
		materials	1100.50	
		- 30%	330.15	
		subtotal		770.35
4402	1	2 1/2" rubber plug		29.50
			2732.45	
			SALES TAX	66.19
			ESTIMATED TOTAL	2577.04

Revin 3737

*Handwritten: J. C. 59a*

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.