



11 Lewis Drive Paola, KS 66071

Oil & Gas Well Drilling  
Water Wells  
Geo-Loop Installation

Phone: 913-557-9083  
Fax: 913-557-9084

**WELL LOG**

A & L Energy Operations, LLC  
Alma #1  
API #15-059-26,664  
May 21 - May 22, 2014

<u>Thickness of Strata</u>	<u>Formation</u>	<u>Total</u>
5	soil & clay	5
13	lime	18
5	shale	23
12	lime	35
7	shale	42
21	lime	63
28	shale	91
20	lime	111
84	shale	195
20	lime	215
28	shale	243
5	lime	248
12	shale	260
2	lime	262
16	shale	278
15	lime	293
16	shale	309
24	lime	333
7	shale	340 ok show
32	lime	372 base of the Kansas City
156	shale	528
7	lime	535
42	shale	577
1	coal	578
5	shale	583
10	lime	593
12	shale	605
3	lime	608
26	shale	634
7	lime	641 good bleeding
6	shale	647
2	broken sand	649 brown & green 40% bleeding
1.5	limey sand	650.5 white, no oil
11	broken sand	661.5 brown & green, 40% bleeding
3.5	broken sand	665 brown & green 80% shale, light bleeding
25	shale	690
28	broken sand	718 brown & grey, no show
		718 TD

Alma #1

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Drilled a 9 7/8" hole to 22.6'

Drilled a 5 5/8" hole to 718'

Set 22.6' of 9 7/8" casing threaded and coupled cemented with 5 sacks of cement.

Set 708' of 2 7/8" 8 round upset 3 centralizers, 1 float shoe, 1 clamp.

Core Times		
	<u>Minutes</u>	<u>Seconds</u>
648		45
649		49
650		50
651		51
652		51
653		40
654		44
655		52
656		45
657		43
658		43
659		56
660		54
661		54
662		51
663		50
664		52
665	1	7
666	1	10
667	1	6
668	1	15
669	1	12
670	1	8
671	1	8
672	1	25
673	1	28
674	1	21
675	1	14
676	1	19
677	1	15



**CONSOLIDATED**  
Oil Well Services, LLC

268418

TICKET NUMBER 47176

LOCATION Atama, 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
5/22/14	3898	Alma # 1	SE 20	14	21	FR

CUSTOMER <u>A+L Energy</u>		
MAILING ADDRESS <u>575 Madison Ave 22nd Fl</u>		
CITY <u>New York</u>	STATE <u>NY</u>	ZIP CODE <u>10022</u>

TRUCK #	DRIVER	TRUCK #	DRIVER
737	CarKen	✓ Safety Meeting	
1440	Gar Moo	✓	
510	Mat Coc	✓	
675	Kei Det	✓	

JOB TYPE <u>long string</u>	HOLE SIZE <u>5 7/8"</u>	HOLE DEPTH <u>718'</u>	CASING SIZE & WEIGHT <u>2 7/8" EUE</u>
CASING DEPTH <u>708'</u>	DRILL PIPE	TUBING	OTHER
SLURRY WEIGHT	SLURRY VOL	WATER gal/sk	CEMENT LEFT in CASING
DISPLACEMENT <u>4.10 bbls</u>	DISPLACEMENT PSI	MIX PSI	RATE <u>5 bpm</u>

REMARKS: held safety meeting, established circulation, mixed + pumped 200# Premium gel followed by 10 bbls fresh water, mixed + pumped 108 slcs 50/50 Pozmix cement w/ 2 1/2 gel per slc, cement to surface, flushed pump clean, pumped 2 1/2" rubber plug to casing TD w/ 4.10 bbls fresh water, pressured to 800 PSI, released pressure, shut in casing.

*[Handwritten signature]*

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		1085.00
5406	15 mi	MILEAGE		63.00
5402	708'	casing footage		
5407	minimum	tax mileage		318.00
5502C	2 hrs	SO Vac		200.00
1124	108 slcs	50/50 Pozmix cement	1242.00	
1118B	381 #	Premium Gel	83.82	
		materials	1325.82	
		- 30%	397.75	
		subtotal		928.07
4402	1	2 1/2" rubber plug		29.50
			3175.00	
		7.65%	SALES TAX	73.25
			ESTIMATED TOTAL	2746.82

Ravin 3737

AUTHORIZATION No Co Rep on location 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.