



KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1092175

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- ☐ New Well ☐ Re-Entry ☐ Workover
- ☐ 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:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- ☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
- ☐ Conv. to GSW
- ☐ Plug Back: _____ Plug Back Total Depth _____
- ☐ Commingled Permit #: _____
- ☐ Dual Completion Permit #: _____
- ☐ SWD Permit #: _____
- ☐ ENHR Permit #: _____
- ☐ GSW Permit #: _____

Spud Date or
Recompletion Date

Date Reached TD

Completion Date or
Recompletion Date

API No. 15 - _____

Spot Description: _____

_____-_____-_____- Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

_____-_____-_____- Feet from ☐ North / ☐ South Line of Section

_____-_____-_____- Feet from ☐ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☐ SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

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.

Drilling Fluid Management Plan

(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 #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

County: _____ Permit #: _____

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 ☐ III Approved by: _____ Date: _____



1092175

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. 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 ☐ Yes ☐ No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey ☐ Yes ☐ No Cores Taken ☐ Yes ☐ No Electric Log Run ☐ Yes ☐ No Electric Log Submitted Electronically ☐ Yes ☐ No <i>(If no, Submit Copy)</i> List All E. Logs Run:	☐ Log Formation (Top), Depth and Datum ☐ Sample Name Top Datum
--	--

CASING RECORD ☐ New ☐ 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

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>	Depth

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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. <i>(Submit ACO-5)</i> ☐ Commingled <i>(Submit ACO-4)</i> ☐ Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Miami County, KS
 Well: Garberg AI-4
 Lease Owner: DE Exploration

Town Oilfield Service, Inc.
 (913) 837-8400

Commenced Spudding:
 5/23/2012

WELL LOG

Thickness of Strata	Formation	Total Depth
0-19	Soil-Clay	1
135	Shale	154
5		159
2	Sandy Shale	161
11	Shale	172
2	Sandy Lime	174
1	Sand	175
2	Sand	177
3	Sand	180
2	Sand	182
2	Sand	184
2	Sand	186
5	Lime	191
6	Shale	197
4	Lime	201
11	Shale	212
7	Lime	219
16	Shale	235
4	Lime	239
5	Shale	244
7	Sand	251
5	Shale	256
17	Lime	273
9	Shale	282
3	Lime	285
15	Shale	300
5	Lime	305
41	Shale	346
4	Sandy Shale	350
6	Sand	356
2	Sand	358
3	Sand	361
2	Sand	363
5	Sandy Shale	368
33	Shale	401
1	Lime	402
5	Shale	407
23	Sand	430
10	Shale	440-TD

Short Cuts

TANK CAPACITY

BBLS. (42 gal.) equals $D^2 \times .14 \times h$

D equals diameter in feet.

h equals height in feet.

BARRELS PER DAY

Multiply gals. per minute x 34.2

HP equals BPH x PSI x .0004

BPH - barrels per hour

PSI - pounds square inch

TO FIGURE PUMP DRIVES

* D - Diameter of Pump Sheave

* d - Diameter of Engine Sheave

SPM - Strokes per minute

RPM - Engine Speed

R - Gear Box Ratio

*C - Shaft Center Distance

D - $RPM \times d$ over $SPM \times R$

d - $SPM \times R \times D$ over RPM

SPM - $RPM \times D$ over $R \times d$

R - $RPM \times D$ over $SPM \times d$

BELT LENGTH - $2C + 1.57(D + d) + \frac{(D-d)^2}{4C}$

* Need these to figure belt length

TO FIGURE AMPS: $\frac{WATTS}{VOLTS} = AMPS$

746 WATTS equal 1 HP

Log Book

Well No. AI-4

Farm Garberg

KS Miami
(State) (County)

4 19 24
(Section) (Township) (Range)

For D. E. Exploration
(Well Owner)

Town Oilfield Services, Inc.

1207 N. 1st East
Louisburg, KS 66053
913-710-5400

Elevation 817

Finished Drilling May 24, 2012

Driller's Name _____

Driller's Name _____

Tool Dresser's Name Brandon Stenf

Tool Dresser's Name Colt Stone

Tool Dresser's Name _____

Contractor's Name TOS

4 19 27

(Section) (Township) (Range)

Distance from 33795 line. 33795 ft

Distance from E line 2095 ft

3 sacks

6 hrs

10" Set _____ 10" Pulled _____

8" Set _____ 8" Pulled _____

7 8 1/4" Set 23 6 1/4" Pulled

4" Set _____ 4" Pulled _____

2" Set _____ 2" Pulled _____

[illegible]

Thickness of Strata	Formation	Total Depth	Remarks
0-19	Soil-clay	19	water
135	Shale	154	
5	sand & lime	159	
2	sandy shale	161	
11	Shale	172	
2	sandy lime	174	
1	sand	175	5% oil
2	sand	177	no oil
3	sand	180	5% oil
2	sand	182	no oil
2	sand	184	10% oil
2	sand	186	no oil
5	Lime	191	
6	shale	197	
4	Lime	201	
11	shale	212	
7	Lime	219	
16	shale	235	
4	Lime	239	
5	shale	244	
7	sand	251	no oil
5	shale	256	
17	Lime	273	
9	shale	282	
3	Lime	285	
15	shale	300	
5	Lime	305	

305

[illegible]



CONSOLIDATED
Oil Well Services, LLC

REMIT TO
Consolidated Oil Well Services, LLC
Dept. 970
P.O. Box 4346
Houston, TX 77210-4346

MAIN OFFICE
P.O. Box 884
Chanute, KS 66720
620/431-9210 • 1-800/467-8676
Fax 620/431-0012

INVOICE

Invoice # 250125

Invoice Date: 05/29/2012 Terms: 0/0/30,n/30

Page 1

D.E. EXPLORATION
DOUG EVANS
P.O. BOX 128
WELLSVILLE KS 66092
(785) 883-4057

GARBERG AI-4
39802
4-19-24
05-24-2012
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	60.00	10.9500	657.00
1118B	PREMIUM GEL / BENTONITE	201.00	.2100	42.21
1111	SODIUM CHLORIDE (GRANULA	116.00	.3700	42.92
1110A	KOL SEAL (50# BAG)	300.00	.4600	138.00
4402	2 1/2" RUBBER PLUG	1.00	28.0000	28.00
1401	HE 100 POLYMER	.50	47.2500	23.63

	Description	Hours	Unit Price	Total
368	CEMENT PUMP	1.00	1030.00	1030.00
368	EQUIPMENT MILEAGE (ONE WAY)	40.00	4.00	160.00
368	CASING FOOTAGE	411.00	.00	.00
370	80 BBL VACUUM TRUCK (CEMENT)	2.00	90.00	180.00
558	MIN. BULK DELIVERY	1.00	350.00	350.00

Parts: 931.76 Freight: .00 Tax: 70.34 AR 2722.10
Labor: .00 Misc: .00 Total: 2722.10
Sublt: .00 Supplies: .00 Change: .00

Signed _____

Date _____

BARTLESVILLE, OK
918/338-0808

EL DORADO, KS
316/322-7022

EUREKA, KS
620/583-7664

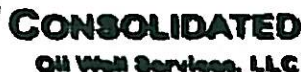
PONCA CITY, OK
580/762-2303

OAKLEY, KS
785/672-2227

OTTAWA, KS
785/242-4044

THAYER, KS
620/839-5269

GILLETTE, WY
307/686-4914



FIELD TICKET & TREATMENT REPORT CEMENT

TICKET NUMBER 39802

LOCATION Ottawa

FOREMAN Alvin Mader

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
5-24-12	2355	Garberg # AT-4	NW 4	19	29	Mt.
CUSTOMER D E Exploration						
MAILING ADDRESS P.O. Box 128						
CITY Wellsville	STATE KS	ZIP CODE 66092				

TRUCK #	DRIVER	TRUCK #	DRIVER
516	Ala. Mad	546	Meat
368	Art Mad	45M	
370	Rya. Sin	RS	
558	Mik. Haa	MH	

JOB TYPE <u>long string</u>	HOLE SIZE <u>5 5/8</u>	HOLE DEPTH <u>940</u>	CASING SIZE & WEIGHT <u>2 3/8</u>
CASING DEPTH <u>411</u>	DRILL PIPE _____	TUBING _____	OTHER <u>baffle 381</u>
SLURRY WEIGHT _____	SLURRY VOL _____	WATER gal/sk _____	CEMENT LEFT in CASING <u>yes</u>
DISPLACEMENT <u>2 1/4</u>	DISPLACEMENT PSI <u>800</u>	MIX PSI <u>200</u>	RATE <u>4 bpm</u>

REMARKS: Held crew meet. Established rate. Mixed + pumped
1/2 gal polymer circulated to condition hole. Mixed +
pumped 100# gel followed by 60 SK 50/150 cement
plus 5# hal seal. 5# only 29# gel per sack. Circulated
cement. Flushed pump. Pumped plug to baffle.
Well held 800 PSI. Set float. Closed valve.

TDS Wes

Don Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
✓ 5401	1	PUMP CHARGE		1030.00
5406	40	MILEAGE		160.00
5402	411'	Casing footage		
5407	min	To n miles		350.00
5502C	2	80 vac		180.00
1124	60	50/50 Cement		657.00
1118B	201 #	gel		42.21
1111	116 #	silt		42.92
1110A	300 #	Kpl seal		138.00
4402	1	2 1/2 plug		28.00
1401	1/2 gal	polymer		23.63
SALES TAX				70.34

Ravin 3737

Ravin 3737 *NO company rep.*
 AUTHORIZATION *Jim Oskid*

TITLE

DATE _____

SALES TAX	70.34
ESTIMATED TOTAL	2722.60

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.