Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1195070

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34339
Name: D & Z Exploration, Inc.
Address 1: 900 N ELM ST.
Address 2: PO BOX 159
City: ST ELMO State: IL Zip: 62458 + ____
Contact Person: Zane Belden
Phone: (618) 829-3274
CONTRACTOR: License # 33715
Name: Town Oilfield Service
Wellsite Geologist: none
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
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

01/17/2014	01/24/2014	01/24/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-091-24273-00-00
Spot Description:
NE - SE - NW - NE Sec. 28 Twp. 14 S. R. 22 ☑ East ☐ West
4306 Feet from ☐ North / ☑ South Line of Section
1602 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Johnson
Lease Name: Donovan Well #: #I-12
Field Name:
Producing Formation: Bartlesville
Elevation: Ground: 1047 Kelly Bushing: 0
Total Vertical Depth: 960 Plug Back Total Depth: 936
Amount of Surface Pipe Set and Cemented at: 20 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 20
feet depth to: 0 w/ 10 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 0 ppm Fluid volume: 0 bbls
Dewatering method used: Evaporated

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

☑ **Confidentiality Requested**
Date: 03/20/2014
☑ **Confidential Release Date:** 03/19/2016
☐ **Wireline Log Received**
☐ **Geologist Report Received**
☑ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 03/20/2014

[redacted] 1195070

Operator Name: D & Z Exploration, Inc. Lease Name: Donovan Well #: #I-12

Sec. 28 Twp. 14 S. R. 22 ☑ East ☐ West County: Johnson

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☐ Yes ☑ No

List All E. Logs Run:

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Bartlesville	878	

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
Surface	9.825	7	20	20	Portland	10	none
Production	5.625	2.825	6.2	936	50/50 poz	119	none

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	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	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 *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

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

Form	ACO1 - Well Completion
Operator	D & Z Exploration, Inc.
Well Name	Donovan #I-12
Doc ID	1195070

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	9.825	7	20	20	Portland	10	none
Production	5.625	2.825	6.2	936	50/50 poz	119	none

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 # 265650

Invoice Date: 01/29/2014 Terms: 0/0/30,n/30 Page 1

D & Z EXPLORATION
901 N. ELM ST.
P.O. BOX 159
ST. ELMO IL 62458
(618)829-3274

DONOVAN I-12
42565
NE 28-14-22
01-24-2014
KS

Part Number	Description	Qty	Unit Price	Total
1124	50/50 POZ CEMENT MIX	119.00	11.5000	1368.50
1118B	PREMIUM GEL / BENTONITE	300.00	.2200	66.00
1111	SODIUM CHLORIDE (GRANULA	230.00	.3900	89.70
1110A	KOL SEAL (50# BAG)	595.00	.4600	273.70
4402	2 1/2" RUBBER PLUG	1.00	29.5000	29.50

	Description	Hours	Unit Price	Total
368	CEMENT PUMP	1.00	1085.00	1085.00
368	EQUIPMENT MILEAGE (ONE WAY)	30.00	4.20	126.00
368	CASING FOOTAGE	936.90	.00	.00
503	MIN. BULK DELIVERY	1.00	368.00	368.00
675	80 BBL VACUUM TRUCK (CEMENT)	2.00	90.00	180.00

Parts:	1827.40	Freight:	.00	Tax:	134.79 AR	3721.19
Labor:	.00	Misc:	.00	Total:	3721.19	
Sublt:	.00	Supplies:	.00	Change:	.00	

Signed _____ Date _____

CONSOLIDATED
Oil Well Services, LLC

265650

TICKET NUMBER 42565
LOCATION Ottawa
FOREMAN Alan Mader

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
1-24-14	3352	Donovan # I-12	NE28	14	22	JO

CUSTOMER: D & 2 Exploration
MAILING ADDRESS: 901 N Elm
CITY: St Elmo | STATE: IL | ZIP CODE: 62458

TRUCK #	DRIVER	TRUCK #	DRIVER
230	Ala Mad	Safety	Meet
368	Ari McD		
675	Kei Det		
503	Kei Car		

JOB TYPE long string | HOLE SIZE 5 5/8 | HOLE DEPTH 960 | CASING SIZE & WEIGHT 2 7/8
CASING DEPTH 936.90 | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT | SLURRY VOL | WATER gal/sk | CEMENT LEFT in CASING yes
DISPLACEMENT 5.4 | DISPLACEMENT PSI 800 | MIX PSI 200 | RATE 4 bpm

REMARKS: Held meeting. Established rate. Mixed & pumped 100# gel followed by 119 sk 50/50 cement plus 2% gel, 5% salt & 5# Kolseal per sack. Circulated cement. Flushed pump. Pumped plug to casing T.D. Well held 800 PSI for 30 min MIT. Set float closed valve.

TOS, Chad

Alan Mader

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT		UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	368		1080.00
5406	30	MILEAGE	368		126.00
5402	936.90	casing footage	368		—
5407	min	ton miles	503		368.00
5502C	2	80 vac	675		180.00
1124	119	50/50 cement			1368.50
1118B	300#	gel			66.00
1111	230#	Salt			89.70
1110A	595#	Kolseal			273.70
4402	1	2 1/2 plug			29.50
				SALES TAX	134.79
				ESTIMATED TOTAL	3721.19

completed

Ravin 3737

AUTHORIZTION Don Goodrich | 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.

Johnson County, KS
Well:Donovan I-12
Lease Owner:D Z

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

Commenced Spudding:
01/17/2014

WELL LOG

Thickness of Strata	Formation	Total Depth
7	soil/clay	7
11	sandstone	18
21	shale	39
2	lime	41
19	shale	60
5	lime	65
5	shale	70
15	lime	85
8	shale	93
8	lime	101
96	shale	110
18	lime	128
17	shale	145
21	lime	166
7	shale	173
57	lime	230
20	shale	250
9	lime	259
17	shale	276
8	lime	284
5	shale	289
9	lime	298
33	shale	331
1	lime	332
12	shale	344
24	lime	368
8	shale	376
24	lime	400
4	shale	404
5	lime	409
4	shale	413
6	lime	419
114	shale	533
7	sand	540
4	sandy shale	544
49	shale	593
11	lime	604
7	shale	611
6	lime	617
16	shale	633

Johnson County, KS
Well:Donovan I-12
Lease Owner:D Z

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

Commenced Spudding:
01/17/2014

3	lime	636
7	shale	643
6	lime	649
53	shale	702
7	sand	709
4	sandy shale	713
46	shale	759
8	brokensand	767
4	sandy shale	771
31	shale	802
5	sand	807
71	shale	878
1	sandy lime	879
3	broken sand	882
1	sand	883
1	sand	884
1	sand	885
5	broken sand	890
2	broken sand	892
6	sandy shale	898
62	shale	960-TD

Short Cuts

TANK CAPACITY

BBLS. (42 gal.) equals D^2x.14xh

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 - RPMxd over SPMxR

d - SPMxRxD over RPM

SPM - RPMXD over RxD

R - RPMXD over SPMxD

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

*** Need these to figure belt length**

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

746 WATTS equal 1 HP

Log Book

Well No. # 1-12

Farm Donovan

KS (State) Johnson (County)

28 (Section) 14 (Township) 22 (Range)

For D+Z Exploration (Well Owner)

Town Oilfield Services, Inc.

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

Driver Farm: Johnson County

KS State; Well No. # 1-12

Elevation 1047

Commenced Spuding 1-17 20 14

Finished Drilling 1-24 20 14

Driller's Name Chad Weaver

Driller's Name

Driller's Name

Tool Dresser's Name Jeff Jann

Tool Dresser's Name Cole Hilborn

Tool Dresser's Name Ryan Wand

Contractor's Name TOS

25 14 22

(Section) (Township) (Range)

Distance from S line, 4290 ft.

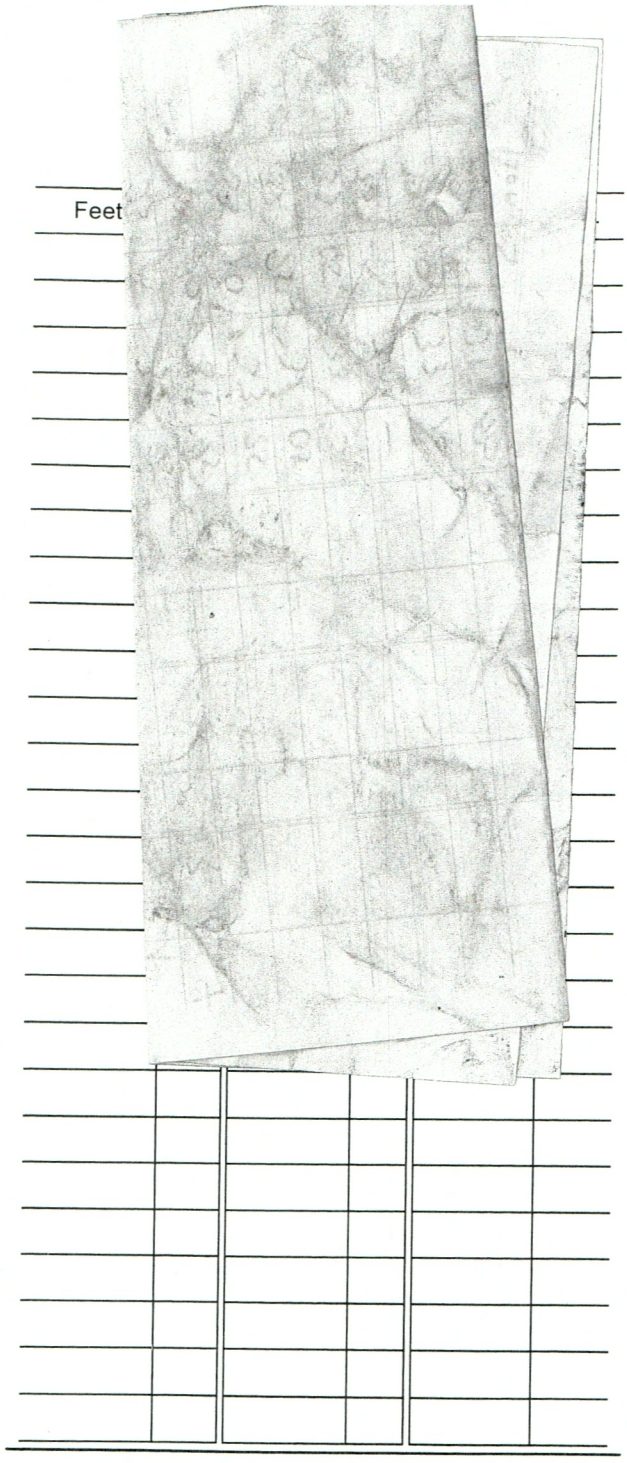
Distance from E line, 1625 ft.

3- sacks

CASING AND TUBING RECORD

10" Set		10" Pulled	
8" Set	20'	8" Pulled	
6¼" Set		6¼" Pulled	
4" Set		4" Pulled	
2" Set	936.90	2" Pulled	

960 TD



Thickness of Strata	Formation	Total Depth	Remarks
7	soil / clay	7	
11	sandstone	18	
21	shale	39	
2	Lime	41	
19	shale	60	
5	Lime	65	
5	shale	70	
15	Lime	85	
8	shale	93	
8	Lime	101	
9	shale	110	
15	Lime	125	
17	shale	145	
21	Lime	166	
7	shale	173	
57	Lime	230	
20	shale	250	
9	Lime	259	
17	shale	276	
8	Lime	284	
5	shale	289	
9	Lime	298	
33	shale	331	
1	Lime	332	
12	shale	344	
24	Lime	368	
8	shale	376	

376

Thickness of Strata	Formation	Total Depth	Remarks
24	Lime	400	
4	shale	404	
5	Lime	409	
4	shale	413	
6	Lime	419	Hanthon
114	shale	533	
7	sand	540	show, no oil
4	sand + shale	544	
49	shale	593	
11	Lime	604	
7	shale	611	
6	Lime	617	
16	shale	633	
3	Lime	636	
7	shale	643	
6	Lime	649	
53	shale	702	red bed - 656'
7	sand	709	
4	sandy shale	713	
46	shale	759	
8	Broken sand	767	very little odor + oil
4	sandy shale	771	
31	shale	802	
5	sand	807	show, no oil
71	shale	878	
1	sand + Lime	879	
3	Broken sand	882	odor, 25% oil, ok bleedings no oil

882

Thickness of Strata	Formation	Total Depth	Remarks
1	sand	883	20% - 30% o.i with some sand, lime
1	sand	884	50% o.i, good bleeding
1	sand	885	75% o.i
5	Broken sand	890	60% - 70% o.i
2	Broken sand	892	no o.i
6	sandy shale	898	
62	shale	960	TD