

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Northern Natural Gas Co.
Well Name	BUSHTON COMPRESSOR STATION CP1
Doc ID	1581211

Tops

Name	Top	Datum
Brown Clay	0	23
Soft Grey Shale	23	30
Sandstone	30	42
Red/Tan Shale	42	61
Grey Shale	61	68
Red/Tan Shale	68	75
Grey Shale with Sandstone Streaks	75	93
Red/Tan Shale	93	105
Grey Shale with Sandstone Streaks	105	122
Grey Shale	122	128
Sandstone	128	228
Grey Shale	228	234
Limestone	234	237
Grey Shale with Sandstone Streaks	237	250

WATER WELL RECORD Form WWC-5

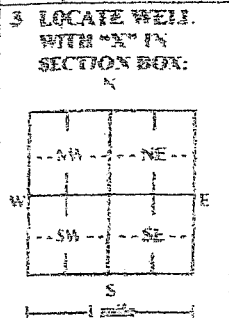
Original Record Correction Change in Well Log

Dr. Issue of Water Resources App. No.

Well ID

1 LOCATION OF WATER WELL: Fraction Section Number Township Number Range Number
 County: _____

2 WELL OWNER: Last Name: _____
 Business Address: Northern Natural Gas
 Address: _____
 City: _____ State: IL
 Street or Rural Address where well is located (if unknown, distance and direction from nearest town or settlement. If at owner's address check here:



4 DEPTH OF COMPLETED WELL: 250 ft.
 Depth(s) Groundwater Encountered: 1) _____ ft.
 2) _____ ft. 3) _____ ft. or 4) Dry Well
WELL'S STATIC WATER LEVEL: _____ ft.
 below land surface, measured on (mo-day-yr) _____
 above land surface, measured on (mo-day-yr) _____
 Pump test data: Well water was _____ ft. after _____ hours pumping _____ gpm
 Well water was _____ ft. after _____ hours pumping _____ gpm
 Estimated Yield _____ gpm
 Base Not Discussed _____ ft. to _____ ft. and _____ ft. to _____ ft.

5 Latitude: 38.517759 (decimal degrees)
Longitude: -98.355524 (decimal degrees)
 Horizontal Datum: WGS 84 NAD 83 NAD 27
 Source for Latitude/Longitude:
 GPS (with model): _____ (WAAS enabled? Yes No)
 Land Survey Topographic Map
 Online Mapper: _____
6 Elevation: _____ ft. Ground Level FOC
 Source: Land Survey GPS Topographic Map
 Other: _____

7 WELL WATER TO BE USED AS:

1. Domestic: <input type="checkbox"/> Household <input type="checkbox"/> Lawn & Garden <input type="checkbox"/> Livestock	2. Irrigation	3. <input type="checkbox"/> Feedlot	4. <input type="checkbox"/> Industrial	5. <input type="checkbox"/> Public Water Supply: well ID: _____	6. <input type="checkbox"/> Dewatering: how many wells? _____	7. <input type="checkbox"/> Aquifer Recharge: well ID: _____	8. <input type="checkbox"/> Monitoring: well ID: _____	9. Environmental Remediation: well ID: _____ <input type="checkbox"/> Air Sparge <input type="checkbox"/> Soil Vapor Extraction <input type="checkbox"/> Recovery <input type="checkbox"/> Injection	10. <input type="checkbox"/> Oil Field Water Supply: owner: _____	11. Test Water: well ID: _____ <input type="checkbox"/> Cased <input type="checkbox"/> Uncased <input type="checkbox"/> Geotextured	12. Geotexture: how many boxes? a) Closed Loop <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical b) Open Loop <input type="checkbox"/> Surface Discharge <input type="checkbox"/> Inj. of Water	13. <input type="checkbox"/> Other (specify): _____
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Was a chemical/bacteriological sample submitted to ADHS? Yes No If yes, date sample was submitted: _____
 Water well disinfected? Yes No

8 TYPE OF CASING USED: Steel PVC Other _____ CASING JOINTS: Glued Clamped Welded Threaded
 Casing diameter: 10 in. to 20 in. Diameter _____ in. to _____ in. Diameter _____ ft. to _____ ft.
 Casing height above land surface _____ in. Weight _____ lbs./ft. Wall thickness or gauge No. _____
TYPE OF SCREEN OR PERFORATION MATERIAL:
 Steel Stainless Steel Fiberglass PVC Other (Specify): _____
 Brass Galvanized Steel Concrete tile None used (open hole)
SCREEN OR PERFORATION OPENINGS ARE:
 Continuous Slot Mill Slot Gauge wrapped Torch Cut Drilled Holes Other (Specify): _____
 Louvered Slammer Key Punched Wire Wrapped Saw Cut None (Open Hole)
SCREEN-PERFORATED INTERVALS: From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.
GRAVEL PACK INTERVALS: From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.

9 GROUT MATERIAL: Mortar cement Cement grout Bentonite Other _____
 Grout Interval: From _____ ft. to _____ ft. From _____ ft. to _____ ft. From _____ ft. to _____ ft.
 Nearest source of possible contamination:
 Septic Tank Lateral Lines Pit Privy Livestock Pen In-stream Storage
 Sewer Lines Cess Pool Sewage Lagoon Fuel Storage Abandoned Water Well
 Watertight Sewer Lines Seepage Pit Feedyard Fertilizer Storage Old Well/Cas. Well
 Other (Specify): _____
 Direction from well? _____ Distance from well? _____ ft.

10 FROM	TO	LITHOLOGIC LOG	FEET	TO	LEAD LOG (cont.) or PLUGGING INTERVALS
0	23	Brown Clay	122	124	Grey Shale
23	30	Soft Grey Shale	124	128	Sandstone
30	42	Sandstone	128	234	Grey Shale
42	61	Red/Tan Shale	234	237	LS
61	68	Grey Shale	237	250	Grey Shale w/ ss streaks
68	75	Red/Tan Shale			
75	93	Grey Shale w/ ss streaks			
93	105	Red/Tan Shale			
105	122	Grey Shale w/ hard ss streaks			

11 CONTRACTOR'S OR LANDOWNER'S CERTIFICATION: This water well was constructed, reconstructed or plugged under my jurisdiction and was completed on (mo-day-yr) 5-27-11 and this record is true to the best of my knowledge and belief. Kansas Water Well Contractor's License No. 760. This Water Well Record was completed on (mo-day-yr) 6-3-11 under the business name of ADZ.
 Signature: _____

Mail 1 white copy along with a fee of \$3.00 for each completed well to: Kansas Department of Health and Environment, Bureau of Water, GWTS Section, 1001 SW Jackson St., Suite 420, Topeka, Kansas 66612-1367. Mail one to Water Well Owner and retain one for your records. Telephone: 785-296-5524