KOLAR Document ID: 1390050

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 # 30329
Name: Thomas Well Service, Inc.
Address 1: PO BOX 97
Address 2:
City: MCLOUTH State: KS Zip: 66054 + 0097
Contact Person: Bob Thomas
Phone: (913) 758-0175
CONTRACTOR: License # 33734
Name: Hat Drilling LLC
Wellsite Geologist: David Griffin, RG
Purchaser: N/A

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: Thomas Well Service, Inc.
Well Name: Taylor-Bird T-11
Original Comp. Date: 08/19/2011 Original Total Depth: 1408
☑ 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 #:

11/07/2017	11/12/2017	11/13/2017
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-103-21322-00-01
Spot Description: N2 SW NW NE
__ - SW - NW - NE Sec. 23 Twp. 8 S. R. 21 ☑ East ☐ West
4523 Feet from ☐ North / ☑ South Line of Section
2911 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: Leavenworth
Lease Name: TAYLOR-BIRD Well #: T-11
Field Name: Leavenworth
Producing Formation: N/A
Elevation: Ground: 1015 Kelly Bushing: 1020
Total Vertical Depth: 1842 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 40 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:** Karen Ritter **Date:** 02/16/2018

Operator Name: Thomas Well Service, Inc. Lease Name: TAYLOR-BIRD Well #: T-11

Sec. 23 Twp. 8 S. R. 21 ☑ East ☐ West County: Leavenworth

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 *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☐ Yes	☑ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

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

Name	Top	Datum
Mississippian	1418	-401
B-K Chert, Zone 1	1630	-613
B-K Chert, Zone 2	1692	-675
Kinderhook	1791	-774

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	12	8.625	23	40	Portland	12	N/A

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	-			
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Thomas Well Service, Inc.
Well Name	TAYLOR-BIRD T-11
Doc ID	1390050

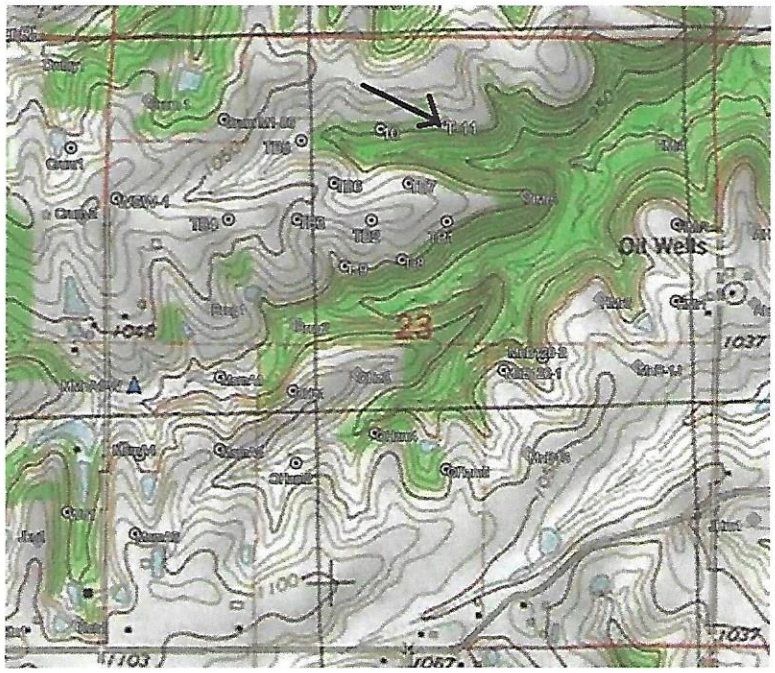
Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12	8.625	23	40	Portland	12	N/A

Geological Wellsite Report

By David Griffin, RG
Griffin Geological Resources, Inc.
November 21, 2017

Well Info: Taylor-Bird T-11, Deepening
N2 SW NW NE/4
4488' fsl, 2972' fwl
Section 23, T8S-R21E
Leavenworth County, KS
API No. 15-103-21322-00-01
GPS Coordinates
W-95.038376, N39.344238
Datum: GL, Elev. 1017'
RTD: 1842', GL
Status: Dry Hole,
Plugged and Abandoned



Operator: Thomas Well Service, Inc.
P.O. Box 97
McLouth, KS 66054
Operator License No.: 30329
Owner: Bob Thomas

Contractor: HAT Drilling, LLC
12371 KS Hwy 7
Mound City, Kansas, 66056
Contractor License No.: 33734

Objective: Evaluate the Mississippian and Hunton

Drilling Notes:

November 7, 2017, Mix Polymer-Gel based mud, Drill out top cement plugs
November 8, 2017, Reach OTD of 1408', now 1410' due to 21' soil pad. Drill from 1410' to 1558', $6\frac{3}{4}$" 5-Blade PDC Bit, Shut down overnight.
November 9, 2017, Drill from 1558' to 1838', Begin Bit Trip, Shut down overnight
November 10 thru November 12, 2017, Try to fish out lost kelly pin in hole, Trip in button bit, Drill 4' more. Junk not recovered, Logging not performed.
November 13, 2017, Abandon and plug hole.

Geological Supervision:

David Griffin, RG, provided wellsite supervision on November 8 and 9, 2017. Drilling was witnessed from 1410' to 1838'. Samples were microscopically examined from 1410' to 1838'. Samples contained much sluff and carryover.

Cement Co.: Consolidated Oil Well Service Co., Contractor License No.: 04996

Geological Datums:

Geologic Tops					
Thomas Well Service, Inc. *Taylor-Bird T-11* *N/2 SW NW NE/4* *Sec. 23-T8S-R21E*				*Triple "E" Drilling* *Taylor-Bird 10* *~NE SE NE NW/4* *Sec. 23-T8S-R21E*	
Geologic Zones of Interest	Sample Tops GL Elev. 1017'		STRC COMP	GRN Log GL Elev. 1011'	
	Depth	Subsea		Depth	Subsea
Base Kansas City	625			na	
Cherokee	na			na	
Coal Marker	~1237	-221	-3	1229	-218
Upper McLouth SS	~1286	-270	-1	1280	-269
Base SS	~1310	-294	-3	1301	-290
Lower McLouth SS	absent?			1345	-334
Burgess SS	absent			1388	-377
Top of Mississippian	1418	-401	-6	1406	-395
B-K Chert, Zone 1	1630	-613			
B-K Chert, Zone 2	1692	-675			
Kinderhook Shale	1791	-774			
Rotary Total Depth	1842	-826		1420	-409

Structural Comparisons:

Comparison of the top of the Top of Mississippian indicates that Taylor-Bird T-11 is 6' structurally low to Taylor-Bird 10, a producer lying 534' to the west.

Gas Detection, Logs, Cores, DST's:

Total gas detection was performed from 1410' to 1838', no wireline logs or cores were ran on this well.

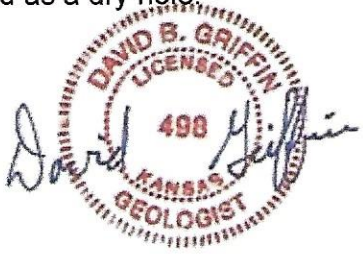
Descriptions of Oil Show Zones:

A very slight to trace show of tar was observed in the top 20' of the Mississippian LS, from ~1418' to 1440'. No other shows were observed.

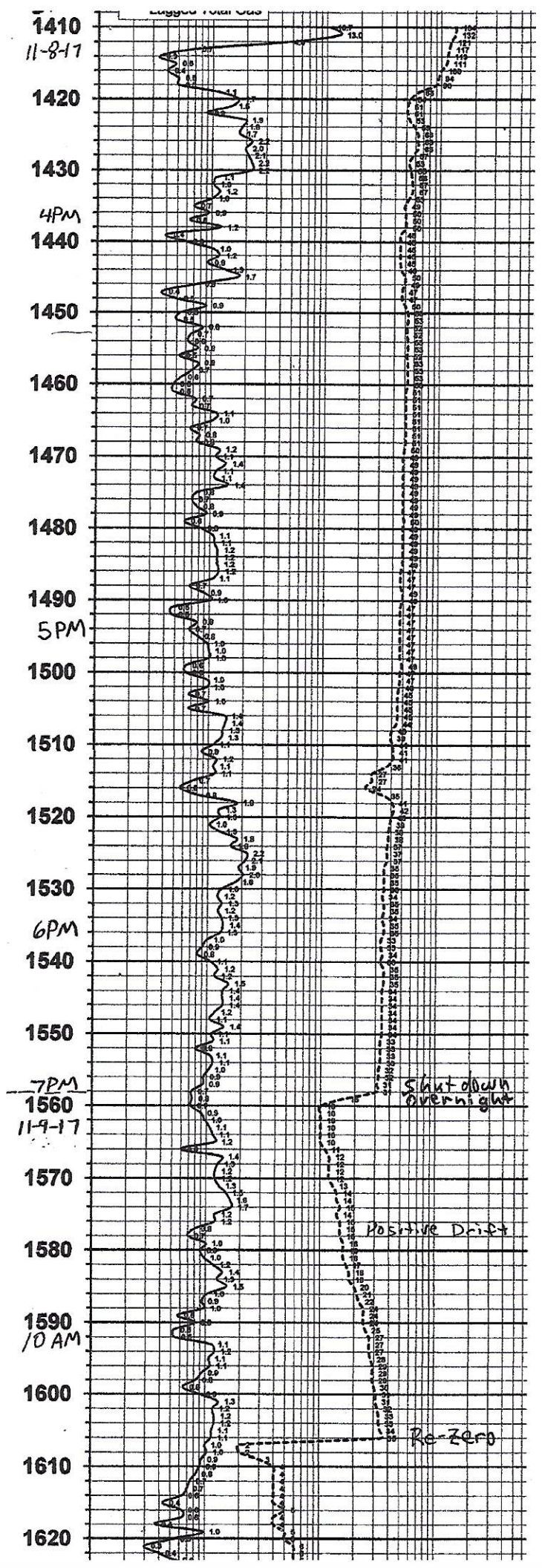
Summary:

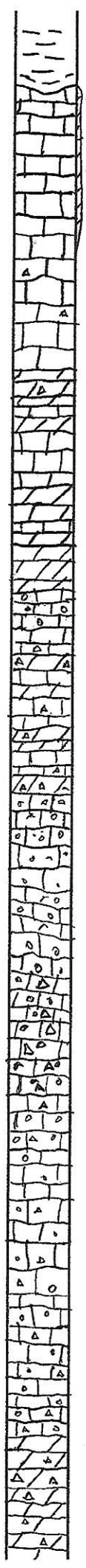
Taylor-Bird T-11 contained only a very slight to trace show of tar in the top 20' of the Mississippian and the Hunton was not reached due to junk in the hole, therefore, the well was not logged and subsequently plugged and abandoned as a dry hole.

Respectfully Submitted,



David Griffin, RG
Griffin Geological Resources, Inc.
Attachment: Sample Log





Drlg Contr: Nat Drilling, LLC

API No.: 15-103-21322-00-01

$6\frac{3}{4}$" PDC Bit

Sh, vlt gy to dk gy, min bk

CFS

VSli Tar, NFO — LS, ltgy, f-mxtln, pr-fr ϕ, v sli tar stain, No Free Oil, No Odor

Trace Tar — LS, AA, pr ϕ, Trace Tar stn, NFO

Miss Top 1418' (-401)

10' samples

Much carryover likely due to inadequate sample box

LS, ltgy, f-mxtln, pr ϕ, NS, No Odor <1%, cht, orange

Good Mud Gel & Polymer Based

LS, AA

Dol, ltgy, vf x ln, pr ix ϕ; cht, 1% vlt gy to clr, NS

LS & Dol, Intbd, NS

LS, ltgy, dns, NS

samples 30-50% carryover & sluff

Dol, grn-gy to ltgy, pr ϕ, NS

Dol, AA, minor LS; NS

Grnst, ltgy, f x ln, pr ϕ, NS

Dol, vlg, vf x ln, cht, 5% lo, o-wh

LS & Dol, interbeded, NS; cht, 3%

Grnstn, ltgy, f-mx ln, pr ϕ, NS

AA, NS

Grstn, AA; cht, 15, o-w, tn, speckled sharp, NS

Gnst, AA; cht, 20

CFS

Gnst, ltgy-tn, f-mx ln, pr-fr ϕ, NS cht, 3, o-wh; shrp

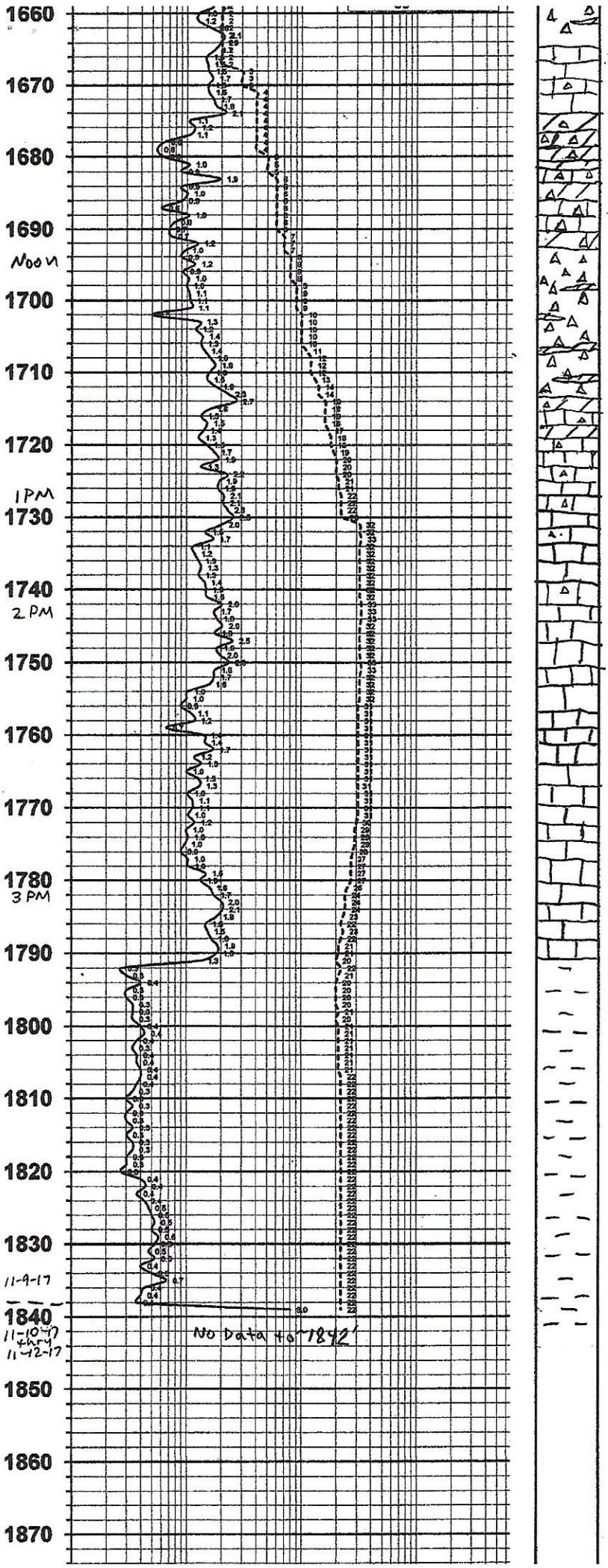
Grnst & LS, cht, 3-5%

AA

AA

Dol, tn, fr ix ϕ; cht, 20, wh, shp, NS

Dol, vlt gy to tan, f x ln, fr-gd ix ϕ



LS, ltgy-tn, f xln, prϕ, NS; Dol, 20, cht, 30, AA

cht, 40; sharp to Trip, frϕ, NS; Dol, 40
LS, 10, NS

cht, 60, vlg, wh, o-wh, sharp to triplt pm-frϕ, NS; Dol, 20, bn-gy to tan, frixϕ, NS

Dol & LS intbds, vlg to dk bn-gy & sily, vf-exln, prϕ; cht, 20, AA, NS

LS, Gy-Bn, dns; cht, 5, carryover?

LS, AA; cht, 2-3%, NS

LS, Gy-Bn, Dns, NS

LS, Gy-Bn, Dns, NS

Shale, med-gy to gy

Shale, AA, NS, No odor

- Try to fish kelly Pin, No Luck
- Not open-Hole Logged due to Risk of getting hung in hole
- Plugged & Abandoned 11-13-17

B-K Chert (Zone 2)
1692 (-675)

Work on table lost Kelly Pin in Hole?

Kinderhook Shale
1791 (-774)

Button Bit Trip at 1838'

Total Depth
~1842 (-825)