

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](mailto: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)</i> <i>(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	Brickley Enterprises, LLC
Well Name	PATTERSON 2
Doc ID	1512049

Tops

Name	Top	Datum
ADMIRE	682	+741
LANSING	1824	-401
KANSAS CITY	2141	-718
MISSISSIPPIAN	2768	-1345
KINDERHOOK	3082	-1659
VIOLA	3152	-1729
SIMPSON	3179	-1756
TD	3186	-1763



Elite Cementing & Acidizing of KS, LLC  
 PO Box 92  
 Eureka, KS 67045



Date	Invoice #
1/13/2020	4880

Bill To	
Brickley Enterprises PO Box 1118 El Dorado, KS 67042	
Customer ID#	1316

Job Date	1/12/2020
Lease Information	
Patterson #2	
County	Butler
Foreman	DG

Item	Description	Qty	Terms	Net 15
			Rate	Amount
C102	Cement Pump-Longstring	1	1,100.00	1,100.00
C107	Pump Truck Mileage (one way)	15	4.20	63.00
C201	Thick Set Cement	125	20.50	2,562.50T
C207	KolSeal	625	0.47	293.75T
C208	Pheno Seal	125	1.30	162.50T
C108A	Ton Mileage (min. charge)	1	365.00	365.00
C661	5 1/2" AFU Float Shoe	1	309.00	309.00T
C604	5 1/2" Cement Basket	1	236.00	236.00T
C504	5 1/2" Centralizer	6	50.00	300.00T
C421	5 1/2" Latch Down Plug	1	242.00	242.00T
C113	80 Bbl Vac Truck	3	90.00	270.00
C224	City Water	3,300	0.01	33.00T

*We appreciate your business!*

Phone #	Fax #	E-mail
620-583-5561	620-583-5524	rene@elitecementing.com

Send payment to:  
 Elite Cementing & Acidizing of KS, LLC  
 PO Box 92  
 Eureka, KS 67045

<b>Subtotal</b>	\$5,936.75
<b>Sales Tax (6.5%)</b>	\$269.02
<b>Total</b>	\$6,205.77
Payments/Credits	\$0.00
<b>Balance Due</b>	\$6,205.77



810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561



**Cement or Acid Field Report**  
 Ticket No. **4880**  
 Foreman David Gardner  
 Camp Eureka

API # 15-015-24139

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State	
1-12-20	1242	Patterson # 2	9	27S.	6E.	Butler	KS	
Customer <u>Brickley Enterprises</u>			Safety Meeting DG ZA AM SM		Unit #	Driver	Unit #	Driver
Mailing Address <u>P.O. Box 107</u>					<u>105</u>	<u>Zevi</u>		
City <u>El Dorado</u>					<u>112</u>	<u>Alan M.</u>		
State <u>KS</u>					<u>145</u>	<u>Steve M.</u>		
Zip Code <u>67042</u>								

Job Type Longstring Hole Depth 3186' K.B. Slurry Vol. 31 Bbl Tubing \_\_\_\_\_  
 Casing Depth 3194' = 8' Above KB Hole Size 7 7/8" Slurry Wt. 13.8# Drill Pipe \_\_\_\_\_  
 Casing Size & Wt. 5 1/2" 14 #45# Cement Left in Casing 0 Water Gal/SK 9.0 Other \_\_\_\_\_  
 Displacement 78 3/4 Bbl Displacement PSI 700 Bump Plug to 1200 BPM \_\_\_\_\_

Remarks: Safety Meeting. 5 1/2" 14" + 15" mixed used pipe set @ 3194' = 8' Above K.B. & 1' off bottom. (Tag bottom w/ Rig & pick up 1'). Circulate on bottom for 45 mins. Rig up to 5 1/2" casing. Break circulation w/ 15 Bbl fresh water. Mixed 100 SKS Thick Set Cement w/ 5# Kolseal, 1# Phenoseal @ 13.8#/gal, yield 1.75 = 31 Bbl slurry. Wash out pump & lines. Shut down. Release latch down plug. Displace plug to seat w/ 78 3/4 Bbl fresh water. Final pumping pressure of 700 PSI. Bump plug to 1200 PSI. Wait 2 mins. Release pressure. Float & plug held good. Good circulation @ all times while cementing. Job complete. Rig down.  
Note: 100 SKS = 800 ft. of fill up @ 30% Excess.  
Plug Rathole w/ 15 SKS & Mouse Hole w/ 10 SKS  
Centralizers on #1, 3, 5, 7, 9, 19 - Basket on top of #1

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C102	1	Pump Charge	1100.00	1100.00
C107	15	Mileage	4.20	63.00
C201	125 SKS	Thick Set Cement	20.50	2562.50
C207	625#	Kolseal 5#/SK	.47	293.75
C208	125#	Phenoseal 1#/SK	1.30	162.50
C108A	6.88 Tons	Ton Mileage - Bulk Truck	m/c	365.00
C6661	1	5 1/2" AFU Float Shoe	309.00	309.00
C604	1	5 1/2" Cement Basket	236.00	236.00
C504	6	5 1/2" x 7 7/8" Centralizers	50.00	300.00
C421	1	5 1/2" Latch Down Plug	242.00	242.00
C113	3 HRS	80 Bbl Vac Truck	90.00	270.00
C224	3300 Gals	City Water	10.00 / 1000	33.00
<u>Thank You</u>				
			Sub Total	5,936.75
			Sales Tax	269.02
			6.5%	

Authorization by Charlie Coulter Title Tool Pusher - Lighthouse Drlg. Total 6,205.77

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

Elite Cementing & Acidizing of KS, LLC  
 PO Box 92  
 Eureka, KS 67045



Date	Invoice #
1/7/2020	4877

Bill To	
Brickley Enterprises PO Box 1118 El Dorado, KS 67042	
Customer ID#	1316

Job Date	1/6/2020
Lease Information	
Patterson #2	
County	Butler
Foreman	DG

Item	Description	Qty	Terms	Net 15
			Rate	Amount
C101	Cement Pump-Surface	1	890.00	890.00
C107	Pump Truck Mileage (one way)	15	4.20	63.00
C200	Class A Cement-94# sack	125	15.75	1,968.75T
C205	Calcium Chloride	350	0.63	220.50T
C206	Gel Bentonite	235	0.21	49.35T
C108A	Ton Mileage (min. charge)	1	365.00	365.00

*We appreciate your business!*

Phone #	Fax #	E-mail
620-583-5561	620-583-5524	rene@elitecementing.com

Send payment to:  
 Elite Cementing & Acidizing of KS, LLC  
 PO Box 92  
 Eureka, KS 67045

<b>Subtotal</b>	\$3,556.60
<b>Sales Tax (6.5%)</b>	\$145.51
<b>Total</b>	\$3,702.11
Payments/Credits	\$0.00
<b>Balance Due</b>	\$3,702.11



810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561



**Cement or Acid Field Report**  
 Ticket No. **4877**  
 Foreman David Gardner  
 Camp Eureka

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
1-6-20	1316	Patterson #2	9	27 S.	6 E.	Butler	KS
Customer <u>Brickley Enterprises</u>			Unit #		Driver		Unit #
Mailing Address <u>P.O. Box 107</u>			105		Jason		
City <u>El Dorado</u>			115		Zevi		
State <u>KS</u>							
Zip Code <u>67042</u>							

Job Type Surface Hole Depth 221' K.B. Slurry Vol. 30 Bbl Tubing \_\_\_\_\_  
 Casing Depth 204' G.L. Hole Size 12 1/4" Slurry Wt. 15" Drill Pipe \_\_\_\_\_  
 Casing Size & Wt. 8 5/8" 24" Cement Left in Casing 15' +/- Water Gal/SK 6.5 Other \_\_\_\_\_  
 Displacement 12 3/4 Bbl Displacement PSI \_\_\_\_\_ Bump Plug to \_\_\_\_\_ BPM \_\_\_\_\_

Remarks: Safety Meeting. Rig up to 8 5/8" casing. Break circulation w/ 10 Bbl fresh water. Mixed 125 sks Class 'A' Cement w/ 3% Carbz, 2% Gel @ 15#/gal, yield 1.35 = 30 Bbl slurry. Displace w/ 12 3/4 Bbl fresh water. Shut down. Close casing in. Good circulation @ all times while cementing. Good cement returns to surface but no excess slurry to pit. Job complete. Rig down.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C101	1	Pump Charge	890.00	890.00
C107	15	Mileage	4.20	63.00
C200	125 sks	Class 'A' Cement	15.75	1968.75
C205	350#	Carbz 3%	.63	220.50
C206	235#	Gel 2%	.21	49.35
C108A	5.88 Tons	Ton Mileage - Bulk Truck	m/c	365.00
<u>Thank you</u>				
			Sub Total	3,556.60
			6.5% Sales Tax	145.51

Authorization by Charlie Coulter Title \_\_\_\_\_ Total 3,702.11

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.





# GAMMA RAY NEUTRON LOG

Comp. BRICKLEY ENTERPRISES, LLC.  
 Well PATTERSON NO.2  
 Field RENOLDS-SCHAFFER  
 Co. BUTLER  
 State KANSAS

Company	<b>BRICKLEY ENTERPRISES, LLC.</b>		
Well	<b>PATTERSON NO.2</b>		
Field	<b>RENOLDS-SCHAFFER</b>		
County	<b>BUTLER</b>	State	<b>KANSAS</b>
Location:	API # : 15-015-24139-00-00		Other Services
	2310' FSL & 330' FWL		PERFORATE
	SEC 9	TWP 27S	RGE 6E
Permanent Datum	GL	Elevation	1411'
Log Measured From	KB 12'	Above Perm. Datum	K.B. 1423'
Drilling Measured From	KELLY BUSHING		D.F. 1421'
			G.L. 1411'

Date of Service	1/27/2020
Run Number	ONE
Depth Driller or PBSD	3186'
Depth Logger	3175'
Bottom Log Interval	3174'
Top Log Interval	2500'
Open Hole Size	7.875"
Type Fluid	WATER
Fluid Level	FULL
Fluid Density	N/A
Max. Recorded Temperature	109 DEG. F.
Max. Wellhead Pressure	00 PSI
Wellhead Connection	N/A
Estimated Cement Top	N/A
Unit Number	P-106
Wireline Size	.288"
Location	HAYS, KANSAS
Recorded By	M. HISS
Witnessed By	JOHN BRICKLEY

	Size	W/Ft	Top	Bottom
Tubing Record				
Surface Casing	8.625"	24#	00'	216'
Production Casing	5.5"	15.5#	00'	TD
Liner Record				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

**N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.**  
**LEON KANSAS,**  
**NORTH 2 1/2, EAST INTO**

**THANK YOU FOR USING PIONEER ENERGY SERVICES!**  
 Your Pioneer Energy Services Crew  
 Engineer: M. HISS  
 Operator: J. BEGLER  
 Operator:  
 Operator:

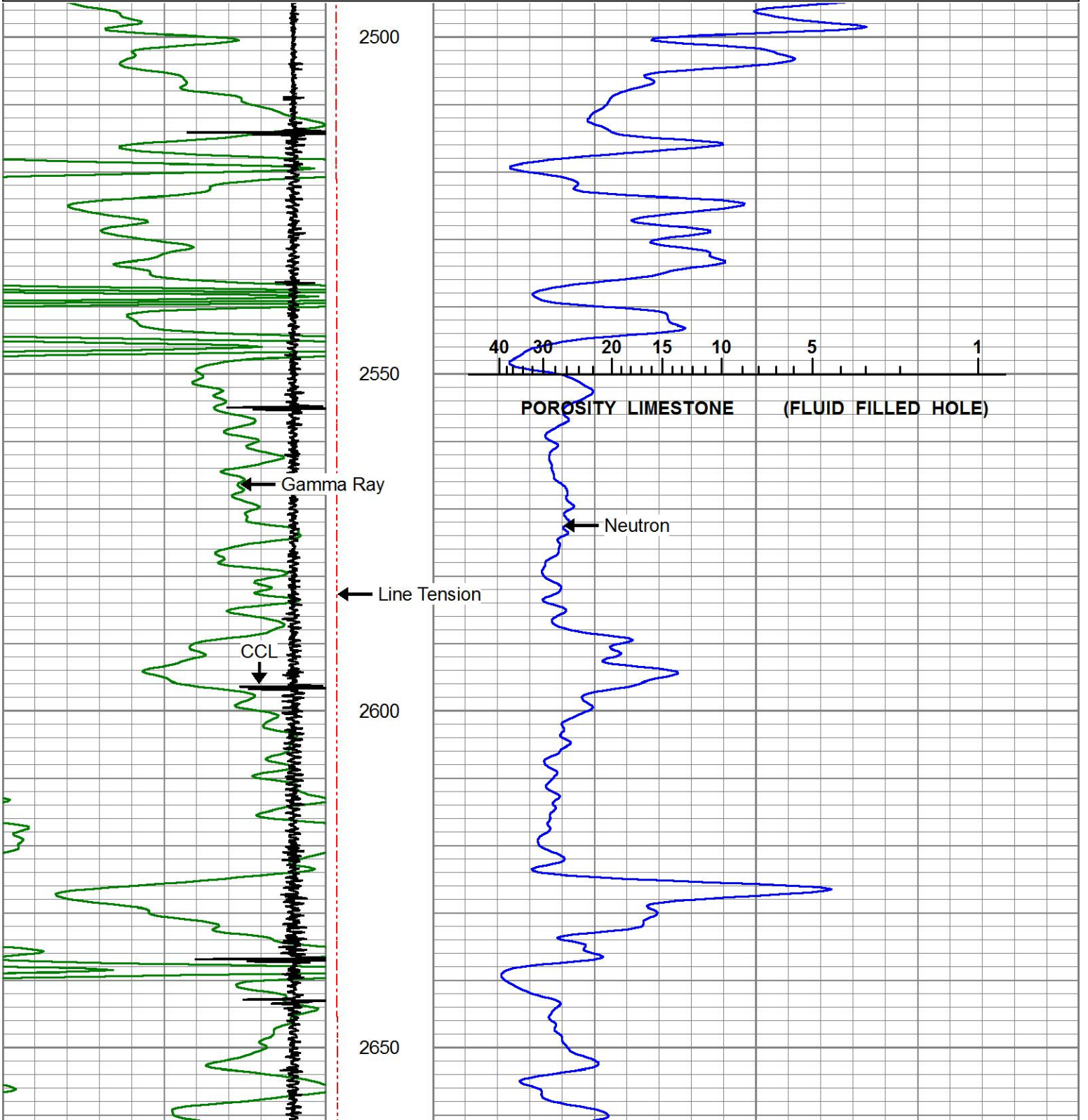
Tool Data - Services  
 Serial Number

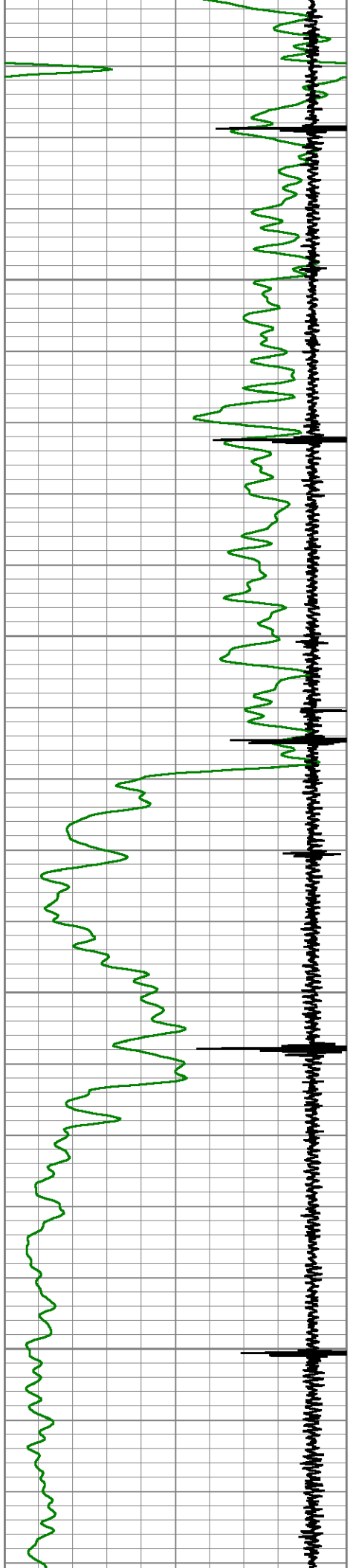
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
CCL	8.39					
GR	7.05		GR_CCL-2 3/4" Probe (111032)	4.54	2.75	50.00
			NEU-PRNEU (ProbeNEU1)	4.75	1.88	
NEU	1.08					

Dataset: brickley\_patterson\_#2\_grn.db: field/well/run1/pass2  
 Total length: 10.32 ft  
 Total weight: 52.00 lb  
 O.D.: 2.75 in

Database File brickley\_patterson\_#2\_grn.db  
 Dataset Pathname pass2  
 Presentation Format pinr\_gr-n-ccl  
 Dataset Creation Mon Jan 27 10:34:28 2020  
 Charted by Depth in Feet scaled 1:240

0	GR	150	LTEN	10	NEU (NAPI)	440
-9	CCL	1	0	(lb2000)		



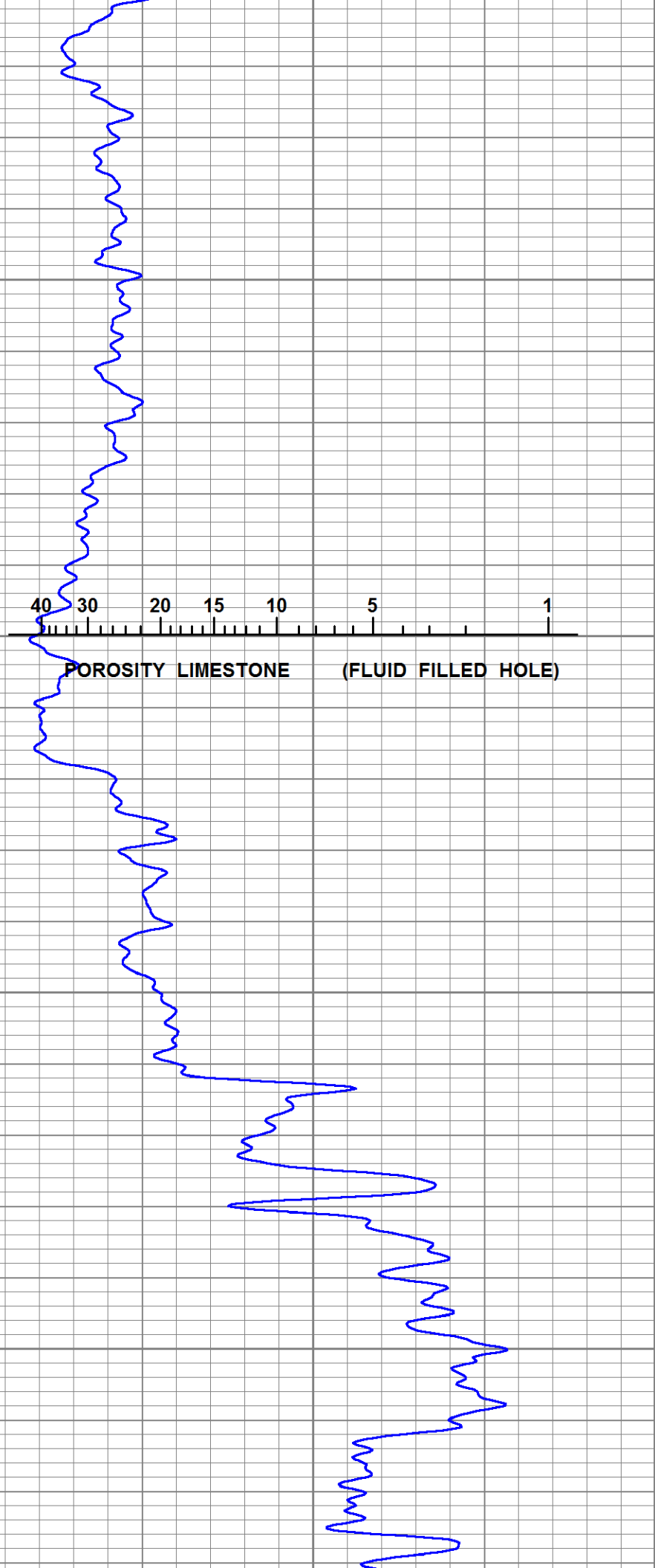


2700

2750

2800

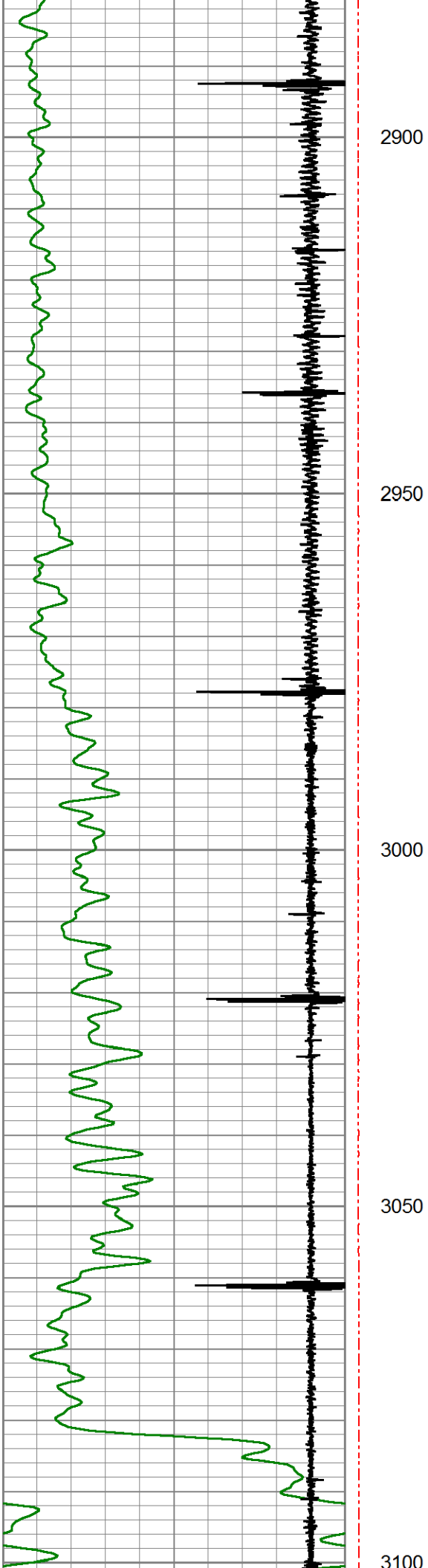
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POROSITY LIMESTONE (FLUID FILLED HOLE)





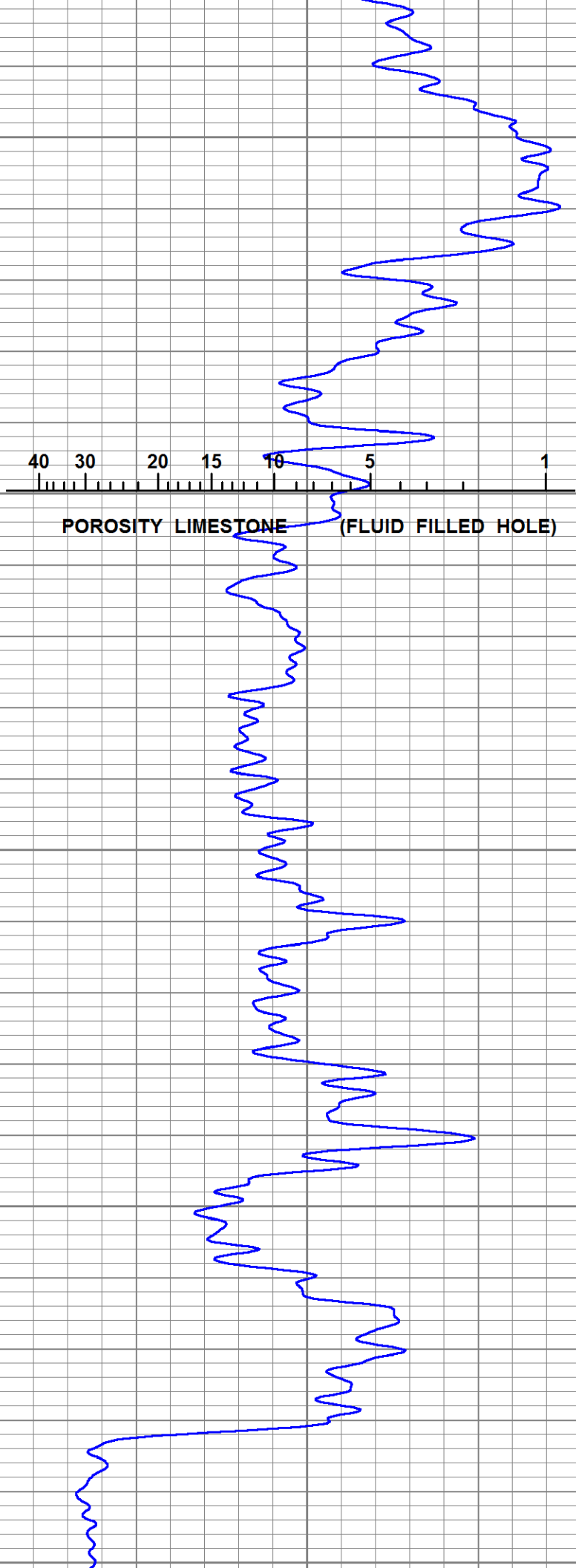
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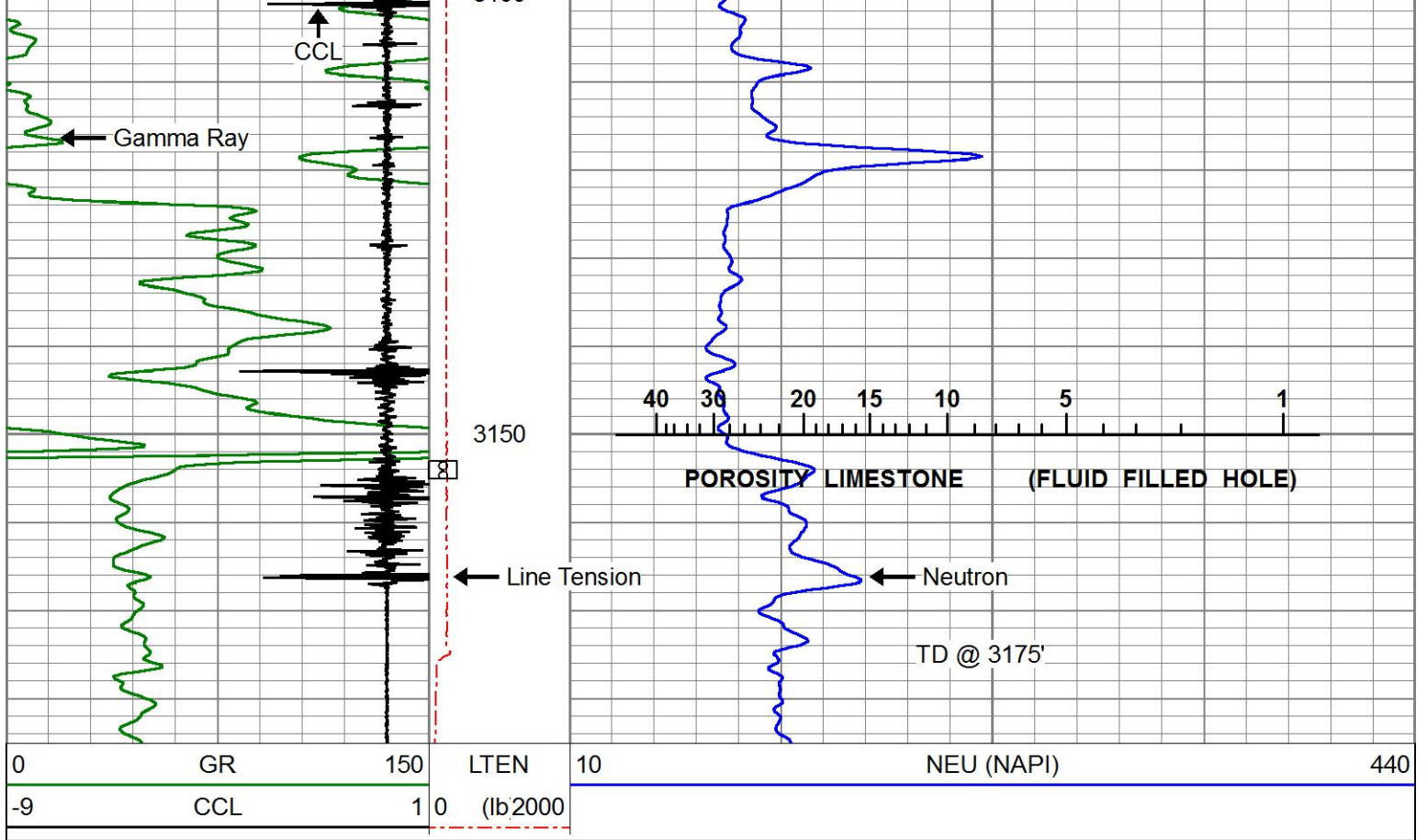
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3100



40 30 20 15 10 5 1

POROSITY LIMESTONE (FLUID FILLED HOLE)



 <p><b>PIONEER</b> Pioneer Energy Services</p>	Company	BRICKLEY ENTERPRISES, LLC.
	Well	PATTERSON NO.2
	Field	RENOLDS-SCHAFFER
	County	BUTLER
	State	KANSAS

# LEETH EVALUATION

**Company** BRICKLEY ENTERPRISES, LLC  
**Well** PATTERSON #2  
**Field** REYNOLD-SCHAFFER  
**County** BUTLER **State** KANSAS

**Location** SEC 9 TWP 27W RGE 6E  
**Spot** 2310'FSL 330'FWL

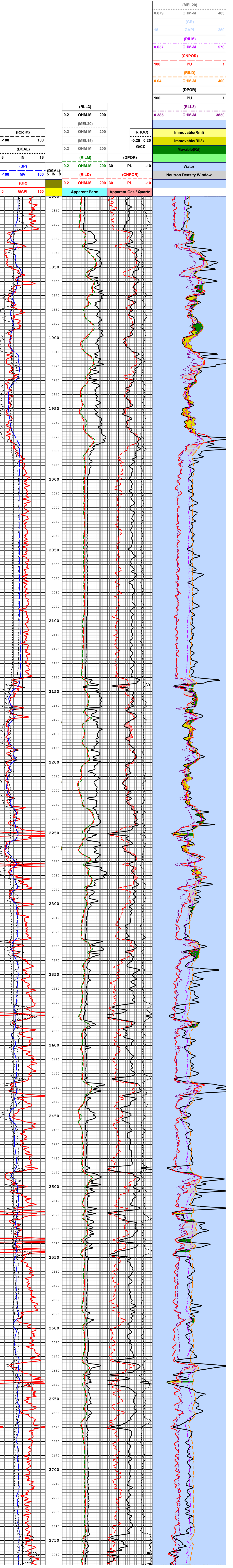
**API Well Number** 15-015-24139-0000 **Elevation**  
**Permanent Datum** GROUND LEVEL **Elevation** K.B.  
**Log Measured From** K.B. **A.G.L.** D.F.  
**Drilling Measured From** KELLY BUSHING G.L.

Description	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6
Date	01/13/20					
Top Parameter Depth	1800	2767	3151			
Bottom Parameter Depth	2767	3151	3181			
Bit Size	7.875					
BHT	129					
Rmf @ FT	1.5	0.5	0.5			
Rw @ FT	0.04	0.04	0.15			
Location	WICHITA					
Evaluation By	R. LEETH					
Recommended Perf / SPF						
Recommended Perf / SPF						

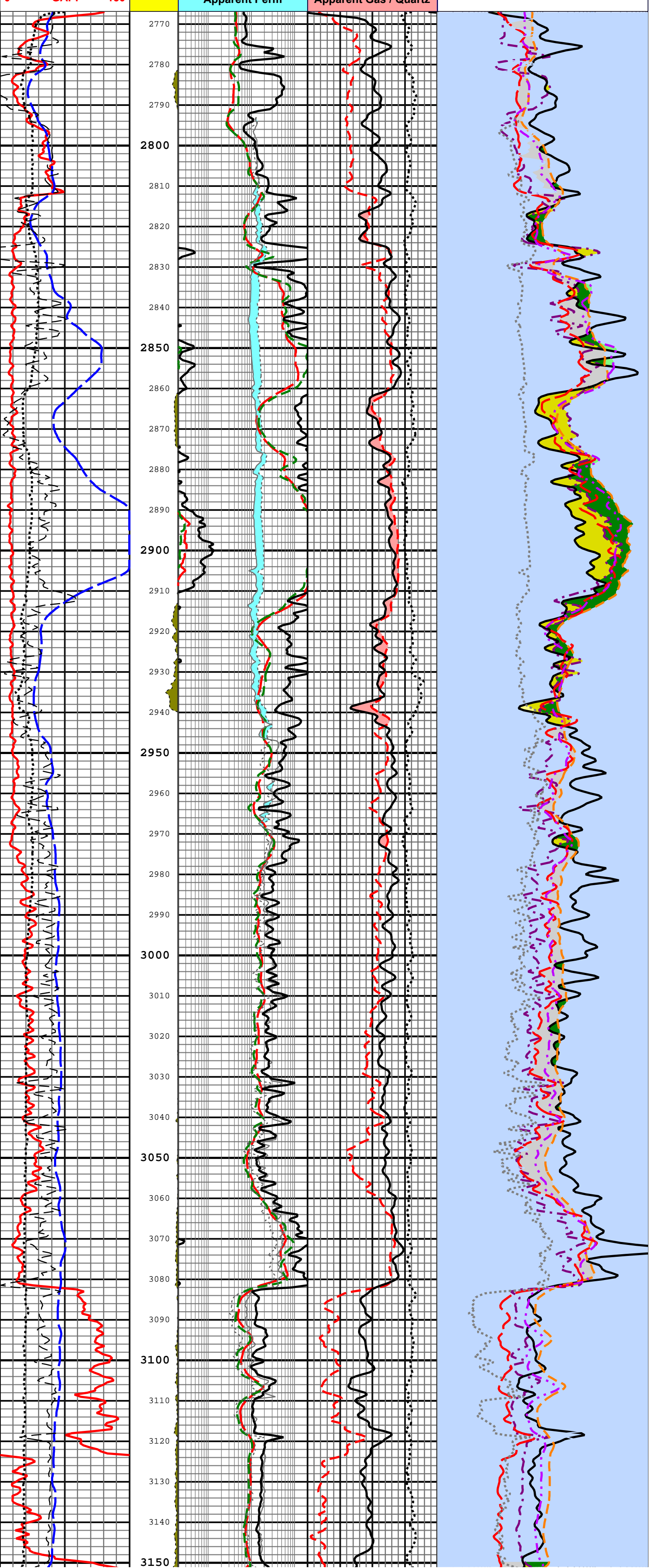
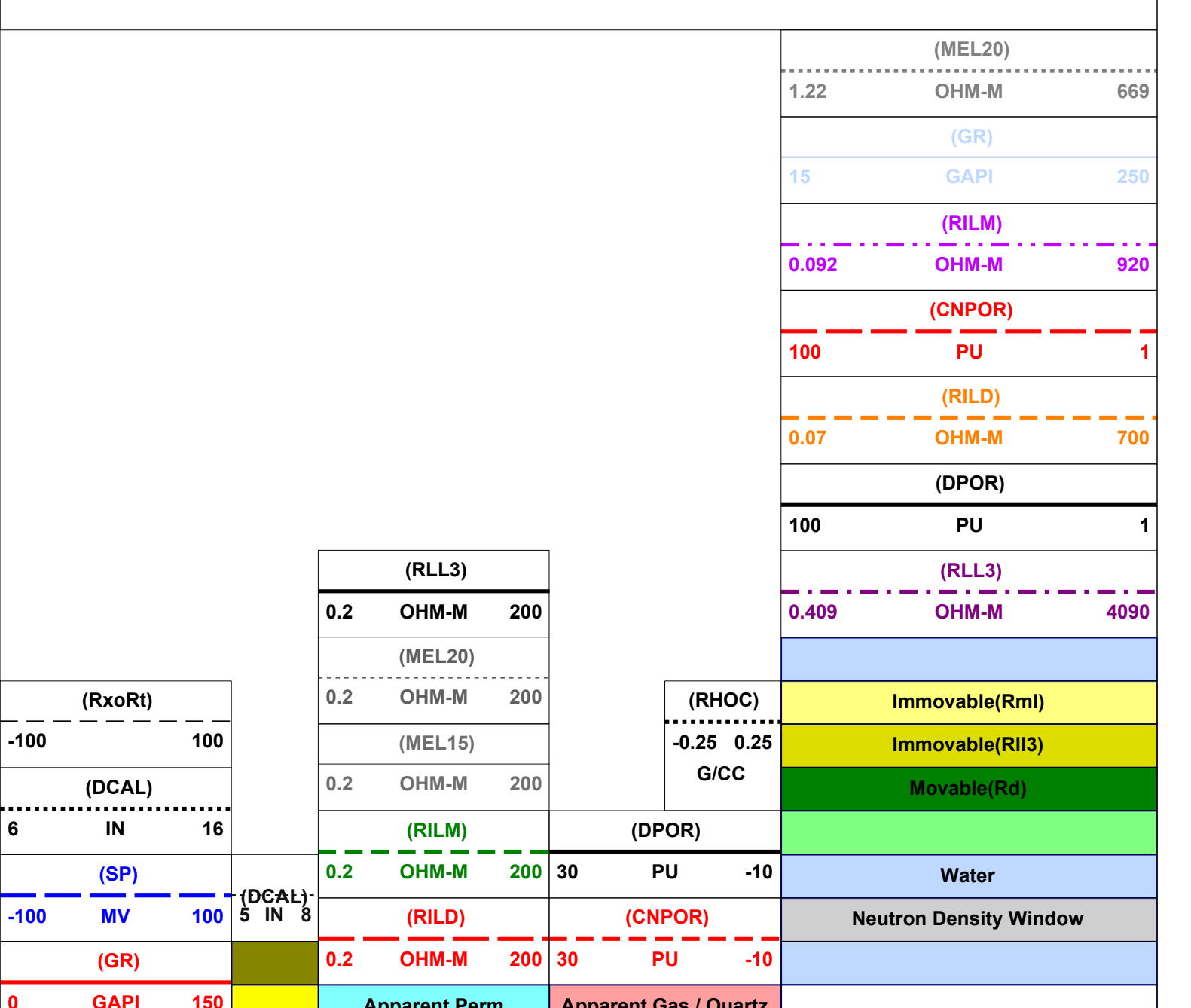
**We do not guarantee results, nor make warranties either expressly or implied. Under no circumstances shall we be liable damages relative to this evaluation.**

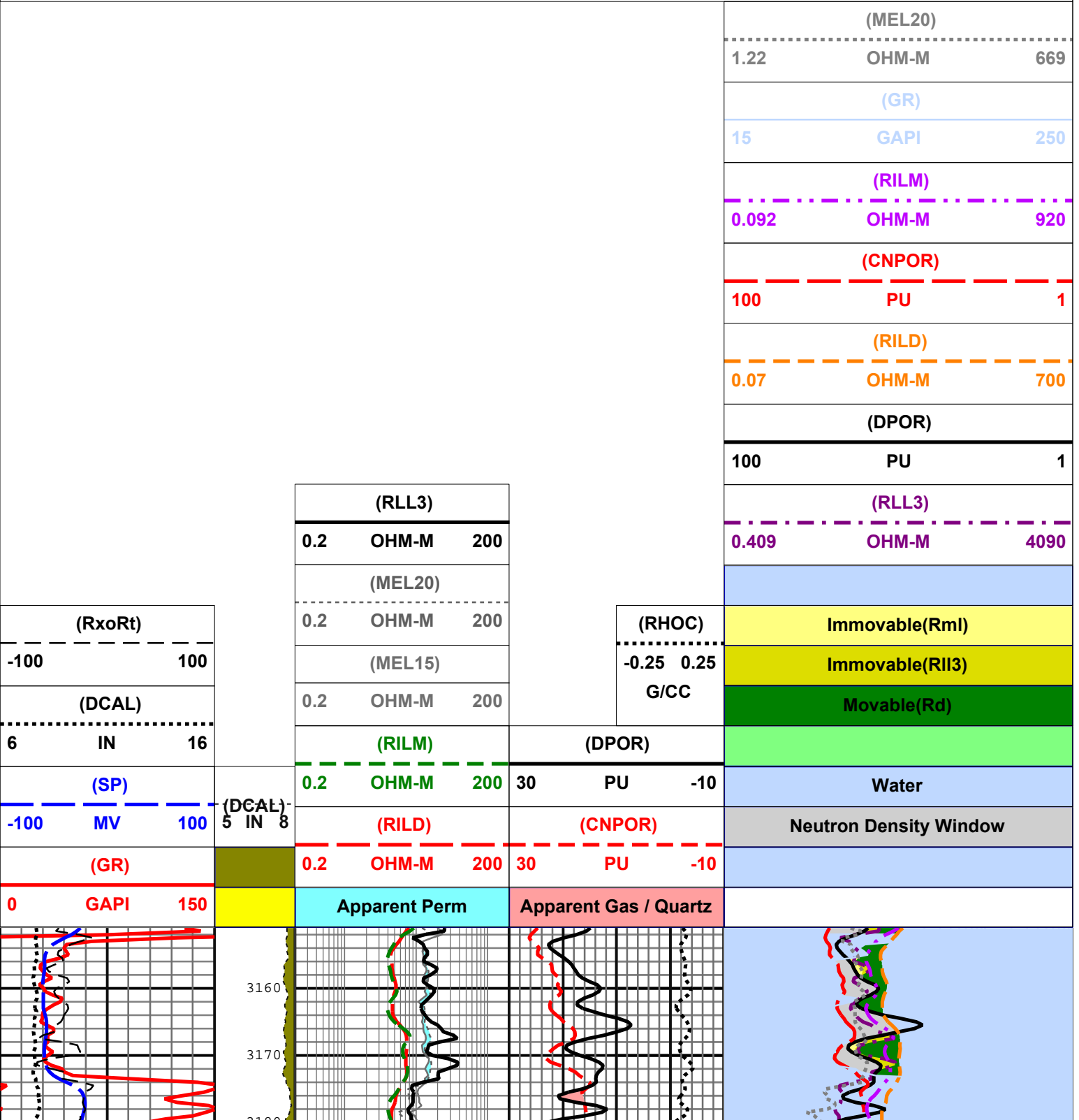
LOG DATA		EVALUATION DATA	
Name	Description	Name	Description
DEPTH.FT	depth	DEPTH.FT	depth
CNPOR.PU	Compensated Neutron porosity	BIT.IN	bit size
DCAL.IN	Compensated Density caliper	BW/b.VV	bulk volume water in matrix porosity system
DPOR.PU	Compensated Density porosity	BW/s.VV	bulk volume water in secondary porosity system
GR.API	gamma ray	BW/sgxo.VV	bulk volume water in the flushed zone system
MEL15.OHM-M	1.5 inch Microinverse resistivity	CALL.IN	caliper
MEL20.OHM-M	2 inch Micronormal resistivity	Dh.G/CC	hydrocarbon density
MELCAL.IN	Microlog caliper	DMAA.G/CC	apparent matrix density
PE	Photoelectric P fact	DSRGIP.MMCFG	delta sum recoverable gas in place
RHOC.G/CC	Compensated Density correction	DSROIP.BO	delta sum recoverable oil in place
RILD.OHM-M	Deep Induction resistivity	DSUMQg.MCFGPD	delta sum of productive gas
RILM.OHM-M	Medium Induction resistivity	DSUMQo.BOPD	delta sum of productive oil
RLI3.OHM-M	Short Guard resistivity	DSUMQw.BMPD	delta sum of productive water
RxoRt.	ratio of shallow resistivity to deep resistivity	GR.API	gamma ray
SP.MV	spontaneous potential	Khb.MD	permeability to hydrocarbon from matrix porosity system
SPOR.PU	Sonic porosity	Khs.MD	permeability to hydrocarbon from secondary porosity system
		ms.DEC	cementation exponent for secondary porosity system
		OOM.DEC	ooidic flag
		PSGC.VV	gas corrected sonic porosity
		PX.VV	crossplot porosity
		Rds.OHMM	calculated deep resistivity
		SP.MV	spontaneous potential
		SUMCg.MCFGPD	sum of productive gas
		SUMCo.BOPD	sum of productive oil
		SUMCw.BWPD	sum of productive water
		SUMRGIP.MMCFG	sum of recoverable gas in place
		SUMROIP.BO	sum of recoverable oil in place
		Swb.VV	water saturation in matrix porosity system
		Sws.VV	water saturation in secondary porosity system
		Sxo.VV	water saturation of the flushed zone
		VSH.VV	shale volume



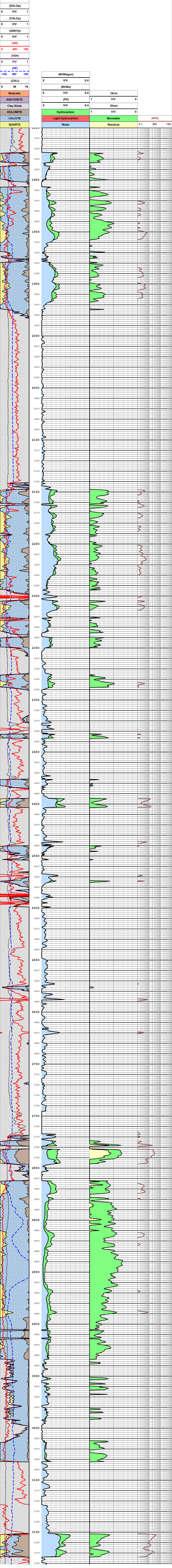














**William G. Hart,**  
*Arthur G. Galt*

COMPANY Brickley Enterprises, Inc  
 LEASE Patterson #2  
 FIELD Keyholds-Schaffer  
 LOCATION NEW NEW SW  
 SEC 9 TWP 27 S RGE 6 E  
 COUNTY Butler STATE KS  
 CONTRACTOR Lighthouse Drilling, L.L.C.

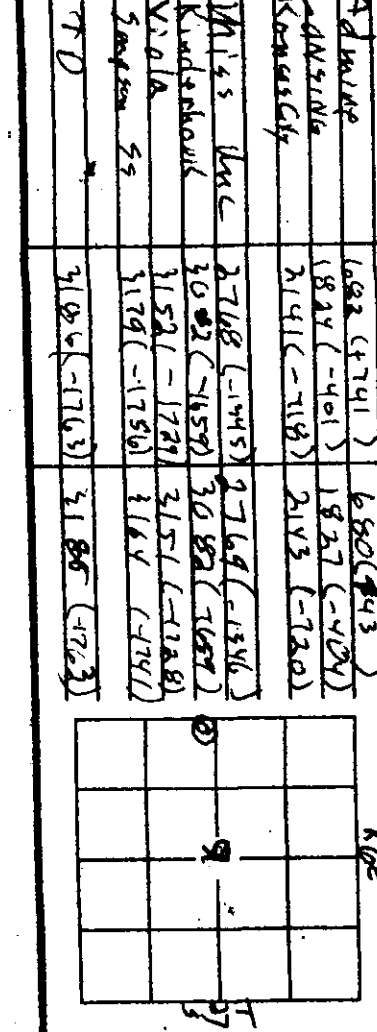
ELEVATIONS  
 KB 14 23  
 DF \_\_\_\_\_  
 GL 1411 (top)  
 Measurements Are All  
 From KB  
 CASING  
 SURFACE 221  
 PRODUCTION 2187

SPUD 1/6/2000 1/11/2020  
 RTD 3/86 LTD 3/86  
 MUD UP 1800 TYPE MUD Clayey

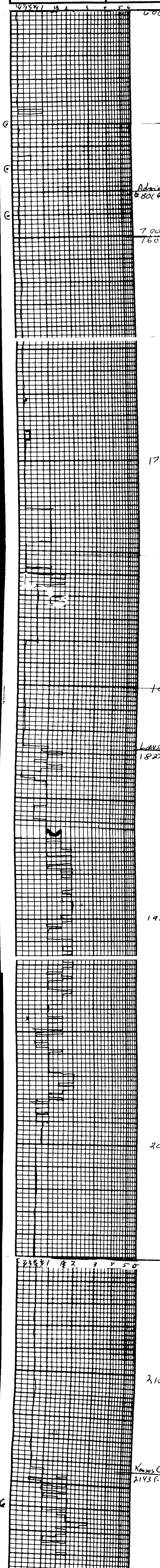
ELECTRICAL SURVEYS  
 D/C \_\_\_\_\_  
 C/P \_\_\_\_\_  
 M/C \_\_\_\_\_

SAMPLES SAVED FROM 650-690 TO 700  
 DRILLING TIME KEPT FROM 650-690 TO 700  
 SAMPLES EXAMINED FROM 650-690 TO 700  
 GEOLOGICAL SUPERVISION FROM 650-690 TO 700  
 GEOLOGIST ON WELL William G. Hart

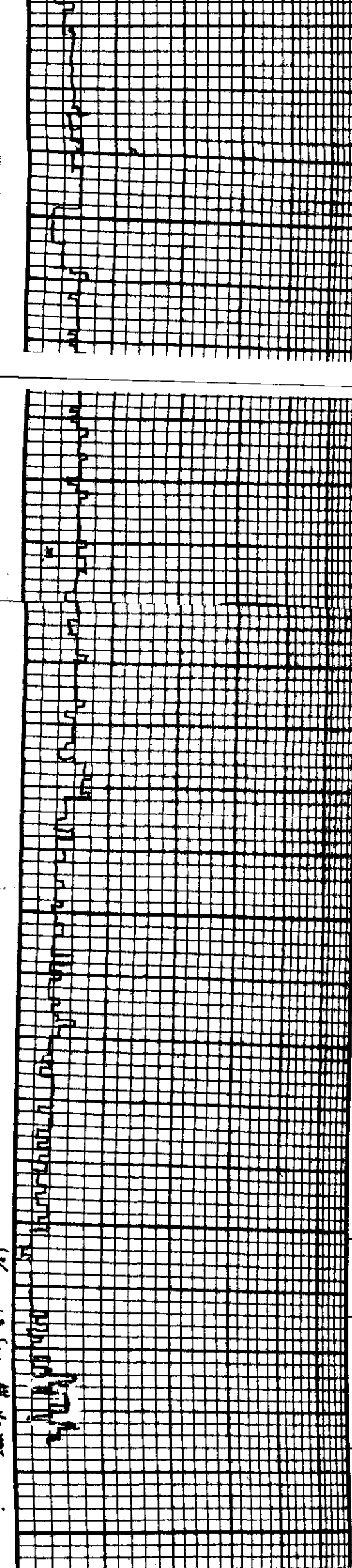
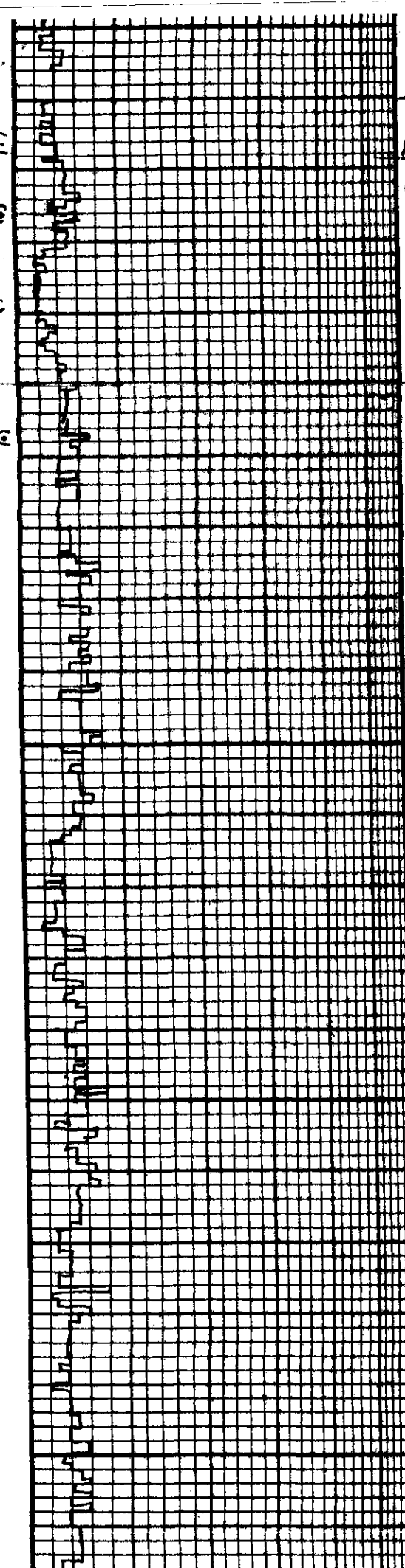
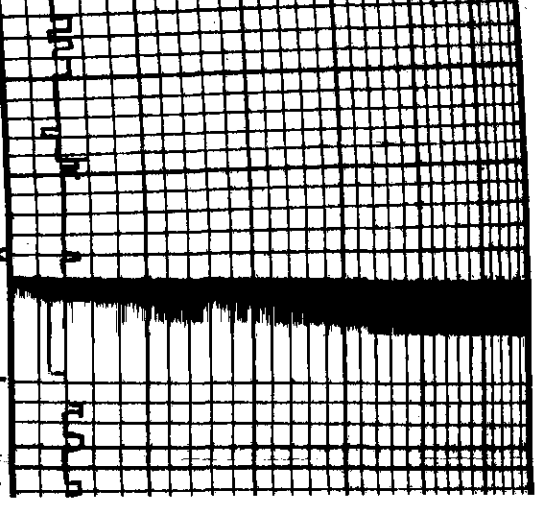
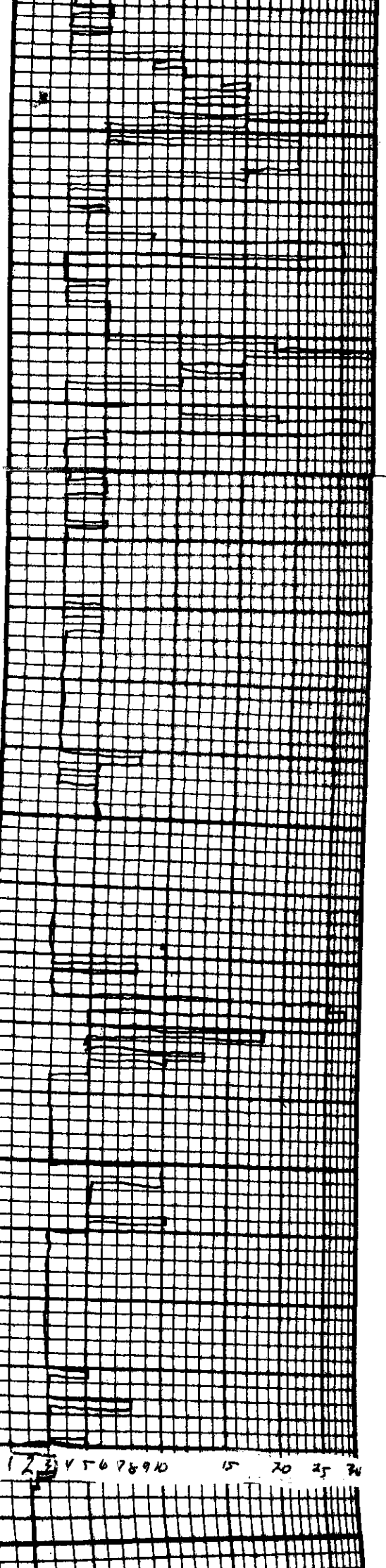
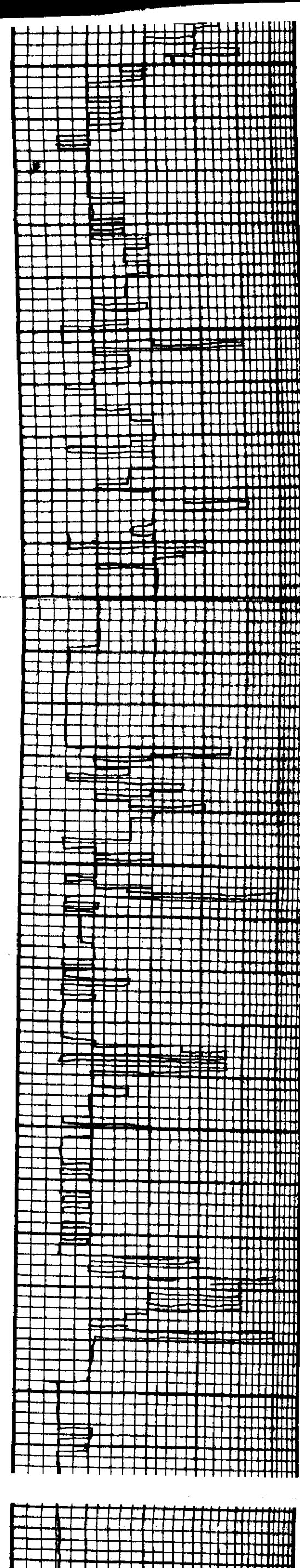
FORMATION TOPS	LOG	SAMPLES
Admire	680 (431)	680 (43)
Kawville	1827 (-40)	1827 (-40)
Kansas City	2143 (-118)	2143 (-120)
Miss. Blk	2718 (-145)	2718 (-136)
Kendalwood	3082 (-159)	3082 (-167)
Viola	3151 (-174)	3151 (-174)
Samson ss	3170 (-175)	3170 (-175)
TD	3196 (-176)	3186 (-176)



16	sh - gray - dk gray - blk	
15	ls - gray - sandstone	
14	ss - gray - v. f. grain	
13		
12		
11		
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		
0		
1600	ls - gray - fine to med	
1500	ss - gray - f. med	
1400	ls - gray - fine to med	
1300	ss - gray - f. med	
1200	ls - gray - fine to med	
1100	ss - gray - f. med	
1000	ls - gray - fine to med	
900	ss - gray - f. med	
800	ls - gray - fine to med	
700	ss - gray - f. med	
600	ls - gray - fine to med	
500	ss - gray - f. med	
400	ls - gray - fine to med	
300	ss - gray - f. med	
200	ls - gray - fine to med	
100	ss - gray - f. med	
0		







2200	ls. con - lt. gray, cherty	
	ls	
	ls	
	sh. black sh. gray	
	sh ls	
	sh. black ls	
	sh. gray ls	
	ls	
2300	sh. gray lt-dk	
4/KC	sh ls with gray matrix	
	sh	
	ls sh	
	sh	
2400	ls block ls gray - con fine	
	sh. gray ss v. sq. r. sh. w. will sorted sh. calc	
	ls con. with tocklam mat	
	sh. blk ls con sh. gray	
	ss in gray sh. con will sorted will add (U.S.)	

2500	ls gray sh. r. sh tan brn	
	sh. blk ls con ls gray brn tan dr. con.	
	sh. black ls dr. aq sh. blk sh. lt-dk, sh. r. sh.	
	sh. ss v. sq. r. sh.	
	ls con lt. gray ch. sh.	
2600	sh. gray, blk. sh. r. sh. ls blk.	
	ls tan dr. sh. con	
	coal block, white, r. sh.	
	sh. r. sh. blk. sh.	
	ls gray - tan dr. con	
	sh. gray, blk. sh. r. sh.	
	ls gray sh. r. sh.	
	change shale	Bit Trip.

2700	sh. r. sh. blk. con. r. sh. sh. r. sh. blk. sh.	
	ss v. sq. a. r. sh. calc.	
	ss, sh. blk. sh. r. sh.	

M.S.	sh. sh. r. sh. green	
2769 (136)	do. wh. - lt. gray NUP N3 ls. wh. mat NUP N3 B3	N3
	interbedded ls & sh. do. fr. sh. r. sh. NUP N3	FOS
2800	ls. mat. r. sh. r. sh. r. sh. ss. r. sh. r. sh. r. sh. do. r. sh. r. sh.	FOS
	ls. r. sh. r. sh. r. sh. r. sh. ls. wh. r. sh. r. sh. r. sh.	FOS
	sh. gray - blk.	P.O.S.
	ls. r. sh. r. sh. r. sh. r. sh. o. l. sh. r. sh.	P.O.S.
	sh. gray, blk, green	
	ls. wh. r. sh. r. sh. r. sh. r. sh. sh. r. sh.	
2900	ls. blk. - r. sh. r. sh. r. sh. r. sh.	
	ls. con. wh. r. sh. r. sh. r. sh. r. sh. sh. r. sh.	
	ls. r. sh. r. sh. r. sh. r. sh.	
	ls. blk. r. sh. r. sh. r. sh. r. sh.	
	ls. con - lt. gray r. sh. r. sh. r. sh. r. sh. sh. r. sh.	
3000	ls. wh. r. sh. r. sh. r. sh. r. sh. ls. wh. con. r. sh. r. sh. r. sh. r. sh.	
	ls. r. sh. r. sh. r. sh. r. sh.	

	ls. con.	
Kinshux	sh. gray blk.	
3082 (759)		
3100		
	sh. r. sh. blk.	
Viola	do. v. sh. r. sh. r. sh. r. sh. r. sh. o. l. sh. r. sh. r. sh. r. sh. r. sh.	P.O.S.
3151 (178)	ls. con. wh. r. sh. r. sh. r. sh. r. sh. ss. r. sh. r. sh. r. sh. r. sh. r. sh.	FOS
3164 (141)	ss. r. sh. r. sh. r. sh. r. sh. r. sh. ss. r. sh. r. sh. r. sh. r. sh. r. sh.	FOS
	ss. r. sh. r. sh. r. sh. r. sh. r. sh. ss. r. sh. r. sh. r. sh. r. sh. r. sh.	P.O.S.
	ss. r. sh. r. sh. r. sh. r. sh. r. sh. do. con. wh. r. sh. r. sh. r. sh. r. sh.	P.O.S.
3200		