



KANSAS CORPORATION COMMISSION 1056017
OIL & GAS CONSERVATION DIVISION

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 # 33168
Name: Woolsey Operating Company, LLC
Address 1: 125 N MARKET STE 1000
Address 2: _____
City: WICHITA State: KS Zip: 67202 + 1729
Contact Person: DEAN PATTISSON
Phone: (316) 267-4379
CONTRACTOR: License # 33793
Name: H2 Drilling LLC
Wellsite Geologist: SCOTT ALBERG
Purchaser: BLUESTEM GAS MKTG / PLAINS MKTG

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 #: _____

<u>09/14/2010</u>	<u>09/23/2010</u>	<u>10/20/2010</u>
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-007-23593-00-00
Spot Description: _____
S2 NE NE NE Sec. 16 Twp. 34 S. R. 11 East West
500 Feet from North / South Line of Section
330 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Barber
Lease Name: DIEL D Well #: 4
Field Name: SCHUPACH
Producing Formation: MISSISSIPPIAN
Elevation: Ground: 1331 Kelly Bushing: 1340
Total Depth: 5175 Plug Back Total Depth: 4920
Amount of Surface Pipe Set and Cemented at: 243 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: 36000 ppm Fluid volume: 1800 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: WOOLSEY OPERATING COMPANY LLC
Lease Name: SWARTZ License #: 33168
Quarter NE Sec. 1 Twp. 34 S. R. 11 East West
County: BARBER Permit #: D30567

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	
<input type="checkbox"/> Letter of Confidentiality Received	Date: _____
<input type="checkbox"/> Confidential Release Date: _____	
<input checked="" type="checkbox"/> Wireline Log Received	
<input checked="" type="checkbox"/> Geologist Report Received	
<input type="checkbox"/> UIC Distribution	
ALT <input checked="" type="checkbox"/> I <input type="checkbox"/> II <input type="checkbox"/> III	Approved by: <u>Deanna Gerrick</u> Date: <u>05/23/2011</u>



1056017

Operator Name: Woolsey Operating Company, LLC Lease Name: DIEL D Well #: 4
 Sec. 16 Twp. 34 S. R. 11 East West County: Barber

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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Compensated Density/Comp Neutron PE Dual Induction	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>CHASE</td> <td>1762</td> <td>-422</td> </tr> <tr> <td>DOUGLAS</td> <td>3684</td> <td>-2344</td> </tr> <tr> <td>MISSISSIPPIAN</td> <td>4551</td> <td>-3211</td> </tr> <tr> <td>SIMPSON</td> <td>4981</td> <td>-3641</td> </tr> </tbody> </table>	Name	Top	Datum	CHASE	1762	-422	DOUGLAS	3684	-2344	MISSISSIPPIAN	4551	-3211	SIMPSON	4981	-3641
Name	Top	Datum														
CHASE	1762	-422														
DOUGLAS	3684	-2344														
MISSISSIPPIAN	4551	-3211														
SIMPSON	4981	-3641														

CASING RECORD <input checked="" 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
Attached	Attached	Attached	Attached	Attached	Attached	Attached	Attached

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
4	4539-4542 & 4562-4588	3050 GAL 10% MIRA	4539-4610 OA
2	4550-4560 & 4592-4610	367,700 gal treated 2% KCl wtr, 133,500# 30/70 sd, 25,000# 16/30 sd & 12,000# 16/30 resin coated sd	4539-4610 OA

TUBING RECORD: Size: <u>2.875</u> Set At: <u>4678</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR. <u>11/03/2010</u>		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____
Estimated Production Per 24 Hours	Oil Bbls. <u>5</u> Gas Mcf <u>64</u> Water Bbls. <u>100</u>	Gas-Oil Ratio <u>12800</u> Gravity _____

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input checked="" 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 checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>4539-4610 OA</u>
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Form	ACO1 - Well Completion
Operator	Woolsey Operating Company, LLC
Well Name	DIEL D 4
Doc ID	1056017

Casing

CONDUC TOR	30	20	53	43	GROUT	4	(4yds not sx)
SURFACE	14.75	10.75	32.75	243	CLASS A	230	2% gel, 3% cc
PRODUC TION	7.875	5.5	15.5	4962	60/40 POZ	50	4% gel, 1/4 # Celoflake
PRODUC TION	7.875	5.5	15.5	4962	CLASS H	130	10% salt, 10% Gypseal, 6# Kolseal, 1/4# Celoflake, .8% fluid loss

ALLIED CEMENTING CO., LLC. 036828

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Great Bend KS

DATE <u>9-15-10</u>	SEC. <u>16</u>	TWP. <u>34S</u>	RANGE <u>11W</u>	CALLED OUT	ON LOCATION	JOB START <u>4:00 AM</u>	JOB FINISH <u>4:30 AM</u>
LEASE <u>Oil</u>	WELL# <u>4</u>	LOCATION <u>Medicine hedge south 281</u>			COUNTY <u>Osage</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			TO <u>Scott canyon RD 3 East south 10</u>				

CONTRACTOR H-2 Rig 3 OWNER Woolsey operating Co.

TYPE OF JOB <u>Surface</u>	CEMENT
HOLE SIZE <u>14 1/2</u> T.D. <u>245</u>	AMOUNT ORDERED <u>230 CY class A</u>
CASING SIZE <u>10 3/4</u> DEPTH <u>231.30</u>	<u>3% cc 2% Gel</u>
TUBING SIZE <u>8 1/2</u> DEPTH <u>18.50</u>	
DRILL PIPE DEPTH	
TOOL DEPTH	
PRES. MAX MINIMUM	COMMON <u>230</u> @ <u>15.75</u> <u>3,553.50</u>
MEAS. LINE SHOE JOINT	POZMIX @
CEMENT LEFT IN CSG. <u>20</u>	GEL <u>4</u> @ <u>20.80</u> <u>83.20</u>
PERFS.	CHLORIDE <u>8</u> @ <u>58.20</u> <u>466.00</u>
DISPLACEMENT <u>22.29 BOBLS</u>	ASC @

EQUIPMENT	@
PUMP TRUCK CEMENTER <u>Wayne</u>	@
# HELPER	@
BULK TRUCK	@
# <u>344</u> DRIVER <u>Bill</u>	@
BULK TRUCK	@
# DRIVER	@
HANDLING <u>230</u>	@ <u>2.90</u> <u>552.00</u>
MILEAGE <u>230 x 12 x 1.10</u>	<u>276</u> <u>312.00</u>
TOTAL	<u>4,966.30</u>

WELL FILE
 Regulatory Correspondence
 Drilling Comp Workovers
 Tests / Meters Operations

REMARKS:
Pipe on Bottom B-back circulation
with Rig mud shut down
Hook up to cement line mix 230
5% class A 3% cc 2% Gel
Displace 22.29 BOBLS fresh water
Cement did circulate shut in
with up Rig down

SERVICE	
DEPTH OF JOB <u>243.30</u>	
PUMP TRUCK CHARGE <u>1018.00</u>	
EXTRA FOOTAGE @	
MILEAGE <u>12</u> @ <u>7.00</u> <u>84.00</u>	
MANIFOLD @	
@	
@	
TOTAL	<u>1102.00</u>

CHARGE TO: Woolsey operating Co.
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
_____ @ _____	
TOTAL	_____

To Allied Cementing Co., LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Scott Alben
 SIGNATURE

SALES TAX (If Any) _____
 TOTAL CHARGES 4,966.30
 DISCOUNT _____ IF PAID IN 30 DAYS

ALLIED CEMENTING CO., LLC. 042212

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: *Medicine Lodge, KS*

DATE <i>09 24 10</i>	SEC <i>76</i>	TWP <i>34s</i>	RANGE <i>11w</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Died D</i>	WELL # <i>4</i>	LOCATION <i>201 & Rattlesnake Rd, 3/4 into Barber</i>		COUNTY <i>Barber</i>	STATE <i>KS</i>		
OLD OR NEW (Circle one)							

CONTRACTOR _____ OWNER *Woolsey Oper.*

TYPE OF JOB *Production Cases*

HOLE SIZE *7 7/8* T.D. *5175*

CASING SIZE *5K* DEPTH *4962*

TUBING SIZE ~~5K~~ DEPTH _____

DRILL PIPE DEPTH _____

TOOL DEPTH _____

PRES. MAX *1500* MINIMUM _____

MEAS. LINE SHOE JOINT *42.12*

CEMENT LEFT IN CSG. *42'*

PERFS. _____

DISPLACEMENT *118 Bbls 2% KCL Water*

CEMENT	AMOUNT ORDERED	<i>75 sk 60:40:4% + 14" Flossal & 130 sk class H + 10% salt + 10% gyp + 6" Colseal + 14" Fluorol + 8% FL-160 & 12 gal Capro.</i>
COMMON	<i>45 sk</i>	@ <i>5.45</i> <i>695.25</i>
POZMIX	<i>30 sk</i>	@ <i>8.00</i> <i>240.00</i>
GEL	<i>3 sk</i>	@ <i>20.80</i> <i>62.40</i>
CHLORIDE		@ _____
ASC		@ _____
Flossal	<i>51.25</i>	@ <i>2.50</i> <i>128.12</i>
Class H	<i>130 sk</i>	@ <i>16.75</i> <i>2177.50</i>
Gypseal	<i>13 sk</i>	@ <i>29.20</i> <i>379.60</i>
Salt	<i>14 sk</i>	@ <i>12.00</i> <i>168.00</i>
Colseal	<i>780</i>	@ <i>.89</i> <i>694.20</i>
FF 160	<i>97.76</i>	@ <i>13.30</i> <i>1300.20</i>
Capro	<i>12 gals</i>	@ <i>31.30</i> <i>375.60</i>
HANDLING	<i>24</i>	@ <i>2.40</i> <i>609.60</i>
MILEAGE	<i>254.10/15</i>	<i>381.00</i>
		TOTAL <i>7211.47</i>

EQUIPMENT

PUMP TRUCK CEMENTER *D. Felo*

360-263 HELPER *M. Thimesch*

BULK TRUCK

364 DRIVER *R. Gilley*

BULK TRUCK DRIVER _____

REGULATORY COMPLIANCE: _____

CONSPICUOUS WORKOVERS: _____

TESTS / METERS: _____

REMARKS: *Pipe on Bottom, Breaks Case, Pump 25 sk + Plug set holes, Mix 50 sk 5 cement, Mix 130 sk tail cement, 5 top pump, work pump & case, Release Plug, Start Disp. w/ 0.4% KCL Water, See Steady increase in P.T. Slow Rate Pump Plug at 118 Bbls total Disp., Release PST, Float Did Hold*

SERVICE

DEPTH OF JOB	<i>4962</i>	
PUMP TRUCK CHARGE	<i>2185.00</i>	
EXTRA FOOTAGE	@ _____	
MILEAGE	<i>15</i>	@ <i>7.00</i> <i>105.00</i>
MANIFOLD	<i>Head/initial</i>	@ _____
		@ _____
		@ _____
		TOTAL <i>2290.00</i>

CHARGE TO: *Woolsey Oper.*

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

1 - AFU Float Shoe	@ _____	<i>214.20</i>
1 - Latch down Plug / SST	@ _____	<i>163.80</i>
1 - tubularizers	@ <i>40.60</i>	<i>406.60</i>
5 - Recip. Scratchers	@ <i>23.94</i>	<i>359.10</i>
		TOTAL <i>1183.70</i>

To Allied Cementing Co., LLC.
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SALES TAX (If Any) _____

TOTAL CHARGES ~~_____~~

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME *Scott Alberg*

SIGNATURE *[Signature]*



Woolsey Operating Company, LLC

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Diel #D 4
Location: S2 NE NE NE
License Number: API: 15-007-23593-00-00
Spud Date: September 14, 2010
Surface Coordinates: 500' FNL, 330' FEL Section 16-Twp 34 South - Rge 11 West
Field Schupach
Bottom Hole Vertical Hole
Coordinates:
Ground Elevation (ft): 1331' K.B. Elevation (ft): 1340'
Logged Interval (ft): 2600 To: 5175 Total Depth (ft): 5175
Formation: McLish Sand
Type of Drilling Fluid: Chemical Mud, Displace at 3400'

Region: Barber County, Kansas
Drilling Completed: September 24, 2010
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Woolsey Operating Company, LLC
Address: 125 N. Market, Suite 1000
Wichita, KS 67202

GEOLOGIST

Name: W. Scott Alberg
Company: Alberg Petroleum, LLC
Address: 609 Meadowlark Lane
Pratt, Kansas 67124

FORMATION TOPS

	SAMPLE TOPS	LOG TOPS
HUSHPUCKNEY SHALE	4313(-2973)	4320(-2980)
B/KC	4365(-3025)	4370(-3030)
PAWNEE	4457(-3117)	4462(-3122)
CHEROKEE GROUP	4506(-3166)	4514(-3174)
CHEROKEE SAND	4533(-3193)	4539(-3199)
MISSISSIPPIAN	4542(-3202)	4550(-3210)
COWLEY C2	4582(-3242)	4589(-3249)
COMPTON LIMESTONE	4743(-3403)	4744(-3404)
KINDERHOOK SHALE	4753(-3413)	4756(-3416)
WOODFORD SHALE	4835(-3495)	4840(-3500)
MAQUOKETA	4863(-3523)	4870(-3530)
VIOLA	4886(-3546)	4892(-3552)
SIMPSON GROUP	4981(-3641)	4983(-3643)
SIMPSON WILCOX	5006(-3666)	5006(-3666)
MCLISH SHALE	5049(-3709)	5053(-3713)
MCLISH SAND	5128(-3788)	5133(-3793)
RTD	5175(-3835)	
LTD		5182(-3842)

COMMENTS

Surface Casing: Set 6 joints 10 3/4" at 243' (tally 231') with 230 sxs Class A, 2% gel, 3% cc, plug down at 4:45 am on September 15, 2010. Cement did Circulate.

Production Casing: 5 1/2" Casing Ran, set at 4962' w/ 50 sks 60/40 poz, 130 sks Class H. 25 sks 60/40 poz in Rathole.

Deviation Surveys: 245-3/4, 742 1/2, 1253 1/4, 1759 1/4, 2268 1, 2588 3/4, 30923/4, 3600 1, 4045 3/4, 4600 3/4, 5175 1.

Pipe Strap @ 4045', Strap 4034.98 - 4033.46 (Board) = Strap long 1.52', no correction.

Contractor Bit Record: 1- 14 3/4" out at 245'

2- 7 7/8" PDC Smith out at 4045'

3 - 7 7/8" Smith F 27 out at 5175'

Gas Detector: GeoDynamics Well Logging, Unit 16

Mud System: Mud Co, Brad Bortz, Jason Witting, Engineers

DSTs: One DST, See DST Remarks

DSTs

DST #1 4475 to 4600' Mississippian

Times 30-60-60-120

SB both openings, No GTS

IHP 2347 FHP 2262

IFP 46-88 FFP 66-132

ISIP 1302 FSIP 1400

Recovery: 77' DM, 63' DM w/ few oil specks.

CREWS

H2 Drilling Rig #3

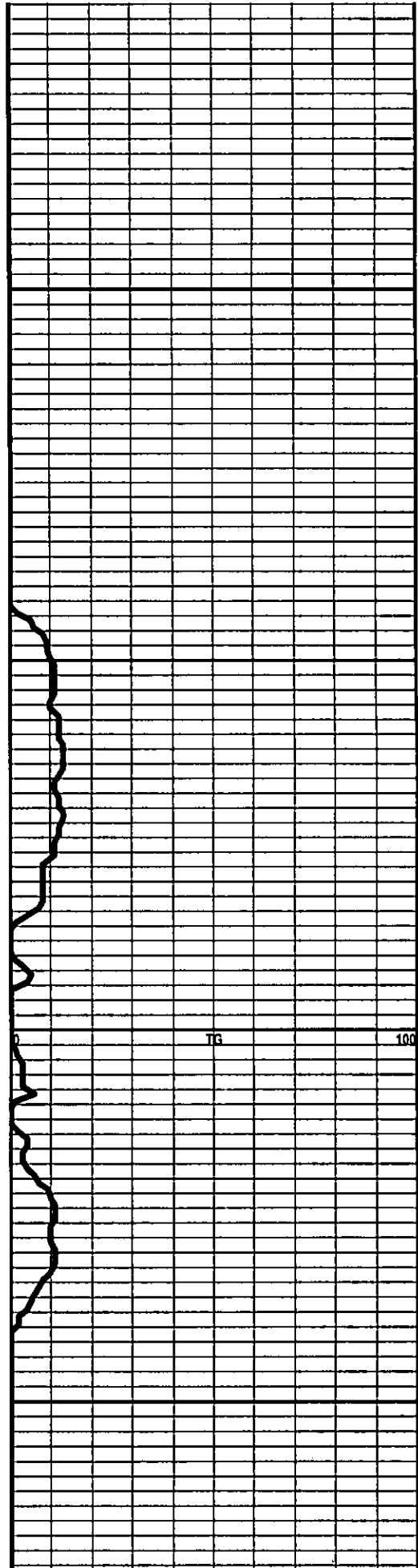
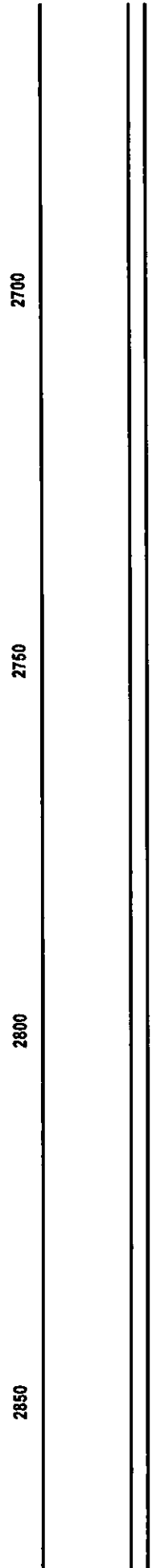
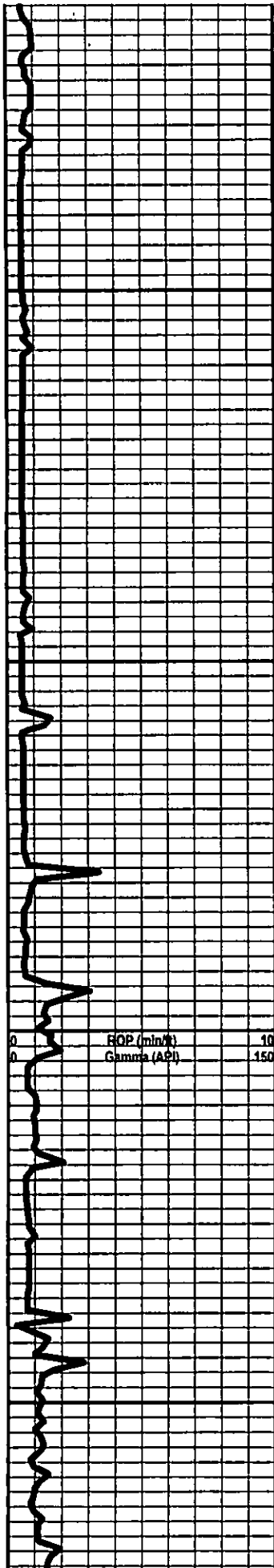
Tool Pusher - James Schultz

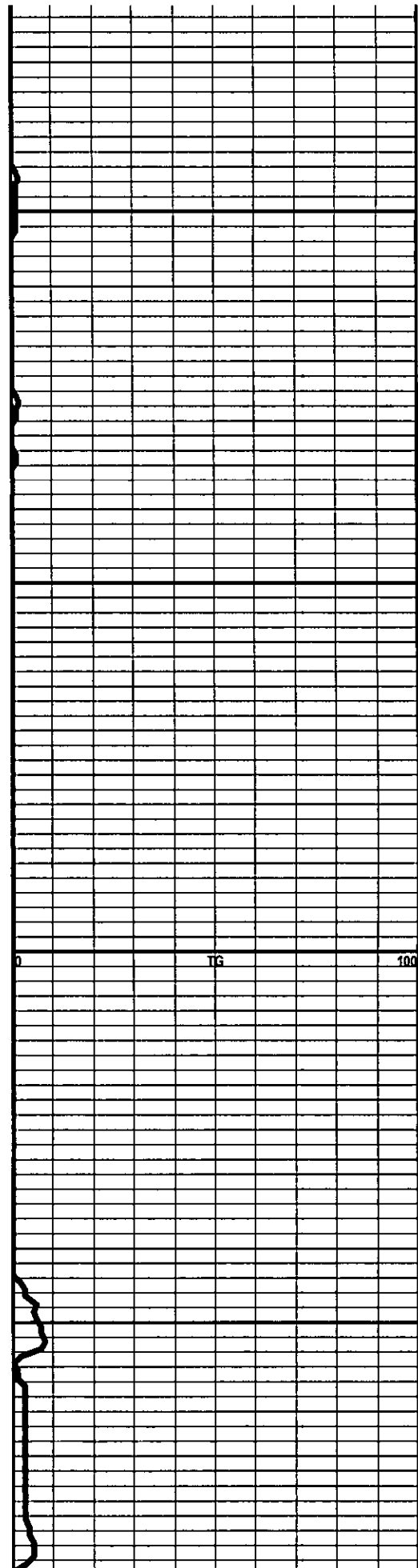
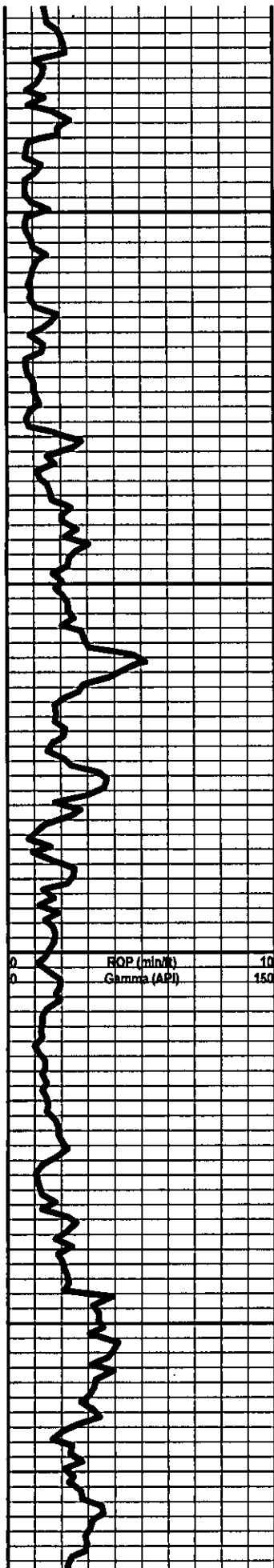
Drillers - Jose Ortiz

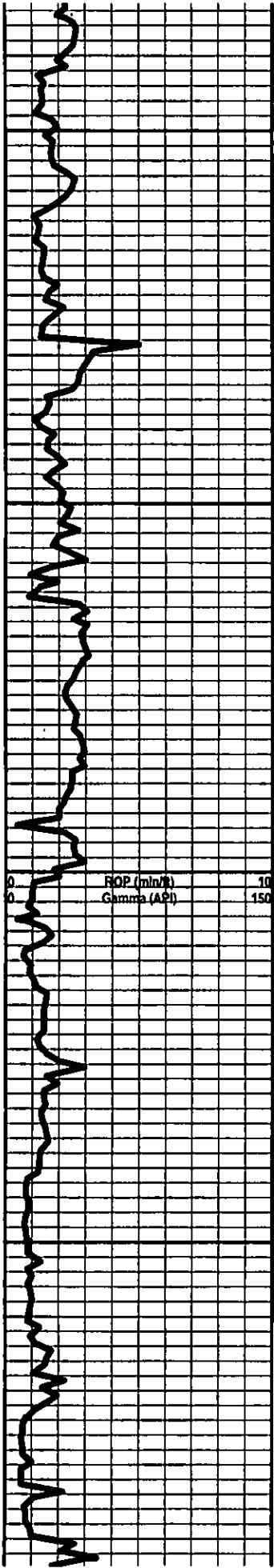
Guillermo Alarcon

Randon Smith

Jose Fabla







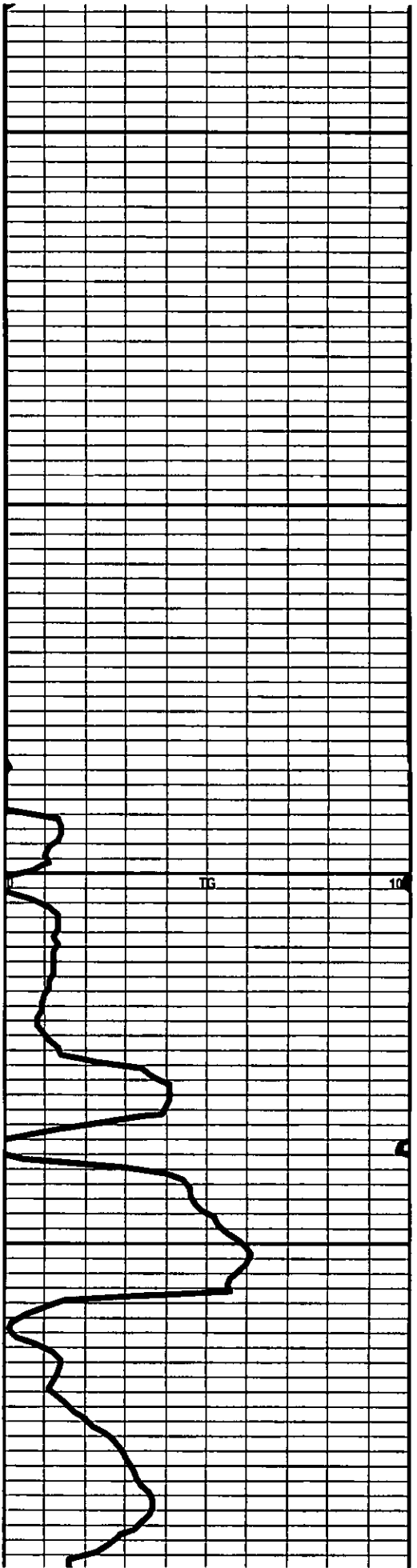
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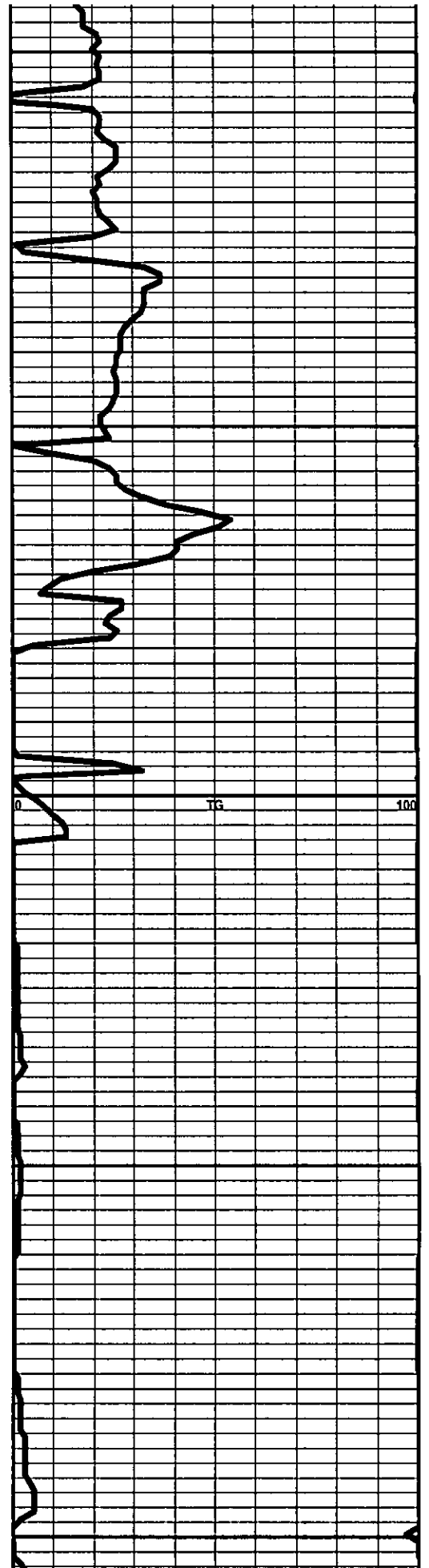
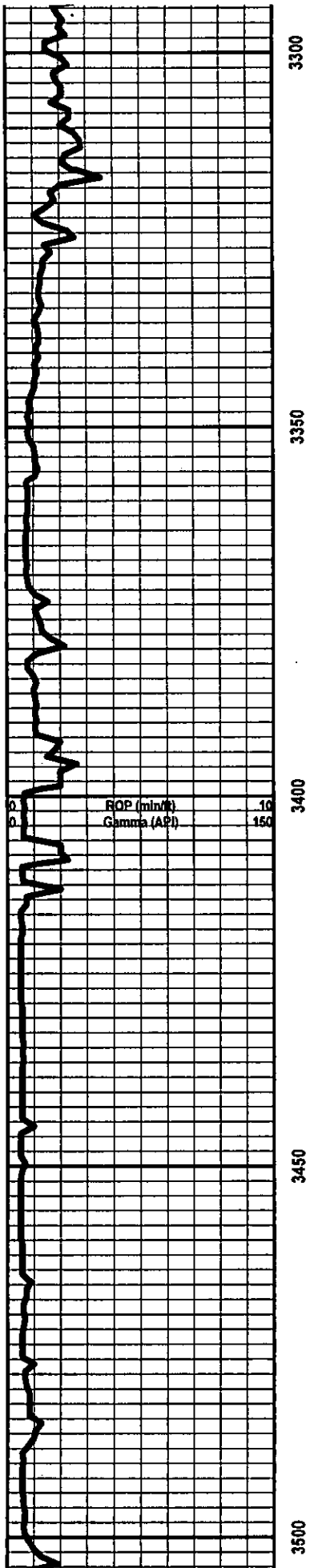
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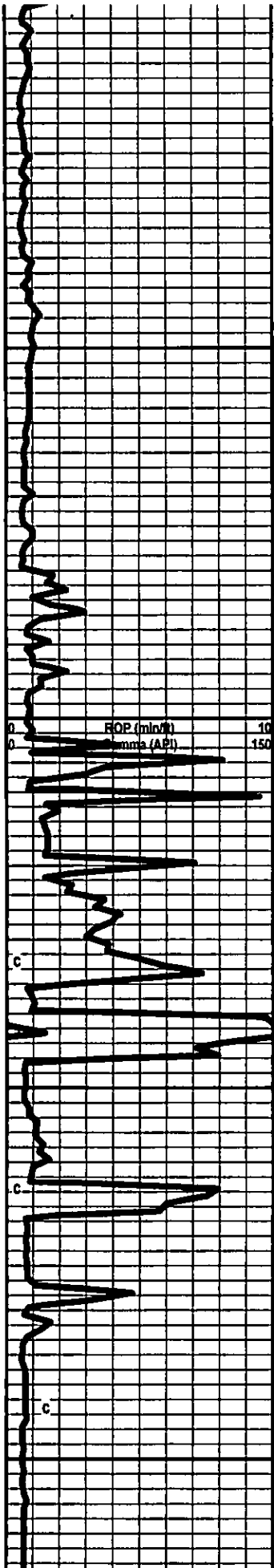
ROP (min) 10
Gamma (API) 150



TG

10





3550

3600

3650

3700

ROP (min)

Gamma (API)

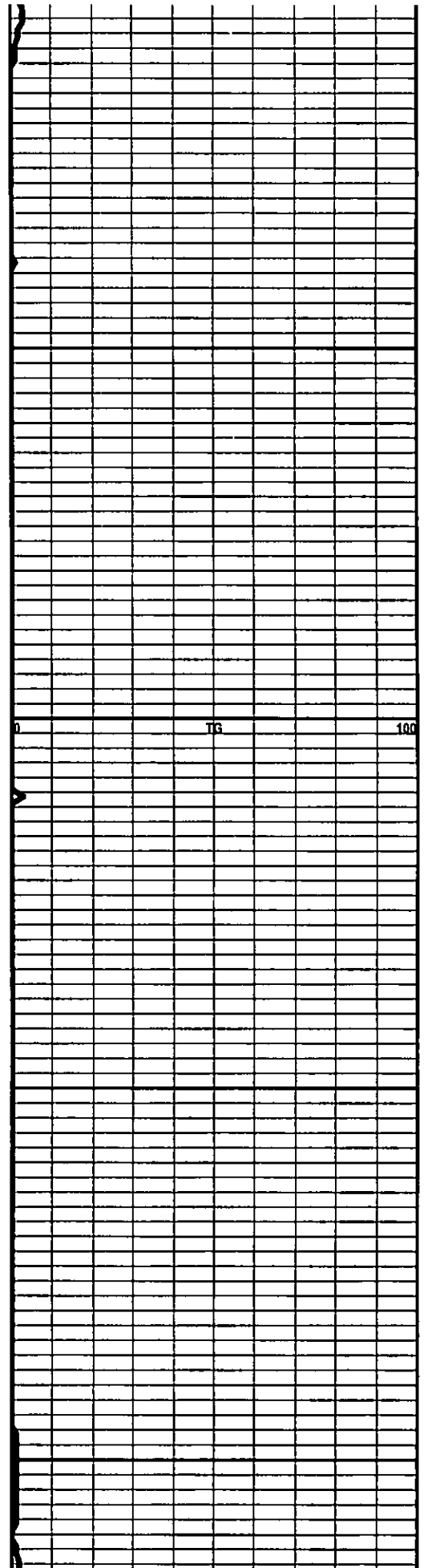
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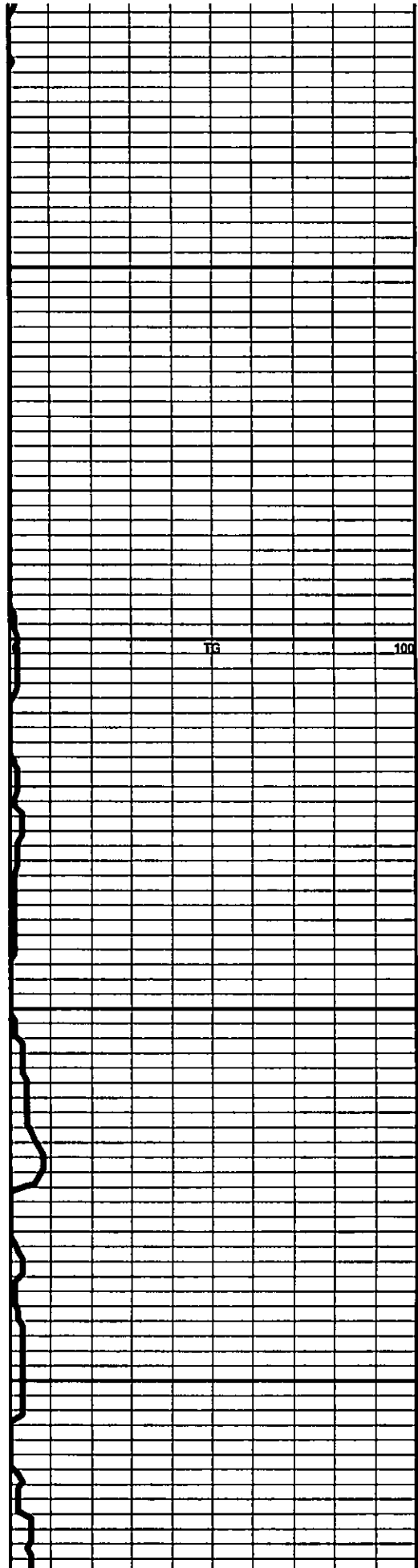
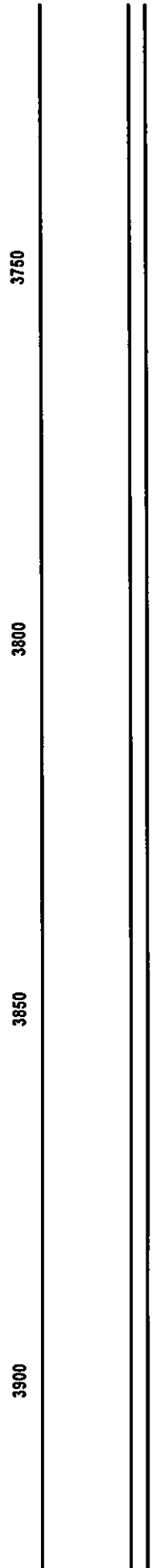
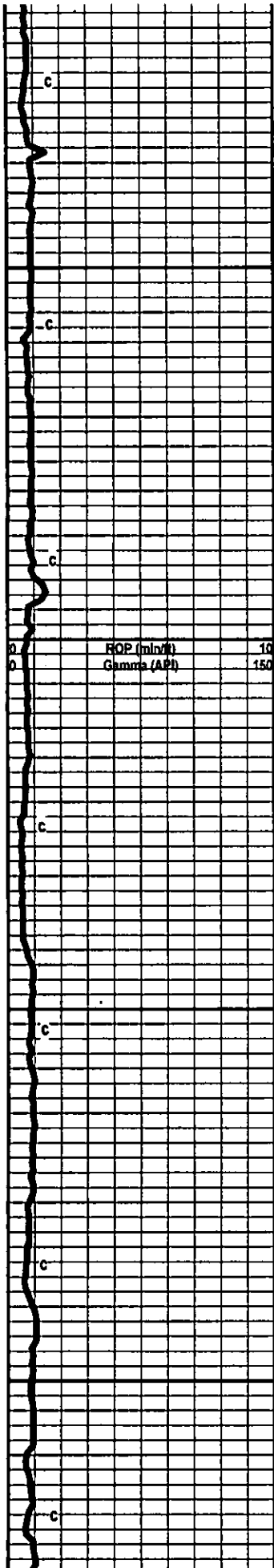
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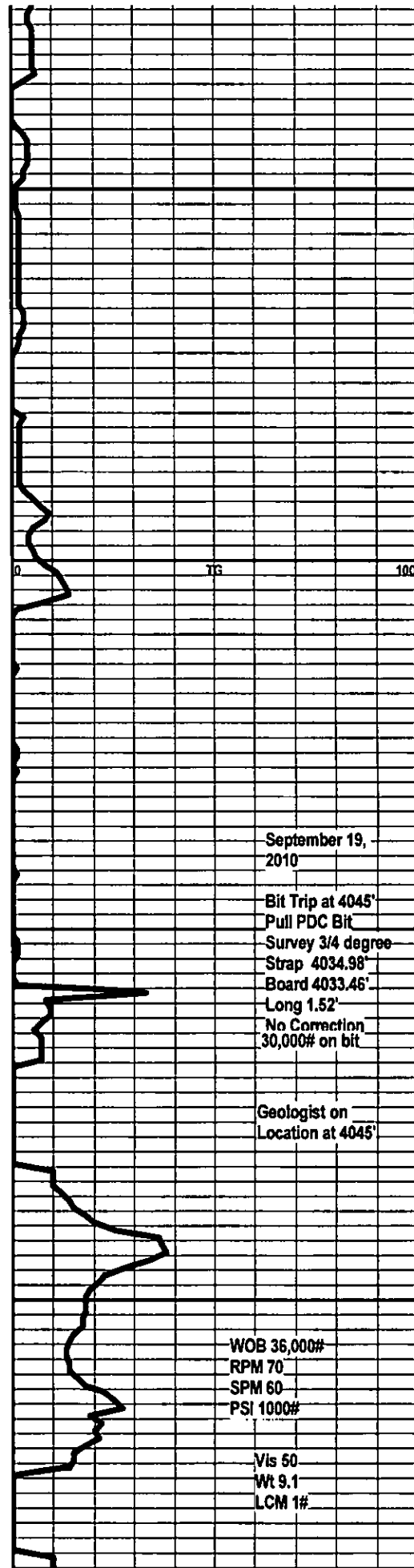
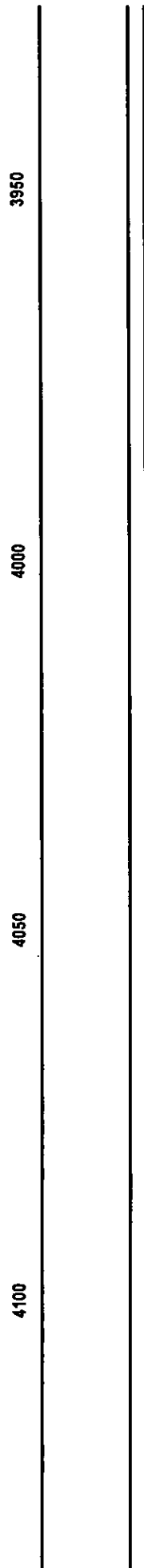
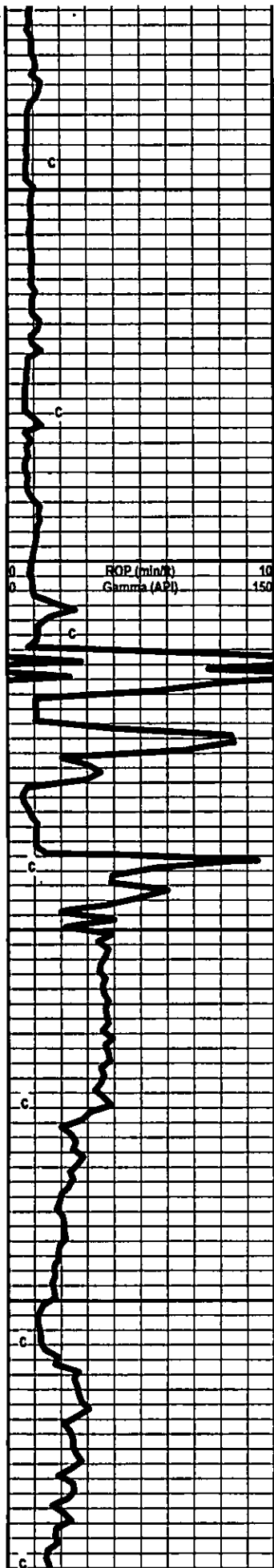
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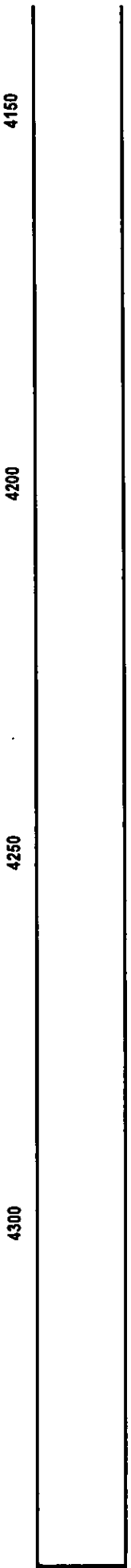
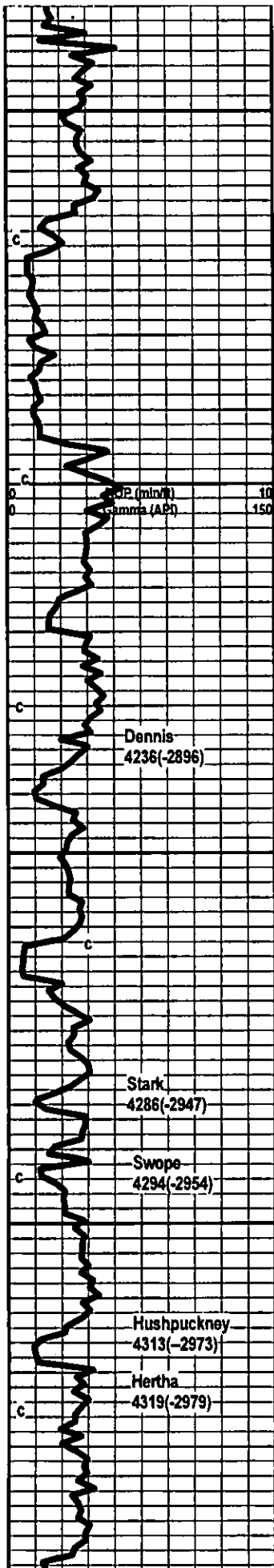


TG

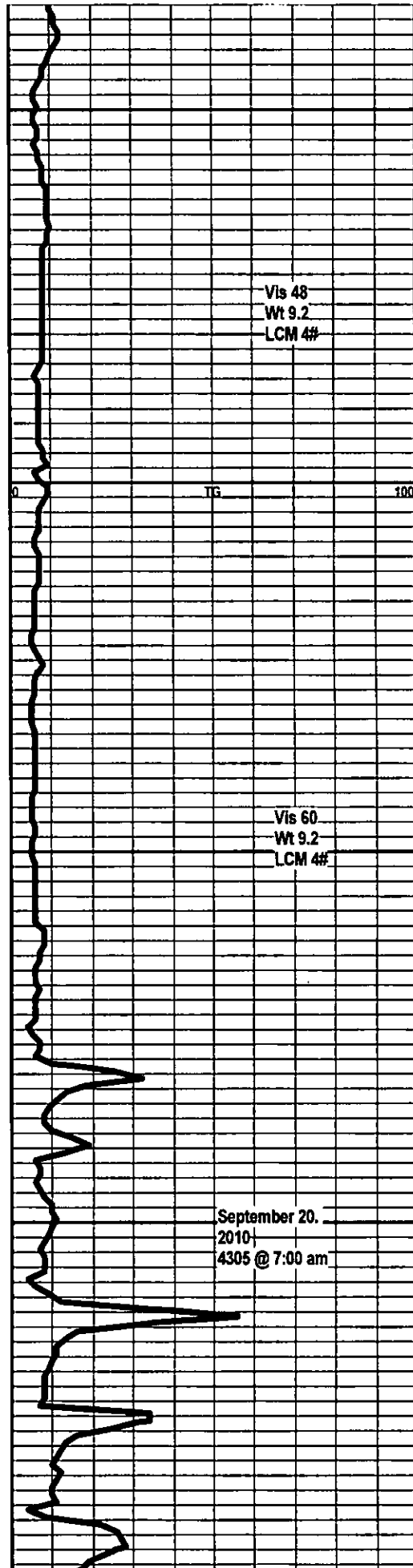
100

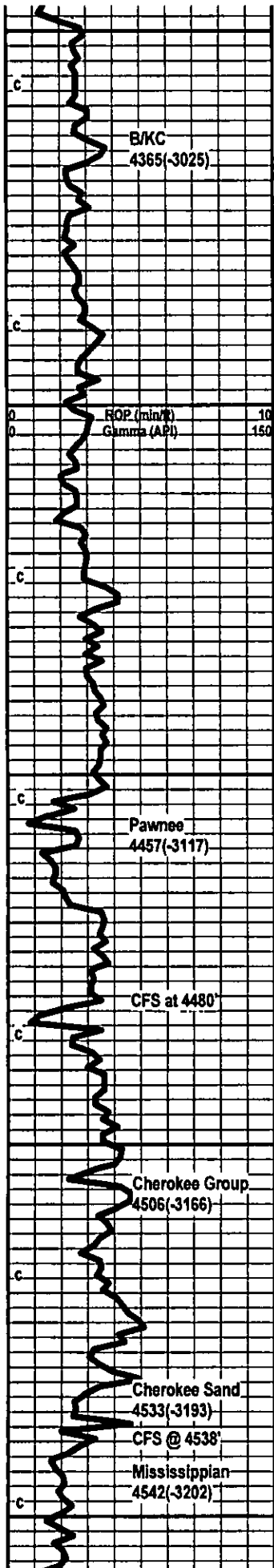






Shale, gray-black, earth in part, slight show gas





Shale, grey, sandy, some in part, slight chert gas bubbles.

Limestone, cream-tan, some lt brown, finely crystalline, trace foss frags, slightly sub chalky, some tan chert.

Shale, grey-black, some green-brown.

Limestone, cream-white, some tan, fxl, trace foss frags, slight chalky, shaley in part.

Shale, green-grey, silty to sandy in part, slightly limey, traces of pyrite.

Limestone, creamy-tan, fmxln, traces of tan chert.

Shale, grey-green, firm, waxy.

Limestone, tan-white, fxl, traces of foss. frags.

Shale, dk grey.

Limestone, cream-white, fmxln, shaley.

Shale, grey, green-brown.

Limestone, cream to tan-white, fxl, slightly foss., sub chalky.

a/a

Shale, Grey-black, carb.

Limestone, cream-white to off-white, tan, fmxln, slightly chalky, foss frags, slightly oolitic, tr. inter ool porosity, slight show of gas bubbles, no odor, no visible staining, poor fluor., trace of oolimoldic porosity.

Limestone, cream-tan, fxl, dense, trace tan chert, slightly foss.

Shale, grey-black, carb

Shale, grey-green, firm.

Limestone, cream, tan-white, fmxln, sub chalky, trace of foss., cherty in part.

Shale, grey, green, firm, trace pyrite.

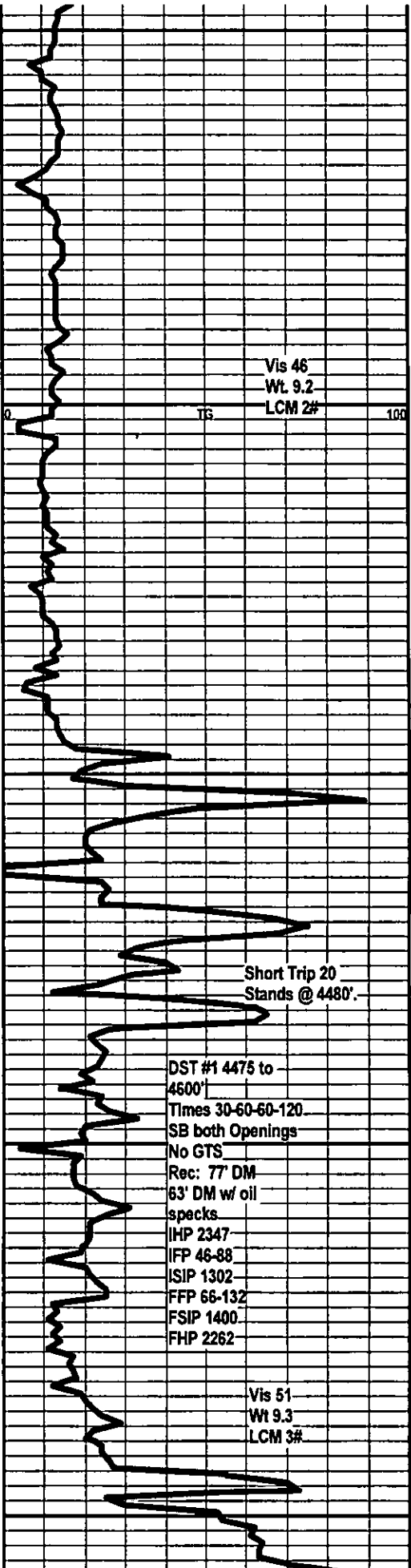
Shale, as above, some interbedded limestone stringers.

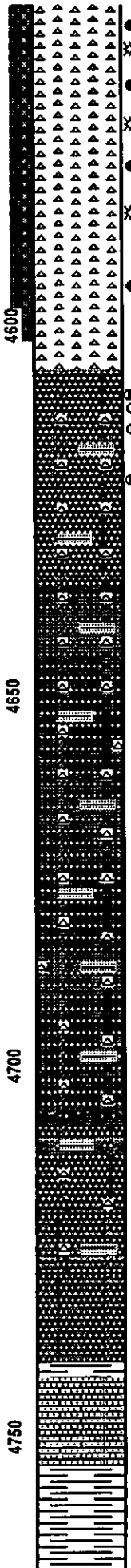
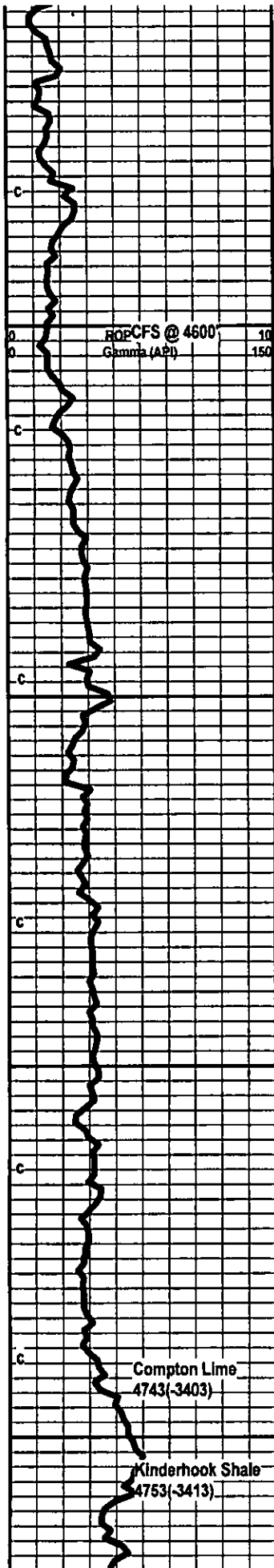
Limestone, cream-white, fxl, sub-chalky, traces of scattered chert.

Shale, grey, dark grey, some green-brown, firm.

SST, grey, dirty, some light brown clusters, well cemented, fine grained, SA, silty in part, traces of dark asphaltic staining, glau, few pieces friable, no odor, no fluor, no shows of free oil.

Chert, white, off white, sharp, fresh, slightly weathered, trace of edge staining, some dark asphaltic staining, slight show of oil and gas, faint odor, very dull fluor along edges





Chert, white, off-white, weathered, scattered vugs, fair light brown staining, p-f odor, slight show oil, few gas bubbles, edge staining, sharp.

Chert, white, smokey grey, sharp, weathered, fair odor, fair show oil, trace of fossils, few scattered vugs with bleeding oil and gas, fair odor. Some free oil in tray.

Chert, white, off-white, sharp, slightly weathered, few scattered small vugs, fair light brown staining, edge staining, dull fluor, p-f odor, slight show of oil, trace free oil in tray.

LS, dolo, tan-white, light brown, cherty, fresh, sharp, some weathered with fair light staining, trace show of oil, no odor, v. dull fluor., abundant grey, dk grey shales, firm, blk, splintery.

Dolo, lt grey, dirty white, traces of pp porosity, cherty, fresh, sharp, trace weathered, very slight show lt. staining, no show free oil, no odor,

Dolo, grey, lt grey, cream, cherty, traces of pp porosity, no odor, no vis shows.

Dolo, grey, lt grey, some cream-white to tan, xln, pp porosity, cherty in part, no odor, no vis shows.

Dolo, lt grey, cream to off-white, cherty, traces of shale.

Dolo, grey to lt grey, cherty, sharp, fresh.

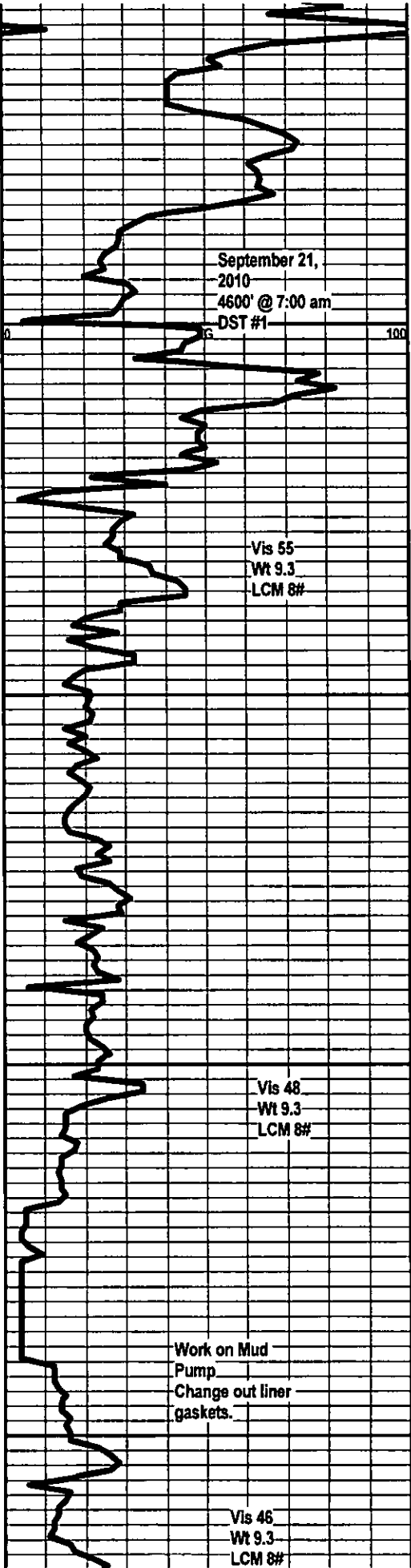
Dolo, grey-white, cream-white, xln, cherty.

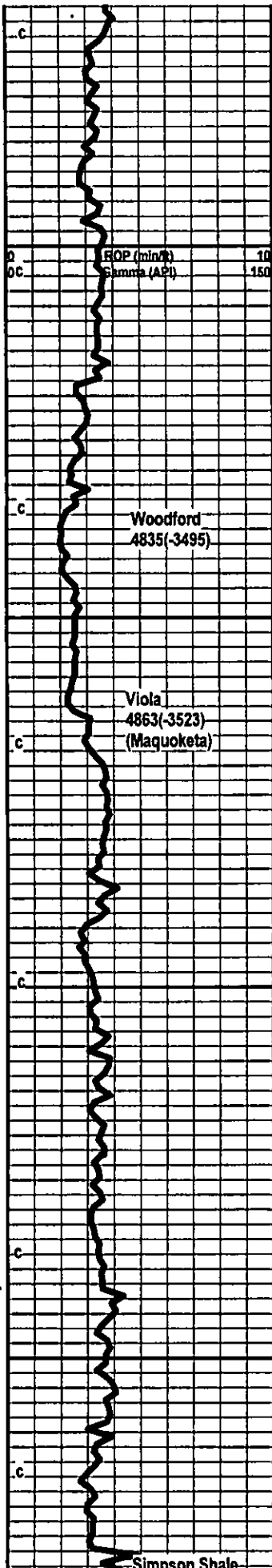
Dolo, grey, lt grey, cherty, traces of grey shale.

Shale, lt green.

Ls, cream-white, fxln, trace of foss frags, slightly cherty.

Shale, grey, dk grey, blk, silty





Shale, grey, dk grey, blkly, silty.

Shale, dk grey, grey, silty.

Shale, dk grey, grey silty, traces of pyrite.

Shale, grey, coffee brown, silty, traces of pyrite.

Shale, grey, lt grey, brown, silty, pyritic, trace gas bubbles.

Shale, Grey-black, brown, carb in part.

a/a

Shale, grey-black, brown, carb.

SST, dolomitic, sa, well cemented, very few clusters, no vis shows, no odor.

Dolo, lt brown, grey-white, xln, argil, silty, trace of chert, no vis shows.

Dolo as above, increasing ls amounts, xln.

Limestone, cream-white, off-white, xln, sl. dolo in part, soft, sl. foss. trace chert.

Limestone, cream-white, fxln, trace of xln porosity, sl. cherty, subchalky in part.

Limestone, off-white, tan, fxln, subchalky, trace tan chert, trace pyrite inclusions.

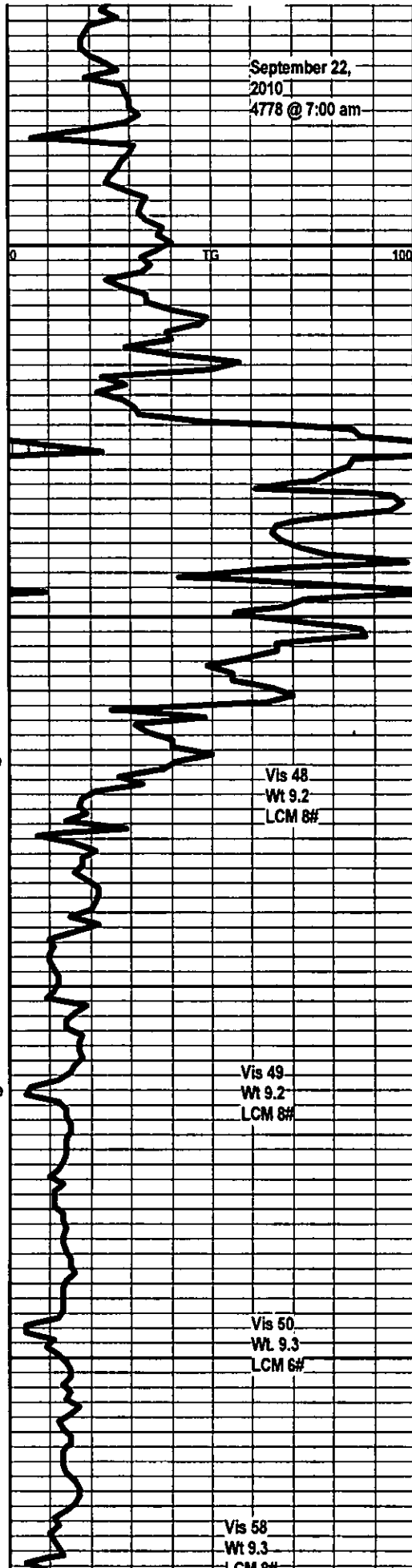
Limestone, tan-white, off-white, slightly dolo, tan cherts, chalky, xln.

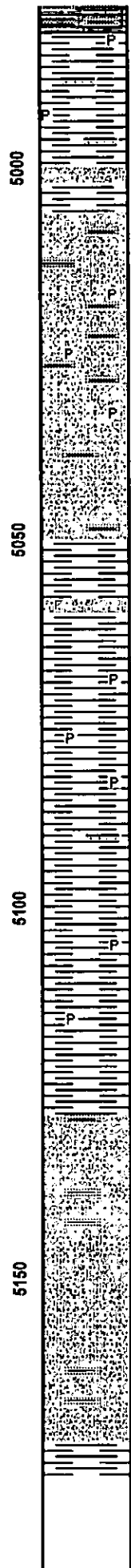
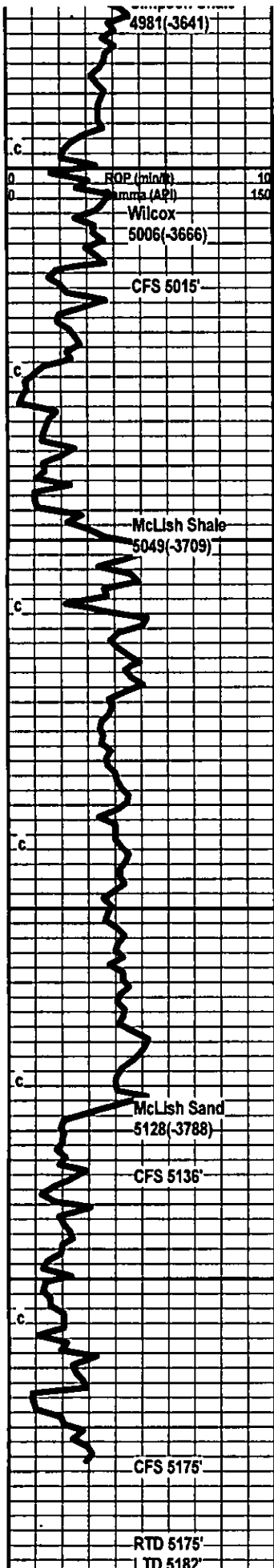
Limestone, dolo, tan, tan-white, xln, traces of tan cherts, trace foss.

Limestone, dolo, tan, off-white, xln, cherty, trace of pale green shales.

Dolo/ls, tan, tan-white, xln, grainy text, tan cherts, pale green shales.

Dolo, tan to tan-white, xln, sandy in part, some





green shales.

Shale, green to dk grey, pyritic, few imbedded sand grains.

Sst, clear to frosted quartz grains, SA to SR, friable, abundant loose grains, glauc, no vis shows, no odor.
Shale, green to dk grey-green.

Sst, clear to grey frosted grains, SA to SR, friable in part, mostly tite, spotted show of oil in tite sd, traces of pyrite inclusions, no odor no fluor, no kick

Sst, clear to white frosted qtz grains, SA to SR, friable in part, fair sorting, some shale inclusions w pyrite, glauc, some tite well cemented clusters, possible v. light stain in rare cluster, no odor, no visible fluor, no visible shows.

Sst, a/a

Shale, green, firm, banded, few embedded sand grains.

Sst, clear to grey, well cemented, shaley in part.

Shale, grey-green, apple green, traces of pyrite, waxey, firm, blk.

Shale, grey-green, firm, traces of pyrite, same sand inclusions.

a/a, sst stringer.

Shale, grey-green, firm, pyritic inclusions.

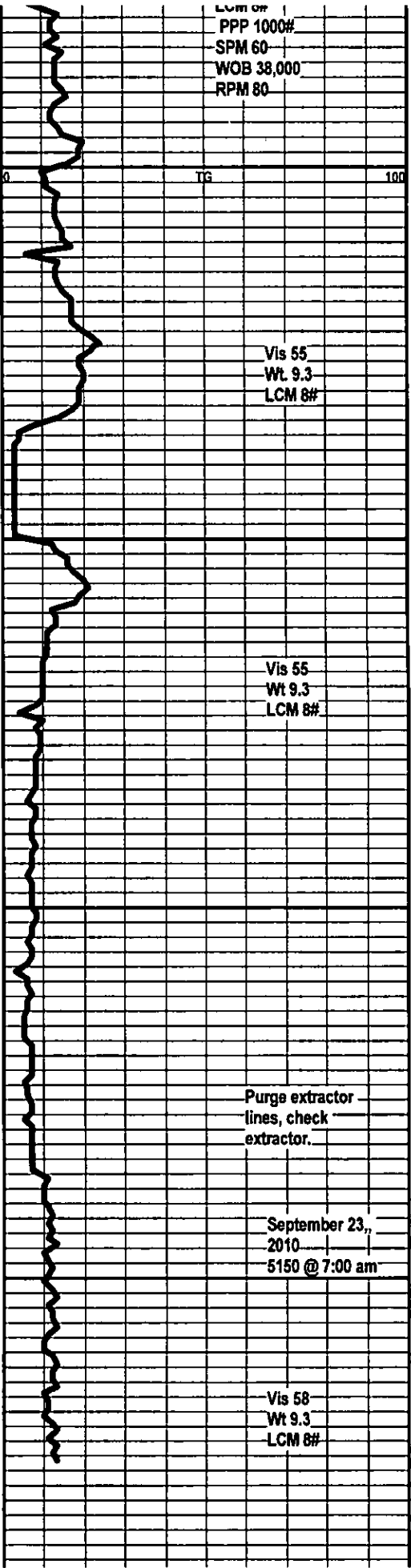
Shale, grey, pale green, firm, blk.

Sst, clear to grey angular grains, well cemented, traces of pyrite, glauc, some shale inclusions, no visible shows, no detectable odor.

Sst, clear to white, some grey frosted angular grains, well cemented, glauc., traces of interbedded shales, pyrite, no visible shows.

Sst, clear to grey, angular to sub rounded, well cemented, few pieces friable in part, glauc, pyritic in part, gray-green shales, no visible shows.

Shale, grey-green, firm, sand inclusions.





TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Woolsey Operating Company

Diel D#4

125 N Market Ste 1000
Wichita KS 67202

16 34s 11w Barber

Job Ticket: 37539

DST#: 1

ATTN: Scott Alberg

Test Start: 2010.09.21 @ 05:43:13

GENERAL INFORMATION:

Formation: **Miss**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 08:38:43

Time Test Ended: 15:45:13

Test Type: **Conventional Bottom Hole**

Tester: **Esak Hadley**

Unit No: **34**

Interval: **4475.00 ft (KB) To 4600.00 ft (KB) (TVD)**

Reference Elevations: **1340.00 ft (KB)**

Total Depth: **4600.00 ft (KB) (TVD)**

1331.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Fair**

KB to GR/CF: **9.00 ft**

Serial #: **6753** **Outside**

Press@RunDepth: **132.13 psig @ 4476.00 ft (KB)**

Capacity: **8000.00 psig**

Start Date: **2010.09.21**

End Date: **2010.09.21**

Last Calib.: **2010.09.21**

Start Time: **05:43:18**

End Time: **15:45:13**

Time On Btm: **2010.09.21 @ 08:35:13**

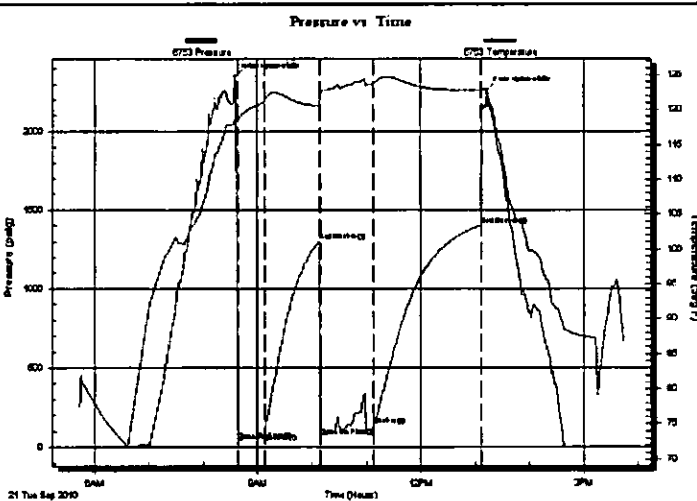
Time Off Btm: **2010.09.21 @ 13:13:13**

TEST COMMENT: **IF Fair to strong blow BOB in 4 min.**

ISI No blow .

FF Strong blow . BOB in 2 sec.

FSI No blow .



PRESSURE SUMMARY

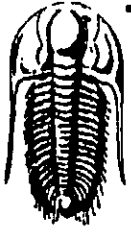
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2346.76	118.60	Initial Hydro-static
4	45.98	118.56	Open To Flow (1)
33	87.59	121.23	Shut-in(1)
93	1302.08	120.58	End Shut-in(1)
95	66.04	122.17	Open To Flow (2)
153	132.13	123.81	Shut-in(2)
272	1399.84	122.83	End Shut-in(2)
278	2261.83	123.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	drig mud w / oil specs	0.31
77.00	drig mud	0.38

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company

Diel D#4

125 N Market Ste 1000
Wichita KS 67202

16 34s 11w Barber

Job Ticket: 37539

DST#: 1

ATTN: Scott Alberg

Test Start: 2010.09.21 @ 05:43:13

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume: bbl

Water Loss: 10.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure: psig

Salinity: 5600.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	drig mud w / oil specs	0.310
77.00	drig mud	0.379

Total Length: 140.00 ft

Total Volume: 0.689 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

