KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1053705

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 # 5056
Name: F. G. Holl Company L.L.C.
Address 1: 9431 E CENTRAL STE 100
Address 2:
City: WICHITA State: KS Zip: 67206 + 2563
Contact Person: Franklin R. Greenbaum
Phone: (316) 684-8481
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Rene Hustead
Purchaser: None

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] 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 #:

03/15/2011	3/25/2011	3/25/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-009-25518-00-00
Spot Description: 80' N. OF W2W2SW
S2 - SW - NW - SW Sec. 6 Twp. 20 S. R. 14 [ ] East [x] West
1400 Feet from [ ] North / [x] South Line of Section
330 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [ ] SE [x] SW
County: Barton
Lease Name: HETZKE/DIRKS 'A' Well #: 1-6
Field Name:
Producing Formation: None
Elevation: Ground: 1919 Kelly Bushing: 1923
Total Depth: 3829 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 862 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] 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: 9000 ppm Fluid volume: 800 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Paul's Oilfield Service
Lease Name: MILLER #1 License #: 31085
Quarter NW Sec. 6 Twp. 19 S. R. 15 [ ] East [x] West
County: Barton Permit #: 15-009-22715-00-01

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

- [x] **Letter of Confidentiality Received**
  Date: 04/13/2011
- [x] **Confidential Release Date:** 04/12/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] I [ ] II [ ] III **Approved by:** NAOMI JAMES **Date:** 04/14/2011

Side Two

1053705

Operator Name: F. G. Holl Company L.L.C. Lease Name: HETZKE/DIRKS 'A' Well #: 1-6

Sec. 6 Twp. 20 S. R. 14 ☐ East ☑ West County: Barton

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

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

Name	Top	Datum
Attached	Attached	Attached

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	12.25	8.6250	23	862	A-CON & Common	400	3%cc, 2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

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	F. G. Holl Company L.L.C.
Well Name	HETZKE/DIRKS 'A' 1-6
Doc ID	1053705

All Electric Logs Run

DIL
CNL/CDL
BHCS
Micro Log
CPI

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	HETZKE/DIRKS 'A' 1-6
Doc ID	1053705

Tops

Name	Top	Datum
Anhydrite	872	+1051
Herrington	1786	+137
Winfield	1838	+85
Towanda	1907	+16
Fort Riley	1940	-17
B/Florence	2048	-125
Kinney LS	2066	-143
Wrefold	2098	-175
Council Grove	2119	-196
Crouse	2158	-235
Neva	2294	-371
Red Eagle	2356	-433
Onaga Shale	2505	-582
Wabaunsee	2530	-607
Stotler	2652	-729
Tarkio	2710	-787
Howard	2850	-927
Severy Shale	2946	-1023
Topeka	2953	-1030
Heebner	3192	-1269
Toronto	3208	-1285
Douglas Shale	3223	-1300
Brown Lime	3282	-1359
Lansing	3292	-1369

Form	ACO1 - Well Completion
Operator	F. G. Holl Company L.L.C.
Well Name	HETZKE/DIRKS 'A' 1-6
Doc ID	1053705

Tops

Name	Top	Datum
BKC	3526	-1603
Arbuckle	3598	-1675
RTD	3829	-1906

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

phone: 316-337-6200
fax: 316-337-6211
http://kcc.ks.gov/

April 11, 2011

Franklin R. Greenbaum
F. G. Holl Company L.L.C.
9431 E CENTRAL STE 100
WICHITA, KS 67206-2563

Re: ACO1
API 15-009-25518-00-00
HETZKE/DIRKS 'A' 1-6
SW/4 Sec.06-20S-14W
Barton County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Franklin R. Greenbaum

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 16029 **DST#: 1**

Test Start: 2011.03.17 @ 06:30:00

GENERAL INFORMATION:

Formation: **Herrington-Krider**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

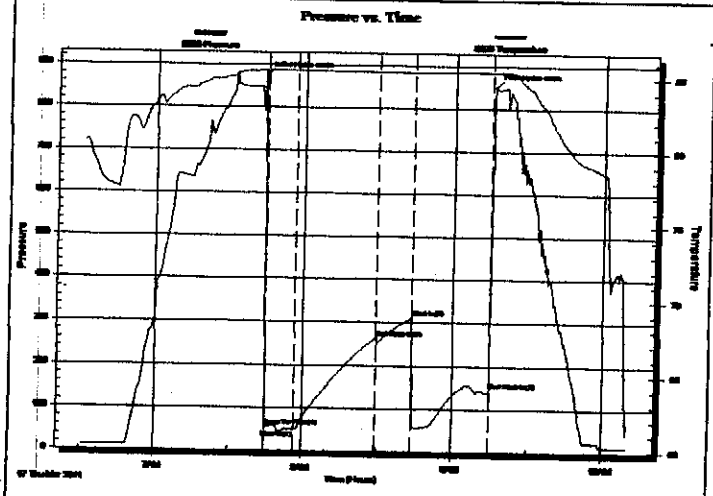
Interval: 1736.00 ft (KB) To 1796.00 ft (KB) (TVD)
Total Depth: 1796.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8525 **Outside**
Press@RunDepth: 143.39 psia @ 1792.61 ft (KB)
Start Date: 2011.03.17 End Date: 2011.03.17
Start Time: 06:31:00 End Time: 10:10:00

Capacity: 5000.00 psia
Last Calib.: 2011.03.17
Time On Btm: 2011.03.17 @ 07:44:00
Time Off Btm: 2011.03.17 @ 09:16:00

TEST COMMENT: 1st Opening 15 Minutes Weak blow for 12 minutes and died
1st Shut-In 30 Minutes no blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	874.42	85.53	Initial Hydro-static
1	55.94	85.34	Open To Flow (1)
13	48.86	85.52	Shut-In(1)
45	263.05	85.48	End Shut-In(1)
60	310.80	85.46	Shut-In(2)
91	143.39	85.42	End Shut-In(2)
92	850.35	85.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drilling mud	0.14

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: Rene Hustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 16030 **DST#: 2**

Test Start: 2011.03.18 @ 06:45:00

GENERAL INFORMATION:

Formation: **Herrington-Winfield**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

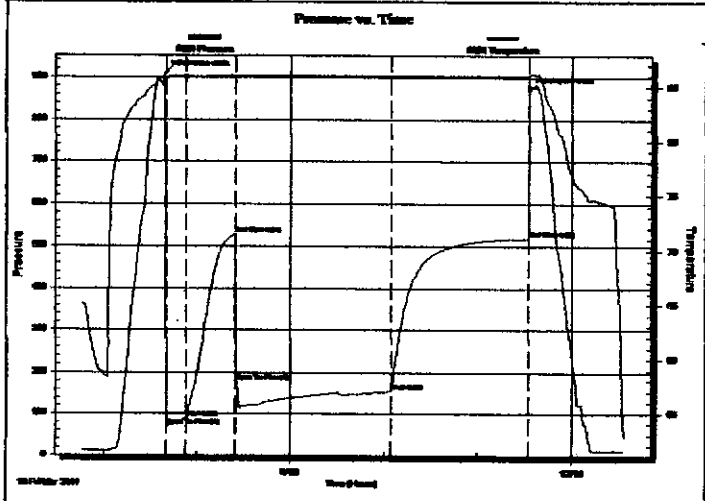
Interval: 1798.00 ft (KB) To 1860.00 ft (KB) (TVD)
Total Depth: 1860.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**
Press@RunDepth: 519.69 psia @ 1855.61 ft (KB)
Start Date: 2011.03.18 End Date: 2011.03.18
Start Time: 06:46:00 End Time: 12:34:00

Capacity: 5000.00 psia
Last Calib.: 2011.03.18
Time On Btm: 2011.03.18 @ 07:39:00
Time Off Btm: 2011.03.18 @ 11:33:00

TEST COMMENT: 1st Opening 30 Minutes-Fairf blow built to 5 inches and decreased to a weak blow
1st Shut-In 60 Minutes-No blow back
2nd Opening 90 Minutes-Good blow-Gas to surface in 10 minutes see gas report
2nd Shut-In 90 Minutes-Good blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	908.29	85.78	Initial Hydro-static
1	68.69	85.81	Open To Flow (1)
14	89.10	86.01	Shut-In(1)
45	527.08	86.04	End Shut-In(1)
46	177.31	86.04	Open To Flow (2)
146	153.74	86.02	Shut-In(2)
234	519.69	86.00	End Shut-In(2)
234	869.51	86.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	Muddy water 60%mud 40% water	2.10
120.00	Muddy water 40%Mud 60% water	1.68
0.00	Chlorides 48000	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	0.25	6.75	10.71
Last Gas Rate	0.25	13.60	21.57
Max. Gas Rate	0.25	14.45	22.92

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: Rene Hustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 16031 **DST#: 3**

Test Start: 2011.03.19 @ 01:30:00

GENERAL INFORMATION:

Formation: **Council Grove**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

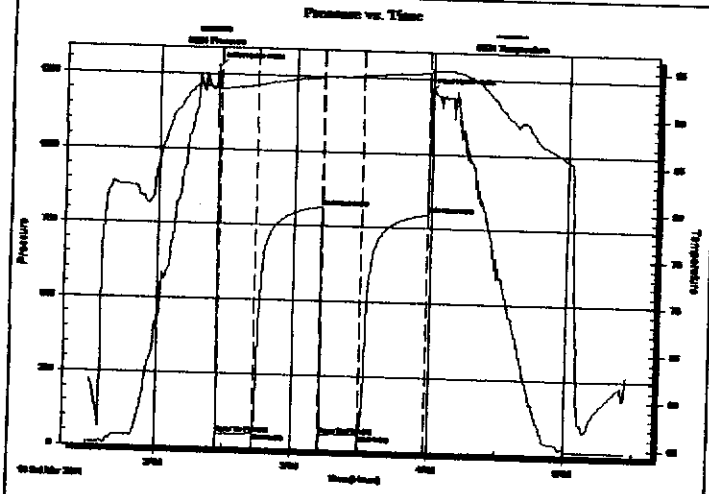
Interval: 2356.00 ft (KB) To 2393.00 ft (KB) (TVD)
Total Depth: 2393.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8524 **Inside**
Press@RunDepth: 798.37 psia @ 2389.00 ft (KB)
Start Date: 2011.03.19 End Date: 2011.03.19
Start Time: 01:31:00 End Time: 05:27:00

Capacity: 5000.00 psia
Last Calib.: 2011.03.19
Time On Btm: 2011.03.19 @ 02:26:00
Time Off Btm: 2011.03.19 @ 03:59:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow for 1 minute and died
1st Shut-In 30 Minutes-No blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1277.45	92.69	Initial Hydro-static
1	46.36	92.53	Open To Flow (1)
17	48.70	92.95	Shut-In(1)
46	815.41	93.92	End Shut-In(1)
47	51.39	93.85	Open To Flow (2)
64	54.51	94.17	Shut-In(2)
93	798.37	94.61	End Shut-In(2)
93	1211.05	94.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Drilling Mud	0.35

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: RenéHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 16032 **DST#: 4**

Test Start: 2011.03.22 @ 01:15:00

GENERAL INFORMATION:

Formation: **Conglomerate Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 2225-20

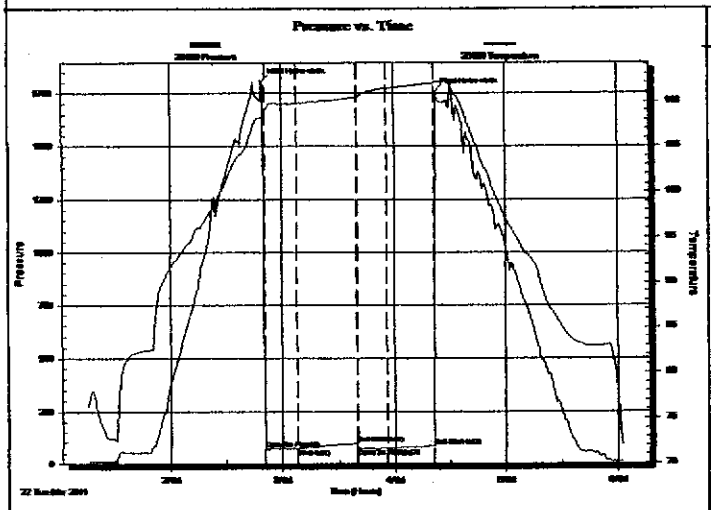
Interval: 3500.00 ft (KB) To 3570.00 ft (KB) (TVD)
Total Depth: 3570.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 26180 **Inside**
Press@RunDepth: 83.10 psia @ 3565.73 ft (KB)
Start Date: 2011.03.22 End Date: 2011.03.22
Start Time: 01:15:30 End Time: 06:03:00

Capacity: 5000.00 psia
Last Calib.: 2011.03.22
Time On Btm: 2011.03.22 @ 02:49:00
Time Off Btm: 2011.03.22 @ 04:22:30

TEST COMMENT: 1st Opening 15 Minutes-Weak blow for 13 minutes and died
1st Shut-In 30 Minutes-no blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1806.77	108.24	Initial Hydro-static
2	68.70	108.51	Open To Flow (1)
19	70.80	109.77	Shut-In(1)
51	96.64	110.40	End Shut-In(1)
52	72.44	110.42	Open To Flow (2)
67	74.93	111.42	Shut-In(2)
93	83.10	112.01	End Shut-In(2)
94	1758.20	112.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Drilling Mud	0.21

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 16033 **DST#: 5**

Test Start: 2011.03.22 @ 03:40:00

GENERAL INFORMATION:

Formation: **arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

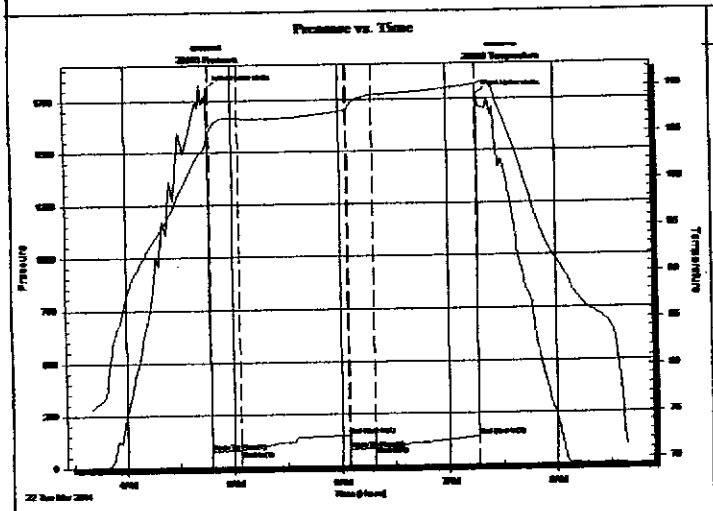
Interval: 3498.00 ft (KB) To 3590.00 ft (KB) (TVD)
Total Depth: 3590.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 29636 **Outside**
Press@RunDepth: 135.74 psia @ 3586.75 ft (KB)
Start Date: 2011.03.22 End Date: 2011.03.22
Start Time: 03:40:30 End Time: 08:38:30

Capacity: 5000.00 psia
Last Calib.: 2011.03.22
Time On Btm: 2011.03.22 @ 04:46:29
Time Off Btm: 2011.03.22 @ 07:17:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow for 13 minutes and died
1st Shut-In 60 Minutes-No blow back
2nd Opening 15 Minutes-Weak blow for 6 minutes and died
2nd Shut-In 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1807.52	104.61	Initial Hydro-static
2	70.22	105.18	Open To Flow (1)
18	75.02	106.66	Shut-In(1)
78	146.61	107.47	End Shut-In(1)
78	75.92	107.49	Open To Flow (2)
93	90.46	109.07	Shut-In(2)
150	135.74	110.14	End Shut-In(2)
151	1768.53	110.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
25.00	Drilling mud	0.35

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 15787 **DST#: 6**

Test Start: 2011.03.23 @ 08:45:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

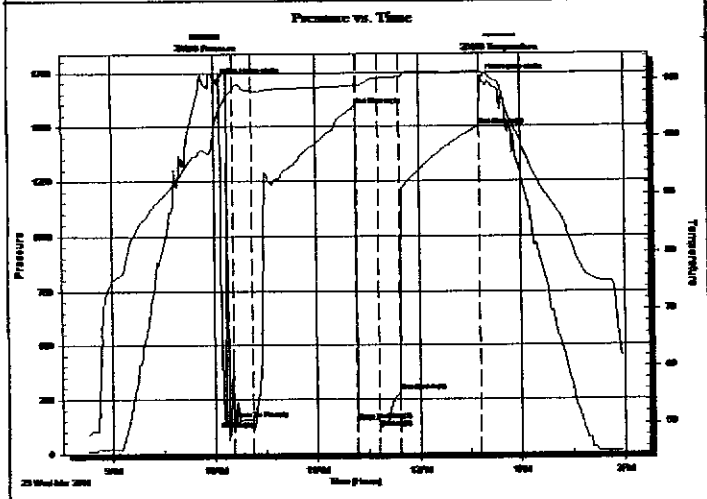
Interval: 3590.00 ft (KB) To 3600.00 ft (KB) (TVD)
Total Depth: 3600.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 26180 **Inside**
Press@RunDepth: 1500.42 psia @ 3596.00 ft (KB)
Start Date: 2011.03.23 End Date: 2011.03.23
Start Time: 08:45:30 End Time: 13:58:30

Capacity: 5000.00 psia
Last Calib.: 2011.03.23
Time On Btm: 2011.03.23 @ 10:01:00
Time Off Btm: 2011.03.23 @ 12:36:00

TEST COMMENT: 1st Opening 15 Minutes weak blow for 15 minutes
1st Shut-In 60 Minutes-No blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 60 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1710.47	103.19	Initial Hydro-static
10	157.50	108.28	Open To Flow (1)
21	151.18	108.08	Shut-In(1)
82	1598.23	109.03	End Shut-In(1)
83	151.66	109.05	Open To Flow (2)
96	154.07	110.31	Shut-In(2)
108	283.39	110.55	End Shut-In(2)
155	1500.42	111.45	End Shut-In(3)
155	1724.21	111.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
230.00	Drilling mud no shows	3.23

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 15788 **DST#: 7**

Test Start: 2011.03.23 @ 08:00:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 2225-20

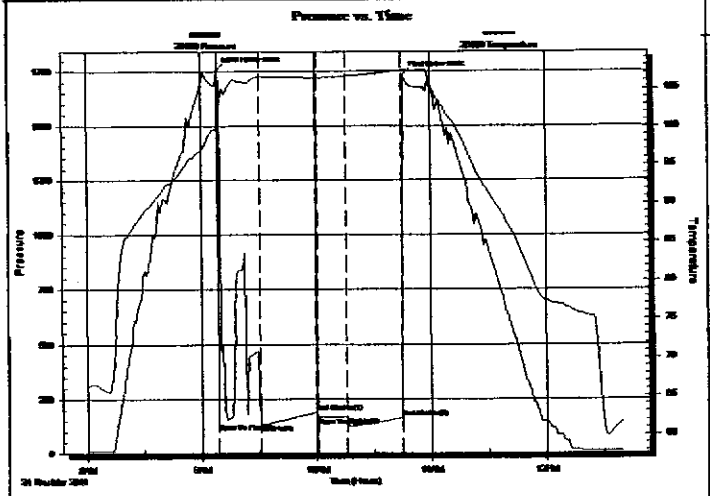
Interval: 3595.00 ft (KB) To 3610.00 ft (KB) (TVD)
Total Depth: 3610.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 26180 **Inside**
Press@RunDepth: 165.39 psia @ 3616.00 ft (KB)
Start Date: 2011.03.24 End Date: 2011.03.24
Start Time: 08:00:30 End Time: 12:39:30

Capacity: 5000.00 psia
Last Calib.: 2011.03.24
Time On Btm: 2011.03.24 @ 09:08:30
Time Off Btm: 2011.03.24 @ 10:45:30

TEST COMMENT: 1st Opening 15 Minutes-weak blow for 15 minutes
1st Shut-In 30 Minutes no blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1757.50	100.05	Initial Hydro-static
1	98.32	100.48	Open To Flow (1)
22	133.24	106.50	Shut-In(1)
51	190.27	106.46	End Shut-In(1)
52	165.36	106.47	Open To Flow (2)
67	169.89	106.60	Shut-In(2)
96	165.39	107.39	End Shut-In(2)
97	1732.55	107.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
275.00	Drilling mud	3.86

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 15789 **DST#: 8**

Test Start: 2011.03.24 @ 08:30:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

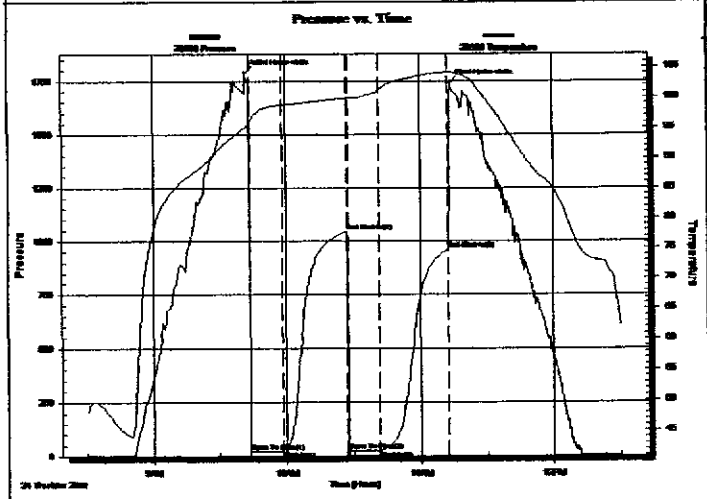
Interval: 3610.00 ft (KB) To 3620.00 ft (KB) (TVD)
Total Depth: ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 29636 **Outside**
Press@RunDepth: 961.14 psia @ 3617.00 ft (KB)
Start Date: 2011.03.24 End Date: 2011.03.24
Start Time: 08:30:30 End Time: 12:30:30

Capacity: 5000.00 psia
Last Calib.: 2011.03.24
Time On Btm: 2011.03.24 @ 09:42:00
Time Off Btm: 2011.03.24 @ 11:14:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow for 8 minutes and died
1st Shut-In- 30 Minutes-No blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1789.42	94.96	Initial Hydro-static
2	21.11	96.13	Open To Flow (1)
17	25.39	98.75	Shut-In(1)
45	1044.79	99.90	End Shut-In(1)
46	24.04	99.93	Open To Flow (2)
60	25.58	101.23	Shut-In(2)
91	961.14	104.21	End Shut-In(2)
92	1740.16	104.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Drilling Mud	0.14

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

F.G.Holl Company L.L.C.

9431 East Central Suite 100
Wichita,Kansas 67206

ATTN: ReneHustead

Hetzke-Dirks "A" #1-6

6-20s-14w Barton

Job Ticket: 15790 **DST#: 9**

Test Start: 2011.03.25 @ 09:30:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:00:00
Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Gene Budig
Unit No: 3325-20

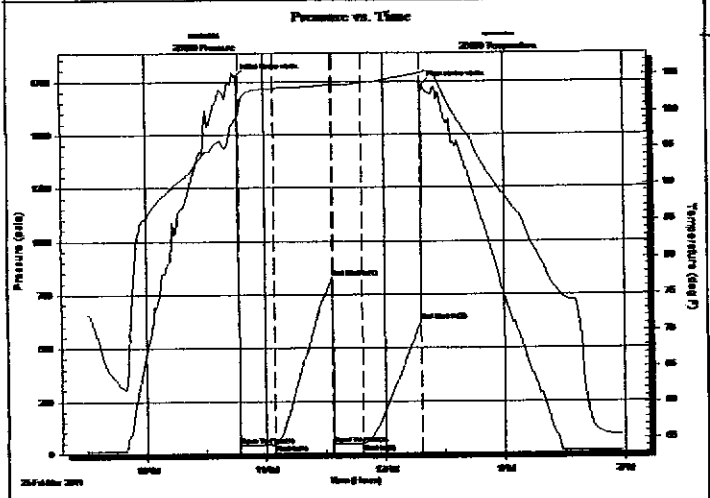
Interval: 3620.00 ft (KB) To 3640.00 ft (KB) (TVD)
Total Depth: 3640.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1923.00 ft (KB)
1915.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 26180 **Inside**
Press@RunDepth: 623.97 psia @ 3636.00 ft (KB)
Start Date: 2011.03.25 End Date: 2011.03.25
Start Time: 09:30:30 End Time: 13:58:30

Capacity: 5000.00 psia
Last Calib.: 2011.03.25
Time On Btm: 2011.03.25 @ 10:45:30
Time Off Btm: 2011.03.25 @ 12:19:00

TEST COMMENT: 1st Opening 15 Minutes-Weak blow for 8 minutes and died
1st Shut-In 30 Minutes-No blow back
2nd Opening 15 Minutes-No blow
2nd Shut-In 30 Minutes-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1772.49	99.00	Initial Hydro-static
2	40.53	99.59	Open To Flow (1)
19	41.26	103.27	Shut-In(1)
48	827.69	103.76	End Shut-In(1)
49	41.51	103.77	Open To Flow (2)
63	43.51	103.94	Shut-In(2)
93	623.97	105.28	End Shut-In(2)
94	1729.82	105.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Drilling Mud	0.21

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)

Mud-Co / Service Mud Inc.

Operator	FG Holl		County	Barton	State	Kansas	Pump	6	X	14	X	60	SPM	Casing Program	8 5/8	" @	862	ft.
Well	Hetzke Dirks A #1-6		Location	1919 EGL								7.75	BPM			" @		ft.
Contractor	Duke #2		Sec	6	TWP	20S	RNG	14W	D.P.	4.5	in.	191	FT/MIN R.A.			" @		ft.
Stockpoint	Pratt, Ks.	Date 3/15/2011	Engineer	Rick Hughes			Collar	6.25	in.	495	ft.	348	FT/MIN R.A.		Total Depth		3829'	ft.

DATE	DEPTH	WEIGHT	VISCOSITY			GELS	pH	FILTRATION			FILTRATION ANALYSIS		SAND	RETORT			L.C.M.	Pump	CUMULATIVE	REMARKS AND TREATMENT	
	feet	lb/gal	Sec API @ F	PV @ F	Yp	10 sec / 10 min.	Strip / Meter	ml API	Cake 32nds	Pres. #/BBL	Cl ppm	Ca ppm	%	Solids %	Oil %	Water %		Press. PSI	COST		
3/15	0																			RURT	
3/16	862																			WOC	Displace at 1700'/starch
3/17	1775	8.9	59	10	28	22/44	7.0	9.2	2		17m	N/C		2.8		97.2				Drlg.	DST #1 @ 1796
3/18	1860	8.9	42	9	14	16/24	7.0	12.4	2		33m	Hvy		2.3		97.7				TI w/DST #2	DST #3 @ 2393
3/19	2380	9.8	45	11	26	31/54	7.0	10.4	2		32m	Hvy		8.8		91.2				CFS	Displace at 2584
3/20	2821	9.1	50	12	12	13/44	11.0	8.8	1		6,000	20		5.0		95.0				Drlg.	DST #4 @ 3570
3/21	3429	9.6	45	8	13	14/76	10.0	12.2	1		5,900	20		8.4		91.6				Drlg.	DST #5 @ 3590
3/22	3579	9.5	57	11	11	17/89	10.0	9.2	1		6,500	20		8.1		91.9				CFS	Influx of salt after DST 5?
3/23	3600	9.1	44	10	10	11/23	11.0	9.8	1		5,800	40		5.4		94.6				CCM	causing high vis,carrying
3/24	3620	9.2	44	12	9	12/41	11.0	8.0	1		8,100	40		5.6		94.4				DST #8	rocks to pump and bit
3/25	3796	8.8	48	9	13	7/32	9.5	8.8	1		8,200	80		3.2		96.8	3			Drlg.	Dump and add 180 bbls
3/26	3829																			RDRT	to recondition
																					DST #6 @ 3600
																					DST #7 @ 3610
																					DST #8 @ 3620'
																					DST #9 @ 3640'
																				FINAL: Ran 9 DST's, Logs OK, Plugged well	
																				Reserve Pit, Chl content ppm:	9000
																				Estimated Volume:	800 bbls
																				Offsite reserve pit with steel pits and	
																				centrifugal transfer pump	

MUD-CO / SERVICE MUD INC.

100 S. Main Suite #310
Wichita, Ks. 67202
316/264-2814 Fax: 316/264-5024

DRILLING MUD RECAP

Materials	Sacks	Amount
C/S HULLS	46	
CAUSTIC SODA	22	
DESCO	1	
DRILL PAK	8	
MIL-GUARD	2	
PREMIUM GEL	445	
SALT CLAY	78	
SODA ASH	24	
DRLG STARCH	79	
SUPER LIG	18	

Materials	Sacks	Amount

	Amount
Total Mud Cost	
Trucking Cost	
Trucking Surcharge	
Taxes	
TOTAL COST	

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET
1718 03633 A

DATE TICKET NO.

DATE OF JOB 3-16-11 DISTRICT Kansas	NEW WELL ☒ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER F G Holl Co. LLC.	LEASE Hetze - Dicks #A1-5 WELL NO.
ADDRESS	COUNTY Barton STATE Kans.
CITY STATE	SERVICE CREW A. Werth, Jmelson, cnw
AUTHORIZED BY	JOB TYPE: 8 5/8" Surface

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
28443 P.U.	1				
33708-20920	1				
19826-19862					

	DATE		TIME
TRUCK CALLED	3-16-11	AM PM	645
ARRIVED AT JOB	3-16-11	AM PM	815
START OPERATION	3-16-11	AM PM	430
FINISH OPERATION	3-16-11	AM PM	1030
RELEASED	3-16-11	AM PM	1130
MILES FROM STATION TO WELL	55 mi/s		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED:
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP101	A-Con Blend Common	SK	200		
CP100	common	SK	200		
CC102	cell Flake	lb	100		
CC109	calcium Chloride	lb	1126		
CC200	cement Gel	lb	376		
CF105	Top Rubber cement Plug. 8 5/8"	EA	1		
CF1753	Cent. 8 5/8" Blue	EA	1		
E100	Unit mileage charge Pickup	mi	55		
E101	Heavy Equip. mileage	mi	110		
E113	Bulk Delivery Charge	Tm	1034		
CE201	Depth Charge 501-1000'	4-hrs	1		
CE240	Blending + mixing Service chg.	SK	400		
CE504	Plug container Ut. Lization chg.	Job	1		
S003	Service Supervisor first 8hrs on loc.	EA	1		

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON $
MATERIALS	%TAX ON $

TOTAL

DLS

SERVICE REPRESENTATIVE Allen F. Werth

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY John D. Hamilton
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX

BASIC energy services, L.P.

TREATMENT REPORT

Customer: F G Holl	Lease No.			Date: 3-26-11	
Lease: Hetze-Dirks	Well #: A1-6				
Field Order #: 036643A	Station: Pratt KS	Casing	Depth	County: Barton	State: Kansas
Type Job: P+A CNW	Formation: TD 3829			Legal Description: 6-20-14	

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size: 4 1/2	Shots/Ft	180	Acid: 3 Sks 60/40 Poz 4% Gel 1/4# C.F. @ 13.8#	RATE	PRESS	ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative: John Armbrister | Station Manager: Scotty | Treater: Allen

Service Units	28443	33708	20920	19826	19860						
Driver Names	A Worth	Joe	Melson	Mike	McGuire						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log: Duke #2
1230 AM					ON loc. Discuss Safety, Setup, Plan Job.
145				5	Pump 20 BBls H20, 1st Plug @ 525'
			5	5	mix + pump 20 sks 60/40 poz 13.8#
			3		Pump 3 BBls H20 Behind cmt
			44		Disp w/ 44 BBls mud
200					Pull Drill Pipe
330			15	5	2nd Plug 900' pump 15 BBls H20
			12 1/2	5	mix + Pump 50 sks 60/40 poz @ 13.8#
			3	5	Pump 3 BBls H20
345					Pull Drill Pipe
400			3	4	3rd Plug 260' pump 3 BBls H20
			12 1/2	4	mix + pump 50 sks 60/40 poz @ 13.8#
			2	4	Pump 2 BBls H20
415					Pull Drill Pipe
515			2 1/2		4th Plug 40' To surface. 10 sks
520					Rat Hole 30 sks 60/40 poz 13.8#
530					Mouse Hole 15 sks 60/40 13.8#
					Washup + Rackup Equip.
630					Job complete.
					thanks
					Allen, Joe, Mike, Mcguire.

Taylor Printing, Inc. 620-672-3656

BASIC ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 03643 A

DATE TICKET NO.

DATE OF JOB 3-25-11 DISTRICT KANSAS	NEW WELL ☒ OLD WELL ☐ PROD ☐ INJ ☐ WDW ☐ CUSTOMER ORDER NO.:
CUSTOMER FG Holl	LEASE Hetze-Dirks #A1-6 WELL NO.
ADDRESS	COUNTY Barton 6-20-14 STATE KANSAS
CITY STATE	SERVICE CREW A. Werth, J. Melson, M. McGuire
AUTHORIZED BY	JOB TYPE: P+A CMW

EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS
28443 P.U.	4				
33208-20920	4				
19826-19860					

	DATE	AM/PM	TIME
TRUCK CALLED	3-25-11	AM	1030
ARRIVED AT JOB	3-26-11	AM	1230
START OPERATION	3-26-11	PM	130
FINISH OPERATION	3-26-11	PM	530
RELEASED	3-26-11	PM	630
MILES FROM STATION TO WELL	55 miles		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).
The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: _____
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	$ AMOUNT
CP103	60/40 Poz	SK	180		
CC200	Cement Gel	lb	310		
CC102	Cell Flake	lb	42		
CF153	Wooden cement Plug 8 5/8"	EA	1		
E100	unit mileage charge	mi	55		
E101	Heavy Equip mileage chg.	mi	110		
E113	Bulk Delivery Charge	Tm	426		
CJ04	Depth Charge 3001-4000'	4-hr	1		
CE240	Blending & mixing Service chg.	sk	180		
S003	Service Supervisor first 8hrs on loc	EA	1		

CHEMICAL / ACID DATA:			

SUB TOTAL ALS

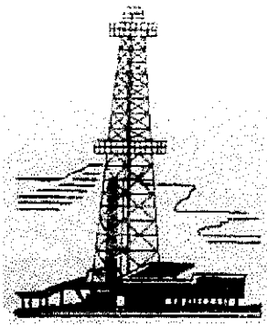
SERVICE & EQUIPMENT	%TAX ON $
MATERIALS	%TAX ON $
	TOTAL

SERVICE REPRESENTATIVE Allen J. Werth

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY John D. Ramsbottom
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

CLOUD LITHO - Abilene, TX



WELLSITE GEOLOGIST'S REPORT

J. R. Hustead
Consulting Geologist

F.G. HOLL Company, L.L.C.

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

Well Name:	HETZKE/DIRKS "A' NO. 1-6		
Location:	SEC 6-T20S-R14W		
Licence Number:	15-009-25,518-0000	**Region:**	BARTON
Spud Date:	MARCH 15-2011	**Drilling Completed:**	MARCH 26-2011
Surface Coordinates:	150' N. OF W/2 W/2 SW		
Bottom Hole Coordinates:	Vertical Hole		
Ground Elevation (ft):	1915'	**K.B. Elevation (ft):**	1923'
Logged Interval (ft):	1650' To: 3829'	**Total Depth (ft):**	3829'
Formation:	LANSING/KC, ARBUCKLE		
Type of Drilling Fluid:	Starch, Chemical Premix (Displaced)		

OPERATOR:

Company: F.G. HOLL COMPANY LLC
Address: 9431 E. CENTRAL STE 100
WICHITA,KANSAS 67206-2563

DRILLING CONTRACTOR:

Duke Drilling Company, Rig #2
Drill Pipe 4.5 X H; DRILL COLLARS 6.25 x 2.25, 496' BHA
BIT #2: 7-7/8" JZ QX20 (3-16);WOB: 32-36; RPM 60-65;KELLY BUSHING 8' ABOVE GROUND LEVEL-MIRT-MARCH 15-2011

CIRCULATION SYSTEM:

MUD-PUMP: EWCO-14W-400,DUPLEX, 6.0 x 14, 60 SPM, 266GPM (85%); SPP: 600 PSI; EARTH PITS; MUD-CO/ SERVICE MUD, INC.;RICK HUGHES

GAS DETECTION SYSTEM:

MBC WELL LOGGING AND LEASING
ANALOG HOTWIRE AND CHROMATOGRAPH

OPEN HOLE LOGS:

DN (PE), DI (SP), ML: Sonic; . LogTech, Hays, KS, K Bange. Log total depth (3829') matched rotary depth.

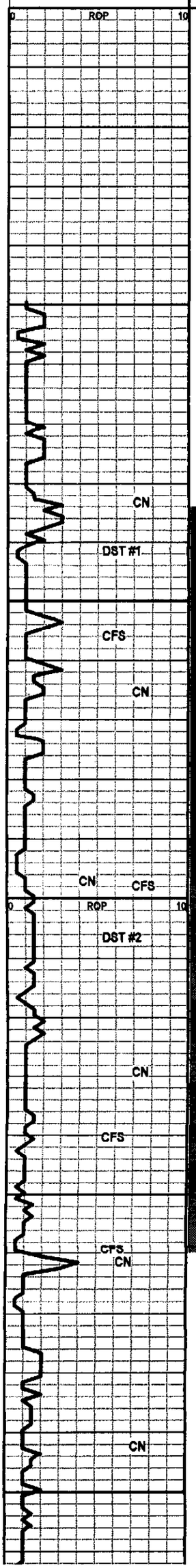
COMPLETION:

ABANDONED

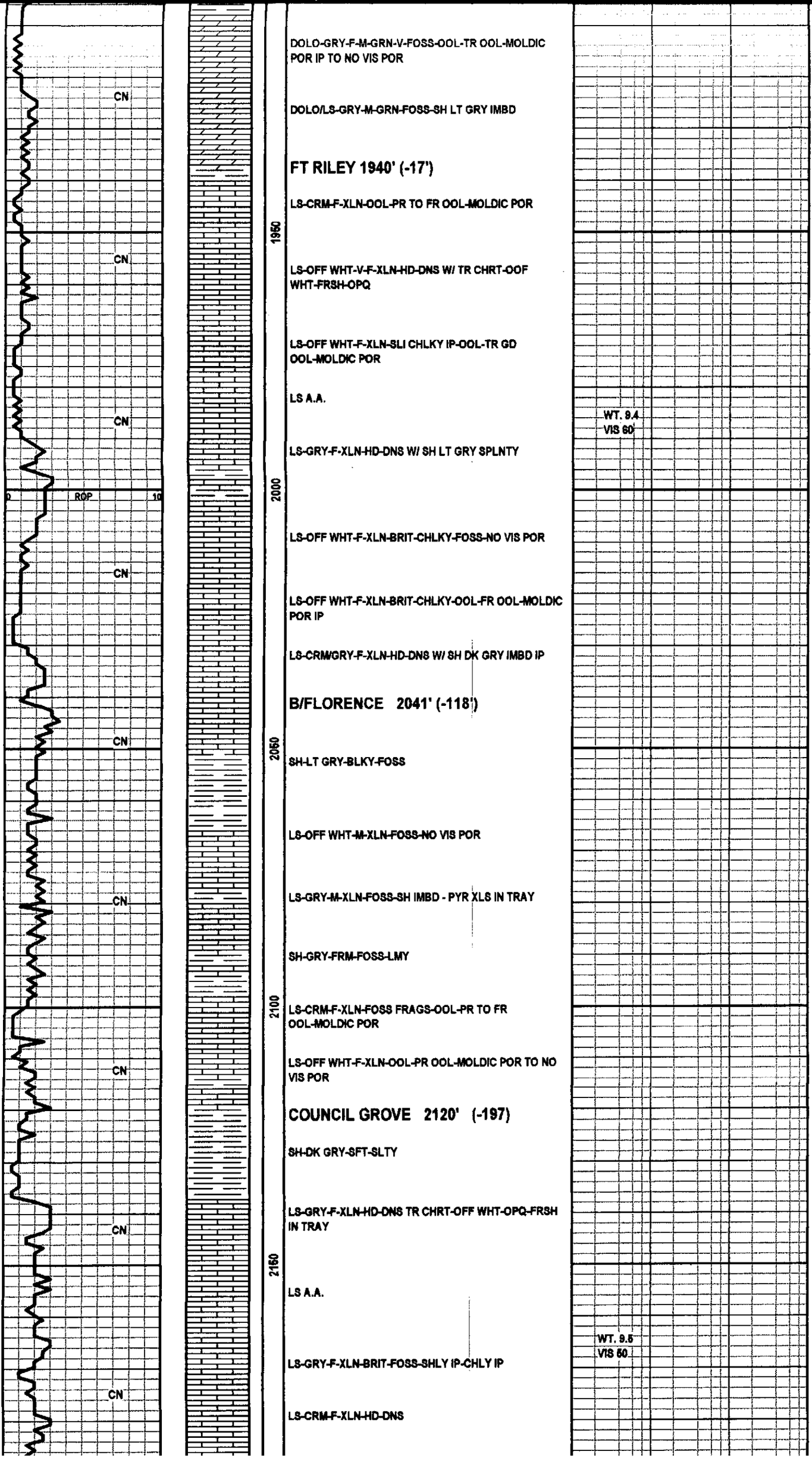
WELLSITE GEOLOGIST:

Rene Hustead
600 N. WINWOOD ST
GARDNER, KS 66030
(913) 908-3390

ROP ROP (min/ft)	DST	Lithology	Porosity and Show	Depth	Geological Descriptions	TG, C1-C4 / REMARKS



DST	Lithology	Porosity and Shows	Depth	Geological Descriptions	TG, C1-C4 / REMARKS
			1700	ANHY-WHT/GRY-OPQ-RNDED-W TR SH LT GRY IMBD-SHALES RED-GREEN	SURVEYS 863' @ 1 DEG 1796' @ 3/4 DEG 2393' @ 1 DEG 3570' @ 1.5 DEG 3829' @ 3/4 DEG
				ANHY-GRY-OPQ-BLOCKY-HD-DNS	DST #1 1736'-1796' REC-10' DRILLING IBLW-WK BLW FOR 12 MIN AND DIED FBLW-NO BLW 15/30/15/30 SIP-263.64-142.89 IFP-67.01-50.92 FFP-251.86-310.7 HP-876.8-819.13
				DOLO/LMY-CRM-V-F-GRN-SUCRO-HD-DNS	
				ANHY-GRY-OPQ-ANG-W/ SH-GRY-GRN-BLKY-WAXY	
				DOLO-CRM-F-GRN-SUCRO-BRIT TO HD-TR PP POR TO NO VIS POR	15 UNIT HW GAS INCRS @1766'
			1750	ANHY-GRY-OPQ-ANG-W/ SH-RED-SLTY	
				ANHY A.A.	
				SH-LT GRY-GUMMY/SH RED	
				HERINGTON 1786' (+137')	MUD DATA @ 1775 WT 8.85 VIS 59 FIL 9.2
				DOLO-CRM-F-GRN-SUCRO-BRIT TO HD-TR PP POR	
				DOLO-CRM-F-GRN-SUCRO-BRIT TO HD-TR PP AND FRAC POR	100 + HW GAS INCRS @ 1796'
			1800	DOLO-GRY-F-GRN-TR FOSS FRAG-SHLY-NO VIS POR	DST #2 1798'-1860' REC-150' MUDDY H2O (60% MUD AND 40% H2O)- 120' MUDDY H2O (40% MUD AND 60% H2O) IBLW-WK BLW BLT TO 5.5 IN DEC TO WK .25 IN BLW FBLW-STRNG BLW BOB-GAS TO SURFACE IN 10 MIN 30/60/90/90 SIP-527.08-519.69 IBLW-68.69-89.10 FBLW-177.31-163.74 HP-908.29-869.51
				DOLO-GRY W/ BLK SPECS-F-GRN-FOSS-FR INTER-GRN/PP POR-TR FRAC	100 + HW GAS INCRS @1820'
				DOLO-CRM/GRY-F-M-GRN-FOSS-FR INTER-GRN POR TO NO VIS POR	
				WINFIELD 1840' (+83')	
				DOLO-CRM/GRY-M-GRN-FOSS-OOL-FR INTER-GRN-TR OOL-MOLDIC AND SM VUG POR	GAS RATES CK/PSIA/MCF/D 1ST .25/ 6.75/ 10.71 LST .25/13.60/21.57 MAX.25/14.45/22.92
			1850	DOLO-CRM-F-GRN-SUCRO-FR INTER-GRN AND TR VUG POR	30 UNIT HW GAS INCRS @ 1860'
				DOLO-CRM/GRY-M-GRN-FOSS FRAGS-TR SH IMBD-FR INTER-GRN POR	
				DOLO-CRM-F-M-GRN-FOSS-TR SH IMBD-TR PYR XLS IN TRAY-PR TOFR INTER-GRN POR	MUD DATA @ 1,860' WT. 8.9 VIS 42 FIL 12.4
				SH-RED-BLKY W/ DOLO IMBD	
			1900	**TOWANDA 1908' (+15')**	


CN
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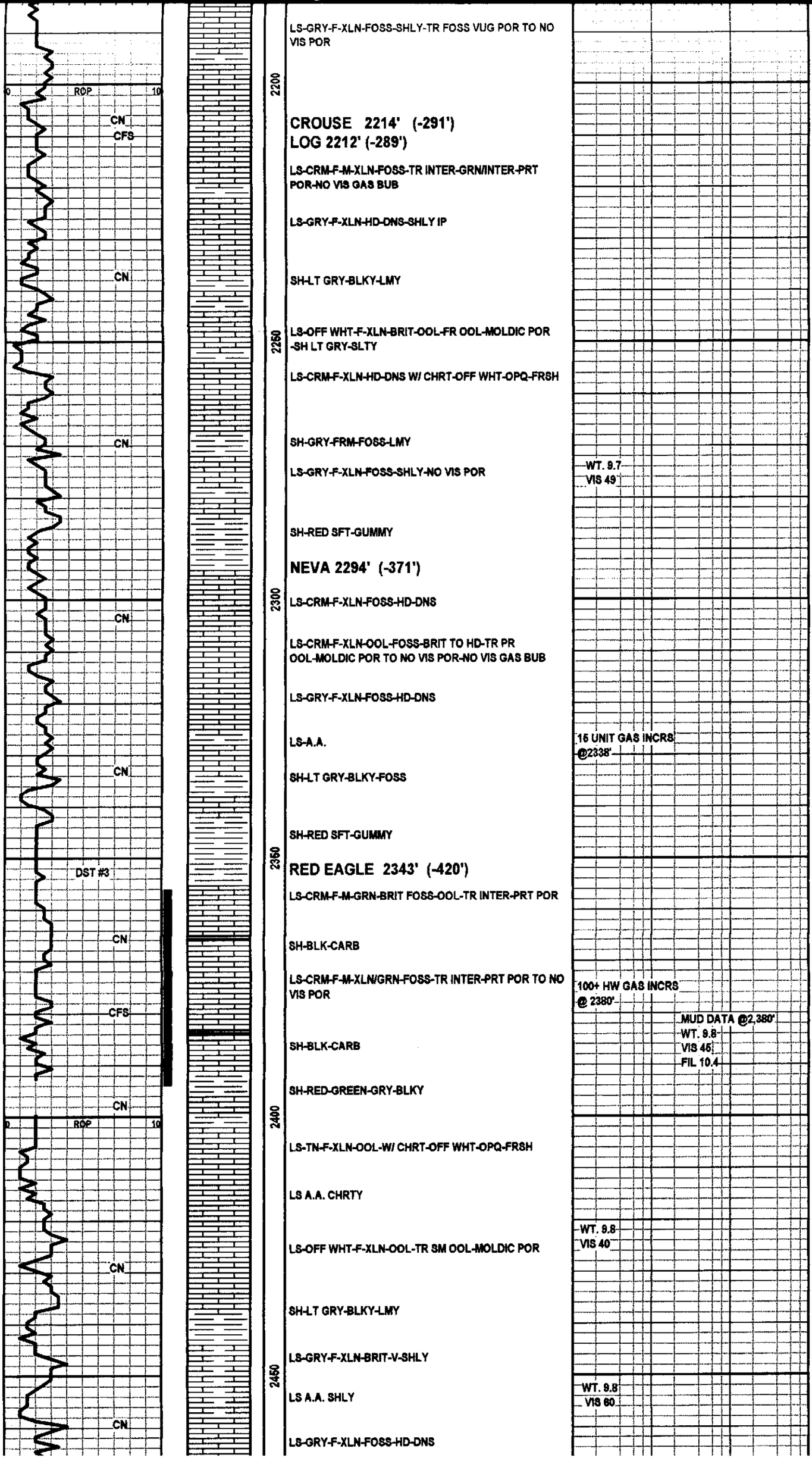
CN
1950
2000
2050
2100
2160
DOLO-GRY-F-M-GRN-V-FOSS-OOL-TR OOL-MOLDIC POR IP TO NO VIS POR
DOLO/LS-GRY-M-GRN-FOSS-SH LT GRY IMBD
FT RILEY 1940' (-17')
LS-CRM-F-XLN-OOL-PR TO FR OOL-MOLDIC POR
LS-OFF WHT-V-F-XLN-HD-DNS W/ TR CHRT-OOF WHT-FRSH-OPQ
LS-OFF WHT-F-XLN-SLI CHLKY IP-OOL-TR GD OOL-MOLDIC POR
LS A.A.
WT. 9.4
VIS 60
LS-GRY-F-XLN-HD-DNS W/ SH LT GRY SPLNTY
LS-OFF WHT-F-XLN-BRIT-CHLKY-FOSS-NO VIS POR
LS-OFF WHT-F-XLN-BRIT-CHLKY-OOL-FR OOL-MOLDIC POR IP
LS-CRM/GRY-F-XLN-HD-DNS W/ SH DK GRY IMBD IP
B/FLORENCE 2041' (-118')
SH-LT GRY-BLKY-FOSS
LS-OFF WHT-M-XLN-FOSS-NO VIS POR
LS-GRY-M-XLN-FOSS-SH IMBD - PYR XLS IN TRAY
SH-GRY-FRM-FOSS-LMY
LS-CRM-F-XLN-FOSS FRAGS-OOL-PR TO FR OOL-MOLDIC POR
LS-OFF WHT-F-XLN-OOL-PR OOL-MOLDIC POR TO NO VIS POR
COUNCIL GROVE 2120' (-197)
SH-DK GRY-SFT-SLTY
LS-GRY-F-XLN-HD-DNS TR CHRT-OFF WHT-OPQ-FRSH IN TRAY
LS A.A.
WT. 9.5
VIS 60
LS-GRY-F-XLN-BRIT-FOSS-SHLY IP-CHLY IP
LS-CRM-F-XLN-HD-DNS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DST #3
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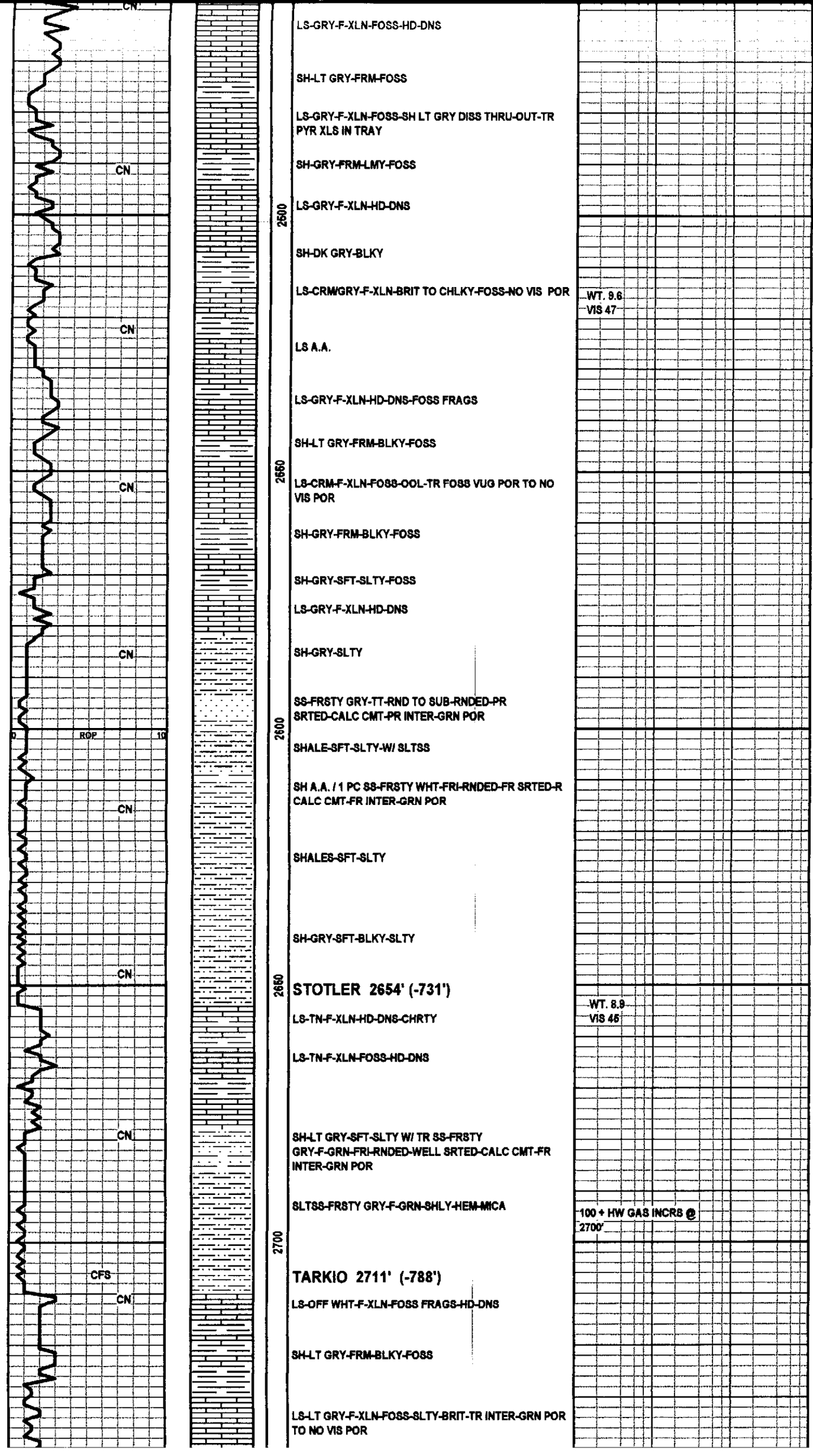
LS-GRY-F-XLN-FOSS-SHLY-TR FOSS VUG POR TO NO VIS POR
CROUSE 2214' (-291')
LOG 2212' (-289')
LS-CRM-F-M-XLN-FOSS-TR INTER-GRN/INTER-PRT POR-NO VIS GAS BUB
LS-GRY-F-XLN-HD-DNS-SHLY IP
SH-LT GRY-BLKY-LMY
LS-OFF WHT-F-XLN-BRIT-OOL-FR OOL-MOLDIC POR -SH LT GRY-SLTY
LS-CRM-F-XLN-HD-DNS W/ CHRT-OFF WHT-OPQ-FRSH
SH-GRY-FRM-FOSS-LMY
LS-GRY-F-XLN-FOSS-SHLY-NO VIS POR
WT. 9.7
VIS 49
SH-RED SFT-GUMMY
NEVA 2294' (-371')
LS-CRM-F-XLN-FOSS-HD-DNS
LS-CRM-F-XLN-OOL-FOSS-BRIT TO HD-TR PR OOL-MOLDIC POR TO NO VIS POR-NO VIS GAS BUB
LS-GRY-F-XLN-FOSS-HD-DNS
LS-A.A.
16 UNIT GAS INCRS @2338'
SH-LT GRY-BLKY-FOSS
SH-RED SFT-GUMMY
RED EAGLE 2343' (-420')
LS-CRM-F-M-GRN-BRIT FOSS-OOL-TR INTER-PRT POR
SH-BLK-CARB
LS-CRM-F-M-XLN/GRN-FOSS-TR INTER-PRT POR TO NO VIS POR
100+ HW GAS INCRS @ 2380'
MUD DATA @2,380'
WT. 9.8
VIS 45
FIL 10.4
SH-BLK-CARB
SH-RED-GREEN-GRY-BLKY
LS-TN-F-XLN-OOL-W/ CHRT-OFF WHT-OPQ-FRSH
LS A.A. CHRTY
WT. 9.8
VIS 40
LS-OFF WHT-F-XLN-OOL-TR SM OOL-MOLDIC POR
SH-LT GRY-BLKY-LMY
LS-GRY-F-XLN-BRIT-V-SHLY
WT. 9.8
VIS 60
LS A.A. SHLY
LS-GRY-F-XLN-FOSS-HD-DNS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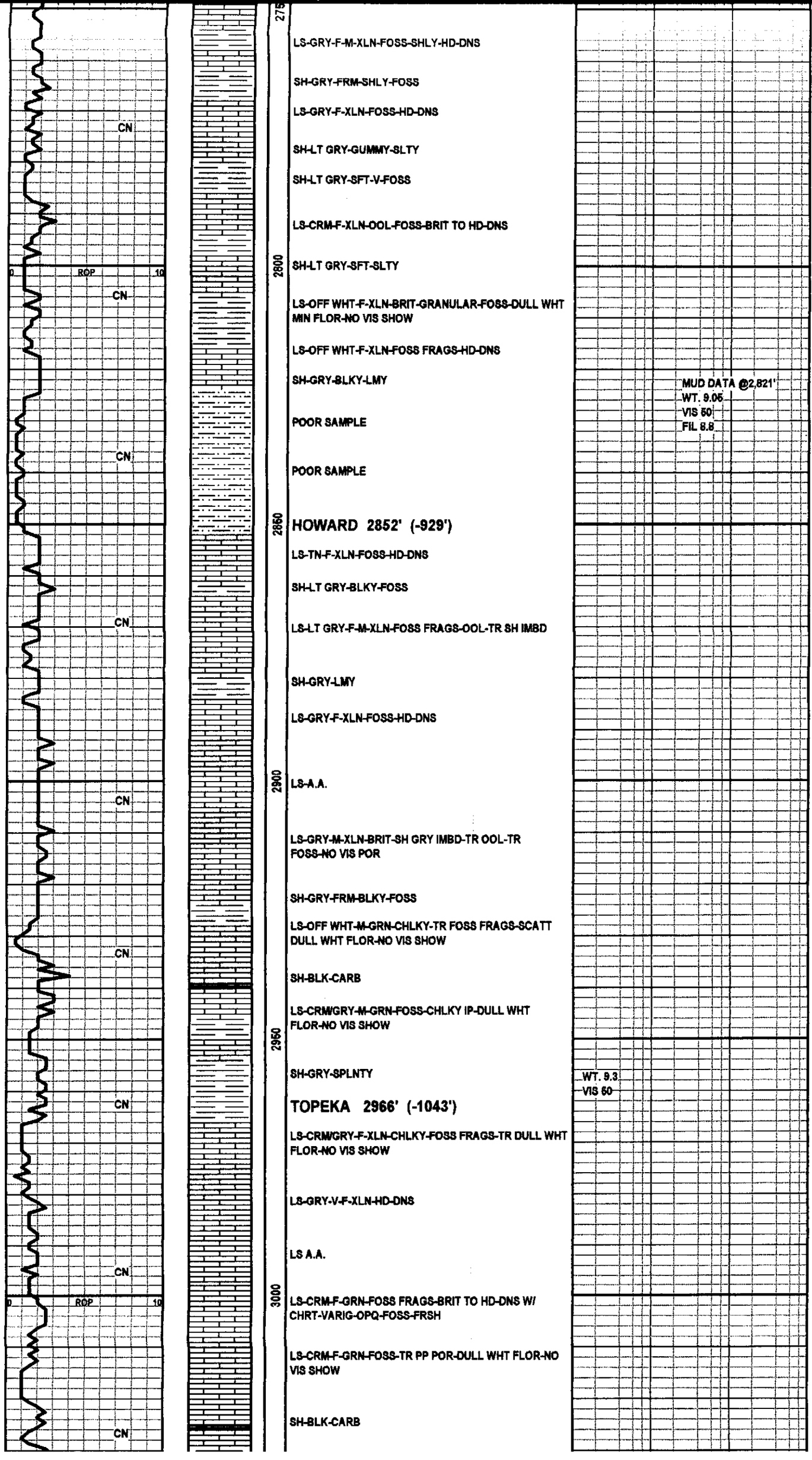
LS-GRY-F-XLN-FOSS-HD-DNS
SH-LT GRY-FRM-FOSS
LS-GRY-F-XLN-FOSS-SH LT GRY DISS THRU-OUT-TR PYR XLS IN TRAY
SH-GRY-FRM-LMY-FOSS
LS-GRY-F-XLN-HD-DNS
SH-DK GRY-BLKY
LS-CRM/GRY-F-XLN-BRIT TO CHLKY-FOSS-NO VIS POR
WT. 9.6
VIS 47
LS A.A.
LS-GRY-F-XLN-HD-DNS-FOSS FRAGS
SH-LT GRY-FRM-BLKY-FOSS
LS-CRM-F-XLN-FOSS-OOL-TR FOSS VUG POR TO NO VIS POR
SH-GRY-FRM-BLKY-FOSS
SH-GRY-SFT-SLTY-FOSS
LS-GRY-F-XLN-HD-DNS
SH-GRY-SLTY
SS-FRSTY GRY-TT-RND TO SUB-RNDED-PR SRTED-CALC CMT-PR INTER-GRN POR
SHALE-SFT-SLTY-W/ SLTSS
SH A.A. / 1 PC SS-FRSTY WHT-FRI-RNDED-FR SRTED-R CALC CMT-FR INTER-GRN POR
SHALES-SFT-SLTY
SH-GRY-SFT-BLKY-SLTY
STOTLER 2654' (-731')
WT. 8.9
VIS 45
LS-TN-F-XLN-HD-DNS-CHRTY
LS-TN-F-XLN-FOSS-HD-DNS
SH-LT GRY-SFT-SLTY W/ TR SS-FRSTY GRY-F-GRN-FRI-RNDED-WELL SRTED-CALC CMT-FR INTER-GRN POR
SLTSS-FRSTY GRY-F-GRN-SHLY-HEM-MICA
100 + HW GAS INCRS @ 2700'
TARKIO 2711' (-788')
LS-OFF WHT-F-XLN-FOSS FRAGS-HD-DNS
SH-LT GRY-FRM-BLKY-FOSS
LS-LT GRY-F-XLN-FOSS-SLTY-BRIT-TR INTER-GRN POR TO NO VIS POR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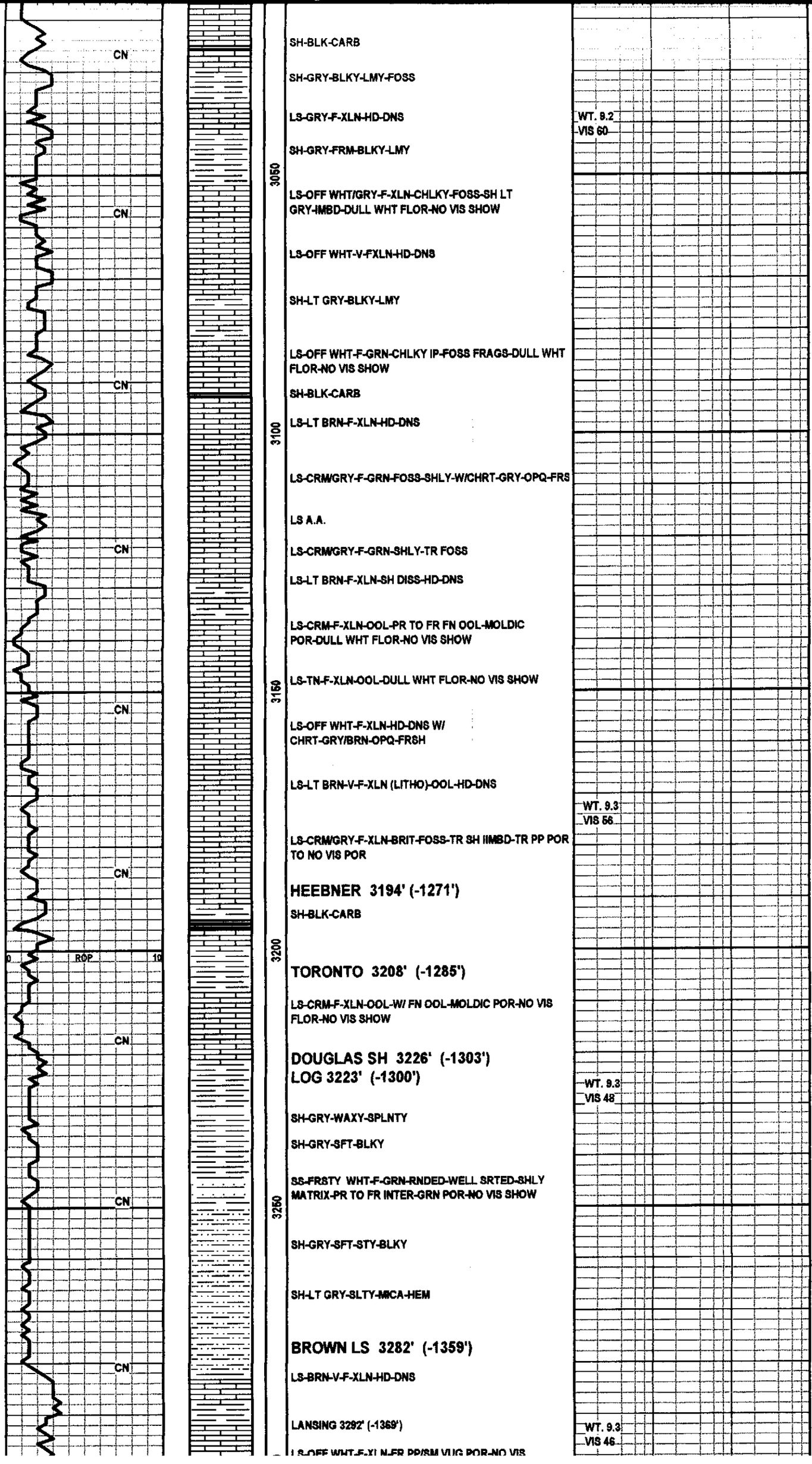
LS-GRY-F-M-XLN-FOSS-SHLY-HD-DNS
SH-GRY-FRM-SHLY-FOSS
LS-GRY-F-XLN-FOSS-HD-DNS
SH-LT GRY-GUMMY-SLTY
SH-LT GRY-SFT-V-FOSS
LS-CRM-F-XLN-OOL-FOSS-BRIT TO HD-DNS
SH-LT GRY-SFT-SLTY
LS-OFF WHT-F-XLN-BRIT-GRANULAR-FOSS-DULL WHT MIN FLOR-NO VIS SHOW
LS-OFF WHT-F-XLN-FOSS FRAGS-HD-DNS
SH-GRY-BLKY-LMY
POOR SAMPLE
POOR SAMPLE
HOWARD 2852' (-929')
LS-TN-F-XLN-FOSS-HD-DNS
SH-LT GRY-BLKY-FOSS
LS-LT GRY-F-M-XLN-FOSS FRAGS-OOL-TR SH IMBD
SH-GRY-LMY
LS-GRY-F-XLN-FOSS-HD-DNS
LS-A.A.
LS-GRY-M-XLN-BRIT-SH GRY IMBD-TR OOL-TR FOSS-NO VIS POR
SH-GRY-FRM-BLKY-FOSS
LS-OFF WHT-M-GRN-CHLKY-TR FOSS FRAGS-SCATT DULL WHT FLOR-NO VIS SHOW
SH-BLK-CARB
LS-CRM/GRY-M-GRN-FOSS-CHLKY IP-DULL WHT FLOR-NO VIS SHOW
SH-GRY-SPLNTY
TOPEKA 2966' (-1043')
LS-CRM/GRY-F-XLN-CHLKY-FOSS FRAGS-TR DULL WHT FLOR-NO VIS SHOW
LS-GRY-V-F-XLN-HD-DNS
LS A.A.
LS-CRM-F-GRN-FOSS FRAGS-BRIT TO HD-DNS W/ CHRT-VARIG-OPQ-FOSS-FRSH
LS-CRM-F-GRN-FOSS-TR PP POR-DULL WHT FLOR-NO VIS SHOW
SH-BLK-CARB
MUD DATA @2,821'
WT. 9.05
VIS 50
FIL 8.8
WT. 9.3
VIS 60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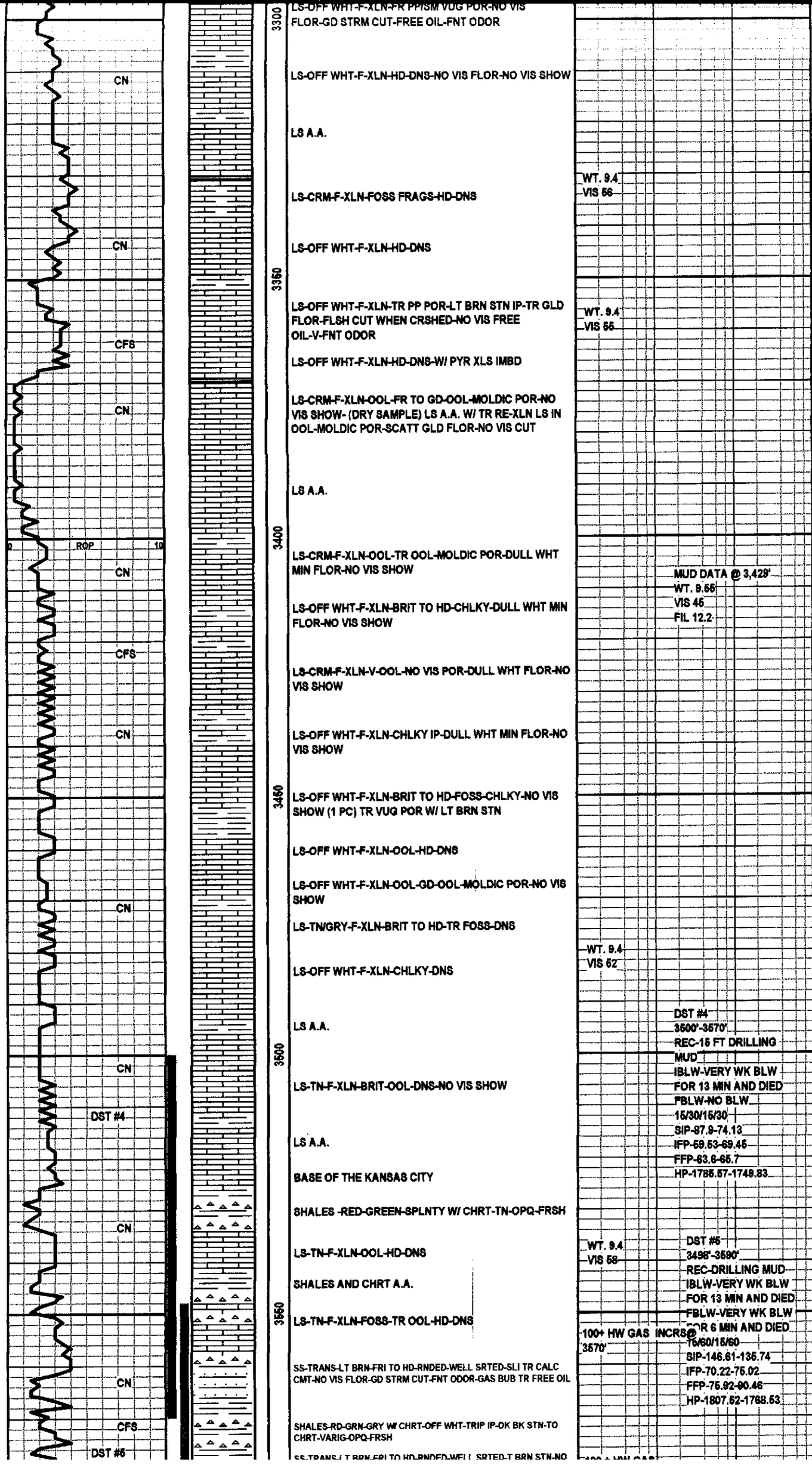
ROP
SH-BLK-CARB
SH-GRY-BLKY-LMY-FOSS
LS-GRY-F-XLN-HD-DNS
SH-GRY-FRM-BLKY-LMY
LS-OFF WHT/GRY-F-XLN-CHLKY-FOSS-SH LT GRY-IMBD-DULL WHT FLOR-NO VIS SHOW
LS-OFF WHT-V-FXLN-HD-DNS
SH-LT GRY-BLKY-LMY
LS-OFF WHT-F-GRN-CHLKY IP-FOSS FRAGS-DULL WHT FLOR-NO VIS SHOW
SH-BLK-CARB
LS-LT BRN-F-XLN-HD-DNS
LS-CRM/GRY-F-GRN-FOSS-SHLY-W/CHRT-GRY-OPQ-FRS
LS A.A.
LS-CRM/GRY-F-GRN-SHLY-TR FOSS
LS-LT BRN-F-XLN-SH DISS-HD-DNS
LS-CRM-F-XLN-OOL-PR TO FR FN OOL-MOLDIC POR-DULL WHT FLOR-NO VIS SHOW
LS-TN-F-XLN-OOL-DULL WHT FLOR-NO VIS SHOW
LS-OFF WHT-F-XLN-HD-DNS W/ CHRT-GRY/BRN-OPQ-FRSH
LS-LT BRN-V-F-XLN (LITHO)-OOL-HD-DNS
LS-CRM/GRY-F-XLN-BRIT-FOSS-TR SH IIMBD-TR PP POR TO NO VIS POR
HEEBNER 3194' (-1271')
SH-BLK-CARB
TORONTO 3208' (-1285')
LS-CRM-F-XLN-OOL-W/ FN OOL-MOLDIC POR-NO VIS FLOR-NO VIS SHOW
DOUGLAS SH 3226' (-1303')
LOG 3223' (-1300')
SH-GRY-WAXY-SPLNTY
SH-GRY-SFT-BLKY
SS-FRSTY WHT-F-GRN-RNDED-WELL SRTED-SHLY MATRIX-PR TO FR INTER-GRN POR-NO VIS SHOW
SH-GRY-SFT-STY-BLKY
SH-LT GRY-SLTY-MICA-HEM
BROWN LS 3282' (-1359')
LS-BRN-V-F-XLN-HD-DNS
LANSING 3292' (-1369')
LS-OFF WHT-F-XLN-FR PP/SM VUG POR-NO VIS
3050
3100
3150
3200
3250
WT. 9.2
VIS 60
WT. 9.3
VIS 56
WT. 9.3
VIS 48
WT. 9.3
VIS 46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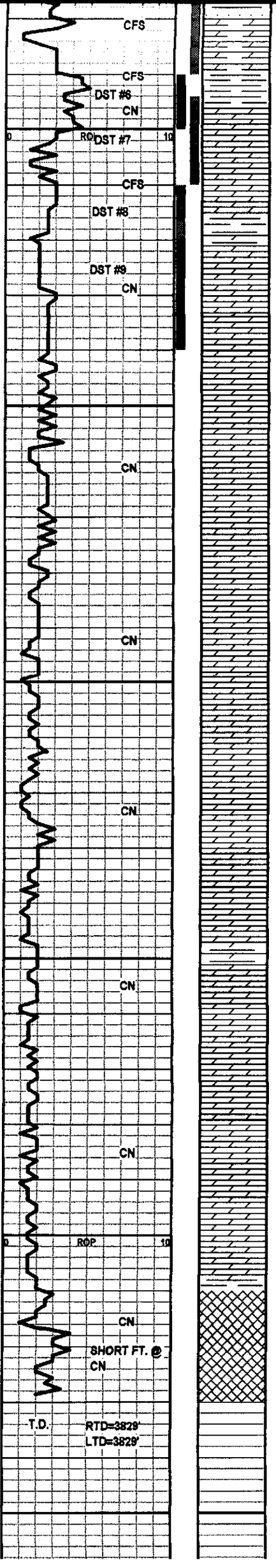
3550
LS-OFF WHT-F-XLN-FR PP/SM VUG POR-NO VIS FLOR-GD STRM CUT-FREE OIL-FNT ODOR
LS-OFF WHT-F-XLN-HD-DNS-NO VIS FLOR-NO VIS SHOW
LS A.A.
LS-CRM-F-XLN-FOSS FRAGS-HD-DNS
LS-OFF WHT-F-XLN-HD-DNS
LS-OFF WHT-F-XLN-TR PP POR-LT BRN STN IP-TR GLD FLOR-FLSH CUT WHEN CRSHED-NO VIS FREE OIL-V-FNT ODOR
LS-OFF WHT-F-XLN-HD-DNS-W/ PYR XLS IMBD
LS-CRM-F-XLN-OOL-FR TO GD-OOL-MOLDIC POR-NO VIS SHOW- (DRY SAMPLE) LS A.A. W/ TR RE-XLN LS IN OOL-MOLDIC POR-SCATT GLD FLOR-NO VIS CUT
LS A.A.
LS-CRM-F-XLN-OOL-TR OOL-MOLDIC POR-DULL WHT MIN FLOR-NO VIS SHOW
LS-OFF WHT-F-XLN-BRIT TO HD-CHLKY-DULL WHT MIN FLOR-NO VIS SHOW
LS-CRM-F-XLN-V-OOL-NO VIS POR-DULL WHT FLOR-NO VIS SHOW
LS-OFF WHT-F-XLN-CHLKY IP-DULL WHT MIN FLOR-NO VIS SHOW
LS-OFF WHT-F-XLN-BRIT TO HD-FOSS-CHLKY-NO VIS SHOW (1 PC) TR VUG POR W/ LT BRN STN
LS-OFF WHT-F-XLN-OOL-HD-DNS
LS-OFF WHT-F-XLN-OOL-GD-OOL-MOLDIC POR-NO VIS SHOW
LS-TN/GRY-F-XLN-BRIT TO HD-TR FOSS-DNS
LS-OFF WHT-F-XLN-CHLKY-DNS
LS A.A.
LS-TN-F-XLN-BRIT-OOL-DNS-NO VIS SHOW
LS A.A.
BASE OF THE KANSAS CITY
SHALES -RED-GREEN-SPLNTY W/ CHRT-TN-OPQ-FRSH
LS-TN-F-XLN-OOL-HD-DNS
SHALES AND CHRT A.A.
LS-TN-F-XLN-FOSS-TR OOL-HD-DNS
SS-TRANS-LT BRN-FRI TO HD-RNDED-WELL SRTED-SLI TR CALC CMT-NO VIS FLOR-GD STRM CUT-FNT ODOR-GAS BUB TR FREE OIL
SHALES-RD-GRN-GRY W/ CHRT-OFF WHT-TRIP IP-DK BK STN-TO CHRT-VARIG-OPQ-FRSH
SS-TRANS-LT BRN-FRI TO HD-RNDED-WELL SRTED-LT BRN STN-NO
WT. 9.4
VIS 56
WT. 9.4
VIS 55
WT. 9.4
VIS 52
WT. 9.4
VIS 58
MUD DATA @ 3,429'
WT. 9.55
VIS 45
FIL 12.2
DST #4
3500'-3570'
REC-15 FT DRILLING MUD
IBLW-VERY WK BLW FOR 13 MIN AND DIED
FBLW-NO BLW
15/30/15/30
SIP-87.9-74.13
IFP-59.53-69.45
FFP-63.6-65.7
HP-1785.57-1749.83
DST #5
3498'-3590'
REC-DRILLING MUD
IBLW-VERY WK BLW FOR 13 MIN AND DIED
FBLW-VERY WK BLW FOR 6 MIN AND DIED
15/60/15/60
SIP-146.61-136.74
IFP-70.22-75.02
FFP-75.92-90.46
HP-1807.52-1768.53
100+ HW GAS INCRS@ 3570'



SS-TRANS-LT BRN-FRI TO HD-RNDED-WELL SRTED-T BRN STN-NO VIS FLOR-FLSH CUT

DOLO-CRM-F-XLN-OOL-PR TO FR INTER-PRT POR-LT BRN STN-SCATT GLD FLOR-FLSH CUT WHEN CRSHED-

ARBUCKLE 3595' (-1672')

PLUGGED BIT/POOR SAMPLES

3600

DOLO-TN-F-GRN-OOL-SNDY TEX-TR INTER-GRN POR-TR LT BRN STN-SCATT FLOR-FLSH CUT-FNT ODOR

DOLO-DK GRY-F-GRN-SNDY TEX-TR INTER-GRN /VUG POR-DK BLK STN-NO VIS FLOR-FLSH CUT WHEN CRSHED-FNT ODOR

DOLO-OFF WHT/TN-M-XLN-OOL-TR INTER-GRN POR-DK BLK STN-FLSH CUT-STRNG ODOR

DOLO-OFF WHT-TN-M-XLN-OOL-SNDY TEX-TR INTER-GRN-DK BLK STN-TR FLSH CUT-FNT ODOR

3650

DOLO-OFF WHT-F-GRN-OOL-HD-DSN W/ (1 PC) TR PR INTER-GRN POR-DK BLK STN

DOLO-OFF WHT-CRS-GRN-PR TO FR-INTER-GRN POR-NO VIS SHOW

DOLO-OFF WHT-CRS-GRN-FR INTER-GRN POR-NO VIS SHOW

DOLO A.A.

DOLO-OFF WHT-CRS-GRN-FR INTER-GRN TO NO VIS POR-NO VIS SHOW

DOLO A.A.

3700

DOLO-OFF WHT-M-GRN-HD-DNS-TR SNDY TEX IMBD-NO VIS SHOW

DOLO-OFF WHT-CRS GRN-TR SNDY TEX-PR TO FR INTER-GRN/FRAC POR-DULL WHT FLOR-NO VIS SHOW

DOLO-OFF WHT-CRS-GRN-BRIT-OOL-TR SNDY TEX-NO VIS SHOW

DOLO-OFF WHT-CRS-GRN-BRIT-TR SNDY TEX-NO VIS SHOW

DOLO-OFF WHT-CRS-GRN-SNDY TEX IP-GLAU IMBD-FR INTER-GRN POR-NO VIS SHOW

3750

SHALES-RED-GRN-BLK-W/ SND GRNS W GLAU IMBD-DOLO-OFF WHT-F-GRN-SNDY TEX-NO VIS SHOW

DOLO-OFF WHT-V-CRS XLS-W/DOLO-TN-F-XLN-HD-DNS-BRITE WHT FLOR-NO VIS SHOW

DOLO-TN-CRS XLN-BRIT TO HD-TR VUG POR-DULL WHT FLOR-NO VIS CUT

DOLO-OFF WHT-CRS XLN-FR INTER-GRN POR-TR VUG-SCATT WHT FLOR-NO VIS CUT TR GLAU IMBD IP

DOLO A.A. W/ SHALES-GRY-RD-SPLNTY

3800

DOLO-OFF WHT-CRS GRN-TR SH IMBD-SNDY TEX IP-SCATT DULLWHT FLOR-NO VIS CUT

QTZ-TRANS-V-HD-FRAC-BRITE WHT FLOR-NO VIS SHOW

SH-RED-SPLNTY

QTZ-TRANS-PINK-FRAC-BRITE WHT FLOR-NO VIS SHOW-LOOSE SND GRNS IN TRAY

3850

100 + HW GAS INCRS @3590'

100+ HW GAS INCRS @3600'

25 UNIT GAS INCRS @ 3620'

20 UNIT HW GAS INCRS @3630'

WT. 9.1
VIS 53
LCM 3#

MUD DATA @ 3,679'
WT. 9.5
VIS 57
FIL 9.2

MUD DATA @ 3,600'
WT. 9.1
VIS 44
FIL 9.8

MUD DATA @ 3,620'
WT. 9.3
VIS 51

MUD DATA @ 3,640'
WT. 9.15
VIS 44
FIL 8.0

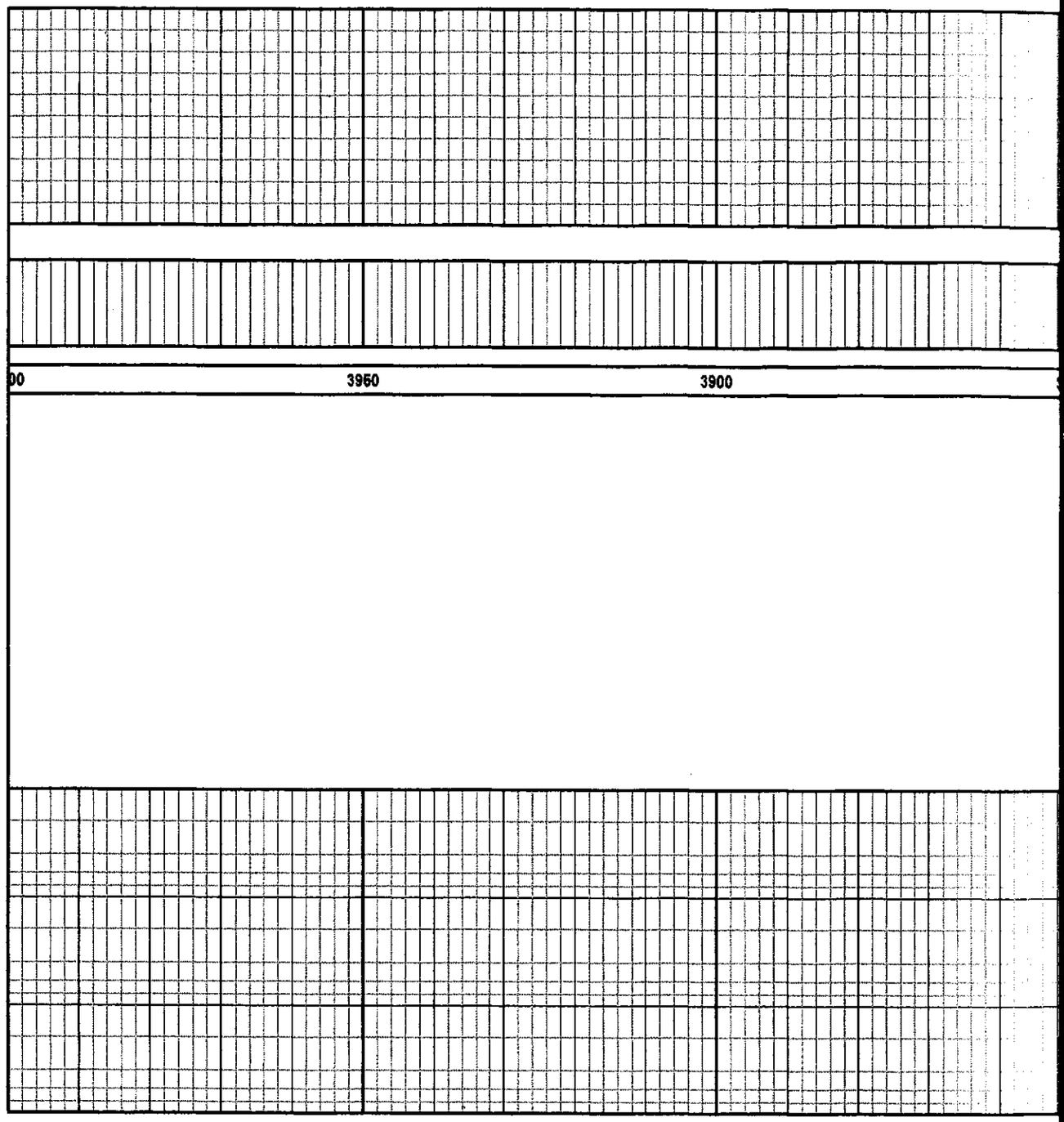
DST #6
3590'-3600'
REC-240 DRILLING MUD
IBLW-WK BLW FOR 15 MIN
FBLW-NO BLW
15/60/15/60
SIP-1598.23-1500.42
IFP-157.5-151.18
FFP-151.66-154.07
HP-1710.47-1724.21

DST #7
3605'-3620'
REC-275' DRILLING MUD
IBLW-WK BLW THRU OUT
FBLW-NO BLW
15/30/15/30
SIP-190.27-185.39
IFP-98.32-133.24
FFP-165.36-169.88
HP-1757.5-1732.55

DST #8
REC-10 FT DRILLING MUD
IBLW-WK BLW FOR 8 MIN AND DIED
FBLW-NO BLW
15/30/15/30
SIP-1044.79-961.14
IFP-21.11-26.39
FFP-24.04-26.68
HP-1789.42-1740.16

DST #9
3620'-3640'
REC-15 FT DRILLING MUD
IBLW-WK BLW FOR 8 MIN AND DIED
FBLW-NO BLW
15/30/15/30
SIP-827.69-623.97
IFP-40.53-41.26
FFP-41.51-43.51
HP-1772.49-1729.82

MUD DATA @ 3,796'
WT. 8.8
VIS 48
FIL 8.8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