KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1045069

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 # 5144
Name: Mull Drilling Company, Inc.
Address 1: 1700 N WATERFRONT PKWY
Address 2: BLDG 1200
City: WICHITA State: KS Zip: 67206 + ____
Contact Person: Mark Shreve
Phone: (316) 264-6366
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Phil Askey
Purchaser: N/A

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 #: ____

6/28/2010	7/5/2010	7/5/2010
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-135-25082-00-00
Spot Description: ____
SW - SW - SE - NE Sec. 19 Twp. 16 S. R. 22 [ ] East [x] West
2319 Feet from [x] North / [ ] South Line of Section
1099 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[x] NE [ ] NW [ ] SE [ ] SW
County: Ness
Lease Name: Wierman 'A' Well #: 1-19
Field Name: Wildcat
Producing Formation: N/A
Elevation: Ground: 2435 Kelly Bushing: 2440
Total Depth: 4520 Plug Back Total Depth: ____
Amount of Surface Pipe Set and Cemented at: 217 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: 18200 ppm Fluid volume: 775 bbls
Dewatering method used: Evaporated
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

- [x] Letter of Confidentiality Received
  Date: 10/04/2010
- [x] Confidential Release Date: 10/10/2012
- [x] Wireline Log Received
- [x] Geologist Report Received
- [ ] UIC Distribution

ALT [ ] I [x] II [ ] III Approved by: NAOMI JAMES Date: 10/04/2010

Side Two

1045069

Operator Name: Mull Drilling Company, Inc. Lease Name: Wierman 'A' Well #: 1-19

Sec. 19 Twp. 16 S. R. 22 ☐ East ☑ West County: Ness

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 (Attach Additional Sheets)	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Electric Log Submitted Electronically (If no, Submit Copy)	☑ Yes	☐ No

List All E. Logs Run:
Log
CNL/CDL/PE; DIL; Sonic; Micro

☑ 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	12.250	8.6250	20	217	Common		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	Mull Drilling Company, Inc.
Well Name	Wierman 'A' 1-19
Doc ID	1045069

Tops

Anhydrite	1775	+663
B/Anhydrite	1812	+627
Heenber Shale	3842	-1402
B/KC	4164	-1723
Marmaton	4208	-1774
Pawnee	4250	-1810
Ft. Scott	4348	-1908
Cherokee Sand	4444	-2008
Miss/Warsaw	4460	-2022
Miss/Osage	4476	-2086

KANSAS
CORPORATION COMMISSION

October 04, 2010

Mark Shreve
Mull Drilling Company, Inc.
1700 N WATERFRONT PKWY
BLDG 1200
WICHITA, KS 67206

Re: ACO1
API 15-135-25082-00-00
Wierman 'A' 1-19
NE/4 Sec.19-16S-22W
Ness 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,
Mark Shreve

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4110

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 7-5-10	19	16	22	Ness	Kansas		4:45PM

Lease Wiseman A Well No. 1-19 Location Brownell 2W ½S Wisto

Contractor WW Drilling Rig 2

Type Job Plug

Hole Size 7⅞ T.D. 4520

Csg. Depth

Tbg. Size Depth

Tool Depth

Cement Left in Csg. Shoe Joint

Meas Line Displace

EQUIPMENT

Pumptrk 1 No. Cementer Steve

Bulktrk 10 No. Driver Brandon

Bulktrk No. Driver Driver Dewayne

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30sx

Mouse Hole 20sx

Centralizers

Baskets

D/V or Port Collar

1st Plug @ 1810 50sx

2nd " " 1130 80sx

3rd " " 660 50sx

4th " " 250 50sx

5th " " 60 20sx

Rat Hole 30sx

Mouse Hole 20sx

Owner

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Mull Drilling

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 300 60/40 4%Gel ¼# Flo Seal /sk

Common 180

Poz. Mix 120

Gel. 10

Calcium

Hulls

Salt

Flowseal 75

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 310

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

Pumptrk Charge Plug

Mileage 22

Tax

Discount

Total Charge

X
Signature

Quality Oilwell Cementing

QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 4106
Cell 785-324-1041

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 6-28-10	19	16	22	Ness	Kansas		7:00pm
Lease Ostermann A	Well No. 1-19			Location Brownell 2W 3N Wmto			

Contractor WW Drilling Rig 2
Type Job Surface
Hole Size 12¼ T.D. 218
Csg. 8⅝ 20lb Depth 218
Tbg. Size Depth
Tool Depth
Cement Left in Csg. 10-15 Shoe Joint
Meas Line Displace 13⅓ Bbl

Owner
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Charge To Mull Drilling
Street
City State
The above was done to satisfaction and supervision of owner agent or contractor.
Cement Amount Ordered 150 Com 3%CC 2%Gel

EQUIPMENT

Pumptrk 1	No.	Cementer	
		Helper Steve	4½
Bulktrk 12	No.	Driver	
		Driver Chad	4½
Bulktrk	No.	Driver	
		Driver	

JOB SERVICES & REMARKS

Remarks:
Rat Hole
Mouse Hole
Centralizers
Baskets
D/V or Port Collar

Cement Did Circulate

Common	150
Poz. Mix	
Gel.	3
Calcium	5
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	158
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Surface

Pumptrk Charge	Surface
Mileage	22
Tax	
Discount	
Total Charge	

Quality Oilwell Cementing

X Signature

Diamond Testing

General information Report

General Information

Company Name MULL DRILLING COMPANY, INC.

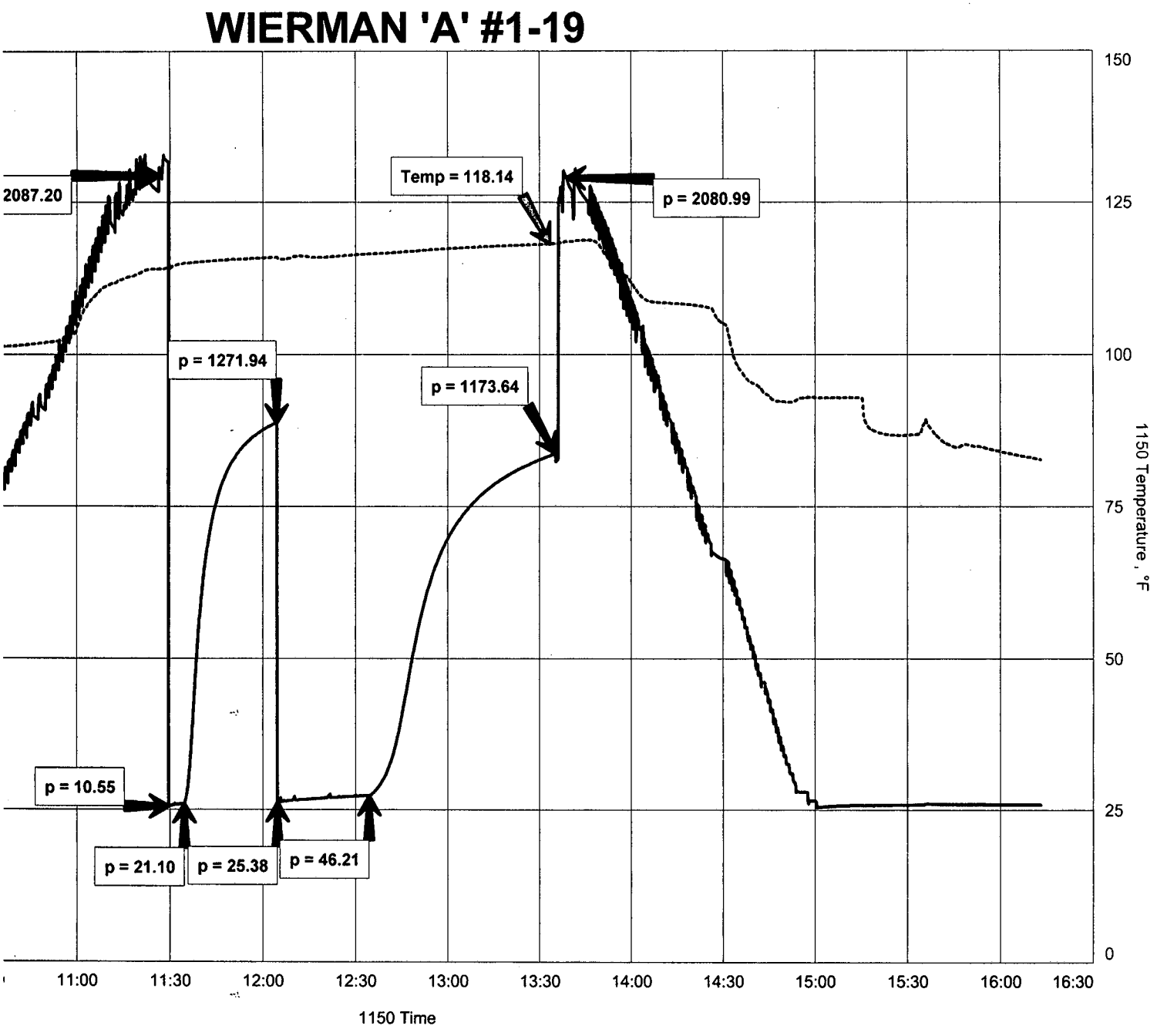
Contact	ERNIE MORRISON		
Well Name	WIERMAN 'A' #1-19	Job Number	
Unique Well ID	DST #1 FT SCOTT / CHEROKEE 4,320' - 4,383'	Representative	ROGER D. FRIEDLY
Surface Location	SEC 19-16S-22W NESS COUNTY, KS	Well Operator	MULL DRILLING COMPANY, INC.
Well License Number		Report Date	2010/07/03
Field	WILDCAT	Prepared By	ROGER D. FRIEDLY
Well Type	Vertical		

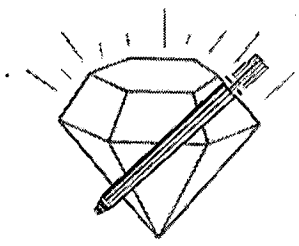
Test Type	CONVENTIONAL		
Formation	DST #1 FT SCOTT / CHEROKEE 4,320' - 4,383'		
Well Fluid Type	01 Oil	Start Test Time	09:00:00
		Final Test Time	16:13:00
Start Test Date	2010/07/03		
Final Test Date	2010/07/03		
Gauge Name	1150		
Gauge Serial Number			

Test Results

RECOVERED: 67' DM 100% MUD WITH A FEW OIL SPECKS

TOOL SAMPLE: 100% DM FEW OIL SPECKS


WIERMAN 'A' #1-19
2087.20
Temp = 118.14
p = 2080.99
p = 1271.94
p = 1173.64
p = 10.55
p = 21.10
p = 25.38
p = 46.21
150
125
100
75
50
25
0
1150 Temperature , °F
11:00
11:30
12:00
12:30
13:00
13:30
14:00
14:30
15:00
15:30
16:00
16:30
1150 Time



DIAMOND TESTING

P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

CLOCK ON:09:00

CLOCK OFF:16:13

DRILL-STEM TEST TICKET

Company MULL DRILLING COMPANY, INC. Lease & Well No. WIERMAN 'A' #1-19

Contractor W.W. RIG #2 Charge to MULL DRILLING COMPANY, INC.

Elevation 2,440 KB Formation FT SCOTT / CHEROKEE Effective Pay ____ Ft. Ticket No. ____

Date 7.3.10 Sec. 19 Twp. 16 S Range 22 W County NESS State KANSAS

Test Approved By PHIL ASKEY Diamond Representative ROGER D. FRIEDLY

Formation Test No. 1 Interval Tested from 4,320 ft. to 4,383 ft. Total Depth 4,383 ft.

Packer Depth 4,315 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Packer Depth 4,320 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4,301 ft. Recorder Number 1150 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4,380 ft. Recorder Number 3815 Cap. 5,700 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 48 Drill Collar Length 123 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 11.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.

Chlorides 4,700 P.P.M. Drill Pipe Length 4,164 ft. I.D. 3 1/2 in.

Jars: Make BOWEN Serial Number #3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 63 ft. Size 4 1/2-FH in.

31' DP IN ANCHOR

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK 1/4" BLOW INCREASING TO 1" (NOBb)

2nd Open: WEAK 1/8' BLOW increasing to 1 1/4" (NOBb)

Recovered 67 ft. of DM 100% MUD WITH A FEW OIL SPECKS

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks: ____

TOOL SAMPLE: 100% DM FEW OIL SPECKS

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 10:30 a.m. A.M. P.M. Time Started Off Bottom 1:35 p.m. A.M. P.M. Maximum Temperature 118

Initial Hydrostatic Pressure ..... (A) 2,087 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 11 P.S.I. to (C) 21 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 1,272 P.S.I.

Final Flow Period ..... Minutes 30 (E) 25 P.S.I. to (F) 46 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1,174 P.S.I.

Final Hydrostatic Pressure ..... (H) 2,081 P.S.I.

Diamond Testing

General information Report

General Information

Company Name MULL DRILLING COMPANY, INC.

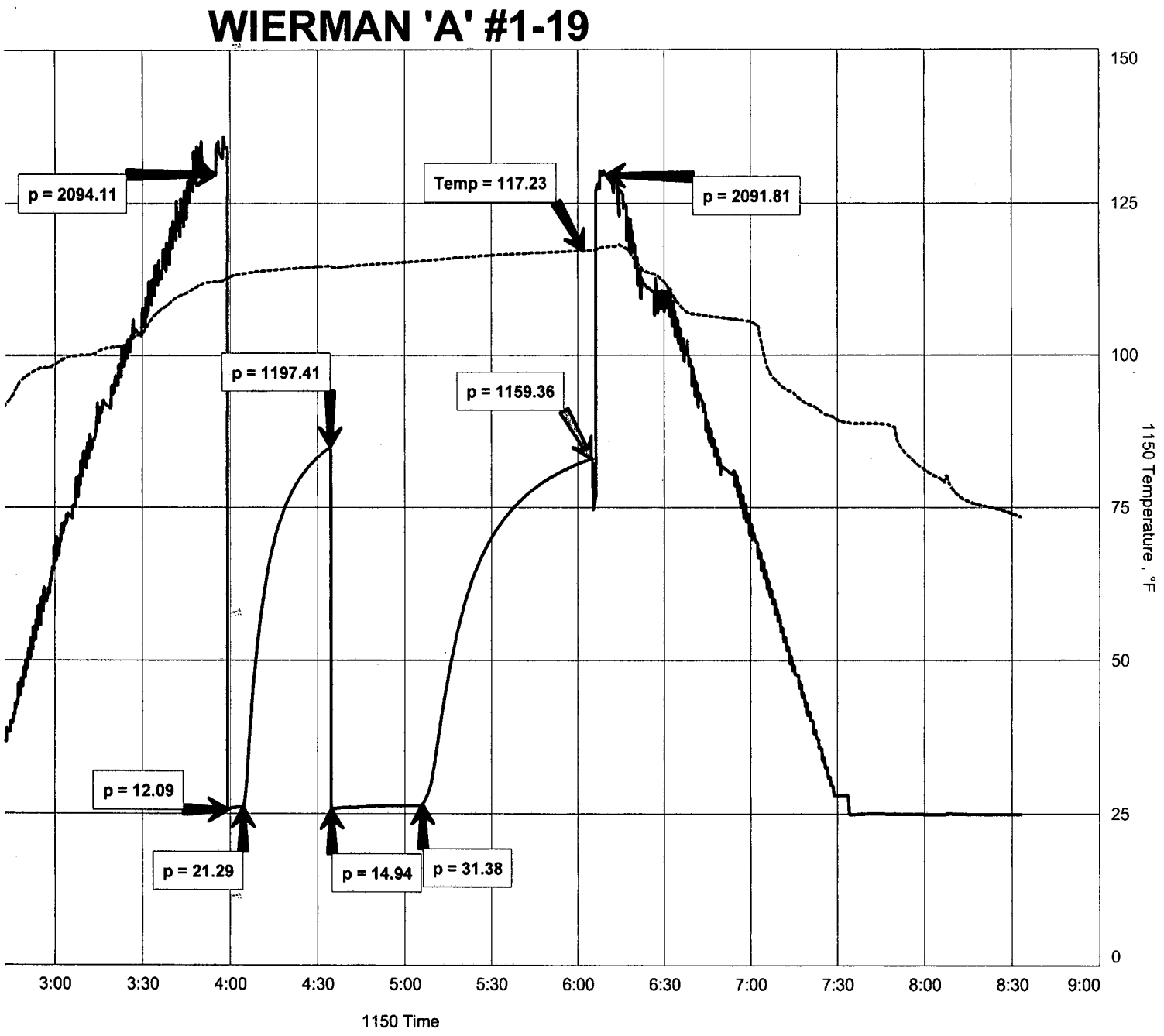
Contact	ERNIE MORRISON		
Well Name	WIERMAN 'A' #1-19	Job Number	
Unique Well ID	DST #2 CHEROKEE 4,425' - 4,460'	Representative	ROGER D. FRIEDLY
Surface Location	SEC 19-16S-22W NESS COUNTY, KS	Well Operator	MULL DRILLING COMPANY, INC.
Well License Number		Report Date	2010/07/04
Field	WILDCAT	Prepared By	ROGER D. FRIEDLY
Well Type	Vertical		

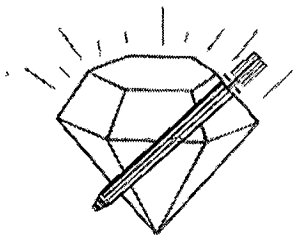
Test Type	CONVENTIONAL		
Formation	DST #2 CHEROKEE 4,425' - 4,460'		
Well Fluid Type	01 Oil	Start Test Time	01:15:00
		Final Test Time	08:33:00
Start Test Date	2010/07/04		
Final Test Date	2010/07/04		
Gauge Name	1150		
Gauge Serial Number			

Test Results

RECOVERED: 5' OCM 8% OIL, 92% MUD
15' SLT OCM 2% OIL, 98% MUD
20' TOTAL FLUID

TOOL SAMPLE: 4% OIL, 96% MUD


WIERMAN 'A' #1-19
p = 2094.11
Temp = 117.23
p = 2091.81
p = 1197.41
p = 1159.36
p = 12.09
p = 21.29
p = 14.94
p = 31.38
150
125
100
75
50
25
0
1150 Temperature , °F
3:00
3:30
4:00
4:30
5:00
5:30
6:00
6:30
7:00
7:30
8:00
8:30
9:00
1150 Time



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

CLOCK ON:01:15

CLOCK OFF:08:33

DRILL-STEM TEST TICKET

Company MULL DRILLING COMPANY, INC. Lease & Well No. WIERMAN 'A' #1-19

Contractor W.W. RIG #2 Charge to MULL DRILLING COMPANY, INC.

Elevation 2,440 KB Formation CHEROKEE Effective Pay ____ Ft. Ticket No. ____

Date 7.4.10 Sec. 19 Twp. 16 S Range 22 W County NESS State KANSAS

Test Approved By PHIL ASKEY Diamond Representative ROGER D. FRIEDLY

Formation Test No. 2 Interval Tested from 4,425 ft. to 4,460 ft. Total Depth 4,460 ft.

Packer Depth 4,420 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Packer Depth 4,425 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4,406 ft. Recorder Number 1150 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4,457 ft. Recorder Number 3815 Cap. 5,700 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 58 Drill Collar Length 123 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 11.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.

Chlorides 4,700 P.P.M. Drill Pipe Length 4,269 ft. I.D. 3 1/2 in.

Jars: Make BOWEN Serial Number #3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 35 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK 1/4" BLOW INCREASING TO 1/2" (NOBb)

2nd Open: NO BLOW (NOBb)

Recovered 5 ft. of OCM 85 OIL, 92% MUD

Recovered 15 ft. of SLT OCM 2% OIL, 98% MUD

Recovered 20 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks: ____

TOOL SAMPLE: 4% OIL, 96% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 3:59 A.M, A.M. P.M. Time Started Off Bottom 6:04 A.M. A.M. P.M. Maximum Temperature 117

Initial Hydrostatic Pressure ..... (A) 2,094 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 12 P.S.I. to (C) 21 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 1,197 P.S.I.

Final Flow Period ..... Minutes 30 (E) 15 P.S.I. to (F) 31 P.S.I.

Final Closed In Period ..... Minutes 60 (G) 1,159 P.S.I.

Final Hydrostatic Pressure ..... (H) 2,092 P.S.I.

Diamond Testing

General information Report

General Information

Company Name MULL DRILLING COMPANY, INC.

Contact	ERNIE MORRISON		
Well Name	WIERMAN 'A' #1-19	Job Number	
Unique Well ID	DST #3 CHEROKEE/MISS. 4,425' - 4,465'	Representative	ROGER D. FRIEDLY
Surface Location	SEC 19-16S-22W NESS COUNTY, KS	Well Operator	MULL DRILLING COMPANY, INC.
Well License Number		Report Date	2010/07/04
Field	WILDCAT	Prepared By	ROGER D. FRIEDLY
Well Type	Vertical		

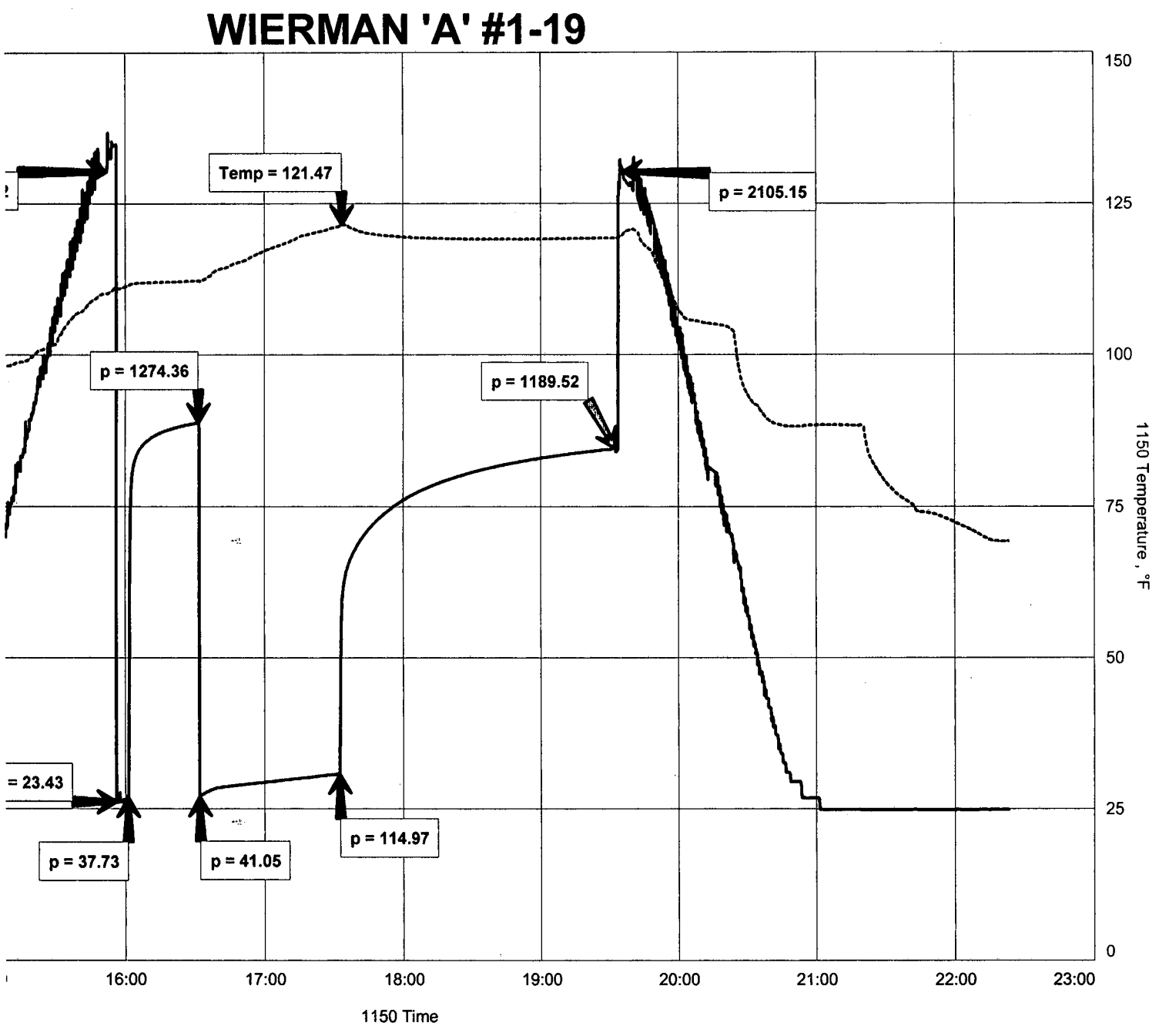
Test Type	CONVENTIONAL		
Formation	DST #3 CHEROKEE/MISS. 4,425' - 4,465'		
Well Fluid Type	06 Water	Start Test Time	13:50:00
		Final Test Time	22:23:00
Start Test Date	2010/07/04		
Final Test Date	2010/07/04		
Gauge Name	1150		
Gauge Serial Number			

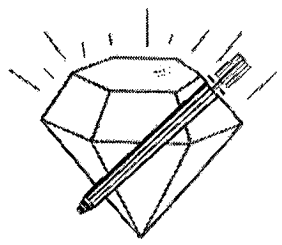
Test Results

RECOVERED: 112' WM 33% WTR, 67% MUD - OIL SPECKS - LESS TAN 1' CLEAN OIL ON TOP
123' SW 100% WTR
235' TOTAL FLUID

TOOL SAMPLE: 58% WTR, 42% MUD

CHLORIDES: 17,000 Ppm
PH: 7.0
RW: .34 @ 62 deg


WIERMAN 'A' #1-19
Temp = 121.47
p = 2105.15
p = 1274.36
p = 1189.52
= 23.43
p = 37.73
p = 41.05
p = 114.97
150
125
100
75
50
25
0
1150 Temperature , °F
16:00
17:00
18:00
19:00
20:00
21:00
22:00
23:00
1150 Time



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

CLOCK ON:13:50

CLOCK OFF:22:23

DRILL-STEM TEST TICKET

Company MULL DRILLING COMPANY, INC. Lease & Well No. WIERMAN 'A' #1-19

Contractor W.W. RIG #2 Charge to MULL DRILLING COMPANY, INC.

Elevation 2,440 KB Formation CHEROKEE \ MISSISSIPPI Effective Pay ____ Ft. Ticket No. ____

Date 7.4.10 Sec. 19 Twp. 16 S Range 22 W County NESS State KANSAS

Test Approved By PHIL ASKEY Diamond Representative ROGER D. FRIEDLY

Formation Test No. 3 Interval Tested from 4,425 ft. to 4,465 ft. Total Depth 4,465 ft.

Packer Depth 4,420 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Packer Depth 4,425 ft. Size 6 3/4 in. Packer Depth ____ ft. Size ____ in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4,406 ft. Recorder Number 1150 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4,462 ft. Recorder Number 3815 Cap. 5,700 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 51 Drill Collar Length 123 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 11.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.

Chlorides 4,700 P.P.M. Drill Pipe Length 4,269 ft. I.D. 3 1/2 in.

Jars: Make BOWEN Serial Number #3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.

Did Well Flow? NO Reversed Out NO Anchor Length 40 ft. Size 4 1/2-FH in.

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK 1/4" BLOW INCREASING TO 2 1/4" (NOBb)

2nd Open: WEAK 1/4" BLOW INCREASING TO 11 1/8" (NOBb)

Recovered 112 ft. of WM 33% WTR, 67% MUD - OIL SPECKS - SOME FREE OIL ON TOP LESS THAN 1'

Recovered 123 ft. of SW 100% WTR - OIL SPECKS

Recovered 235 ft. of TOTAL FLUID CHLORIDES: 17,000 Ppm

Recovered ____ ft. of PH 7.0

Recovered ____ ft. of RW .34 @ 62

Remarks: ____

TOOL SAMPLE: 58% WTR, 42% MUD, - FEW OIL SPECKS

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 3:57 P.M. A.M. P.M. Time Started Off Bottom 7:32 P.M. A.M. P.M. Maximum Temperature 121

Initial Hydrostatic Pressure ..... (A) 2,105 P.S.I.

Initial Flow Period ..... Minutes 5 (B) 23 P.S.I. to (C) 38 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 1,274 P.S.I.

Final Flow Period ..... Minutes 60 (E) 41 P.S.I. to (F) 115 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 1,190 P.S.I.

Final Hydrostatic Pressure ..... (H) 2,105 P.S.I.

PHIL ASKEY
PETROLEUM GEOLOGIST

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY Mull Drilling Company, Inc.
LEASE Wierman "A" #1-19
FIELD 2319' FNL & 1099' FEL
LOCATION Wildcat
SEC 19 TWSP 16S RGE 22W
COUNTY Ness STATE Kansas
CONTRACTOR WW Drilling Rig #2
SPUD 6/28/10 COMP 7/5/10
RTD 4520' LTD 4519'
MUD UP 3400' TYPE MUD Chemical - Mud Co

ELEVATIONS
KB 2440'
DF 2438'
GL 2435'
Measurements Are All From KB

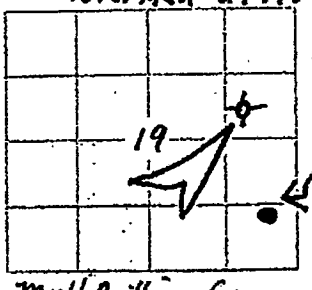
CASING
SURFACE 8 5/8" @ 219' w/ 150 sxs
PRODUCTION

ELECTRICAL SURVEYS
Superior Well Services P.E.; CNL/CDL; DIL; Sonic; Micro

SAMPLES SAVED FROM 3700' TO RTD
DRILLING TIME KEPT FROM 1700'-1900'; 3600' TO RTD
SAMPLES EXAMINED FROM 3700' TO RTD
GEOLOGICAL SUPERVISION FROM 3910' TO RTD
GEOLOGIST ON WELL Phil Askey, P.G.

FORMATION TOPS	LOG		SAMPLES	
Anhydrite	1774	+666	1776	Flat
Heebner	3842	-1402	3842	-6 L
Lansing	3877	-1437	3878	-3
B/KC	4152	-1712	4153	-3
Marmaton	4187	-1747	4188	-4
Pawnee	4250	-1810	4250	-4
Ft. Scott	4348	-1908	4348	-2
Cherokee Shale	4365	-1925	4365	-4
Basal Penn Lime	4418	-1978	4419	-1
Cherokee Sand	4453	-2013	4453	-5
Miss Warsaw	4460	-2020	4462	Flat

Reference Well
Mull Drilling Company
Wierman #1-19



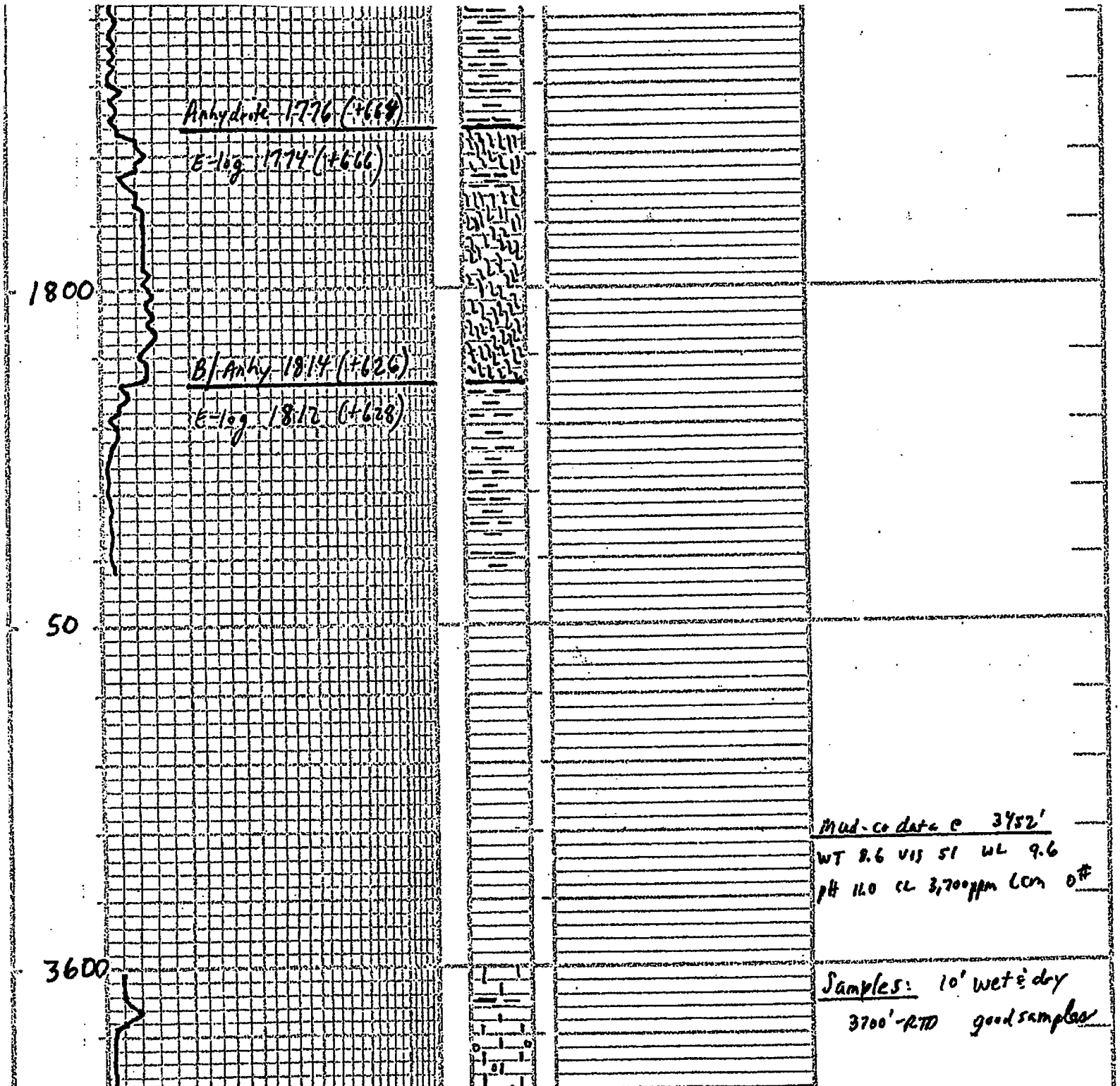
Mull Drilling Co

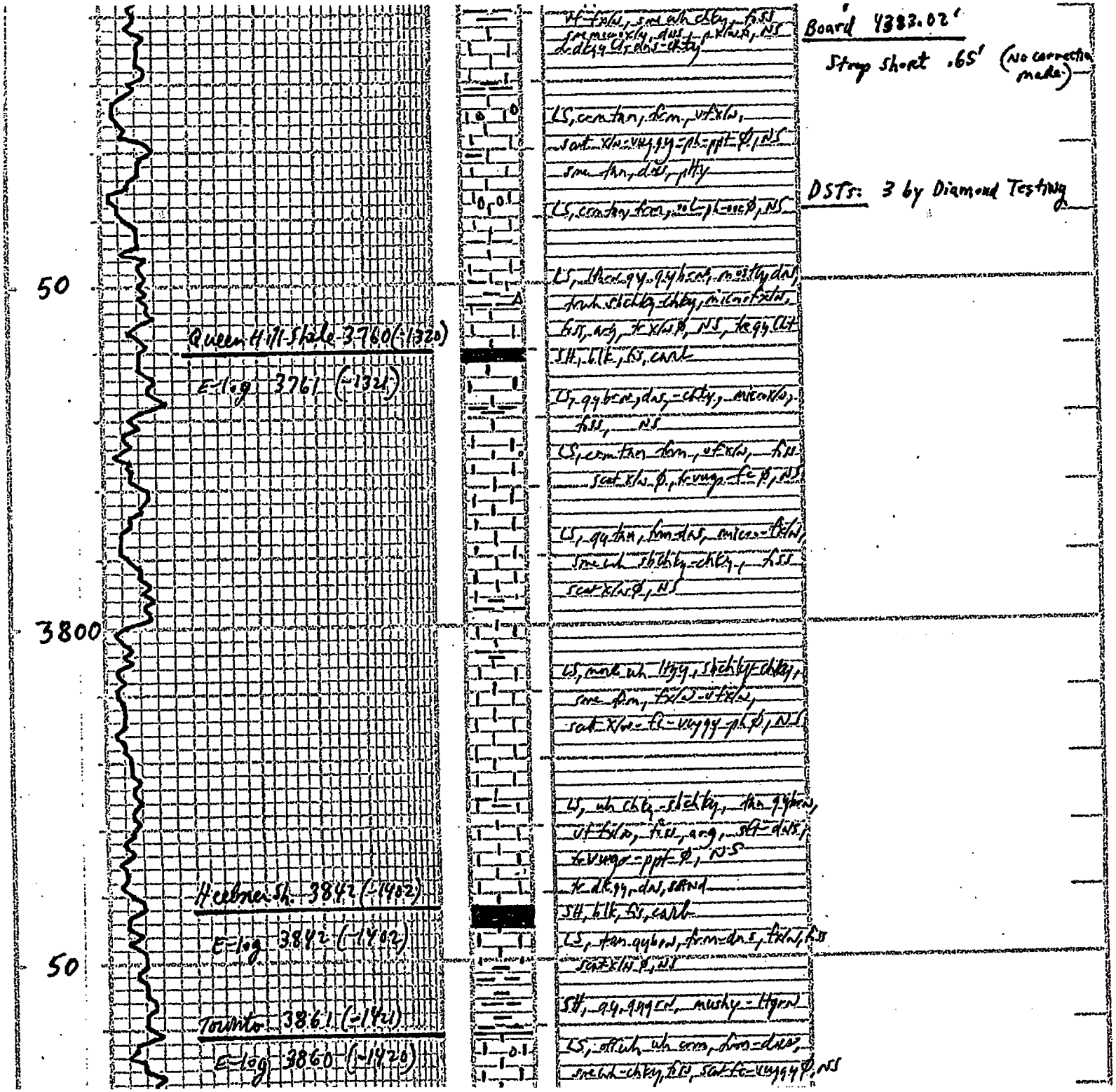
REMARKS

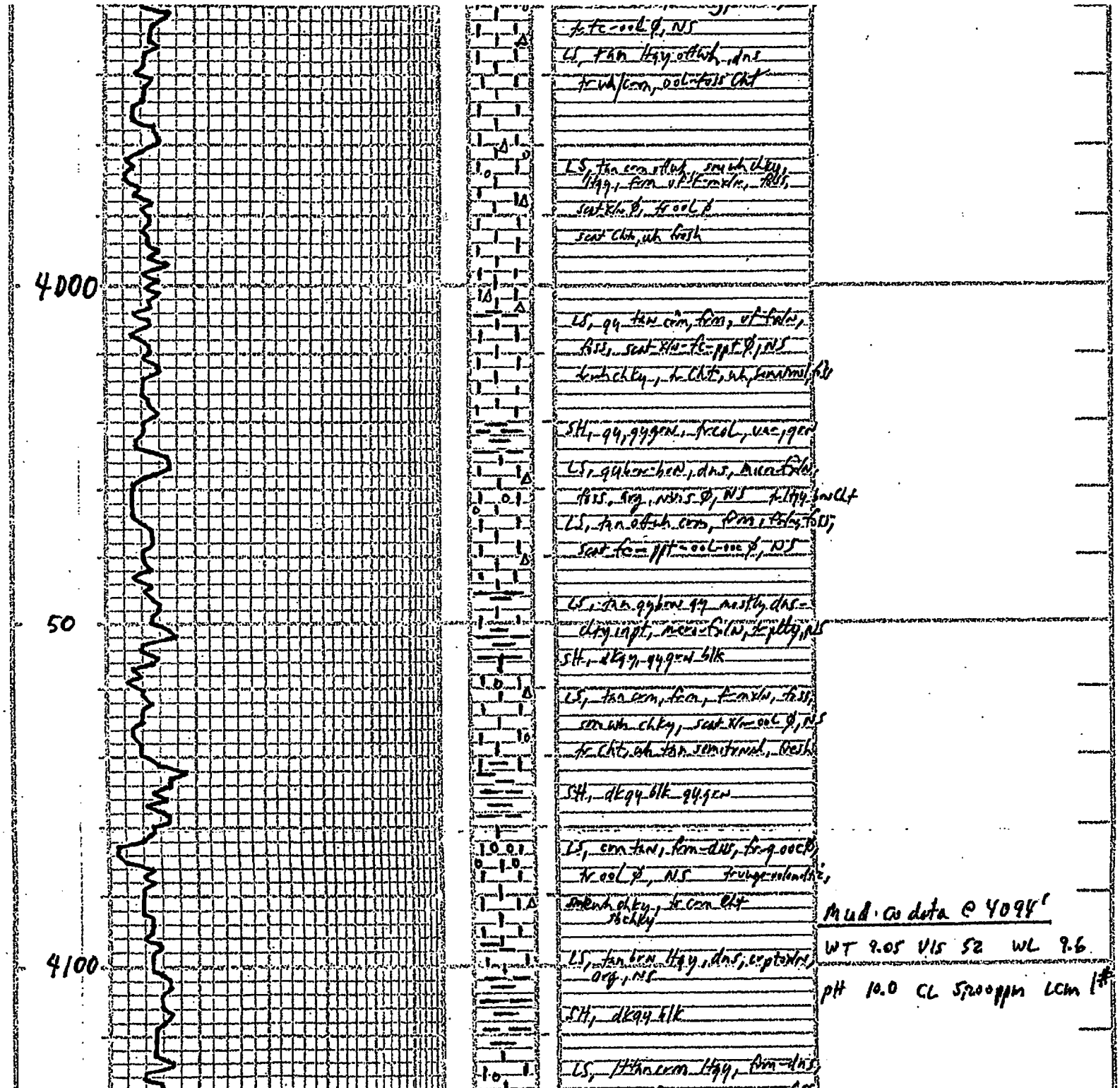
The Mull Drilling, Wierman "A" #1-19 ran slightly low structurally to the reference well, Mull Drilling, Wierman Oil #1-19 except the Miss Warsaw was flat structurally. The Cherokee Sand "A" did not develop in this well and did not contain an oil show w/ regards to DST results. The Lower Cherokee Sand had spotty Miss Warsaw cuttings & oil shows but had unfavorable DST results.

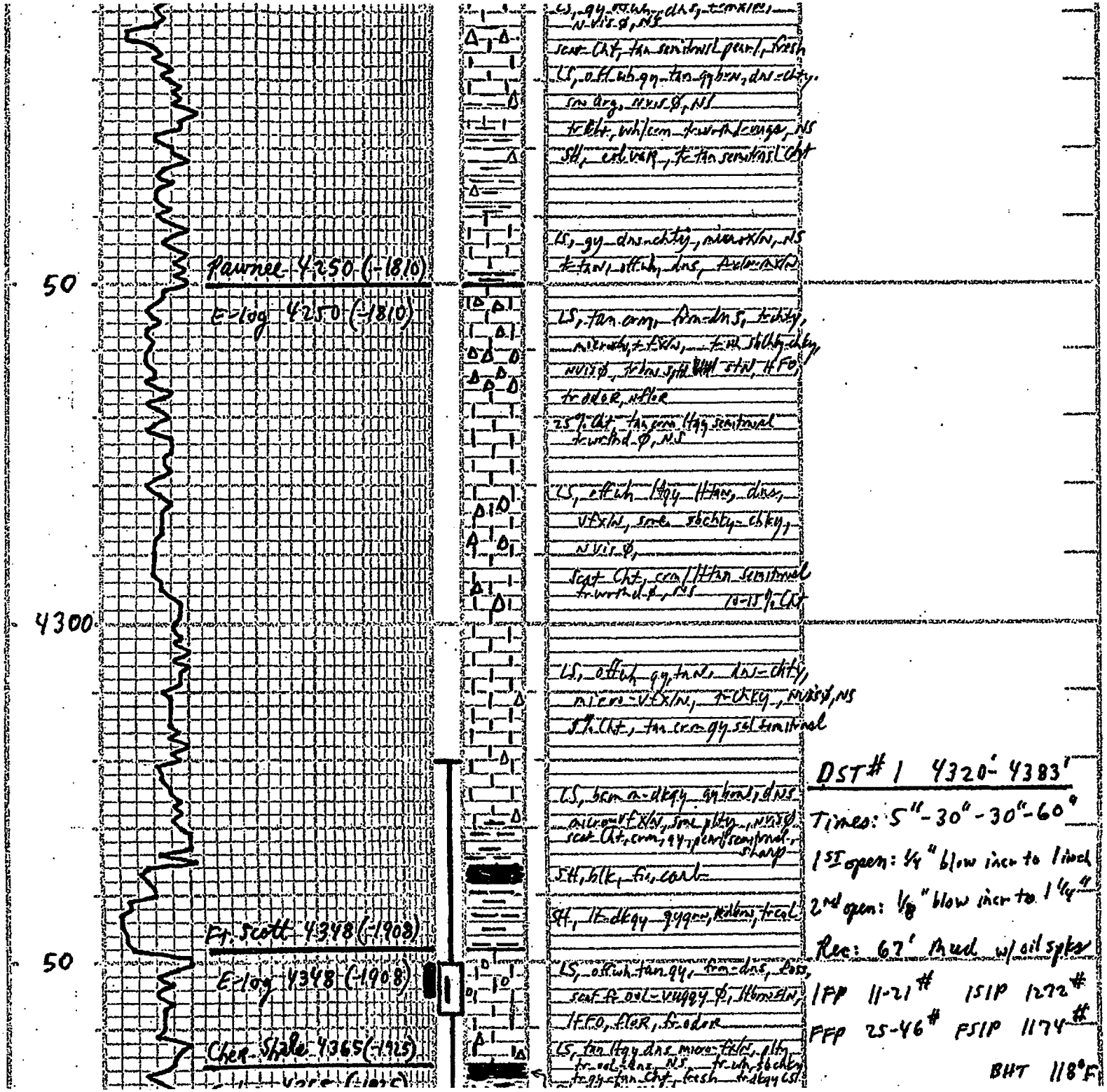
After review of all samples, DST results, and E-log evaluation, it was decided to plug and abandon this well.

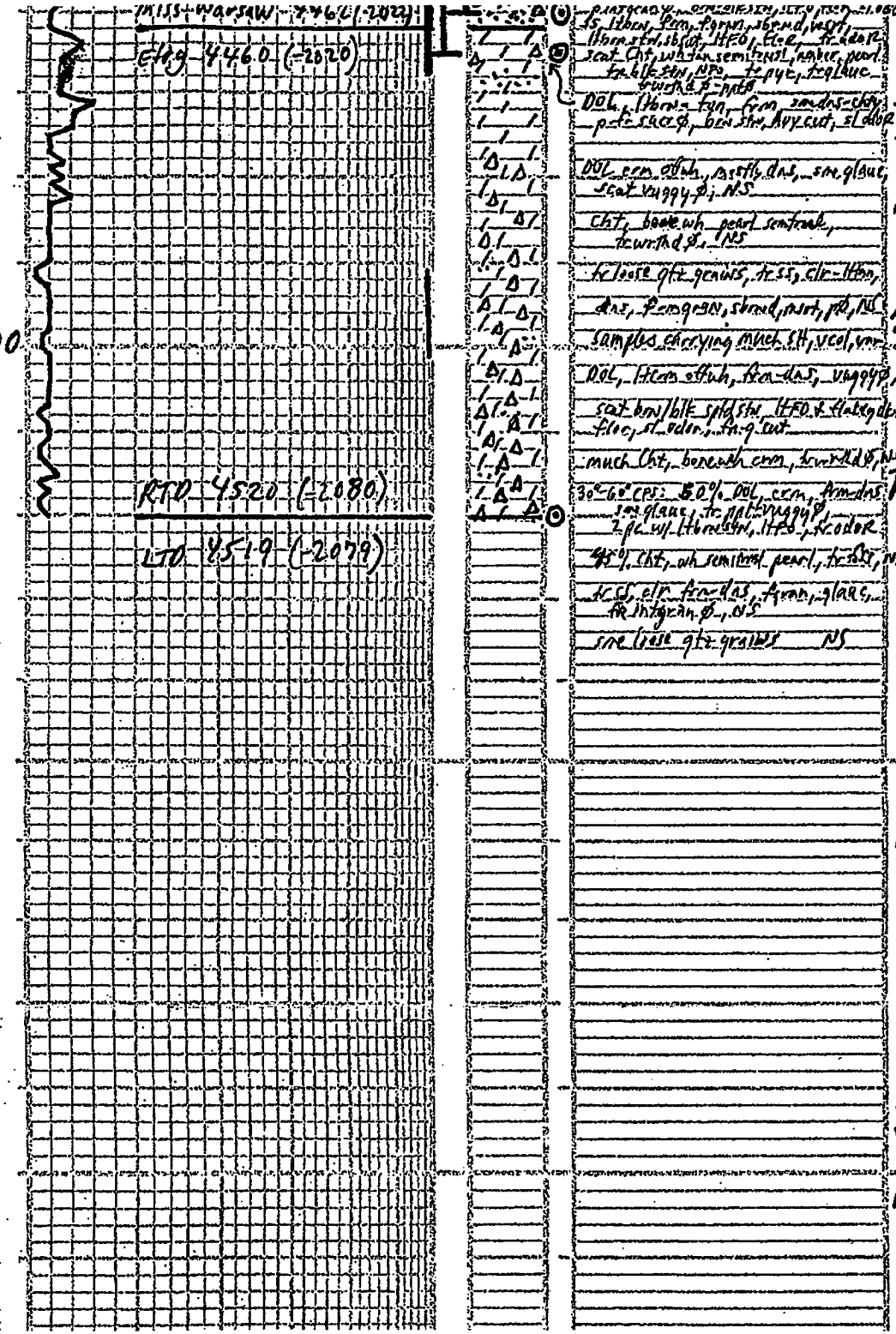
5091


Anhydrite 1776 (+664)
E-log 1774 (+666)
B/Anhy 1814 (+626)
E-log 1812 (+628)
1800
50
3600
Mud-co data @ 3452'
WT 8.6 VIS 51 WL 9.6
pH 11.0 CL 3,700 ppm Ca 0#
Samples: 10' wet & dry
3700'-RTD good samples


Board 4383.02'
Strap short .65' (No correction made)
DSTs: 3 by Diamond Testing
50
Queen Hill Shale 3780 (-1320)
E-log 3761 (-1321)
3800
Hebner Sh. 3842 (-1402)
E-log 3842 (-1402)
50
Toronto 3861 (-1421)
E-log 3860 (-1420)


4000
50
4100
Mud Co data @ 4094'
WT 9.05 VIS 52 WL 9.6
pH 10.0 CL 5,200ppm LCM 1#


50
Pawnee 4250 (-1810)
E-log 4250 (-1810)
4300
50
Ft. Scott 4348 (-1908)
E-log 4348 (-1908)
Cher. Shale 4365 (-1925)
DST # 1 4320'-4383'
Times: 5"-30"-30"-60"
1st open: 1/4" blow incr to 1 inch
2nd open: 1/8" blow incr to 1 1/4"
Rec: 67' mud w/ oil spks
IFP 11-21# ISIP 1272#
FFP 25-46# FSIP 1174#
BHT 118°F



DST #3 4425 - 4465'

Times: 5" - 30" - 60" - 120"

1st open: ¼ inch blow increase to 2¼ inches (no blow back)

2nd open: ¼ inch blow increase to 11⅛ inches (no blow back)

Rec: 112' WM (33% W 67% M) oil spks and 1' FO on top)

123' SW (100% SW w/ oil spks)

CL 17,000 ppm

Total Fluid 235'

IFP 28-38# ISIP 1274#

FFP 41-115# FSIP 1190#

BHT 121°F

Mud-co data @ 4465'

WT 8.9 VIS 50 WL 11.2

pH 9.5 Cl 4,800 ppm LCM 2#