



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD 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 #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Letter of Confidentiality Received
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1044964

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ 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

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: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	Hess 1-16
Doc ID	1044964

Tops

Name	Top	Datum
Bs/Stone Corral	2391	+ 499
Heebner	3914	-1024
Lansing	3952	-1062
Muncie Creek	4102	-1212
Hushpuckney	4228	-1338
Marmaton	4298	-1408
Upper Ft. Scott	4390	-1500
Johnson	4515	-1625
Morrow	4547	-1657
Mississippian	4566	-1676
LTD	4748	



*Mark Parkinson, Governor
Thomas E. Wright, Chairman
Joseph F. Harkins, Commissioner
Ward Loyd, Commissioner*

September 30, 2010

Ronald N. Sinclair
Grand Mesa Operating Company
1700 N WATERFRONT PKWY BLDG 600
WICHITA, KS 67206-5514

Re: ACO1
API 15-063-21858-00-00
Hess 1-16
NW/4 Sec.16-14S-31W
Gove 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,
Ronald N. Sinclair



SUPERIOR
Hays,
Kansas

DUAL RECEIVER
CEMENT BOND LOG

Company HESS #1-16
Well HESS #1-16
Field GOVE
County GOVE
State KANSAS

Company GRAND MESA OPERATING
Well HESS #1-16
Field GOVE
County GOVE
State KANSAS

Location: 2004' FNL & 1141' FWL
SEC 16 TWP 14S RGE 31W
Permanent Datum GROUND LEVEL Elevation 2885
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services PREF
Elevation K.B. 2890
D.F. 2888
G.L. 2885

Date	8/24/10
Run Number	ONE
Depth Driller	4750
Depth Logger	4697
Bottom Logged Interval	4696
Top Log Interval	3540
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	
Max. Recorded Temp.	
Estimated Cement Top	3656
Time Well Ready	
Time Logger on Bottom	
Equipment Number	747
Location	HAYS,KANSAS
Recorded By	R.SMITH
Witnessed By	JOHN JOHNSON

Borehole Record		Tubing Record					
Run Number	Bit	From	To	Size	Weight	From	To
Casing Record							
Surface String		Size 8 5/8		Wgt/Ft		Top 0	Bottom 219
Prot. String							
Production String		5 1/2					
Liner							

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS,KANSAS (785) 628-6395
DIRECTIONS
OAKLEY,KS. S TO JAYHAWK RD.(MONUMENT ROCK SIGN
, 4 E TO T., 1/2 N., EAST INTO

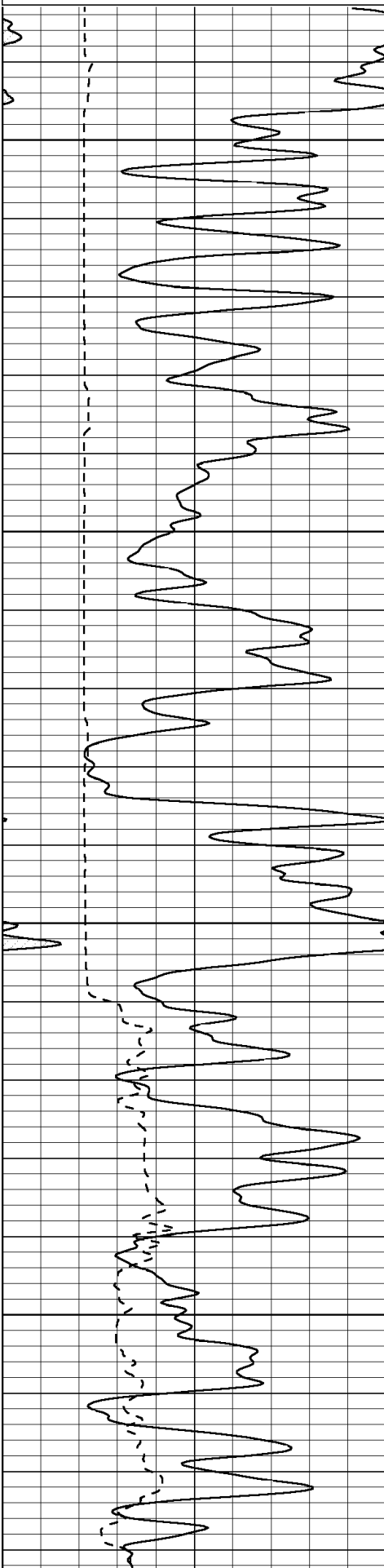
Charted by:

Depth in Feet scaled 1:240

200	TT5 (usec)	1000
0	Gamma Ray (GAPI)	150

0	Amplified Amplitude (mV)	20
0	AMPLITUDE (mV)	100
9	Collar Locator	-1

200	Variable Density	1000
-----	------------------	------

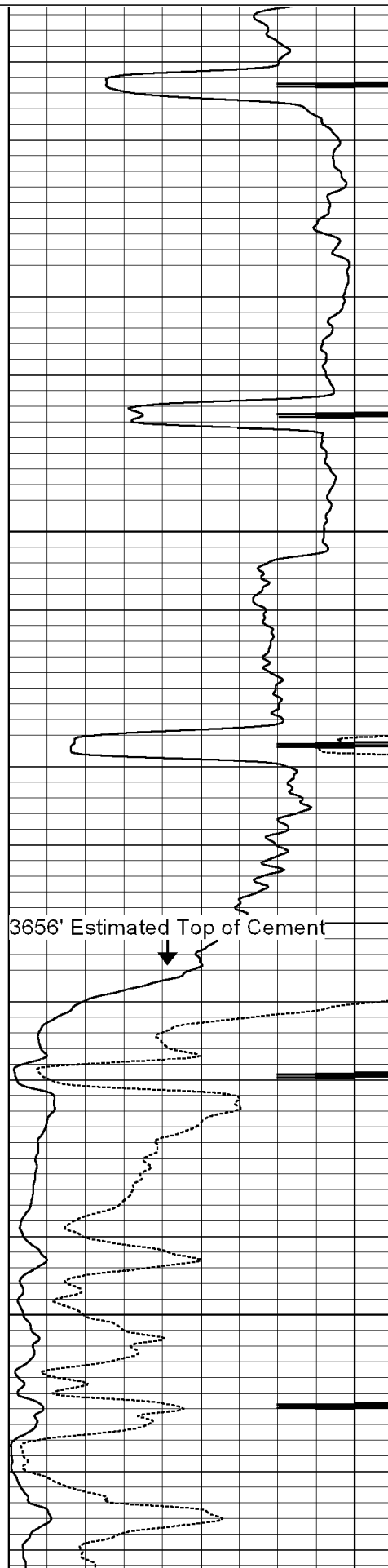


3550

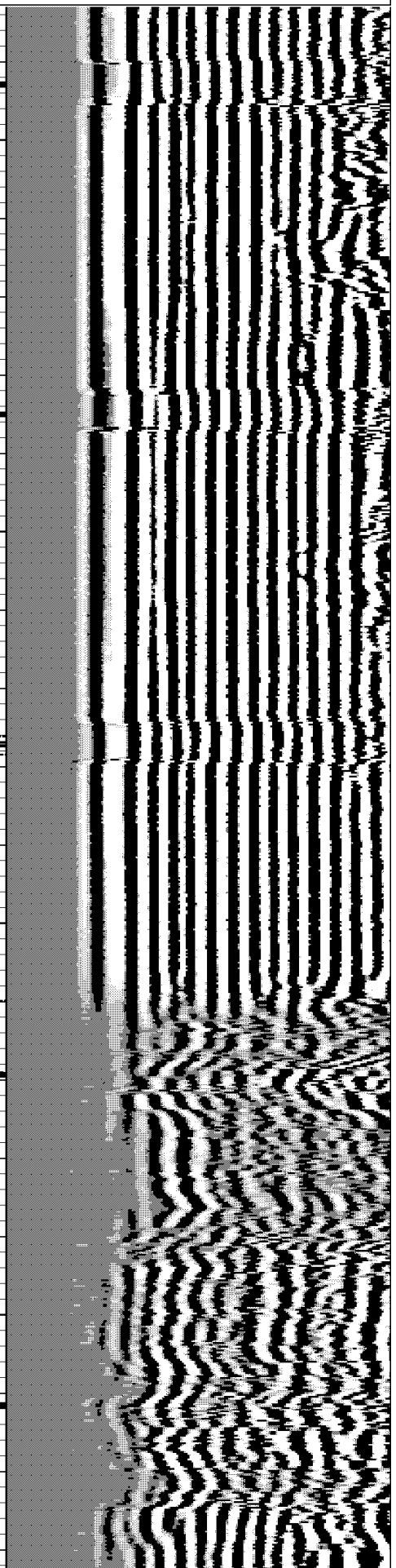
3600

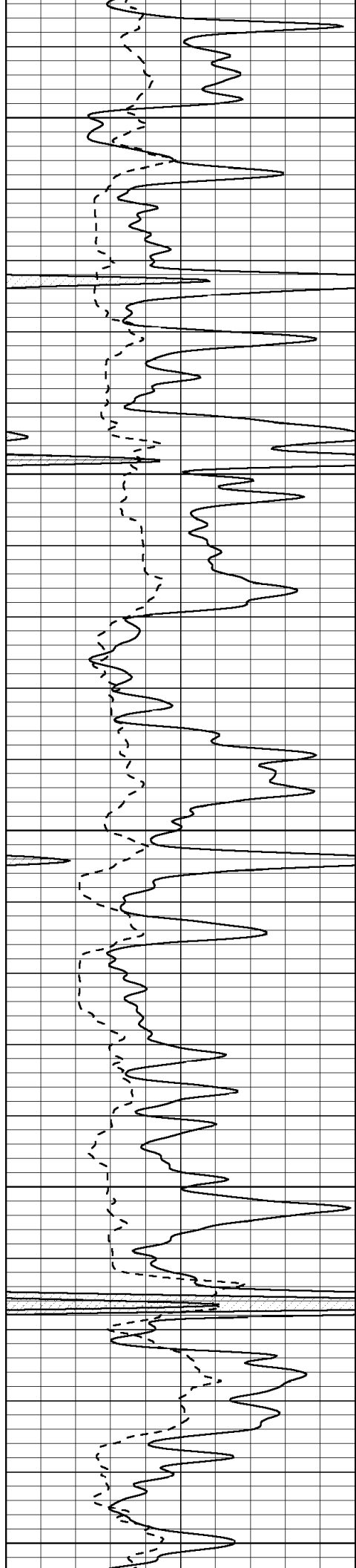
3650

3700



3656' Estimated Top of Cement





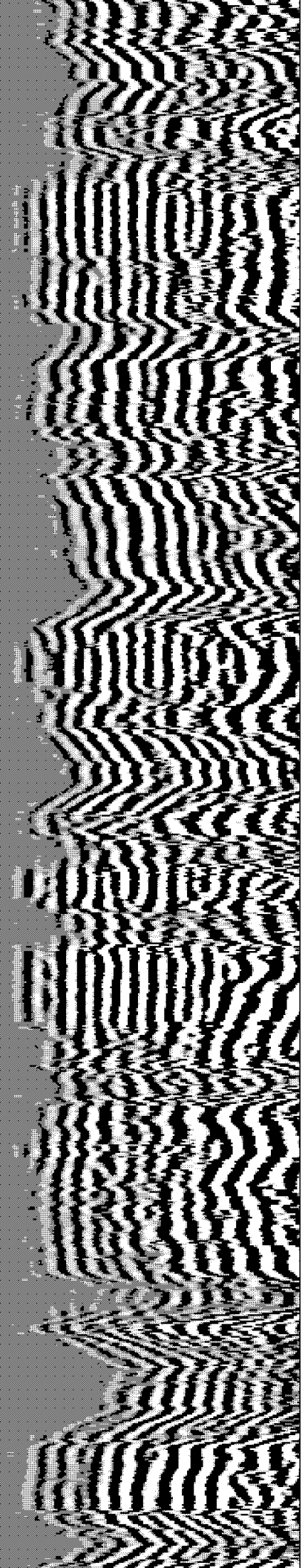
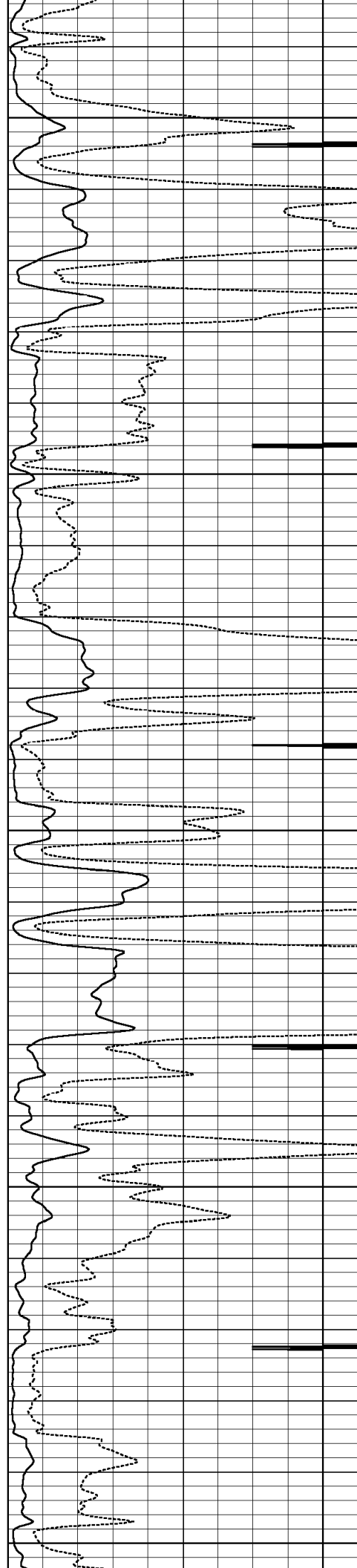
3750

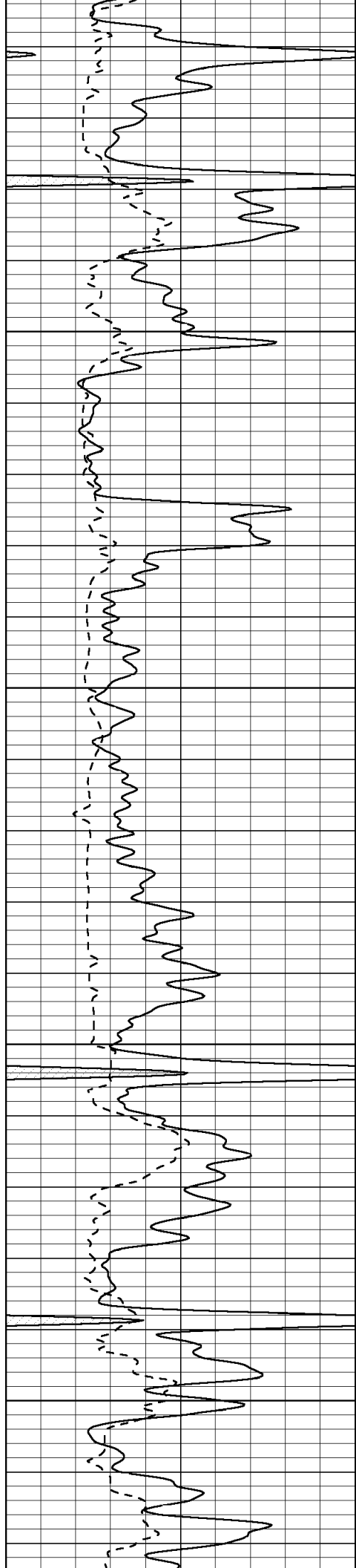
3800

3850

3900

3950



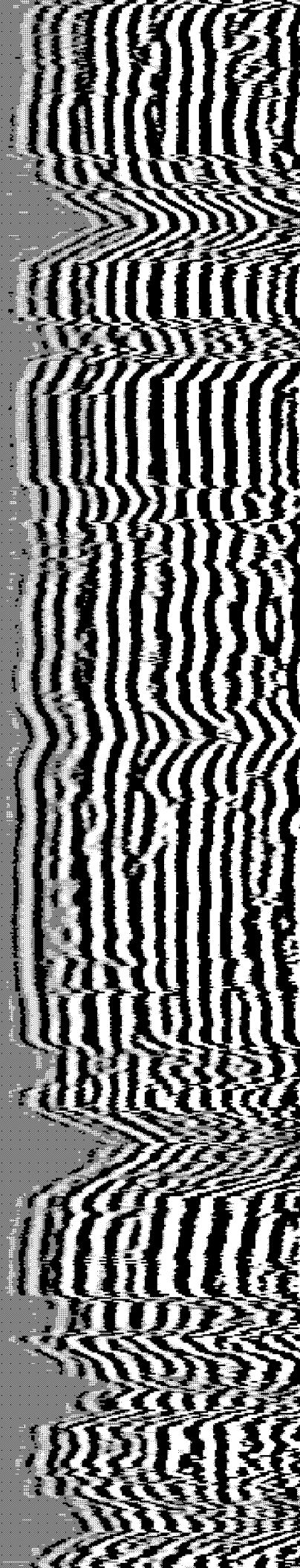
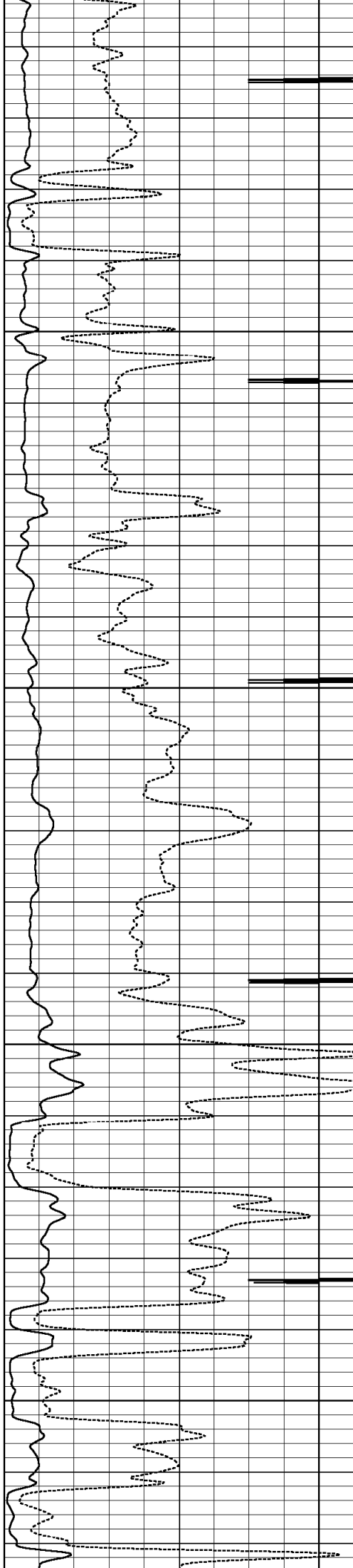


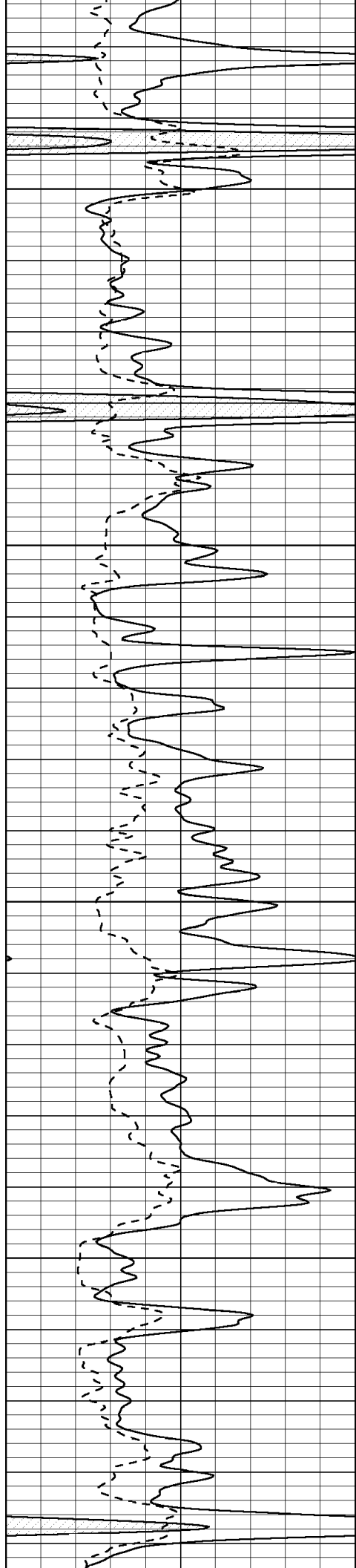
4000

4050

4100

4150



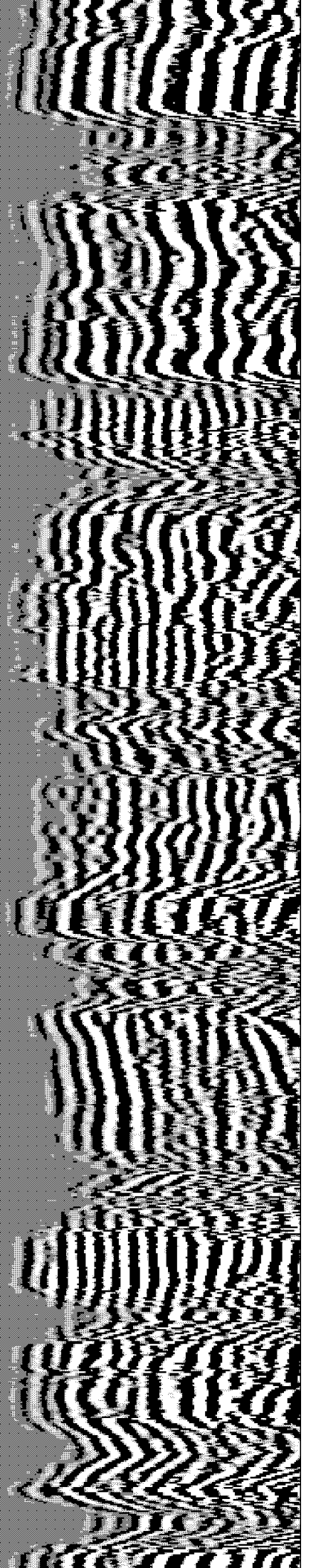
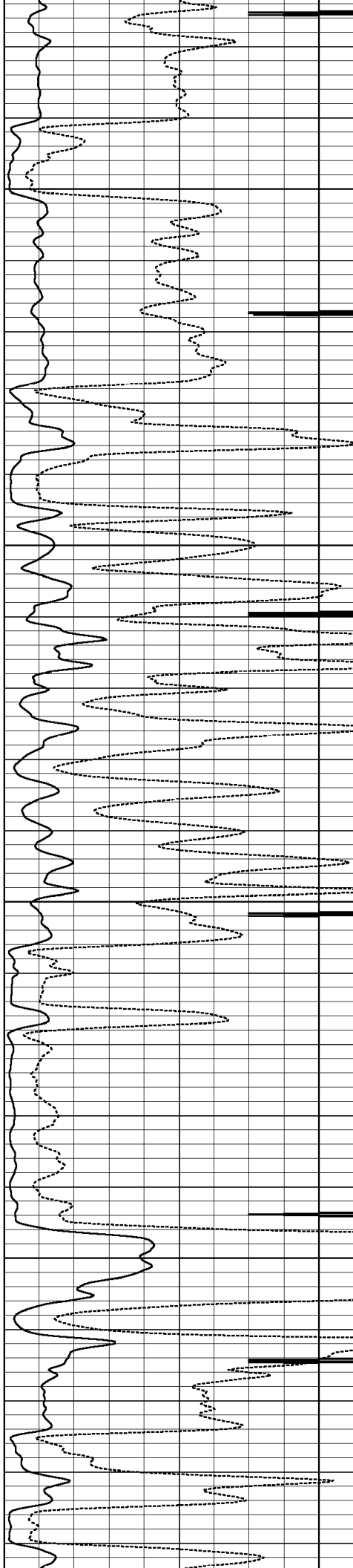


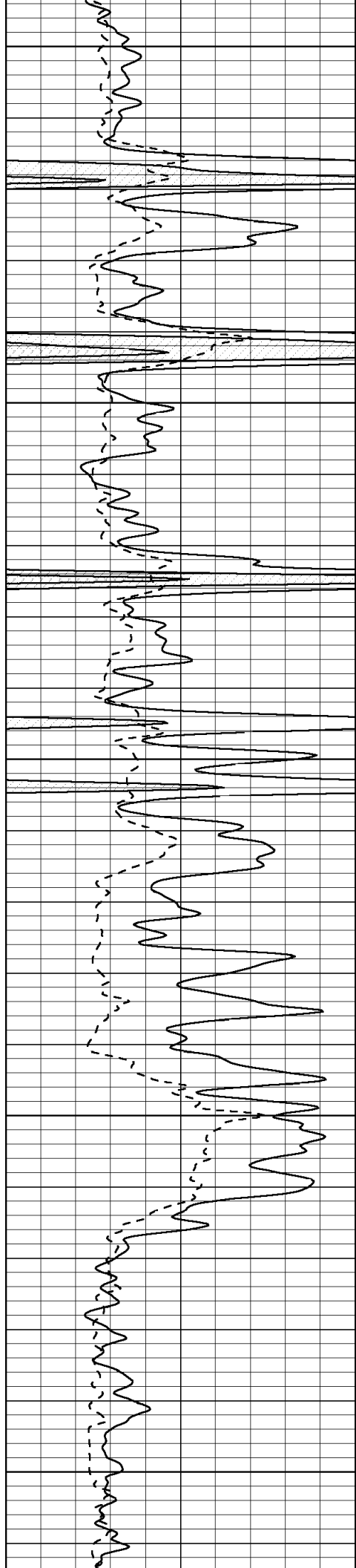
4200

4250

4300

4350





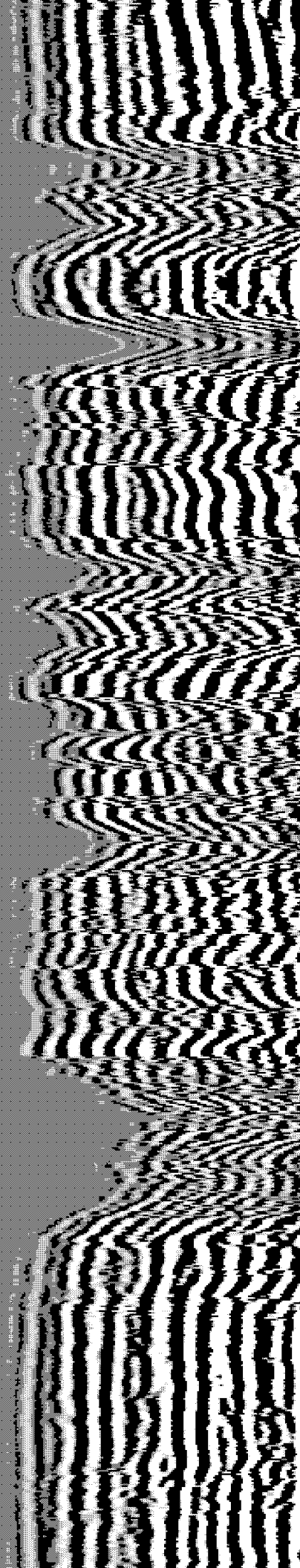
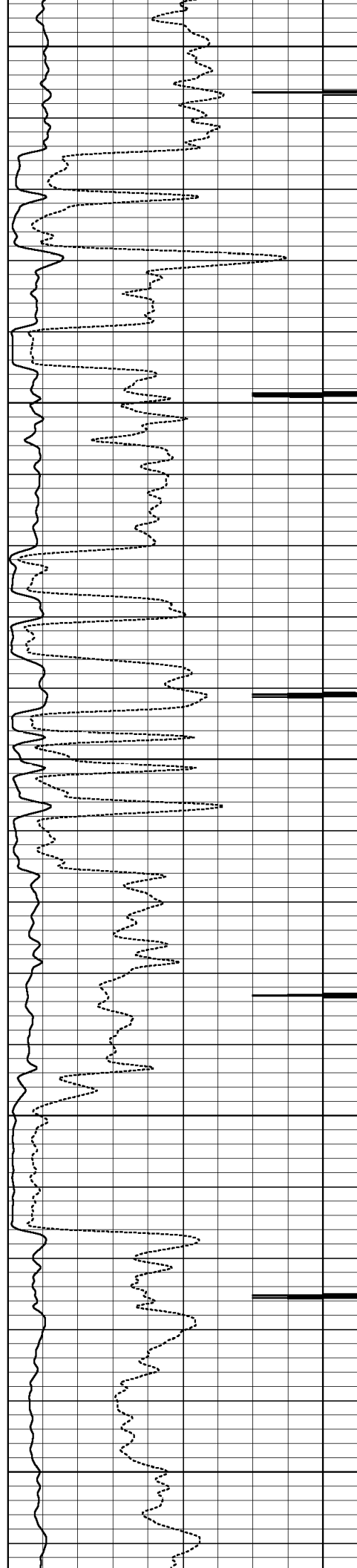
4400

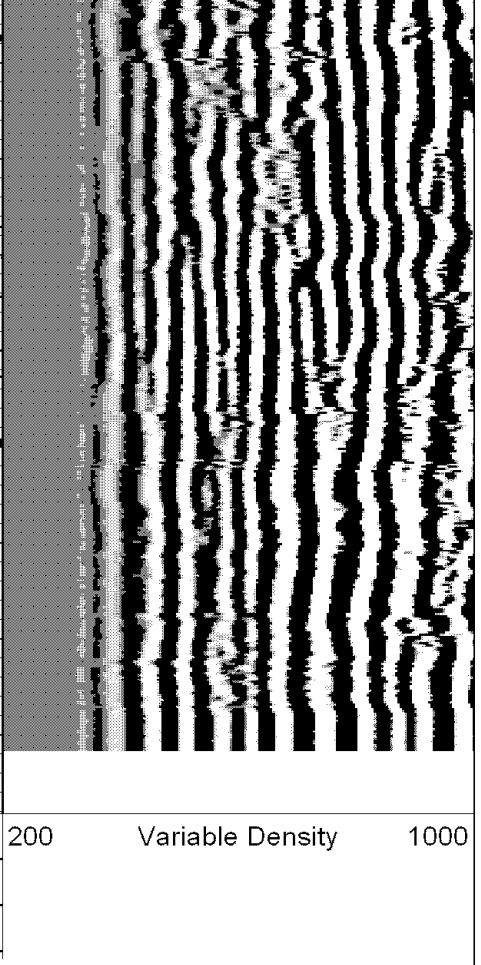
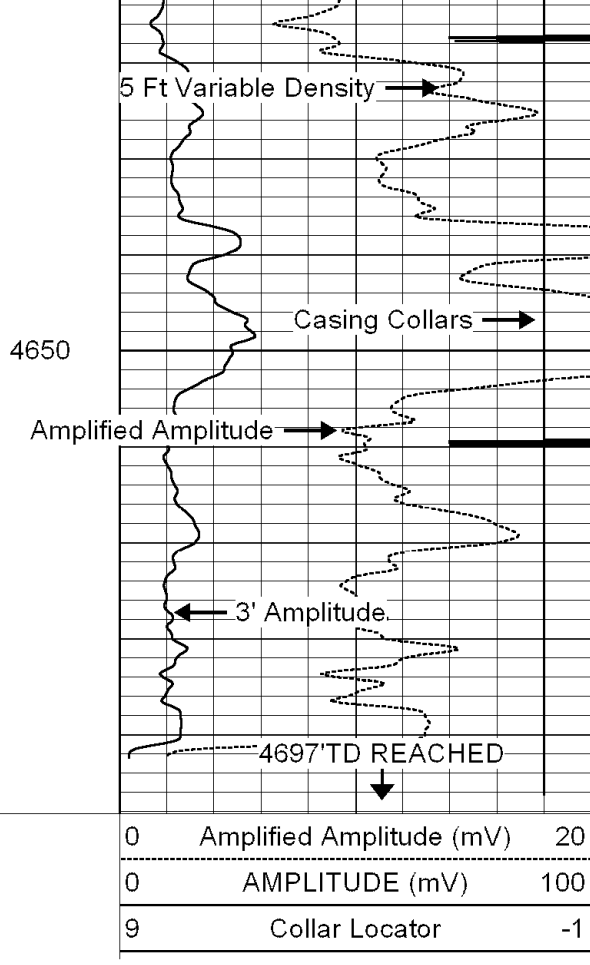
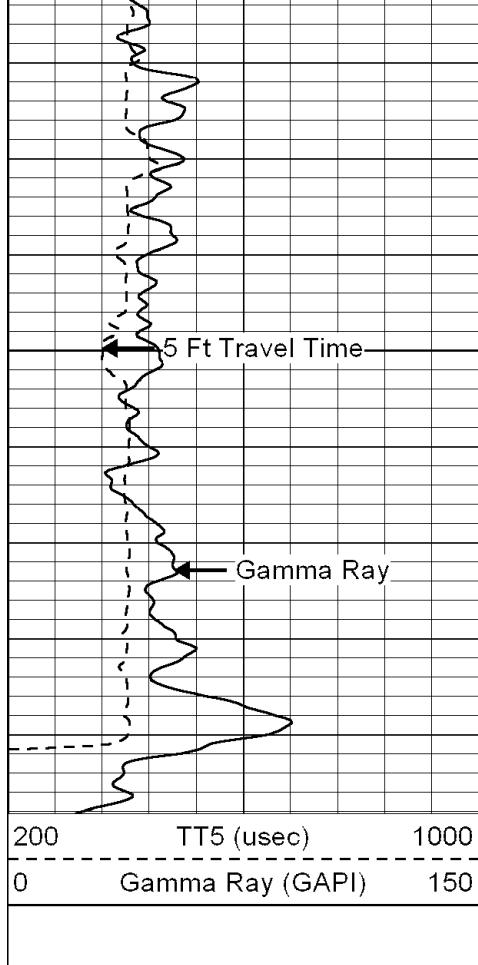
4450

4500

4550

4600





ALLIED CEMENTING CO., LLC. 035102A

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

OAKLEY

DATE <u>8-2-10</u>	SEC. <u>16</u>	TWP. <u>14S</u>	RANGE <u>31W</u>	CALLED OUT	ON LOCATION <u>3:45 PM</u>	JOB START <u>10:00 PM</u>	JOB FINISH <u>6:30 PM</u>
LEASE <u>Hess</u>	WELL # <u>1-16</u>	LOCATION <u>OAKLEY 20S-4E-1/2N-E</u>			COUNTY <u>GOVE</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>INTO</u>				

CONTRACTOR MURPHY DRG REG# 24
 TYPE OF JOB SURFACE
 HOLE SIZE 12 1/4" T.D. 217'
 CASING SIZE 8 5/8" DEPTH 217'
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. 15
 PERFS.
 DISPLACEMENT 13 BBL

EQUIPMENT

PUMP TRUCK CEMENTER TERRY
 # A22 HELPER WAYNE
 BULK TRUCK
 # 394 DRIVER DARRIN
 BULK TRUCK
 # DRIVER

REMARKS:

CEMENT DID CONC.

THANK YOU

CHARGE TO: GRAND MESA OPERATING CO.
 STREET _____
 CITY _____ STATE _____ ZIP _____

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 Anthony Martin
 SIGNATURE Anthony Martin

OWNER SAME

CEMENT AMOUNT ORDERED 165 SKS COM 38CC 28 PSI

COMMON	<u>165 SKS</u>	@	<u>15.45</u>	<u>2549.25</u>
POZMIX		@		
GEL	<u>3 SKS</u>	@	<u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>6 SKS</u>	@	<u>58.30</u>	<u>349.80</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>174 SKS</u>	@	<u>2.40</u>	<u>417.60</u>
MILEAGE	<u>1000 PCLSK / MILE</u>			<u>348.00</u>
TOTAL				<u>3726.45</u>

SERVICE

DEPTH OF JOB	<u>217'</u>		
PUMP TRUCK CHARGE			<u>1018.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>20 MI</u>	@	<u>7.00</u>
MANIFOLD		@	
		@	
TOTAL			<u>1158.00</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

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

JOB LOG

SWIFT Services, Inc.

DATE 8-10-10 PAGE NO. 2

CUSTOMER Grand Mesa WELL NO. #1-16 LEASE Hess JOB TYPE 2-stage TICKET NO. 18202

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0920							on loc w/FE
								RTD 4750'
								5 1/2" x 15.5" x 4730' x 20'
								Cent. 2, 4, 6, 8, 10, 12, 14, 55
								Baskets 2, 55
								D.V. 55 @ 2405'
	0920							start FE
	1140							Break Circ.
	1155	4.5	0			200		Start P-Flashes ^{500 gal Mud Flush} 20 bbl KCL Flush
	1202	5.5	32/0			250		Start Cement 175 sks EA-2
	1209		42					End Cement
								Wash PPL / Drop LD Plug
	1213	6.5	0			100		Start Displacement intr
	1222	6.5	60			100		start mud
	1225	5	78			200		Catch Cement
	1231		112			400 / 1400		Land Plug
								Release Pressure
								Float Hold
								Drop Opening Plug
								Plug Hit
	1245					1000		Open D.V. Tool
								Circle
	1435	2.5	7					Plug RM 30 sks SMD
	1440	4.5	0			100		start KCL Flush
		6	20/0			150		Start Cement 270 sks SMD
	1510		150					End Cement
								Drop Closing Plug
	1513	6	0			100		Start Displacement / circ cement
		5	20			200		circ cement catch Pres
	1525		57			450		Land Plug
						1500		Close D.V. Tool
								Release Press, / pu closed
								6150 80 sks to pi + milk shake
								John A. Turner
								Thank you Nick, Josh F., Shane

JOB LOG

SWIFT Services, Inc.

DATE 24 AUG 10 PAGE NO. 1

CUSTOMER GRAND MESA

WELL NO.

LEASE HESS 1-16

JOB TYPE ACIDIZING FORMATION

TICKET NO. 18933

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
1500	1500							ON LOCATION
15	1510	3		✓				START ACID DOWN WELL
		3	9 1/2	✓				START FLUSH
	1518	3	27	✓				TUBING LOADED
	1520			✓		300		STAGING.
	1525			✓		600		" "
	1535			✓		700		" "
	1542			✓		800		" "
	1620			✓		800		RELEASE PRESSURE.
								RACK TRUCK UP.
								TREAT WITH 250 gal 15% MCA PERFS @ 4530-38 PACKER @ 4502
	1630							JOB COMPLETE.
								THANKS #110
								JASON & A JEFF

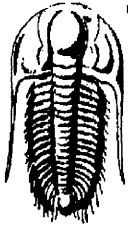
JOB LOG

SWIFT Services, Inc.

DATE 25 AUG 10 PAGE NO.

CUSTOMER GRAND MESA WELL NO. LEASE HESS 1-16 JOB TYPE ACIDIZE FORMATION TICKET NO. 18934

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1200							ON LOCATION
	1209	1		7				SPOT ACID ON BOTTOM
								MOVE PACKER UP - SET PACKER
	1222	4		7				START ACID DOWN WELL
		4	5	7				START FLUSH
	1234	Ø	27½	7				TUBING LOADED 1 BBL LATE
	1238			7		300		STAGING.
	1242			7		400		
	1247			7		500		
	1252			7		600		
	1308			7		800		
	1320	½	29½	7		800		TREATING
	1324	Ø	31½	7		800		ISBP
						VAC.		1 MIN 15 SEC - VAC
								TREAT WITH 200 GAL 15% MCA.
								PERFS @ 4518-22
								PACKER @ 4502
	1345							JOB COMPLETE.
								THANKS #110
								JASON & JEFF



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Grand Mesa Operating
1700 N Waterfront Pkw y Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

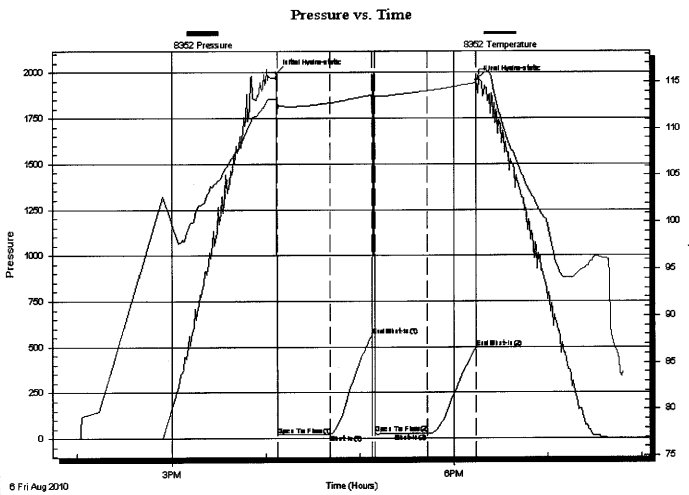
Hess 1-16
16-14s-31w Gove KS
Job Ticket: 039978 **DST#: 1**
Test Start: 2010.08.06 @ 14:02:05

GENERAL INFORMATION:

Formation: **LKC "H"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:07:10
Time Test Ended: 19:48:09
Interval: **4094.00 ft (KB) To 4138.00 ft (KB) (TVD)**
Total Depth: 4138.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2890.00 ft (KB)
2885.00 ft (CF)
KB to GR/CF: 5.00 ft
Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31

Serial #: 8352 Outside
Press@RunDepth: 24.59 psig @ 4101.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.08.06 End Date: 2010.08.06 Last Calib.: 2010.08.06
Start Time: 14:02:05 End Time: 19:48:10 Time On Btm: 2010.08.06 @ 16:06:30
Time Off Btm: 2010.08.06 @ 18:14:30

TEST COMMENT: IF: Weak, died in 1 min.
IS: No return
FF: No blow , Flushed tool, surge, no blow
FS: No return



PRESSURE SUMMARY

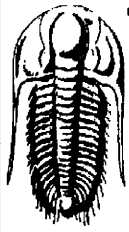
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1998.10	113.11	Initial Hydro-static
1	19.02	111.84	Open To Flow (1)
35	23.77	112.71	Shut-In(1)
61	561.48	113.56	End Shut-In(1)
63	24.55	112.73	Open To Flow (2)
97	24.59	114.00	Shut-In(2)
128	491.56	114.86	End Shut-In(2)
128	1959.84	115.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M m=100%	0.02

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Hess 1-16

1700 N Waterfront Pkw y Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

16-14s-31w Gove KS

Job Ticket: 039978

DST#: 1

Test Start: 2010.08.06 @ 14:02:05

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 9.52 in³
Resistivity: ohm.m
Salinity: 2000.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M m=100%	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

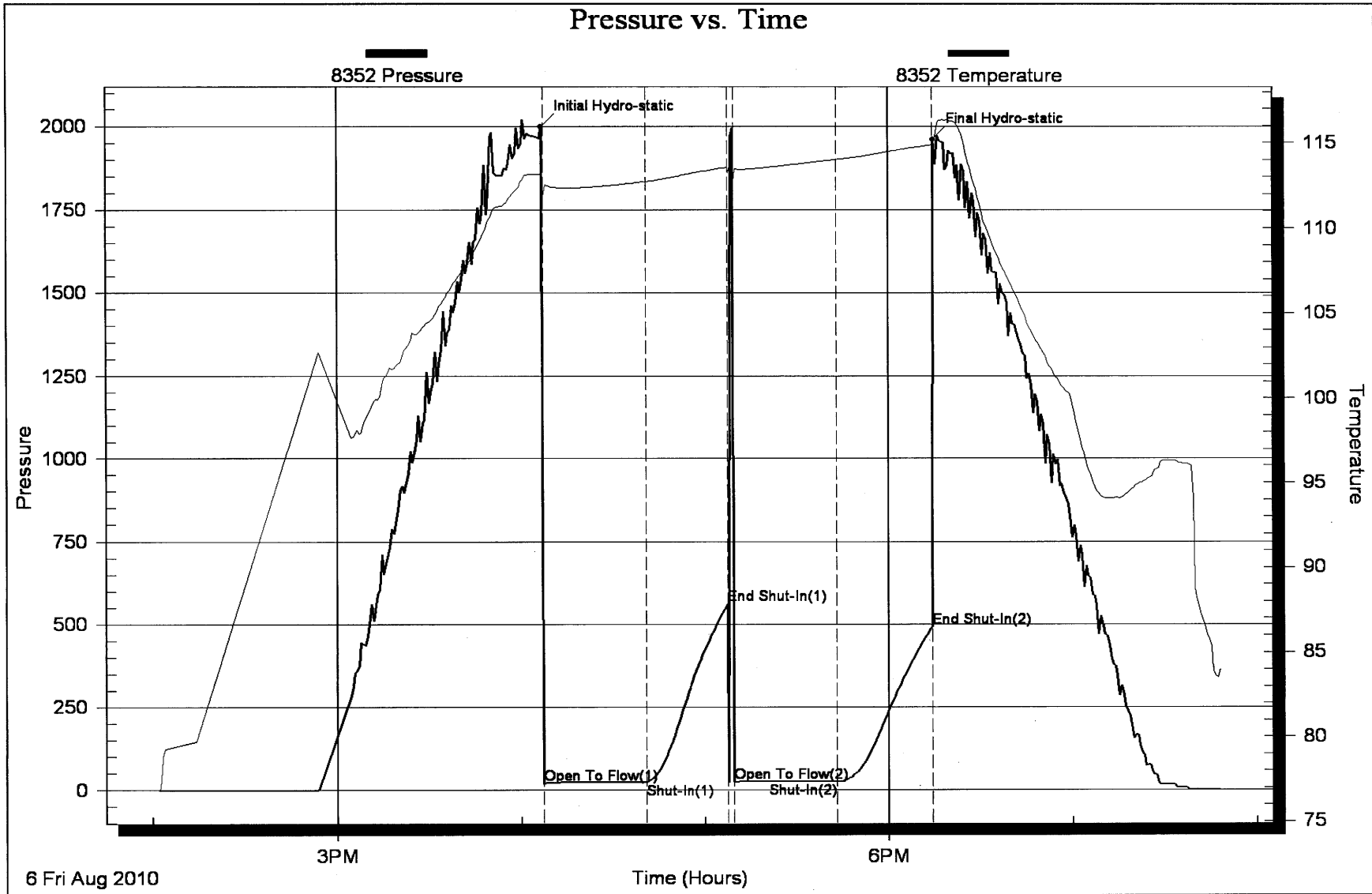
Num Gas Bombs: 0

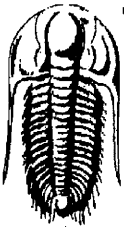
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Grand Mesa Operating
1700 N Waterfront Pkw y Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

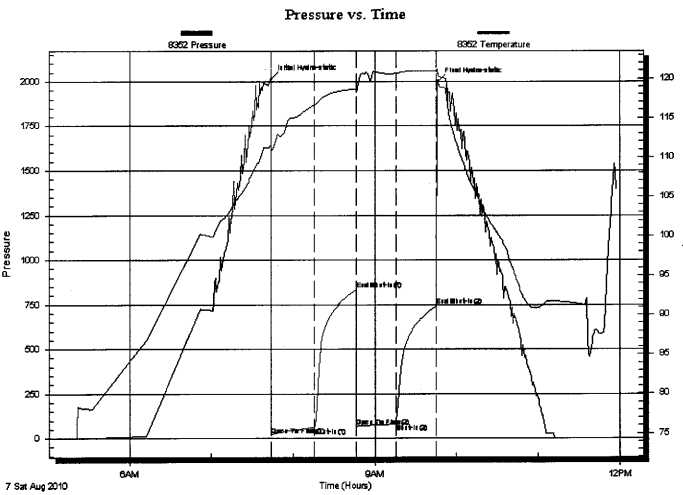
Hess 1-16
16-14s-31w Gove KS
Job Ticket: 039979 **DST#: 2**
Test Start: 2010.08.07 @ 05:20:05

GENERAL INFORMATION:

Formation: **LKC "I-J"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:44:10
Time Test Ended: 11:57:20
Interval: **4151.00 ft (KB) To 4186.00 ft (KB) (TVD)**
Total Depth: 4138.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31
Reference Elevations: 2890.00 ft (KB)
2885.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 Outside
Press@RunDepth: 80.37 psig @ 4152.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.08.07 End Date: 2010.08.07 Last Calib.: 2010.08.07
Start Time: 05:20:05 End Time: 11:57:20 Time On Btm: 2010.08.07 @ 07:43:50
Time Off Btm: 2010.08.07 @ 09:46:39

TEST COMMENT: IF: Weak, 1.5 inches
IS: No return
FF: Weak, half inch
FS: No return



PRESSURE SUMMARY

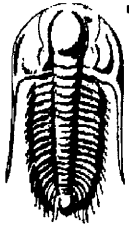
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2015.15	111.41	Initial Hydro-static
1	20.06	110.65	Open To Flow (1)
32	61.36	116.66	Shut-In(1)
63	834.06	118.63	End Shut-In(1)
63	66.78	118.27	Open To Flow (2)
92	80.37	120.62	Shut-In(2)
122	741.89	120.93	End Shut-In(2)
123	2000.24	120.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	MW	1.00
3.00	O	0.04

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Hess 1-16

1700 N Waterfront Pkwy Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

16-14s-31w Gove KS

Job Ticket: 039979

DST#: 2

Test Start: 2010.08.07 @ 05:20:05

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	MW	1.004
3.00	O	0.042

Total Length: 153.00 ft

Total Volume: 1.046 bbl

Num Fluid Samples: 0

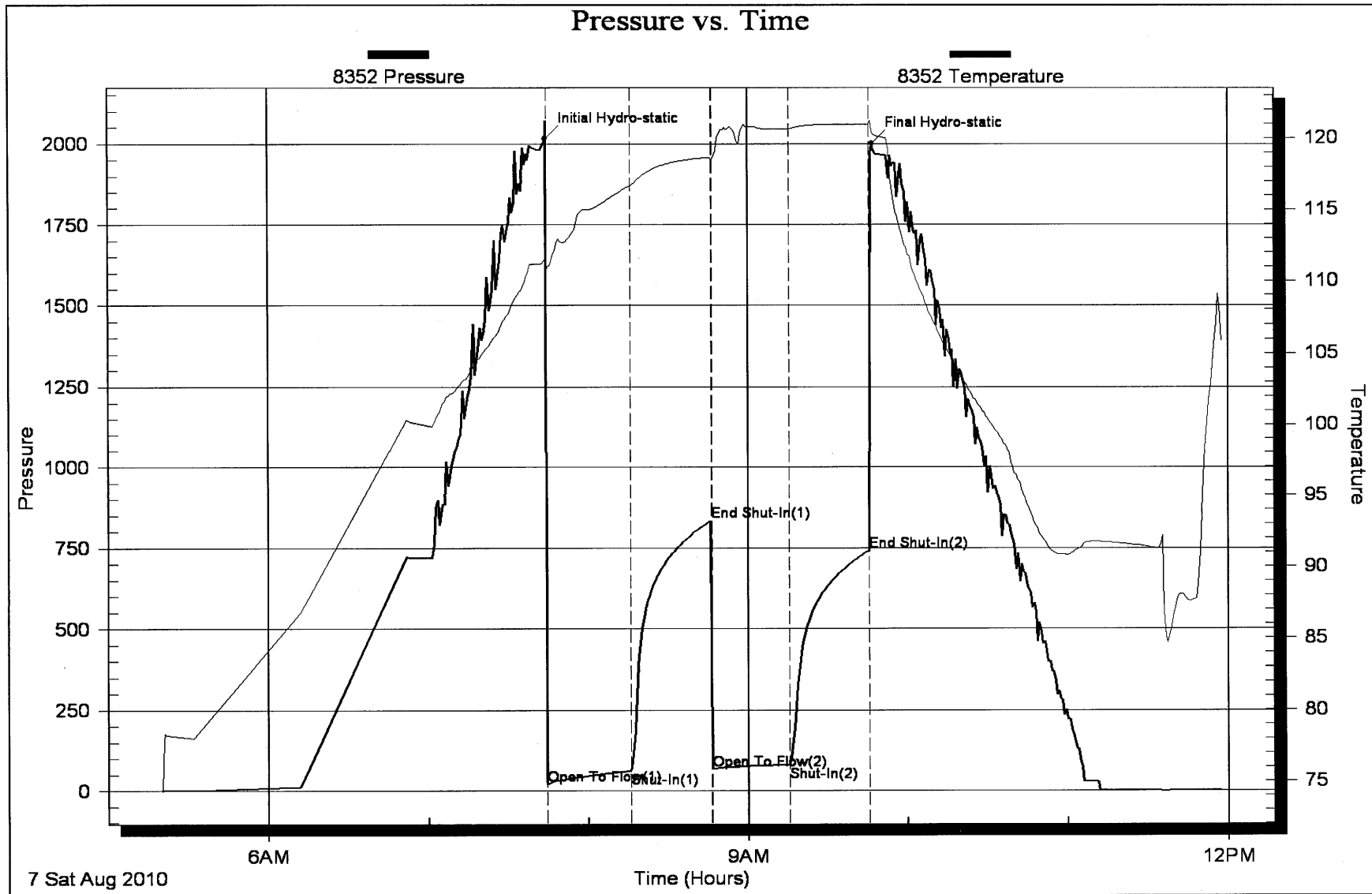
Num Gas Bombs: 0

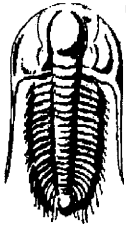
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Grand Mesa Operating
1700 N Waterfront Pkwy Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

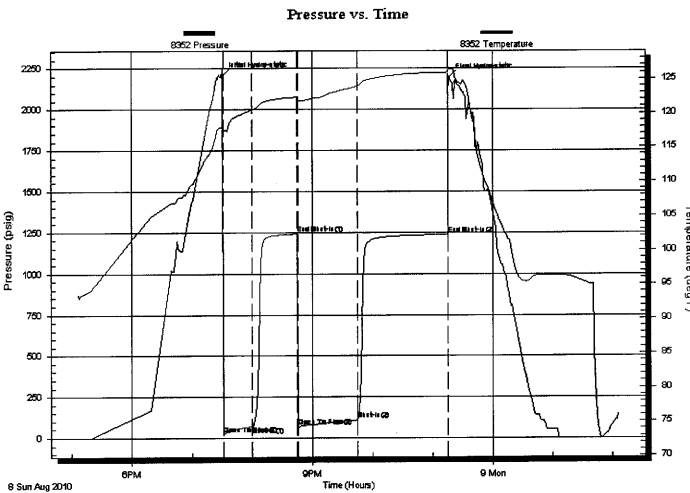
Hess 1-16
16-14s-31w Gove KS
Job Ticket: 039980 **DST#: 3**
Test Start: 2010.08.08 @ 17:07:05

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: **No Whipstock:** ft (KB)
Time Tool Opened: 19:31:30
Time Test Ended: 02:05:50
Interval: **4495.00 ft (KB) To 4546.00 ft (KB) (TVD)**
Total Depth: 4138.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: Andy Carreira
Unit No: 31
Reference Elevations: 2890.00 ft (KB)
2885.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8352 Outside
Press@RunDepth: 110.27 psig @ 4507.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2010.08.08 End Date: 2010.08.09 Last Calib.: 2010.08.09
Start Time: 17:07:05 End Time: 02:05:50 Time On Btm: 2010.08.08 @ 19:30:20
Time Off Btm: 2010.08.08 @ 23:16:29

TEST COMMENT: IF: Strong, building to 10 inches
IS: No return
FF: BOB, 22 min
FS: No return



PRESSURE SUMMARY

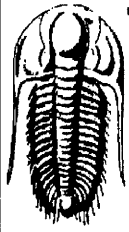
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2206.21	117.80	Initial Hydro-static
2	24.63	116.68	Open To Flow (1)
31	68.79	120.43	Shut-In(1)
75	1241.07	122.30	End Shut-In(1)
76	71.48	121.90	Open To Flow (2)
135	110.27	123.94	Shut-In(2)
225	1237.02	125.88	End Shut-In(2)
227	2191.50	126.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
226.00	MCGO g=15% m=20% o=65%	2.07
0.00	GIP= 620ft	0.00

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Grand Mesa Operating

Hess 1-16

1700 N Waterfront Pkw y Blvd
BLDG 600
Wichita Ks 67206
ATTN: Macklin Armstrong

16-14s-31w Gove KS

Job Ticket: 039980

DST#: 3

Test Start: 2010.08.08 @ 17:07:05

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: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.76 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3400.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
226.00	MCGO g=15% m=20% o=65%	2.070
0.00	GIP= 620ft	0.000

Total Length: 226.00 ft Total Volume: 2.070 bbl

Num Fluid Samples: 0

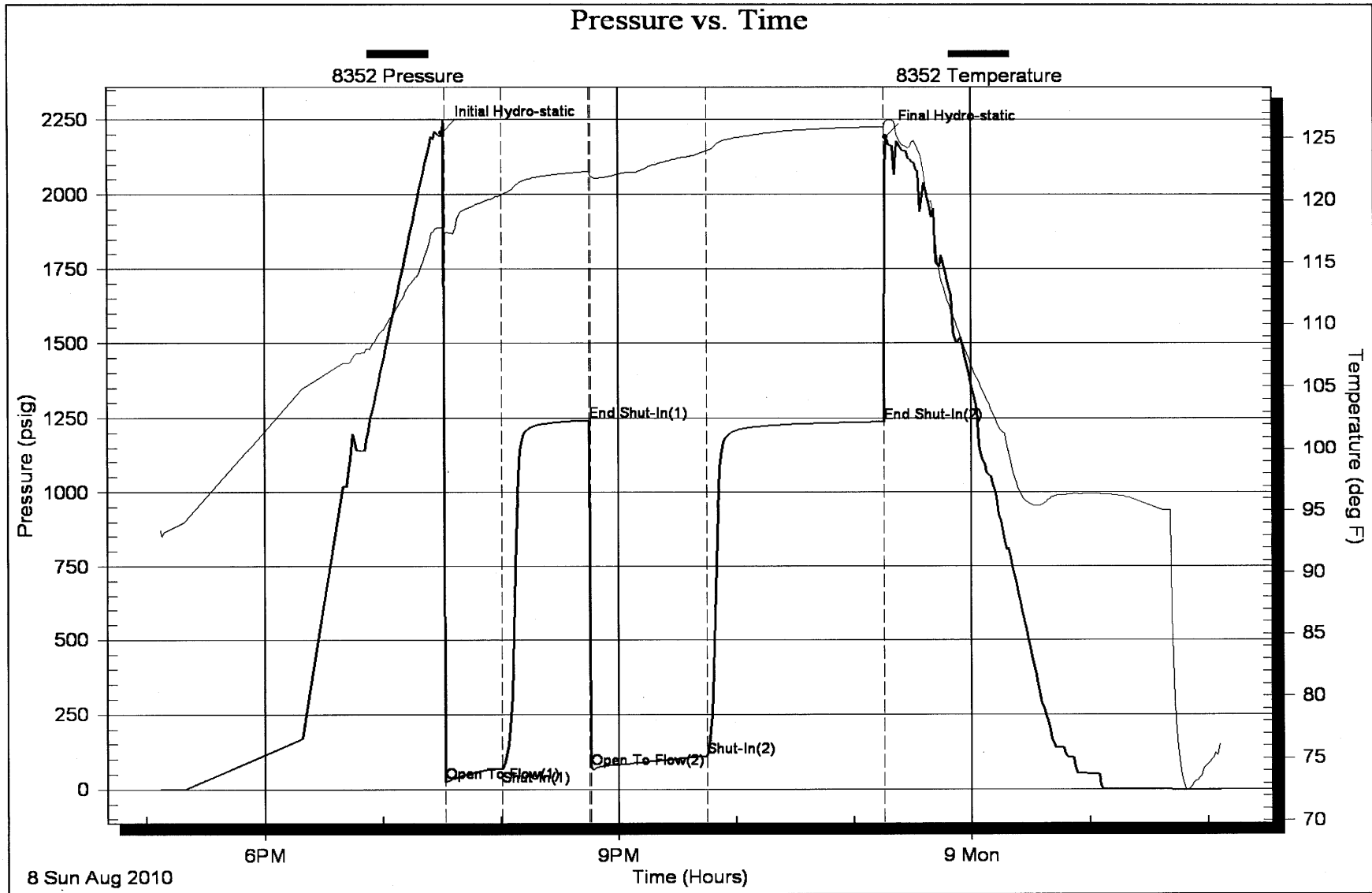
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



MACKLIN M. ARMSTRONG
 330 SOUTH TAYLOR ROAD BOX 111
 WICHITA, KANSAS 67208
 PHONE: 316-440-8888
 Grand Mesa Operating Company
 WELLS: HESS NO. 1-16
 FIELD: WILD CAT
 COUNTY: GOVE
 STATE: KANSAS
 ELEVATION: KB 2890
 LOCATION: 2004 FNL and 1141' FWL
 SEC: 16 TWP: 14S RNG: 31W
 GEOMETRIC CENTER: 28° 28' 00" N 91° 52' 00" W
 CORNER: 1/4 SE 1/4
 LOG: 4 SONIC LOG
 COMPANY: M/M/FIN DRILLING COMPANY RIG 24
 RIG NO.: 8-210
 COMMENCED: 8-2-10
 RIG ID: 4750
 SURFACE CHAINING: 8 5/8" 23# @ 21'
 RIG LEAD: 4748
 PRODUCER CHAINING: 5 7/8" 15.5# @ 4748
 DRILLING TIME: 3600-TD
 STOPPED: 3800-TD
 DATE: 8-10-10
 OPERATOR: M/S
 SUPERVISOR: M/S
 DRILLER: M/S
 LOGGERS: M/S
 TIME: M/S
 WELLS: 8-3-10 594 PUD
 8-4-10 239 DRILLING
 8-5-10 345 DRILLING
 8-6-10 420 DRILLING
 8-7-10 448 DRILLING
 8-8-10 458 DRILLING
 8-9-10 479 DRILLING
 8-10-10 490 DRILLING
 567.5' CASING

REMARKS: PIPE WAS SET TO FURTHER TEST THE JOHNSON ZONE.

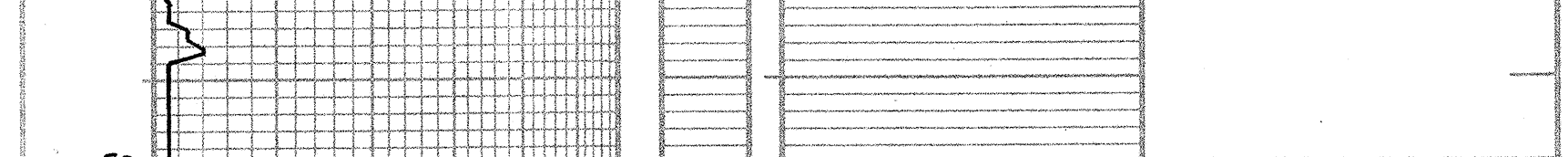
Respectfully Submitted,
Macklin M. Armstrong

Mohs & Type	Serial No.	Measures	Depth In	Depth Out	Hours
7 1/2" SM F2071	M1616	15-15-15	217	3614	41 1/2
7 1/2" SM F272	PP4026	16-15-15	3614	4750	54

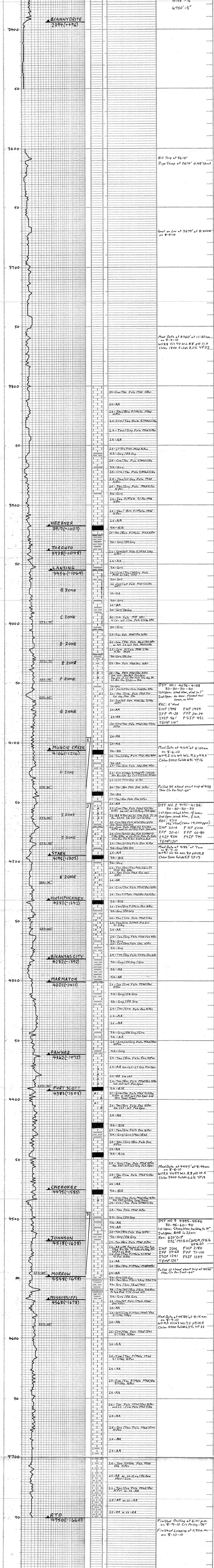
Formation	Sample	Log	Datum	Formation	Sample	Log	Datum
ANHYDRITE	2371	2369	+537 -16				
B/ANHYDRITE	2394	2391	+515 -16				
HEBNER	3917	3916	-1038 -17				
TORONTO	3938	3935	-1045 -9				
LANSING	3954	3952	-1062 -8				
MUNCIE CREEK	4106	4102	-1212 -3				
STARK	4195	4192	-1302 -0				
HUSHPUCKNEY	4232	4229	-1339 -6				
B/KANSAS CITY	4282	4280	-1390 -12				
MARMATON	4301	4298	-1408 -2				
PAWNEE	4362	4360	-1470 +6				
FORT SCOTT	4393	4390	-1500 +8				
CHEROKEE SHALE	4475	4472	-1582 +10				
JOHNSON	4518	4515	-1625 +8				
MORROW	4548	4544	-1634 +8				
MISSISSIPPI	4568	4564	-1674 +22				
TOTAL DEPTH	4750	4748	-1858				

* Structural Position to: NOR-WEST KANSAS OIL, LLC JOSEPH NO.1 SW SWNE SEC 21 T14S R31W

LEGEND



SCALE 1" = 100'



COMPANY: GRAND MESA OPERATING COMPANY
 LEASE: HESS NO. 1-16
 LOCATION: 2004 FNL & 1141' FWL SEC 16 TWP 14S RNG 31W
 COUNTY: GOVE STATE: KANSAS
 ELEVATION: KB 2890