KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1065249

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 # 3842
Name: Larson Engineering, Inc. dba Larson Operating Company
Address 1: 562 W STATE RD 4
Address 2:
City: OLMITZ State: KS Zip: 67564 + 8561
Contact Person: Thomas Larson
Phone: (620) 653-7368
CONTRACTOR: License # 33935
Name: H. D. Drilling, LLC
Wellsite Geologist: Robert Lewellyn
Purchaser:

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 #:

6/30/2011	7/12/2011	7/12/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-171-20816-00-00
Spot Description:
SE - SE - NE - NW Sec. 12 Twp. 16 S. R. 31 [ ] East [x] West
1175 Feet from [x] North / [ ] South Line of Section
2534 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [x] NW [ ] SE [ ] SW
County: Scott
Lease Name: York Well #: 1-12
Field Name:
Producing Formation: none
Elevation: Ground: 2817 Kelly Bushing: 2824
Total Depth: 4560 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 261 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: 19500 ppm Fluid volume: 800 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: 10/28/2011
- [x] **Confidential Release Date:** 10/27/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** NAOMI JAMES **Date:** 10/28/2011

Side Two

[redacted]

1065249

Operator Name: Larson Engineering, Inc. dba Larson Operating Company Lease Name: York Well #: 1-12

Sec. 12 Twp. 16 S. R. 31 ☐ East ☑ West County: Scott

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:

Dual Induction
Dual Comp Porosity
Microresistivity

☑ 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	8.625	20	261	Class A	175	2% gel, 3% CC

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)* D & A

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Larson Engineering, Inc. dba Larson Operating Company
Well Name	York 1-12
Doc ID	1065249

Tops

Name	Top	Datum
Anhydrite	2210	+614
Base Anhydrite	2267	+557
Heebner Sh	2853	-1029
Lansing-KC	3886	-1062
Stark Sh	4156	-1332
Base-KC	4236	-1412
Marmaton	4266	-1442
Altamont	4288	-1464
Pawnee	4359	-1535
Fort Scott	4412	-1588
Cherokee	4437	-1613
Mississippian	4516	-1692

ALLIED CEMENTING CO., LLC. 037247

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Great Bend KS

DATE 7-12-11	SEC. 12	TWP. 16	RANGE 31	CALLED OUT	ON LOCATION	JOB START 530 PM	JOB FINISH 600 PM
LEASE Young	WELL # 1-12	LOCATION Healey west To Bibon RD North To west into				COUNTY Scott	STATE KS
(OLD) OR NEW (Circle one)							

CONTRACTOR HD - Rig 3
TYPE OF JOB Rotary Plug
HOLE SIZE 7 7/8 T.D. 4560
CASING SIZE DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 2250
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG.
PERFS.
DISPLACEMENT

OWNER Lawson

CEMENT

AMOUNT ORDERED 280sx 60/40 + 4% gel + 1/4# flo seal

COMMON	168	@ 16.25	2730.00
POZMIX	112	@ 8.50	952.00
GEL	10	@ 21.25	212.50
CHLORIDE		@	
ASC		@	
flo seal	70	@ 2.70	189.00
HANDLING	293	@ 2.25	659.25
MILEAGE	293 x 60 x .11		1.933.80
		TOTAL	6676.55
Mileage and Drage 1933.80 x 70% =			1.353.66
New Total			5.322.89

EQUIPMENT

PUMP TRUCK CEMENTER Wayne
366 HELPER Greg
BULK TRUCK
#482-241 DRIVER Trent
BULK TRUCK
DRIVER

REMARKS:

1st plug 2250 mix 50 sx
2nd plug 1620 mix 80 sx
3rd plug 810 mix 50 sx
4th plug 290 mix 50 sx
5th plug 60 mix 20 sx
Rathole mix 30 sx

SERVICE

DEPTH OF JOB 2250

PUMP TRUCK CHARGE			1250.00
EXTRA FOOTAGE		@	
MILEAGE	Truck 120	@ 7.00	840.00
MANIFOLD		@	
	Light Truck 120	@ 4.00	480.00
		@	
		TOTAL	2570.00
Mileage D/S 1320 x 70% = 924			
New Total			1646.00

CHARGE TO: Lawson Engineering
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	TOTAL	

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

SALES TAX (If Any)
TOTAL CHARGES 6.968.89
DISCOUNT 20% 1.393.77 IF PAID IN 30 DAYS
5.575.11

PRINTED NAME LEWAYNE TRESNER

SIGNATURE Dwayne Tresner

ALLIED CEMENTING CO., LLC. 038769

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:
Great Bend KS

DATE 6-30-11	SEC. 12	TWP. 16	RANGE 31	CALLED OUT	ON LOCATION	JOB START 10:00pm	JOB FINISH 10:30pm
LEASE York	WELL # 1-12		LOCATION Healy KS 2west 4/5 north			COUNTY Scott	STATE KS
OLD OR NEW (Circle one)			3½ north to 290 Rd 3¾ miles to Rd 290 1west 4/5 north				

CONTRACTOR H D Rig #3
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 264
CASING SIZE 8 5/8 DEPTH 264
TUBING SIZE DEPTH
DRILL PIPE 4½ DEPTH 264
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15 Ft
PERFS.
DISPLACEMENT Freshwater

OWNER Larson Engineering Inc

CEMENT

AMOUNT ORDERED 175sx Class A, 3%cc 2%gel

EQUIPMENT

PUMP TRUCK CEMENTER Bob Rather
366 HELPER Corey R.
BULK TRUCK
341 DRIVER Kevin W.
BULK TRUCK
DRIVER

COMMON	175	@ 16.25	2.843.75
POZMIX		@	
GEL	3	@ 21.25	63.75
CHLORIDE	6	@ 58.20	349.20
ASC		@	
HANDLING	184	@ 2.25	414.00
MILEAGE	184 x 60 x .11		1.214.20
		TOTAL	4.885.95

REMARKS:

Break circulation with Rig mud Run 5bbl freshwater ahead spacer Mix 175 sx Com 3%cc 2%gel with 27.12 bbls water. Displace with 16.86 bbls water Cement did circulate. Shut in Rig down

SERVICE

DEPTH OF JOB 264
PUMP TRUCK CHARGE 1125.00
EXTRA FOOTAGE @
MILEAGE T-264 120 @ 7.00 840.00
MANIFOLD @
light T-264 120 @ 4.00 480.00
@
TOTAL 2.445.00

CHARGE TO: Larson Engineering Inc
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@
@
@
@
@
TOTAL

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

SALES TAX (If Any)
TOTAL CHARGES 7.330.95
DISCOUNT 20% 1.466.00 IF PAID IN 30 DAYS
5.864.95

PRINTED NAME L. LEWAYNE TOESNER

SIGNATURE L. Lewayne Toesner

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lewellyn

York #1-12

12-16-31

Job Ticket: 43261 **DST#: 1**

Test Start: 2011.07.05 @ 14:50:54

GENERAL INFORMATION:

Formation: **B**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:50:54
Time Test Ended: 19:35:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 3910.00 ft (KB) To 3935.00 ft (KB) (TVD)
Total Depth: 3935.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

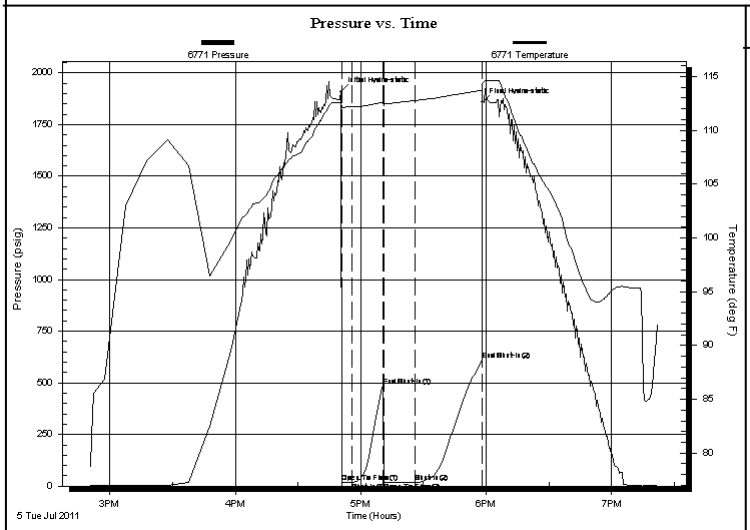
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 18.99 psig @ 3911.00 ft (KB)
Start Date: 2011.07.05 End Date: 2011.07.05
Start Time: 14:50:54 End Time: 19:22:09

Capacity: 8000.00 psig
Last Calib.: 2011.07.05
Time On Btm: 2011.07.05 @ 16:50:39
Time Off Btm: 2011.07.05 @ 17:58:09

TEST COMMENT: Weak blow died in 4 min.
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1908.29	112.66	Initial Hydro-static
1	17.73	112.09	Open To Flow (1)
6	18.16	112.17	Shut-In(1)
20	485.33	112.60	End Shut-In(1)
21	18.35	112.46	Open To Flow (2)
36	18.99	112.77	Shut-In(2)
68	608.29	113.72	End Shut-In(2)
68	1856.72	114.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31

Job Ticket: 43261 **DST#: 1**

Test Start: 2011.07.05 @ 14:50:54

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2200.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

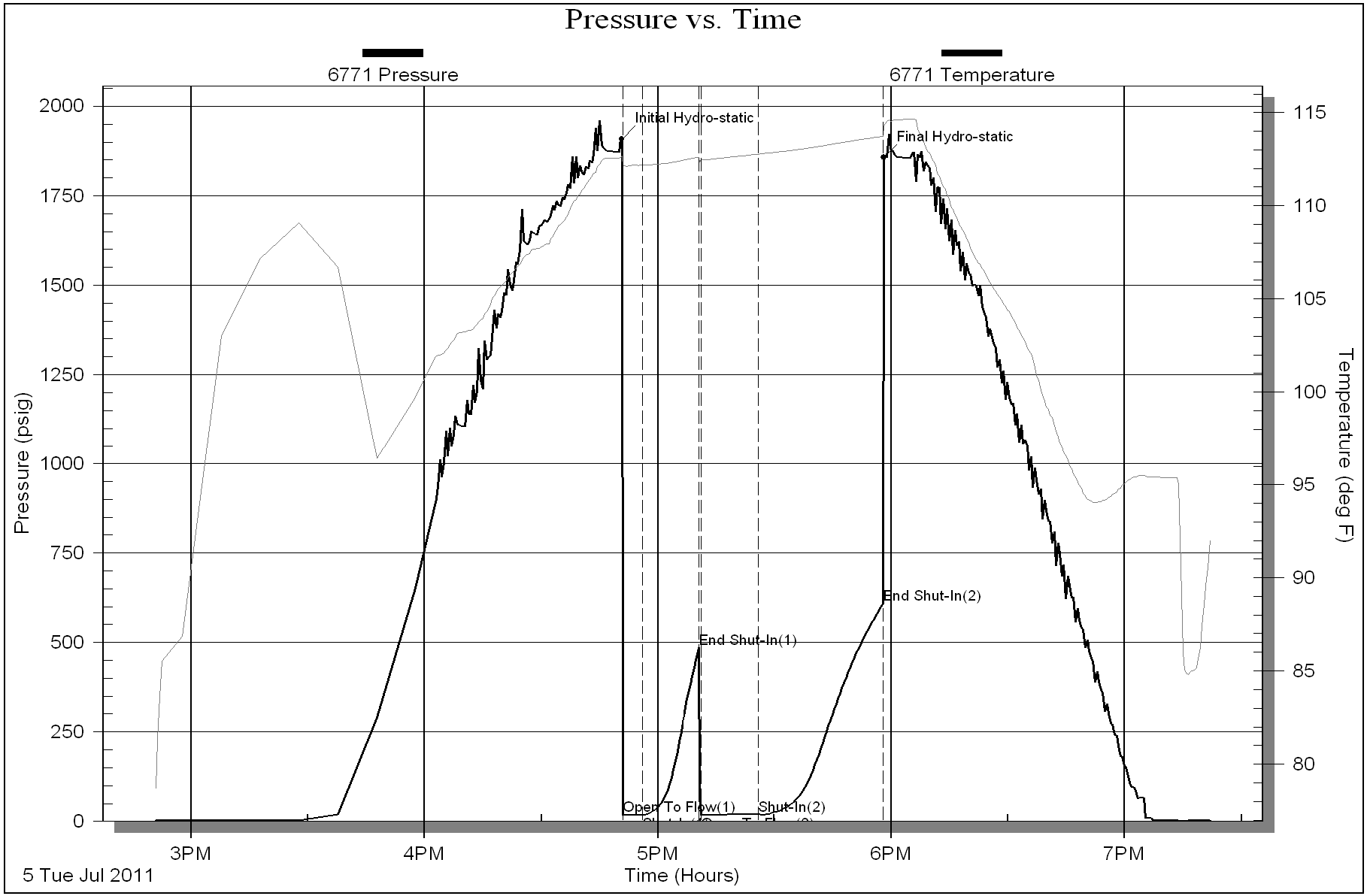
Recovery Table

Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6771 **Outside** Larson Engineering Inc 12-16-31 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 43261 Printed: 2011.07.06 @ 09:39:23

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43262 **DST#: 2**

Test Start: 2011.07.06 @ 12:20:28

GENERAL INFORMATION:

Formation: **H**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:08:58
Time Test Ended: 17:15:28

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 55

Interval: 4060.00 ft (KB) To 4090.00 ft (KB) (TVD)
Total Depth: 4090.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

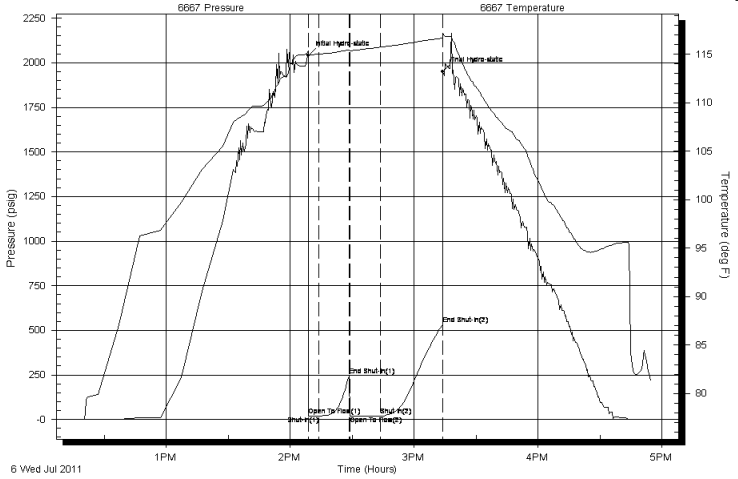
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6667 **Inside**

Press@RunDepth: 19.50 psig @ 4061.00 ft (KB)
Start Date: 2011.07.06 End Date: 2011.07.06
Start Time: 12:20:28 End Time: 16:54:28

Capacity: 8000.00 psig
Last Calib.: 2011.07.06
Time On Btm: 2011.07.06 @ 14:08:43
Time Off Btm: 2011.07.06 @ 15:13:58

TEST COMMENT: Weak blow died in 2 min
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2040.63	115.32	Initial Hydro-static
1	18.53	114.87	Open To Flow(1)
5	18.93	115.02	Shut-In(1)
20	242.32	115.47	End Shut-In(1)
21	18.92	115.37	Open To Flow(2)
35	19.50	115.74	Shut-In(2)
65	529.95	116.67	End Shut-In(2)
66	1949.81	117.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43262 **DST#: 2**

Test Start: 2011.07.06 @ 12:20:28

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

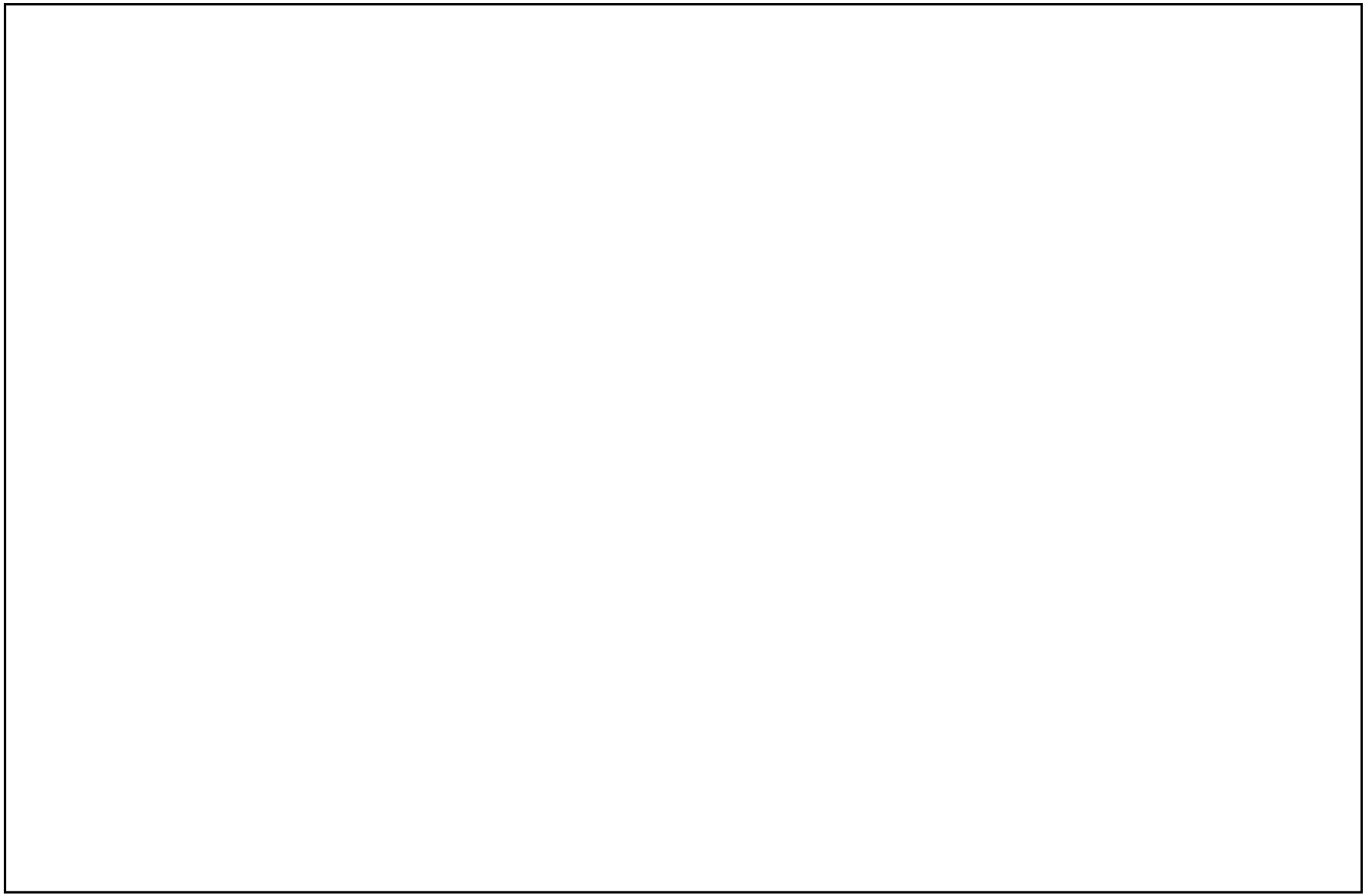
Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lew ellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43263 **DST#: 3**

Test Start: 2011.07.07 @ 03:10:54

GENERAL INFORMATION:

Formation: **I**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:12:54
Time Test Ended: 09:00:09

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 55

Interval: 4096.00 ft (KB) To 4128.00 ft (KB) (TVD)
Total Depth: 4128.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

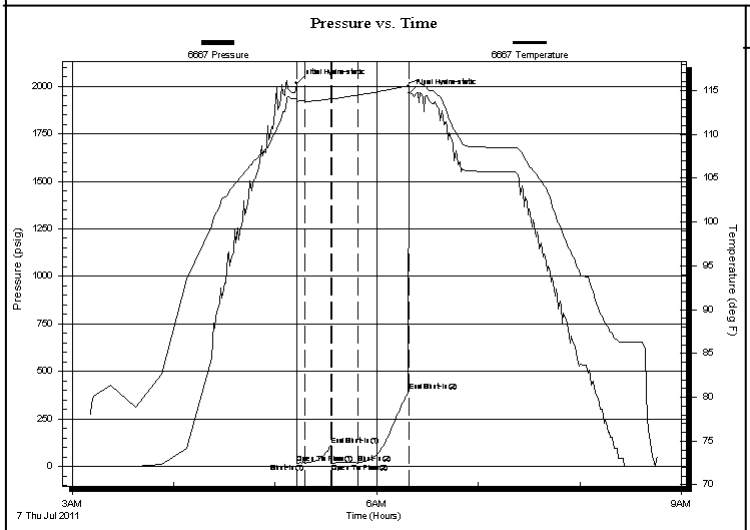
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6667 **Inside**

Press@RunDepth: 19.87 psig @ 4097.00 ft (KB)
Start Date: 2011.07.07 End Date: 2011.07.07
Start Time: 03:10:54 End Time: 08:46:09

Capacity: 8000.00 psig
Last Calib.: 2011.07.07
Time On Btm: 2011.07.07 @ 05:12:39
Time Off Btm: 2011.07.07 @ 06:19:09

TEST COMMENT: Weak blow died in 4 min.
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2015.31	114.14	Initial Hydro-static
1	19.37	113.59	Open To Flow (1)
5	19.44	113.77	Shut-In(1)
20	111.79	114.06	End Shut-In(1)
21	18.89	114.02	Open To Flow (2)
37	19.87	114.48	Shut-In(2)
66	394.51	115.52	End Shut-In(2)
67	1963.72	115.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	mud 100%m	0.00

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43263 **DST#: 3**

Test Start: 2011.07.07 @ 03:10:54

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.97 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

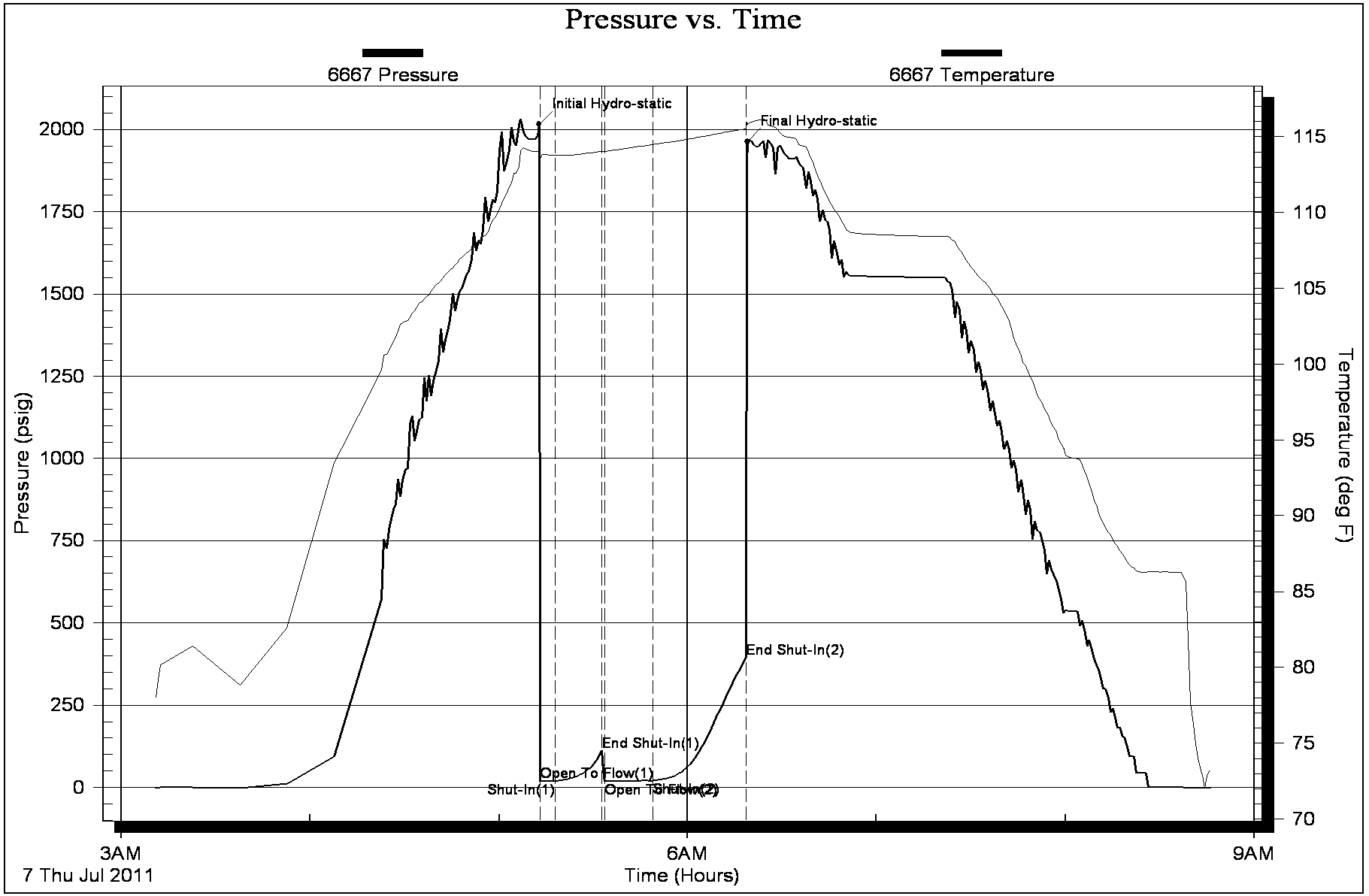
Length ft	Description	Volume bbl
1.00	mud 100%m	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6667 Pressure
6667 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(2)
End Shut-In(1)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
115
110
105
100
95
90
85
80
75
70
3AM
7 Thu Jul 2011
6AM
Time (Hours)
9AM

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lew ellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43264 **DST#: 4**

Test Start: 2011.07.07 @ 19:35:41

GENERAL INFORMATION:

Formation: **K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:24:41
Time Test Ended: 00:58:26

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 55

Interval: 4150.00 ft (KB) To 4176.00 ft (KB) (TVD)
Total Depth: 4176.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

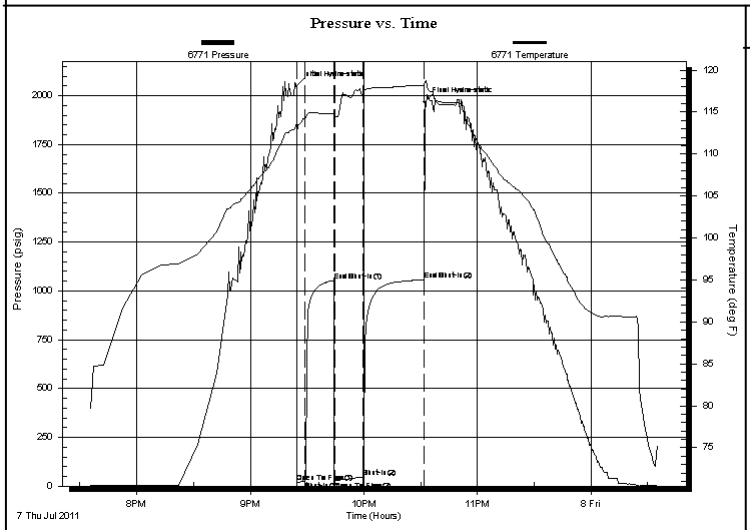
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 47.29 psig @ 4151.00 ft (KB)
Start Date: 2011.07.07 End Date: 2011.07.08
Start Time: 19:35:41 End Time: 00:35:26

Capacity: 8000.00 psig
Last Calib.: 2011.07.08
Time On Btm: 2011.07.07 @ 21:24:26
Time Off Btm: 2011.07.07 @ 22:32:11

TEST COMMENT: Weak surface blow
No return
No blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2050.54	113.62	Initial Hydro-static
1	17.82	112.26	Open To Flow (1)
5	25.75	114.25	Shut-In(1)
20	1053.20	114.85	End Shut-In(1)
20	26.72	114.19	Open To Flow (2)
36	47.29	117.26	Shut-In(2)
68	1055.99	118.22	End Shut-In(2)
68	1969.27	118.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	heavy mud 100%m	0.17

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43264 **DST#: 4**

Test Start: 2011.07.07 @ 19:35:41

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2300.00 ppm				
Filter Cake:	2.00 inches				

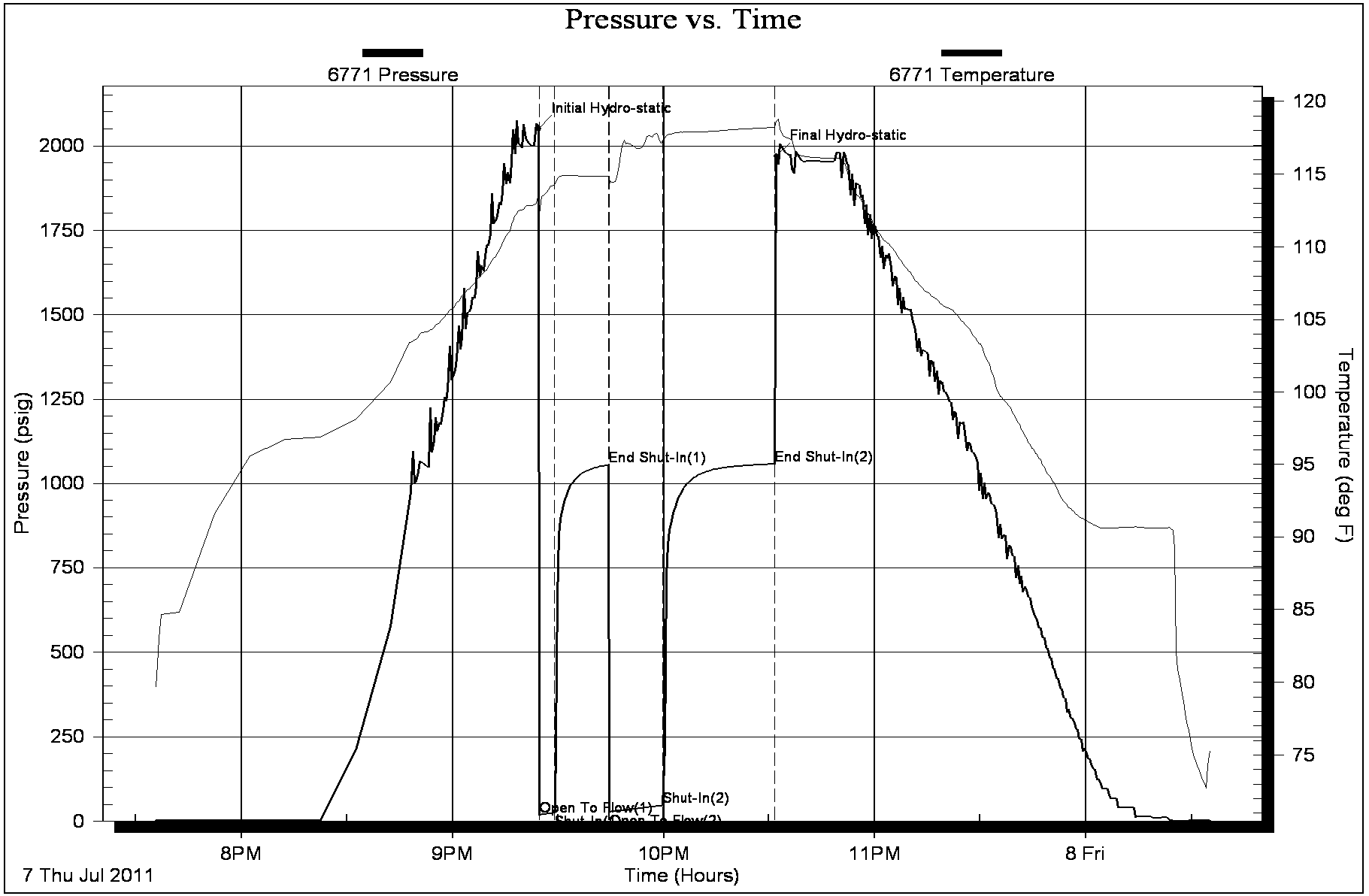
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
35.00	heavy mud 100%m	0.172

Total Length: 35.00 ft Total Volume: 0.172 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
2000
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
75
8PM
9PM
10PM
11PM
8 Fri
7 Thu Jul 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lew ellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43264 **DST#: 4**

Test Start: 2011.07.07 @ 19:35:41

GENERAL INFORMATION:

Formation: **K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:24:41
Time Test Ended: 00:58:26

Test Type: Conventional Bottom Hole
Tester: Shane McBride
Unit No: 55

Interval: 4150.00 ft (KB) To 4176.00 ft (KB) (TVD)
Total Depth: 4176.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

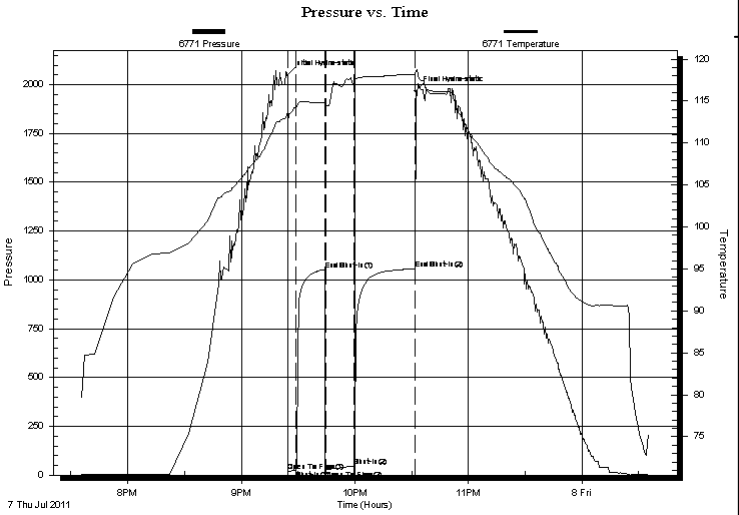
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 47.29 psig @ 4151.00 ft (KB)
Start Date: 2011.07.07 End Date: 2011.07.08
Start Time: 19:35:41 End Time: 00:35:26

Capacity: 8000.00 psig
Last Calib.: 2011.07.08
Time On Btm: 2011.07.07 @ 21:24:26
Time Off Btm: 2011.07.07 @ 22:32:11

TEST COMMENT: Weak surface blow
No return
No blow
No return



PRESSURE SUMMARY

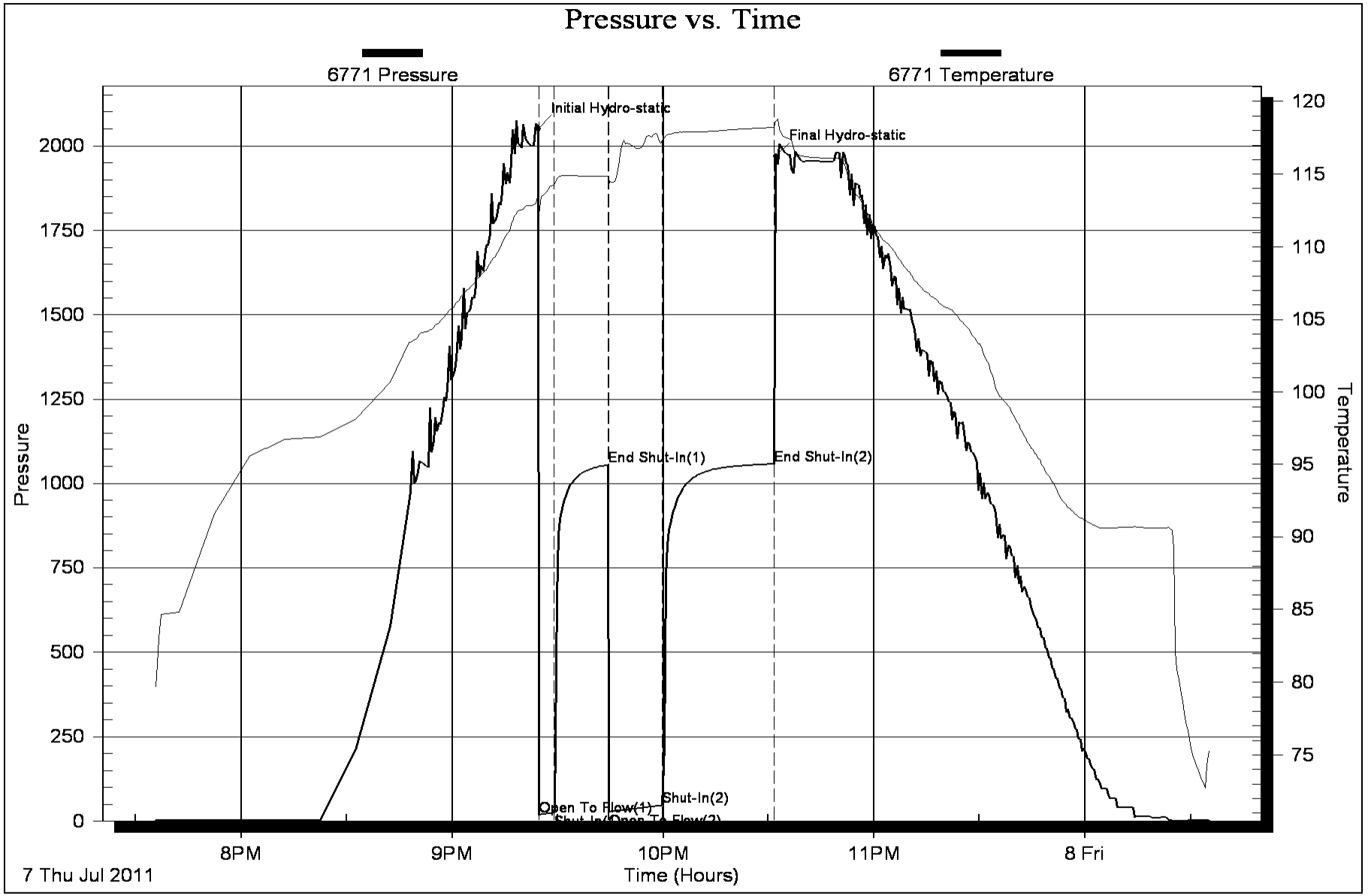
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2050.54	113.62	Initial Hydro-static
1	17.82	112.26	Open To Flow (1)
5	25.75	114.25	Shut-In(1)
20	1053.20	114.85	End Shut-In(1)
20	26.72	114.19	Open To Flow (2)
36	47.29	117.26	Shut-In(2)
68	1055.99	118.22	End Shut-In(2)
68	1969.27	118.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	heavy mud 100%m	0.17

Gas Rates

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


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Pressure
Temperature
2000
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
75
8PM
9PM
10PM
11PM
8 Fri
7 Thu Jul 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43266 **DST#: 6**

Test Start: 2011.07.09 @ 15:55:00

GENERAL INFORMATION:

Formation: **Altamont**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:20:30
Time Test Ended: 22:12:15

Test Type: Conventional Bottom Hole
Tester: Jace McKinney
Unit No: 55

Interval: 4248.00 ft (KB) To 4345.00 ft (KB) (TVD)
Total Depth: 4345.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

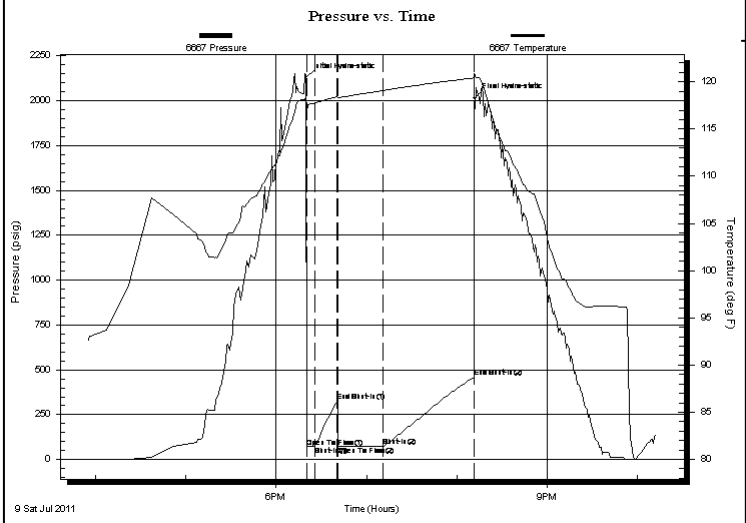
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6667 **Inside**

Press@RunDepth: 74.02 psig @ 4346.00 ft (KB)
Start Date: 2011.07.09 End Date: 2011.07.09
Start Time: 15:55:15 End Time: 22:12:15

Capacity: 8000.00 psig
Last Calib.: 2011.07.09
Time On Btm: 2011.07.09 @ 18:20:00
Time Off Btm: 2011.07.09 @ 20:12:00

TEST COMMENT: Built to 3" Blow
No Return Blow
Very Weak Surface Blow
No Return Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2131.17	118.03	Initial Hydro-static
1	70.39	116.88	Open To Flow (1)
6	72.67	117.75	Shut-In(1)
21	325.42	118.42	End Shut-In(1)
21	72.08	118.32	Open To Flow (2)
51	74.02	119.09	Shut-In(2)
112	458.44	120.42	End Shut-In(2)
112	2015.90	120.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	m 100%M	0.32

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43266 **DST#: 6**

Test Start: 2011.07.09 @ 15:55:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.60 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3200.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

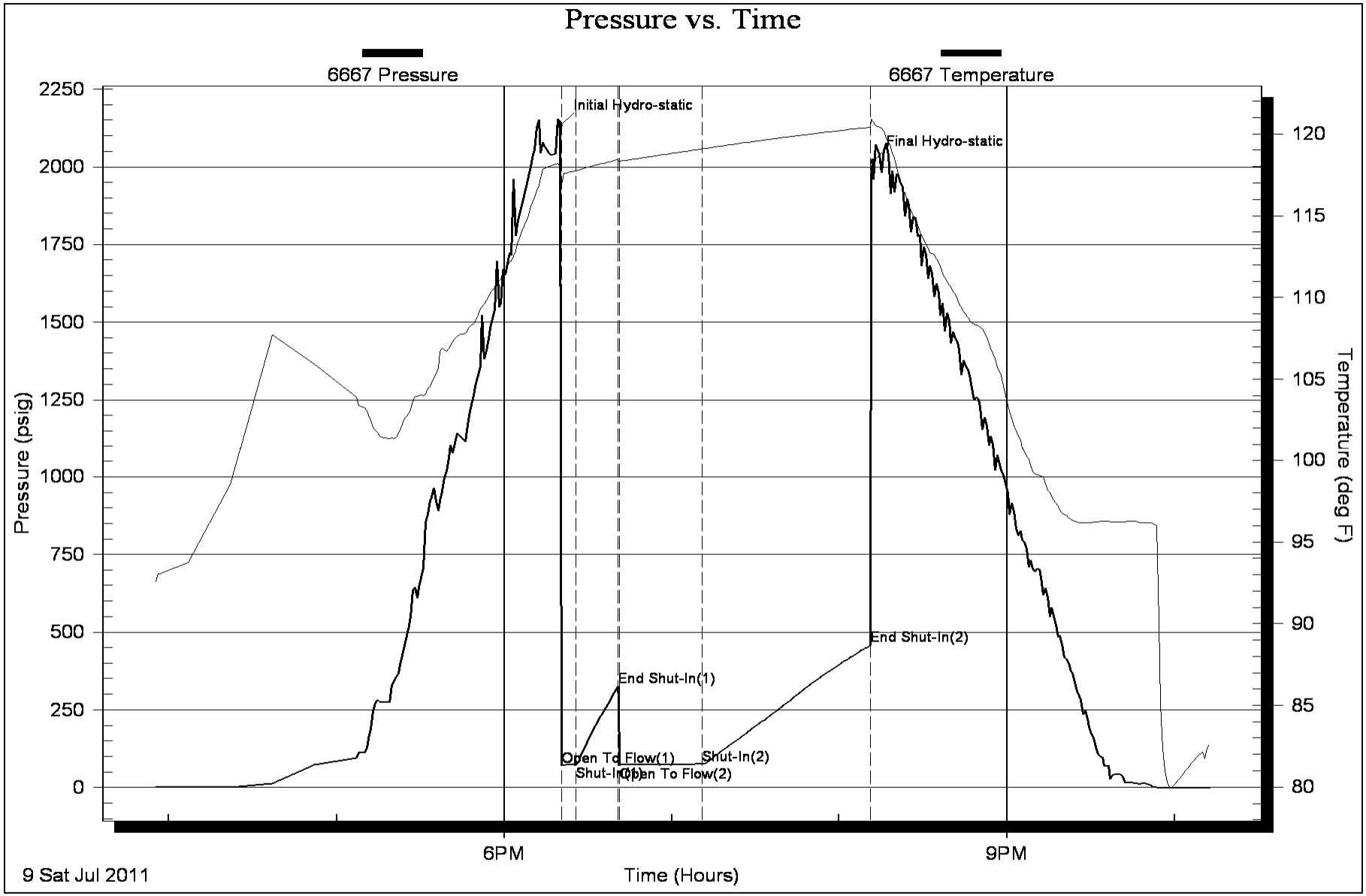
Length ft	Description	Volume bbl
65.00	m 100%M	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6667 Pressure
6667 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Shut-In(2)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2250
2000
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
6PM
9PM
9 Sat Jul 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lew ellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43267 **DST#: 7**

Test Start: 2011.07.10 @ 15:35:00

GENERAL INFORMATION:

Formation: **Pawnee - Fort Scott**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:41:30
Time Test Ended: 20:49:00

Test Type: Conventional Bottom Hole
Tester: Jace McKinney
Unit No: 55

Interval: 4356.00 ft (KB) To 4457.00 ft (KB) (TVD)
Total Depth: 4457.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

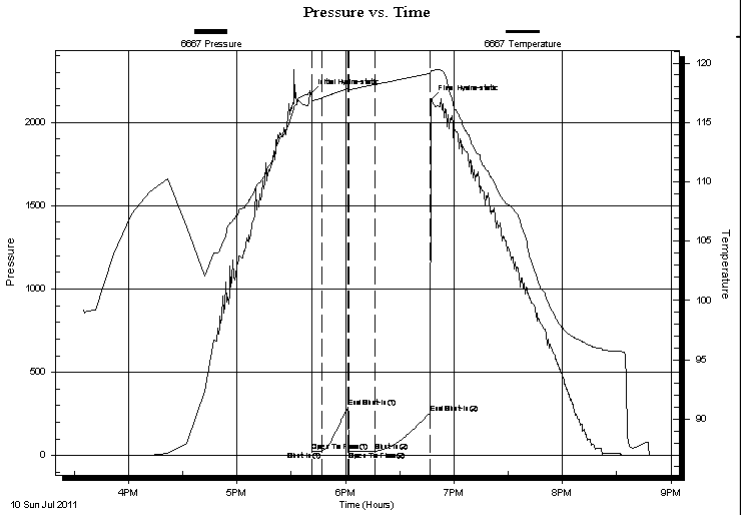
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6667 **Inside**

Press@RunDepth: 28.25 psig @ 4357.00 ft (KB)
Start Date: 2011.07.10 End Date: 2011.07.10
Start Time: 15:35:15 End Time: 20:49:00

Capacity: 8000.00 psig
Last Calib.: 2011.07.10
Time On Btm: 2011.07.10 @ 17:41:00
Time Off Btm: 2011.07.10 @ 18:47:30

TEST COMMENT: Weak Surface Blow
No Return Blow
No Blow
No Return Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2171.32	117.44	Initial Hydro-static
1	25.47	116.87	Open To Flow (1)
6	25.61	117.05	Shut-In(1)
21	290.11	117.85	End Shut-In(1)
21	26.36	117.72	Open To Flow (2)
36	28.25	118.19	Shut-In(2)
66	256.87	119.12	End Shut-In(2)
67	2135.94	119.31	Final Hydro-static

Recovery

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

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43267 **DST#: 7**

Test Start: 2011.07.10 @ 15:35:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2800.00 ppm				
Filter Cake:	2.00 inches				

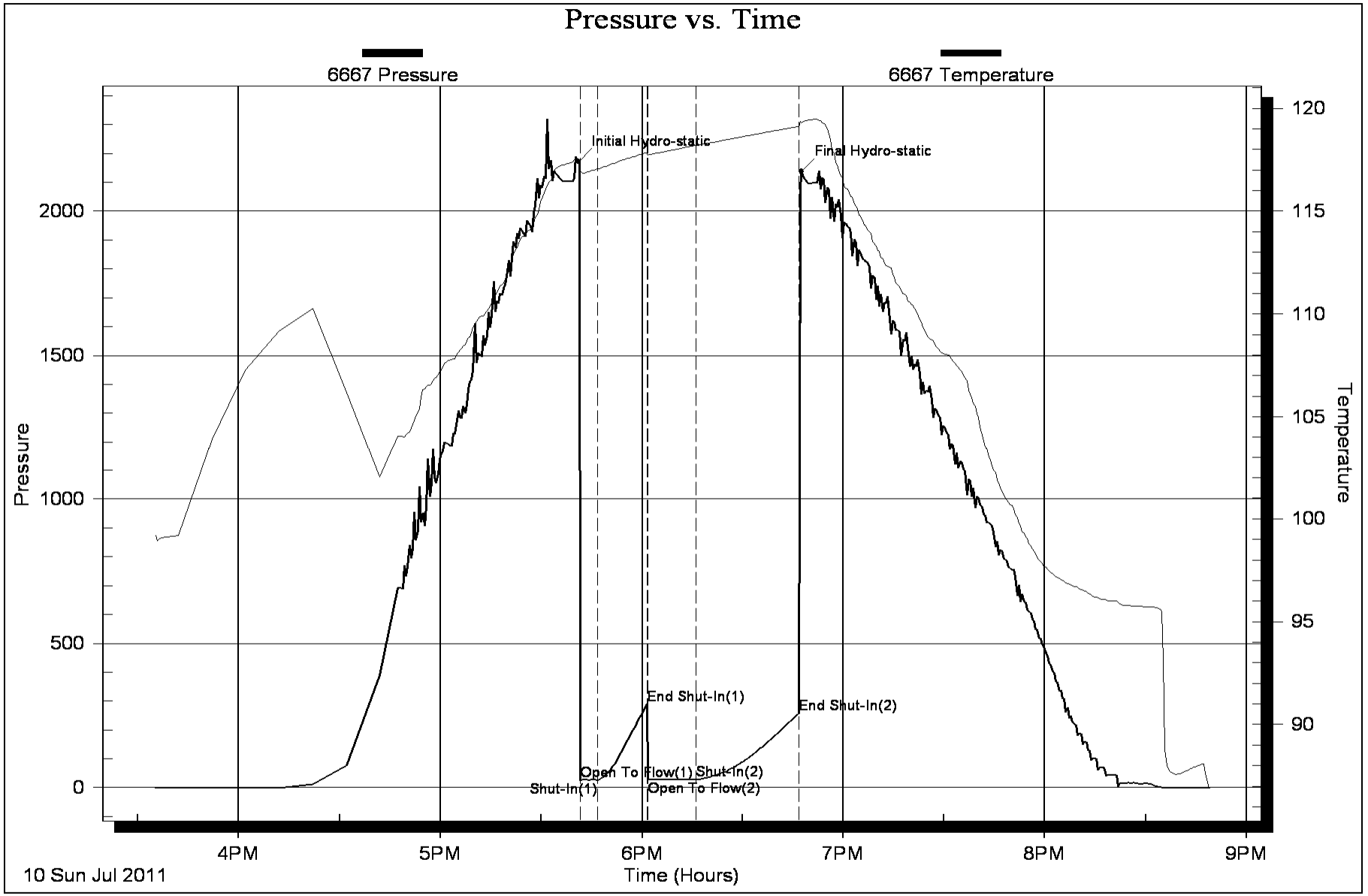
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	m 100% M	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:


Pressure vs. Time
6667 Pressure
6667 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Open To Flow(1)
Shut-In(2)
Open To Flow(2)
Pressure
Temperature
2000
1500
1000
500
0
120
115
110
105
100
95
90
4PM
5PM
6PM
7PM
8PM
9PM
10 Sun Jul 2011
Time (Hours)

DRILL STEM TEST REPORT

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564
ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43268 **DST#: 8**

Test Start: 2011.07.11 @ 09:20:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:18:45
Time Test Ended: 14:48:30

Test Type: Conventional Bottom Hole
Tester: Jace McKinney
Unit No: 55

Interval: 4436.00 ft (KB) To 4515.00 ft (KB) (TVD)
Total Depth: 4515.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

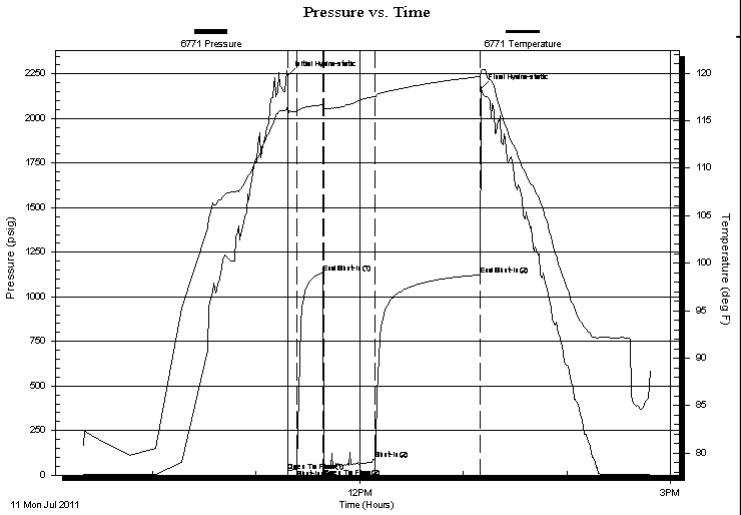
Reference Elevations: 2824.00 ft (KB)
2817.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 6771 **Outside**

Press@RunDepth: 89.64 psig @ 4516.00 ft (KB)
Start Date: 2011.07.11 End Date: 2011.07.11
Start Time: 09:20:15 End Time: 14:48:30

Capacity: 8000.00 psig
Last Calib.: 2011.07.11
Time On Btm: 2011.07.11 @ 11:18:30
Time Off Btm: 2011.07.11 @ 13:10:30

TEST COMMENT: Built To 1/2" Blow
No Return Blow
Built To 1" Blow
No Return Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2242.16	116.62	Initial Hydro-static
1	23.99	115.51	Open To Flow (1)
6	32.01	115.91	Shut-In(1)
21	1134.23	116.67	End Shut-In(1)
21	37.26	116.28	Open To Flow (2)
51	89.64	117.53	Shut-In(2)
111	1123.27	119.63	End Shut-In(2)
112	2169.27	120.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	100% M	0.34

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Larson Engineering Inc

562 State Rd 4
Olmitz, Ks
67564

ATTN: Bob Lewellyn

York #1-12

12-16-31 Scott, Ks

Job Ticket: 43268 **DST#: 8**

Test Start: 2011.07.11 @ 09:20:00

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.75 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2200.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

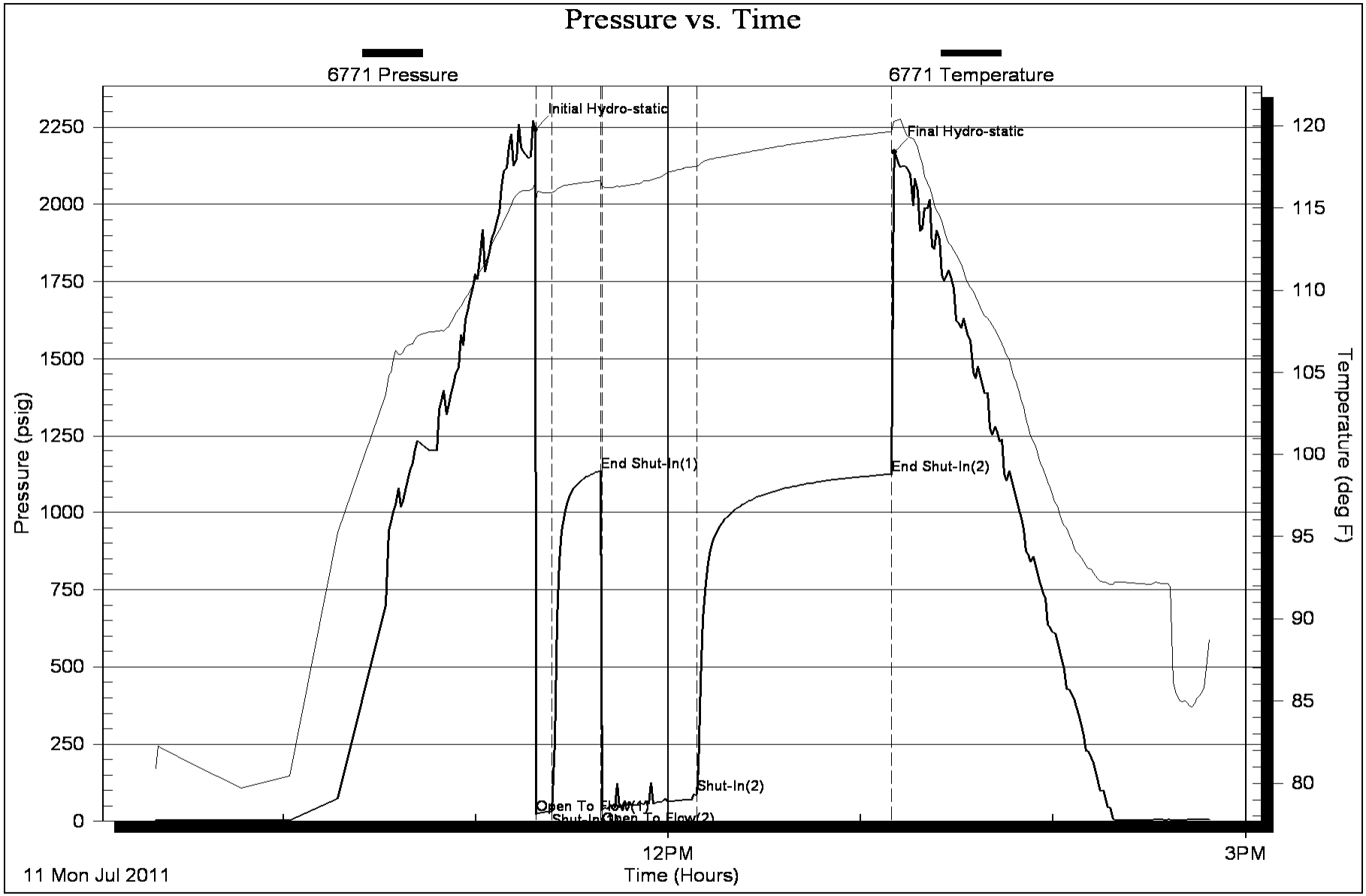
Length ft	Description	Volume bbl
70.00	100% M	0.344

Total Length: 70.00 ft Total Volume: 0.344 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:


Pressure vs. Time
6771 Pressure
6771 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Pressure (psig)
Temperature (deg F)
2250
2000
1750
1500
1250
1000
750
500
250
0
120
115
110
105
100
95
90
85
80
12PM
3PM
11 Mon Jul 2011
Time (Hours)

Robert C. Lewellyn

Consulting Petroleum Geologist

P. O. Box 375
Kechi, Kansas 67067
316-518-0495
boblewellyn@yahoo.com

GEOLOGICAL REPORT

Larson Engineering, Inc.
No. 1-12 York
1175' FNL & 2534' FWL Sec. 12-16S-31W
Scott County, Kansas

CONTRACTOR:	H D Drilling, LLC
SPUDDED:	June 30, 2011
DRILLING COMPLETED:	July 12, 2011
SURFACE CASING:	8 5/8" @ 261 KBM/175 sx.
ELECTRIC LOGS:	DIL CNL/CDL MEL
ELEVATIONS:	2824 KB 2817 GL

FORMATION TOPS: (Electric Log)

Anhydrite	2210 (+ 614)
Base Anhydrite	2267 (+ 557)
Heebner Shale	3853 (-1029)
Lansing-Kansas City Group	3886 (-1062)
Muncie Creek Shale	4063 (-1239)
Stark Shale	4156 (-1332)
Hushpuckney Shale	4193 (-1369)
Base Kansas City	4236 (-1412)
Marmaton	4266 (-1442)
Altamont	4288 (-1464)
Pawnee	4359 (-1535)
Myrick Station	4386 (-1562)
Fort Scott	4412 (-1588)
Cherokee	4437 (-1613)
Cherokee Sand	4506 (-1682)
Mississippian	4516 (-1692)
Electric Log Total Depth	4560 (-1736)

Samples were examined microscopically from 3800 to Rotary Total Depth. Samples were examined wet and dry and samples from potentially productive zones were viewed under a fluoroscope and

checked for oil cut. Following is a description of zones of interest, Drill Stem Tests, etc. For a complete lithologic description of all formations refer to the sample log in the back pages of this report.

Lansing-Kansas City Zones:

3894-3899 (A Zone)
Limestone, buff, dense, some finely crystalline, trace of scattered poor vugular and intercrystalline porosity, some scattered cream chalky, no show of oil.

3921-3923 (B Zone)

Limestone, buff, some gray, dense to finely crystalline and partly oolitic, poor scattered vugular and interoolitic porosity, scattered poor spotted stain, very slight show of free oil, faint fleeting odor, very poor fluorescence, poor cut.

Drill Stem Test No. 1 3910-3935
5-15-15-30; weak blow, died in four minutes of first flow, did not return on second flow; recovered one foot of mud. ISIP 485# FSIP 608# IFP 17-18# FFP 18-18# IHP 1908# FHP 1856# BHT 113 degrees F.

3936-3967 (C-D Zone)

Limestone, cream to buff, dense and chalky with scattered finely crystalline, zone is mostly tight with no shows of oil.

3969-3982 (E Zone)

Limestone, buff, dense, some finely crystallie, some cream chalky, trace of very poor vugular and intercrystalline porosity, some scattered dead stain, no show of live oil.

3984-3997 (F Zone)

Limestone, cream to buff, some tan, dense to finely crystalline and slightly fossiliferous, some scattered poor vugular and intercrystalline porosity with traces of dead stain, no show of live oil.

3999-4013 (G Zone)

Limestone, tan, finely crystalline and oolitic, fair to good ooliticastic porosity, rare trace of dead stain, no show of live oil.

4076-4086 (H Zone)

Limestone, buff to gray, dense to finely crystalline and fossiliferous, scattered poor to fair small vug and interfossil porosity, some scattered poor spotted stain, trace of free oil, faint fleeting odor, poor fluorescence, poor cut.

Drill Stem Test No. 2 4060-4090
5-15-15-30; weak blow, died in two minutes, did not return on second flow; recovered one foot of mud. ISIP 242# FSIP 529# IFP 18-18# FFP 18-18# IHP 2040# FHP 1949# BHT 117 degrees F.

4106-4116 (I Zone)

Limestone, cream to buff, dense to finely crystalline slightly fossiliferous, some sucrosic, some cream finely crystalline with fair intercrystalline and scattered fair small vug porosity, scattered poor spotted stain, very slight show of free oil, faint odor, very poor fluorescence, poor cut.

Drill Stem Test No. 3 4096-4128
5-15-15-30; weak blow, died in four minutes of first flow, did not return on second flow; recovered one foot of mud. ISIP 111# FSIP 394# IFP 19-19# FFP 18-19# IHP 2015# FHP 1963# BHT 116 degrees F.

4136-4144 (J Zone)

Limestone, tan, some buff, finely crystalline and oolitic, fair to good ooliticastic porosity, rare trace of dead stain, no show of live oil.

4168-4178 (K Zone)

Limestone, cream to buff, dense to finely crystalline and partly fossiliferous, scattered fair intercrystalline and vugular porosity, poor to fair spotted stain, slight show of free oil, faint to fair odor, poor fluorescence, poor to fair cut.

Drill Stem Test No. 4 4150-4176
5-15-15-30; weak surface blow through first flow period, did not return on second flow; recovered 35 feet of heavy mud. ISIP 1053# FSIP 1055# IFP 17-25# FFP 26-47# IHP 2050# FHP 1969# BHT 118 degrees F.

4196-4201 (Middle Creek Zone)

Limestone, buff, some tan, dense, some finely crystalline, slightly fossiliferous, trace of poor vugular and intercrystalline porosity, rare trace of spotted stain, no free oil, no odor, no fluorescence, no cut.

4204-4212 (L Zone)

Limestone, buff to tan, some brown, some gray, dense to finely crystalline, slightly fossiliferous, fair intercrystalline and interfossil porosity, scattered poor spotted stain, trace of free oil, faint fleeting odor, poor fluorescence, poor cut, few pieces with calcite crystal overgrowth attached to fragments.

Drill Stem Test No. 5 4190-4215
5-15-15-30; weak blow, died in three minutes, did not return on second flow; recovered one foot of mud. ISIP 352# FSIP 613# IFP 16-15# FFP I6-17# IHP 2072# FHP 1978# BHT 116 degrees F.

4212-4236 (Lower L Zone)

Limestone, tan to brown, some gray, dense to finely crystalline, very slightly fossiliferous, mostly tight with a trace of very poor intercrystalline and small vug porosity, rare trace of very poor spotted stain, no free oil, no odor, no fluorescence, no cut, zone calculates water bearing on the electric log and warrants no further evaluation.

4238-4266 (Pleasanton)

Limestone, buff to gray, dense to finely crystalline and oolitic with dense-oolitic, buff limestone with gray oollites, partly fossiliferous, some scattered very poor intercrystalline porosity, no show of oil.

4266-4276 (Marmaton Zone)

Limestone, buff to tan, dense to finely cyrstalline, some tan to brown lithographic limestone, zone is mostly tight with traces of dead stain and no shows of live oil.

4308-4316 (Altamont "A" Zone)

Limestone, cream to buff, dense to finely crystalline, trace of poor intercrystalline porosity, some poor vugular porosity, trace of poor spotted stain, some stain on fracture faces on dense pieces, trace of free oil, faint fleeting odor, poor fluorescence, poor cut.

Drill Stem Test No. 6 4248-4345
5-15-30-60; built to three-inch blow on first flow; came back on second flow as very weak surface blow and lasted through the second flow period; recovered 65 feet of mud. ISIP 325# FSIP 458# IFP 70-73# FFP 72-74# IHP 2131# FHP 2016# BHT 120 degrees F.

4369-4383 (Pawnee)

Limestone, buff to tan, dense to finely crystalline, some tan lithographic limestone, scattered very poor vugular porosity, trace of light spotted stain, trace of free oil, faint fleeting odor, poor fluorescence, poor cut.

4386-4407 (Myrick Station)

Limestone, tan to brown, dense to finely crystalline, trace of sucrosic, scattered very poor intercrystalline and vugular porosity, trace of scattered very poor spotted stain, trace of free oil, faint fleeting odor, poor fluorescence, poor cut. Some cream to buff finely crystalline and chalky limestone, tight, no show of oil.

4412-4437 (Fort Scott)

Limestone, tan to brown, finely crystallilne and oolitic, poor intercrystalline and interoolitic porosity, scattered poor spotted stain, very slight show of free oil, faint fleeting odor, poor fluorescence, poor cut. Lower section is limestone, buff to tan, finely crystalline and oolitic, lower section mostly tight with no show of oil.

4440-4458 (Cherokee Lime)

Limestone, tan to brown, dense, some finely crystalline, zone is mostly tight with no show of oil.

Drill Stem Test No. 7 4356-4457
5-15-15-30; built to weak surface blow, did not return on second flow; recovered five feet of mud. ISIP 290# FSIP 257# IFP 25-26# FFP 26-28# IHP 2171# FHP 2136# BHT 119 degrees F.

4460-4479 (Cherokee Lime)

Limestone, tan to brown, dense to sub-lithographic, zone is mostly tight and contained no shows of oil.

4479-4503 (Johnson Zone)

Limestone, buff to tan to brown, dense to finely crystalline, slightly fossiliferous, poor intercrystalline and interfossil porosity, scattered poor spotted stain with some dead stain, slight show of free oil, faint odor, poor fluorescence, poor cut.

4506-4509 (Cherokee sand)

Sand, white, fine-grained, calcareous, subangular to subround, well sorted and well-cemented, mostly tight, small show of tarry free oil, poor spotted stain, some dead stain, faint odor, no fluorescence, poor cut.

Drill Stem Test No. 8 4436-4515
5-15-30-60; built to one-half inch blow on first flow; built to one-inch blow on second flow, no blowback; recovered 70 feet of mud. ISIP 1134# FSIP 1123# IFP 24-32# FFP 37-90# IHP 2242# FHP 2169# BHT 120 degrees F.

4516-4560 (Mississippian)

Limestone, buff to tan, dense to finely crystalline, some sub-lithographic, some cream chalky limestone, trace of glauconitic lime, section is mostly tight with no shows of oil.

Conclusions and Recommendations:

Sample examination, drill stem testing, and electric logging revealed no zones of possible commercial production of oil. It was therefore recommended that the No. 1-12 York be plugged and abandoned.

Respectfully submitted,

Robert C. Lewelllyn
Consulting Petroleum Geololgist

RCL:me

STATE
KANSAS
COUNTY
Scott
BLOCK
SEC.
12
T. 16S R. 31W

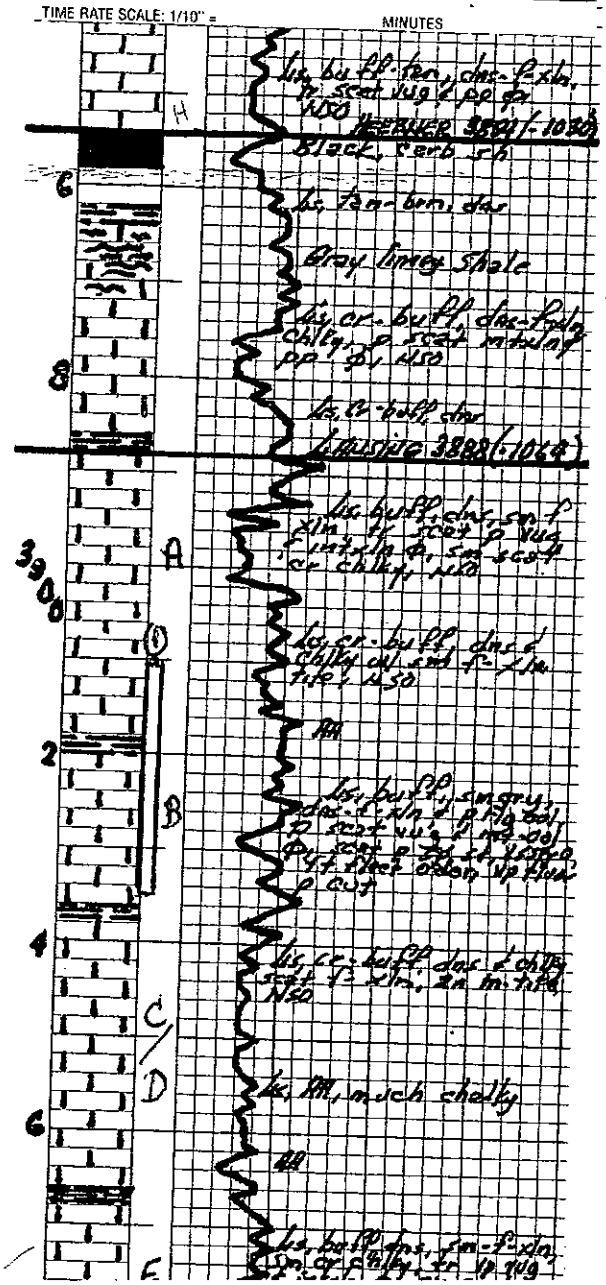
COMPANY Larson Engineering, Inc.
FARM York WELL NO. 1-12
SURVEY 1175' FNL & 2534' FWL
TOTAL DEPTH 4560
CONTRACTOR HD Drilling, LLC
COMMENCED 06-30-2011
COMPLETED 07-12-2011
REMARKS
ALTITUDE 2824 KB
PRODUCTION D&A
Robert C. Lewellyn - Geologist

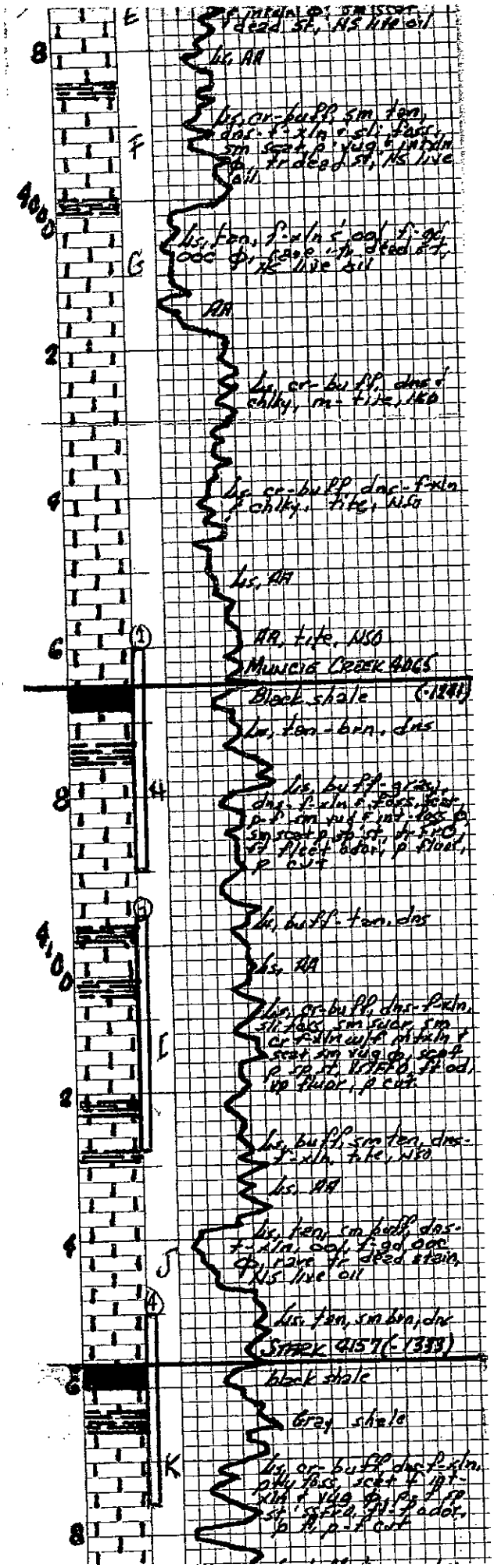
CASING RECORD

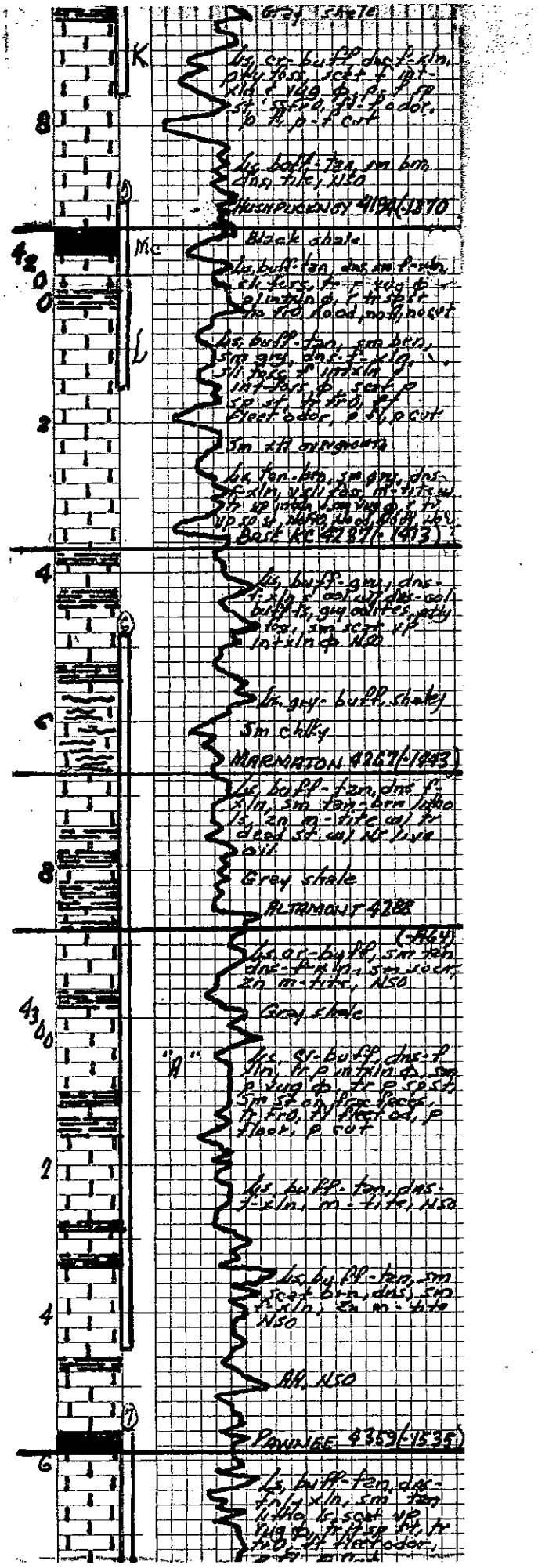
8 5/8" @ 261 KBM/175 sx.

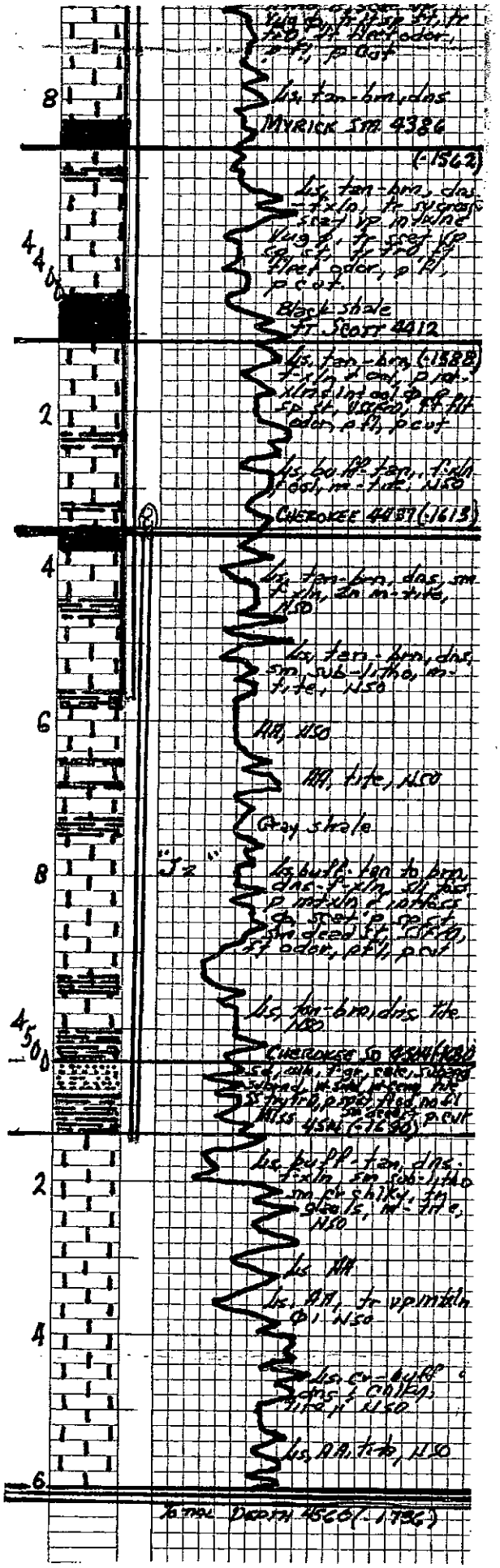
SHOT QUARTS BETWEEN

TIME RATE SCALE: 1/10" = MINUTES




E
F
G
K
MUNCIE CREEK 4065
Black shale (-1881)
STARK 4157 (-1373)
black shale
gray shale


Gray shale
HUSHPUCKNEY 4194(-1370)
Black shale
Base KC 4287(-1413)
Sm chlky
MARMATON 4267(-1493)
Gray shale
ALTAMONT 4288 (-1434)
Gray shale
"A"
PAWNEE 4359(-1535)
K
L
8
4200
2
4
6
8
4300
2
4
6


8
4400
2
4
6
8
4500
2
4
6
MYRICK SM 4386 (-1562)
Black shale
FT. SCOTT 4412
CHEROKEE 4487 (-1613)
"J-2"
TOTAL DEPTH 4560 (-1736)

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/

October 28, 2011

Thomas Larson
Larson Engineering, Inc. dba Larson Operating Company
562 W STATE RD 4
OLMITZ, KS 67564-8561

Re: ACO1
API 15-171-20816-00-00
York 1-12
NW/4 Sec.12-16S-31W
Scott 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,
Thomas Larson