KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1119845

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 # 33629
Name: Great Plains Energy, Inc.
Address 1: 6121 S 58th ST, STE B
Address 2:
City: Lincoln State: NE Zip: 68516 + __ __ __ __
Contact Person: Dan Blankenau
Phone: (402) 443-6125
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Clayton Erickson
Purchaser: None

Designate Type of Completion:

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

- [ ] Oil
- [ ] WSW
- [ ] SWD
- [ ] SIOW
- [ ] Gas
- [x] D&A
- [ ] ENHR
- [ ] SIGW
- [ ] OG
- [ ] GSW
- [ ] Temp. Abd.
- [ ] CM *(Coal Bed Methane)*
- [ ] Cathodic
- [ ] Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

- [ ] Deepening
- [ ] Re-perf.
- [ ] Conv. to ENHR
- [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

9/26/2012	10/03/2012	10/04/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-137-20620-00-00
Spot Description:
SE - NE - SE - NW Sec. 6 Twp. 4 S. R. 23 [ ] East [x] West
1800 Feet from [x] North / [ ] South Line of Section
2490 Feet from [ ] East / [x] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [x] NW [ ] SE [ ] SW
County: Norton
Lease Name: Persinger Farms Well #: 1-6
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2437 Kelly Bushing: 2438
Total Depth: 3890 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 332 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: 1200 ppm Fluid volume: 1200 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

- [ ] **Letter of Confidentiality Received**
  Date:
- [ ] **Confidential Release Date:**
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** Deanna Garrison **Date:** 04/09/2013

Side Two

1119845

Operator Name: Great Plains Energy, Inc. Lease Name: Persinger Farms Well #: 1-6

Sec. 6 Twp. 4 S. R. 23 ☐ East ☑ West County: Norton

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

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

List All E. Logs Run:
Attached

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

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.250	8.6250	23	332	Common	180	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	Great Plains Energy, Inc.
Well Name	Persinger Farms 1-6
Doc ID	1119845

All Electric Logs Run

CD/NL
Sonic
Micro
Dual Induction

Form	ACO1 - Well Completion
Operator	Great Plains Energy, Inc.
Well Name	Persinger Farms 1-6
Doc ID	1119845

Tops

Name	Top	Datum
Anhydrite	2033	+405
Base Anhydrite	2064	+374
Topeka	3290	-852
Heebner	3483	-1045
Toronto	3512	-1074
Lansing	3526	-1088
BKC	3708	-1270
Arbuckle	3779	-1341
Granite	3846	-1408

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

620

DATE	SEC.	RANGE/TWP.	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
					COUNTY	STATE
LEASE			WELL #			

CONTRACTOR		OWNER			
TYPE OF JOB					
HOLE SIZE	T.D.	CEMENT			
CASING SIZE	DEPTH	AMONT ORDERED			
TUBING SIZE	DEPTH				
DRILL PIPE	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON		@	
DISPLACEMENT	SHOE JOINT	POZMIX		@	
CEMENT LEFT IN CSG.		GEL		@	
PERFS		CHLORIDE		@	
		ASC		@	
EQUIPMENT				@	
				@	
PUMP TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
		HANDLING		@	
		MILEAGE		@	
				TOTAL	

REMARKS				
	SERVICE			
	DEPT OF JOB		@	
	PUMP TRUCK CHARGE		@	
	EXTRA FOOTAGE		@	
	MILEAGE		@	
	MANIFOLD		@	
			@	
			TOTAL	

CHARGES TO:	
STREET	STATE
CITY	ZIP

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit 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 "TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT	
	@
	@
	@
	@
	@
	TOTAL
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

Hoxie Sentinel Print / Form 411

SIGNATURE

PRINTED NAME

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

DATE	SEC.	RANGE/TWP.	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
					COUNTY	STATE
LEASE			WELL #			

CONTRACTOR		OWNER			
TYPE OF JOB					
HOLE SIZE	T.D.	CEMENT			
CASING SIZE	DEPTH	AMONT ORDERED			
TUBING SIZE	DEPTH				
DRILL PIPE	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON		@	
DISPLACEMENT	SHOE JOINT	POZMIX		@	
CEMENT LEFT IN CSG.		GEL		@	
PERFS		CHLORIDE		@	
		ASC		@	
EQUIPMENT				@	
				@	
PUMP TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
		HANDLING		@	
		MILEAGE		@	
				TOTAL	

REMARKS	SERVICE			
	DEPT OF JOB		@	
	PUMP TRUCK CHARGE		@	
	EXTRA FOOTAGE		@	
	MILEAGE		@	
	MANIFOLD		@	
			@	
			TOTAL	

CHARGES TO:	
STREET	STATE
CITY	ZIP

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit 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 "TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT	
	@
	@
	@
	@
	@
	TOTAL
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

Hoxie Sentinel Print / Form 411

SIGNATURE

PRINTED NAME

DRILL STEM TEST REPORT

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48150 **DST#: 1**

Test Start: 2012.09.29 @ 05:44:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "C & D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:28:00
Time Test Ended: 12:44:00

Test Type: Conventional Bottom Hole (Initial)
Tester: James Winder
Unit No: 57

Interval: 3482.00 ft (KB) To 3580.00 ft (KB) (TVD)
Total Depth: 3580.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

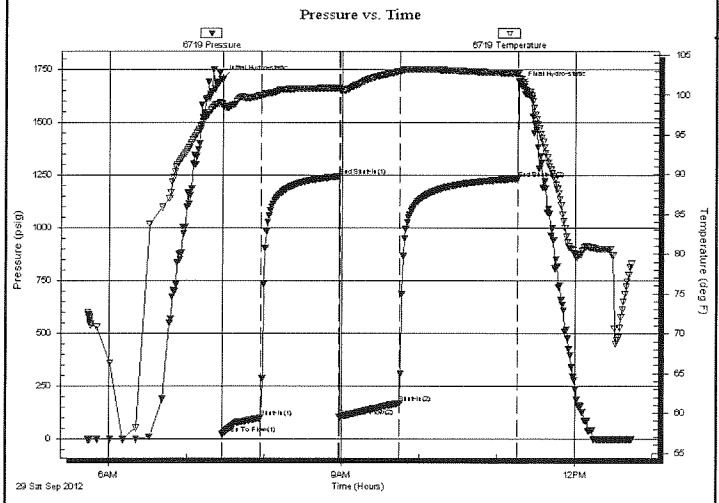
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: 170.94 psig @ 3483.00 ft (KB)
Start Date: 2012.09.29 End Date: 2012.09.29
Start Time: 05:44:05 End Time: 12:43:59

Capacity: 8000.00 psig
Last Calib.: 2012.09.29
Time On Btm: 2012.09.29 @ 07:27:00
Time Off Btm: 2012.09.29 @ 11:18:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 24 1/2 min.
60 - ISI: Bled off, No blow back
45 - FF: Blow built to BOB in 32 1/2 min.
90 - FSI: Bled off, No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1706.52	98.89	Initial Hydro-static
1	22.83	98.57	Open To Flow (1)
31	100.89	99.92	Shut-In(1)
91	1245.37	100.86	End Shut-In(1)
92	106.10	100.60	Open To Flow (2)
138	170.94	102.93	Shut-In(2)
229	1234.54	102.73	End Shut-In(2)
231	1677.24	102.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MW w /trace oil 62%w , 38%m	0.30
184.00	MCW w /trace oil 78%w , 22%m	2.03
61.00	WCM w /trace oil 77%m, 23%w	0.86
30.00	SOCM 98%m, 2%o	0.42

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48150 **DST#: 1**

Test Start: 2012.09.29 @ 05:44:00

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:	58000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	800.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MW w /trace oil 62%w , 38%m	0.295
184.00	MCW w /trace oil 78%w , 22%m	2.034
61.00	WCM w /trace oil 77%m, 23%w	0.856
30.00	SOCM 98%m, 2%o	0.421

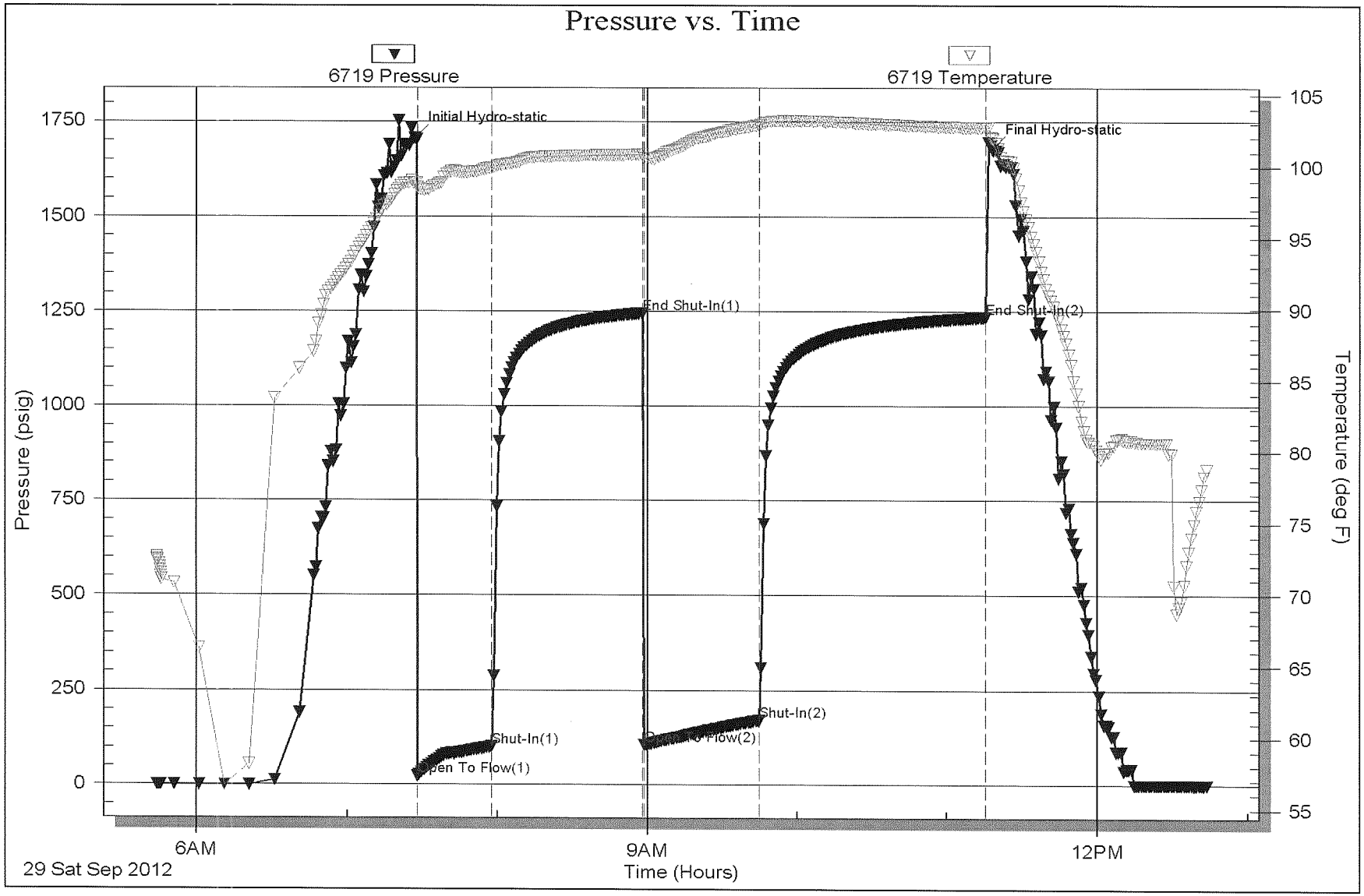
Total Length: 335.00 ft Total Volume: 3.606 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW = .122 ohms @ 74.7 deg F
Chlorides = 58,000 ppm

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 48150 Printed: 2012.09.29 @ 23:09:53

DRILL STEM TEST REPORT

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48226 **DST#: 2**

Test Start: 2012.09.29 @ 18:27:00

GENERAL INFORMATION:

Formation: LKC-F
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:58:00
Time Test Ended: 01:09:30

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder/Wilbur
Unit No: 57

Interval: 3577.00 ft (KB) To 3603.00 ft (KB) (TVD)
Total Depth: 3603.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

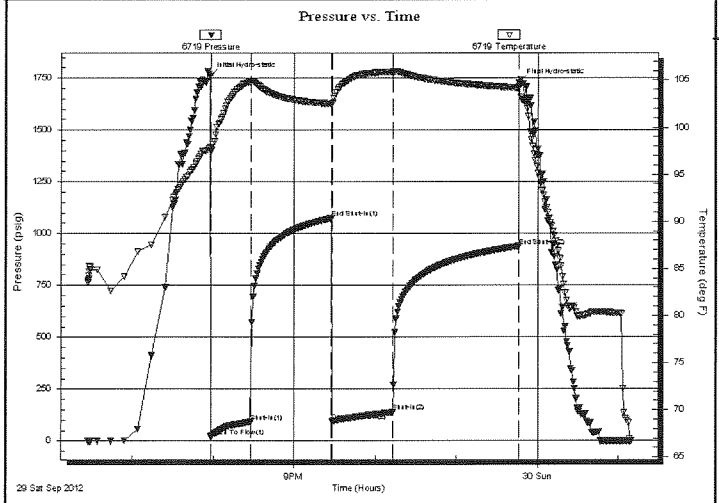
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: 138.34 psig @ 3578.00 ft (KB)
Start Date: 2012.09.29 End Date: 2012.09.30
Start Time: 18:27:05 End Time: 01:09:29

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2012.09.29 @ 19:57:30
Time Off Btm: 2012.09.29 @ 23:46:30

TEST COMMENT: 30 - IF: Blow built to 10 1/2"
60 - ISI: No Blow back
45 - FF: Blow built to 10"
90 - FSI: No Blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.05	97.88	Initial Hydro-static
1	18.92	97.57	Open To Flow (1)
30	91.79	104.86	Shut-In(1)
90	1073.63	102.48	End Shut-In(1)
91	95.08	102.60	Open To Flow (2)
136	138.34	105.88	Shut-In(2)
229	937.73	104.18	End Shut-In(2)
229	1727.79	104.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
265.00	mcw 90% w 10%m	2.62

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48226 **DST#: 2**

Test Start: 2012.09.29 @ 18:27:00

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:	70000 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	900.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
265.00	mcw 90% w 10%m	2.624

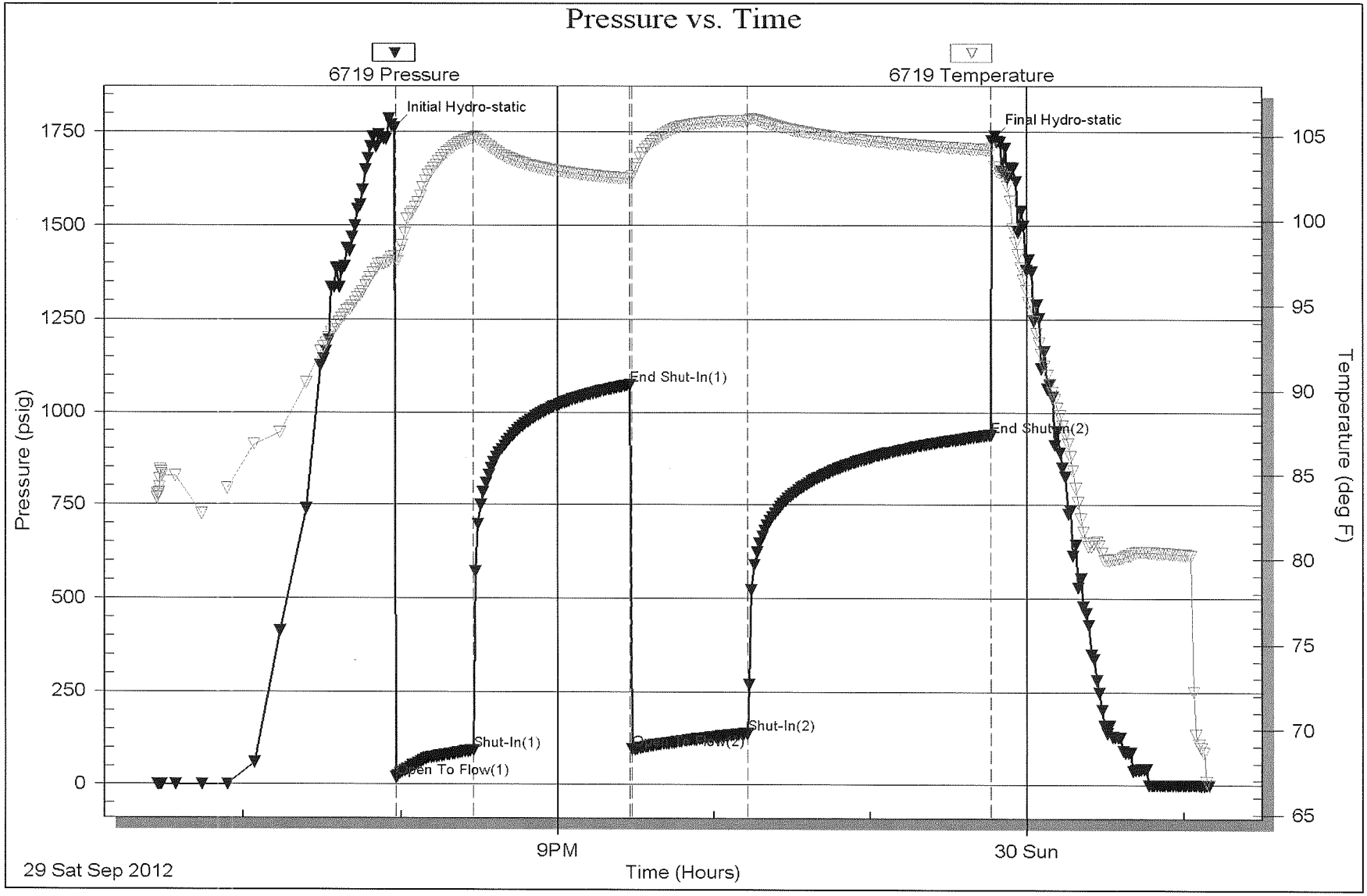
Total Length: 265.00 ft Total Volume: 2.624 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: rw=.138@57.1 deg F
chlorides=70000 ppm

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 48226 Printed: 2012.09.30 @ 02:32:19

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48227 **DST#: 3**

Test Start: 2012.09.30 @ 08:10:00

GENERAL INFORMATION:

Formation: LKC-H
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:43:00
Time Test Ended: 14:49:30

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder/Wilbur
Unit No: 57

Interval: 3620.00 ft (KB) To 3650.00 ft (KB) (TVD)
Total Depth: 3580.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

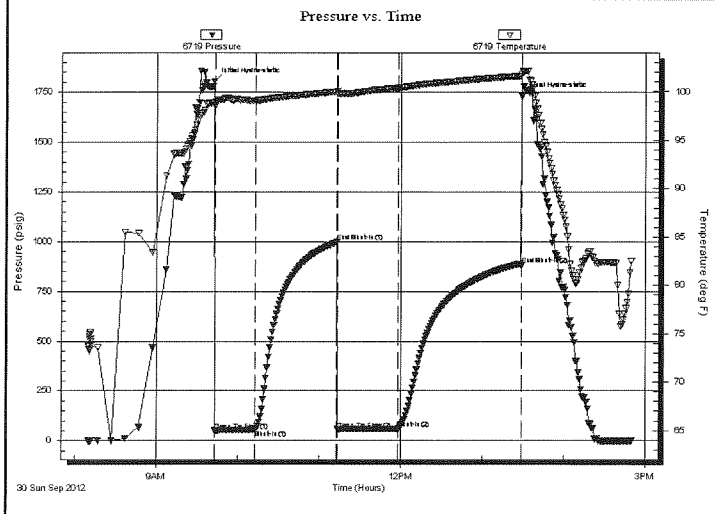
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: 59.78 psig @ 3621.00 ft (KB)
Start Date: 2012.09.30 End Date: 2012.09.30
Start Time: 08:10:05 End Time: 14:49:29

Capacity: 8000.00 psig
Last Calib.: 2012.09.30
Time On Btm: 2012.09.30 @ 09:42:30
Time Off Btm: 2012.09.30 @ 13:29:00

TEST COMMENT: 30 IF:2 1/2 surge blow at open,bled off,on/off surface blow for 20 min. then dead
60 ISI: No blow back
45 FF: No blow
90 FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1803.21	98.86	Initial Hydro-static
1	51.17	98.47	Open To Flow (1)
31	55.97	99.08	Shut-In(1)
91	999.76	100.00	End Shut-In(1)
91	56.97	99.73	Open To Flow (2)
136	59.78	100.39	Shut-In(2)
226	881.42	101.61	End Shut-In(2)
227	1731.08	101.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	100% mud w ith a trace of oil	0.34

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48227 **DST#: 3**

Test Start: 2012.09.30 @ 08:10:00

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:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

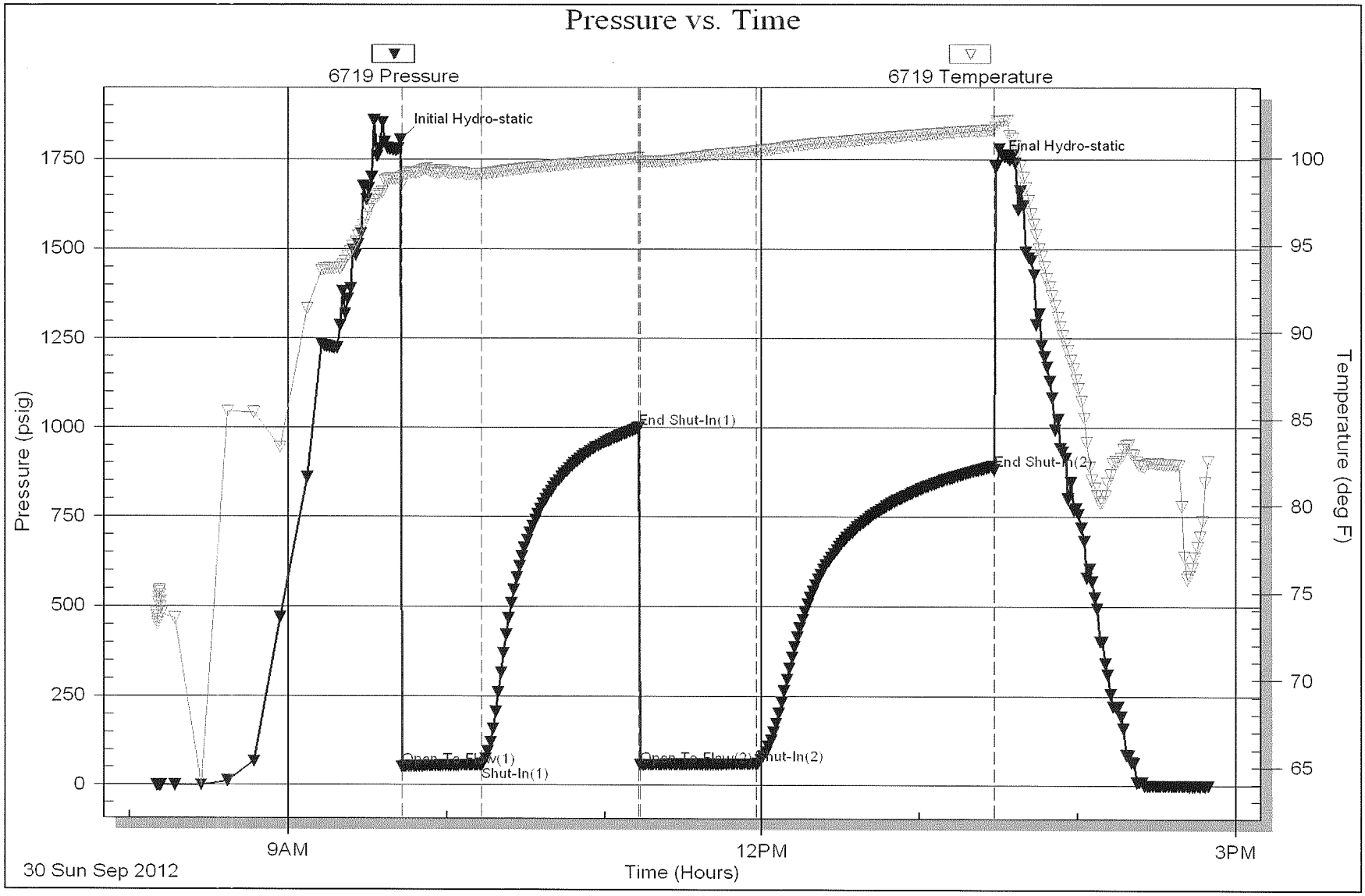
Recovery Table

Length ft	Description	Volume bbl
70.00	100% mud w ith a trace of oil	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:

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 48227 Printed: 2012.09.30 @ 16:15:29

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48228 **DST#: 4**

Test Start: 2012.10.01 @ 01:30:00

GENERAL INFORMATION:

Formation: **LKC I-J-K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:50:00
Time Test Ended: 07:18:30

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder/Wilbur
Unit No: 57

Interval: 3646.00 ft (KB) To 3716.00 ft (KB) (TVD)
Total Depth: 3716.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

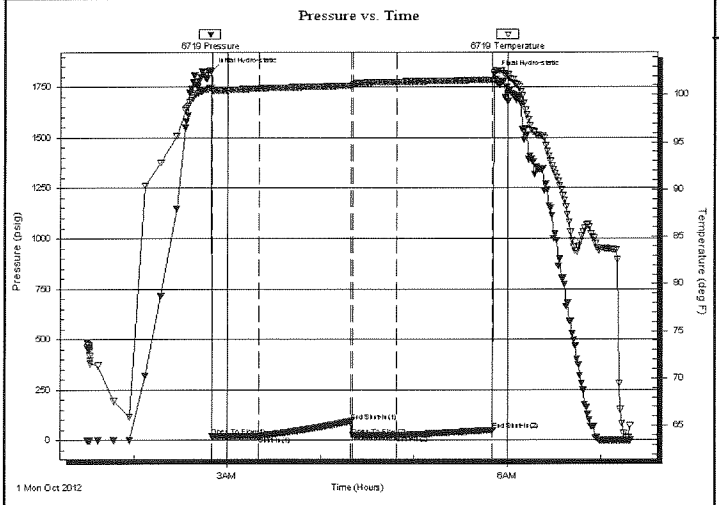
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: 23.83 psig @ 3647.00 ft (KB)
Start Date: 2012.10.01 End Date: 2012.10.01
Start Time: 01:30:05 End Time: 07:18:29

Capacity: 8000.00 psig
Last Calib.: 2012.10.01
Time On Btm: 2012.10.01 @ 02:49:30
Time Off Btm: 2012.10.01 @ 05:51:30

TEST COMMENT: 30 IF: Built to 1/4" Died back, Dead after 26min
60 ISI: No Blow
30 FF: No Blow
60 FSI: NO Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1828.32	100.74	Initial Hydro-static
1	18.82	100.47	Open To Flow (1)
31	21.72	100.67	Shut-In(1)
90	94.09	100.97	End Shut-In(1)
91	22.89	101.05	Open To Flow (2)
120	23.83	101.37	Shut-In(2)
181	49.30	101.60	End Shut-In(2)
182	1813.72	102.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud with a trace of oil	0.05

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48228 **DST#: 4**

Test Start: 2012.10.01 @ 01:30:00

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:	63.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

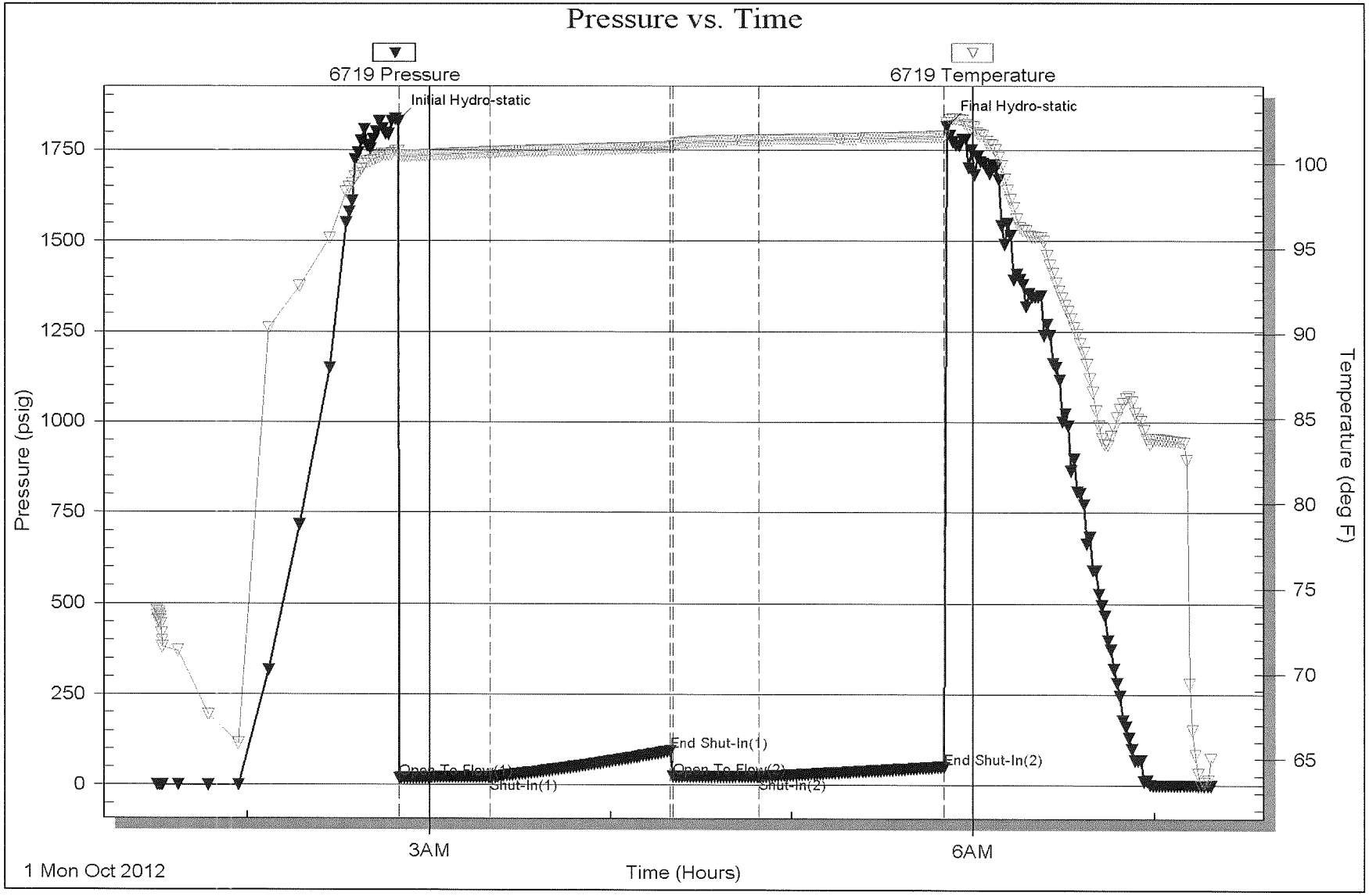
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud with a trace of oil	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

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

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 48228 Printed: 2012.10.01 @ 07:51:50

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48229 **DST#: 5**

Test Start: 2012.10.01 @ 16:05:00

GENERAL INFORMATION:

Formation: **Basil Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:29:00
Time Test Ended: 22:48:30

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder/Wilbur
Unit No: 57

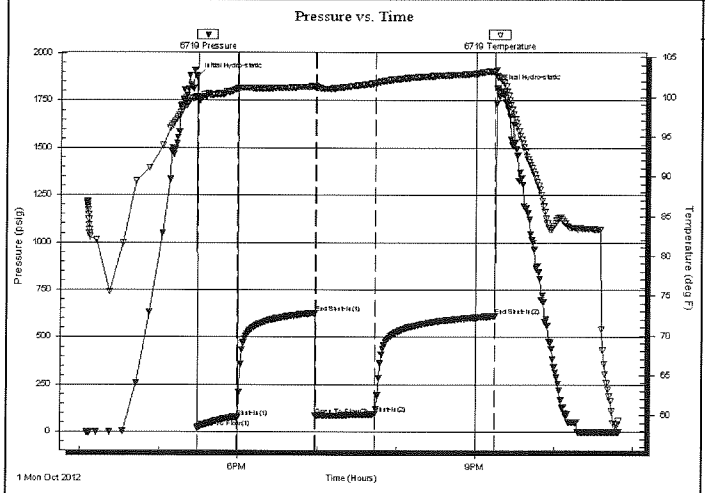
Interval: 3705.00 ft (KB) To 3770.00 ft (KB) (TVD)
Total Depth: 3580.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**
Press@RunDepth: 94.70 psig @ 3706.00 ft (KB)
Start Date: 2012.10.01 End Date: 2012.10.01
Start Time: 16:05:05 End Time: 22:48:29

Capacity: 8000.00 psig
Last Calib.: 2012.10.01
Time On Btm: 2012.10.01 @ 17:28:30
Time Off Btm: 2012.10.01 @ 21:16:00

TEST COMMENT: 30 IF:Built to 4 3/4"
60 ISI: No Blow
45 FF: Built to 3 1/4"
90 FSI: No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1877.19	100.08	Initial Hydro-static
1	23.00	99.75	Open To Flow (1)
31	78.33	101.05	Shut-In(1)
90	627.26	101.34	End Shut-In(1)
90	86.07	101.29	Open To Flow (2)
135	94.70	101.75	Shut-In(2)
226	612.07	103.23	End Shut-In(2)
228	1815.33	102.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	SOWCM 87M 11W 2o	0.59
45.00	WOCM 50M 20W 30o	0.63

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48229 **DST#: 5**

Test Start: 2012.10.01 @ 16:05:00

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:	30000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	SOWCM 87M 11W 2o	0.590
45.00	WOCM 50M 20W 30o	0.631

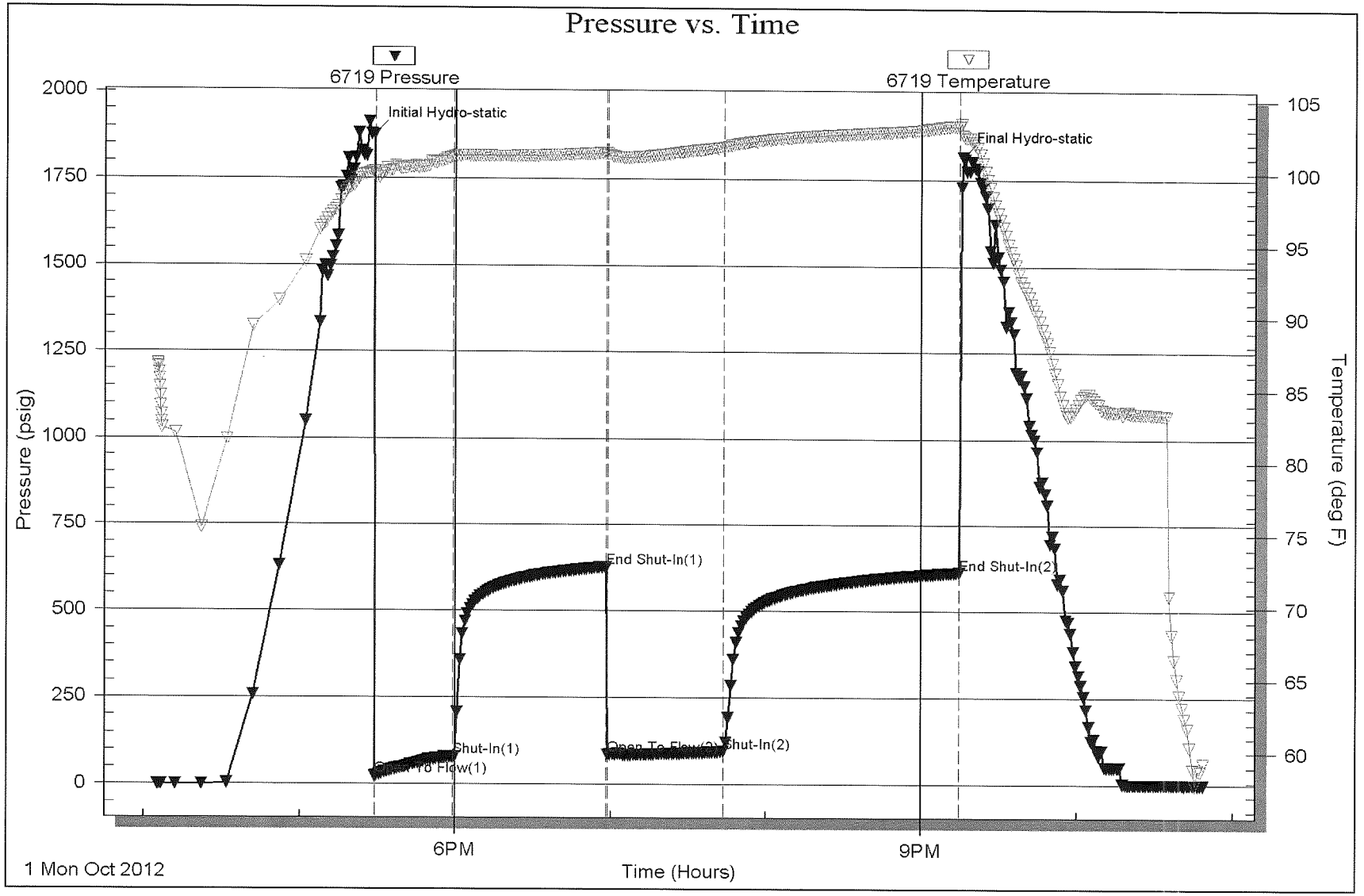
Total Length: 165.00 ft Total Volume: 1.221 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: RW=.334ohms@53.5 deg F=30000 ppm

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 48229 Printed: 2012.10.02 @ 03:18:27

DRILL STEM TEST REPORT

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48230 **DST#: 6**

Test Start: 2012.10.02 @ 06:07:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:39:30
Time Test Ended: 09:36:00

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder
Unit No: 57

Interval: 3776.00 ft (KB) To 3782.00 ft (KB) (TVD)
Total Depth: 3782.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

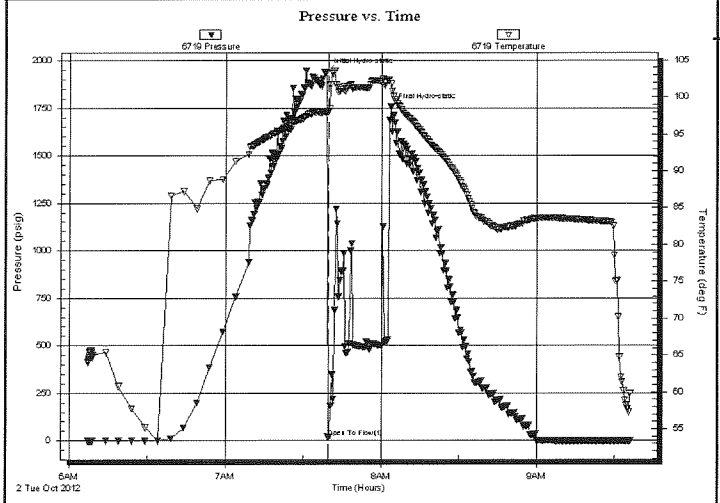
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: psig @ 3777.00 ft (KB)
Start Date: 2012.10.02 End Date: 2012.10.02
Start Time: 06:07:05 End Time: 09:36:00

Capacity: 8000.00 psig
Last Calib.: 2012.10.02
Time On Btm: 2012.10.02 @ 07:39:00
Time Off Btm: 2012.10.02 @ 08:03:30

TEST COMMENT: IF: Slow build up to 1/8" in 1 min., then surged and built faster
I checked the hole and mud was still holding
It was building fairly quick and was several inches down when I went to check hole again
Mud was gone - lost packer seat - BOB at 2 min. Pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.99	98.07	Initial Hydro-static
1	18.50	97.99	Open To Flow (1)
25	1755.58	101.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1010.00	Mud 100%	13.07

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48230 **DST#: 6**

Test Start: 2012.10.02 @ 06:07:00

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:	66.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1200.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

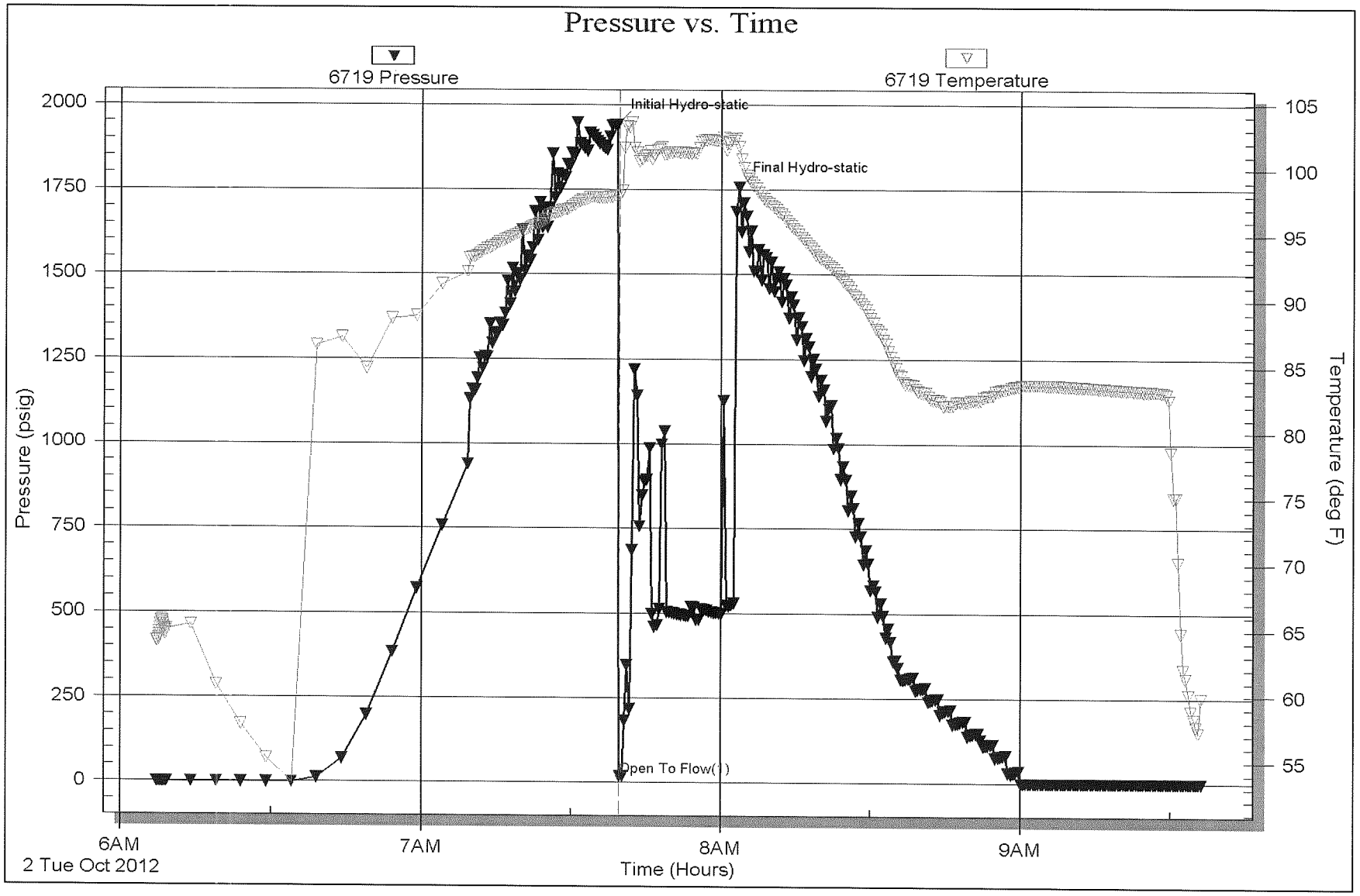
Recovery Table

Length ft	Description	Volume bbl
1010.00	Mud 100%	13.075

Total Length: 1010.00 ft Total Volume: 13.075 bbl

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

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 48230 Printed: 2012.10.02 @ 10:30:17

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48231 **DST#: 7**

Test Start: 2012.10.02 @ 13:57:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:33:30
Time Test Ended: 17:20:30

Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder
Unit No: 57

Interval: 3778.00 ft (KB) To 3787.00 ft (KB) (TVD)
Total Depth: 3787.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

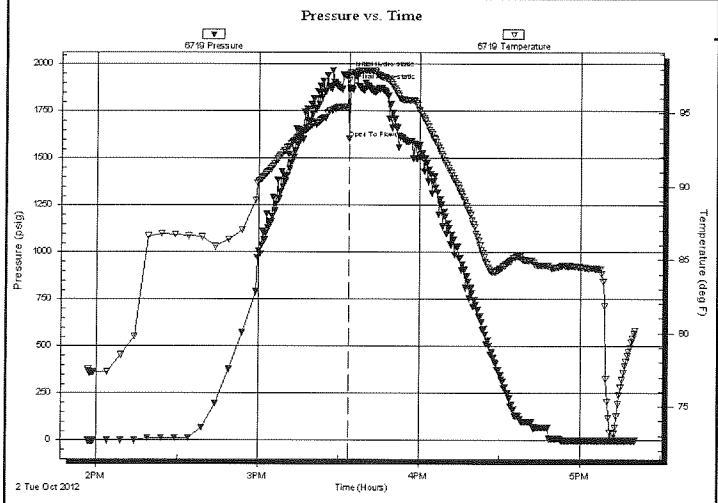
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Inside**

Press@RunDepth: psig @ 3779.00 ft (KB)
Start Date: 2012.10.02 End Date: 2012.10.02
Start Time: 13:57:05 End Time: 17:20:30

Capacity: 8000.00 psig
Last Calib.: 2012.10.02
Time On Btm: 2012.10.02 @ 15:33:00
Time Off Btm: 2012.10.02 @ 15:34:00

TEST COMMENT: Packer Failure
Reset tool - Failed again
Pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1938.34	95.43	Initial Hydro-static
1	1602.64	97.24	Open To Flow (1)
1	1875.83	97.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
220.00	Mud 100%	1.99

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48231 **DST#: 7**

Test Start: 2012.10.02 @ 13:57:00

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:	66.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1200.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

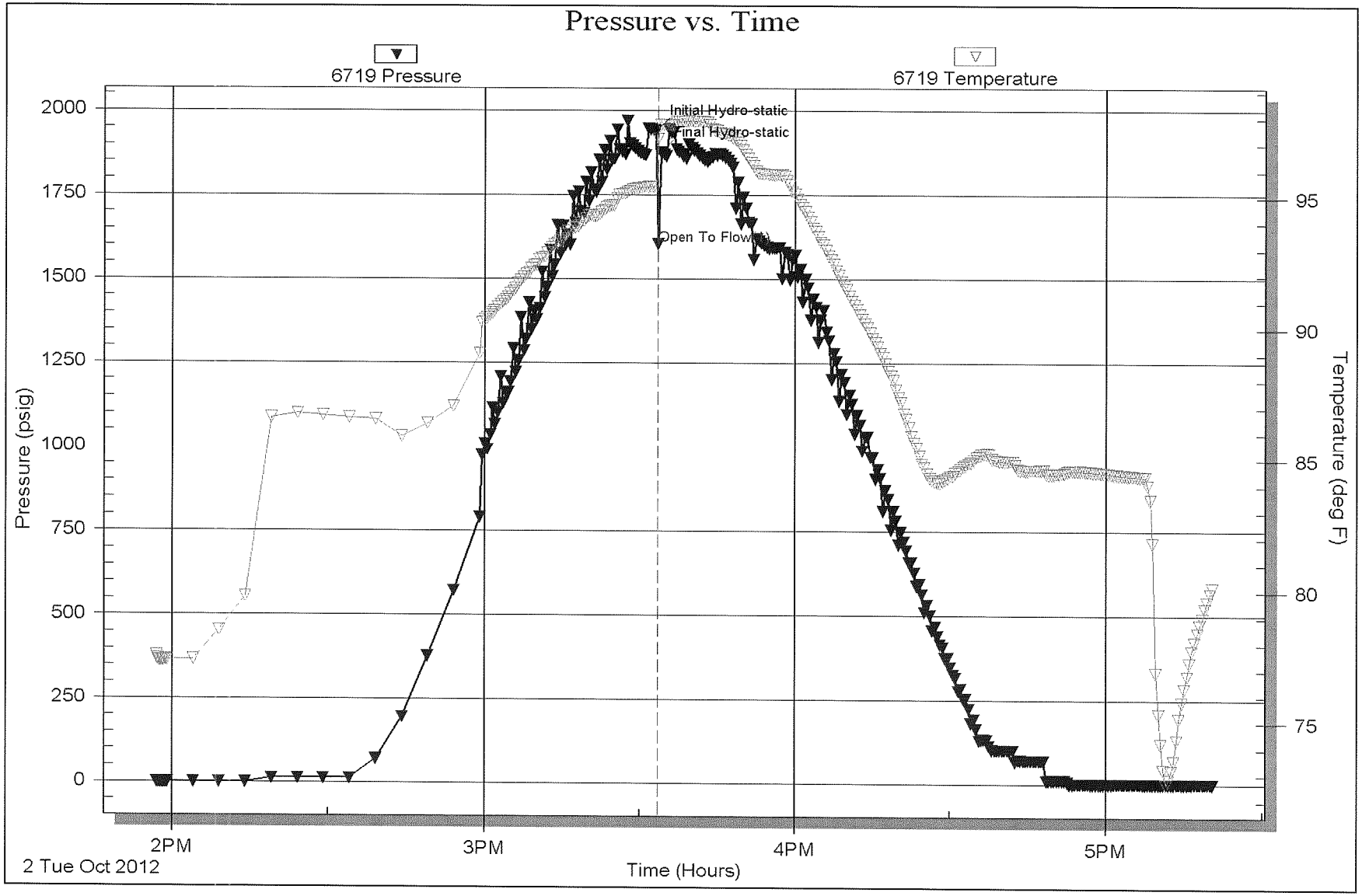
Recovery Table

Length ft	Description	Volume bbl
220.00	Mud 100%	1.993

Total Length: 220.00 ft Total Volume: 1.993 bbl

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

Serial #: 6719 **Inside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 7



Trilobite Testing, Inc Ref. No: 48231 Printed: 2012.10.03 @ 08:09:40

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48232 **DST#: 8**

Test Start: 2012.10.03 @ 12:01:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:42:30
Time Test Ended: 19:07:30

Test Type: Conventional Straddle (Reset)
Tester: James Winder
Unit No: 57

Interval: 3782.00 ft (KB) To 3790.00 ft (KB) (TVD)
Total Depth: 3890.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

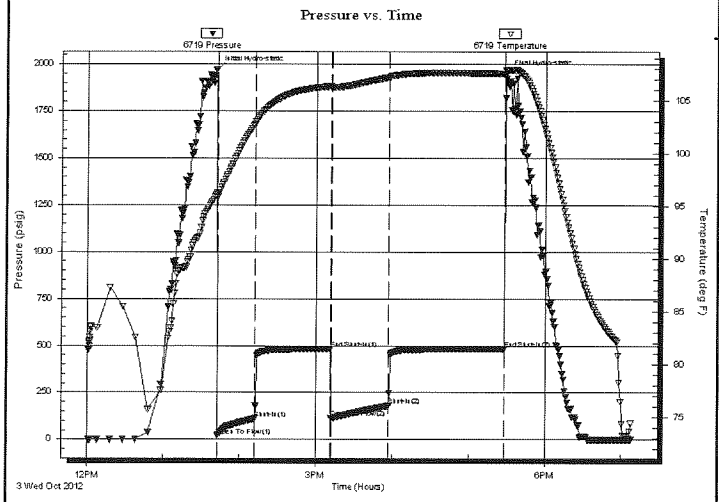
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6719 **Outside**

Press@RunDepth: 179.66 psig @ 3783.00 ft (KB)
Start Date: 2012.10.03 End Date: 2012.10.03
Start Time: 12:01:05 End Time: 19:07:29

Capacity: 8000.00 psig
Last Calib.: 2012.10.03
Time On Btm: 2012.10.03 @ 13:42:00
Time Off Btm: 2012.10.03 @ 17:29:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 21 min.
60 - ISI: No blow back
45 - FF: Blow built to BOB in 34 1/2 min.
90 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1968.52	96.24	Initial Hydro-static
1	19.03	95.89	Open To Flow (1)
30	111.01	102.86	Shut-In(1)
90	481.97	106.37	End Shut-In(1)
90	114.22	106.16	Open To Flow (2)
135	179.66	107.23	Shut-In(2)
226	482.26	107.57	End Shut-In(2)
227	1951.25	107.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
305.00	Water 95%w , 5%m	3.19
45.00	MCW 75%w , 25%m	0.63

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48232 **DST#: 8**

Test Start: 2012.10.03 @ 12:01:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:42:30
Time Test Ended: 19:07:30

Test Type: Conventional Straddle (Reset)
Tester: James Winder
Unit No: 57

Interval: 3782.00 ft (KB) To 3790.00 ft (KB) (TVD)
Total Depth: 3890.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

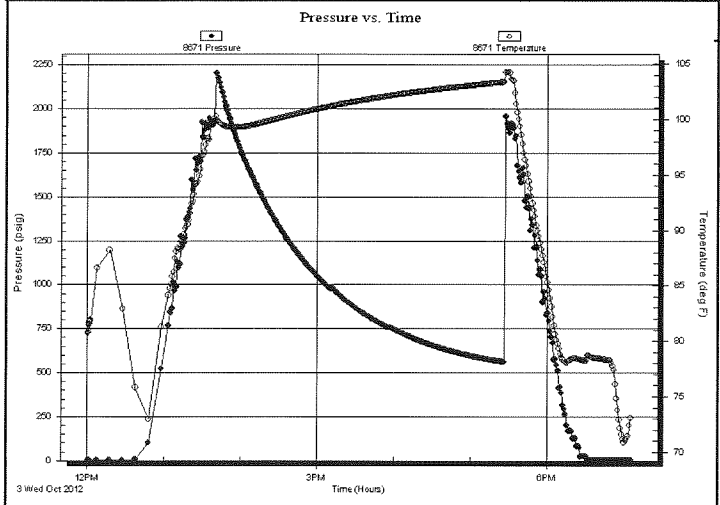
Reference Elevations: 2438.00 ft (KB)
2433.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8671 **Below (Straddle)**

Press@RunDepth: psig @ 3791.00 ft (KB)
Start Date: 2012.10.03 End Date: 2012.10.03
Start Time: 12:01:05 End Time: 19:05:59

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 21 min.
60 - ISI: No blow back
45 - FF: Blow built to BOB in 34 1/2 min.
90 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
305.00	Water 95%w , 5%m	3.19
45.00	MCW 75%w , 25%m	0.63

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Great Plains Energy

6121 S. 58th St. STE B
Lincoln, NE 68516

ATTN: Clayton Erickson

6/4s/23w Norton KS

Persinger Farms #1-6

Job Ticket: 48232 **DST#: 8**

Test Start: 2012.10.03 @ 12:01:00

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:	55000 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.20 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
305.00	Water 95%w , 5%m	3.185
45.00	MCW 75%w , 25%m	0.631

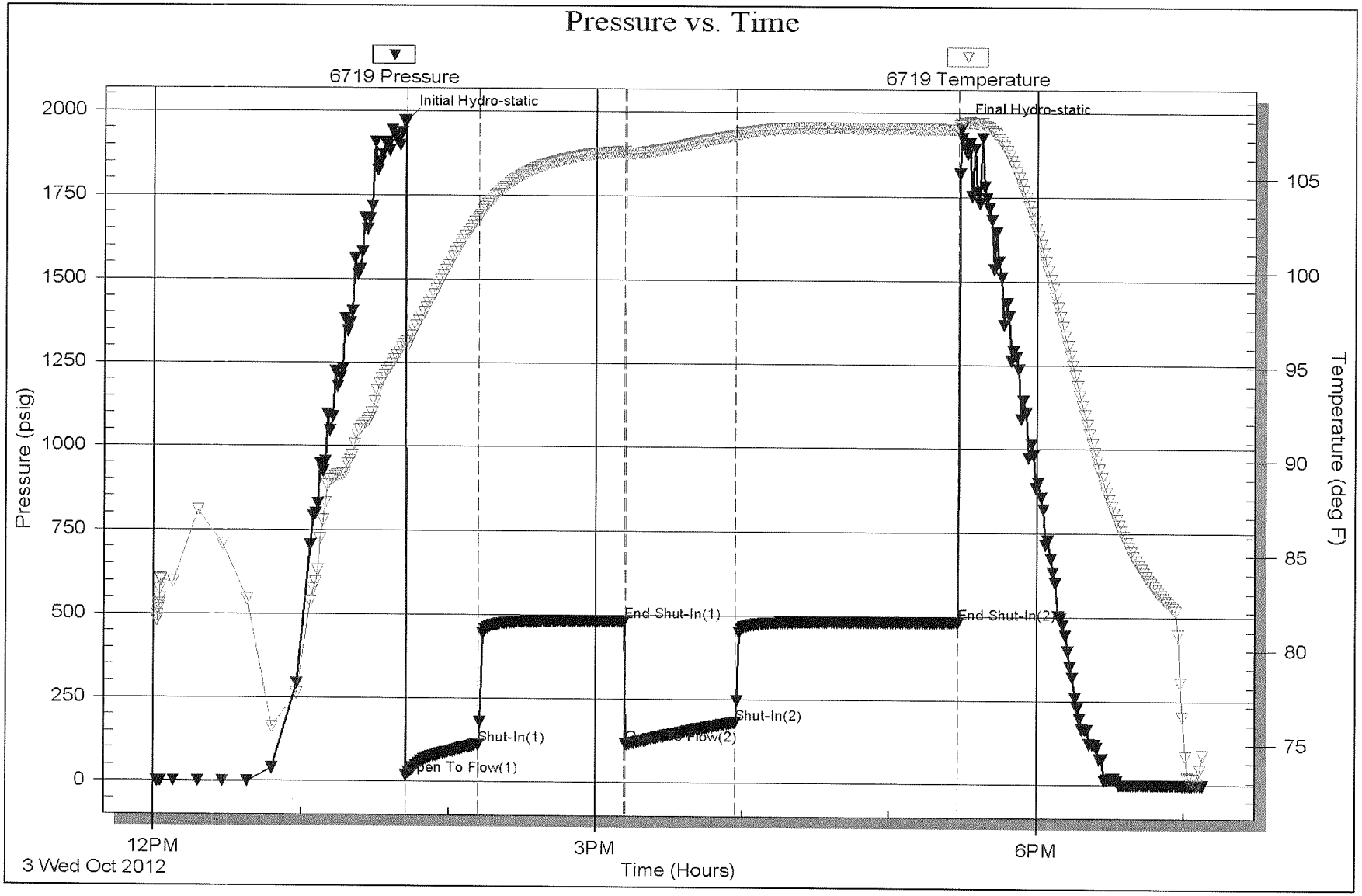
Total Length: 350.00 ft Total Volume: 3.816 bbl

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

Laboratory Name: Laboratory Location:

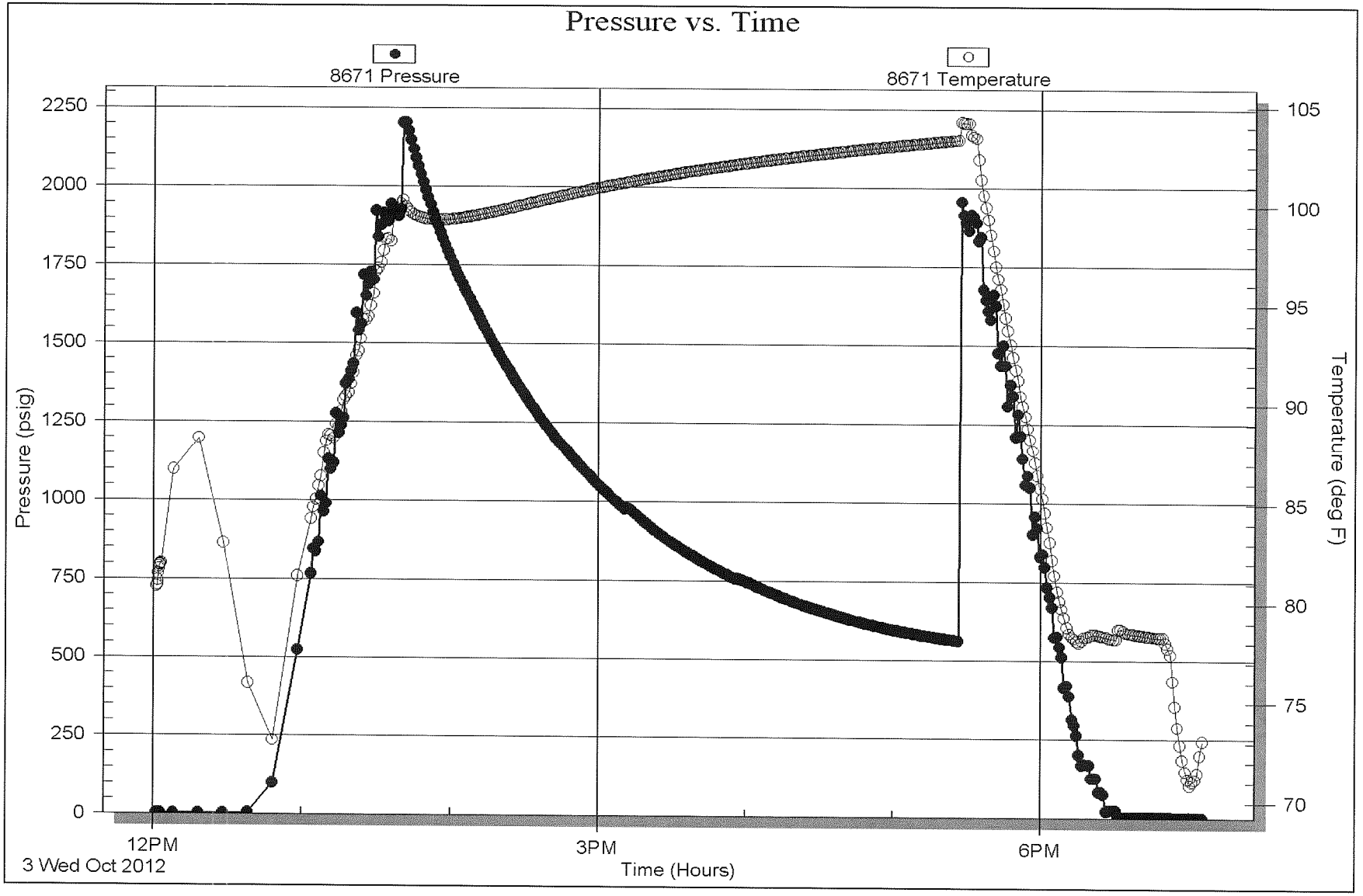
Recovery Comments: RW = .121 ohms @ 80.8 deg F
Chlorides = 55,000 ppm

Serial #: 6719 **Outside** Great Plains Energy Persinger Farms #1-6 DST Test Number: 8



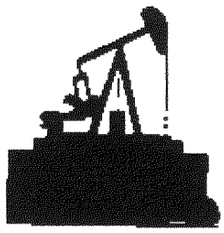
Trilobite Testing, Inc Ref. No: 48232 Printed: 2012.10.04 @ 08:09:24

Serial #: 8671 Below (Straddle) Great Plains Energy Persinger Farms #1-6 DST Test Number: 8



Trilobite Testing, Inc Ref. No: 48232 Printed: 2012.10.04 @ 08:09:25

ERICKSON WELLSITE GEOLOGY



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

Well Name:	Persinger Farms #1-6		
Location:	SE NE SE NW Sec6 T4S R23W		
License Number:		Region:	Norton County, KS
Spud Date:	9-26-2012	Drilling Completed:	10/3/2012
Surface Coordinates:	1800' FNL & 2490' FWL		
Bottom Hole Coordinates:			
Ground Elevation (ft):	2433	K.B. Elevation (ft):	2438
Logged Interval (ft):	3200 To: TD	Total Depth (ft):	3890
Formation:			
Type of Drilling Fluid:	Chemical Mud		

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Great Plains Energy, Inc.
Address: 6121 South 58th St., Ste. B
Lincoln, NE 68516

GEOLOGIST

Name: Clayton Erickson
Company: Erickson Wellsite Geology
Address: 402 Palmer Street
P.O. Box 294
Loomis, NE 68958

FORMATION TOPS

	Log Tops	Sample tops
ANHYDRITE	2033(+405)	2033(+405)
Base Anhy	2064(+374)	2064(+374)
TOPEKA	3290(-852)	3291(-853)
HEEBNER	3483(-1045)	3485(-1047)
TORONTO	3512(-1074)	3511(-1073)
LANSING	3526(-1088)	3526(-1088)
BKC	3708(-1270)	3708(-1270)
MARMATON	3738(-1300)	3738(-1300)
ARBUCKLE	3779(-1341)	3776(-1338)
REAGAN	3796(-1358)	3794(-1356)
Granite Wash	3810(-1372)	3812(-1374)
Granite	3846(-1408)	3842(-1404)
TD	3890(-1452)	3890(-1452)

DSTs

DST #1 3482-3580; 30-60-45-90; Hydro: 1707-1677 IFP: 23-101 ISIP: 1245 FFP: 106-171 FSIP: 1235; Rec: 30' 2%o 98%m, 61' trace oil 23%w 77%m, 184' trace oil 78%w 22%m, 60' trace oil 62%w 38%m; RW: .122@ 74.7F Chl: 58,000; IF: BOB 24.5 min ISI: dead FF: BOB 32.5 min FSI: dead

DST #2 3577-3603; 30-60-45-90; Hydro: 1760-1728 IFP: 19-92 ISIP: 1074 FFP: 95-138 FSIP: 938; Rec: 265' 90%w 10%m; RW: .138 @57.1F Chl: 70,000; IF: 10 1/2" ISI: dead FF: 10" FSI: dead

DST #3 3620-3650; 30-60-45-90; Hydro: 1803-1731 IFP: 51-56 ISIP: 1000 FFP: 57-60 FSIP: 881; Rec: 70' mud w/ trace oil; IF: 2 1/2" bled off, surface dead in 20 min ISI: dead FF: dead FSI: dead

DST #4 3646-3716; 30-60-30-60; Hydro: 1828-1814 IFP: 19-22 ISIP: 94 FFP: 23-24 FSIP: 49; Rec: 10' mud w/ trace oil; IF: 1/4" deadin 26min ISI: dead FF: dead FSI: dead

DST #5 3705-3770; 30-60-45-90; Hydro: 1877-1815 IFP: 23-78 ISIP: 627 FFP: 86-95 FSIP: 612; Rec: 45' 30%o 20%w 50%m, 120' 2%o 11%w 87%m; RW: .334 @53.5F Chl: 30,000; IF: 4 3/4 ISI: dead FF: 3 1/4" FSI: dead

10%m; RW: .138 @57.1F Chl: 70,000; IF: 10 1/2" ISI: dead FF: 10" FSI: dead

DST #3 3620-3650; 30-60-45-90; Hydro: 1803-1731 IFP: 51-56 ISIP: 1000 FFP: 57-60 FSIP: 881; Rec: 70' mud w/ trace oil; IF: 2 1/2" bled off, surface dead in 20 min ISI: dead FF: dead FSI: dead

DST #4 3646-3716; 30-60-30-60; Hydro: 1828-1814 IFP: 19-22 ISIP: 94 FFP: 23-24 FSIP: 49; Rec: 10' mud w/ trace oil; IF: 1/4" deadin 26min ISI: dead FF: dead FSI: dead

DST #5 3705-3770; 30-60-45-90; Hydro: 1877-1815 IFP: 23-78 ISIP: 627 FFP: 86-95 FSIP: 612; Rec: 45' 30%o 20%w 50%m, 120' 2%o 11%w 87%m; RW: .334 @53.5F Chl: 30,000; IF: 4 3/4 ISI: dead FF: 3 1/4" FSI: dead

DST #6 3776-3782 Misrun

DST #7 3778-3787 Misrun

DST #8 3782-3790; 30-60-45-90; Hydro: 1969-1951 IFP: 19-111 ISIP: 482 FFP: 114-180 FSIP: 482; Rec: 45' 75%w 25%m, 305' 95%w 5%m; Rw: .121 @80.8F Chl: 55,000ppm; IF: BOB 21min ISI: dead F: BOB 34min FSI: dead

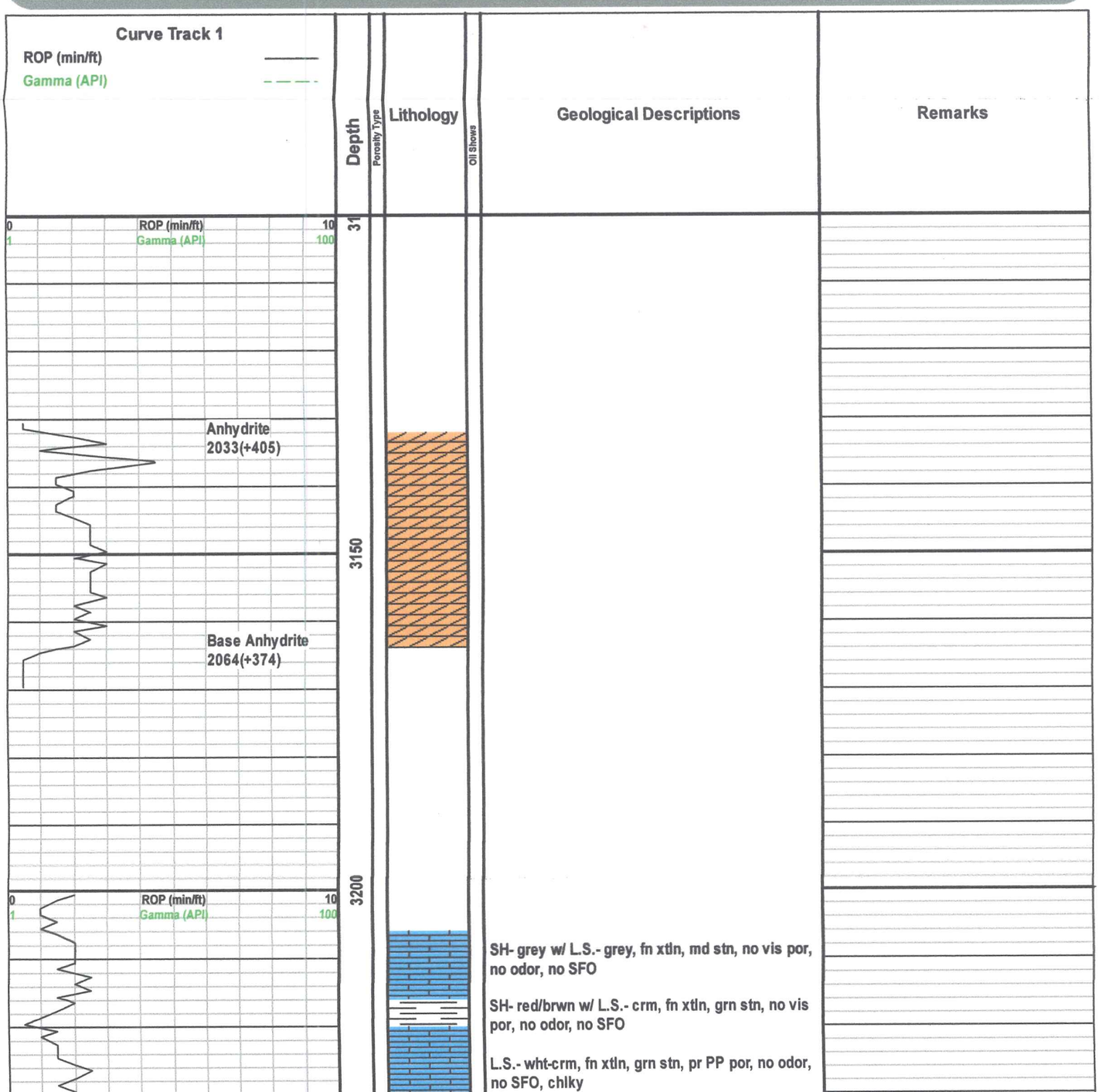
COMMENTS

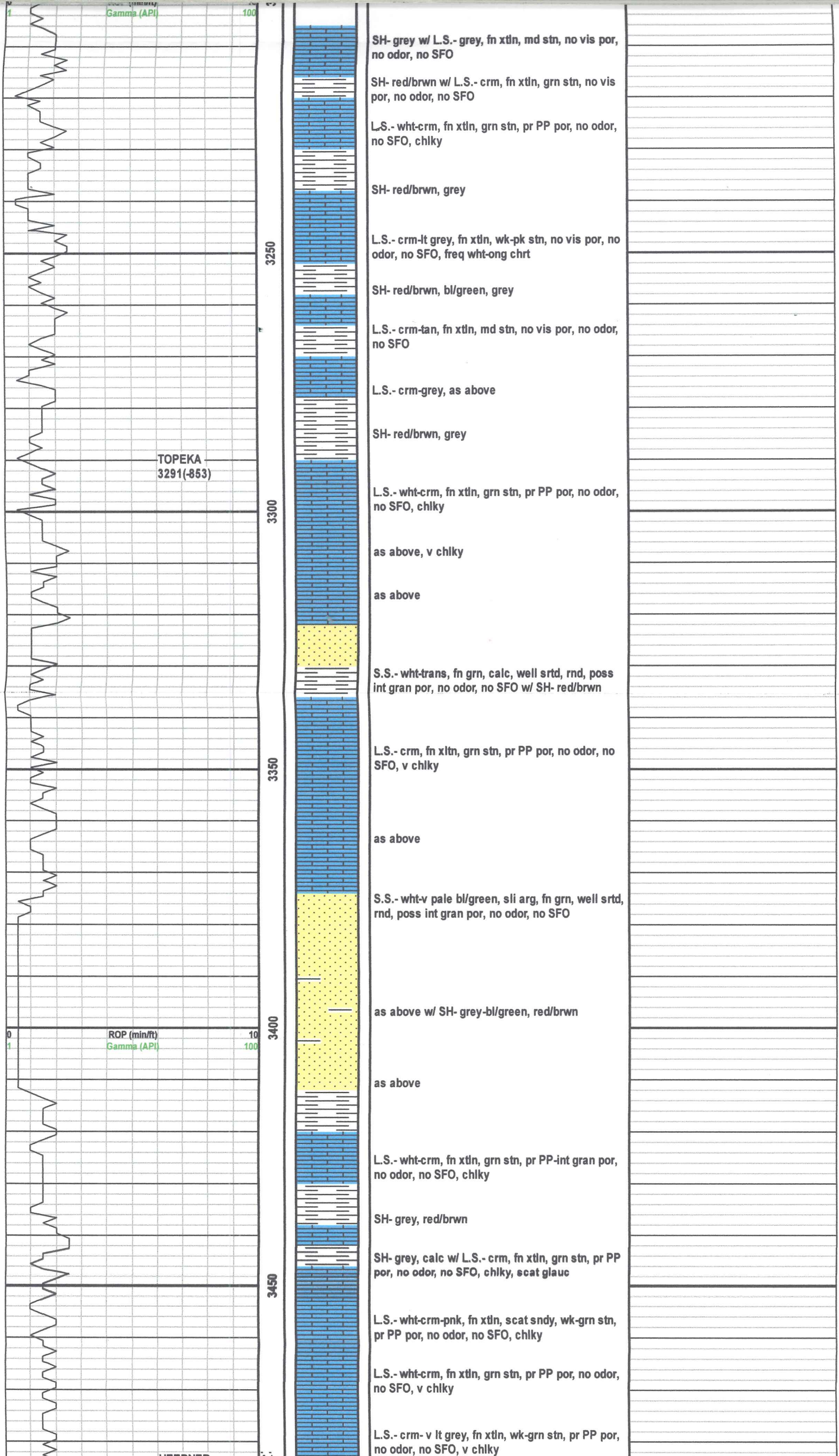
ROCK TYPES

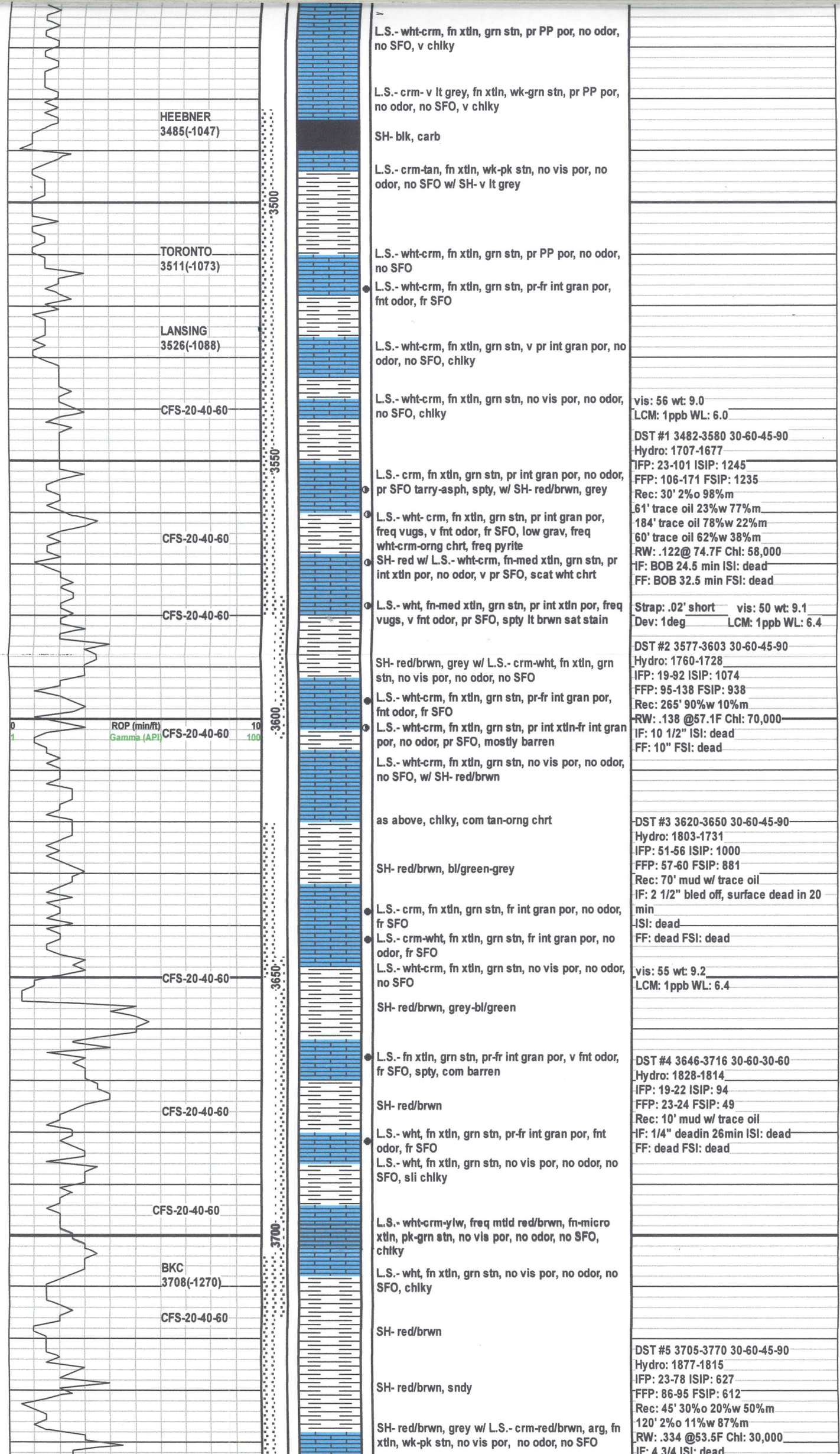
Anhy, Bent, Brec, Cht
Clyst, Carb. shale, Arkose, Dol
Gyp, Igne, Lmst, Meta
Mrlst, Salt, Shale, Shcol
Shgy, Sltst, Ss, Till

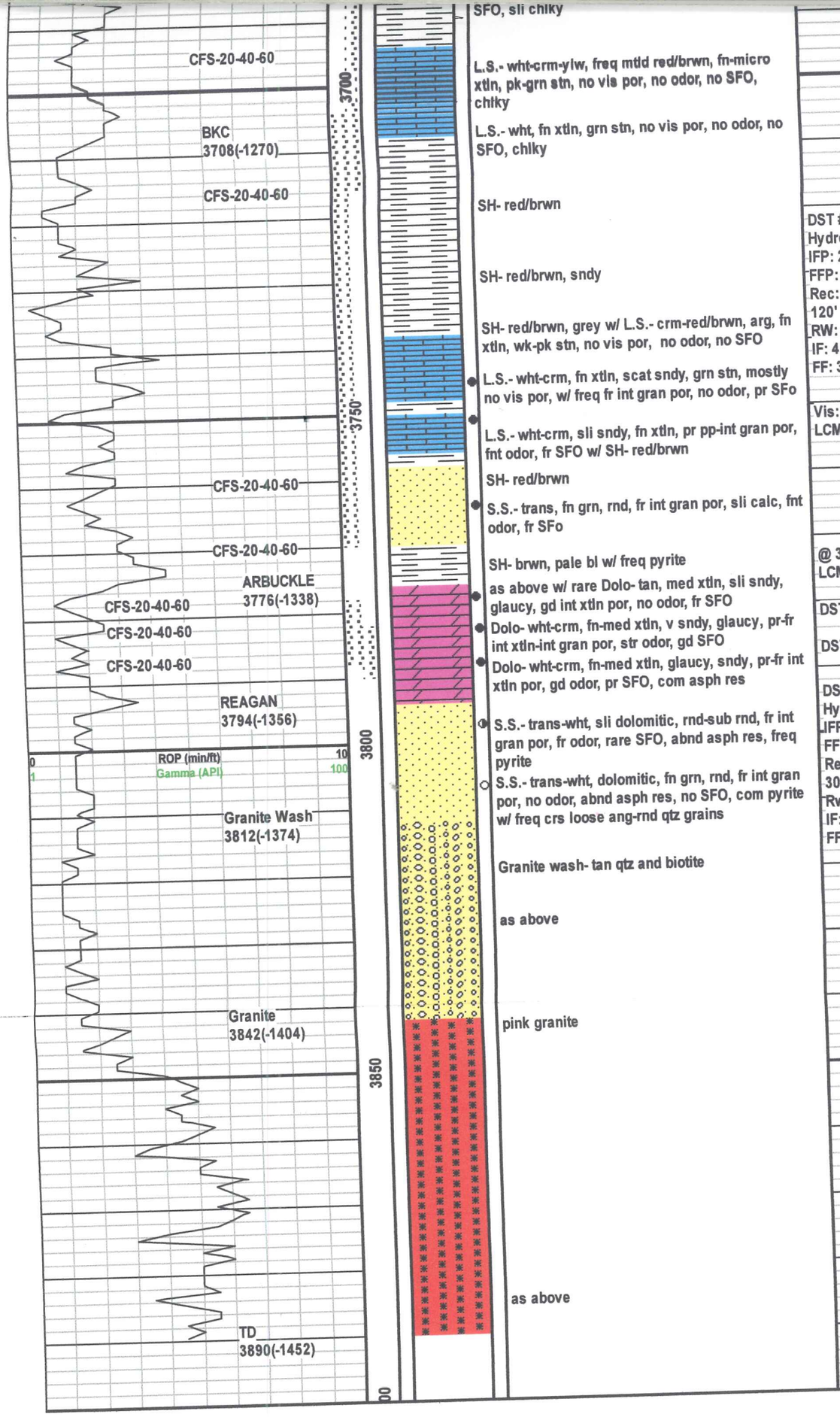
OTHER SYMBOLS

OIL SHOW: Even, Spotted, Ques, Dead
INTERVAL: Dst




1
Gamma (API)
100
3250
3300
3350
3400
3450
TOPEKA
3291(-853)
0
ROP (min/ft)
10
1
Gamma (API)
100
SH- grey w/ L.S.- grey, fn xtln, md stn, no vis por, no odor, no SFO
SH- red/brwn w/ L.S.- crm, fn xtln, grn stn, no vis por, no odor, no SFO
L.S.- wht-crm, fn xtln, grn stn, pr PP por, no odor, no SFO, chlky
SH- red/brwn, grey
L.S.- crm-lt grey, fn xtln, wk-pk stn, no vis por, no odor, no SFO, freq wht-ong chrt
SH- red/brwn, bl/green, grey
L.S.- crm-tan, fn xtln, md stn, no vis por, no odor, no SFO
L.S.- crm-grey, as above
SH- red/brwn, grey
L.S.- wht-crm, fn xtln, grn stn, pr PP por, no odor, no SFO, chlky
as above, v chlky
as above
S.S.- wht-trans, fn grn, calc, well srtd, rnd, poss int gran por, no odor, no SFO w/ SH- red/brwn
L.S.- crm, fn xltn, grn stn, pr PP por, no odor, no SFO, v chlky
as above
S.S.- wht-v pale bl/green, sli arg, fn grn, well srtd, rnd, poss int gran por, no odor, no SFO
as above w/ SH- grey-bl/green, red/brwn
as above
L.S.- wht-crm, fn xtln, grn stn, pr PP-int gran por, no odor, no SFO, chlky
SH- grey, red/brwn
SH- grey, calc w/ L.S.- crm, fn xtln, grn stn, pr PP por, no odor, no SFO, chlky, scat glauc
L.S.- wht-crm-pnk, fn xtln, scat sndy, wk-grn stn, pr PP por, no odor, no SFO, chlky
L.S.- wht-crm, fn xtln, grn stn, pr PP por, no odor, no SFO, v chlky
L.S.- crm- v lt grey, fn xtln, wk-grn stn, pr PP por, no odor, no SFO, v chlky


HEEBNER
3485(-1047)
TORONTO
3511(-1073)
LANSING
3526(-1088)
CFS-20-40-60
CFS-20-40-60
CFS-20-40-60
ROP (min/ft)
Gamma (API)
CFS-20-40-60
CFS-20-40-60
CFS-20-40-60
CFS-20-40-60
BKC
3708(-1270)
CFS-20-40-60
3500
3550
3600
3650
3700
L.S.- wht-crm, fn xtln, grn stn, pr PP por, no odor, no SFO, v chlky
L.S.- crm- v lt grey, fn xtln, wk-grn stn, pr PP por, no odor, no SFO, v chlky
SH- blk, carb
L.S.- crm-tan, fn xtln, wk-pk stn, no vis por, no odor, no SFO w/ SH- v lt grey
L.S.- wht-crm, fn xtln, grn stn, pr PP por, no odor, no SFO
L.S.- wht-crm, fn xtln, grn stn, pr-fr int gran por, fnt odor, fr SFO
L.S.- wht-crm, fn xtln, grn stn, v pr int gran por, no odor, no SFO, chlky
L.S.- wht-crm, fn xtln, grn stn, no vis por, no odor, no SFO, chlky
vis: 56 wt: 9.0
LCM: 1ppb WL: 6.0
DST #1 3482-3580 30-60-45-90
Hydro: 1707-1677
IFP: 23-101 ISIP: 1245
FFP: 106-171 FSIP: 1235
Rec: 30' 2%o 98%m
61' trace oil 23%w 77%m
184' trace oil 78%w 22%m
60' trace oil 62%w 38%m
RW: .122@ 74.7F Chl: 58,000
IF: BOB 24.5 min ISI: dead
FF: BOB 32.5 min FSI: dead
L.S.- crm, fn xtln, grn stn, pr int gran por, no odor, pr SFO tarry-asph, spty, w/ SH- red/brwn, grey
L.S.- wht- crm, fn xtln, grn stn, pr int gran por, freq vugs, v fnt odor, fr SFO, low grav, freq wht-crm-orng chrt, freq pyrite
SH- red w/ L.S.- wht-crm, fn-med xtln, grn stn, pr int xtln por, no odor, v pr SFO, scat wht chrt
L.S.- wht, fn-med xtln, grn stn, pr int xtln por, freq vugs, v fnt odor, pr SFO, spty lt brwn sat stain
Strap: .02' short vis: 50 wt: 9.1
Dev: 1deg LCM: 1ppb WL: 6.4
DST #2 3577-3603 30-60-45-90
Hydro: 1760-1728
IFP: 19-92 ISIP: 1074
FFP: 95-138 FSIP: 938
Rec: 265' 90%w 10%m
RW: .138 @57.1F Chl: 70,000
IF: 10 1/2" ISI: dead
FF: 10" FSI: dead
SH- red/brwn, grey w/ L.S.- crm-wht, fn xtln, grn stn, no vis por, no odor, no SFO
L.S.- wht-crm, fn xtln, grn stn, pr-fr int gran por, fnt odor, fr SFO
L.S.- wht-crm, fn xtln, grn stn, pr int xtln-fr int gran por, no odor, pr SFO, mostly barren
L.S.- wht-crm, fn xtln, grn stn, no vis por, no odor, no SFO, w/ SH- red/brwn
as above, chlky, com tan-orng chrt
SH- red/brwn, bl/green-grey
DST #3 3620-3650 30-60-45-90
Hydro: 1803-1731
IFP: 51-56 ISIP: 1000
FFP: 57-60 FSIP: 881
Rec: 70' mud w/ trace oil
IF: 2 1/2" bled off, surface dead in 20 min
ISI: dead
FF: dead FSI: dead
L.S.- crm, fn xtln, grn stn, fr int gran por, no odor, fr SFO
L.S.- crm-wht, fn xtln, grn stn, fr int gran por, no odor, fr SFO
L.S.- wht-crm, fn xtln, grn stn, no vis por, no odor, no SFO
vis: 55 wt: 9.2
LCM: 1ppb WL: 6.4
SH- red/brwn, grey-bl/green
L.S.- fn xtln, grn stn, pr-fr int gran por, v fnt odor, fr SFO, spty, com barren
SH- red/brwn
DST #4 3646-3716 30-60-30-60
Hydro: 1828-1814
IFP: 19-22 ISIP: 94
FFP: 23-24 FSIP: 49
Rec: 10' mud w/ trace oil
IF: 1/4" deadin 26min ISI: dead
FF: dead FSI: dead
L.S.- wht, fn xtln, grn stn, pr-fr int gran por, fnt odor, fr SFO
L.S.- wht, fn xtln, grn stn, no vis por, no odor, no SFO, sli chlky
L.S.- wht-crm-ylw, freq mtld red/brwn, fn-micro xtln, pk-grn stn, no vis por, no odor, no SFO, chlky
L.S.- wht, fn xtln, grn stn, no vis por, no odor, no SFO, chlky
SH- red/brwn
SH- red/brwn, sndy
DST #5 3705-3770 30-60-45-90
Hydro: 1877-1815
IFP: 23-78 ISIP: 627
FFP: 86-95 FSIP: 612
Rec: 45' 30%o 20%w 50%m
120' 2%o 11%w 87%m
RW: .334 @53.5F Chl: 30,000
SH- red/brwn, grey w/ L.S.- crm-red/brwn, arg, fn xtln, wk-pk stn, no vis por, no odor, no SFO
IF: 4 3/4 ISI: dead



DST #5 3705-3770 30-60-45-90
Hydro: 1877-1815
IFP: 23-78 ISIP: 627
FFP: 86-95 FSIP: 612
Rec: 45' 30%o 20%w 50%m
120' 2%o 11%w 87%m
RW: .334 @53.5F Chl: 30,000
IF: 4 3/4 ISI: dead
FF: 3 1/4" FSI: dead

Vis: 60 Wt: 9.2
LCM: 1.5ppb WL: 6.4

@ 3787' Vis: 56 Wt: 9.2
LCM: 2ppb WL: 7.2

DST #6 3776-3782 Misrun

DST #7 3778-3787 Misrun

DST #8 3782-3790 30-60-45-90
Hydro: 1969-1951
IFP: 19-111 ISIP: 482
FFP: 114-180 FSIP: 482
Rec: 45' 75%w 25%m
305' 95%w 5%m
Rw: .121 @80.8F Chl: 55,000ppm
IF: BOB 21min ISI: dead
FF: BOB 34min FSI: dead

Dev: 1 1/4 deg

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

No. 629

DATE 10/3/12	SEC. 6	RANGE/TWP. 4-23	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
					COUNTY	STATE KS
LEASE Persinger Farm			WELL # 1-6			

CONTRACTOR		OWNER Great Plains			
TYPE OF JOB					
HOLE SIZE 7⅞	T.D. 3890	CEMENT			
CASING SIZE	DEPTH	AMONT ORDERED	230		
TUBING SIZE	DEPTH				
DRILL PIPE 4½	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON	138	@ 15.50	2139.-
DISPLACEMENT	SHOE JOINT	POZMIX	92	@ 8.50	782.-
CEMENT LEFT IN CSG.		GEL	8	@ 26.00	208.-
PERFS		CHLORIDE		@	
		ASC		@	
EQUIPMENT				@	
				@	
PUMP TRUCK				@	
#				@	
BULK TRUCK		Flo-seal	57.50	@ 2.25	129.38
# Jay				@	
BULK TRUCK				@	
# Fred				@	
		HANDLING	238	@ 2.15	511.70
		MILEAGE	60	@ 23.80	1428.-
				TOTAL	

REMARKS		SERVICE Rotary Plug		
1st 25 sx Rathole 3780		DEPT OF JOB		@	
2nd 25 sx 2050'		PUMP TRUCK CHARGE	Rathole	@ plus	18.50
3rd 100 sx 1275'		EXTRA FOOTAGE		@	
4th 40 sx 375'		MILEAGE	60x2	@ 6.2	744.-
5th 10 sx 40' Viper		MANIFOLD		@	
Rathole 30 sx		Light Veh	60x2	@ 2.4	240.-
Plug down 0200				TOTAL	

CHARGES TO: Great Plains	
STREET	STATE
CITY	ZIP

PLUG & FLOAT EQUIPMENT	
8⅝	@ 79.-
	@
	@
	@
	@
	TOTAL
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit 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 "TERMS AND CONDITIONS" listed on the reverse side.

Hoxie Sentinel Print / Form 411

SIGNATURE Gary Lichon PRINTED NAME Gary Lichon

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

№ 620

DATE 9/24/11	SEC. 6	RANGE/TWP. 4-27	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
					COUNTY	STATE KS
LEASE Persinger			WELL # 1-6			

CONTRACTOR WW 6		OWNER Great Plains			
TYPE OF JOB Surface					
HOLE SIZE 12 1/4	T.D. 332	CEMENT			
CASING SIZE 8 5/8	DEPTH 322	AMONT ORDERED			
TUBING SIZE	DEPTH				
DRILL PIPE 4 1/2	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON	210	@ 15.50	
DISPLACEMENT 19.25 bbl	SHOE JOINT	POZMIX		@	
CEMENT LEFT IN CSG.		GEL	4	@ 26	
PERFS		CHLORIDE	7	@ 52	
		ASC		@	
EQUIPMENT				@	
				@	
PUMP TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
BULK TRUCK				@	
#				@	
		HANDLING	221	@ 2.15	475.15
		MILEAGE	60	@ 22.10	1326
				TOTAL	

REMARKS	SERVICE	Surface	
Plug Down @ 12 PM	DEPT OF JOB		@
	PUMP TRUCK CHARGE		@ 1050
	EXTRA FOOTAGE		@
	MILEAGE	60+7	@ 6.2
Circulate Cement to Pit	MANIFOLD		@
	Blue Hulled		@ 2.2
			TOTAL

CHARGES TO: Great Plains	
STREET	STATE
CITY	ZIP

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit 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 "TERMS AND CONDITIONS" listed on the reverse side.

PLUG & FLOAT EQUIPMENT	
	@
	@
	@
	@
	@
	TOTAL
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

Hoxie Sentinel Print / Form 411

SIGNATURE

PRINTED NAME