CORRECTION #1

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1173678

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30606
Name: Murfin Drilling Co., Inc.
Address 1: 250 N WATER STE 300
Address 2:
City: WICHITA State: KS Zip: 67202 + 1216
Contact Person: Rich Pancake
Phone: (316) 267-3241
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Wes Hansen
Purchaser: MV Purchasing, LLC

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

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

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

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

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

08/17/2013	08/24/2013	09/25/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-039-21186-00-00
Spot Description:
SW SE NE NE Sec. 7 Twp. 5 S. R. 30 ☐ East ☑ West
1210 Feet from ☑ North / ☐ South Line of Section
550 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Decatur
Lease Name: Juenemann Well #: 1-7
Field Name: NA
Producing Formation: LKC
Elevation: Ground: 2918 Kelly Bushing: 2929
Total Vertical Depth: 4603 Plug Back Total Depth: 4516
Amount of Surface Pipe Set and Cemented at: 195 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 2662
feet depth to: 0 w/ 175 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

☑ **Confidentiality Requested**
Date: 12/13/2013
☑ **Confidential Release Date:** 12/13/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/19/2013

CORRECTION #1
Page Two

1173678

Operator Name: Murfin Drilling Co., Inc. Lease Name: Juenemann Well #: 1-7

Sec. 7 Twp. 5 S. R. 30 ☐ East ☑ West County: Decatur

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

List All E. Logs Run:

Dual Induction
Dual Compensated
Microresistivity

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

Name Top Datum

See Attachment

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	12.2500	8.6250	23	225	Common	195	3% cc
Production	7.8750	5.5000	15.5	4598	OWC	175	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

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
4	4130 - 4135 LKC J	250 gal 20% MCA, 750 gal 20% NEFE	

TUBING RECORD: Size: 2.375 Set At: 4166 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 09/30/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	6		138		36

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:
4130 - 4135

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

Summary of Changes

Lease Name and Number: Juenemann 1-7

API/Permit #: 15-039-21186-00-00

Doc ID: 1173678

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	12/13/2013	12/19/2013
Perf_Material_1		250 gal 20% MCA, 750 gal 20% NEFE
Save Link	../../kcc/detail/operatorEditDetail.cfm?docID=1172794	../../kcc/detail/operatorEditDetail.cfm?docID=1173678
Tubing Size	2.38	2.375

Confidentiality Requested:
☑ Yes ☐ No

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1172794

Form ACO-1
August 2013
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☐ 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:

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☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

08/17/2013	08/24/2013	09/25/2013
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Spot Description:
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550 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Decatur
Lease Name: Juenemann Well #: 1-7
Field Name: NA
Producing Formation: LKC
Elevation: Ground: 2918 Kelly Bushing: 2929
Total Vertical Depth: 4603 Plug Back Total Depth: 4516
Amount of Surface Pipe Set and Cemented at: 195 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 2662
feet depth to: 0 w/ 175 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

☑ **Confidentiality Requested**
Date: 12/13/2013
☐ **Confidential Release Date:**
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 12/13/2013

Operator Name: Murfin Drilling Co., Inc. Lease Name: Juenemann Well #: 1-7

Sec. 7 Twp. 5 S. R. 30 ☐ East ☑ West County: Decatur

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken *(Attach Additional Sheets)*	☑ Yes	☐ No	
Samples Sent to Geological Survey	☑ Yes	☐ No	
Cores Taken	☐ Yes	☑ No	
Electric Log Run	☑ Yes	☐ No	
Geologist Report / Mud Logs	☐ Yes	☐ No	

List All E. Logs Run:

Dual Induction
Dual Compensated
Microresistivity

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

Name	Top	Datum
See Attachment		

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	12.2500	8.6250	23	225	Common	195	3% cc
Production	7.8750	5.5000	15.5	4598	OWC	175	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection: 09/30/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	6		138		36

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)*

PRODUCTION INTERVAL:

Top	Bottom
4130 - 4135	

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4					250 gal 20% MCA, 750 gal 20% NEFE

TUBING RECORD: Size: 2.375 Set At: 4166 Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Juenemann 1-7
Doc ID	1172794

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4130 - 4135 LKC J		

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	Juenemann 1-7
Doc ID	1172794

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.2500	8.6250	23	225	Common	195	3% cc
Production	7.8750	5.5000	15.5	4598	OWC	175	

	Juenemann #1-7 1210' FNL 550' FEL Sec. 7-5S-30W 2929' KB						Brown Farms #1-1 2150' FNL 500' FEL Sec. 1-5S-31W 2852' KB	
Formation	Sample top	Datum	Ref	Log tops	Datum	Ref	Log tops	Datum
Anhydrite	2656	+273	+4	2656	+273	+4	2583	+269
B/Anhydrite	2694	+235	+1	2692	+267	+3	2618	+234
Topeka	3757	-828	-14	3758	-829	-15	3666	-814
Heebner	3929	-1000	-16	3930	-1001	-17	3836	-984
Lansing	3976	-1047	-16	3975	-1046	-15	3883	-1031
Stark	4139	-1210	-12	4141	-1212	-14	4050	-1198
BKC	4192	-1263	-13	4189	-1260	-10	4102	-1250
Pawnee	4304	-1375	-13	4300	-1371	-9	4214	-1362
Ft Scott	4374	-1445	-13	4377	-1448	-16	4284	-1432
Cherokee	4387	-1458	-14	4390	-1461	-17	4296	-1444
Mississippi	4498	-1569	-11	4492	-1563	-5	4410	-1558
RTD	4600						4510	
LTD				4603			4508	

WESLEY D. HANSEN Consulting Petroleum Geologist

212 N. Market, Suite 257, Wichita, KS 67202
Office: 316-267-7313 Cellular ; 316-772-6188

KGS
AAPG
Kansas License #418

MURFIN DRILLING COMPANY, INC.
WICHITA, KANSAS

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

Well Name:	Murfin Drilling Co., Inc. #1-7 Juenemann		
Location:	1210' FNL, 550' FEL of Section 7-5S-30W		
License Number:	API: 15-039-21186	Region:	Decatur County, KS
Spud Date:	8-17-2013	Drilling Completed:	8-25-2013
Surface Coordinates:	1210' FNL, 550' FEL of Section 7-5S-30W		
Bottom Hole Coordinates:	Vertical hole		
Ground Elevation (ft):	2918'	K.B. Elevation (ft):	2929'
Logged Interval (ft):	3640' To: RTD	Total Depth (ft):	4600'
Formation:	Mississippian at RTD		
Type of Drilling Fluid:	Chemical - Displaced at 3343'		

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

OPERATOR

Company: Murfin Drilling Co., Inc.
Address: 250 N. Water
Suite 300
Wichita, KS 67202

GEOLOGIST

Name: Wesley D. Hansen
Company: Wesley D. Hansen - Consulting Petroleum Geologist
Address: 212 N. Market, Suite 257
Wichita, KS 67202
Office: 316-263-7313 Cellular: 316-772-6188

COMMENTS

Contractor: Murfin Drilling Co., Inc. Rig #2
Pusher: Arturo Cabezas

Surface Casing: 8 5/8" set at 225' w/195sx
Production Casing: 5 1/2" set at 4598' w/175 sx

Mud by: Morgan Mud - Dave and Cade Lines were the engineers

DST's by: Trilobite - James Winder was the tester

Logs by: Pioneer Wireline (DIL, CN-CD, MEL, BHCS)

Deviation Surveys: 1/2 deg. @ 225'; 3/4 deg. @ 1006'; 1/2 deg. @ 1542'; 1/2 deg. @ 2078'; 3/4 deg. @ 2582'; 1/4 deg. @ 3627'; 1/2 deg. @ 3970'; 1/2 deg. @ 4600'

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on bit
1	12 1/4"	HTC	B22	225'	225'	2
2	7 7/8"	HTC	DP506F	3627'	3402'	36 1/4
3	7 7/8"	HTC	GX-20C	4600'	973'	52

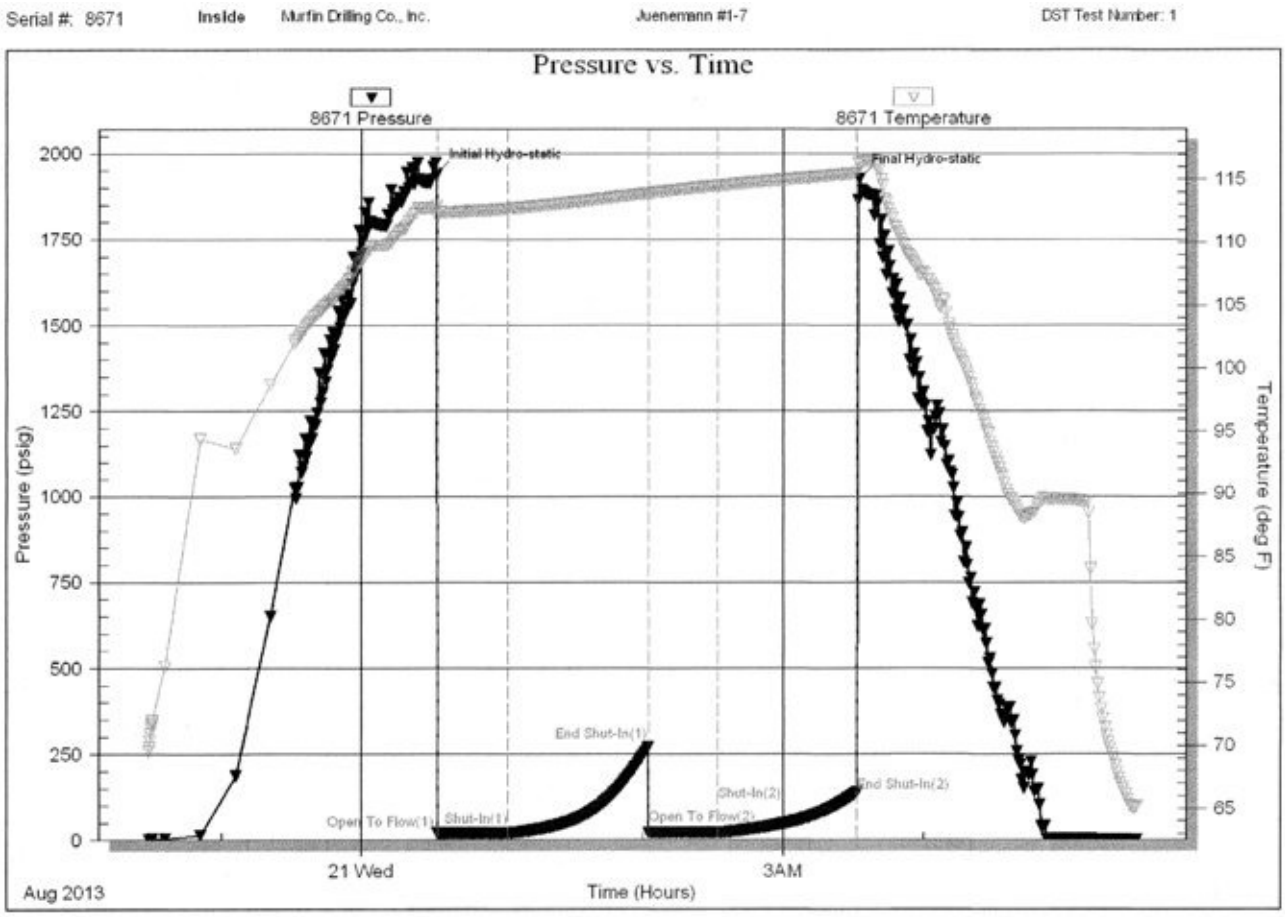
FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS Depth	Datum	LOG TOPS Depth	Datum	COMPARISON WELL MDCI Brown Farms 1-1 1-5S-31W 2852' KB
Anhydrite	2656'	+273	2656'	+273	+4
B/Anhydrite	2694'	+235	2692'	+237	+3
Topeka	3757'	-828	3758'	-829	-15
Heebner	3929'	-1000	3930'	-1001	-17
Lansing	3976'	-1047	3975'	-1046	-15
Stark Shale	4139'	-1210	4141'	-1212	-14
BKC	4192'	-1263	4194'	-1265	-15
Pawnee	4304'	-1375	4300'	-1371	-9
Fort Scott	4374'	-1445	4377'	-1448	-16
Cherokee Shale	4387'	-1458	4390'	-1461	-17
Mississippian	4488'	-1559	4492'	-1563	-5
RTD	4600'	-1671			
LTD			4603'	-1674	

DRILL STEM TESTS

DST No. 1 Toronto
Interval: 3930'-3970'
Times: 30-60-30-60
Recovery: 2' mud
FP: 19-20/21-22 SIP: 270-139
HP: 1941-1925 BHT: 115 deg. F

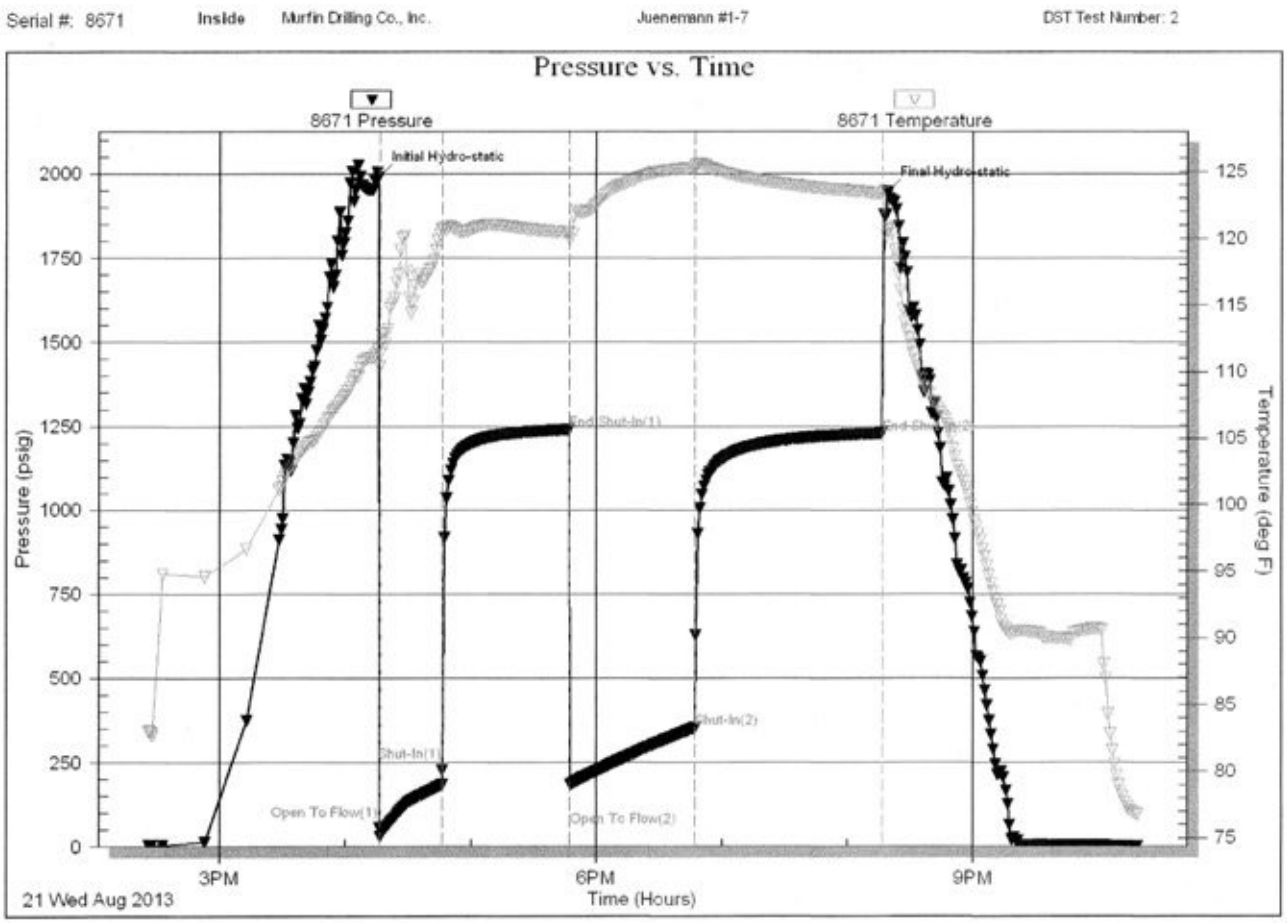
IFP: 1/4" blow, died back, dead in 17 minutes
ISIP: no return blow
FFP: no blow
FSIP: no return blow



DRILL STEM TESTS

DST No. 2 Lansing "A" and "B"
Interval: 3980'-4015'
Times: 30-60-60-90
Recovery: 170' MCW (38m, 62w, trace oil); 62' SMCW (12m, 88w, trace oil); 498' VSMCW (4m, 96w), chl. 25,000; total fluid 730'
FP: 30-182/185-353 SIP: 1240-1229
HP: 1990-1946 BHT: 123 deg. F

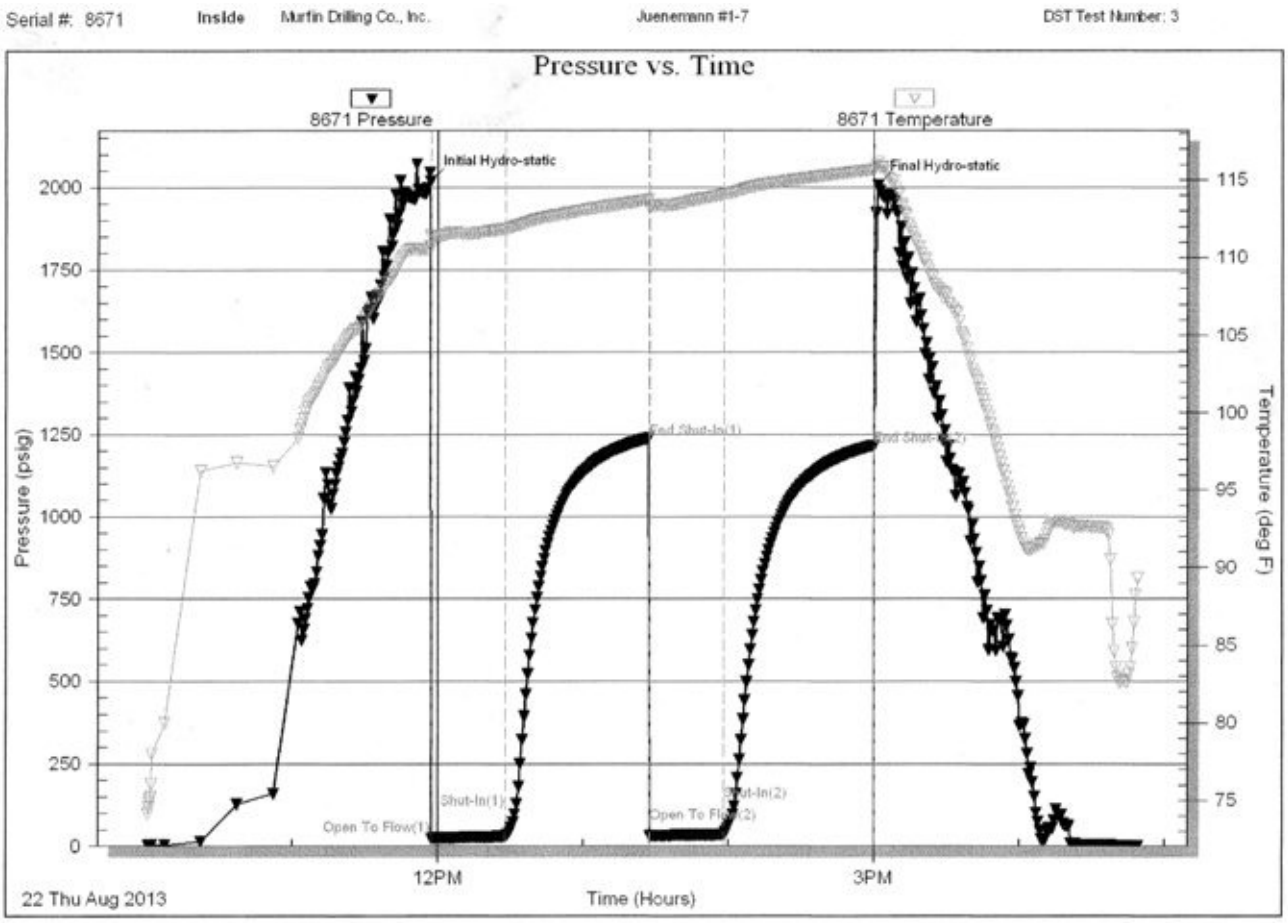
IFP: strong blow, B.O.B. in 11 minutes
ISIP: no return blow
FFP: fair to strong blow, B.O.B. in 16 minutes
FSIP: weak return blow, bldg. to 1/4 inch



DRILL STEM TESTS

DST No. 3 Lansing "F" and "G"
Interval: 4028'-4066'
Times: 30-60-30-60
Recovery: 45' mud
FP: 24-30/31-35 SIP: 1239-1218
HP: 2019-2005 BHT: 116 deg. F

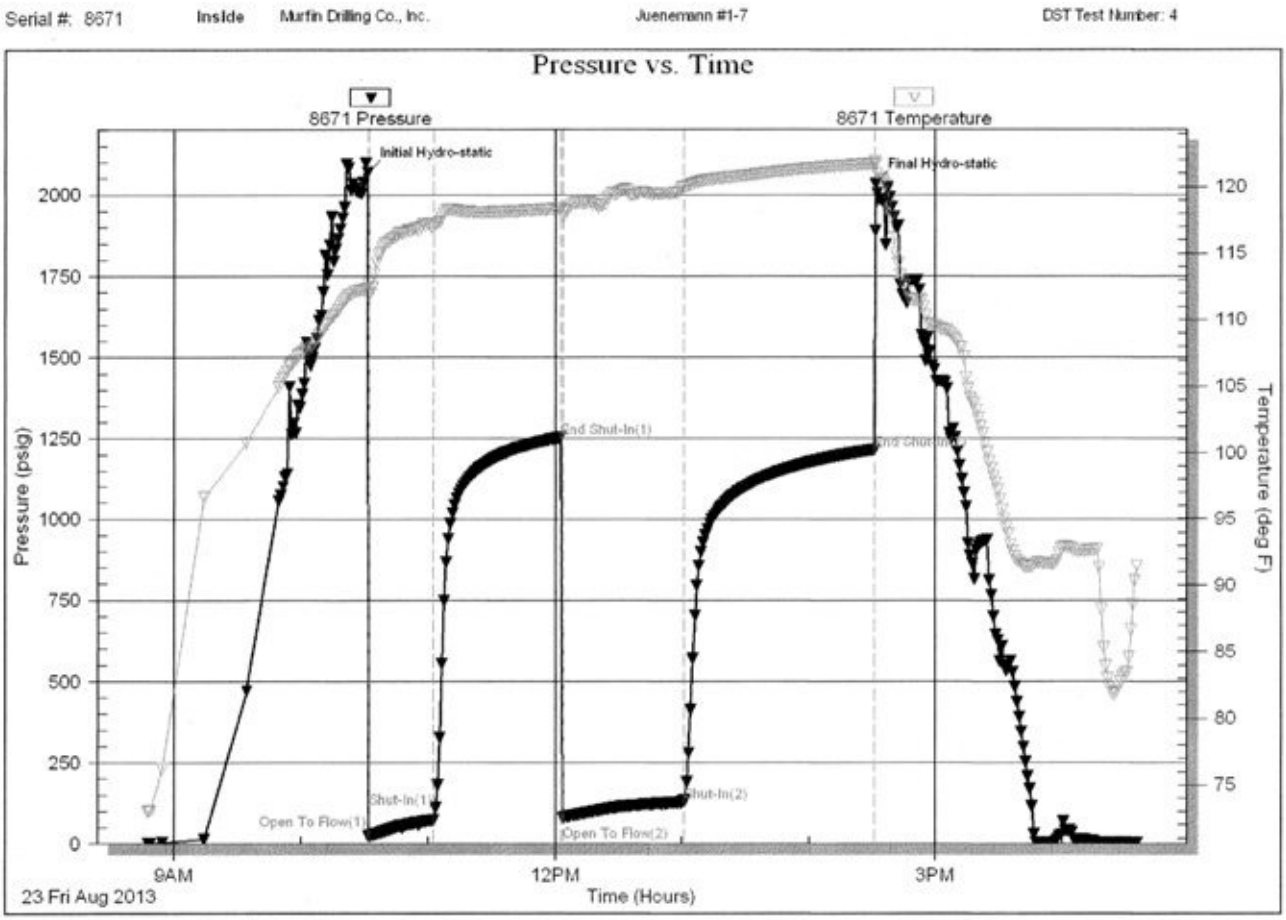
IFP: 1/4" blow bldg. to 1/2", dead at 25 minutes
ISIP: no return blow
FSIP: no return blow



DRILL STEM TESTS

DST No. 4 Lansing "J" and "K"
Interval: 4098'-4170'
Times: 30-60-60-90
Recovery: 95' GIP; 31' SLG&MCO (6g, 4m, 90o); 117' SLG&OCM (4g, 37o, 59m); 59' SLGO&WCM (7g, 7o, 31w, 55m); 58' SLO&MCW (2o, 22m, 76w), chl 19,500; oil gravity 35.8 deg.
FP: 23-73/79-130 SIP: 1253-1216
HP: 2069-2034 BHT: 122 deg. F

IFP: fair blow bldg. to 7 1/2"
ISIP: no return blow
FFP: fair blow bldg. to 11" in 42 minutes
FSIP: 1" return blow



ROCK TYPES

- Anhy
- Cht
- Coal
- Congl
- Gyp
- Ls colorless
- Lmst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- redshale
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Sdy dolo
- Silty dolo
- Shy dolo
- Shaly ls

ACCESSORIES

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

OTHER SYMBOLS

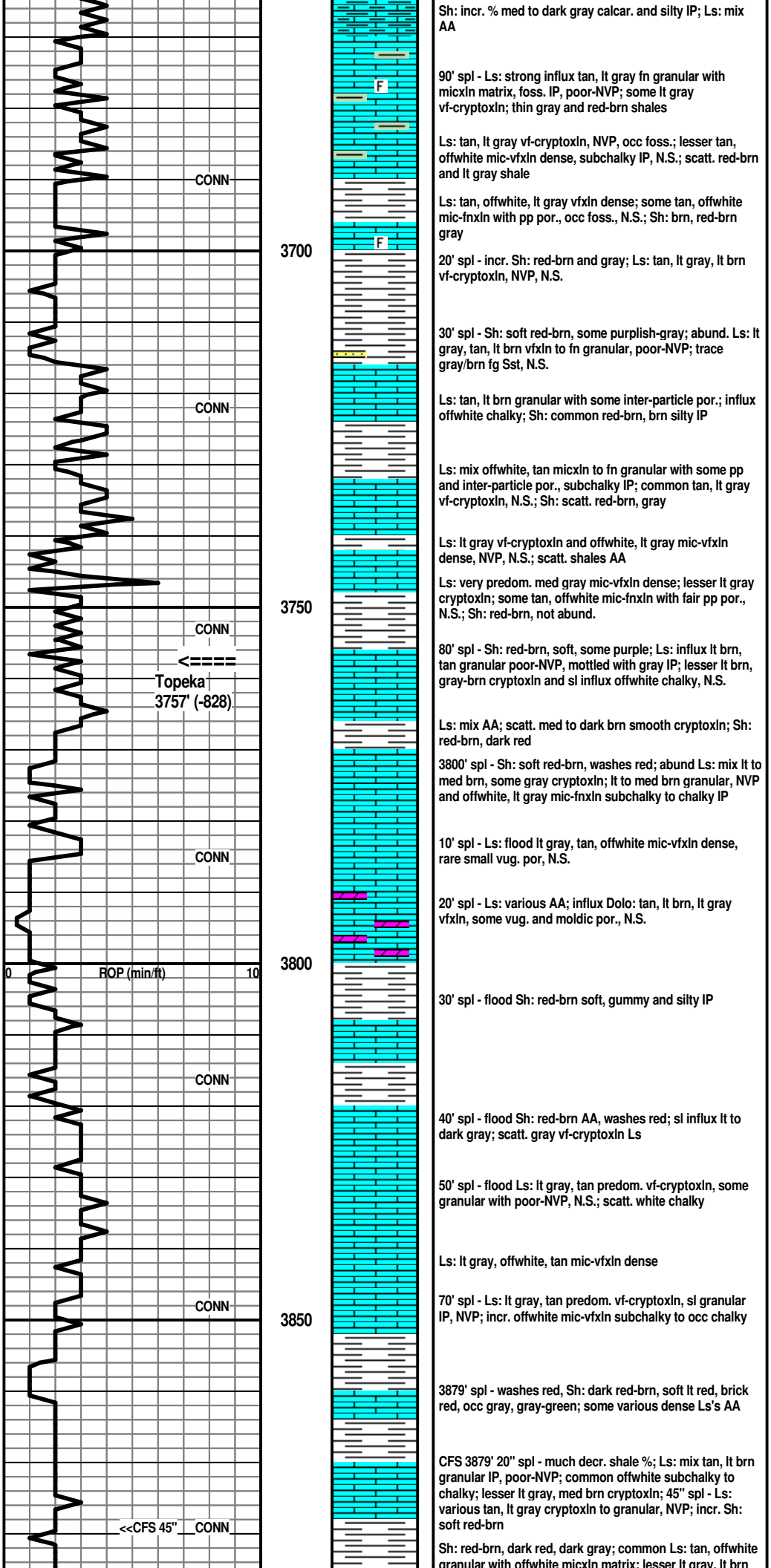
INTERVALS
- Core
- Dst
- Dst

EVENTS
- Rft
- Dst top/base

OIL SHOWS
- Even
- Spotted
- Quest.

- Trace
- Dead
- Gas show

Curve Track 1 ROP (min/ft)	Depth	Lithology	Oil Shows	Geological Descriptions	Remarks
0 ROP (min/ft) 10 0 ROP (min/ft) 10 NB CONN CONN	3600 3650			Ls: predom. lt to med gray fn-vfxln, poor-NVP; other tan, ofwhite fnxln to sl granular, sl subchalky IP, N.S.; Sh: lt to med gray Ls: various AA, some tinted maroon; with incr. Sh: lt to med gray, some maroon-gray Ls: lt to med gray vfxln dense, shaly IP; tan, offwhite mic-fnxln some pp por., N.S.; lesser tan, lt brn granular poor-NVP; some gray shale Ls: mix gray, tan, brn gen. dense; Sh: gray, some red-brn	**Morning Depth & Activity** 8-17-2013 MIRT, Spud @ 3:00 PM 8-18 Drlg. @ 447' 8-19 Drlg. @ 2685' 8-20 Drlg. @ 3745' 8-21 TIH w/bit post DST No. 1 @ 3970' 8-22 CFS @ 4066' for DST No. 3 8-23 CTCH @ 4170' for DST No. 4 8-24 Drlg. @ 4325' 8-25 RTD @ 4600' Logging Geologist on location at 3627' Trip PDC bit at 3627' Start 1' drilling time and 10' wet and dry samples at 3640'



Sh: incr. % med to dark gray calcar. and silty IP; Ls: mix AA

90' spl - Ls: strong influx tan, lt gray fn granular with micxln matrix, foss. IP, poor-NVP; some lt gray vf-cryptoxln; thin gray and red-brn shales

Ls: tan, lt gray vf-cryptoxln, NVP, occ foss.; lesser tan, offwhite mic-vfxln dense, subchalky IP, N.S.; scatt. red-brn and lt gray shale

Ls: tan, offwhite, lt gray vfxln dense; some tan, offwhite mic-fnxln with pp por., occ foss., N.S.; Sh: brn, red-brn gray

20' spl - incr. Sh: red-brn and gray; Ls: tan, lt gray, lt brn vf-cryptoxln, NVP, N.S.

30' spl - Sh: soft red-brn, some purplish-gray; abund. Ls: lt gray, tan, lt brn vfxln to fn granular, poor-NVP; trace gray/brn fg Sst, N.S.

Ls: tan, lt brn granular with some inter-particle por.; influx offwhite chalky; Sh: common red-brn, brn silty IP

Ls: mix offwhite, tan micxln to fn granular with some pp and inter-particle por., subchalky IP; common tan, lt gray vf-cryptoxln, N.S.; Sh: scatt. red-brn, gray

Ls: lt gray vf-cryptoxln and offwhite, lt gray mic-vfxln dense, NVP, N.S.; scatt. shales AA

7:00 AM at 3745' on 8-20-2013

Ls: very predom. med gray mic-vfxln dense; lesser lt gray cryptoxln; some tan, offwhite mic-fnxln with fair pp por., N.S.; Sh: red-brn, not abund.

80' spl - Sh: red-brn, soft, some purple; Ls: influx lt brn, tan granular poor-NVP, mottled with gray IP; lesser lt brn, gray-brn cryptoxln and sl influx offwhite chalky, N.S.

Topeka 3757' (-828)

Ls: mix AA; scatt. med to dark brn smooth cryptoxln; Sh: red-brn, dark red

vis 56 wt 8.9 lcm 3#

3800' spl - Sh: soft red-brn, washes red; abund Ls: mix lt to med brn, some gray cryptoxln; lt to med brn granular, NVP and offwhite, lt gray mic-fnxln subchalky to chalky IP

10' spl - Ls: flood lt gray, tan, offwhite mic-vfxln dense, rare small vug. por, N.S.

20' spl - Ls: various AA; influx Dolo: tan, lt brn, lt gray vfxln, some vug. and moldic por., N.S.

30' spl - flood Sh: red-brn soft, gummy and silty IP

40' spl - flood Sh: red-brn AA, washes red; sl influx lt to dark gray; scatt. gray vf-cryptoxln Ls

50' spl - flood Ls: lt gray, tan predom. vf-cryptoxln, some granular with poor-NVP, N.S.; scatt. white chalky

Morgan Mud Check at 3835'
10:40 AM on 8-20-2013

wt	vis	wl	pH	chl
8.8	57	6.8	11.5	1400
PV	**YP**	**GelS**	**lcm**	**solids**
20	19	10/28	4#	3.6%

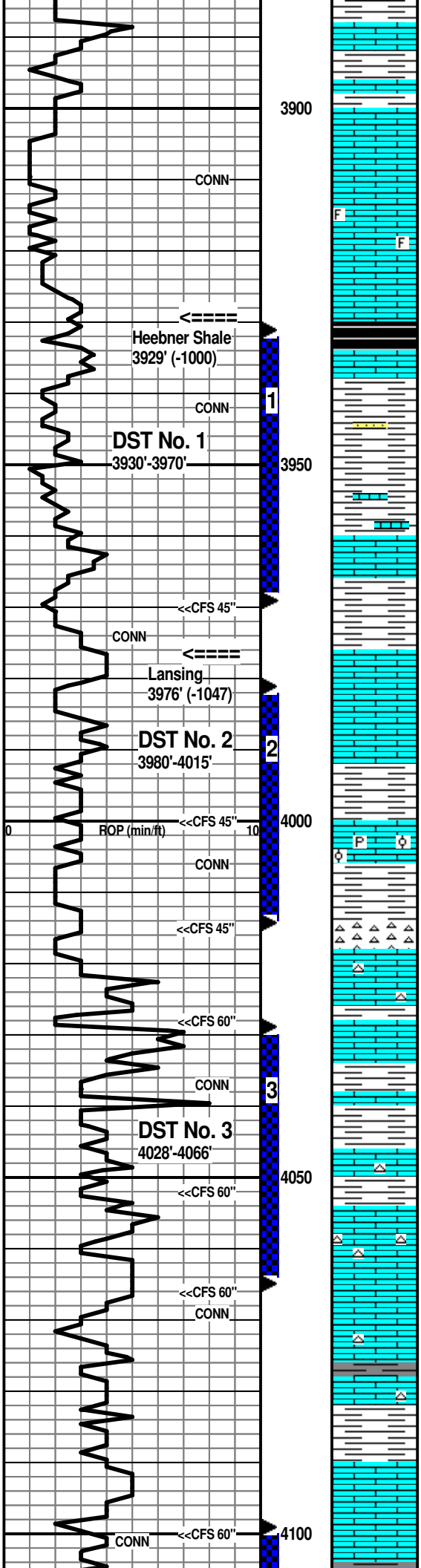
Ls: lt gray, offwhite, tan mic-vfxln dense

70' spl - Ls: lt gray, tan predom. vf-cryptoxln, sl granular IP, NVP; incr. offwhite mic-vfxln subchalky to occ chalky

3879' spl - washes red, Sh: dark red-brn, soft lt red, brick red, occ gray, gray-green; some various dense Ls's AA

CFS 3879' 20" spl - much decr. shale %; Ls: mix tan, lt brn granular IP, poor-NVP; common offwhite subchalky to chalky; lesser lt gray, med brn cryptoxln; 45" spl - Ls: various tan, lt gray cryptoxln to granular, NVP; incr. Sh: soft red-brn

Sh: red-brn, dark red, dark gray; common Ls: tan, offwhite granular with offwhite micxln matrix; lesser lt gray, lt brn



cryptoxln and offwhite subchalky to chalky

10' spl - Ls: tan, lt brn vfxln, NVP; offwhite, tan mic-fnxln dense; Sh: incr. med to dark gray, red-brn

Ls: tan, offwhite, some lt gray mic-vfxln dense, some chalky; some lt to med gray shale

30' spl - flood Ls: tan mic-fnxln with pp por. and flood white chalky, N.S.

40' spl - Ls: mix AA with some tan foss. with fossil moldic por.; tan, lt gray vfxln, NVP, N.S.

50' spl - Sh: sl influx black carbon.; Ls: flood med to dark brn, gray-brn cryptoxln

60' spl - Sh: med to dark gray, lesser red-brn; occ lt gray vfg silty Sst, N.S.

70' spl - Sh: good influx red-brn, lesser gray AA; some Ls: tan, offwhite vfxln with good vug. por. with dark brn to black oily patchy to subsat stain, dark brn to black listless oil to sl live oil, no odor

3970' CFS 20" spl - flood Ls: very predom. tan, lt gray vf-cryptoxln, vsl pyritic IP; common offwhite, tan mic-vfxln dense, subchalky IP; scatt. chips with shows AA; 45" spl - Ls: mix AA, scatt. shows; strong influx Sh: soft red-brn and red-maroon

Ls: tan, lt gray vf-cryptoxln predom. NVP, some scatt. vug. por., N.S.; abund. offwhite, tan mic-vfxln dense, subchalky

4000' spl - Ls: tan, lt gray, lt brn vf-cryptoxln, NVP; common offwhite dense, subchalky to chalky; 1-2 chips tan dense with patchy stain, nfo, no odor

CFS 4000' 20" spl - very predom. various dense subchalky to chalky and tan, lt brn vf-cryptoxln with scatt. small vug. por., N.S.; 2 chips tan, offwhite gran. with inter-particle por., good show lt to dark brn oil on break, no odor; 45" spl - flood Sh: soft red-brn, lesser lt to med gray, soft clayey lt gray

4015' spl - Ls: good influx tan, lt brn vfxln with some vug. and inter-particle por, occ sl oolitic with several chips with dark brn to black spotty stain, sfo on break, no odor; CFS 4015' spls >>>

20' spl - flood orange, tan and lt gray chert, subtransl to opq, sharp; 4028' spl - Ls: flood offwhite chalky; lesser tan, offwhite mic-vfxln dense, subchalky; some tan vf-cryptoxln with some vug. por., N.S.; decr. cherts AA

40' spl - Ls: lt gray, lt to med brn predom. cryptoxln, sl mottled and gran. IP, NVP, N.S.; scatt. tan vf-cryptoxln with some poor vug. por. with lt brn spotty stain, vsl sfo on break, no odor

50' spl - Ls: scatt. chips with shows AA; predom. lt gray, brn cryptoxln, N.S.; Sh: good influx lt green, lt to med gray, red-brn

CFS 4052' spls - >>>

4060' and 4066' spls - Ls: some tan, lt gray cryptoxln with scatt. vug. and moldic por. with pp lt stain, vsl shows minute oil on break, no odor; Sh: influx red-brn, washes red

CFS 4066' 30" spl - Ls: good influx lt to med gray vf-cryptoxln and offwhite, tan mic-vfxln dense, subchalky; sl influx orange and lt gray chert, N.S.; 60" spl - >>>

80'/90' spls - Sh: some black carbon., dark gray, dark red-brn; Ls: influx offwhite micxln subchalky to chalky; tan, lt gray predom. cryptoxln, poor-NVP; Chert: tan, offwhite, orange, N.S.

Ls: mix tan, lt gray vf-cryptoxln, NVP and offwhite mic-vfxln dense, cherty AA; incr. Sh: dark red-brn, red-brn, some dark gray to black

CFS 4100' 30" spl - flood Ls: offwhite, lt gray mic-vfxln dense, subchalky to occ chalky; lesser cryptoxln AA; 60" spl - Ls mix AA, rare fossil moldic por., N.S.

Ls: mix various cryptoxln and tan, offwhite dense, some pp por., N.S.

DST No. 1 Toronto
Interval: 3930'-3970'
Times: 30-60-30-60
IFP: 1/4" blow, died back, dead in 17 minutes
ISIP: no return blow
FFP: no blow
FSIP: no return blow
Recovery: 2' mud
FP: 19-20/21-22 SIP: 270-139
HP: 1941-1925 BHT: 115 deg. F

Heebner Shale 3929' (-1000)

DST No. 2 Lansing "A" and "B"
Interval: 3980'-4015'
Times: 30-60-60-90
IFP: strong blow, B.O.B. in 11 minutes
ISIP: no return blow
FFP: fair to strong blow, B.O.B. in 16 minutes
FSIP: weak return blow, bldg. to 1/4 inch
Recovery: 170' MCW (38m, 62w, trace oil); 62' SMCW (12m, 88w, trace oil); 498' VSMCW (4m, 96w), chl. 25,000; total fluid 730'
FP: 30-182/185-353 SIP: 1240-1229
HP: 1990-1946 BHT: 123 deg. F

Strap at 3970' was 1.02' short to board

7:00 AM at 3970' on 8-21-2013

Lansing 3976' (-1047)

Morgan Mud Check at 3970'
7:40 AM on 8-21-2013

wt	vis	wl	pH	chl
9.0	57	6.8	11.5	1400

PV	YP	GelS	lcm	solids
18	18	11/31	5#	5.0%

CFS 4015' 20" spl - common shows AA; some gray fn gran. with shows and dess. pyrite; common offwhite subchalky to chalky; 45" spl - flood soft red-brn, dark red-brn and gray shales

CFS 4028' 30" spl - Ls: tan, offwhite mic-vfxln subchalky; influx lt gray, tan vf-cryptoxln, NVP, N.S.; persistant orange and tan cherts; 60" spl - cherty Ls mix AA; incr. Sh: med to dark gray, red-brn

CFS 4052' 30" spl - Ls: mix lt gray, lt brn cryptoxln and offwhite, tan mic-vfxln dense, N.S.; some tan, offwhite mic-vfxln with spotty lt stain, nfo; scatt. tan and orange chert; Sh: red-brn, some gray, lt green; 60" spl - Ls: various tan, lt brn, lt gray vf-cryptoxln, rarely pyritic; lt gray, tan gran. and offwhite subchalky to chalky, N.S.

CFS 4066' 60" spl - Ls: various tan, lt gray, some lt brn cryptoxln to sl granular, NVP, N.S.; 1-2 chips with poor edge stain, nfo, no odor; common offwhite subchalky to chalky

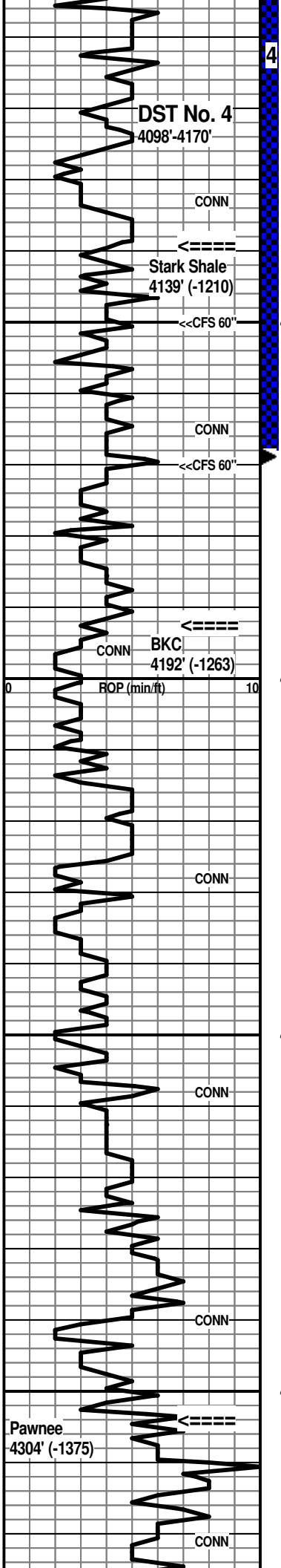
7:00 AM at 4066' on 8-22-2013

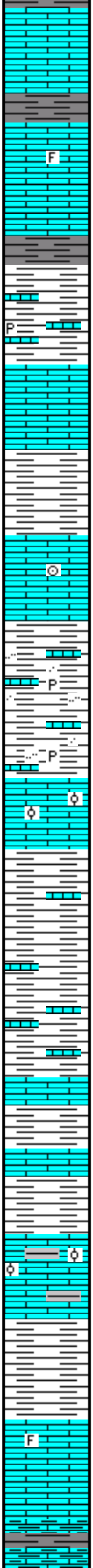
Morgan Mud Check at 4066'
4:20 PM on 8-22-2013

wt	vis	wl	pH	chl
9.2	66	6.4	10.5	1700

PV	YP	GelS	lcm	solids
23	21	10/32	5#	6.4%

DST No. 3 Lansing "F" and "G"
Interval: 4028'-4066'
Times: 30-60-30-60
IFP: 1/4" blow bldg. to 1/2", dead at 25 minutes
ISIP: no return blow
FFP: no blow
FSIP: no return blow
Recovery: 45' mud
FP: 24-30/31-35 SIP: 1239-1218





20' spl - Ls: good influx lt to med brn, gray sl mottled granular to cryptoxln, poor-NVP; common tan, offwhite dense; Sh: sl influx med to dark gray

30' spl - Ls: mix AA, some med brn cryptoxln; Sh: influx med to dark gray, gray-green

40' spl - Ls: influx tan, lt brn fn granular with poor to fair inter-particle and pp por., occ foss., with faint odor, pp stain, sfo on break, patchy to subsat. stain in dry spls; Sh: sl influx red-brn

50' spl - Ls: scatt. tan vf-cryptoxln with vug. and moldic por. with dark brn to black stain; good influx tan, lt gray, lt brn cryptoxln, NVP, N.S.; Sh: med to dark gray, dark red-brn

CFS 4150' 30" spl - Ls: tan, lt gray, lt brn cryptoxln; scatt. shows AA; Sh: sl incr. % dark red-brn, med-dark gray, occ dark purple; 60" spl - Ls: various cryptoxln, mottled IP; Sh: more med to dark red-brn, dark gray to black, pyritic gray

60'/70' spls - Sh: var. red-brn, silty IP; med to dark gray; Ls: offwhite, tan mic-vfxln dense, subchalky; tan, lt gray cryptoxln, NVP; some tan fn gran. (70' spl) with pp por., f-gd sfo on break, no odor, patchy-sat. stain in dry spls; CFS spls >>>

80' spl - trashy with common med to dark gray and red-brn shales; Ls: lt to med gray, lt brn cryptoxln to sl gran. NVP, N.S.; 90' spl - Ls: lt to med brn, lt-med gray gran. to cryptoxln. NVP; fairly common med to dark red-brn and med gray shales

4200' spl - Ls: mix AA, some smooth lt brn cryptoxln, trace crinoid fragments; shales AA

10' spl - Ls: lt to med gray, lt brn vf-cryptoxln, sl mottled and gran. IP; some yellow tinted dense gray; Sh: red-brn, dark gray, occ black

20' spl - Sh: influx red-brn silty to vf sandy; more gray to black, pyritic IP; common various cryptoxln Ls's

Ls: influx lt to med gray vf-cryptoxln; lt brn mottled gran. to oolitic, NVP, N.S.

40' spl - Ls: mix AA with influx Sh: lt to med gray, some yellow/gray, occ purple and soft red-brn, washes red

50' spl - predom. various shales AA; Ls: gray and lt brn granular, NVP, N.S.

Sh: red-brn, lt to med gray with Ls: lt to med gray vf-cryptoxln

70' spl - Sh: predom. red-brn silty IP with lt to med gray and purple; Ls: gray, brn granular, NVP, N.S.

80' spl - mix Sh: red-brn, lt to med gray and Ls: lt to med gray granular and med brn, gray cryptoxln, NVP, N.S.

90' spl - Ls: lt to med brn cryptoxln to granular and oolitic, NVP; lt to med gray vfxln dense, shaly; Sh: lt to med gray, purplish gray, purple

4300' spl - Ls/Sh mix AA with more purple shale

10' spl - still predom. multicolored shales with Ls: offwhite, lt gray mic-vfxln and lt gray vf-cryptoxln

20' spl - flood Ls: tan, lt brn granular, sl foss. IP, NVP, N.S.; lesser offwhite granular with micxln matrix, N.S.

30' spl - Ls: mix AA with strong influx lt to med gray shaly Ls and calcar. shale

HP: 2019-2005 BHT: 116 deg. F

DST No. 4 Lansing "J" and "K"
Interval: 4098'-4170'
Times: 30-60-60-90
IFP: fair blow bldg. to 7 1/2"
ISIP: no return blow
FFP: fair blow bldg. to 11" in 42 minutes
FSIP: 1" return blow
Recovery: 95' GIP; 31' SLG&MCO (6g, 4m, 90o); 117' SLG&OCM (4g, 37o, 59m); 59' SLGO&WCM (7g, 7o, 31w, 55m); 58' SLO&MCW (2o, 22m, 76w), chl 19,500; oil gravity 35.8 deg.
FP: 23-73/79-130 SIP: 1253-1216
HP: 2069-2034 BHT: 122 deg. F

Stark Shale 4139' (-1210)

CFS 4170' 30" spl - Ls: predom. tan, lt gray cryptoxln, some gran. NVP, N.S.; occ tan fn-vfxln with pp and inter-particle por. with brn pp stain, dark brn gen. listless oil on break, no odor; Sh: scatt. med gray, red-brn; 60" spl - Ls: var. AA with lesser offwhite mic-vfxln dense; Sh: sl incr. med to dark red-brn and med gray

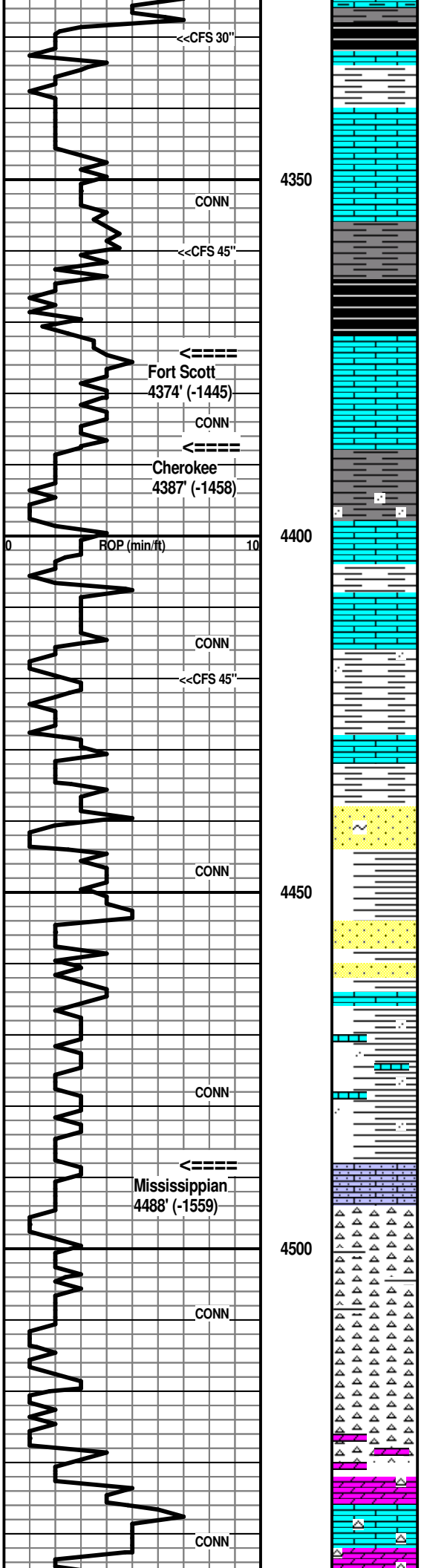
7:00 AM at 4170' on 8-23-2013

Morgan Mud Check at 4170'
1:15 PM on 8-23-2013

wt	vis	wl	pH	chl
9.2	61	6.4	10.5	1400
PV	YP	GelS	lcm	solids
19	19	13/31	6#	6.4%

BKC 4192' (-1263)

Pawnee 4304' (-1375)



4350

4400

4450

4500

CFS 4330' 30" spl - flood Sh: dark gray to black carbon.

50' spl - Sh: med to dark gray and black; Ls: new med brn and gray mottled granular, poor-NVP, N.S.

60' spl - flood Ls: tan fn granular with inter-particle por.; other offwhite, tan mic-vfxln dense, subchalky; some lt gray, tan cryptoxln

CFS 4360' 20" spl - Ls: lt to med gray, offwhite mic-vfxln dense, shaly; occ gray-brn cryptoxln and tan granular, NVP, N.S.; 45" spl - flood Sh: lt to med gray, some dark gray calcar.

80' spl - flood Sh: dark gray to black carbon.

90' spl - Ls: lt to med gray and lt to med brn cryptoxln to granular, NVP, N.S.

4400' spl - Ls: lt to med brn, gray-brn cryptoxln and offwhite, tan mic-vfxln dense; incr. Sh: med to dark gray to black carbon.

10' spl - Sh: med to dark gray, soft lt gray, clayey; Sst: scatt. coarse to very coarse qtz grains, one cluster tan fg, friable, N.S.

20' spl - Ls: tan, lt brn cryptoxln, some granular, poor to NVP, N.S.; lesser offwhite mic-vfxln dense, subchalky to chalky; trace red-brn fg Sst, N.S.; Sh: med to dark gray, soft red-brn

CFS 4420' 20" spl - flood Ls: predom. tan, lt brn cryptoxln and offwhite, tan, lt gray mic-vfxln dense; 45" spl - flood Sh: vc gray to black, influx dark red-brn, purple, gray-green; scatt. very coarse qtz grains

40' spl - Sh: multi-colored, predom. red-brn with dark yellow, purple; scatt. qtz grains AA; trace lt gray vfg soft Sst with shale fragments

50' spl - Ls: minor tan, gray cryptoxln; Sh: multi-colored AA; influx Sst: orange tinted vf-med grnd, sl glauc.; some offwhite vf-fg, sl glauc., N.S.

60' spl - Sh: med to dark red-brn, dark yellow and purple, some lt green subwaxy

70' spl - Sh: mc AA with some mottled purple/yellow/ochre; influx Sst: clear to yellow, tan and red tinted fn-coarse grnd, poorly sorted, N.S.

80' spl - Sh: mc AA with influx purple; Sst: influx red-brn, fn-coarse grnd and red-brn quartzitic, N.S.; Ls: vari-colored cryptoxln and offwhite mic-vfxln dense

90' spl - mix Ls: tan, lt brn, lt gray cryptoxln and mc shales; Sst: scatt. tan fn-coarse clusters and very coarse single grains, N.S.

4500' spl - flood Sh: mottled med to dark red-brn, brick red, dark yellow, purple; scatt. very coarse qtz grains

10' spl - Sh: mc AA with more purple and orange-yellow; influx offwhite vf-fg calcar. Sst to finely sandy Ls (looks like possible St. Gen. remnant)

20' spl - flood Chert: offwhite, tan opq, some offwhite sl weath. with pp por., N.S.; spls sill shaly

30' spl - Chert: offwhite, tan, mottled offwhite/yellow opq; some offwhite weath. AA

40' spl - predom. cherts AA, weath. lP, N.S.; scatt. offwhite, tan vfxln Dolomite and offwhite sl glauc. Dolomite, N.S.

50' spl - mix Dolomite AA with some tan vfxln Ls; cherty AA

60' spl - mix Ls: offwhite, tan mic-vfxln dense with Dolo:

7:00 AM at 4325' on 8-24-2013

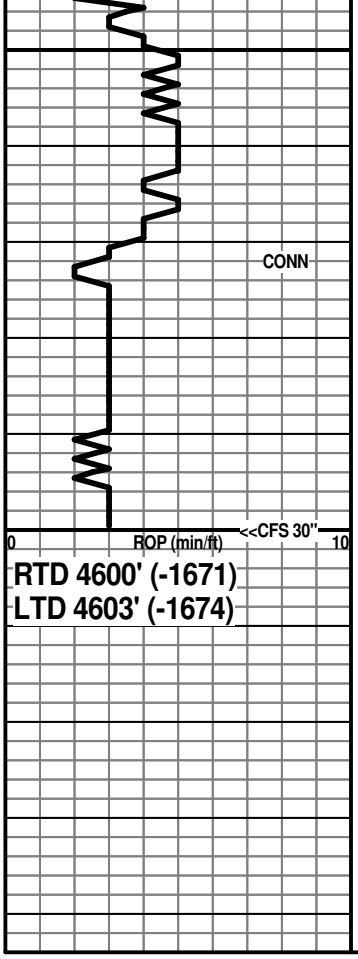
Fort Scott 4374' (-1445)

Cherokee 4387' (-1458)

Morgan Mud Check at 4385'
12:05 PM on 8-24-2013

wt	vis	wl	pH	chl
9.2	67	6.4	10.0	1400
PV	YP	GelS	lcm	solids
19	22	15/35	5#	6.4%

Mississippian 4498' (-1559)



4550

4600

offwhite, tan fn-vfxln, some vug. por., N.S.; very cherty

70' spl - Ls: tan, offwhite mic-vfxln and Dolo: tan fn-vfxln dense to some fair small vug. por.; much decr. in chert

80' spl - Ls: AA with some tan granular; influx Dolo: lt gray vfxln dense; incr. Chert: lt gray, tan opq

90' spl - flood Dolo: lt brn, lt gray cryptoxln; some tan with interxln por., N.S.; Chert incr. offwhite, tan opq

4600' spl - Dolo: mix AA with incr. tan fnxln, sucrosic IP with good interxln por., sl cherty AA

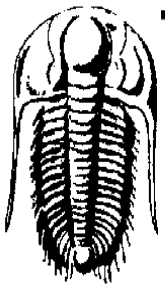
CFS 4600' spls - Dolo: lt brn, lt gray vf-cryptoxln; lesser tan fnxln, sucrosic with interxln and vug. por., N.S.; sl cherty AA

After review of DST results and open hole log evaluation, the decision was made to run 5 1/2" casing for further testing through perforations.

Respectfully submitted,

Wesley D. Hansen
Petroleum Geologist
Kansas License No. 418

RTD reached at 11:45 PM on 8-24-2013
CFS - Short trip 12 stands - CTCH 75"
Drop Survey - TOFL



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

Juenemann #1-7

7-5s-30w Decatur,KS

Start Date: 2013.08.20 @ 22:29:00

End Date: 2013.08.21 @ 05:30:45

Job Ticket #: 52665 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.03 @ 09:31:14

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52665 **DST#: 1**

Test Start: 2013.08.20 @ 22:29:00

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:32:15
Time Test Ended: 05:30:45

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

Interval: 3930.00 ft (KB) To 3970.00 ft (KB) (TVD)
Total Depth: 3970.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

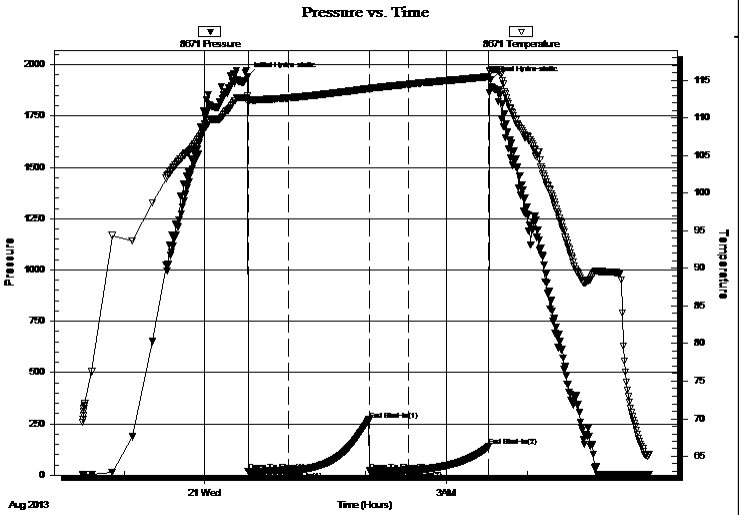
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8671 **Inside**

Press@RunDepth: 21.65 psig @ 3931.00 ft (KB)
Start Date: 2013.08.20 End Date: 2013.08.21
Start Time: 22:29:05 End Time: 05:30:44

Capacity: 8000.00 psig
Last Calib.: 2013.08.21
Time On Btm: 2013.08.21 @ 00:32:00
Time Off Btm: 2013.08.21 @ 03:32:30

TEST COMMENT: 30 - IF: 1/4" Blow at open, slowly died back, dead at 17 min.
60 - ISI: No blow back
30 - FF: No blow
60 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1940.50	112.90	Initial Hydro-static
1	19.18	112.02	Open To Flow (1)
31	20.26	112.67	Shut-In(1)
91	269.76	113.89	End Shut-In(1)
91	20.61	113.73	Open To Flow (2)
120	21.65	114.48	Shut-In(2)
180	139.18	115.47	End Shut-In(2)
181	1925.19	116.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.01

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52665 **DST#: 1**

Test Start: 2013.08.20 @ 22:29:00

GENERAL INFORMATION:

Formation: **Toronto**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:32:15
Time Test Ended: 05:30:45

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

Interval: 3930.00 ft (KB) To 3970.00 ft (KB) (TVD)
Total Depth: 3970.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

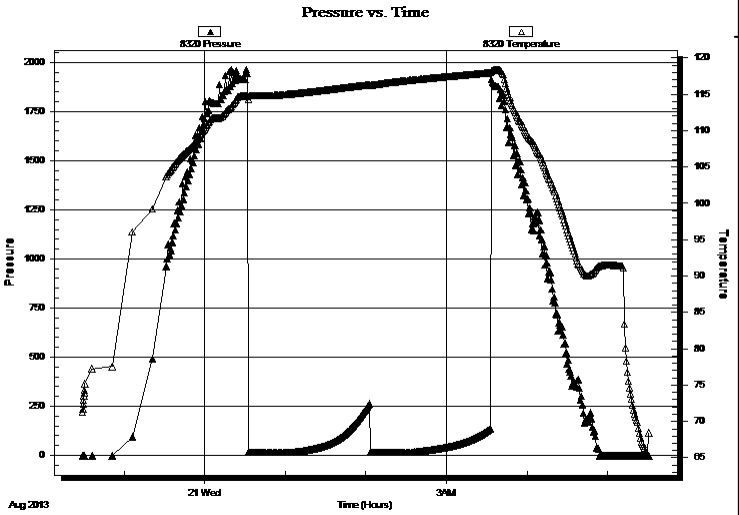
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8320 **Outside**

Press@RunDepth: psig @ 3931.00 ft (KB)
Start Date: 2013.08.20 End Date: 2013.08.21
Start Time: 22:29:05 End Time: 05:30:29

Capacity: 8000.00 psig
Last Calib.: 2013.08.21
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: 1/4" Blow at open, slowly died back, dead at 17 min.
60 - ISI: No blow back
30 - FF: No blow
60 - FSI: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.01

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52665 **DST#: 1**

Test Start: 2013.08.20 @ 22:29:00

Tool Information

Drill Pipe:	Length:	3695.00 ft	Diameter:	3.80 inches	Volume:	51.83 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	234.00 ft	Diameter:	2.25 inches	Volume:	1.15 bbl	Weight to Pull Loose:		80000.00 lb
					Total Volume:	52.98 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		27.00 ft					String Weight:	Initial	64000.00 lb
Depth to Top Packer:		3930.00 ft						Final	64000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		40.00 ft							
Tool Length:		68.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3907.00		
Hydraulic tool	5.00			3912.00		
Jars	5.00			3917.00		
Safety Joint	3.00			3920.00		
Packer	5.00			3925.00	28.00	Bottom Of Top Packer
Packer	5.00			3930.00		
Stubb	1.00			3931.00		
Recorder	0.00	8671	Inside	3931.00		
Recorder	0.00	8320	Outside	3931.00		
Perforations	36.00			3967.00		
Bullnose	3.00			3970.00	40.00	Bottom Packers & Anchor
Total Tool Length:	**68.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52665 **DST#: 1**

Test Start: 2013.08.20 @ 22:29:00

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:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.77 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

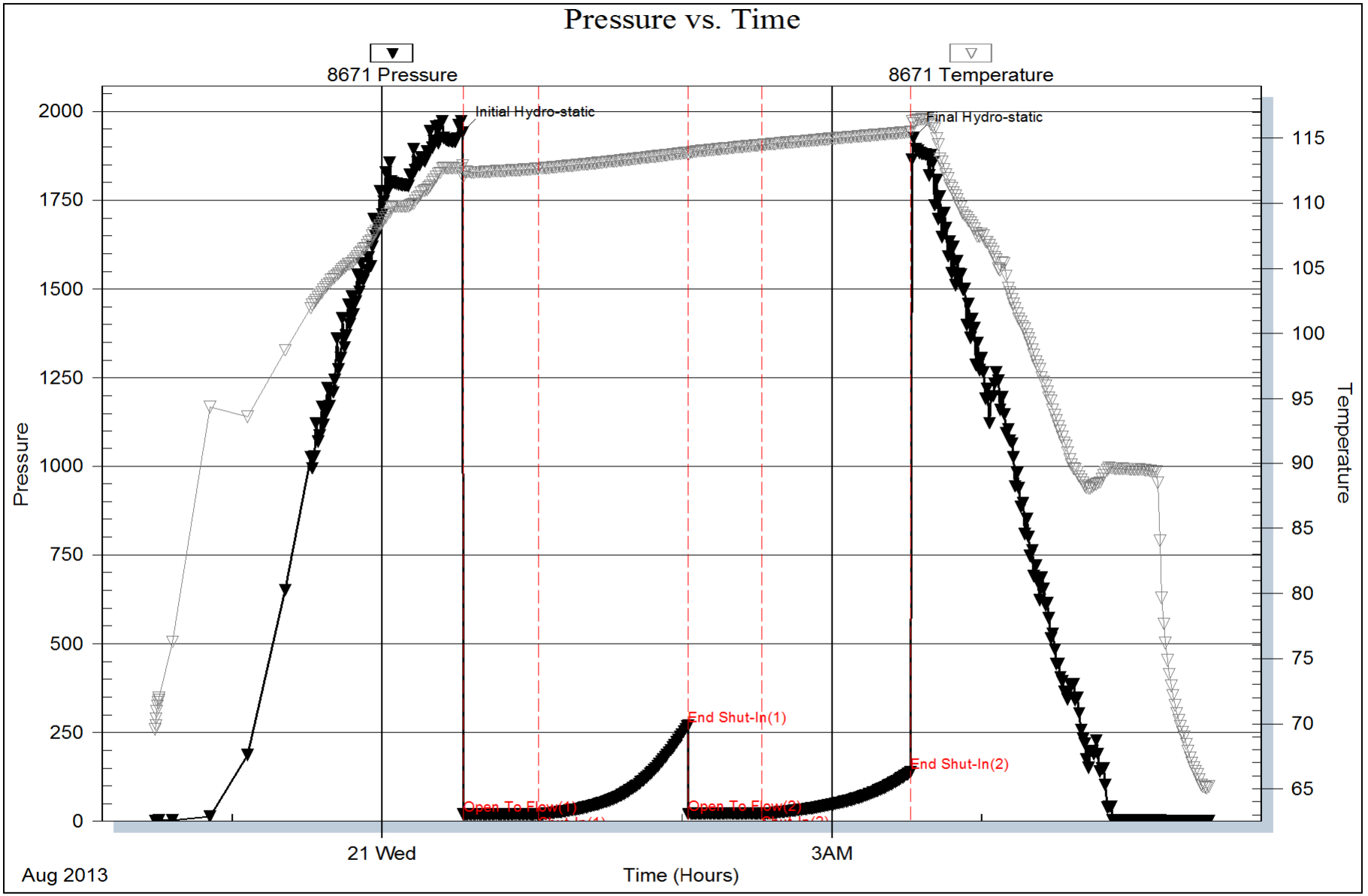
Recovery Table

Length ft	Description	Volume bbl
2.00	Mud 100%	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

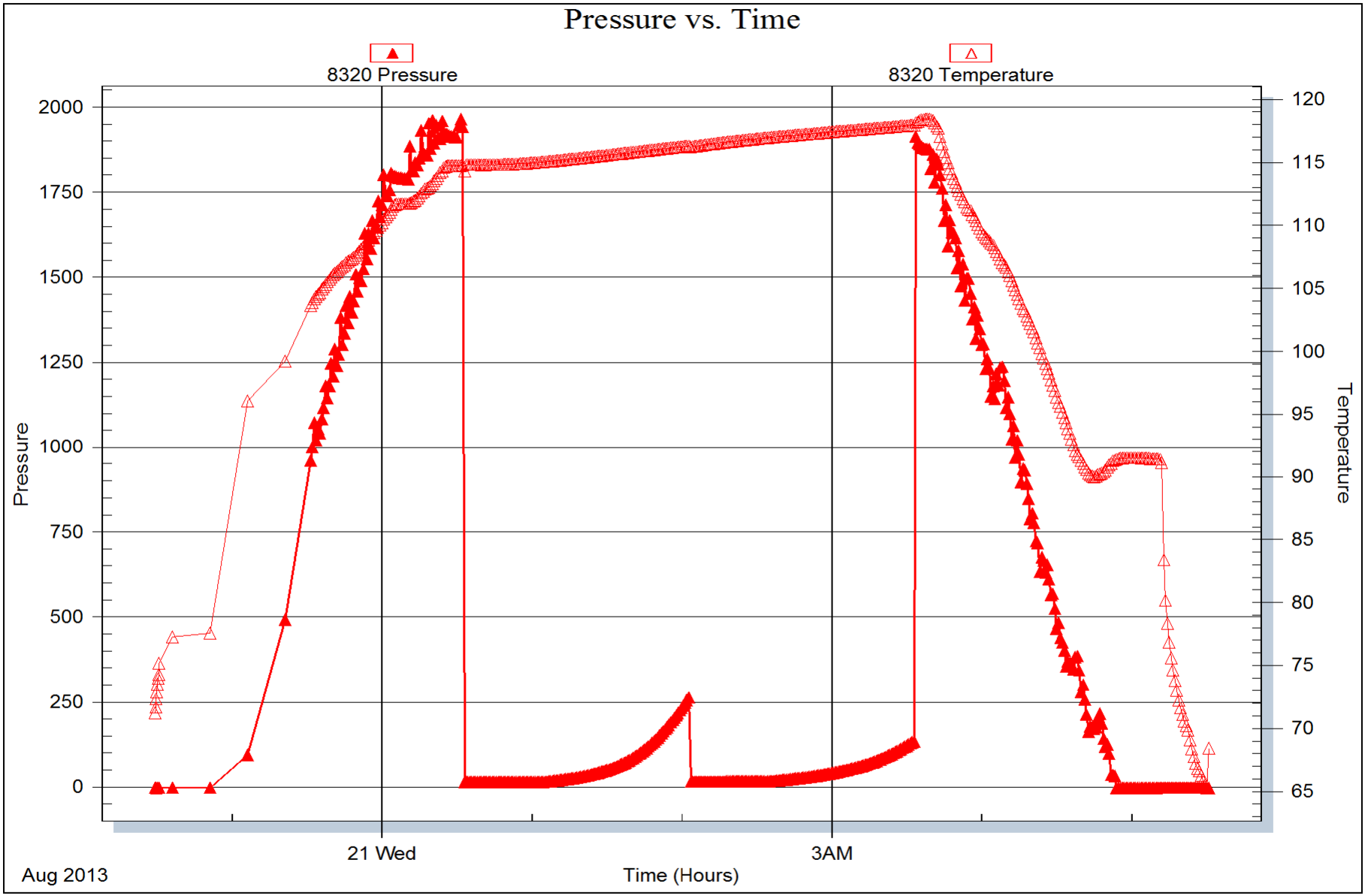
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8671 **Inside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 52665 Printed: 2013.09.03 @ 09:31:16

Serial #: 8320 **Outside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 1



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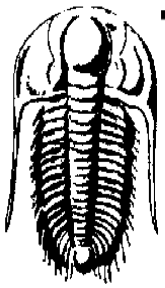


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

Juenemann #1-7

7-5s-30w Decatur,KS

Start Date: 2013.08.21 @ 14:26:00
End Date: 2013.08.21 @ 22:18:45
Job Ticket #: 52666 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.03 @ 09:27:12

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52666 **DST#: 2**

Test Start: 2013.08.21 @ 14:26:00

GENERAL INFORMATION:

Formation: **LKC "A - B"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:16:30
Time Test Ended: 22:18:45

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

Interval: 3980.00 ft (KB) To 4015.00 ft (KB) (TVD)
Total Depth: 4015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

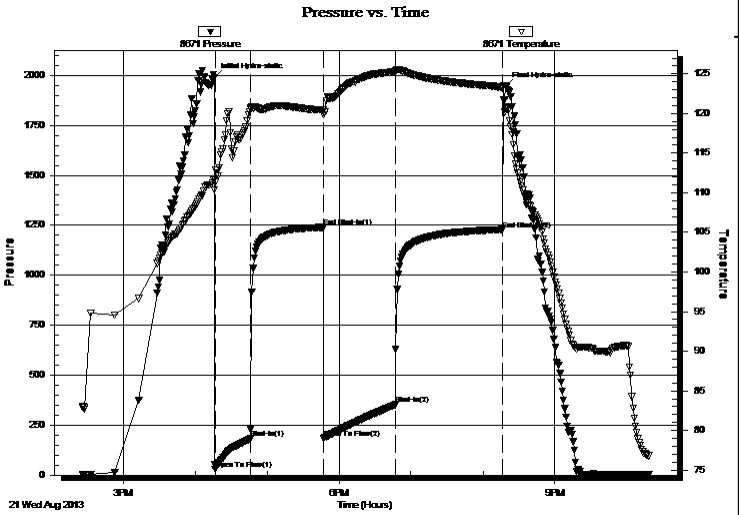
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8671 **Inside**

Press@RunDepth: 352.74 psig @ 3981.00 ft (KB)
Start Date: 2013.08.21 End Date: 2013.08.21
Start Time: 14:26:05 End Time: 22:18:44

Capacity: 8000.00 psig
Last Calib.: 2013.08.21
Time On Btm: 2013.08.21 @ 16:16:00
Time Off Btm: 2013.08.21 @ 20:19:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 13 min.
60 - ISI: No blow back
60 - FF: Blow built to BOB in 16 min.
90 - FSI: Weak blow back, built to 1/4"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1990.10	111.73	Initial Hydro-static
1	29.84	111.31	Open To Flow (1)
30	182.36	120.61	Shut-In(1)
91	1239.99	120.44	End Shut-In(1)
92	184.82	119.83	Open To Flow (2)
151	352.74	125.24	Shut-In(2)
241	1228.74	123.32	End Shut-In(2)
243	1945.59	120.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
498.00	Water 96%w , 4%m	4.85
62.00	SMCW w/trace oil 88%w , 12%m	0.87
170.00	MCW w/trace oil 62%w , 38%m	2.38

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52666 **DST#: 2**

Test Start: 2013.08.21 @ 14:26:00

GENERAL INFORMATION:

Formation: **LKC "A - B"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 16:16:30
Time Test Ended: 22:18:45

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

Interval: 3980.00 ft (KB) To 4015.00 ft (KB) (TVD)
Total Depth: 4015.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

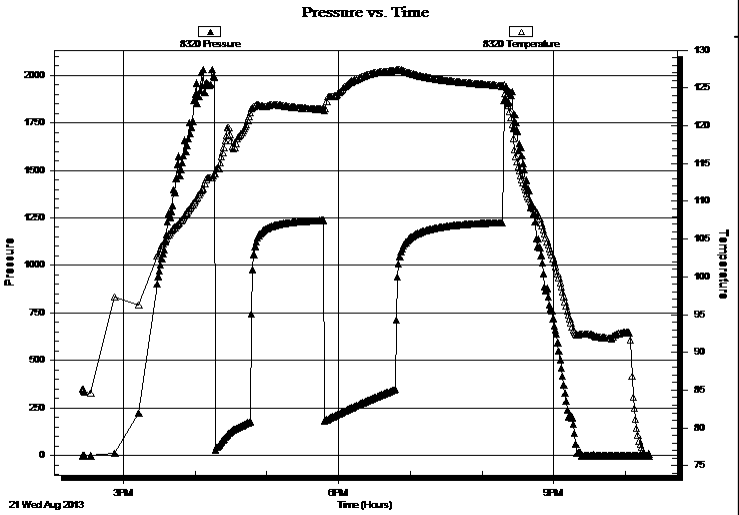
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8320 **Outside**

Press@RunDepth: psig @ 3981.00 ft (KB)
Start Date: 2013.08.21 End Date: 2013.08.21
Start Time: 14:26:05 End Time: 22:19:29

Capacity: 8000.00 psig
Last Calib.: 2013.08.21
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to BOB (11") in 13 min.
60 - ISI: No blow back
60 - FF: Blow built to BOB in 16 min.
90 - FSI: Weak blow back, built to 1/4"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
498.00	Water 96%w , 4%m	4.85
62.00	SMCW w/trace oil 88%w , 12%m	0.87
170.00	MCW w/trace oil 62%w , 38%m	2.38

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52666 **DST#: 2**

Test Start: 2013.08.21 @ 14:26:00

Tool Information

Drill Pipe:	Length:	3726.00 ft	Diameter:	3.80 inches	Volume:	52.27 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	234.00 ft	Diameter:	2.25 inches	Volume:	1.15 bbl	Weight to Pull Loose:		70000.00 lb
					Total Volume:	53.42 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		8.00 ft					String Weight:	Initial	66000.00 lb
Depth to Top Packer:		3980.00 ft						Final	68000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		35.00 ft							
Tool Length:		63.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3957.00		
Hydraulic tool	5.00			3962.00		
Jars	5.00			3967.00		
Safety Joint	3.00			3970.00		
Packer	5.00			3975.00	28.00	Bottom Of Top Packer
Packer	5.00			3980.00		
Stubb	1.00			3981.00		
Recorder	0.00	8671	Inside	3981.00		
Recorder	0.00	8320	Outside	3981.00		
Perforations	31.00			4012.00		
Bullnose	3.00			4015.00	35.00	Bottom Packers & Anchor
Total Tool Length:	**63.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52666 **DST#: 2**

Test Start: 2013.08.21 @ 14:26:00

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:	25000 ppm
Viscosity:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.76 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
498.00	Water 96%w , 4%m	4.854
62.00	SMCW w /trace oil 88%w , 12%m	0.870
170.00	MCW w /trace oil 62%w , 38%m	2.385

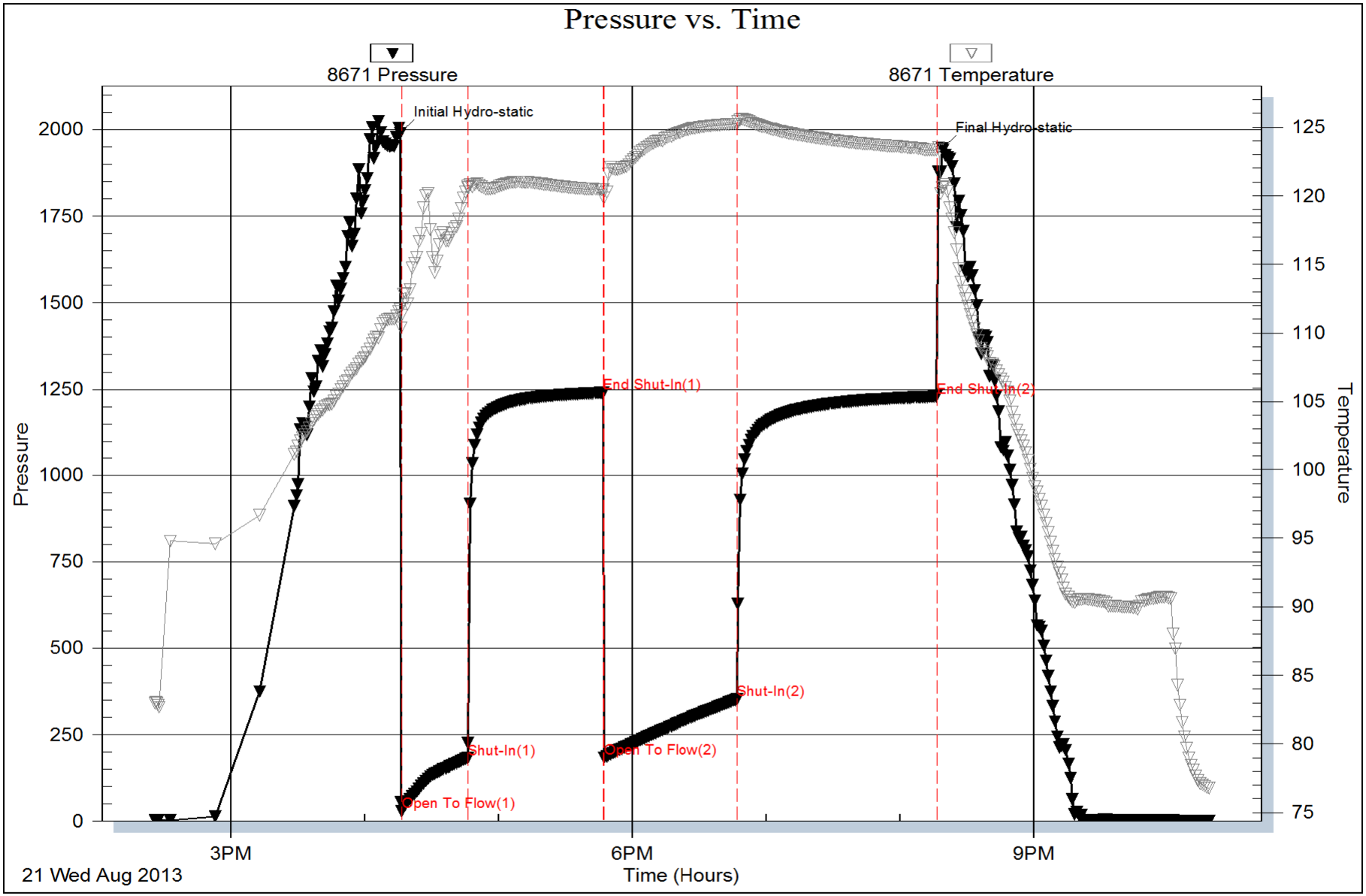
Total Length: 730.00 ft Total Volume: 8.109 bbl

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

Laboratory Name: Laboratory Location:

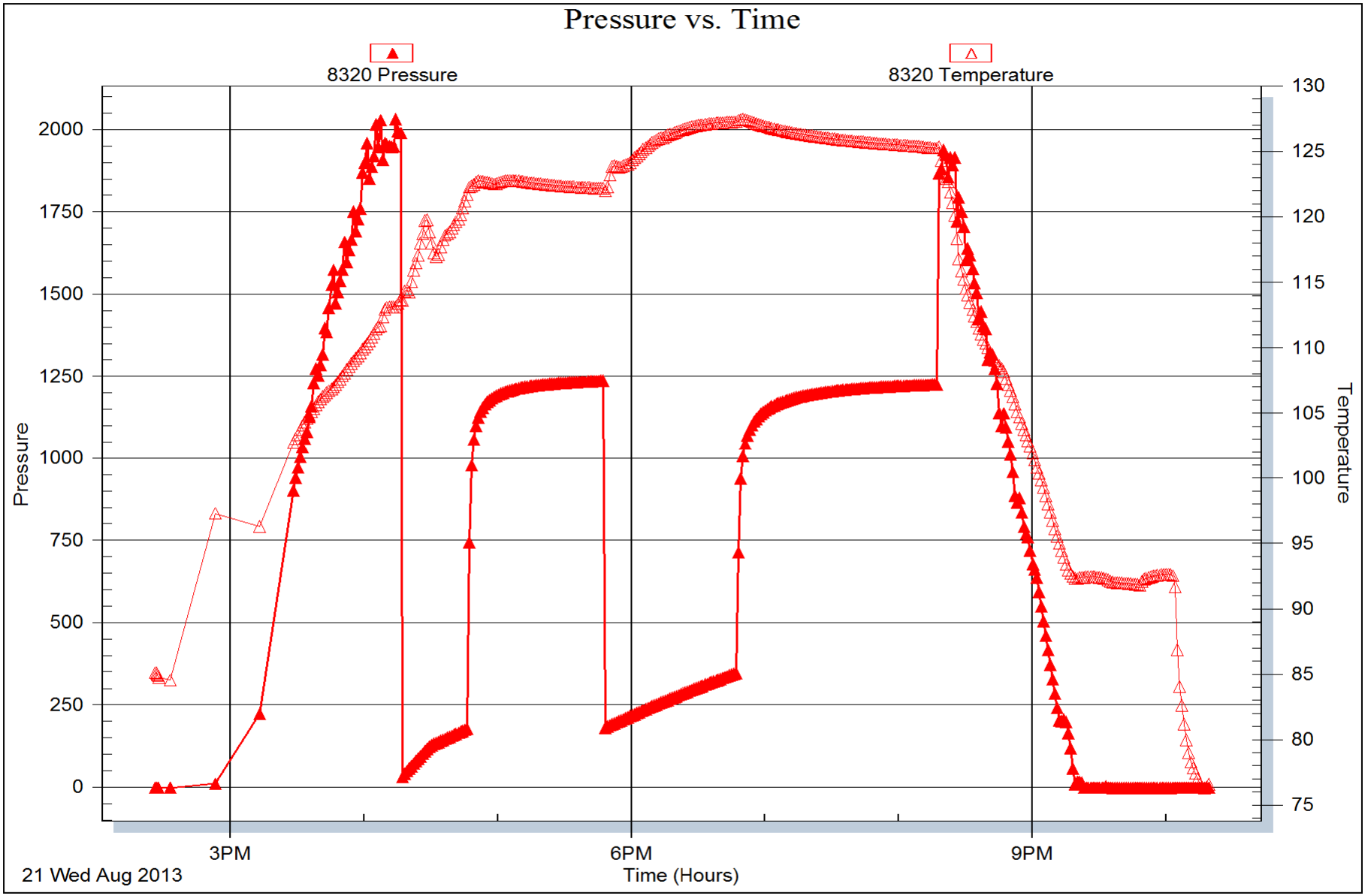
Recovery Comments: RW = .248 ohms @ 79 deg F

Serial #: 8671 **Inside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 52666 Printed: 2013.09.03 @ 09:27:13

Serial #: 8320 **Outside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 2



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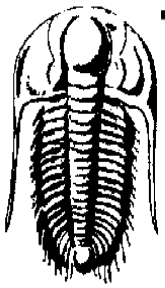


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

Juenemann #1-7

7-5s-30w Decatur,KS

Start Date: 2013.08.22 @ 10:00:00
End Date: 2013.08.22 @ 16:49:00
Job Ticket #: 52667 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.03 @ 09:26:18

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52667 **DST#: 3**

Test Start: 2013.08.22 @ 10:00:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:57:00
Time Test Ended: 16:49:00

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

Interval: 4028.00 ft (KB) To 4066.00 ft (KB) (TVD)
Total Depth: 4066.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

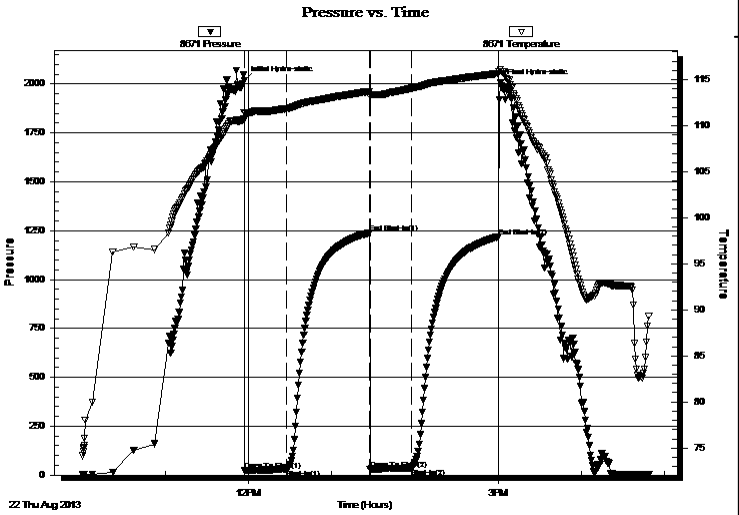
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8671 **Inside**

Press@RunDepth: 34.76 psig @ 4029.00 ft (KB)
Start Date: 2013.08.22 End Date: 2013.08.22
Start Time: 10:00:05 End Time: 16:48:59

Capacity: 8000.00 psig
Last Calib.: 2013.08.22
Time On Btm: 2013.08.22 @ 11:56:45
Time Off Btm: 2013.08.22 @ 15:01:30

TEST COMMENT: 30 - IF: 1/4" Blow at open, built to 1/2", slowly died back, dead at 25 min.
60 - ISI: No blow back
30 - FF: No blow
60 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2019.22	111.42	Initial Hydro-static
1	24.06	110.65	Open To Flow (1)
31	29.53	111.84	Shut-In(1)
91	1239.40	113.73	End Shut-In(1)
91	30.87	113.16	Open To Flow (2)
121	34.76	114.07	Shut-In(2)
184	1217.83	115.65	End Shut-In(2)
185	2004.51	116.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Mud 100%	0.22

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52667 **DST#: 3**

Test Start: 2013.08.22 @ 10:00:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:57:00
Time Test Ended: 16:49:00

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

Interval: 4028.00 ft (KB) To 4066.00 ft (KB) (TVD)
Total Depth: 4066.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

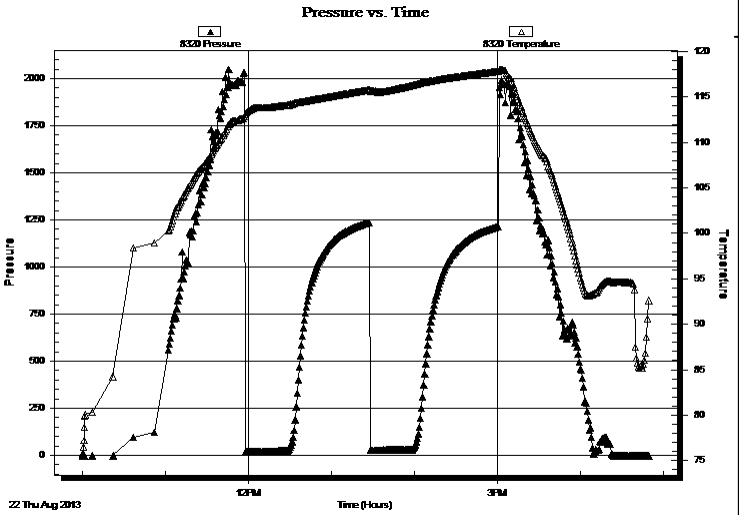
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8320 **Outside**

Press@RunDepth: psig @ 4029.00 ft (KB)
Start Date: 2013.08.22 End Date: 2013.08.22
Start Time: 10:00:05 End Time: 16:49:44

Capacity: 8000.00 psig
Last Calib.: 2013.08.22
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: 1/4" Blow at open, built to 1/2", slowly died back, dead at 25 min.
60 - ISI: No blow back
30 - FF: No blow
60 - FSI: No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Mud 100%	0.22

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52667 **DST#: 3**

Test Start: 2013.08.22 @ 10:00:00

Tool Information

Drill Pipe:	Length:	3789.00 ft	Diameter:	3.80 inches	Volume:	53.15 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	234.00 ft	Diameter:	2.25 inches	Volume:	1.15 bbl	Weight to Pull Loose:		72000.00 lb
					Total Volume:	54.30 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		23.00 ft					String Weight:	Initial	66000.00 lb
Depth to Top Packer:		4028.00 ft						Final	66000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		38.00 ft							
Tool Length:		66.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4005.00		
Hydraulic tool	5.00			4010.00		
Jars	5.00			4015.00		
Safety Joint	3.00			4018.00		
Packer	5.00			4023.00	28.00	Bottom Of Top Packer
Packer	5.00			4028.00		
Stubb	1.00			4029.00		
Recorder	0.00	8671	Inside	4029.00		
Recorder	0.00	8320	Outside	4029.00		
Perforations	34.00			4063.00		
Bullnose	3.00			4066.00	38.00	Bottom Packers & Anchor
Total Tool Length:	**66.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52667 **DST#: 3**

Test Start: 2013.08.22 @ 10:00:00

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:	57.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.78 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

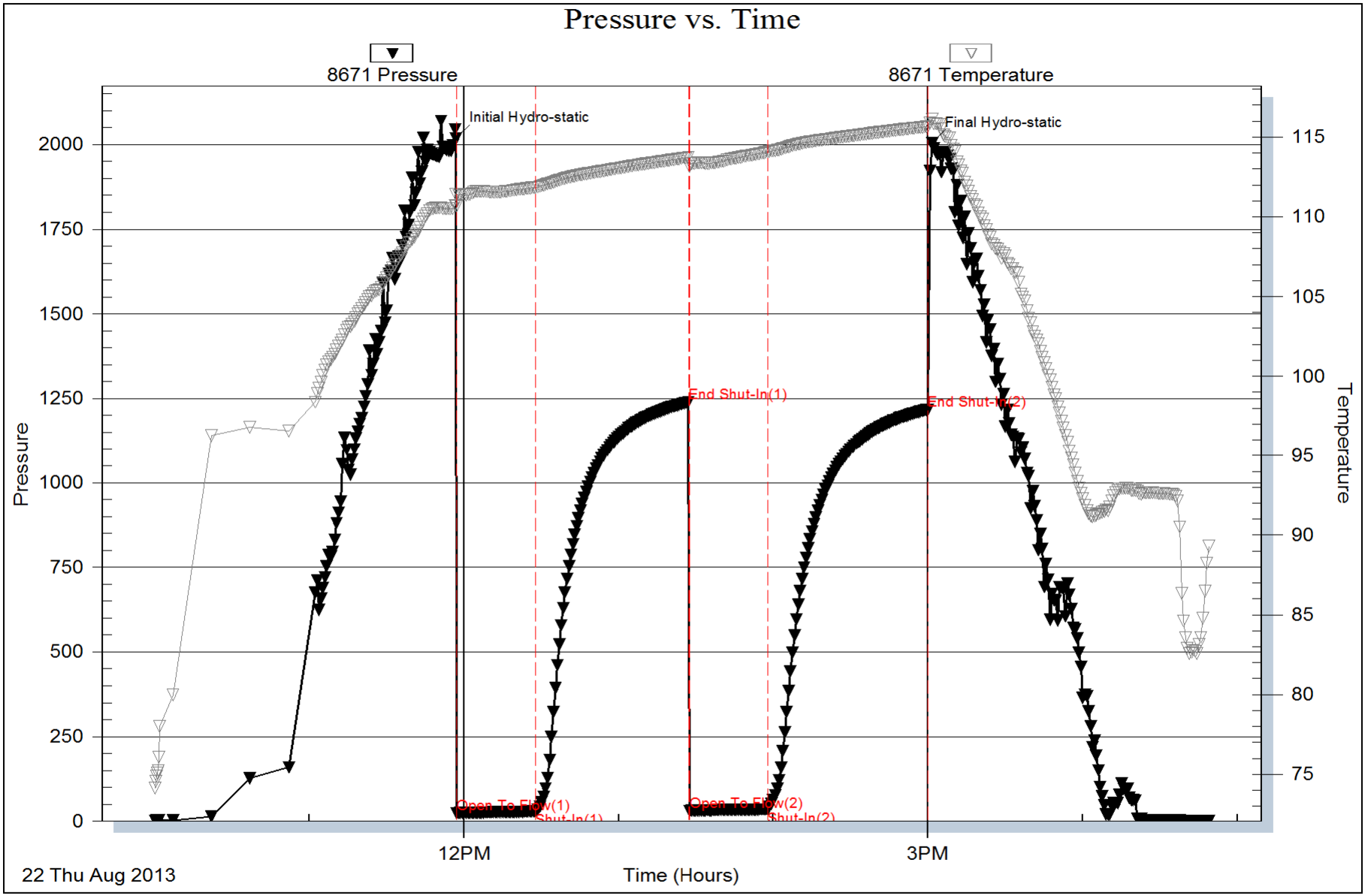
Recovery Table

Length ft	Description	Volume bbl
45.00	Mud 100%	0.221

Total Length: 45.00 ft Total Volume: 0.221 bbl

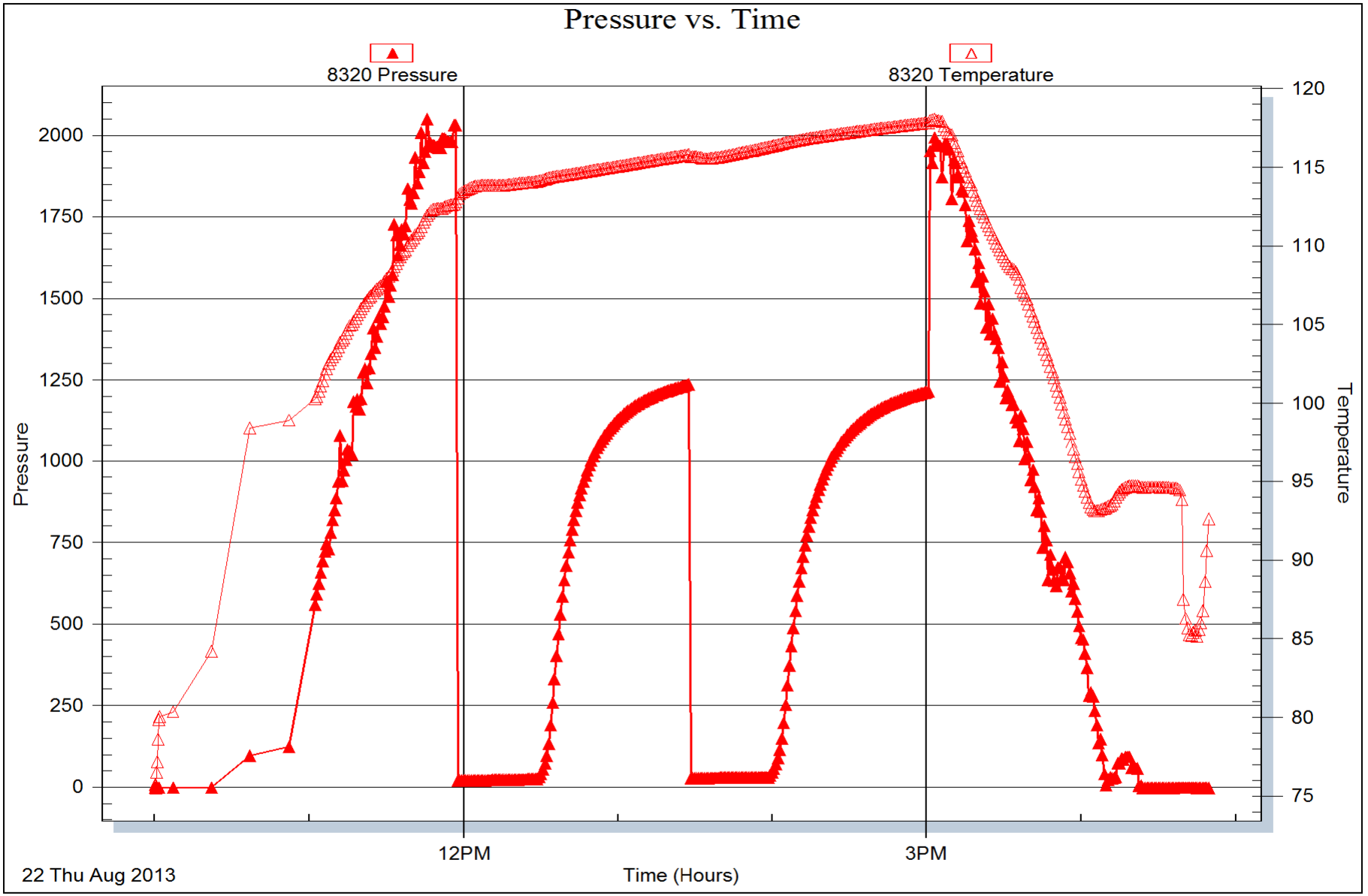
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8671 **Inside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 3

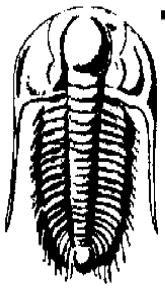


Trilobite Testing, Inc Ref. No: 52667 Printed: 2013.09.03 @ 09:26:20

Serial #: 8320 **Outside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 52667 Printed: 2013.09.03 @ 09:26:20



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co., Inc.**

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

Juenemann #1-7

7-5s-30w Decatur,KS

Start Date: 2013.08.23 @ 08:47:00

End Date: 2013.08.23 @ 16:35:30

Job Ticket #: 52668 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.03 @ 09:17:29

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52668 **DST#: 4**

Test Start: 2013.08.23 @ 08:47:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:31:30
Time Test Ended: 16:35:30

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

Interval: 4098.00 ft (KB) To 4170.00 ft (KB) (TVD)
Total Depth: 4170.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

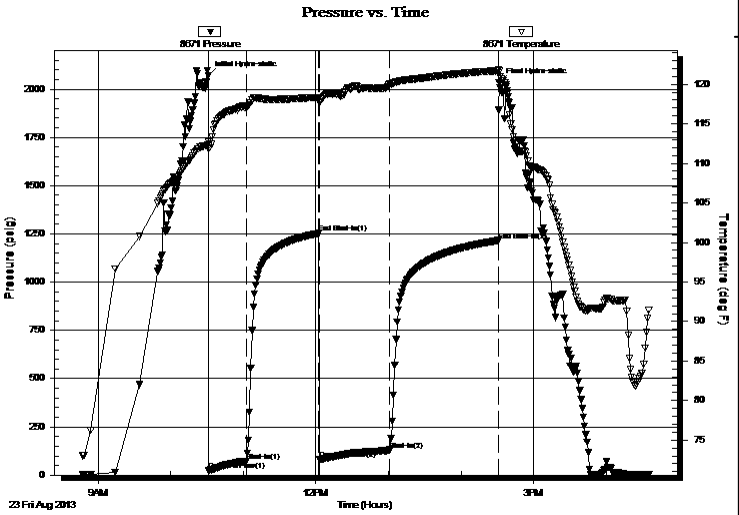
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8671 **Inside**

Press@RunDepth: 129.91 psig @ 4099.00 ft (KB)
Start Date: 2013.08.23 End Date: 2013.08.23
Start Time: 08:47:05 End Time: 16:35:29

Capacity: 8000.00 psig
Last Calib.: 2013.08.23
Time On Btm: 2013.08.23 @ 10:31:15
Time Off Btm: 2013.08.23 @ 14:31:30

TEST COMMENT: 30 - IF: Blow built to 7"
60 - ISI: No blow back
60 - FF: Blow built to BOB (11") in 42 min.
90 - FSI: Blow back built to 1"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2068.87	112.70	Initial Hydro-static
1	22.66	111.86	Open To Flow (1)
31	73.23	116.96	Shut-In(1)
92	1253.02	118.34	End Shut-In(1)
92	79.63	117.72	Open To Flow (2)
150	129.91	120.02	Shut-In(2)
240	1215.71	121.71	End Shut-In(2)
241	2033.51	121.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
58.00	SO/MCW 76%w , 22%m, 2%o	0.29
59.00	SO/WCM 55%m, 31%w , 7%o, 7%g	0.29
117.00	OCM 59%m, 37%o, 4%g	0.58
31.00	CO 90%o, 6%g, 4%m	0.43
0.00	GIP = 95'	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52668 **DST#: 4**

Test Start: 2013.08.23 @ 08:47:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:31:30
Time Test Ended: 16:35:30

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

Interval: 4098.00 ft (KB) To 4170.00 ft (KB) (TVD)
Total Depth: 4170.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

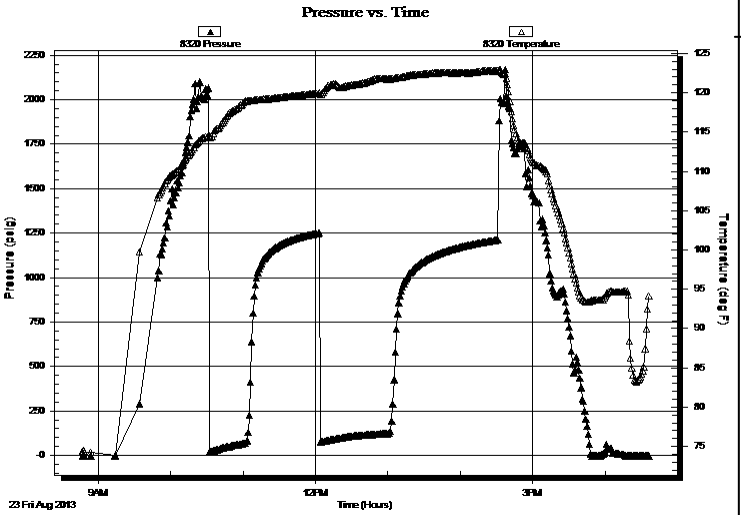
Reference Elevations: 2929.00 ft (KB)
2918.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 8320 **Outside**

Press@RunDepth: psig @ 4099.00 ft (KB)
Start Date: 2013.08.23 End Date: 2013.08.23
Start Time: 08:47:05 End Time: 16:36:29

Capacity: 8000.00 psig
Last Calib.: 2013.08.23
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to 7"
60 - ISI: No blow back
60 - FF: Blow built to BOB (11") in 42 min.
90 - FSI: Blow back built to 1"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
58.00	SO/MCW 76%w , 22%m, 2%o	0.29
59.00	SO/WCM 55%m, 31%w , 7%o, 7%g	0.29
117.00	OCM 59%m, 37%o, 4%g	0.58
31.00	CO 90%o, 6%g, 4%m	0.43
0.00	GIP = 95'	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52668 **DST#: 4**

Test Start: 2013.08.23 @ 08:47:00

Tool Information

Drill Pipe:	Length:	3853.00 ft	Diameter:	3.80 inches	Volume:	54.05 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	234.00 ft	Diameter:	2.25 inches	Volume:	1.15 bbl	Weight to Pull Loose:		90000.00 lb
					Total Volume:	55.20 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		17.00 ft					String Weight:	Initial	67000.00 lb
Depth to Top Packer:		4098.00 ft						Final	70000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		72.00 ft							
Tool Length:		100.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4075.00		
Hydraulic tool	5.00			4080.00		
Jars	5.00			4085.00		
Safety Joint	3.00			4088.00		
Packer	5.00			4093.00	28.00	Bottom Of Top Packer
Packer	5.00			4098.00		
Stubb	1.00			4099.00		
Recorder	0.00	8671	Inside	4099.00		
Recorder	0.00	8320	Outside	4099.00		
Perforations	34.00			4133.00		
Blank Spacing	33.00			4166.00		
Perforations	1.00			4167.00		
Bullnose	3.00			4170.00	72.00	Bottom Packers & Anchor
Total Tool Length:	**100.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

250 N. Water Suite 300
Wichita, KS 67202

ATTN: Wes Hansen

7-5s-30w Decatur,KS

Juenemann #1-7

Job Ticket: 52668 **DST#: 4**

Test Start: 2013.08.23 @ 08:47:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	35.8 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	19500 ppm
Viscosity:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.40 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1700.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

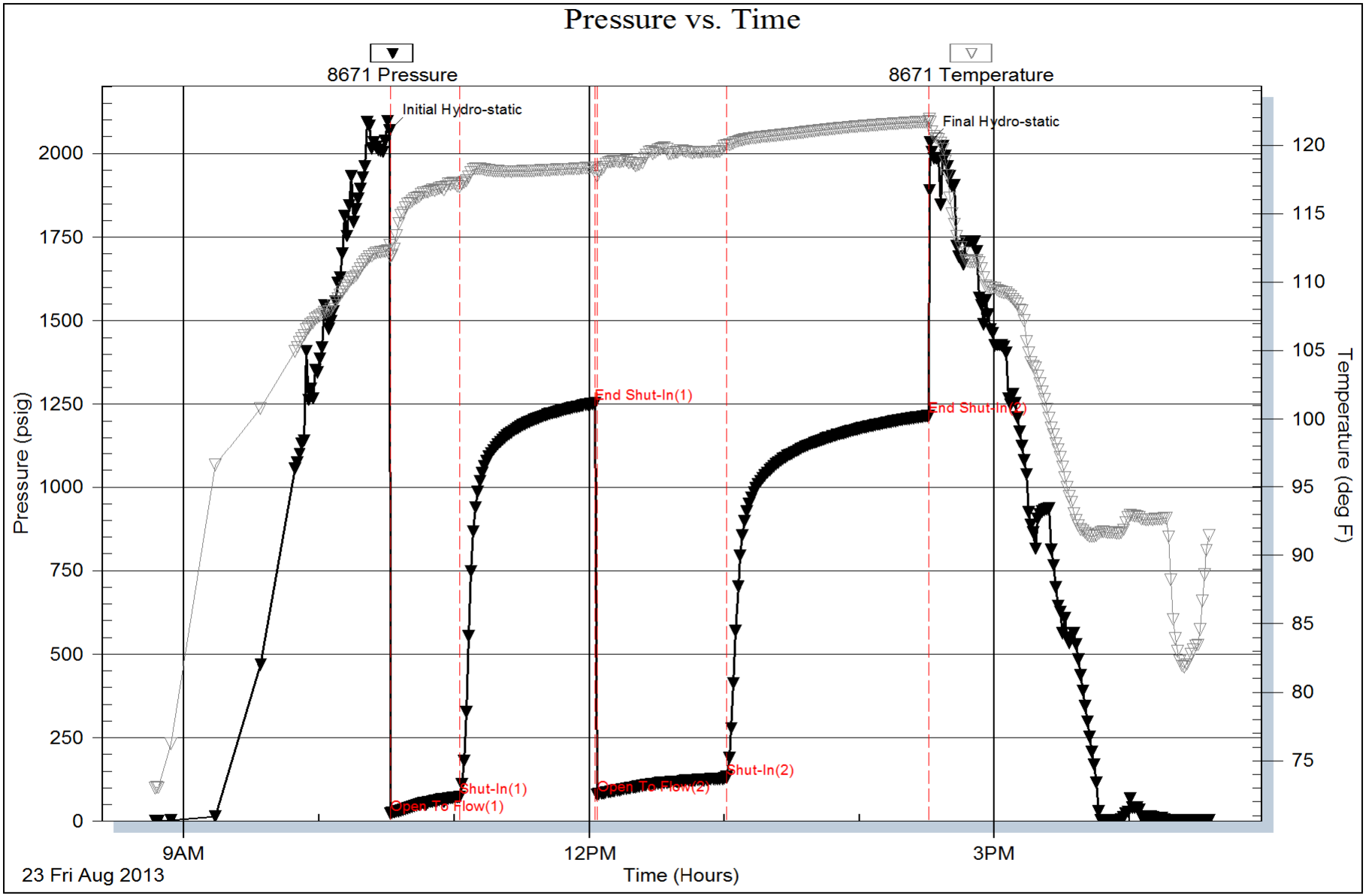
Length ft	Description	Volume bbl
58.00	SO/MCW 76%w , 22%m, 2%o	0.285
59.00	SO/WCM 55%m, 31%w , 7%o, 7%g	0.290
117.00	OCM 59%m, 37%o, 4%g	0.575
31.00	CO 90%o, 6%g, 4%m	0.435
0.00	GIP = 95'	0.000

Total Length: 265.00 ft Total Volume: 1.585 bbl

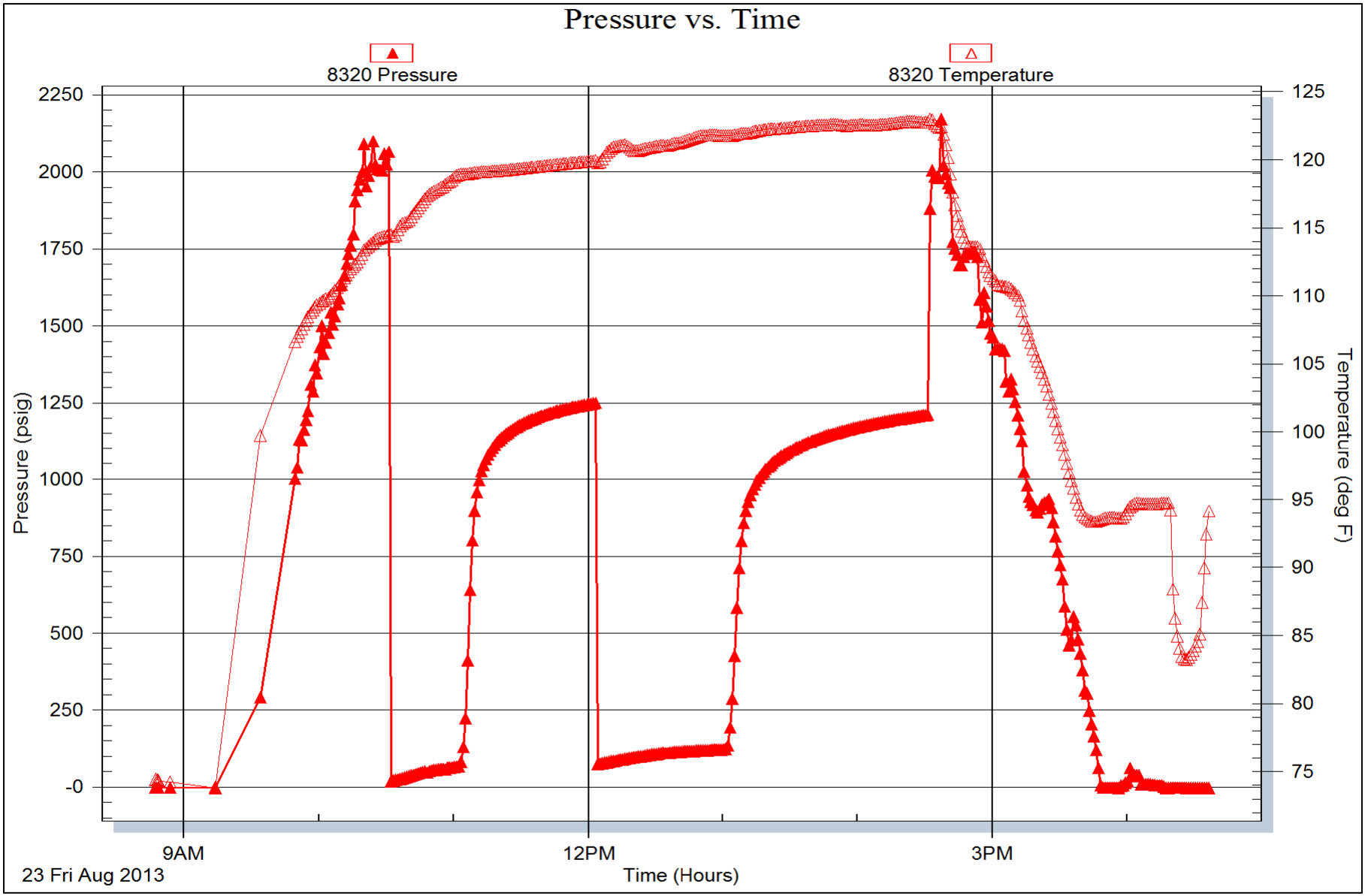
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: Gravity = 40 api @ 102 deg F
RW = .254 ohms @ 95.2 deg F


Pressure vs. Time
8671 Pressure
8671 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Shut-In(1)
Open To Flow(1)
Open To Flow(2)
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
9AM
12PM
3PM
23 Fri Aug 2013
Time (Hours)

Serial #: 8320 **Outside** Murfin Drilling Co., Inc. Juenemann #1-7 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 52668 Printed: 2013.09.03 @ 09:17:31

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52665

Well Name & No. Juenemann #1-7 Test No. 1 Date 8-20-13

Company Murfin Drilling Co. Inc. Elevation 2929 KB 2918 GL

Address 250 N. Water Suite 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin #2

Location: Sec. 7 Twp. 5s Rge. 30w Co. Decatur State KS

Interval Tested 3930 - 3970 Zone Tested Toronto

Anchor Length 40 Drill Pipe Run 3695 Mud Wt. 8.8

Top Packer Depth 3925 Drill Collars Run 234 Vis 57

Bottom Packer Depth 3930 Wt. Pipe Run - WL 6.8

Total Depth 3970 Chlorides 1400 ppm System LCM 4

Blow Description IF: 1/4" Blow at open, slowly died back, dead at 17 min.

ISI: No blowback

FF: No blow

FSI: No blowback

Rec 2	Feet of Mud	%gas	%oil	%water 100	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 115 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1941

(B) First Initial Flow 19

(C) First Final Flow 20

(D) Initial Shut-In 270

(E) Second Initial Flow 21

(F) Second Final Flow 22

(G) Final Shut-In 139

(H) Final Hydrostatic 1925

Initial Open 30

Initial Shut-In 60

Final Flow 30

Final Shut-In 60

- ☐ Test ★ 1150
- ☐ Jars ★ 250
- ☐ Safety Joint ★ 75
- ☑ Circ Sub ★ NA
- ☑ Hourly Standby
- ☐ Mileage 48RT 74.40
- ☑ Sampler
- ☑ Straddle
- ☑ Shale Packer
- ☑ Extra Packer
- ☑ Extra Recorder
- ☑ Day Standby
- ☑ Accessibility

Sub Total 1549.40

T-On Location 21:45 8/20

T-Started 22:29

T-Open 00:32

T-Pulled 3:31

T-Out 5:30 8/21

Comments

- ☑ Ruined Shale Packer
- ☑ Ruined Packer
- ☑ Extra Copies

Sub Total 0

Total 1549.40

MP/DST Disc't

Approved By Wesley Hansen Our Representative James Winder

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52666

Well Name & No. Juenemann #1-7 Test No. 2 Date 8-21-13

Company Murfin Drilling Co. Inc. Elevation 2929 KB 2918 GL

Address 250 N. Water Suite 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin #2

Location: Sec. 7 Twp. 5S Rge. 30W Co. Decatur State KS

Interval Tested 3980 - 4015 Zone Tested LKC "A-B"

Anchor Length 35 Drill Pipe Run 3726 Mud Wt. 9.0

Top Packer Depth 3975 Drill Collars Run 234 Vis 57

Bottom Packer Depth 3980 Wt. Pipe Run - WL 6.8

Total Depth 4015 Chlorides 1400 ppm System LCM 5

Blow Description IF: Blow built to BOB (11") in 13 min.

ISI: No blowback

FF: Blow built to BOB in 16 min.

FSI: Weak blowback built to 1/4"

Rec	170	Feet of	MCW	%gas	trace	%oil	62	%water	38 %mud
Rec	62	Feet of	SMCW	%gas	trace	%oil	88	%water	12 %mud
Rec	498	Feet of	Water	%gas		%oil	96	%water	4 %mud
Rec		Feet of		%gas		%oil		%water	%mud
Rec		Feet of		%gas		%oil		%water	%mud

Rec Total 730 BHT 123 Gravity - API RW .248 @ 79 °F Chlorides 25000 ppm

(A) Initial Hydrostatic 1990

(B) First Initial Flow 30

(C) First Final Flow 182

(D) Initial Shut-In 1240

(E) Second Initial Flow 185

(F) Second Final Flow 353

(G) Final Shut-In 1229

(H) Final Hydrostatic 1946

Initial Open 30

Initial Shut-In 60

Final Flow 60

Final Shut-In 90

- ☐ Test ✱ 1250
- ☐ Jars ✱ 250
- ☐ Safety Joint ✱ 75
- ☑ Circ Sub ✱NA
- ☑ Hourly Standby
- ☐ Mileage 48RT 74.40
- ☑ Sampler
- ☑ Straddle
- ☑ Shale Packer
- ☑ Extra Packer
- ☑ Extra Recorder
- ☑ Day Standby
- ☑ Accessibility

Sub Total 1649.40

T-On Location 14:05

T-Started 14:26

T-Open 16:16

T-Pulled 20:16

T-Out 22:15

Comments

- ☑ Ruined Shale Packer
- ☑ Ruined Packer
- ☑ Extra Copies

Sub Total 0

Total 1649.40

MP/DST Disc't

Approved By Wesley Hansen Our Representative James Winder

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52667

Well Name & No. Juenemann Test No. 3 Date 8-22-13

Company Murfin Drilling Co. Inc Elevation 2929 KB 2918 GL

Address 250 N. Water Suite 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin #2

Location: Sec. 7 Twp. 5S Rge. 30W Co. Decatur State KS

Interval Tested 4028 - 4066 Zone Tested LKC "F-G"

Anchor Length 38 Drill Pipe Run 3789 Mud Wt. 9.0

Top Packer Depth 4023 Drill Collars Run 234 Vis 57

Bottom Packer Depth 4028 Wt. Pipe Run - WL 6.8

Total Depth 4066 Chlorides 1400 ppm System LCM 5

Blow Description IF: ¼" Blow at open, built to ½", slowly died back, dead at 25 min.

ISI: No blowback

FF: No blow

FSI: No blowback

Rec 45	Feet of Mud	%gas	%oil	%water 100	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 45 BHT 116 Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 2019

(B) First Initial Flow 24

(C) First Final Flow 30

(D) Initial Shut-In 1239

(E) Second Initial Flow 31

(F) Second Final Flow 35

(G) Final Shut-In 1218

(H) Final Hydrostatic 2005

Initial Open 30

Initial Shut-In 60

Final Flow 30

Final Shut-In 60

- ☐ Test ★ 1250
- ☐ Jars ★ 250
- ☐ Safety Joint ★ 75
- ☑ Circ Sub ★NA
- ☑ Hourly Standby
- ☐ Mileage 48RT 74.40
- ☑ Sampler
- ☑ Straddle
- ☑ Shale Packer
- ☑ Extra Packer
- ☑ Extra Recorder
- ☑ Day Standby
- ☑ Accessibility

Sub Total 1649.40

T-On Location 9:45

T-Started 10:00

T-Open 11:57

T-Pulled 15:00

T-Out 16:45

Comments

- ☑ Ruined Shale Packer
- ☑ Ruined Packer
- ☑ Extra Copies

Sub Total 0

Total 1649.40

MP/DST Disc't

Approved By Wesley Hansen Our Representative James Winder

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 52668

Well Name & No. Juenemann #1-7 Test No. 4 Date 8-23-13

Company Murfin Drilling Co. Inc Elevation 2929 KB 2918 GL

Address 250 N. Water Suite 300 Wichita, KS 67202

Co. Rep / Geo. Wes Hansen Rig Murfin #2

Location: Sec. 7 Twp. 5s Rge. 30w Co. Decatur State KS

Interval Tested 4098 - 4170 Zone Tested LKC "J-K"

Anchor Length 72 Drill Pipe Run 3853 Mud Wt. 9.2

Top Packer Depth 4093 Drill Collars Run 234 Vis 60

Bottom Packer Depth 4098 Wt. Pipe Run - WL 6.4

Total Depth 4170 Chlorides 1700 ppm System LCM 4

Blow Description IF: Blow built to 7½"

ISI: No blowback

FF: Blow built to BOB (11") in 42 min.

FSI: Blowback built to 1"

Rec 31	Feet of CO	6 %gas	90 %oil	- %water	4 %mud	
Rec 117	Feet of OCM	4 %gas	37 %oil	- %water	59 %mud	
Rec 59	Feet of SO/WCM	7 %gas	7 %oil	31 %water	55 %mud	
Rec 58	Feet of SO/MCW	- %gas	2 %oil	76 %water	22 %mud	
Rec	Feet of GIP: 95'	%gas	%oil	%water	%mud	

Rec Total 265 BHT 122 Gravity 35.8 API RW .254 @ 95.2 °F Chlorides 19,500 ppm

(A) Initial Hydrostatic 2069

(B) First Initial Flow 23

(C) First Final Flow 73

(D) Initial Shut-In 1253

(E) Second Initial Flow 79

(F) Second Final Flow 130

(G) Final Shut-In 1216

(H) Final Hydrostatic 2034

Initial Open 30

Initial Shut-In 60

Final Flow 60

Final Shut-In 90

☐ Test ✱ 1250

☐ Jars ✱ 250

☐ Safety Joint ✱ 75

☑ Circ Sub ✱NA

☑ Hourly Standby

☐ Mileage 48RT x 2 148.80

☑ Sampler

☑ Straddle

☑ Shale Packer

☑ Extra Packer

☑ Extra Recorder

☑ Day Standby Tools loaded 17:15 8/24

☑ Accessibility

Sub Total 1723.80

T-On Location 8:00

T-Started 8:47

T-Open 10:31

T-Pulled 14:30

T-Out 16:30

Comments

☑ Ruined Shale Packer

☑ Ruined Packer

☑ Extra Copies

Sub Total ??

?Total 1723.80

MP/DST Disc't

Approved By Wesley Hanson Our Representative James Winder

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acct. Prod - LH

ALLIED
OIL & GAS SERVICES, LLC

PROD COPY

INVOICE

PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

Invoice Number: 138045
Invoice Date: Aug 17, 2013
Page: 1

Now Includes:

Treat-Em-Rite Pressure Pumping Service, LLC

Bill To:

Murfin Drlg. Co., Inc.
250 N. Water
STE #300
Wichita, KS 67202

Customer ID	Field Ticket #	Payment Terms	
Murfin	61303	Net 30 Days	
Job Location	**Camp Location**	**Service Date**	**Due Date**
KS1-01	Oakley	Aug 17, 2013	9/16/13

Quantity	Item	Description	Unit Price	Amount
		Juenemann #1-7		
195.00	CEMENT MATERIALS	Class A Common	17.90	3,490.50
7.00	CEMENT MATERIALS	Chloride	64.00	448.00
204.75	CEMENT SERVICE	Cubic Feet	2.48	507.78
377.20	CEMENT SERVICE	Ton Mileage	2.60	980.72
1.00	CEMENT SERVICE	Surface	1,512.25	1,512.25
40.00	CEMENT SERVICE	Pump Truck Mileage	7.70	308.00
1.00	CEMENT SERVICE	Manifold Head Rental	275.00	275.00
40.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	176.00
1.00	CEMENT SUPERVISOR	Andrew Forslund		
1.00	EQUIPMENT OPERATOR	Tyler Flipse		
1.00	OPERATOR ASSISTANT	David Scariano		

ID203 3. 3986.0001 5285.47 Amount S. Sq K1-7

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

$ 2,694.38

ONLY IF PAID ON OR BEFORE

Sep 11, 2013

Subtotal	7,698.25
Sales Tax	281.60
Total Invoice Amount	7,979.85
Payment/Credit Applied	
TOTAL	**7,979.85**

(2694.38)

01(11) 5285.47

ALLIED OIL & GAS SERVICES, LLC 061303

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley

DATE 8-12-10	SEC. 7	TWP. 5	RANGE 30	CALLED OUT	ON LOCATION	JOB START 7:00pm	JOB FINISH 9:30pm
LEASE Juenemann	WELL # 1-7		LOCATION Rexford 2N 1E			COUNTY Decatur	STATE KS
OLD OR (NEW) (Circle one)			4 3/4N with 0				

CONTRACTOR Murfin 2
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 225'
CASING SIZE 8 5/8 DEPTH 225'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 13.37 BBL.

OWNER Same

CEMENT
AMOUNT ORDERED 195 sks com 3% cc

EQUIPMENT

PUMP TRUCK # 120 CEMENTER Andrew Copeland
HELPER Tyler Flipse
BULK TRUCK # 600 DRIVER David Scriano
BULK TRUCK # DRIVER

COMMON 195 sks	@	12.80	3490.50
POZMIX	@		
GEL	@		
CHLORIDE 7 sks	@	64.00	448.00
ASC	@		
	@		
	@		
	@		
	@		
	@		
	@		
	@		
HANDLING 204.25 cu/ft	@	2.48	502.38
MILEAGE 2.60 ton/mile 94 mi			980.22
		TOTAL	5427.00

REMARKS:

Cement did circulate

thank you

SERVICE

DEPTH OF JOB 225'			
PUMP TRUCK CHARGE			1512.25
EXTRA FOOTAGE	@		
MILEAGE 40 miles	@	2.20	308.00
MANIFOLD head	@		225.00
Light vehicle	@	4.40	176.00
	@		
	TOTAL		2271.25

CHARGE TO: Murfin
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
	TOTAL		

To: Allied Oil & Gas Services, 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 7,698.05
DISCOUNT 2,694.38 IF PAID IN 30 DAYS
5,003.86 Net.

PRINTED NAME Arturo Cabezas

SIGNATURE Arturo Cabezas

Acctg —

cc : WI
cc : L-2
cc : L-1

SWIFT Services, Inc.

P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300

Invoice

DATE	INVOICE #
9/18/2013	24939

BILL TO

Murfin Drilling Co Inc
PO Box 661
Colby, KS 67701-0661

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#1-7	Jeunemann	Decatur	Company Tools	Oil	Development	Port Collar	Nick

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	120	Miles	6.00	720.00
576D-D	Pump Charge - Port Collar - 2662 Feet	1	Job	1,500.00	1,500.00
290	D-Air	4	Gallon(s)	42.00	168.00T
330	Swift Multi-Density Standard (MIDCON II)	195	Sacks	17.00	3,315.00T
276	Flocele	100	Lb(s)	2.00	200.00T
581D	Service Charge Cement	350	Sacks	2.00	700.00
583D	Drayage	2,053	Ton Miles	1.00	2,053.00
	Subtotal				8,656.00
	Sales Tax Decatur County			7.15%	263.33

USED FOR 1c 203

APPROVED JK

We Appreciate Your Business!

Total $8,919.33

SWIFT Services, Inc.

CHARGE TO: Murfin Drlg Co Inc
ADDRESS
CITY, STATE, ZIP CODE

TICKET Nº 24939

PAGE 1 OF 1

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Hays, Ks	#1-7	Jeanemann	Decatur	Ks		9-18-13	same
2. Ness City, Ks.	TICKET TYPE ☑ SERVICE ☐ SALES	CONTRACTOR Co Tools	RIG NAME/NO.	SHIPPED VIA CT	DELIVERED TO Location	ORDER NO.	
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE		WELL PERMIT NO.	WELL LOCATION	
4.	oil	Development	Port Collar				
REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
575		1			MILEAGE #111	120	mi			6 00	720 00
576D		1			Pump Charge (Port Collar)	1	Eq	2662	'	1500 00	1500 00
290		1			D-Air	4	gal			42 00	168 00
330		2			SMD Cement	195	sks			17 00	3315 00
276		2			Flocele	100	#			2 00	200 00
581		2			Cement Service Charge	350	00			2 00	700 00
583		2			Drayage	2053	TM			1 00	2053 00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X

DATE SIGNED 9-18-13 TIME SIGNED 1130 ☑ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL	8656 00
Decatur TAX 7.15%	263 33
TOTAL	8919 33

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Mike Koehn APPROVAL

Thank You!

JOB LOG

SWIFT Services, Inc.

DATE 9-18-13 | PAGE NO. 1

CUSTOMER: Murfin Drlg Co Inc | WELL NO. #1-7 | LEASE: Jeuenmann | JOB TYPE: Port Collar | TICKET NO. 24939

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0900							on loc setup Trks
								2 3/8" x 5 1/2"
								P.C. @ 2662'
	0930						1000	Test Csg to 1000 Psi
								Open P.C.
	0940	1.75	5				200	Take rate & check for blow
	0945	2.75	0			400	~~1000~~	Start Mud
	1015	3	80/0			400	~~1000~~	Start SMD Cement
	1042	4	92/0			400	~~1000~~	circ Cement/raise weight
	1043	4	5/0			400	~~1000~~	End Cement/start Displacement
	1045		9.5					Cement Displaced
								Close PC
	1050						1000	Test Csg to 1000 Psi
								Run 5's ts
	1100	3	0				150	Reverse out
	1110		30●					Hole Clean
								195 sks SMD
								circ 20 sks to pit
								Thank you
								Nick, David E & John

CONSOLIDATED
Oil Well Services, LLC

Acctg –
cc: WI
cc: LK
cc: L-1

Co[illegible] s, LLC

MAIN OFFICE
P.O. Box 884
Chanute, KS 66720
620/431-9210 • 1-800/467-8676
Fax 620/431-0012

INVOICE Invoice # 261726

Invoice Date: 08/28/2013 Terms: 10/10/30,n/30 Page 1

MURFIN DRILLING
P.O. BOX 288
RUSSELL KS 67665
( ) -

JUENEMANN 1-7
38043
7-5S-30W
08-26-2013
KS

USED FOR 4C193
APPROVED

Part Number	Description	Qty	Unit Price	Total
1126	OIL WELL CEMENT	225.00	23.7000	5332.50
1110A	KOL SEAL (50# BAG)	1125.00	.5600	630.00
1102	CALCIUM CHLORIDE (50#)	240.00	.9400	225.60
1111A	SODIUM METASILICATE	200.00	2.5200	504.00
1142A	KCL SUB MB6875 CC3107 (1	3.00	41.1000	123.30
4104	CEMENT BASKET 5 1/2"	3.00	290.0000	870.00
4136	TURBOLIZER 5 1/2"	14.00	75.7500	1060.50
4159	FLOAT SHOE AFU 5 1/2"	1.00	433.7500	433.75
4285	5 1/2" PORT COLLAR	1.00	2178.7500	2178.75
4310	5 1/2" ROTATING HEAD	1.00	150.0000	150.00
4315	ROTATING SCRATCHERS	15.00	94.5000	1417.50
4454	5 1/2" LATCH DOWN PLUG	1.00	318.2500	318.25

Sublet Performed	Description	Total
9996-130	CEMENT MATERIAL DISCOUNT	-1324.42
9995-130	CEMENT EQUIPMENT DISCOUNT	-436.25

	Description	Hours	Unit Price	Total
T-118	SINGLE PUMP	1.00	3175.00	3175.00
T-118	EQUIPMENT MILEAGE (ONE WAY)	50.00	5.25	262.50
566	TON MILEAGE DELIVERY	1.00	925.00	925.00

Amount Due 18553.62 if paid after 09/27/2013

Parts:	13244.15	Freight:	.00	Tax:	852.27	AR	16698.25
Labor:	.00	Misc:	.00	Total:	16698.25		
Sublt:	-1760.67	Supplies:	.00	Change:	.00		

Signed _____ Date _____

CONSOLIDATED
Oil Well Services, LLC

261726

TICKET NUMBER 38043
LOCATION Oakley KS
FOREMAN Mike Shaw (Walt Dinsdel)

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8-26-13	5406	Juenemann #1-7	7	8S	30W	Decatur KS

CUSTOMER: Murfin Drilling
MAILING ADDRESS:
CITY | STATE | ZIP CODE:

Rexford 9W 1E 5W U.S

TRUCK #	DRIVER	TRUCK #	DRIVER
530T118	Tim W		
506	Mike P / Steven		

JOB TYPE Long St 1.95 HOLE SIZE 7 7/8 HOLE DEPTH 4600 CASING SIZE & WEIGHT 5½" 15.5#
CASING DEPTH 4598 DRILL PIPE TUBING OTHER
SLURRY WEIGHT 14.2 SLURRY VOL 1.42 WATER gal/sk CEMENT LEFT in CASING Plug @ 2677'
DISPLACEMENT 109 ½ bbls DISPLACEMENT PSI 800 MIX PSI 1400 RATE

REMARKS: Safety Meeting and rig up on Murfin drilling rig #2 Float equipment Turbolizers on Jnts 1, 2, 3, 4, 5, 6, 7, 11, 13, 15, 20, 30, 45, 47 Baskets on 2, 3, 46 PC tool on top #46 @ 2677' Run casing to bottom Circulate 30 min on Joint #4 (@) Thrion bottom. Pump 5 bbls water Flo check 5 bbls water mixed 175 sks OWC with 5# Kolseal down losing Shutdown mixed Cleared pump & lines released plug displaced 109½ bbls Water with 800 psi lift Plug landed @ 1400 psi and held Mix 80 sks RH 20 sks MH

Thank You Mike & Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401C	1	PUMP CHARGE	3175.00	3175.00
5406	50	MILEAGE	5.25	262.50
5407A	10.57 Tons	Ton Mileage delivery	1.75	925.00
1126	225 sks	OWC	23.70	5332.50
1110A	1125	Kolseal	.56	630.00
1102	240#	Calcium Chloride	.94	225.60
1111A	240#	Sodium Metasilicate	2.52	504.00
1142A	3 gal	KCL	41.10	123.30
4104	3	5½" Baskets W	290.00	870.00
4136	14	5½" Turbolizers	75.75	1060.50
4159	1	5½" Float Shoe AFU	433.75	433.75
4285	1	5½" Port collar	2178.75	2178.75
4310	1	Rotating head	150.00	150.00
4315	15	Rotating Scratchers	94.50	1417.50
4454	1	5½" Latchdown Plug	318.25	318.25
			Subtotal	17606.65
		loss DD discount		1760.67
			Subtotal	15845.98
			SALES TAX	852.27
			ESTIMATED TOTAL	16698.25

Completion

Ravin 3737

AUTHORIZTION Glenn Wehrman TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.