



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1167953
OIL & GAS CONSERVATION DIVISION

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM *(Coal Bed Methane)*
- Cathodic Other *(Core, Expl., etc.):* _____

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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



1167953

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

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

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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

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

Company: TDI, INC
 Address: 1310 BISON ROAD
 HAYS, KANSAS 67601

Contact Geologist: TOM DENNING
 Contact Phone Nbr: 785-628-2593
 Well Name: HENRY # 1
 Location: SW SE NE SW Sec.5-13s-20w
 Pool: SW SE NE SW Sec.5-13s-20w
 State: KANSAS
 API: 15-051-26,602-00-00
 Field: ELLIS SOUTHEAST
 Country: USA



TDI, Inc.
 1310 BISON ROAD
 HAYS, KANSAS 67601
 (785) 628-2593

Scale 1:240 Imperial

Well Name: HENRY # 1
 Surface Location: SW SE NE SW Sec.5-13s-20w
 Bottom Location:
 API: 15-051-26,602-00-00
 License Number: 4787
 Spud Date: 10/17/2013 Time: 5:00 PM
 Region: ELLIS COUNTY
 Drilling Completed: 10/22/2013 Time: 3:38 AM
 Surface Coordinates: 1325' FSL & 2000' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 2133.00ft
 K.B. Elevation: 2143.00ft
 Logged Interval: 3100.00ft To: 3930.00ft
 Total Depth: 3930.00ft
 Formation: LANSING-KANSAS CITY
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.5691344 Latitude: 38.946438
 N/S Co-ord: 1325' FSL
 E/W Co-ord: 2000' FWL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 W 35TH
 HAYS, KS 67601

Phone Nbr: (785) 639-1337
 Logged By: Geologist Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 10/17/2013 Time: 5:00 PM
 TD Date: 10/22/2013 Time: 3:38 AM
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 2143.00ft Ground Elevation: 2133.00ft
 K.B. to Ground: 10.00ft

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL BASED ON NEGATIVE RESULTS OF DSTS AND LOG EVALUATION

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES, DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG

DRILL STEM TESTING BY TRILOBITE TESTING INC: ONE (1) CONVENTIONAL TEST, ONE (1) FAILED STRADDLE TEST, TWO (2) SUCCESSFUL STRADDLE TESTS FOR A TOTAL OF FOUR (4) TESTS

FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY

HENRY # 1	WIESNER UNIT #1
SW SE NE SW	NE NE SW
Sec. 5-13s-20w	Sec. 5-13s-20w
2133' GL 2143' KB	Reference Well

FORMATION

SAMPLE TOPS

LOG TOPS


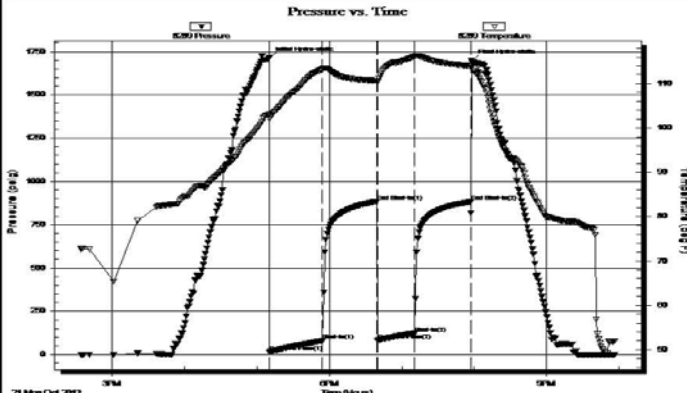
LOG TOPS

FORMATION	SAMPLE TOPS	LOG TOPS	LOG TOPS
Anhydrite	1488+ 655	1481+ 662	+ 664
B-Anhydrite	1545+ 598	1528+ 615	+ 616
Topeka	3168-1025	3169-1026	-1022
Heebner Shale	3397-1254	3399-1256	-1252
Toronto	3420-1277	3421-1278	-1275
LKC	3438-1295	3438-1295	-1292
BKC	3687-1544	3682-1539	-1538
Marmaton-Pawnee	3737-1594	3738-1595	-1589
Arbuckle	3828-1685	3821-1678	-1662
RTD	3930-1787		
LTD		3930-1787	-1787


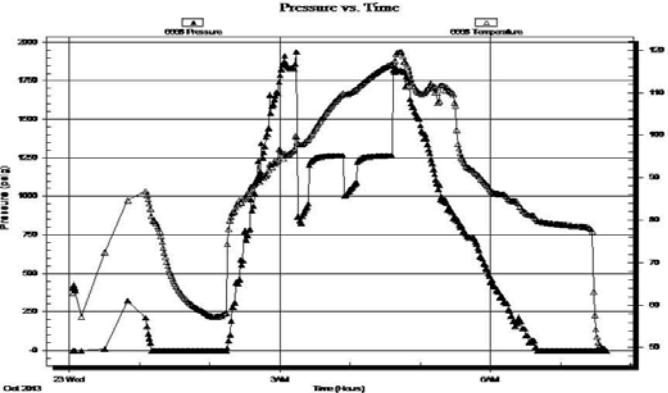
SUMMARY OF DAILY ACTIVITY

- 10-17-13 RU, spud 4:00PM, set 8 5/8" to 222' w/ 150 sxs Common 2%Gel 3%CC, plug down 10:15PM, WOC 8 hrs, slope 3/4 degree
- 10-18-13 256', drill plug at 6:15 AM
- 10-19-13 2144', drilling
- 10-20-13 3035', drilling, displace 3092'-3113'
- 10-21-13 3585', CFS 3595', DST #1 3556'-3595' "H" LKC, slope 1/2 degree
- 10-22-13 3710', drilling, RTD 3930'@3:38PM, Mini ST, CCH, TOWB, logs, start DST #2 straddle test of Marmaton 3744'-3798'
- 10-23-13 3930', DST #2 misrun-pkr failure, straddle DST # 3 3744'-3823' Marmaton, TIWB, CCH, TOWB, start DST # 4 straddle test 3588'-3610' "I" LKC
- 10-24-13 3930', finish DST # 4, P & A


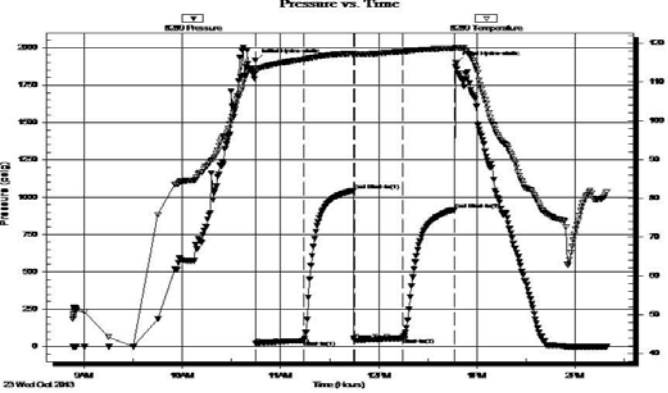
DST # 1 TEST SUMMARY

	DRILL STEM TEST REPORT																																					
	TDI Inc. 1310 Bison Rd Hays KS 67601 ATTN: Herb Deines	5 13s 20w Ellis Henry # 1 Job Ticket: 52269 Test Start: 2013.10.21 @ 14:34:00	DST#: 1																																			
GENERAL INFORMATION: Formation: LKC " H " Deviated: No Whipstock: 2151.00 ft (KB) Time Tool Opened: 17:10:15 Time Test Ended: 21:57:00 Test Type: Conventional Bottom Hole (Initial) Tester: Jim Svaty Unit No: 54 Interval: 3556.00 ft (KB) To 3595.00 ft (KB) (TVD) Total Depth: 3595.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair Reference Elevations: 2151.00 ft (KB) 2141.00 ft (CF) KB to GR/CF: 10.00 ft																																						
Serial #: 8289 Outside Press@RunDepth: 124.22 psig @ 3557.00 ft (KB) Start Date: 2013.10.21 End Date: 2013.10.21 Start Time: 14:34:02 End Time: 21:57:00 Capacity: 8000.00 psig Last Calib.: 2013.10.21 Time On Btm: 2013.10.21 @ 17:10:00 Time Off Btm: 2013.10.21 @ 19:57:45																																						
TEST COMMENT: 45-IFP- Surface Blow Building to 10 in. 45-ISIP- No Blow 30-FFP- No Blow Flushed - No Blow 45-FSP- No Blow																																						
	PRESSURE SUMMARY																																					
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240.00	MCV 5% m 95% w	3.37																																				
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)																																				


DST # 2 STRADDLE TEST 3744' TO 3798' MARMATON BOTTOM PACKER FAILED

	DRILL STEM TEST REPORT			
	TDI Inc. 1310 Bison Rd Hays KS 67601 ATTN: Herb Deines	5 13s 20w Ellis Henry # 1 Job Ticket: 52270 DST#: 2 Test Start: 2013.10.23 @ 00:03:00		
GENERAL INFORMATION: Formation: Marmaton Deviated: No Whipstock: 2151.00 ft (KB) Time Tool Opened: 03:15:15 Time Test Ended: 07:40:00 Test Type: Conventional Straddle (Reset) Tester: Jim Svaty Unit No: 54 Interval: 3744.00 ft (KB) To 3798.00 ft (KB) (TVD) Total Depth: 3595.00 ft (KB) (TVD) Reference Elevations: 2151.00 ft (KB) 2141.00 ft (CF) Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft				
Serial #: 6668 Below (Straddle) Press@RunDepth: psig @ 3803.00 ft (KB) Capacity: 8000.00 psig Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23 Start Time: 00:03:02 End Time: 07:39:45 Time On Btm: Time Off Btm:				
TEST COMMENT: 10-IFP- BOB in 40 sec. 30-ISIP- No Blow 10-FFP- BOB in 40 sec. 30-FSP- No Blow				
	PRESSURE SUMMARY			
	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
Recovery		Gas Rates		
Length (ft)	Description	Volume (bbl)	Choke (inches) Pressure (psig) Gas Rate (Mc/d)	
434.00	MCW 15% m 85% w	6.09		
1184.00	MCW 40% m 60% w	16.61		
372.00	Mud 100%	5.22		
* Recovery from multiple tests Trilobite Testing, Inc Ref. No: 52270 Printed: 2013.10.23 @ 10:45:37				

DST # 3 STRADDLE TEST 3744' TO 3823' MARMATON BOTTOM PACKER HELD

	DRILL STEM TEST REPORT			
	TDI Inc. 1310 Bison Rd Hays KS 67601 ATTN: Herb Deines	5 13s 20w Ellis Henry # 1 Job Ticket: 52271 DST#: 3 Test Start: 2013.10.23 @ 08:53:00		
GENERAL INFORMATION: Formation: Marmaton Deviated: No Whipstock: 2151.00 ft (KB) Time Tool Opened: 10:44:45 Time Test Ended: 14:20:00 Test Type: Conventional Straddle (Reset) Tester: Jim Svaty Unit No: 54 Interval: 3744.00 ft (KB) To 3823.00 ft (KB) (TVD) Total Depth: 3930.00 ft (KB) (TVD) Reference Elevations: 2151.00 ft (KB) 2141.00 ft (CF) Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft				
Serial #: 8289 Outside Press@RunDepth: 57.34 psig @ 3751.00 ft (KB) Capacity: 8000.00 psig Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23 Start Time: 08:53:02 End Time: 14:19:45 Time On Btm: 2013.10.23 @ 10:44:30 Time Off Btm: 2013.10.23 @ 12:47:15				
TEST COMMENT: 30-IFP- Good Surge on Open No Blow 30-ISIP- No Blow 30-FFP- Surface Blow Building to 3 in. 30-FSP- No Blow				
	PRESSURE SUMMARY			
	Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
	0	1916.84	113.73	Initial Hydro-static
	1	19.76	112.58	Open To Flow (1)
	30	40.58	115.93	Shut-In(1)
	60	1044.76	117.45	End Shut-In(1)
	61	41.63	117.18	Open To Flow (2)
	91	57.34	117.88	Shut-In(2)
	122	912.89	118.72	End Shut-In(2)
	123	1898.75	118.90	Final Hydro-static
Recovery		Gas Rates		
Length (ft)	Description	Volume (bbl)	Choke (inches) Pressure (psig) Gas Rate (Mc/d)	
80.00	MCW 40% m 60% w Show of Oil	1.12		
10.00	CO 100%	0.14		

DST # 4 STRADDLE TEST 3588' TO 3610' "I" LKC BOTTOM PACKER HELD



DRILL STEM TEST REPORT

TDI Inc. **5 13s 20w Ellis**

1310 Bison Rd **Henry # 1**
Hays KS 67601
Job Ticket: 52272 **DST#: 4**

ATTN: Herb Deines Test Start: 2013.10.23 @ 21:04:00

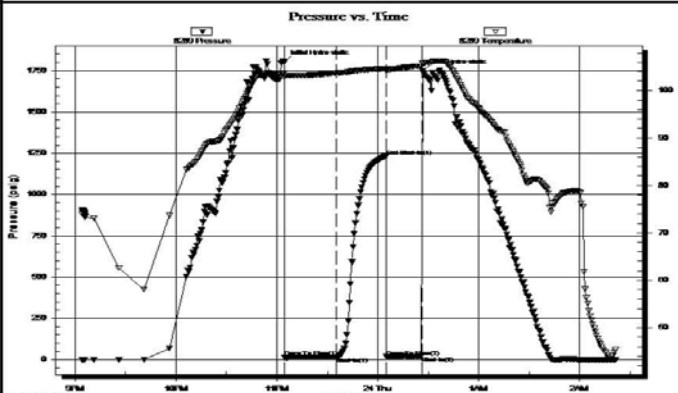
GENERAL INFORMATION:

Formation: **LKC "I"** Test Type: Conventional Straddle (Reset)
 Deviated: No Whipstock: 2151.00 ft (KB) Tester: Jim Svaty
 Time Tool Opened: 23:04:30 Unit No: 54
 Time Test Ended: 02:22:00
 Interval: **3588.00 ft (KB) To 3610.00 ft (KB) (TVD)** Reference Elevations: 2151.00 ft (KB)
 Total Depth: 3930.00 ft (KB) (TVD) 2141.00 ft (CF)
 Hole Diameter: 7.88 inches-Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8289 Outside

Press@RunDepth: 15.36 psig @ 3589.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.23 End Date: 2013.10.24 Last Calib.: 2013.10.24
 Start Time: 21:04:02 End Time: 02:21:45 Time On Btm: 2013.10.23 @ 23:04:15
 Time Off Btm: 2013.10.24 @ 00:26:30

TEST COMMENT: 30-IFP- Surface Blow
 30-ISIP- No Blow
 20-FFP- No Blow Flushed at 15min. Good Surge No Blow
 Pulled



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1802.93	103.55	Initial Hydro-static
1	13.51	102.87	Open To Flow (1)
31	15.36	103.71	Shut-In(1)
61	1232.44	104.66	End Shut-In(1)
61	17.60	104.07	Open To Flow (2)
82	20.20	105.15	Shut-In(2)
83	1748.06	105.72	Final Hydro-static

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

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

* Recovery from multiple tests

ROCK TYPES

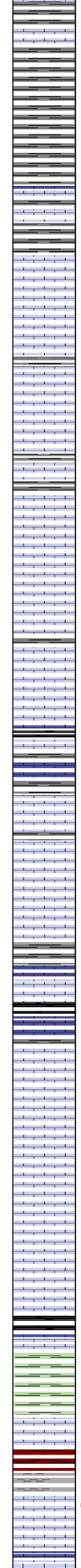
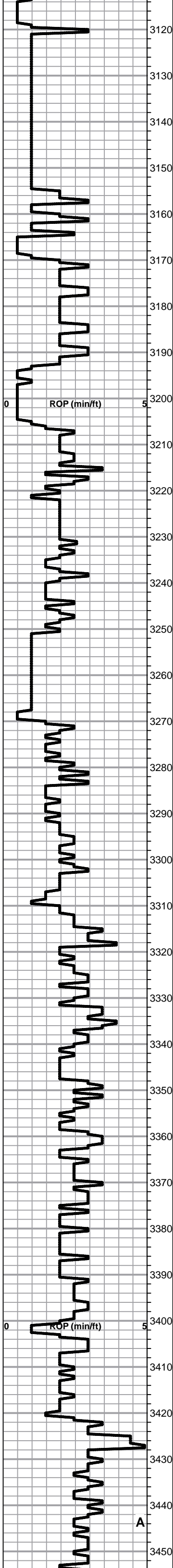
Clystgy	Dolsec	Lmst fw7>	shale, gry	Shcol
Chtcong1	Dol Lime	Lscong1	Carbon Sh	
Dolprim	Lmst fw<7	shale, grn	shale, red	

ACCESSORIES

MINERAL P Pyrite Varicolored chert Chert White	FOSSIL Oolite Oomoldic
----------------------------------------------------------------	-------------------------------------

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #1 ROP (min/ft)	Depth Intervals DST	Lithology Oil Show	Geological Descriptions	Curve Track #3
1:240 Imperial ROP (min/ft)	Cored Interval DST Interval	3070 3080 3090 3100 3110	BEGIN 1' DRILL TIME FROM 3060' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 3060' TO RTD ANHYDRITE TOP 1481+662 ANHYDRITE BASE 1528+615 Lime, grayish brn, fnxln, fossiliferous in part Shale, lt gray, forming soft mud	1:240 Imperial 8 5/8" SET TO 222' W/ 150 SXS COMMON 2%GEL 3%CC SLOPE @ 226' 3/4 DEGREE



Shale, lt gray, soft sticky clumps
 Lime, dark brn, fnxln

Shale, lt-med gray, soft blocky to sticky clumps in part

Lime, crm-gray, soft chalk
 Shale, lt gray, soft sticky clumps
TOPEKA ELog 3169-1026
 Lime, lt brn, fnxln
 Lime, lt brn-lt grayish brn, fnxln-granular
 Lime, lt brn, bedded chalk, few chips micro xln
 Lime, lt brn, granular-micro oomoldic, mostly barren
 Lime, lt brn-med gray, fnxln
 Lime, lt-med brn, fnxln, bedded chalk in part
 Lime, lt-med brn, fn-vfxln
 Lime, lt-med brn, fnxln-granular in part, slight bedded chalk
 Lime, lt-med brn, fnxln-granular, slight chalk matrix in part
 Lime, lt-med brn, granular with sticky chalk clumps in part

Shale, black carbonaceous
 Lime, lt brn, fnxln-granular in part

Lime, lt-med brn, granular-fnxln
 Lime, crm, fnxln, some lithographic
 Lime, crm-tan, fnxln, bedded chalk in part
 Lime, crm-lt brn, fnxln, slight bedded chalk
 Lime, crm-lt brn, fnxln

Shale, black carbonaceous
 Lime, crm-lt brn, fn-micro xln

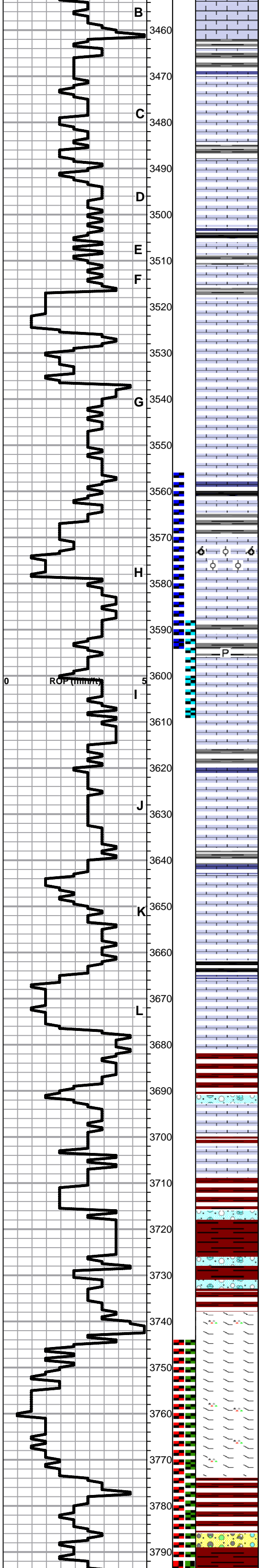
Lime, tan-lt brn, fnxln-granular, slightly fossiliferous, NS
 Limek tan-lt brn, fnxln-granular, slight bedded chalk, NS
 Lime, tan-lt brn, fnxln-granular in part, slight chalk
 Lime, tan-lt brn, fnxln with darker brn lime in part
 Lime, tan-lt brn, fnxln
 Lime, tan-lt brn, fnxln

HEEBNER SHALE ELog 3399-1256
 Shale, black carbonaceous, fissile, blocky
 Lime, tan-lt brn, fn-vfxln

Shale, lime green, soft sticky mud clumps

TORONTO ELog 3421-1278
 Lime, crm-tan, fn-micro xln, thin hard bedded chalk, NS
 Shale, reddish brn, forming soft mud

LKC ELog 3438-1295
 Lime, crm-tan, fnxln, few chips spotty stain in fossiliferous-oolitic mix, NFO, No Odor, appears poorly developed
 Lime, tan-lt gray, fnxln, NS



Lime, lt gray-crm, fnxln, NS

Shale, lime green forming soft mud

Lime, tan-lt brn-brn, fnxln

Lime, tan-lt brn, fnxln, thin bedded oolitic with spotty stain, NFO, v lt odor, not well developed

Lime, crm-tan, fnxln-granular, slight bedded chalk, NS

Lime, crm-tan, fn-vfxln, slight chalk

Shale, gray-black carbonaceous
Lime, very lt gray tinted, fnxln

Lime, off white with gray mottling in part, bedded chalk

Lime, crm-tan, granular with chalk, few chips with lt oil specks on crush

Lime, crm-tan, fnxln-granular, bedded chalk, NS

Lime, tan, fnxln, bedded chalk in part

Lime, crm-tan, fnxln, bedded chalk

Lime, crm-tan, fnxln, bedded chalk

Shale, gray-black carbonaceous
Lime, tan-lt brn, fnxln

Zone of fine oolitic material with vug development, lt staining, lt odor, NFO

Lime, lt brn, fn-vfxln

Lime, lt brn, fn-vfxln

Lime, white-crm, fnxln, lot of black dead flaky staining, NFO, No Odor

Lime, crm-lt brn, fn-vfxln, slight bedded chalk

Lime, crm-tan, fn-vfxln, slight chalk

Lime, crm, fn-micro xln, slight bedded chalk, NS

Lime, crm, fnxln, white chalk wash, NS

Lime, crm, fn-vfxln, white chalk wash

Lime, tan-lt brn, fn-vfxln, slight chalk

Shale, gray-black carbonaceous

Lime, crm-tan, fnxln, bedded chalk, few pcs vuggy dolomitic, NS

BKC ELog 3682-1539

Shale, red, dove gray, forming soft mud with red soft sticky

Lime, white-crm, fnxln, slight bedded chalk

Lime, white-crm, fnxln

Shale, lt red wash, soft mud with clastic lime mix in part

Lime, clastic mix with red shale staining

Shale, red soft mud-brn, firm blocky

Shale, reds, brns, maroon, soft blocky

MARMATON ELog 3738-1595

Lime, crm-tan, fnxln, orange chert fragments in part

Lime, crm-tan, fnxln-granular with thin vuggy development, lt odor with lt even staining

Lime, crm, fnxln-granular, lt even staining, dolomitic in part, very lt odor

Lime, crm-tan, fnxln, increasing chert content, tans, reds, orange, fresh, sharp

Shale, red, brn, soft-firm blocky

Shale, red-dark brn, lt red wash, soft mud to firm blocky

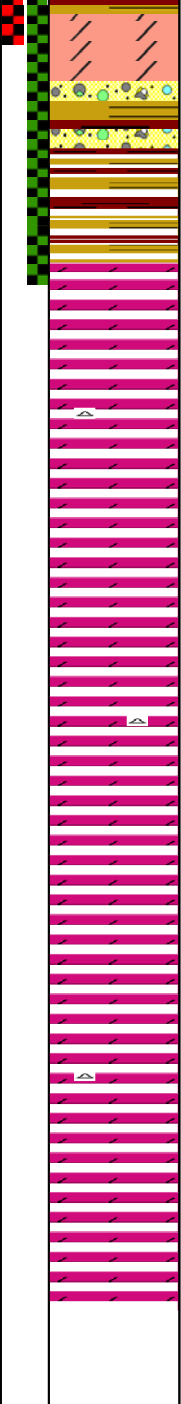
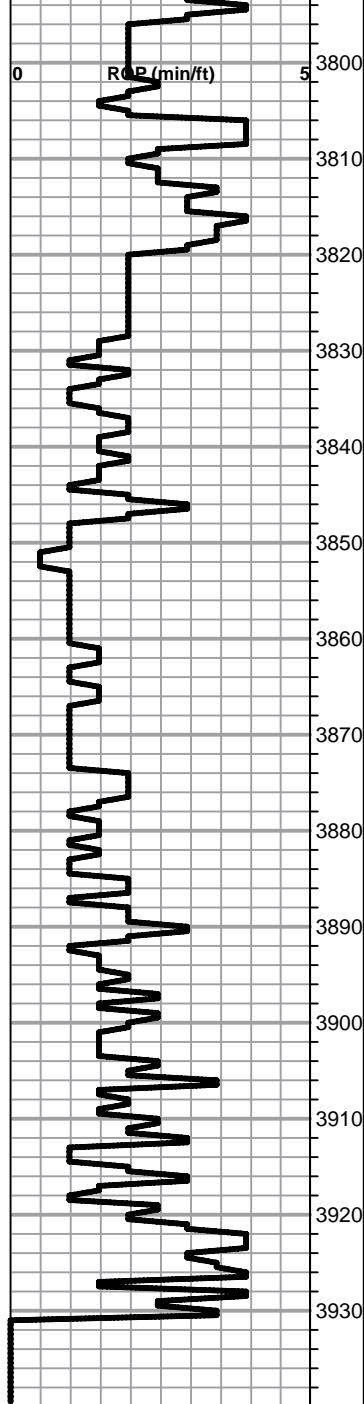
Shale, lt red wash

DST # 1 3556' TO 3595' SEE
HEADER FOR TEST
SUMMARY

DST # 4 3588' TO 3610' SEE
HEADER FOR TEST
SUMMARY

DST # 2 3744' TO 3798'
PACKER FAILURE- BOTTOM
PACKER FAILED TO SEAL
OFF ARBUCKLE

DST # 3 3744' TO 3823' SEE
HEADER FOR TEST
SUMMARY



Lime, white to cream, fine grained, soft sucrosic, NS, very similar to simpson dolomite in appearance

Shales and cherts, vari color

Shale, reds, brns, maroon, firm blocky

ARBUCKLE ELog 3821-1678

Dolomite, ivory-cream, granular, fn-cxln, sucrosic, It sheen on crush with lt staining in part, no detectable odor due to heavy mix of slough

Dolomite, ivory-cream, granular, fn-cxln, sucrosic, mostly clean with no stain or SFO or odor

Dolomite, ivory-cream, granular-fnxln

Dolomite, ivory-cream, granular, sucrosic, fn-cxln

Dolomite, ivory-cream, fnxln-granular, sucrosic in part, few pyrite crystalline clusters

Dolomite, ivory, sucrosic, med-cxln

Dolomite, as above

Dolomite, as above

Dolomite, as above

Dolomite, as above

RTD 3930-1787 LTD 3930-1787

SLOPE @3930' 1 DEGREE

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7454

Date	10-17-73	Sec.	Twp.	Range	County	State	On Location	Finish
					Ellis	KS		10:15p.m.
Location					Casey's West to Rg			
Le	Henry # 1			Well No. 1	Owner			
Contractor	Southwind #1				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job	Surface				Charge To TDJ			
Hole Size	12 1/4		T.D.	227		Street		
Csg.	8 5/8		Depth	226		City State		
Tbg. Size			Depth			The above was done to satisfaction and supervision of owner agent or contractor.		
Tool			Depth			Cement Amount Ordered 150cm 3/CC 2/6E2		
Cement Left in Csg.	15'		Shoe Joint			Meas Line Displace 13 1/2 B.L.		
EQUIPMENT					Common 150			
Pumptrk	16	No.	Cementer	Craig		Poz. Mix		
			Helper			Gel. 3		
Bulktrk		No.	Driver	Billy		Calcium 5		
Bulktrk	9	No.	Driver	Jason V.		Hulls		
JOB SERVICES & REMARKS					Salt			
Remarks:					Flowseal			
Rat Hole					Kol-Seal			
Mouse Hole					Mud CLR 48			
Centralizers					CFL-117 or CD110 CAF 38			
Baskets					Sand			
D/V or Port Collar					Handling 158			
8 5/8 on bottom. Est. Circulation.					Mileage			
Mix 150 4C + Displace.					FLOAT EQUIPMENT			
Cement (Cement)					Guide Shoe			
					Centralizer			
					Baskets 8 5/8 Swage			
					AFU Inserts			
					Float Shoe			
					Latch Down			
					Pumptrk Charge Surface			
					Mileage 17			
					Tax			
					Discount			
					Total Charge			
X Signature								

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7543

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-24-13	5	13	20	Ellis	KS		1:45 PM

Location Ellis 3 blocks W of Caseys

Lease	Henry	Well No. #1	Owner
Contractor	Southwind #1		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Type Job	Plug		Charge To
Hole Size	7 7/8	T.D. 3931	TDI
Csg. Drill Pipe		Depth	Street
Tbg. Size		Depth	City State
Tool		Depth	The above was done to satisfaction and supervision of owner agent or contractor.
Cement Left in Csg.		Shoe Joint	Cement Amount Ordered 270 60/40 4 1/2 gal 1/4 flow
Meas Line		Displace	

EQUIPMENT

Pumptrk 17	No.	Cementer	Common
		Helper Cody	162
Bulktrk 19	No.	Driver David	Poz. Mix 108
		Driver	Gel. 10
Bulktrk Pu	No.	Driver Brett	Calcium
		Driver	

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole - 30 sx	Salt
Mouse Hole - 15 sx	Flowseal 67#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand
	Handling 280
	Mileage
1st Plug @ 3800' w/ 50 sx	8 5/8
2nd Plug @ 1500' w/ 25 sx	FLOAT EQUIPMENT
3rd Plug @ 720' w/ 100 sx	Guide Shoe
4th Plug @ 275' w/ 40 sx	Centralizer
5th Plug @ 40' w/ 10 sx	Baskets
	AFU Inserts
	Float Shoe
Rat hole - 30 sx	Latch Down
Mouse hole - 15 sx	Wood Plug - 1
	Pumptrk Charge plug
	Mileage 17

X Signature *Zany Beans*

Tax
Discount
Total Charge



DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Henry #1

5 13s 20w Ellis,KS

Start Date: 2013.10.21 @ 14:34:00

End Date: 2013.10.21 @ 21:57:00

Job Ticket #: 52269 DST #: 1

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

Printed: 2013.10.25 @ 13:23:00

TDI Inc.
5 13s 20w Ellis,KS
Henry #1
DST # 1
LKC " H "
2013.10.21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52269 **DST#: 1**
Test Start: 2013.10.21 @ 14:34:00

GENERAL INFORMATION:

Formation: **LKC " H "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:10:15
 Time Test Ended: 21:57:00
 Interval: **3556.00 ft (KB) To 3595.00 ft (KB) (TVD)**
 Total Depth: 3595.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jim Svaty
 Unit No: 54
 Reference Elevations: 2151.00 ft (KB)
 2141.00 ft (CF)
 KB to GR/CF: 10.00 ft

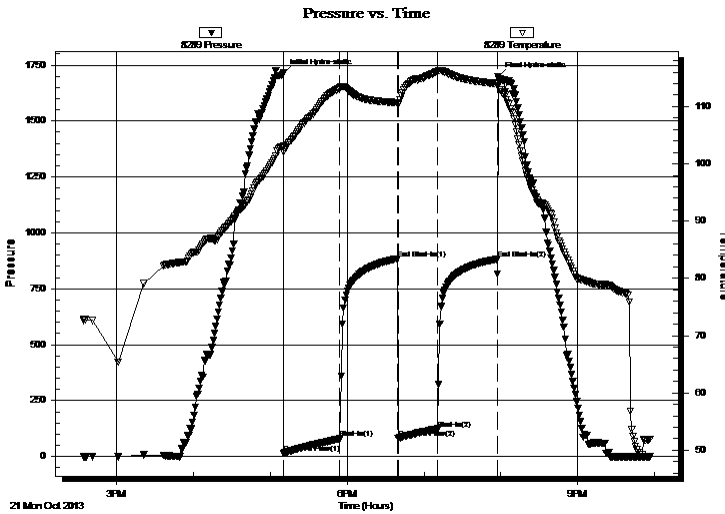
Serial #: 8289

Outside

Press @ Run Depth: 124.22 psig @ 3557.00 ft (KB)
 Start Date: 2013.10.21 End Date: 2013.10.21
 Start Time: 14:34:02 End Time: 21:57:00
 Capacity: 8000.00 psig
 Last Calib.: 2013.10.21
 Time On Btm: 2013.10.21 @ 17:10:00
 Time Off Btm: 2013.10.21 @ 19:57:45

TEST COMMENT: 45-IFP- Surface Blow Building to 10"
 45-ISIP- No Blow
 30-FFP- No Blow Flushed - No Blow
 45-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1713.59	103.07	Initial Hydro-static
1	15.14	102.02	Open To Flow (1)
45	79.83	113.24	Shut-In(1)
90	884.60	110.66	End Shut-In(1)
90	81.97	110.42	Open To Flow (2)
121	124.22	116.13	Shut-In(2)
167	882.05	113.98	End Shut-In(2)
168	1699.51	114.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	MCW 5% m 95% w	3.37

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis,KS
Henry #1
Job Ticket: 52269 **DST#: 1**
Test Start: 2013.10.21 @ 14:34:00

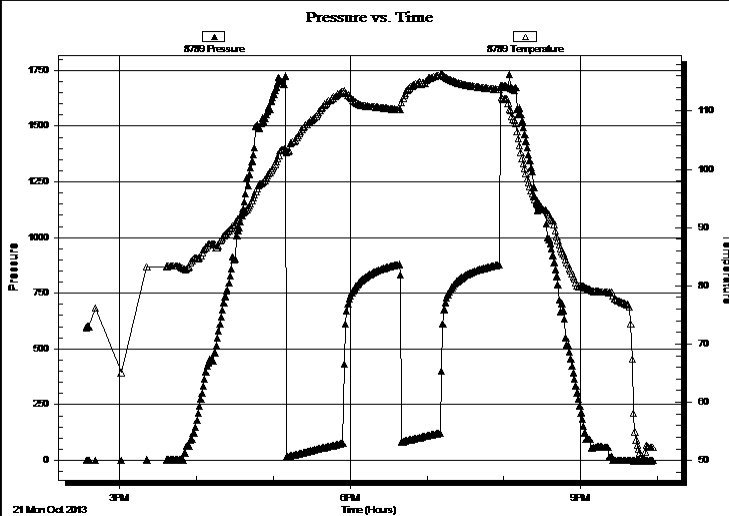
GENERAL INFORMATION:

Formation: **LKC " H "**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:10:15
Time Test Ended: 21:57:00
Interval: **3556.00 ft (KB) To 3595.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 2151.00 ft (KB)
2141.00 ft (CF)
KB to GR/CF: 10.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Jim Svaty
Unit No: 54

Serial #: 8789 Inside

Press @ RunDepth: psig @ 3557.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.21 End Date: 2013.10.21 Last Calib.: 2013.10.21
Start Time: 14:34:02 End Time: 21:56:45 Time On Btm:
Time Off Btm:

TEST COMMENT: 45-IFP- Surface Blow Building to 10"
45-ISIP- No Blow
30-FFP- No Blow Flushed - No Blow
45-FSIP- No Blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
240.00	MCW 5% m 95% w	3.37

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52269 **DST#: 1**
Test Start: 2013.10.21 @ 14:34:00

Tool Information

Drill Pipe:	Length: 3565.00 ft	Diameter: 3.80 inches	Volume: 50.01 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume: 50.01 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	37000.00 lb
Depth to Top Packer:	3556.00 ft			Final	37000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	39.00 ft				
Tool Length:	60.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Change Over Sub	1.00			3536.00	
Shut In Tool	5.00			3541.00	
Hydraulic tool	5.00			3546.00	
Packer	5.00			3551.00	21.00 Bottom Of Top Packer
Packer	5.00			3556.00	
Stubb	1.00			3557.00	
Recorder	0.00	8789	Inside	3557.00	
Recorder	0.00	8289	Outside	3557.00	
Perforations	35.00			3592.00	
Bullnose	3.00			3595.00	39.00 Bottom Packers & Anchor
Total Tool Length:	60.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **5 13s 20w Ellis,KS**
 1310 Bison Rd **Henry #1**
 Hays KS 67601 Job Ticket: 52269 **DST#: 1**
 ATTN: Herb Deines Test Start: 2013.10.21 @ 14:34:00

Mud and Cushion Information

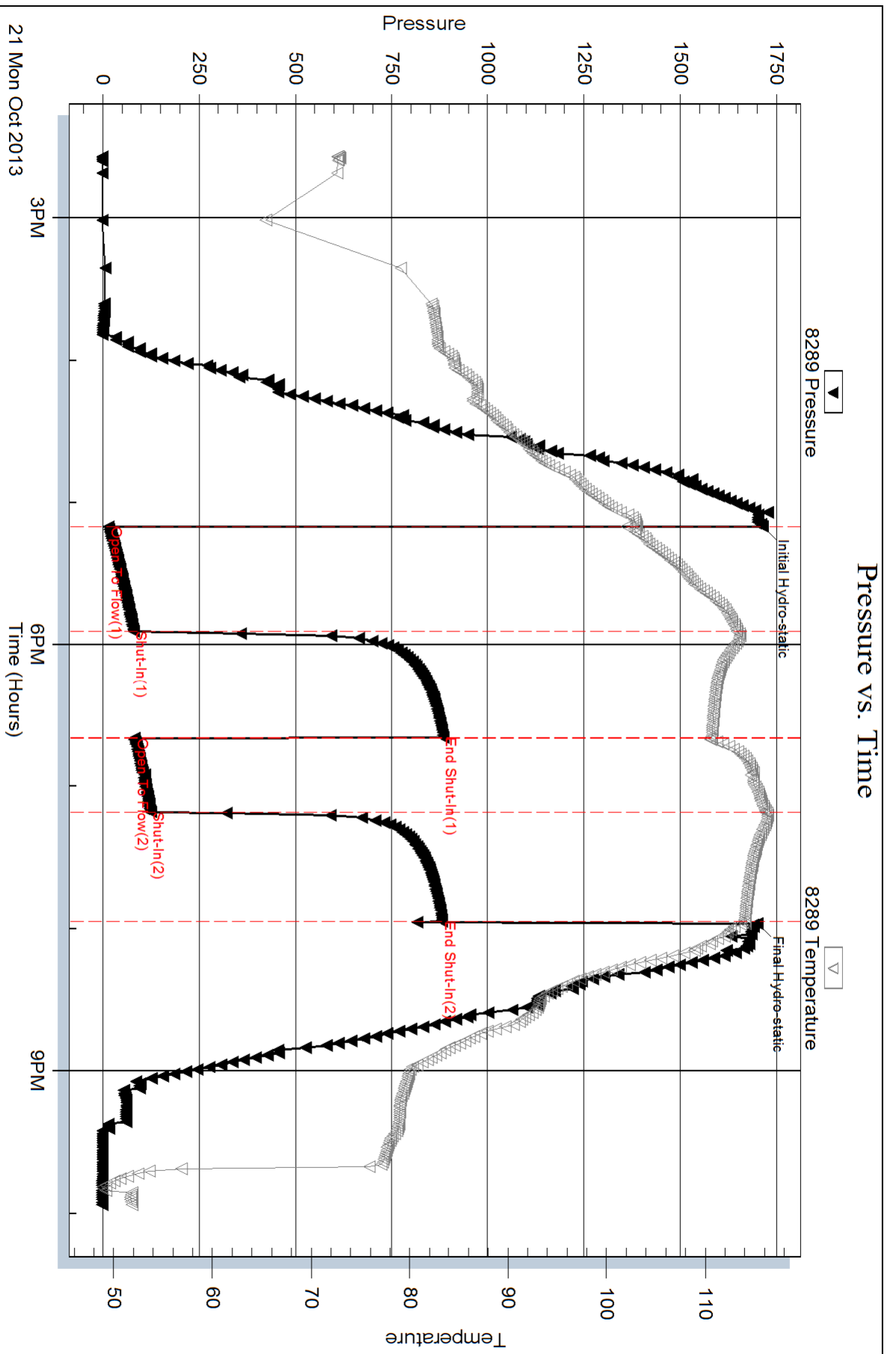
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	85000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.75 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2100.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	MCW 5% _m 95% _w	3.367

Total Length: 240.00 ft Total Volume: 3.367 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: .130 @ 52



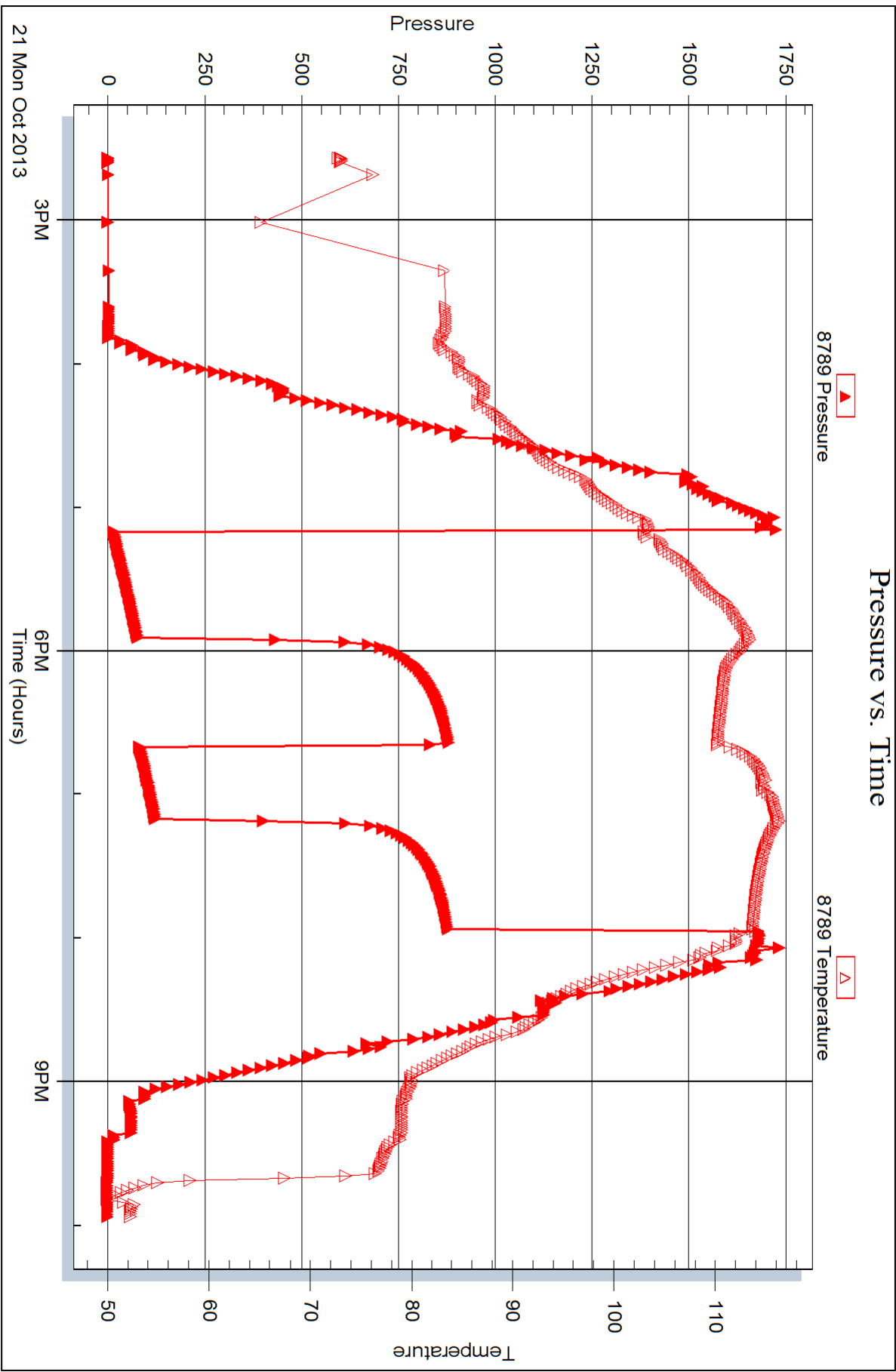
Serial #: 8789

Inside

TDI Inc.

Henry #1

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Henry #1

5 13s 20w Ellis,KS

Start Date: 2013.10.23 @ 00:03:00

End Date: 2013.10.23 @ 07:40:00

Job Ticket #: 52270 DST #: 2

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

Printed: 2013.10.25 @ 13:22:24

TDI Inc.
5 13s 20w Ellis,KS
Henry #1
DST # 2
Marmaton
2013.10.23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52270 **DST#: 2**
Test Start: 2013.10.23 @ 00:03:00

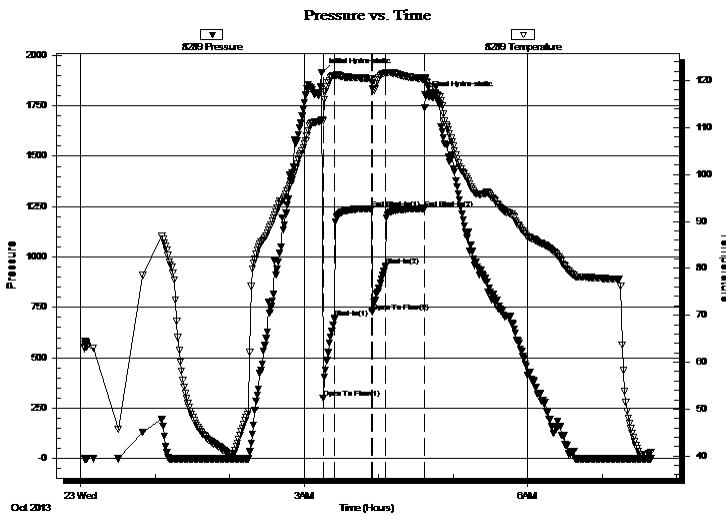
GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:15:15
Time Test Ended: 07:40:00
Interval: **3744.00 ft (KB) To 3798.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Jim Svaty
Unit No: 54
Reference Elevations: 2151.00 ft (KB)
2141.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8289 Outside
Press @ Run Depth: 953.96 psig @ 3745.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23
Start Time: 00:03:02 End Time: 07:39:45 Time On Btm: 2013.10.23 @ 03:14:30
Time Off Btm: 2013.10.23 @ 04:37:30

TEST COMMENT: 10-IFP- BOB in 40 sec.
30-ISIP- No Blow
10-FFP- BOB in 40 sec.
30-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1915.54	111.58	Initial Hydro-static
1	298.36	111.52	Open To Flow (1)
10	694.91	121.02	Shut-In(1)
40	1239.58	120.41	End Shut-In(1)
41	728.31	119.53	Open To Flow (2)
51	953.96	121.65	Shut-In(2)
83	1241.14	120.27	End Shut-In(2)
83	1802.46	120.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MCW 15% m 85% w	6.09
1184.00	MCW 40% m 60% w	16.61
372.00	Mud 100%	5.22

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52270 **DST#: 2**
Test Start: 2013.10.23 @ 00:03:00

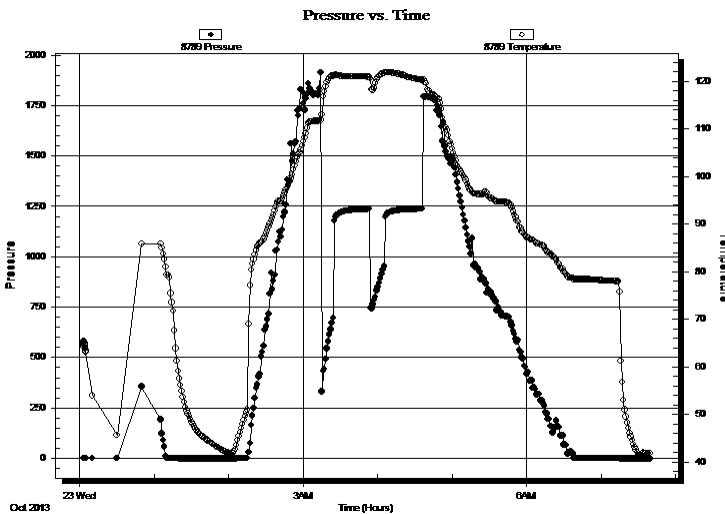
GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:15:15
Time Test Ended: 07:40:00
Interval: **3744.00 ft (KB) To 3798.00 ft (KB) (TVD)**
Total Depth: 3595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Jim Svaty
Unit No: 54
Reference Elevations: 2151.00 ft (KB)
2141.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8789 Inside
Press @ Run Depth: psig @ 3745.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23
Start Time: 00:03:02 End Time: 07:39:30 Time On Btm:
Time Off Btm:

TEST COMMENT: 10-IFP- BOB in 40 sec.
30-ISIP- No Blow
10-FFP- BOB in 40 sec.
30-FSIP- No Blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
434.00	MCW 15% m 85% w	6.09
1184.00	MCW 40% m 60% w	16.61
372.00	Mud 100%	5.22

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis,KS
Henry #1
Job Ticket: 52270 **DST#: 2**
Test Start: 2013.10.23 @ 00:03:00

Tool Information

Drill Pipe:	Length: 3754.00 ft	Diameter: 3.80 inches	Volume: 52.66 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 52.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3744.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	3798.00 ft			
Interval between Packers:	54.00 ft			
Tool Length:	206.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Mis-run Straddle Packer Failed

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3724.00	
Shut In Tool	5.00			3729.00	
Hydraulic tool	5.00			3734.00	
Packer	5.00			3739.00	21.00 Bottom Of Top Packer
Packer	5.00			3744.00	
Stubb	1.00			3745.00	
Recorder	0.00	8789	Inside	3745.00	
Recorder	0.00	8289	Outside	3745.00	
Perforations	15.00			3760.00	
Change Over Sub	1.00			3761.00	
Blank Spacing	31.00			3792.00	
Change Over Sub	1.00			3793.00	
Perforations	1.00			3794.00	
Blank Off Sub	1.00			3795.00	
Blank Spacing	3.00			3798.00	54.00 Tool Interval
Packer	1.00			3799.00	
Perforations	3.00			3802.00	
Change Over Sub	1.00			3803.00	
Recorder	0.00	6668	Below	3803.00	
Blank Spacing	126.00			3929.00	131.00 Bottom Packers & Anchor

Total Tool Length: 206.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis,KS
Henry #1
Job Ticket: 52270 **DST#: 2**
Test Start: 2013.10.23 @ 00:03:00

Mud and Cushion Information

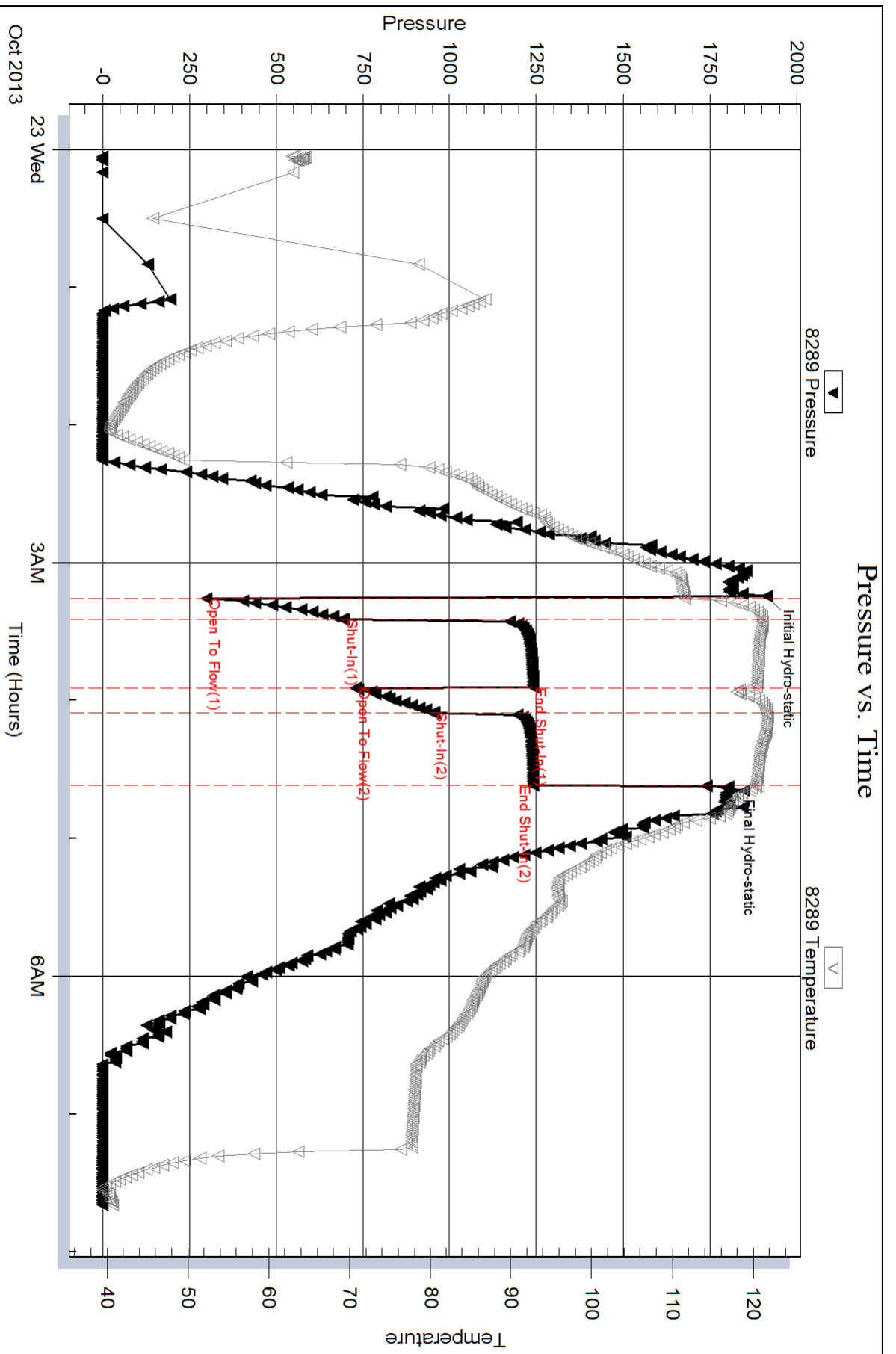
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	28000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.76 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

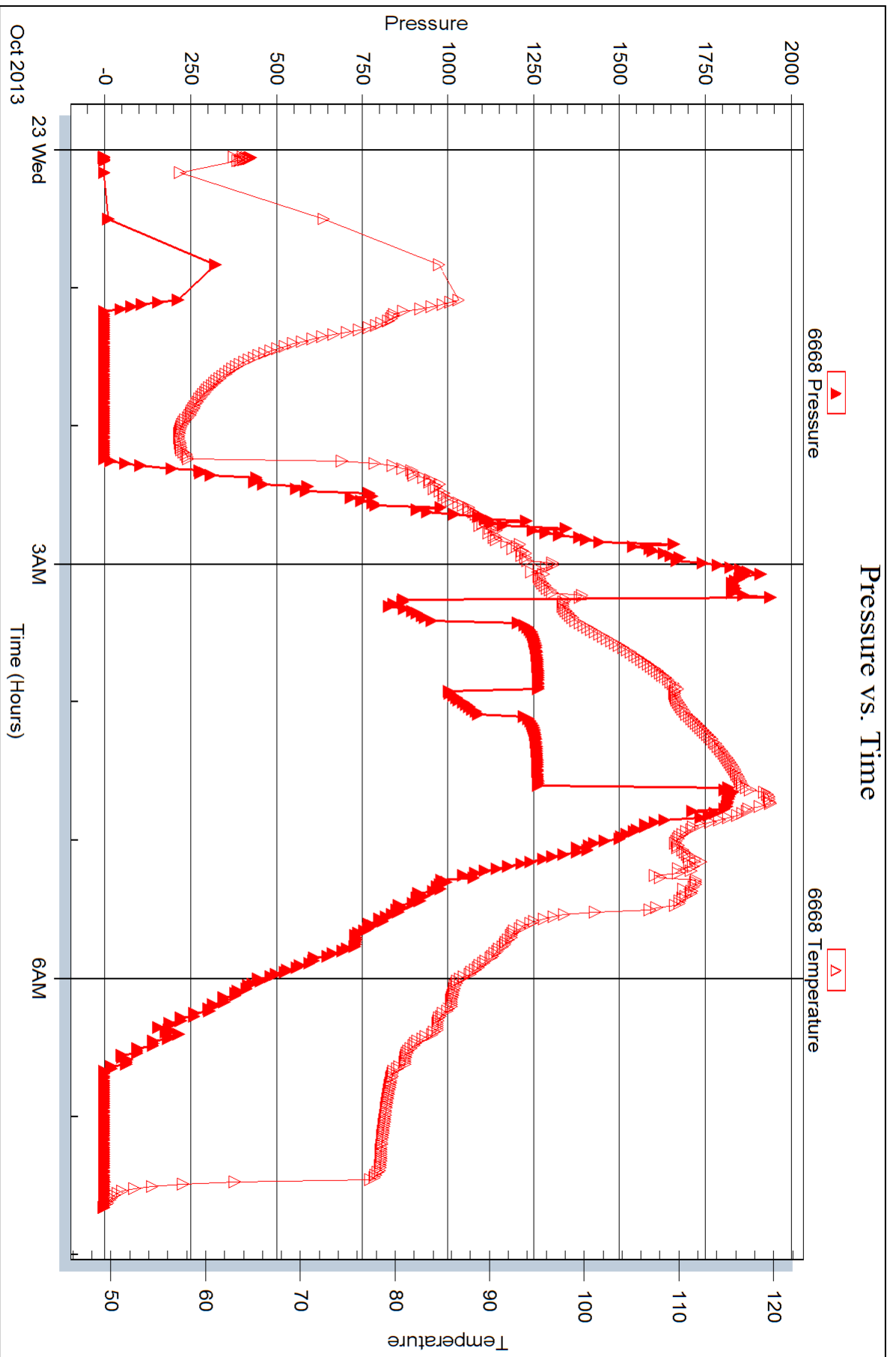
Recovery Information

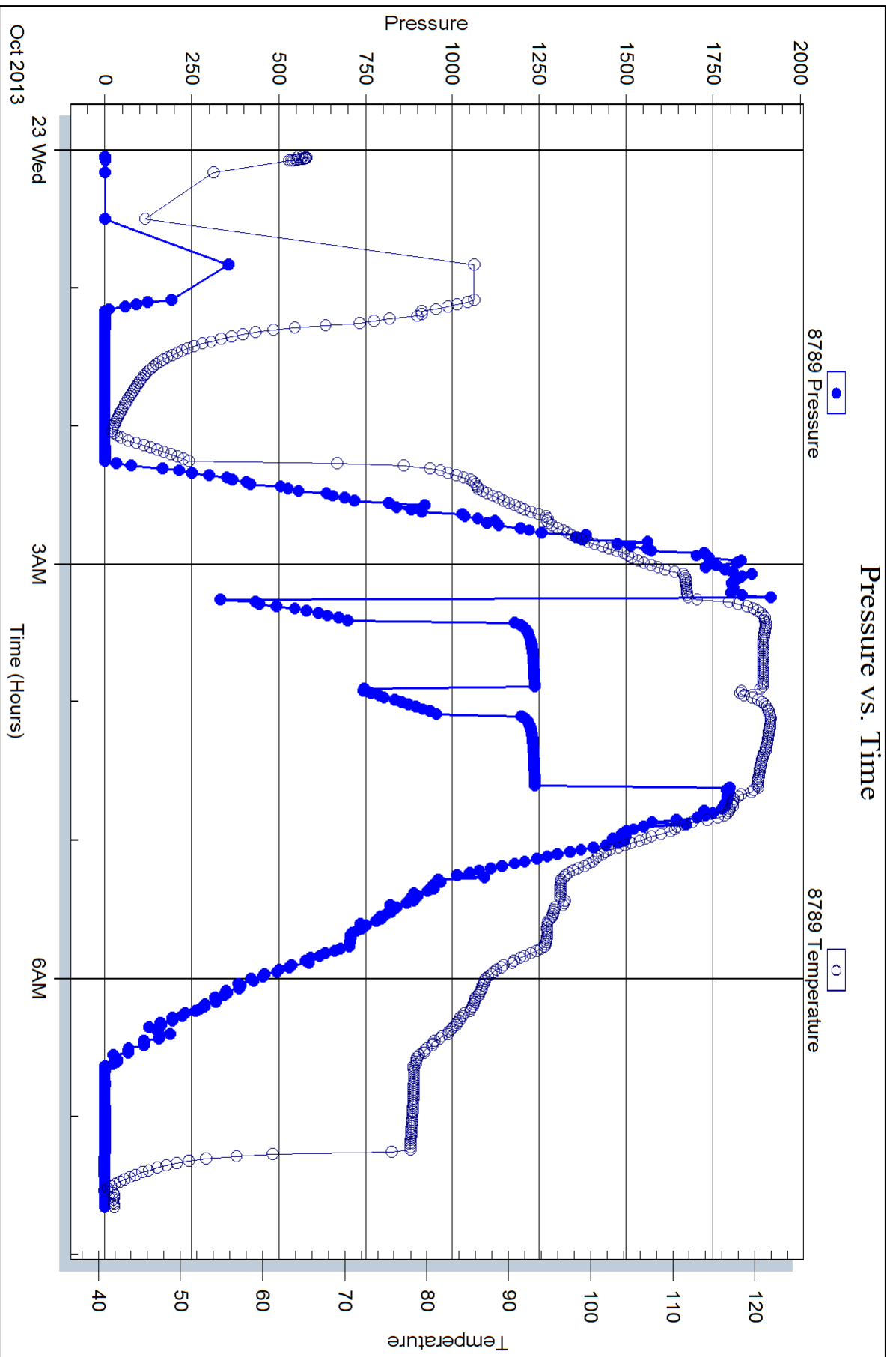
Recovery Table

Length ft	Description	Volume bbl
434.00	MCW 15%m 85%w	6.088
1184.00	MCW 40%m 60%w	16.608
372.00	Mud 100%	5.218

Total Length: 1990.00 ft Total Volume: 27.914 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: .435 @ 40









DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Henry #1

5 13s 20w Ellis,KS

Start Date: 2013.10.23 @ 08:53:00

End Date: 2013.10.23 @ 14:20:00

Job Ticket #: 52271 DST #: 3

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

Printed: 2013.10.25 @ 13:21:52

TDI Inc.
5 13s 20w Ellis,KS
Henry #1
DST # 3
Marmaton
2013.10.23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52271 **DST#: 3**
Test Start: 2013.10.23 @ 08:53:00

GENERAL INFORMATION:

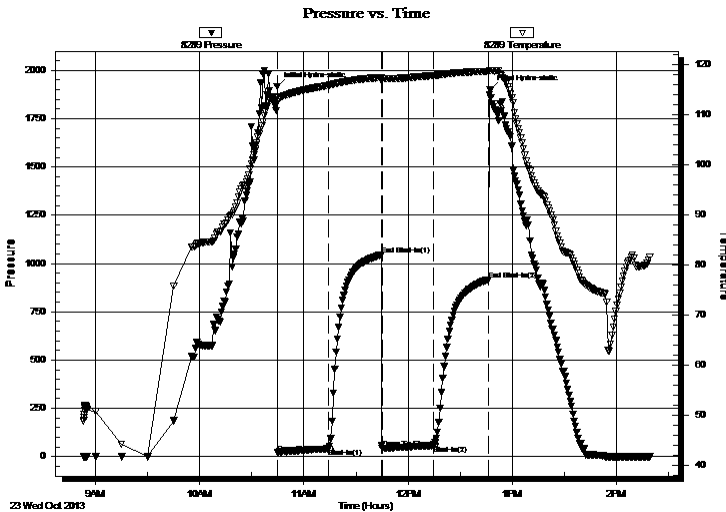
Formation: **Marmaton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:44:45
 Time Test Ended: 14:20:00
 Interval: **3744.00 ft (KB) To 3823.00 ft (KB) (TVD)**
 Total Depth: 3930.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Jim Svaty
 Unit No: 54
 Reference Elevations: 2151.00 ft (KB)
 2141.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8289 Outside

Press @ Run Depth: 57.34 psig @ 3751.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23
 Start Time: 08:53:02 End Time: 14:19:45 Time On Btm: 2013.10.23 @ 10:44:30
 Time Off Btm: 2013.10.23 @ 12:47:15

TEST COMMENT: 30-IFP- Good Surge on Open No Blow
 30-ISIP- No Blow
 30-FFP- Surface Blow Building to 3 in.
 30-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1916.84	113.73	Initial Hydro-static
1	19.76	112.58	Open To Flow (1)
30	40.58	115.93	Shut-In(1)
60	1044.76	117.45	End Shut-In(1)
61	41.63	117.18	Open To Flow (2)
91	57.34	117.88	Shut-In(2)
122	912.89	118.72	End Shut-In(2)
123	1898.75	118.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	MCW 40% m 60% w Show of Oil	1.12
10.00	CO 100%	0.14

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
 1310 Bison Rd
 Hays KS 67601
 ATTN: Herb Deines

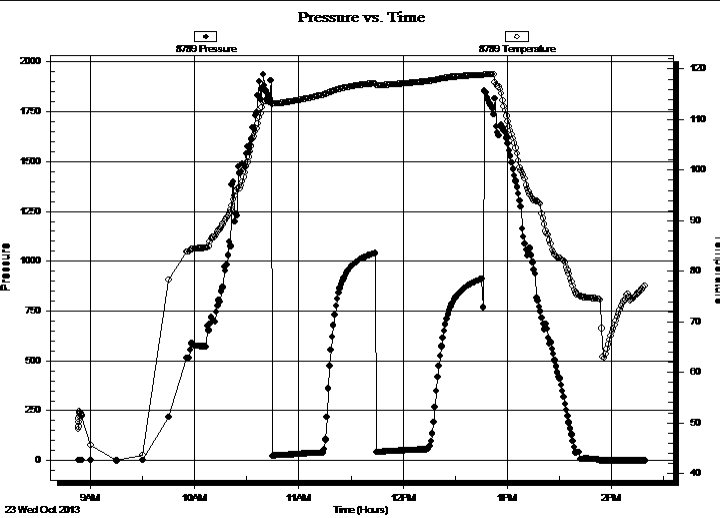
5 13s 20w Ellis, KS
Henry #1
 Job Ticket: 52271 **DST#: 3**
 Test Start: 2013.10.23 @ 08:53:00

GENERAL INFORMATION:

Formation: **Marmaton**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:44:45
 Time Test Ended: 14:20:00
Interval: 3744.00 ft (KB) To 3823.00 ft (KB) (TVD)
 Total Depth: 3930.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Jim Svaty
 Unit No: 54
 Reference Elevations: 2151.00 ft (KB)
 2141.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8789 Inside
 Press @ Run Depth: psig @ 3751.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.23 End Date: 2013.10.23 Last Calib.: 2013.10.23
 Start Time: 08:53:02 End Time: 14:19:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP- Good Surge on Open No Blow
 30-ISIP- No Blow
 30-FFP- Surface Blow Building to 3 in.
 30-FSIP- No Blow



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

Recovery		
Length (ft)	Description	Volume (bbl)
80.00	MCW 40% m 60% w Show of Oil	1.12
10.00	CO 100%	0.14

* Recovery from multiple tests

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52271 **DST#: 3**
Test Start: 2013.10.23 @ 08:53:00

Tool Information

Drill Pipe:	Length: 3754.00 ft	Diameter: 3.80 inches	Volume: 52.66 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 52.66 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3744.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	3823.00 ft				
Interval between Packers:	79.00 ft				
Tool Length:	206.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3724.00	
Shut In Tool	5.00			3729.00	
Hydraulic tool	5.00			3734.00	
Packer	5.00			3739.00	21.00 Bottom Of Top Packer
Packer	5.00			3744.00	
Stubb	1.00			3745.00	
Perforations	5.00			3750.00	
Change Over Sub	1.00			3751.00	
Recorder	0.00	8789	Inside	3751.00	
Recorder	0.00	8289	Outside	3751.00	
Blank Spacing	62.00			3813.00	
Change Over Sub	1.00			3814.00	
Perforations	5.00			3819.00	
Blank Off Sub	1.00			3820.00	
Blank Spacing	3.00			3823.00	79.00 Tool Interval
Packer	1.00			3824.00	
Perforations	7.00			3831.00	
Change Over Sub	1.00			3832.00	
Recorder	0.00	6668	Below	3832.00	
Blank Spacing	93.00			3925.00	
Change Over Sub	1.00			3926.00	
Bullnose	3.00			3929.00	106.00 Bottom Packers & Anchor

Total Tool Length: 206.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **5 13s 20w Ellis,KS**
 1310 Bison Rd **Henry #1**
 Hays KS 67601 Job Ticket: 52271 **DST#: 3**
 ATTN: Herb Deines Test Start: 2013.10.23 @ 08:53:00

Mud and Cushion Information

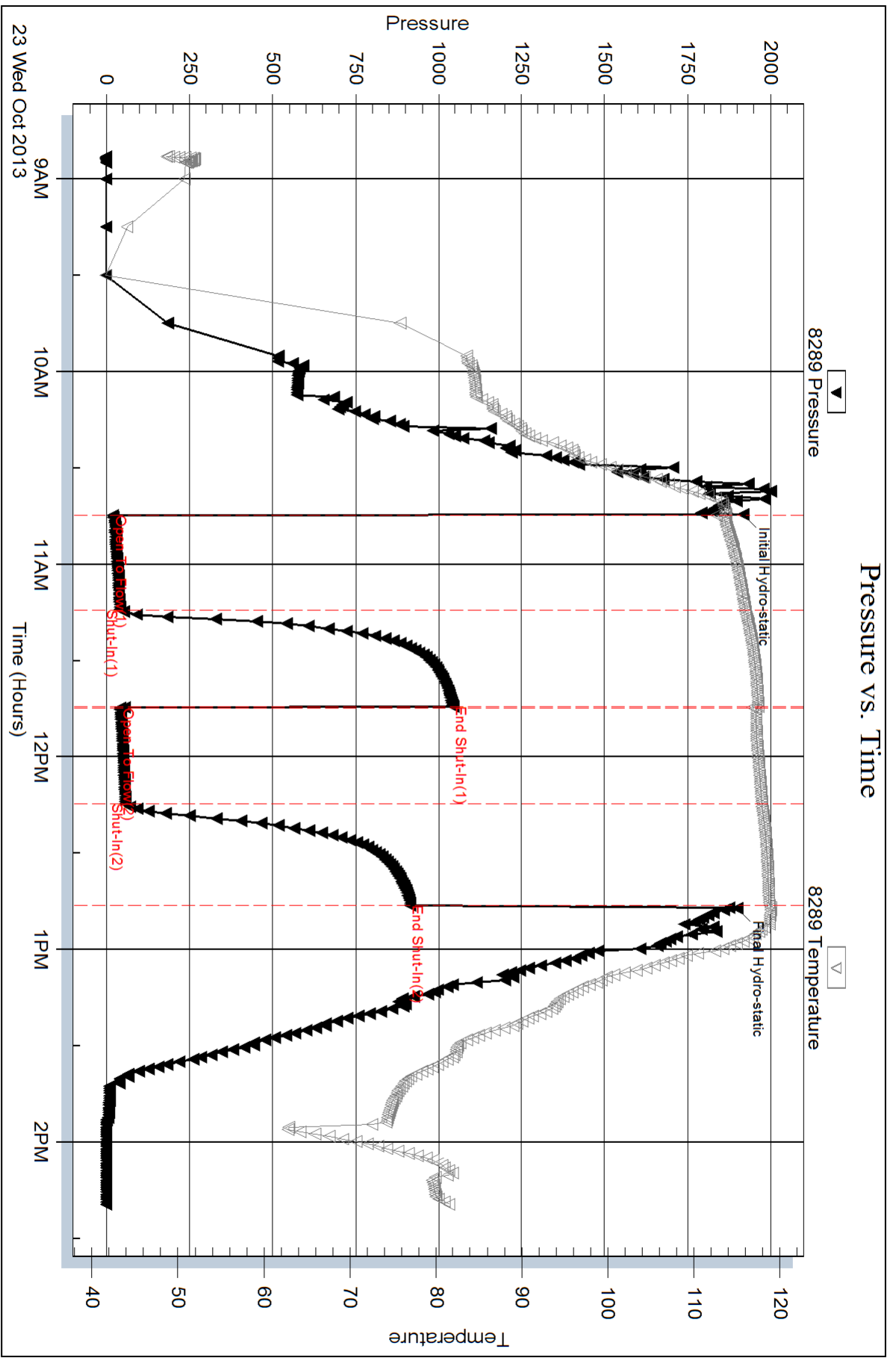
Mud Type: Gel Chem	Cushion Type:	Oil API: 37 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 24000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 6.78 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2000.00 ppm		
Filter Cake: 2.00 inches		

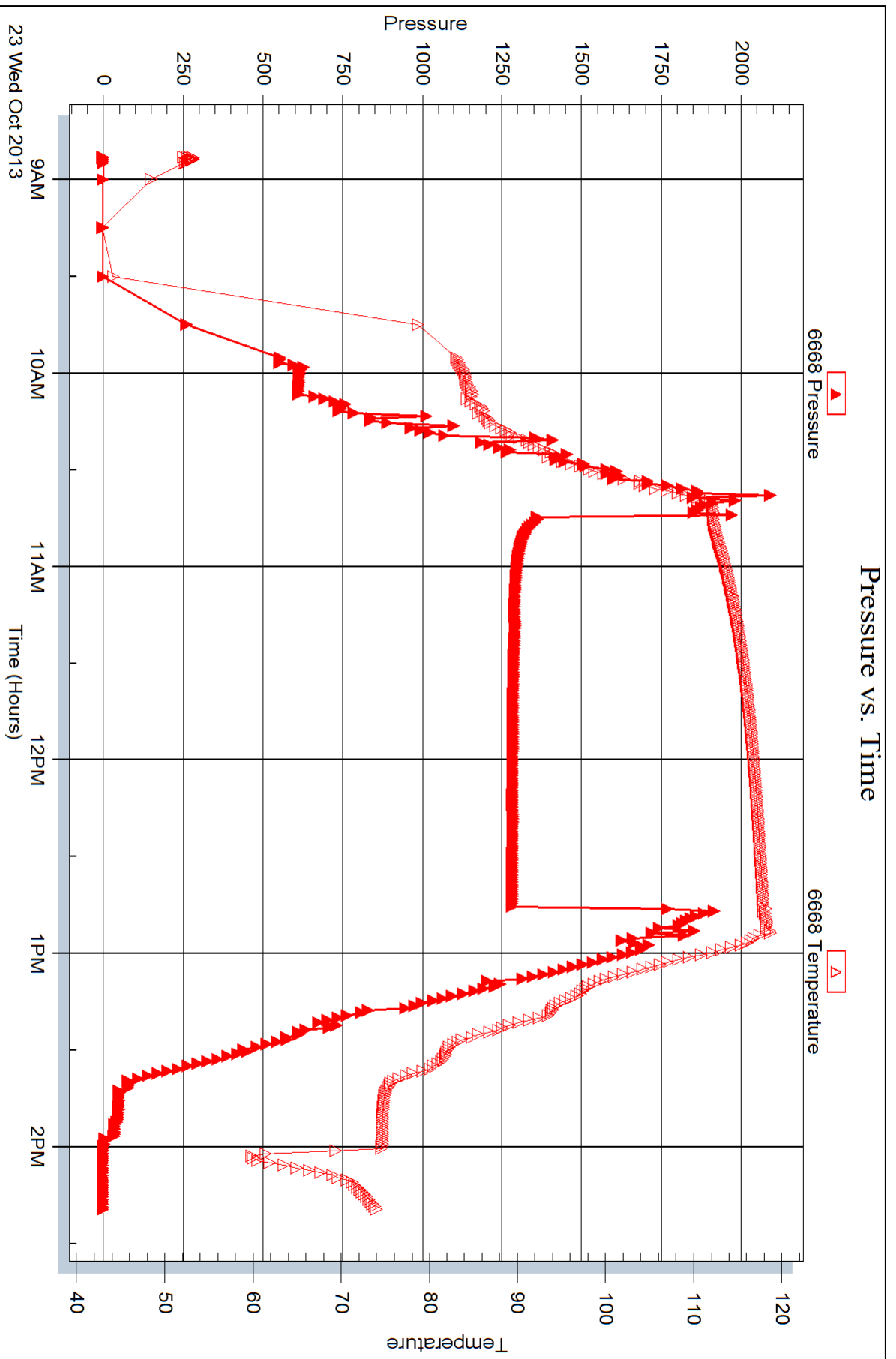
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	MCW 40%m 60%w Show of Oil	1.122
10.00	CO 100%	0.140

Total Length: 90.00 ft Total Volume: 1.262 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: .253 @ 78





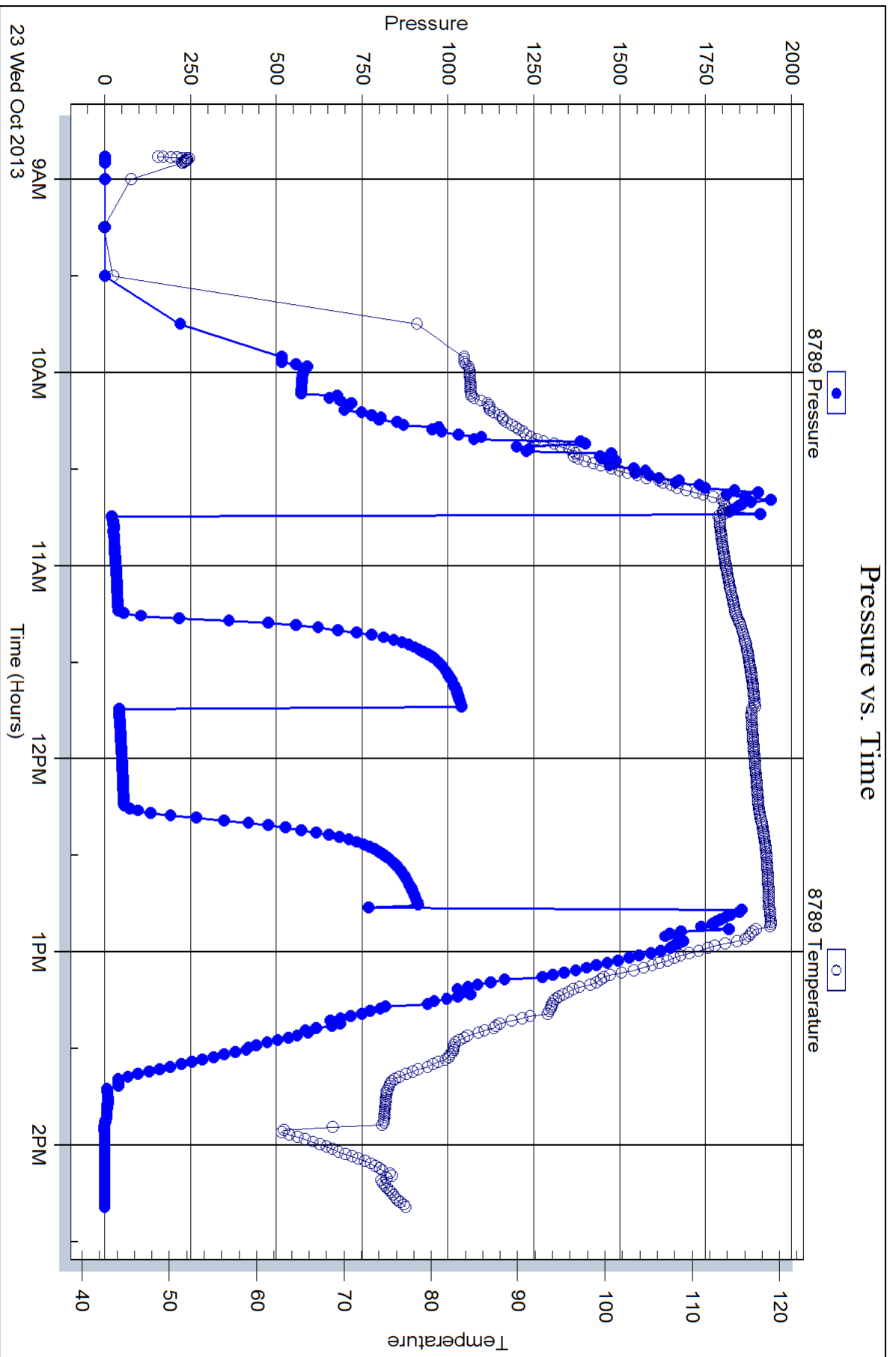
Serial #: 8789

Inside

TDI Inc.

Henry #1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **TDI Inc.**

1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

Henry #1

5 13s 20w Ellis,KS

Start Date: 2013.10.23 @ 21:04:00

End Date: 2013.10.24 @ 02:22:00

Job Ticket #: 52272 DST #: 4

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

Printed: 2013.10.25 @ 13:21:23

TDI Inc.
5 13s 20w Ellis,KS
Henry #1
DST # 4
LKC " 1 "
2013.10.23



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

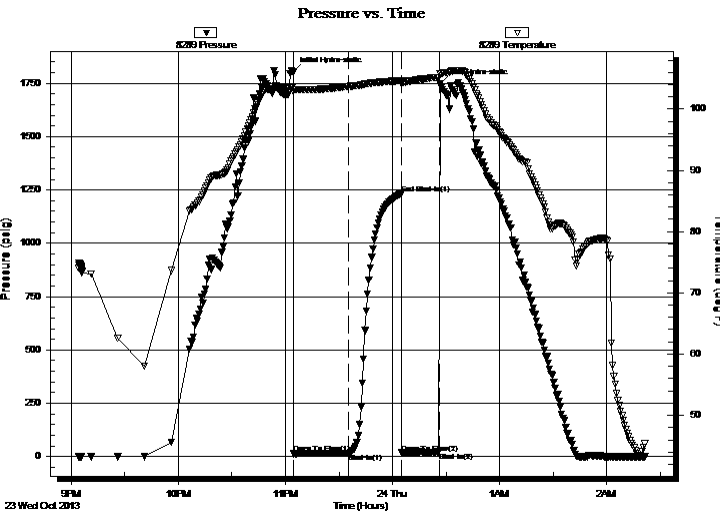
5 13s 20w Ellis, KS
Henry #1
Job Ticket: 52272 **DST#: 4**
Test Start: 2013.10.23 @ 21:04:00

GENERAL INFORMATION:

Formation: **LKC " I "**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Straddle (Reset)
Time Tool Opened: 23:04:30 Tester: Jim Svaty
Time Test Ended: 02:22:00 Unit No: 54
Interval: 3588.00 ft (KB) To 3610.00 ft (KB) (TVD) Reference Elevations: 2151.00 ft (KB)
Total Depth: 3930.00 ft (KB) (TVD) 2141.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8289 Outside
Press @ Run Depth: 15.36 psig @ 3589.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2013.10.23 End Date: 2013.10.24 Last Calib.: 2013.10.24
Start Time: 21:04:02 End Time: 02:21:45 Time On Btm: 2013.10.23 @ 23:04:15
Time Off Btm: 2013.10.24 @ 00:26:30

TEST COMMENT: 30-IFP- Surface Blow
30-ISIP- No Blow
20-FFP- No Blow Flushed at 15min. Good Surge No Blow
Pulled



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1802.93	103.55	Initial Hydro-static
1	13.51	102.87	Open To Flow (1)
31	15.36	103.71	Shut-In(1)
61	1232.44	104.66	End Shut-In(1)
61	17.60	104.07	Open To Flow (2)
82	20.20	105.15	Shut-In(2)
83	1748.06	105.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TDI Inc.
1310 Bison Rd
Hays KS 67601

ATTN: Herb Deines

5 13s 20w Ellis,KS

Henry #1
Job Ticket: 52272 **DST#: 4**

Test Start: 2013.10.23 @ 21:04:00

GENERAL INFORMATION:

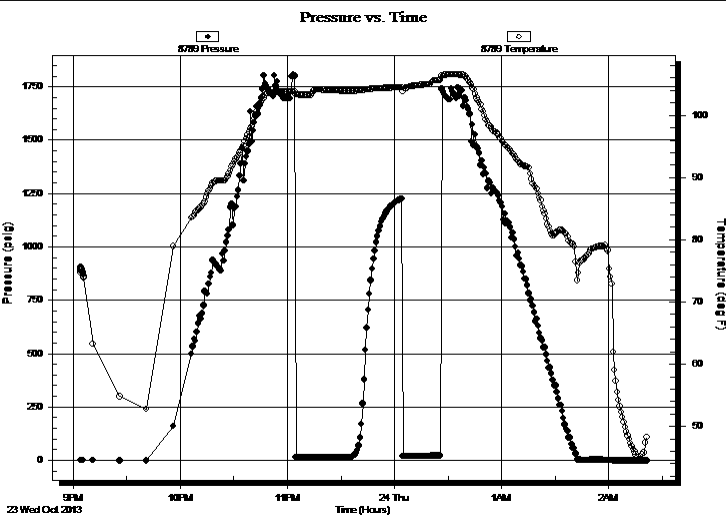
Formation:	LKC " I "		
Deviated:	No Whipstock:	ft (KB)	Test Type: Conventional Straddle (Reset)
Time Tool Opened:	23:04:30		Tester: Jim Svaty
Time Test Ended:	02:22:00		Unit No: 54
Interval:	3588.00 ft (KB) To 3610.00 ft (KB) (TVD)		Reference Elevations: 2151.00 ft (KB)
Total Depth:	3930.00 ft (KB) (TVD)		2141.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition: Fair	KB to GR/CF: 10.00 ft

Serial #: 8789

Inside

Press @ Run Depth:	psig @	3589.00 ft (KB)	Capacity:	8000.00 psig	
Start Date:	2013.10.23	End Date:	2013.10.24	Last Calib.:	2013.10.24
Start Time:	21:04:02	End Time:	02:21:30	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: 30-IFP- Surface Blow
30-ISIP- No Blow
20-FFP- No Blow Flushed at 15min. Good Surge No Blow
Pulled



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI Inc.
1310 Bison Rd
Hays KS 67601
ATTN: Herb Deines

5 13s 20w Ellis,KS
Henry #1
Job Ticket: 52272 **DST#: 4**
Test Start: 2013.10.23 @ 21:04:00

Tool Information

Drill Pipe:	Length: 3598.00 ft	Diameter: 3.80 inches	Volume: 50.47 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 44000.00 lb
			<u>Total Volume: 50.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3588.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	3610.00 ft			
Interval between Packers:	22.00 ft			
Tool Length:	363.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3568.00	
Shut In Tool	5.00			3573.00	
Hydraulic tool	5.00			3578.00	
Packer	5.00			3583.00	21.00 Bottom Of Top Packer
Packer	5.00			3588.00	
Stubb	1.00			3589.00	
Recorder	0.00	8789	Inside	3589.00	
Recorder	0.00	8289	Outside	3589.00	
Perforations	17.00			3606.00	
Blank Off Sub	1.00			3607.00	
Blank Spacing	3.00			3610.00	22.00 Tool Interval
Packer	1.00			3611.00	
Perforations	3.00			3614.00	
Change Over Sub	1.00			3615.00	
Recorder	0.00	6668	Below	3615.00	
Blank Spacing	315.00			3930.00	320.00 Bottom Packers & Anchor
Total Tool Length:	363.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI Inc. **5 13s 20w Ellis,KS**
 1310 Bison Rd **Henry #1**
 Hays KS 67601 Job Ticket: 52272 **DST#: 4**
 ATTN: Herb Deines Test Start: 2013.10.23 @ 21:04:00

Mud and Cushion Information

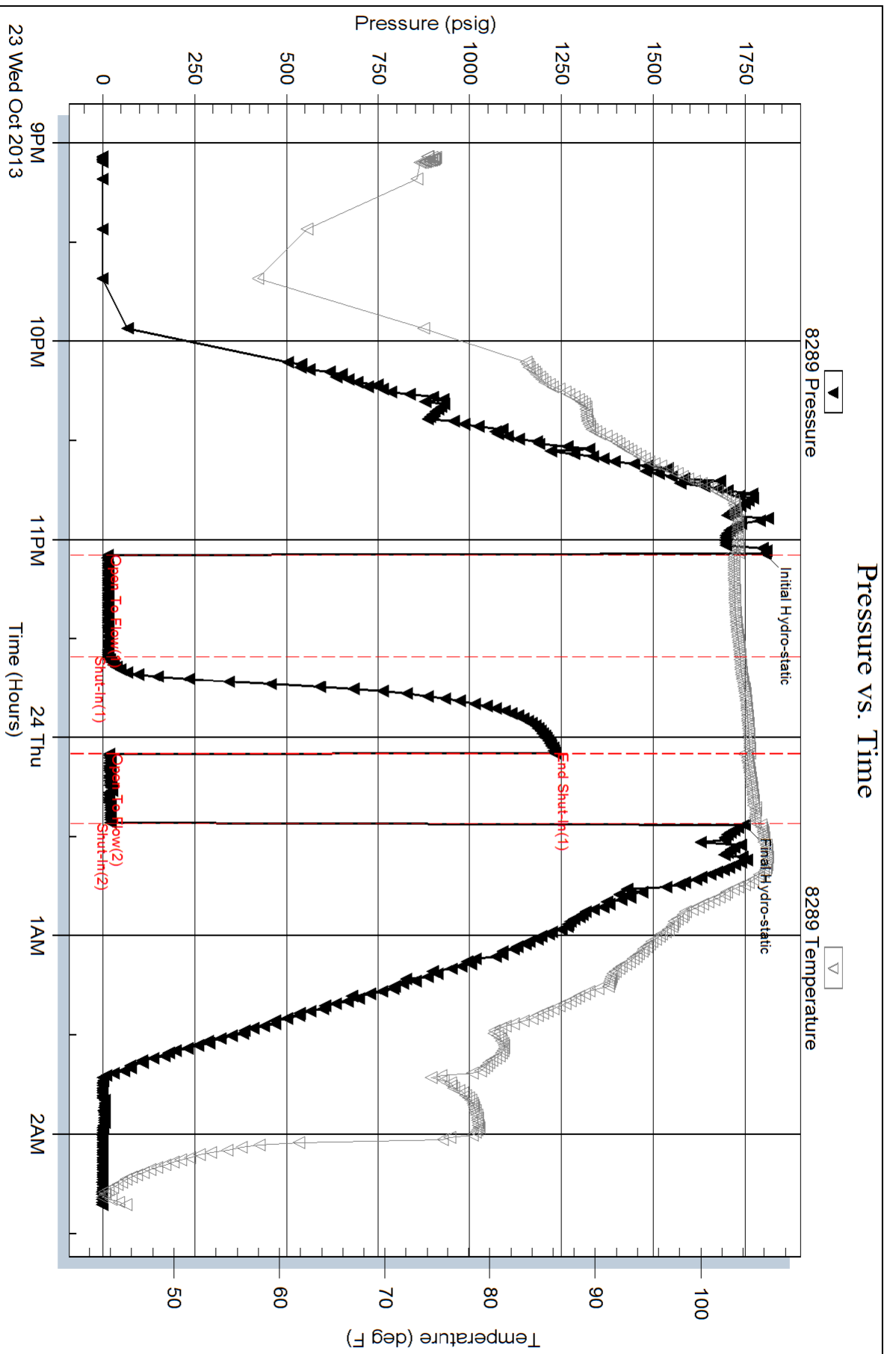
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

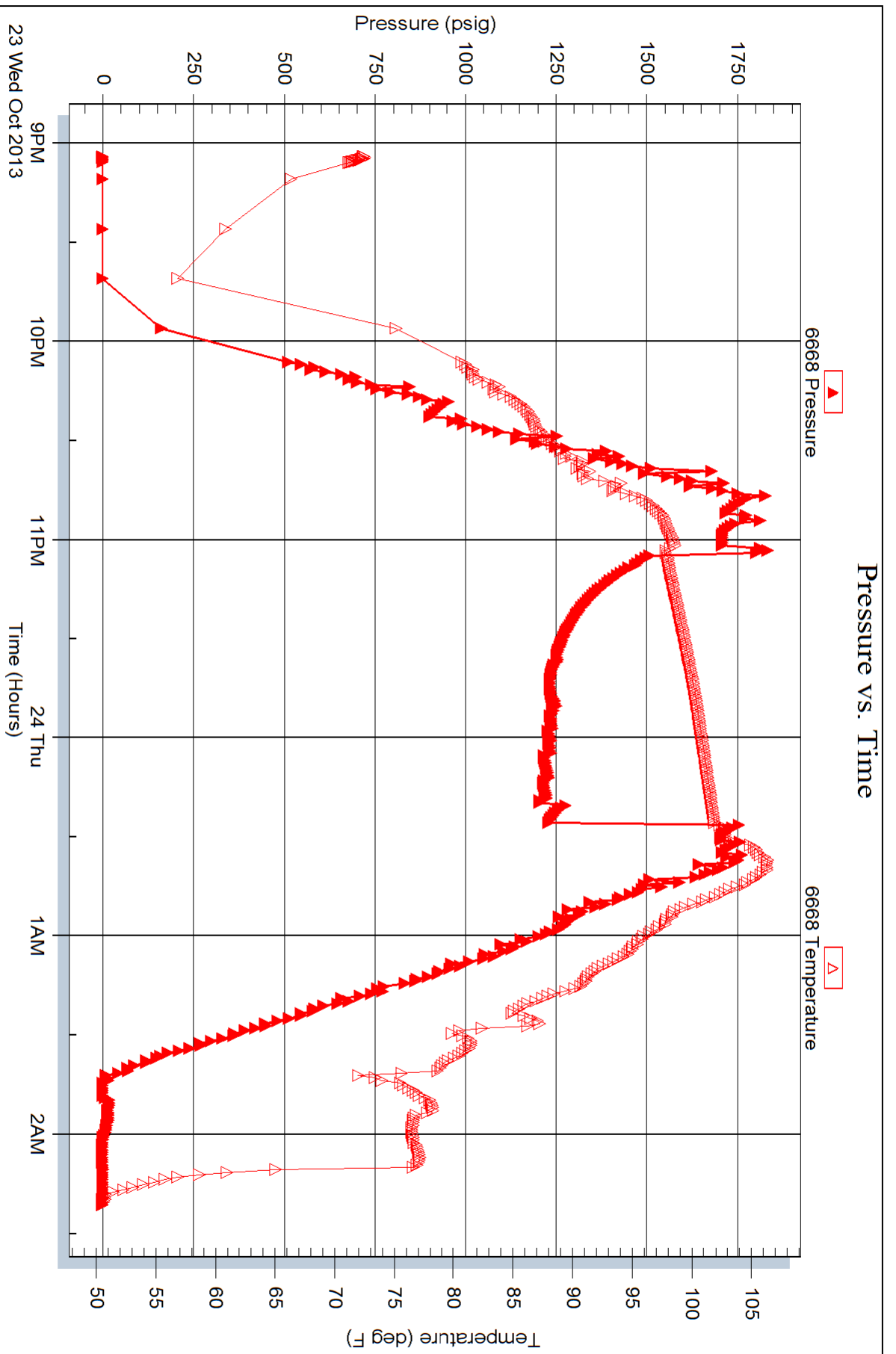
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:





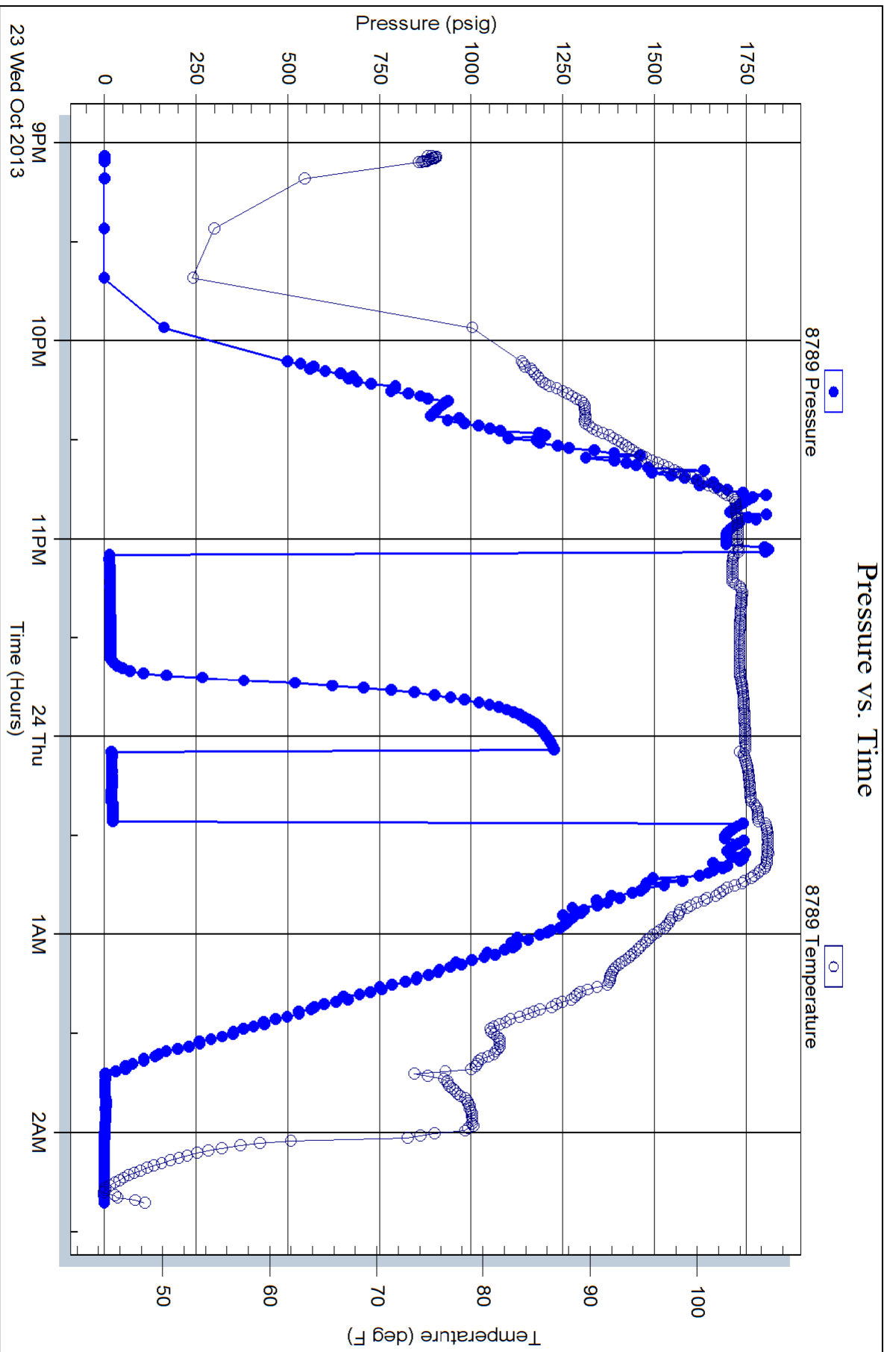
Serial #: 8789

Inside

TDI Inc.

Henry #1

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 52272

Printed: 2013.10.25 @ 13:21:25



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52269

4/10

Well Name & No. Henry #1 Test No. 1 Date 10-21-13
 Company TDI INC Elevation 2151 KB 2141 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 5 Twp. 13^s Rge. 20^w Co. Ellis State KS

Interval Tested 3550-3595 Zone Tested LRC "H"
 Anchor Length 39 Drill Pipe Run 3565 Mud Wt. 8.9
 Top Packer Depth 3551 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3550 Wt. Pipe Run 0 WL 6.8
 Total Depth 3595 Chlorides 2100 ppm System LCM 2

Blow Description IFP - Surface Blow Building to 10 in
ISIP - No Blow
FFP - No Blow Flushed - No Blow
FSIP - No Blow

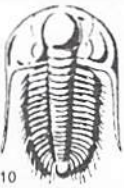
Rec	Feet of	%gas	%oil	%water	%mud
<u>240</u>	<u>MCW</u>		<u>95</u>	<u>5</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 240 BHT 114 Gravity API RW:130 @ 52 °F Chlorides 85000 ppm

(A) Initial Hydrostatic 1713 Test 1150 T-On Location 11:27
 (B) First Initial Flow 15 Jars _____ T-Started 14:34
 (C) First Final Flow 79 Safety Joint _____ T-Open 17:10
 (D) Initial Shut-In 884 Circ Sub _____ T-Pulled 19:55
 (E) Second Initial Flow 81 Hourly Standby _____ T-Out 21:57
 (F) Second Final Flow 124 Mileage 34 RT 52.70 Comments _____
 (G) Final Shut-In 882 Sampler _____
 (H) Final Hydrostatic 1699 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1202.70
 Accessibility _____ MP/DST Disc't _____

Initial Open 45
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 45
 Sub Total 1202.70

Approved By _____ Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52270

Well Name & No. Henry #1 Test No. 2 Date 10-22-13
 Company TPI INC. Elevation 2151 KB 2141 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 5 Twp. 13^s Rge. 20^w Co. Ellis State KS

Interval Tested 3744 - 3798 Zone Tested MARMATON
 Anchor Length 54 (132TP) Drill Pipe Run 3754 Mud Wt. 9.1
 Top Packer Depth 3744 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3798 Wt. Pipe Run 0 WL 6.8
 Total Depth 3930 Chlorides 2000 ppm System LCM 2

Blow Description IFP - BOB in 40 sec.
ISIP - No Blow
FFP - BOB in 40 sec.
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>434</u>	<u>MCW</u>			<u>85</u>	<u>15</u>
<u>1184</u>	<u>MCW</u>			<u>60</u>	<u>40</u>
<u>372</u>	<u>MUD</u>				<u>100</u>
	<u>Miss Run Packer Failed</u>				

Rec Total 1990 BHT 120 Gravity API RW 435 @ 40 °F Chlorides 28000 ppm

(A) Initial Hydrostatic 1915 Test 950 T-On Location 23:14
 (B) First Initial Flow 298 Jars T-Started 00:03
 (C) First Final Flow 694 Safety Joint T-Open 03:15
 (D) Initial Shut-In 1239 Circ Sub T-Pulled 04:35
 (E) Second Initial Flow 728 Hourly Standby T-Out 07:40
 (F) Second Final Flow 953 Mileage 52.70 Comments _____
 (G) Final Shut-In 1241 Sampler _____
 (H) Final Hydrostatic 1802 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Copies _____

Initial Open 10
 Initial Shut-In 30
 Final Flow 10
 Final Shut-In 30
 Sub Total 66.67
 Total 1669.37
 MP/DST Disc't _____
 Sub Total 1602.70

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52271

Well Name & No. Henry #1 Test No. 3 Date 10-23-13
 Company TDI Inc Elevation 2151 KB 2141 GL
 Address 1310 Bison Rd Hays KS 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 5 Twp. 13^S Rge. 20^W Co. Ellis State KS

Interval Tested 3744 - 3823 Zone Tested MARMATON
 Anchor Length 79 (107TP) Drill Pipe Run 3754 Mud Wt. 9.1
 Top Packer Depth 3744 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3823 Wt. Pipe Run 0 WL 6.8
 Total Depth 3930 Chlorides 2000 ppm System LCM 2

Blow Description IFP - No Blow Wood Surge on Open
ISIP - No Blow
FFP - Surface Blow Building to 3in.
FSIP - No Blow

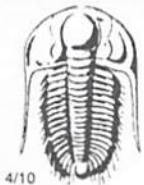
Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>mcw show of Oil</u>			<u>60</u>	<u>40</u>
<u>10</u>	<u>CO</u>		<u>100</u>		

Rec Total 90 BHT 118 Gravity 37 API RW 1253 @ 78 °F Chlorides 24000 ppm

(A) Initial Hydrostatic 1916 Test 1150 T-On Location 23:14 - (10-23)
 (B) First Initial Flow 19 Jars _____ T-Started 08:53
 (C) First Final Flow 40 Safety Joint _____ T-Open 10:45
 (D) Initial Shut-In 1044 Circ Sub _____ T-Pulled 12:45
 (E) Second Initial Flow 41 Hourly Standby _____ T-Out 14:20
 (F) Second Final Flow 57 Mileage _____
 (G) Final Shut-In 912 Sampler _____
 (H) Final Hydrostatic 1898 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____
 Initial Shut-In 30 Extra Recorder _____
 Final Flow 30 Day Standby _____
 Final Shut-In 30 Accessibility _____
 Sub Total 1750

Approved By _____ Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52272

Well Name & No. Henry #1 Test No. 4 Date 10-23-13
 Company JDI INC. Elevation 2151 KB 2141 GL
 Address 310 Bison Rd Hays KS. 67601
 Co. Rep / Geo. Herb Deines Rig Southwind #1
 Location: Sec. 5 Twp. 13^s Rge. 20^w Co. Ellis State KS

Interval Tested 3588 - 3610 Zone Tested LKC "I"
 Anchor Length 22 (320TP) Drill Pipe Run 3598 ~~3754~~ Mud Wt. 9.1
 Top Packer Depth 3588 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 3610 Wt. Pipe Run 0 WL 6.8
 Total Depth 3930 Chlorides 2000 ppm System LCM 2

Blow Description IFP - SURFACE BLOW
ISIP - NO BLOW
FFP - NO BLOW FLUSHED AT 15min NO BLOW PULLED
FSIP -

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 105 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1802 Test 1150 T-On Location 21:03
 (B) First Initial Flow 13 Jars _____ T-Started 21:04
 (C) First Final Flow 15 Safety Joint _____ T-Open 23:05
 (D) Initial Shut-In 1232 Circ Sub _____ T-Pulled 00:25
 (E) Second Initial Flow 17 Hourly Standby _____ T-Out 02:22
 (F) Second Final Flow 20 Mileage 52.70 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1748 Straddle 600 Ruined Shale Packer _____

Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 30 Extra Packer _____ Extra Copies _____
 Final Flow 20 Extra Recorder _____ Sub Total 0
 Final Shut-In pulled. Day Standby _____ Total 1802.70
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1802.70

Approved By _____ Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
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<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

November 12, 2013

Tom Denning
TDI, Inc.
1310 BISON RD
HAYS, KS 67601-9696

Re: ACO1
API 15-051-26602-00-00
Henry 1
SW/4 Sec.05-13S-20W
Ellis County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Tom Denning