

1363619



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

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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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>	PRODUCTION INTERVAL: Top _____ Bottom _____
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:
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Form	ACO1 - Well Completion
Operator	H & B Petroleum Corp.
Well Name	WELLMAN 1
Doc ID	1363619

All Electric Logs Run

Dual Induction
Compensated Density
Sonic
Micro

Form	ACO1 - Well Completion
Operator	H & B Petroleum Corp.
Well Name	WELLMAN 1
Doc ID	1363619

Tops

Name	Top	Datum
Heebner	2825	
Toronto	2841	
Brown Lime	2964	
Lansing	2998	
Bottom Kansas City	3270	
Viola	3386	
Simpson	3440	
Arbuckle	3508	

GLOBAL OIL FIELD SERVICES, LLC

2924

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT: _____
Russell, KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
4-20-17	33	21	9W				2 AM
LEASE	WELL #	LOCATION			COUNTY	STATE	
Wagon	1	Russell, KS			Rice	KS	
OLD OR NEW (CIRCLE ONE) <u>NEW</u>							

CONTRACTOR Southwind Drilling & Rig #1

TYPE OF JOB SURFACE

HOLE SIZE 1 1/4 T.D. 351'

CASING SIZE 5/8 DEPTH 340 3/4 + 9 1/2

TUBING SIZE _____ DEPTH _____

DRILL PIPE 1 1/2 DEPTH 351'

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT 15 15'

CEMENT LEFT IN CSG. 20

PERFS _____

DISPLACEMENT 21 896

EQUIPMENT _____

PUMP TRUCK _____ CEMENTER Ben

412 HELPER Jason

BULK TRUCK _____

173 DRIVER Tom

BULK TRUCK _____

_____ DRIVER _____

OWNER _____

CEMENT AMOUNT ORDERED 250 SK 40/110 PZ

396 CC 296 GEL

COMMON _____ @ _____

POZMIX _____ @ _____

GEL _____ @ _____

CHLORIDE _____ @ _____

ASC _____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

HANDLING _____ @ _____

MILEAGE _____ @ _____

TOTAL _____

REMARKS:

RUN 8 HRS. 1100 8 1/2 CASING, CEMENTING 1100
11x250 SK, DIRECT W/ 21 1/2" COL 1120, 2400 111
@ 200 PSI, CEMENT DID CIRCULATE

CHARGE TO: H+B Petroleum

STREET _____

CITY _____ STATE _____ ZIP _____

Global Oil Field 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.

PRINTED NAME Wesley P. Hoff

SIGNATURE Wesley P. Hoff

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____

EXTRA FOOTAGE _____ @ _____

MILEAGE _____ @ _____

MANIFOLD _____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

PLUG & FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

SALES TAX (if Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

GLOBAL OIL FIELD SERVICES, LLC

2928

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT: Russell, KS

DATE <u>4-29-17</u>	SEC. <u>33</u>	TWP. <u>21</u>	RANGE <u>9W</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <u>1/1/17</u>	WELL # <u>1</u>	LOCATION <u>A</u>			COUNTY <u>Russell</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE) <u>NEW</u>							

CONTRACTOR Global Oil Field Services, LLC

TYPE OF JOB _____

HOLE SIZE 2 7/8" T.D. _____

CASING SIZE 5 1/2" DEPTH 3574 + 14' 65"

TUBING SIZE _____ DEPTH _____

DRILL PIPE 1 1/2" DEPTH _____

TOOL 50 ESCAR DEPTH 3579 + 14' 65"

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT 14.69'

CEMENT LEFT IN CSG. 14.69'

PERFS _____

DISPLACEMENT 85.58%

EQUIPMENT _____

PUMP TRUCK _____ CEMENTER Ben

117 HELPER _____

BULK TRUCK _____ DRIVER _____

_____ DRIVER _____

OWNER _____

CEMENT AMOUNT ORDERED 180 SY CON

10 1/2" x 24' 6" 5 1/2" PUMP

COMMON _____ @ _____

POZMIX _____ @ _____

GEL _____ @ _____

CHLORIDE _____ @ _____

ASC _____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

HANDLING _____ @ _____

MILEAGE _____ @ _____

TOTAL _____

REMARKS:

2 7/8" casing, 10' x 10' 2000 PSI, 14' 65"
2 1/2" x 11', 10' x 10' 2000 PSI, 14' 65"
2 1/2" x 11', 10' x 10' 2000 PSI, 14' 65"
2 1/2" x 11', 10' x 10' 2000 PSI, 14' 65"
2 1/2" x 11', 10' x 10' 2000 PSI, 14' 65"
2 1/2" x 11', 10' x 10' 2000 PSI, 14' 65"

SERVICE

DEPTH OF JOB _____

PUMP TRUCK CHARGE _____

EXTRA FOOTAGE _____ @ _____

MILEAGE _____ @ _____

MANIFOLD _____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

PLUG & FLOAT EQUIPMENT

1 1/2" x 10' _____ @ _____

1 1/2" x 10' _____ @ _____

1 1/2" x 10' _____ @ _____

1 1/2" x 10' _____ @ _____

1 1/2" x 10' _____ @ _____

TOTAL _____

CHARGE TO: H&B Petroleum

STREET _____

CITY _____ STATE _____ ZIP _____

Global Oil Field 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.

PRINTED NAME Milo Hammersmith

SIGNATURE Milo Hammersmith

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

GLOBAL OIL FIELD SERVICES, LLC

2979

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT: Russell

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
6-14-17							3:20 PM
LEASE <u>Wellman</u>	WELL #	1	LOCATION <u>ALDEN S.S. 1/2E 1/4 N</u>		COUNTY <u>Rice</u>		STATE <u>Kansas</u>
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR Co Tools
 TYPE OF JOB Squeeze
 HOLE SIZE 7.875
 CASING SIZE 5 1/2
 TUBING SIZE 2 7/8
 DRILL PIPE 2 7/8
 TOOL Reinforced Oil Tools
 PRES. MAX
 MEAS. LINE
 CEMENT LEFT IN CSG.
 PERFS
 DISPLACEMENT T-19788
 EQUIPMENT C-111ET 2.6

OWNER
 CEMENT AMOUNT ORDERED 50sx Comm.

COMMON @
 POZMIX @
 GEL @
 CHLORIDE @
 ASC @
 HANDLING @
 MILEAGE @

PUMP TRUCK # 409 CEMENTER Shawn G.
 BULK TRUCK # 328 HELPER Cody H.
 BULK TRUCK # DRIVER CHRIS
 DRIVER

★ GOT APPROX 25-30 SX Cement INTO FORMATION.

REMARKS:
 Set packer @ 3551 + Test Below Perf
 To 2,000ft (HOLD) Pull up to
 3397, + Set Packer. Took Injection
 Rate of 3/4 Bbl @ 1800ft.
 Pressure Bkcrsd to 5000 HLD (MAX)
 50 SX Comm. Chg-line + HAD
 Running Squeezes to 2,000ft.
 Release + pull up. FINISHED CLEAN. Pull 5 SXS
 + SHOT IN @ 500ft. THANKS

CHARGE TO: H & B Oil Co.
 STREET
 CITY STATE ZIP

packer 3397 - squeeze
 Global Oil Field 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.

PRINTED NAME
 SIGNATURE Michael

TOTAL

SERVICE

DEPTH OF JOB
 PUMP TRUCK CHARGE
 EXTRA FOOTAGE @
 MILEAGE @
 MANIFOLD @

TOTAL

PLUG & FLOAT EQUIPMENT

@
 @
 @
 @
 @

TOTAL

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&B Petroleum Corp
PO Box 1305
Hutchinson KS 67504-1305

33-21s-9w Rice, KS

Wellman #1

Job Ticket: 64141

DST#: 1

ATTN: Wyatt Urban

Test Start: 2017.04.24 @ 10:05:47

GENERAL INFORMATION:

Formation: **LKC A-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:11:42

Time Test Ended: 18:22:26

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 77

Interval: **3010.00 ft (KB) To 3052.00 ft (KB) (TVD)**

Total Depth: 3052.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1706.00 ft (KB)

1697.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 8360

Inside

Press@RunDepth: 118.88 psig @ 3016.00 ft (KB)

Start Date: 2017.04.24

End Date:

2017.04.24

Start Time: 10:05:47

End Time:

18:22:26

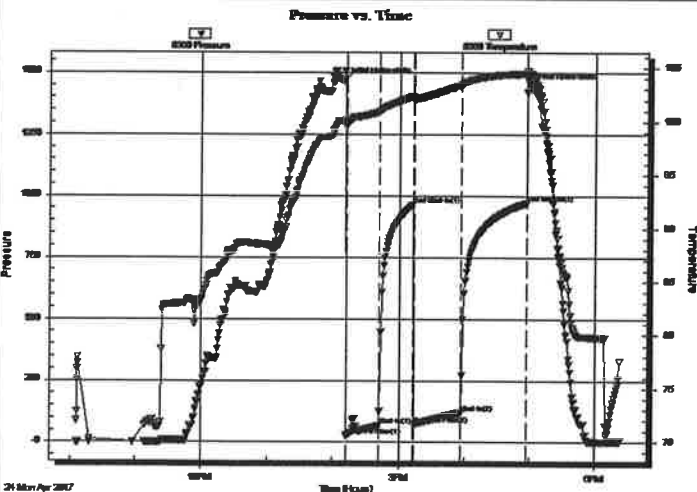
Capacity: 8000.00 psig

Last Calib.: 2017.04.24

Time On Btm: 2017.04.24 @ 14:09:27

Time Off Btm: 2017.04.24 @ 17:00:26

TEST COMMENT: 30-IFP-w k to a gd bl 1/2" to 9" bl
30-ISIP- no bl
45-FFP-w k to a gd bl 1/2" to 9" bl
60-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1464.66	99.99	Initial Hydro-static
3	27.05	99.51	Open To Flow (1)
33	67.97	100.92	Shut-In(1)
64	963.88	102.34	End Shut-In(1)
64	73.99	102.09	Open To Flow (2)
107	118.88	103.38	Shut-In(2)
168	971.12	104.47	End Shut-In(2)
171	1441.50	104.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
90.00	MW 30%M70%W w/show of oil	1.26
2.00	CO	0.03
0.00	60 GIP	0.00

Gas Rates

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

DST Test Number: 1

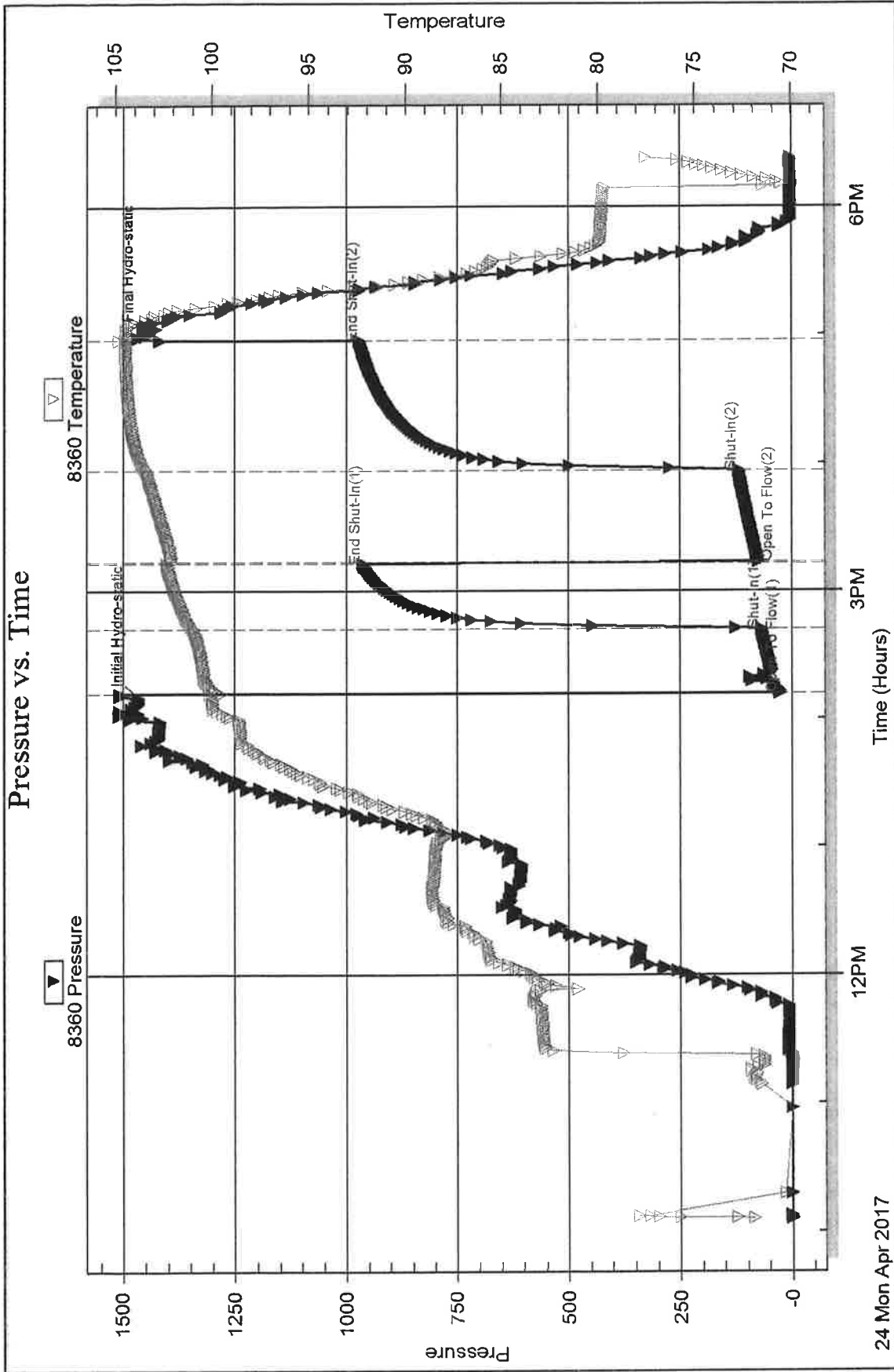
Wellman #1

H&B Petroleum Corp

Inside

Serial #: 8360

Pressure vs. Time



Printed: 2017.04.28 @ 10:55:48

Ref. No: 64141

Triobite Testing, Inc



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson KS 67504-1305
 ATTN: Wyatt Urban

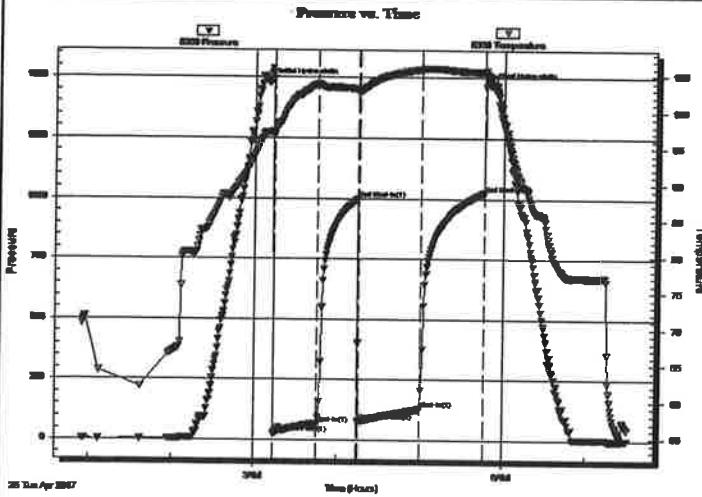
33-21s-9w Rice, KS
Wellman #1
 Job Ticket: 64142 **DST#: 2**
 Test Start: 2017.04.25 @ 00:55:30

GENERAL INFORMATION:

Formation: **LKC D-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:13:55
 Time Test Ended: 07:29:54
 Interval: **3054.00 ft (KB) To 3087.00 ft (KB) (TVD)**
 Total Depth: 3087.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial#: 8360 **Inside**
 Press@RunDepth: 130.75 psig @ 3060.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.25 End Date: 2017.04.25 Last Calib.: 2017.04.25
 Start Time: 00:55:30 End Time: 07:29:54 Time On Btm: 2017.04.25 @ 03:10:55
 Time Off Btm: 2017.04.25 @ 05:50:09

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/4" bl
 30-ISIP-no bl
 45-FFP-w k bl thru-out 1/2 " to 2" bl
 45-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1475.97	97.18	Initial Hydro-static
3	26.21	96.79	Open To Flow (1)
35	69.21	103.80	Shut-In(1)
64	998.96	103.06	End Shut-In(1)
65	78.18	102.83	Open To Flow (2)
109	130.75	105.85	Shut-In(2)
155	1024.04	105.47	End Shut-In(2)
160	1465.63	104.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
60.00	MW 10%M90%W w/show of oil	0.84
40.00	SOCMW 1%O40%M59%W	0.56
5.00	CO	0.07
0.00	75'GIP	0.00

* Recovery from multiple tests

Gas Rates

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

Serial #: 8360

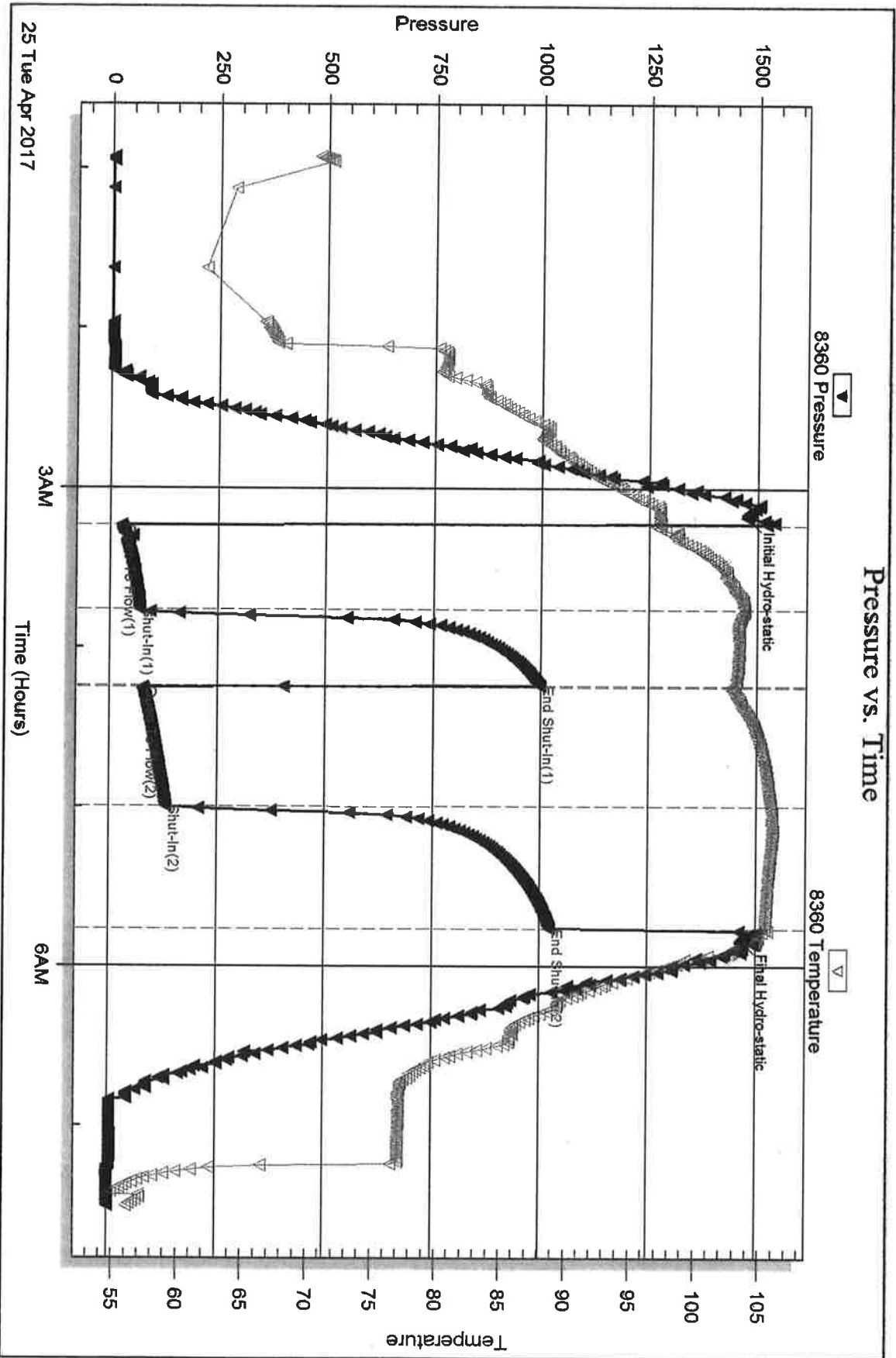
Inside

H&B Petroleum Corp

Wellman #1

DST Test Number: 2

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson KS 67504-1305
 ATTN: Wyatt Urban

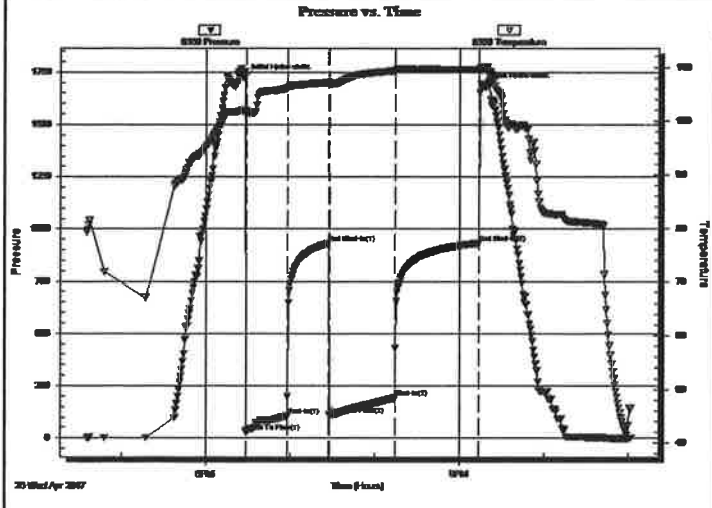
33-21s-9w Rice, KS
Wellman #1
 Job Ticket: 64143 **DST#: 3**
 Test Start: 2017.04.26 @ 16:35:16

GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 18:28:11
 Tester: Ray Schwager
 Time Test Ended: 23:01:25
 Unit No: 77
 Interval: **3410.00 ft (KB) To 3465.00 ft (KB) (TVD)**
 Reference Elevations: 1706.00 ft (KB)
 Total Depth: 3465.00 ft (KB) (TVD) 1697.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 8360 **Inside**
 Press@RunDepth: 194.22 psig @ 3412.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.26 End Date: 2017.04.26 Last Calib.: 2017.04.26
 Start Time: 16:35:16 End Time: 23:01:25 Time On Btm: 2017.04.26 @ 18:26:56
 Time Off Btm: 2017.04.26 @ 21:16:40

TEST COMMENT: 30-IFP-BOB in 11 min
 30-ISIP-w k surface bl bk
 45-FFP-BOB in 14 min
 60-FSIP-w k surface bl bk

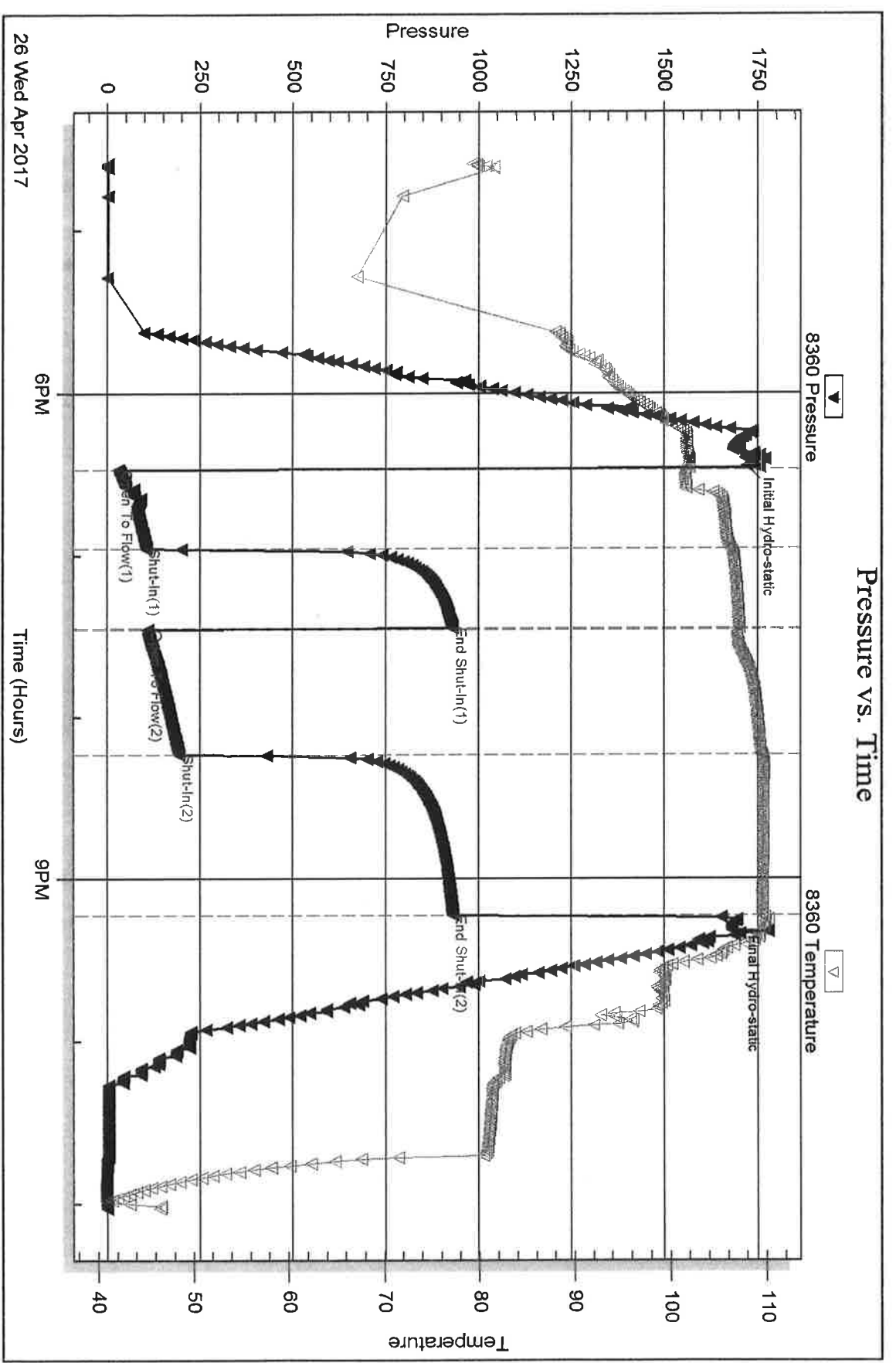


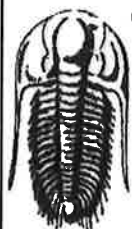
PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1720.81	101.92	Initial Hydro-static
2	31.07	101.45	Open To Flow (1)
31	105.19	106.12	Shut-In(1)
60	931.81	107.14	End Shut-In(1)
61	110.63	106.88	Open To Flow (2)
107	194.22	109.36	Shut-In(2)
167	932.55	109.51	End Shut-In(2)
170	1681.42	109.79	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
120.00	SOCW 1%O99%W	1.68
180.00	GOCMV 30%G6%O20%M44%W	2.52
80.00	O&GCM 5%G8%O5%W82%M	1.12
0.00	535' GIP	0.00

* Recovery from multiple tests

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





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson KS 67504-1305
 ATTN: Wyatt Urban

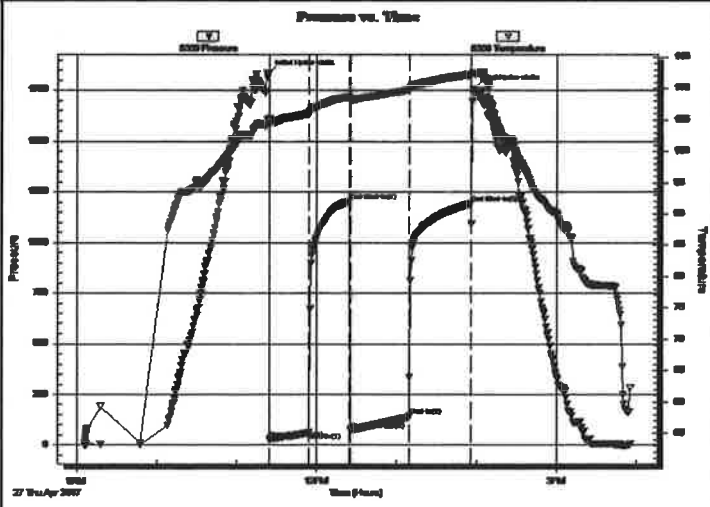
33-21s-9w Rice, KS
Wellman #1
 Job Ticket: 64144 **DST#: 4**
 Test Start: 2017.04.27 @ 09:05:59

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 11:24:54 Tester: Ray Schwager
 Time Test Ended: 15:55:53 Unit No: 77
 Interval: **3508.00 ft (KB) To 3516.00 ft (KB) (TVD)** Reference Elevations: 1706.00 ft (KB)
 Total Depth: 3516.00 ft (KB) (TVD) 1697.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 8360 Inside
 Press@RunDepth: 143.32 psig @ 3510.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.27 End Date: 2017.04.27 Last Calib.: 2017.04.27
 Start Time: 09:05:59 End Time: 15:55:53 Time On Btm: 2017.04.27 @ 11:23:39
 Time Off Btm: 2017.04.27 @ 13:57:38

TEST COMMENT: 30-IFP-BOB in 5 min
 30-ISIP-3/4" bl bk
 45-FFP-BOB in 10 min
 45-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1831.59	105.09	Initial Hydro-static
2	28.81	104.41	Open To Flow (1)
31	62.22	105.97	Shut-In(1)
62	1203.82	108.66	End Shut-In(1)
62	75.70	108.26	Open To Flow (2)
106	143.32	109.79	Shut-In(2)
153	1192.36	112.15	End Shut-In(2)
154	1754.03	112.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	GMO 35%G20%M45%O	0.28
330.00	CO	4.63
0.00	5'15' GIP	0.00

* Recovery from multiple tests

Gas Rates

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

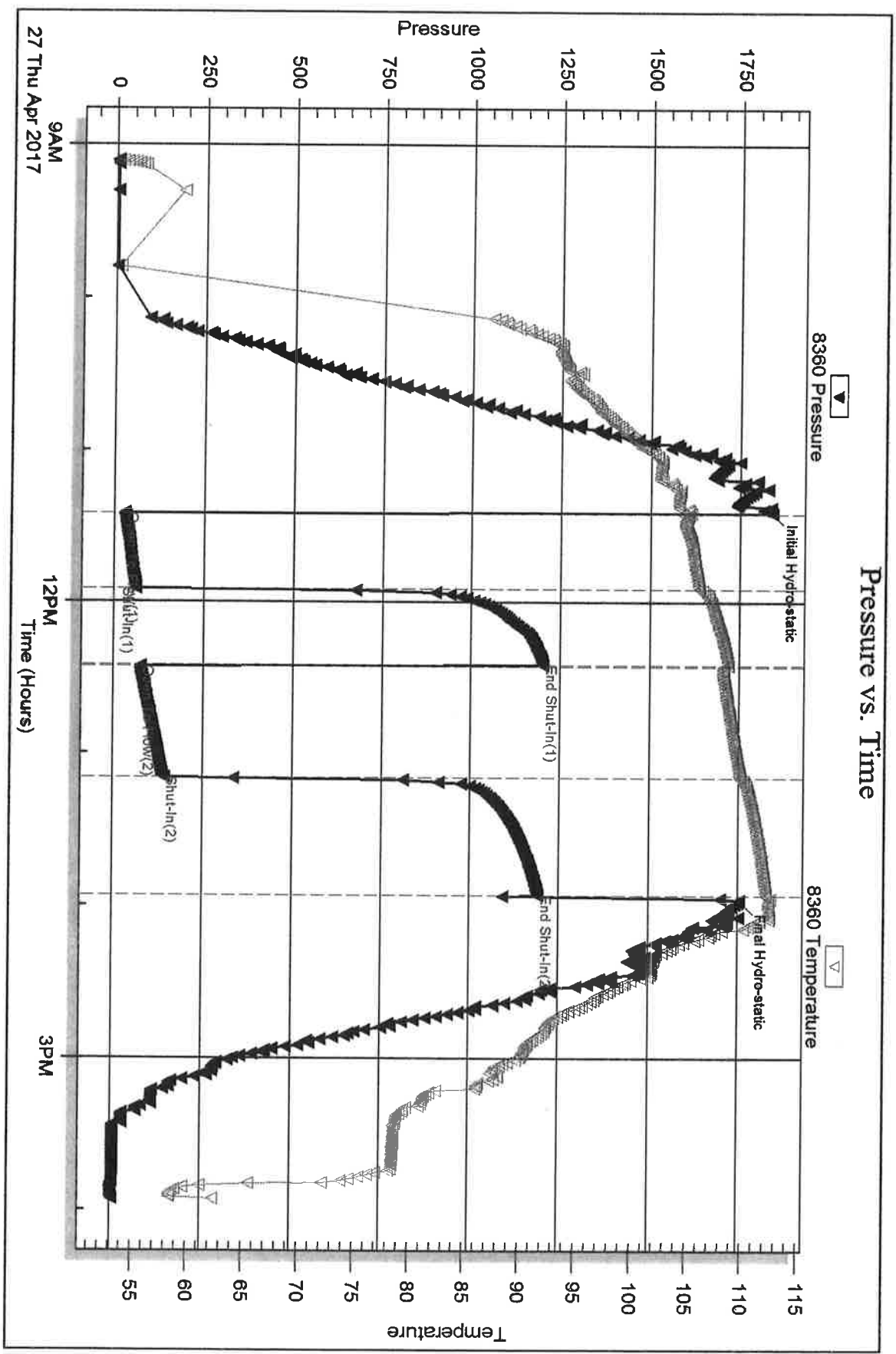
Serial #: 8360

Inside

H&B Petroleum Corp

Wellman #1

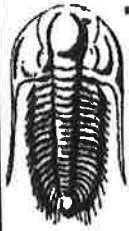
DST Test Number: 4



Triobke Testing, Inc

Ref. No: 64144

Printed: 2017.04.28 @ 10:54:24



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson KS 67504-1305
 ATTN: Wyatt Urban

33-21s-9w Rice, KS

Wellman #1
 Job Ticket: 64145 **DST#: 5**
 Test Start: 2017.04.27 @ 22:55:25

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:19:05
 Time Test Ended: 03:53:19

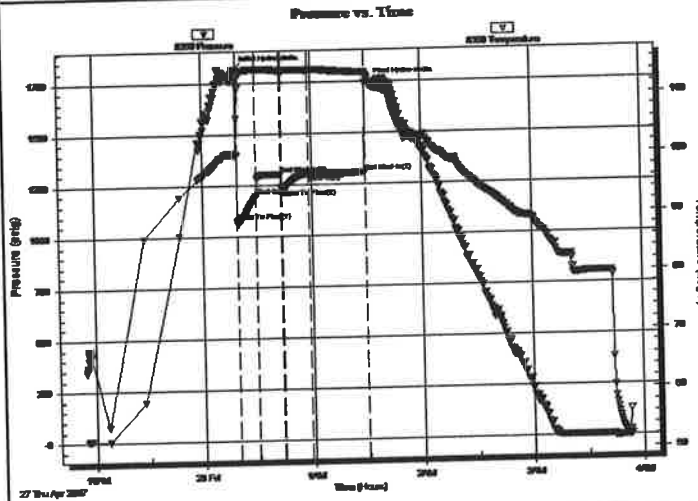
Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77

Interval: **3517.00 ft (KB) To 3535.00 ft (KB) (TVD)**
 Total Depth: 3535.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360 Inside Capacity: 8000.00 psig
 Press@RunDepth: 1302.51 psig @ 3518.00 ft (KB) Last Calib.: 2017.04.28
 Start Date: 2017.04.27 End Date: 2017.04.28
 Start Time: 22:55:25 End Time: 03:53:19 Time On Btm: 2017.04.28 @ 00:17:50
 Time Off Btm: 2017.04.28 @ 01:31:35

TEST COMMENT: 10-IFP-BOB thru-out
 15-ISIP-no bl bk
 15-FFP-BOB thru-out
 30-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.16	100.26	Initial Hydro-static
2	1073.49	106.46	Open To Flow (1)
12	1196.01	114.73	Shut-In(1)
26	1301.79	114.40	End Shut-In(1)
26	1228.21	114.09	Open To Flow (2)
41	1302.51	114.51	Shut-In(2)
72	1303.79	113.99	End Shut-In(2)
74	1744.31	111.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 20%M80%W	1.68
2760.00	Water	38.72

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (A)

Serial #: 8360

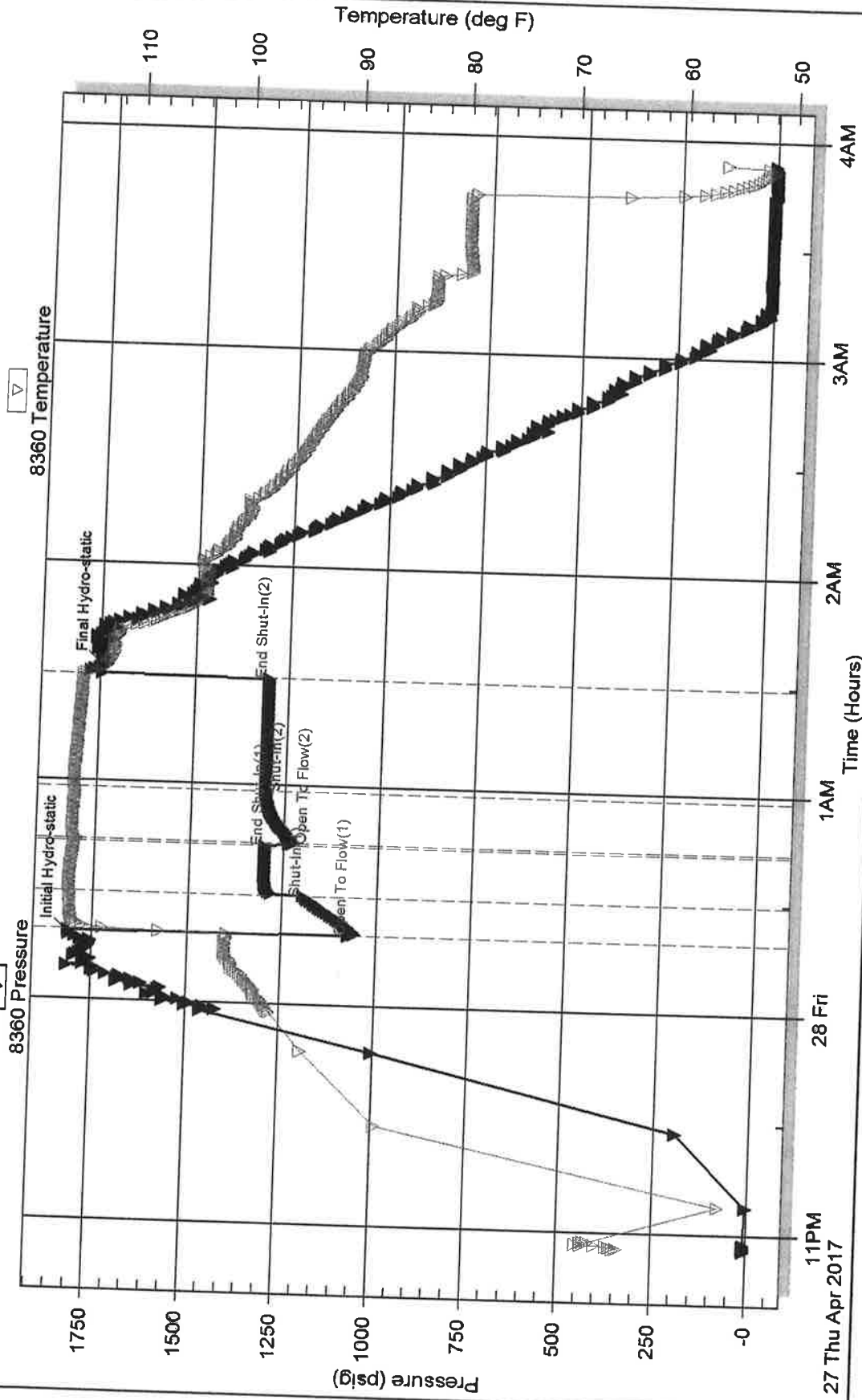
Inside

H&B Petroleum Corp

Wellman #1

DST Test Number: 5

Pressure vs. Time



TriLobite Testing, Inc

Ref. No: 64145

Printed: 2017.04.28 @ 10:53:40



Mudgrove

Petroleum Geology
212 Main Street, Claflin KS

NOTES

Company: H&B Petroleum Corp.

Lease: Wellman #1

Location: NE-SW-SE-SW (537' FSL & 1901' FWL)

Sec: 33 Twsp: 21S Rge: 9W

County: Rice State: Kansas

Field: Rino

KB: 1706' GL: 1697'

Contractor: Southwind Drilling, Inc. (Rig #9)

Spud: 04/20/2017 Comp: 04/28/2017

RTD: 3600' LTD: 3598'

Mud Up: 2600' Type Mud: Chemical

API #: 15-159-22841-00-00

Samples Saved From: 2700' to RTD

Drilling Time Kept From: 2700' to RTD

Samples Examined From: 2700' to RTD

Geological Supervision from: 2700' to RTD

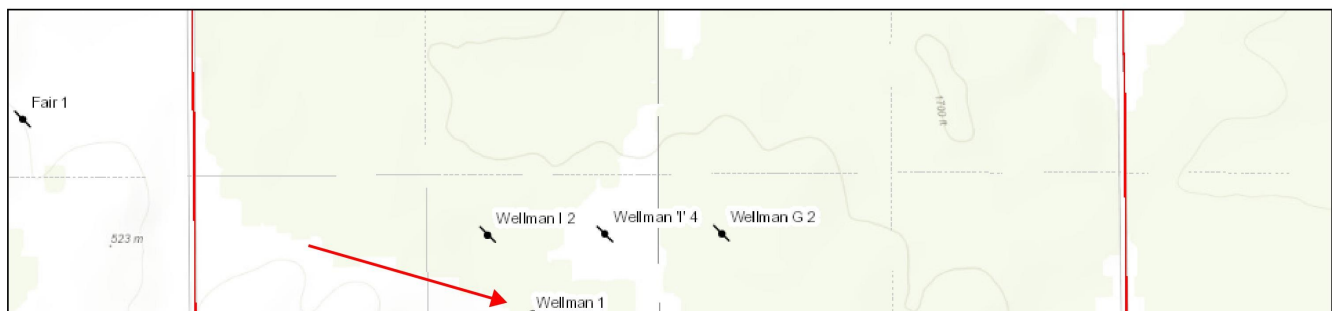
Geologist on Well: Wyatt Urban

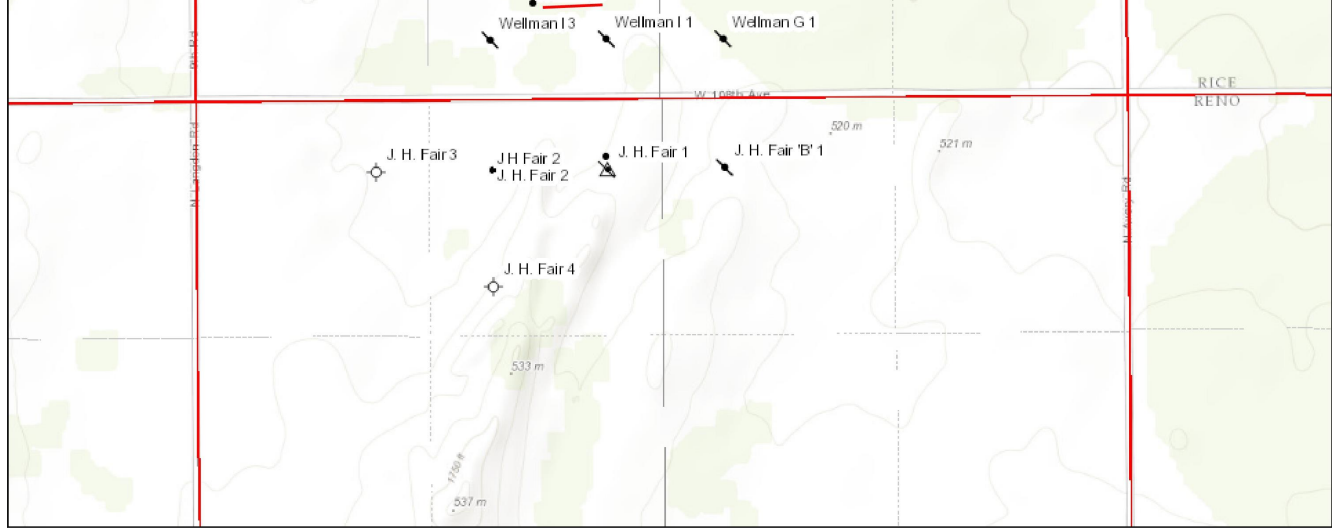
Surface Casing: 8 5/8" @ 351'

Production Casing: 5 1/2" @ 3598'

Electronic Surveys: Logged by ELI: CDL/CNL, DIL, MEL, SONIC


H&B Petroleum Corp- Wellman #1





H&B Petroleum Corporation well comparison sheet

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
H&B Petroleum - Wellman #1					Thunderbird Drlg-Wellman #3				NCRA- I #2 WELLMAN			
NE-SW-SE-SW 33-21S-9W					SW-SE-SW 33-21S-9W				NW-SE-SW 33-21S-9W			
1706 KB					1703 KB				1703 KB			
					Structural Relationship				Structural Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	2825	-1119	2823	-1117	2824	-1121	2	4	2831	-1128	9	11
Toronto	2841	-1135	2840	-1134	2841	-1138	3	4				
Douglas	2860	-1154	2859	-1153	2859	-1156	2	3				
Brown Lime	2964	-1258	2956	-1250	2964	-1261	3	11	2969	-1266	8	16
Lansing	2998	-1292	2993	-1287	2994	-1291	-1	4	3002	-1299	7	12
BKC	3270	-1564	3275	-1569	3279	-1576	12	7				
Viola	3386	-1680	3385	-1679	3374	-1671	-9	-8	3440	-1737	57	58
Simpson Sh .	3440	-1734	3440	-1734	3426	-1723	-11	-11				
Simpson Sd.	3452	-1746	3451	-1745	3433	-1730	-16	-15	3498	-1795	49	50
Arbuckle	3508	-1802	3506	-1800	3491	-1788	-14	-12	3564	-1861	59	61
RTD	3600	-1894	3600	-1894	3499	-1796	-98	-98	3569	-1866	-28	-28
RTD	3598	-1892	3600	-1894	3498	-1795	-97	-99				

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	H&B Petroleum Corp PO Box 1305 Hutchinson Ks 67504-1305 ATTN: Al HammerSmith, Wyatt	33-21s-9w Rice Wellman #1 Job Ticket: 64141 DST#: 1 Test Start: 2017.04.24 @ 10:05:47

GENERAL INFORMATION:

Formation: **LKC A-C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:11:42
 Time Test Ended: 18:22:26

Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 77

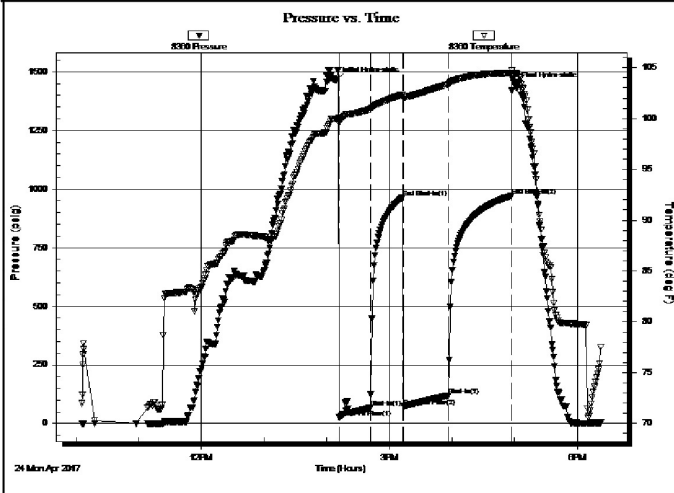
Interval: **3010.00 ft (KB) To 3052.00 ft (KB) (TVD)**
 Total Depth: 3052.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360 **Inside**

Press@RunDepth: 118.88 psig @ 3016.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2017.04.24 End Date: 2017.04.24	Last Calib.: 2017.04.24
Start Time: 10:05:47 End Time: 18:22:26	Time On Btm: 2017.04.24 @ 14:09:27
	Time Off Btm: 2017.04.24 @ 17:00:26

TEST COMMENT: 30-IFP-w k to a gd bl 1/2to 9" bl
 30-ISIP- no bl
 45-FFP-w k to a gd bl 1/2"to 9"bl



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1464.66	99.99	Initial Hydro-static
3	27.05	99.51	Open To Flow (1)
33	67.97	100.92	Shut-In(1)
64	963.88	102.34	End Shut-In(1)
64	73.99	102.09	Open To Flow (2)
107	118.88	103.38	Shut-In(2)
168	971.12	104.47	End Shut-In(2)
171	1441.50	104.44	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
90.00	MW 30%M70%W w/show of oil	1.26
2.00	CO	0.03
0.00	60 GIP	0.00

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

DRILL STEM TEST REPORT

H&B Petroleum Corp

PO Box 1305
Hutchinson Ks 67504-1305

ATTN: Al HammerSmith, Wyatt

33-21s-9w Rice

Wellman #1

Job Ticket: 64142 **DST#: 2**

Test Start: 2017.04.25 @ 00:55:30

GENERAL INFORMATION:

Formation: **LKC D-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:13:55
 Time Test Ended: 07:29:54

Interval: 3054.00 ft (KB) To 3087.00 ft (KB) (TVD)
 Total Depth: 3087.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

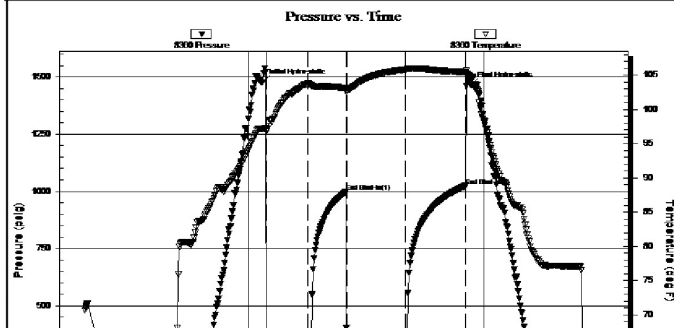
Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77

Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

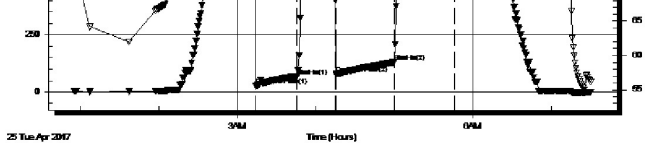
Serial #: 8360 Inside

Press@RunDepth: 130.75 psig @ 3060.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.25 End Date: 2017.04.25 Last Calib.: 2017.04.25
 Start Time: 00:55:30 End Time: 07:29:54 Time On Btm: 2017.04.25 @ 03:10:55
 Time Off Btm: 2017.04.25 @ 05:50:09

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/4"bl
 30-ISIP-no bl
 45-FFP-w k bl thru-out 1/2 " to 2"bl
 45-FSIP-no bl



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1475.97	97.18	Initial Hydro-static
3	26.21	96.79	Open To Flow (1)
35	69.21	103.80	Shut-In(1)
64	998.96	103.06	End Shut-In(1)
65	78.18	102.83	Open To Flow (2)
109	130.75	105.85	Shut-In(2)
155	1024.04	105.47	End Shut-In(2)
160	1465.63	104.82	Final Hydro-static



25 Tue Apr 2017

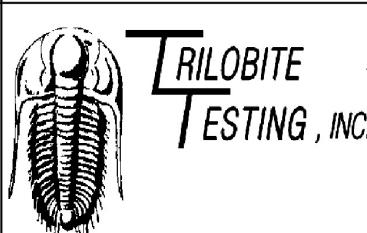
Recovery

Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
60.00	MW 10%M90%W w/show of oil	0.84
40.00	SOCMW 1%O40%M59%W	0.56
5.00	CO	0.07
0.00	75'GIP	0.00

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

H&B Petroleum Corp

33-21s-9w Rice

PO Box 1305
Hutchinson Ks 67504-1305

Wellman #1

Job Ticket: 64143 **DST#: 3**

ATTN: Al HammerSmith, Wyatt

Test Start: 2017.04.26 @ 16:35:16

GENERAL INFORMATION:

Formation: **Simp. Sd**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:28:11

Time Test Ended: 23:01:25

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 77

Interval: 3410.00 ft (KB) To 3465.00 ft (KB) (TVD)

Total Depth: 3465.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1706.00 ft (KB)

1697.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 8360 Inside

Press@RunDepth: 194.22 psig @ 3412.00 ft (KB)

Start Date: 2017.04.26

End Date:

2017.04.26

Start Time: 16:35:16

End Time:

23:01:25

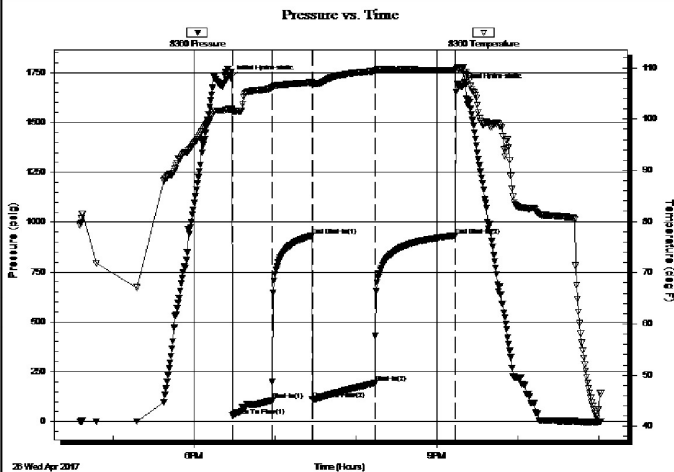
Capacity: 8000.00 psig

Last Calib.: 2017.04.26

Time On Btm: 2017.04.26 @ 18:26:56

Time Off Btm: 2017.04.26 @ 21:16:40

TEST COMMENT: 30-IFP-BOB in 11 min
30-ISIP-w k surface bl bk
45-FFP-BOB in 14 min
60-FSIP-w k surface bl bk



26 Wed Apr 2017

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1720.81	101.92	Initial Hydro-static
2	31.07	101.45	Open To Flow (1)
31	105.19	106.12	Shut-In(1)
60	931.81	107.14	End Shut-In(1)
61	110.63	106.88	Open To Flow (2)
107	194.22	109.36	Shut-In(2)
167	932.55	109.51	End Shut-In(2)
170	1681.42	109.79	Final Hydro-static

Recovery

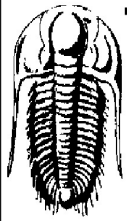
Length (ft)	Description	Volume (bbl)
120.00	SOCW 1%O 99%W	1.68
180.00	GOCMW 30%G 6%O 20%M 44%W	2.52
80.00	O&GCM 5%G 8%O 5%W 82%M	1.12
0.00	52'GIP	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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0.00	535' GIP	0.00

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson Ks 67504-1305
 ATTN: Al HammerSmith, Wyatt

33-21s-9w Rice
Wellman #1
 Job Ticket: 64144 **DST#: 4**
 Test Start: 2017.04.27 @ 09:05:59

GENERAL INFORMATION:

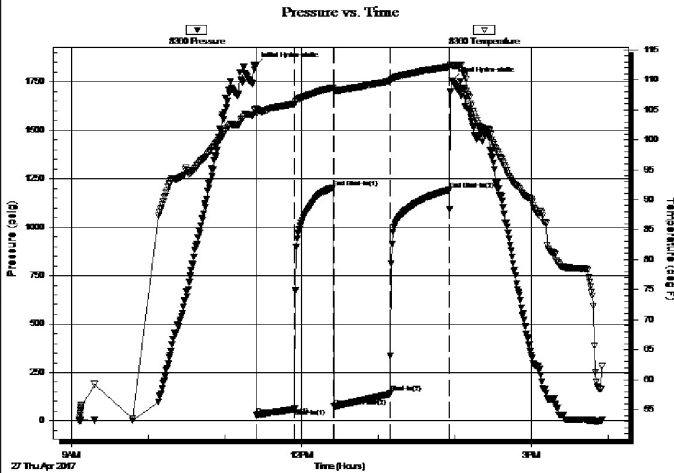
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:24:54
 Time Test Ended: 15:55:53
 Interval: **3508.00 ft (KB) To 3516.00 ft (KB) (TVD)**
 Total Depth: 3516.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360

Inside

Press@RunDepth: 143.32 psig @ 3510.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.27 End Date: 2017.04.27 Last Calib.: 2017.04.27
 Start Time: 09:05:59 End Time: 15:55:53 Time On Btm: 2017.04.27 @ 11:23:39
 Time Off Btm: 2017.04.27 @ 13:57:38

TEST COMMENT: 30-IFP-BOB in 5 min
 30-ISIP-3/4"bl bk
 45-FFP-BOB in 10min
 45-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1831.59	105.09	Initial Hydro-static
2	28.81	104.41	Open To Flow (1)
31	62.22	105.97	Shut-In(1)
62	1203.82	108.66	End Shut-In(1)
62	75.70	108.26	Open To Flow (2)
106	143.32	109.79	Shut-In(2)
153	1192.36	112.15	End Shut-In(2)
154	1754.03	112.41	Final Hydro-static

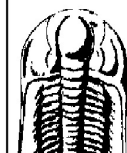
Recovery

Length (ft)	Description	Volume (bbl)
20.00	GMO 35%G20%M45%O	0.28
330.00	CO	4.63
0.00	515' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson Ks 67504-1305

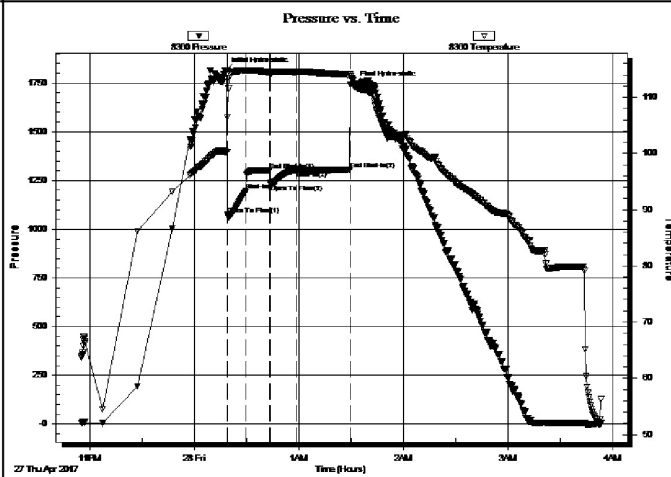
33-21s-9w Rice
Wellman #1

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:19:05
 Time Test Ended: 03:53:19
 Interval: **3517.00 ft (KB) To 3535.00 ft (KB) (TVD)**
 Total Depth: 3535.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360 Inside
 Press@RunDepth: 1302.51 psig @ 3518.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.27 End Date: 2017.04.28 Last Calib.: 2017.04.28
 Start Time: 22:55:25 End Time: 03:53:19 Time On Btm: 2017.04.28 @ 00:17:50
 Time Off Btm: 2017.04.28 @ 01:31:35

TEST COMMENT: 10-IFP-BOB thru-out
 15-ISIP-no bl bk
 15-FFP-BOB thru-out
 30-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.16	100.26	Initial Hydro-static
2	1073.49	106.46	Open To Flow (1)
12	1196.01	114.73	Shut-In(1)
26	1301.79	114.40	End Shut-In(1)
26	1228.21	114.09	Open To Flow (2)
41	1302.51	114.51	Shut-In(2)
72	1303.79	113.99	End Shut-In(2)
74	1744.31	111.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 20% M80% W	1.68
2760.00	Water	38.72

* Recovery from multiple tests

Gas Rates

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

ROCK TYPES

Cht vari
 Lmst fw<7
 shale, gry
 shale, red
 Dolprim
 shale, grn
 Carbon Sh
 Ss

ACCESSORIES

STRINGER

Sandstone

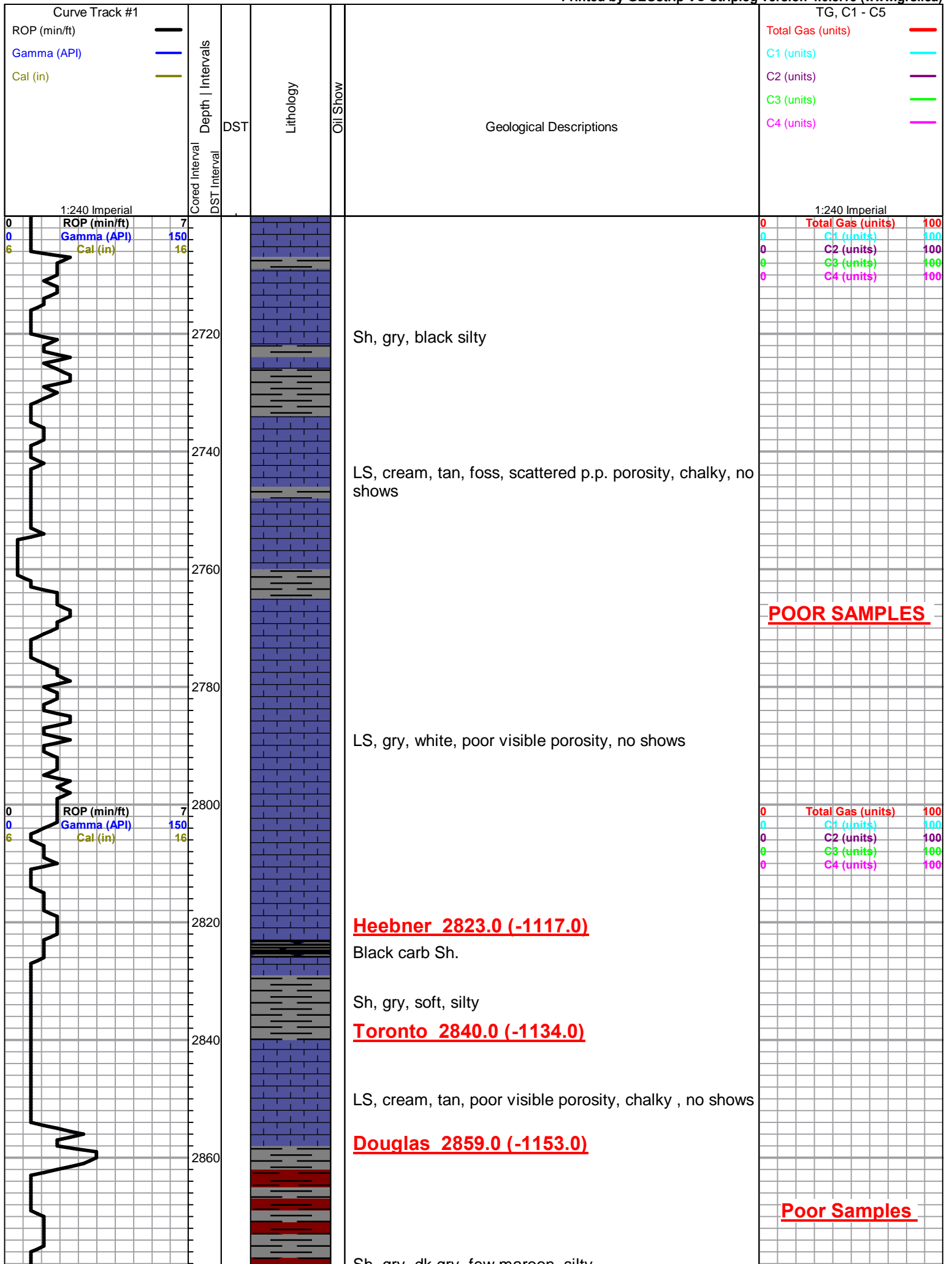
OTHER SYMBOLS

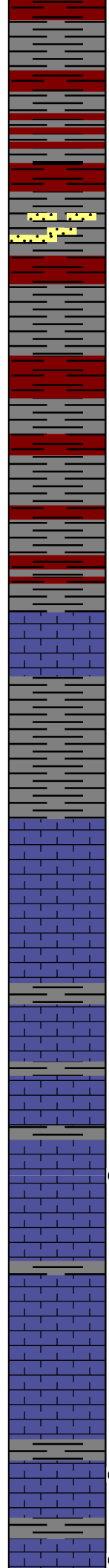
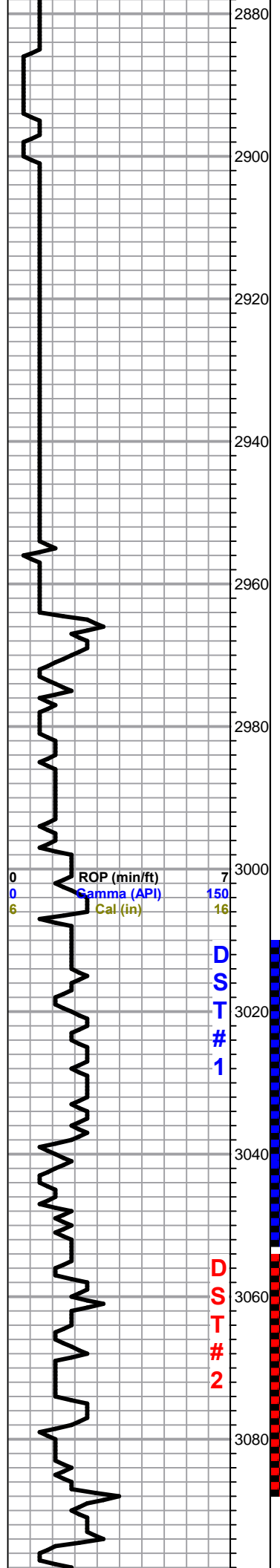
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- Dead Oil Stn
- Fluorescence
- * Gas

DST

- DST Int
- DST alt
- Core
- tail pipe





Sh, gry, dk gry, few maroon, silty

Sh, a/a, tr. sd. gry, vfg, well sorted, no shows

Sh, maroon, gry, dark gray, greenish, mica

Brown Lime 2964.0 (-1258.0)
LS, brn, fxl, dense, poor visible porosity, no shows

Sh, gry, soft, silty

Lansing 2993.0 (-1287.0)
LS, tan, brn, fxl, poor visible porosity, no shows

LS, tan, gry, fxl, dense, few foss, poor visible porosity, no shows

LS, cream, mottled, fxl, poor visible porosity, chalky, no shows

● LS, cream, ool, fair scattered p.p. porosity, black/brn stain, sfo, good odor

Sh, gry, silty, soft

LS, cream, tan, brn, foss, fxl, dense, poor visible porosity, no shows

● LS, brn, fxl, scattered vuggy porosity, chalky, black stain, sfo/sat., good odor

● LS, gry, brn, fxl, few foss, poor scattered visible

Poor Samples
(Found hole in pipe on dst #1)

DST#1 3010-3052
30-30-45-60

1st Open:
Weak - good blow build to 9"

2nd Open:
Same

Recovery:
60' GIP

2' Clean Oil
90' MW SFO
(70% W, 30%M)

120' Water

Pressures:
ISIP 963 psi
FSIP 971 psi
IFP 27-67 psi
FFP 73-118 psi
HSH 1464-1441 psi

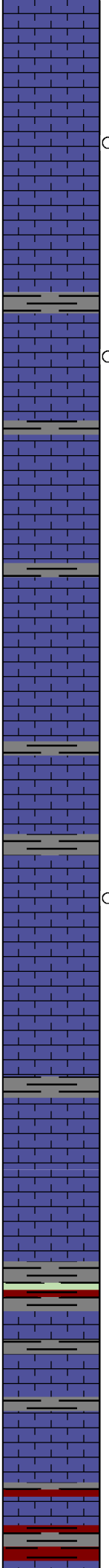
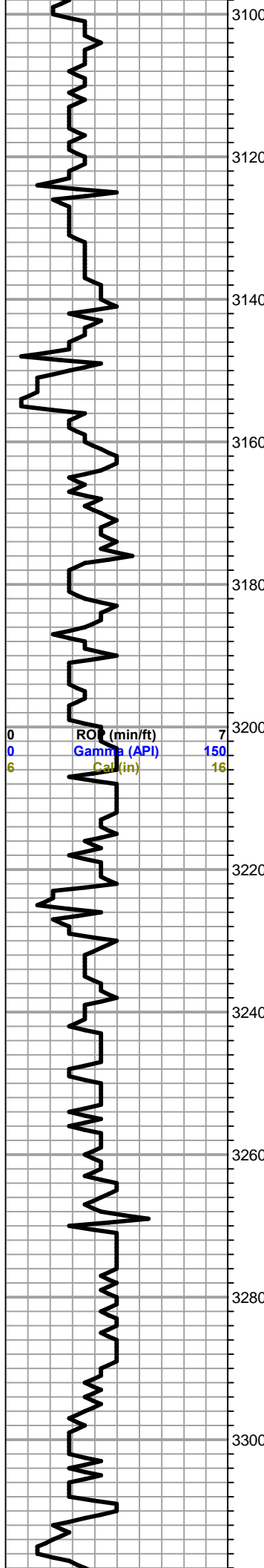
DST#2 3054-3087
30-30-45-45

1st Open:
Weak blow

2nd Open:
Weak blow

Recovery:
75' GIP

5' clean oil



porosity, tr. sfo, no odor

LS, white, cream, ool, dns, poor visible porosity, sl. chalky, tr. brn stain, tr. sfo, no odor

LS, gry, white, fxl, dense, cherty, no shows

Slug gry shale

LS, tan, buff, suc. foss, ool/oom, poor -fair scattered vuggy oom porosity, chalky, tr/wk. sfo, no odor

LS, cream, white, ool, poorly developed, dense, no shows

Sh, gry, silty, mica

LS, cream, fxl, dense, cherty, no shows, no odor

LS, cream, tan, fxl, poor visible porosity, no shows

LS, cream, ool, poorly developed, poor visible porosity, tr. black stain, tr. sfo, no odor

LS, cream, tan, fxl, dense, poor visible porosity, no shows

Sh, gry, dk gry,

LS, brn, cream, fxl, dense, poor visible porosity, no shows,

Base Kansas City 3275.0 (-1569.0)

Sh, gry, dk gry, maroon, waxey

LS, brn, cream, denes, poor visible porosity, no shows

LS, a/a, tr. orange chert

40' SOCMW
(1%O, 59%W, 40% M)

60' MW w/ show of oil
(90%W, 10%M)

120' Water

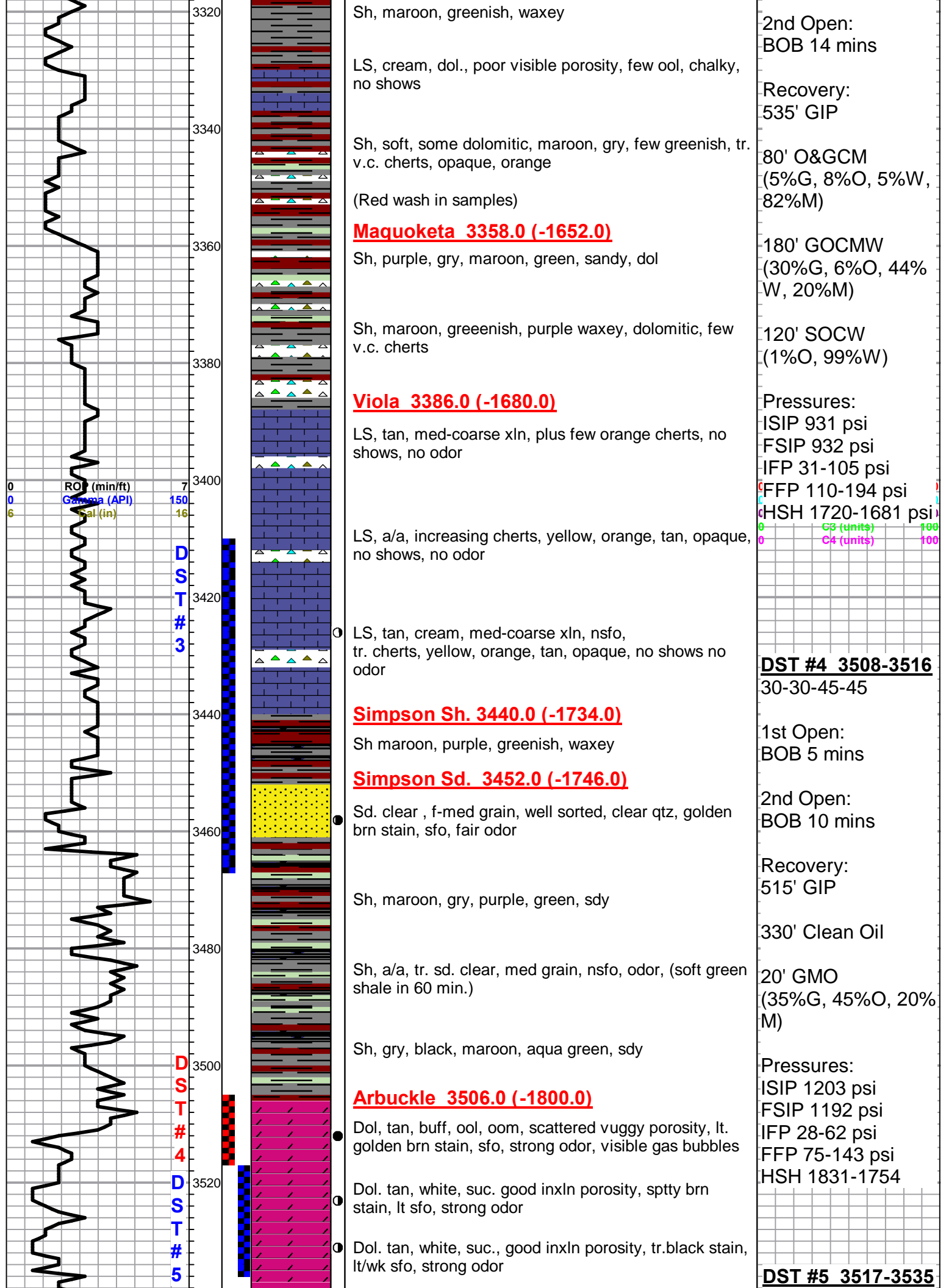
Pressures:
ISIP 998 psi
FSIP 1024 psi
IFP 26-69 psi
FFP 78-130 psi

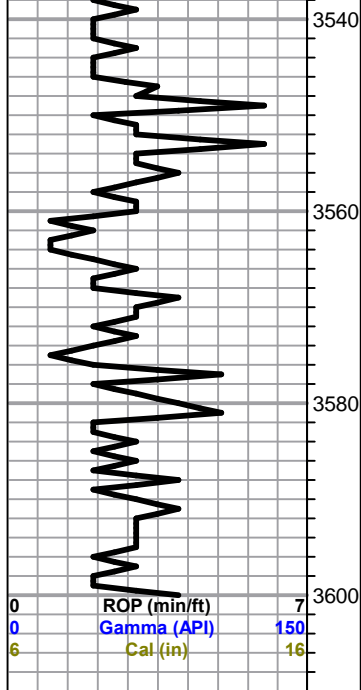
(1) LS, tan, ool, poor visible porosity, tr. sfo, no odor (caving???)

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

DST#3 3410-3465
30-30-45-60

1st Open:
BOB 11 mins





Dol. white, suc. fair inxln porosity, spty tr. sfo, odor
 Dol. white, cream, suc. poor-fair inxln porosity, (few) tr. spty sfo, faint odor
 Dol. white, med xln, coarse, fair inxln porosity, nsfo, odor
 Dol. white, cream, fxl, poor inxln porosity, dense, nsfo, odor
 Dol. white, fxl, poor - fair inxln porosity, sdy qtz grains, nsfo, no odor

LTD 3598.0 (-1892.0)
RTD 3600.0 (-1894.0)

10-15-15-30
 1st Open BOB Inst.
 Recovery
 120' MW
 (80%W, 20%M)
 2760' Water
 Pressures
 ISIP 1301 psi
 FSIP 1303 psi
 IFP 1073-1196 psi
 FFP 1302-1303 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100



Mudgrove

Petroleum Geology
212 Main Street, Claflin KS

NOTES

Company: H&B Petroleum Corp.

Lease: Wellman #1

Location: NE-SW-SE-SW (537' FSL & 1901' FWL)

Sec: 33 Twsp: 21S Rge: 9W

County: Rice State: Kansas

Field: Rino

KB: 1706' GL: 1697'

Contractor: Southwind Drilling, Inc. (Rig #9)

Spud: 04/20/2017 Comp: 04/28/2017

RTD: 3600' LTD: 3598'

Mud Up: 2600' Type Mud: Chemical

API #: 15-159-22841-00-00

Samples Saved From: 2700' to RTD

Drilling Time Kept From: 2700' to RTD

Samples Examined From: 2700' to RTD

Geological Supervision from: 2700' to RTD

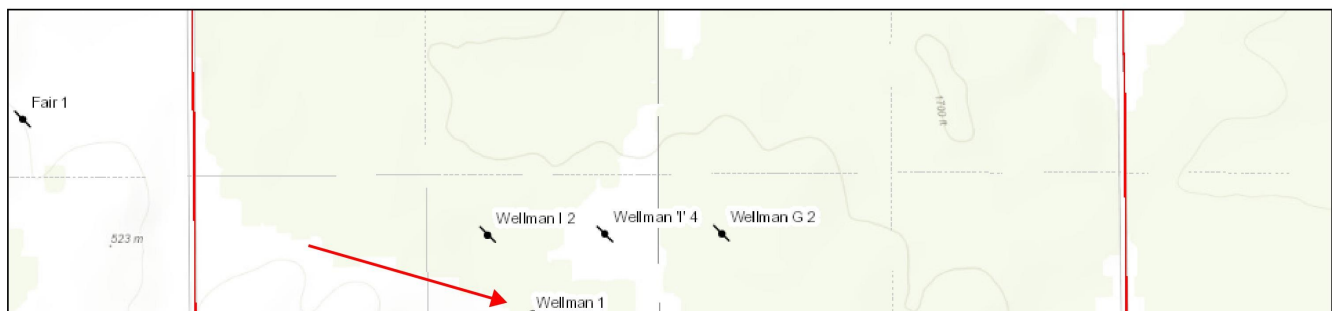
Geologist on Well: Wyatt Urban

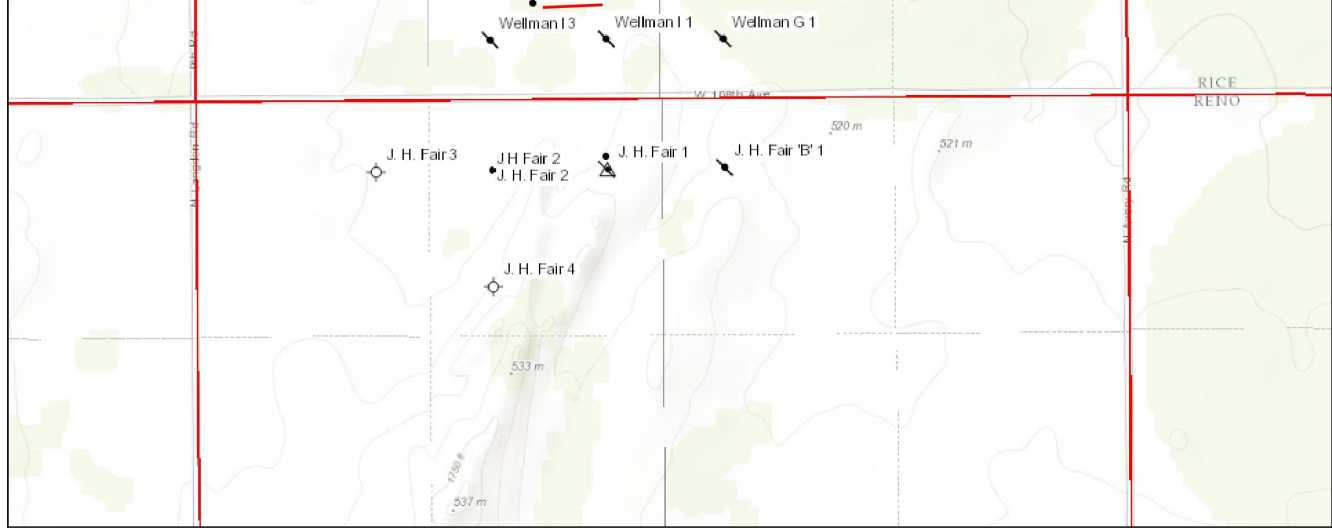
Surface Casing: 8 5/8" @ 351'

Production Casing: 5 1/2" @ 3598'

Electronic Surveys: Logged by ELI: CDL/CNL, DIL, MEL, SONIC


H&B Petroleum Corp- Wellman #1





H&B Petroleum Corporation well comparison sheet

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
H&B Petroleum - Wellman #1					Thunderbird Drlg-Wellman #3				NCRA- I #2 WELLMAN			
NE-SW-SE-SW 33-21S-9W					SW-SE-SW 33-21S-9W				NW-SE-SW 33-21S-9W			
1706 KB					1703 KB				1703 KB			
					Structural Relationship				Structural Relationship			
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Heebner	2825	-1119	2823	-1117	2824	-1121	2	4	2831	-1128	9	11
Toronto	2841	-1135	2840	-1134	2841	-1138	3	4				
Douglas	2860	-1154	2859	-1153	2859	-1156	2	3				
Brown Lime	2964	-1258	2956	-1250	2964	-1261	3	11	2969	-1266	8	16
Lansing	2998	-1292	2993	-1287	2994	-1291	-1	4	3002	-1299	7	12
BKC	3270	-1564	3275	-1569	3279	-1576	12	7				
Viola	3386	-1680	3385	-1679	3374	-1671	-9	-8	3440	-1737	57	58
Simpson Sh .	3440	-1734	3440	-1734	3426	-1723	-11	-11				
Simpson Sd.	3452	-1746	3451	-1745	3433	-1730	-16	-15	3498	-1795	49	50
Arbuckle	3508	-1802	3506	-1800	3491	-1788	-14	-12	3564	-1861	59	61
RTD	3600	-1894	3600	-1894	3499	-1796	-98	-98	3569	-1866	-28	-28
RTD	3598	-1892	3600	-1894	3498	-1795	-97	-99				

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT	
	H&B Petroleum Corp PO Box 1305 Hutchinson Ks 67504-1305 ATTN: Al HammerSmith, Wyatt	33-21s-9w Rice Wellman #1 Job Ticket: 64141 DST#: 1 Test Start: 2017.04.24 @ 10:05:47

GENERAL INFORMATION:

Formation: **LKC A-C**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:11:42
 Time Test Ended: 18:22:26

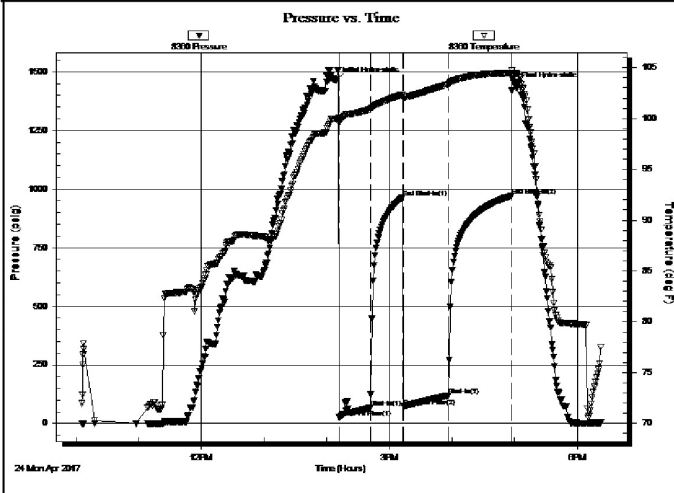
Interval: **3010.00 ft (KB) To 3052.00 ft (KB) (TVD)**
 Total Depth: 3052.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360 **Inside**

Press@RunDepth: 118.88 psig @ 3016.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2017.04.24 End Date: 2017.04.24	Last Calib.: 2017.04.24
Start Time: 10:05:47 End Time: 18:22:26	Time On Btm: 2017.04.24 @ 14:09:27
	Time Off Btm: 2017.04.24 @ 17:00:26

TEST COMMENT: 30-IFP-w k to a gd bl 1/2to 9" bl
 30-ISIP- no bl
 45-FFP-w k to a gd bl 1/2"to 9"bl



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1464.66	99.99	Initial Hydro-static
3	27.05	99.51	Open To Flow (1)
33	67.97	100.92	Shut-In(1)
64	963.88	102.34	End Shut-In(1)
64	73.99	102.09	Open To Flow (2)
107	118.88	103.38	Shut-In(2)
168	971.12	104.47	End Shut-In(2)
171	1441.50	104.44	Final Hydro-static

Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
90.00	MW 30%M70%W w/show of oil	1.26
2.00	CO	0.03
0.00	60 GIP	0.00

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

DRILL STEM TEST REPORT

H&B Petroleum Corp

PO Box 1305
Hutchinson Ks 67504-1305

ATTN: Al HammerSmith, Wyatt

33-21s-9w Rice

Wellman #1

Job Ticket: 64142 **DST#: 2**

Test Start: 2017.04.25 @ 00:55:30

GENERAL INFORMATION:

Formation: **LKC D-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:13:55
 Time Test Ended: 07:29:54

Interval: 3054.00 ft (KB) To 3087.00 ft (KB) (TVD)
 Total Depth: 3087.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair

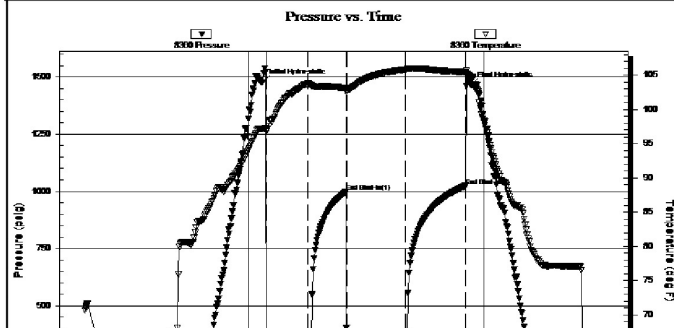
Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77

Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

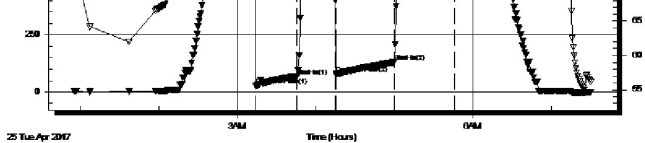
Serial #: 8360 Inside

Press@RunDepth: 130.75 psig @ 3060.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.25 End Date: 2017.04.25 Last Calib.: 2017.04.25
 Start Time: 00:55:30 End Time: 07:29:54 Time On Btm: 2017.04.25 @ 03:10:55
 Time Off Btm: 2017.04.25 @ 05:50:09

TEST COMMENT: 30-IFP-w k bl thru-out 1/2" to 1 1/4"bl
 30-ISIP-no bl
 45-FFP-w k bl thru-out 1/2 " to 2"bl
 45-FSIP-no bl



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1475.97	97.18	Initial Hydro-static
3	26.21	96.79	Open To Flow (1)
35	69.21	103.80	Shut-In(1)
64	998.96	103.06	End Shut-In(1)
65	78.18	102.83	Open To Flow (2)
109	130.75	105.85	Shut-In(2)
155	1024.04	105.47	End Shut-In(2)
160	1465.63	104.82	Final Hydro-static



25 Tue Apr 2017

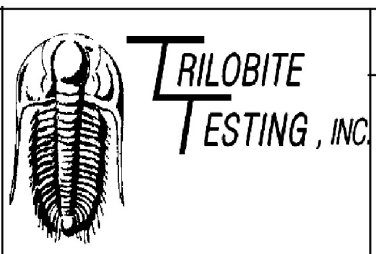
Recovery

Length (ft)	Description	Volume (bbl)
120.00	Water	1.68
60.00	MW 10%M90%W w/show of oil	0.84
40.00	SOCMW 1%O40%M59%W	0.56
5.00	CO	0.07
0.00	75'GIP	0.00

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson Ks 67504-1305
 ATTN: Al HammerSmith, Wyatt

33-21s-9w Rice
Wellman #1
 Job Ticket: 64143 **DST#: 3**
 Test Start: 2017.04.26 @ 16:35:16

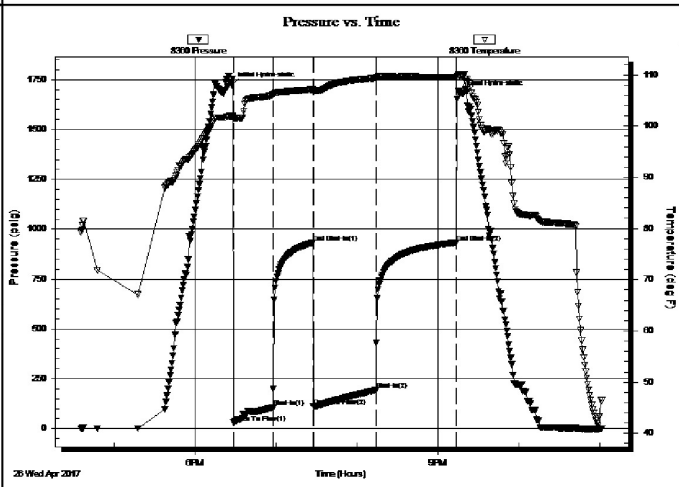
GENERAL INFORMATION:

Formation: **Simp. Sd**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 18:28:11
 Time Test Ended: 23:01:25
 Interval: **3410.00 ft (KB) To 3465.00 ft (KB) (TVD)**
 Total Depth: 3465.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360

Inside
 Press@RunDepth: 194.22 psig @ 3412.00 ft (KB)
 Start Date: 2017.04.26 End Date: 2017.04.26
 Start Time: 16:35:16 End Time: 23:01:25
 Capacity: 8000.00 psig
 Last Calib.: 2017.04.26
 Time On Btm: 2017.04.26 @ 18:26:56
 Time Off Btm: 2017.04.26 @ 21:16:40

TEST COMMENT: 30-IFP-BOB in 11 min
 30-ISIP-w k surface bl bk
 45-FFP-BOB in 14 min
 60-FSIP-w k surface bl bk



26 Wed Apr 2017

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1720.81	101.92	Initial Hydro-static
2	31.07	101.45	Open To Flow (1)
31	105.19	106.12	Shut-In(1)
60	931.81	107.14	End Shut-In(1)
61	110.63	106.88	Open To Flow (2)
107	194.22	109.36	Shut-In(2)
167	932.55	109.51	End Shut-In(2)
170	1681.42	109.79	Final Hydro-static

Recovery

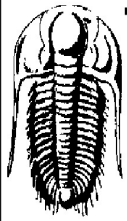
Length (ft)	Description	Volume (bbl)
120.00	SOCW 1%O 99%W	1.68
180.00	GOCMW 30%G 6%O 20%M 44%W	2.52
80.00	O&GCM 5%G 8%O 5%W 82%M	1.12
0.00	52'GIP	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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0.00	535' GIP	0.00

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson Ks 67504-1305
 ATTN: Al HammerSmith, Wyatt

33-21s-9w Rice
Wellman #1
 Job Ticket: 64144 **DST#: 4**
 Test Start: 2017.04.27 @ 09:05:59

GENERAL INFORMATION:

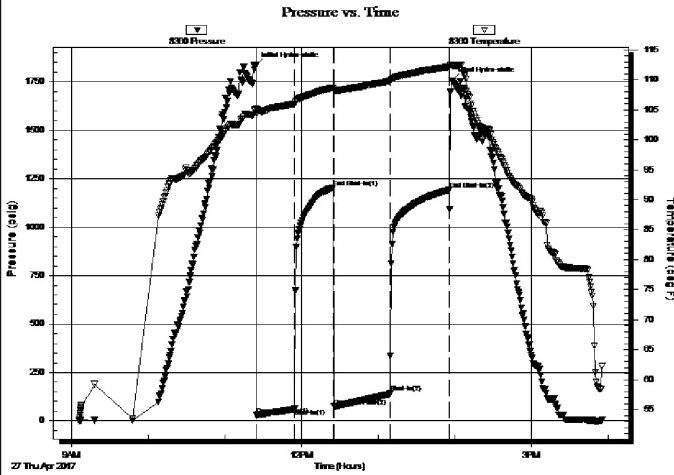
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:24:54
 Time Test Ended: 15:55:53
 Interval: **3508.00 ft (KB) To 3516.00 ft (KB) (TVD)**
 Total Depth: 3516.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360

Inside

Press@RunDepth: 143.32 psig @ 3510.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.27 End Date: 2017.04.27 Last Calib.: 2017.04.27
 Start Time: 09:05:59 End Time: 15:55:53 Time On Btm: 2017.04.27 @ 11:23:39
 Time Off Btm: 2017.04.27 @ 13:57:38

TEST COMMENT: 30-IFP-BOB in 5 min
 30-ISIP-3/4"bl bk
 45-FFP-BOB in 10min
 45-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1831.59	105.09	Initial Hydro-static
2	28.81	104.41	Open To Flow (1)
31	62.22	105.97	Shut-In(1)
62	1203.82	108.66	End Shut-In(1)
62	75.70	108.26	Open To Flow (2)
106	143.32	109.79	Shut-In(2)
153	1192.36	112.15	End Shut-In(2)
154	1754.03	112.41	Final Hydro-static

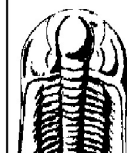
Recovery

Length (ft)	Description	Volume (bbl)
20.00	GMO 35%G20%M45%O	0.28
330.00	CO	4.63
0.00	515' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

H&B Petroleum Corp
 PO Box 1305
 Hutchinson Ks 67504-1305

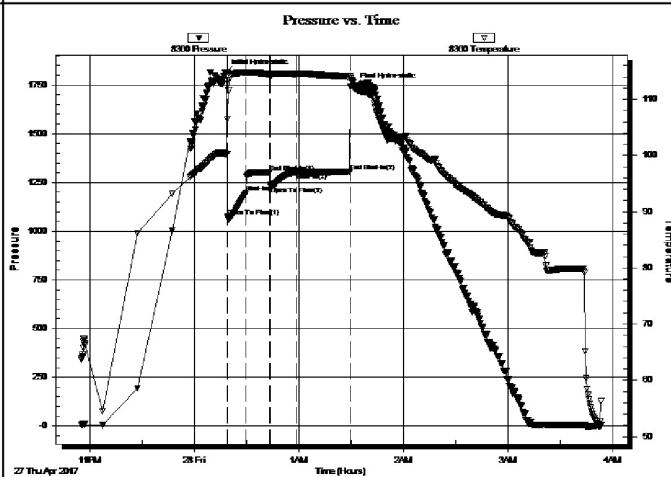
33-21s-9w Rice
Wellman #1

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:19:05
 Time Test Ended: 03:53:19
 Interval: **3517.00 ft (KB) To 3535.00 ft (KB) (TVD)**
 Total Depth: 3535.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Ray Schwager
 Unit No: 77
 Reference Elevations: 1706.00 ft (KB)
 1697.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8360 Inside
 Press@RunDepth: 1302.51 psig @ 3518.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.27 End Date: 2017.04.28 Last Calib.: 2017.04.28
 Start Time: 22:55:25 End Time: 03:53:19 Time On Btm: 2017.04.28 @ 00:17:50
 Time Off Btm: 2017.04.28 @ 01:31:35

TEST COMMENT: 10-IFP-BOB thru-out
 15-ISIP-no bl bk
 15-FFP-BOB thru-out
 30-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.16	100.26	Initial Hydro-static
2	1073.49	106.46	Open To Flow (1)
12	1196.01	114.73	Shut-In(1)
26	1301.79	114.40	End Shut-In(1)
26	1228.21	114.09	Open To Flow (2)
41	1302.51	114.51	Shut-In(2)
72	1303.79	113.99	End Shut-In(2)
74	1744.31	111.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 20% M80% W	1.68
2760.00	Water	38.72

* Recovery from multiple tests

Gas Rates

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

ROCK TYPES

Cht vari
 Lmst fw<7
 shale, gry
 shale, red
 Dolprim
 shale, grn
 Carbon Sh
 Ss

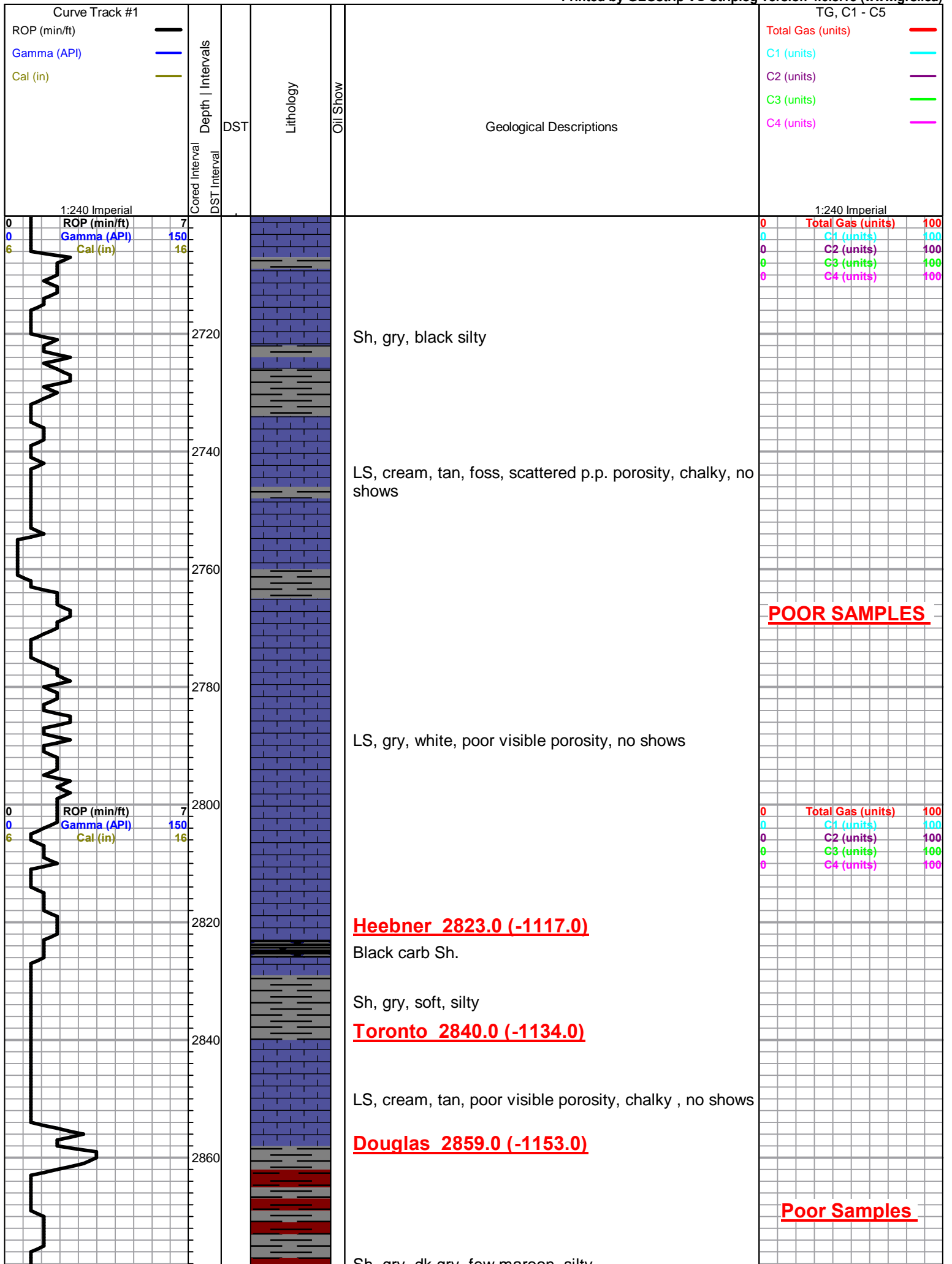
ACCESSORIES

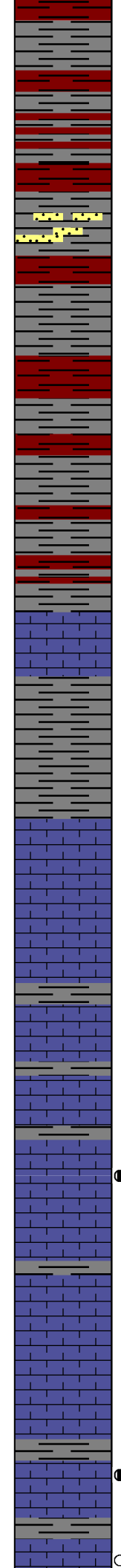
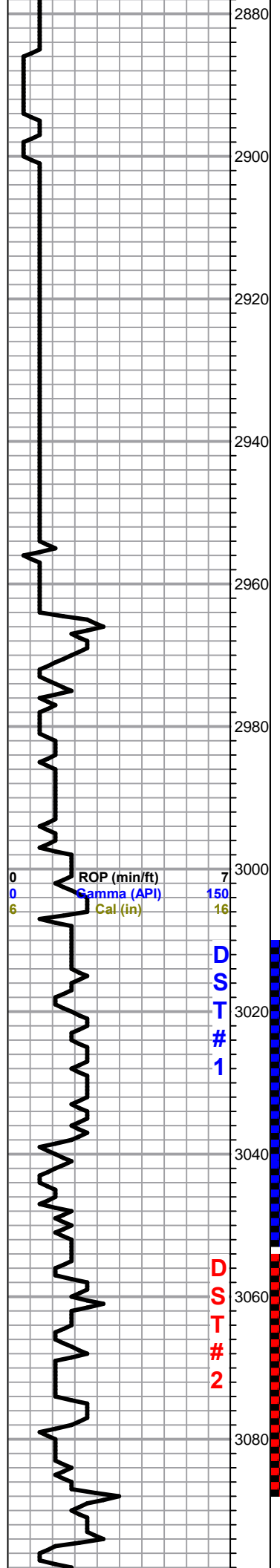
STRINGER

Sandstone

OTHER SYMBOLS

Oil Show
 ● Good Show
 ● Fair Show
 ○ Poor Show
 ○ Spotted or Trace
 ○ Questionable Stn
 D Dead Oil Stn
 ■ Fluorescence
 * Gas
DST
 DST Int
 DST alt
 Core
 tail pipe





Sh, gry, dk gry, few maroon, silty

Sh, a/a, tr. sd. gry, vfg, well sorted, no shows

Sh, maroon, gry, dark gray, greenish, mica

Brown Lime 2964.0 (-1258.0)
LS, brn, fxl, dense, poor visible porosity, no shows

Sh, gry, soft, silty

Lansing 2993.0 (-1287.0)
LS, tan, brn, fxl, poor visible porosity, no shows

LS, tan, gry, fxl, dense, few foss, poor visible porosity, no shows

LS, cream, mottled, fxl, poor visible porosity, chalky, no shows

● LS, cream, ool, fair scattered p.p. porosity, black/brn stain, sfo, good odor

Sh, gry, silty, soft

LS, cream, tan, brn, foss, fxl, dense, poor visible porosity, no shows

● LS, brn, fxl, scattered vuggy porosity, chalky, black stain, sfo/sat., good odor

● LS, gry, brn, fxl, few foss, poor scattered visible

Poor Samples
(Found hole in pipe on dst #1)

DST#1 3010-3052
30-30-45-60

1st Open:
Weak - good blow build to 9"

2nd Open:
Same

Recovery:
60' GIP

2' Clean Oil

90' MW SFO
(70% W, 30%M)

120' Water

Pressures:
ISIP 963 psi
FSIP 971 psi
IFP 27-67 psi
FFP 73-118 psi
HSH 1464-1441 psi

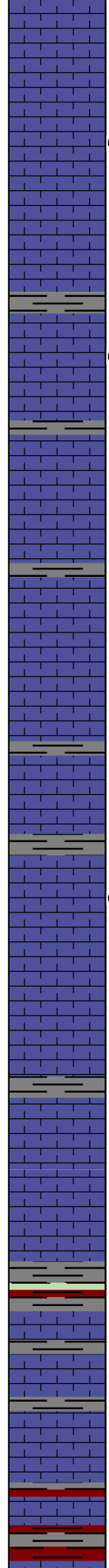
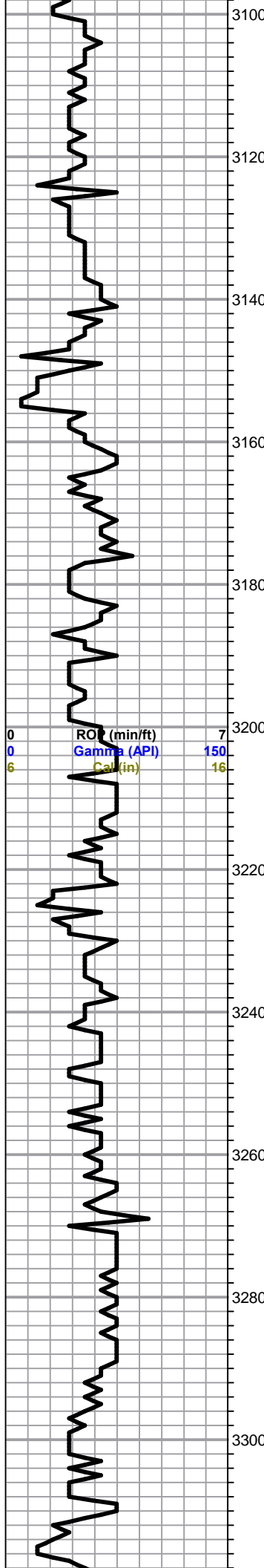
DST#2 3054-3087
30-30-45-45

1st Open:
Weak blow

2nd Open:
Weak blow

Recovery:
75' GIP

5' clean oil



porosity, tr. sfo, no odor

LS, white, cream, ool, dns, poor visible porosity, sl. chalky, tr. brn stain, tr. sfo, no odor

LS, gry, white, fxl, dense, cherty, no shows

Slug gry shale

LS, tan, buff, suc. foss, ool/oom, poor -fair scattered vuggy oom porosity, chalky, tr/wk. sfo, no odor

LS, cream, white, ool, poorly developed, dense, no shows

Sh, gry, silty, mica

LS, cream, fxl, dense, cherty, no shows, no odor

LS, cream, tan, fxl, poor visible porosity, no shows

LS, cream, ool, poorly developed, poor visible porosity, tr. black stain, tr. sfo, no odor

LS, cream, tan, fxl, dense, poor visible porosity, no shows

Sh, gry, dk gry,

LS, brn, cream, fxl, dense, poor visible porosity, no shows,

Base Kansas City 3275.0 (-1569.0)

Sh, gry, dk gry, maroon, waxey

LS, brn, cream, denes, poor visible porosity, no shows

LS, a/a, tr. orange chert

40' SOCMW
(1%O, 59%W, 40% M)

60' MW w/ show of oil
(90%W, 10%M)

120' Water

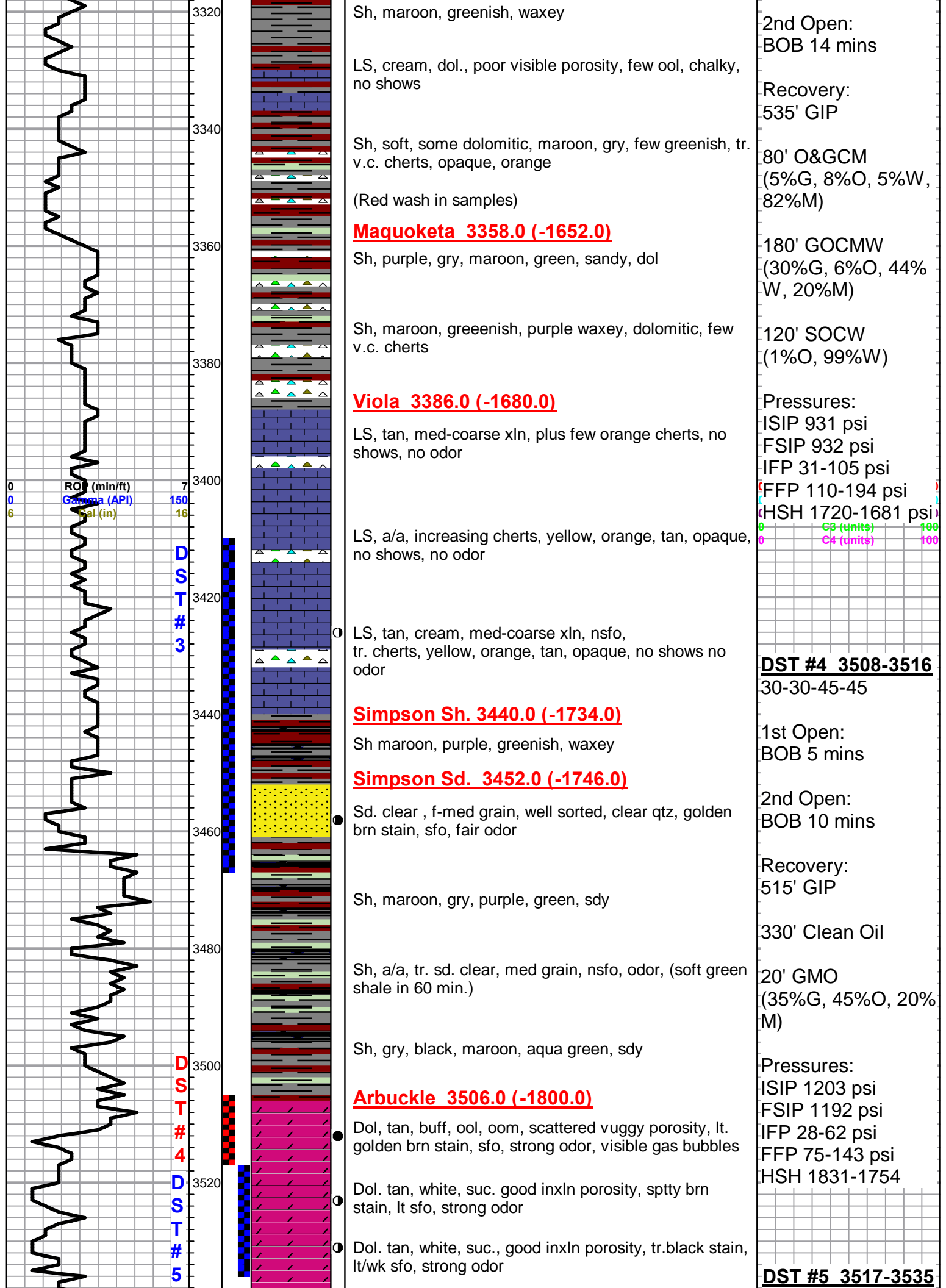
Pressures:
ISIP 998 psi
FSIP 1024 psi
IFP 26-69 psi
FFP 78-130 psi

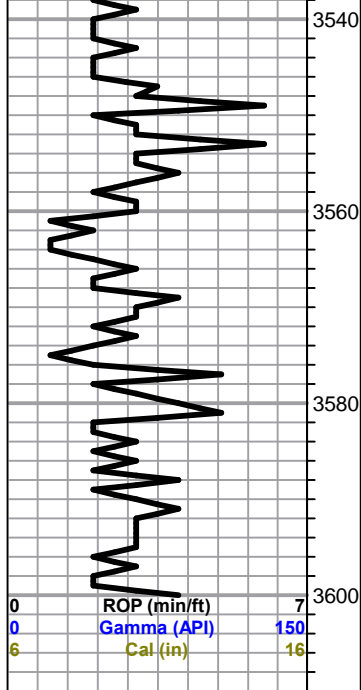
(1) LS, tan, ool, poor visible porosity, tr. sfo, no odor (caving???)

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

DST#3 3410-3465
30-30-45-60

1st Open:
BOB 11 mins





Dol. white, suc. fair inxln porosity, spty tr. sfo, odor
 Dol. white, cream, suc. poor-fair inxln porosity, (few) tr. spty sfo, faint odor
 Dol. white, med xln, coarse, fair inxln porosity, nsfo, odor
 Dol. white, cream, fxl, poor inxln porosity, dense, nsfo, odor
 Dol. white, fxl, poor - fair inxln porosity, sdy qtz grains, nsfo, no odor

LTD 3598.0 (-1892.0)
RTD 3600.0 (-1894.0)

10-15-15-30
 1st Open BOB Inst.
 Recovery
 120' MW
 (80%W, 20%M)
 2760' Water
 Pressures
 ISIP 1301 psi
 FSIP 1303 psi
 IFP 1073-1196 psi
 FFP 1302-1303 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100