



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1233339
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: _____

1233339

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> _____	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: ZAMECNIK # 1
 Location: SE NE SW SW Sec 8-T11S-R11W
 API: 15-167-24,013-00-00
 Pool: WILDCAT
 State: KANSAS

Field: UNNAMED
 Country: USA



Scale 1:240 Imperial

Well Name: ZAMECNIK # 1
 Surface Location: SE NE SW SW Sec 8-T11S-R11W
 Bottom Location:
 API: 15-167-24,013-00-00
 License Number: 4787
 Spud Date: 11/8/2014 Time: 3:30 PM
 Region: RUSSELL COUNTY
 Drilling Completed: 11/15/2014 Time: 2:53 AM
 Surface Coordinates: 820' FSL & 1005' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 1617.00ft
 K.B. Elevation: 1627.00ft
 Logged Interval: 2000.00ft To: 3950.00ft
 Total Depth: 3950.00ft
 Formation: LANSING-KANSAS CITY
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -98.5734312
 Latitude: 39.1056273
 N/S Co-ord: 820' FSL
 E/W Co-ord: 1005' FWL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 WEST 35TH STREET
 HAYS, KANSAS 67601

Phone Nbr: 785-625-3380
 Logged By: GEOLOGIST Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 11/8/2014 Time: 3:30 PM
 TD Date: 11/15/2014 Time: 2:53 AM

ELEVATIONS

K.B. Elevation: 1627.00ft
 K.B. to Ground: 10.00ft

Ground Elevation: 1617.00ft

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL BASED ON LOG ANALYSIS AND NEGATIVE RESULTS OF DST # 1. REFERENCE WELL FOR CORRELATION WAS MICK # 1, NE NE SE, SECTION 36-T10S-R12W. SAMPLES AND LOGS INDICATED NUMEROUS ZONES WITH POROSITY DEVELOPMENT BUT LACKING IN OIL SHOWS AND STAINING IN ANY ZONE IN THE WELL. DST # 1 PRESSURE CHARTS INDICATED A WELL DEVELOPED RESERVOIR BUT RECOVERED ONLY MUDDY SALT WATER (95,000 ppm Cl).

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

FORMATION TOPS COMPARISON

	ZAMECNIK # 1		MICK # 1
	SE NE SW SW		NE NE SE
	Sec.8-T11S-R11W		Sec.36-T10S-R12W
	GL 1617' KB 1627'		KB 1694
Anhydrite top	583+1044	+56	+988
Anhydrite base	616+1011	+55	+956
Grand Haven	2186-559	+27	-586
Dover Lime	2213-586	+30	-616
Stotler/Tarkio	2263-636	+25	-661
Elmont	2366-739	+13	-752
Howard	2490-863	+11	-874
Topeka	2558-931	+8	-938
Heebner Shale	2799-1172	+2	-1174
Toronto	2824-1197	+1	-1198
LKC	2872-1245	-9	-1236
Stark Shale	3106-1479	+5	-1484
Hushpuchney Sh	3142-1515	+7	-1522
BKC	3178-1551	+6	-1557
Pawnee	3243-1616	+7	-1623
Ft. Scott	3292-1665	+5	-1670
Cherokee Shale	3321-1694	+8	-1702
Mississippi	3441-1814	-6	-1808
Kinderhook Sh	3600-1973	-121	-1852
Viola	3678-2051	-131	-1920
Simpson Shale	3912-2285	-114	-2171

Simpson Dol.	3920-2293	-116	-2177
Simpson Sand	3935-2308	-118	-2190
Arbuckle	Not Reached		-2208
RTD	3950-2323		-2236

DST # 1 TEST SUMMARY

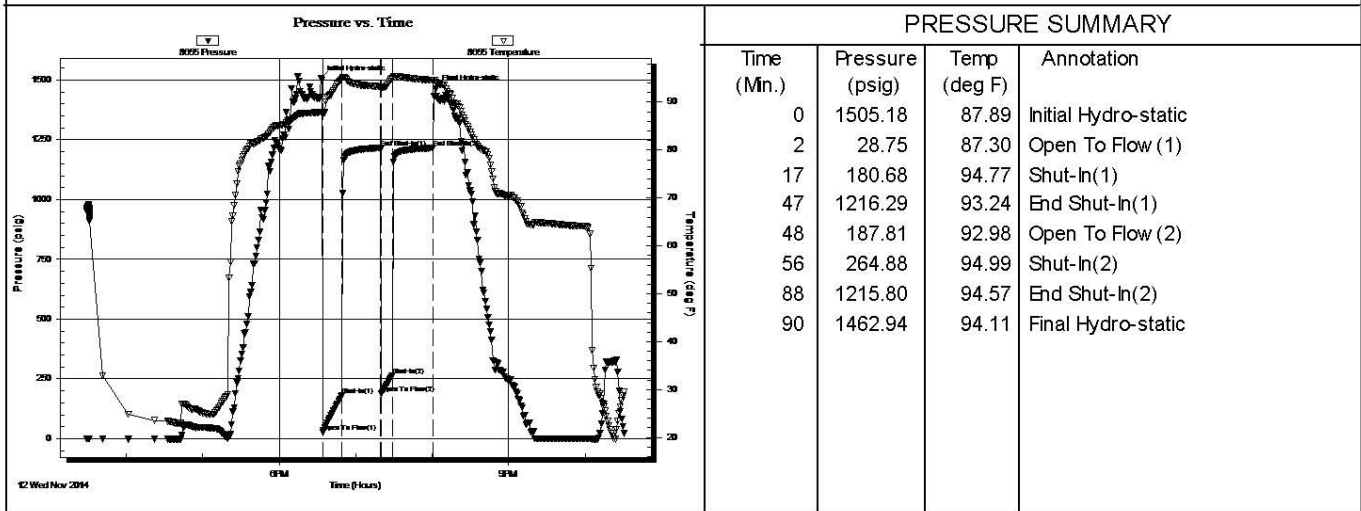
	DRILL STEM TEST REPORT	
	TDI 1310 Bison Rd Hays, KS 67601 ATTN: Herb Deines	8-11S-11W Russell, KS Zamecnik #1 Job Ticket: 58408 DST#: 1 Test Start: 2014.11.12 @ 15:29:08

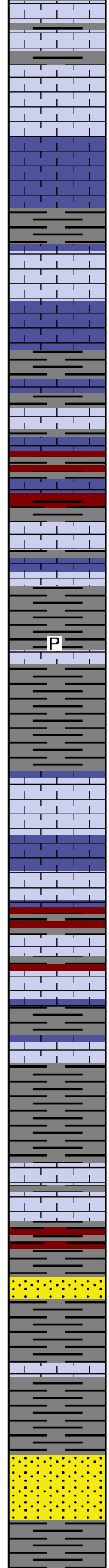
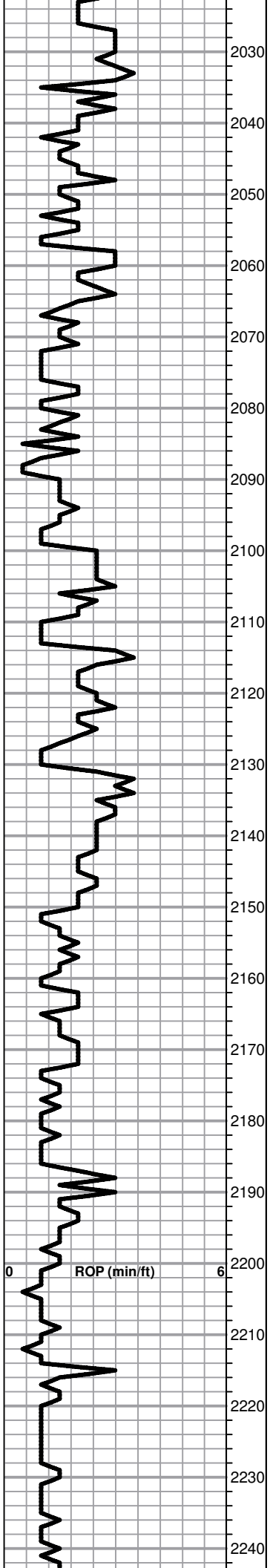
GENERAL INFORMATION:

Formation: KC "D-G"	Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)	Tester: Brannan Lonsdale
Time Tool Opened: 18:34:08	Unit No: 62
Time Test Ended: 22:30:38	
Interval: 2922.00 ft (KB) To 2988.00 ft (KB) (TVD)	Reference Elevations: 1627.00 ft (KB)
Total Depth: 2988.00 ft (KB) (TVD)	1617.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair	KB to GR/CF: 10.00 ft

Serial #: 8655	Outside		
Press@RunDepth: 264.88 psig @ 2923.00 ft (KB)	Capacity: 8000.00 psig		
Start Date: 2014.11.12	End Date: 2014.11.12	Last Calib.: 2014.11.12	
Start Time: 15:29:09	End Time: 22:30:38	Time On Btm: 2014.11.12 @ 18:32:38	
		Time Off Btm: 2014.11.12 @ 20:02:38	

TEST COMMENT: 15- IF- BOB 2.5mins
 30- IS- No blow
 10- FF- BOB 3.5mins
 30- FS- No blow





2030

2040 Lime, lt brn-lt grayish brn, fnxln

2050 Lime, lt brn, fnxln

2060 Lime,lt brn, fnxln, fusulinids

2070 Lime, lt brn-lt gray, fnxln, soft chalky matrix

2080 Lime, lt brn, fnxln

2090 Lime, lt brn, fnxln
Shale, red-med gray, soft sticky clumps

2100 Lime, lt brn-lt gray, fnxln

2110 P
Lime, lt-med brn-lt gray, fnxln

2120

2130 Lime, lt brn-lt gray, fnxln

2140 Lime, lt gray, fnxln with chalky matrix

2150 Lime, lt brn-med gray, fnxln

2160 Lime, lt brn with red staining, fnxln

2170 Lime, lt brn-lt gray, fnxln

2180

GRAND HAVEN 2186-559

2190 Lime, crm-lt brn grading to med brn0lt grayish brn, fnxln

2200 SS lt gray, very fine grain, poorly sorted, gritty, micaceous,
NS, No Staining

2210

DOVER LIME 2213-586

2220 Lime, med brn, fnxln

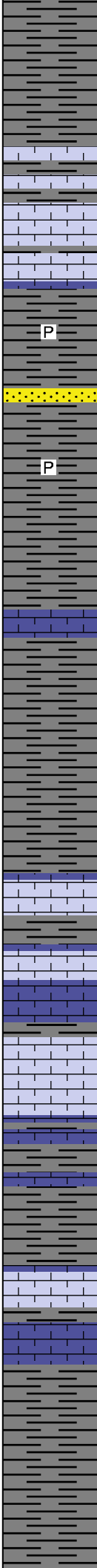
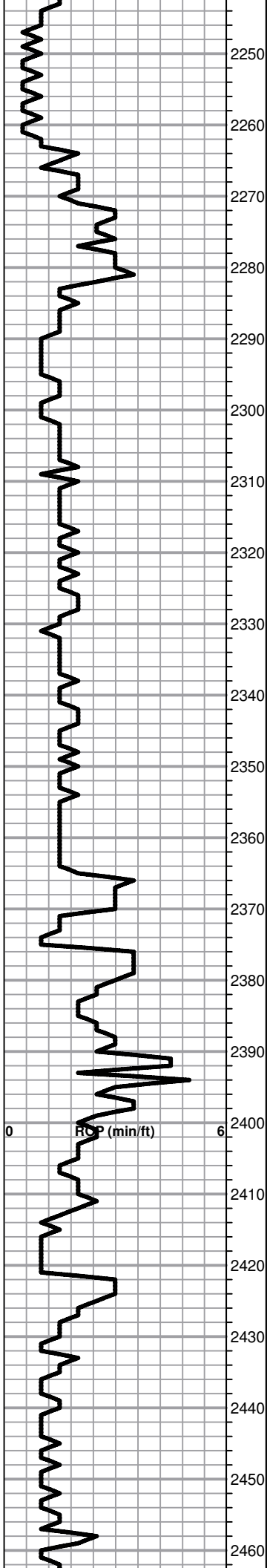
2230 SS, lt gray, VF grained to gritty, micaceous, lt green
glaconitic tint, NS, No Staining

2240

1ST PLUG 610' W/50 SXS
2ND PLUG 420' W/100 SXS
3RD PLUG 40' W/10 SXS
RATHOLE W/ 30 SXS
MOUSEHOLE W/ 15 SXS

205 SXS 60/40POS 4%GEL
1/4# FLOCELE PER SX

Total Gas	100
C1	100
C2	100
C3	100
C4	100
C5	100



Shale, lt gray, mostly soft sticky clumping

STOTLER/TARKIO LIME 2263-636

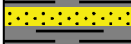
Lime, lt brn, fnxln

Lime, crm-lt brn, fnxln

Lime, med brn, fn-vfxln

P

Shale, lt-med gray, soft sticky clumping to soft blocky scattered pyrite clusters



SS, lt gray, fine gritty, micaceous, NS

P

Shale, lt gray, soft

Shale, lt gray, soft blocky-soft sticky clumps

ELMONT 2366-739

Lime, med brn-med grayish brn, fn-vfxln

Lime, med brn, fn-vfxln

Lime, crm-lt brn, fn-vfxln

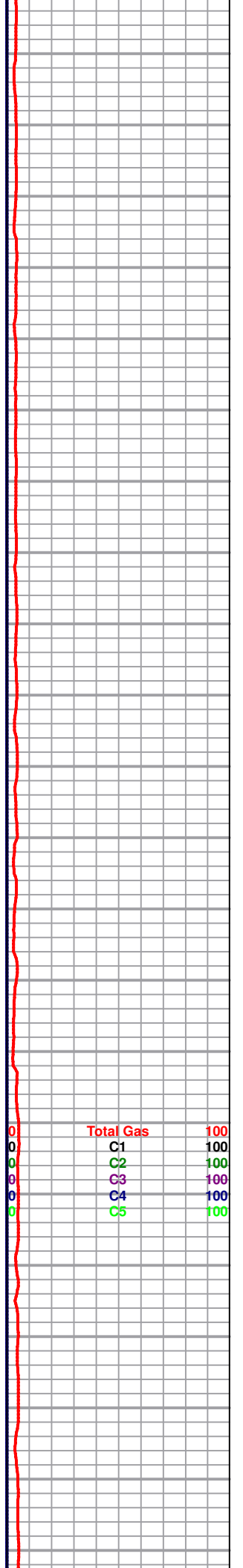
Shale, dove gray, soft sticky clumps

Lime, lt grayish brn, soft granular, slightly fossiliferous

Lime, off white-med brn, fnxln

Shale, lt-med gray, soft sticky clumps

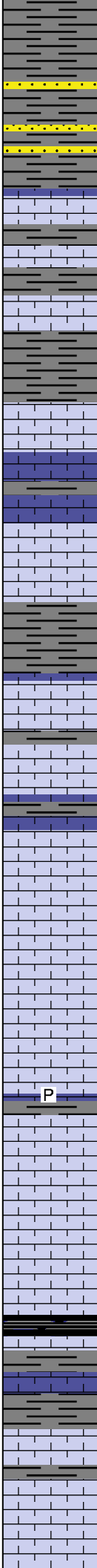
Shale, lt gray, soft sticky



0	Total Gas	100
0	C1	100
0	C2	100
0	C3	100
0	C4	100
0	C5	100

2470
2480
2490
2500
2510
2520
2530
2540
2550
2560
2570
2580
2590
2600
2610
2620
2630
2640
2650
2660
2670
2680

ROP (min/ft)



Shale, lt gray, soft sticky, scattered fine grained sandstone, lt gray, gritty, NS

HOWARD 2490-863

Lime, lt-med brn, fn-vfxln, slightly fossiliferous-fusulinids and crinoid segments

Lime, off white, soft granular

Lime, lt brn-med grayish brn, fnxln

Lime, med-dark grayish brn, fn-vfxln

Lime, med gray, fn-vfxln

Lime, off white-lt gray, fn-vfxln

Shale, dove gray, soft mud

TOPEKA 2558-931

Lime, lt brn-lt grayish brn, fnxln, thin cemented fossil beds

Lime, lt brn-lt grayish brn, fn-vxln

Lime, offwhite-med gray, fn-micro xln, hard on crush

Lime, lt brn, granular, NS, No Wet Cut

Lime, offwhite-lt brn, fnxln

Lime, lt brn-lt grayish brn, fnxln, slightly fossiliferous

P

Lime, lt gray-lt grayish brn, fnxln

Lime, lt brn, fnxln-granular in part, slight chalk in chalky matrix

Lime, lt brn-lt grayish brn, fnxln-granular

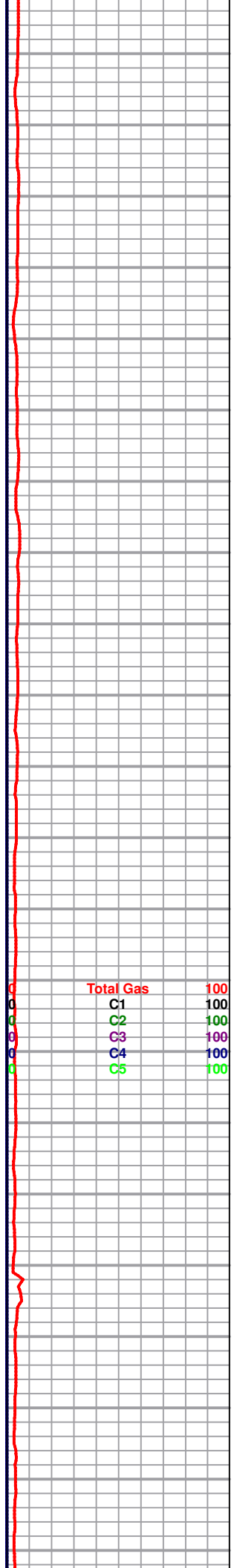
Shale, black carbonaceous, blocky

Lime, grayish brn, fn-vfxln

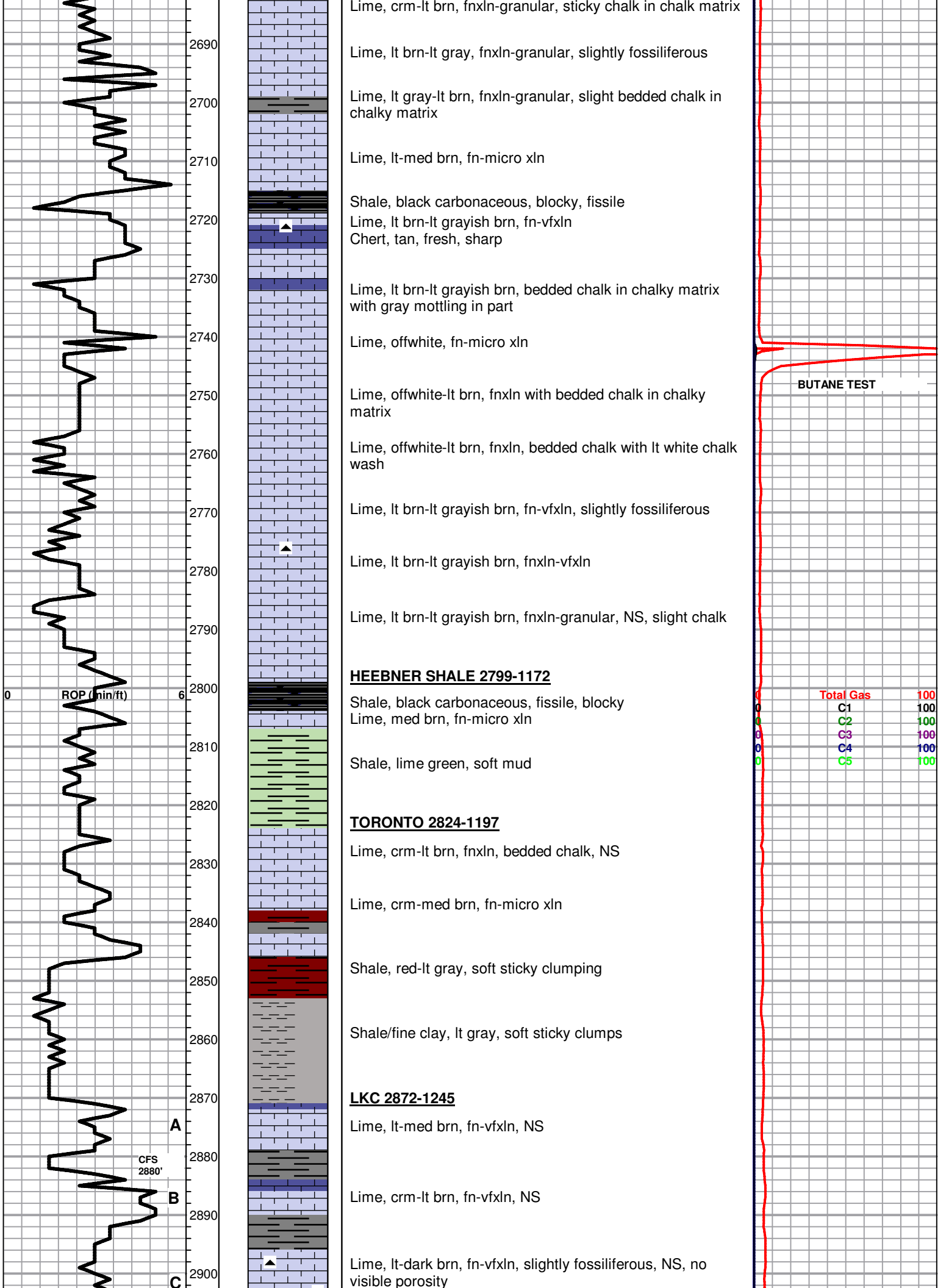
Shale, lt gray, soft sticky clumps

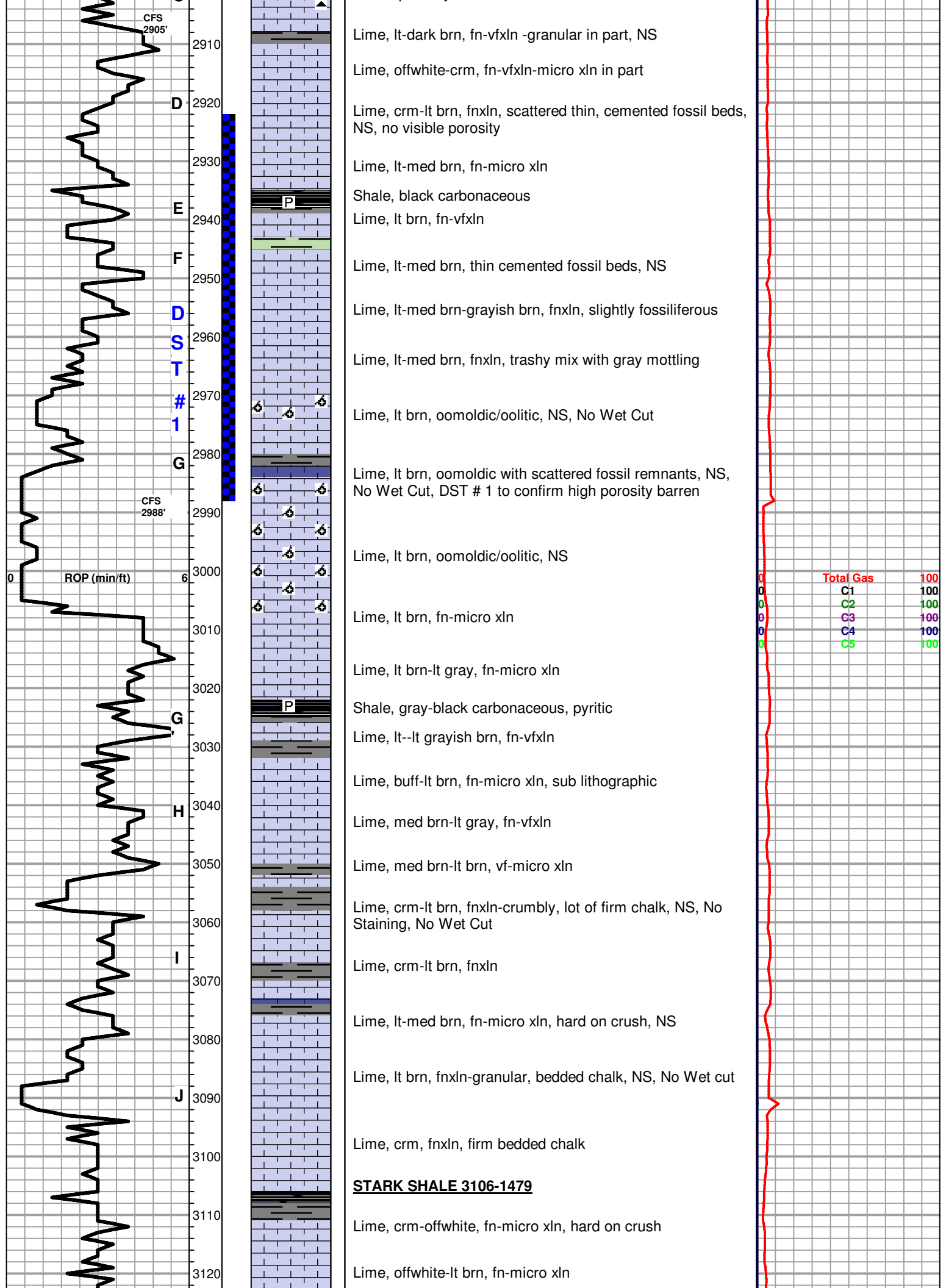
Lime, crm-off white, fn-vfxln, sub-lithographic

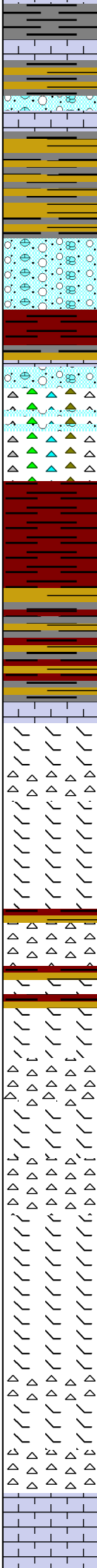
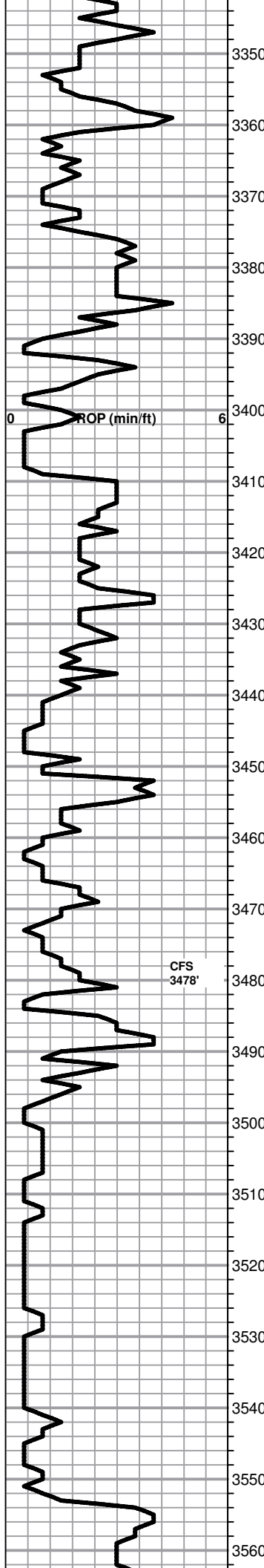
Lime, crm-lt brn, fnxln-granular, bedded chalk in chalky matrix



Total Gas	100
C1	100
C2	100
C3	100
C4	100
C5	100







Shale, gray-dark gray, soft blocky

Shale, vari color, soft blocky

Shale, vari color, soft mud to soft blocky

Lime, clastic mix with vari color shales

Shale, soft with red wash

Clastic lime and vari color chert mix

Shale, reddish brn with lt red wash with lost of sticky clumping

Shale, reddish brn, soft sticky

MISSISSIPPI 3441-1814

Lime, lt brn, fine grained granular, hard on crush, dolomitic in part

Lime, lt brn, fnxln-granular, dolomitic, NS, No Wet Cut

Chert, white, tans, bedded, fresh, sharp

Chert, white-tans-vari color, fresh, sharp, NS

Chert, vari color-reds, brns, maroon, yellow gold
Shale, vari color

Shale, lt red wash

Lime, lt brn, fnxln-granular, dolomitic, hard on crush

Chert, increase in white cherts, fresh sharp, NS

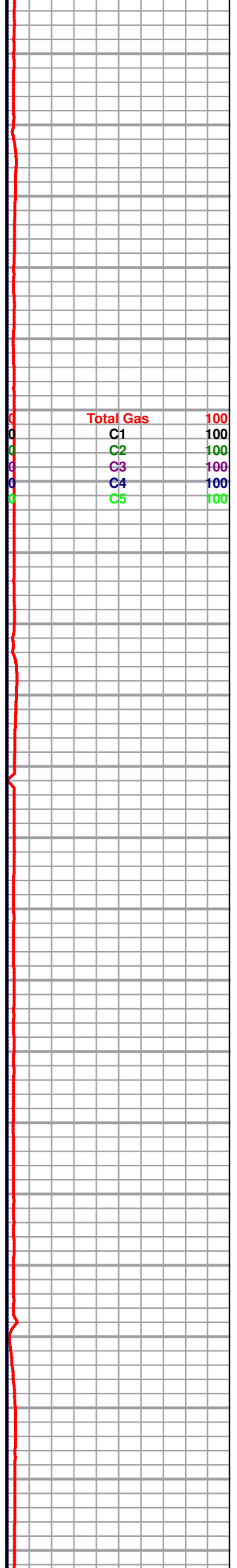
Chert, white-tan, fresh, sharp

Chert, mix of lt color shades from tan-white-lt brn, fresh, sharp

Chert, vari color, lt shades with reds and brns, fresh, sharp

Lime, lt brn, fnxln with vari color shales in samples

NOTE: STARTED HAVING SHALE SLOUGHING PROBLEMS AND MAINTAINING TARGET MUD WEIGHTS

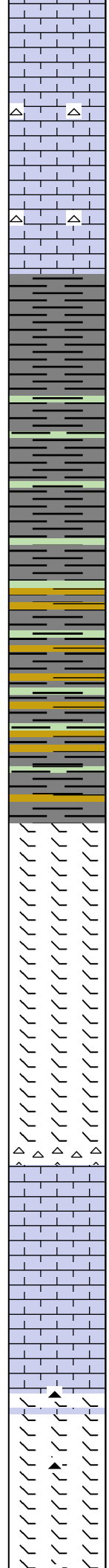


PROBLEMS AND MAINTAINING TARGET MOD WEIGHTS.
JETTED #1 AND ADDED SEVERAL TREATMENTS FROM
THIS DEPTH TO RTD

3570
3580
3590
3600
3610
3620
3630
3640
3650
3660
3670
3680
3690
3700
3710
3720
3730
3740
3750
3760
3770
3780

0 RCP (min/ft) 6

CFS 3645'



Lime and shale, as above

Lime and shale, as above

Lime and shale, as above

KINDERHOOK SHALE 3600-1973

Shale, lt-dark gray, firm, waxy

Shale, lt-dark gray, firm, waxy

Shale, shades of gray and grayish green, firm, waxy

Shale, med-dark gray-grayish green, firm, waxy

Shale, dove gray, soft with sticky clumping in part

Shale, vari color, firm, waxy

Shale, med-dark gray, blocky, few scattered sandstone clusters, NS, No staining

Shale, mostly shades of gray and brown, firm, waxy

VIOLA 3678-2015

Lime, lt brn, fnxln-hard fine granular, dolomitic, NS

LOG LITHODENSITY VALUES INDICATED INTERVALS OF PARTIAL DOLOMITIZATION THROUGHOUT THIS SECTION

Lime, lt brn, vfxln, dolomitic, hard on crush, NS

Lime, lt brn, fnxln, dolomitic

Lime, lt brn, fnxln, dolomitic, NS

Lime, lt brn, fnxln, dolomitic, hard on crush

Lime, lt brn, vfxln, very hard on crush

Lime, lt brn-lt gray, fn-vfxln

Lime, lt brn-lt gray, fn-vfxln

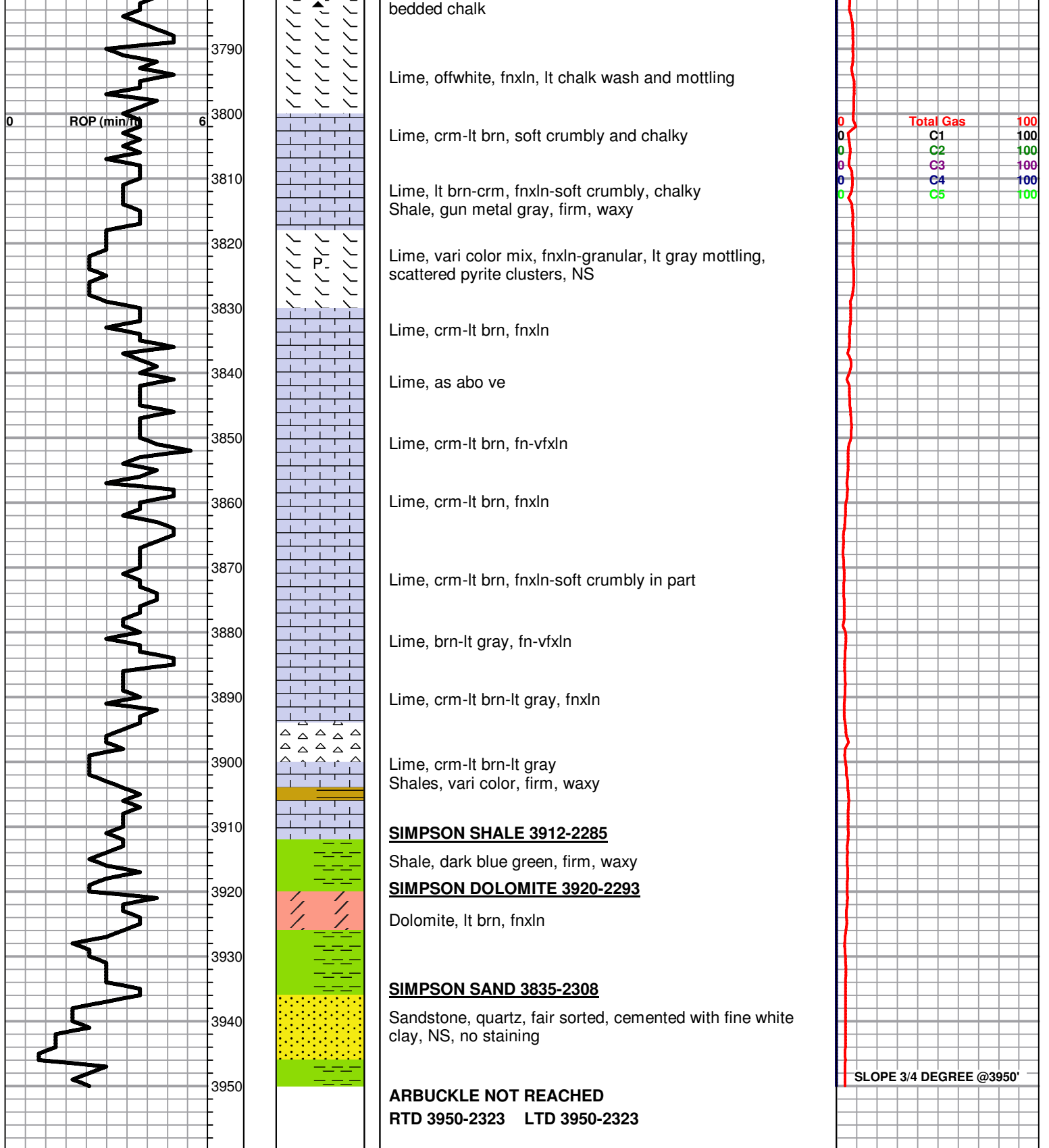
Lime, lt grayish brn-gray, fn-micro xln
Chert, tan, fresh, sharp

Lime, lt brn-lt gray, fnxln, chalk in chalky matrix, soft on crush

Lime, lt brn-lt gray, fnxln with chalky matrix with slight

Total Gas 100
C1 100
C2 100
C3 100
C4 100
C5 100





GLOBAL CEMENTING, L.L.C.

1508

REMIT TO 18048 170RD
RUSSELL, KS 67665

SERVICE POINT:

Russell KS

DATE <i>11-8-14</i>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Zanecek</i>	WELL #. <i>1</i>	LOCATION			COUNTY	STATE	
OLD OR NEW (CIRCLE ONE) <input checked="" type="radio"/>							

CONTRACTOR <i>Southwind Drilling Rig #1</i>	OWNER
TYPE OF JOB <i>Surface</i>	CEMENT
HOLE SIZE <i>17 7/8"</i>	T.D. <i>222 ft</i>
CASING SIZE <i>4 5/8"</i>	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS	
DISPLACEMENT	

AMOUNT ORDERED <i>150 sacks com 3% cc</i>	
<i>2% gel</i>	
COMMON	@
POZMIX	@
GEL	@
CHLORIDE	@
ASC	@
HANDLING	@
MILEAGE	@

EQUIPMENT	
PUMP TRUCK # <i>P1</i>	CEMENTER <i>Cody</i>
	HELPER <i>Rod</i>
BULK TRUCK # <i>B4</i>	DRIVER <i>Jason</i>
BULK TRUCK #	DRIVER

REMARKS:

Ran 5 joints of 4 5/8 casing + landing joint EST
Calculation had to be pumped cement calculated cement
Displaced 1.5 bbls of H₂O shut in at 200 psi

SERVICE

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

CHARGE TO: *TDI Inc*
STREET _____
CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

	@
	@
	@
	@
	@

Global Cementing, L.L.C.,
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 *LARRY BEAVERS*
SIGNATURE *Larry Beavers*

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

GLOBAL CEMENTING, L.L.C.

1515

REMIT TO 18048 170RD
RUSSELL, KS 67665

SERVICE POINT: Russell KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
11-15-14							9:30
LEASE <u>Zamernick</u> WELL # <u>1</u> LOCATION						COUNTY <u>Russell Co</u>	STATE <u>KS</u>
OLD OR NEW (CIRCLE ONE)							

CONTRACTOR Southwind Drilling Rig #1
 TYPE OF JOB Plug
 HOLE SIZE _____ T.D. 610
 CASING SIZE 1 1/2 DEPTH _____
 TUBING SIZE _____ DEPTH _____
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. _____
 PERFS _____
 DISPLACEMENT _____

OWNER _____
 CEMENT AMOUNT ORDERED 2555 lbs 60/40 P02
1/2 gel by Flo seal

EQUIPMENT
 PUMP TRUCK # P1 CEMENTER Cody HELPER Brod
 BULK TRUCK # B1 DRIVER Mark
 BULK TRUCK # _____ DRIVER _____

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

REMARKS:
1 plug 610 505 lbs
2- 420- 1005 lbs
3 404- 105 lbs
as 15 P+305 lbs wiper plug

TOTAL _____

CHARGE TO: TPI INC
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE
 DEPTH OF JOB _____
 PUMP TRUCK CHARGE _____
 EXTRA FOOTAGE _____ @ _____
 MILEAGE 10 @ _____
 MANIFOLD _____ @ _____
 _____ @ _____
 _____ @ _____
 TOTAL _____

Global Cementing, L.L.C.,
 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.

PLUG & FLOAT EQUIPMENT
 _____ @ _____
Dry hole Plug @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 TOTAL _____

PRINTED NAME LARRY BEAVER
 SIGNATURE Larry Beaver

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



DRILL STEM TEST REPORT

Prepared For: **TDI**

1310 Bison Rd
Hays, KS 67601

ATTN: Herb Deines

Zamecnik #1

8-11S-11W Russell,KS

Start Date: 2014.11.12 @ 15:29:08

End Date: 2014.11.12 @ 22:30:38

Job Ticket #: 58408 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.11.17 @ 13:53:05

TDI
8-11S-11W Russell,KS
Zamecnik #1
DST # 1
KC "D-G"
2014.11.12



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

TDI
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

8-11S-11W Russell, KS
Zamecnik #1
Job Ticket: 58408 **DST#: 1**
Test Start: 2014.11.12 @ 15:29:08

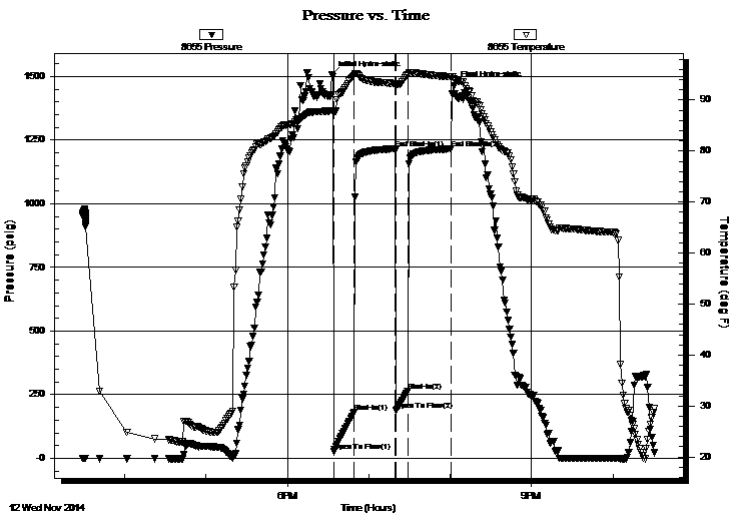
GENERAL INFORMATION:

Formation: **KC "D-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:34:08
Time Test Ended: 22:30:38
Interval: **2922.00 ft (KB) To 2988.00 ft (KB) (TVD)**
Total Depth: 2988.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 1627.00 ft (KB)
1617.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8655 Outside
Press@RunDepth: 264.88 psig @ 2923.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.11.12 End Date: 2014.11.12 Last Calib.: 2014.11.12
Start Time: 15:29:09 End Time: 22:30:38 Time On Btm: 2014.11.12 @ 18:32:38
Time Off Btm: 2014.11.12 @ 20:02:38

TEST COMMENT: 15- IF- BOB 2 1/2 mins
30- IS- No blow
10- FF- BOB 3 1/2 mins
30- FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1505.18	87.89	Initial Hydro-static
2	28.75	87.30	Open To Flow (1)
17	180.68	94.77	Shut-In(1)
47	1216.29	93.24	End Shut-In(1)
48	187.81	92.98	Open To Flow (2)
56	264.88	94.99	Shut-In(2)
88	1215.80	94.57	End Shut-In(2)
90	1462.94	94.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
530.00	WM, 30%W 70%M	7.24

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

TDI
1310 Bison Rd
Hays, KS 67601
ATTN: Herb Deines

8-11S-11W Russell,KS
Zamecnik #1
Job Ticket: 58408 **DST#: 1**
Test Start: 2014.11.12 @ 15:29:08

Tool Information

Drill Pipe:	Length: 2925.00 ft	Diameter: 3.75 inches	Volume: 39.96 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - 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: 32000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 27000.00 lb
Depth to Top Packer:	2922.00 ft			Final 28000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	66.00 ft			
Tool Length:	86.00 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			2903.00	
Shut In Tool	5.00			2908.00	
Hydraulic tool	5.00			2913.00	
Packer	5.00			2918.00	20.00 Bottom Of Top Packer
Packer	4.00			2922.00	
Stubb	1.00			2923.00	
Recorder	0.00	8651	Inside	2923.00	
Recorder	0.00	8655	Outside	2923.00	
Perforations	28.00			2951.00	
Change Over Sub	1.00			2952.00	
Drill Pipe	32.00			2984.00	
Change Over Sub	1.00			2985.00	
Bullnose	3.00			2988.00	66.00 Bottom Packers & Anchor

Total Tool Length: 86.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

TDI **8-11S-11W Russell, KS**
 1310 Bison Rd **Zamecnik #1**
 Hays, KS 67601 Job Ticket: 58408 **DST#: 1**
 ATTN: Herb Deines Test Start: 2014.11.12 @ 15:29:08

Mud and Cushion Information

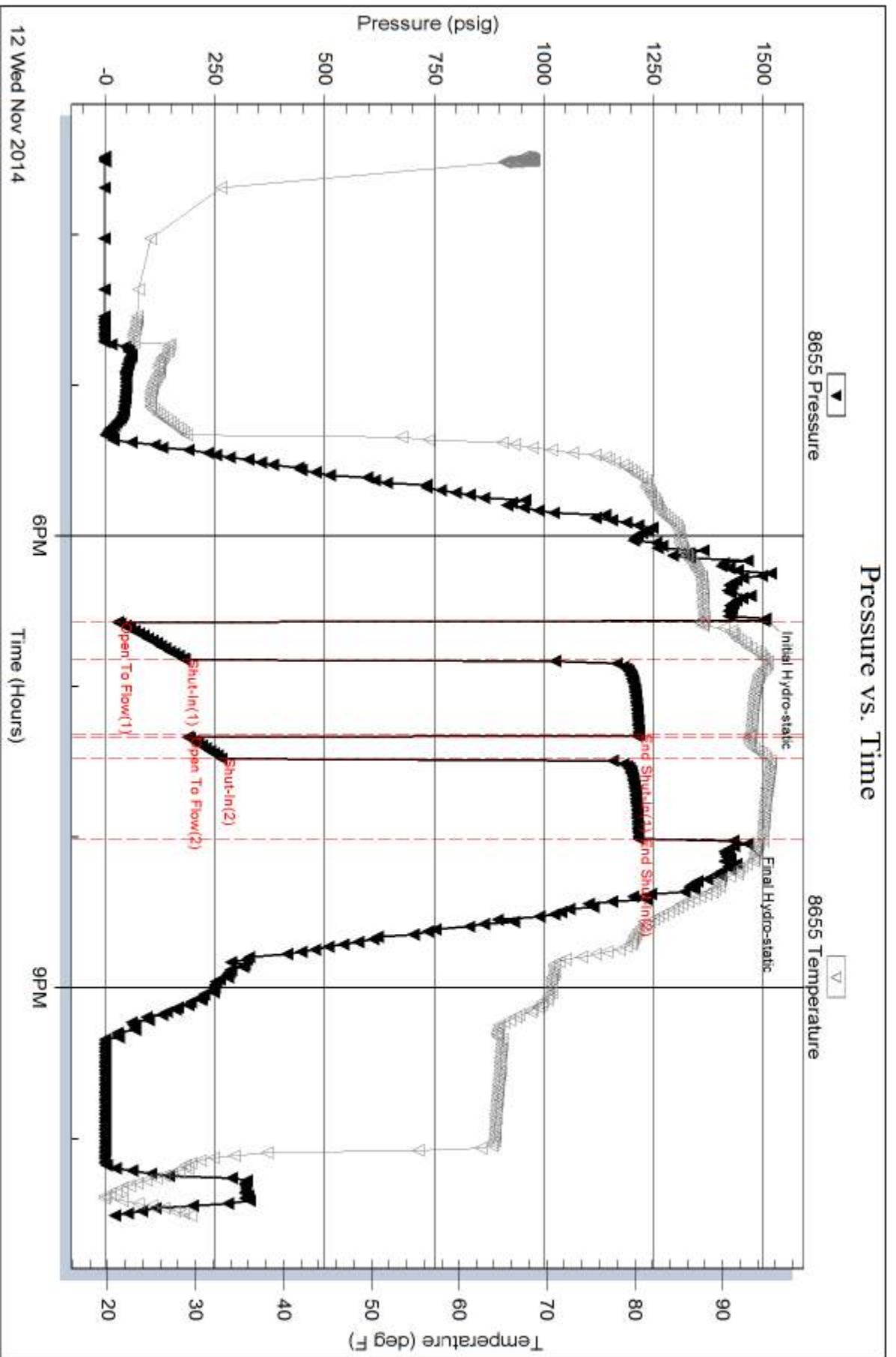
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	95000 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7200.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
530.00	WM, 30%W 70%M	7.240

Total Length: 530.00 ft Total Volume: 7.240 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

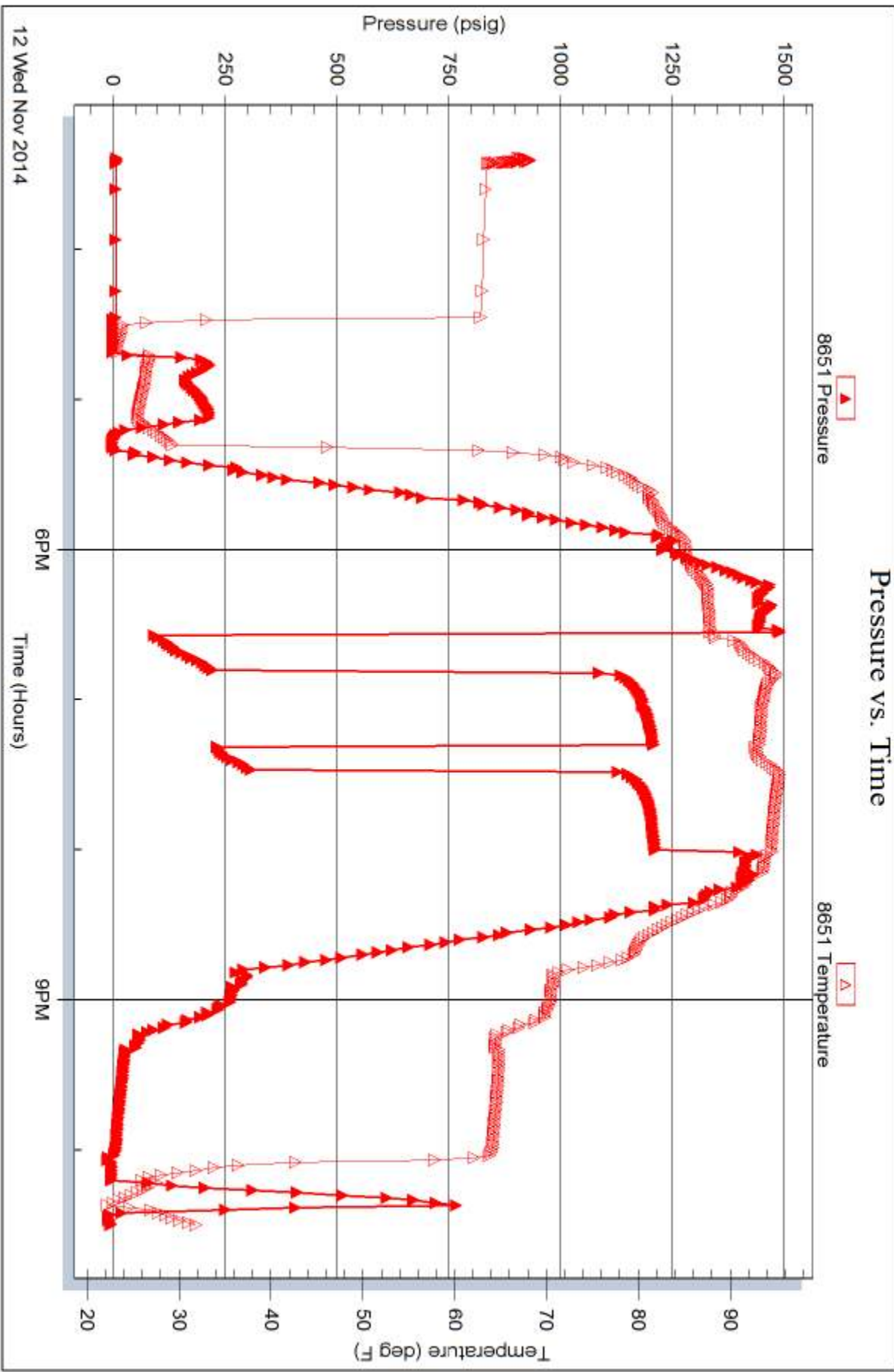


Serial #: 8651

Inside TDI

Zamecnik #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 58408

Printed: 2014.11.17 @ 13:53:07



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 58408

Well Name & No. Zamechik #1 Test No. 1 Date 11/12/14
 Company TDI Elevation 1627 KB 1617 GL
 Address 1310 Bison Rd. Hays, KS 67601
 Co. Rep / Geo. Herb Demes Rig Southwind #1
 Location: Sec. 8 Twp. 11 S Rge. 11 W Co. Russell State KS

Interval Tested 2922-2988 Zone Tested KC "D-G"
 Anchor Length 66' Drill Pipe Run 2925 Mud Wt. 9.6
 Top Packer Depth 2917 Drill Collars Run — Vis 48
 Bottom Packer Depth 2922 Wt. Pipe Run — WL 7.6
 Total Depth 2988 Chlorides 7,200 ppm System LCM 1#
 Blow Description IF - BOB 2 1/2 hrs
ISI - No How
FF - BOB 3 1/2 mins
FSD - No How

Rec	Feet of	%gas	%oil	%water	%mud
<u>530</u>	<u>WM</u>			<u>30</u>	<u>70</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 530' BHT 95° Gravity — API RW .14 @ 35° F Chlorides 95,000 ppm
 (A) Initial Hydrostatic 1505 Test 1150 T-On Location 1455
 (B) First Initial Flow 29 Jars — T-Started 1529
 (C) First Final Flow 181 Safety Joint — T-Open 1835
 (D) Initial Shut-In 1216 Circ Sub — T-Pulled 2000
 (E) Second Initial Flow 188 Hourly Standby — T-Out 2232
 (F) Second Final Flow 265 Mileage 142 RT x 2 Comments Loaded tools
 (G) Final Shut-In 1216 Sampler 117rt 181.35+181.35 11/15 @ 1400
 (H) Final Hydrostatic 1463 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 1600
 Day Standby 2.5d 3.5h Total 3112.70
 Accessibility — MP/DST Disc't —
 Sub Total 1512.70

Approved By _____ Our Representative Brannon Lonsdale

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.