KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1050006

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 3882
Name: Samuel Gary Jr. & Associates, Inc.
Address 1: 1515 WYNKOOP, STE 700
Address 2:
City: DENVER State: CO Zip: 80202 + __ __ __ __
Contact Person: CLAYTON CAMOZZI
Phone: (303) 831-4673
CONTRACTOR: License # 5822
Name: Val Energy, Inc.
Wellsite Geologist: TIM HEDRICK
Purchaser:

Designate Type of Completion:

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

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

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

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

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

09/29/2010	10/05/2010	10/05/2010
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-165-21899-00-00
Spot Description:
SE - SE - NE - NE Sec. 3 Twp. 17 S. R. 16 [ ] East [x] West
1120 Feet from [x] North / [ ] South Line of Section
130 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[x] NE [ ] NW [ ] SE [ ] SW
County: Rush
Lease Name: R.A.M. Well #: 1-3
Field Name:
Producing Formation: N/A
Elevation: Ground: 1978 Kelly Bushing: 1988
Total Depth: 3676 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1093 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 51000 ppm Fluid volume: 1000 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: CRAIG OIL COMPANY
Lease Name: RUBIN NUSS License #: 31341
Quarter SW Sec. 5 Twp. 16 S. R. 14 [ ] East [x] West
County: BARTON Permit #: D09153

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

- [x] **Letter of Confidentiality Received**
  Date: 01/26/2011
- [x] **Confidential Release Date:** 01/25/2013
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [x] **I** [ ] **II** [ ] **III** **Approved by:** NAOMI JAMES **Date:** 01/27/2011

Side Two

1050006

Operator Name: Samuel Gary Jr. & Associates, Inc. Lease Name: R.A.M. Well #: 1-3

Sec. 3 Twp. 17 S. R. 16 ☐ East ☑ West County: Rush

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

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

Samples Sent to Geological Survey ☑ Yes ☐ No

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

List All E. Logs Run:
Attached

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

Name	Top	Datum
TOPEKA	2880	-892
HEEBNER	3214	-1226
DOUGLAS	3245	-1257
LANSING	3271	-1283
ARBUCKLE	3550	-1562
TD	3676	

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

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	12.25	8.625	23	1093	CLASS A	400	2% GEL, 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth

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

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

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

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:

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

Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	R.A.M. 1-3
Doc ID	1050006

All Electric Logs Run

SONIC
MICRO
POR
DIL

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

Kansas
Corporation Commission

phone: 316-337-6200
fax: 316-337-6211
http://kcc.ks.gov/

Thomas E. Wright, Chairman
Ward Loyd, Commissioner

Sam Brownback, Governor

January 26, 2011

CLAYTON CAMOZZI
Samuel Gary Jr. & Associates, Inc.
1515 WYNKOOP, STE 700
DENVER, CO 80202

Re: ACO1
API 15-165-21899-00-00
R.A.M. 1-3
NE/4 Sec.03-17S-16W
Rush 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 at 303-831-4673.

Respectfully,
CLAYTON CAMOZZI

Notice: *Fill out COMPLETELY and return to Conservation Division at the address below within 60 days from plugging date.*

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1045482

Form CP-4
March 2009
Type or Print on this Form
Form must be Signed
All blanks must be Filled

WELL PLUGGING RECORD

K.A.R. 82-3-117

OPERATOR: License #: 3882
Name: Samuel Gary Jr. & Associates, Inc.
Address 1: 1515 WYNKOOP, STE 700
Address 2:
City: DENVER State: CO Zip: 80202 + ____
Contact Person: CLAYTON CAMOZZI
Phone: (303) 831-4673
Type of Well: *(Check one)* ☐ Oil Well ☐ Gas Well ☐ OG ☑ D&A ☐ Cathodic
☐ Water Supply Well ☐ Other: ☐ SWD Permit #:
☐ ENHR Permit #: ☐ Gas Storage Permit #:
Is ACO-1 filed? ☐ Yes ☑ No If not, is well log attached? ☐ Yes ☐ No
Producing Formation(s): List All *(If needed attach another sheet)*
Depth to Top: Bottom: T.D.
Depth to Top: Bottom: T.D.
Depth to Top: Bottom: T.D.

API No. 15 - 15-165-21899-00-00
Spot Description:
SE - SE - NE - NE Sec. 3 Twp. 17 S. R. 16 ☐ East ☑ West
1,120 Feet from ☑ North / ☐ South Line of Section
130 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
County: Rush
Lease Name: R.A.M. Well #: 1-3
Date Well Completed: 10/5/2010
The plugging proposal was approved on: *(Date)*
by: STEVE DURANT *(KCC **District** Agent's Name)*
Plugging Commenced: 10/5/2010
Plugging Completed: 10/5/2010

Show depth and thickness of all water, oil and gas formations.

Oil, Gas or Water Records		*Casing Record (Surface, Conductor & Production)*			
Formation	Content	Casing	Size	Setting Depth	Pulled Out
		SURFACE	8.6250	1093	0

Describe in detail the manner in which the well is plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugs were used, state the character of same depth placed from (bottom), to (top) for each plug set.

CEMENT PLUGS SET THROUGH DRILL PIPE (220 SX 60/40 POZ WITH 4% GEL, 1/4 #/SK FLOW SEAL)
50 SX @ 3560', 50 SX @ 1110', 50 SX @ 540', 20 SX @ 60' TO THE SURFACE
30 SX IN RATHOLE, 20 SX IN MOUSEHOLE

Plugging Contractor License #: 5822 Name: Val Energy, Inc.
Address 1: 200 W DOUGLAS AVE STE 520 Address 2:
City: WICHITA State: KS Zip: 67202 + 3005
Phone: (316) 263-6688
Name of Party Responsible for Plugging Fees: 10/5/2010
State of COLORADO County, DENVER , ss.
CLAYTON CAMOZZI ☑ Employee of Operator or ☐ Operator on above-described well,
(Print Name)
being first duly sworn on oath, says: That I have knowledge of the facts statements, and matters herein contained, and the log of the above-described well is as filed, and the same are true and correct, so help me God.

Submitted Electronically

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



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

Well Name:	**R.A.M 1-3**		
Location:	**SEC 3,17S,16W , Rush Co. Kansas**		
License Number:	**15-165-21899-00-00**	**Region:**	**Wildcat**
Spud Date:	**09/27/2010**	**Drilling Completed:**	**10/04/2010**
Surface Coordinates:	**1120' FNL, 130' FEL**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**1978'**	**K.B. Elevation (ft):**	**1988'**
Logged Interval (ft):	**1760' To: 3680'**	**Total Depth (ft):**	**3680'**
Formation:	**Lansing, Arbuckle**		
Type of Drilling Fluid:			

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: **Samuel Gary Jr, & Assoc.**
Address: **1515 Wykoop, Ste. # 700**
Denver, Colo. 80202
Geo: Clayton Camozzi

GEOLOGIST

Name: **Rodney Napier**
Company: **Earth Tech OGL, Inc.**
Address: **PO Box 683**
Hooker, Okla . 73945
Off. 888-543-8378 Cell: 620-655-8252

Circulating Report

START UN MANNED UNIT 09/30/2010
CFS 3190' 20,40,60
CFS/CTCH 3285' 20,40,60 TOTAL 1.5 HRS
SHORT TRIP
CTCH 3285' 1 HR
CFS 3311' 20,40,60 TOTAL 1.5 HRS
CFS 3353' 30 MIN
CFS 3378' 20,40,60
CFS 3448' 20,40,60
CFS 3583' 20,40,60
TD 3680'
CFS 30 MIN
SHORT TRIP TO LAST DST POINT.
CTCH 1.5 HRS
TOH FOR LOGS

DST's Report

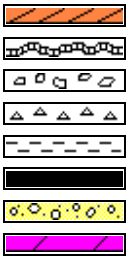
DST#1 3244'-3310' ANCHOR:66', IF:WEAK BLOW BUILT TO 1 1/2 " IN BUCKETT, ISI:BLED OFF NO BLOW,FF:WEAK SURFACE BLOW INCREASED TO 1', FSI:BLED OFF NO BLOW BACK, RECOVERY 31' SOCM,NO GIP
IH:1562,FIF:19,FFF:22,ISI:767,SIF:25,SFF:29,FSI:759,FH:1544
TIMES 10,60,40,120

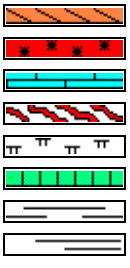
.

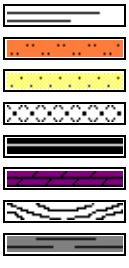
DST's Report

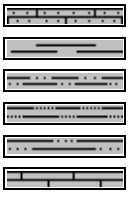
DST#2 3335'-3378' ANCHOR 43' IF:WEAK 1/4 BLOW,ISI NO BLOW BACK,FF:NO BLOW,FSI:NO BLOWBACK RECOVERY 5' OSM BHT 106 DEG
IH:1614,FIF:17,FFF:19,ISI:1113, SIF:19,SFF:22,FSI:949,FH:1593
TIMES 10,60,20,60

ROCK TYPES


Anhy
Bent
Brec
Cht
Clyst
Coal
Congl
Dol


Gyp
Igne
Lmst
Meta
Mrlst
Salt
Shale
Shcol


Shgy
Sltst
Ss
Till
Carb sh
Dol
Dtd
Gry sh


Sandylms
Shale
Sltstn
Shlyslts
Sltysh
Lms

ACCESSORIES

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

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

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

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING
- Well
- Moderate
- Poor

ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

INTERVALS
- Core
- Dst
- Dst

EVENTS
- Rft
- Sidewall

Curve Track 1	Depth	Lithology	Oil Shows	Geological Descriptions	TG, C1-C5
ROP (min/ft) Gamma (API)					TG (units) C1 (units) C2 (units) C3 (units) C4 (units) C5 (units)

0 ROP (min/ft) 5
3 Gamma (API) 3000

17

START UNMANNED UNIT 09/30/2010

TG, C1-C5
1 10 100 10

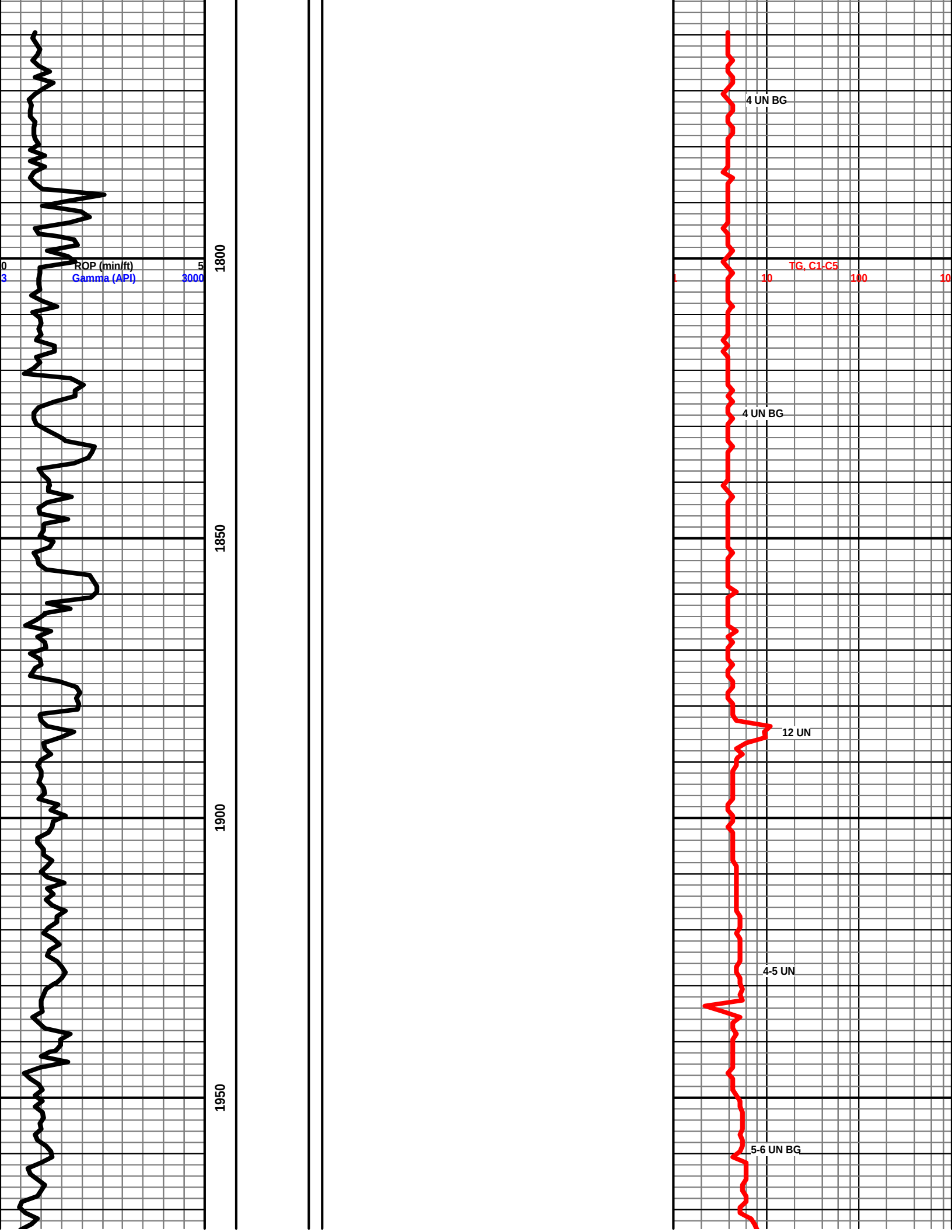
DRILLING CONTRACTOR VAL-6

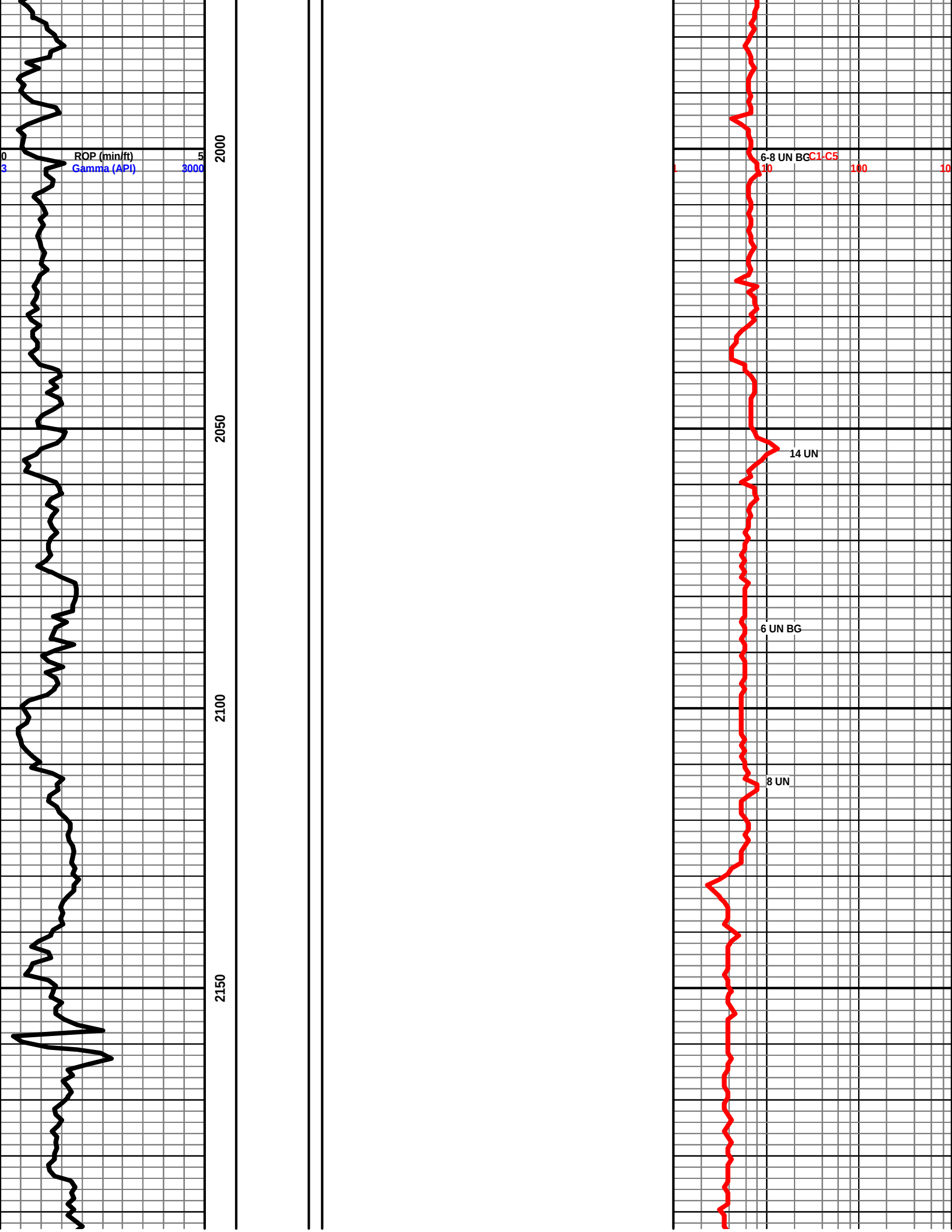
SURFACE CASING SET @ 1093'

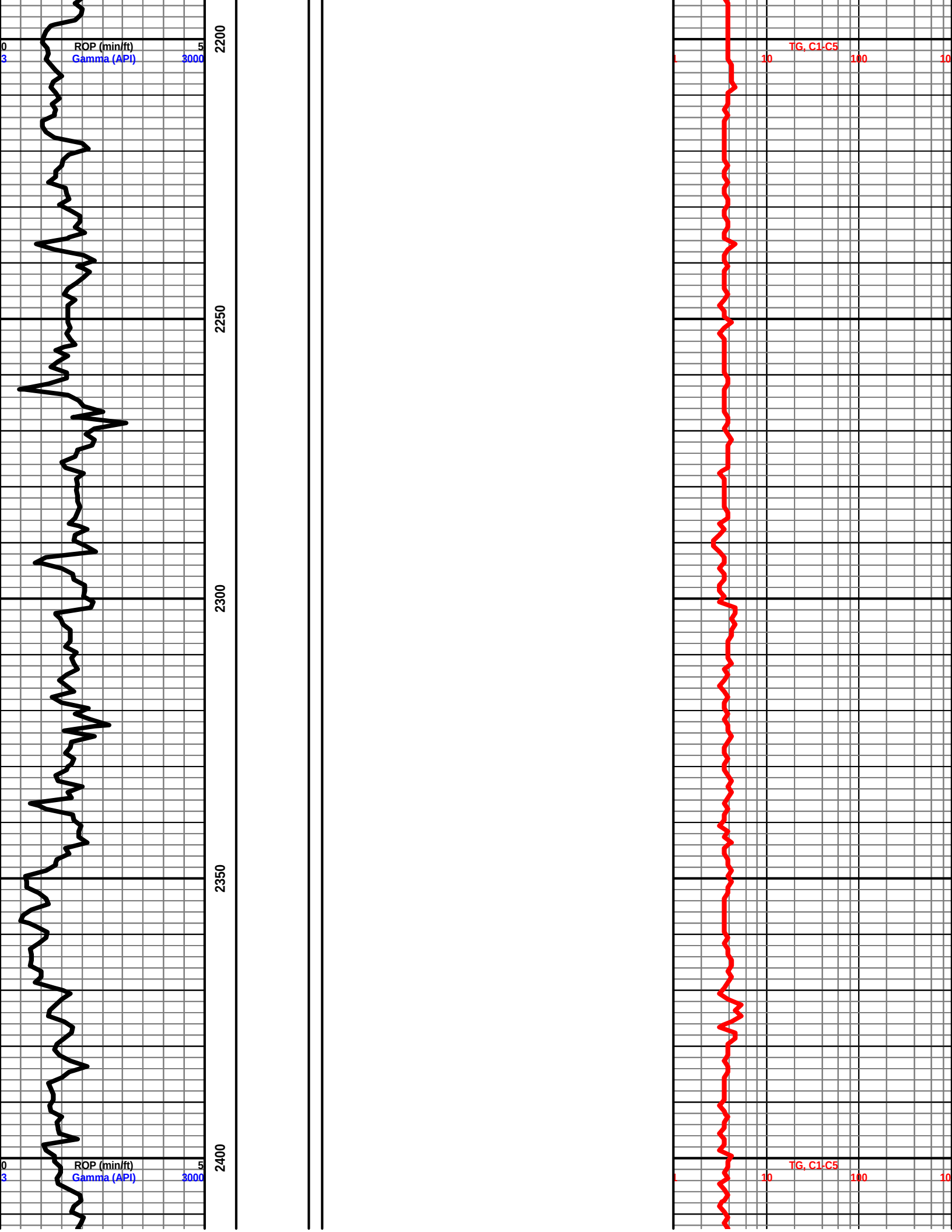
DRILLING CONTRACTOR VAL-6

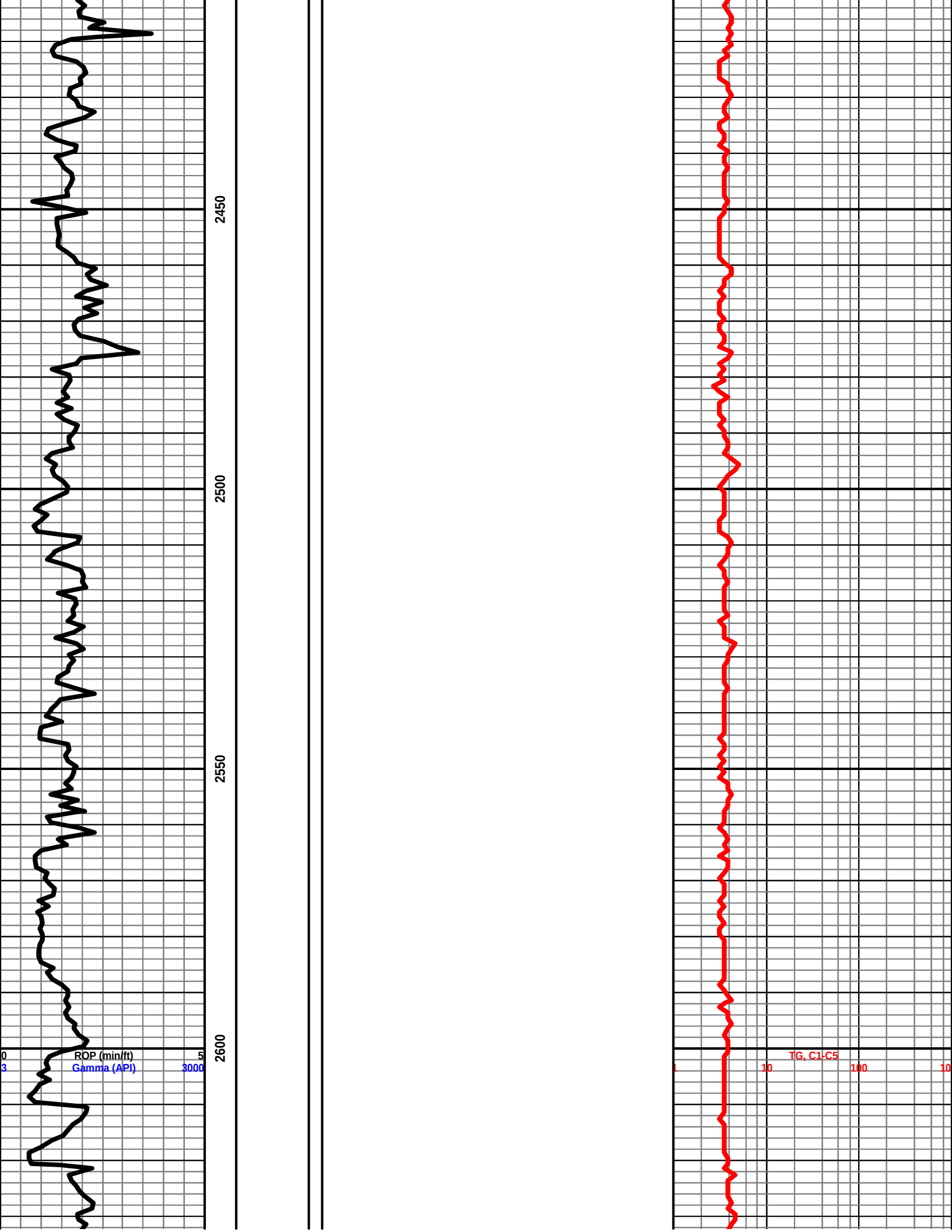
SURVEY'S
1093' 1/2 DEG

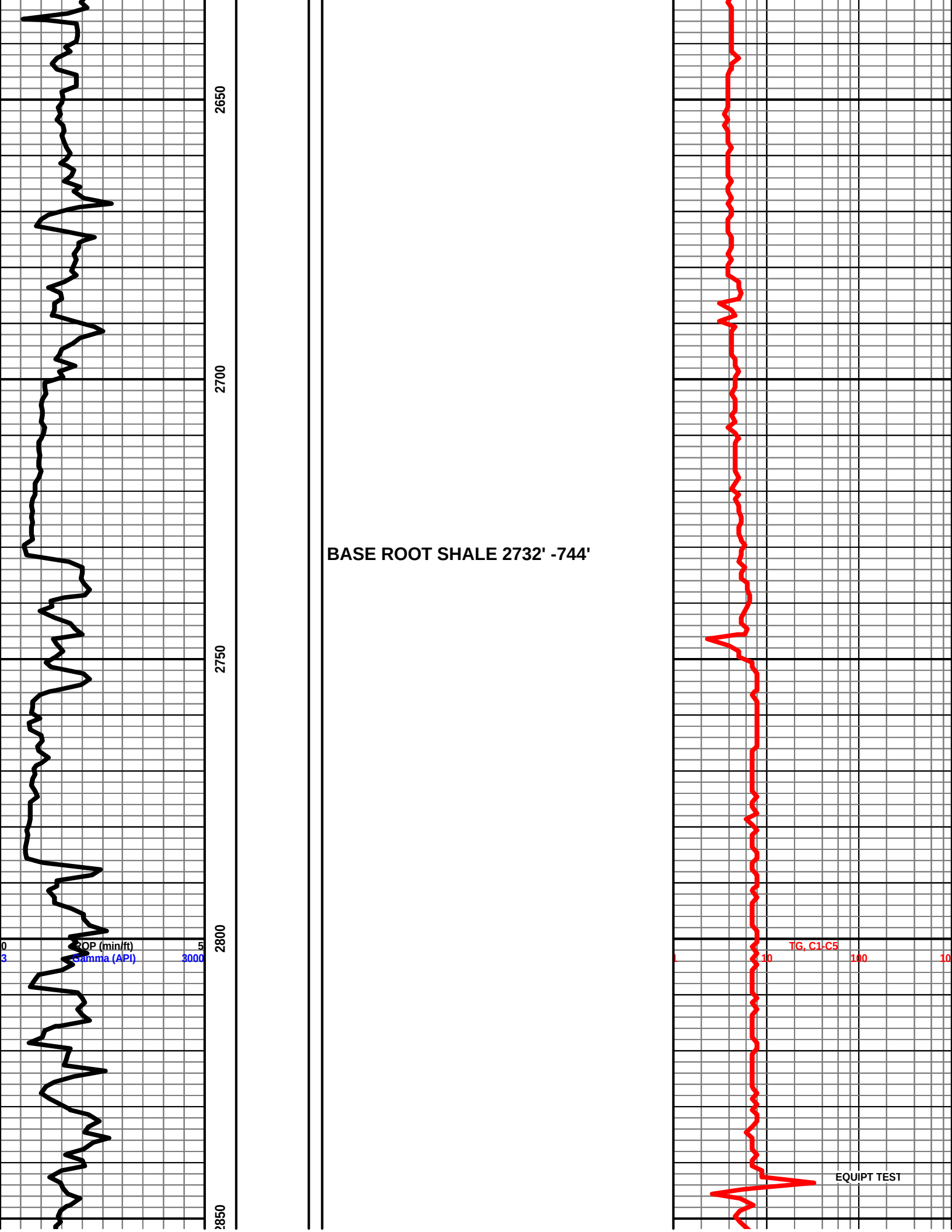
1750

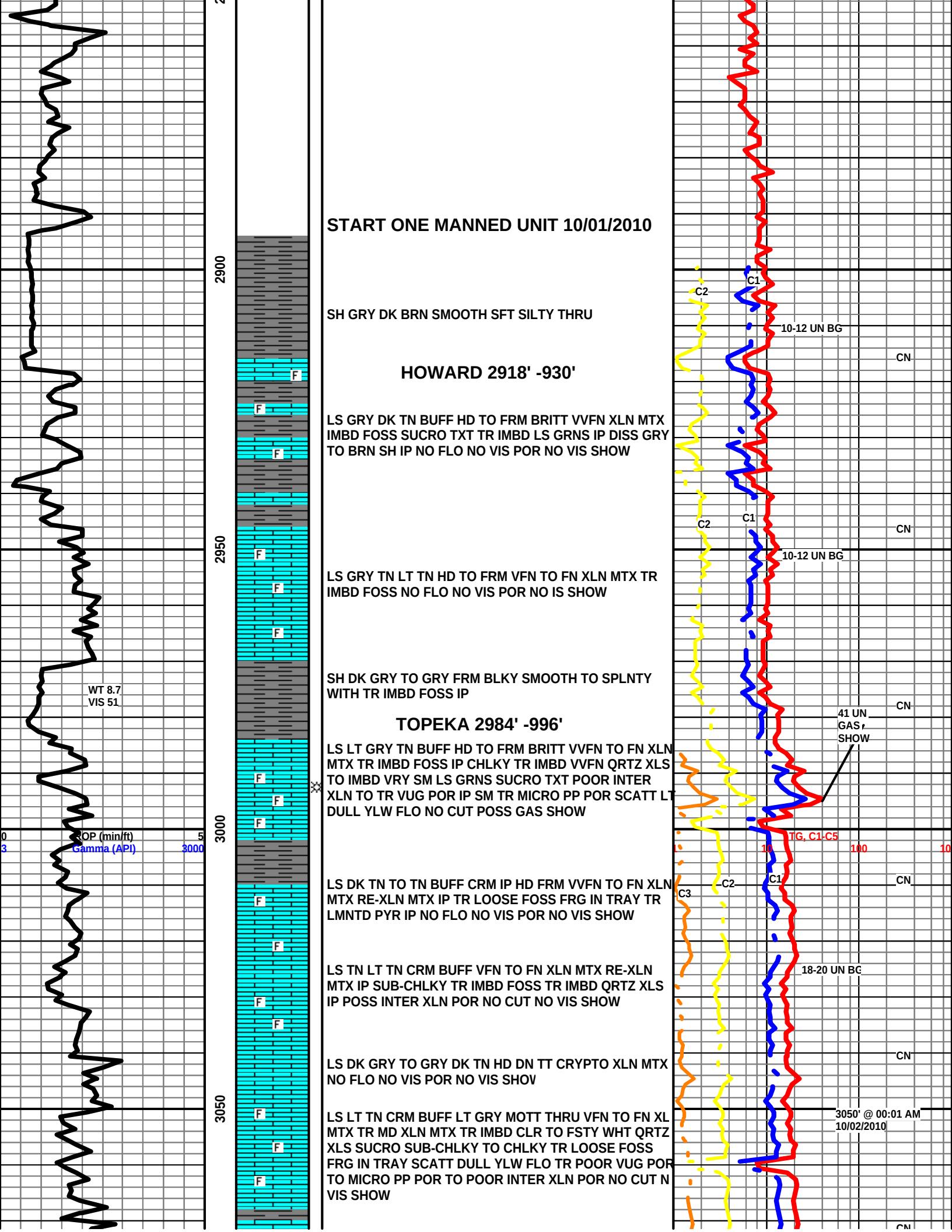

0
ROP (min/ft)
5
3
Gamma (API)
3000
1800
1850
1900
1950
TG, C1-C5
1
10
100
10
4 UN BG
4 UN BG
12 UN
4-5 UN
5-6 UN BG

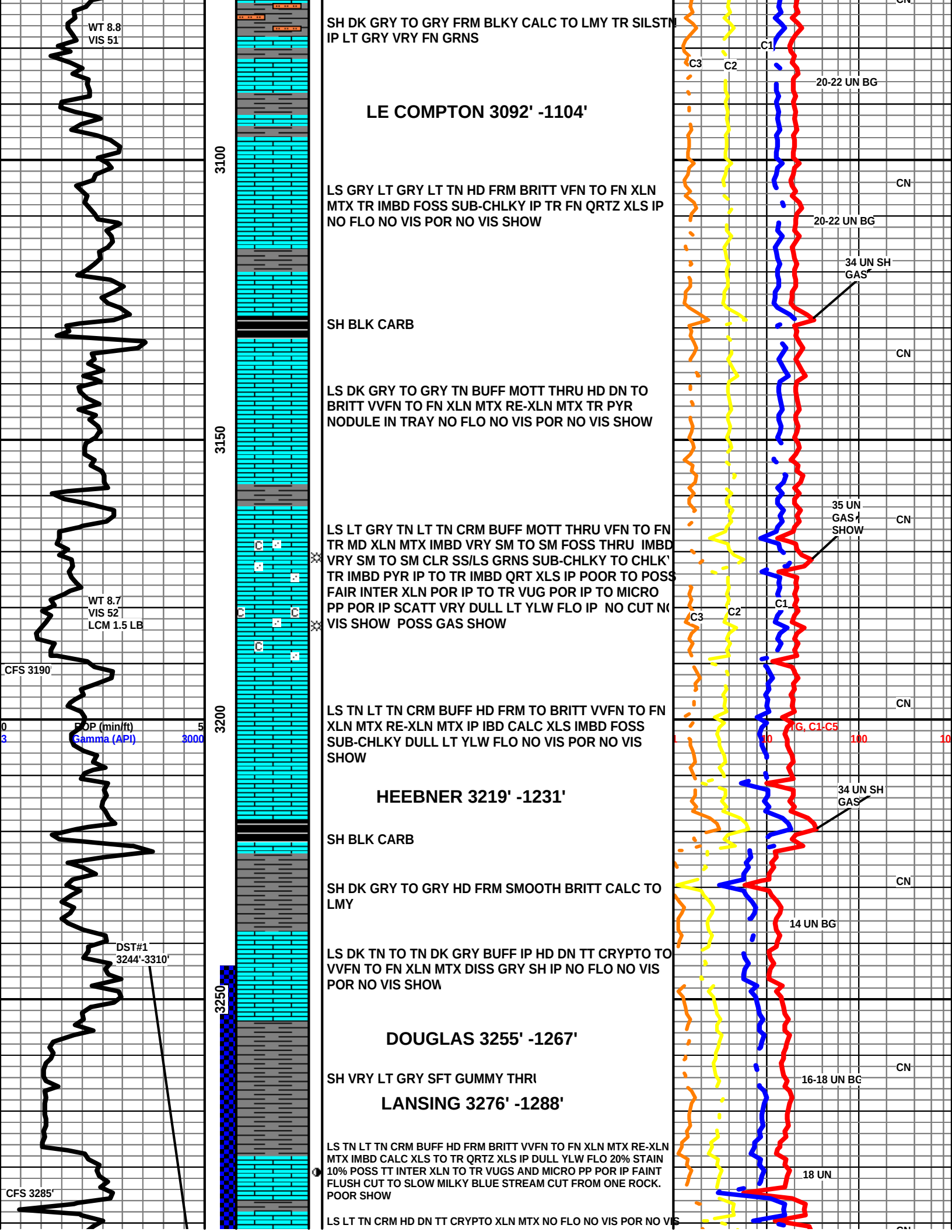

0
3
ROP (min/ft)
Gamma (API)
5
3000
2000
2050
2100
2150
6-8 UN BG
C1-C5
1
10
100
10
14 UN
6 UN BG
8 UN

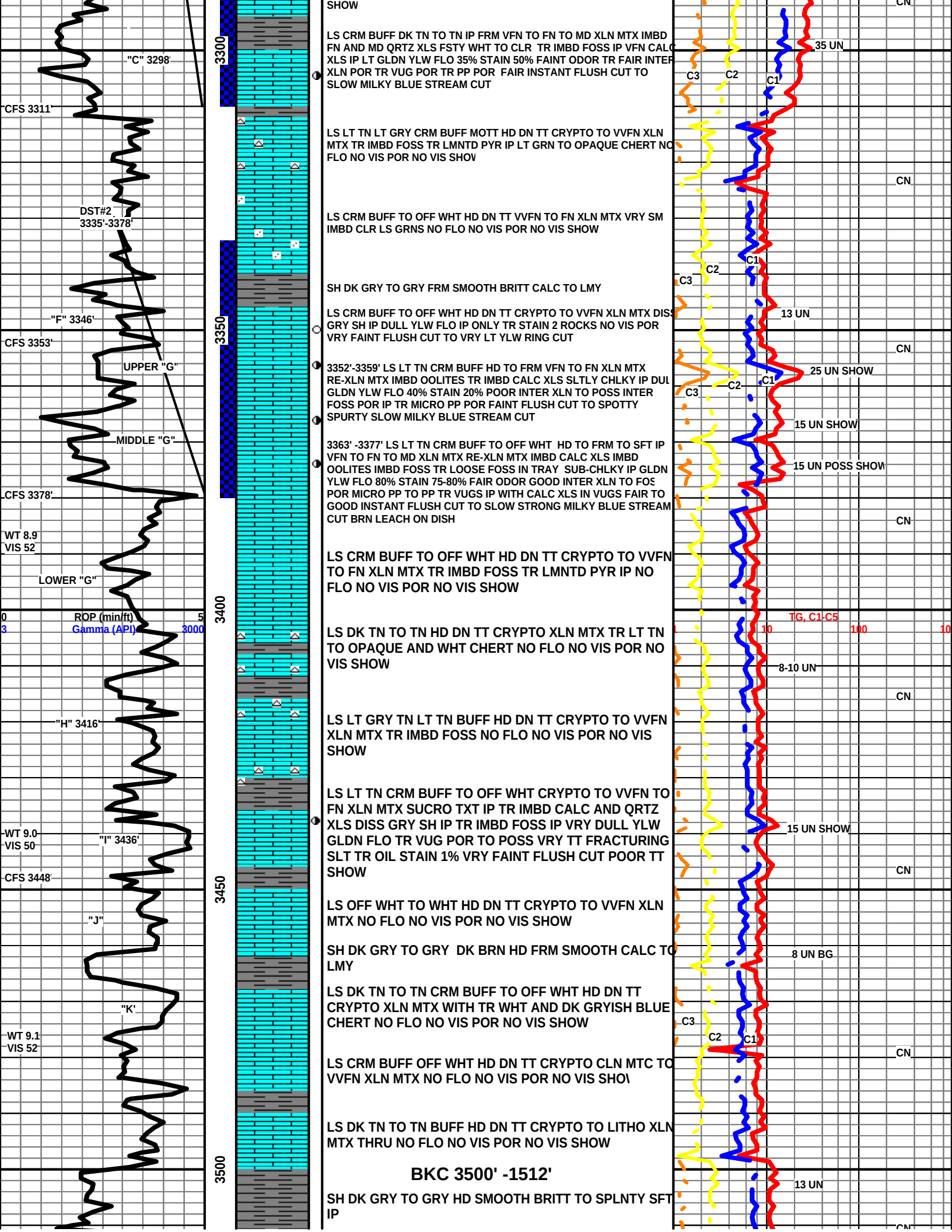

0
ROP (min/ft)
5
3
Gamma (API)
3000
2200
2250
2300
2350
2400
TG, C1-C5
1
10
100
10
0
ROP (min/ft)
5
3
Gamma (API)
3000
TG, C1-C5
1
10
100
10

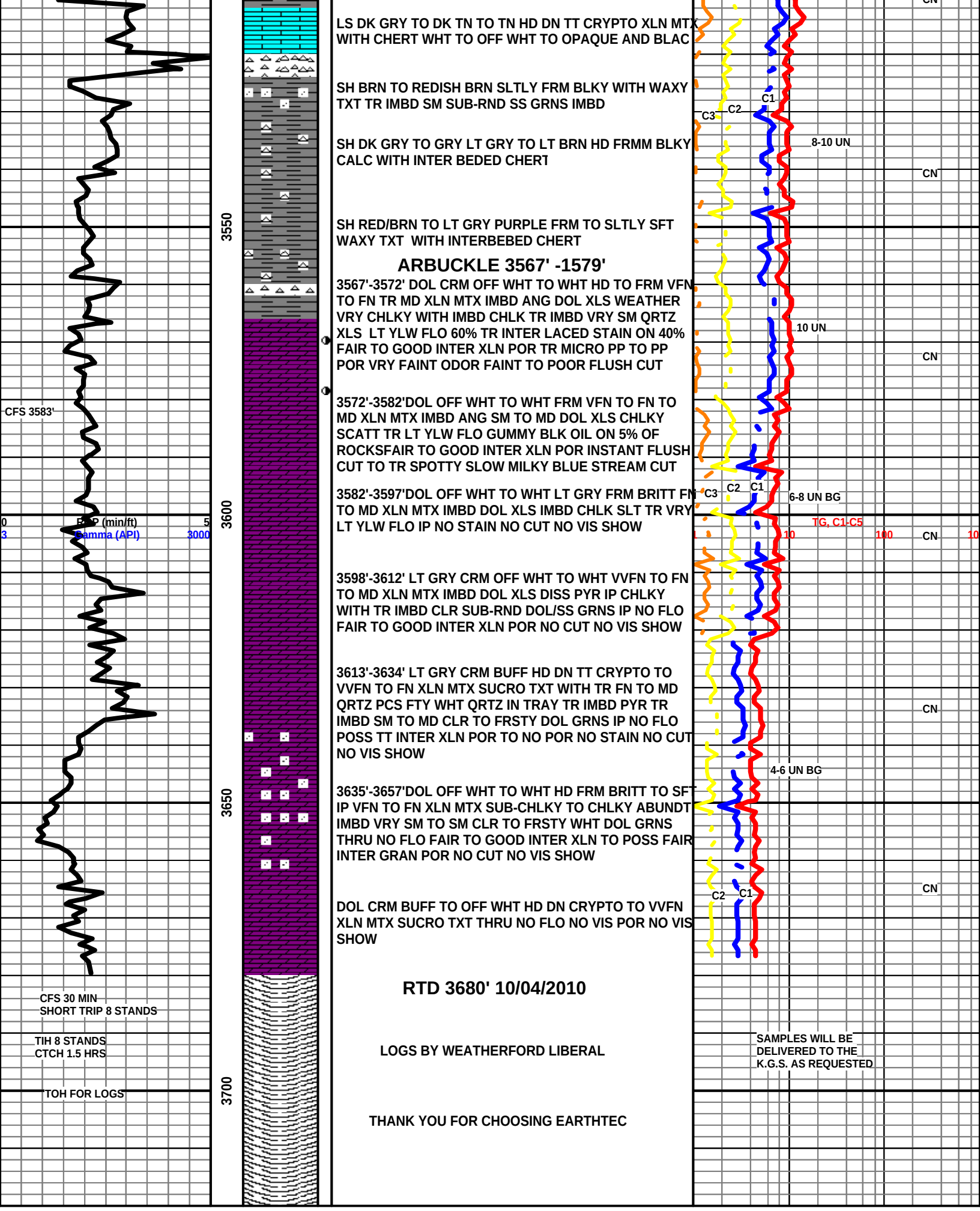

2450
2500
2550
2600
0
ROP (min/ft)
5
3
Gamma (API)
3000
TG, C1-C5
1
10
100
10


2650
2700
2750
2800
2850
BASE ROOT SHALE 2732' -744'
0
3
ROP (min/ft)
Gamma (API)
5
3000
TG, C1-C5
1
10
100
10
EQUIPT TEST


START ONE MANNED UNIT 10/01/2010
SH GRY DK BRN SMOOTH SFT SILTY THRU
HOWARD 2918' -930'
LS GRY DK TN BUFF HD TO FRM BRITT VVFN XLN MTX IMBD FOSS SUCRO TXT TR IMBD LS GRNS IP DISS GRY TO BRN SH IP NO FLO NO VIS POR NO VIS SHOW
LS GRY TN LT TN HD TO FRM VFN TO FN XLN MTX TR IMBD FOSS NO FLO NO VIS POR NO IS SHOW
SH DK GRY TO GRY FRM BLKY SMOOTH TO SPLNTY WITH TR IMBD FOSS IP
TOPEKA 2984' -996'
LS LT GRY TN BUFF HD TO FRM BRITT VVFN TO FN XLN MTX TR IMBD FOSS IP CHLKY TR IMBD VVFN QRTZ XLS TO IMBD VRY SM LS GRNS SUCRO TXT POOR INTER XLN TO TR VUG POR IP SM TR MICRO PP POR SCATT LT DULL YLW FLO NO CUT POSS GAS SHOW
LS DK TN TO TN BUFF CRM IP HD FRM VVFN TO FN XLN MTX RE-XLN MTX IP TR LOOSE FOSS FRG IN TRAY TR LMNTD PYR IP NO FLO NO VIS POR NO VIS SHOW
LS TN LT TN CRM BUFF VFN TO FN XLN MTX RE-XLN MTX IP SUB-CHLKY TR IMBD FOSS TR IMBD QRTZ XLS IP POSS INTER XLN POR NO CUT NO VIS SHOW
LS DK GRY TO GRY DK TN HD DN TT CRYPTO XLN MTX NO FLO NO VIS POR NO VIS SHOW
LS LT TN CRM BUFF LT GRY MOTT THRU VFN TO FN XL MTX TR MD XLN MTX TR IMBD CLR TO FSTY WHT QRTZ XLS SUCRO SUB-CHLKY TO CHLKY TR LOOSE FOSS FRG IN TRAY SCATT DULL YLW FLO TR POOR VUG POR TO MICRO PP POR TO POOR INTER XLN POR NO CUT N VIS SHOW
WT 8.7
VIS 51
ROP (min/ft)
Gamma (API)
2900
2950
3000
3050
C1
C2
C3
10-12 UN BG
18-20 UN BG
41 UN GAS SHOW
TG, C1-C5
CN
3050' @ 00:01 AM 10/02/2010


WT 8.8
VIS 51
WT 8.7
VIS 52
LCM 1.5 LB
CFS 3190'
CFS 3285'
DST#1
3244'-3310'
ROP (min/ft)
Gamma (API)
3100
3150
3200
3250
SH DK GRY TO GRY FRM BLKY CALC TO LMY TR SILSTN IP LT GRY VRY FN GRNS
LE COMPTON 3092' -1104'
LS GRY LT GRY LT TN HD FRM BRITT VFN TO FN XLN MTX TR IMBD FOSS SUB-CHLKY IP TR FN QRTZ XLS IP NO FLO NO VIS POR NO VIS SHOW
SH BLK CARB
LS DK GRY TO GRY TN BUFF MOTT THRU HD DN TO BRITT VVFN TO FN XLN MTX RE-XLN MTX TR PYR NODULE IN TRAY NO FLO NO VIS POR NO VIS SHOW
LS LT GRY TN LT TN CRM BUFF MOTT THRU VFN TO FN TR MD XLN MTX IMBD VRY SM TO SM FOSS THRU IMBD VRY SM TO SM CLR SS/LS GRNS SUB-CHLKY TO CHLK TR IMBD PYR IP TO TR IMBD QRT XLS IP POOR TO POSS FAIR INTER XLN POR IP TO TR VUG POR IP TO MICRO PP POR IP SCATT VRY DULL LT YLW FLO IP NO CUT NO VIS SHOW POSS GAS SHOW
LS TN LT TN CRM BUFF HD FRM TO BRITT VVFN TO FN XLN MTX RE-XLN MTX IP IBD CALC XLS IMBD FOSS SUB-CHLKY DULL LT YLW FLO NO VIS POR NO VIS SHOW
HEEBNER 3219' -1231'
SH BLK CARB
SH DK GRY TO GRY HD FRM SMOOTH BRITT CALC TO LMY
LS DK TN TO TN DK GRY BUFF IP HD DN TT CRYPTO TO VVFN TO FN XLN MTX DISS GRY SH IP NO FLO NO VIS POR NO VIS SHOW
DOUGLAS 3255' -1267'
SH VRY LT GRY SFT GUMMY THRI
LANSING 3276' -1288'
LS TN LT TN CRM BUFF HD FRM BRITT VVFN TO FN XLN MTX RE-XLN MTX IMBD CALC XLS TO TR QRTZ XLS IP DULL YLW FLO 20% STAIN 10% POSS TT INTER XLN TO TR VUGS AND MICRO PP POR IP FAINT FLUSH CUT TO SLOW MILKY BLUE STREAM CUT FROM ONE ROCK. POOR SHOW
LS LT TN CRM HD DN TT CRYPTO XLN MTX NO FLO NO VIS POR NO VIS
C1
C2
C3
20-22 UN BG
34 UN SH GAS
35 UN GAS SHOW
14 UN BG
16-18 UN BG
18 UN
CN
TG, C1-C5


SHOW
LS CRM BUFF DK TN TO TN IP FRM VFN TO FN TO MD XLN MTX IMBD
FN AND MD QRTZ XLS FSTY WHT TO CLR TR IMBD FOSS IP VFN CALC
XLS IP LT GLDN YLW FLO 35% STAIN 50% FAINT ODOR TR FAIR INTER
XLN POR TR VUG POR TR PP POR FAIR INSTANT FLUSH CUT TO
SLOW MILKY BLUE STREAM CUT
LS LT TN LT GRY CRM BUFF MOTT HD DN TT CRYPTO TO VVFN XLN
MTX TR IMBD FOSS TR LMNTD PYR IP LT GRN TO OPAQUE CHERT NO
FLO NO VIS POR NO VIS SHOV
LS CRM BUFF TO OFF WHT HD DN TT VVFN TO FN XLN MTX VRY SM
IMBD CLR LS GRNS NO FLO NO VIS POR NO VIS SHOW
SH DK GRY TO GRY FRM SMOOTH BRITT CALC TO LMY
LS CRM BUFF TO OFF WHT HD DN TT CRYPTO TO VVFN XLN MTX DISS
GRY SH IP DULL YLW FLO IP ONLY TR STAIN 2 ROCKS NO VIS POR
VRY FAINT FLUSH CUT TO VRY LT YLW RING CUT
3352'-3359' LS LT TN CRM BUFF HD TO FRM VFN TO FN XLN MTX
RE-XLN MTX IMBD OOLITES TR IMBD CALC XLS SLTLY CHLKY IP DUL
GLDN YLW FLO 40% STAIN 20% POOR INTER XLN TO POSS INTER
FOSS POR IP TR MICRO PP POR FAINT FLUSH CUT TO SPOTTY
SPURTY SLOW MILKY BLUE STREAM CUT
3363' -3377' LS LT TN CRM BUFF TO OFF WHT HD TO FRM TO SFT IP
VFN TO FN TO MD XLN MTX RE-XLN MTX IMBD CALC XLS IMBD
OOLITES IMBD FOSS TR LOOSE FOSS IN TRAY SUB-CHLKY IP GLDN
YLW FLO 80% STAIN 75-80% FAIR ODOR GOOD INTER XLN TO FOS
POR MICRO PP TO PP TR VUGS IP WITH CALC XLS IN VUGS FAIR TO
GOOD INSTANT FLUSH CUT TO SLOW STRONG MILKY BLUE STREAM
CUT BRN LEACH ON DISH
LS CRM BUFF TO OFF WHT HD DN TT CRYPTO TO VVFN
TO FN XLN MTX TR IMBD FOSS TR LMNTD PYR IP NO
FLO NO VIS POR NO VIS SHOW
LS DK TN TO TN HD DN TT CRYPTO XLN MTX TR LT TN
TO OPAQUE AND WHT CHERT NO FLO NO VIS POR NO
VIS SHOW
LS LT GRY TN LT TN BUFF HD DN TT CRYPTO TO VVFN
XLN MTX TR IMBD FOSS NO FLO NO VIS POR NO VIS
SHOW
LS LT TN CRM BUFF TO OFF WHT CRYPTO TO VVFN TO
FN XLN MTX SUCRO TXT IP TR IMBD CALC AND QRTZ
XLS DISS GRY SH IP TR IMBD FOSS IP VRY DULL YLW
GLDN FLO TR VUG POR TO POSS VRY TT FRACTURING
SLT TR OIL STAIN 1% VRY FAINT FLUSH CUT POOR TT
SHOW
LS OFF WHT TO WHT HD DN TT CRYPTO TO VVFN XLN
MTX NO FLO NO VIS POR NO VIS SHOW
SH DK GRY TO GRY DK BRN HD FRM SMOOTH CALC TO
LMY
LS DK TN TO TN CRM BUFF TO OFF WHT HD DN TT
CRYPTO XLN MTX WITH TR WHT AND DK GRYISH BLUE
CHERT NO FLO NO VIS POR NO VIS SHOW
LS CRM BUFF OFF WHT HD DN TT CRYPTO CLN MTC TO
VVFN XLN MTX NO FLO NO VIS POR NO VIS SHO\
LS DK TN TO TN BUFF HD DN TT CRYPTO TO LITHO XLN
MTX THRU NO FLO NO VIS POR NO VIS SHOW
BKC 3500' -1512'
SH DK GRY TO GRY HD SMOOTH BRITT TO SPLNTY SFT
IP
"C" 3298'
CFS 3311'
DST#2
3335'-3378'
"F" 3346'
CFS 3353'
UPPER "G"
MIDDLE "G"
CFS 3378'
WT 8.9
VIS 52
LOWER "G"
0
ROP (min/ft)
5
3
Gamma (API)
3000
"H" 3416'
WT 9.0
VIS 50
"I" 3436'
CFS 3448'
"J"
"K"
WT 9.1
VIS 52
3300
3350
3400
3450
3500
CN
35 UN
C3
C2
C1
13 UN
25 UN SHOW
15 UN SHOW
15 UN POSS SHOW
TG, C1-C5
1
10
100
8-10 UN
8 UN BG


LS DK GRY TO DK TN TO TN HD DN TT CRYPTO XLN MTX WITH CHERT WHT TO OFF WHT TO OPAQUE AND BLAC
SH BRN TO REDISH BRN SLTLY FRM BLKY WITH WAXY TXT TR IMBD SM SUB-RND SS GRNS IMBD
SH DK GRY TO GRY LT GRY TO LT BRN HD FRMM BLKY CALC WITH INTER BEDED CHERT
SH RED/BRN TO LT GRY PURPLE FRM TO SLTLY SFT WAXY TXT WITH INTERBEBED CHERT
ARBUCKLE 3567' -1579'
3567'-3572' DOL CRM OFF WHT TO WHT HD TO FRM VFN TO FN TR MD XLN MTX IMBD ANG DOL XLS WEATHER VRY CHLKY WITH IMBD CHLK TR IMBD VRY SM QRTZ XLS LT YLW FLO 60% TR INTER LACED STAIN ON 40% FAIR TO GOOD INTER XLN POR TR MICRO PP TO PP POR VRY FAINT ODOR FAINT TO POOR FLUSH CUT
3572'-3582'DOL OFF WHT TO WHT FRM VFN TO FN TO MD XLN MTX IMBD ANG SM TO MD DOL XLS CHLKY SCATT TR LT YLW FLO GUMMY BLK OIL ON 5% OF ROCKSFAIR TO GOOD INTER XLN POR INSTANT FLUSH CUT TO TR SPOTTY SLOW MILKY BLUE STREAM CUT
3582'-3597'DOL OFF WHT TO WHT LT GRY FRM BRITT FN TO MD XLN MTX IMBD DOL XLS IMBD CHLK SLT TR VRY LT YLW FLO IP NO STAIN NO CUT NO VIS SHOW
3598'-3612' LT GRY CRM OFF WHT TO WHT VVFN TO FN TO MD XLN MTX IMBD DOL XLS DISS PYR IP CHLKY WITH TR IMBD CLR SUB-RND DOL/SS GRNS IP NO FLO FAIR TO GOOD INTER XLN POR NO CUT NO VIS SHOW
3613'-3634' LT GRY CRM BUFF HD DN TT CRYPTO TO VVFN TO FN XLN MTX SUCRO TXT WITH TR FN TO MD QRTZ PCS FTY WHT QRTZ IN TRAY TR IMBD PYR TR IMBD SM TO MD CLR TO FRSTY DOL GRNS IP NO FLO POSS TT INTER XLN POR TO NO POR NO STAIN NO CUT NO VIS SHOW
3635'-3657'DOL OFF WHT TO WHT HD FRM BRITT TO SFT IP VFN TO FN XLN MTX SUB-CHLKY TO CHLKY ABUNDT IMBD VRY SM TO SM CLR TO FRSTY WHT DOL GRNS THRU NO FLO FAIR TO GOOD INTER XLN TO POSS FAIR INTER GRAN POR NO CUT NO VIS SHOW
DOL CRM BUFF TO OFF WHT HD DN CRYPTO TO VVFN XLN MTX SUCRO TXT THRU NO FLO NO VIS POR NO VIS SHOW
RTD 3680' 10/04/2010
LOGS BY WEATHERFORD LIBERAL
THANK YOU FOR CHOOSING EARTHTEC
CFS 3583'
CFS 30 MIN
SHORT TRIP 8 STANDS
TIH 8 STANDS
CTCH 1.5 HRS
TOH FOR LOGS
SAMPLES WILL BE DELIVERED TO THE K.G.S. AS REQUESTED
3550
3600
3650
3700
ROP (min/ft)
Gamma (API)
C1
C2
C3
8-10 UN
10 UN
6-8 UN BG
4-6 UN BG
TG, C1-C5
CN

QUALITY OILWELL CEMENTING, INC.
PO Box 32 - 740 West Wichita Ave, Russell KS 67665
Phone:785-324-1041 fax:785-483-1087
Email: cementing@ruraltel.net

Date: 9/30/2010
Invoice # 4320

P.O.#:

Due Date: 10/30/2010
Division: *Russell*

Invoice

Contact:
Samuel Gary Jr & Associates Inc
Address/Job Location:
Samuel Gary Jr & Associates Inc
3111 W. 10th Street
Great Bend, KS 67503

☑ DRLG ☐ COMP ☐ W/O ☐ LOE
AFE #
ACCT. # 8200-136
APPROVED BY KJS

Reference:
RAM 1-3

Description of Work:
LONG SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable
Labor		$ 889.71	No
Common-Class A	400	$ 4,560.00	Yes
8 5/8" Basket	3	$ 923.69	Yes
Bulk Truck Matl-Material Service Charge	422	$ 822.36	No
Calcium Chloride	14	$ 513.72	Yes
Pump Truck Mileage-Job to Nearest Camp	31	$ 301.45	No
Flo Seal	100	$ 194.87	Yes
8 5/8" Centralizer	3	$ 187.08	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	31	$ 176.40	No
Premium Gel (Bentonite)	8	$ 126.90	Yes
8 5/8" Top Rubber Plug	1	$ 103.28	Yes

Item	Quantity	Price	Taxable
Baffle Plate Aluminum, 8 5/8"	1	$87.69	Yes

Invoice Terms:
Net 30

SubTotal:	$	*8,887.15*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(1,333.07)
SubTotal for Taxable Items:	$	5,692.65
SubTotal for Non-Taxable Items:	$	1,105.17
Total:	$	7,554.08
6.30% Rush County Sales Tax Tax:	$	358.64
Amount Due:	**$**	**7,912.71**
Applied Payments:		
Balance Due:	**$**	**7,912.71**

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
This does not include any applicable taxes unless it is listed.
©2008-2013 Straker Investments, LLC. All rights reserved.

RECEIVED
OCT 11 2010
SAMUEL GARY JR.
& ASSOCIATES, INC.

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. 4320

Date	Sec.	Twp.	Range	County	State	On Location	Finish
9-29-10	3	17	16	Rush	KS		9:00 A.M.

Lease Ram Well No. 1-3 Location Codell W to 01.5 Rd 25 1/2 W

Contractor Val #6

Type Job Surface

Hole Size 12 1/4 T.D. 1093

Csg. 8 5/8 23# Depth 1093

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 42.52 Shoe Joint 42.52

Meas Line Displace 66 3/4 BL

EQUIPMENT

Pumptrk 5 No. Cementer Craig / Helper

Bulktrk No. Driver Frank / Driver

Bulktrk 12 No. Driver Driver Casey

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

8 5/8 on bottom Est Circulation
Mix 400sk Cement & Displace Plug
Cement Circulated
Plug down @ Cmplt

Thanks!

X Signature D. Stelo

Owner

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.

Charge To Sam Conf JT + A Associates

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 400 Com 3%cc 2% Gel 1/4# Flo

Common	400	
Poz. Mix		
Gel.	8	
Calcium	14	
Hulls		
Salt		
Flowseal	100 #	
Kol-Seal		
Mud CLR 48		
CFL-117 or CD110 CAF 38		
Sand		
Handling	422	
Mileage		

FLOAT EQUIPMENT

Guide Shoe		
Centralizer	8 5/8	
Baskets	3 Centralizers	
AFU Inserts	3 Baskets	
Float Shoe	Baffle Plate	
Latch Down	1 Rubber Plug	
Pumptrk Charge	Long Surface	
Mileage	31	
Tax		
Discount		
Total Charge		

Quality Oilwell Cementing

QUALITY OILWELL CEMENTING, INC.
PO Box 32 - 740 West Wichita Ave, Russell KS 67665
Phone:785-324-1041 fax:785-483-1087
Email: cementing@ruraltel.net

Date: 10/6/2010
Invoice # 4584
P.O.#:
Due Date: 11/5/2010
Division: *Russell*

Invoice

Contact:
Samuel Gary Jr & Associates Inc
Address/Job Location:
Samuel Gary Jr & Associates Inc
3111 W. 10th Street
Great Bend, KS 67503

Reference:
RAM 1-3

Description of Work:
PLUG JOB

Services / Items Included:	*Quantity*		*Price*	*Taxable*	*Item*	*Quantity*	*Price*	*Taxable*
Labor		$	908.92	No				
Common-Class A	132	$	1,607.87	Yes				
Bulk Truck Matl-Material Service Charge	228	$	474.74	No				
POZ Mix-Standard	88	$	421.44	Yes				
Pump Truck Mileage-Job to Nearest Camp	31	$	322.09	No				
Bulk Truck Mileage-Job to Nearest Bulk Plant	31	$	188.48	No				
Premium Gel (Bentonite)	8	$	135.59	Yes				
Flo Seal	55	$	114.52	Yes				
Dry Hole Plug	1	$	58.30	Yes				

Invoice Terms:
Net 30

SubTotal:	$	*4,231.95*
Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice:	$	(634.79)
SubTotal for Taxable Items:	$	1,987.06
SubTotal for Non-Taxable Items:	$	837.52
Total:	$	3,597.16
6.30% Rush County Sales Tax Tax:	$	125.18
Amount Due:	**$**	**3,722.34**
Applied Payments:		
Balance Due:	**$**	**3,722.34**

Thank You For Your Business!

Past Due Invoices are subject to a service charge (annual rate of 24%)
This does not include any applicable taxes unless it is listed.
©2008-2013 Straker Investments, LLC. All rights reserved.

☑ DRLG ☐ COMP ☐ W/O ☐ LOE
AFE #
ACCT. # 8200-138
APPROVED BY KJS

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone ~~785-483-2025~~ Home Office P.O. Box 32 Russell, KS 67665 No. 4584

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-5-10	3	17	16	Rush	Ks		8:00AM

Lease Ram Well No. 1-3 Location Galatia, Ks - SW to OTis Rd, 2S, 1W

Contractor Val Energy #6 Owner ¼ S, W/S

Type Job plug To Quality Oilwell Cementing, Inc.

Hole Size 7⅞" T.D. 3680' You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Csg. Depth Charge To Sam Gary Jr & Associates

Tbg. Size 4½" Depth 3580' Street

Tool Depth City State

Cement Left in Csg. Shoe Joint The above was done to satisfaction and supervision of owner agent or contractor.

Meas Line Displace H20/mud Cement Amount Ordered 220 sx 60/40 4%Gel ¼#F.S.

EQUIPMENT

Pumptrk 9 No. Cementer Helper Neale

Bulktrk 10 No. Driver Driver Cisco

~~Bulktrk~~ p.u. No. Driver Driver Rick

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30 sx

Mouse Hole 20 sx

Centralizers

Baskets

D/V or Port Collar

3580' - 50 sx

1110' - 50 sx

540' - 50 sx

60' - 20 sx

Rathole - 30 sx

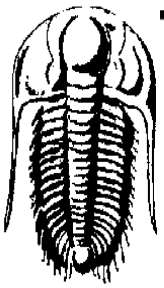
Mousehole - 20 sx

Cement did Circulate

Common	132
Poz. Mix	88
Gel.	8
Calcium	
Hulls	
Salt	
Flowseal	55 #
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	228
Mileage	
FLOAT EQUIPMENT	
Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	plug
Mileage 31	
Tax	
Discount	
Total Charge	

X Signature Randy Mott

Quality Oilwell Cementing



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Samuel Gary JR & Associates, Inc**

1515 Wynkoop
Suite 700
Denver, CO 80202

ATTN: Clayton Camozzi

3-17s-16w-RUSH-KS

R.A.M. #1-3

Start Date: 2010.10.02 @ 20:59:00
End Date: 2010.10.03 @ 04:30:39
Job Ticket #: 39457 DST #: 1

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

DRILL STEM TEST REPORT

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202
ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39457 **DST#: 1**

Test Start: 2010.10.02 @ 20:59:00

GENERAL INFORMATION:

Formation: **LANSING "A-C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:33:10
Time Test Ended: 04:30:39

Test Type: Conventional Bottom Hole
Tester: Jake Fahrenbruch
Unit No: 43

Interval: 3244.00 ft (KB) To 3310.00 ft (KB) (TVD)
Total Depth: 3310.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

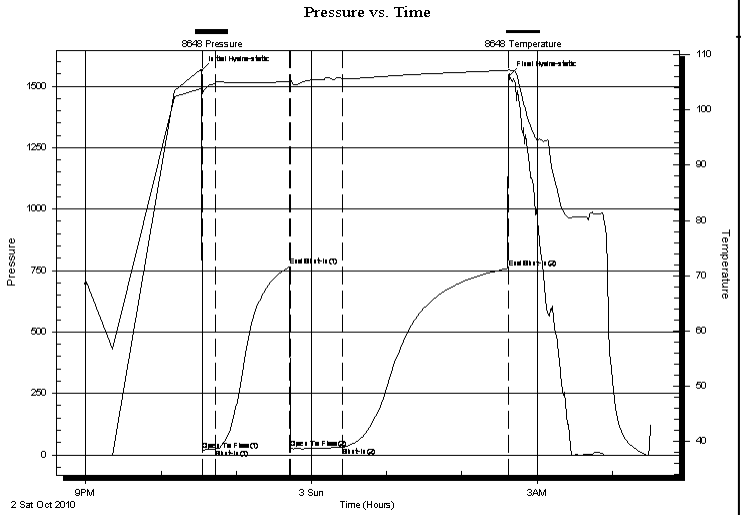
Reference Elevations: 1989.00 ft (KB)
1979.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8648 **Inside**

Press@RunDepth: 29.14 psig @ 3245.00 ft (KB)
Start Date: 2010.10.02 End Date: 2010.10.03
Start Time: 20:59:05 End Time: 04:30:40

Capacity: 8000.00 psig
Last Calib.: 2010.10.03
Time On Btm: 2010.10.02 @ 22:32:40
Time Off Btm: 2010.10.03 @ 02:38:09

TEST COMMENT: IF: Weak blow , built to 1.5" in bucket.
ISI: Bled off, no blow back.
FF: Weak surface blow , increased to 1" in bucket.
FSI: Bled off, no blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1561.83	103.90	Initial Hydro-static
1	19.03	103.01	Open To Flow (1)
11	22.11	105.14	Shut-In(1)
70	766.96	105.18	End Shut-In(1)
71	24.91	105.34	Open To Flow (2)
113	29.14	105.69	Shut-In(2)
245	759.09	107.20	End Shut-In(2)
246	1543.57	107.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	SOCM 5%0 95%m	0.43

Gas Rates

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

DRILL STEM TEST REPORT

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202
ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39457 **DST#: 1**

Test Start: 2010.10.02 @ 20:59:00

GENERAL INFORMATION:

Formation: **LANSING "A-C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 22:33:10
Time Test Ended: 04:30:39

Test Type: Conventional Bottom Hole
Tester: Jake Fahrenbruch
Unit No: 43

Interval: 3244.00 ft (KB) To 3310.00 ft (KB) (TVD)
Total Depth: 3310.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

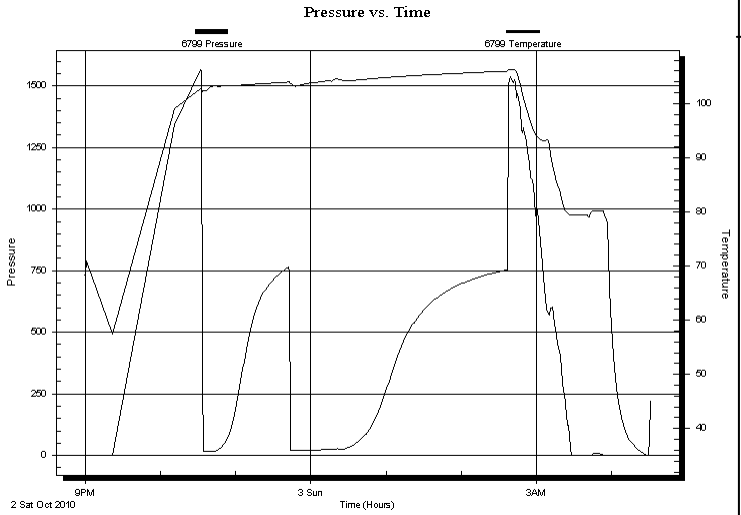
Reference Elevations: 1989.00 ft (KB)
1979.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6799 **Outside**

Press@RunDepth: psig @ 3245.00 ft (KB)
Start Date: 2010.10.02 End Date: 2010.10.03
Start Time: 20:59:05 End Time: 04:31:29

Capacity: 8000.00 psig
Last Calib.: 2010.10.03
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Weak blow , built to 1.5" in bucket.
ISI: Bled off, no blow back.
FF: Weak surface blow , increased to 1" in bucket.
FSI: Bled off, no blow back.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
31.00	SOCM 5%0 95%m	0.43

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202

ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39457 **DST#: 1**

Test Start: 2010.10.02 @ 20:59:00

Tool Information

Drill Pipe:	Length:	3220.00 ft	Diameter:	3.80 inches	Volume:	45.17 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight to Pull Loose:		55000.00 lb
					Total Volume:	45.17 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		4.00 ft					String Weight:	Initial	47000.00 lb
Depth to Top Packer:		3244.00 ft						Final	47000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		66.00 ft							
Tool Length:		94.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			3221.00		
Hydraulic tool	5.00			3226.00		
Jars	5.00			3231.00		
Safety Joint	3.00			3234.00		
Packer	5.00			3239.00	28.00	Bottom Of Top Packer
Packer	5.00			3244.00		
Stubb	1.00			3245.00		
Recorder	0.00	8648	Inside	3245.00		
Recorder	0.00	6799	Outside	3245.00		
Perforations	27.00			3272.00		
Blank Spacing	33.00			3305.00		
Bullnose	5.00			3310.00	66.00	Bottom Packers & Anchor
Total Tool Length:	**94.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202

ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39457 **DST#: 1**

Test Start: 2010.10.02 @ 20:59:00

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:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2700.00 ppm				
Filter Cake:	inches				

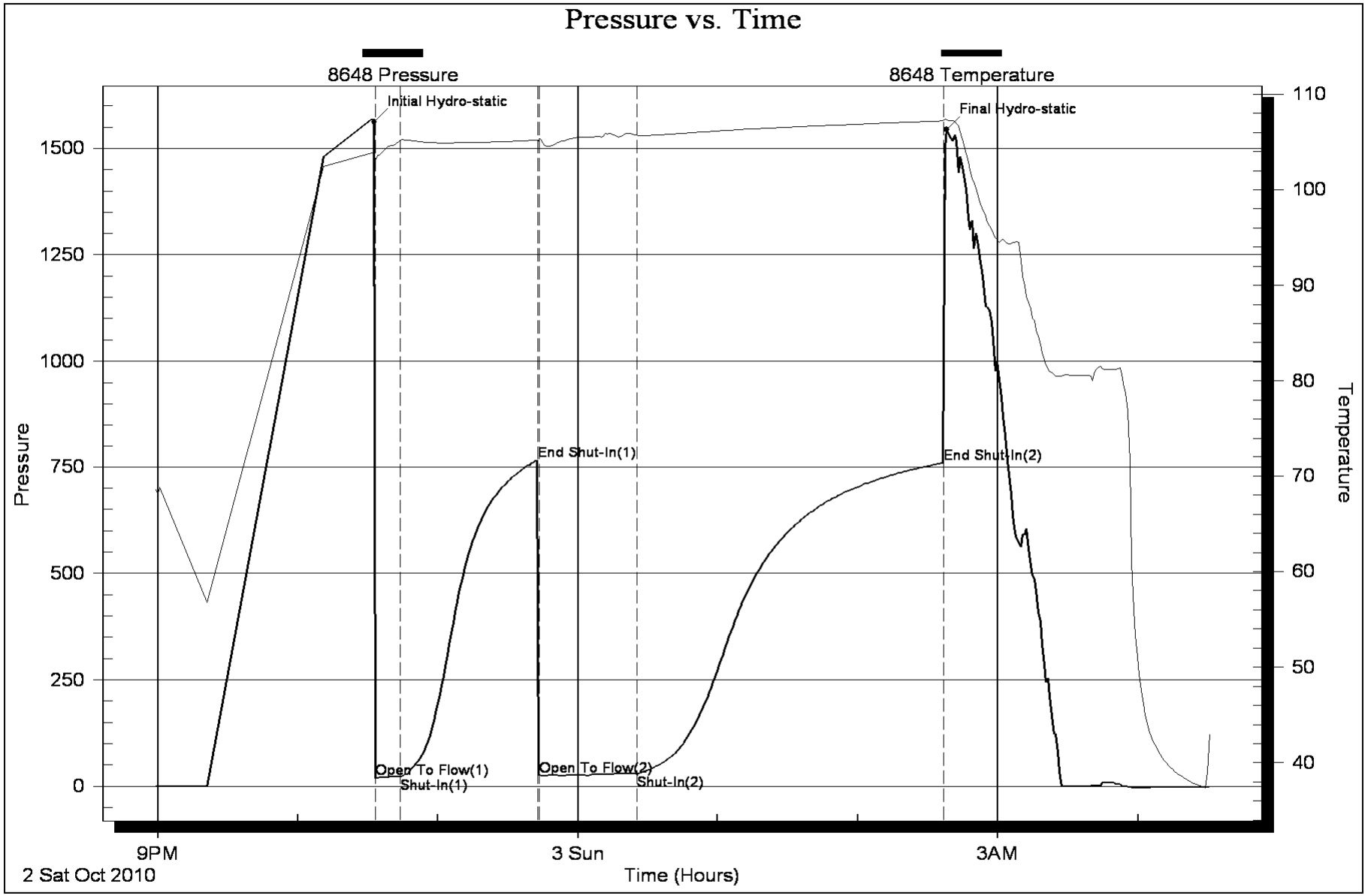
Recovery Information

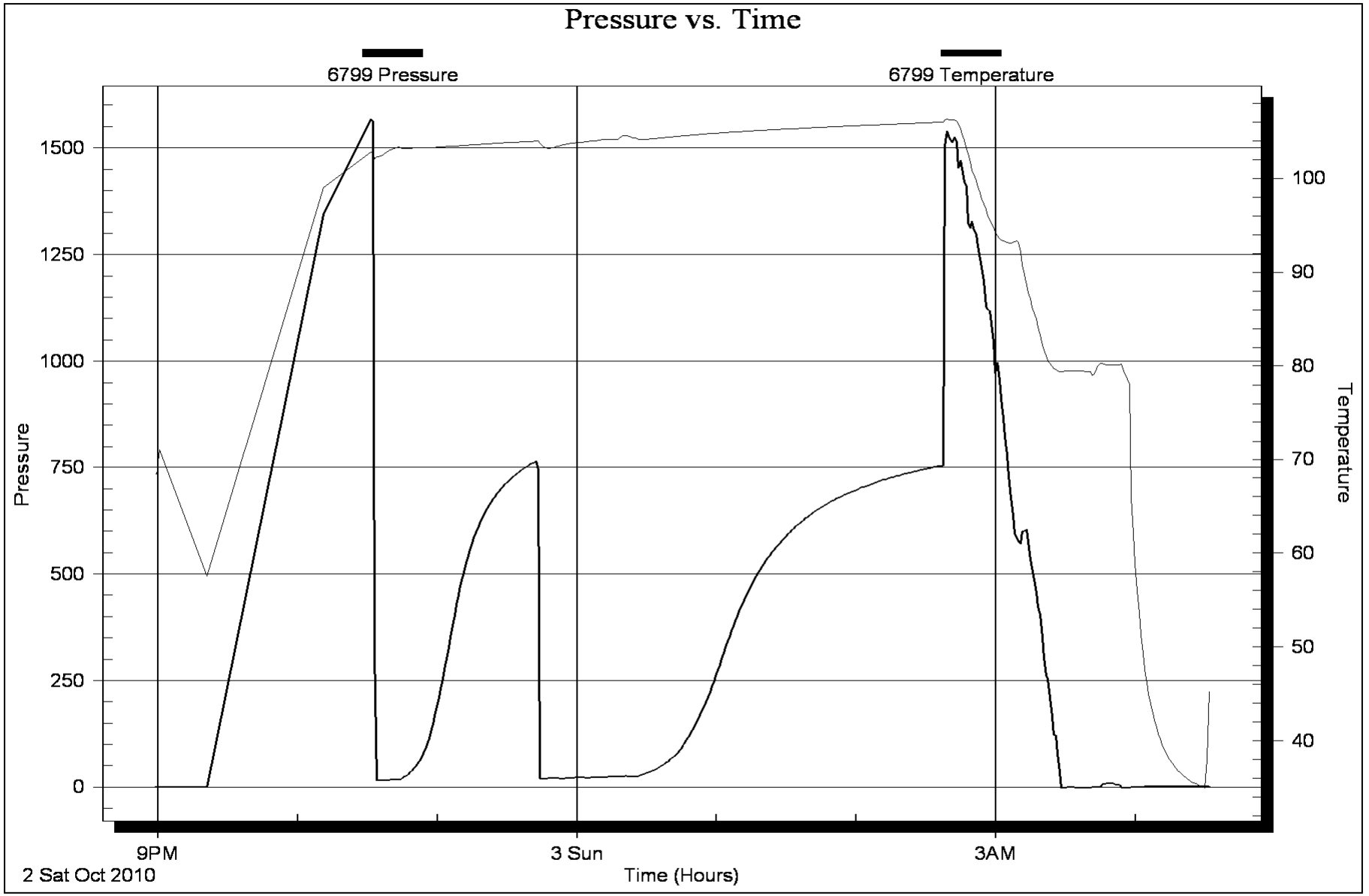
Recovery Table

Length ft	Description	Volume bbl
31.00	SOCM 5%0 95%m	0.435

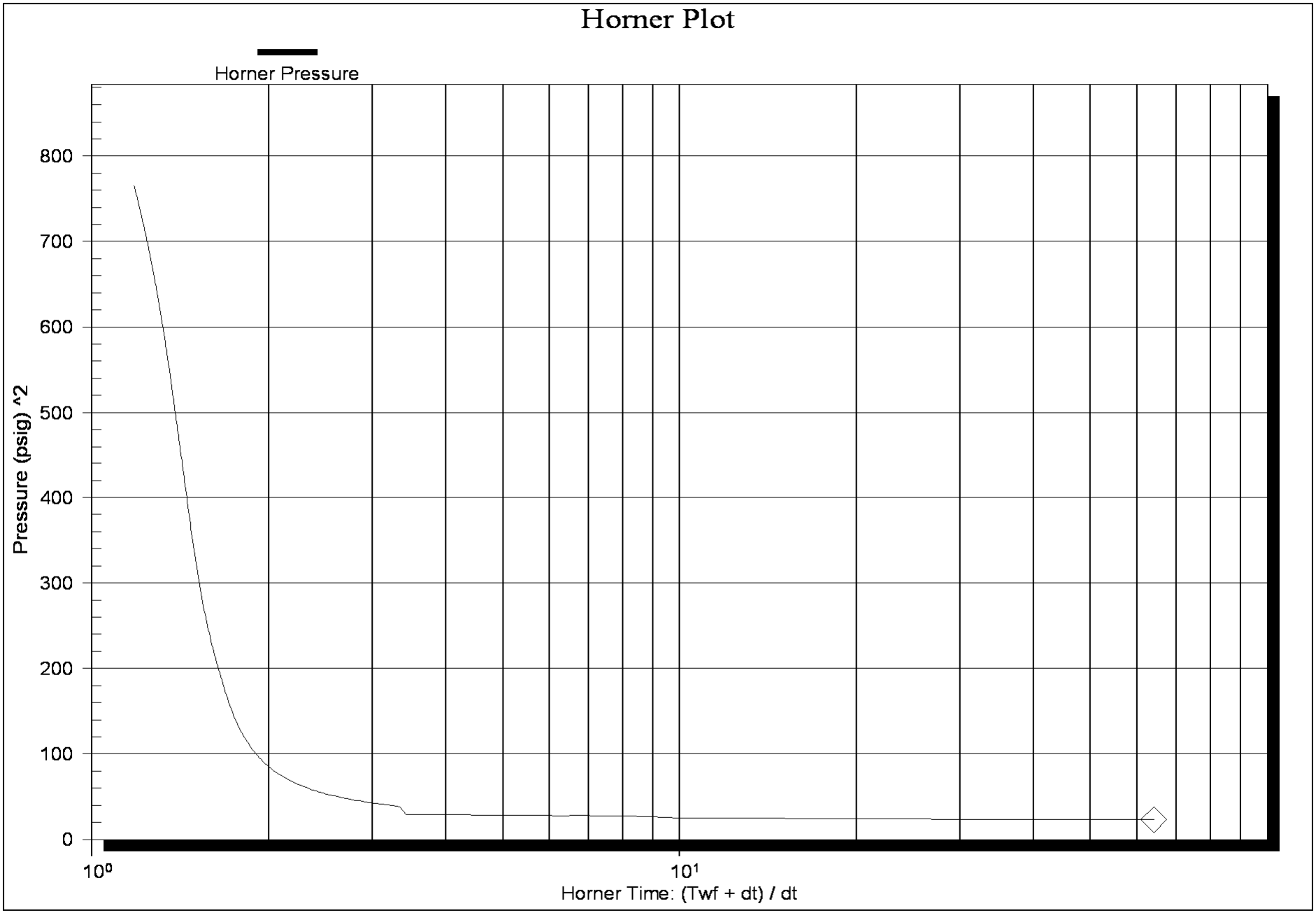
Total Length: 31.00 ft Total Volume: 0.435 bbl

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


Pressure vs. Time
8648 Pressure
8648 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure
Temperature
1500
1250
1000
750
500
250
0
110
100
90
80
70
60
50
40
9PM
3 Sun
3AM
2 Sat Oct 2010
Time (Hours)

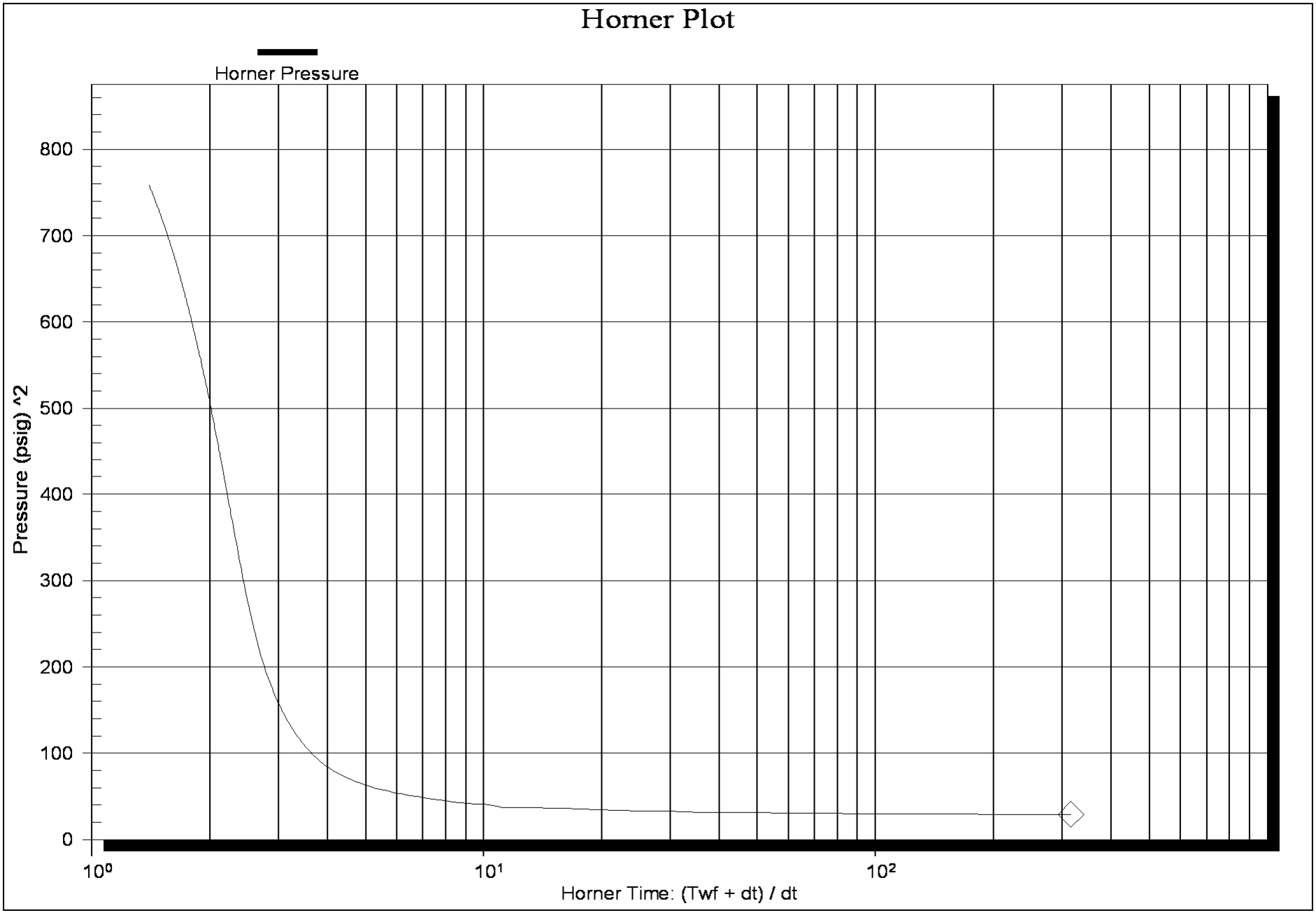

Pressure vs. Time
6799 Pressure
6799 Temperature
1500
1250
1000
750
500
250
0
Pressure
100
90
80
70
60
50
40
Temperature
9PM
3 Sun
3AM
2 Sat Oct 2010
Time (Hours)

Horner Plot

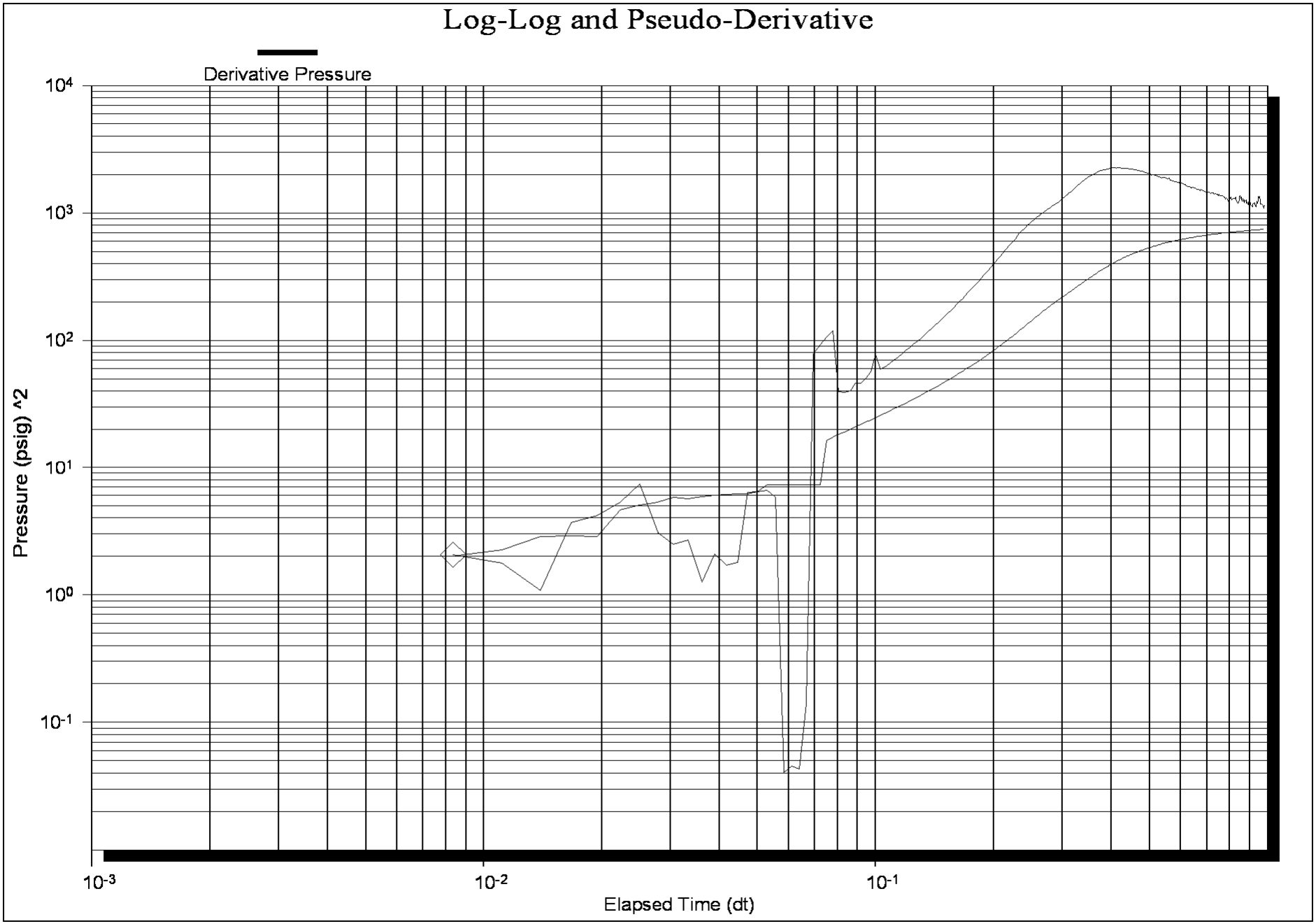


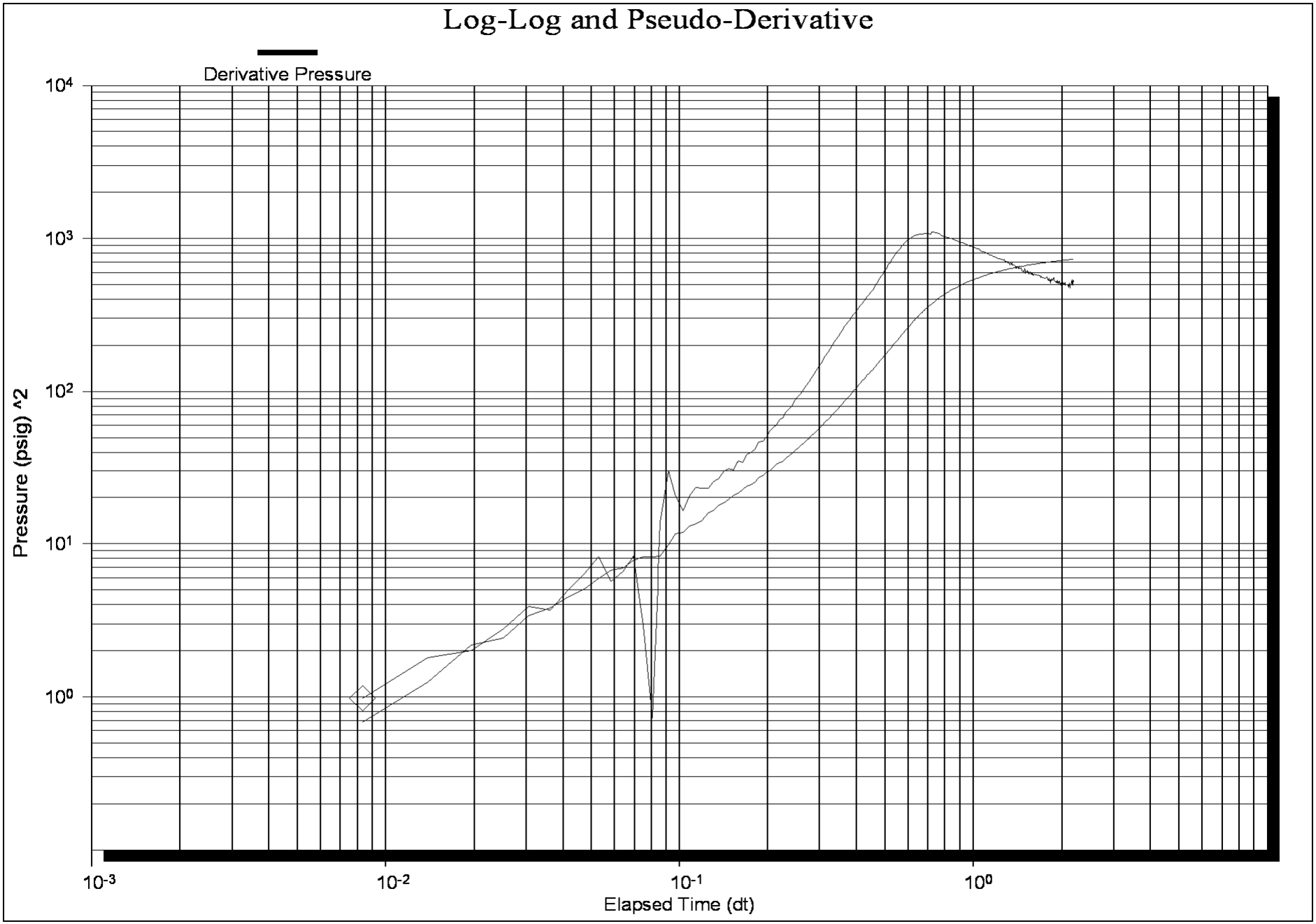
Serial Number: 8648 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 1

Horner Plot



Serial Number: 8648 (Inside) P* : Slope (m) : kpa/log cycle Flow Cycle: 2


Log-Log and Pseudo-Derivative
Derivative Pressure
Pressure (psig) ^2
10^4
10^3
10^2
10^1
10^0
10^{-1}
10^{-3}
10^{-2}
10^{-1}
Elapsed Time (dt)


Log-Log and Pseudo-Derivative
Derivative Pressure
Pressure (psig) ^2
10^4
10^3
10^2
10^1
10^0
10^-3
10^-2
10^-1
10^0
Elapsed Time (dt)

DRILL STEM TEST REPORT

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202
ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39458 **DST#: 2**

Test Start: 2010.10.03 @ 14:30:00

GENERAL INFORMATION:

Formation: **LANSING "F&G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:50:30
Time Test Ended: 19:53:50

Test Type: Conventional Bottom Hole
Tester: Jake Fahrenbruch
Unit No: 43

Interval: 3335.00 ft (KB) To 3378.00 ft (KB) (TVD)
Total Depth: 3378.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

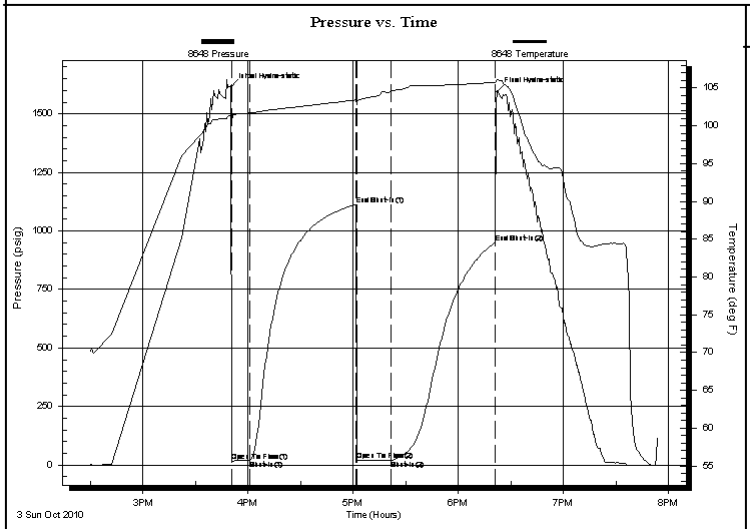
Reference Elevations: 1989.00 ft (KB)
1979.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8648 **Inside**

Press@RunDepth: 22.36 psig @ 3336.00 ft (KB)
Start Date: 2010.10.03 End Date: 2010.10.03
Start Time: 14:30:05 End Time: 19:53:50

Capacity: 8000.00 psig
Last Calib.: 2010.10.03
Time On Btm: 2010.10.03 @ 15:50:20
Time Off Btm: 2010.10.03 @ 18:22:20

TEST COMMENT: IF: Weak .25" blow .
ISI: No blow back.
FF: No blow .
FSI: No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1614.00	101.44	Initial Hydro-static
1	17.22	100.57	Open To Flow (1)
11	18.50	101.70	Shut-In(1)
72	1112.69	103.42	End Shut-In(1)
72	19.26	103.11	Open To Flow (2)
92	22.36	104.54	Shut-In(2)
151	949.23	105.75	End Shut-In(2)
152	1593.31	106.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 1%o 99%m	0.07

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary JR & Associates, Inc

1515 Wynkoop
Suite 700
Denver, CO 80202

ATTN: Clayton Camozzi

R.A.M. #1-3

3-17s-16w-RUSH-KS

Job Ticket: 39458 **DST#: 2**

Test Start: 2010.10.03 @ 14:30:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8200.00 ppm				
Filter Cake:	inches				

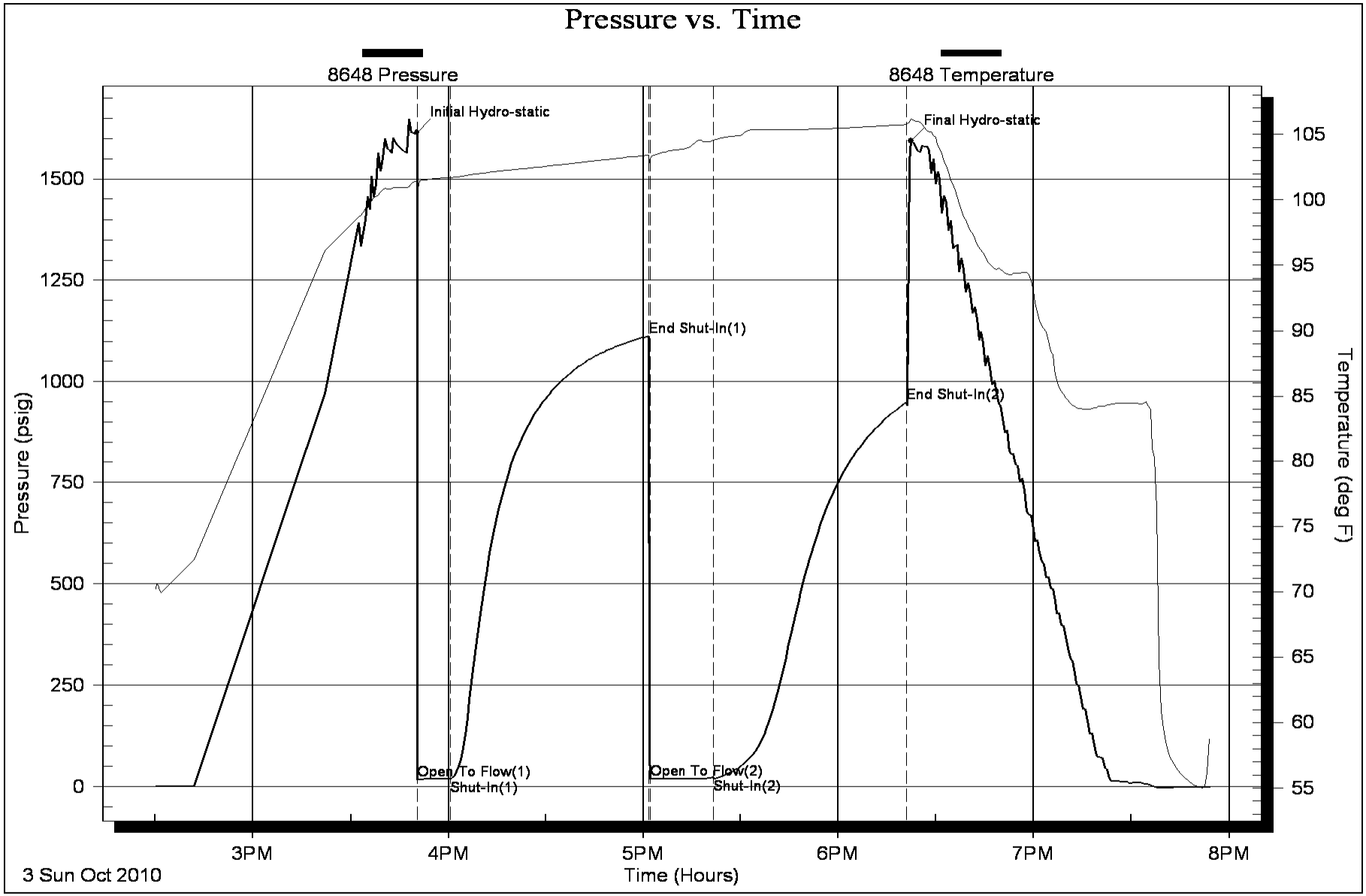
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 1%o 99%m	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:


Pressure vs. Time
8648 Pressure
8648 Temperature
Initial Hydro-static
Final Hydro-static
End Shut-In(1)
End Shut-In(2)
Open To Flow(1)
Shut-In(1)
Open To Flow(2)
Shut-In(2)
Pressure (psig)
Temperature (deg F)
Time (Hours)
3 Sun Oct 2010
3PM
4PM
5PM
6PM
7PM
8PM
0
250
500
750
1000
1250
1500
55
60
65
70
75
80
85
90
95
100
105