Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1246790

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 # 31327
Name: Pauley, Gary dba Pauley Oil
Address 1: 314 5TH ST
Address 2:
City: CLAFLIN State: KS Zip: 67525 + _ _ _ _
Contact Person: Gary Pauley
Phone: (785) 252-8024
CONTRACTOR: License # 34541
Name: Ninnescah Drilling LLC
Wellsite Geologist: Steven Petermann
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 #:

11/25/2014 Spud Date or Recompletion Date
12/7/2014 Date Reached TD
2/20/2015 Completion Date or Recompletion Date

API No. 15 - 15-185-23915-00-00
Spot Description:
W2 - SE - SW - SE Sec. 13 Twp. 23 S. R. 12 ☐ East ☑ West
330 Feet from ☐ North / ☑ South Line of Section
1800 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Stafford
Lease Name: Ruth Russell Well #: 2
Field Name:
Producing Formation: Arbuckle
Elevation: Ground: 1841 Kelly Bushing: 1854
Total Vertical Depth: 3900 Plug Back Total Depth: 3895
Amount of Surface Pipe Set and Cemented at: 351 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: 20000 ppm Fluid volume: 800 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Pauley Oil
Lease Name: FSI License #: 31327
Quarter NW Sec. 7 Twp. 23 S. R. 11 ☐ East ☑ West
County: Stafford Permit #: 20387

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:** NAOMI JAMES **Date:** 03/23/2015

1246790

Operator Name: Pauley, Gary dba Pauley Oil Lease Name: Ruth Russell Well #: 2

Sec. 13 Twp. 23 S. R. 12 ☐ East ☑ West County: Stafford

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

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

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

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Dual Compensated Porosity
Microresistivity
Dual Induction

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

Name	Top	Datum
Heebner	3178	-1324
Brown Lime	3318	-1464
Lansing	3348	-1494
Arbuckle	3734	-1880

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	8.875	24	351	Common	375	3%cc, 2%gel
Production	7.875	5.5	15.5	3895	Common	175	10%sa, 5%gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

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

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
4	3742-3746	250 gal 15%MCA	3742

TUBING RECORD: Size: 2.875 Set At: 3740 Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 3/1/2015

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	10		300		36

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

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

PRODUCTION INTERVAL: 3742

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

DIAMOND TESTING GENERAL REPORT

Jake Fahrenbruch, Tester

Cell: (620) 282-8977 / Office: (800) 542-7313

TEST INFORMATION

Well Name	**Ruth Russell #2**
Company Name	**Pauley Oil**
Formation	**Viola 3624'-3680'**
Test Type	**Bottom-Hole DST**
Surface Location	**Sec 13-23s-12w-Stafford Co.-KS**
KB Elevation (SL)	**1854.000**
Gauge Name	**Inside 5951**
Start Test Date	**2014/12/05**
Start Test Time	**07:25:00**
Final Test Date	**2014/12/05**
Final Test Time	**14:32:00**
Job Number	**F352**
Contact	
Site Contact	**Steve Peterman**

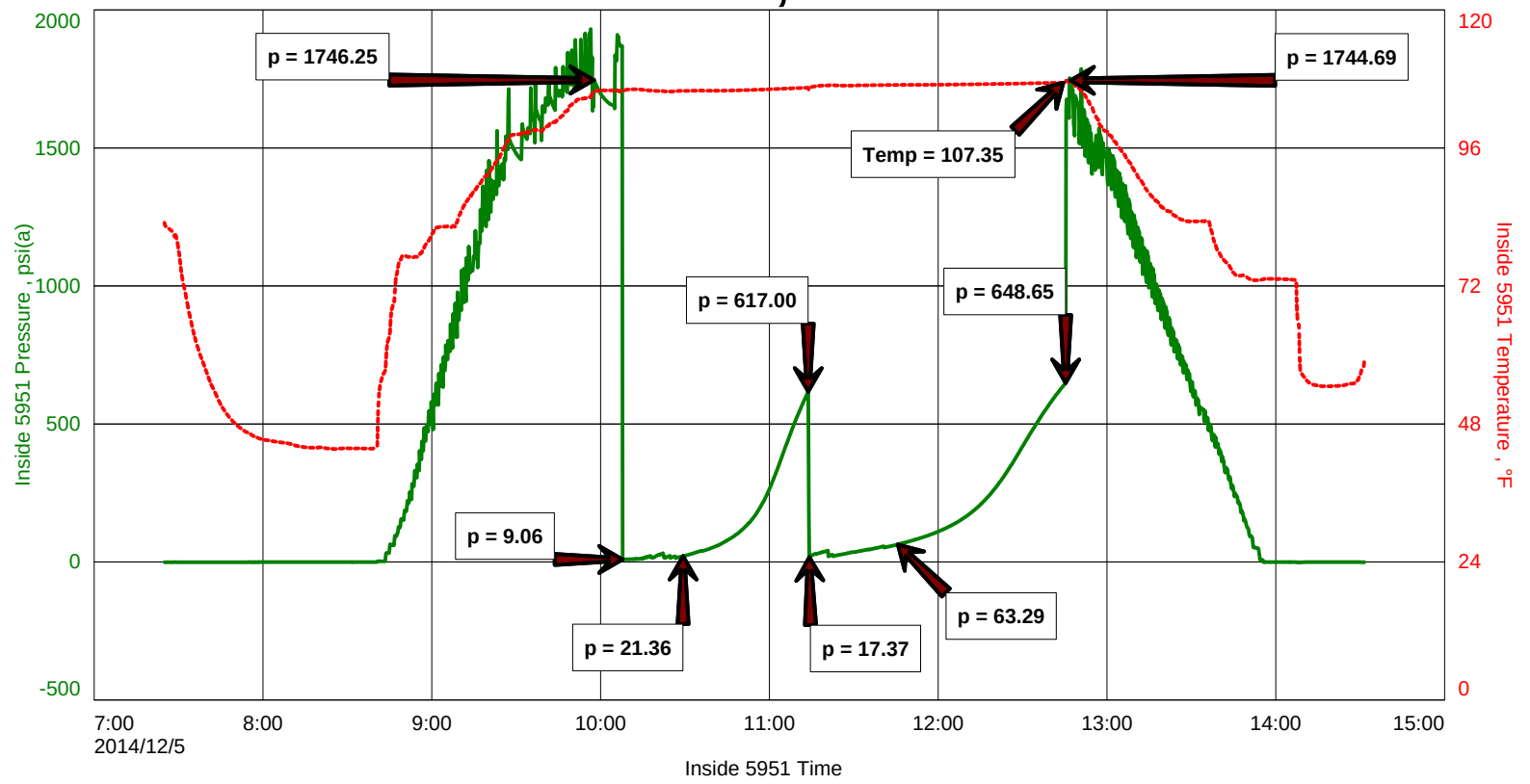
TEST RESULTS

Initial flow, weak blow, increased to .75"
Final flow, weak surface blow, blow died

RECOVERED 20' OF DRILLING MUD

Pauley Oil
Start Test Date: 2014/12/05
Final Test Date: 2014/12/05

Ruth Russell #2
Formation: Viola 3624'-3680'
Job Number: F352



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: RUTH RUS2 DST1

ON LOCATION: 22:45 12-4
START RECORDERS: 07:25 12-5
STOP RECORDERS: 14:32 12-5

Company PAULEY OIL — Lease & Well No. RUTH RUSSELL #2
Contractor VINNESCAH DRLG. LLC — Charge to PAULEY OIL
Elevation 1854' KB — Formation VIOLA — Effective Pay — Ft. Ticket No. F352
Date 12/5/14 — Sec. 13 — Twp. 23S — Range 12W — County STAFFORD — State KANSAS
Test Approved By STEVE PETERMAN — Diamond Representative JAKE FAHRENBRUCH

Formation Test No. 1 — Interval Tested from 3624 ft. to 3680 ft. — Total Depth 3680 ft.
Packer Depth 3619 ft. — Size 6 3/4 in. — Packer depth — ft. — Size 6 3/4 in.
Packer Depth 3624 ft. — Size 6 3/4 in. — Packer depth — ft. — Size 6 3/4 in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3610 ft. — Recorder Number 5951 — Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3630 ft. — Recorder Number 5584 — Cap. 5000 P.S.I.
Below Straddle Recorder Depth — ft. — Recorder Number — — Cap. — P.S.I.

Mud Type CHEMICAL — Viscosity 51 — Drill Collar Length — ft. — I.D. 2 1/4 in.
Weight 8.9 — Water Loss 8.2 cc. — Weight Pipe Length — ft. — I.D. 2 7/8 in.
Chlorides 4000 P.P.M. — Drill Pipe Length 3599 ft. — I.D. 3 1/2 in.
Jars: Make STERLING — Serial Number — — Test Tool Length 25 ft. — Tool Size 3 1/2-IF in.
Did Well Flow? — Reversed Out — — Anchor Length 56 ft. — Size 4 1/2-FH in.
Main Hole Size 7 7/8 — Tool Joint Size 4½" XH in. — 23' PERF IN ANCHOR — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK BLOW, INCREASED TO 3/4".
2nd Open: WEAK BLOW @ SURFACE. BLOW DIED.

Recovered 20 ft. of DRILLING MUD — 100% MUD
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of

Price Job
Other Charges
92 MRT (PRATT)
15 3/4 HR ON LOC
Total

Remarks:

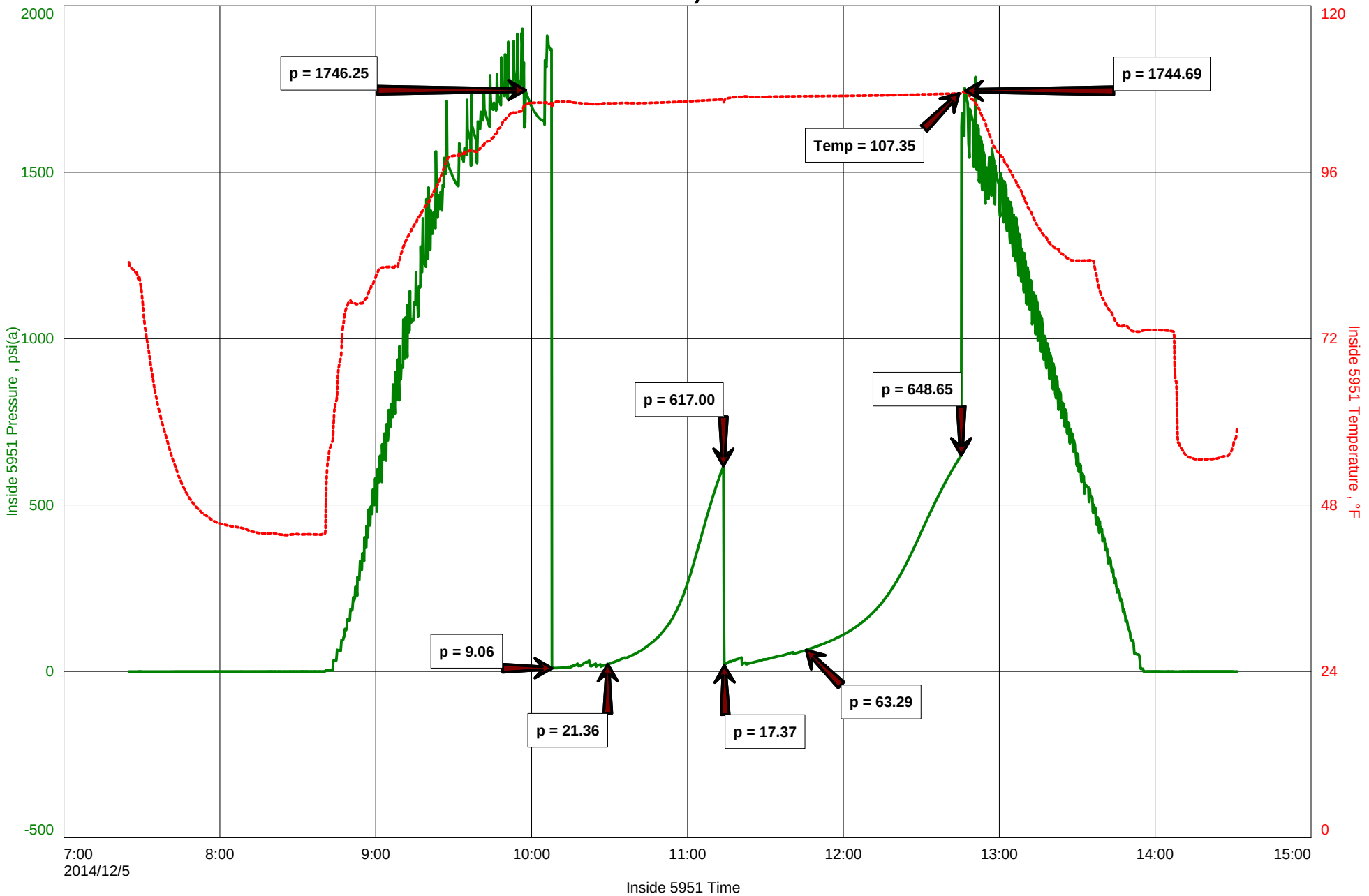
Time Set Packer(s) 10:10 A.M. / P.M. — Time Started Off Bottom 12:45 A.M. / P.M. — Maximum Temperature 107°F

Initial Hydrostatic Pressure (A) 1746 P.S.I.
Initial Flow Period Minutes 20 (B) 9 P.S.I. to (C) 21 P.S.I.
Initial Closed In Period Minutes 45 (D) 617 P.S.I.
Final Flow Period Minutes 30 (E) 17 P.S.I. to (F) 63 P.S.I.
Final Closed In Period Minutes 60 (G) 649 P.S.I. Thanks!
Final Hydrostatic Pressure (H) 1745 P.S.I. Jake Fahrenbruch

Pauley Oil
Start Test Date: 2014/12/05
Final Test Date: 2014/12/05

Ruth Russell #2
Formation: Viola 3624'-3680'
Job Number: F352

DST #2, Viola



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: RUTHRUS2DST1

TIME ON: 07:25
TIME OFF: 14:32

Company Pauley Oil — Lease & Well No. Ruth Russell #2
Contractor Ninnescah Drlg. LLC — Charge to Pauley Oil
Elevation 1854' KB — Formation Viola — Effective Pay ____ Ft. — Ticket No. F352
Date 12-5-14 — Sec. 13 — Twp. 23s S — Range 12w W — County Stafford — State KANSAS
Test Approved By Steve Peterman — Diamond Representative Jake Fahrenbruch

Formation Test No. 1 — Interval Tested from 3624 ft. to 3680 ft. — Total Depth 3680 ft.
Packer Depth 3619 ft. — Size 6 3/4 in. — Packer depth ----- ft. — Size 6 3/4 in.
Packer Depth 3624 ft. — Size 6 3/4 in. — Packer depth ----- ft. — Size 6 3/4 in.
Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3610 ft. — Recorder Number 5951 — Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3630 ft. — Recorder Number 5584 — Cap. 5000 P.S.I.
Below Straddle Recorder Depth ----- ft. — Recorder Number ----- — Cap. ----- P.S.I.

Mud Type Chemical — Viscosity 51 — Drill Collar Length 0 ft. — I.D. 2 1/4 in.
Weight 8.9 — Water Loss 8.2 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in
Chlorides 4,000 P.P.M. — Drill Pipe Length 3,599 ft. — I.D. 3 1/2 in
Jars: Make STERLING — Serial Number ---------- — Test Tool Length 25 ft. — Tool Size 3 1/2-IF in
Did Well Flow? NO — Reversed Out NO — Anchor Length 56 ft. (23' PERF IN ANCHOR) — Size 4 1/2-FH in
Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: Weak blow, inc to .75".
2nd Open: Weak surface blow, blow died.

Recovered 20 ft. of Drilling Mud 100% mud
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Recovered ____ ft. of
Remarks:

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 10:10 A.M. / P.M. — Time Started Off Bottom 12:45 PM A.M. / P.M. — Maximum Temperature 107 F

Initial Hydrostatic Pressure ..... (A) 1746 P.S.I.
Initial Flow Period ..... Minutes 20 (B) 9 P.S.I. to (C) 21 P.S.I.
Initial Closed In Period ..... Minutes 45 (D) 617 P.S.I.
Final Flow Period ..... Minutes 30 (E) 17 P.S.I. to (F) 63 P.S.I.
Final Closed In Period ..... Minutes 60 (G) 649 P.S.I.
Final Hydrostatic Pressure ..... (H) 1745 P.S.I.

DIAMOND TESTING GENERAL REPORT

Jake Fahrenbruch, Tester

Cell: (620) 282-8977 / Office: (800) 542-7313

TEST INFORMATION

Well Name	**Ruth Russell #2**
Company Name	**Pauley Oil**
Formation	**Arbuckle 3739'-3748'**
Test Type	**Bottom-Hole DST**
Surface Location	**Sec 13-23s-12w-Stafford Co.-KS**
KB Elevation (SL)	**1854.000**
Gauge Name	**Inside 5951**
Start Test Date	**2014/12/05**
Start Test Time	**22:53:00**
Final Test Date	**2014/12/06**
Final Test Time	**06:13:00**
Job Number	**F353**
Contact	**Gary Pauley**
Site Contact	**Steve Petermann**

TEST RESULTS

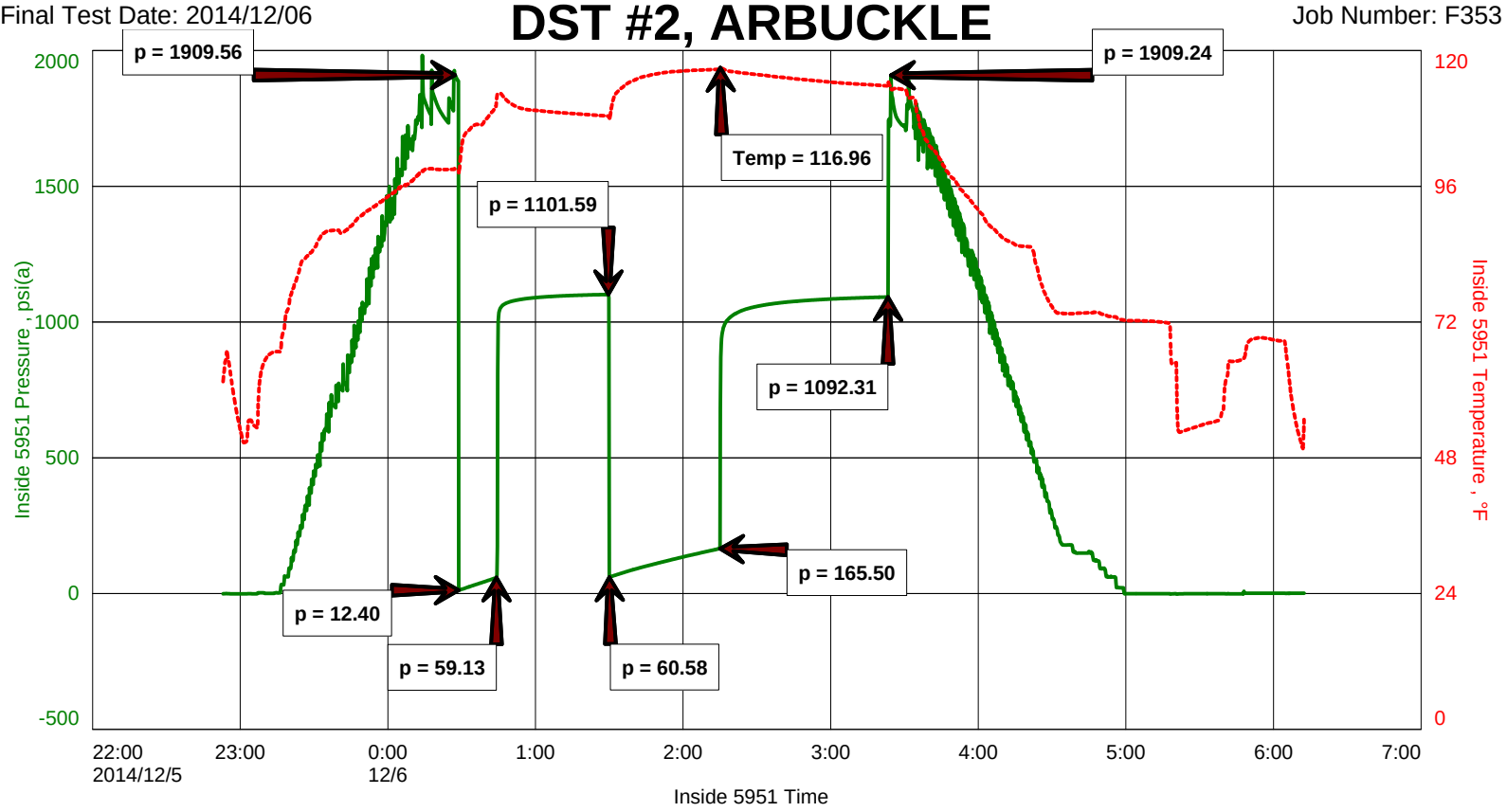
Initial flow, strong blow at B.O.B. in 11.5 minutes. No blowback.
Final flow, strong blow at B.O.B. in 18 minutes. Blowback at 3".

TOTAL RECOVERED FLUID: 370'

90'	**Clean Oil**	**100% oil**
285'	**SOS SMCW**	**1% oil, 94% wtr, 5% mud**
-----	**~100' Gas In Pipe**	
-----	**Gravity: 37 @ 60 F ----- RW: .45 ohm @ 46 F ----- Chlorides: 23,000 PPM ----- PH: 8.0**	

Pauley Oil
Start Test Date: 2014/12/05
Final Test Date: 2014/12/06

Ruth Russell #2
Formation: Arbuckle 3739'-3748'
Job Number: F353



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: RUTH RUS 2 DST 2

ON LOCATION: 22:45
START RECORDERS: 22:53
STOP RECORDERS: 06:13

Company PAULEY OIL Lease & Well No. RUTH RUSSELL #2
Contractor NINNESCAH DRLG. LLC Charge to PAULEY OIL
Elevation 1854' KB Formation ARBUCKLE Effective Pay Ft. Ticket No. F353
Date 12-6-14 Sec. 13 Twp. 23 S Range 12 W County STAFFORD State KANSAS
Test Approved By STEVE PETERMANN Diamond Representative JAKE FAHRENBRUCH

Formation Test No. 2 Interval Tested from 3739 ft. to 3748 ft. Total Depth 3748 ft.
Packer Depth 3734 ft. Size 6 3/4 in. Packer depth — ft. Size 6 3/4 in.
Packer Depth 3739 ft. Size 6 3/4 in. Packer depth — ft. Size 6 3/4 in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3725 ft. Recorder Number 5951 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3726 ft. Recorder Number 5584 Cap. 5000 P.S.I.
Below Straddle Recorder Depth — ft. Recorder Number — Cap. — P.S.I.

Mud Type CHEMICAL Viscosity 46 Drill Collar Length — ft. I.D. 2 1/4 in.
Weight 9.3 Water Loss 9.4 cc. Weight Pipe Length — ft. I.D. 2 7/8 in.
Chlorides 4000 P.P.M. Drill Pipe Length 3714 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number — Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? — Reversed Out — Anchor Length 9 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 "XH" in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: STRONG BLOW AT B.O.B. IN 11½ MIN. NO BB
2nd Open: STRONG BLOW AT B.O.B. IN 18 MIN. BB @ 3".

Recovered — ft. of TOTAL RECOVERED FLUID: 370'
Recovered 90 ft. of CLEAN OIL 100% OIL
Recovered 285 ft. of SOS SMCW 1% OIL, 94% WTR, 5% MUD
Recovered — ft. of ≈100' GAS IN PIPE
Recovered — ft. of GRAVITY = 37 @ 60°F
Recovered — ft. of RW: .45 Ω @ 46°F
Remarks: CHLORIDES: 23,000 PPM
PH: 8.0

Price Job
Other Charges 68 MRT (PRATT)
Total

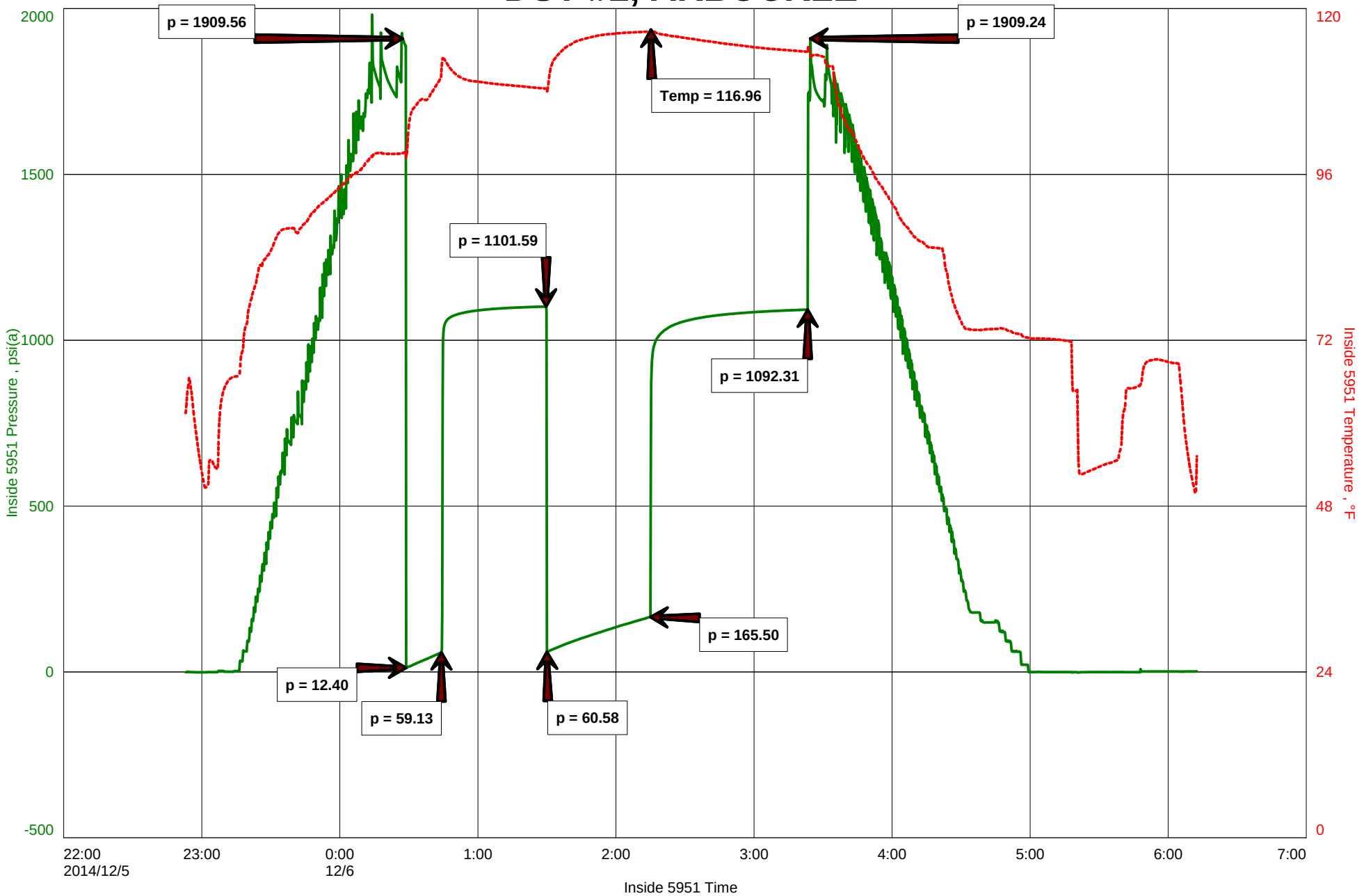
Time Set Packer(s) 12:30 A.M. P.M. Time Started Off Bottom 3:15 A.M. P.M. Maximum Temperature 117°F

Initial Hydrostatic Pressure (A) 1910 P.S.I.
Initial Flow Period Minutes 15 (B) 12 P.S.I. to (C) 59 P.S.I.
Initial Closed In Period Minutes 45 (D) 1102 P.S.I.
Final Flow Period Minutes 45 (E) 61 P.S.I. to (F) 166 P.S.I.
Final Closed In Period Minutes 60 (G) 1092 P.S.I. Thank You!
Final Hydrostatic Pressure (H) 1909 P.S.I. Jake Fahrenbruch

Pauley Oil
Start Test Date: 2014/12/05
Final Test Date: 2014/12/06

Ruth Russell #2
Formation: Arbuckle 3739'-3748'
Job Number: F353

DST #2, ARBUCKLE



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: RUTHRUS2DST2

TIME ON: 22:53
TIME OFF: 06:13

Company Pauley Oil — Lease & Well No. Ruth Russell #2
Contractor Ninnescah Drlg. LLC — Charge to Pauley Oil
Elevation 1854' KB — Formation Arbuckle — Effective Pay ____ Ft. — Ticket No. F353
Date 12-6-14 — Sec. 13 — Twp. 23s S — Range 12w W — County Stafford — State KANSAS
Test Approved By Steve Petermann — Diamond Representative Jake Fahrenbruch

Formation Test No. 2 — Interval Tested from 3739 ft. to 3748 ft. — Total Depth 3748 ft.
Packer Depth 3734 ft. — Size 6 3/4 in. — Packer depth ----- ft. — Size 6 3/4 in.
Packer Depth 3739 ft. — Size 6 3/4 in. — Packer depth ----- ft. — Size 6 3/4 in.
Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3725 ft. — Recorder Number 5951 — Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3726 ft. — Recorder Number 5584 — Cap. 5000 P.S.I.
Below Straddle Recorder Depth ----- ft. — Recorder Number ----- — Cap. ----- P.S.I.

Mud Type Chemical — Viscosity 46 — Drill Collar Length 0 ft. — I.D. 2 1/4 in.
Weight 9.3 — Water Loss 9.4 cc. — Weight Pipe Length 0 ft. — I.D. 2 7/8 in
Chlorides 4,000 P.P.M. — Drill Pipe Length 3,714 ft. — I.D. 3 1/2 in
Jars: Make STERLING — Serial Number ---------- — Test Tool Length 25 ft. — Tool Size 3 1/2-IF in
Did Well Flow? NO — Reversed Out NO — Anchor Length 9 ft. — Size 4 1/2-FH in
Main Hole Size 7 7/8 — Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. — Bottom Choke Size 5/8 in

Blow: 1st Open: Strong blow at B.O.B. in 11.5 minutes. No blowback.
2nd Open: Strong blow at B.O.B. in 18 minutes. Blowback @ 3".

Recovered ____ ft. of TOTAL RECOVERED FLUID: 370'
Recovered 90 ft. of Clean Oil 100% oil
Recovered 285 ft. of SOS SMCW 1% oil, 94% wtr, 5% mud
Recovered ____ ft. of ~100' Gas In Pipe
Recovered ____ ft. of Gravity: 37 @ 60 F
Recovered ____ ft. of RW: .45 ohm @ 46 F
Remarks: Chlorides: 23,000 PPM
PH: 8.0

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 12:30 AM A.M. P.M. — Time Started Off Bottom 3:15 AM A.M. P.M. — Maximum Temperature 117 F

Initial Hydrostatic Pressure			(A)	1910 P.S.I.	
Initial Flow Period	Minutes 15		(B)	12 P.S.I. to (C)	59 P.S.I.
Initial Closed In Period	Minutes 45		(D)	1102 P.S.I.	
Final Flow Period	Minutes 45		(E)	61 P.S.I. to (F)	166 P.S.I.
Final Closed In Period	Minutes 60		(G)	1092 P.S.I.	
Final Hydrostatic Pressure			(H)	1909 P.S.I.	

MUD LOG

WellSight Systems

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

Well Name:	**Ruth Russell #2**
Well Id:	**15-185-23915-0000**
Location:	**W2-SE-SW-SE (330' FSL 1800'FEL) 13-23S-12W**
License Number:	**Region:**
Spud Date:	**Drilling Completed:**
Surface Coordinates:	
Bottom Hole Coordinates:	
Ground Elevation (ft):	**1841** **K.B. Elevation (ft):** **1854**
Logged Interval (ft):	**2700** **To:** **3900** **Total Depth (ft):** **3900**
Formation:	
Type of Drilling Fluid:	**Chem Mud**

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

OPERATOR

Company: **Pauley Oil**
Address:

GEOLOGIST

Name: **Steven Petermann**
Company: **Consulting Petroleum Geologist**
Address: **3206 NorthWestern Avenue**
Hutchinson, Ks 67502

Formation Tops

Log Datums:

Heebner	**3176 (-1322)**
Douglas Shale	**3209 (-1355)**
Brown LST	**3318 (-1464)**
Lansing	**3344 (-1490)**
Lansing F	**3415 (-1561)**
BKC	**3595 (-1741)**
Viola	**3616 (-1762)**
Simpson	**3674 (-1820)**
Arbuckle	**3733 (-1879)**

DSTs

DST depths shown are correlated to RIG DEPTH and were NOT adjusted to log depths.

DST#1 Viola 3624'-3680' (20-45-30-60) IF:WB incr to 3/4" No BB FF: WSB died No BB IFP: 9-21psi FFP: 17-63psi ISIP 617#/FSIP 649# Recover 20'Mud

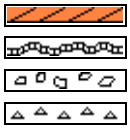
DST#2 Arbuckle 3739'-3748' (15-45-45-60) IF: Strong Blow BOB 11.5 min 12-59psi/FF Strong Blow BOB 18 min 61-166psi ISIP 1102#/FSIP 1092#/Recover 90'Oil and 285' SOSMCW (1%Oil 5%Mud 94%Wtr)

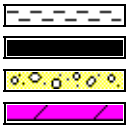
Comments

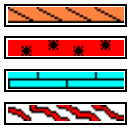
Good shows of oil and/or gas were observed in the Lansing/KC, Viola, and Arbuckle as noted below. The Operator elected to test the L/KC zones behind pipe in lieu of drill stem testing. DSTs were performed on the Viola and Arbuckle and Production casing was set and cemented to further evaluate these zones. In addition to the Operator's planned Arbuckle completion it is recommended that the Following Zones be considered for perforating and stimulation as warranted prior to Abandonment:

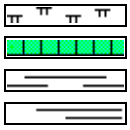
Viola 3646-3672 (will require a frac stimulation)
L/KC "K Zone" 3543-3546
L/KC "J Zone" 3509-3511 and 3515-3518 and 3520-3524
L/KC "I Zone" 3495-3497
L/KC "F Zone" 3417-3421

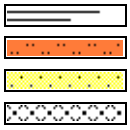
ROCK TYPES


Anhy
Bent
Brec
Cht


Clyst
Coal
Congl
Dol


Gyp
Igne
Lmst
Meta


Mrlst
Salt
Shale
Shcol


Shgy
Sltst
Ss
Till

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

FOSSIL

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

STRINGER

Anhy
Arg
Bent
Coal
Dol
Gyp
Ls
Mrst
Sltstrg
Ssstrg

TEXTURE

Boundst
Chalky
Cryxln
Earthy
Finexln
Grainst
Lithogr
Microxln
Mudst
Packst
Wackest

OTHER SYMBOLS

POROSITY

Earthy
Fenest
Fracture
Inter
Moldic
Organic
Pinpoint
Vuggy

SORTING

Well
Moderate
Poor

ROUNDING

Rounded
Subrnd
Subang
Angular

OIL SHOW

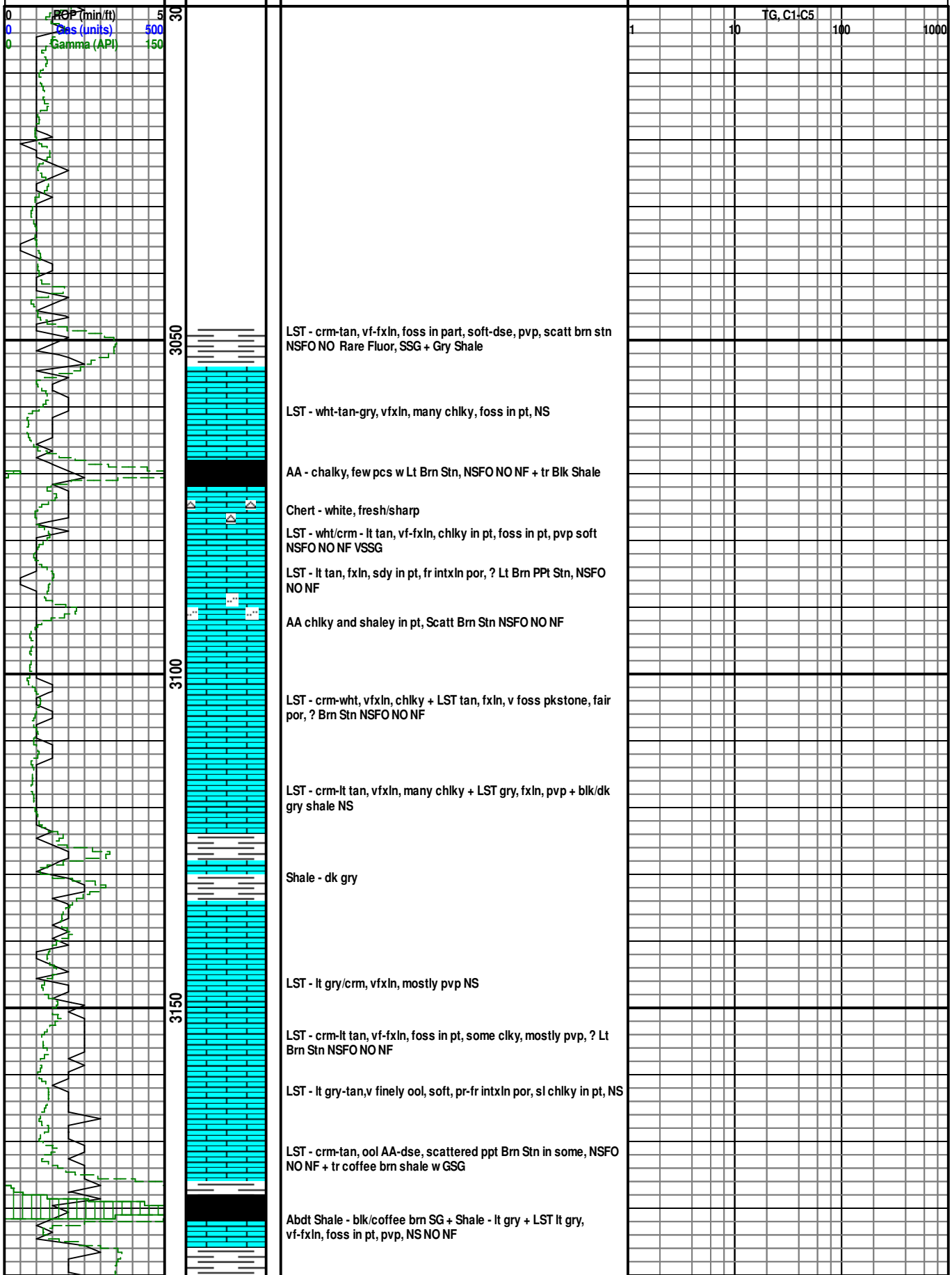
Even
Spotted
Ques
Dead
Ssg
Ssfo&g
Sg
Sg ssfo
O&g

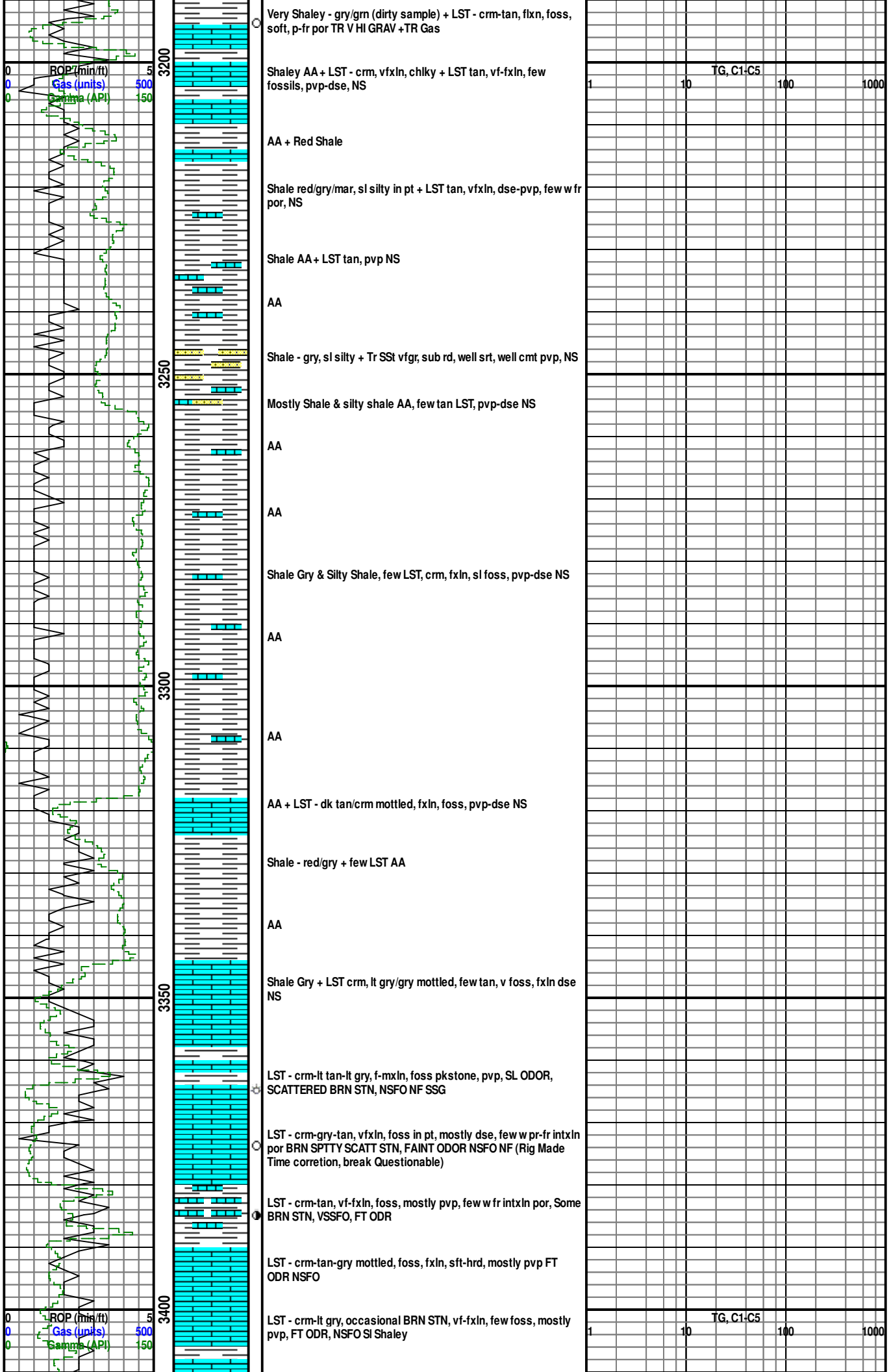
INTERVAL

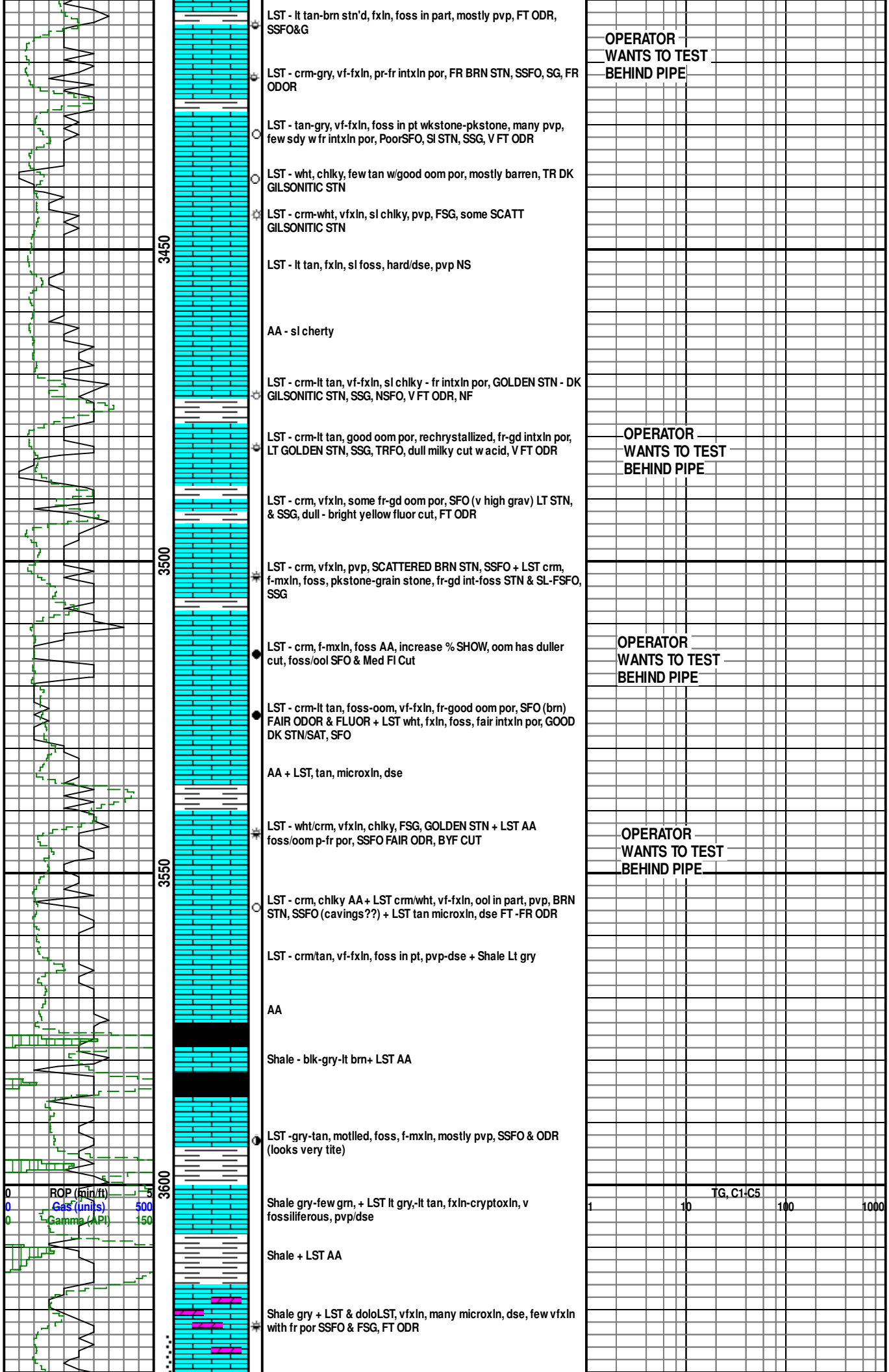
Core
Dst

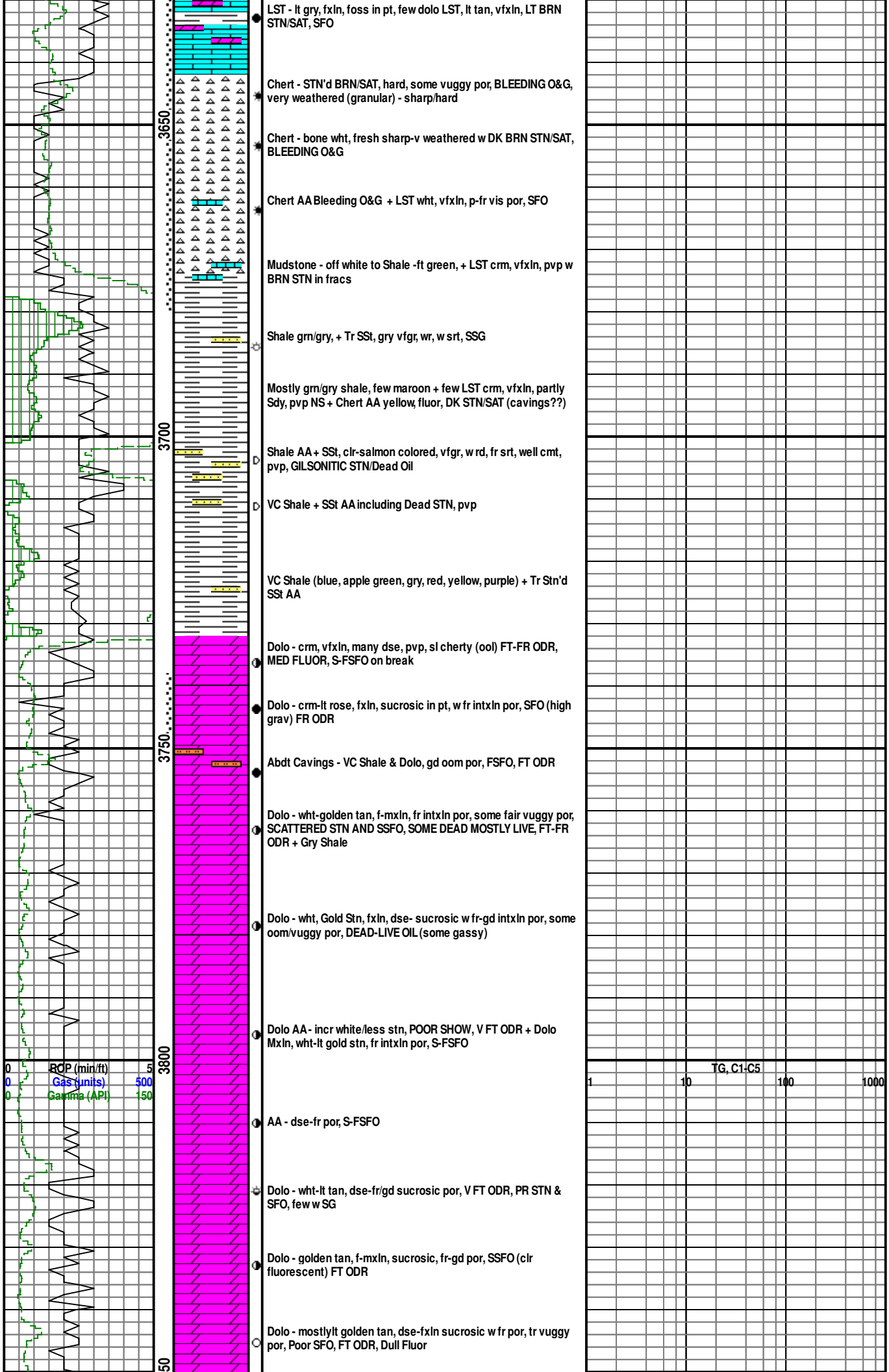
EVENT

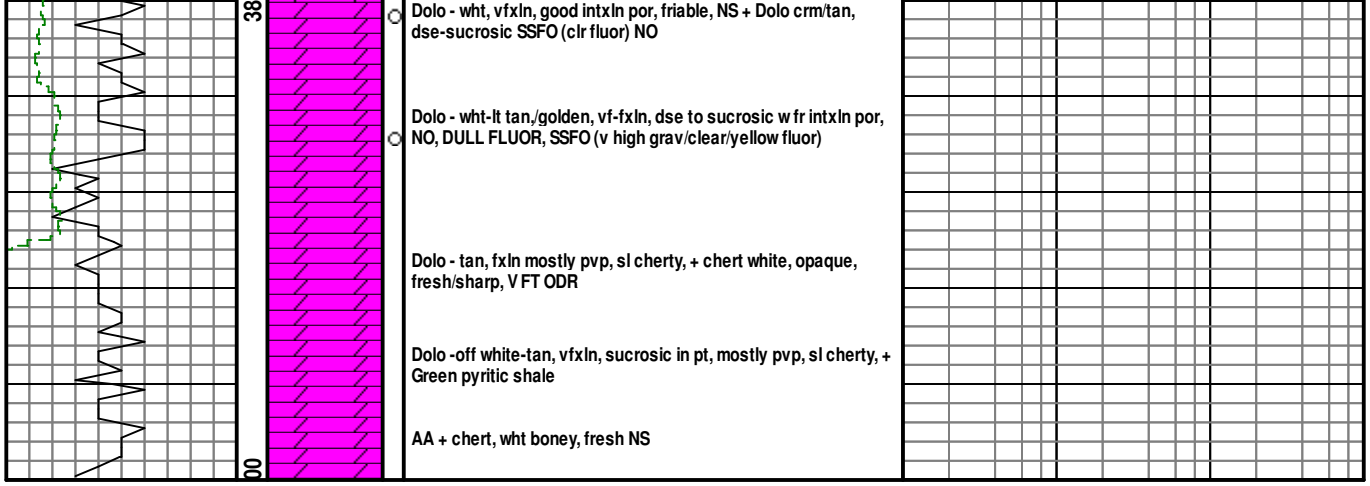
Rft
Sidewall


Curve Track 1
ROP (min/ft)
Gas (units)
Gamma (API)
Depth
Lithology
Oil Shows
Geological Descriptions
TG, C1-C5
TG (Units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)
0 ROP (min/ft) 5
0 Gas (units) 500
0 Gamma (API) 150
1 10 100 1000
3050
3100
3150
LST - crm-tan, vf-fxln, foss in part, soft-dse, pvp, scatt brn stn NSFO NO Rare Fluor, SSG + Gry Shale
LST - wht-tan-gry, vfxln, many chlky, foss in pt, NS
AA - chalky, few pcs w Lt Brn Stn, NSFO NO NF + tr Blk Shale
Chert - white, fresh/sharp
LST - wht/crm - lt tan, vf-fxln, chlky in pt, foss in pt, pvp soft NSFO NO NF VSSG
LST - lt tan, fxln, sdy in pt, fr intxln por, ? Lt Brn PPt Stn, NSFO NO NF
AA chlky and shaley in pt, Scatt Brn Stn NSFO NO NF
LST - crm-wht, vfxln, chlky + LST tan, fxln, v foss pkstone, fair por, ? Brn Stn NSFO NO NF
LST - crm-lt tan, vfxln, many chlky + LST gry, fxln, pvp + blk/dk gry shale NS
Shale - dk gry
LST - lt gry/crm, vfxln, mostly pvp NS
LST - crm-lt tan, vf-fxln, foss in pt, some clky, mostly pvp, ? Lt Brn Stn NSFO NO NF
LST - lt gry-tan,v finely ool, soft, pr-fr intxln por, sl chlky in pt, NS
LST - crm-tan, ool AA-dse, scattered ppt Brn Stn in some, NSFO NO NF + tr coffee brn shale w GSG
Abdt Shale - blk/coffee brn SG + Shale - lt gry + LST lt gry, vf-fxln, foss in pt, pvp, NS NO NF


0 ROP (min/ft) 5
0 Gas (units) 500
0 Gamma (API) 150
3200
3250
3300
3350
3400
Very Shaley - gry/grn (dirty sample) + LST - crm-tan, flxn, foss, soft, p-fr por TR V HI GRAV +TR Gas
Shaley AA + LST - crm, vfxln, chlky + LST tan, vf-fxln, few fossils, pvp-dse, NS
AA + Red Shale
Shale red/gry/mar, sl silty in pt + LST tan, vfxln, dse-pvp, few w fr por, NS
Shale AA + LST tan, pvp NS
AA
Shale - gry, sl silty + Tr SSt vfgr, sub rd, well srt, well cmt pvp, NS
Mostly Shale & silty shale AA, few tan LST, pvp-dse NS
AA
AA
Shale Gry & Silty Shale, few LST, crm, fxln, sl foss, pvp-dse NS
AA
AA
AA + LST - dk tan/crm mottled, fxln, foss, pvp-dse NS
Shale - red/gry + few LST AA
AA
Shale Gry + LST crm, lt gry/gry mottled, few tan, v foss, fxln dse NS
LST - crm-lt tan-lt gry, f-mxln, foss pkstone, pvp, SL ODOR, SCATTERED BRN STN, NSFO NF SSG
LST - crm-gry-tan, vfxln, foss in pt, mostly dse, few w pr-fr intxln por BRN SPTTY SCATT STN, FAINT ODOR NSFO NF (Rig Made Time corretion, break Questionable)
LST - crm-tan, vf-fxln, foss, mostly pvp, few w fr intxln por, Some BRN STN, VSSFO, FT ODR
LST - crm-tan-gry mottled, foss, fxln, sft-hrd, mostly pvp FT ODR NSFO
LST - crm-lt gry, occasional BRN STN, vf-fxln, few foss, mostly pvp, FT ODR, NSFO Sl Shaley
TG, C1-C5
1 10 100 1000
TG, C1-C5
1 10 100 1000


3450
3500
3550
3600
0 ROP (min/ft) 5
0 Gas (units) 500
0 Gamma (API) 150
LST - lt tan-brn stn'd, fxln, foss in part, mostly pvp, FT ODR, SSFO&G
LST - crm-gry, vf-fxln, pr-fr intxln por, FR BRN STN, SSFO, SG, FR ODOR
LST - tan-gry, vf-fxln, foss in pt wkstone-pkstone, many pvp, few sdy w fr intxln por, PoorSFO, Sl STN, SSG, V FT ODR
LST - wht, chlky, few tan w/good oom por, mostly barren, TR DK GILSONITIC STN
LST - crm-wht, vfxln, sl chlky, pvp, FSG, some SCATT GILSONITIC STN
LST - lt tan, fxln, sl foss, hard/dse, pvp NS
AA - sl cherty
LST - crm-lt tan, vf-fxln, sl chlky - fr intxln por, GOLDEN STN - DK GILSONITIC STN, SSG, NSFO, V FT ODR, NF
LST - crm-lt tan, good oom por, rechrystallized, fr-gd intxln por, LT GOLDEN STN, SSG, TRFO, dull milky cut w acid, V FT ODR
LST - crm, vfxln, some fr-gd oom por, SFO (v high grav) LT STN, & SSG, dull - bright yellow fluor cut, FT ODR
LST - crm, vfxln, pvp, SCATTERED BRN STN, SSFO + LST crm, f-mxln, foss, pkstone-grain stone, fr-gd int-foss STN & SL-FSFO, SSG
LST - crm, f-mxln, foss AA, increase % SHOW, oom has duller cut, foss/ool SFO & Med Fl Cut
LST - crm-lt tan, foss-oom, vf-fxln, fr-good oom por, SFO (brn) FAIR ODOR & FLUOR + LST wht, fxln, foss, fair intxln por, GOOD DK STN/SAT, SFO
AA + LST, tan, microxln, dse
LST - wht/crm, vfxln, chlky, FSG, GOLDEN STN + LST AA foss/oom p-fr por, SSFO FAIR ODR, BYF CUT
LST - crm, chlky AA + LST crm/wht, vf-fxln, ool in part, pvp, BRN STN, SSFO (cavings??) + LST tan microxln, dse FT -FR ODR
LST - crm/tan, vf-fxln, foss in pt, pvp-dse + Shale Lt gry
AA
Shale - blk-gry-lt brn+ LST AA
LST -gry-tan, motlled, foss, f-mxln, mostly pvp, SSFO & ODR (looks very tite)
Shale gry-few grn, + LST lt gry,-lt tan, fxln-cryptoxln, v fossiliferous, pvp/dse
Shale + LST AA
Shale gry + LST & doloLST, vfxln, many microxln, dse, few vfxln with fr por SSFO & FSG, FT ODR
OPERATOR WANTS TO TEST BEHIND PIPE
OPERATOR WANTS TO TEST BEHIND PIPE
OPERATOR WANTS TO TEST BEHIND PIPE
OPERATOR WANTS TO TEST BEHIND PIPE
TG, C1-C5
1 10 100 1000


3650
3700
3750
3800
LST - lt gry, fxln, foss in pt, few dolo LST, lt tan, vfxln, LT BRN STN/SAT, SFO
Chert - STN'd BRN/SAT, hard, some vuggy por, BLEEDING O&G, very weathered (granular) - sharp/hard
Chert - bone wht, fresh sharp-v weathered w DK BRN STN/SAT, BLEEDING O&G
Chert AA Bleeding O&G + LST wht, vfxln, p-fr vis por, SFO
Mudstone - off white to Shale -ft green, + LST crm, vfxln, pvp w BRN STN in fracs
Shale grn/gry, + Tr SSt, gry vfgr, wr, w srt, SSG
Mostly grn/gry shale, few maroon + few LST crm, vfxln, partly Sdy, pvp NS + Chert AA yellow, fluor, DK STN/SAT (cavings??)
Shale AA + SSt, clr-salmon colored, vfgr, w rd, fr srt, well cmt, pvp, GILSONITIC STN/Dead Oil
VC Shale + SSt AA including Dead STN, pvp
VC Shale (blue, apple green, gry, red, yellow, purple) + Tr Stn'd SSt AA
Dolo - crm, vfxln, many dse, pvp, sl cherty (ool) FT-FR ODR, MED FLUOR, S-FSFO on break
Dolo - crm-lt rose, fxln, sucrosic in pt, w fr intxln por, SFO (high grav) FR ODR
Abdt Cavings - VC Shale & Dolo, gd oom por, FSFO, FT ODR
Dolo - wht-golden tan, f-mxln, fr intxln por, some fair vuggy por, SCATTERED STN AND SSFO, SOME DEAD MOSTLY LIVE, FT-FR ODR + Gry Shale
Dolo - wht, Gold Stn, fxln, dse- sucrosic w fr-gd intxln por, some oom/vuggy por, DEAD-LIVE OIL (some gassy)
Dolo AA - incr white/less stn, POOR SHOW, V FT ODR + Dolo Mxln, wht-lt gold stn, fr intxln por, S-FSFO
AA - dse-fr por, S-FSFO
Dolo - wht-lt tan, dse-fr/gd sucrosic por, V FT ODR, PR STN & SFO, few w SG
Dolo - golden tan, f-mxln, sucrosic, fr-gd por, SSFO (clr fluorescent) FT ODR
Dolo - mostlylt golden tan, dse-fxln sucrosic w fr por, tr vuggy por, Poor SFO, FT ODR, Dull Fluor
0 ROP (min/ft) 5
0 Gas (units) 500
0 Gamma (API) 150
TG, C1-C5
1 10 100 1000


38
00
Dolo - wht, vfxln, good intxln por, friable, NS + Dolo crm/tan, dse-sucrosic SSFO (clr fluor) NO
Dolo - wht-lt tan,/golden, vf-fxln, dse to sucrosic w fr intxln por, NO, DULL FLUOR, SSFO (v high grav/clear/yellow fluor)
Dolo - tan, fxln mostly pvp, sl cherty, + chert white, opaque, fresh/sharp, V FT ODR
Dolo -off white-tan, vfxln, sucrosic in pt, mostly pvp, sl cherty, + Green pyritic shale
AA + chert, wht boney, fresh NS

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 1101

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-7-14	13	23	12	Stafford	KS		12:30PM

Location IKe + Joe's - 8S, 1/2E, Pratt

Lease Ruth Russell Well No. 2

Contractor Ninnescah #101

Type Job Production

Hole Size 7 7/8" T.D. 3900'

Csg. 5 1/2" New 15.50# Depth 3895'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 18' Shoe Joint 18'

Meas Line Displace 92 1/4 Bbls

EQUIPMENT

Pumptrk 20 No. Cementer Helper Nick

Bulktrk 15 No. Driver Driver Tyson

~~Bulktrk~~ pu No. Driver Driver Rick

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers 2-13

Baskets Pipe on bottom, break Circulation pump 500 gal mud Clear 48, plug RatHole w/ 30 sx Plug mouseHole w/ 20 sx Hook to 5 1/2" Casing + mix 125 sx Cement Shut down Released plug washed pump + lines Released plug + Displaced w/ 92 1/4 Bbls. Released Float Lift pressure 700 # Land plug to 1500 #

X Signature

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 Pauley oil

Street

City State

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

Cement Amount Ordered 175 Common 10% Salt 5% Gilsonite - 500 gal mud Clear 48

Common	175
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	16
Flowseal	
Kol-Seal	875 #
Mud CLR 48	500 gal
CFL-117 or CD110 CAF 38	
Sand	
Handling	198
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	12 turbos
Baskets	
AFU Inserts	
Float Shoe	1
Latch Down	1
Pumptrk Charge	prod String
Mileage	33
Tax	
Discount	
Total Charge	

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. 887

Date	Sec.	Twp.	Range	County	State	On Location	Finish
11-25-14	13	23	12	Stafford	Ks		1:30 AM

Location IKE + Jo's - 8S to 60Rd, 3/4 E, N Into

Lease Ruth Russell Well No. #2

Contractor Ninnescah #107

Type Job Surface

Hole Size T.D. 353'

Csg. Depth 351'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 20' Shoe Joint 20'

Meas Line Displace 21 BLS

EQUIPMENT

Pumptrk 16 No. Cementer Helper Billy

Bulktrk 19 No. Driver Driver Tyler

~~Bulktrk~~ P.U. No. Driver Driver Rick

JOB SERVICES & REMARKS

Remarks: Cement did Circulate.

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

used 325 SX
Common 3% CC
2% Gel 1/4 # Flo-seal

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 Pauley oil

Street

City State

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

Cement Amount Ordered 375 Common 3%CC 2%Gel
1/4# Flo-seal used 325

Common 325

Poz. Mix

Gel. 7

Calcium 14

Hulls

Salt

Flowseal 187 #

Kol-Seal

Mud CLR 48

CFL-117 or CD110 CAF 38

Sand

Handling 375

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer

Baskets

AFU Inserts

Float Shoe

Latch Down

1- Wooden plug

Pumptrk Charge Surface

Mileage 33

Tax

Discount

Total Charge

X Signature Richard A Barry