Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1157056

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 # 33185
Name: Quail Oil & Gas, LC
Address 1: 525 INDUSTRIAL DR.
Address 2: PO BOX K
City: GARDEN CITY State: KS Zip: 67846 + 9643
Contact Person: Daron Patterson
Phone: (620) 271-0236
CONTRACTOR: License # 33905
Name: Royal Drilling Inc
Wellsite Geologist: David Barker
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 #:

07/25/2013	07/30/2013	07/30/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-167-23895-00-00
Spot Description:
NE - SW - SW - SW Sec. 6 Twp. 14 S. R. 11 ☐ East ☑ West
335 Feet from ☐ North / ☑ South Line of Section
654 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: Russell
Lease Name: Daron Well #: 1-6
Field Name:
Producing Formation: None
Elevation: Ground: 1758 Kelly Bushing: 1765
Total Vertical Depth: 3294 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 475 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: 22000 ppm Fluid volume: 1250 bbls
Dewatering method used: Evaporated
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: 10/07/2013
☑ **Confidential Release Date:** 10/07/2015
☐ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 10/07/2013

1157056

Operator Name: Quail Oil & Gas, LC Lease Name: Daron Well #: 1-6

Sec. 6 Twp. 14 S. R. 11 ☐ East ☑ West County: Russell

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:

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

Name	Top	Datum
Topeka L.S.	2564	-802
Heebner Sh	2818	-1056
Toronto	2827	-1065
Brown Lime	3269	-1507
Arbuckle	3294	-1532

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	12.250	8.625	23	475	Common	300	3%CC & 2% 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

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

ALLIED OIL & GAS SERVICES, LLC 054757

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Russell KS

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
7-26-13	6	14	11			2:30AM	3:00AM
LEASE Daron	WELL # 1-6		LOCATION Dorrance KS 1W 1W 1S Einto			COUNTY Russell	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Royal 42
TYPE OF JOB surface
HOLE SIZE 12 1/4 T.D. 472
CASING SIZE 8 5/8 23# DEPTH 475
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 15
CEMENT LEFT IN CSG. 15
PERFS.
DISPLACEMENT 29 1/4 bbl

OWNER

CEMENT
AMOUNT ORDERED 300 com 3%cc

EQUIPMENT

PUMP TRUCK CEMENTER Robert Y
417 HELPER Woody O
BULK TRUCK
481 DRIVER Joe G
BULK TRUCK
DRIVER

COMMON	300	@ 17.90	5370.00
POZMIX		@	
GEL		@	
CHLORIDE	10	@ 64.00	640.00
ASC		@	
HANDLING	314.18 sks	@ 2.48	779.18
MILEAGE	145.00 t/m	2.60	377.00
		TOTAL	7166.18

REMARKS:
ran 11 jts of 8 5/8 23# csg recieve circulation mix 300 com 3%cc displace 29 1/4 bbl shut in cement did circulate to surface
Thank you

SERVICE

DEPTH OF JOB	472		
PUMP TRUCK CHARGE	1512.25		
EXTRA FOOTAGE		@	
MILEAGE	10 HVMI	@ 7.70	77.00
MANIFOLD		@	
	10 LVMI	@ 4.40	44.00
		@	
		TOTAL	1633.25

CHARGE TO: Quail Oil and Gas
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	TOTAL	

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 8799.43
DISCOUNT 2199.86 IF PAID IN 30 DAYS
Net 6599.57

PRINTED NAME Tom Blake

SIGNATURE Tom Blake

ALLIED
OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 7.30.13 District Russell Ticket No. #56979
Company Quail Oil Rig Rig #2
Lease Doran Well No. 1-6
County Russell State KS
Location Dorrance Field
OLD Hwy 40 I-70 exit 1m ½ W Into

CASING DATA: Conductor ☐ PTA ☒ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☐ Production ☐ Liner ☐

Size ____ Type ____ Weight ____ Collar ____

7⅞ Hole 4½ Pipe @ 3300'

Casing Depths: Top ____ Bottom ____

Drill Pipe: Size ____ Weight ____ Collars ____
Open Hole: Size ____ T.D. ____ ft. P.B. to ____ ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. ____ Lin. ft./Bbl. .01422
Open Holes: Bbls/Lin. ft. ____ Lin. ft./Bbl. ____
Drill Pipe: Bbls/Lin. ft. ____ Lin. ft./Bbl. ____
Annulus: Bbls/Lin. ft. ____ Lin. ft./Bbl. ____
Bbls/Lin. ft. ____ Lin. ft./Bbl. .05482

Perforations: From ____ ft. to ____ ft. Amt. ____

CEMENT DATA:
Spacer Type: ____
Amt. 235 Sks Yield 1.42 ft³/sk Density ____ PPG
60/40 POZ
LEAD: Pump Time ____ hrs. Type ____
Excess ____
Amt. ____ Sks Yield ____ ft³/sk Density ____ PPG
TAIL: Pump Time ____ hrs. Type ____
Excess ____
Amt. ____ Sks Yield ____ ft³/sk Density ____ PPG
WATER: Lead ____ gals/sk Tail ____ gals/sk Total ____ Bbls.

Pump Trucks Used #408 - Dalton
Bulk Equip. #610 - Kevin

Float Equip: Manufacturer ____
Shoe: Type ____ Depth ____
Float: Type ____ Depth ____
Centralizers: Quantity ____ Plugs Top ____ Btm. ____
Stage Collars ____
Special Equip. ____
Disp. Fluid Type ____ Amt. ____ Bbls. Weight ____ PPG
Mud Type ____ Weight ____ PPG

COMPANY REPRESENTATIVE ____ CEMENTER Tom P.

TIME AM/PM	PRESSURES PSI: DRILL PIPE CASING	PRESSURES PSI: ANNULUS	FLUID PUMPED DATA: TOTAL FLUID	FLUID PUMPED DATA: Pumped Per Time Period	FLUID PUMPED DATA: RATE Bbls Min.	REMARKS
~~8:00 PM~~						On location - rigged up.
						P1 = 50sk @ 3300' - 8.21 bbl slurry
						Jason - mudflush. Wash - pumped.
						P2 = 50sk @ 650' - 8.21 bbl slurry
						Dis - 5.96 bbl H2O
						P3 = 80sk @ 40' - 13.14 bbl slurry
						Dis = .44 bbl H2O
						P4 = 10sk @ 40' = 1.64 bbl slurry
						1x 8⅝ wooden plug.
						Fill cement to surface!
						P5 = RATHOLE = 30sk - 4.92 bbl slurry
						P6 = MOUSE HOLE = 15sk - 2.46 bbl slurry
						Rigged down

FINAL DISP. PRESS: ____ PSI BUMP PLUG TO ____ PSI BLEEDBACK ____ BBLS. THANK YOU

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/

October 07, 2013

Daron Patterson
Quail Oil & Gas, LC
525 INDUSTRIAL DR.
PO BOX K
GARDEN CITY, KS 67846-9643

Re: ACO1
API 15-167-23895-00-00
Daron 1-6
SW/4 Sec.06-14S-11W
Russell County, Kansas

Dear Production Department:

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

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

Respectfully,
Daron Patterson

GENERAL INFORMATION

Client Information:

Company: QUAIL OIL+GAS

Contact: DARON PATTERSON

Phone: Fax: e-mail:

Site Information:

Contact: DAVE BARGER

Phone: Fax: e-mail:

Well Information:

Name: DARON 1-6

Operator: QUAIL OIL+GAS

Location-Downhole:

Location-Surface: S6/14S/11W

Test Information:

Company:

Representative:

Supervisor:

Test Type: DST #1 CONVENTIONAL Job Number:

Test Unit:

Start Date: 2013/07/29 Start Time: 02:00:00

End Date: 2013/07/29 End Time: 08:30:00

Report Date: Prepared By:

Remarks: Qualified By:

RECOVERY: 20' DRILLING MUD
WHEN TOOL INITIALLY OPENED, SLID 10' TO GET IT ON BOTTOM.

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

DRILL-STEM TEST TICKET

FILE: STC/Daron1-6dst1

TIME ON: 02:00 07/29/13

TIME OFF: 08:30 07/29\13

Company QUAIL OIL+GAS — Lease & Well No. DARON 1-6

Contractor ROYAL DRLG RIG2 — Charge to QUAILOIL+GAS

Elevation 1738 G.L Formation LANSING Effective Pay _____ Ft. Ticket No. D1343

Date 7/29/13 Sec. 6 Twp. 14 S Range 11 W County RUSSELL State KANSAS

Test Approved By DAVE BARKER — Diamond Representative JOHN RIEDL

Formation Test No. 1 Interval Tested from 2899 ft. to 2915 ft. Total Depth 2915 ft.

Packer Depth 2894 ft. Size 6 3/4 in. — Packer depth _____ ft. Size 6 3/4 in.

Packer Depth 2899 ft. Size 6 3/4 in. — Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2902 ft. — Recorder Number 30046 Cap. 6000 P.S.I.

Bottom Recorder Depth (Outside) 2912 ft. — Recorder Number 11073 Cap. 4000 P.S.I.

Below Straddle Recorder Depth _____ ft. — Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 47 — Drill Collar Length 0 ft. I.D. 2 1/4 in.

Weight 9 Water Loss 8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 4900 P.P.M. — Drill Pipe Length 2873 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number #2 — Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO — Anchor Length 16 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: WEAK (1" DECREASING + DEAD IN 14 MIN.)

2nd Open: NO BLOW; FLUSHED TOOL AND HAD WEAK SURGE

Recovered 20 ft. of DRILLING MUD

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: TOTAL FLUID RECOVERY:20' IN DRILL PIPE

TOOL SAMPLE GRINDOUT: 100% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 5:15 A.M A.M. P.M. Time Started Off Bottom 7:15 P.M A.M. P.M. Maximum Temperature 100

Initial Hydrostatic Pressure ..... (A) 1412 P.S.I.

Initial Flow Period ..... Minutes 15 (B) 25 P.S.I. to (C) 28 P.S.I.

Initial Closed In Period ..... Minutes 30 (D) 898 P.S.I.

Final Flow Period ..... Minutes 15 (E) 27 P.S.I. to (F) 27 P.S.I.

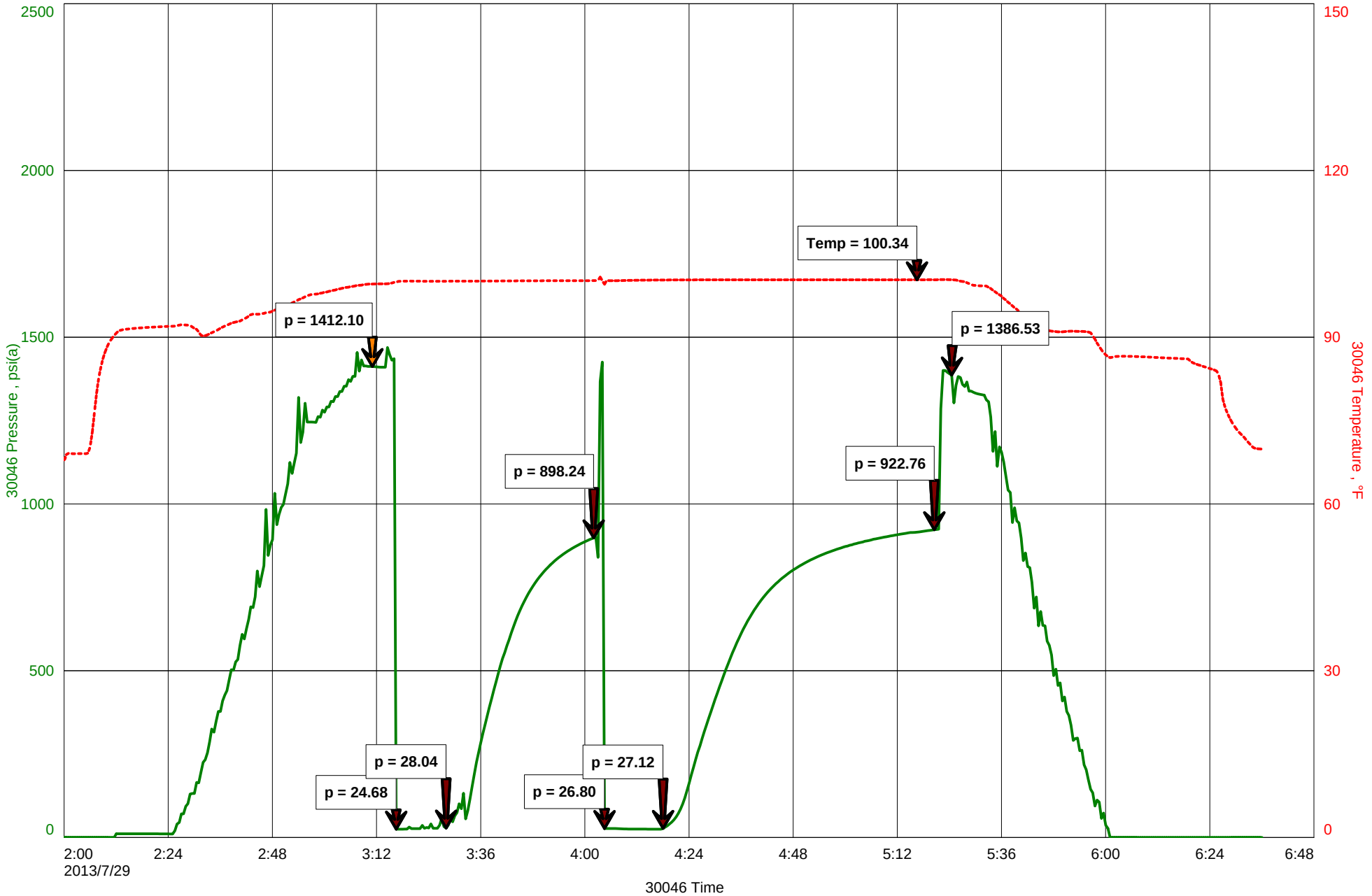
Final Closed In Period ..... Minutes 60 (G) 923 P.S.I.

Final Hydrostatic Pressure ..... (H) 1386 P.S.I.

QUAIL OIL+GAS
Start Test Date: 2013/07/29
Final Test Date: 2013/07/29

DARON 1-6
Formation: LANSING

DARON 1-6



David A. Barker

CONSULTING GEOLOGIST

Geologist's Report
Drilling Time and Sample Log

OPERATOR Quail Oil & Gas, LLC
LEASE Daron WELL NO. #1-6
FIELD Dorrance API No. 15-167-23895
LOCATION NE SW SW SW - 335 FSL & 654 FWL
SEC. 6 TWP. 14S RGE. 11W
COUNTY RUSSELL STATE Kansas

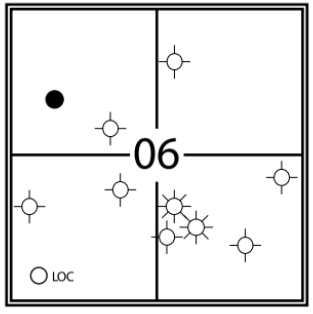
ELEVATION
KB 1762'
DF
GL 1755'
Measuremnts Are All From KB

CASING RECORD
SURFACE Set 8 5/8", 23# w/ 300 SX @475'
PRODUCTION N/A

CONTRACTOR Royal Drilling #2
COMM. 07/25/2013 COMP. 08/12/2013
RTD 3294' LOG TD
SAMPLES SAVED FROM 2300' TO TD
DRILLING TIME KEPT FROM 2300' TO TD
SAMPLES EXAMINED FROM 2300' TO TD
GEOLOGICAL SUPERVISION FROM 2300' TO TD
MUD UP APPROX 2200' TYPE MUD CHEMICAL

ELECTRICAL SURVEYS
N/A

FORMATION	LOG TOP	LOG DATUM	SAMPLE TOP	SAMPLE DATUM	STRUCT. COMP.
Topeka LS.			2564	-802	
Heebner Sh.			2818	-1056	
Toronto			2827	-1065	
Brown Lime			1889	-1129	
Arbuckle			3269	-1507	
TD			3294	-1532	



REFERENCE WELL FOR STRUCTURAL POSITION

GEOLOGIST

Name: David A. Barker
Company: Consulting Geologist
Address: 212 N. Market, Suite# 320
Wichita, Kansas 67202
(316) 259-4294

OPERATOR

Company: Quail Oil & Gas, LC
Address: 525 Industrial Dr.
P.O. Box K
Garden City, KS, 67846

Contractor

Royal Drilling Inc.
719 Witt Ave
P.O. Box 342
Russell, KS 67665

ACCESSORIES

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

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

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

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

OTHER SYMBOLS

INTERVALS
- Core
- Dst
- Dst

EVENTS
- Rft
- Sidewall
- Cfs
- Conn

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

LITHOLOGY
- Anhy
- Cht
- Congl
- Shale
- Shgy
- Ss
- Carb shale
- Gray shale
- Sandy lmst
- Shale
- Slt stn
- Shaly slst
- Slty shale
- Blank
- Gray lmst
- Cream lmst
- Red shale
- Blue-green siltstn
- D. green shale
- Green shale
- Brown lmst
- Brown shale
- Brown dol
- Brown cream
- D. green lmst
- Light cream lmst
- Gray cream lmst
- Green dol
- Gray dol

SORTING
- Well
- Moderate
- Poor

ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

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

ROCK TYPES

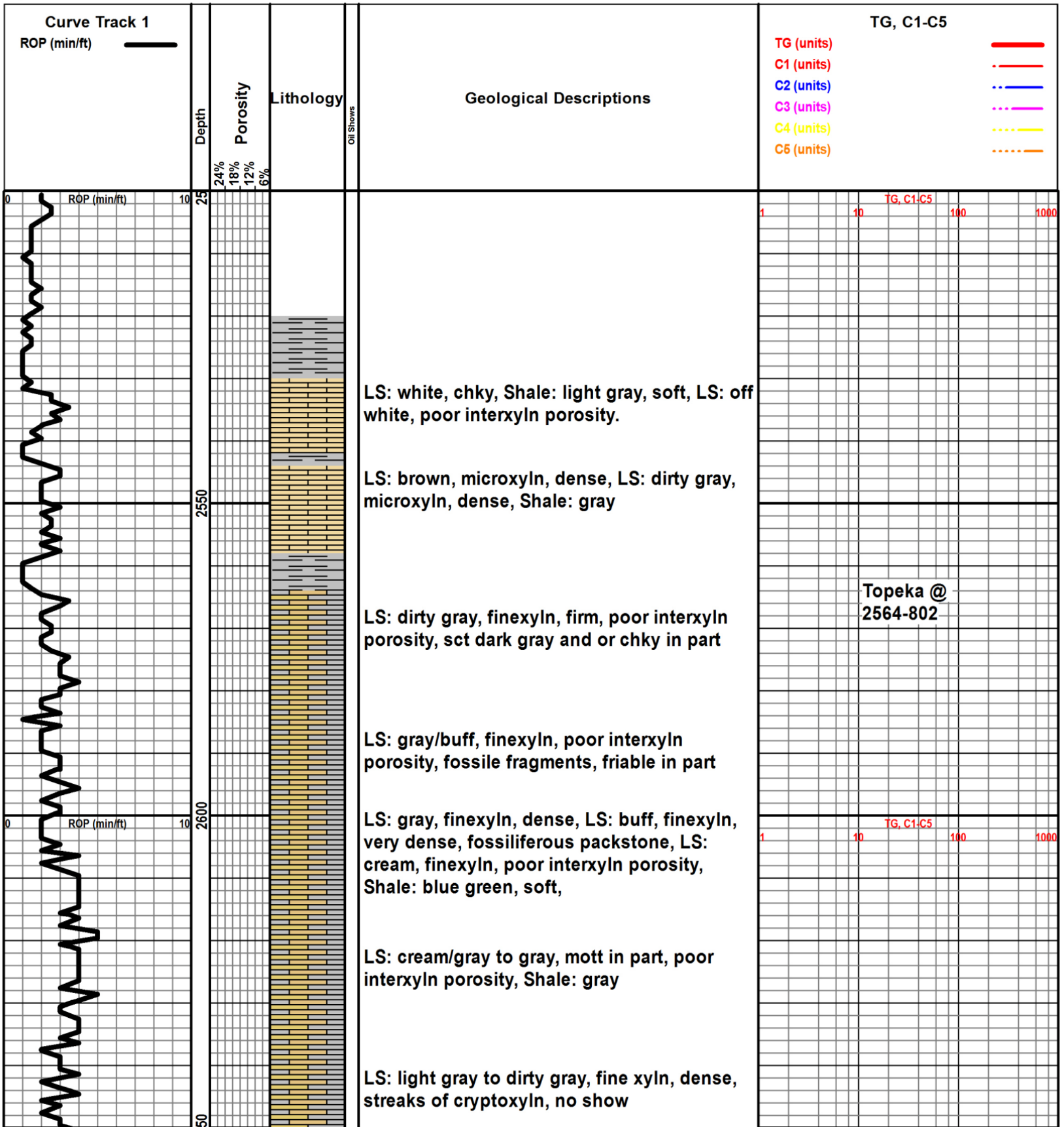
- Anhy
- Cht
- Congl
- Shale
- Shgy
- Ss
- Carb shale
- Gray shale
- Sandy lmst
- Shale
- Slt stn
- Shaly slst
- Slty shale
- Blank
- Gray lmst
- Cream lmst
- Red shale
- Blue-green siltstn
- D. green shale
- Green shale
- Brown lmst
- Brown shale
- Brown dol
- Brown cream
- D. green lmst
- Light cream lms
- Gray cream lms
- Green dol
- Gray dol

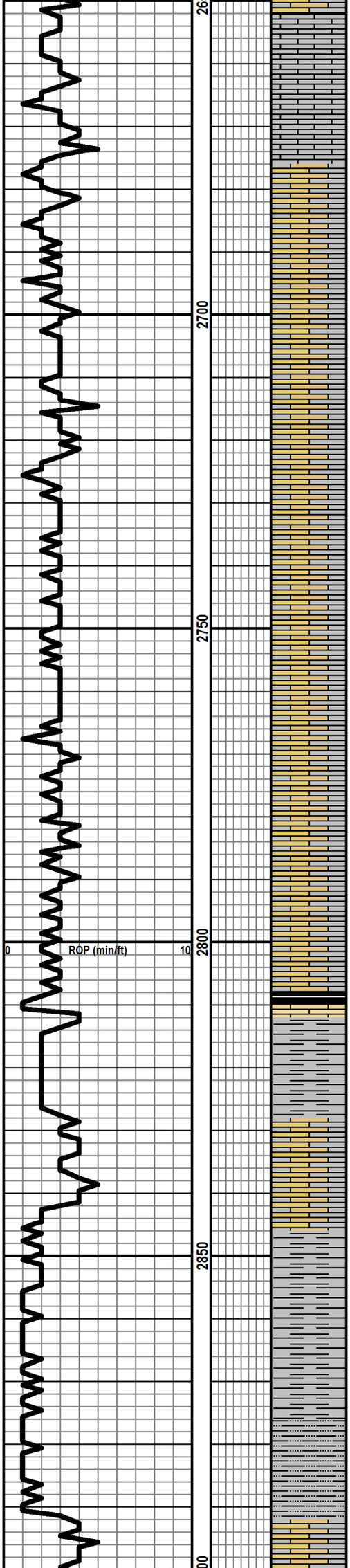
DST #1

2899'-2915' 15-30-15-60 IF: WEAK, 1" BLOW DECREASE, DEAD 15 MIN, FF: NO BLOW, REC: 20' DM, HP 1412-1386#, FP 25-28/27-27, SIP 898-923#

Remarks

Due to the low structural position, poor drill stem test results, and the lack of oil shows, the Daron 1-6 was plugged and abandoned on Tuesday, August 12, 2013. It was also deemed unnecessary to run an electrical log due to well results.





LS: light gray, microxyln, dense, LS: cream to buff, finexyln, no visable porosity, dense, cherty, LS: gray/brown, finexyln, mott

LS: gray/buff, finexyln, poor interxyln porosity, cherty in part

Shale: dark gray, dense, finexyln, poor interxyln porosity, scattered chky pieces, firm, massive.

LS: dirty gray, finexyln, poor interxyln porosity, scattered chky pieces, firm, massive.

LS: brownish/gray, dark brown, dense, finxyln, poor interxyln porosity, Shale: gray

LS: gray/brown, finexyln to microxyln, dense, mott mudstone, no show

LS: cream finexyln, poor interxyln porosity, firm, no show

Shale: black, carboniferous, fine white sharp chert flecks, LS: cream, finexyln, poor interxyln porosity, no show

LS: brownish/gray, finexyln, dense to microxyln, LS: tan, microxyln, dense, platey.

LS: off white, finexyln, firm to sub chky,

Shale: gray/green to red,

Shale: gray, Siltstone: gray, dense, blocky

LS: brown, microxyln, very dense, Shale: gray, soft, LS: gray/cream, fossiliferous, poor interxyln porosity, no show

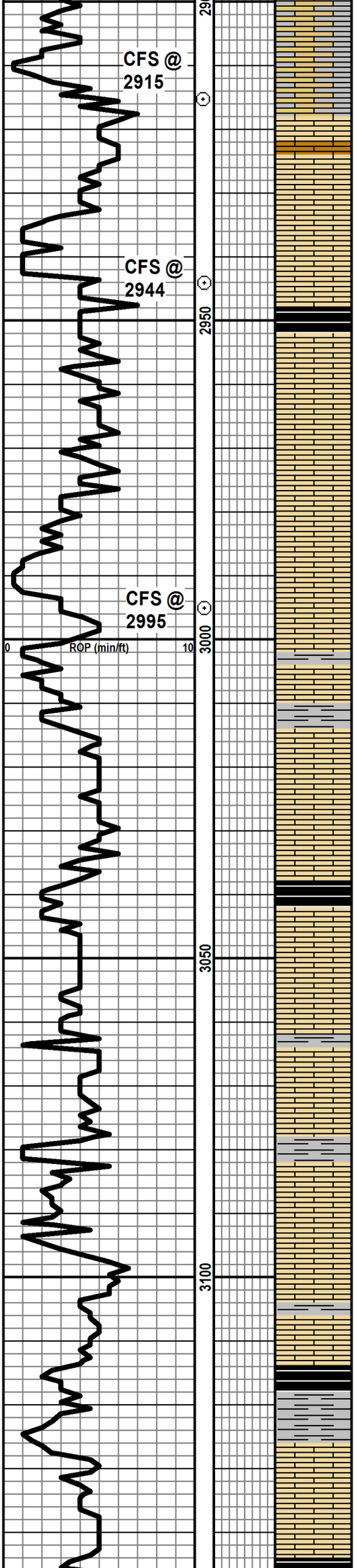
TG, C1-C5

1 10 100 1000

Heebner Shale @2818 -1056

Toronto @ 2827 -1065

Brown LM @ 2891 -1129



2915, 20 minute sample: slight odor from sample, LS: light brown, fair sct, fine oolmoldic porosity, fair to poor interxyln porosity, fair cut, dull yellow fluorescence, slight show of free oil on fresh cut surface,

2915, 40 minute sample: slight odor. LS" light brown, finexyhln, poor interxyln porosity, slight visable oolmoldic porosity, fair stain, random gas bubbles, no show of free oil

2944 20 minute sample: no odor, LS: white, chky, LS: cream, finexyln, oolitic packstone with random oolmoldic porosity, no show, poor dull yellow fluorescence.

2944 40 min sample: LS: white chky, no show

LS: gray/brown, microxyln, dense, no visable porosity, Shale: gray

LS: dark gray/brown, microxyln, dense, Shale: gray

2995 20 min: weak odor, chky LS: gray, oolitic, slight inter oolitic stain, slight show of free oil, heavy cut

2995 45 min: very weak odor, LS: white, chky, no show.

LS: off white, poor oolicastic porosity, poor interxyln porosity,

LS: gray/brown, microxyln, dense, chky, no show

Shale: red, LS: cream, finexyln, friable in part, Shale: gray

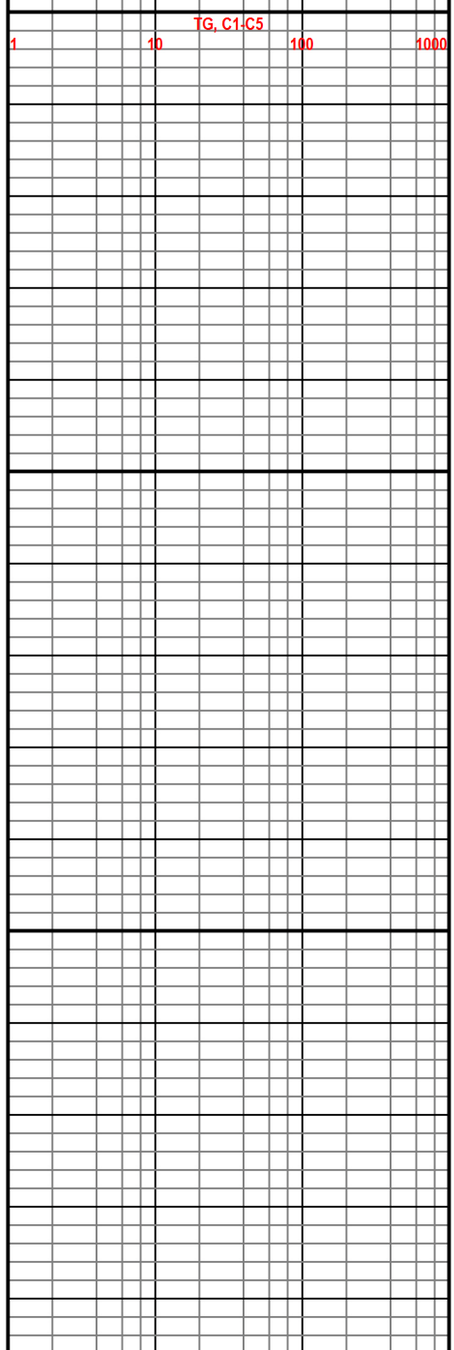
LS: light gray to cream, microxyln, no visable porosity,

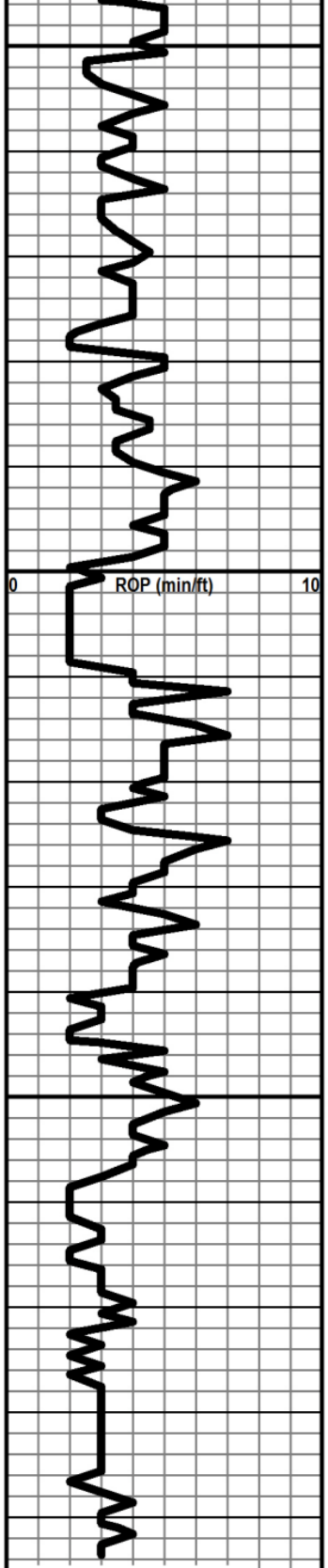
LS: white, chky, LS: buff, slight visable oomoldic porosity, poor interxyln porosity

LS: brown, slight visable oolicastic porosity, firm, fair interxyln porosity, no show, LS: cream, finelxyln, friable

Shale: black to gray

LS: white, chky, LS: cream, friable, sct oolitic pieces





RTD 3294 -1532

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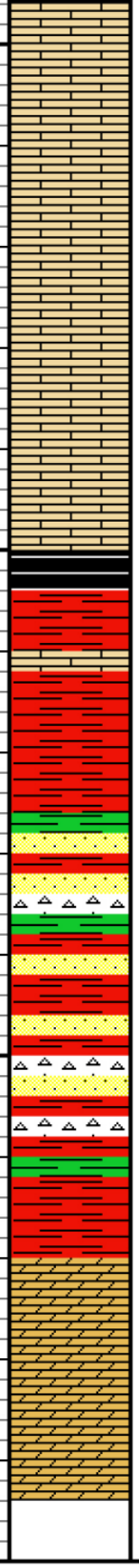


LS: dark gray/brown, microxyln, dense, poor interxyln porosity, LS: gray, finexyln, gritty, poor interxyln porosity, Shale: gray

LS: gray to cream, finexyln to microxyln, poor interxyln porosity,

LS: buff to cream, finexlyn, friable in part, no show, Chert: smoky, semi clear,

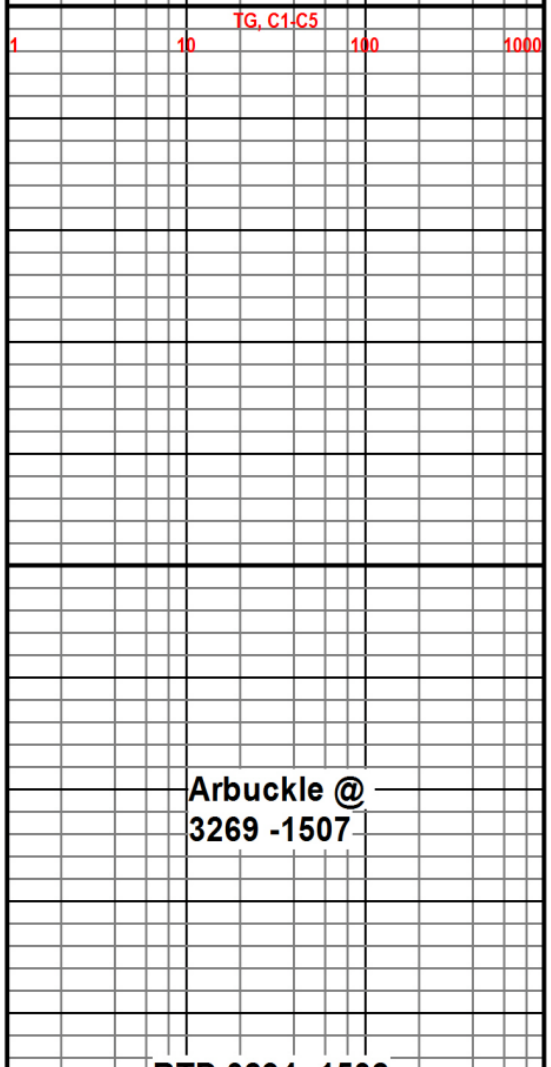
Shale: red to gray, LS: cream, finexyln, friable, sct chky pieces.

Shale: red, dense, LS: cream, finexlyln, poor interxyln porosity,

Shale: varied colored, LS: white, chky, SD. STN: fine grain, rounded, poorly sorted, poor intergranular porosity, no show, variegated shale and chert.

Shale: variegated, LS: white, chky, SD. STN: fine grain, rounded, poorly sorted, poor intergranular porosity, no show, variegated shale and chert.

Dolomite: gray/cream, finegraned, fair to poor intergranular porosity, no show, no fluorescence,



Arbuckle @
3269 -1507

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