



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1172210
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1172210

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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

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

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

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

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

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

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

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Rama Operating Co., Inc.
Well Name	Pundsack 311
Doc ID	1172210

Tops

Name	Top	Datum
Heebner	3252	-1329
Toronto	3272	-1349
Douglas	3288	-1365
Lansing	3384	-1461
Viola	3647	-1724
Simpson	3684	-1761
Arbuckle	3739	-1816
RTD	3742	-1819



Joshua R. Austin

Petroleum Geologist

report for

RAMA Operating CO., Inc



COMPANY: RAMA Operating Company, Inc.

LEASE: Pundsack #311

FIELD: Pundsack

LOCATION: 1000' FNL & 2170' FEL SE-SW-NW-NE

SEC: 30 TWSP: 21s RGE: 13w

COUNTY: Stafford STATE: Kansas

KB: 1923 GL: 1910

API # 15-185-23,839-00-00

CONTRACTOR: Sterling Drilling (rig #5)

Spud: 11-08-2013 Comp: 11-15-2013

RTD: 3742 LTD: 3742

Mud Up: 2900' Type Mud: Chemical was displaced

Samples Saved From: 3100' to RTD
 Drilling Time Kept From: 2800' to RTD
 Samples Examined From: 3100' to RTD
 Geological Supervision From: 3200' to RTD
 Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 829'
 Production Casing: 5 1/2" @ 3739'

Electronic Surveys: By Pioneer Energy Services

NOTES

RAMA Operating Co., Inc.

well comparison sheet

DRILLING WELL

Pundsack 311

COMPARISON WELL

Pundsack 310

COMPARISON WELL

Brown

Pundsack 311				Pundsack 310				Brown						
1923 KB				1918 KB				1920 KB						
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Relationship	Formation	Sample	Sub-Sea	Log	Relationship
Heebner	3251	-1328	3252	-1329	3242	-1324	-4	-5						
Toronto	3272	-1349	3272	-1349	3262	-1344	-5	-5						
Douglas	3288	-1365	3288	-1365	3278	-1360	-5	-5						
Brown Lime	3374	-1451	3374	-1451	3364	-1446	-5	-5						
Lansing	3386	-1463	3384	-1461	3376	-1458	-5	-3		3385	-1465	2	4	
Viola	3645	-1722	3647	-1724	3638	-1720	-2	-4		3644	-1724	2	0	
Simpson	3685	-1762	3684	-1761	3680	-1762	0	1		3684	-1764	2	3	
Arbuckle	3739	-1816	N/A		3731	-1813	-3			3738	-1818	2		
Total Depth	3742	-1819	3742	-1819	3735	-1817	-2	-2		3745	-1825	6	6	



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: PUNDSACK311DST1

TIME ON: 2:08 AM
TIME OFF: 9:34 AM

Company RAMA Operating Co., Inc. Lease & Well No. Pundsack #311
Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.
Elevation 1923' KB Formation Lansing "B-F" Effective Pay _____ Ft. Ticket No. F196
Date 13 Nov 2013 Sec. 30 Twp. 21 S Range 13 W County Stafford State KANSAS
Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

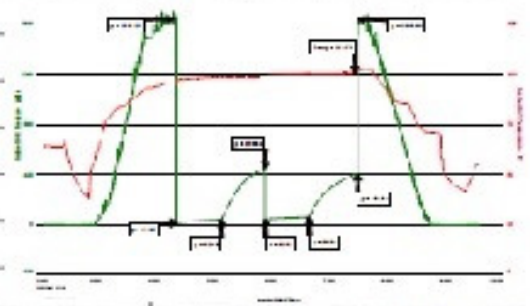
Formation Test No. ONE Interval Tested from 3395 ft. to 3460 ft. Total Depth 3460 ft.
Packer Depth 3390 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3395 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3381 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3433 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 54 Drill Collar Length 329 ft. I.D. 2 1/4 in.
Weight 8.7 Water Loss 7.2 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 1800 P.P.M. Drill Pipe Length 3041 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 65 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, increased to B.O.B. in 8 minutes. No blow-back.
2nd Open: Strong blow, increased to B.O.B in 9 minutes. No blow-back.

Recovered 90 ft. of Very slightly oil specked mud (less than 1% oil)
Recovered _____ ft. of 400' Gas In Pipe
Recovered _____ ft. of Tool Sample: Gassy SOSM
Recovered _____ ft. of 15% gas, 1% oil, 84% mud
Recovered _____ ft. of _____
Recovered _____ ft. of _____



Remarks: _____
4:24 AM A.M. 7:24 AM A.M. 101 Deg F

Time Set Packer(s) 4:24 AM P.M. Time Started Off Bottom 7:24 AM P.M. Maximum Temperature 101 Deg F

Initial Hydrostatic Pressure..... (A) 1639 P.S.I.
Initial Flow Period..... Minutes 45 (B) 17 P.S.I. to (C) 42 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 451 P.S.I.
Final Flow Period..... Minutes 45 (E) 43 P.S.I. to (F) 61 P.S.I.
Final Closed In Period..... Minutes 45 (G) 409 P.S.I.
Final Hydrostatic Pressure..... (H) 1637 P.S.I.



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: PUNDSACK311DST2

TIME ON: 5:12 PM
TIME OFF: 12:58 PM

Company RAMA Operating Co., Inc. Lease & Well No. Pundsack #311
Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.
Elevation 1923' KB Formation Lansing "H&I" Effective Pay _____ Ft. Ticket No. F197
Date 13 Nov 2013 Sec. 30 Twp. 21 S Range 13 W County Stafford State KANSAS
Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

Formation Test No. TWO Interval Tested from 3495 ft. to 3535 ft. Total Depth 3535 ft.
Packer Depth 3490 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3495 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3481 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 3500 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 53 Drill Collar Length 329 ft. I.D. 2 1/4 in.
Weight 9.0 Water Loss 8.0 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 6000 P.P.M. Drill Pipe Length 3141 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 40 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ALL PERF
Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong blow, increased to B.O.B. in 7 minutes. Blowback increased to 2".
2nd Open: Fairly strong blow, increased to B.O.B. in 21 minutes. Blowback increased to .5".

Recovered 30 ft. of Gssy MO 25% g, 40% o, 35% m
Recovered 60 ft. of GC SWC OCM 10% g, 20% o, 10% w, 60% m
Recovered 240 ft. of OS SMCW 2% o, 88% w, 10% m
Recovered _____ ft. of 250' Gas In Pipe
Recovered _____ ft. of Total Recovered Fluid: 330'



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: PUNDSACK311DST3

TIME ON: 8:48 AM
TIME OFF: 2:10 PM

Company RAMA Operating Co., Inc. Lease & Well No. Pundsack #311
Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.

Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.
 Elevation 1923' KB Formation Lansing "L" Effective Pay _____ Ft. Ticket No. F198
 Date 14 Nov 2013 Sec. 30 Twp. 21 S Range 13 W County Stafford State KANSAS
 Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

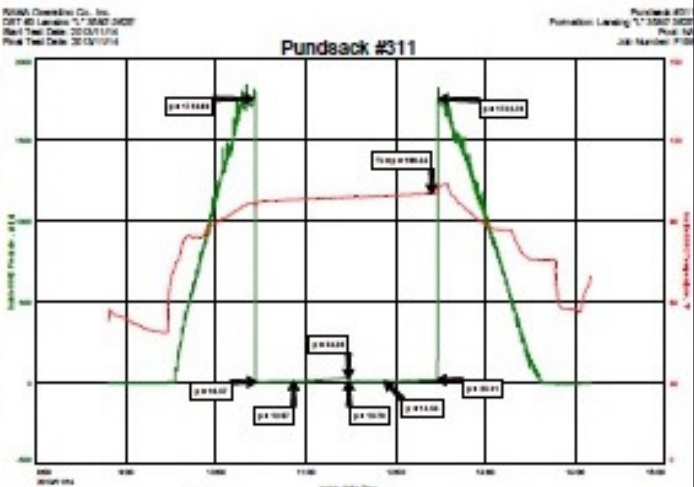
Formation Test No. THREE Interval Tested from 3580 ft. to 3625 ft. Total Depth 3625 ft.
 Packer Depth 3575 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 3580 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 3566 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) _____ 3590 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 54 Drill Collar Length 329 ft. I.D. 2 1/4 in.
 Weight 9.3 Water Loss 8.4 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
 Chlorides 5800 P.P.M. Drill Pipe Length 3226 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 45 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: Surface blow, increased to .5" in bucket.
 2nd Open: No blow.

Recovered 5 ft. of Drilling Mud
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: _____



Time Set Packer(s) 10:25 AM A.M. P.M. Time Started Off Bottom 12:25 PM A.M. P.M. Maximum Temperature 100 Deg F
 Initial Hydrostatic Pressure..... (A) 1754 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 11 P.S.I. to (C) 13 P.S.I.
 Initial Closed In Period..... Minutes 30 (D) 34 P.S.I.
 Final Flow Period..... Minutes 30 (E) 14 P.S.I. to (F) 15 P.S.I.
 Final Closed In Period..... Minutes 30 (G) 23 P.S.I.
 Final Hydrostatic Pressure..... (H) 1753 P.S.I.



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: PUNDSACK311DST4

TIME ON: 8:39 PM
 TIME OFF: 2:17 AM 11-15

Company RAMA Operating Co., Inc. Lease & Well No. Pundsack #311
 Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.

Elevation 1923' KB Formation _____ Effective Pay _____ Ft. Ticket No. F 199
 Date 14 Nov 2013 Sec. 30 Twp. _____ 21 S Range _____ 13 W County Stafford State KANSAS
 Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

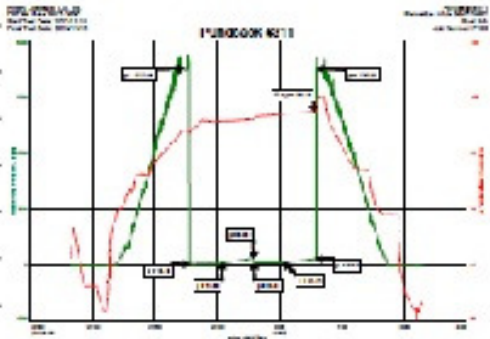
Formation Test No. FOUR Interval Tested from 3647 ft. to 3690 ft. Total Depth 3690 ft.
 Packer Depth 3642 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 3647 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Depth of Selective Zone Set _____

Top Recorder Depth (Inside) _____ 3633 ft. Recorder Number _____ 0062 Cap. _____ 5,000 P.S.I.
 Bottom Recorder Depth (Outside) _____ 3655 ft. Recorder Number _____ 5951 Cap. _____ 5,000 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 54 Drill Collar Length 329 ft. I.D. 2 1/4 in.
 Weight 9.3 Water Loss 8.4 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
 Chlorides 5800 P.P.M. Drill Pipe Length 3293 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 43 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ALL PERF Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Surface blow, increased to 2" in bucket. No blow-back.
 2nd Open: Surface blow, increased to 2" in bucket. No blowback.

Recovered 35 ft. of HOCM 35% oil, 65% mud
 Recovered _____ ft. of 90' GIP
 Recovered _____ ft. of Tool Sample: HOCM 40% oil, 60% mud
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____



Remarks: _____

Time Set Packer(s) 10:33 PM A.M. P.M. Time Started Off Bottom 12:33 AM A.M. P.M. Maximum Temperature 102 Deg F
 Initial Hydrostatic Pressure (A) _____ 1747 P.S.I.
 Initial Flow Period _____ Minutes 30 (B) _____ 11 P.S.I. to (C) _____ 19 P.S.I.
 Initial Closed In Period _____ Minutes 30 (D) _____ 65 P.S.I.
 Final Flow Period _____ Minutes 30 (E) _____ 18 P.S.I. to (F) _____ 22 P.S.I.
 Final Closed In Period _____ Minutes 30 (G) _____ 59 P.S.I.
 Final Hydrostatic Pressure (H) _____ 1747 P.S.I.



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: PUNDSACK311DST5

TIME ON: 9:41 AM
 TIME OFF: 4:30 PM

Company RAMA Operating Co., Inc. Lease & Well No. Pundsack #311
 Contractor Sterling Drilling Rig #5 Charge to RAMA Operating Co., Inc.
 Elevation 1923' KB Formation _____ Arbuckle Effective Pay _____ Ft. Ticket No. F200
 Date 15 Nov 2013 Sec. 30 Twp. _____ 21 S Range _____ 13 W County Stafford State KANSAS
 Test Approved By Josh Austin Diamond Representative Jake Fahrenbruch

Formation Test No. FIVE Interval Tested from 3680 ft. to 4742 ft. Total Depth 3742 ft.

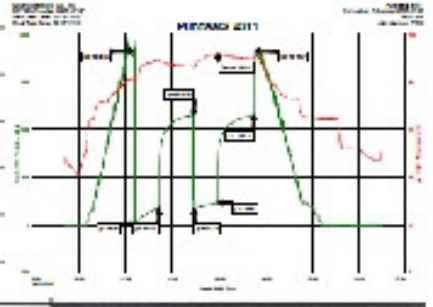
Formation Test No. PVE Interval Tested from 3680 ft. to 4742 ft. Total Depth 5742 ft.
 Packer Depth 3675 ft. Size 6 3/4 in. Packer depth ----- ft. Size 6 3/4 in.
 Packer Depth 3680 ft. Size 6 3/4 in. Packer depth ----- ft. Size 6 3/4 in.
 Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3666 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
 Bottom Recorder Depth (Outside) 3686 ft. Recorder Number 5951 Cap. 5,000 P.S.I.
 Below Straddle Recorder Depth ----- ft. Recorder Number ----- Cap. ----- P.S.I.

Mud Type Chemical Viscosity 54 Drill Collar Length 329 ft. I.D. 2 1/4 in.
 Weight 9.3 Water Loss 8.4 cc. Weight Pipe Length ----- ft. I.D. 2 7/8 in.
 Chlorides 5800 P.P.M. Drill Pipe Length 3326 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 62 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 @ BOB in 14.5 minutes. Surface blow-back.**
 2nd Open: **Strong blow @ BOB in 15.5 minutes. Half-inch blow-back.**

Recovered 50 ft. of Free Oil 100% oil
 Recovered 180 ft. of G&WCOM 10% gas, 30% oil, 20% wtr, 40% mud
 Recovered 240 ft. of OSMCW 2% oil, 88% wtr, 10% mud
 Recovered ---- ft. of Total Recovered Fluid: 470'
 Recovered ---- ft. of Tool Sample: SO&MCW 5% oil, 85% wtr, 10% mud
 Recovered ---- ft. of 60' +/- Gas In Pipe



Remarks: Chlorides: 18,000 PPM
 Gravity: 25 (corrected)
 RW: .32 ohm @ 62 Deg F PH: 7.5

Time Set Packer(s) 11:13 AM A.M. P.M. Time Started Off Bottom 1:43 PM A.M. P.M. Maximum Temperature 110 Deg F
 Initial Hydrostatic Pressure..... (A) 1811 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 19 P.S.I. to (C) 176 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 1152 P.S.I.
 Final Flow Period..... Minutes 30 (E) 174 P.S.I. to (F) 241 P.S.I.
 Final Closed In Period..... Minutes 45 (G) 1146 P.S.I.
 Final Hydrostatic Pressure..... (H) 1811 P.S.I.

ROCK TYPES

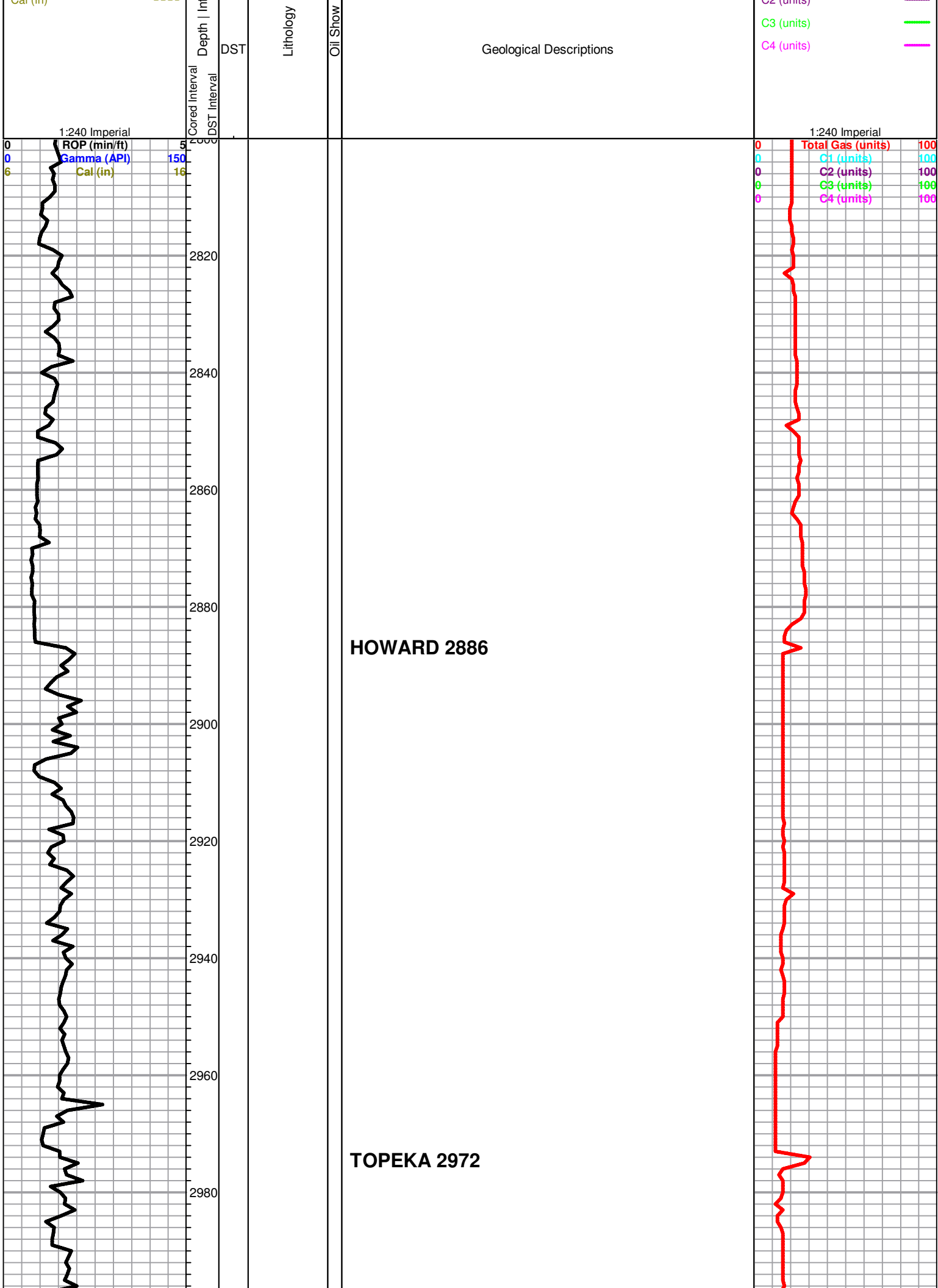
Cht	Lmst fw>	shale, gry	Ss
Dolsec	shale, grn	Carbon Sh	

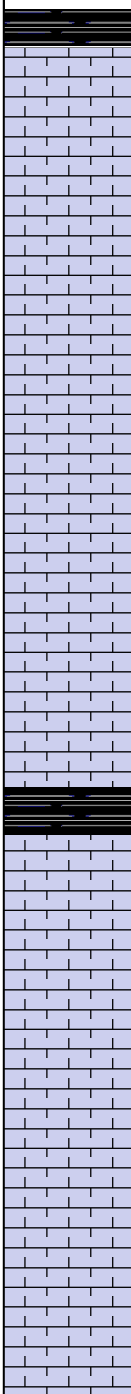
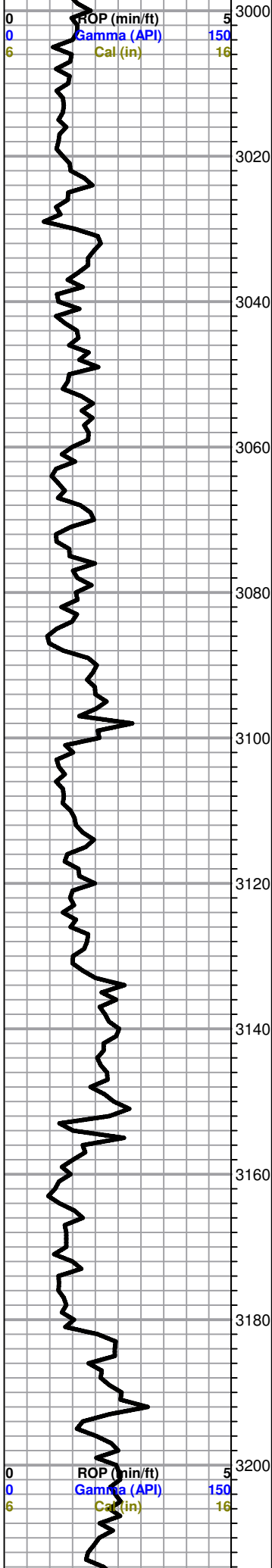
OTHER SYMBOLS

DST

	DST Int
	DST alt
	Core
	tail pipe

Curve Track #1						TG, C1 - C5
ROP (min/ft)						Total Gas (units)
Gamma (API)		Intervals				C1 (units)
Col (in)						C2 (units)





(wet and dry samples started)

black carboniferous shale

Limestone; grey-cream-tan, fine-medium xln, granular in part, slightly fossiliferous, no shows

Limestone; tan-cream, fine xln, dense, cherty, poor porosity, plus white chalk

Limestone; cream-lt. grey, fine xln, chalky, fossiliferous, granular, no shows

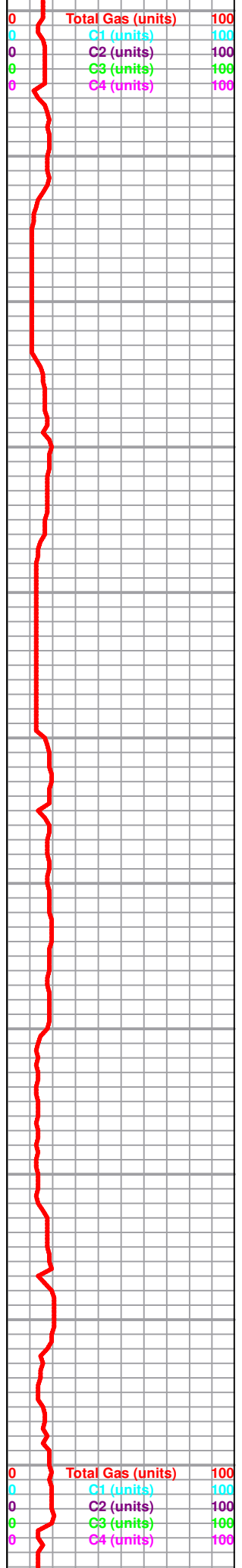
Limestone; as above

black carboniferous shale

Limestone; cream-buff, fine xln, dense, cherty, poor visible porosity, plus grey-opaque, boney, Chert

Limestone; tan-cream, fine xln, dense, cherty, no visible porosity, no shows

Limestone; as above, plus grey boney Chert



3220
3240
3260
3280
3300
3320
3340
3360
3380
3400
3420

Limestone; cream, fine xln, few granular pieces, no shows

HEEBNER 3251 (-1328)

black carboniferous shale

TORONTO 3272 (-1349)

Limestone; white-lt. grey-cream, fine xln, chalky, glauconitic, no shows

DOUGLAS 3288 (-1365)

Shale; grey, maroon, green, micaceous

Shale; as above, silty in part, soft/gummy

Shale; grey-greyish green, micaceous in part, few silty pieces

Shale; grey-green, soft

BROWN LIME 3374 (-1451)

Limestone; tan-brown, fine xln, dense, cherty, few fossiliferous pieces

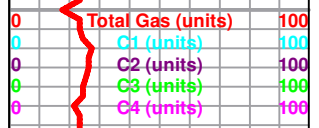
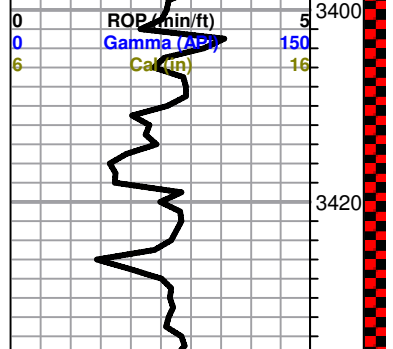
LANSING 3386 (-1463)

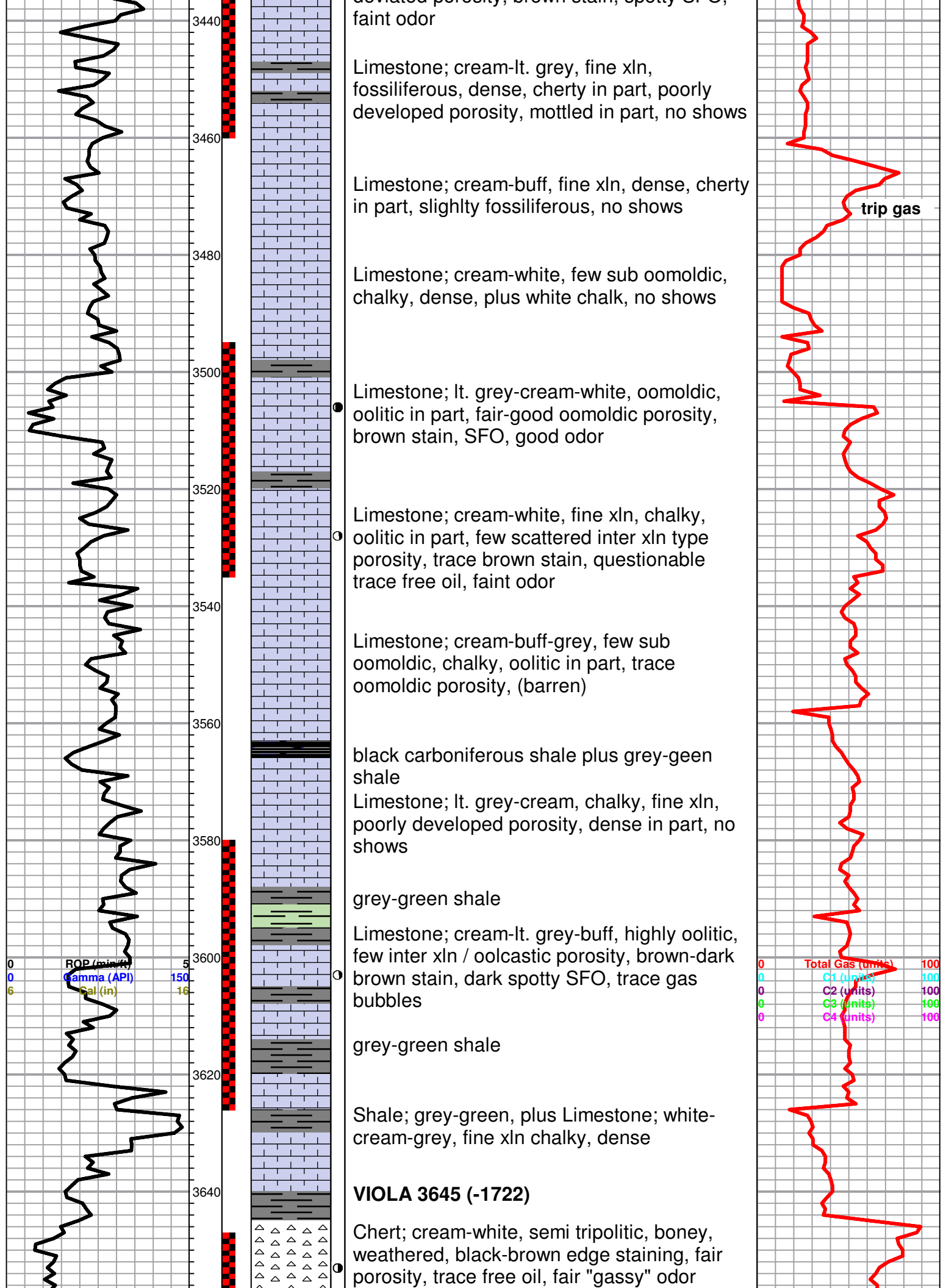
Limestone; grey-cream, fine xln, dense, cherty, poorly developed porosity, no shows

Limestone; cream-lt. grey, fine xln, dense, sparry calcite inclusions, few inter xln porosity, trace brown stain, spotty SFO, faint odor

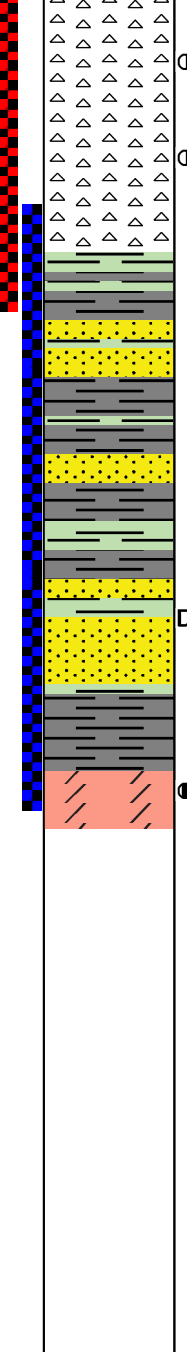
Limestone; cream, highly oolitic, poorly deviated porosity, brown stain, spotty SFO

KB 1923





3660
3680
3700
3720
3740
3760
3780



● Chert; tan-cream, boney, semi tripolitic in part, black-brown edge staining, few weathered pieces, good staining, SFO, fair "gassy" odor
● Chert as above

SIMPSON SHALE 3685 (-1762)

blueish green waxey shale
grey-green-maroon shale, waxey in part
Shale; as above, plus Sand; cream-clear, calcareous, no shows

as above

D Sand; grey-buff-clear, medium grained, sub angular, sub rounded, friable, black stain, trace free oil, faint odor

ARBUCKLE 3739 (-1816)

● Dolomite; grey, fine-medium xln, few rhombic, fair inter xln porosity, dark brown stain, SFO, good odor

ROTARY TOTAL DEPTH 3742 (-1819)



Customer Rama Operating Co., Inc.	Lease No.	Date
Lease Pundsack	Well # 311	11-9-13
Field Order # 9398	Station Pratt, Kansas	Casing 8 7/8" 23Lb.
Type Job C.N.W. - B Surface	Formation	Depth 832 Feet
		County Stafford
		State Kansas
		Legal Description 30-215-13W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 8 7/8"	Tubing Size 2 3/4"	Shots/Ft 175 sacks	From	To	12 Lb./Gal.	Rate 14.49 Gal./st.	Press 47 CU.F.	ISIP 5 Min.
Depth 832 Feet	Depth	From	To	150 sacks	60/40 Poz with	Min		10 Min.
Volume 52.4 Bbl.	Volume	From	To	28 Gal.	38 Calcium Chloride	Avg .25 Lb./st. cell plate		15 Min.
Max Press 350 S.I.	Max Press	From	To	4.8 Lb./Gal.	5.18 Gal./st.	HHF Used 1.2 CU.F.T.		Annulus Pressure
Well Connection 1 1/2" gal. container	Annulus Vol.	From	To	Flush	52 Bbl. Fresh Water	Gas Volume		Total Load
Plug Depth 818 Feet	Packer Depth	From	To					

Customer Representative Allen	Station Manager Tevin Gordley	Treater Clarence R. Messick
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Service Units	37,216	33,708	20,920	70,959	19,918
Driver Names	Messick	Namby	Young		

Time P.M.	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
4:00					Truckson location and hold safety meeting.
5:30					Sterling Drilling start to run Weld on Guides hoe, Shoe Joint with Baffle Plate screwed into collar and a total of 13 Joints new 23Lb./Ft. 8 7/8" casing.
6:30					Casing in well. Circulate for 5 minutes.
6:45	300			5	Start Fresh water Pre-Flush.
	300		10	6	Start Mixing 175 sacks A-CON Blend cement
7:06	250		87	5	Start Mixing 150 sacks 60/40 Poz Blend cement
	-0		119		stop pumping. Shut in well. Release Top Rubber Plug. Open well.
7:15	150			5	Start Fresh water Displacement.
7:30	350		52		Plug down. Did not circulate cement
					Shut in well.
					Wash up pump truck
					Tag cement 36 Feet down from surface.
8:00					Order 1" cement.
10:45					Cement on location Run 2 Joints of 1" Pipe.
10:50		-0		3	Start Mixing common cement
			5		cement circulated to surface.
					Pull 1" Tubing out of well.
					Wash up pump truck.
					Job Complete.

