

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas  DH  EOR

OG  GSW

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 EOR  Conv. to SWD  
 Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

1. Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
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>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Younger Energy Company
Well Name	GINGRICH UNIT #1-20
Doc ID	1459101

All Electric Logs Run

Dual Induction
Compensated Density/Neutron PE
Micro
Sonic

Form	ACO1 - Well Completion
Operator	Younger Energy Company
Well Name	GINGRICH UNIT #1-20
Doc ID	1459101

Tops

Name	Top	Datum
Topeka	3132	-1086
Queen Hill	3402	-1356
Heebner	3528	-1482
Toronto	3550	-1504
Douglas	3568	-1522
Brown Lime	3661	-1615
Lansing	3667	-1621
H zone	3799	-1753
Base KC	3916	-1870
Conglomerate	4009	-1963
Simpson	4104	-2058
Arbuckle	4172	-2126





Scale 1:240 Imperial

Well Name: Gingrich #1-20  
Surface Location: Sec. 20 - T23S - R15W  
Bottom Location:  
API: 15-145-21847-0000  
License Number: 30705  
Spud Date: 2/21/2019 Time: 6:30 PM  
Region: Pawnee County  
Drilling Completed: 3/1/2019 Time: 4:30 PM  
Surface Coordinates: 2500' FSL & 400' FWL  
Bottom Hole Coordinates:  
Ground Elevation: 2038.00ft  
K.B. Elevation: 2046.00ft  
Logged Interval: 3200.00ft To: 4205.00ft  
Total Depth: 4205.00ft  
Formation: Arbuckle  
Drilling Fluid Type: Chemical/Fresh Water Gel

#### OPERATOR

Company: Younger Energy Company  
Address: 9415 E. Harry St.  
Suite 403, Bldg. 400  
Wichita, KS 67207  
Contact Geologist:  
Contact Phone Nbr: 316-681-2542  
Well Name: Gingrich #1-20  
Location: Sec. 20 - T23S - R15W  
API: 15-145-21847-0000  
Pool: Kansas  
State: Kansas  
Field: Benson NE  
Country: USA

#### SURFACE CO-ORDINATES

Well Type: Vertical  
Longitude: -99.00333  
Latitude: 38.03610  
N/S Co-ord: 2500' FSL  
E/W Co-ord: 400' FWL

#### LOGGED BY

***Keith Reavis***  
*Consulting Geologist*

Company: Keith Reavis, Inc.  
Address: 3420 22nd Street  
Great Bend, KS 67530  
Phone Nbr: 620-617-4091  
Logged By: KLG #136 Name: Keith Reavis

#### CONTRACTOR

Contractor: Duke Drilling Company  
Rig #: 2  
Rig Type: mud rotary  
Spud Date: 2/21/2019 Time: 6:30 PM  
TD Date: 3/1/2019 Time: 4:30 PM  
Rig Release: Time:

## ELEVATIONS

K.B. Elevation: 2046.00ft  
K.B. to Ground: 8.00ft

Ground Elevation: 2038.00ft

## NOTES

Due to low structural position, lack of testable shows and negative drill stem tests, it was determined that the Gingrich #1-20 was non-commercial and the operator elected to plug the well as a dry test.

A Bloodhound gas detection system operated by Bluestem Labs was employed during the drilling of this well. ROP and gas data from the Bloodhound, as well as gamma ray and caliper curves from the electrical log suite were imported into this log. All log formations tops were generally 2 to 3 ft. higher than measured driller tops. The drill time was not shifted to provide an exact match to the logs but left as recorded in the field.

Samples were saved and will be available for review at the Kansas Geological Survey Well Sample Library located in Wichita, KS.

Respectfully submitted,  
Keith Reavis

## daily drilling report

DATE	7:00 AM DEPTH	REMARKS
02/25/2019	3184	Geologist Keith Reavis on location @ 1225 hrs, 3280 ft, drilling ahead Topeka section, bit going bad, TOH @ 3305', TIH w/new bit, resume drilling
02/26/2019	3511	drilling ahead, Heebner, Toronto, shut down for repairs, replace hydromatic resume drilling, Douglas
02/27/2019	3750	drilling ahead, Lansing/KC
02/28/2019	4045	drilling ahead, conglomerate section, Simpson, show in Simpson Sand warrants test, short trip, TOH w/bit, in w/tools, conducting DST #1
03/01/2019	4137	complete DST #1, successful test, TOH w/tools, TIH w/bit, resume drilling TD @ 4205 ft 1430 hrs, etch, TOH for logs, conduct and complete open hole logging operations, geologist off loc @ midnight

## well comparison sheet

DRILLING WELL					COMPARISON WELL			
Gingrich 1-20 2500' FSL & 400' FWL Sec 20-T23S-R15W					Alpine - Cossman #1 SE SE NW Sec 20-T23S-R15W			
2046 KB					2051 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log
Topeka	3133	-1087	3132	-1086	3128	-1077	-10	-9
Queen Hill	3405	-1359	3402	-1356	3390	-1339	-20	-17
Heebner	3531	-1485	3528	-1482	3514	-1463	-22	-19
Toronto	3552	-1506	3550	-1504	3535	-1484	-22	-20
Douglas	3574	-1528	3568	-1522	3556	-1505	-23	-17
Brown Lime	3663	-1617	3661	-1615	3644	-1593	-24	-22
Lansing	3671	-1625	3667	-1621	3653	-1602	-23	-19
H zone	3802	-1756	3799	-1753	3780	-1729	-27	-24
Base KC	3920	-1874	3916	-1870	3900	-1849	-25	-21
Conglomerate	4012	-1966	4009	-1963	4004	-1953	-13	-10
Simpson	4104	-2058	4104	-2058	4079	-2028	-30	-30
Arbuckle	4172	-2126	4172	-2126	4152	-2101	-25	-25
Total Depth	4205	-2159	4204	-2158	4155	-2104	-55	-54



Company: Younger Energy

SEC: 20 TWN: 23S RNG: 15W  
County: PAWNEE  
State: Kansas



# Company

## Lease: Gingrich Unit #1-20

State: Kansas  
 Drilling Contractor: Duke Drilling  
 Company, Inc - Rig 2  
 Elevation: 2038 GL  
 Field Name: Benson NE  
 Pool: Infield  
 Job Number: 315

**Operation:**  
 Uploading recovery &  
 pressures

**DATE**  
 February  
**28**  
 2019

**DST #1**    **Formation: Simpson Sand**    **Test Interval: 4104 - 4137'**    **Total Depth: 4137'**  
 Time On: 20:34 02/28    Time Off: 06:07 03/01  
 Time On Bottom: 23:27 02/28    Time Off Bottom: 03:07 03/01

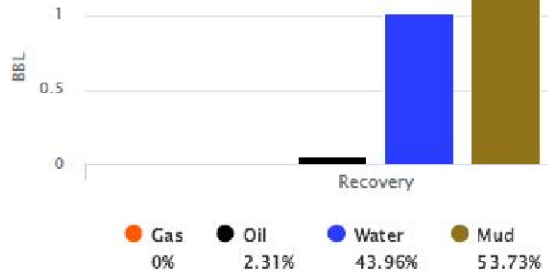
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
Foot	BBL/S					
3	0.0387	O	0	100	0	0
113	1.4577	SLOCSLWCM	0	1	15	84
63	0.8127	SLMCW	0	0	98	2

Total Recovered: 179 ft  
 Total Barrels Recovered: 2.3091

Reversed Out  
 NO

Initial Hydrostatic Pressure	2030	PSI
Initial Flow	14 to 30	PSI
Initial Closed in Pressure	1341	PSI
Final Flow Pressure	31 to 83	PSI
Final Closed in Pressure	1328	PSI
Final Hydrostatic Pressure	2031	PSI
Temperature	112	°F
Pressure Change Initial Close / Final Close	1.0	%

### Recovery at a glance



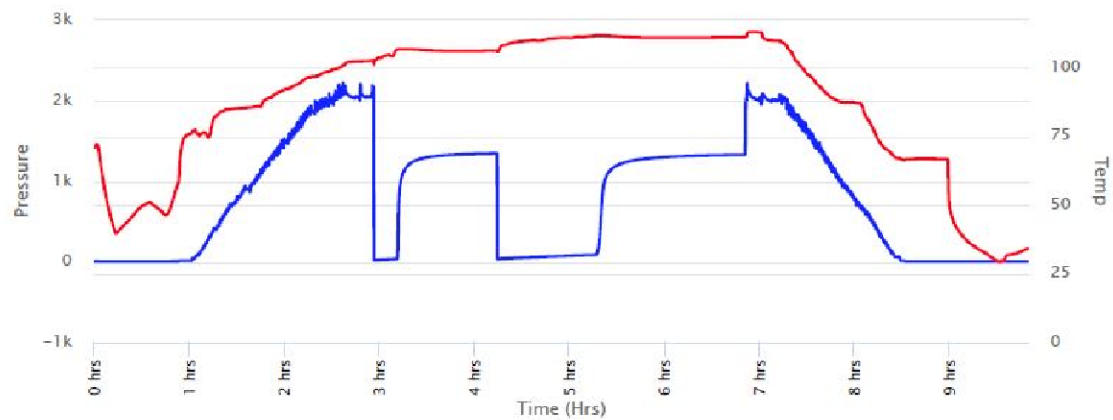
GIP cubic foot volume: 0

**DATE**  
 February  
**28**  
 2019

**DST #1**    **Formation: Simpson Sand**    **Test Interval: 4104 - 4137'**    **Total Depth: 4137'**  
 Time On: 20:34 02/28    Time Off: 06:07 03/01  
 Time On Bottom: 23:27 02/28    Time Off Bottom: 03:07 03/01

Electronic Volume Estimate:	<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
108"	Minutes: 10	Minutes: 60	Minutes: 60	Minutes: 90
	Current Reading:	Current Reading:	Current Reading:	Current Reading:
	3.3" at 10 min	0" at 60 min	6.7" at 60 min	0" at 90 min
	Max Reading: 3.3"	Max Reading: 0"	Max Reading: 6.7"	Max Reading: 0"

Inside Recorder



— Press(Psig)    — Temp(F)

### ROCK TYPES

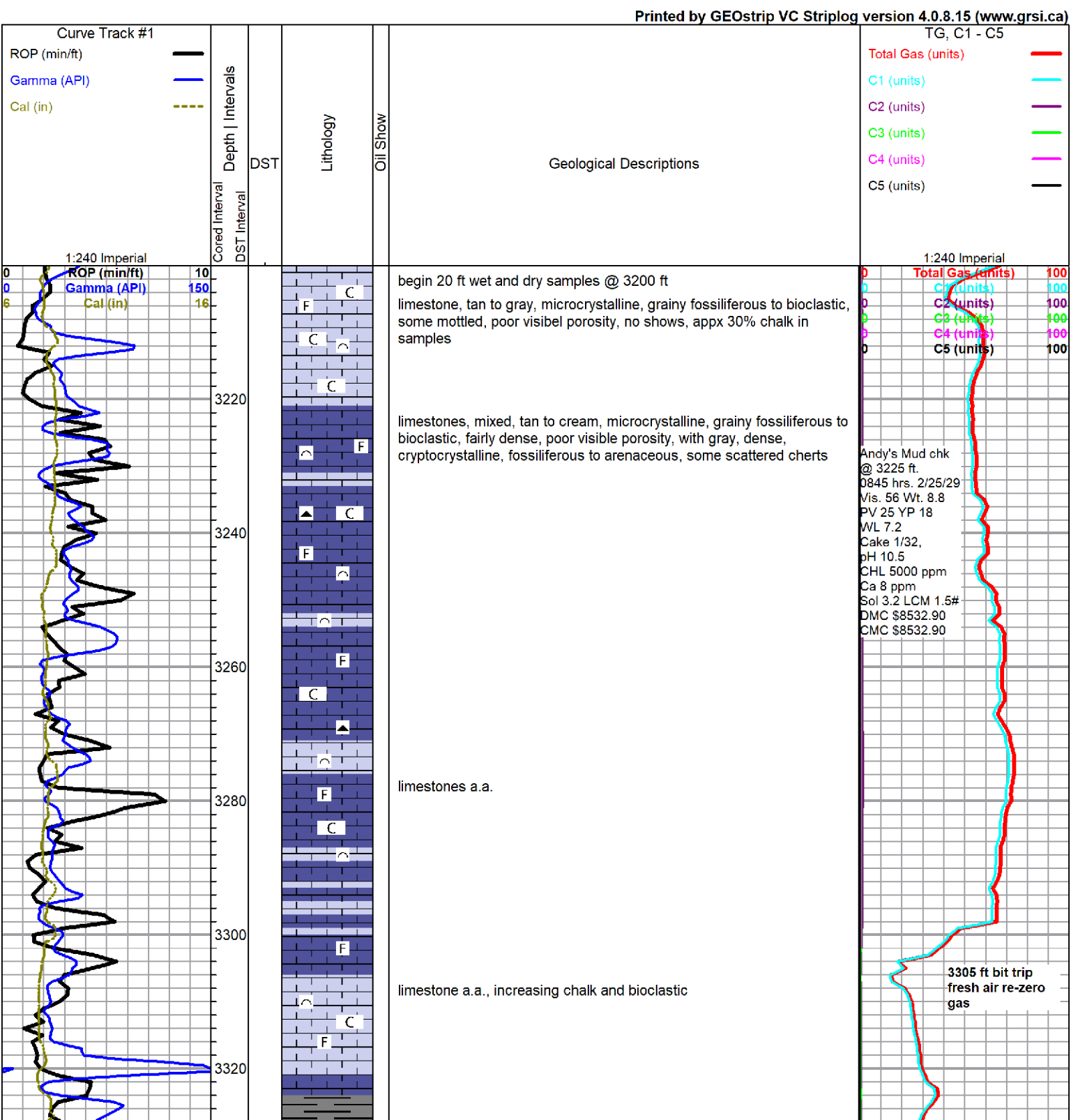
	Cht vari		Dolsec		shale, grn		shale, red
	Chtcong		Lmst fw<7		shale, gry		Ss
	Dolprim		Lmst fw>7		Carbon Sh		

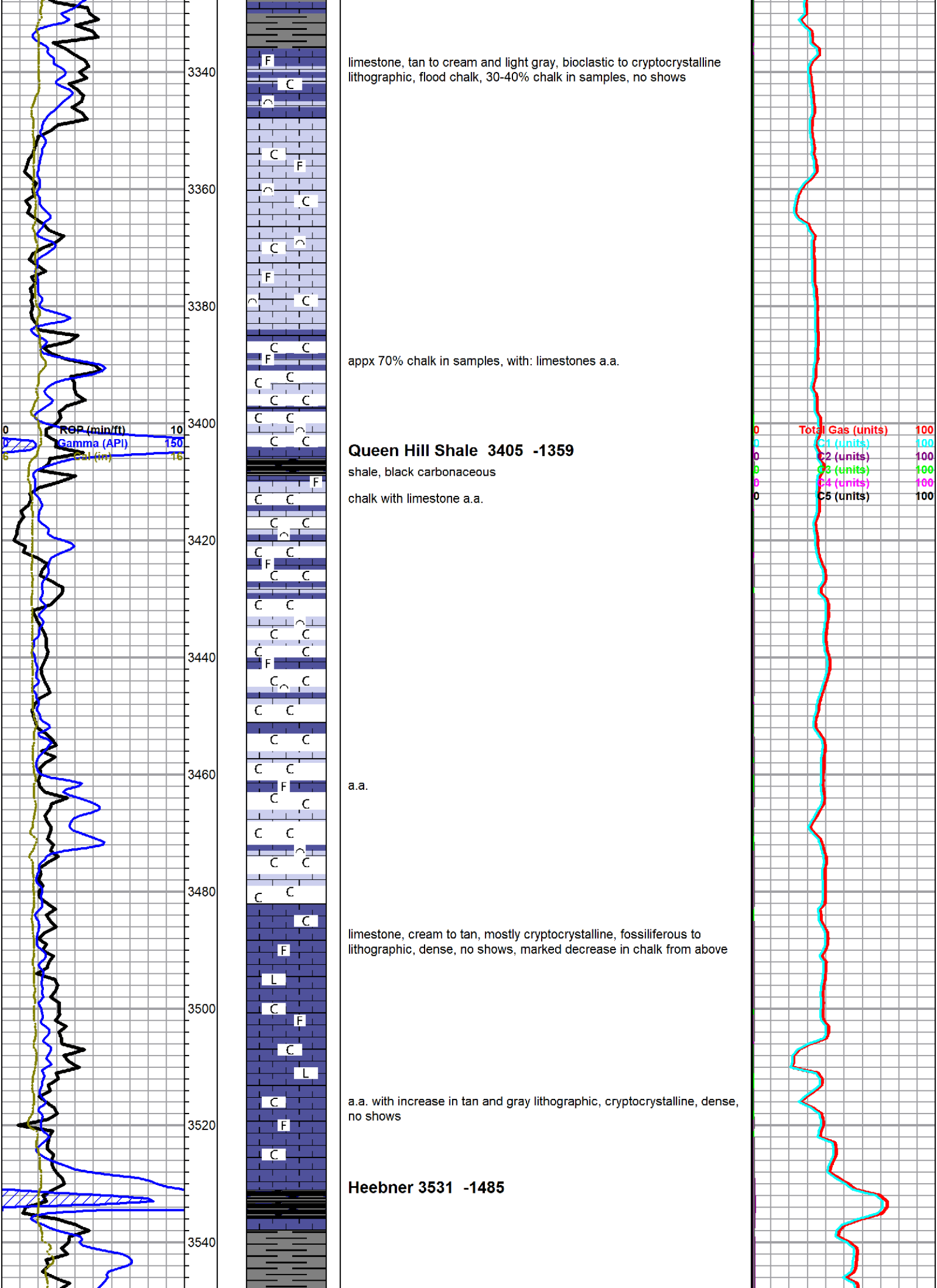
### ACCESSORIES



<b>MINERAL</b>	<b>FOSSIL</b>	<b>STRINGER</b>	<b>TEXTURE</b>
⊥ Calcareous	∩ Bioclastic or Fragmental	■ Limestone	C Chalky
▲ Chert, dark	F Fossils < 20%	■ Sandstone	L Lithogr
∩ Glauconite	⊕ Oolite	■ Shale	
■ Heavy, dark minerals	⊗ Pellets	■ green shale	
P Pyrite		■ red shale	
△ Chert White			

OTHER SYMBOLS	
<b>Oil Show</b>	<b>DST</b>
● Good Show	■ DST Int
● Fair Show	■ DST alt
● Poor Show	■ Core
○ Spotted or Trace	■ tail pipe
○ Questionable Stn	
D Dead Oil Stn	
■ Fluorescence	
* Gas	





limestone, tan to cream and light gray, bioclastic to cryptocrystalline lithographic, flood chalk, 30-40% chalk in samples, no shows

appx 70% chalk in samples, with: limestones a.a.

**Queen Hill Shale 3405 -1359**

shale, black carbonaceous

chalk with limestone a.a.

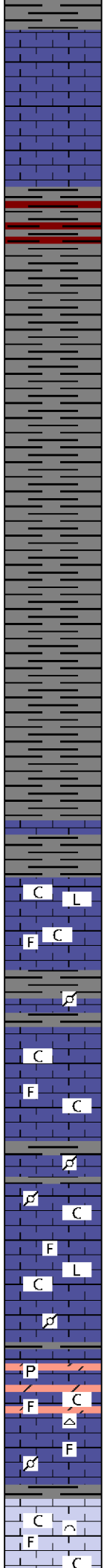
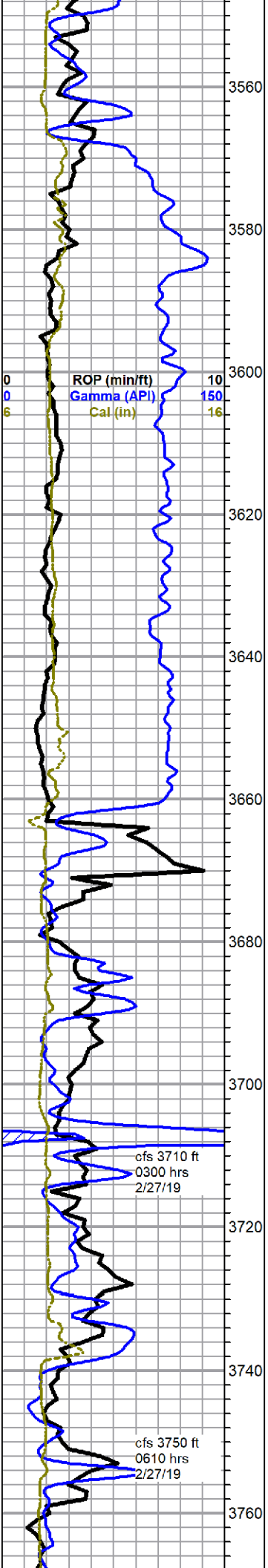
a.a.

limestone, cream to tan, mostly cryptocrystalline, fossiliferous to lithographic, dense, no shows, marked decrease in chalk from above

a.a. with increase in tan and gray lithographic, cryptocrystalline, dense, no shows

**Heebner 3531 -1485**

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100



**Toronto 3552 -1506**

limestone, white to light gray, crypto-microcrystalline, fossiliferous, chalky, no visible porosity, no shows, abundant chalk

**Douglas 3574 -1528**

red and gray shales, slight red wash

grading to shale, gray, soft and mushy, with gray dense shales, heavy gray wash

a.a.

**Brown Lime 3663 -1617**

limestone, brown to tan, micro-cryptocrystalline, fossiliferous, some large clasts, dense, no shows

**Lansing 3671 -1625**

limestone, white, mostly cryptocrystalline, lithographic to chalky fossiliferous, trace oolitic, poor visible porosity, no shows, abundant chalk

limestone, gray/white/black mottled, pelletal to fossiliferous, chalky, no visible porosity, abundant chalk, no shows, trace gray chert

limestone, white to light gray, cryptocrystalline, fossiliferous, some chalky, abundant chalk in samples, poor visible porosity, no shows

limestone, gray and tan mottled, very pelletal and fossiliferous, chalky, no visible porosity, no shows

limestone, white to light gray, cryptocrystalline, fossiliferous to lithographic, some chalky, abundant chalk in samples, poor visible porosity, no show

mix of mottled pelletal and chalky white limestones a.a. with influx brown microcrystalline dolomite, poor visible porosity, no shows, trace chert and pyrite

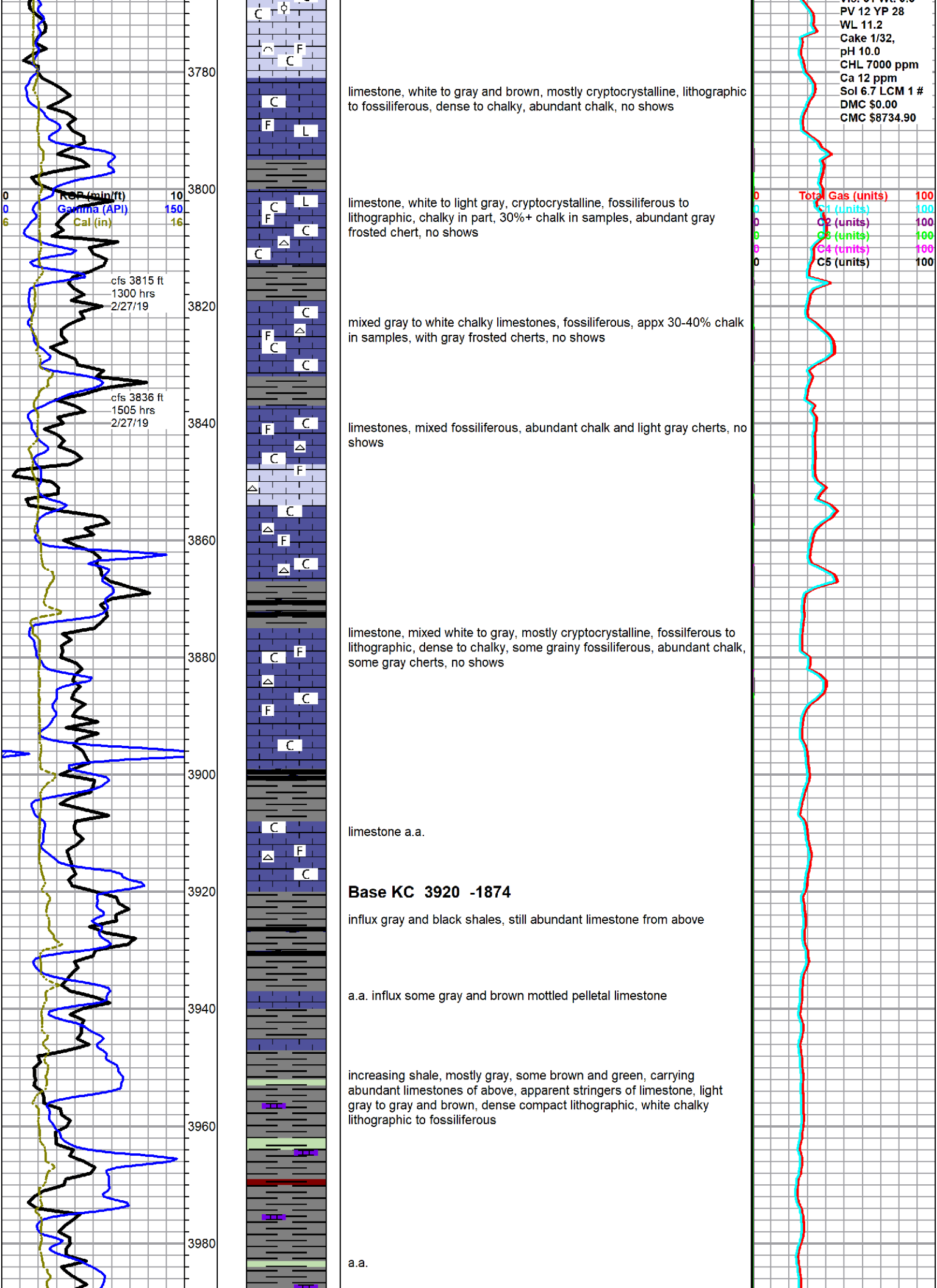
limestone, gray to white, chalky pelletal, no shows

limestone, white to cream and tan, chalky, bioclastic to fossiliferous, trace oolitic, appx. 30-40% chalk, no shows

Andy's Mud chk @ 3556 ft. 0845 hrs. 2/26/29 Vis. 58 Wt. 9.2 PV 14 YP 26 WL 10.8 Cake 1/32, pH 10.0 CHL 6000 ppm Ca 10 ppm Sol 6.0 LCM 1 # DMC \$202.00 CMC \$8734.90

Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100  
 C5 (units) 100

Andy's Mud chk @ 3760 ft. 0930 hrs. 2/27/29 Vis. 61 Wt 9.3



PV 12 YP 28  
 WL 11.2  
 Cake 1/32,  
 pH 10.0  
 CHL 7000 ppm  
 Ca 12 ppm  
 Sol 6.7 LCM 1 #  
 DMC \$0.00  
 CMC \$8734.90

0  
 0  
 6  
 KOB (min/ft)  
 Gamma (API)  
 Cal (in)

cfs 3815 ft  
 1300 hrs  
 2/27/19

cfs 3836 ft  
 1505 hrs  
 2/27/19

Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100  
 C5 (units) 100

limestone, white to gray and brown, mostly cryptocrystalline, lithographic to fossiliferous, dense to chalky, abundant chalk, no shows

limestone, white to light gray, cryptocrystalline, fossiliferous to lithographic, chalky in part, 30%+ chalk in samples, abundant gray frosted chert, no shows

mixed gray to white chalky limestones, fossiliferous, appx 30-40% chalk in samples, with gray frosted cherts, no shows

limestones, mixed fossiliferous, abundant chalk and light gray cherts, no shows

limestone, mixed white to gray, mostly cryptocrystalline, fossiliferous to lithographic, dense to chalky, some grainy fossiliferous, abundant chalk, some gray cherts, no shows

limestone a.a.

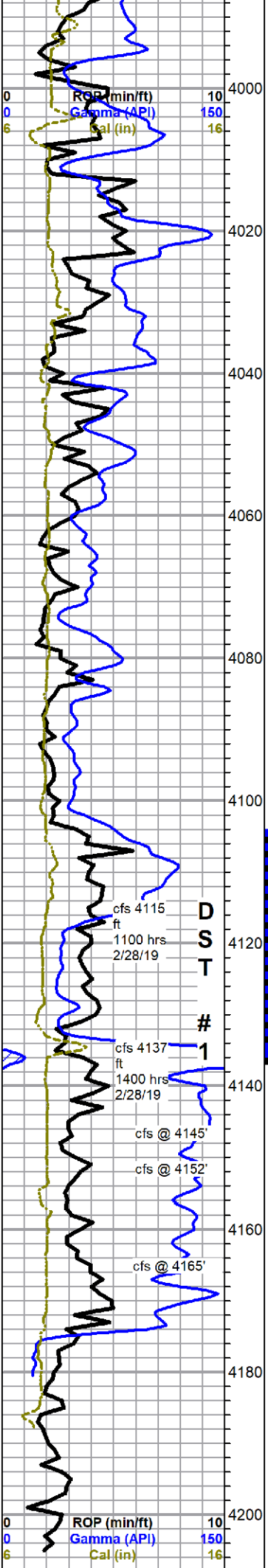
**Base KC 3920 -1874**

influx gray and black shales, still abundant limestone from above

a.a. influx some gray and brown mottled pelletal limestone

increasing shale, mostly gray, some brown and green, carrying abundant limestones of above, apparent stringers of limestone, light gray to gray and brown, dense compact lithographic, white chalky lithographic to fossiliferous

a.a.



limestone a.a.

### Conglomerate 4012 -1966

4020 sample, limestones and shale a.a., picking up some red shale with red wash in sample, some olive shales, orange and yellow cherts

by 4060 sample, flood cherts, mixed color with orange and yellow predominant red shale with other mixed shale and limestone, heavy red wash in samples

grades to primarily chert, mixed color, mostly fresh and sharp, trace black stain, few scattered black stained tripolitic, no odor, no free oil, some very fine well rounded quartz sand grains in tray bottom

a.a. with marked influx pale green and lavender cherts

### Simpson Shale 4104 -2058

60 min sample, flood green mushy clays, some green waxy shale

green and maroon shales, stringers dirty olive/yellow sandstones, no shows

### Simpson Sand 4130 -2084 (log top 4118 -2072)

4137 sample - sandstone, white, quartz grains, white limey infill, very fine grain, well rounded, well sorted, calcareous, some dirty sandstones, yellow to brown to gray, well cemented, barren, few clusters light gray clean quartz sandstone a.a., light stain, some intergrain oil in place, slight show heavy black free oil and on break, no odor, no fluorescence, slow milky streaming cut - flood chalk in samples - 30 min marked decrease in chalk, slight increase in show, 60 min, a.a., decrease show

4145 cfs sandstone, gray, very fine grain, fair sorting, round to sub angular, friable, dark blocky mineral infill (biotite or mica) with glauconite, no shows

4152 cfs, back into green, maroon and gray simp shale

4165 cfs shale a.a., some sand as @ 4145 sample

sandstone, gray, very fine grain, fair sorting, round to sub angular, dark blocky mineral intergrain fill (biotite or mica), well cemented and dense no shows

### Arbuckle 4172 -2126

dolomite, light gray to tan, microcrystalline, rhombic to recrystallized to sub-sucrosic, some scattered porosity, mostly dense, abundant caliche/chalk, some translucent to light gray frosted cherts, no shows or odor

TD 4205 ft @ 1630 hrs 3/1/19  
ELI log TD 4204 ft  
complete logging operations 2345 hrs 3/1/19

Total Gas (units) 100  
C1 (units) 100  
C2 (units) 100  
C3 (units) 100  
C4 (units) 100  
C5 (units) 100

Andy's Mud chk  
@ 4093 ft.  
0930 hrs. 2/28/29  
Vis. 59 Wt. 9.4  
PV 10 YP 22  
WL 10.4  
Cake 1/32,  
pH 10.0  
CHL 7000 ppm  
Ca 10 ppm  
Sol 7.3LCM 1 #  
DMC \$610.25  
CMC \$9345.15

Total Gas (units) 100  
C1 (units) 100  
C2 (units) 100





**Company: Younger Energy Company**  
**Lease: Gingrich Unit #1-20**

SEC: 20 TWN: 23S RNG: 15W  
 County: PAWNEE  
 State: Kansas  
 Drilling Contractor: Duke Drilling Company, Inc - Rig 2  
 Elevation: 2038 GL  
 Field Name: Benson NE  
 Pool: Infield  
 Job Number: 315

**Operation:**  
 Uploading recovery & pressures

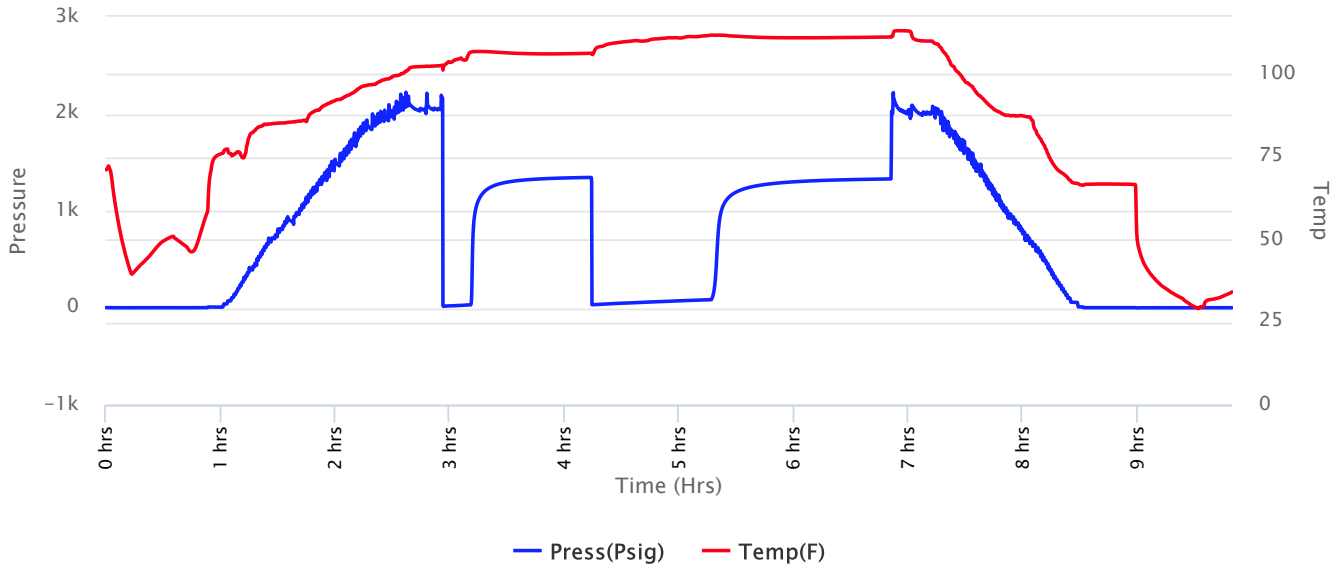
**DATE**  
 February  
**28**  
 2019

**DST #1 Formation: Simpson Sand Test Interval: 4104 - 4137' Total Depth: 4137'**  
 Time On: 20:34 02/28 Time Off: 06:07 03/01  
 Time On Bottom: 23:27 02/28 Time Off Bottom: 03:07 03/01

Electronic Volume Estimate:  
 108'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 10	Minutes: 60	Minutes: 60	Minutes: 90
Current Reading: 3.3" at 10 min	Current Reading: 0" at 60 min	Current Reading: 6.7" at 60 min	Current Reading: 0" at 90 min
Max Reading: 3.3"	Max Reading: 0"	Max Reading: 6.7"	Max Reading: 0"

Inside Recorder





**Company: Younger Energy Company**  
**Lease: Gingrich Unit #1-20**

SEC: 20 TWN: 23S RNG: 15W  
 County: PAWNEE  
 State: Kansas  
 Drilling Contractor: Duke Drilling Company, Inc - Rig 2  
 Elevation: 2038 GL  
 Field Name: Benson NE  
 Pool: Infield  
 Job Number: 315

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 February  
**28**  
 2019

**DST #1**      **Formation: Simpson Sand**      **Test Interval: 4104 - 4137'**      **Total Depth: 4137'**  
 Time On: 20:34 02/28      Time Off: 06:07 03/01  
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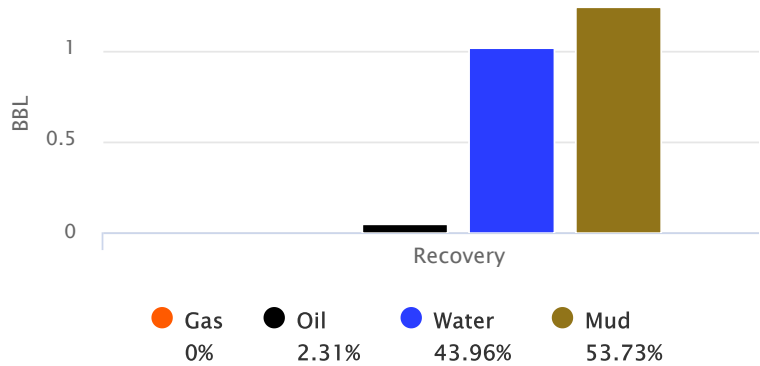
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
3	0.0387	O	0	100	0	0
113	1.4577	SLOCSLWCM	0	1	15	84
63	0.8127	SLMCW	0	0	98	2

Total Recovered: 179 ft  
 Total Barrels Recovered: 2.3091

Reversed Out  
 NO

Initial Hydrostatic Pressure	2030	PSI
Initial Flow	14 to 30	PSI
<b>Initial Closed in Pressure</b>	<b>1341</b>	<b>PSI</b>
Final Flow Pressure	31 to 83	PSI
<b>Final Closed in Pressure</b>	<b>1328</b>	<b>PSI</b>
Final Hydrostatic Pressure	2031	PSI
Temperature	112	°F
Pressure Change Initial Close / Final Close	1.0	%

**Recovery at a glance**



GIP cubic foot volume: 0











GLOBAL OIL FIELD SERVICES, LLC **RECEIVED MAR 5 2019**

# Invoice

24 S. Lincoln  
RUSSELL, KS 67665

Date	Invoice #
3/4/2019	0013335

<b>Bill To</b>
YOUNGER ENERGY COMPANY 9415 E HARRY ST STE 403 BLDG 400 WICHITA, KS 67207

P.O. No.	Terms	Project
GINGRICH#1-20	Due on receipt	

Quantity	Description	Rate	Amount
320	COMMON CEMENT	16.50	5,280.00
80	POZ	9.50	760.00
14	CALCIUM-CHLORIDE	80.00	1,120.00
8	BENTONITE GEL	30.00	240.00
422	HANDLING	1.90	801.80
	BULK MILEAGE	1,400.00	1,400.00
1	TRI-PLEX PUMP CHARGE FOR SURFACE	850.00	850.00
40	HEAVY EQUIPMENT. ONE WAY	6.50	260.00
40	LMV- ONE WAY	2.75	110.00
1	8 5/8 BAFFLE PLATE	103.00	103.00
1	8 5/8 RUBBER PLUG	165.00	165.00
	15% DISCOUNT IF PAID WITHIN 15 DAYS OF INVOICE PAWNEE CO SALES TAX	8.50%	0.00
	<i>- 1663.47</i>		
	<i>+ 131</i> <i>Cement surface csq</i>		
			<i>9426.33</i>

Thank you for your business.

Phone #	Fax #
785-445-3525	785-445-3526

**Total** ~~\$11,089.80~~

DR

*Gingrich #1-20*  
*40*

