

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1251528
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: _____

1251528

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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Younger Energy Company
Well Name	Bauer "Y" 2-27
Doc ID	1251528

All Electric Logs Run

Sonic
Frac Finder
Dual Induction
Micro
Compensated Density/Neutron PE
Geologist Report
Tracer Survey
Cement Bond
Computer Processed Interpretation

Form	ACO1 - Well Completion
Operator	Younger Energy Company
Well Name	Bauer "Y" 2-27
Doc ID	1251528

Tops

Name	Top	Datum
Queen Hill	3251	-1286
Heebner	3353	-1388
Douglas	3386	-1421
Brown Lime	3461	-1496
Lansing	3470	-1505
Base Kansas City	3707	-1742
Conglomerate	3778	-1813
Viola	3806	-1841
Simpson	3839	-1874
Arbuckle	3894	-1929

Form	ACO1 - Well Completion
Operator	Younger Energy Company
Well Name	Bauer "Y" 2-27
Doc ID	1251528

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3884'-3888'	Cement Squeeze 50 sxs	
4	3884'-3885'		
	CIBP		3860'
4	3474'-80',3502'- 08',3542'-48'	1650 gal. 15% NEFE acid	
4	3596'-3604',3620'-26'	1100 gal. 15% NEFE acid	
4	3692'-98'	250 gal. 15% NEFE	

ALLIÉ

OIL & GAS SERVICES, LLC

PO Box 93999
Southlake, TX 76092

Voice: (817) 546-7282
Fax: (817) 246-3361

INVOICE

Invoice Number: 148297
Invoice Date: Jan 20, 2015
Page: 1

RECEIVED FEB 2 2015

Federal Tax I.D.#: 20-8651475

Bill To:
Younger Energy Co. 9415 E. Harry St. STE #403 Wichita, KS 67207-5083

Customer ID	Field Ticket #	Payment Terms	
Youn	63742	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Great Bend	Jan 20, 2015	2/19/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Bauer Y #2-27		
150.00	CEMENT MATERIALS	Class A Common	17.90	2,685.00
423.00	CEMENT MATERIALS	Chloride	1.10	465.30
588.00	CEMENT MATERIALS	Chloride	1.10	646.80
225.00	CEMENT MATERIALS	65/35/6% Gel Blend	19.88	4,473.00
57.00	CEMENT MATERIALS	Flo Seal	2.97	169.29
418.33	CEMENT SERVICE	Cubic Feet Charge	2.48	1,037.46
179.58	CEMENT SERVICE	Ton Mileage Charge	2.75	493.85
1.00	CEMENT SERVICE	Surface	2,058.75	2,058.75
10.00	CEMENT SERVICE	Pump Truck Mileage	7.70	77.00
1.00	CEMENT SERVICE	Manifold Rental	275.00	275.00
10.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	44.00
3.00	EQUIPMENT SALES	8-5/8 Centralizer	75.00	225.00
1.00	EQUIPMENT SALES	8-5/8 Rubber Plug	131.00	131.00
1.00	EQUIPMENT SALES	8-5/8 AFU Insert	530.00	530.00
1.00	CEMENT SUPERVISOR	Kevin Eddy		
1.00	OPERATOR ASSISTANT	Brian Lang		

DP
180211 cement 8-5/8" SURFACE CSG
w/225 SXS 65/35, 6% GEL, 3% CC,
1/4" FLOSEAL/SX150 SXS CLASSA,
3% CC, 2% GEL; CEMENT

Subtotal	13,311.45
Sales Tax	760.02
Total Invoice Amount	14,071.47
Payment/Credit Applied	
TOTAL	14,071.47

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 4,659.01

ONLY IF PAID ON OR BEFORE
Feb 19, 2015

- 4659.01
9412.46
Bauer Y2-27
JIB

ALLIED OIL & GAS SERVICES LLC 063742

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Great Bend / KS

DATE <u>01-20-15</u>	SEC <u>27</u>	TWP <u>21</u>	RANGE <u>16</u>	CALLED OUT	ON LOCATION <u>730 AM</u>	JOB START <u>150 PM</u>	JOB FINISH <u>200 PM</u>
LEASE <u>Bauer Y</u>	WELL# <u>2-27</u>	LOCATION <u>Radium Rd 12 South 3 west</u>		COUNTY <u>Awnee</u>	STATE <u>KS</u>		
OLD OR <u>NEW</u> (Circle one)			<u>1 South west into</u>				

CONTRACTOR Duke Z OWNER _____

TYPE OF JOB Surface

HOLE SIZE <u>12 1/4</u>	T.D. <u>930</u>
CASING SIZE <u>85/8</u>	DEPTH <u>930</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>22.90</u>	
PERFS.	
DISPLACEMENT <u>Fresh H2O 57.78</u>	

EQUIPMENT

PUMP TRUCK # <u>398</u>	CEMENTER <u>Kevin Eddy</u>
BULK TRUCK # <u>544/198</u>	HELPER
BULK TRUCK # _____	DRIVER <u>Brian Lang</u>
BULK TRUCK # _____	DRIVER

CEMENT
AMOUNT ORDERED 225 SXS 65/35 + 6% Gel + 3% cc + 1/4 flt
150 SXS CLASS A + 3% cc

COMMON <u>150</u>	@ <u>17.90</u>	<u>2,685.00</u>
POZMIX	@	
6ES <u>423</u>	@ <u>1.10</u>	<u>465.30</u>
CHLORIDE <u>598</u>	@ <u>1.10</u>	<u>646.80</u>
ASC	@	
<u>225 Sx 65/35+6%</u>	@ <u>19.88</u>	<u>4,473.00</u>
<u>Fla seal 57</u>	@ <u>2.97</u>	<u>169.29</u>
<u>Mallards Total</u>		<u>8,439.39</u>
<u>Disc 35%</u>		<u>2,953.79</u>
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <u>418.33</u>	@ <u>2.48</u>	<u>1037.44</u>
MILEAGE <u>179.58 x 10 x 2.75</u>		<u>493.85</u>

REMARKS:

ON Location / Hold Safety meeting / Rig up Rig Ran 930 ft of 8 5/8 casing. Hook To Head Brake circ w/ Rig mud + Drop Ball Pump 5 AHEAD. mix 225 SXS 65/35+6% Gel + 3% cc. 1/4 flt. mix 150 SXS CLASS A 3% cc + 2% Gel. SHUT DOWN Release Plug Displace 57.78 BRIS Fresh H2O. Land Plug @ 860 PSF. Release Plug Hold Cement. Did circ. Rig Down. ARU INsert Did not Hold SHUT IN.

CHARGE TO: Younger Energy

STREET _____

CITY _____ STATE _____ ZIP _____

THANK YOU!

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.

PRINTED NAME Don Brown

SIGNATURE Don Brown

DEPTH OF JOB <u>930</u>	
PUMP TRUCK CHARGE	<u>2058.75</u>
EXTRA FOOTAGE	@
MILEAGE <u>Hum 10</u>	@ <u>7.70</u> <u>77.00</u>
MANIFOLD	@ <u>275.00</u> <u>275.00</u>
<u>Hum 10</u>	@ <u>4.40</u> <u>44.00</u>
	@

TOTAL 3,986.04
Disc 35% 1,395.12

PLUG & FLOAT EQUIPMENT

<u>3 Centralizers</u>	@ <u>75.00</u>	<u>225.00</u>
<u>1 Rubber Plug</u>	@ <u>131.00</u>	<u>131.00</u>
<u>1 AFIn insert</u>	@ <u>530.00</u>	<u>530.00</u>
	@	
	@	

TOTAL 886.00
Disc 35% 310.10

SALES TAX (If Any) _____

TOTAL CHARGES 13,311.45

DISCOUNT 4,659.01 IF PAID IN 30 DAYS

8,652.44



INVOICE

PO Box 93999
Southlake, TX 76092

RECEIVED FEB 9 2015

Invoice Number: 148410
Invoice Date: Jan 27, 2015
Page: 1

Voice: (817) 546-7282
Fax: (817) 246-3361

Federal Tax I.D.#: 20-8651475

Bill To:
Younger Energy Co. 9415 E. Harry St. STE #403 Wichita, KS 67207-5083

Customer ID	Field Ticket #	Payment Terms	
Youn	63616	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Great Bend	Jan 27, 2015	2/26/15

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Bauer Y #2-27		
150.00	CEMENT MATERIALS	ASC	23.50	3,525.00
250.00	CEMENT MATERIALS	Sodium Silicate	8.30	2,076.00
750.00	CEMENT MATERIALS	Kol Seal	0.98	735.00
43.00	CEMENT MATERIALS	FL-160	18.90	812.70
21.00	CEMENT MATERIALS	Defoamer	3.50	73.50
50.00	CEMENT MATERIALS	60/40/4% Gel Blend	18.92	946.00
250.38	CEMENT SERVICE	Cubic Feet Charge	2.48	620.94
160.07	CEMENT SERVICE	Ton Mileage Charge	2.75	440.19
1.00	CEMENT SERVICE	Production Casing	2,765.75	2,765.75
15.00	CEMENT SERVICE	Pump Truck Mileage	7.70	115.50
1.00	CEMENT SERVICE	Manifold Rental	275.00	275.00
15.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	66.00
1.00	EQUIPMENT SALES	5-1/2 Latch Down & Baffle	660.00	660.00
2.00	EQUIPMENT SALES	5-1/2 Basket	395.00	790.00
1.00	EQUIPMENT SALES	5-1/2 Packer Shoe	3,765.00	3,765.00
10.00	EQUIPMENT SALES	5-1/2 Turbolizer	95.00	950.00
1.00	EQUIPMENT OPERATOR	Dustin Chambers		
1.00	CEMENT SUPERVISOR	Kevin Eddy		
1.00	OPERATOR ASSISTANT	Marlyn Spangenberg		

OR

OK

ALL PRICES ARE NET, PAYABLE
30 DAYS FOLLOWING DATE OF
INVOICE. 1 1/2% CHARGED
THEREAFTER. IF ACCOUNT IS
CURRENT, TAKE DISCOUNT OF

\$ 7,074.30

ONLY IF PAID ON OR BEFORE
Feb 26, 2015

Subtotal	18,616.58
Sales Tax	1,168.16
Total Invoice Amount	19,784.74
Payment/Credit Applied	
TOTAL	19,784.74

180311

Cement 5-1/2" Production Csg
w/150 5XS ASC. Plugged
rat hole + mouse hole
w/50 5XS 60/40 4% gel POZ
BAUER 1-2-27

BAUER 1-2-27
318

- 7074.30

12,710.44

ALLIED OIL & GAS SERVICES, LLC 055616

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Great Bend, KS

DATE <u>1-27-15</u>	SEC. <u>27</u>	TWP. <u>21S</u>	RANGE <u>15W</u>	CALLED OUT	ON LOCATION <u>1:20pm</u>	JOB START <u>6:00pm</u>	JOB FINISH <u>7:05pm</u>
LEASE <u>Bauer</u>	WELL# <u>2-27</u>	LOCATION <u>Radum Rd 5 To Blk top</u>			COUNTY <u>Polk</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>				<u>3w 1s wind</u>			

CONTRACTOR Duke #2

TYPE OF JOB 5 1/2 production

HOLE SIZE 7 1/8 T.D.

CASING SIZE 5 1/2 DEPTH 3972

TUBING SIZE DEPTH

DRILL PIPE 4 1/2 DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15 ft

PERFS.

DISPLACEMENT Freshwater 925 bbls

EQUIPMENT

PUMP TRUCK CEMENTER Dustin Chambers

366 HELPER Kevia Eddy

BULK TRUCK

471-112 DRIVER Marilyn Sporkenberg

BULK TRUCK

DRIVER

OWNER

CEMENT

AMOUNT ORDERED 150 cks ASC + 27 gal

6 bags p + 107 salt + 5 # Kal Seal + 27 gal FL 160 + 140

50 cks 60# class A 40% p.s. 47 gal 14.90

COMMON	@		
POZMIX	@		
GEL	@		
CHLORIDE	@		
ASC	<u>150</u>	@ <u>23.50</u>	<u>3,525.00</u>
<u>250 gal Sodium Silicate</u>	@	<u>173.00</u>	<u>2,076.00</u>
<u>Kal Seal 750</u>	@	<u>.98</u>	<u>735.00</u>
<u>FL-160 43</u>	@	<u>18.90</u>	<u>812.70</u>
<u>DE 21</u>	@	<u>3.50</u>	<u>73.50</u>
<u>50 cks 60/40 74%</u>	@	<u>18.92</u>	<u>946.00</u>
	@		<u>8,168.20</u>
	@		
	@		
HANDLING <u>250.38</u>	@	<u>2.48</u>	<u>620.93</u>
MILEAGE <u>160.07</u>		<u>2.75</u>	<u>440.30</u>

REMARKS:

Break circulation with Rig mud
pump Ball thru @ 1000 ft
plug RH + MH 50 cks
pump 250 gal Sodium Silicate
mix 150 cks ASC
Displace 925 bbls Freshwater
back 2 plug 1200 # Released Hold
plug 120 min 6' 30 min

CHARGE TO: Younger Energy

STREET _____

CITY _____ STATE _____ ZIP _____

TOTAL 8,168.20

SERVICE

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>2765.75</u>
EXTRA FOOTAGE	@	
MILEAGE <u>Hum 15</u>	@ <u>7.70</u>	<u>115.50</u>
MANIFOLD	@ <u>275.00</u>	<u>275.00</u>
<u>Hum 15</u>	@ <u>4.40</u>	<u>660.00</u>
	@	

TOTAL 4,283.38

PLUG & FLOAT EQUIPMENT

<u>1-5/2 Latch Down Buffer</u>	@ <u>600.00</u>	<u>600.00</u>
<u>2-5/2 Baskets</u>	@ <u>395.00</u>	<u>790.00</u>
<u>1-5/2 Factor Shoe</u>	@	<u>3,765.00</u>
<u>12-5/2 Turbulizers</u>	@ <u>95.00</u>	<u>950.00</u>
	@	

TOTAL 6,165.00

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 18,616.58

DISCOUNT 7,074.30 IF PAID IN 30 DAYS

11,542.38

PRINTED NAME X Don Browning

SIGNATURE X Don Browning

Thank You!

OPERATOR

Company: Younger Energy Company
 Address: 9415 E. Harry
 Suite 403, Bldg. 400
 Wichita, KS 67207

Contact Geologist:
 Contact Phone Nbr: 316-681-2542
 Well Name: Bauer "Y" #2-27
 Location: SEC.27 - T21S - R15W
 API: 15-145-21797-00-00
 Pool:
 State: Kansas

Field: Hurray North
 Country: USA



Scale 1:240 Imperial

Well Name: Bauer "Y" #2-27
 Surface Location: SEC.27 - T21S - R15W
 Bottom Location:
 API: 15-145-21797-00-00
 License Number: 30705
 Spud Date: 1/19/2015 Time: 6:00 PM
 Region: Pawnee
 Drilling Completed: 1/27/2015 Time: 8:00 AM
 Surface Coordinates: 330' FSL & 1063' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 1957.00ft
 K.B. Elevation: 1965.00ft
 Logged Interval: 3200.00ft To: 4110.00ft
 Total Depth: 4110.00ft
 Formation: Viola, Simpson, Arbuckle
 Drilling Fluid Type: Chemical/Fresh Water Gel

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude:
 Latitude:
 N/S Co-ord: 330' FSL
 E/W Co-ord: 1063' FEL

LOGGED BY

Keith Reavis
Consulting Geologist

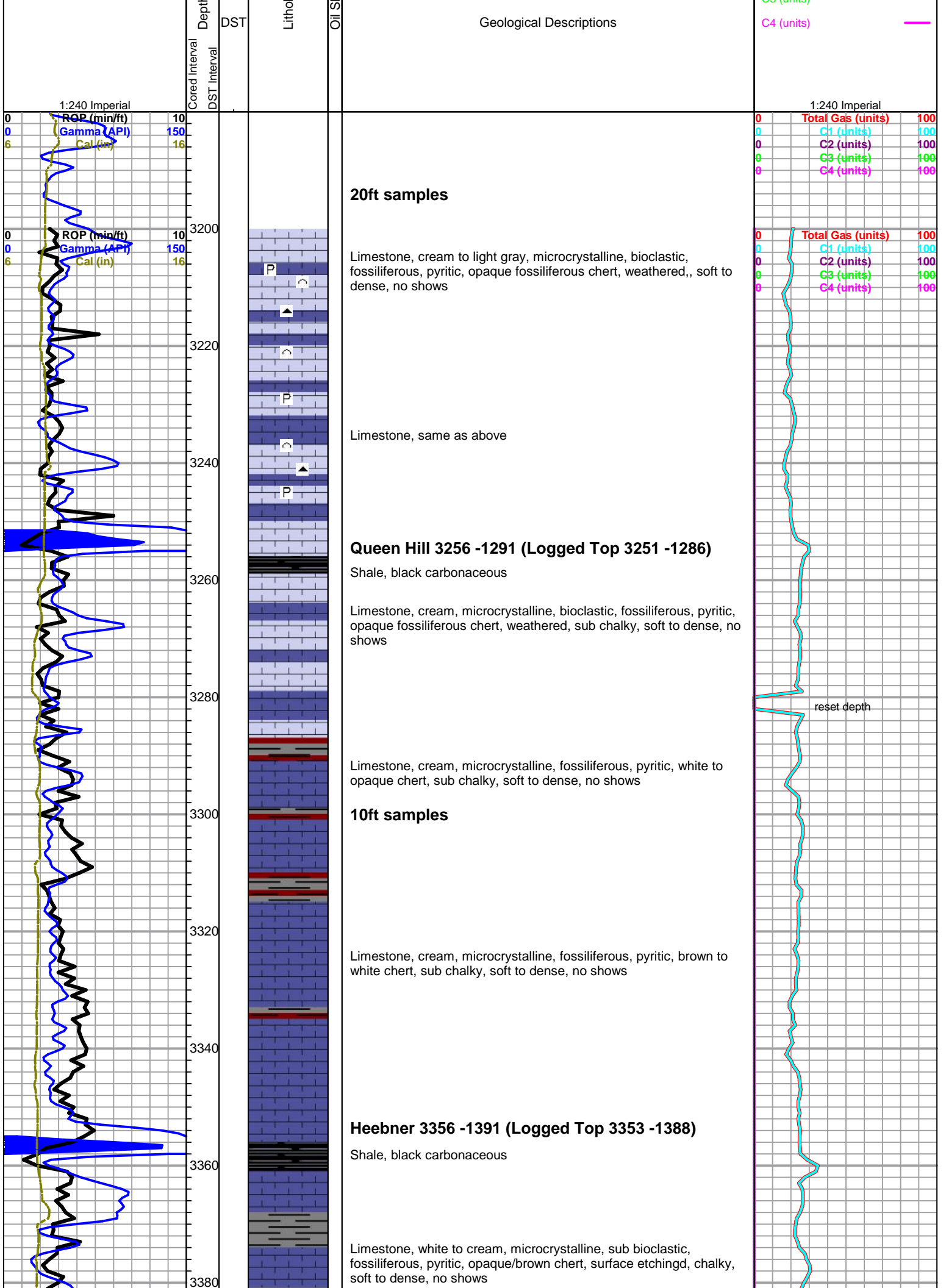
Company: Keith Reavis, Inc.
 Address: 3420 22nd Street
 Great Bend, KS 67530

Phone Nbr: 620-617-4091
 Logged By: Logan Walker

Name: Logan Walker

CONTRACTOR

Contractor: Duke Drilling Company
 Rig #: 2
 Rig Type: mud rotary
 Spud Date: 1/19/2015 Time: 6:00 PM
 TD Date: 1/27/2015 Time: 8:00 AM
 Rig Release: Time:



Douglas 3988 -1423 (Logged Top 3386-1421)

Shale, gray to pale green to red, silty, gray wash

Shale, gray wash, silty, gummy

Brown Lime 3463 -1498 (Logged Top 3461 -1496)

Limestone, tan to brown, cryptocrystalline, dense fossiliferous, no shows

Lansing 3476 -1511 (Logged Top 3470 -1505)

Limestone, white to cream, microcrystalline, fossiliferous, pyritic, white chert, soft to dense, surface etching, poor visible porosity spotty free oil in tray, spotty bleeding free oil, free oil on break, gassy, poor cut, poor fluorescence, tight, no odor

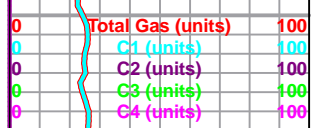
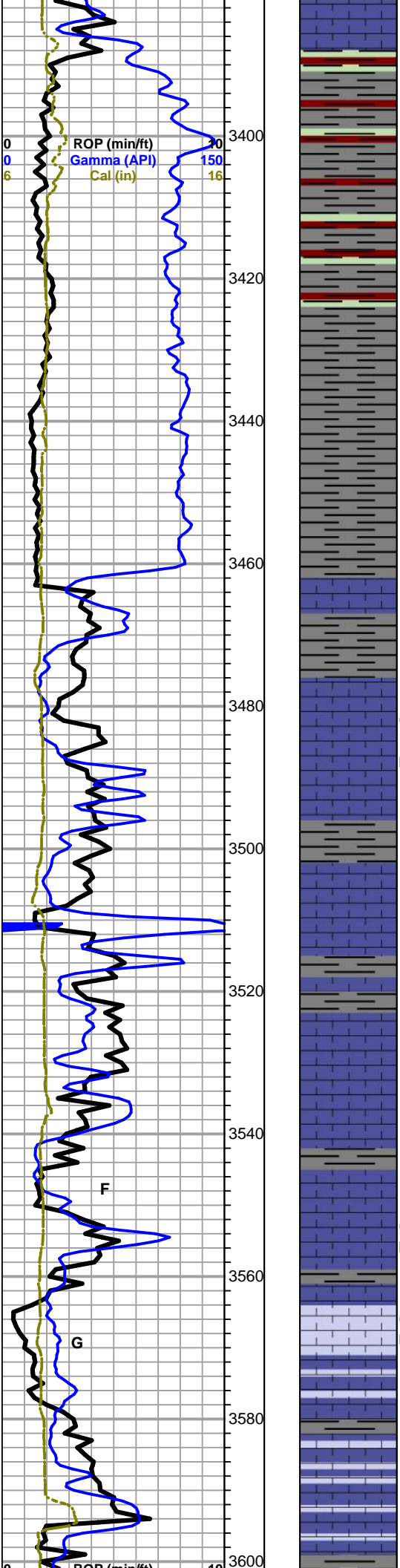
Limestone, cream, cryptocrystalline, fossiliferous, soft to dense, sub chalky, no shows

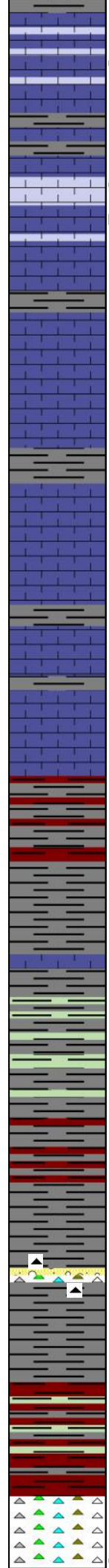
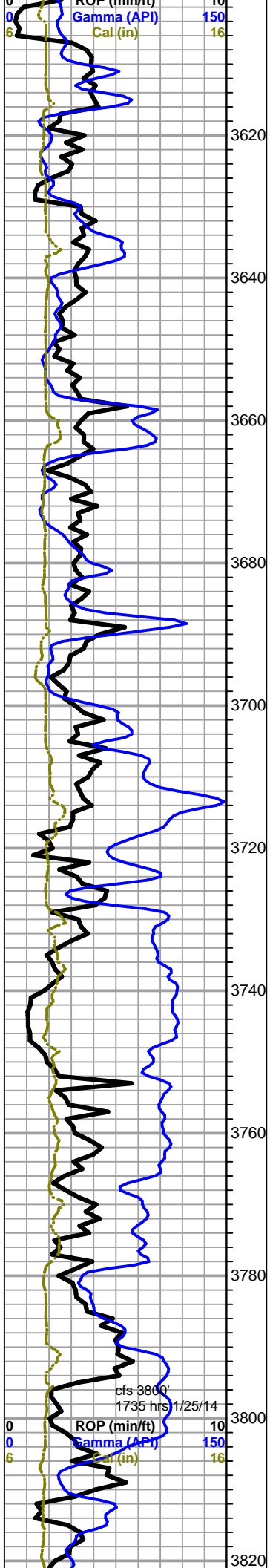
Limestone, cream, cryptocrystalline to microcrystalline, fossiliferous, brown to opaque chert, sharp, soft to dense, sub chalky, no shows

Limestone, cream, microcrystalline, fossiliferous, white chert, pyritic, weathered, soft to dense, sub chalky, poor visible porosity, spotty free oil in tray, bleeding free oil, heavy oil, great cut, great, fluorescence, fleeting odor

Limestone, cream, microcrystalline, bioclastic, fossiliferous, opaque/gray chert, pyritic, weathered, soft to dense, sub chalky, poor visible porosity, spotty free oil in tray, slow bleeding free oil, heavy oil, great cut, great, fluorescence, fleeting odor

Limestone, cream, microcrystalline, sub bioclastic, fossiliferous, brown to chert, pyritic, oomoldic, sub chalky, soft to dense, shows from above





Limestone, cream to light gray, microcrystalline, sub bioclastic, fossiliferous, oolitic, poor visible porosity, surface etching, sub chalky, staining, heavy thick oil, faint odor, poor cut, poor fluorescence

3620

Limestone, cream to light gray, microcrystalline, sub bioclastic, fossiliferous, oolitic, oomoldic, poor visible porosity, surface etching, sub chalky, staining, heavy thick oil, faint odor, after break fair to good cut, poor fluorescence

3640

Limestone, cream to tan, microcrystalline, fossiliferous, orange fossiliferous chert, sub oolitic, white chert, pyritic, soft to dense, sub chalky, shows carried from above

3660

Stark Shale 3665 -1700 (Logged Top 3658 -1693)

Limestone, white to cream, microcrystalline to cryptocrystalline, fossiliferous, gray chert, sub oolitic, soft to dense, sub chalky, no shows

3680

Limestone, cream, microcrystalline, sub bioclastic, fossiliferous, soft to dense, sub chalky, no shows

3700

Base KC 3711 -1746 (Logged Top 3707 -1742)

Shale, gray to red, silty

3720

Shale, gray to pale green to red to lavender, silty gray wash

3760

Conglomerate 3780 -1815 (Logged Top 3778 -1813)

Limestone, olive, dense, trace of oragne/yellow fossiliferous chert, sub chalky, abundant shale

3780

Shale, gray wash, silty

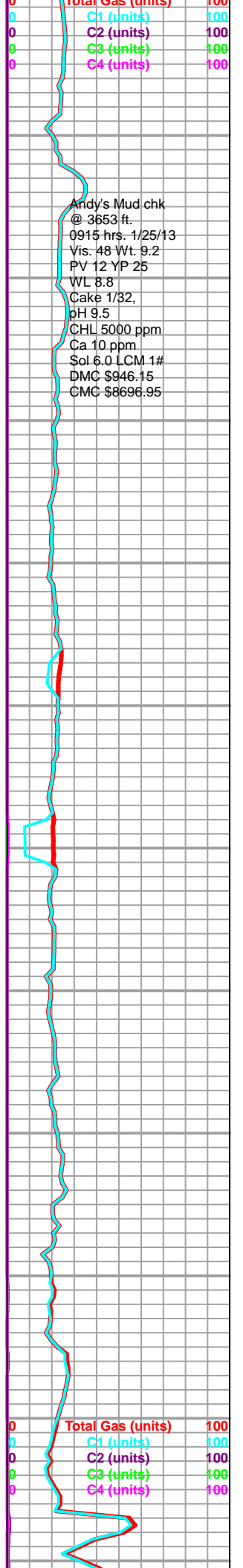
3800

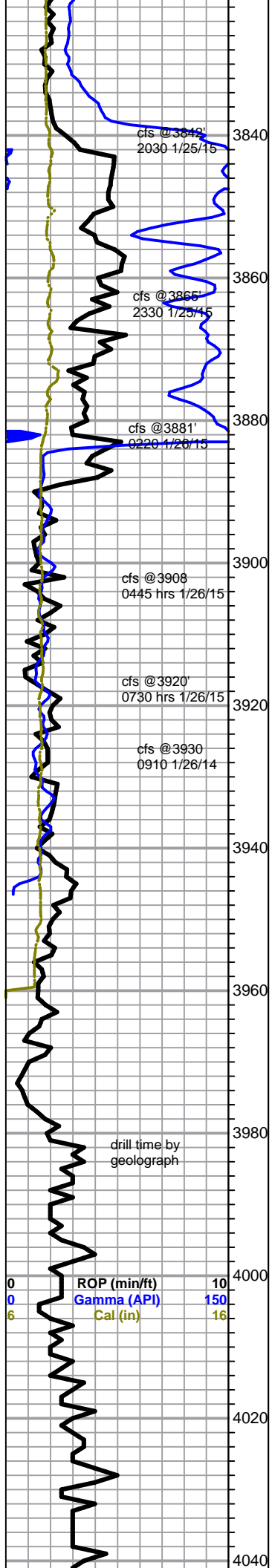
Shale, red wash to gray to pale green, silty

Viola 3810 -1845 (Logged Top 3806 -1841)

mixed multi colored chert, etching on fresh chert, triple oolitic, fresh

3820





mixed multi colored chert, etching on fresh chert, tripolitic, fresh chert, poor visible porosity, spotty free oil in tray, spotty slow bleeding oil, fair to good cut on break, fair fluorescence, fleeting odor, dead stain, gas

Simpson 3842 -1877 (Logged Top 3839 -1874)

Chert, same as above, shows same as above, more free oil

Sand, cloudy, sub angular, sub rounds, poor sorting, fair cemented, dead stain

Shale, pale green, waxy, pyritic

Simpson Sand 3888 -1923 (Logged Top 3884 -1919)

Sand, clear to cloudy, fine to med. grain, sub angular, poor to faint sorting, fair cemented, pyritic, friable, inter-granular porosity, stained, spotty free oil on break, spotty free oil in tray, great odor, great fluorescence, fair to good cut

Arbuckle 3903 -1938 (Logged Top 3894 -1929)

Dolomite, light gray to cream, microcrystalline, sucrosic, poor visible porosity, oolitic, intercrystalline, pin hole vugs, free oil in tray, great odor, slow tight bleed, great fluorescence, poor to fair cut

Dolomite, same as above, no oolites, oil show weakens/ falls out

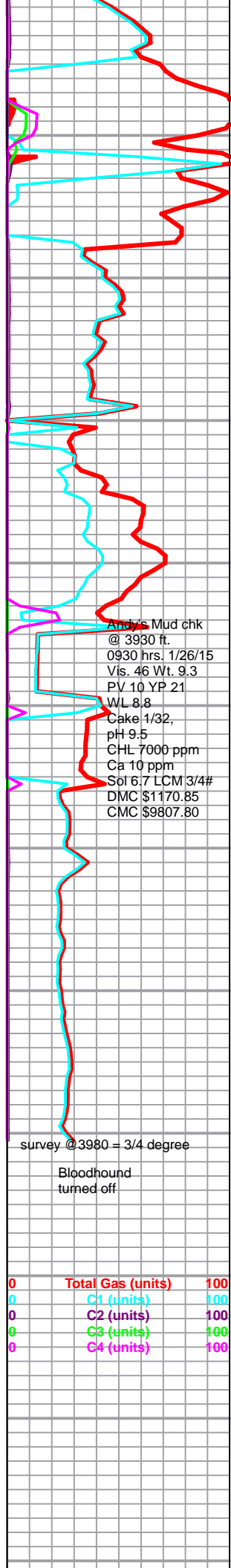
Dolomite, white to cream, microcrystalline, sucrosic, scattered poor visible porosity, pin hole vugs, recrystallized oolitic, sub oomoldic, intercrystalline, caliche-chalk, trace spotty free oil in tray, slight staining, fleeting odor

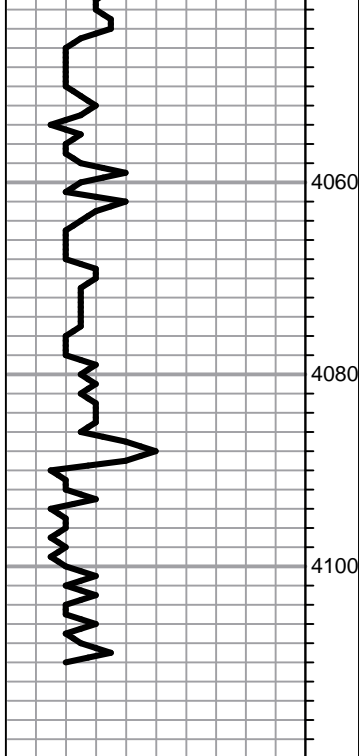
Dolomite, white to cream, microcrystalline, sucrosic, poor visible porosity, pin hole vugs, oolitic, oolmodic, intercrystalline, abundant caliche-chalk, faint odor from above

**TD @3980' 1200hrs 1/26/15
Logged TD @3987'**

Dolomite, white to cream, microcrystalline to cryptocrystalline, pyritic, recrystallized oolites, sucrosic, poor visible porosity, pin hole vugs, intercrystalline, sub caliche-chalk, soft o dense, no shows

Dolomite, cream, microcrystalline, sucrosic, poor visible porosity, pin hole vugs, oolmodic, intercrystalline, sub caliche-chalk, soft to dense, no shows





Dolomite, same as above, no shows

Dolomite, cream to tan, microcrystalline to cryptocrystalline, sucrosic, poor visible porosity, surface etching, recrystallized oolites, intercrystalline, abundant caliche-chalk, soft to dense, no shows

TD @4100' 0800 hrs 1/27/14

Andys Mud chk
@ 4110 ft.
0800 hrs. 1/27/15
Vis. 48 Wt. 9.3
PV 11 YP 20
WL 8.8
Cake 1/32,
pH 9.5
CHL 6000 ppm
Ca 10 ppm
Sol 6.8 LCM 2#
DMC \$447.00
GMC \$10254.80