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 # 5088
Name: Darrah, John Jay, Jr.
Address 1: P.O. BOX 2786
Address 2:
City: WICHITA State: KS Zip: 67201 + 2786
Contact Person: Mike Atterbury
Phone: (316) 219-3390
CONTRACTOR: License # 32701
Name: C & G Drilling, Inc.
Wellsite Geologist: Seth Evenson
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 #:

8/6/2018	8/9/2018	9/19/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-127-20599-00-00
Spot Description:
E2 - SE - NW - NE Sec. 20 Twp. 16 S. R. 8 ☑ East ☐ West
895 Feet from ☑ North / ☐ South Line of Section
1515 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: Morris
Lease Name: BACHURA-HICKEY UNIT Well #: 20-1
Field Name: Wildcat
Producing Formation: NA
Elevation: Ground: 1385 Kelly Bushing: 1394
Total Vertical Depth: 3275 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 210 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: 300 ppm Fluid volume: 1745 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: 11/30/2018
☐ **Confidential Release Date:** 11/29/2020
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 12/03/2018

Page Two

Operator Name: Darrah, John Jay, Jr. Lease Name: BACHURA-HICKEY UNIT Well #: 20-1

Sec. 20 Twp. 16 S. R. 8 ☑ East ☐ West County: Morris

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

Geologist Report / Mud Logs ☐ Yes ☑ No

List All E. Logs Run:
Attached

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

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	210	Class G	158	2% gel, 3% CaCl
Production	7.875	5.5	17	3243	Class G	125	2% gel, .75% C-37, .5% C-41, 12% salt

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	-			
	-			

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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	0			

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)*

PRODUCTION INTERVAL:

Top	Bottom
3042	3050

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	3042	3050			250 gal 15% MA & 500 gal 15% HCl NE-FE; 750 gal 15% HCl NE-FE
	3120	3122	CIBP Cast Iron Bridge Plug	3120	
2	3135	3139			250 gal 15% MA & 250 gal 15% HCl NE-FE

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Darrah, John Jay, Jr.
Well Name	BACHURA-HICKEY UNIT 20-1
Doc ID	1423227

All Electric Logs Run

Dual Induction
Dual Comp Porosity
Sonic
Micro resistivity

Form	ACO1 - Well Completion
Operator	Darrah, John Jay, Jr.
Well Name	BACHURA-HICKEY UNIT 20-1
Doc ID	1423227

Tops

Name	Top	Datum
Oread	1343	51
Heebner	1366	28
Toronto	1378	16
Douglas	1393	1
Lansing	1647	-253
BKC	2002	-608
Cherokee	2221	-827
Mississippian	2497	-1103
Kinderhook	2721	-1327
Hunton	2885	-1491
Maquoketa	2963	-1569
Viola	3043	-1649
Simpson	3117	-1723
Simpson Dolomite	3122	-1728
Simpson SS	3156	-1762
Arbuckle	3220	-1826

Form	ACO1 - Well Completion
Operator	Darrah, John Jay, Jr.
Well Name	BACHURA-HICKEY UNIT 20-1
Doc ID	1423227

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	210	Class G	158	2% gel, 3% CaCl
Production	7.875	5.5	17	3243	Class G	125	2% gel, .75% C-37, .5% C-41, 12% salt

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

John Jay Darrah, Jr.

P. O. Box 2786
Wichita, KS. 67201-2786

ATTN: Will Darrah/Seth Eve

20/16S/8E Morris, KS

Bachura-Hickey U20-1

Job Ticket: 63811 **DST#: 1**

Test Start: 2018.08.08 @ 16:28:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:10
Time Test Ended: 22:19:39

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

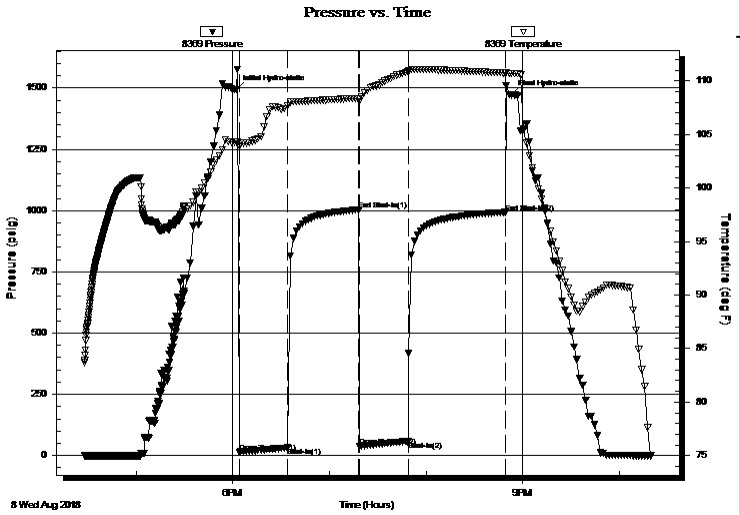
Interval: 3043.00 ft (KB) To 3050.00 ft (KB) (TVD)
Total Depth: 3050.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1394.00 ft (KB)
1385.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8369 **Outside**

Press@RunDepth:	57.90 psig @	3044.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2018.08.08	End Date:	2018.08.08	Last Calib.:	1899.12.30
Start Time:	16:28:01	End Time:	22:19:40	Time On Btm:	2018.08.08 @ 18:02:20
				Time Off Btm:	2018.08.08 @ 20:53:00

TEST COMMENT: IF - Weak blow building to 2 inches initial flow period.
FF - Weak blow building to 2 inches final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1493.80	104.26	Initial Hydro-static
2	14.65	103.90	Open To Flow (1)
32	32.02	107.65	Shut-In(1)
76	1003.07	108.37	End Shut-In(1)
77	38.36	108.08	Open To Flow (2)
107	57.90	110.82	Shut-In(2)
167	992.20	110.74	End Shut-In(2)
171	1471.38	110.71	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
105.00	Oil specked mud TR O & 100% M	0.52

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

John Jay Darrah, Jr.

P. O. Box 2786
Wichita, KS. 67201-2786

ATTN: Will Darrah/Seth Eve

20/16S/8E Morris, KS

Bachura-Hickey U20-1

Job Ticket: 63811 **DST#: 1**

Test Start: 2018.08.08 @ 16:28:00

GENERAL INFORMATION:

Formation: **Viola**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:04:10
Time Test Ended: 22:19:39

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

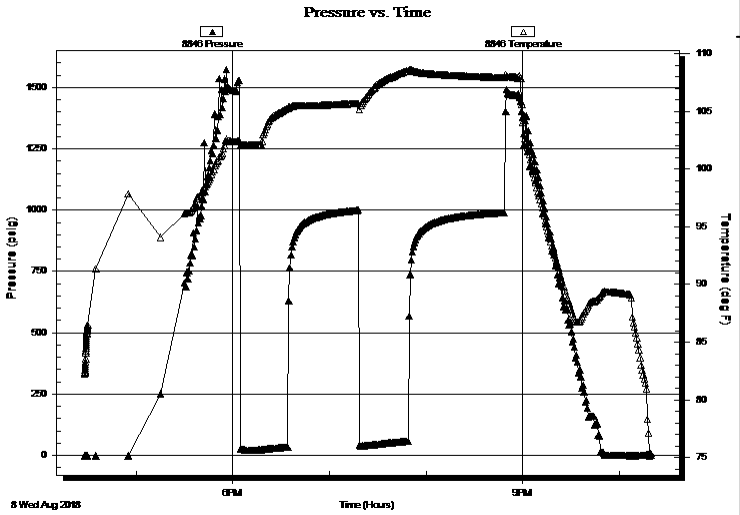
Interval: 3043.00 ft (KB) To 3050.00 ft (KB) (TVD)
Total Depth: 3050.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1394.00 ft (KB)
1385.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8846 **Inside**

Press@RunDepth:	psig @	3044.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2018.08.08	End Date:	2018.08.08	Last Calib.:	1899.12.30
Start Time:	16:28:01	End Time:	22:19:50	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF - Weak blow building to 2 inches initial flow period.
FF - Weak blow building to 2 inches final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
105.00	Oil specked mud TR O & 100% M	0.52

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

John Jay Darrah, Jr.

P. O. Box 2786
Wichita, KS. 67201-2786

ATTN: Will Darrah/Seth Eve

20/16S/8E Morris, KS

Bachura-Hickey U20-1

Job Ticket: 63811 **DST#: 1**

Test Start: 2018.08.08 @ 16:28:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	10.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	Oil specked mud TR O & 100% M	0.516

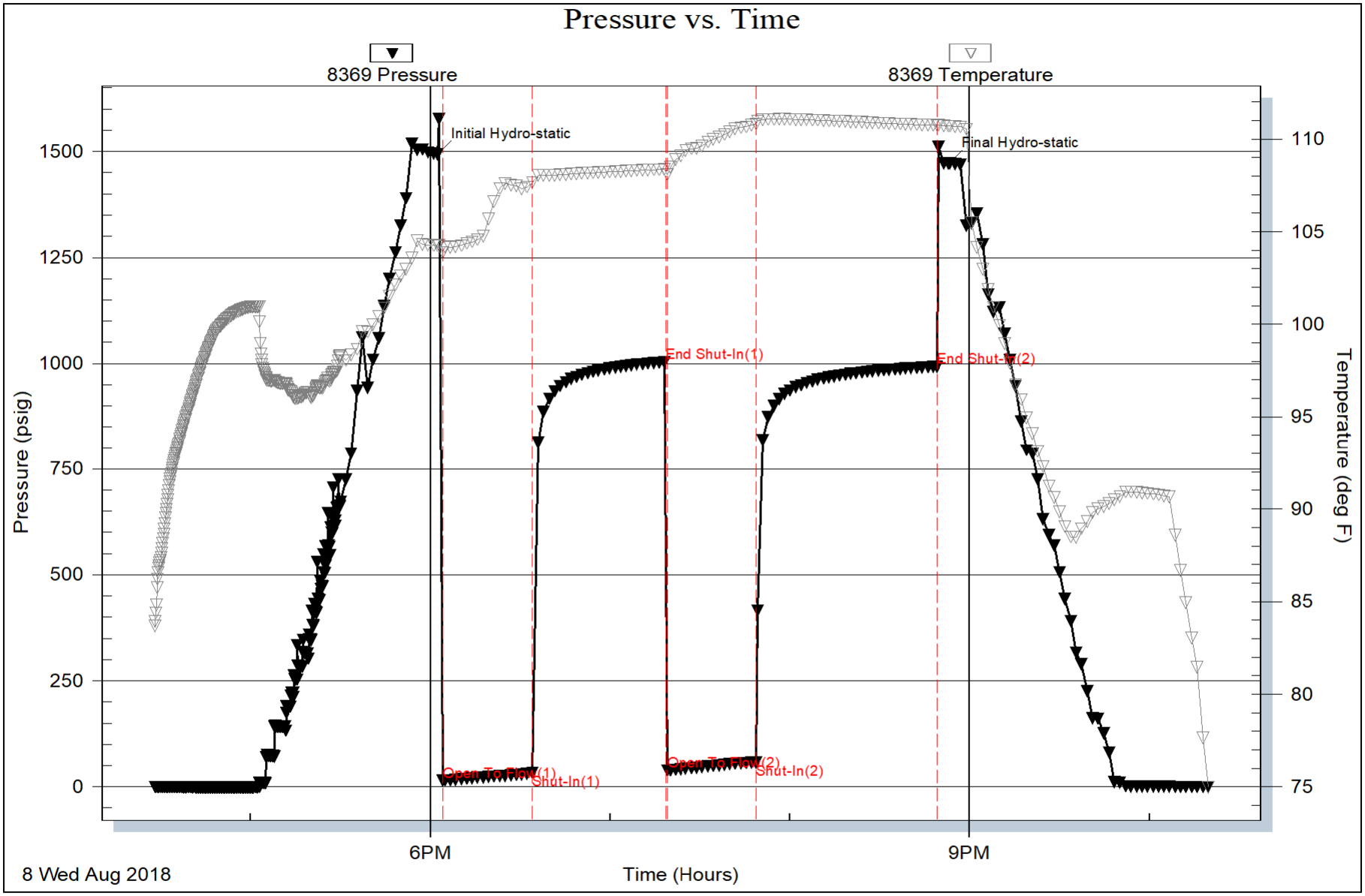
Total Length: 105.00 ft Total Volume: 0.516 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

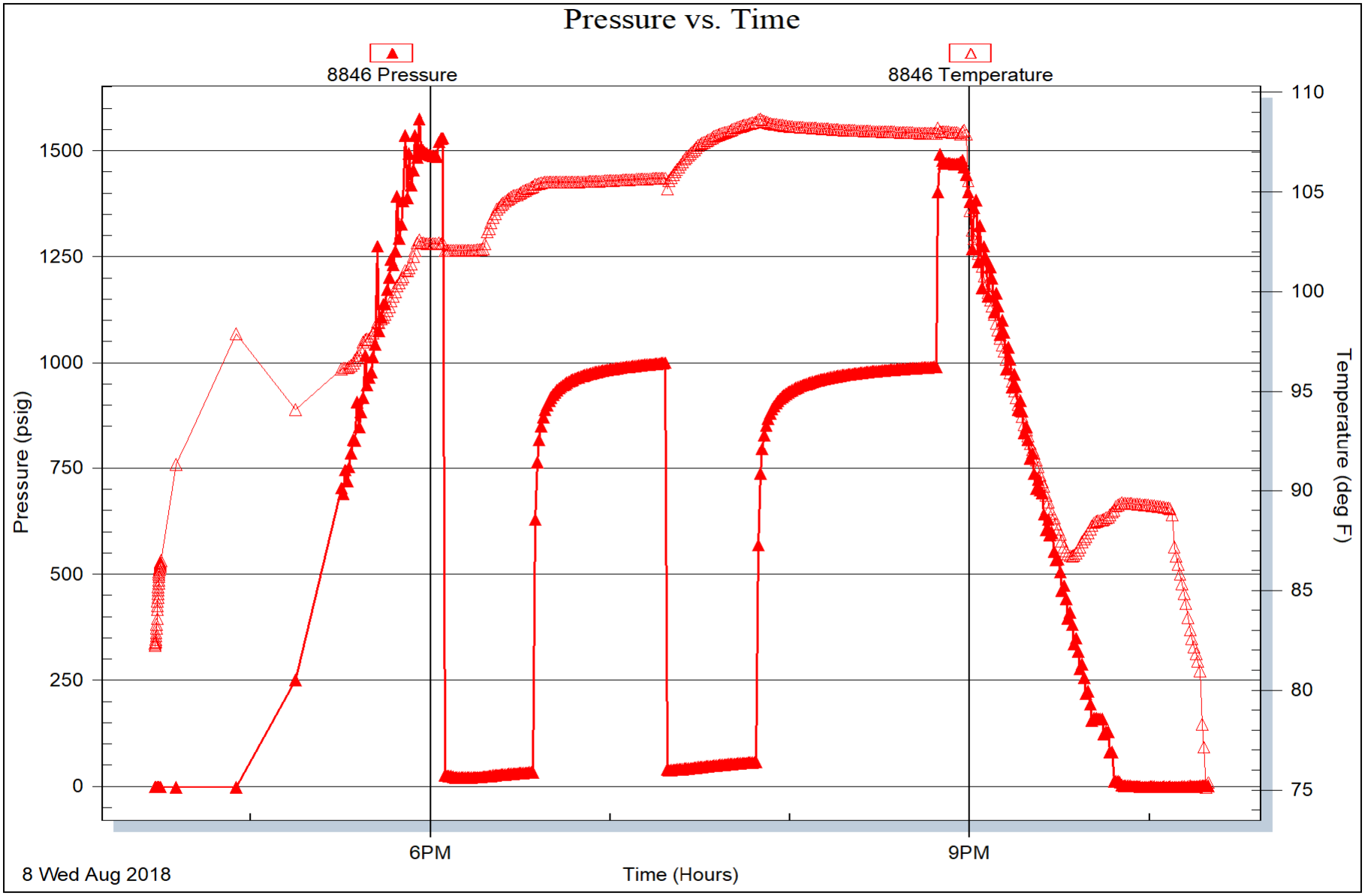
Recovery Comments:

Serial #: 8369 **Outside** John Jay Darrah, Jr. Bachura-Hickey U20-1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63811 Printed: 2018.08.09 @ 06:54:53

Serial #: 8846 **Inside** John Jay Darrah, Jr. Bachura-Hickey U20-1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63811 Printed: 2018.08.09 @ 06:54:53

COPELAND
Acid & Cement

POST OFFICE BOX 438
HAYSVILLE, KS 67060
(316) 524-1225
(316) 524-1027 FAX

BURRTON, KS (620) 463-5161 FAX (620) 463-2104
GREAT BEND, KS (620) 793-3366 FAX (620) 793-3536

Invoice

V45137

INVOICE NUMBER:
C45454-IN

BILL TO:
JOHN JAY DARRAH, JR.
PO BOX 2786
WICHITA, KS 67202-2786

LEASE: BACHURA-HICKEY UNIT 20-1

82300/800
CEMENT

DATE	ORDER	SALESMAN	ORDER DATE	PURCHASE ORDER	SPECIAL INSTRUCTIONS
08/14/2018	C45454		08/06/2018		NET 30

QUANTITY	U/M	ITEM NO./DESCRIPTION	D/C	PRICE	EXTENSION
		NEW WELL			
70.00	MI	MILEAGE CEMENT PUMP TRUCK	22.00	4.00	218.40
70.00	MI	MILEAGE PICK UP	22.00	2.00	109.20
1.00	EA	PUMP CHARGE-SURFACE CHARGE	22.00	1,100.00	858.00
150.00	SK	60/40 POZ MIX 2% GEL	22.00	11.00	1,287.00
8.00	SK	CALCIUM CHLORIDE	22.00	30.00	187.20
158.00	EA	BULK CHARGE	22.00	1.25	154.05
486.64	MI	BULK TRUCK - TON MILES	22.00	1.10	417.54

REMIT TO:
P.O. BOX 438
HAYSVILLE, KS 67060

RECEIVED BY

COP

FUEL SURCHARGE IS NOT TAXABLE AND IS ADDED TO MILEAGE, PUMP AND OR DELIVERY CHARGES ONLY.

NET 30 DAYS

MOSCO

Net Invoice:	3,231.39
Sales Tax:	110.57
Invoice Total:	**3,341.96**

There will be a charge of 1.5% "per month" (18% annual rate) on all accounts over 30 days past due.

Copeland Acid & Cement is a subsidiary of Gressel Oil Field Service

COPELAND Acid & Cement

NEW WELL

FIELD ORDER № C 45454

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 8-6 20 18

IS AUTHORIZED BY: John Jay Darrah Jr.
(NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease Bachura-Hirkey Unit Well No. 20-1 Customer Order No. _____

Sec. Twp. Range 20-16-8E County Morris State KS

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED _____ By _____
Well Owner or Operator Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT	
2	70	Mileage Pump Truck	4.00	280.00	NT
2	70	Mileage Pick Up	2.00	140.00	NT
2		Pump Charge Surface Pipe		1100.00	NT
2	150	Sks 60/40 2% Gel	11.00	1650.00	T
2	8	Calcium Chloride	30.00	240.00	T
2	158	Bulk Charge	1.25	197.50	NT
2		Bulk Truck Miles 6.857 x 70 miles = 486.64	1.10	535.30	NT
		Process License Fee on _____ Gallons	228	4142.80	
		TOTAL BILLING		-911.42	

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

3231.38

Copeland Representative Greg C.

Station 63

Will D.
Well Owner, Operator or Agent

Remarks _____

NET 30 DAYS

COPELAND Acid & Cement

TREATMENT REPORT

Acid Stage No. _____

Date 8/6/2018 District GB F.O. No. 45454

Company JOHN JAY DARRAH JR.

Well Name & No. BACHURA-HICKEY UNIT 20-1

Location _____ Field _____

County MORRIS State KS

Casing: Size 8 5/8 Type & Wt. _____ Set at _____ ft.

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.

Cemented: Yes Perforated from _____ ft. to _____ ft.

Tubing: Size & Wt. _____ Swung at _____ ft.

Perforated from _____ ft. to _____ ft.

Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

Type Treatment:	Amt.		Type Fluid	Sand Size	Pounds of Sand
Bkdown		Bbl./Gal.			
		Bbl./Gal.			
		Bbl./Gal.			
		Bbl./Gal.			
Flush		Bbl./Gal.			

Treated from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No. ft. 0

Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.

Pump Trucks. No. Used: Std. 320 Sp. _____ Twin _____

Auxiliary Equipment 327

Personnel GREG AARON

Auxiliary Tools _____

Plugging or Sealing Materials: Type _____

_____ Gals. _____ lb.

Company Representative WILL DARRAH Treater GREG C.

TIME	PRESSURES		Total Fluid Pumped	REMARKS
a.m./p.m.	Tubing	Casing		
11:30				ON LOCATION
				RUN 8 5/8 SURFACE PIPE TO 213'
				MIX 150 SKS 60/40 2% GEL 3% CALCIUM CHLORIDE
				DISPLACE WITH 13 BBLS OF FRESH WATER
				CEMENT CIRCULATED TO SURFACE
4:00				JOB COMPLETE
				THANK YOU!

COPELAND
Acid & Cement

POST OFFICE BOX 438
HAYSVILLE, KS 67060
(316) 524-1225
(316) 524-1027 FAX

BURRTON, KS (620) 463-5161 FAX (620) 463-2104
GREAT BEND, KS (620) 793-3366 FAX (620) 793-3536

Invoice

V 45135

INVOICE NUMBER:
C45498-IN

BILL TO:
JOHN JAY DARRAH, JR.
PO BOX 2786
WICHITA, KS 67202-2786

LEASE: BACHURA-HICKEY UNIT

82300/800
CEMENT

DATE	ORDER	SALESMAN	ORDER DATE	PURCHASE ORDER	SPECIAL INSTRUCTIONS
08/16/2018	C45498		08/10/2018		NET 30

QUANTITY	U/M	ITEM NO./DESCRIPTION	D/C	PRICE	EXTENSION
		NEW WELL			
70.00	MI	MILEAGE CEMENT PUMP TRUCK	20.00	4.00	224.00
70.00	MI	MILEAGE PICKUP	20.00	2.00	112.00
1.00	EA	PUMP CHARGE-LONG STRING	20.00	1,600.00	1,280.00
125.00	SK	60/40 POZ MIX 2% GEL	20.00	11.00	1,100.00
750.00	LB	FINE SALT	25.92	0.09	50.00
100.00	LB	FRICTION REDUCER C-37	20.00	3.00	240.00
750.00	LB	GILSONITE	20.00	0.75	450.00
5.00	EACH	5 1/2" TURBO-CENTRALIZER	20.00	85.00	340.00
1.00	EACH	BASKETS	20.00	155.00	124.00
1.00	EA	LATCH DOWN PLUG AND BAFFLE	20.00	175.00	140.00
1.00	LB	FLOAT SHOE W/AUTO FILL	20.00	355.00	284.00
157.00	EA	BULK CHARGE	20.00	1.25	157.00
483.70	MI	BULK TRUCK - TON MILES	20.00	1.10	425.66

REMIT TO:
P.O. BOX 438
HAYSVILLE, KS 67060

RECEIVED BY

COP

FUEL SURCHARGE IS NOT TAXABLE AND IS ADDED TO MILEAGE, PUMP AND OR DELIVERY CHARGES ONLY.

NET 30 DAYS

Net Invoice:	4,926.66
MOSCO Sales Tax:	204.60
Invoice Total:	**5,131.26**

There will be a charge of 1.5% "per month" (18% annual rate) on all accounts over 30 days past due.

Copeland Acid & Cement is a subsidiary of Gressel Oil Field Service

COPELAND Acid & Cement

New Well

FIELD ORDER № C 45498

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 3/10/12 20

IS AUTHORIZED BY: John J. Derrah
(NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease Bechura - Hackey Well No. Unit #20-1 Customer Order No. _____

Sec. Twp. Range _____ County Morris State Ks

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED _____ By _____
Well Owner or Operator Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT	
2	70	mileage pump truck	4.00	280.00	NT
2	70	mileage pickup	2.00	140.00	NT
2	1	Pump Charge - long string		1,600.00	NT
2	125	60/40 poz. 2% gel	11.00	1,375.00	T
2	750#	Salt	.083333	62.50	T
2	100#	C-37	3.00	300.00	T
2	750#	Gilsonite	.75	562.50	T
2	5	5½" Turbo Centralizers	85.00	425.00	T
2	1	Basket		155.00	T
2	1	Latch down plug & baffle		175.00	T
2	1	Float shoe w/ auto-fill		355.00	T
2	157	Bulk Charge	1.25	196.25	NT
2		Bulk Truck Miles 6.91 T x 70 = 483.7 T m x 1.10	1.10	532.07	NT
		Process License Fee on _____ Gallons		6,158.32	
		TOTAL BILLING	20% -	1,231.66	

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

4,926.66

Copeland Representative Nathan W.

Station G-B

Jud C & G Drilling
Well Owner, Operator or Agent

Remarks _____

NET 30 DAYS

COPELAND Acid & Cement

TREATMENT REPORT

Acid Stage No. _____

Date 8/10/2018 District GB F.O. No. C45498

Company John J Darrah

Well Name & No. Bachura-Hickey Unit

Location _____ Field _____

County Morris State KS

Casing: Size 5.5" Type & Wt. 17.0# Set at _____ ft.

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Formation: _____ Perf. _____ to _____

Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.

Cemented: Yes Perforated from _____ ft. to _____ ft.

Tubing: Size & Wt. _____ Swung at _____ ft.

Perforated from _____ ft. to _____ ft.

Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

Type Treatment:	Amt.		Type Fluid	Sand Size	Pounds of Sand
Bkdown		Bbl./Gal.			
		Bbl./Gal.			
		Bbl./Gal.			
		Bbl./Gal.			
Flush		Bbl./Gal.			

Treated from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No. ft. 0

from _____ ft. to _____ ft. No. ft. 0

Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.

Pump Trucks. No. Used: Std. 365 Sp. _____ Twin _____

Auxiliary Equipment 360/308

Personnel Nathan-Greg-Mike

Auxiliary Tools _____

Plugging or Sealing Materials: Type _____

_____ Gals. _____ lb.

Company Representative Jud C&G Drilling Treater Nathan W.

TIME a.m./p.m.	PRESSURES Tubing	PRESSURES Casing	Total Fluid Pumped	REMARKS
10:00		5.5"		On Location. Rig on bottom circulating. Lay down pipe and run casing.
				Hole-3275 Centralizers-1,4,6,11,13
				Pipe-3244' Basket-1
				Baffle-3230'
				Break circulation with mud pump. Circulate for 2 hours.
				Pump 600gal of Mud Flush.
				Plug Rat Hole with 30sks and Mouse Hole with 25sks.
				Mix 125sks 60/40poz 2%gel .75% C-37 .5% C-41p 12% Salt 5#/sk Gilsonite.
				Wash out pump and lines.
				Displace with 74.9bbls at 6bpm-700# Plug landed at 1000# Pressure up
7:10				to 1500# Held. Release pressure. Float held.
				Thank You!
				Nathan W.