KOLAR Document ID: 1461975

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 # 34344
Name: Culbreath Oil & Gas Company, Inc.
Address 1: 3501 S YALE AVE
Address 2:
City: TULSA State: OK Zip: 74135 + 8014
Contact Person: Dillan Carney
Phone: (918) 749-3508
CONTRACTOR: License # 35410
Name: STP Drilling LLC
Wellsite Geologist: Larry Nicholson
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 #:

4/18/2019	4/23/2019	4/24/2019
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-065-24166-00-00
Spot Description:
SW - SW - SE - SE Sec. 7 Twp. 9 S. R. 25 ☐ East ☑ West
272 Feet from ☐ North / ☑ South Line of Section
1200 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: Graham
Lease Name: ROHLEDER Well #: 1
Field Name:
Producing Formation: N/A
Elevation: Ground: 2606 Kelly Bushing: 2613
Total Vertical Depth: 4200 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 263 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: 14500 ppm Fluid volume: 660 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:
☐ Confidential Release Date:
☑ Wireline Log Received ☑ Drill Stem Tests Received
☑ Geologist Report / Mud Logs Received
☐ UIC Distribution
ALT ☐ I ☑ II ☐ III Approved by: Karen Ritter Date: 06/04/2019

Operator Name: Culbreath Oil & Gas Company, Inc. Lease Name: ROHLEDER Well #: 1

Sec. 7 Twp. 9 S. R. 25 ☐ East ☑ West County: Graham

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
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
ANHY	2300	313
B ANHY	2334	279
HBNR	3856	-1243
LGKC	3898	-1285
BKC	4124	-1511

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	23	263	Surface Blend II	185	3%CC 2% gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

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)*

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	Culbreath Oil & Gas Company, Inc.
Well Name	ROHLEDER 1
Doc ID	1461975

All Electric Logs Run

Directional
Micro
Resistivity
Porosity
Sonic

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	ROHLEDER 1
Doc ID	1461975

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	23	263	Surface Blend II	185	3%CC 2% gel

QES
PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 56104
LOCATION
FOREMAN Cory Davis
Walt Dinkel

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-18-19		Rohleder #1	7	8 S	26 W	Graham

CUSTOMER: Culbreath Oil + Gas Co, Inc
MAILING ADDRESS:
CITY: | STATE: | ZIP CODE:

Hoxie south to CR406 13 west to 110 Ave 1N-1/4W

TRUCK #	DRIVER	TRUCK #	DRIVER
731	Neil White		
70	Matadi Mmioh - Xavier Colby		
703	Cory Davis - Kaleb Compton		
1098	Walt Dinkel		

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 263 CASING SIZE & WEIGHT 8 5/8 23#
CASING DEPTH 263 DRILL PIPE TUBING OTHER
SLURRY WEIGHT 15.2 SLURRY VOL WATER gal/sk CEMENT LEFT in CASING 15-20'
DISPLACEMENT 15.5 DISPLACEMENT PSI MIX PSI RATE 4 BPM

REMARKS: Safety meeting, rig up on STP Drl, cir. casing on bottom mix 185 sks com, 3% cc - 2% gel, Displace 15.5 BBL H_2O, Shut in

Thank You
Walt + Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
Ce0451	1	PUMP CHARGE	1,150.00	1,150.00
Ce0002	30	MILEAGE	7.15	214.50
Ce0711	8.70		1.75	660.00
CC5871	185 sks	Surface Blend II	24.00	4,440.00
				6,464.50
			Less 25% Disc -	1,616.13
				4,848.37
			SALES TAX	
			ESTIMATED TOTAL	

Ravin 3737

AUTHORIZTION [signature] TITLE [signature] DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

QES

PRESSURE PUMPING LLC
PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 55994
LOCATION Oakley Ks
FOREMAN Cory Davis

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-24-19	2777	Rohleder #1	7	8S	26W	Graham Ks

CUSTOMER: Culbreath oil + Gas inc

Hoxie Ks S to RD 406 13 west to RD 110 1N 1/4 W into

MAILING ADDRESS:

CITY: STATE: ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
753	Cory D		
566	Kaleb C		
703	Xavier C		

JOB TYPE PTA HOLE SIZE HOLE DEPTH CASING SIZE & WEIGHT
CASING DEPTH DRILL PIPE 4 1/2 TUBING OTHER
SLURRY WEIGHT SLURRY VOL WATER gal/sk CEMENT LEFT in CASING
DISPLACEMENT DISPLACEMENT PSI MIX PSI RATE

REMARKS: Saftey meeting rig up on STP Drilling circ. mud Plug as ordered @2345
#1 Pump 5 BBL H2O ahead mix 8 BBL cement/50 sks wash up with 5 BBL water Pump 2 min mud
#2 @1450 mix 16 BBL cement/100 sks Displace 5 BBL water
#3 @ 325' mix 8 BBL Cement/50 sks Displace 2 BBL H2O
#4 @ 40' Push 8 5/8 Plug down mix 2 BBL Cement/15 sks
RH. mix 4 BBL Cement ~~on~~ wash up + Rig down

Thanks Cory + Crew

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0451	1	PUMP CHARGE	1900.00	1900.00
CE0002	30	MILEAGE	7.15	214.50
CE0711	10.32	Tonmileage Delivery min	1.75	660.00
CC5829	240 sks	Lite-Weight Blend	16.00	3,840.00
CP8228	1	8 5/8 wooden Plug	165.00	165.00
			sub total	6,119.50
			25% Dis	1,529.88
			sub total	4,589.62
			SALES TAX	
			ESTIMATED TOTAL	

Ravin 3737

AUTHORIZTION [signature] TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

GEOLOGICAL REPORT

FINAL

Larry A. Nicholson

NAD 83
39.27791574
-100.14906001

COMPANY & WELL: Culbreath O&G Rohleder #1-17
LOCATION: 272' FSL 1200' FEL SW SW SE SE
SEC 7 TWP 9S RGE 25W
COUNTY Graham STATE Ks

COMPANY Culbreath Oil & Gas Company, Inc.
API # 15-065-24166 FIELD Knobel
LEASE Rohleder WELL # #1-7
LOCATION SW SW SE SE
SURVEY 272' FSL 1200' FEL
SECTION 7 TWP 9S RGE 25W
COUNTY Graham STATE Kansas

CONTRACTOR STP Drilling LLC Rig # 1
SPUD 04-18-19 8:00 am COMP
RTD 4200 LTD 4198 4-23-19 9:35 pm
MUD UP AT 3426
MUD TYPE Chemical, Andy's Aaron Blew

ELEVATIONS
K.B. 2613
D.F.
G.L. 2606
All measurements from K.B. 2613

SAMPLES SAVED	FROM 3550	TO RTD		
DRILLING TIME	FROM 3500	TO RTD		
SAMPLES EXAMINED	FROM 3550	TO RTD		
GEOLOGICAL SUPERVISION	FROM 3500	TO RTD		
WELLSITE GEOLOGIST	LARRY A. NICHOLSON			

CASING RECORD

Conductor		of	w/	sx
Surface	263	of 8 5/8	w/ 185	sx
Production		of	w/	sx

ELECTRICAL SURVEYS Hallb ACRT, POR, MICRO, BSAT, SURV SONIC

FORMATION TOPS & STRUCTURAL POSITION

FORMATION	SAMPLE TOPS	SUBSEA DATUM	ELEC LOG TOPS	SUBSEA DATUM	REFERENCE WELL A	REFERENCE WELL B
Anydrite			2300	+313		
B/Anydrite			2334	+279		
Heebner			3856	-1243		
Lansing			3898	-1285		
G zone			3980	-1367		
M Creek			4014	-1401		
H zone			4032	-1419		
I zone			4054	-1441		
J zone			4074	-1461		
Stark			4084	-1471		
BKC			4127	-1514		
RTD			4200	-1587		
LTD			4198	-1585		

REFERENCE WELLS A:
B:

DRILLSTEM TEST SUMMARY :

Dst #1 4044-4085 (LKC I-J) 30 45 30 45 IF:15-18 FF:20-21 SI:534-263
Rec 10' Mud IF: weak surf died 8 min, nr FF: N blow, nr

REMARKS & RECOMMENDATIONS:

Based on the lack of shows, reservoir and recovery on dsts, the well was P&A

* Note the ROP, was slide up
3' to match the Electric log
Dst is 3' higher

LAN 7/92, Modified 5/05, 11/11, 4/12, 4/18
1inch = 25.4mm 8.5 x 97.5 216 mm x 2460 mm

LEGEND

Dolomite | Limestone | Shale | Carbonaceous Shale | Sandstone | Chert | Anhydrite

GAMMA RAY / SP (0–150)	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	REMARKS

Gas Units (-100 – 100), con, PE; DRILLING TIME IN MINUTES (Rate of Penetration Increases); PER FOOT; CALIPER (6 in – 16 in); lag; Sonic, Neuton, Density

SAMPLE DESCRIPTIONS

Ls, lt gry, vfn xln, sli dol, remn oolite to sli granular, fr por, n stn, n odor, n sho

Ls, lt gry, vfn xln, sli dol, remn oolite to sli granular, fr por, chlky, n stn, n odor, n sho

Ls, lt gry, vfn xln, sli dol, remn oolite to sli granular, fr por, vchlky, n stn, n odor, n sho
Sh, grngry, md gry

Ls, crm, sparysli dol, remn ool & bioclastics, ppt vugs, n stn, n odor, n sho

Ss, md grn, well srt, dk grn glacunite,dns
Ls, lt gry, sli dol, spary cacl xln, trc foss, sm clustry pyrite, n stn, n odor, n sho
Ls, lt gry, micro xln, litic, sli dol, n stn, n odor, n sho

Ls, crm, vfn xln, trc spary calc, sli chlky, few ool inclusion, n stn, n odor, n sho

Ls, lt gry, mico xln, lithic txt, n vis por, n flor, n stn, n odor, n sho
Ss, lmy, lt brn, qtz, fn-md grn, sub rnd, gluc inclu, pr por, no stn, no sho

Sh, md gry sft-wxy

Silty Ls, md gry, vfn grn, firm-sft, chlky in part, n vis por, n flor, no sho
Lmy mudstn, gry, sft,

Ls, crm, vfn xln, spary calc, trc ppt por, n stn, n odor, n sho

Ls, wht lt gry, micro xln, lithic, 10% spary bioclast & dk gry oolites, pr intra ool por, 10% vfn xln with fn spary xln, n stn, n odor,

Ls, wht lt gry, micro xln, lithic, 10% spary bioclast & dk gry oolites, pr intra ool por, 10% vfn xln with fn spary xln, n stn, n odor,
Sh, lt gry vfn clay

Ls, crm, vfn xln, sli dol, v chlky, n stn, n odor, n sho

Sh, lt brn vsft clay

Ls, crm lt gry, vfn xln, sli dol, chlky, n stn, n odor, n sho

Ls, crm, fossif, vfn xln, spary calc xln, n stn, n odor n sho

Ls, crm, vfn xln, britle, pr-fr por, wht chlky in part, n stn, n odor, n sho

Ls, crm, vfn xln, britle, pr-fr por, wht chlky in part, n stn, n odor, n sho

Ls, crm, vfn xln, britle, pr-fr por, wht chlky in part, n stn, n odor, n sho

Sh, blk carb, brn

Ls, lt tan crm, micro-vfn xln, trc spary calc, pr intra xln por, n stn, n odor, n sho

Sh, brn, lt brn vsft
Ls, lt tan crm, micro- vfn xln, dns,pr intra xln por, chlky, n stn, n odor, n sho

Ls, crm lt gry, micro-vfn xln, dns, pr ixln por, scat crm chert, n stn, n odor, n sho

Sh, gry-dk gry lmy sh
Ls, crm, micro-vfn xln, dns, pr ixln por, chlky in part,n stn, n odor, n sho

Sh, blk, brn, grn gry

Ls, lt crm, vfn xln, fr por, few lt gry chert, n stn, n odor, n sho

Ls, lt crm gry, dull, vfn xln, pr ixtra grn por, scat lt gry chert, chlky, n stn, n odor, n sho

Ls, lt crm tan, mostly ool grnstn w/spary calc cmt, n vis intra ool por, vfn xln, spary calc, chlky, n stn, n odor, n sho

Ls, lt crm tan, vfn xln, spary calc xln, fr ixln por, 3% ool grnstn, pr intra ool por, chlky in part, n stn, n odor, n sho

Ls, crm lt gry, vfn xln, granular in part, scat spary calc, micro xln, dns, chlky, n stn, n odor, n sho
Sh, blk carb, ppt gas bubbles,
Ls, lt gry brn, micro xln lithic, n vis por, scat lt tan chert, n stn, n odor, n sho

Ls, lt gry, micro xln, lithic, dsn, 5% ool grnstn, n intra ool por, n stn, n odor, n sho

Sh, md gry, dk gry with dk grn gluconite, brn, lt brn

Ls, wht crm, micro xln, dns, dull, 15% wht tranl chert, chlky, n stn, n odor, n sho

Silty sh, org rd, gry aqu grn, sft
Ls, wht crm, micro xln, lithic,wht tranl chrt in part, few remn subrnd ool grnstn hvy cmt, no vis por, n odor, n stn, n sho

Ls, crm lt wht, micro xln, no vis por, occ wht & lt crm gry tranl shrp chrt, sli chlky, n stn, n odor, n sho

Ls, crm lt wht, micro-vfn xln, dns, no vis por, scat lt gry crm chert, sli chlky, n stn, n odor, n sho

Ls, crm & wht sli gry, micro xln, lithic, no vis por, n flor, n sho
Sh, multi color, brn org, gry grn,

Ls, crm lt wht, micro-vfn xln, dns, no vis por, few dns ool grnstn, n intra ool por, scat lt gry crm chert, sli chlky, n stn, n odor,

Sh, brn, dk gry,

Ls, crm lt wht, micro xln, dns, no vis por, few spary bioclastics, few cutn flky-spks O on break, tite, n odor, nsfo

Ls, crm lt wht, micro xln, dns, dull, no vis por, few cutn with trc edge spks, n odor, n nsfo
Sh, blk carb, dk gry, gry grn

Ls, lt gry tan, micro xln, lithic, vfn xln & chlky, scat lt crm chert, n stn, n odor, n sho

Sh, md gry

Ls, lt gry tan, micro xln, dull, n por, vfn xln-chlky, spks gil stn on few edges, n odor, n sho

Ls, crm lt wht, vfn xln, trc spary calc, micro xln, dull, no vis por, scat wht crm tranl shrp chrt, chlky in part, n stn, n odor, n sho

Ls, crm lt wht, vfn xln, trc spary calc, micro xln, dull, no vis por, scat wht crm tranl shrp chrt, chlky in part, n stn, n odor, n sho

Ls, crm lt wht, vfn xln, trc spary calc, micro xln, dull, no vis por, incr wht crm tranl shrp chrt, chlky in part, n stn, n odor, n sho

Sh,blk carb, brn
Ls, crm lt wht, micro xln, dns, n por, n stn, n odor, n sho

Sh, blk, brn, trc grygrn

Ls, crm lt wht, micro xln, no vis por, few hvy cmt ool grnstn, n-pr intra ool por, few spks O on crush, occ wht crm tranl shrp chrt,

Ls, crm, micro xln, dns, trc spary calc, scat lt gry chert, n stn, n odor, n sho

Ls, lt crm, micro xln, lithic, dns, few remn oolites, hvy sec cmt, n intra ool por, few spts O in tray. Spks O on crush, n Ostn in dry, vvfnt odor, nsfo

Ls, lt crm, 3% motld weatherd chert, w/spks dk brn O on crush, n vis por, vvfnt odor, nsfo
Sh, lt gry, vsft, clay, gritty

Ls, lt crm, micro xln, lithic, dns, n vis por, scat lt gry chert, 5 cutn spks dk brn O on cutn surf, few spts O on break, vvfnt odor, trc edge & vug stn,few ppt gas bubble, nsfo

Ls, lt crm, micro xln, lithic, dns, n vis por, scat lt gry chert, trc blk flky asphaltic edge stn on few chert, trc pyrite
Sh, blk, dk gry, brn, pyrite
Ls, lt crm, micro xln, lithic, dns, n vis por, scat lt gry chert w/sparce vfn pyrite xln. n sho
Ls, lt crm, micro xln, lithic, dns, n vis por, scat lt gry chert, 2 cutn vfn xln, n-pr por, md brn O spts on break, n odor, nsfo

Sh, md gry, blk, sft, brn

Ls, lt crm, micro xln, dns, dull, n vis por, trc spary calc xln, scat lt gry chert, n odor, n stn, n sho

Ls, lt crm, micro xln, dns, dull, n vis por, trc spary calc xln, scat lt gry chert, chlky, n odor, n stn, n sho

Sh, md gry, brn, dk brn

Sh, multi col, brn org, silty, org chert

Sh, multi col, brn org, silty, lt brn vsft clay

Ls, lt gry, dull, n vis por, scat dull lt gry and tan gry chert, n stn, n odor, n sho

Sh, multi col, brn org, silty, lt brn vsft clay

Ls, lt gry, micro xln, dull, n vis por, few dns bioclastic cutn, scat tan & org tan chert, n stn, n odor, n sho

Ls, lt gry, micro xln, dull, n vis por, scat tan chert, vchlky, n stn, n odor, n sho

Sh, multi col, md gry, dk org sily, grngry

Sh, org, gry, grygrn

REMARKS

Spud 8:00 AM..04-18-2019
RTD 9:35 PM 04-23-2019

"BIT RECORD"
Surface Bit : Rr Smith, 12-1/4,
\# out at 263'
Bit No.1, Smith F24 7-7/8"
Serial #RJ9081
in at 263- out at 4200

"VERTICAL SURVEYS"
1/4° @ 263' @
1° @ 4085'
3/4° @ 4200'

"PUMP DATA"
Emsco D 375
Stroke 14", Liner 6"
60 strokes 350 gpm

"DAILY REPORT"

Spud
04-18-2019 - 8:00 AM

Drlg to 12 1/4" to 263'

Set 8-5/8" 23# 6 jts
set @ 263'
185 sxs
Common, 3%cc 2% gel

Plug down 12:30 PM 04-18-19
Did Circ, QES

Drlg plug 8:30 PM 04-18-19

04-19-2019- 7:00 AM
Drlg @ 1250'

04-20-2019 - 7:00 AM
Drlg @ 2,410'

04-21-2019 - 7:00 AM
Drlg @ 3,360'

04-22-2019 - 7:00 AM
Drlg @ 3,870'

04-23-2019 - 7:00 AM
Dst #1 @ 4,085'

04-23-2019 - 9:35 PM
RTD @ 4.200

04-24-2019 - 2:00 AM
Haliburton
LTD @ 4,198
finish 6:00 AM

Plugged well with 255 sxs
60/40 poz, 4%gel

1st plug @ 2325 w/50 sxs

2nd plug @ 1450' w/100 sxs

3rd plug @ 325 w/50sxs

4th plug @ 40' w/10 sxs

40 sxs rathole/mousehole

15 sxs mousehole

QES
04/25/19

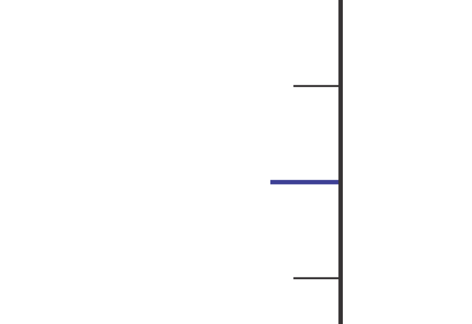
Mud Check 4 04/18/19 at 3,912'
vis: 51 wt: 8.9 Chlor: 500
LCM: 2# Ph: 10.5 WL:6.8

DST (1) 4044-4085
LKC I-J
30-45-30-45
IF: weak surf died 8 min
IS: n return
FF: n blow
FS: n return

Total Rec: 10 ft Mud
(100%M)

FP: 15-18 FFP: 20-21
SIP: 534 FSIP: 263
HP: 1990 FHP: 1864

Temp 115° F BHT



Mud Check 5 04/23/19 at 4,085'
vis: 52 wt: 9.2 Chlor: 500
LCM: 2# Ph: 10.0 WL:6.8

Pipe Strap	4093.01
Board	4091.69
Strap long	1.32

GAMMA RAY / SP | Gas Units | DRILLING TIME IN MINUTES (Rate of Penetration Increases) | PER FOOT | CALIPER | DEPTH | LITHOLOGY | SAMPLE DESCRIPTIONS | REMARKS

COMPANY Culbreath Oil & Gas Company, Inc.
LEASE Rohleder #1-17 SW SW SE SE
LOCATION 272' FSL 1200' FEL SEC. 7 TWP 9S RGE 25W
COUNTY Graham STATE Ks

ELEVATIONS
K.B. 2613
D.F.
G.L. 2606
All measurements from K.B. 2613

DRILL STEM TEST REPORT

Culbreath Oil & Gas Company

3501 S. Yale Ave
Tulsa OK 74135

ATTN: Larry Nicholson

7-9s-25w Graham KS

Rohleder #1

Job Ticket: 65536 **DST#: 1**

Test Start: 2019.04.23 @ 05:27:00

GENERAL INFORMATION:

Formation: **LKC " I - J "**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:07:00
Time Test Ended: 12:08:20

Test Type: Conventional Bottom Hole (Initial)
Tester: Ryan Nichols
Unit No: 71

Interval: 4044.00 ft (KB) To 4085.00 ft (KB) (TVD)
Total Depth: 4085.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

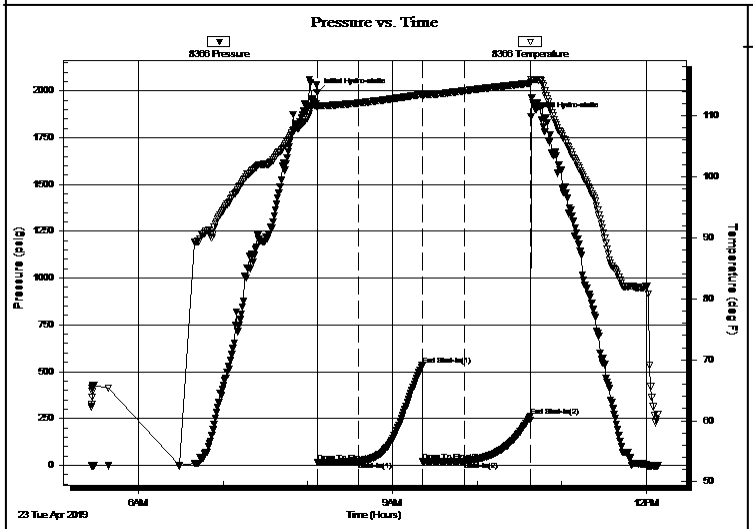
Reference Elevations: 2613.00 ft (KB)
2606.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8366 **Outside**

Press@RunDepth: 21.17 psig @ 4045.00 ft (KB)
Start Date: 2019.04.23 End Date: 2019.04.23
Start Time: 05:27:01 End Time: 12:08:20

Capacity: 8000.00 psig
Last Calib.: 2019.04.23
Time On Btm: 2019.04.23 @ 08:06:40
Time Off Btm: 2019.04.23 @ 10:38:20

TEST COMMENT: 30 IF - Weak surface blow died @ 8 mins
45 ISI - No return
30 FF - No blow
45 FSI - No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1989.73	112.00	Initial Hydro-static
1	15.11	111.32	Open To Flow (1)
30	18.10	112.09	Shut-In(1)
75	533.92	113.49	End Shut-In(1)
75	19.61	113.29	Open To Flow (2)
105	21.17	114.11	Shut-In(2)
152	263.45	115.35	End Shut-In(2)
152	1863.59	115.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%M	0.05

Gas Rates

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

DRILL STEM TEST REPORT

Culbreath Oil & Gas Company

3501 S. Yale Ave
Tulsa OK 74135

ATTN: Larry Nicholson

7-9s-25w Graham KS

Rohleder #1

Job Ticket: 65536 **DST#: 1**

Test Start: 2019.04.23 @ 05:27:00

GENERAL INFORMATION:

Formation: **LKC " I - J "**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:07:00
Time Test Ended: 12:08:20

Test Type: Conventional Bottom Hole (Initial)
Tester: Ryan Nichols
Unit No: 71

Interval: 4044.00 ft (KB) To 4085.00 ft (KB) (TVD)
Total Depth: 4085.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

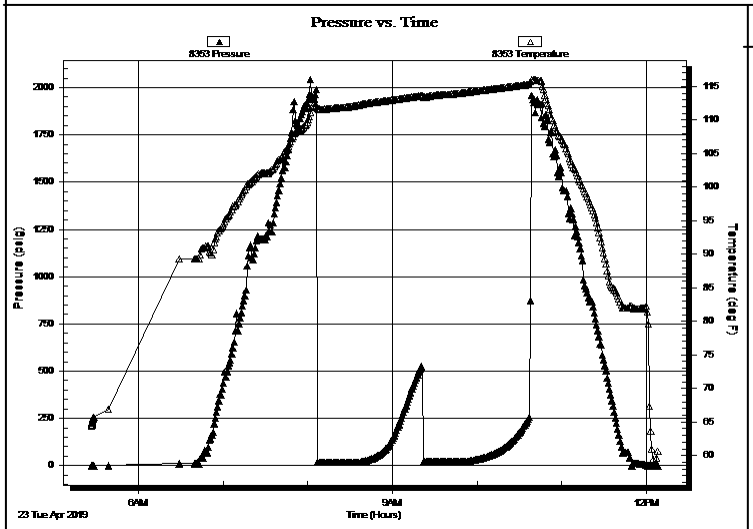
Reference Elevations: 2613.00 ft (KB)
2606.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8353 **Inside**

Press@RunDepth: psig @ 4045.00 ft (KB)
Start Date: 2019.04.23 End Date: 2019.04.23
Start Time: 05:27:01 End Time: 12:08:10

Capacity: 8000.00 psig
Last Calib.: 2019.04.23
Time On Btm:
Time Off Btm:

TEST COMMENT: 30 IF - Weak surface blow died @ 8 mins
45 ISI - No return
30 FF - No blow
45 FSI - No return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%M	0.05

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company

3501 S. Yale Ave
Tulsa OK 74135

ATTN: Larry Nicholson

7-9s-25w Graham KS

Rohleder #1

Job Ticket: 65536 **DST#: 1**

Test Start: 2019.04.23 @ 05:27:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.80 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

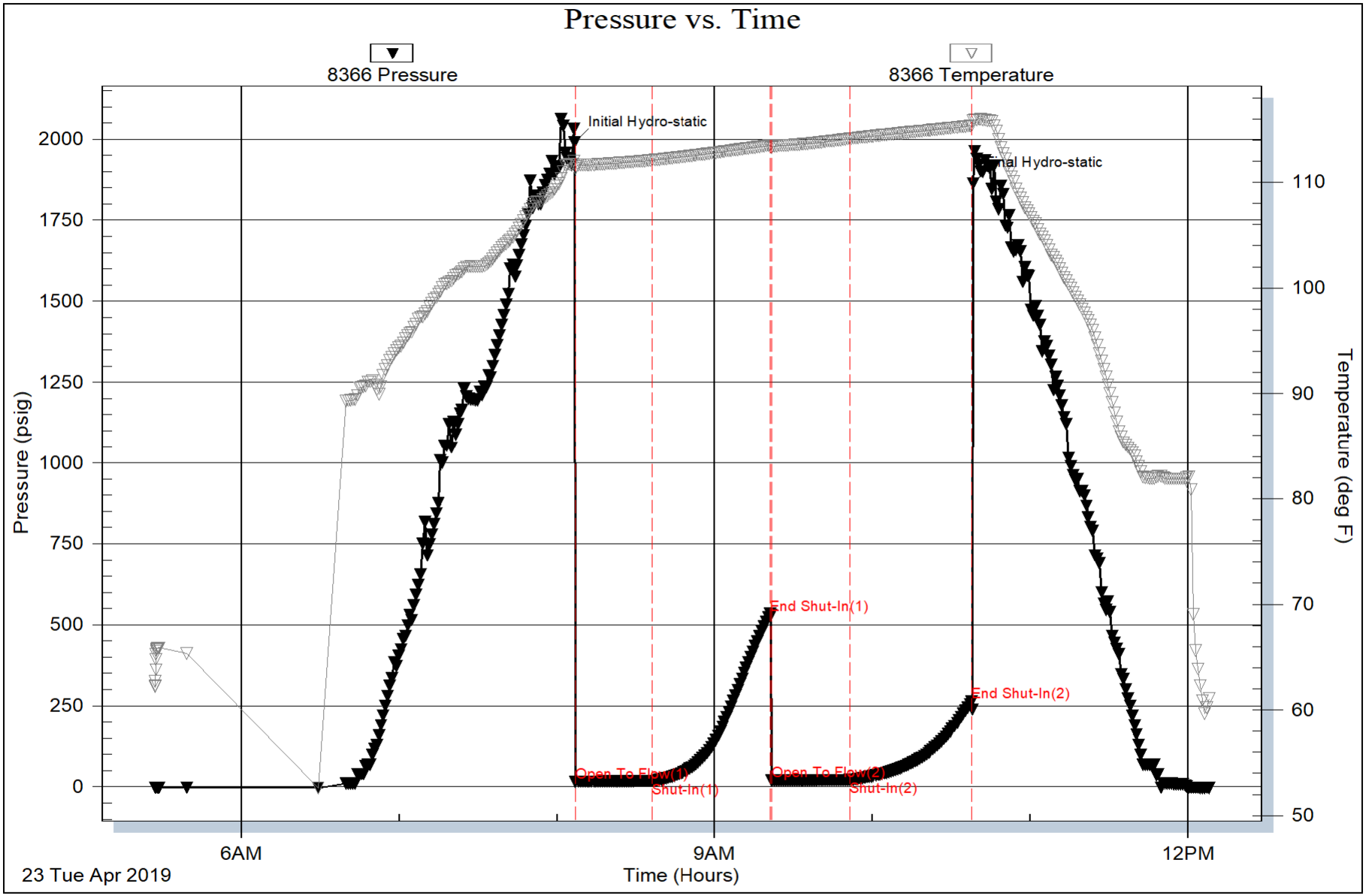
Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100%M	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8366 **Outside** Culbreath Oil & Gas Company Rohleder #1 DST Test Number: 1



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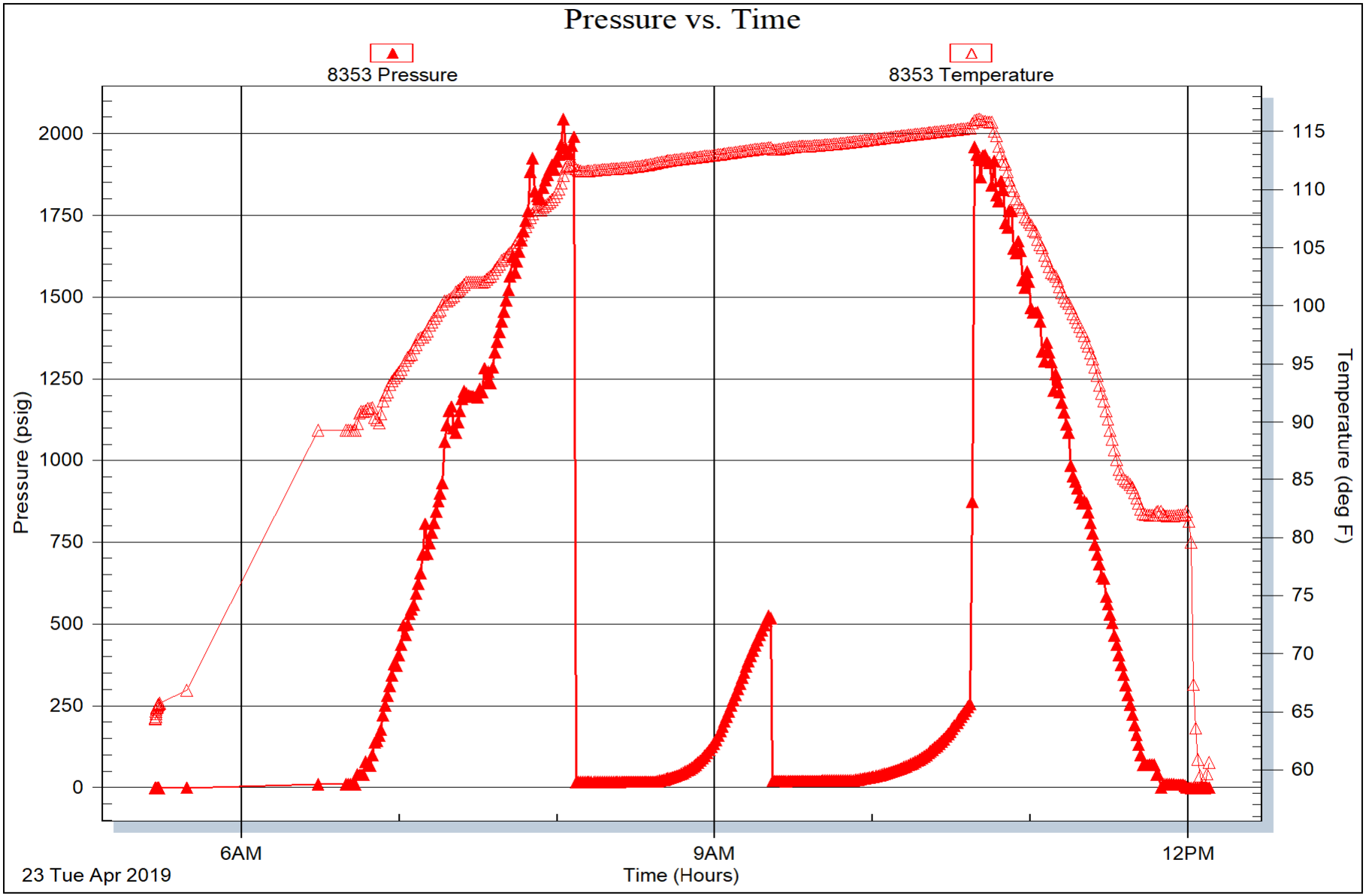
Serial #: 8353 **Inside** Culbreath Oil & Gas Company Rohleder #1 DST Test Number: 1



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