

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. 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) (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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QUALITY WELL SERVICE, INC.

8428

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

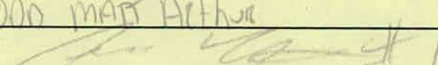
Mailing Address P.O. Box 468

Office 620-786-6992

Fax 620-672-3663

Todd's Cell 620-388-4967

Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-27-23	26	29S	13W	Pratt	Ks		
Lease Reta		Well No. 1		Location			
Contractor Murfin Drilling R.G. 104				Owner			
Type Job Surface				To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 12 1/4		T.D. 396'		Charge To Griffin			
Csg. 95/8		Depth 385'		Street			
Tbg. Size		Depth		City State			
Tool		Depth		City State			
Cement Left in Csg.		Shoe Joint 42.17		The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line		Displace 22 Bbl		Cement Amount Ordered 385 cc Common			
EQUIPMENT				2 1/2" 6' 3 1/2" 1/2" PS USED 275			
Pumptrk 3	No.			Common 275 cc			
Bulktrk 12	No.			Poz. Mix			
Bulktrk	No.			Gel. 577 lbs			
Pickup	No.			Calcium 776 lbs			
JOB SERVICES & REMARKS				Hulls			
Rat Hole				Salt			
Mouse Hole				Flowseal 138 lbs			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
D/V or Port Collar				CFL-117 or CD110 CAF 38			
Rn 9 H ₂ O 95/8 23" CSG SET				Sand			
START CSG CSG on Bottom				Handling 408			
Hook up to CSG & Break circ w/ rig				Mileage 15 / 612.0			
START Pumping H ₂ O				85/8 FLOAT EQUIPMENT			
START Mix Pump 275 cc Common				Guide Shoe H' M 1 EA			
2 1/2" GEL 3 1/2" 1/2" PS @ 14.8" / gal				Centralizer Baffle Plate 1 EA			
SHUT DOWN RELEASE 95/8 WARDEN Plug				Baskets WARDEN Plug 1 EA			
START Disg				AFU Inserts			
Plug down 500'				Float Shoe			
Close Valve on CSG				Latch Down			
Good circ thru JOG				SERVICE Spv 1 EA			
circ CNT TO BT				LMV 15			
THANK YOU				Pumptrk Charge Surface			
PLEASE CALL AGAIN				Mileage 30			
TODD MART Arthur							
X Signature 				Tax			
				Discount			
				Total Charge			

Griffin management LLC

RETA 1

10/26/23

MI and RU Murfin 104

11/1/23

Starting Laying down drill pipe at 8:00 am

Laid down pipe and drill collars. Start running casing at 2:00 pm

Run 113 jts 5 ½" 17# casing Total 4740'. PBTD 4732'. Quality cemented with 175 sks Pro C cement 10% salt, 2% gel and 5# Koseal Plug down at 6:15 pm. Released rig.

11/7/23

RU CCWS (Reyes)

Unloaded tubing 149 jts 2 7/8" = 4828.53'

Avg 32.41

11/8/23

RU Log tech. Run CBL/GR log and perforated 4464 - 4482' 3 spft. LTD 4734'. PU model R packer and 138 jts. RU Tiger Chemical to spot at 4483'. Pumped 750 gals 15% MCA acid and 10.5 KCL spacer water. Breakdown 580#. Treat 3.5 bpm at 400#. Ball action up to 600#. ISIP 200#. 15 mins 50#. Used 1500 gals 15% MCA acid, 10.5 bbls KCL spacer water, 28 bbls KCL flush water and 40 balls. Total 76 bbls used RU to swab. IFL surface Swab down and recovered 49.5 bbls Last swab was 11% OC Next hr recovered 7 bbls 15% OC FFL 4200' Open bypass and swab back 12 bbls 12% OC Total acid load swabbed back 56.5 bbls Shut in well

11/9/23

TP 100#. IFL 2900'

1st swab recovered 1500'/250' oil 12% OC

2nd swab recovered 700' 6% OC

3rd swab recovered 375' 12% OC

4th swab recovered 300' 16% OC

Swabbed 12.5 bbls

Wait 15 mins recovered 200' 25% OC

Wait 15 mins recovered 200' 20% OC

Wait 15 mins recovered 80' 20% OC

Swabbed 2.5 bbls

30 mins recovered 100' 29% OC

30 mins recovered 125' 25% OC

Swabbed 1 bbls. Total swabbed today 16 bbls

Released packer and pick up 2 jts to clean perf balls off perforations. PU swab and swabbed 49.5 bbls off casing. Laid down tubing. RD

11/13/23

RU Gore N2 and fracked with

2,633 bbls slick water

41,741# 20/40 mesh sand

8,055# Restin coated 20/40 sand

960,000 scf N2

Avg 40 bpm at 1285#

ISIP 1106#. 15 mins 955. Shut in well.

11/15/23

CP 1000# open well at 8:00 am

Fluid to surface at 10:00 am

1st hr CP 120# flowed 22.5 bbls

2nd hr CP. 65# flowed 13 bbls

3rd hr. CP. 70# flowed 15 bbls

4th hr. CP 70# flowed 10 bbls

5th hr. CP 40# flowed 7.5 bbls. Sli oil

6th hr. CP 50# flowed 10 bbls

7th hr. CP 30# flowed 7.5 bbls

4:45 pm CP 0# flowed 15 bbls in 2.25 hrs

Total flowed back 100.5 bbls

11/16/23

RU CCWS (Les)

Pick up desander and tubing as follows

- | | |
|-----------------------|--------|
| 1) 2 7/8" purge valve | .60' |
| 1) Jt 2 7/8" tubing. | 32.41' |
| 1) 2 7/8" Desander. | 19.50' |

- 1) 2' x 2 7/8" sub 2.00'
- 1) 2 7/8" seating nipple. 1.10'
- 140). 2 7/8" tubing. 4537.40'

Bottom of tubing landed at 4591.91'

Seating nipple at 4538.50'

RO to run pump and rods as follows:

- 1) 2 1/2" x 2" x 18' RWB insert pump
- 1) 2' x 7/8" pony rod
- 6) 1.25" x 25' sinker bars
- 173) 7/8" rods
- 1) 8' x 7/8" pony rod
- 1) 4' x 7/8" pony rod
- 1) 26' polished rod

Loaded hole.

11/17/23

RD CCWS. Set pumping unit and started pumping at 3:00 pm

12/19/23

RU CCWS (Reyes)

Pulled pump and rods. RO to TOOH

PU 3 jts and tagged 4' in on 4 jt picked up.
Tagged at 4691'. TOOH. Shut down

12/20/24

PU Hydrostatic bailer. TIH. Tagged at 4686'
Bailed 51' to 4737'. TOOH. Dumped bailer
TIH with tubing string as follows

1) Purge valve.	00.60'
1) 2 7/8" jt.	32.41'
1) Desander.	19.50'
1) 2' 2 7/8" sub.	2.00'
1) Seating nipple.	1.10'
140) jts 2 7/8"	4537.40'

Bottom of tubing landed at 4591.91

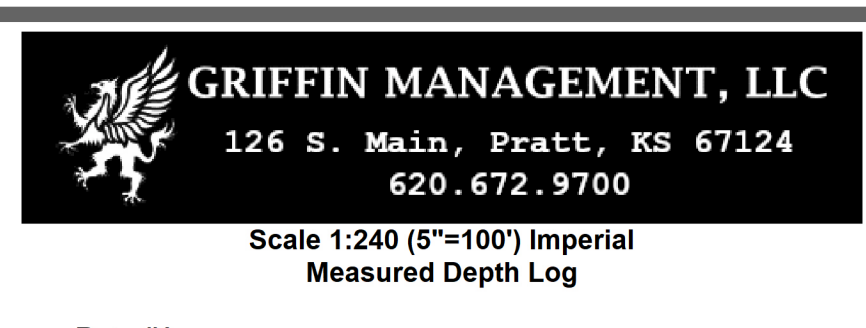
Seating nipple at 4538'

RO to run pump and rods

- 1) 2 1/2" x 2" x 18' RWB insert pump
- 1) 2' x 7/8" pony rod
- 6) 1.25" x 25' sinker bars
- 173) 7/8" rods
- 1) 8' x 7/8" pony rod
- 1) 4' x 7/8" pony rod

1) 26' polished rod

Load hole and hung off well. RD



Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Reta #1
 API: 15-151-22577
 Location: T29S R13W Sec 26
 License Number: 33936
 Spud Date: 10/26/2023
 Surface Coordinates: 1650' FSL & 2380' FWL
 Region: Pratt County, KS
 Drilling Completed: 10/31/2023
 Bottom Hole Coordinates: Vertical Wellbore
 Ground Elevation (ft): 1871' K.B. Elevation (ft): 1876'
 Logged Interval (ft): 3600' To: 4741' Total Depth (ft): 4741'
 Formation: Ordovician (Arbuckle) @ RTD
 Type of Drilling Fluid: Mud-Co. Chemical Dispac
 Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Griffin Management, LLC
 Address: 126 S. Main
 Pratt, KS 67124

GEOLOGIST

Name: Eli J. Felts
 Company: Griffin Management, LLC
 Address: 126 S. Main
 Pratt, KS 67124

Lithology	MD	ROP (min/ft) Gas (units)	Geological Descriptions	DSTs/Mud/Surveys, etc.
	3600			
	3650		LS - white, cream, fine xln chaly in most; stringers SH appear - dark brown to earthy black; sb carb	
	3700		SH - increasing % dark earthy carbonaceous shales; sl laminations visible; fissile in some; slight gas bubbles visible along edges; abdt white chalky soft; loose in tray	
	3750		LS - pale cream to white, lt grey, fn to v. fine xln w/smooth surface & limited visible porosity; sl xln calcite dev & trace ooc partially preserved in sm; weak oa; poss fractured ip; no odor; no stain; abdt white chalky residual scattered	
	3800		SH - flood grey - pale blue silt soft; gritty txbt in some high & silty to v. fine gm sandy inclusions; no visible porosity related to sand presence; bound completely w/ clay minerals/shales; dark speckled inclusions w/ micaceous appearance; sm metallic pyritic xln; v. fine fragments/xln shape not clearly represented	
	3850		SH & Siltstone: much of sample appears as above; lt greys; w/ influx white to lt grey/cream sandstone; v. fine grains well rounded & sorted; shalebound clusters w/ out visible intragranular por; no odor; no staining/no shows	
	3900		Sandy SH/Shaley Sands; greys & white/cream cuttings w/ fn.-v. fine grains visible; uniformly rounded & sorted; streaks dark glauconitic stain along edges in some; no live indications of recent potential reservoir; prior migration likely, however shales & clay minerals binding and cutting off permeability	
	3950		SH - shades of grey, smooth silty txbt in most w/ decreasing sandy inclusions; some white sandy stringers appear as edge contacts w/ few stringers LS - cream white chalky & partially visible sand; thin lens lime; limited evidence; no shows	
	4000		SH - mostly grey silty smooth; soft poorly compacted in most; soft w/ limited resistance on break; additional wave limy fragments appear; increasing % present in sample; white-cream fine xln chalky txbt; sl sandy	
	4050		LS - cream to lt tan, brown; v. fine to microxln; some oolitic w/ white rounded & heavy groupings where present; intra-oolitic space occupied w/ micritic limestone matrix; no visible porosity present; firm break in some nearing CH sharp breaks; no odor; no staining or shows	
	4100		LS - cream to white, sm lt grey, buff, fine xln in most; scattered glauconitic staining appears fracture patterns; chalky; no odor; no stain	
	4150		LS - cream to white, some dark webbed staining glauconitic mineral stains; fine xln w/ oa smooth txbt; sb cherty in some; sl buff sucrosic dolomitic xln marbled ip; residual stain w/ no live presence; no odor; ns	
	4200		LS - cream to buff, fine xln w/ smooth txbt in most; some partial pp dissolution porosity along edges/faces in some; appears along fractures & does not carry through when broken; stain present in these areas, a brown, non-movable residual staining; chalky break; no odor; ns	
	4250		LS - cream to lt grey w/ some caramel/tan to brown marbled w/ dense sections; mostly chalky to argillaceous w/ lt greyish blue silty shale stringers interbedded; granular appearance w/ visible sloughing from possible clay hydration & swelling	
	4300		LS - white to lt grey, cream, fine xln in most w/ increasing to med xln ip w/ poss dolomitic-xln dev in part; near edges of some cuttings; fossiliferous w/ intrafoss-oolitic to ooc in some; barren w/ chalky break; soft powdery break w/ no visible shows; no odor	
	4350		LS - white to buff, some stained w/ golden-amber residual surface w/ some slightly saturated hue giving darker shade in some pos; fn xln w/ dissolution porosity in part; oa chalky break; shows appear residual, non-lively; questionable pp floater traces; no odor	
	4400		LS - cream to white w/ increasing amber-tan staining present along edges & within porosity development; increasing dissolution & intrafossiliferous; sm re-xln dev in some; lacking live oil indicators although staining increasing & lighter shades overall; fair to good porosity in some w/ potential development w/ more favorable structure & should be kept in radar in offset locations for reservoir development & shows; check logs for calculations	
	4450		LS - cream to white; lt grey; fine xln w/ chalky appearance in most; some stained pos appearing as above are present but decreasing significantly; greyish milky cast appearing over sample giving dull, dead appearance thru most pos; no odor; no show	
	4500		LS - mst white w/ lt grey; few traces tan-brown staining; chalky txbt in most; some visible foss w/ some intrafoss poros dev in couple pos; break reveals traces lt amber residual clay flakes oil that float in irregular shapes; non-liquid/moveable appearance; other than these couple pieces, remainder of sample is without indicators of commercial or otherwise test-worthy reservoir potential	
	4550		LS - mst cream to beige, fn to med xln, chalky txbt in many w/ oa smooth txbt, soft to have edge stain; appears to be rare contact; no odor; no show	
	4600		LS - cream to dull grey, fine xln in mst; chalky txbt abdt throughout most pos; slight pp porosity poorly developed & carries buff to pinkish stained hue; soft to med chalky break; no odor; ns	
	4650		LS - cream to buff, fine xln w/ oa similar appearance to prior sample with some pos having dark edge contacts along edges of dark shale contact visible; trace fragments dark shale to represent formation change; otherwise lacking significance	
	4700		LS - cream, fine xln & SH appears increasing; some dark earthy shales along w/ medium brown w/ significant gas bubbles surrounding brown shale fragments; no odor; no shows save shale gas	
	4750		SH - flood dark grey to black shales; mature and well compacted appearance; smooth stony appearance in some w/ smooth laminations & presence of gas increasing further along breaks & planes; no odor present; shale gas from Stark S	
	4800		LS - most stark white w/ smooth txbt; fine to v. fine xln; sl cherty in part; lacking visible porosity; dense & well compacted; boney tight cherty lime	
	4850		LS - cream to grey shift from bone white; edge contacts transitions to sl granular w/ fossiliferous - chalky appearance oa; poorly dev porosity & shales to argillaceous; no odor; ns	
	4900		SH - sample transitions further into shale dominated section; limy structure remains in some pos although otherwise soft, loose & colorful appearance highlight shift from carbonate limestone into shaly beds w/ limy influence	
	4950		SH - varicolored w/ variety of notable features: Black carbonaceous w/ dense fissile & firm; others pale grey to tan w/ v. soft to mushy break; swells and dissolving w/ limited probing; some blue-purple hue & traces pale greens	
	5000		LS - pale grey; fn to v. fine xln to bony & lithographic; uniformly & without question the least conspicuous & quite possibly lacking any trait. The nerdiest of geologists has a hard time finding significance in this do nothing, go nowhere sorry excuse for a rock. Mark my words that no one will be taking this truly sad sample on any second dates; wow, mean really guy, do better will ya	
	5050		LS & Cherty lime; cream, white w/ dark brown to black staining; pattern of staining appears similar to tripolitic development often associated w/ Miss Osage & weathered CH with highly weathered & stained/saturated appearance; matrix in these samples appears more lime/calcium based than chert/shale; as would generally be indicative of osage weathering; possible exposure or vertical communication affecting post-miss recession or migration of hydrothermal fluids contributing to similar dissolution & porosity formation; further inquiry & research may be of aid in this quiz-hypothesis/inference (4380 & 4380 Drilling Samples)	
	5100		CH - varicolored w/ sharp & bone like w/ cream - yellow/orange, cream, pale greens to purple in some; vitreous w/ some of some yellow weathering in some; dark tripolitic txbt w/ heavy staining in these parts; lacking odor; reworked appearance	
	5150		*shift from CH to LS - pale grey to white, fine xln w/ sl chalky appearance; well compacted & dense overall, uniform & lithographic; possible Gilmore City LS	
	5200		SH - flood green to maroon shales; silty smooth & med firm shales; mottled & varicolored w/ marbled colors w/ overall consistent txbt & attributes otherwise	
	5250		20" sample - No cuttings present in sample box	
	5300		SH - flood dark green to brown silty & blocky cuttings w/ v. slight visible silty granular txbt throughout; firm well compacted & almost structured blocks appear to have structural density possibly due to fair % calcium mineral ratio; uniform in consistency w/ some slight shifts in color shifting greens to browns, sl maroon in some	
	5350		SH - v. similar to above description; smooth silty & blocky, firm uniform consistency; pale green dominates color scheme along w/ some brown-maroon; trace pos dark approaching black	
	5400		SH - oa resembles shales present and described above; slight transition w/ some pieces appearing sandy to tan w/ 3 clusters: SS - white w/ dark speckled/potted inclusions; increasing CH - bone white vitreous w/ smooth, fresh appearance in most; some edge weathering & visible contacts with dolomite porous sections; some chalky material present in part; fractures appears bright & lively in ~10-15% of sample	
	5450		Dolomite - white to cream/buff w/ significant staining, fn xln sucrosic & abdt med xln rhombic xln growth w/ good porosity development, appears re-xln w/ offset xln stacking increasing intraxln porosity; amber to lt brown staining in most w/ shows live oil on break; fluorescence glows bright yellow to green in webbed pattern following porosity development	
	5500		40" sample brings additional wave of well developed dolomite; white w/ tan to brown staining & few dark stained pos; quality shows persist along with good xln/re-xln porosity stained & partially saturated w/ live shows; stringers boney white vitreous shale appear to increase with overall quality persisting overall this CFS contains best shows and reservoir quality observed so far in this test well	
	5550		Dolomite - white to cream w/ tan to brown staining in much of sample; transitioning to more fine xln sucrosic & decreasing med xln rhombs; fair to good porosity & reservoir potential remains good, although less quality overall than prior stop; increasing CH - bone white vitreous w/ smooth, fresh appearance in most; some edge weathering & visible contacts with dolomite porous sections; some chalky material present in part; fractures appears bright & lively in ~10-15% of sample	
	5600		Dolomite - white to bone in majority of rocks; declining overall porosity & shows decreasing quickly; dolomite xln has degraded to fn-v. fine xln at most w/ significant increase presence of CH ratio along w/ additional clean bone white vitreous chert fragments; shows declining along w/ fluor indicating live presence in 2-3% of cuttings overall; appears to have chalky presence along with degrading of porosity	
	5650		LS - dolomitic & cherty bone white; fine xln w/ smooth txbt w/ some smooth glassy cherty sections; white chalky residue abundantly spread throughout giving milky grey to white cloudy appearance washing over cup; odor decrease to negligible if any; fluore non-present & shows vanished	
	5700		SH - flood turquoise green w/ smooth waxy txbt; fissile break; firm overall w/ slippery break in some; microsilty smooth surface of shales; w/ few stringers grey sandstone clusters; frosted qtz; well md & sorted w/ consistent, fair to firm cementation; vis pyrite in some; no odor; no shows, no fluor	
	5750		SH - transition from dark green to grey; some mottled; v. fine silty w/ few clusters SS - clear to lt grey; med grained sl frosted qtz w/ dark inclusions; poor to fair frab; barren; no odor; no show	
	5800		Dolomite & Dolomitic SS - abdt clusters cream w/ tan staining; appears fine xln sucrosic dolomite w/ saturated stain & slight shows live free oil; fair to good fissility breaking into smooth sandy grains w/ some sb angl; weak spotty fluor w/ slight odor w/ shake; double check logs & dry samples w/ fresh eyes	
	5850		SH - turquoise green, typical Smp type & abdt grey to dark brown; mottled to speckled; fair % SS - white to pale grey clusters w/ dark speckled/potted inclusions; most clusters shaly; clear to frosted qtz; sb rounded & poorly sorted med-large grains; mst porous bound in shale/pyrite w/ rare "clean" clusters; 2 w/ good frab & oa good vis pos; dark minerals/shaly inclusions; loose grains on break; barren w/ no odor; no fluor, ns	
	5900		Dol - tan to brown, fine xln to v. fine in some; well compacted & dense blocks w/ no vis xln porosity; no odor or stains; contact pos sandy shale & traces CH - oolitic nodes present within vitreous CH	
	5950		Dolomite - cream to buff w/ sl pinkish hue; fine xln sucrosic w/ some med xln rhomb dev; fair vis porosity building/increasing; cast/staining present uniform throughout w/ dull yellow fluor present in all pos visible dolomite; fair fissility w/ no live show on break; stain present poss mineral staining; too consistently present for HC indication; typical Arb odor is not present	
	6000		Dolomite - cream/buff; sm sl tan; fine xln suc & med xln ip; more uniformly developed xln porosity & relatively clean presence w/out significant weathering evidence or re-work/erosional materials; xln pyrite present in some; trace shales appear on edges in some; glauconitic; likely indicative saltwater presence/saturation or migration through this section; no odor; no staining; no shows; dull ylw fluor persists	

QUALITY WELL SERVICE, INC.

8432

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

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Office 620-786-6992
Fax 620-672-3663

Todd's Cell 620-388-4967
Brady's Cell 620-727-6964

Date	11-1-23	Sec.	26	Twp.	29S	Range	13W	County	PRATT	State	KJ	On Location		Finish			
Lease	KETA	Well No.	1	Location													
Contractor	Murfin Drilling	R.G. # 104										Owner	To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.				
Type Job	LS											Charge To	Griffin				
Hole Size	7 7/8	T.D.	4741'														
Csg.	5 1/2 17"	Depth	4742'														
Tbg. Size		Depth															
Tool		Depth															
Cement Left in Csg.		Shoe Joint	7.23														
Meas Line		Displace	109.85														
EQUIPMENT										Cement Amount Ordered 205# PROC 2% FEL 10% SALT							
Pumptrk	3	No.		5 1/2" x Kobal .6% C16A .25% CAIP 25 1/2" PS													
Bulktrk	15	No.		Common 205#													
Bulktrk		No.		Poz. Mix													
Pickup		No.		Gel. 335 lbs													
JOB SERVICES & REMARKS										Calcium							
Rat Hole	30#	Hulls															
Mouse Hole		Salt 1129 lbs															
Centralizers	1-2-3-4-5-6-7	Flowseal															
Baskets		Kol-Seal 1025 lbs															
D/V or Port Collar	UGA	Mud CLR 48 500 GAL															
Run 113 #1's	5 1/2 17" CSG SET @ 4740	CFL-117" or CD110" CAF-38 C16A 116 lbs															
START CSG on Bottom	TAG	Sand CC-1 9 GAL CAIP 48 lbs															
DROP BALL Hook up to CSG	BREAK circ wiring	Handling 276															
START Pumping 10 Bbls @ 12 Bbls MF	10 Bbls @ 12	Mileage 10/3850															
START Plug R-H	30#	5 1/2 FLOAT EQUIPMENT															
START MIX Pump 175# PROC	2 1/4 8% GAL	Guide-Shoe H:M 1 EA															
SHUT DOWN WASH out	RELEASE 5 1/2 LD PIST	Centralizer 7 EA															
START Disp w/ 2% KCL		Baskets															
LIFT PSI 90 Bbls out	550"	AFU Inserts															
Plug Down 110 Bbls out	1200"	Float Shoe															
PSI in CSG 1700"		Latch Down 1 EA															
RELEASE: HELD 1/2 Bbl Back		SERVICE SQV 1 EA															
Go on circ then JOB		LMV 10															
THANK YOU		Pumptrk Charge LS															
PLEASE CALL AGAIN		Mileage 20															
TODD MATT HERMAN																	
Signature													Tax				
														Discount			
														Total Charge			