KOLAR Document ID: 1484052

Confiden	tiality Re	quested:
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

		DECODIDEIO		
WELL	HISTORY	- DESCRIPTIO	N OF WELL	& LEASE

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
Oil WSW SWD Gas DH EOR	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #:	
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #: GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East _ West
Recompletion Date Reached TD Completion Date of Recompletion Date	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:						

KOLAR Document ID: 1484052

Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

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 Ctom Tooto Tol	kan						og Eormotio	n (Tan) Danth a	nd Datum	
Drill Stem Tests Tak (Attach Addition				Yes 🔄 No			-	n (Top), Depth a		Sample
Samples Sent to G	ieological S	Survey		Yes 🗌 No		Nam	e		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud Logs List All E. Logs Run:			Yes No Yes No Yes No							
			Rej	CASING port all strings set-c		Ne e, inte		on, etc.		
Purpose of String	g	Size Hole Drilled		Size Casing let (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
				ADDITIONAL		SQL	JEEZE RECORD			
Purpose: Depth Top Bottom		Тур	be of Cement	# Sacks Used			Type and Percent Additives			
Perforate Protect Casing Plug Back TD										
Plug Off Zone	e									
 Did you perform a Does the volume o Was the hydraulic f 	of the total ba	ase fluid of the h	nydraulic	fracturing treatment		-		No (If No, s	kip questions 2 ar kip question 3) Il out Page Three	
Date of first Production	on/Injection	or Resumed Pro	oduction/	Producing Meth	od:		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Productio Per 24 Hours	n	Oil E	3bls.	Gas Mcf Water Bbls. Gas-Oil		Gas-Oil Ratio	Gravity			
DISPOS	ITION OF G	iAS:		N	IETHOD OF CO	MPLE	TION:			DN INTERVAL:
	Sold U	Jsed on Lease -18.)		Open Hole		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		Тор	Bottom	
Shots Per	Perforation		tion	Bridge Plug	Bridge Plug		Acid	Fracture, Shot, Ce	menting Squeeze	Becord
Foot	Тор	Botto		Туре	Set At	-			d of Material Used)	
						-				
						-				
TUBING RECORD:	Siz	:e:	Set At	t:	Packer At:					

Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	NORMAN KLEPPER A 2
Doc ID	1484052

Tops

Name	Тор	Datum
Anhydrite	574	+1262
B. Anhydrite	596	+1240
Heebner	3094	-1258
Toronto	3114	-1278
Douglas	3130	-1294
Brown Lime	3229	-1393
Lansing	3254	-1418
ВКС	3492	-1656
Simpson	3560	-1724
Arbuckle	3594	-1758

Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	NORMAN KLEPPER A 2
Doc ID	1484052

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	24	433	60/40 Poz	2% gel, 3% CC

Acid & Cement

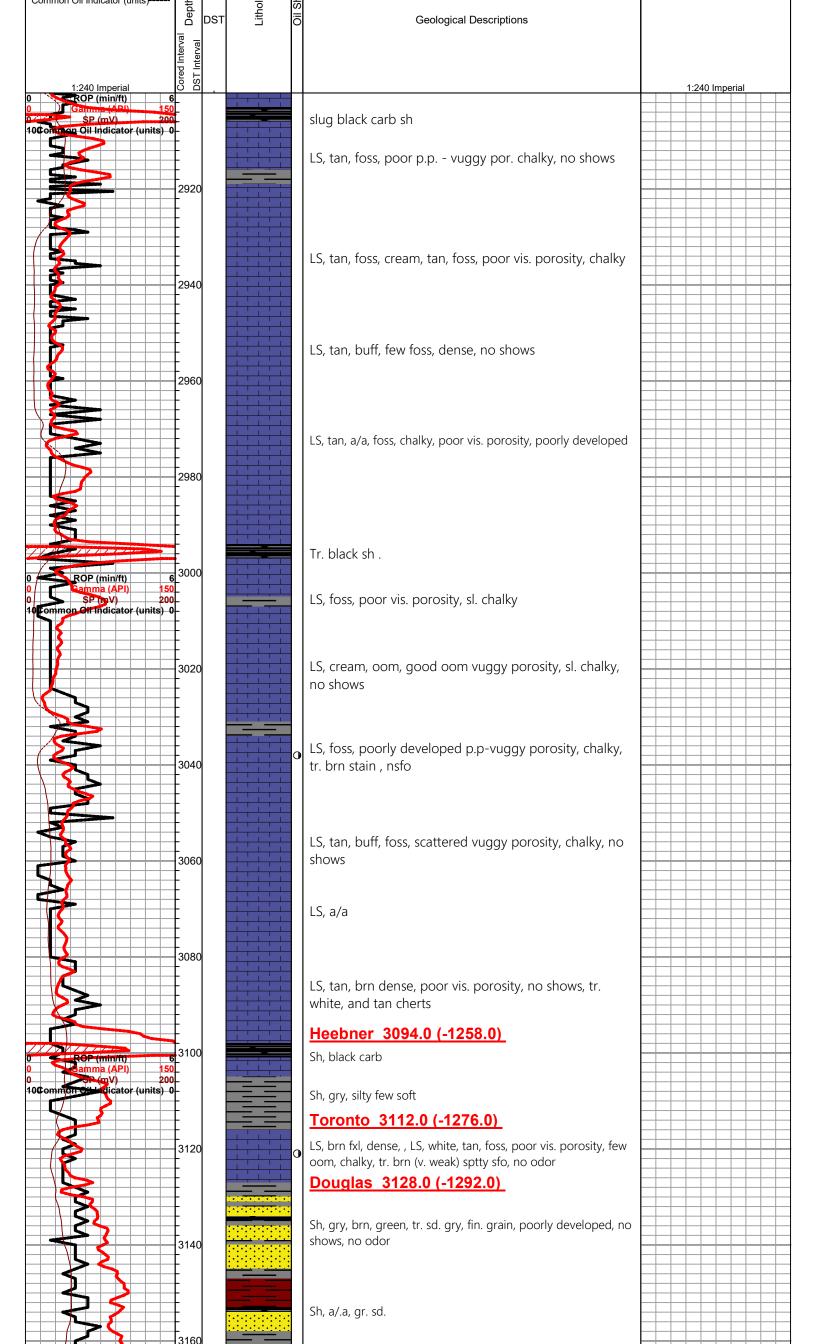
TREATMENT REPORT

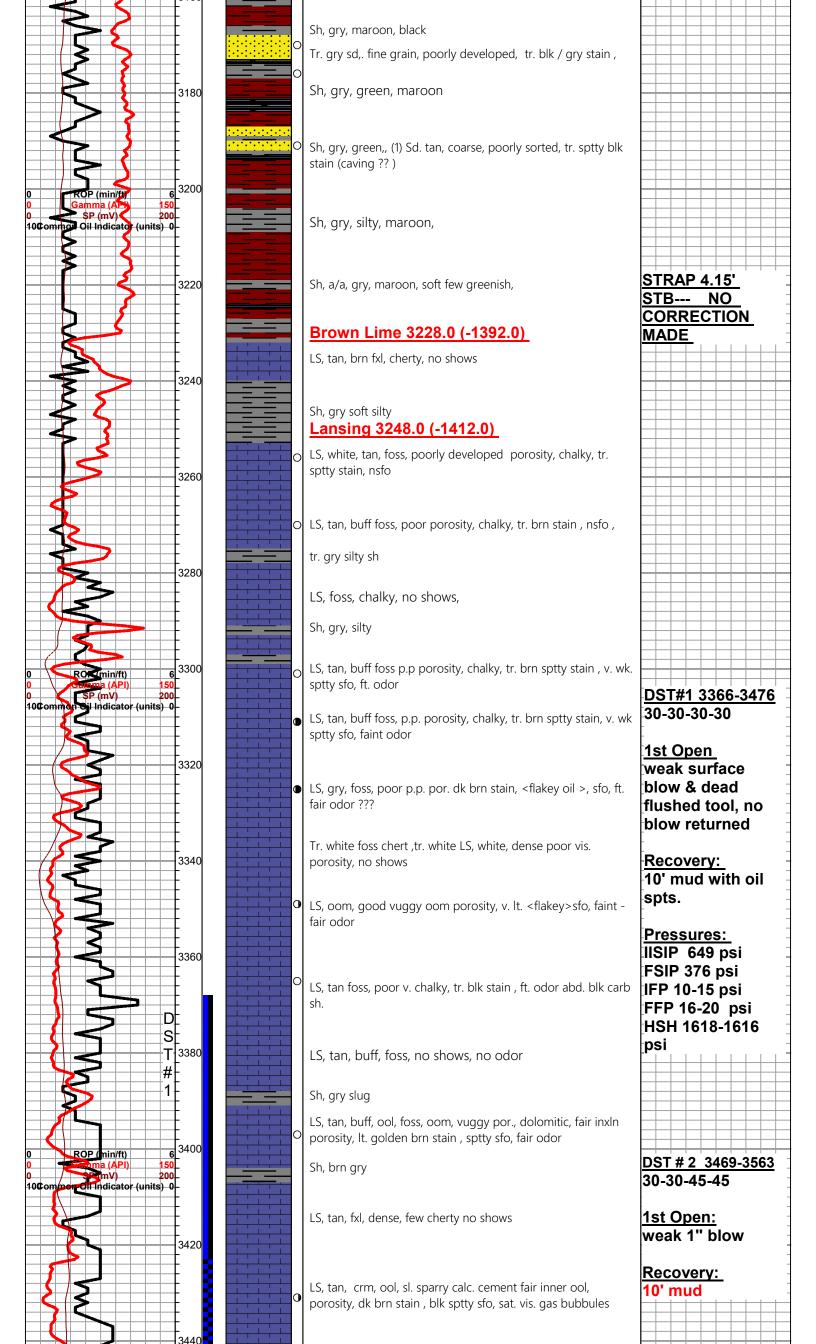
Acid Stage No. Type Treatment: Amt, Type Fluid Sand Size Pounds of Sand Bkdown Bbl./Gal. Date 10/10/2019 District GB F.O. No. 50040 Bbl./Gal. Company K&N Petroleum Bbl./Gal. Well Name & No. Norman Klepper A-2 Bbl./Gal. Field Location County Stafford State KS Bbl./Gal. Flush ft. No.ft. 0 Treated from ft. to h. No. ft. 0 Cesing: Size 8.5/8" Type & Wt. _____ Set at _____ft. from _____h, to ___ 0 ft. No. ft. Formation: Perf. to _____ from ft. to Bbl./Gal. Actual Volume of Oil / Water to Load Hole: Formation: Perf. _____to ___ Perl. to Formation: Liner: Size _____Type & Wt _____Top at _____ft. Bottom at _____ R. Pump Trucks. No. Used: Std. 365 Sp. Twin R. Auxiliary Equipment 367 Cemented: Yes Perforated from ft. to Swung at ft. Personnel Nathan-Mike-Duane Tubing: Size & Wt. ft. Auxiliary Tools ft. to Perforated from Plugging or Sealing Materials: Type Gals. th. Open Hole Size ______ T.D. _____ft. P.B. to _____ ft. Nathan W. Ed Treater **Company Representative** PRESSURES TIME **Total Fluid Pumped** REMARKS Tubing a.m./p.m. Casing On Location. 8 5/8" 3:00 Hole-435' Pipe-433' Break circulation with mud pump. Mix 400sks 60/40poz 2%gel 3% Calcium Chloride. Displace with 25.75bbls at 5bpm-400# Circulated cement to surface. 6:45 Thank You! Nathan W.

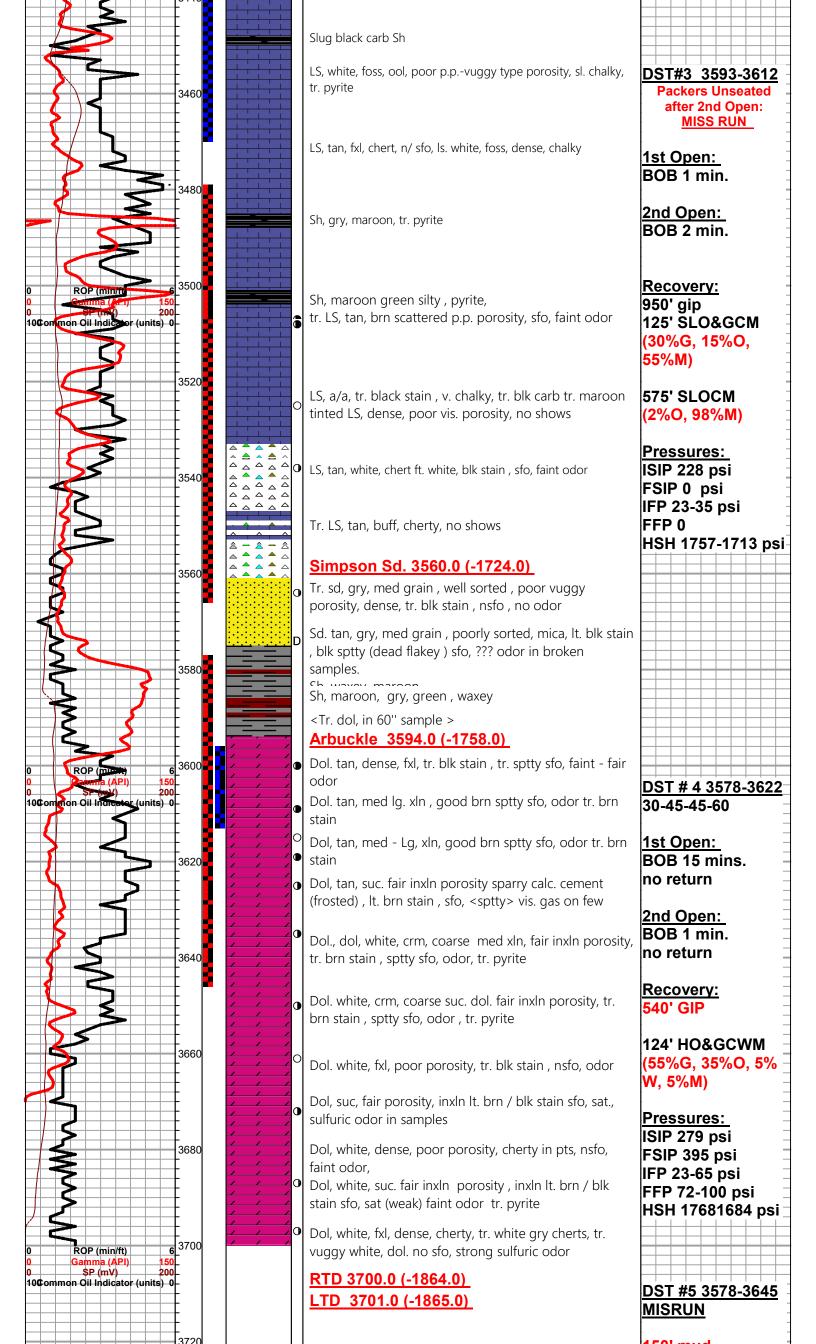


DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	KB_1836' DF_1834'
FIELD HEYEN LOCATION SW-NE-SE-SW (962' FSL& 2259' FWL SEC 17 TWSP_22S RGE_11W COUNTY Stafford STATE_Kansas CONTRACTOR_Southwind Drilling, inc. (Rig # 1) SPUD_10/08/2019 COMP 10/17/2019 RTD3700' LTD3700' MUD_UP 2850' TYPE SAMPLES SAVED FROM SAMPLES SAVED FROM 2900' DRILLING TIME KEPT FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568	DF <u>1834'</u> GL <u>1826'</u> Measurements Are All
FIELD HEYEN LOCATION SW-NE-SE-SW (962' FSL& 2259' FWL SEC 17 TWSP_22S RGE_11W COUNTY Stafford STATE_Kansas CONTRACTOR_Southwind Drilling, inc. (Rig # 1) SPUD_10/08/2019 COMP_10/17/2019 RTD	DF <u>1834'</u> GL <u>1826'</u> Measurements Are All
LOCATION _SW-NE-SE-SW (962' FSL& 2259' FWL SECTTWSP22SRGE11W COUNTYStaffordSTATEKansas CONTRACTOR _Southwind Drilling, inc. (Rig # 1) SPUD10/08/2019COMP10/17/2019 RTD3700'LTD3700' MUD UP2850'TYPE MUD _Chemical SAMPLES SAVED FROM2900' DRILLING TIME KEPT FROM2900' GEOLOGICAL SUPERVISION FROM2960' GEOLOGIST ON WELLWyatt FORMATION TOPS LOGSAMPLE Anhydrite5961240 600) GL <u>1826'</u> Measurements Are All
SEC) GL <u>1826'</u> Measurements Are All
COUNTY Stafford STATE Kansas CONTRACTOR Southwind Drilling, inc. (Rig # 1) SPUD 10/08/2019 COMP 10/17/2019 RTD 3700' LTD 3700' MUD UP 2850' TYPE MUD Chemical SAMPLES SAVED FROM 2900' 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2900' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568	Measurements Are All
COUNTY Stafford STATE Kansas CONTRACTOR Southwind Drilling, inc. (Rig # 1) SPUD 10/08/2019 COMP 10/17/2019 RTD 3700' LTD 3700' MUD UP 2850' TYPE MUD Chemical SAMPLES SAVED FROM 2900' 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2900' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568	
CONTRACTOR _Southwind Drilling, inc. (Rig # 1) SPUD _10/08/2019 _COMP10/17/2019 RTD	From KB
SPUD10/08/2019COMP10/17/2019 RTD3700'LTD3700' MUD UP2850'TYPE MUD Chemical SAMPLES SAVED FROM2900' DRILLING TIME KEPT FROM2900' SAMPLES EXAMINED FROM2900' GEOLOGICAL SUPERVISION FROM2960' GEOLOGIST ON WELLWyatt FORMATION TOPS LOG Anhydrite 574 +1262 B. Anhydrite 596 +1240	
SPUD10/08/2019COMP10/17/2019 RTD3700'LTD3700' MUD UP2850'TYPE MUD Chemical SAMPLES SAVED FROM2900' DRILLING TIME KEPT FROM2900' SAMPLES EXAMINED FROM2900' GEOLOGICAL SUPERVISION FROM2960' GEOLOGIST ON WELLWyatt FORMATION TOPS LOG Anhydrite 574 +1262 B. Anhydrite 596 +1240	CASING
RTD 3700' LTD 3700' MUD UP 2850' TYPE MUD Chemical SAMPLES SAVED FROM 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568	SURFACE 8 5/8"@433'
MUD UP 2850' TYPE MUD Chemical SAMPLES SAVED FROM 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	PRODUCTION None
SAMPLES SAVED FROM 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	ELECTRICAL SURVEYS
SAMPLES SAVED FROM 2900' DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	ELI WIRELINE DIL, DUCP , MEL
DRILLING TIME KEPT FROM 2900' SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	
SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	T0 RTD
SAMPLES EXAMINED FROM 2900' GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	TO
GEOLOGICAL SUPERVISION FROM 2960' GEOLOGIST ON WELL Wyatt FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	
GEOLOGIST ON WELLWyattFORMATION TOPSLOGSAMPLEAnhydrite574+1262568B. Anhydrite596+1240600	HARVER MARKED AND AND AND AND AND AND AND AND AND AN
FORMATION TOPSLOGSAMPLEAnhydrite574+1262568B. Anhydrite596+1240600	T0 RTD
FORMATION TOPS LOG SAMPLE Anhydrite 574 +1262 568 B. Anhydrite 596 +1240 600	Jrban
Anhydrite 574 +1262 568 - B. Anhydrite 596 +1240 600 -	
B. Anhydrite 596 +1240 600	S
	1268
1258 200/ 1258 200/	1236
	-1258
3114 3112	-1276
Douglas 3130 -1294 3128	-1292
Brown Lime 3229 -1393 3228	
Lansing 3254 -1418 3248	-1392
BKC 3492 -1656 3492	-1412
Simpson 3560 -1724 3563 Arbuckle 3594 -1758 3594	-1412 -1656 X
LTD /RTD 3701 -1865 -3700	-1412

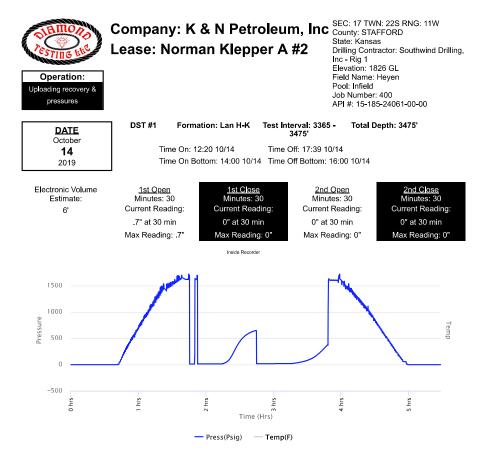
				LEGEND			
Oil Show ● Good Show ● Fair Show ● Poor Show ● Spotted or Trace ○ Questionable Stn D Dead Oil Stn ■ Fluorescence ★ Gas	DST ■ DST Ir ■ DST a ■ Core ■ tail pip	lt					
					Printed by GEOst	rip VC Striplog versio	on 4.0.8.15 (www.grsi.ca)
Curve Track #1					-		TG, C1 - C5
ROP (min/ft)	<u> </u>						
Gamma (API)	L Sa						
SP (mV)	Intervals	Лбо	WOL				

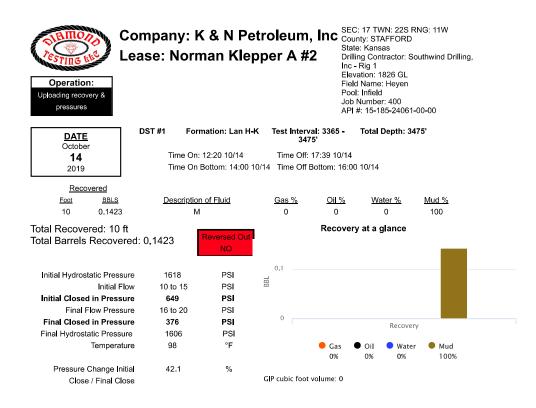


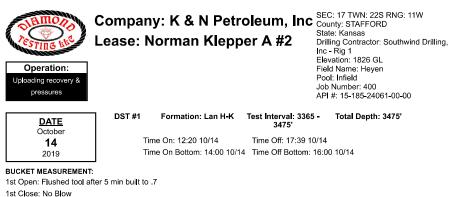




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			Т								
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	ΤΤ		Т								
			3740								
			73/40								\Box
	1										-







Ist Open: Flushed tool after 5 min built to .7 Ist Close: No Blow 2nd Open: No Blow 2nd Close: No Blow REMARKS:

Surge of .8 then died in 5 min. Flushed the tool at 5 min.

Tool Sample: 0% Gas 1% Oil 0% Water 99% Mud



pressures

Company: K & N Petroleum, Inc SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind D

SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00



DST #1 Formation: Lan H-K Test Interval: 3365 -3475'

5 Total Depth: 3475'

14 2019
 Time On: 12:20 10/14
 Time Off: 17:39 10/14

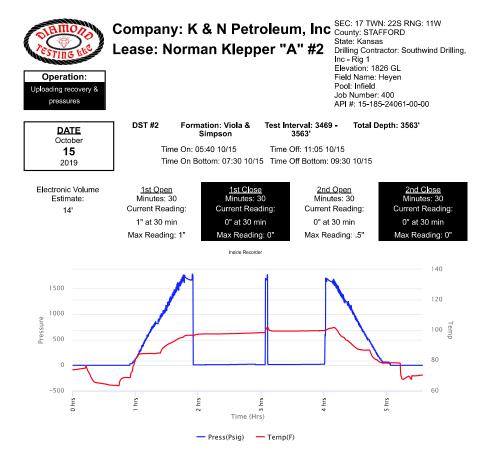
 Time On Bottom: 14:00 10/14
 Time Off Bottom: 16:00 10/14

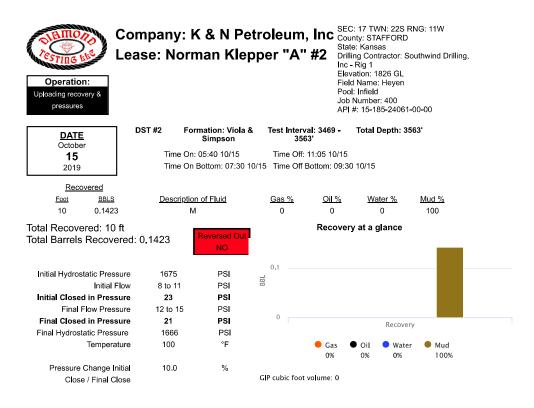
		Down noie Makeup	
Heads Up:	28.72 FT	Packer 1:	3360.48 FT
Drill Pipe:	3361.63 FT	Packer 2:	3365.48 FT
ID-3 1/2		Top Recorder:	3349.9 FT
Weight Pipe: ID-2 7/8	FT	Bottom Recorder:	3460 FT
Collars:	FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool: ID-3 1/2-FH Jars Safety Joint	33.57 FT	Bottom Choke:	5/8"
Total Anchor:	109.52		
Anchor Packer Sub:	<u>Makeup</u> 1 F⊤		
Perforations: (top): 4 1/2-FH	27 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/2	63.52 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	16 FT		

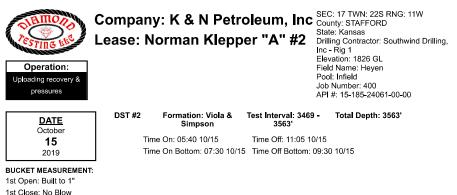
Operation: Uploading recovery & pressures		K & N Petro rman Kleppe	bleum, Inc ca st er A #2 Di In El Fi Pa Jo	EC: 17 TWN: 22S RNG: 11W ounty: STAFFORD ate: Kansas illing Contractor: Southwind Drilling, c - Rig 1 evation: 1826 GL eld Name: Heyen ob: Infield b Number: 400 Pl #: 15-185-24061-00-00				
DATE October	DST #1 F	ormation: Lan H-K	Test Interval: 3365 - 3475'	Total Depth: 3475'				
14	Time	Dn: 12:20 10/14	Time Off: 17:39 10/1	4				
2019	Time	On Bottom: 14:00 10/14	Time Off Bottom: 16:	00 10/14				
Mud Properties								
Mud Type: Chemical	Weight: 8.8	Viscosity: 62	Filtrate: 7.2	Chlorides: 4000 ppm				

Operation: Uploading recovery & pressures	Company: K & N Petroleum, Inc SEC: 17 TWI: 228 RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00
DATE October	DST #1 Formation: Lan H-K Test Interval: 3365 - Total Depth: 3475' 3475'
14	Time On: 12:20 10/14 Time Off: 17:39 10/14
2019	Time On Bottom: 14:00 10/14 Time Off Bottom: 16:00 10/14
	Gas Volume Report
	1st Open 2nd Open

1st Open					2nd Open			
Time	Orifice	PSI	MCF/D		Time	Orifice	PSI	MCF/D







BUCKET MEASUREMENT 1st Open: Built to 1" 1st Close: No Blow 2nd Open: Built to .5" 2nd Close: No Blow

REMARKS: Flushed tool 5 min into 2nd open

Tool Sample: 0% Gas 0% Oil 0% Water 100% Mud



Company: K & N Petroleum, Inc County: STAFFORD Lease: Norman Klepper "A" #2

SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00



DATE October DST #2

a & Test Interval: 3469 -3563'

9 - Total Depth: 3563'

15 2019
 Time On: 05:40 10/15
 Time Off: 11:05 10/15

 Time On Bottom: 07:30 10/15
 Time Off Bottom: 09:30 10/15

		Down Hole Makeup	
Heads Up:	15.05 FT	Packer 1:	3464.48 FT
Drill Pipe:	3456.79 FT	Packer 2:	3469.48 FT
ID-3 1/2		Top Recorder:	3453.9 FT
Weight Pipe: /D-2 7/8	FT	Bottom Recorder:	3556 FT
Collars:	FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool:	28.74 FT	Bottom Choke:	5/8"
ID-3 1/2-FH			
Safety Joint			
Total Anchor:	93.52		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	19 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/2	63.52 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	8 FT		

Operation: Uploading recovery & pressures		: K & N Petro orman Klepp	er "A" #2	EC: 17 TWN: 22S RNG: 11W county: STAFFORD tate: Kansas vrilling Contractor: Southwind Drilling, to - Rig 1 levation: 1826 GL ield Name: Heyen ool: Infield ob Number: 400 PI #: 15-185-24061-00-00
DATE October	DST #2	Formation: Viola & Simpson	- Test Interval: 3469 3563'	Total Depth: 3563'
15	Time	On: 05:40 10/15	Time Off: 11:05 10/1	5
2019	Time	On Bottom: 07:30 10/15	Time Off Bottom: 09	:30 10/15
		Mud Proper	ties	
Mud Type: Chemical	Weight: 8.9	Viscosity: 65	Filtrate: 7.2	Chlorides: 4000 ppm

Operation: Uploading recovery & pressures	Company: K & N I Lease: Norman KI	Petroleum, Inc ca lepper "A" #2 br lin El Fri Pot Jo	EC: 17 TWN: 22S RNG: 11W bunty: STAFFORD ate: Kansas illing Contractor: Southwind Drilling, c - Rig 1 evation: 1826 GL eld Name: Heyen sol: Infield b Number: 400 PI #: 15-185-24061-00-00
DATE October	DST #2 Formation: Vic Simpson	la & Test Interval: 3469 - 3563'	Total Depth: 3563'
15	Time On: 05:40 10/15	5 Time Off: 11:05 10/15	5
2019	Time On Bottom: 07:	30 10/15 Time Off Bottom: 09:	30 10/15
	_ Gas Vol	ume Report	
	1st Open	20	nd Open

Time

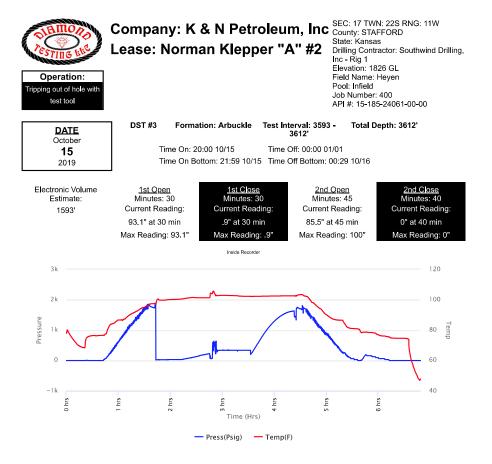
Orifice PSI

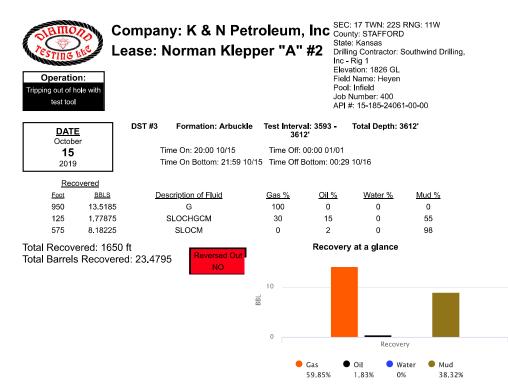
MCF/D

MCF/D

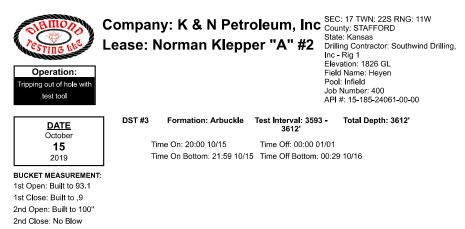
Orifice PSI

Time





Initial Hydrostatic Pressure	1757	PS
Initial Flow	23 to 35	PS
Initial Closed in Pressure	228	PSI
Final Flow Pressure	64 to 340	PS
Final Closed in Pressure	1636	PSI
Final Hydrostatic Pressure	1713	PSI
Temperature	103	°F
Pressure Change Initial	0.0	%
Close / Final Close		



REMARKS:

appears that shortly after the 2nd open the packers unseated

Tool Sample: 0% Gas 2% Oil 0% Water 98% Mud



test too

Company: K & N Petroleum, Inc County: STAFFORD Lease: Norman Klepper "A" #2

SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00



DST #3 Formation: Arbuckle Test Interval: 3593 -3612'

Total Depth: 3612'

15	
2019	

 Time On: 20:00 10/15
 Time Off: 00:00 01/01

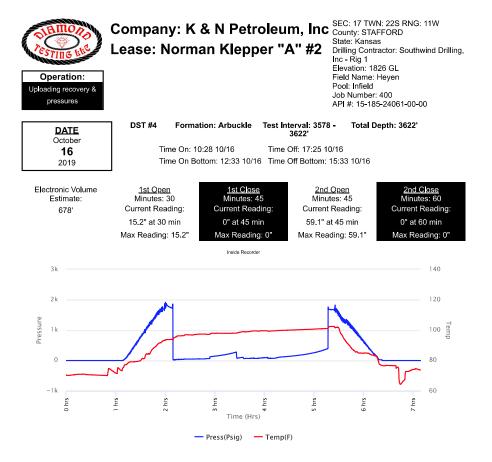
 Time On Bottom: 21:59 10/15
 Time Off Bottom: 00:29 10/16

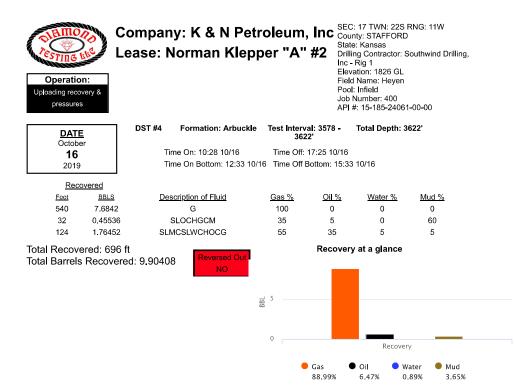
		Down Hole Makeup	
Heads Up:	18.7 FT	Packer 1:	3588 FT
Drill Pipe:	3583.96 FT	Packer 2:	3593 FT
ID-3 1/2		Top Recorder:	3577.42 FT
Weight Pipe: /D-2 7/8	FT	Bottom Recorder:	3613 FT
Collars:	FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool:	28.74 FT	Bottom Choke:	5/8"
ID-3 1/2-FH			
Safety Joint			
Total Anchor:	19		
Anchor	<u>Makeup</u>		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	18 FT		
Change Over:	FT		
Drill Pipe: (in anchor): /D-3 1/2	FT		
Change Over:	FT		
Perforations: (below): 4 1/2-FH	FT		

Operation: Tripping out of hole with test tool		: K & N Petro orman Klepp	er "A" #2	EC: 17 TWN: 22S RNG: 11W ounty: STAFFORD tate: Kansas rilling Contractor: Southwind Drilling, ic - Rig 1 levation: 1826 GL leid Name: Heyen ool: Infield pb Number: 400 PI #: 15-185-24061-00-00				
DATE October	DST #3 F	Formation: Arbuckle	Test Interval: 3593 - 3612'	Total Depth: 3612'				
15	Time	On: 20:00 10/15	Time Off: 00:00 01/0	1				
2019	Time	On Bottom: 21:59 10/15	Time Off Bottom: 00	:29 10/16				
Mud Properties								
Mud Type: Chemical	Weight: 9.1	Viscosity: 60	Filtrate: 8.8	Chlorides: 6000 ppm				

Operation: Tripping out of hole with test tool	Company: K & N Pe Lease: Norman Kle	pper "A" #2	SEC: 17 TWN: 22S RNG: 11W Sounty: STAFFORD State: Kansas Prilling Contractor: Southwind Drilling, nc - Rig 1 Elevation: 1826 GL iield Name: Heyen Vool: Infield ob Number: 400 IPI #: 15-185-24061-00-00
DATE October	DST #3 Formation: Arbucl	kle Test Interval: 3593 - 3612'	Total Depth: 3612'
15	Time On: 20:00 10/15	Time Off: 00:00 01/0	01
2019	Time On Bottom: 21:59	10/15 Time Off Bottom: 00):29 10/16
	Gas Volur	ne Report	
	1st Open	2	nd Open

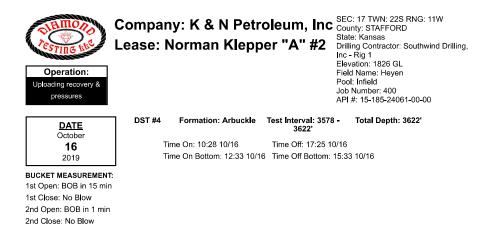






GIP cubic foot volume: 49.48655

Initial Hydrostatic Pressure	1768	PS
Initial Flow	23 to 65	PS
Initial Closed in Pressure	279	PSI
Final Flow Pressure	72 to 100	PS
Final Closed in Pressure	395	PSI
Final Hydrostatic Pressure	1684	PS
Temperature	101	°F
Pressure Change Initial	0.0	%
Close / Final Close		





pressures

REMARKS:

Tool Sample: 10% Gas 65% Oil 5% Water 20% Mud

Company: K & N Petroleum, Inc County: STAFFORD Lease: Norman Klepper "A" #2

SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00

DATE October DST #4 Formation: Arbuckle Test Interval: 3578 -3622'

- Total Depth: 3622'

16	
2019	

 Time On: 10:28 10/16
 Time Off: 17:25 10/16

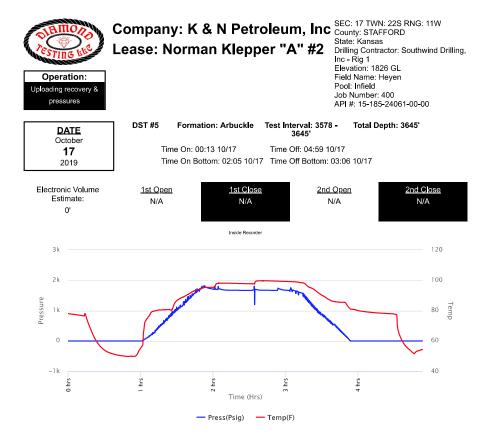
 Time On Bottom: 12:33 10/16
 Time Off Bottom: 15:33 10/16

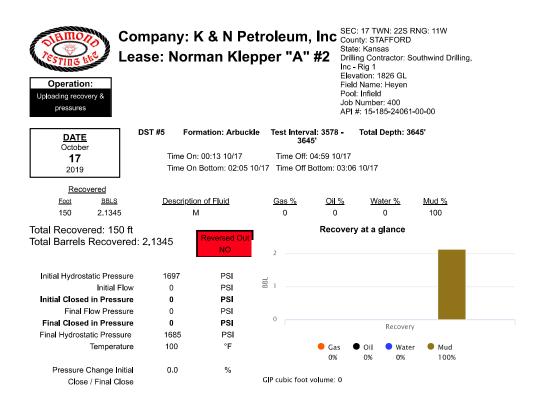
		Down Hole Makeup	
Heads Up:	33.57 FT	Packer 1:	3573 FT
Drill Pipe:	3583.83 FT	Packer 2:	3578 FT
ID-3 1/2		Top Recorder:	3562.42 FT
Weight Pipe: /D-2 7/8	FT	Bottom Recorder:	3623 FT
Collars:	FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool:	28.74 FT	Bottom Choke:	5/8"
ID-3 1/2-FH			
Safety Joint			
Total Anchor:	44		
Anchor	Makeup		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	43 FT		
Change Over:	FT		
Drill Pipe: (in anchor): ID-3 1/2	FT		
Change Over:	FT		
Perforations: (below): 4 1/2-FH	FT		

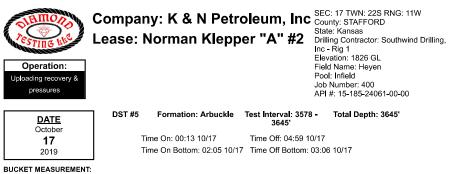
Operation: Uploading recovery & pressures		: K & N Petro rman Klepp	er "A" #2	EC: 17 TWN: 22S RNG: 11W ounty: STAFFORD tate: Kansas rilling Contractor: Southwind Drilling, c - Rig 1 levation: 1826 GL leid Name: Heyen ool: Infield pb Number: 400 PI #: 15-185-24061-00-00
DATE October	DST #4 F	ormation: Arbuckle	Test Interval: 3578 - 3622'	Total Depth: 3622'
16	Time	On: 10:28 10/16	Time Off: 17:25 10/1	6
2019	Time	On Bottom: 12:33 10/10	3 Time Off Bottom: 15	:33 10/16
		Mud Prope	rties	
Mud Type: Chemical	Weight: 9.5	Viscosity: 54	Filtrate: 10.8	Chlorides: 9000 ppm

Operation: Uploading recovery & pressures	Company: K & N Petro Lease: Norman Kleppo	bleum, Inc c er "A" #2	EC: 17 TWN: 22S RNG: 11W county: STAFFORD tate: Kansas irilling Contractor: Southwind Drilling, to - Rig 1 levation: 1826 GL ield Name: Heyen tool: Infield ob Number: 400 PI #: 15-185-24061-00-00
DATE October	DST #4 Formation: Arbuckle	Test Interval: 3578 - 3622'	Total Depth: 3622'
16	Time On: 10:28 10/16	Time Off: 17:25 10/2	16
2019	Time On Bottom: 12:33 10/16	Time Off Bottom: 15	:33 10/16
	⊐ Gas Volume R	Report	
	1st Onen	2	nd Open









BUCKET MEASUREMENT: 1st Open: Miss run

REMARKS:

Packers did not hold on initial open. Pulled and and tried to set packers again they failed to hold. After talking with the Geo we tried a third time to seat the packers and they failed again.

Tool Sample: 0% Gas 0% Oil 0% Water 100% Mud



Company: K & N Petroleum, Inc SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind E

SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00



DST #5 Formation: Arbuckle Test Interval: 3578 -3645'

- Total Depth: 3645'

17 2019
 Time On: 00:13 10/17
 Time Off: 04:59 10/17

 Time On Bottom: 02:05 10/17
 Time Off Bottom: 03:06 10/17

		Down Hole Makeup	
Heads Up:	33.44 FT	Packer 1:	3573.13 FT
Drill Pipe:	3583.83 FT	Packer 2:	3578.13 FT
ID-3 1/2		Top Recorder:	3562.55 FT
Weight Pipe: ID-2 7/8	FT	Bottom Recorder:	3638 FT
Collars:	FT	Well Bore Size:	7 7/8
ID-2 1/4		Surface Choke:	1"
Test Tool:	28.74 FT	Bottom Choke:	5/8"
ID-3 1/2-FH			
Safety Joint			
Total Anchor:	66.87		
Anchor	Makeup		
Packer Sub:	1 FT		
Perforations: (top): 4 1/2-FH	24 FT		
Change Over:	1 FT		
Drill Pipe: (in anchor): ID-3 1/2	31.87 FT		
Change Over:	1 FT		
Perforations: (below): 4 1/2-FH	8 FT		

Operation: Uploading recovery & pressures		: K & N Petro orman Klepp	er "A" #2	SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, no - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00
DATE October	DST #5	Formation: Arbuckle	Test Interval: 3578 3645'	- Total Depth: 3645'
17	Time	On: 00:13 10/17	Time Off: 04:59 10/	17
2019	Time	On Bottom: 02:05 10/17	7 Time Off Bottom: 03	3:06 10/17
		Mud Prope	rties	
Mud Type: Chemical	Weight: 9.5	Viscosity: 54	Filtrate: 10.8	Chlorides: 9000 ppm

Operation: Uploading recovery & pressures	Company: K & N Pet Lease: Norman Klep		SEC: 17 TWN: 22S RNG: 11W County: STAFFORD State: Kansas Drilling Contractor: Southwind Drilling, Inc - Rig 1 Elevation: 1826 GL Field Name: Heyen Pool: Infield Job Number: 400 API #: 15-185-24061-00-00
DATE October	DST #5 Formation: Arbuckle	e Test Interval: 3578 3645'	8 - Total Depth: 3645'
17	Time On: 00:13 10/17	Time Off: 04:59 1	10/17
2019	Time On Bottom: 02:05 10	/17 Time Off Bottom:	03:06 10/17
	– Gas Volum	e Report	
	1st Open		2nd Open

Time

PSI

Orifice

MCF/D

PSI

Orifice

Time

MCF/D

COPPELLIND Acid & Cement

TREATMENT REPORT

	cemen	T 253.							Acid Stage	No	
					Type Treatment: A				Sand Size	e Pou	nds of Sand
	A CONTRACTOR OF A	strict GB	F.O. P	lo. <u>60028</u>	Bkdown	Bbl./Gal					
	& N PETRO										
	No. NORMA	N KLEPPER #		~ .		Bbl./Gal.					
	TALEORD		Field WC			Bbl /Gal					
County 5	TAFFORD		State KS	and the second	Flush	Bbl./Gal.					
					Treated from			_		No. ft.	0
Casing:				Set atft.	from		ft. to			No. ft.	
Formation:			Perf	10	from		ft. to		tt.	No. ft.	0
Formation:			Perf.	to	Actual Volume of Oil / W	Vater to Load H	ole:		in the second		Bbl./Gal.
Formation:			Perf.	to							
Uner: Size	Туре &	Wt	Top atft.	Bottom atft.	Pump Trucks. No. U	sed: Std.	320	Sp.		Twin	
Ce	mented: Yes	Perforated	from	ft. toft.	Auxiliary Equipment		100.00		327	1. 1. 1.	
Fubing: Si	ze & Wt			ft.	Personnel GREG CLA	RENCE		_			
AN LUN	Perforated fro		ft. to	ft.	Auxiliary Tools			_		19	
					Plugging or Sealing Mate	erlals: Type					
Open Hole S	ize	T.D.	tt. P	B toft	The summer of			_	Gal	ls	łb.
din.	100		1 Stute	Les suit a bub	10-11-12-12-12			1	5.000	1.1	
Company Re	presentative		KYLEN	l	Treater			GREG	5 C.		
TIME	PRESS	WRES									
a.m./p.m.	Tubing	Casing	- Total Fluid Pumped			REMA	RKS				
											the second s
3:30				ON LOCATION							
3:30				ON LOCATION				_	1		
3:30				9.00	0/40 4% GFL &	1/4# SK			@ 358	9'	
3:30				ON LOCATION PUMP 50 SKS 60	0/40 4% GEL &	1/4# SK	CELLOF	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 6		1/4# SK (CELLOF	LAKE	@ 358	9'	
3:30				9.00		1/4# SK (CELLOF	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @	9 600'	1/4# SK (CELLOP	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 6	9 600'	1/4# SK (CELLOF	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @	9 600' 9 240'	1/4# SK (CELLOF	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @	9 600' 9 240'	1/4# SK (CELLOP	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @) 600') 240') 60'	1/4# SK (CELLOP	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @) 600') 240') 60'	1/4# SK (CELLOP	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE	9 600' 9 240' 9 60' WITH 30 SKS		CELLOP	LAKE	@ 358	9'	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @	9 600' 9 240' 9 60' WITH 30 SKS		CELLOP	LAKE	@ 358	91	
3:30				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE	9 600' 9 240' 9 60' WITH 30 SKS			LAKE	@ 358	91	
9:15				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	9'	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H	9 600' 9 240' 9 60' WITH 30 SKS			LAKE	@ 358	91	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	91	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	91	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	9'	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	9'	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	91	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	91	
				PUMP 50 SKS 60 PUMP 70 SKS @ PUMP 40 SKS @ PUMP 20 SKS @ PLUG RATHOLE PLUG MOUSE H JOB COMPLETE	9 600' 9 240' 9 60' WITH 30 SKS				@ 358	91	