

Confidentiality Requested: Yes No

Kansas Corporation Commission OIL & GAS CONSERVATION DIVISION

Form ACO-1 August 2013 Form must be Typed Form must be Signed All blanks must be Filled

#### **WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R East West
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
□ Oil □ WSW □ SHOW   □ Gas □ D&A □ ENHR □ SIGW   □ OG □ GSW □ Temp. Abd.   □ CM (Coal Bed Methane) □ Cathodic □ Other (Core, Expl., etc.):   □ If Workover/Re-entry: Old Well Info as follows:   Operator:  Well Name:	Producing Formation:  Elevation: Ground: Kelly Bushing: Feet  Total Vertical Depth: Plug Back Total Depth: Feet  Multiple Stage Cementing Collar Used? Yes No  If yes, show depth set: Feet  If Alternate II completion, cement circulated from: sx cmt.
Original Comp. Date: Original Total Depth:  Deepening Re-perf. Conv. to ENHR Conv. to SWD  Plug Back Conv. to GSW Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
□ Commingled         Permit #:	Chloride content: ppm Fluid volume: bbls  Dewatering method used:  Location of fluid disposal if hauled offsite:
GSW Permit #:	Cuerter See Two S R Total West
Spud Date or Date Reached TD Completion Date or Recompletion Date	QuarterSec.         TwpS. R East West           County:         Permit #:

#### **AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I III Approved by: Date:

Page Two



Operator Name:			L	ease Name: _			Well #:			
Sec Twp	S. R	East We	est C	County:						
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres	sures, whether sh	ut-in pressur	e reached stati	c level, hydrosta	tic pressures, bott				
Final Radioactivity Lo files must be submitted					gs must be ema	iled to kcc-well-log	gs@kcc.ks.go	. Digital electronic log		
Drill Stem Tests Taker (Attach Additional		Yes	No	L		n (Top), Depth an		Sample		
Samples Sent to Geo	logical Survey	Yes	No	Nam	e		Тор	Datum		
Cores Taken Electric Log Run		Yes Yes	No No							
List All E. Logs Run:										
		(	CASING REC	ORD Ne	w Used					
		· ·		ıctor, surface, inte	ermediate, producti		T			
Purpose of String	Size Hole Drilled	Size Casin Set (In O.D		Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives		
		ADD	ITIONAL CEN	MENTING / SQL	JEEZE RECORD					
Purpose:	Depth Top Bottom	Type of Cem	ent #	Sacks Used		Type and Pe	ercent Additives			
Perforate Protect Casing	100 20111111									
Plug Back TD Plug Off Zone										
1 lag on zono										
Did you perform a hydrau	ulic fracturing treatment	on this well?			Yes	No (If No, ski)	o questions 2 ar	nd 3)		
Does the volume of the to		•				_	o question 3)	(" 100 ")		
Was the hydraulic fractur	ing treatment information	on submitted to the c	hemical disclo	sure registry?	Yes	No (If No, fill o	out Page Three	of the ACO-1)		
Shots Per Foot		ION RECORD - Bri Footage of Each Int				cture, Shot, Cement		d Depth		
	, ,				,		,			
TUBING RECORD:	Size:	Set At:	Pa	acker At:	Liner Run:					
						Yes No				
Date of First, Resumed	Production, SWD or Ef		cing Method: owing	Pumping	Gas Lift C	ther <i>(Explain)</i>				
Estimated Production Per 24 Hours	Oil	Bbls. G	as Mcf	Wate	er Bl	ols. G	ias-Oil Ratio	Gravity		
DIODOCITI	ON OF CAS:		, 4 CT - 1		TION:		DRODUCTIO	AN INTEDVAL.		
Vented Solo	ON OF GAS:  Used on Lease	Open Ho		IOD OF COMPLE $\Box$		nmingled	PHODUCIIC	ON INTERVAL:		
	bmit ACO-18.)	Other (S	necify)	(Submit		mit ACO-4)				

# QUALITY WELL SERVICE, INC. Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410 Fax 620-672-3663

Rich's Cell 620-727-3409 Brady's Cell 620-727-6964

	-	vp. Range		County	State	On Location	Finish				
Date Q5-06-14	28 19	75 09w	$\mid R$	ce	K5_	12:30Am	_ <i></i>				
Lease Lincoln	Well N	Vo. /8	Location	on Chase	KS, N tond	L, I'KE, Wfin	4				
Contractor South will	nd #2			Owner G		int-					
Type Job Rotary PT	7-			Vou oro bor	lell Service, Inc. eby requested to re	nt cementing equipmen	t and furnish				
Hole Size 71/6		3350		cementer ar	nd helper to assist o	owner or contractor to d	U WORK AS IISTEU.				
Csg.8/8		pth Set 26	4'	Charge 5	bect - Ste	wont Oren.	4-				
Tbg. Size 4/2 Deill f	pe De	pth 3228"		Street 8	) Bendy di	Day Ste. 45	9 202 70				
Tool	De	pth			vek	State Co.	80202-34				
Cement Left in Csg.	Sh	oe Joint		The above w	as done to satisfaction	n and supervision of owner	agent or contractor.				
Meas Line		splace Fresh \$	mud	Cement Am	ount Ordered 21	5 s x 60:40:4	lug es				
	EQUIPMEN	IT .		1 1/2 / 1/2							
Pumptrk	<u>ce 5</u>				<u>30</u>						
Bulktrk No. Dan	nd B			Poz. Mix	<u>85</u>		Rigary.				
Bulktrk No.				Gel. 7							
Pickup No.	1/4 F -			Calcium							
JOB SE	RVICES & R			Hulls							
Rat Hole 305X =	7. 48 B	61s Sturny		Salt							
Mouse Hole 201x - 4	1,99 86	ils Slung		Flowseal							
Centralizers				Kol-Seal							
Baskets				Mud CLR 4							
-D/V-or Port Gollar De /	1 1	+3228-cia		4	r CD110 CAF 38		**************************************				
Pump 8/2Bbls Fre	SL HO	Spacen - M	7:x 33								
F60:40:4 caneit B1	end = B.	.73 BULSIUM	_ 1i	4							
w/3Bb/s Frush H20	\$ 40 K	¿ BOIS Mud,		Mileage 5		DUENT					
Pineat 1150; lond		ump 81/2 B61s	Speek	. 145 5 5 5 5	FLOAT EQU	IPMENI					
Mix 355x cemen	t, Disp		1/mud		The second secon						
Dail Pipeat 750			8/KSpe	a≨ ]							
	. W/3 FA	esh 44 nu	d, Dail								
Pipe at 314, long	& Hole, 1		D1512 4	21							
28615 Fresh, F	Plug 60	)'w/25sy'=	6.235								
Plug Ret & Mous	eholes	w/ 50 sx = 1	2.575	Shutageh Dow							
Cem.	ent Did	Circ.			wite suporu	, Stor					
					MU ZS						
		シメモ		Pumptrk C		Plug					
				Mileage	25 x Z	Та	×				
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, t	2.	111				Total Charg					
X Signature	per &	ter	-			iolai Graig	Taylor Printing, Inc				

1700 S. Country Estates Rd. Liberal, Kansas 67905 Phone 620-624-2277

# FIELD SERVICE TICKET 1717 05661

TICKET NO. PRESSURE PUMPING & WIRELINE DATE CUSTOMER ORDER NO. OLD ☐ PROD ☐ INJ ☐ WDW DATE OF DISTRICT WELL NO. incoln LEASE CUSTOMER STATE COUNTY **ADDRESS** SERVICE CREW CITY JOB TYPE: **AUTHORIZED BY** DATE **EQUIPMENT#** HRS TRUCK CALLED EQUIPMENT HRS **EQUIPMENT#** HRS ARRIVED AT JOB 4377 START OPERATION **FINISH OPERATION** 

RELEASED MILES FROM STATION TO WELL CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP. (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT) \$ AMOUNT QUANTITY **UNIT PRICE** MATERIAL, EQUIPMENT AND SERVICES USED UNIT ITEM/PRICE REF. NO. 700 100 170 K 4/1 200 3 741 5062 5 SUB TOTAL CHEMICAL / ACID DATA: %TAX ON \$ SERVICE & EQUIPMENT %TAX ON \$ **MATERIALS** TOTAL

1010

SERVICE REPRESENTATIVE

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.



#### Scale 1:240 Imperial

Well Name:

Lincoln #18

Surface Location:

1900' FSL and 1830' FWL

Bottom Location:

API:

15-159-22778-0000

License Number:

Spud Date:

4/28/2014

Time:

5:30 PM

Region: **Drilling Completed:**  Sec. 28 - T19S - R09W, Rice County 5/4/2014

Time:

To:

10:30 PM

3350.00ft

Surface Coordinates:

**Bottom Hole Coordinates:** Ground Elevation:

1709.00ft

K.B. Elevation:

1718.00ft

Logged Interval:

2350.00ft

Total Depth: Formation: 3350.00ft

Arbuckle

Drilling Fluid Type:

Chemical/Fresh Water Gel

#### **OPERATOR**

Company:

Gilbert-Stewart Operating, LLC

Address:

1801 Broadway

Suite 450

Denver, CO 80202

Contact Geologist:

Scott Stewart 303.596.5510

Contact Phone Nbr:

Lincoln #18

Well Name:

API:

15-159-22778-0000

Location:

1900' FSL and 1830' FWL

Field:

Chase-Silica

Pool: State:

Kansas

Country:

USA

#### LOGGED BY



Company:

Valhalla Exploration, LLC

Address:

8100 E. 22nd St. North

Building 1800-2

Wichita, KS 67226

Phone Nbr:

316.655.3550

Logged By:

Geologist

Name:

Derek W. Patterson

#### REMARKS

After review of the geologic log, open hole electric logs, and negative DST results for the Lincoln #18, it was decided upon by operator to plug and abandon the well as a dry hole. Said well was plugged on May 5, 2014.

Note: DST intervals, drill time, gas curves, and lithology have all been shifted 1' shallow/higher to correspond with the electric log curves. All circulation and connection points have also been moved to match the overall shift.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Derek W. Patterson

#### **GENERAL INFORMATION**

Service Companies

Drilling Contractor: Southwind Drilling - Rig #2

Drilling Fluid: Mud-Co/Service Mud Inc.

Tool Pusher: Bill Sanders Daylight Driller: Travis Chism Evening Driller: Tim Decker Morning Driller: Shane Decker

Gas Detector: Bluestem Environmental

Engineer: Sidney Edelbrock

Unit: 0279 Operational By: 1100'

Testing Company: Superior Testers Tester: Dustin Ellis

Deviation	Survey
Depth	Survey
263'	1°
2880'	1°
3102'	1 1/4°
3350' - RTD	1°

Pipe Strap						
Depth	Pipe Strap					
3102'	4.28' Short to Board					

Engineer: Rick Hughes

Logging Company: Pioneer Energy Services

Engineer: Robert Barnhart

Logs Ran: DI, CDNL, Micro, Sonic

Bit Record			
Dit # Size Make Type Serial Number Depth In	Depth Out	Feet	Hours
Bit # Size Ware 1995	263'	263'	1.5
1 12 1/4" JZ H1 HR 0 2 7 7/8" JZ HA20Q RR 263'	3350'	3087'	65.75

	Surface Casing
4.28.2014	Ran 6 joints of new 23#/ft 8 5/8" casing, tallying 252', set @ 263' KB. Cemented with 200 sacks Common (3%CC, 2% gel). Cement did circulate. Plug down @ 2230 hrs 4.28.14. By Basic Energy Services.

# DAILY DRILLING REPORT

	LOTOO IL DIL	Previous 24 Hours of Operations
Date 5.1.2014	0700 Hrs Depth 2708'	Drilling and connections upper Pennsylvanian beds and into Topeka. Geologist Derek W. Patterson on location 2310 hrs 4.29.14. Reset Bloodhound, test system. Resume drilling and connections
		Topeka.  Made 898' over past 24 hrs of operations.  WOB: 30k RPM: 80 PP: 850 SPM: 58  DMC: \$3,072.95 CMC: \$3,431.75
5.2.2014	3078'	Drilling and connections Topeka, Heebner, Toronto, Douglas, and into Brown Lime. Stop @ 2880' for short trip. CTCH, run wireline survey (per rig's request), conduct 28 stand short trip, ream through final 3 stands back to bottom, CTCH. Resume drilling and connections Brown Lime and into Lansing-KC. Drilling and connections Lansing-KC. CFS @ 2933' (LKC 'B'). Resume drilling and connections Lansing-KC. CFS @ 2974' (LKC 'F'). Resume drilling Lansing-KC. CFS @ 2985' (LKC 'G'), CFS @ 2998' (LKC 'G'). Resume drilling and connections Lansing-KC.
		Made 370' over past 24 hrs of operations.  WOB: 30-32k RPM: 80 PP: 850 SPM: 58  DMC: \$2,308.90 CMC: \$5,740.85
5.3.2014	3240'	Drilling and connections Lansing-KC. CFS @ 3102' (LKC 'J'). Shows warrant test. CTCH, drop survey, TOH for DST #1 1045 hrs 5.2.14. TIH with tool. Conduct DST #1, test pulled early due to lack of results, test successful. TIH with bit, CTCH. Resume drilling and connections following DST #1 1830 hrs 5.2.14. Drilling and connections Lansing-KC, Base Kansas City, Marmaton, Basal Penn Conglomerate, and into Arbuckle. CFS @ 3240' (Arb). Shows warrant test. CTCH, TOH for DST #2 0505 hrs 5.3.14.
		Made 162' over past 24 hrs of operations.  WOB: 35k RPM: 80 PP: 800 SPM: 58  DMC: \$0.00 CMC: \$5,740.65
5.4.2014	3267'	TOH for DST #2. TIH with tool. Conduct DST #2, test successful. TIH with bit, CTCH. Resume drilling following DST #2 1530 hrs 5.3.14. Drilling Arbuckle. CFS @ 3247' (Arb). Shows warrant test. CTCH, TOH for DST #3 1735 hrs 5.3.14. TIH with tool. Conduct DST #3, test successful. TIH with bit, CTCH. Resume drilling following DST #3 0440 hrs 5.4.14. Drilling Arbuckle. CFS @ 3256' (Arb), CFS @ 3267' (Arb). Made 27' over past 24 hrs of operations.
		WOB: 33k RPM: 80 PP: 800 SPM: 58
5.5.2014	RTD - 3350' LTD - 3348'	CFS @ 3267' (Arb), CFS @ 3273' (Arb). Decision made to run test. CTCH, TOH for DST #4 0955 hrs 5.4.14. TIH with tool. Conduct DST #4, test successful. TIH with bit. Resume drilling following DST #4 1915 hrs 5.4.14. Drilling and connections Arbuckle ahead to RTD of 3350'. RTD reached 2230 hrs 5.4.14. CTCH to wait on loggers. Drop survey. TOH for open hole logging

operations 0500 hrs 5.5.14. Rig up loggers.

Made 83' over past 24 hrs of operations. WOB: 33k RPM: 80 PP: 800 SPM: 58

DMC: \$0.00 CMC: \$6,441.25

5.6.2014

RTD - 3350' LTD - 3348' Conduct open hole logging operations. Decision made to perform straddle test across the Arbuckle. Make up tool, TIH with tool. Geologist Derek W. Patterson off location 1345 hrs 5.5.14. Conduct

DST #5 (straddle), test successful. Orders received to plug and abandon the Lincoln #18 as a dry

hole. Said well was plugged on 5.5.14. DMC: \$1,227.65 CMC: \$7,568.90

#### **WELL COMPARISON SHEET**

	svansvant/PRESIDER 002	construction and the same		emere a resident		Comparis	eon Well		Comparison Well				Comparison Well			
ı.		e Dalin		140	Comparison Well Petroleum Energy - Steffen 'A' #1				Carl Todd			Hawkins Oil - Purcell 'A' #4				
				incoln #18	Sec. 28 - T19S - R09W			Sec. 28 - T19S - R09W				Sec. 28 - T19S - R09W				
	_	ec. 28 - T1		200.000					"	NE N			S/2 NW SE			
	1:	900' FSL &	1830' FV	VL	O7 A	130' S E/2 NE SW Oil - Arbuckle Structural				Oil - Arbuckle Structural			Oil - Ai	buckle	Struc	tural
					34	0.00	Relatio		1707		Relatio	onship	1703	KB	Relation	nship
	1718				1708			Log		Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Formation		Sub-Sea	Log	Sub-Sea	Sample	Sub-Sea	Sample	Log	2469	-762	8	9	2456	-753	-1	0
Topeka	2472	-754	2471	-753	8				2403	, 52			2556	-853	1	1
King Hill	2570	-852	2570	-852									2638	-935	2	3
Queen Hill	2651	-933	2650	-932	0.705	1001	7	7	2742	-1035	11	11	2729	-1026	2	2
Heebner	2742	-1024	2742	-1024	2739	-1031	7	8	2142	1000			2750	-1047	2	3
Toronto	2763	-1045	2762	-1044	2760	-1052		8					2759	-1056	2	4
Douglas	2772	-1054	2770	-1052	2768	-1060	6 7	8	2870	-1163	11	12	2858	-1155	3	4
Brown Lime	2870	-1152	2869	-1151	2867	-1159	4	4	2895	-1188	9	9	2885	-1182	3	3
Lansing-Kansas City	2897	-1179	2897	-1179	2891	-1183	4	4	2050	1100	_ <u> </u>		2907	-1204	4	4
LKC 'B'	2918	-1200	2918	-1200	<b>II</b>			ļ	<del> </del>	-			2928	-1225	1	2
LKC 'D'	2942	-1224	2941	-1223				<del></del>	l <del></del>				2952	-1249	2	2
LKC 'F'	2965	-1247	2965	-1247	<b>M</b>	<b>-</b>		<del> </del>	-				2965	-1262	2	4
LKC 'G'	2978	-1260	2976	-1258									3021	-1318	0	1
Muncie Creek	3036	-1318	3035	-1317	1		-	<del>                                     </del>	1				3029	-1326	-2	1
LKC 'H'	3046	-1328	3043	-1325	<u></u>								3048	-1345	-1	0
LKC 'I'	3064	-1346	3063	-1345	<u> </u>	<del> </del>		1	<del> </del>	<del>                                     </del>			3067	-1364	-2	-1
LKC 'J'	3084	-1366	3083	-1365	<u> </u>			<del>                                     </del>	1			$\vdash$	3095	-1392	1	0
Stark	3109	-1391	3110	-1392	<u>N</u>		<del></del>	<del> </del>	<del> </del>				3102	-1399	1	1
LKC 'K'	3116	-1398	3116	-1398		<b>-</b>	<del>                                     </del>	-		<del></del>	<del>                                     </del>		3126	-1423	1	-1
Hushpuckney	3140	-1422	3142	-1424				+	<del>  </del>	+		t	3133	-1430	3	0
LKC L'	3145	-1427	3148	-1430		1			<b>{├</b> ──	+	4		3158	-1455	1	3
Base Kansas City	3172	-1454	3170	-1452			₩	<del></del>	╢──	·			3161	-1458	1	2
Marmaton	3175	-1457	3174	-1456		+			3207	-1500	10	12	3195	-1492	2	4
Conglomerate	3208	-1490	3206	-1488		-1533	20	23	3241	-1534	21	24	3225	-1522	9	12
Arbuckle	3231	-1513	3228	-1510	3241		-55	-53	3257	-1550	-82	-80	3237	-1534	-98	-96
Total Depth	3350	-1632	3348	-1630	3285	-1577	-00	-33	0207	,,,,,,,						

Note: DST intervals have been shifted 1' shallow/higher to correspond with the electric log curves.



Congl DOL<sub>2</sub> LMST1



LMST3 IMST4



SILTSTONE SHALE BRN SHALE CAR



SHALE GRN SHALE GRA SHALE RED

#### **ACCESSORIES**

**MINERAL** 

▲ Chert, dark

P Pyrite · Silty

△ Chert White

**FOSSIL** 

F Fossils < 20%

Oolite

√ Oomoldic

DST DST1

DST2 ₽ DST3

Core II tail pipe STRINGER

Limestone2

Shale Gray Shale Red

**TEXTURE** C Chalky

#### OTHER SYMBOLS

#### MISC

DR Daily Report

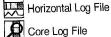
Digital Photo



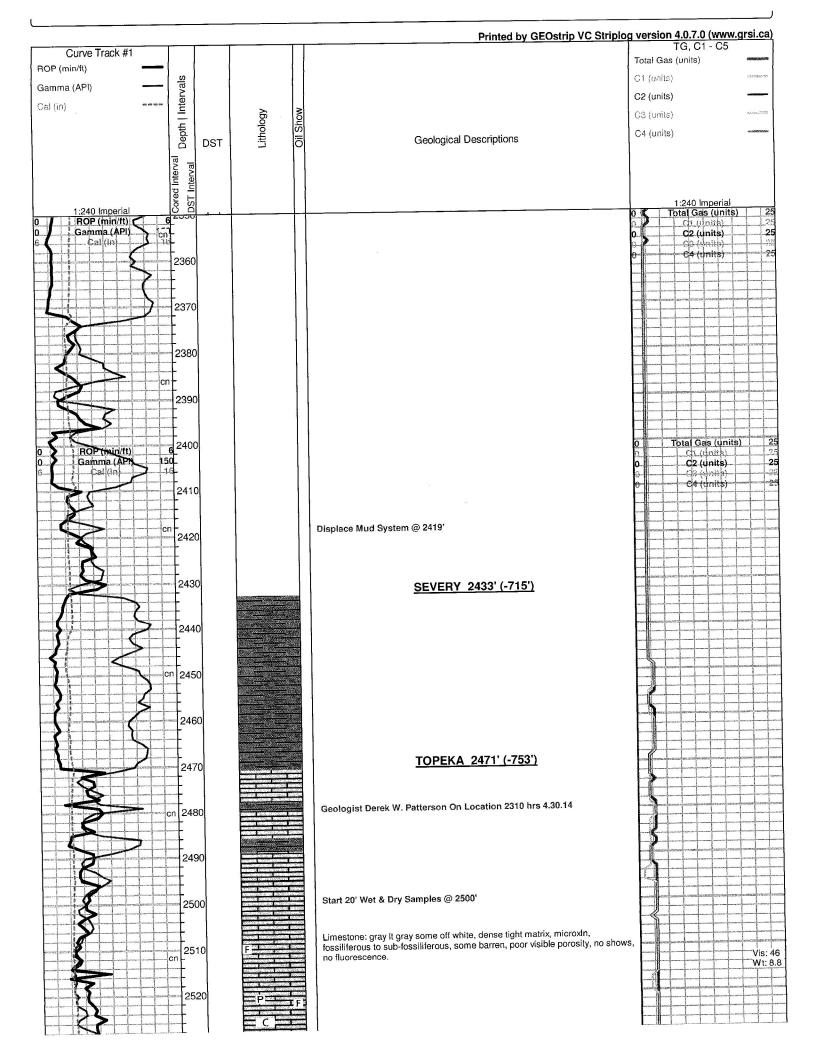
Folder

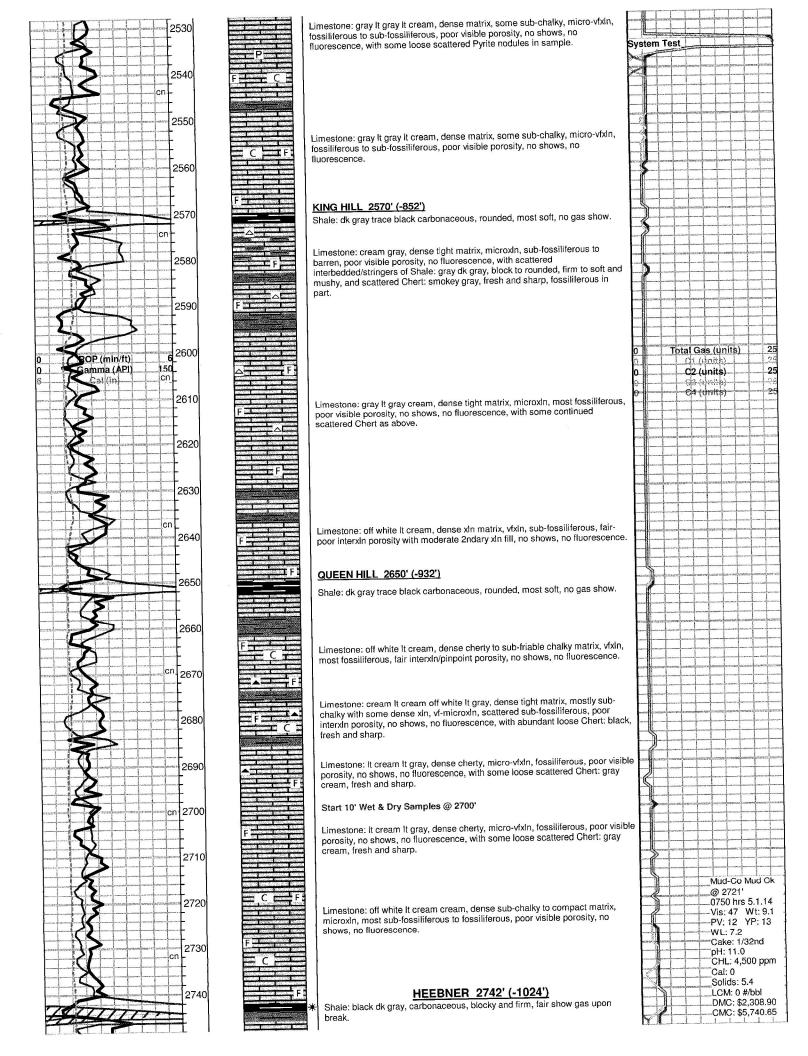


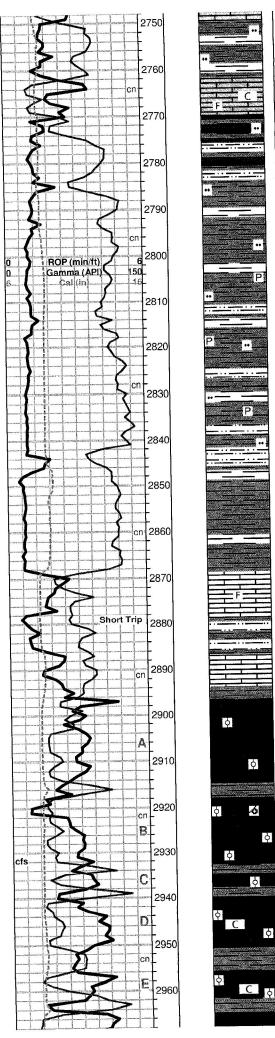




Drill Cuttings Rpt







Shale: gray dk gray dk green, mostly rounded and soft, some silty in part.

## TORONTO 2762' (-1044')

Limestone: off white It cream, mostly dense sub-chalky matrix, microxin, subfossiliferous to barren, poor visible porosity, no shows, no fluorescence.

#### DOUGLAS 2770 (-1052')

Shale: brick red dk brown some gray, blocky to rounded, soft and mushy, with scattered Siltstone: gray lt gray, dense and blocky, vfgrained, heavily micaceous, sample washes dk reddish-brown.

Shale: gray dk gray some dk green, blocky to rounded, most softer to mushy, some firm, silty, sample washes dk gray.

Shale: gray dk gray some dk green, blocky to rounded, soft to firm, very silty, some pyritic, with scattered Siltstone: gray lt gray, dense and blocky, vfgrained, heavily micaceous, sample washes dk gray.

Shale: gray dk gray some dk green, blocky to rounded, soft to firm, very silty, some pyritic, with scattered Siltstone: gray lt gray, dense and blocky, vfgrained, heavily micaceous, sample washes dk gray.

Shale: gray It gray trace dk green, rounded and waxy, very soft and gummy, Siltstone drops out, sample washes It gray.

#### **BROWN LIME 2869' (-1151')**

2879' cfs - Limestone: tan brown, very dense matrix, micro-cryptoxln, blocky, some scattered fossils, no visible porosity, no shows, no fluorescence.

Shale: gray dk gray, block to rounded, hard to soft, some silty/pyritic in part, with Siltstone: dk gray, dense and blocky, vfgrained, heavily micaceous.

Limestone: gray brown, dense matrix, microxln, scattered sub-fossiliferous with most barren, no visible porosity, no shows, no fluorescence.

## LANSING-KANSAS CITY 2897' (-1179')

Limestone: cream tan, dense tight xin matrix, microxin, scattered subfossiliferous to sub-oolitic, overall poor visible porosity, no shows, no fluorescence.

2932' cfs - Limestone: cream It cream, sub-friable to dense matrix, vfxln, heavily oolitic with oolicastic development, fair comoldic/pinpoint porosity throughout, slight golden stain, fair-good show gas with minor oil show upon break, spotty It yellow fluorescence, faint bluish-white cut, fair gassy odor.

Limestone: cream tan gray, dense tight matrix, heavily oolitic, poor visible porosity, no shows, no fluorescence.

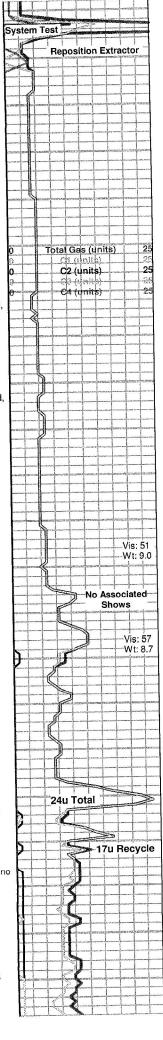
Limestone: tan gray, dense tight matrix, heavily collitic, poor visible porosity, no shows, no fluorescence.

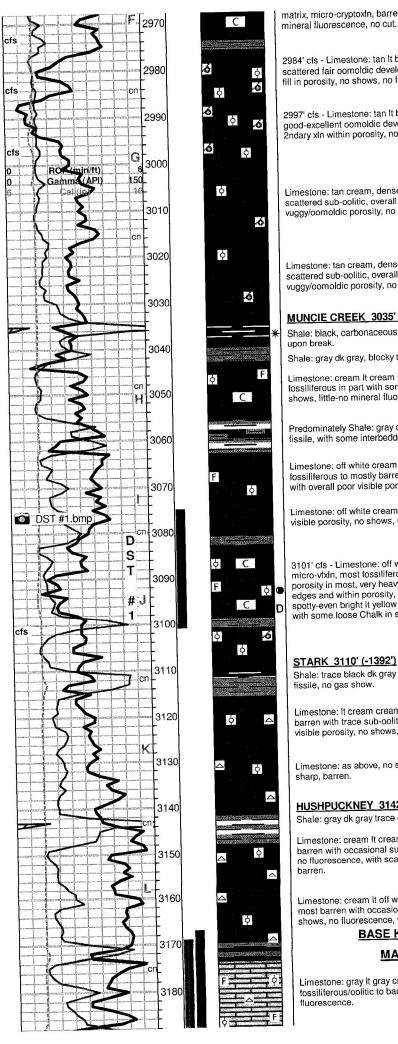
Limestone: cream tan gray, dense sub-chalky matrix, micro-vfxln, heavily oolitic, fair interoolitic porosity, no shows, no fluorescence, grading to Limestone: cream tan, dense cherty matrix, microxln, barren, no visible porosity, no shows, no fluorescence.

Shale: gray dk gray, blocky to rounded, softer.

Limestone: cream tan, dense chalky matrix, vfxln, heavily oolitic, fair interxln porosity, no shows, no fluorescence.

2973' cfs - Limestone: off white It cream, dense tight sub-chalky to cherty





matrix, micro-cryptoxin, barren, no visible porosity, no shows, poor dull white

2984' cfs - Limestone: tan It brown, dense sub-friable matrix, vfxln, oolitic with scattered fair comoldic development and associated porosity, some 2ndary xln fill in porosity, no shows, no fluorescence

2997' cfs - Limestone: tan It brown, dense sub-friable matrix, vfxln, oolitic with good-excellent oomoldic development and associated porosity, fair amount of 2ndary xln within porosity, no shows, no fluorescence.

Limestone: tan cream, dense tight matrix, microxln, mostly barren with some scattered sub-oolitic, overall poor visible porosity with occasional poor vuggy/oomoldic porosity, no shows, no fluorescence.

Limestone: tan cream, dense tight matrix, microxin, mostly barren with some scattered sub-oolitic, overall poor visible porosity with occasional poor vuggy/oomoldic porosity, no shows, no fluorescence.

#### MUNCIE CREEK 3035' (-1317')

Shale: black, carbonaceous, blocky and firm, some waxy, poor-fair show gas

Shale: gray dk gray, blocky to rounded, mostly soft.

Limestone: cream It cream It tan, dense sub-chalky matrix, micro-vfxln, fossiliferous in part with some sub-oolitic, overall poor interxln porosity, no shows, little-no mineral fluorescence, no cut.

Predominately Shale: gray dk gray pale green, blocky and firm, splintery to fissile, with some interbedded/stringers of Limestone.

Limestone: off white cream tan, dense matrix, microxln, scattered subfossiliferous to mostly barren, sub-oolitic in part, trace poor micro vug porosity with overall poor visible porosity, no shows, no fluorescence.

Limestone: off white cream tan, dense matrix, microxln, most barren, poor-no visible porosity, no shows, no fluorescence.

3101' cfs - Limestone: off white It cream, dense to sub-friable chalky matrix, micro-vfxln, most fossiliferous/bioclastic, fair-good vuggy/interfossiliferous porosity in most, very heavy dk brown oil saturation, some dead staining along edges and within porosity, fair-good show heavy dk stringy oil upon break, even spotty-even bright it yellow fluorescence, streaming milky-white cut, no odor, with some loose Chalk in sample.

#### STARK 3110' (-1392')

Shale: trace black dk gray gray, some carbonaceous, blocky, firm, splintery to

Limestone: It cream cream tan, dense tight cherty xln matrix, microxln, most barren with trace sub-oolitic, some 2ndary xln along edges, overall poor-no visible porosity, no shows, no fluorescence.

Limestone: as above, no shows, with scattered Chert: cream tan, fresh and

#### HUSHPUCKNEY 3142' (-1424')

Shale: gray dk gray trace dk green, blocky and firm, fissile to splintery.

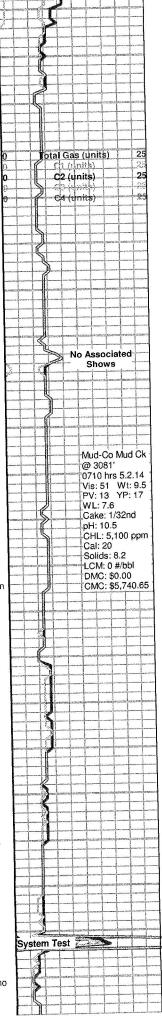
Limestone: cream It cream tan, dense tight cherty xIn matrix, microxIn, most barren with occasional sub-oolitic, overall poor-no visible porosity, no shows, no fluorescence, with scattered Chert: cream It cream, fresh and sharp,

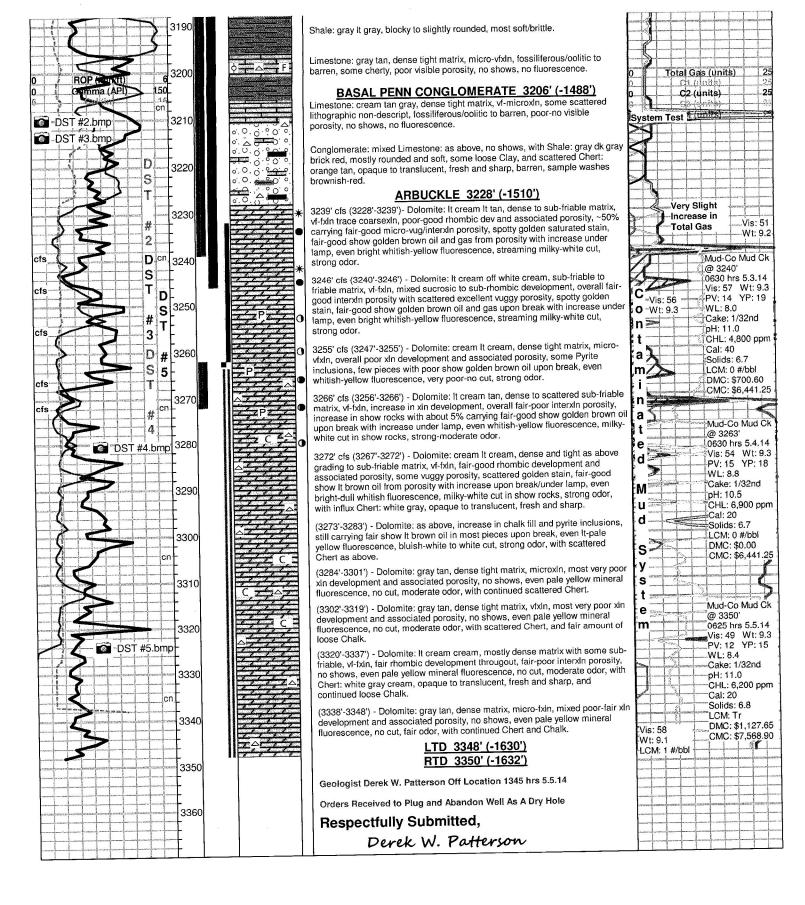
Limestone: cream It off white cream, dense tight cherty xln matrix, microxin, most barren with occasional sub-oolitic, overall poor-no visible porosity, no shows, no fluorescence, with scattered Chert as above.

## BASE KANSAS CITY 3170' (-1452')

#### MARMATON 3174' (-1456')

Limestone: gray It gray cream It cream, dense tight matrix, micro-vfxln, fossiliferous/oolitic to barren, some cherty, poor visible porosity, no shows, no







Gilbert-Stew art Operating

28-19s-9w-Rice

1801 Broadway Ste 450 Denver Colorado 80202

Lincoln #18 Job Ticket: 18318

DST#:1

ATTN: Derek Patterson

Test Start: 2014.05.02 @ 12:27:00

## GENERAL INFORMATION:

Formation:

Lansing KC J

Deviated:

Whipstock

Test Type:

Conventional Bottom Hole (Initial)

ft (KB)

Time Tool Opened: 13:46:00

Tester:

Dustin ⊞is

Time Test Ended: 15:45:00

Unit No:

3315-Great Bend-52

Interval:

3076.00 ft (KB) To 3102.00 ft (KB) (TVD)

Reference Bevations:

1718.00 ft (KB)

Total Depth:

3102.00 ft (KB) (TVD)

KB to GR/CF:

PRESSURE SUMMARY

1709.00 ft (CF) 9.00 ft

Hole Diameter:

7.88 inches Hole Condition: Fair

Serial #: 6838

52.59 psig @

ft (KB)

2014.05.02

Capacity:

5000.00 psig

Start Date: Start Time:

2014.05.02 12:27:00 End Date: End Time: 15:45:00

Last Calib.:

2014.05.02 2014.05.02 @ 13:45:30

Time On Btm: Time Off Btm:

2014.05.02 @ 14:32:30

Press@RunDepth:

TEST COMMENT: 1st Open 10 minutes Very very weak surface blow through out.

1st Shut in 30 minutes No blow back. 2nd Open 10 minutes Dead -Pulled tool

2nd Shut in N-A

Pressure vs. Time

	6636 Francus		ess	Companies	. 1	Time	Pressure	Temp	Annotation	
E	d 27		190		1"	(Min.)	(psig)	(deg F)		
1600			11/1/		. 95	0	1580.10	98.00	Initial Hydro-static	
ļ.	N	i	1 1		,	1	43.84	97.83	Open To Flow (1)	
120			<del>                                     </del>	<del>\</del>	1	11	52.59	97.87	Shut-In(1)	
į.	$\mathcal{A} +$		11 1	- way	*	41	945.37	98.75		
,				M		42	47.01	98.66	Open To Flow (2)	
776	]   [			<b>h</b> )	75 07	47	47.76	98.70	End Shut-In(2)	
ra -	11/	<del>                                     </del>	+	+1/	, (	47	1561.53	98.89	Final Hydro-static	
` [ X Z	/   <u> </u>			\	7 3					
911	-H — —	111-		+	1 6	1				
E /	V			\	1					
70		<del>     </del>		<del>  \                                   </del>	1 5					
F /	/\	Description of the last of the		\	1					
a	<del>-</del>	Sam () (cros)	( ) Parties (C)	3 <sup>1</sup> U	:0					
2 Fei Sky 2014		Time () icars)	100			<u> </u>	<u> </u>			
		Recovery						Ga	s Rates	
				Volume (bbl)	7	l —		Choke (	(inches) Pressure (psig)	Gas Rate (Mcf/d)
Length (ft)		escription			4	L				
4.00	Slightly oil spe	ect mud Mud	100%	0.06						(4)
					7					
<u> </u>					7					
					-					
					4					
	8			1	- 1	1				

Superior Testers Enterprises LLC

Ref. No: 18318

Printed: 2014.05.02 @ 17:00:18



Gilbert-Stew art Operating

28-19s-9w-Rice

1801 Broadway Ste 450

Lincoln #18

DST#: 2

Denver Colorado 80202

Job Ticket: 18319

ATTN: Derek Patterson

Test Start: 2014.05.03 @ 06:26:00

#### GENERAL INFORMATION:

Time Tool Opened: 07:46:30

Time Test Ended: 12:13:00

Formation:

Arbuckle

Deviated:

Whipstock No

ft (KB)

Test Type:

Conventional Bottom Hole (Initial)

Tester:

Dustin Elis

Unit No:

3315-Great Bend-52

3170.00 ft (KB) To 3240.00 ft (KB) (TVD) Interval:

Reference Bevations:

1718.00 ft (KB) 1709.00 ft (CF)

Total Depth: Hole Diameter: 3240.00 ft (KB) (TVD)

KB to GR/CF:

9.00 ft

Serial #: 6839 Press@RunDepth:

Outside

87.70 psig @

7.88 inches Hole Condition: Fair

3235.74 ft (KB)

Capacity:

5000.00 psig

Start Date:

2014.05.03

End Date:

2014.05.03

Last Calib.:

2014.05.03

Time On Btm:

2014.05.03 @ 07:45:30

Start Time:

06:27:00

End Time:

12:13:00

Time Off Btm:

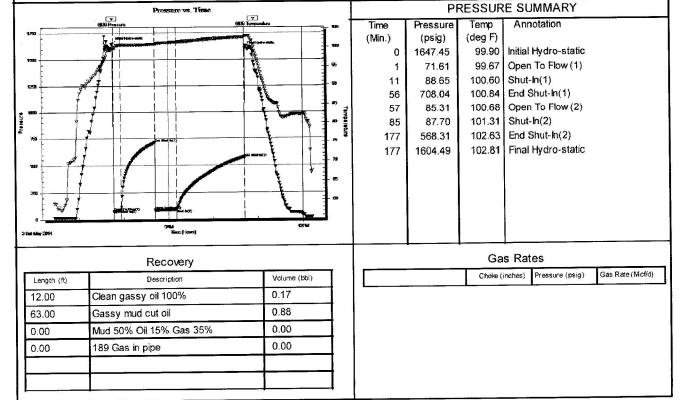
2014.05.03 @ 10:42:30

TEST COMMENT: 1st Open 10 minutes Weak building blow built to 5 inches into a 5 gallon bucket of water.

1st Shut in 45 minutes No blow

2nd Open 30 minutes Weak building blow built to the bottom of the bucket in 26 minutes.

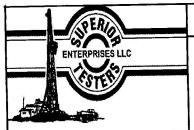
2nd Shut in 90 minutes Yes blow back



Superior Testers Enterprises LLC

Ref. No: 18319

Printed: 2014.05.04 @ 02:46:22



Gilbert-Stew art Operating

28-19s-9w-Rice

1801 Broadway Ste 450 Denver Colorado 80202

Lincoln #18 Job Ticket: 18320

DST#: 3

ATTN: Derek Patterson

Test Start: 2014.05.03 @ 07:02:00

## GENERAL INFORMATION:

Time Tool Opened: 08:24:00

Time Test Ended: 13:10:00

Formation:

Arbuckle

Deviated:

No Whipstock: ft (KB)

Test Type:

Conventional Bottom Hole (Initial)

Tester:

Dustin ⊞lis

Unit No:

3315-Great Bend-52

Reference Bevations:

1718.00 ft (KB) 1709.00 ft (CF)

KB to GR/CF:

PRESSURE SUMMARY

9.00 ft

Interval: Total Depth: 3168.00 ft (KB) To 3247.00 ft (KB) (TVD)

3247.00 ft (KB) (TVD)

Hole Diameter:

7.88 inches Hole Condition: Fair

Capacity:

Serial #: 8931 Press@RunDepth: Outside 92.68 psig @

3242.66 ft (KB) End Date:

2014.05.03

Last Calib.:

5000.00 psig

Start Date: Start Time: 2014.05.03 07:02:00

End Time:

13:10:00

Time On Btm:

2014.05.04 2014.05.03 @ 08:23:30

Time Off Btm:

2014.05.03 @ 11:40:30

TEST COMMENT: 1st Open 15 minutes Weak building blow built to 6 inches into a 5 gallon bucket of water.

1st Shur in 45 minutes No blow back

2nd Open 45 minutes Weak building blow built to 10.5 inches into a 5 gallon bucket of water.

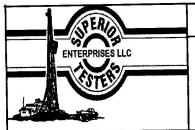
2nd Shut in 90 minutes No blow back

Pressure vs. Time

	#68 Frances #68 Temps	maters .	Time	Pressure	Temp	Annotation		
	Walter I		(Min.)	(psig)	(deg F)			
19:00 F			0	1659.72		Initial Hydro-static		
Ė,		1 5	1	72.06	97.90			
eza	<del>/                                      </del>	<b>\</b>	15	81.30	98.02			
$+$ $\setminus$ ,	/	1 :	60	576.11	98.77	End Shut-In(1)		
V		-	60	96.18		Open To Flow (2) Shut-In(2)		
	/ }		104 197	92,68 480,13		End Shut-In(2)		
ma -	Samuel Co.	7	197	1597.03		Final Hydro-static		
500		700		:				
259			ļ					
0 - <u></u>	SMM Minrs: () -(SMM)	CTW CTW						
	Recovery		Gas Rates					
Length (ft)	Description	Volume (bbi)			Choke (	inches) Pressure (psig)	Gas Rate (Mcf/d)	
4.00	Clean gassy oil 100%	0.06						
63.00	Gassy mud cut oil	0.88						
0.00	Mud 60% Oil 20% Gas 20%	0.00						
0.00	180 Gas in pipe	0.00					ě	
			1					
	Tradeva Enterprises LLC Ref	No: 18320			Drinted	: 2014.05.04 @ 02:4	1:17	

Superior Testers Enterprises LLC

Ref. No: 18320



Gilbert-Stew art Operating

28-19s-9w-Rice

1801 Broadway Ste 450 Denver Colorado 80202

Lincoln #18 Job Ticket: 18321

DST#:4

ATTN: Derek Patterson

Test Start: 2014.05.04 @ 11:34:00

#### GENERAL INFORMATION:

Time Tool Opened: 12:42:30

Formation:

Arbuckle

Deviated:

No Whipstock: ft (KB)

Test Type:

Conventional Bottom Hole (Initial)

Dustin Elis Tester:

KB to GR/CF:

Unit No:

3315-Great Bend-52

Interval:

Time Test Ended: 17:15:00

3263.00 ft (KB) To 3273.00 ft (KB) (TVD)

1718.00 ft (KB)

Total Depth:

3273.00 ft (KB) (TVD)

Reference Elevations:

1709.00 ft (CF)

9.00 ft

Hole Diameter:

7.88 inches Hole Condition: Fair

Press@RunDepth:

Serial #: 8931

Inside 320.60 psig @

3268.00 ft (KB)

2014.05.04

Capacity: Last Calib.: 5000.00 psig

Start Date: Start Time:

2014.05.04 11:34:00 End Date: End Time:

17:15:00

Time On Btm:

2014.05.04 2014.05.04 @ 12:42:00

Time Off Btm:

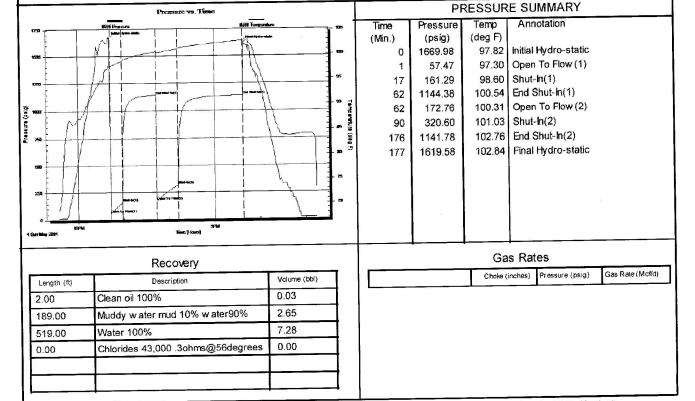
2014.05.04 @ 15:38:30

TEST COMMENT: 1st Open 15 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 4 minutes.

1st Shut in 45 minutes No blow back

2nd Open 30 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 6 minutes.

2nd Shut in 90 minutes No blow back





Gilbert-Stew art Operating

28-19s-9w-Rice

1801 Broadway Ste 450 Denver Colorado 80202

Lincoln #18 Job Ticket: 18322

DST#: 5

ATTN: Derek Patterson

Test Start: 2014.05.05 @ 12:11:00

GENERAL INFORMATION:

Time Tool Opened: 13:47:00

Time Test Ended: 20:04:30

Formation:

Arbuckle

Deviated:

Interval:

No Whipstock:

ft (KB)

Test Type: Conventional Straddle (Initial)

Tester:

Dustin Elis

Unit No:

3315-Great Bend-52

3232.00 ft (KB) To 3263.00 ft (KB) (TVD)

Total Depth:

3348.00 ft (KB) (TVD)

Reference Elevations:

1718.00 ft (KB) 1709.00 ft (CF)

Hole Diameter:

7.88 inches Hole Condition: Fair

KB to GR/CF:

9.00 ft

Serial #: 8931

Press@RunDepth:

450.31 psig @

ft (KB)

2014.05.05

Capacity:

5000.00 psig

Start Date: Start Time:

2014.05.05 12:11:00 End Date: End Time:

20:04:30

Last Calib.:

2014.05.05

Time On Btm: Time Off Btm: 2014.05.05 @ 17:56:00

2014.05.05 @ 13:46:00

TEST COMMENT: 1st Open 15 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 3 minutes.

1st Shut in 60 minutes No blow back

2nd Open 60 minutes Strong building blow built to the bottom of a 5 gallon bucket of water in 2 minutes.

2nd Shut in 120 minutes Yes blow back

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17.0		7				Arrows.	- 1075
1700		T+ i		<u> </u>			130
1250	<b></b>		.,,				- 95
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750	- <b>/</b>	1					
900 T		+			part te(f)	•	- 75
20	1	4		AUTH PROCES		+	- 70
	£	1	a Planti			<u> </u>	- 65
-	CTW CTW		397	N. Vivo	e()-ksan)	u	•

Pressure vs. Time

	PRESSURE SUMMARY							
	Time	Pressure	Temp	Annotation				
105	(Min.)	(psig)	(deg F)					
	0	1648.26	96.46	Initial Hydro-static				
137	1	82.00	103.80	Open To Flow (1)				
95	15	161.70	104.03	Shut-In(1)				
_	76	1148.12	104.31	End Shut-In(1)				
90 3	77	206.09	105.49	Open To Flow (2)				
Temperature (dag 5)	134	450.31	106.31	Shut-In(2)				
10.	248	1139.06	105.54	End Shut-In(2)				
<b>m</b> 3	250	1640.19	105.71	Final Hydro-static				
क								
70								
Œ								
	1000							

Length (ft)	Description	Volume (bbl)	
5.00	Free clean oil 100%	0.07	
504.00 Oil cut mud 10%Oil 90% Mud		7.07	
126.00 Oil cut mud with oil cut water		1.77	
0.00	Oil 1% Mud69% Water30%	0.00	
315.00 Water 99%w ater 1%Oil		4.42	
0.00	126 gas in pipe	0.00	

Gas Rates

Choke (inches)

Pressure (psig)

Gas Rate (Mcf/d)