KOLAR Document ID: 1424809

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 #	API No.:
Name:	Spot Description:
Address 1:	SecTwpS. REast _ West
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xxxxxxxx) (e.gxxxx.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 ☐ SWD	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
□ OG □ GSW	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)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:  Dual Completion Permit #:	Dewatering method used:
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. Twp. S. R. East West
Recompletion Date 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: 1424809

### Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No					
		B	CASING eport all strings set-c		New Used	ion, etc.		
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD			
Purpose:		epth T Bottom	ype of Cement	# Sacks Used		Type and F	Percent Additives	
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a     Does the volume     Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)		
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:				
TODING RECORD:	. 3126.	Set	n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	Bear Petroleum, LLC
Well Name	STATES 1
Doc ID	1424809

### All Electric Logs Run

Micro Log
Dual Induction Log
Compensated Density/Neutron Log
Cement Bond Log
Geo Report

Form	ACO1 - Well Completion
Operator	Bear Petroleum, LLC
Well Name	STATES 1
Doc ID	1424809

### Tops

Name	Тор	Datum
Herington	2276	-103
Winfield	2334	-161
Towanda	2402	-229
Ft Riley	2448	-275
Heebner	3726	-1553
Toronto	3744	-1571
Lansing	3812	-1639
Pawnee	4228	-2055
Ft Scott	4274	-2101
Cherokee	4288	-2085
Mississippi	4365	-2192
Gilmore City	4420	-2247
Kinderhook Sand	4440	-2267
Viola	4484	-2311

Form	ACO1 - Well Completion
Operator	Bear Petroleum, LLC
Well Name	STATES 1
Doc ID	1424809

### Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth		Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1318	60/40 poz	500	2% gel, 3% cc
Production	8	5.5	15.5	4545	60/40 poz	125	2% gel



# NEW NELL

FIELD ORDER № C 45872

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

		3	10-324-1223	DATE Gliali	8	20
S AUTHORI	ZED BY: _	seer Pedokum				
			(NAME OF CUSTOMER)			
			City		State	
o Treat Well As Follows:	Lease Stc.	ves V	Vell No	Custome	er Order No.	*
ec. Twp. lange			County <u>Acuree</u>		State	ts
ot to be held li aplied, and no eatment is pay ar invoicing de	able for any dai representations rable. There will partment in acc	consideration hereof it is agreed that Copela nage that may accrue in connection with sa have been relied on, as to what may be the be no discount allowed subsequent to such ordance with latest published price schedul himself to be duly authorized to sign this or	id service or treatment. results or effect of the date. 6% interest will b es.	Copeland Acid Service I servicing or treating said e charged after 60 days.	nas made no re well. The con	epresentation, expressed of sideration of said service of
	IST BE SIGNED IS COMMENCED			By		
		Well Owner or Op	perator			ent
CODE	QUANTITY	[	DESCRIPTION		UNIT	AMOUNT
2	45	milecse pump to	uck		1 oct	180,00
2	45	milesse pickup			2.09	90.00
2	į	Pump Chrise - & Lo.	-s String			1,100.00
n		60/			10, 751	
2	500	60/40 por. 7% col.				5,375,00
2	27	Coloium Chloride			30,00	210,00
2	(	85/8" Wood Plus				65.00
2	1	85/8' Wood Plus 85/8' Aluminum Bo	Sce			105.00
2	(22	Pulls Chause			25/	200 200
	527	Bulk Charge	<del></del>	(Of	101	658.75
2		Bulk Truck Miles 22.647 K 4		× 1,	1.	1,177.66
		Process License Fee on		Gallons		9,506. 41
				TOTAL BILLING		
I certify the	at the above	material has been accepted and u	sed; that the above e owner, operator o	service was perforr r his agent, whose s	ned in a goo ignature ap	od and workmanlike
		e Nano wi		1990 ST	oral S.	
Copeland				Nich c		
	, B.			MICK 2"		
				Dick S. Well Owner, Open	ator or Agent	



### TREATMENT REPORT

Acid a	& Cemen	t 🕮						Acid Stage No		
					Type Treatment:	Amt.	Type Fluid	Sand Size	Pound	ts of Sand
Date 6	/14/2018 [	District GB	F.O. N	lo. C45872	Bkdown		I			
	Bear Petroleu			Water Control of the	l —					
	& No. States #				1		l			
Location			Field				l			
County	Pawnee		State KS		Flush	Bbl./Ga	l			
A					Treated from		_ft. to		No. ft.	0
Casing:	Size 8 5/8	" Type & Wt.		Set at ft.			ft. to		No. ft.	0
Formation			Perf						No. ft.	0
Formation			Perf.		Actual Volume of O	THE SECOND				Bbl./Gal.
Formation			Perf.	to						
	ze Type &	Wt.	Top at ft.	Bottom atft.	Pump Trucks.	No. Used: Std.	365 Sp.		Twin	
			om		Auxiliary Equipment			50/308		
			Swung at		Personnel Nathai					_
	Perforated f		ft. to		Auxiliary Tools					
					4		e			
Open Hole	Size	T.D	ft. P.	B. toft.				Gals.		lb.
										Land Committee of the property of the
Company (	Representative		Dick S	•	Treater		Nathan	W.		
TIME		SURES					-			
a.m./p.m.	Tubing	Casing	Total Fluid Pumped			REMARK	(S			
11:45		8 5/8"		On Location.						
				Pipe-1318'						
				<u> </u>			<u> </u>			
				Break circulation	with mud p	ump.				
				Mix 500sks 60/4	Opoz 2%gel	3% Calcium	Chloride at	16#/gal.		
								, 0		
1:45				Displace with 82	bbls at 5bpn	n-300#				
1.43				Displace With 02	<del>55.5 at 55p.</del>					
				Thank You!						
				THAIR TOU:			<del></del>			
				Nathan W.						
		<u> </u>		Nathan vv.						
		<u> </u>								





# FIELD ORDER Nº C 45429

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

		DATE_	6/21/18	20
		see Petroleur		
Address		City	State	
		Hes Well No. 1		
Coo Tues				
Range		County Premac	State _	12)
not to be held li mplied, and no reatment is pay our invoicing de	able for any da representations rable. There will partment in acc	consideration hereof it is agreed that Copeland Acid Service is to service or treat mage that may accrue in connection with said service or treatment. Copeland Acid Service or treatment. Copeland Acid have been relied on, as to what may be the results or effect of the servicing or triple to be no discount allowed subsequent to such date. 6% interest will be charged after ordance with latest published price schedules.	eid Service has made no re	presentation, expressed or
	IST BE SIGNED	DBy		
	I	Well Owner or Operator	Age	nt
CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT
2	45	mikese pump truck	4.001	180,00
2	45	milecuc pickup	- 60/	90,00
2	(	Pump Charge Long String		1,600.00
2	175	Pump Charge - Long String 60/40 por. 28 scl.	10.75/	75.188,1
2	400 f	Gilsonite		675.00
2	1.000 H	Scit	., 75	750,00
2	SO H	C-41p - Delocner		187.50
2	50 4	C-12 - Fluid Loss	6 00/	300.00
2	100 #	C-37 - Friction Reducer	4 00/	460,60
2	600 scl.	Mud-flush	.75	450.00
2	5	56 Turbo- Centrolizas	35.00/	425.00
2	(	5½ Bostol		155.00
2	1	51/2" Flock Shae we auto-Fill		355,00
2	(	sik Letch down plus & bettle		175.00
2	217	Bulk Charge	1 751	771.75
2		Bulk Truck Miles 8,75 T x 45 n = 343, 75 Tm x 1.	1.01	433.13
		Process License Fee onGallons		7,878,13
		TOTAL B	ILLING	1,000,12
manner u	nder the dire	material has been accepted and used; that the above service was ction, supervision and control of the owner, operator or his agent, the properties of the owner.	as performed in a goo , whose signature app	d and workmanlike bears below.
Station 6				
Station_C		Well	Owner, Operator or Agent	
Remarks_		NET 30 DAVS	1. 4	



### TREATMENT REPORT

Acid	& Cemen	t 🕰						Acid Stage No	)	
					Type Treatment:	Amt.	Type Fluid	Sand Size	Pound	ds of Sand
Date 6	5/21/2018	District GB	F.O. 1	No. C45429	Bkdown		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1. 30	
-	Bear Petrole									
Well Name	e & No. States	#1			1					
Location			Field							
County	Pawnee		State KS		Flush					
					Treated from		ft. to	ft.	No. ft.	0
Casing:	Size 5.5"	Type & Wt.	15.5#	Set atft.			ft. to		No. ft.	0
Formation				to	from		ft. to		No. ft.	0
Formation	:		Perf.	to	Actual Volume of O	il / Water to Load Hol		2.2.2500		Bbl./Gal.
Formation			Perf.							
	ze Type 8	& Wt.	Top at ft.		Pump Trucks.	No. Used: Std.	365 Sp.		Twin	
	(A)	The state of the s				:		0/308	_	
			Swung at		Personnel Nathar		N. N		-	- 22
			ft. to		Auxiliary Tools					
					Plugging or Sealing I	Materials: Type				
Open Hole	Size	T.D	ft. P	B. toft.	1			Gals.		lb.
			- 1							
Company	Representative		Dick S	•	Treater		Nathan	W.		
TIME		SSURES	1							
a.m./p.m.	Tubing	Casing	Total Fluid Pumped			REMARKS				
3:00		5.5"		On Location. Rig	laying dow	n pipe and pi	reparing to	run casin	g.	
							0 1000			
				Hole-4549'						8
				Pipe-4545'						
				Baffle-4501'	Cen	tralizers-1,3,	5.7.9			
		<b>-</b>				sket-5	-,.,-			
						oner 5				
F-2F				Start running cas	ing and floa	t aquinment	in hole			
5:25				Start running cas	ing and noa	t equipment	iii iioie.			
				Land pipe and ho	ok up to bre	ank circulatio	n with muc	Lnumn		
				Circulate on bott			m with mut	pump.		
7:45				Circulate on bott	om for 45 m	inutes.	10.000			
				D COO . I . CI	M. J.El. J.	. 4 Eb 20	0.44			
				Pump 600gal of I	viud Flush a	t 4.5ppm-20	U#			
				nt n	1 00 1					
				Plug Rat Hole wit						
				Plug Mouse Hole	with 20sks.		material control of the control of t			
				Mix 125sks 60/40			%C-12 .759	%C-41p		
				12% Salt 5#/sk G	ilsonite at 1	.6#/gal.				
							****			
				Wash out pump	and lines.					
				Displace with 107						
				Plug landed at 10	000# Pressu	re up to 150	0# Release	d pressur	e.	
9:45				Float Held.						
				Thank You!	Natl	han W.				

### LITHOLOGY STRIP LOG

### **WellSight Systems**

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

Well Name: States #1

Well Id:

Location: 1100' FSL & 1320' FWL Sec 10 T22S-R20W

To:

License Number:

Region:

Spud Date: 6/13/2018

**Drilling Completed:** 

**Surface Coordinates:** 

**Bottom Hole** 

Coordinates:

Ground Elevation (ft): 2167

K.B. Elevation (ft): 2173

Logged Interval (ft): 2120

Total Depth (ft):

Formation:

Type of Drilling Fluid:

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

#### **OPERATOR**

Company: Bear Petroleum

Address:

**GEOLOGIST** 

Name: Rod Andersen

Company:

Kansas Petroleum Resources LLC

Address:

### **ROCK TYPES**

Anhy A Bent aog o a Brec Cht Clyst

Coal Congl Dol Gyp Igne

Lmst Meta Mrlst Salt Shale

Shcol Shgy Sitst Ss Till

### **ACCESSORIES** 0

MINERAL

Anhy
Arage Anhy Arggrn Arg В Bent -Bit ß **Brecfrag** Τ

Calc

Carb

Chtdk

.

Θ Nodule 60 Phos P Pyr **B** Salt Sandy ... | Silt Sil 8 Sulphur **Tuff** 

Minxl

\*

8 **Echin**  $\infty$ Fish 8 **Foram** F Fossil B Gastro φ Oolite 0 Ostra  $\nabla$ Pelec Ø Pellet

Crin

Gyp Ls Mrst Sitstrg Ssstrg

**TEXTURE Boundst** Chalky CryxIn

1 - OAZZE	Poi Feldspa Ferrpel Ferr Glau Gyp Hvymin Kaol Marl	ar @	] ] ] ]	Algae Amph Belm Bioclst Brach Bryozoa Cephal Coral	ā		Stro Stro Ani Arg Ber Coa Dol	er ER ny Int	20 20 20 20 20 20 20 20 20 20 20 20 20 2	Finexin Grainst Lithogr Microxin Mudst Packst Wackest		
		EX 250 1926 St. V. EE			OTHER	CVMD	01.4				West and the second	
POI BEXTOES	ROSITY Earthy Fenest Fracture Inter Moldic Organic Pinpoin Vuggy	e R	οι	RTING Well Modera Poor JNDING Rounde Subrnd Subang		OIL S	Ang SHO Eve	gular W n otted	INTE	ERVAL Core Dst NT Rft Sidewall		
		Curve Track 1 ROP (min/ft)—— Gas (units)	Depth		Geological De	escriptio	ons	TG (Units) C1 (units) C2 (units) C3 (units) C4 (units) C5 (units)	TG, C1-C5		,	
		D ROP (min/ft) 10 Gas (units) 100	2150 21		Anhydrite wt sh gry Anhydrite wt	ered LS gra	ay		TG, C1-C5	200		

sh gry

ROP (min/ft) 100 Gas (units) 100 Ls gy-brn mottled fxln

Anhydrite wt

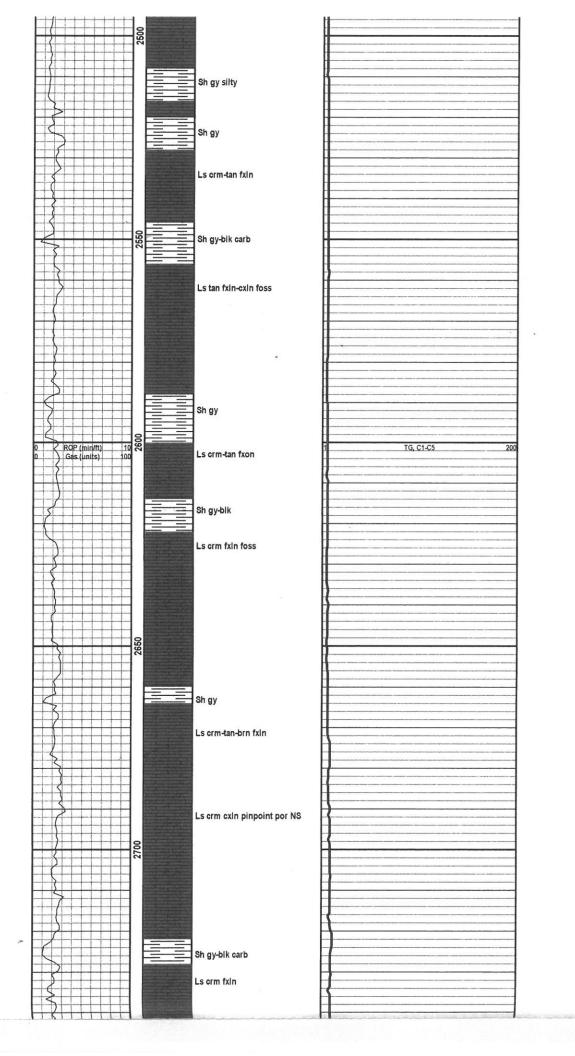
Ls gry mottled

Anhydrite wt

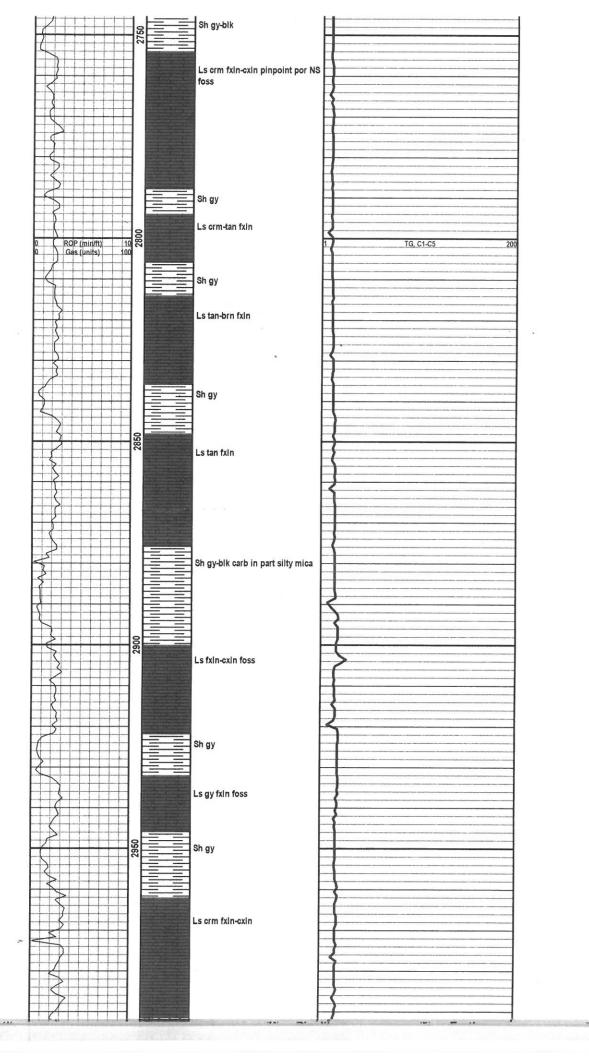
TG, C1-C5

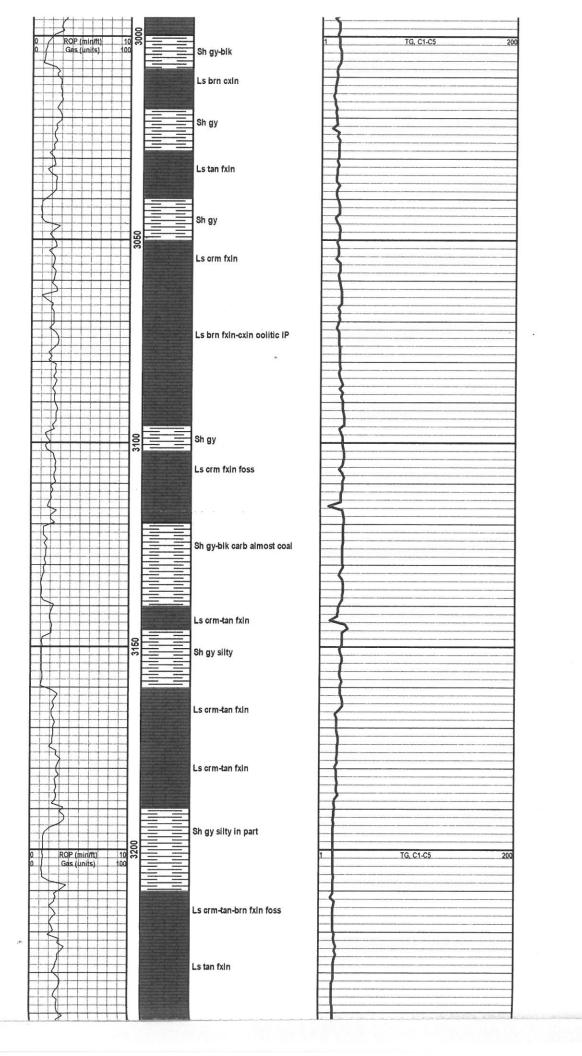
1-1/	A)	
2250	2/1	
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	Committee of the Commit	
	Ls gy fxin	
	Anhydrite wt	
	Amilyante Wt	
	Herrington 2276 -103	
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	Dol brn succrosic NS slight gas	
	kick	
	NICK .	
	TO.	
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	Ob west and a	
	Sh gy fissle	
	D	
	Sh av	1
	Sh gy	
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	Winfield 2334 -161	<del> </del>
	Willield 2004 - 101	
	Dol brn-gy sucrosic NS	
7320		i — — — — — — — — — — — — — — — — — — —
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	Doi bill suc. Illily	
	16.550 (18.55)	
		***************************************
	Dol brn suc	
	Dol brn suc	
	Dol brn suc Sh gy scattered	
001		
0 ROP (midth) 1972	Sh gy scattered	1 TG, C1-C5 200
0 RQP (mint#1) 1007 0 Gas. (units) 100		1 TG, C1-C5 200
0 RQP (mid#t) 190 0 Gas (units) 100	Sh gy scattered  Towanda 2402 -229	1 TG, C1-C5 200
0 ROP (mid#t) 19 70 Gas (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (minifft) 10 70 Gas (units) 100 C	Sh gy scattered	1 TG, C1-C5 200
0 ROP (mintrt) 1970 0 Gas (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (min/fft) 1972 0 Gas (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (min/ftt) 1972 0 Gas. (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 RQP (minfft) 100 Gas. (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (minifft) 100 Gas. (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
7400 (Hiptim) 1082 (100 (100 (100 (100 (100 (100 (100 (10	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 RQP (mid#t) 19 0 0 Gas (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (min/fft) 1972 0 Gas (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (min(fft) 1972 0 Gas. (units) 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420	1 TG, C1-C5 200
0 RQP (minfft) 100 Gas. (units) 100	Sh gy scattered  Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit	1 TG, C1-C5 200
0 ROP (miniff) 100 Gas. (units) 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420	1 TG, C1-C5 200
0 ROP (Intuiti) 190 0 Gas (units) 100 7450	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick  Ls crm-tan cxln-fxln NS	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick  Ls crm-tan cxln-fxln NS	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick  Ls crm-tan cxln-fxln NS	1 TG, C1-C5 200
O Gas (units). 100	Towanda 2402 -229  Dol gy sucrisic limy NS 5 unit gas kick at 2420  Sh gy  Ft. Riley 2448 -275  Ls crm cxln pinpoint porosity slight gas kick  Ls crm-tan cxln-fxln NS	1 TG, C1-C5 200

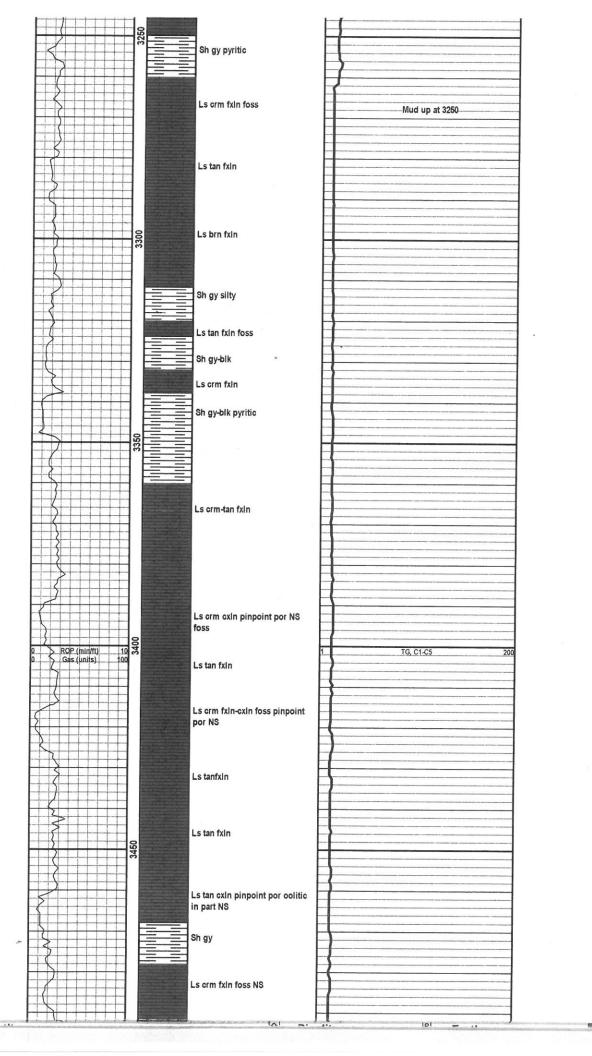
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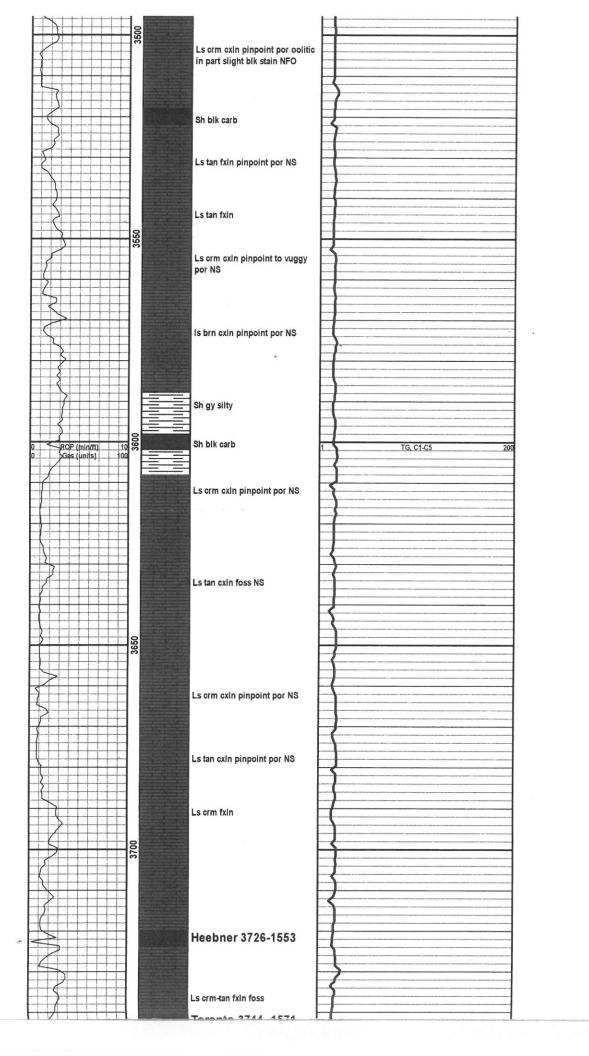
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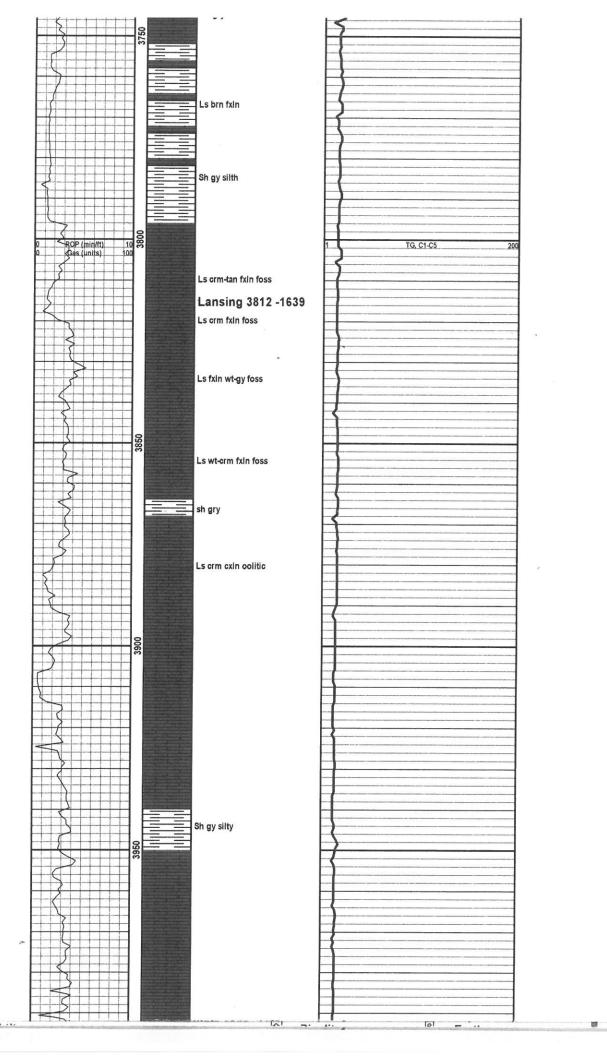




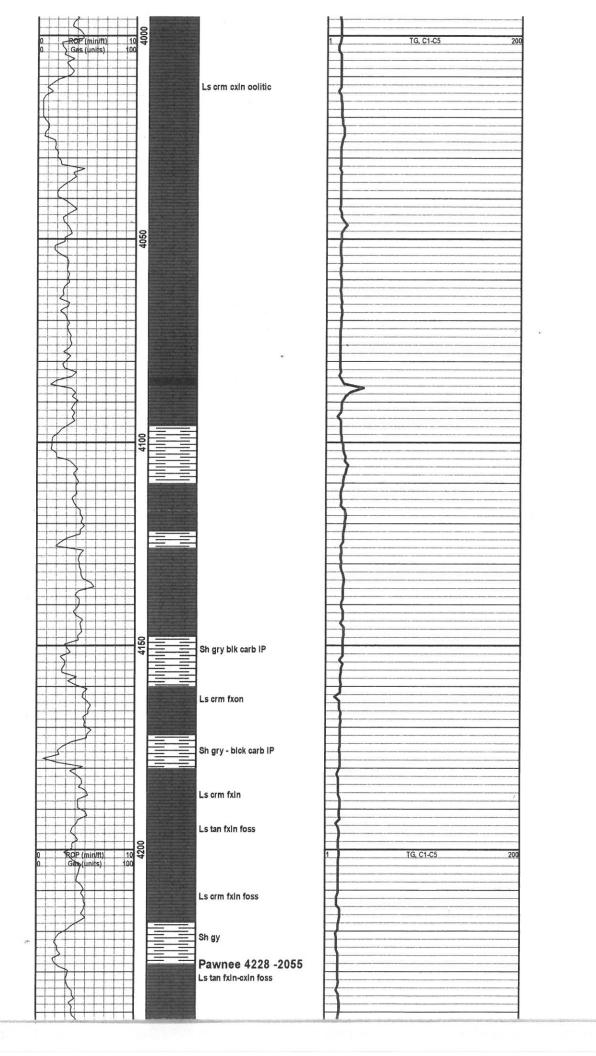


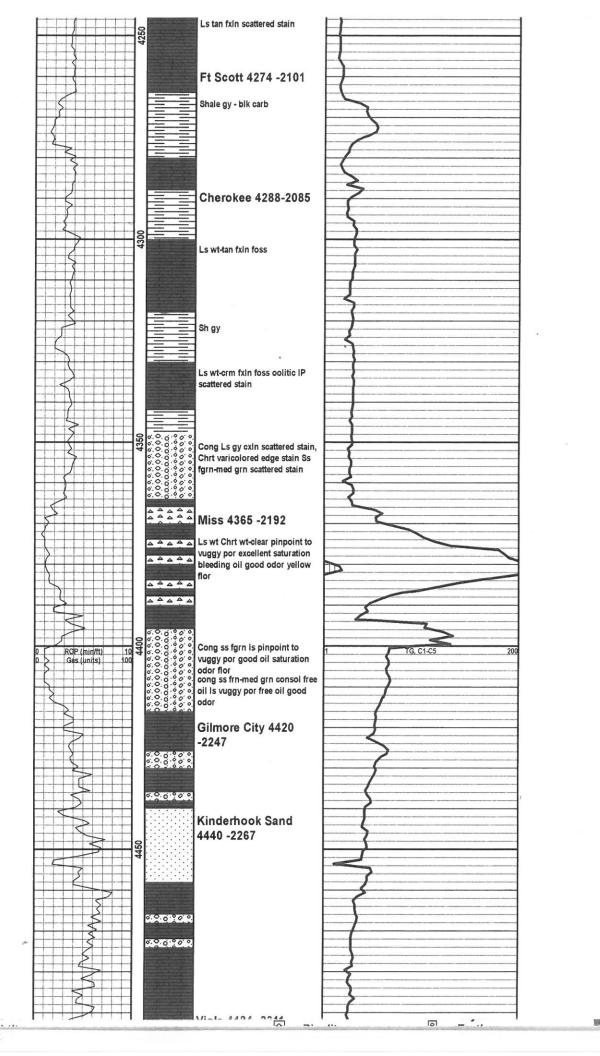
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0	ROP Gas	(min/ft) (units)	100	4600		1	1 TG, C1-C5 200
0	ROP Gas	(min/ft) (units)	10	4600			1 TG, C1-C5 200
0	ROP Gas	(min/ft)	100	4600		,	1 TG, C1-C5 200
0	ROP	(min/ft)	100	4600			1 TG, C1-C5 200
0	ROP Gas	(min/ft)	100	4600			1 TG, C1-C5 200
0	ROP Gas	(min/ft)	100	4600			1 TG, C1-C5 200
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0	ROP	(min/ft)	100	4600			1 TG, C1-C5 200
0	ROP	(min/ft)	100	4600			1 TG, C1-C5 200
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0	ROP	! (ininft)	100	4650 4600			1 TG, C1-C5 200
0	ROP	! (mints)	100				1 TG, C1-C5 200
0	ROP	e (units)	100				1 TG, C1-C5 200
0 0	ROP	e (units)	100				1 TG, C1-C5 200
0 0	ROP	P (mints)	100				1 TG, C1-C5 200
0 0	ROP	P (mints)	100				1 TG, C1-C5 200
	ROP	P (mints)	100				1 TG, C1-C5 200
	ROP	P (mints)	100				1 TG, C1-C5 200
	ROP	P (mints)	100				1 TG, C1-C5 200
	ROP	P (mints)	100				1 TG, C1-C5 200
	ROPPI	P (mints)	100				1 TG, C1-C5 200
	ROPPO	P (mints)	100				1 TG, C1-C5 200
	ROPPO	P (mints)	100				1 TG, C1-C5 200
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	ROP	P (mints)	100				1 TG, C1-C5 200
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Field Service P.O. BOX Haysville, KS		138 67060	CE	CEMENT BOND LOG	BOND	LOG	
.LC.	Company	BEAR PETROLEUM, LLC.	ETROL	EUM, L	LC.		
M, L	Well	STATES #1	#1				
LEU	Field	BURDETT	*******				
<b>‡1</b>	County	PAWNEE	m	State	KANSAS	SAS	
ES# ETT EE	Location					Other Services	
EAR FATE JRD AWN ANS		1100' FSL & 1320' FWL	. & 1320' F	-WF			
ST BI PA	SEC. 10	) TWP.	22S	RGE.	20W	Elevation	
Compar Well Field County State	Permanent Datum Log Measured From Drilling Measured From	From	GROUND LEVEL Elevatio KELLY BUSHING 6' AGL KELLY BUSHING	EL Elevation IG 6' AGL IG	2167	K.B. 2173 D.F. G.L. 2167	
Date		06-28-2018					
Depth Driller		4549					
Depth Logger		4501					
Top Log Interval	82	3086					
Type Fluid		WATER					
Density / Viscosity							
Estimated Cement Top	3	3286					
Time Logger on Bottom	3						
Equipment Number Location		405 GREAT BEND	0				
Recorded By		ASMINSHOS ACIO AM	, , ,				
	hole Record			Tubing	Tubing Record	•	
Run Number Bit	From	To	Size	Weight	From	То	>>
			1	1			ere >:
Casing Record Surface String	Size 8.625	WgVHt	Ť	0 00		Hottom 1319	ld H∈
Production String	5 5			0			< Fc
Liner							<<
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

THANK YOU FOR USING GRESSEL OIL FIELD SERVICE!



MAIN PASS

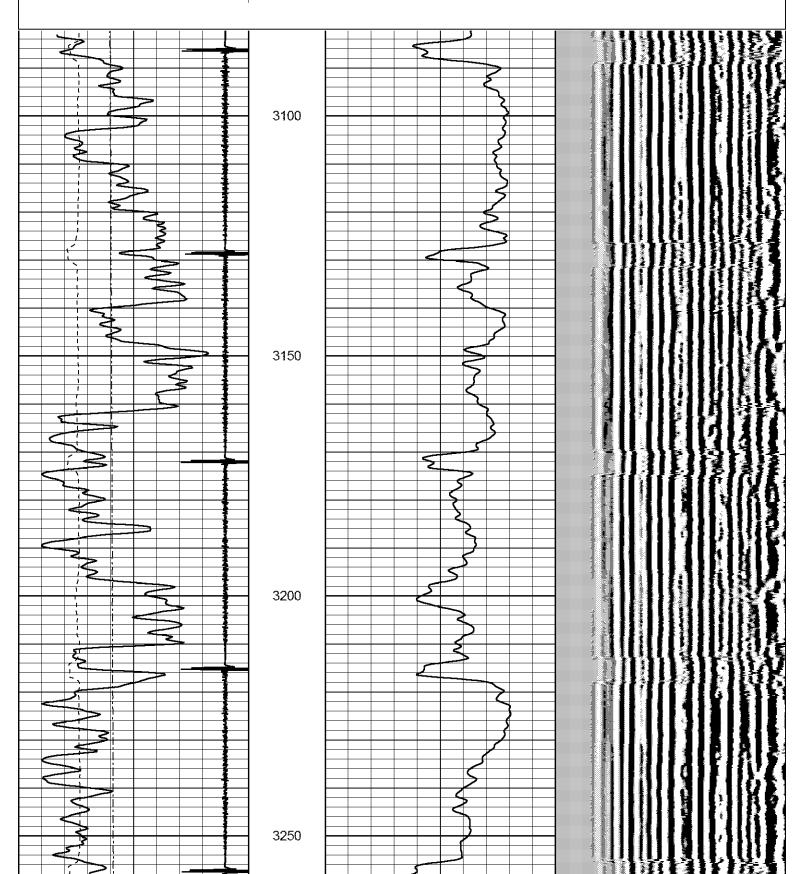
Database File: states1.db Dataset Pathname: pass3 Presentation Format: cbl02

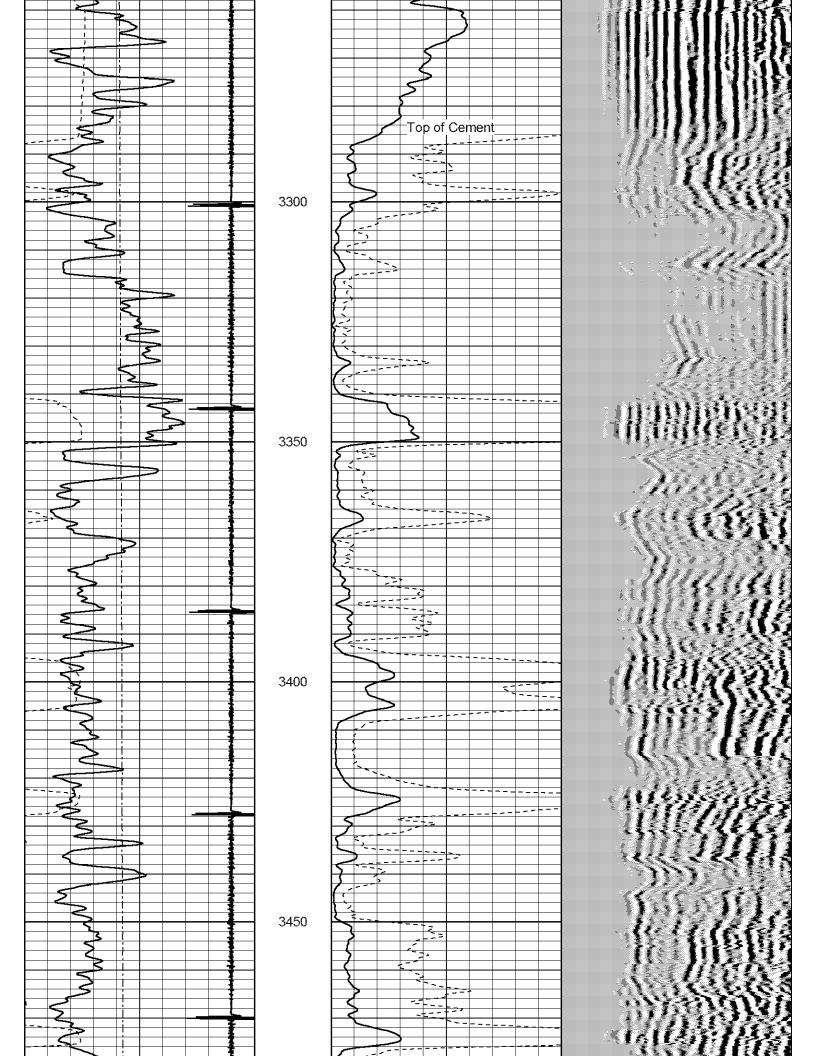
Thu Jun 28 09:55:29 2018 by Log 7.0 B1 Depth in Feet scaled 1:240 Dataset Creation:

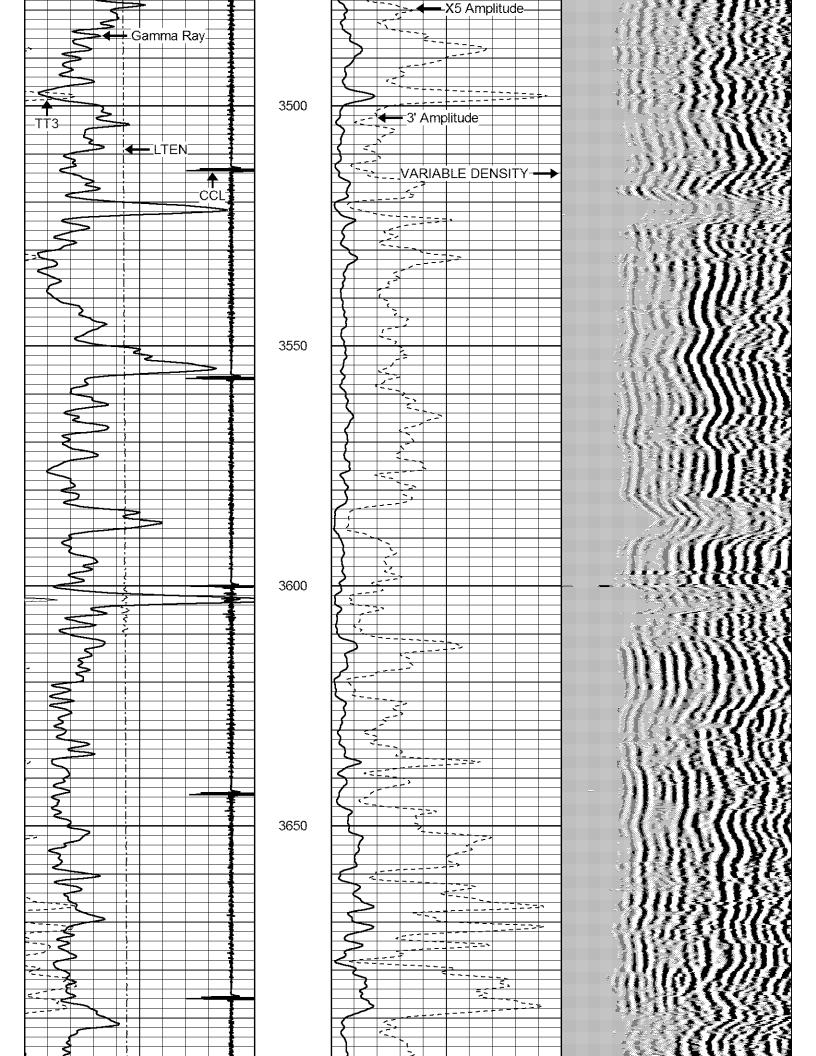
Charted by:

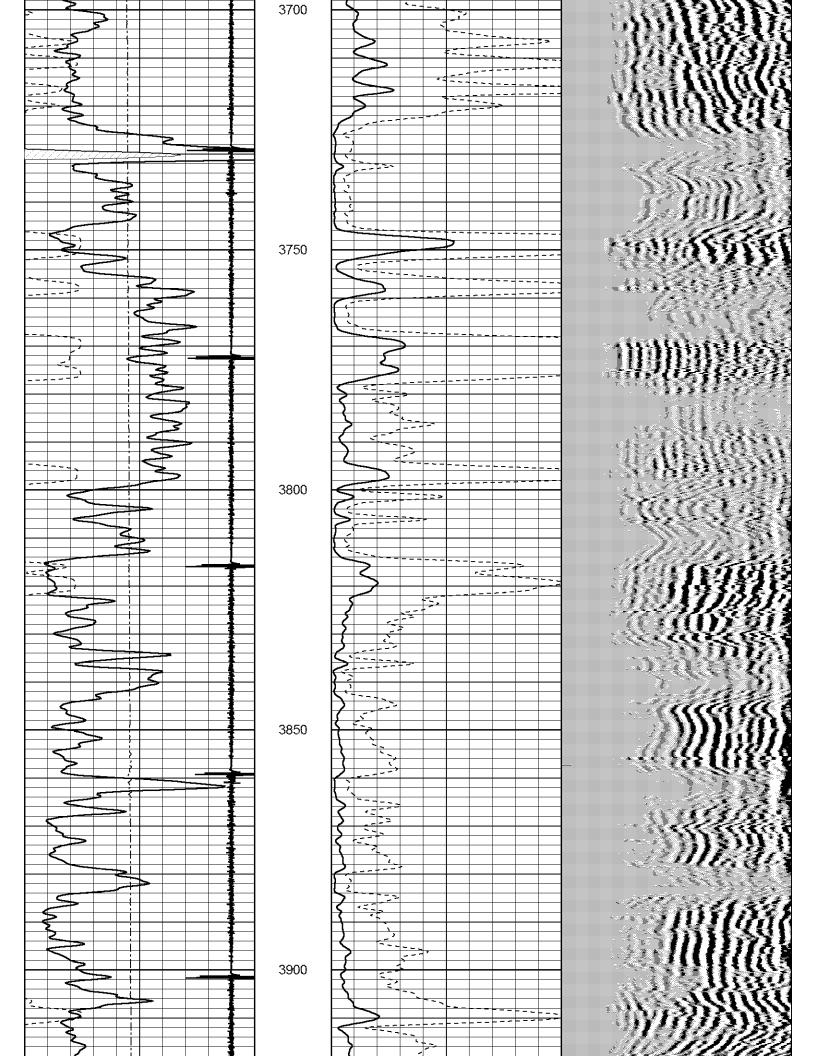
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
320	TT3 (usec)	120
0	LTEN (lb)	2000

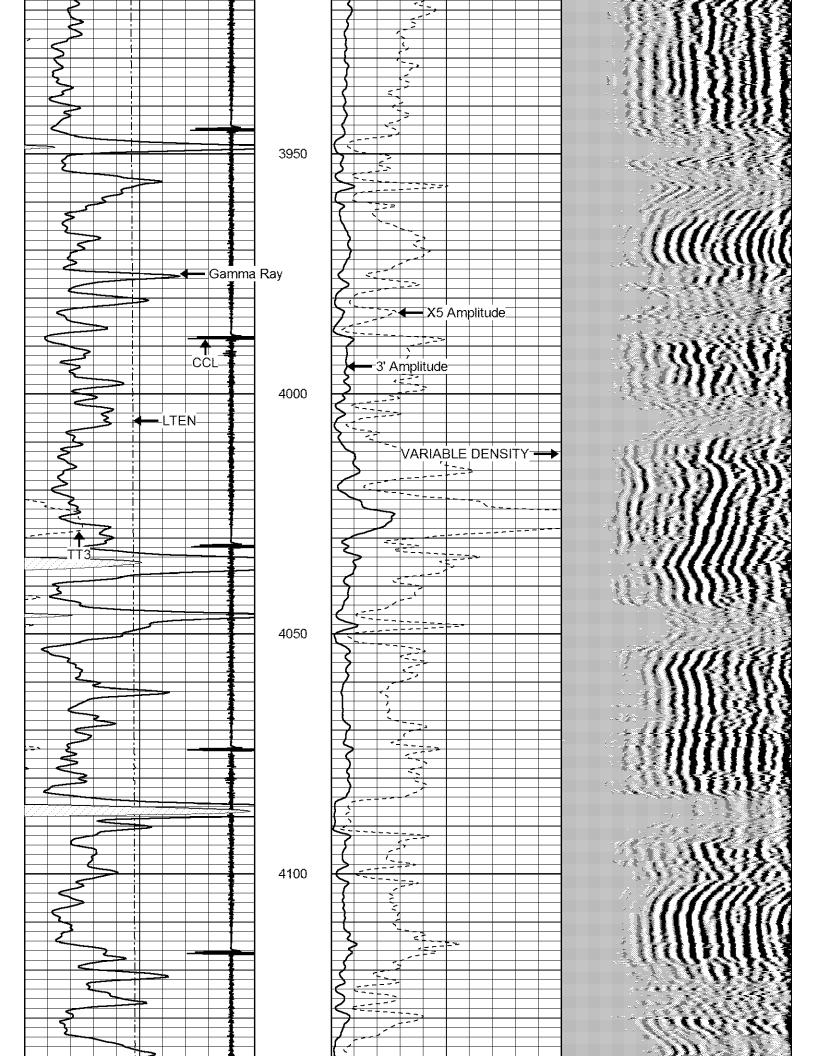
0	Amplitude (mV)	100 200	VARIABLE DENSITY	1200
0	X5 Amplitude (mV)	20		

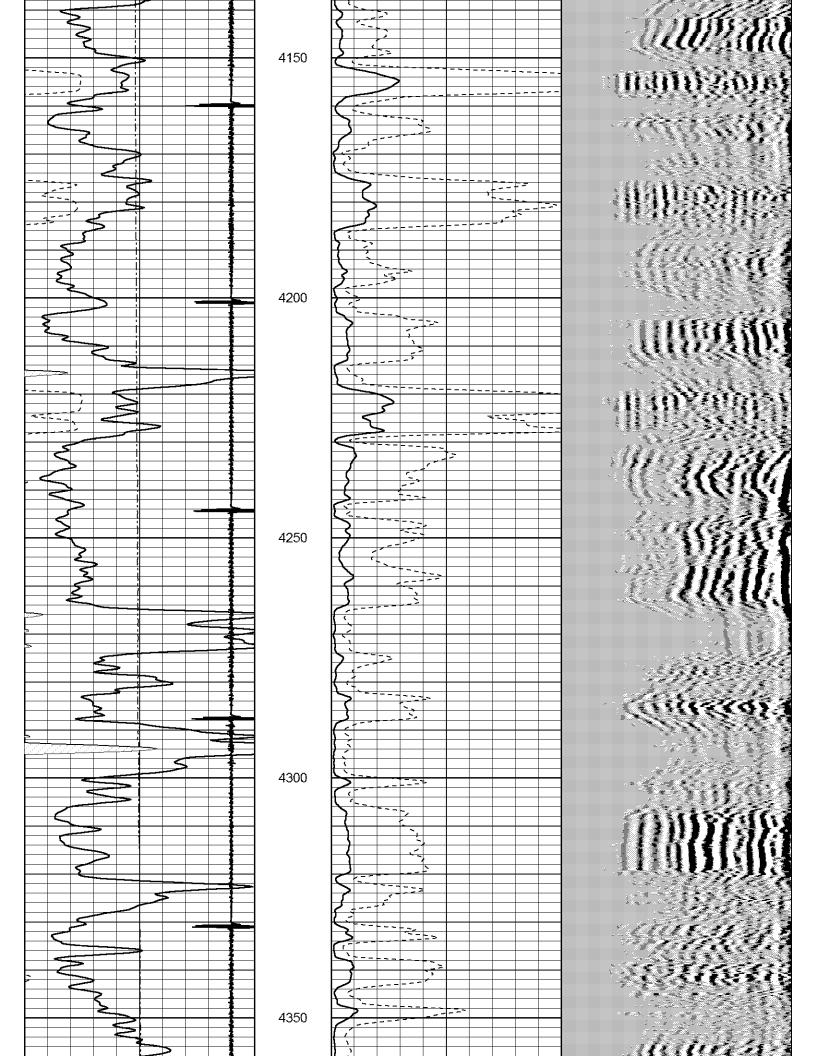


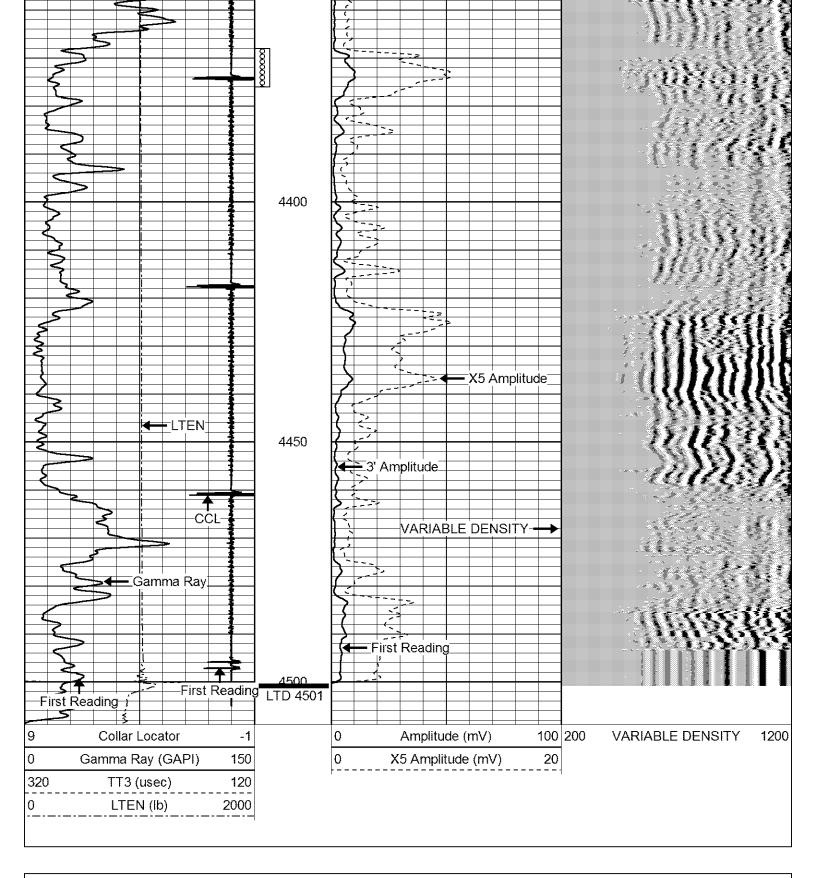












# Field Service

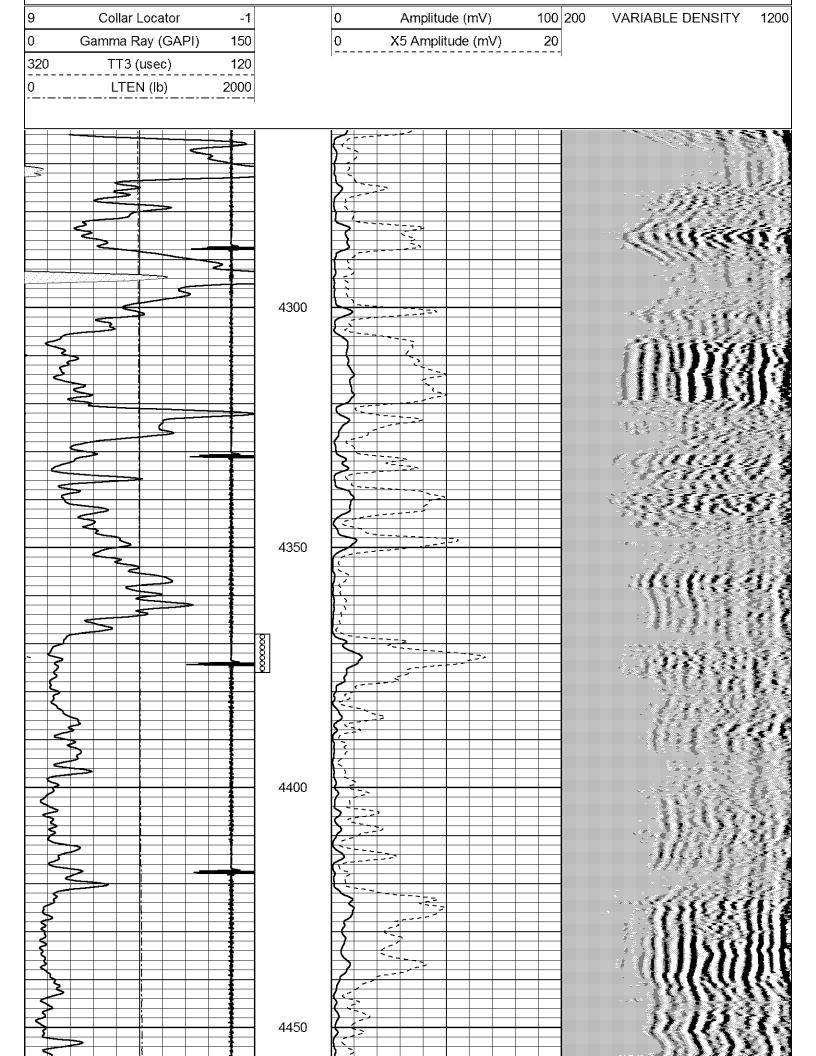
P.O. BOX 438 Haysville, KS 67060

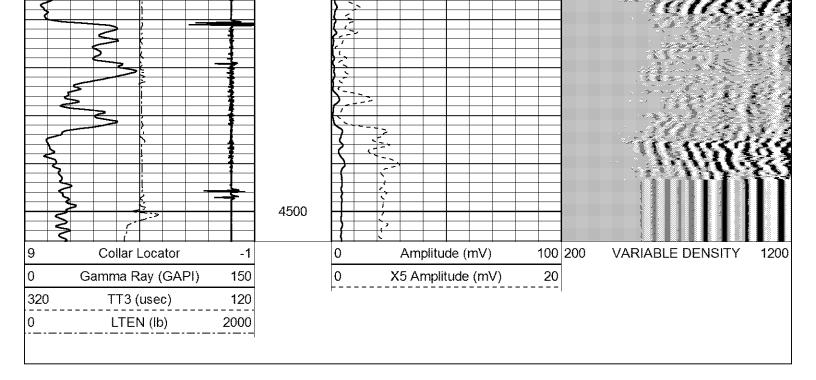
# REPEAT SECTION

Database File: states1.db
Dataset Pathname: pass2
Presentation Format: cbl02

Dataset Creation: Thu Jun 28 09:45:53 2018 by Log 7.0 B1

Charted by: Depth in Feet scaled 1:240





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	10.00
WVF3	8.76 — 7.76 —	000 000 000 000 000 000 000 000 000 00	CBL-probecbl (probecbl1) probe cbl	8.75	2.75	92.00

CC	CL	3.69			CCL-Probe (275) probe ccl	1.55	2.75	30.00
G	έR	0.90			GR-probegr (progr1) probe gamma ray	3.02	2.75	20.00
			To To	ataset: otal Length: otal Weight: .D.	states1.db: field/well/run1/pass3 14.32 ft 152.00 lb 2.75 in			



Prepared For: **Bear Petroleum** 

PO Box 438 Haysville, KS 67060

ATTN: Rod Anderson

### States #1

### 10-22S-20W Pawnee,KS

Start Date: 2018.06.19 @ 22:42:28 End Date: 2018.06.20 @ 07:30:30 Job Ticket #: 63978 DST #: 1

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620



Bear Petroleum

PO Box 438

10-22S-20W Pawnee,KS

States #1

Job Ticket: 63978

DST#: 1

ATTN: Rod Anderson

Haysville, KS 67060

Test Start: 2018.06.19 @ 22:42:28

Test Type: Conventional Bottom Hole (Initial)

### **GENERAL INFORMATION:**

Formation: Mississippi

Deviated: Whipstock: No ft (KB)

Time Tool Opened: 01:34:30 Tester: Leal Cason Time Test Ended: 07:30:30 74

Unit No:

Interval: 4390.00 ft (KB) To 4403.00 ft (KB) (TVD) Reference Elevations: 2173.00 ft (KB) Total Depth: 4403.00 ft (KB) (TVD)

2167.00 ft (CF)

7.88 inches Hole Condition: Good KB to GR/CF: Hole Diameter: 6.00 ft

Serial #: 8875 Inside

Press@RunDepth: 4391.00 ft (KB) Capacity: 232.46 psig @ psig

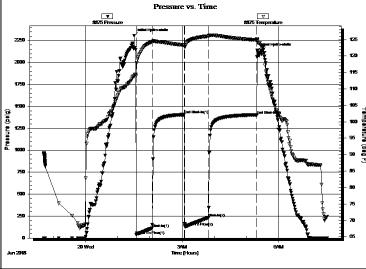
Start Date: 2018.06.19 End Date: 2018.06.20 Last Calib.: 2018.06.20 Start Time: 22:42:29 End Time: 07:30:30 Time On Btm: 2018.06.20 @ 01:30:45 2018.06.20 @ 05:20:15 Time Off Btm:

TEST COMMENT: IF: Fair Blow, BOB in 12 minutes, Built to 22 1/2"

ISI: No Blow Back

FF: Fair Blow, BOB in 17 minutes, Built to 27 1/2"

FSI: No Blow Back



	Time	Pressure	Temp	Annotation	ı
	(Min.)	(psig)	(deg F)		l
	0	2304.92	113.87	Initial Hydro-static	ı
	4	35.74	113.99	Open To Flow (1)	ı
	34	113.54	124.33	Shut-ln(1)	l
	94	1405.93	123.28	End Shut-In(1)	l
	95	132.33	122.72	Open To Flow (2)	l
	139	232.46	126.04	Shut-ln(2)	ı
666	229	1403.68	124.86	End Shut-In(2)	l
,	230	2136.84	124.71	Final Hydro-static	l
					l
					l
					ı

PRESSURE SUMMARY

### Recovery

Length (ft)	Description	Volume (bbl)
252.00	Water	3.53
63.00	MCW 10%M 90%W	0.88
15.00	SOMCW 2%O 30%M 68%W	0.21

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

Trilobite Testing, Inc. Ref. No: 63978 Printed: 2018.06.20 @ 13:36:14



Bear Petroleum

10-22S-20W Pawnee,KS

PO Box 438

Haysville, KS 67060

Job Ticket: 63978

States #1

DST#: 1

ATTN: Rod Anderson

Test Start: 2018.06.19 @ 22:42:28

### GENERAL INFORMATION:

Formation: Mississippi

Deviated: Whipstock: No ft (KB)

Test Type: Conventional Bottom Hole (Initial) Time Tool Opened: 01:34:30 Tester: Leal Cason 74

Time Test Ended: 07:30:30 Unit No:

Interval: 4390.00 ft (KB) To 4403.00 ft (KB) (TVD) Reference Elevations: 2173.00 ft (KB)

Total Depth: 4403.00 ft (KB) (TVD) 2167.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 6.00 ft

Serial #: 6749 Outside

Press@RunDepth: 4391.00 ft (KB) psig @ Capacity: psig

Start Date: 2018.06.19 End Date: 2018.06.20 Last Calib.: 2018.06.20

Start Time: 22:42:48 End Time: 07:30:49 Time On Btm:

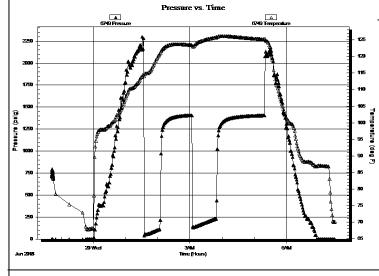
Time Off Btm:

TEST COMMENT: IF: Fair Blow, BOB in 12 minutes, Built to 22 1/2"

ISI: No Blow Back

FF: Fair Blow, BOB in 17 minutes, Built to 27 1/2"

FSI: No Blow Back



PRESSURE S	SUMMARY
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ressure Temp	Annotation
(psig) (deg F)	

### Recovery

Length (ft)	Description	Volume (bbl)
252.00	Water	3.53
63.00	MCW 10%M 90%W	0.88
15.00	SOMCW 2%O 30%M 68%W	0.21

### Gas Rates

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

Trilobite Testing, Inc. Ref. No: 63978 Printed: 2018.06.20 @ 13:36:15



**TOOL DIAGRAM** 

Bear Petroleum

10-22S-20W Pawnee,KS

PO Box 438

0.00 ft Diameter:

States #1

DST#: 1

Haysville, KS 67060

Job Ticket: 63978

ATTN: Rod Anderson

Test Start: 2018.06.19 @ 22:42:28

**Tool Information** 

Drill Collar:

Drill Pipe: Length: 4372.00 ft Diameter: Heavy Wt. Pipe: Length: 0.00 ft Diameter:

3.80 inches Volume: 61.33 bbl 0.00 inches Volume: 0.00 bbl 2.25 inches Volume: 0.00 bbl

61.33 bbl

Total Volume:

6.75 inches

Tool Weight: 2100.00 lb
Weight set on Packer: 25000.00 lb
Weight to Pull Loose: 80000.00 lb

Drill Pipe Above KB: 8.00 ft

Length:

Weight to Pull Loose: 80000.00 lb Tool Chased ft

Depth to Top Packer: 4390.00 ft

String Weight: Initial 65000.00 lb Final 69000.00 lb

Depth to Bottom Packer: ft
Interval between Packers: 13.00 ft
Tool Length: 39.00 ft

Number of Packers: 2 Diameter:

Tool Comments: Shale Packer on Bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut In Tool	5.00			4369.00		
Hydraulic tool	5.00			4374.00		
Jars	5.00			4379.00		
Safety Joint	2.00			4381.00		
Packer	5.00			4386.00	26.00	Bottom Of Top Packer
Packer	4.00			4390.00		
Stubb	1.00			4391.00		
Recorder	0.00	8875	Inside	4391.00		
Recorder	0.00	6749	Outside	4391.00		
Perforations	9.00			4400.00		
Bullnose	3.00			4403.00	13.00	Bottom Packers & Anchor

Total Tool Length: 39.00

Trilobite Testing, Inc Ref. No: 63978 Printed: 2018.06.20 @ 13:36:15



**FLUID SUMMARY** 

Bear Petroleum 10-22S-20W Pawnee,KS

PO Box 438 States #1

Haysville, KS 67060 Job Ticket: 63978 **DST#:1** 

ATTN: Rod Anderson Test Start: 2018.06.19 @ 22:42:28

**Mud and Cushion Information** 

Mud Type: Gel Chem Cushion Type: Oil API: deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: 67000 ppm

Viscosity: 53.00 sec/qt Cushion Volume: bbl

Water Loss: 8.77 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 3500.00 ppm Filter Cake: 0.02 inches

### **Recovery Information**

### Recovery Table

Length ft	Description		
252.00	Water	3.535	
63.00	MCW 10%M 90%W	0.884	
15.00	SOMCW 2%O 30%M 68%W	0.210	

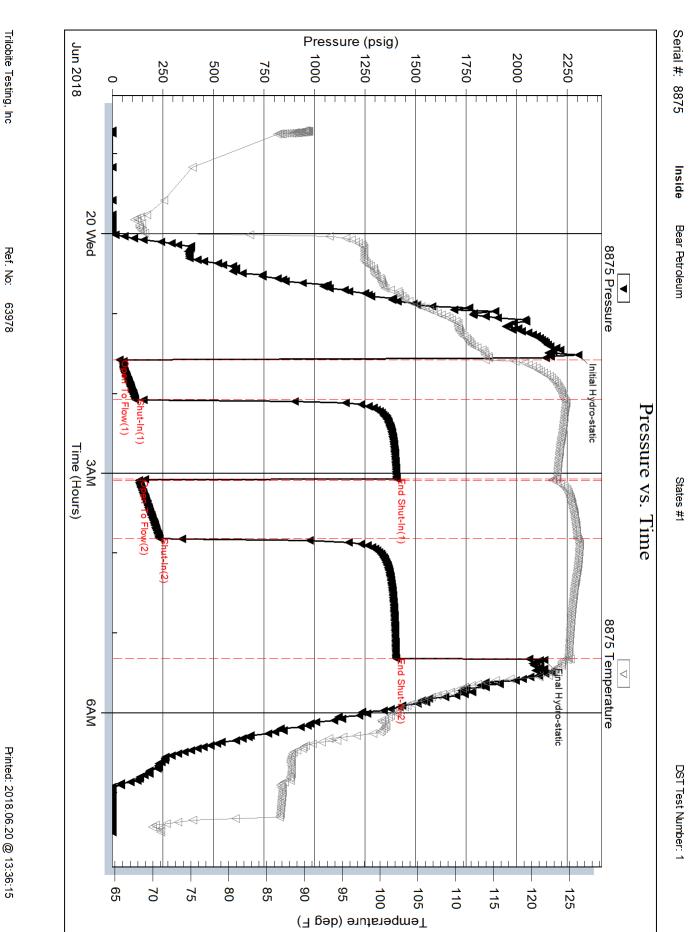
Total Length: 330.00 ft Total Volume: 4.629 bbl

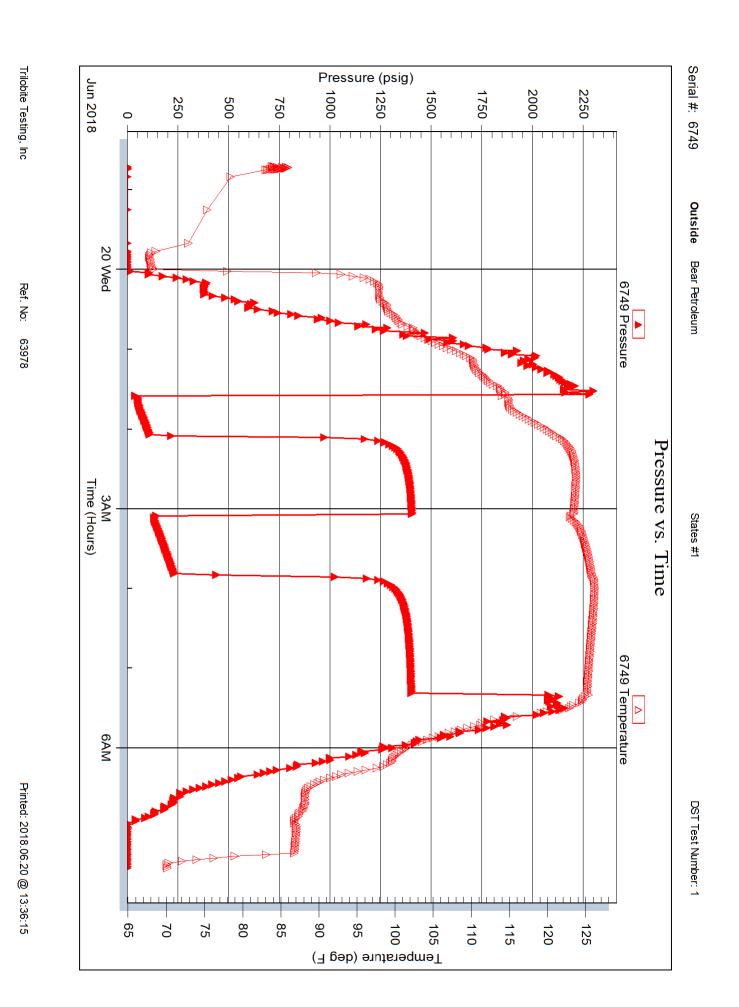
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW was .1 @ 80degrees

Trilobite Testing, Inc Ref. No: 63978 Printed: 2018.06.20 @ 13:36:15







# RILOBITE ESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

### **Test Ticket**

No. 63978

410 - 611-411.					
Well Name & No. States 1		Test No		Date	21 10/10/20 1
Company Bear Petroleum			21 73	кв_2/6	GL
Address FO BOX 438 Hay					
Co. Rep/Geo. Rod Anderson	•	Rig <i>R C</i>	ya!	/	
Location: Sec		co. Paw	rnee	State 🗡	<u>s</u>
Interval Tested 4390 - 4403	The state of the s		pi 72	6 7	
Anchor Length 13	_ Drill Pipe Run	43	12	Mud Wt. 9-3	
Top Packer Depth 4385	_ Drill Collars Run _		0	Vis53	
Bottom Packer Depth 4390	_ Wt. Pipe Run		0	WL 8.8	
Total Depth	_ Chlorides3	3500 pl	om System	LCM	
Blow Description IF: Fair Blow, BOB i	in 12 minutes	Built 7	0 221/2	inches	
The official Market	ato5 P `1	0 271	/2	- C	- <del></del>
FF. Fair Blow BOB in 17 Mi FSI: NO Blow Back	NUTES, BUILT	U ZI	LINCH	03	- N. S.
Rec15_ Feet of <u>SOMCW</u>		%gas	2 %oil	68 %water	<b>学</b> ⊘ %mud
Rec 63 Feet of MCW		%gas	%oil	90 %water	10 %mud
Rec 252 Feet of WATER		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Total 330 BHT 12.5	Gravity N/C A				
(A) Initial Hydrostatic 23 0 5	<b>□</b> Test 1150			ocation 2/00	
(B) First Initial Flow36	Jars 250			led 22:4	2
(C) First Final Flow	Safety Joint 75		T-Oper	01:34	1
(D) Initial Shut-In 1406	☐ Circ Sub		T-Pulle	710	-
(E) Second Initial Flow	☐ Hourly Standby		T-Out	67:30	
(F) Second Final Flow232	Mileage (160)	94rt	Comm	ients	
(G) Final Shut-In 1404	☐ Sampler_				
(H) Final Hydrostatic 2/3 7	Straddle				
- a water set on transferre	Shale Packer		_ 4 ~~	uined Shale Packer_	2004.00 1000 1000 1000 1000 1000 1000 100
Initial Open 30	Extra Packer			ined Packer	
Initial Shut-In 60				tra Copies	
Final Flow 45	☐ Extra Recorder			otal 0	
Final Shut-In 90	Day Standby				
	□ Accessibility Sub Total1819		MP/D	ST Disc't	•
Approved By Jodansen		Representative_		00	

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.