

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1061193

Form ACO-1 June 2009 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:		Sec	TwpS. R 🗌 East 🗌 West
Address 2:		Fe	eet from North / South Line of Section
City: State: Zip:	+	Fe	eet from East / West Line of Section
Contact Person:		Footages Calculated from I	Nearest Outside Section Corner:
Phone: ()			
CONTRACTOR: License #			
Name:			Well #:
Wellsite Geologist:			vven #
-			
Purchaser:			
Designate Type of Completion:	-		Kelly Bushing:
New Well Re-Entry	Workover	Total Depth: Plu	ug Back Total Depth:
Oil WSW SWD	SIOW	Amount of Surface Pipe Se	et and Cemented at: Feet
Gas D&A ENHR	SIGW	Multiple Stage Cementing	Collar Used? 🗌 Yes 🗌 No
☐ OG ☐ GSW	Temp. Abd.	If yes, show depth set:	Feet
CM (Coal Bed Methane)		If Alternate II completion, c	ement circulated from:
Cathodic Other (Core, Expl., etc.):		feet depth to:	w/sx cmt.
If Workover/Re-entry: Old Well Info as follows:			
Operator:		Drilling Fluid Managemer	at Blan
Well Name:		(Data must be collected from th	
Original Comp. Date: Original Tota	al Depth:	Oblarida contenti	ppm Fluid volume: bbls
Deepening Re-perf. Conv. to E	NHR Conv. to SWD		
Conv. to G	SW	Dewatering method used: _	
Plug Back: Plug I Plug	Back Total Depth	Location of fluid disposal if	hauled offsite:
Commingled Permit #:		Operator Name	
Dual Completion Permit #:			License #:
SWD Permit #:			
ENHR Permit #:			TwpS. R East West
GSW Permit #:		County:	Permit #:
	Completion Date or Recompletion Date		

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
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Side Two	1061193
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East West	County:	

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional She	eets)	Yes No	L	0	n (Top), Depth an	d Datum Top	Sample Datum
Samples Sent to Geolog	gical Survey	Yes No					
Cores Taken Electric Log Run Electric Log Submitted E (If no, Submit Copy)	Electronically	YesNoYesNoYesNo					
List All E. Logs Run:							
		CASING		ew Used			
		Report all strings set	-conductor, surface, inte	ermediate, producti	ion, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

Shots Per Foot		PERFORATION Specify For	RECOF	RD - Bridge P Each Interval F	lugs Set/Typ Perforated	e			ement Squeeze Record of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packe	r At:	Liner R	un:	No	
Date of First, Resumed	Product	ion, SWD or ENHF	ł.	Producing M	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	s.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIO	ON OF (BAS:			METHOD	OF COMPLE	TION:		PRODUCTION INT	ERVAL:
Vented Sold		Jsed on Lease		Open Hole	Perf.	Uually (Submit /	Comp. ACO-5)	Commingled (Submit ACO-4)		
(If vented, Sul	bmit ACC)-18.)		Other (Specify)						<u></u>

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

August 10, 2011

DEAN PATTISSON Woolsey Operating Company, LLC 125 N MARKET STE 1000 WICHITA, KS 67202-1729

Re: ACO1 API 15-007-23680-00-00 LUTHI GU 4 SE/4 Sec.36-33S-11W Barber County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, DEAN PATTISSON

ALLIED CEMENTING CO., LLC. 040699

Federal Tax I.	D.# 20-5975804		
REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665		SERVICE POINT	ichody = 10.
			<i></i>
$DATE \frac{7}{3} - 3 \stackrel{\text{I}}{3} \frac{\text{SEC.}}{3} \frac{\text{TWP.}}{33s} \frac{\text{RANGE}}{(l_{1} \cup l_{2})} C$	ALLED OUT ON	I LOCATION JOB START	JOB FINISHON
i l - d	ain Black	COUNTY Barger	STATE
	- 1 1 1	A IL HOMER	KUI
OLD OR NEW (Circle one) East to (dar Hills Re	1 Minto	
CONTRACTOR $\frac{1}{2}$	OWNER 120	olsey Oberation	9
TYPE OF JOB Surface	~~~		/
HOLE SIZE / 4 3 (4 T.D.	CEMENT		
CASING SIZE Store DEPTH 199'	AMOUNT ORDER		
TUBING SIZE 103/4 DEPTH	240 SXC	Class At3 icc :	-21.ge
DRILL PIPE DEPTH	- · ·	· · · · ·	
TOOL 818 1 DEPTH 12		A	70.00.00
PRES. MAX MINIMUM	COMMON <u>Class</u>	A 2405× @ 16,25	3900.00
MEAS. LINE SHOE JOINT	POZMIX	@	
CEMENT LEFT IN CSG.	GEL	55× @21.25	
PERFS.	CHLORIDE	9 SX @ 58.20	523.80
DISPLACEMENT 1912 Bbls water	ASC	@	
EQUIPMENT		@	
EQUITIMENT	TATELL FI	@	
	Demulatory Correspo	ondence @	
PUMPTRUCK CEMENTER Can Balcoing		orkovers @@	
#352 HELPER Kon Gilley	Tests / Meters	@	
BULK TRUCK	A THE PARTY OF THE	@	
# 356 DRIVER BOLDy Great-Ben	cl	@	
BULK TRUCK	- 	@	
# DRIVER	HANDLING 259	@ 2. 2	571.50
	MILEAGE 15/1		419.10
REMARKS:			L 5520.61
Run 199' 10 314 Casing		101/	
KON ILL JOTY Casing		OFDITOF	
Break Sirculation IN Aunus		SERVICE	
		100	
Displace W/ 1912 Bbls water	DEPTH OF JOB		
	- PUMP TRUCK CH		1120100
heave 15 cement in pipe	EXTRA FOOTAGE	e@	_ 1125
- L Shut In	MILEAGE		
Cementalia circulate	MANIFOLD	@	10 0 100
	LightVehicle	30 @ 4.00	
		@	
CHARGE TO: 100 sey perating			11/00 -
STREET		TOTA	L 1455.
51KEE1	· · · ·		
CITY STATE ZIP	TOT 1	C & ELOAT FOLIDAJ	7 10 1711
	FLU	IG & FLOAT EQUIPME	
		. <u>.</u>	
To Allied Cementing Co., LLC.	X	@	<u> </u>
You are hereby requested to rent cementing equipment	<u> </u>		
and furnish cementer and helper(s) to assist owner or		@	
contractor to do work as is listed. The above work was			
done to satisfaction and supervision of owner agent or		TOTA	L
contractor. I have read and understand the "GENERAL	and and a second se	· · · · ·	
	SALES TAX (If Ar	ıy)	
TERMS AND CONDITIONS" listed on the reverse side.		KCADE	
	TOTAL CHARGES	5	

PRINTED NAME MIKE THAN DISCOUNT ______ SIGNATURE ______

IF PAID IN 30 DAYS

ALLIED CEMENTING CO., LLC. 040177

	Federal Tax I.I	D.# 20-5975804			
REMIT TO P.O. BOX 31			SERV	ICE POINT:	
RUSSELL, KANSAS 67665				4	The Lodse Ks
_		4-20	4-20	4-21	4-21
DATE 4 -21-2011 SEC. 36 TWP. F	RANGE , C	ALLED OUT	ON LOCATION	JOB START	JOB FINISH
DATE 41-21-2011 36 333	IIw J	S:00 Am	9:30pm	1:30 pm	2:30Am
LEASE Lush; Well # 4	OCATION 2812	Gerlein B	1k TP	BSIDEr	STATE
	Essa to Cease				
CONTRACTOR H2 773			loolsey a	marrie	
TYPE OF JOB Production		OWNER (A	JUCIDEY (<u>percon</u>	19
	5125	CEMENT			
	H 50071		RDERED 75.	s. 60%	10129-601
TUBING SIZE DEPT			C1555 177 100		
DRILL PIPE DEPT			ci + + 8% FL		
TOOL DEPT		UN RUISO	() 00/0/0	100714	Friesty
PRES. MAX MINI		COMMON_	Lasc A 45	r@ 16.25	731.25
	JOINT 43'	POZMIX	20-311 P3	(@ <u>8</u> ,50	255.00
CEMENT LEFT IN CSG.	JUINI		201	@21.25	(3.75
		GEL			67.
PERFS. DISPLACEMENT / 19 bb/s OF 2	2% recluich	CHLORIDE _		_@	
	- 10 11 CL WIRL	ASC	120-	$\frac{1}{r_{e}^{a}} \frac{1}{19, 2}$	2502.50
EQUIPMENT		CLASS H		<u>(@ 77, 2.</u> (@ 34.2.°	444.60
		Gypseal			
PUMPTRUCK CEMENTER Dorn	F.	Salt	75K	@ <u>23.95</u> , 89	335.50
#471-265 HELPER Jesun	T	Kolser	650# 9B#	. @	1685.60
BULK TRUCK		FL-160	<u>70</u> #		1602
#356-290 DRIVER REPAR	AT APTT A	Flosen	32#	_@_&	86.40
BULK TRUCK WE				_@	
# DRIVER Regulato	ry Correspondence Workovers		7~7		F(70
Drla	mp) operations	HANDLING	-4 .	@ <u></u>	5611
Testal	Leters open	MILEAGE 19	<u>7/.11/252</u>		415.80
REMARKS:				TOTAL	7665.70
Pipe on buddom & breck	Circuletian				
my 255, Ofcement for Re			SERVI	CE -	,
Of Secuenser Cement, Mrv				~	·
foil comeny Shut dawn, Rec		DEPTH OF IC	ов <u>5007'</u>	р .	
Relesse plug, Stert displa			K CHARGE		2695.00
Pressure C+ 80 bbis, Slow 1		EXTRA FOO		 @	
\$2110 bbis, bump plug er		MILEAGE		@ 7,00	21000
12000-1700 PS1, Flog 2 du	\$ A	MANIFOLD		@	
			ps drentel	 @	200:0
		light Uch	1de 30	@ 4,00	120.00
CHARGE TO: WOOlsey Operca	no	aqui par	· •/ ©	_ ~	
CHARGE IO: WCCOrsey O First	1/19			TOTAL	<u>3225. "</u>
STREET				IOIAL	2405
CITYSTATE	ZIP		PLUG & FLOAT	FOUIPMEN	J.L.
		51/2			
			7		2111 00
		2 1	Togt Shoe	_@	514.00
			Lown Plug		144.00
To Allied Cementing Co., LLC.		- 1	olizers	@ 66.00	424.00
You are hereby requested to rent ceme	nting equipment	<u>32-5000</u>	teners	_@ <u>7/.:°°</u>	LLId"
and furnish cementer and helper(s) to a	assist owner or			_@	
contractor to do work as is listed. The					
done to satisfaction and supervision of				TOTAL	3759
contractor. I have read and understand	•				
TERMS AND CONDITIONS" listed o		SALES TAX ((If Any)		
		TOTAL CHAI	DCES AR	USCODIO	
		IUTALLHA			

DISCOUNT _

IF PAID IN 30 DAYS

570.

PRINTED NAME	X MINE THARP
SIGNATURE _	MATO

REAL	DRILL STEM TES	TREP	ORT				
ENTERPRISES LLC	Woolsey Operating Company L.L	C.	Luti	hi GU #	4		
	125 North Market Suite 1000		36-3	33s-11w	Barbe	r	
	Wichita,Kansas 67202		Job ⁻	Ticket: 16	6048	DST	Γ#:1
	ATTN: Scott Alberg		Test	Start: 20	011.04.18	@ 10:05:0	00
GENERAL INFORMATION:	•						
Formation:MississippiDeviated:NoWhipstock:Time Tool Opened:00:00:0UTime Test Ended:00:00:0U	ft (KB)		Test Teste Unit I	er: (Conventic Gene Buc 3335		n Hole (Initial)
Total Depth: 4650.00 ft (KB) (T	6 50.00 ft (KB) (TVD) VD) e Condition: Poor		Refe	erence Ele KB t	evations: to GR/CF:	1448	7.00 ft (KB) 6.00 ft (CF) 9.00 ft
2nd Opening 60	End Date: End Time:			o.: Btm: 2 Btm: 2 3 minutes	2011.04.1	2011.04 8 @ 12:26 8 @ 16:57	::30 ::30
Pressure vs. 7	lime		PR	FSSUR	RE SUM	MARY	
143 Pasar 270 400 400 400 400 400 400 400 4	443 Temporale 443 Temporale 444 Temporale 444 Temporale 445 Te	Time (Min.) 0 1 36 91 92 152 270 271	Pressure (psia) 2290.10 94.27 99.46 458.49 101.76 111.93 554.20 2182.59	Temp (deg F) 116.42 116.42 116.89 119.18	Annota Initial Hy Open To Shut-In(End Shu Open To Shut-In(End Shu	ation dro-static b Flow (1) 1) tt-ln(1) b Flow (2) 2)	
Recovery				Ga	s Rates		
Length (ft)Description80.00Drilling mud0.00there w as a fair show of0.00betw een the shut-in & H0.00there w as no gas detect	lydrolic tools 0.00			Choke (i	nches) Pre	issure (psia)	Gas Rate (Mct/d)

Superior Testers Enterprises LLC Ref. No: 16048

		DRI	LL STEM TEST R	EPORT	-		FLUID S	UMMAR
	SES LLC	Woolse	ey Operating Company L.L.C.		Luthi GU	#4		
	<u>ده</u>	125 No	rth Market Suite 1000		36-33s-11v	w Barber		
CST CST			a,Kansas 67202				DOT# 4	
					Job Ticket: 1	16048	DST#:1	
	-	ATTN:	Scott Alberg		Test Start: 2	2011.04.18 @ 1	10:05:00	
lud and Cushie	on Information							
lud Type: Gel Ch	em		Cushion Type:			Oil A PI:		deg API
lud Weight:	9.00 lb/gal		Cushion Length:		ft	Water Salinity	:	ppm
iscosity:	47.00 sec/qt		Cushion Volume:		bbl			
/ater Loss:	9.19 in ³		Gas Cushion Type:					
Resistivity:	ohm.m		Gas Cushion Pressure:		psia			
	500.00 ppm							
ilter Cake:	1.00 inches							
ecovery Inform	nation							
			Recovery Table			_		
	Leng		Description		Volume			
	ft				bbl	4		
		80.00	Drilling mud		0.393	-		
		0.00	there was a fair show of dead		0.00	-		
		0.00	betw een the shut-in & Hydrolic	tools	0.00	-		
		0.00	there was no gas detected		0.00	<u>)</u>		
	Total Length:	80	.00 ft Total Volume:	0.393 bbl				
	Num Fluid Sam	ples: 0	Num Gas Bombs:	0	Serial #	:		
	Num Fluid Sam Laboratory Na		Num Gas Bombs: Laboratory Location:		Serial #	:		
		me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #	:		
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			
	Laboratory Na	me:			Serial #			

	RERIO		DRI	LL STE	MTEST	REPOR	T	TOOL DIAGRA
		;	Woolse	ey Operating (Company L.L.C		Luthi GU #4	
	CTE S			rth Market Su			36-33s-11w Barber	
			Wichita	Kansas 6720,	02		Job Ticket: 16048	DST#: 1
			ATTN:	Scott Alberg	I		Test Start: 2011.04.18 @	2 10:05:00
Tool Information	on		Į					
Drill Pipe:	Length:	4214.00 ft	Diameter:	3.80 in	ches Volume:	59.11 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.86 in	ches Volume:	0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length:	297.00 ft	Diameter:	2.25 in	ches Volume:	1.46 bbl	Weight to Pull Loose:	85000.00 lb
Drill Pipe Above I	VD.	6.00 ft			Total Volume:	60.57 bbl	Tool Chased	0.00 ft
Depth to Top Pac		4534.00 ft					String Weight: Initial	60000.00 lb
Depth to Bottom		4334.00 ft					Final	61000.00 lb
Interval betw een		115.95 ft						
Tool Length:	ri denero.	144.95 ft						
Number of Packe	ers:	2	Diameter:	6.75 in	ches			
Tool Comments:				0110				
Tool Comments: Tool Description	on	Le	ngth (ft)	Serial No.	Position	Depth (ft) A	ccum. Lengths	
		Le				Depth (ft) A 4506.00	ccum. Lengths	
Tool Descriptie		Le	ngth (ft)				ccum. Lengths	
Tool Descriptio		Le	ngth (ft) 1.00			4506.00	ccum. Lengths	
Tool Descriptio Change Over Su Shut-In Tool		Le	ngth (ft) 1.00 5.00			4506.00 4511.00	ccum. Lengths	
Tool Descriptio Change Over Su Shut-In Tool Hydroic Tool		Le	ngth (ft) 1.00 5.00 5.00			4506.00 4511.00 4516.00	ccum. Lengths	
Tool Descriptio Change Over Su Shut-In Tool Hydroic Tool Jars		Le	ngth (ft) 1.00 5.00 5.00 6.00			4506.00 4511.00 4516.00 4522.00	Accum. Lengths	Bottom Of Top Packer
Tool Descriptio Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer		Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00			4506.00 4511.00 4516.00 4522.00 4524.00		Bottom Of Top Packer
Tool Description Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer Packer		Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00 5.00			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00		Bottom Of Top Packe
Tool Description Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer Packer Perforations	b	Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00 5.00 5.00			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00 4534.00		Bottom Of Top Packe
Tool Descriptio Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint	b	Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00 5.00 5.00 5.00			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00 4534.00 4539.00		Bottom Of Top Packe
Tool Description Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer Packer Perforations Change Over Su Drill Pipe	b	Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00 5.00 5.00 5.00 0.75			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00 4534.00 4539.00 4539.75		Bottom Of Top Packe
Tool Description Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer Packer Perforations Change Over Su Drill Pipe	b	Le	ngth (ft) 1.00 5.00 5.00 6.00 2.00 5.00 5.00 5.00 0.75 95.45			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00 4534.00 4539.00 4539.75 4635.20		Bottom Of Top Packe
Tool Description Change Over Su Shut-In Tool Hydroic Tool Jars Safety Joint Packer Packer Packer Packer Perforations Change Over Su Drill Pipe Change Over Su	b	Le	ngth (ft) 1.00 5.00 5.00 2.00 5.00 5.00 5.00 0.75 95.45 0.75			4506.00 4511.00 4516.00 4522.00 4524.00 4529.00 4534.00 4539.00 4539.75 4635.20 4635.95		Bottom Of Top Packe

4649.95

115.95

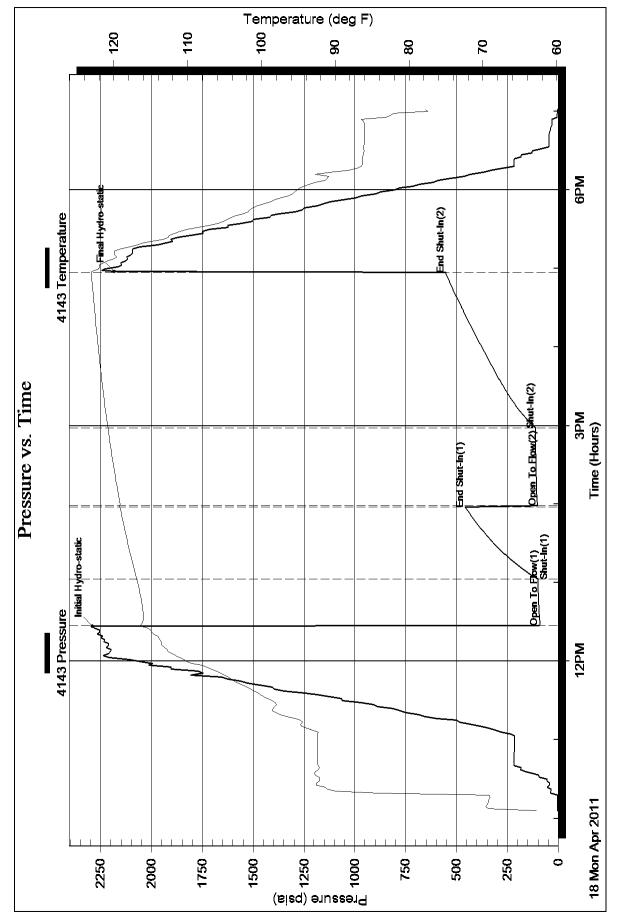
Total Tool Length: 144.95

3.00

Bullnose

Bottom Packers & Anchor





Printed: 2011.04.18 @ 19:20:38

Ref. No: 16048

Superior Testers Enterprises LLC

Woolsey Operating Company, LLC				
Scale 1:240 (5"=100') Imperial Measured Depth Log				
Well Name:	Luthi GU #4			
Location:	NE NE SE			
License Number:	API: 15-007-23680-00-00 Region: Barber County, Kansas			
Spud Date:	April 12, 2011 Drilling Completed: April 20, 2011			
Surface Coordinates:	2310' FSL, 330' FEL Section 36-Twp 33 South - Rge 11 West Kochia Pool			
Bottom Hole	Vertical Hole			
Coordinates:				
Ground Elevation (ft):	1448 K.B. Elevation (ft): 1457			
Logged Interval (ft):	4000 To: 5125 Total Depth (ft): 5125			
Formation:	McLish Shale			
Type of Drilling Fluid:	Chemical Mud, Displace at 3400' Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com			

OPERATOR

Company: Woolsey Operating Company,LLC Address: 125 N. Market, Suite 1000 Wichita, KS 67202

GEOLOGIST

Name: W. Scott Alberg Company: Alberg Petroleum, LLC Address: 609 Meadowlark Lane Pratt, Kansas 67124

FORMATION TOPS

	SAMPLE TOPS	LOG TOPS
HUSHPUCKNEY SHALE	4374(-2917)	4370(-2813)
B/KC	4429(-2972)	4425(-2967)
PAWNEE	4515(-3058)	4511(-3054)
CHEROKEE GROUP	4561(-3104)	4560(-3103)
CHEROKEE SAND	4586(-3128)	4585(-3128)
MISSISSIPPIAN	4592(-3135)	4590(-3133)
KINDERHOOK SHALE	4818(-3361)	4816(-3359)
WOODFORD SHALE	4900(-3443)	4895(-3438)
VIOLA	4938(-3481)	4936(-3479)
SIMPSON GROUP	5029(-3572)	5024(-3567)
SIMPSON SAND	5040(-3583)	5038(-3581)
MCLISH SHALE	5090(-3633)	5090(-3633)
RTD	5125(-3668)	
LTD		5122(-3665)

Pipe Strap at 4512' indicated board depth was 26' long to pipe strap. Tops above 4512' are corrected estimations of true horizon depths.

COMMENTS

Surface Casing: Set 5 joints 10 3/4" at 211' with 240 sxs Class A, 2% gel, 3% cc, plug down at 11:30 p.m. on April 12, 2011. Cement did Circulate.

Production Casing:

Deviation Surveys: 1/4- 215',1/4-1214', 1/4-1721', 3/4-2227, 3/4-2736', 1-3213', 1/4-3720', 1/2-3816', 1/2-3975. 1-4133',1-4512', 1 1/2-5125'.

Contractor Bit Record:

1- 14 3/4" out at 215'. 2- 7 7/8" out at 4512' 3- 7 7/8" out at 5125'.

Gas Detector: Woolsey Operating Company, Trailer #2 Mud System: Mud Co, Brad Bortz, Engineer DSTs: Superior Testers Logged by Superior Well Services LTD - 5122'

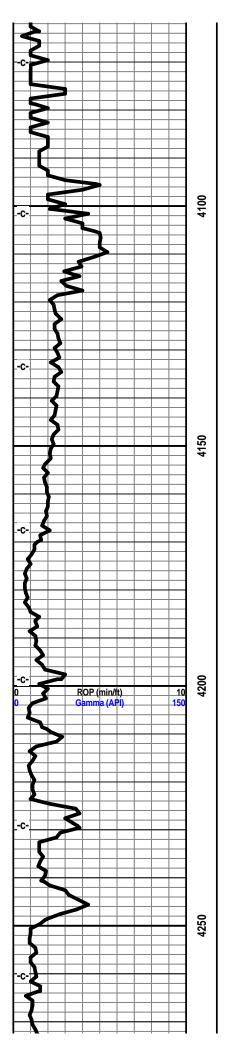
DSTs

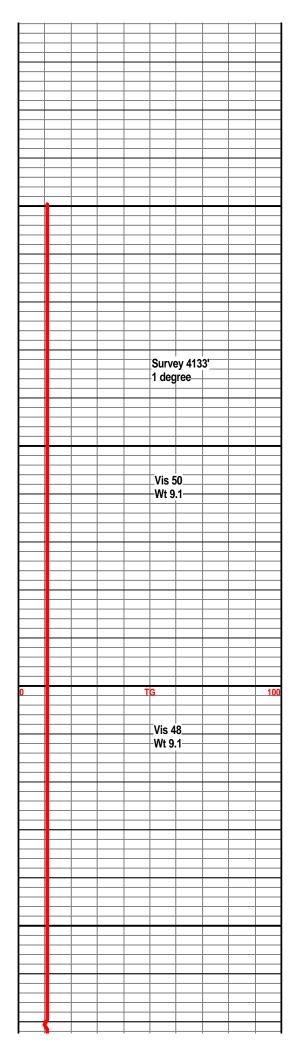
DST #1 4534 to 4650' Times 30-60-60-120 IF-Strong blow BOB in 13 minutes, no blow back FF-Strong blow BOB 2 minutes, no blow back. IHP 2290 FHP 2164 IFP 94-99 FFP 101-111 ISIP 458 FSIP 554 Recovery, 80' Drilling Mud, slight show of oil in tools.

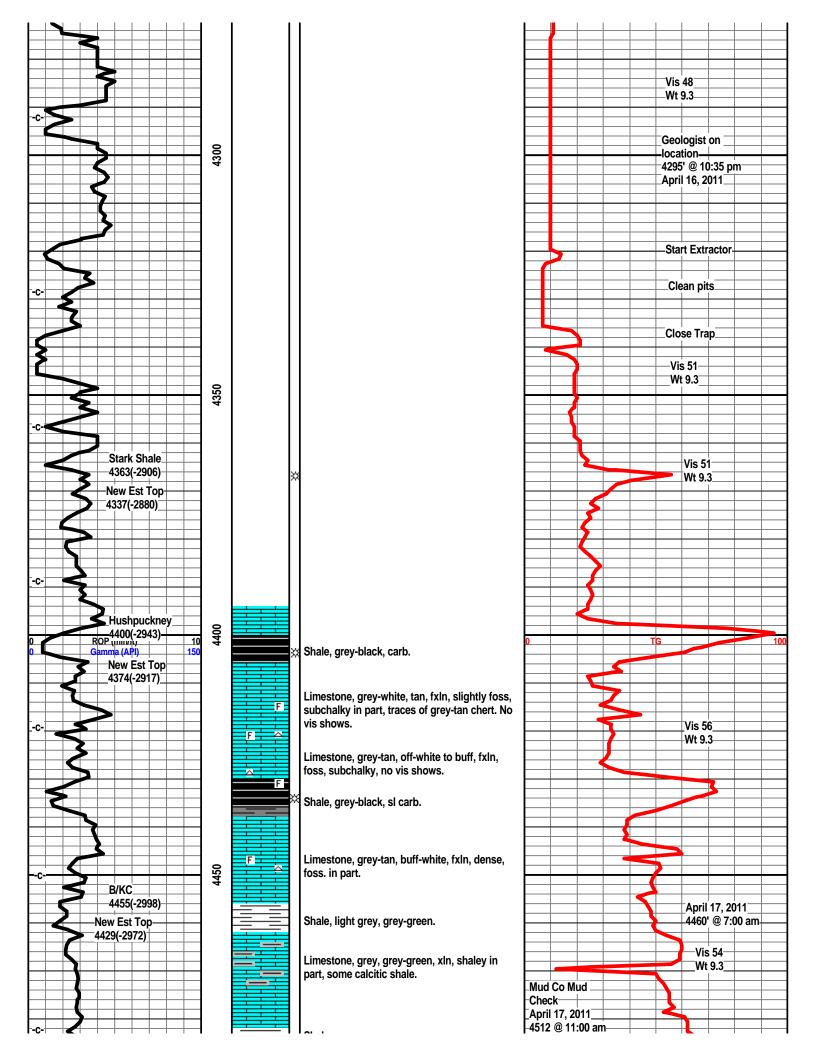
H2 Drilling Rig #3 Tool Pusher - Randy Smith Drillers - Gary Axtell Luis Marquez Cain Charles

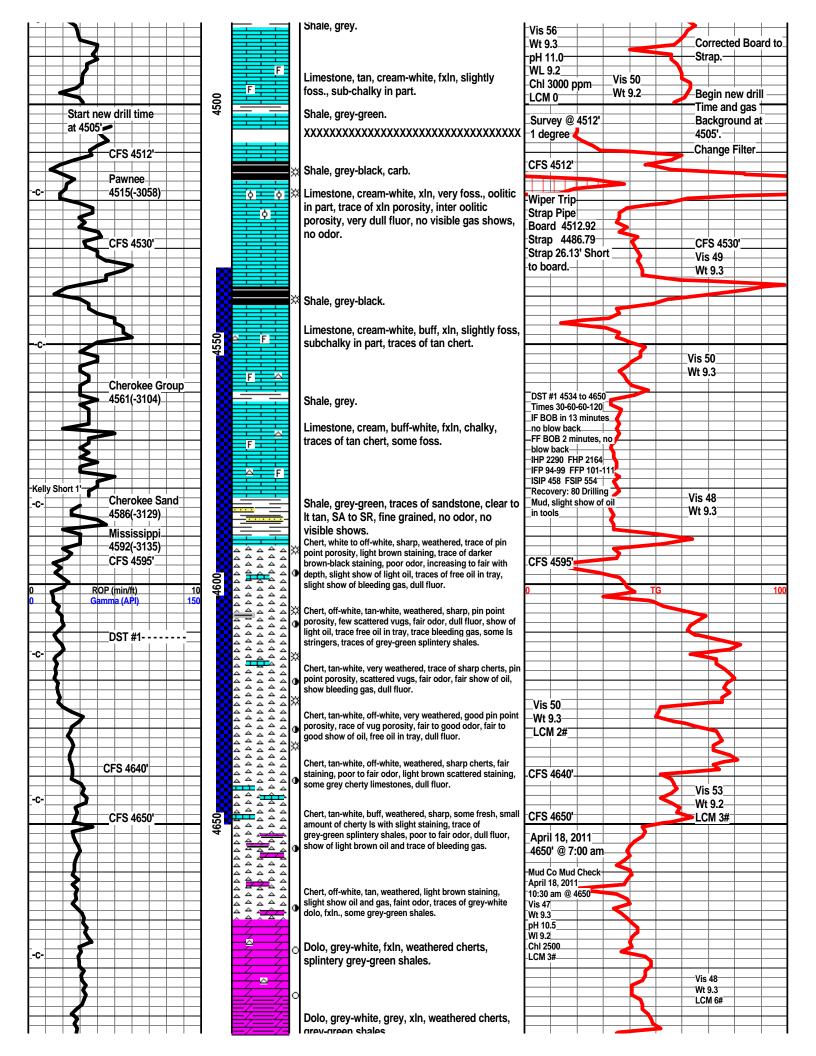
CREWS

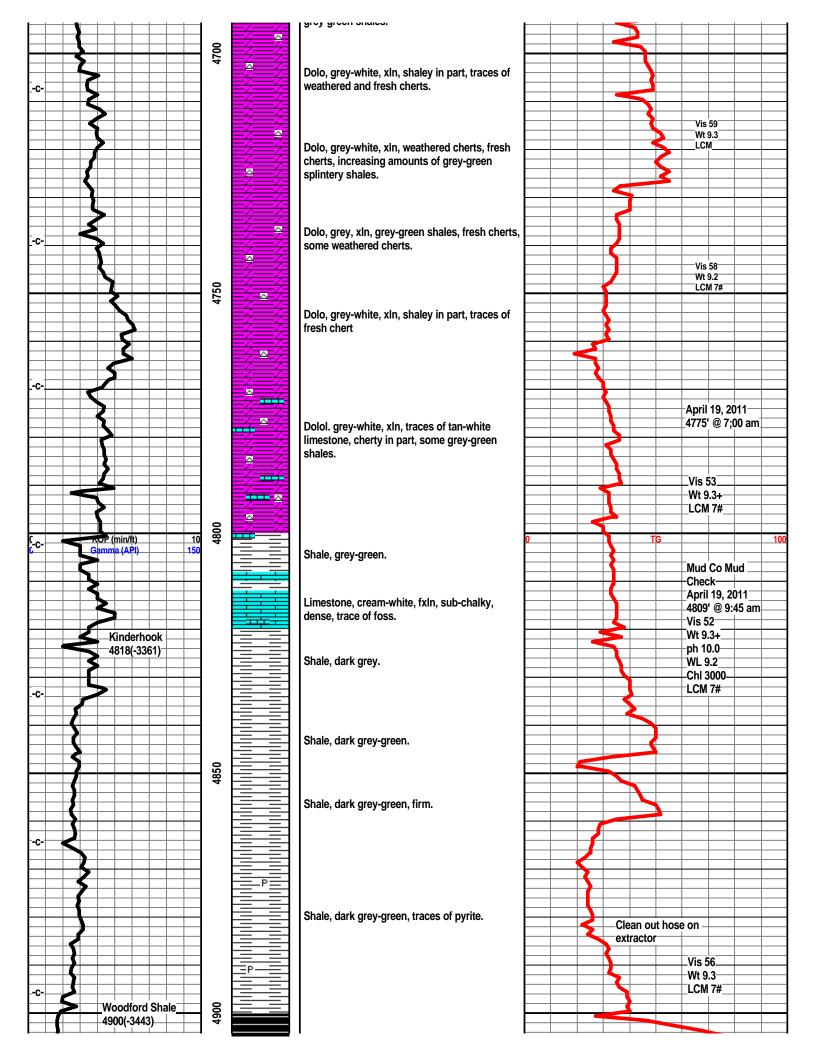
Anhy mathematic a a co co a Anhy Bent Brec Cht Clyst Coal	•••••• Congl •••••• Sdy dolo •••••• Shy dolo •••••• Dol •••••• Gyp •••••• Sdy Imst	ROCK TYPES	Black sh Gry sh Shale Shysitst Sitysh
MINERAL ∅ Anhy □ Arg □ Bent □ Bit ඔ Brecfrag □ Calc □ Calc □ Carb □ Carb □ Chtdk ☑ Dol □ Ferrpel □ Ferr ☑ Glau ☑ Gyp □ Marl □ Nodule ● Phos 戶 Pyr □ Salt □ Sandy ☑ Silt	 Chlorite Dol Sand Slty FOSSIL Algae Algae Amph Belm Bioclst Brach Bryozoa Cephal Coral Crin Echin Fish Foram Fossil Gastro Oolite Ostra 	ACCESSORIES	 Grysh Gryslt Lms Sandylms Sandylms Sh Sltstn TEXTURE Boundst Chalky Chalky Cryxln Earthy Cryxln Earthy Finexln Grainst Lithogr Microxln Microxln Mudst Packst Wackest
Curve Track 1 ROP (min/ft) Gamma (API)	Lithology G	eological Descriptions	TG, C1-C5 TG (units) C1 (units) C2 (units) C3 (units) C4 (units) C5 (units)
0 ROP (min/ft) 10 	Daily Drillin April 12, 20 April 13, 20 April 14, 20 April 14, 20 April 15, 20 April 16, 20 April 16, 20 April 17, 20 April 18, 20 April 19, 20	ng Progress 111 MIRT 111 215' WOC 111 1911' @ 7:00 am 111 3000' @ 7:00 am 111 3830' @ 7:00 am 111 4460' @ 7:00 am 111 4650' @ 7:00 am 111 5125' @ 7:00 am	0 Image: Constraint of the second

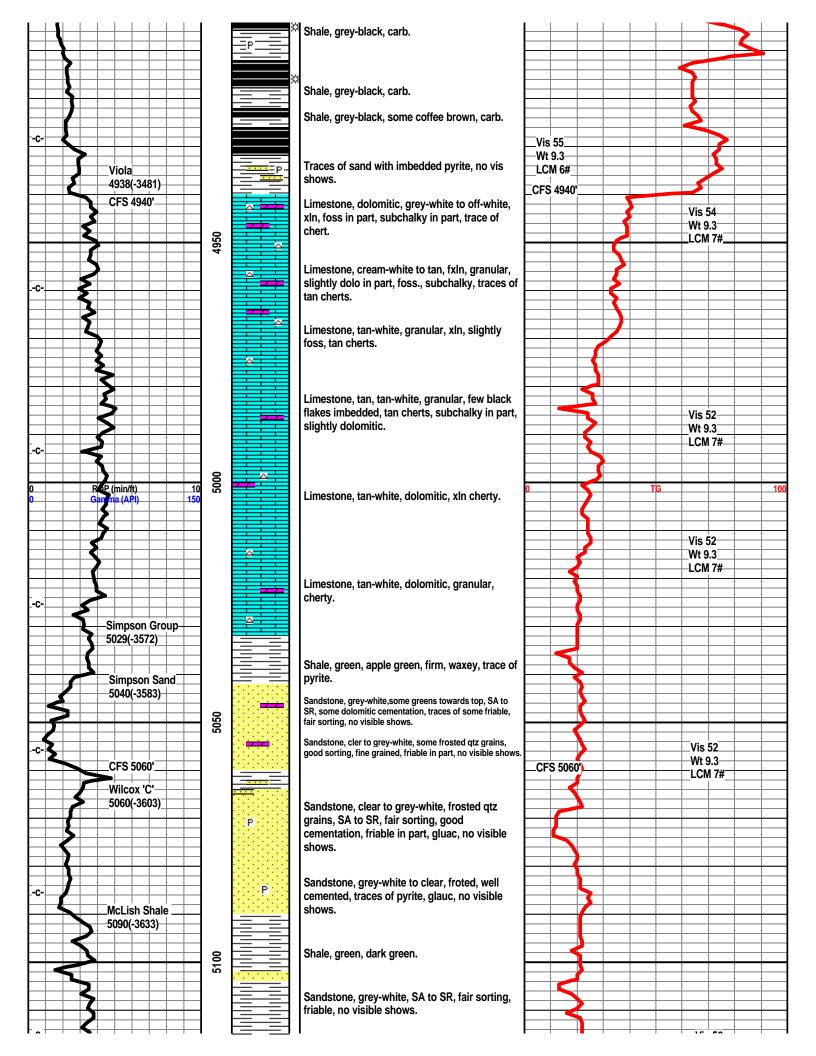












		8								+
										\mp
										+
					-					+
										+
					1					+
										+
										+
++++										+
										+
										\bot
										\pm
					-					+
										+
										T
										\pm
		2							-	+
		5150						LCM	8#	T
								Chl 5	000	+
+ $+$ $+$				<u> </u>	2 degre	e		-WL 9	.2——	+
				Surv	vey @	5125'_		_рН 9.	0	T
					+			-Wt 9.		+
						5125'	@ 7:00 am_	Vis 4	9	+
						April 2	20, 2011		@ 8:35 a	im
	LTD 5122'							—April	20, 2011-	+
	RTD 5125					TD 51	22'	_Chec	k	T
•	RTD 5125'							Mud	Cp Mud _	+
					F	TD 51	25'			+
			Shale, dark green, firm, traces of pyrite.		<u> </u>					
					1					+