KOLAR Document ID: 1669123

Confident	iality 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:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□ NE □ NW □ SE □ SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD □ Gas □ DH □ EOR	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #: 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 TwpS. 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: 1669123

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

Page Two

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken		<u> </u>	/es 🗌 No	1		L	og Forn	nation (Top), De	pth and	d Datum	Sample	
(Attach Additiona				(N	lame)			Тор	Datum
Samples Sent to Ge Cores Taken Electric Log Run Geologist Report / M List All E. Logs Run:	Aud Logs	vey		∕es ∟ Νο ∕es □ Νο ∕es □ Νο ∕es □ Νο	1							
			Rep	CASI ort all strings	NG RECO		Nev		duction, etc.			
Purpose of String		ze Hole Drilled	Si	ze Casing et (In O.D.)		Weight _bs. / Ft.		Setting Depth	Type o Cemei		# Sacks Used	Type and Percent Additives
Purpose:		Depth	Turo	ADDITIO e of Cement		NTING / S		EEZE RECC		and Pa	ercent Additives	
Perforate Top Bottom			тур	e of Cement	#0				туре	anu re	Acent Additives	
Protect Casing Plug Back TD Plug Off Zone												
 Did you perform a h Does the volume of Was the hydraulic fractional first Production 	the total base acturing treat	e fluid of the hy ment informat	ydraulic fi ion subm	acturing treat	emical disclo		stry?	Gas Lift	No (If	No, skip No, fill c	o questions 2 an o question 3) out Page Three o	
Estimated Production Per 24 Hours	1	Oil B	bls.	Gas	Mcf	,	Wate	r	Bbls.	Ga	as-Oil Ratio	Gravity
DISPOSIT	TION OF GAS	8:			METHO		1PLE	TION:			PRODUCTIC Top	N INTERVAL: Bottom
Vented So	old Use	ed on Lease		Open Hole	Perf.		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)			100		
Shots Per Foot	Perforation Top	Perforat Bottor		Bridge Plug Type		e Plug t At		,	Acid, Fracture, Sho (Amount ar		enting Squeeze of Material Used)	Record
TUBING RECORD:	Size:		Set At:		Packer	At:						

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	EDWARDS COMM. 1-6
Doc ID	1669123

Tops

Name	Тор	Datum		
Base Anhydrite	24560	+667		
Heebner	3954	-827		
Lansing	4002	-875		
Muncie Creek	4179	-1052		
Stark Shale	4276	-1149		
Hushpuckney	4322	-1195		
Marmaton	4427	-1300		
Johnson	4641	-1514		
Mississippian	4772	-1645		

Form	ACO1 - Well Completion				
Operator	Shakespeare Oil Co., Inc.				
Well Name	EDWARDS COMM. 1-6				
Doc ID	1669123				

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	23	268	Class A	2% gel, 3% cc

	416 Main		\bigcirc		Invoice
	P.O. Box 2		Г	Date	e Invoice #
OLLETELD SERVIC	Victoria, K			8/4/20	22 0673
	Service Line (785	5) 639-3949 5) 639-7269	-	F 416 M V Billing Email: fi	Pay from this Invoice. Remit Payment to: ain Street PO BOX 225 Victoria, KS 67671 Questions-Call Tianna at (785) 639-3949 Panksoilfield@yahoo.com CC License Number 35469
	County/State	Lease/Well#	Tern	ns	Job Type
	Scott County, KS	Edwards Comm, 1-6	Net 3		DRY PTA PTA HOUS PTA PTA
Description		Quantity		Rate	Amount
Mileage 12.91 tons at 92 miles 60/40 4% gel 1/4# floseal Discount RE Wankt	CENVED AUG 1 2 2022 502-1) 1,1 7 A	92 87.72 290	6.5 1.5 16.7 -873.7	50 1,781.58 75 4,857.50T
Accounts Due Net 10th. 1-1/2% Per Month on	all Past Due Accounts. 1	8% Annual Rate.	Subtot	al	\$7,863.38
We appreciate your	busínes a	nd look	Sales 1	Гах (8.5	5%) \$371.60
forward to servi			Balanc	e Due	\$8,234.98

D

FRANKS Oilfi Id Service ♦ 815 Main Street Victoria, KS 67671 ♦ 24 Hour Phone (785) 639-7269

* Office Phone (785) 639-3949

AUTHORIZATION

Email: franksoilfield@yahoo.com

LOCATION Hoxie

· · = = = = = = = = = = = = = = = = = =	
Email: franksoilfield@yahoo.com	FOREMAN Tom Williams
FIELD TICKET & TREATMENT REP	PORT
CEMENT	

				CEMEN	Т			
DATE	CUSTOMER #	WELL I	NAME & NUME	BER	SECTION	TOWNSHIP	RANGE	COUNTY
8-4-22	7311	Edwards	ComM.	1-6	6	16	340	Scott
CUSTOMER	nkos hoas	a Dild	LO. Inc		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRI	ESS A		UVI TIC	-	101	TomW		
	DR W	Main			102	(c:1 5		
CITY			ZIP CODE					
Salo	<u>°</u> M	Ih	62981					
JOB TYPE		HOLE SIZE		HOLE DEPTH	l	_ CASING SIZE & V		
		DRILL PIPE 4			<u></u>		OTHER	
		SLURRY VOL		-	K		CASING	
DISPLACEMENT	г <u></u>	DISPLACEMENT	PSI	MIX PSI	the large state	RATE	Theor	in asland
REMARKS: 54	NEÉ Z <u>MEÉ</u>	Eng &	SPT 4	for Sc	suthwind	Porting	, 110g	a adered
15 2470						- <u></u>		
1550								
175				··· ···-		<u></u>		
300	4054							
<u> </u>								
RH-30		20						
					Tha	tes Tand	lain	
	290 5%	totel						
ACCOUNT CODE	QUANTITY	or UNITS	DE	ESCRIPTION o	f SERVICES or PR	ODUCT	UNIT PRICE	TOTAL
12005			PUMP CHARG	E PTI	Á		7150000	7150000
moal	92		MILEAGE		·····		16.50	\$598°°
mar 2	12	91 EUNS	Tan 1	Nelra 60	Deliver	îl	\$1781 58	41781 58
CBQIO	29	Osy .	60/40	4º16 90	Let Ki	\$1050 [411,75	\$41,85750
						· · · · · · · · · · · · · · · · · · ·	-	
							seb totel	\$8737 68
						10251	6 Wichise.	\$873 70
						= ¥.####################################	abtote!	\$7,86338
							_	
	1							

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

TITLE

371.60

8234.98

SALES TAX

ESTIMATED

TOTAL

DATE

	416 Main S	Street		\bigcirc		IJ	nvoice
OILFIELD SERVIC	P.O. Box 2 Victoria, K	S 6767			Dat		Invoice # 0662
	Office (785				416 M Billing Email: 1	Remit Pay Iain Street Victoria, K Questions (785) 639	PO BOX 225 S 67671 -Call Tianna at 0-3949 eld@yahoo.com e Number
	County/State	Lease/	Well#	Ter	ms	Sa	Јор Туре
	Scott County, KS	Edwards C	comm. 1-6	Net	: 30	(Surface
Description	•		Quantity	6	Rate		Amount
Mileage 8.82 tons at 92 miles Surface Blend Discount Source A The Source A The Sour		~	8	92 111.44 180			598.00 1,217.16 4,410.00 -737.51
Accounts Due Net 10th. 1-1/2% Per Month o	n all Past Due Accounts. 1	8% Annual I	Rate.	Subto	otal		\$6,637.65
We appreciate you	r busínes a	nd lo	ok	Sales	Tax (8.	5%)	\$337.37
forward to serve				Balan	ce Due	D	\$6,975.02

FRANKS Oilfi Id Service ♦ 815 Main Street Victoria, KS 67671 ♦ 24 Hour Phone (785) 639-7269

• Office Phone (785) 639-3949

Email: franksoilfield@yahoo.com

DEATION Harre

FOREMAN Tam Willsamas

FIELD	TICKET	& TREATMENT	REPORT
		OFARENT	

				CEMEN				
DATE	CUSTOMER #	WELL	NAME & NUM	IBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-27-22	2311	Edwards	Comm.	1-6	6	1.6	34W	Scatt
CUSTOMER							<u> </u>	
56	okrspears	= Dilla	TnG		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRI	ESS /		-		101	TomW		
202	R. Wma	in			102	Jackt		
		STATE	ZIP CODE					
Salan	7	IL	62881		<u> </u>		·	
JOB TYPE		HOLE SIZE /	2 14 "	HOLE DEPTH	276	CASING SIZE & W	'EIGHT <u>\$ 1/5</u> ''	23#
CASING DEPTH	2711	DRILL PIPE			· · · · · · · · · · · · · · · · · · ·	······	OTHER	
SLURRY WEIGH	IT 14.8	SLURRY VOL	1,4	WATER gal/s	k	CEMENT LEFT in	CASING	
DISPLACEMENT	r 16 Bbl	DISPLACEMENT	PSI	MIX PSI		RATE		
REMARKS: 5	Setu on	eeting_	¥ 30	t 100	no Saut	h Wind	Circulat	e mad
Mix 1	305× 500	- Free ble	nd& a	d: splace	d 16 Bh	1 of shat	- in 12	-15 am
	<u> </u>				······			

Gement did circulate

		Thaks	Tam	4 Jack	
ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT		UNIT PRICE	TOTAL
PLODZ	l	PUMP CHARGE SUFFACE		\$1150 00	\$1150 CD
maol	MA 92	MILEAGE		\$ 450	\$598 00
MODZ	8.82 tons	Ton Mileuge Polivery Class A 3Pack 290gel		+121714	\$1217"
(Baay	180 57	Class A Black 290gel		\$2450	\$44100
		8			
	· · · · · · · · · · · · · · · · · · ·				
				sets total	\$7375'
			Ireal	Check	\$ 737 51
e			10	316 total	\$4437
	····				
			· . · ·		
	in the second				
	1				
	· · · · · · · · · · · · · · · · · · ·				
				SALES TAX	337.3
				ESTIMATED TOTAL	6975.
AUTHORIZATION		TITLE		DATE	k

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



DRILL STEM TEST REPORT

Prepared For: Shakespeare Oil Co INC

202 W Main St Salem, IL 62881

ATTN: Vern Schrag

Edwards-Comm #1-6

6-16S.-34W Scott,KS

 Start Date:
 2022.08.02 @ 07:40:00

 End Date:
 2022.08.02 @ 14:06:09

 Job Ticket #:
 69209
 DST #: 1

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

RILOBITE	DRILL STEM TES	ST REP	ORT				
	Shakespeare Oil Co INC		6-16	S34W	Scott,K	S	
ESTING , I	202 W Main St Salem, IL 62881				omm #1		
				icket: 69:		DST:	
. Mireda c.	ATTN: Vern Schrag		Test	Start. 20.	22.08.02 (<i>y</i> 07.40.00)
GENERAL INFORMATION: Formation: Marmaton							
Deviated: No Whipstoc Time Tool Opened: 10:16:10 Time Test Ended: 14:06:09	c ft (KB)		Test Teste Unit N	er: N	Convention Martine Sal 31		Hole (Initial)
Total Depth: 4460.00 ft (KB)	4460.00 ft (KB) (TVD) (TVD) Hole Condition: Good		Refer	rence ⊟e [,] KB to	vations: o GR/CF:	3117.0	00 ft (KB) 00 ft (CF) 00 ft
Serial #:8734OutsidePress@RunDepth:35.66 psStart Date:2022.08.Start Time:07:40:	End Date:	2022.08.02 14:06:10	Capacity: Last Calib. Time On B Time Off B	tm: 2	2022.08.02 2022.08.02	2022.08.0 @ 10:16:0	00
TEST COMMENT: 15-IF- Strong 30-ISI-No ret 30-FF-No blo 30-FSI-No re	irn <i>w</i> urn	Irface blow	PRI	ESSUR	E SUMN		
2290 ¥ Limit have	874 Temperature 115	Time	Pressure	Temp	Annotat		
2000		(Min.) 0	(psig) 2174.46	(deg F) 111.47	Initial Hyd	ro-static	
1720		1	34.79		Open To		
1500		16 . 47	36.04 44.02		Shut-In(1) End Shut-		
		47	35.89		Open To		
		47 74 107	35.66 36.72	111.60 112.05	Shut-In(2) End Shut-		
		108	2233.56	113.18	Final Hyd		
0 vert vert vert							
Recove	ry		↓ ↓	Gas	s Rates		
Length (ft) Description	Volume (bbl)			Choke (in	nches) Press	sure (psig)	Gas Rate (Mcf/d)
2.00 100% Mud w /Oil spe	cks 0.03				!		
Trilobite Testing, Inc	Ref. No: 69209				2022.08.0		

	DRILL STEM TES	T REP	ORT		
RILOBITE	Shakespeare Oil Co INC		6-16S34	W Scott,K	S
ESTING , M			Edwards	-Comm #1	-6
	Salem, IL 62881		Job Ticket:	69209	DST#: 1
	ATTN: Vern Schrag		Test Start:	2022.08.02 @	07:40:00
GENERAL INFORMATION:	•				
Formation:MarmatonDeviated:NoWhipstock:Time Tool Opened:10:16:10Time Test Ended:14:06:09	ft (KB)		Test Type: Tester: Unit No:	Convention Martine Sali 81	al Bottom Hole (Initial) nas
Interval:4419.00 ft (KB) ToTotal Depth:4460.00 ft (KB) (Hole Diameter:7.88 inches He			Reference I	⊟evations: B to GR/CF:	3127.00 ft (KB) 3117.00 ft (CF) 10.00 ft
Serial #: 8959InsidePress@RunDepth:psigStart Date:2022.08.02Start Time:07:40:01	End Date:	2022.08.02 14:06:10	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 psig 2022.08.02
TEST COMMENT: 15-IF- Strong s 30-ISI-No retur 30-FF-No blow 30-FSI-No retu	n Time	face blow	PRESSU	JRE SUMM	IARY
8509 Pressure	5553 Temperature 115	Time	Pressure Temp	Annotati	
2 Luc Ag 2022		(Min.)	(psig) (deg F	-)	
Recovery			G	as Rates	
Length (ft) Description	Volume (bbl)		Chok	e (inches) Press	ure (psig) Gas Rate (Mcf/d)
2.00 100% Mud w /Oil speck	s 0.03				
Trilobite Testing Inc	Ref. No: 69209			d: 2022.08.08	

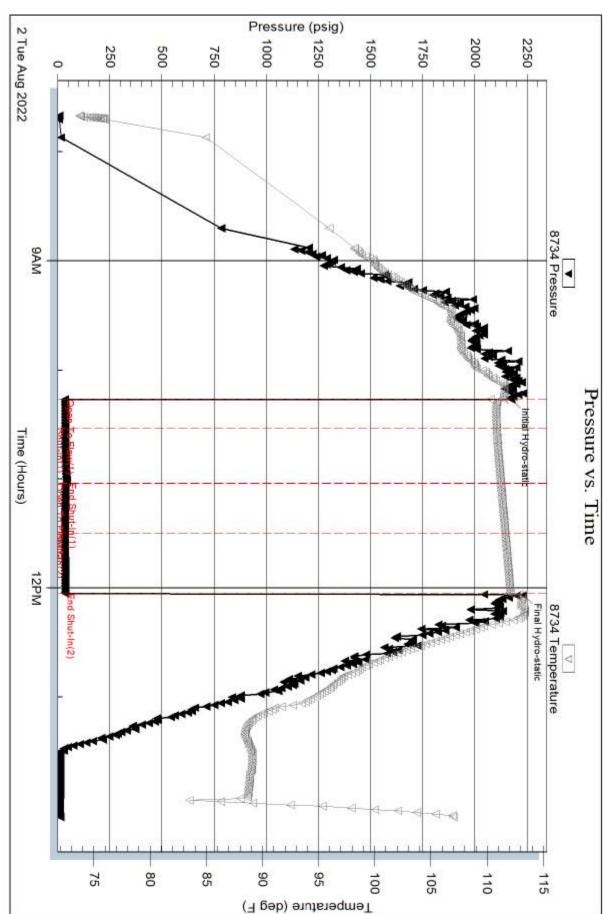
	DRII	L STE	M TEST	REPOR	Т	TOOL DIAGRA
RILOBITE	Shakesp	peare Oil Co I	NC		6-16S34W Scott,	KS
TESTING, IN	202 W N	<i>l</i> lain St			Edwards-Comm # [*]	1-6
	Salem, I	L 62881			Job Ticket: 69209	DST#: 1
NOX .	ATTN:	Vern Schrag]		Test Start: 2022.08.02	@ 07:40:00
Tool Information	•					
Drill Pipe: Length: 4418.00 ft	Diameter:	3.80 ind	ches Volume:	61.97 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe: Length: 0.00 ft	Diameter:	2.75 ind	ches Volume:	0.00 bbl	Weight set on Packe	er: 25000.00 lb
Drill Collar: Length: 0.00 ft	Diameter:	2.25 inc	ches Volume:	0.00 bbl	Weight to Pull Loose	: 65000.00 lb
Drill Pipe Above KB: 32.00 ft		-	Total Volume:	61.97 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB: 32.00 ft Depth to Top Packer: 4419.00 ft					String Weight: Initial	
Depth to Bottom Packer: 44 19.00 ft					Final	60000.00 lb
Interval betw een Packers: 41.00 ft						
Tool Length: 74.00 ft						
Number of Packers: 2	Diameter:	6.75 ind	ches			
Tool Comments: Tool Description	ength (ft)	Serial No.	Position	Depth (ft) Ac	ccum. Lengths	
Tool Comments: Tool Description Lo Change Over Sub	1.00	Serial No.	Position	4387.00	ccum. Lengths	
Tool Comments: Tool Description Change Over Sub Shut In Tool	1.00 5.00		Position	4387.00 4392.00	ccum. Lengths	
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool	1.00 5.00 5.00	1113	Position	4387.00 4392.00 4397.00	ccum. Lengths	
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool Jars	1.00 5.00 5.00 5.00		Position	4387.00 4392.00 4397.00 4402.00	ccum. Lengths	
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool	1.00 5.00 5.00 5.00 5.00 5.00	1113 01-07	Position	4387.00 4392.00 4397.00 4402.00 4407.00	ccum. Lengths	
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint	1.00 5.00 5.00 5.00 5.00 5.00 3.00	1113	Position	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00		Rottom Of Ton Packa
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer	1.00 5.00 5.00 5.00 5.00 3.00 5.00	1113 01-07	Position	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00	ccum. Lengths 33.00	Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer	1.00 5.00 5.00 5.00 5.00 3.00 5.00 4.00	1113 01-07	Position	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00		Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Stubb	1.00 5.00 5.00 5.00 5.00 3.00 5.00	1113 01-07 -001	Position	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00 4420.00		Bottom Of Top Packe
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool Jars	1.00 5.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00	1113 01-07		4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00		Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Stubb Recorder Recorder	1.00 5.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00 4420.00		Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Stubb Recorder Recorder Perforations	1.00 5.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 0.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4415.00 4419.00 4420.00 4420.00		Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Packer Recorder Recorder Recorder Perforations Change Over Sub	1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 0.00 2.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00 4420.00 4420.00 4420.00 4422.00		Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Packer Stubb Recorder	1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 2.00 1.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4419.00 4420.00 4420.00 4420.00 4422.00 4423.00		Bottom Of Top Packe
Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Packer Stubb Recorder Recorder Perforations Change Over Sub Drill Pipe	1.00 5.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 0.00 2.00 1.00 31.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4415.00 4415.00 4419.00 4420.00 4420.00 4420.00 4420.00 4422.00 4423.00 4454.00	33.00	Bottom Of Top Packe
Tool Comments: Tool Description Lo Change Over Sub Shut In Tool Hydraulic tool Jars EM Tool Safety Joint Packer Packer Packer Packer Packer Perforations Change Over Sub Drill Pipe Change Over Sub	1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 0.00 2.00 1.00 31.00 1.00	1113 01-07 -001 8959	Inside	4387.00 4392.00 4397.00 4402.00 4407.00 4410.00 4410.00 4415.00 4420.00 4420.00 4420.00 4422.00 4422.00 4423.00 4454.00 4455.00	33.00	· · ·

(Orn-		DRI	LL S	TEM TEST	REPORT	Γ		FLUID S	
	TRILOBITE TESTING , INC	Shakes	speare Oi	I Co INC		6-16S34	W Scott,KS		
	ESTING , INC		Main St IL 62881			Edwards - Job Ticket:	-Comm #1-6 69209	DST#:1	
		ATTN:	Vern Sc	chrag			2022.08.02 @ 0		
Mud and Cu	shion Information	ļ							
Mud Type: Ge	el Chem		(Cushion Type:			Oil API:		deg API
Mud Weight:	9.00 lb/gal			Cushion Length:		ft	Water Salinity:		ppm
Viscosity:	60.00 sec/qt			Cushion Volume:		bbl			
Water Loss:	7.99 in³ ohm.m			Gas Cushion Type: Gas Cushion Pressi	100	noia			
Resistivity: Salinity: Filter Cake:	2500.00 ppm 1.00 inches		(Sas Cushion Press	iie.	psig			
Recovery In	formation		F	Recovery Table					
	Leng	nth		Description		Volume	7		
	ft			Description		bbl			
		2.00	100% N	lud w /Oil specks		0.02	8		
	Total Length:	2	2.00 ft	Total Volume:	0.028 bbl				
	Num Fluid Sam Laboratory Na Recovery Com	me:		Num Gas Bombs Laboratory Loca		Serial ‡	4 .		

Printed: 2022.08.08 @ 15:37:22

Ref. No: 69209

Trilobite Testing, Inc



Serial #: 8734

Outside Shakespeare Oil Co INC

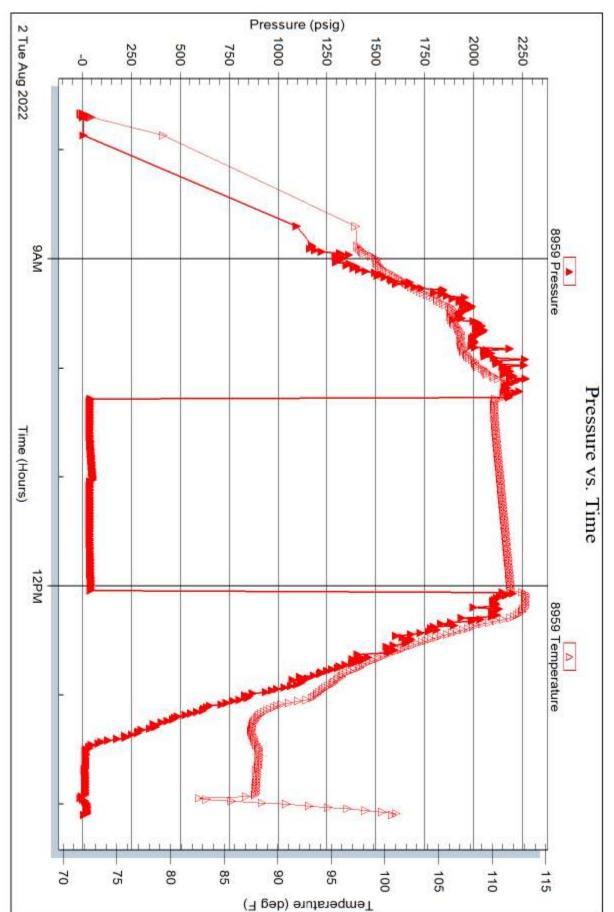
Edw ards-Comm #1-6

DST Test Number: 1

Printed: 2022.08.08 @ 15:37:22

Ref. No: 69209

Trilobite Testing, Inc



Inside Shakespeare Oil Co INC

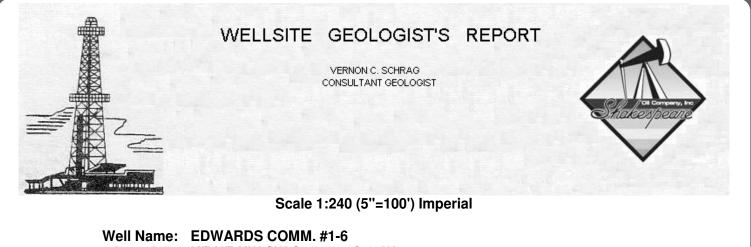
Serial #: 8959

Edw ards-Comm #1-6

DST Test Number: 1

RILOBITE		Test	Ticket	
410 ESTING INC. 1515 Commerce Parkway	 Hays, Kansas 67601 	NO.	69209	
Well Name & No. Edwards - Comm #1-	-6 - Test No		Date 8-2-20	
Company Shakes peace Oil Cu INC.				
Address 202 W. Main St. Salen, 7	-34			
Co. Rep/Geo. Vern Schrag.		wind #	8	
Location: Sec. 6 Twp 165.				
Interval Tested 4419 - 4460	Zone Tested Marmatin .			
Anchor Length	Drill Pipe Run		Mud Wt. 9.2	
Top Packer Depth 4414			Vis 60	2
Bottom Packer Depth 4419	Wt. Pipe Run		WL 8.0	
Total Depth 4460	Chlorides 2500 ppm			
Blow Description JE. De Strong Surface Die				
ISI No return.	•			
FF. No blow				
FSI No return.	9			
Rec_2 Feet of Mud wfor	Specks %gas	%oil	%water /op	%mud
Rec Feet of	 Contraction of the second state o	%oil	%water	%mud
Rec Feet of	%gas	%oil	%water	%mud
Rec Feet of	%gas	%oil	%water	%mud
Rec Feet of	%gas	%oil	%water	%mud
Rec Total BHT _//3	Gravity API RW (₽°F	Chlorides	ppm
(A) Initial Hydrostatic 2174	Test1950		ocation 05.'00	
(B) First Initial Flow 35	Jars 300	C	ed 07:40	
(C) First Final Flow36	Safety Joint	T-Oper	10:16	
(D) Initial Shut-In 44	1 Circ Sub	T-Pulle	d 12:01	
(E) Second Initial Flow	Hourly Standby	T-Out	14:06	
(F) Second Final Flow36	Mileage SCRTX2 84+84	7	ents Tools loaded (22
(G) Final Shut-In 37	Sampler		4-22	
(H) Final Hydrostatic 2234	Straddle		1 Tool350	
	Shale Packer			
Initial Open 15	C Extra Packer		ined Shale Packer	
Initial Shut-In 30	Extra Recorder		ined Packer	
Final Flow	Day Standby		tra Copies tal 800 - 350	
Final Shut-In	Accessibility	_ Sub Id Total		
	Sub Total 2418	-	ST Disc't	
Approved By	Our Representative			

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 hele shall be paid for at cost by the party for whom the test is made.



Location: NE NE NW SW Sec. 6-16S-34W Licence Number: API: 15-171-21291 Spud Date: July 27, 2022 Surface Coordinates: 2850' FNL & 1258' FWL

Region: Scott Co., KS Drilling Completed: August 4, 2022

Coordinates:

Bottom Hole

Coordinates: Ground Elevation (ft): 3117' K.B. Elevation (ft): 3127 Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4825' Formation: D&A Mississippi Type of Drilling Fluid: Chemical Premix (Displaced) Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR:

Company:Shakespeare Oil Co., Inc.Address:202 West Main Street Salem, IL 62881

Southwind Drilling Co., Rig #8

DP 4.5" XH (16.6#); DC 6-1/4" x 2-3/8", 411.58'; Kelly 40.00', Tool Joint 5.5" ; Bit: 7-7/8", JZ-HA23C, 3/15s; rpm 80, WOB 35k; Kelly Bushing 10' above ground level; Doug Roberts (tool pusher).

DRILLING CONTRACTOR:

CASING:

Ran 6 joints of new 23#, 8 5/8" casing, tally @ 256', set @ 268'

CIRCULATION SYSTEM:

Continental EMSCO D-375, duplex, 6 x 14 x 2, 58 spm, Chemical, premix, earth pits, MudCo/Service Mud, Inc., Reid Atkins, Tony Maestas.

DRILL STEM TESTS:

Trilobite Testing, Inc., Scott City, KS, Martine Salinas.

OPEN HOLE LOGS:

DN(PE), DI (SP), ML, 5" detail LTD-3800; 2" DI to suface casing; ELI Wireline Services, Hays, KS, Jeff Leubbers.

None.

GAS DETECTION SYSTEM:

ROP	Lithology Ponsity and Show Depth	Geological Descriptions	TG (units) Fifty One		al Ga	S			-
0 ROP 15			0	H	ot-Wire			_	100
								\pm	
					_	$\left - \right $		+	
			ANHYDRITE 2	2446 (+681)-	_			\neg	
			-B/ANHY 2466				_	\Rightarrow	
	3800								
0 ROP 15	\vee		0	H	ot-Wire	$\left \right $		+	100
			BIT TRIP 3795	EXCHANG	витт	N BIT	FOR PL	-816 -	
			PDC.					\mp	
								\pm	
		Note: started 10' samples at 3840'.						\pm	
					-			\rightarrow	
								\Rightarrow	
		LS: It brown; mic-xtal; chalky; fos-frag; very poor						=	
		porosity; N.S.							
						\square		-	
Burr Oak	·	Shale: black; carbonaceous; few chips 3850.				\square		\neg	
		LS: dense; N.S.						\Rightarrow	
	<u> </u>	Shale: It-dk grayish-brn; calcareous; fos; along w/						\pm	

		_	Shale: It-dk grayish-brn; calcareous; fos; along w/ green silty shales;										
	==	3850											
			Shale: greenish & maroon; silty; very marly; 3870 washes red.										
	•		LS: It brown; mic-vf xtal; chalky; few chips black specks, gillsonitic; very tight; finely spotted dry stain;						\square	\square	\square		
			trace 3880.										
			LS: It brown w/scattered pinkish grains & streaks; sli										
			fos, (fusulinids); poor porosity at best; N.S.										
			I St. It browns of stalls for from your poor int from										
			LS: It brown; vf-xtal; fos-frag; very poor int frag porosity; N.S., 3900.										
CON Queen Hill			Shale: dk gray;										_
		0	LS: It brown; vf-xtal; sli fos-frag; minor soft chalk;										
		3900	very poor porosity at best; N.S., 3920.	-VIS 6	0, WT	9.0—							
5			I St. It brown might stall challes in parts poor porceits										
	Ø		LS: It brown; mic-vf xtal; chalky in part; poor porosity; N.S.										
			LS: It brown w/gray spots; vf-xtal; peletal; poor					\square					
			apparent porosity; N.S., 3940.										
			LS: It brown; vf-xtal; fine-med well defined grain suptd								\square		_
			oolite; tight int ool porosity; N.S.; 3950.							\square	\square	\square	
											\square	\square	
			I.C. sussials have a factor, susandary using territorial										
WOP_			LS: grayish-brn; vf-xtal; granular; rough textured; tight vug porosity; dk brn spotted dry stain; no oil;										
	•	3950	traces 3970, 3980.										_
			HEEBNER SH 3956 (-829)	MUE	-CO:	3956:	VIS 51	. WT 8	3.9, FIL	6.4. C	HL 240	0. LC	м —
			Shale: black; carbonaceous; few chips 3970.	-2#.—									
			Shalar green marcon, ciltuin norti										
Adjustments	<u> </u>		Shale: green, maroon; silty in part;							eq			
Aujustments	<u> </u>		LS: v-lt brn to white; mic-vf xtal; trc opaq chert; few if										\exists
	•		any grains; strong mineral fluor; no visible porosity;										
	F		few chips 3990, incr 4000. trc spotted stain at 3990 does not compare well	_									_
			w/Toronto, looks like Oread float.										
ŀ 2			LS: as above; N.S.										
			Shale: green, maroon; sli silty & fos in parts;										
0 C C Lansing 2 15		4000		0				Hot	Wire				100
		4	LANSING 4001 (-874) (corrected)	U					wire				
			LS: very It brown; mic-vf xtal; dense to chalky in part;								\square		_
-S			some faded grains; strong mineral fluor; very poor						\square	\square	\square		
			porosity at best; N.S.				\square		\square	\square	\square	\square	
			LS: as above.	-									
			Shale: gray, green, maroon; fine sulfides; lime fossils;										
B-zone			LS: It brown; vf-xtal; minor soft chalk; oolitic; very										
			tight int ool porosity; N.S.; some lime is mottled										
con		4050	maroon; 4060. Trc fine vug por, N.S. 4070.										
		40											
D-zone			Shale: mostly green; some maroon;										_
			LS: It brown w/ md brn streaks & spots; mic-vf xtal; sli										
			chalky; almost no grains; no visible porosity; N.S.;										
┠┼┨┼┼┼┼┼┼┼┤			4080.							\square	\square		
			LS: as above, but no streaks or spots; N.S.		\square			\square	\square	\square			
				-	\square			\square	\square	\square		= 1	
			LS: It-md brown; mic-vf xtal; chalky in part; sli. granular; scattered spar; no apparent porosity; N.S.	WOF	ik on	AIR C	ONTR		STEM	4082			
			armining control oper, no apparent por oally, N.O.										
												\exists	
			LS: It brown; vf-xtal; mostly dense; sli chalky in part; no visible porosity; N.S.										
E-zone		4100	· · · · · · · · · · · · · · · · · · ·										
		4	S. It brown: minut vtale platage all aballar the										
	•		LS: It brown; mic-vf xtal; platey; sli. chalky; trc grains; dull fluor; trc spotted drab dry stain, cloudy cut;										
			no live oil; 4120-20, 40 min										
• 4120-0			LS: very It brown; vf-xtal; dense to chalky in part; no visible porosity; N.S.							\square	\square		
								\square	\square	\square	\square		
									\square				
G-zone			I St yong It han ya ya ya ya na isina a ama isina fala					\square	\square				
	Ø		LS: very lt brown; vf-xtal; oolitic to oomoldic; fair oomoldic porosity; N.S.; trc 4150, incr 4160.									=	
			· · · · · · · · · · · · · · · · · · ·	_	H			\square	E	F	\square		
CON			LS: It brown; mic-vf xtal; sli oolitic; mostly dense; no		E			\square		\square		\square	
		4150	visible porosity; N.S.									\square	
		41											
			LS: as above.										
			LS: It brown to grayish; mic-vf xtal; sli chalky; almost							\square			
			no grains; no apparent porosity; N.S.									\exists	
				E						\square			
										\bowtie			
Muncie			MUNCIE CREEK SH 4181 (-1054) Shale: black; carbon.; few chips 4200.	-VIS	2, WT	9,1-				⊢			
			LS: md brown; vf-xtal; sli. oolitic; mostly dense;		_, ., .								
			N.S.; includes gray to brown mottled semi-trans. chert;										
				L]		$ \longrightarrow $		<u> </u>	$ \longrightarrow $	

H-zone													
0 (ROP 15		4200	LS: very lt brown; vf-xtal; faded oolite in part; trc chert; mostly dense; no visible porosity; N.S., 4210.	0				Hot-	Wire				100
			LS: as above.										
5													
2			Shale: dk gray to black; LS: md brown; vf-xtal; dense; N.S.	-									
E.			Shale: green, gray; LS: It brown; vf-xtal; partly chalky; oolitic to fos-frag;	-VIS 6	60, WT	9.2—							
CON 4240 0	•		very tight int ool & frag porosity; dull fluor; N.S., 4240-20m; trc spotted dry stain, cloudy cut; no visible oil 40m, 60m.										
			Shale: green, gray;										
Jzone	•	4250	LS: gray to brown; vf-xtal; oolitic; trc pin-point vug por w/specks dk oil stain; no live oil; 4257-60m.										
4257_ ○			LS: grayish brn; vf-xtal; coarse oomoldic por. is	-									
			barren; 4263-40m. LS: grayish brown w/ dk gray specks; mic-vf xtal; sli.										
→ → → → → → → → → → → → → → → → → → →			chalky; no visible porosity; N.S. STARK SH 4277 (-1150) Shale: black; carbon.; 4283-40 min.										
Canville 4 Canville 4283 O	•		LS: md brn; vf-xt; trc coarse vug porosity; black stain & free oil; dull fluor; spotted dk brn dry stains; trace										
• 4290 0	•		to <<1% at 4283-40, 60m. N.S. at 4290-20m. Trc vug por w/black free oil 4290-40m looks like Canville.										
\mathbf{I}		4300	LS: It brown w/ flood of soft white chalk; mic-vf xtal; mostly dense; N.S.; 4310.										
		43	LS: It grayish brown; mic-vf xtal; mostly dense as										
Ś			above; N.S.	MUD	-CO: 4	1332: 1	VIS 55,	WT 9	2, FIL	8.0, Cł	HL 250), LCN	1 1#.—
			LS: as above;	WOF		LIGH		NT & F		AT 433	0' ? AI		AIN -
Hush			HUSHPUCKNEY SH 4324 (-1197) Shale: black; carbonaceous; fissile;	-AT 4	332 ?'.	WIPE	R TRI	P OUT	OF H	OLE TO	O DRIL REPAI	L —	
			LS: It brown; mic-vf xtal; dense to chalky in part; somewhat oolitic; no visible porosity; N.S.	APP	EARE	D THA	T KEL	LYWA	SMA	rked	r Wipi Wroi	IG AN	
4340			LS: It grayish brown; mic-vf xtal; mostly dense, some		VERE AT 43			-00T	ABOV	ECON	IN 4336	6 AND	
<u> </u>		4350	sli chalky; only faded grains; no visible porosity; N.S.										
			Chales group nearly represented										
BKC			Shale: gray; poorly represented. LS: It -md grayish brown; mic-vf xtal; dense fos-frag, sli oolitic; no visible porosity; N.S.										
CON Checkerboard			LS: grayish brown; vf-xtal; much rough vuggy texture;										
			crinoidal; tight int xtal por in part; only dull fluor; trc spar; scattered pin-pt to md vug por; clean, no stains, no oil at 4382-40, 60 min.										
			LS: gray-brn; oolitic; dense; N.S.										
S	· ·		SiltSt: green; fragile; 4420. Shale: green; marly;	_VIS 6	8, WT	9.2							
CONSTRUCTION OF THE CONSTRUCTURE OF THE CONSTRUCTION OF THE CONSTRUCTURE OF THE CONSTR	· · · · · · · · · · · · · · · · · · ·	4400	Shale: green; mariy; Probably SiltSt as above ?	0				Hot-	Wire				100
	· · · · · · · · · · · · · · · · · · ·		SiltSt & Shale: mostly green; MARMATON 4416 (-1289)										
← Marmaton			MARMATON 4416 (-1289) LS: It brown to gray; mic-vf xtal; chalky in part; trc chert; no apparent porosity; N.S.										
			LS: md-dk brown; vf-xtal; sub-vitreous; dense, platey; finely granular in part; only dull fluor; N.S., 4440.		N DR								
			LS: It brown; vf-xtal; trc tight int oolitic por; speckled stain; no live oil; trc spotted dry stain; 4440-40m.		-CO: ; LCM		VHILE	т.і.н.,	VIS 50), WT 9	9.4, FIL	8.8, C	HL -
			LS: very It brown; vf-xtal; grain supported med oolite;	-DS1	Г#1: N	IARN	IATO	N: 44	19-44	60', 5	SURF	BLO	-W
3	•	0	tight int ool por; weak matrix breaks easy; some grains in relief; dull fluor; SFO; much sptd & some sat dry stain, 50% 4450, decreasing & tighter at 4460 and at	MU		P: 44	-37;	FP: 3			0- 30- 6; HP		<u>'</u>
		4450	CFS 30/60	21/-	+-22.3*	+, DN	1. 11) I					
			LS: very It brown; mic-xtal; few if any grains; mostly										
			dense to chalky in part; no visible porosity; N.S.										
			LS: It brown; vf-f xtal; few faded grains; slow 3M reaction to HCl indicates somewhat dolomitic; tight int xtaline porosity; N.S., 4480-20, 40 min.		,4480: BABL			POOF	SPOT	TED S	STAINS	SARE	
• <u> </u>													
			LS: It grayish brown; mic-vf xtal; dense; no visible porosity; N.S.										
		500	Shale: black; carbonaceous; 4510.	-VIS 6	8, WT	9.3—							
		45	LS: md brn; mic xtal; dense; N.S. Shale: green, gray										
Pawnee			PAWNEE LS 4511 (-1384) LS: It brown; vf-xtal; trc white opaq chert; mostly										
3			dense; N.S.										
			LS: It brown; mic-vf xtal; dense; includes grayish opaq chert; trc chalk; no vis por; N.S.										
cón Z													
			LS: gray; vf-xtal; w/gray-brn semi-opaq chert; mostly dense; no visible poroisty; N.S.	Mor	'n Dri	ller 4	532-4	615					
			dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible		n Dri	ller 4	532-4	615					
CÓN 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4550	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile.		n Dri		532-4	615					
		4550	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray		n Dri		532-4	615					
← Myrick.		4550	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show		'n Dri		532-4	615					
← Myrick.		4550	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580.		n Dri		532-4	l615					
← Myrick		4550	 dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. 										
← Myrick.		4550	 dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; 										
← Myrick		4550	 dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. 										
CON CON CON CON CON CON CON CON		4600 4550	 dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent 					615	Wire				
← Ft. Scott			 dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; 										
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		4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various: grays, green, maroon; mixed with minor It-dk brown limestones which are dense w/N.S. Shale: various & lime as above. Shale: various & lime as above. Shale: various & lime as above. Shale: some dk gray to black & various; mixed w/ It brown limestones, N.S. MORROW SHALE 4709 (-1582) Shale various: grays, greens and maroon;										
		4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various: grays, green, maroon; mixed with minor It-dk brown limestones which are dense w/N.S. Shale: various & lime as above. Shale: various & lime as above. Shale: various & lime as above. Shale: some dk gray to black & various; mixed w/ It brown limestones, N.S. MORROW SHALE 4709 (-1582) Shale various: grays, greens and maroon;										
		4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: Itmd brown; grain supported colite w/much gray colitic chert; some colites are darker than matrix; hard; tight int col por; trace pin-pt cil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; col & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some denses sli collitic to fosf-rag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: Ithrown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faw if any grains; mostly dense to sli chalky; N.S. LS: mostly It brown; mic-vf xtal; faded colite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lime as before. Shale: various & lime as before. Shale various & lime as before.										
		4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; fight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; few if any grains; mostly dense to sli chalky; N.S. LS: mostly It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lime as above. Shale various & lime as before. Shale various & lime as before.										
		4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sil mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; few if any grains; mostly dense to sli chalky; N.S. LS: mostly it brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lime as before. Shale various & lime as before. Shale: green, gray, lacking maroon as above; includes gray to tan limey mudstones; trc siltstones; 4760. Shale: mostly black, some green fissile; 4780.										
		4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: Itmd brown; grain supported colite w/much gray colitic chert; some colites are darker than matrix; hard; tight int col por; trace pin-pt cil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; col & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some denses sli collitic to fosf-rag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: Ithrown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faw if any grains; mostly dense to sli chalky; N.S. LS: mostly It brown; mic-vf xtal; faded colite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lime as before. Shale: various & lime as before. Shale various & lime as before.										
		4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted than shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. LS: mostly It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & liste a sabove. Shale: various & liste as above. Shale: various & liste as before. Shale various & liste as before. Shale various & liste as before. Shale various & liste as before. Shale: mostly black, some green fissile; 4760. Shale: mostly black, some green fissile; 4760. MISSISSIPPI 4772										
		4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% it brn spotted thy stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 496-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. EASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lesser lime as before. Shale: various & lesser lime as before. Shale: various & lime as above. Shale: various & lime as above. Shale: various & lime as above. Shale: various & lime as before. Shale: some dk gray to black & various; mixed w/ It brown limestones; N.S. MORROW SHALE 4709 (-1582) Shale various & lime as before. Shale: an situe as before. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Shale: nostly black, some green fissile; 4780.										
CON CON CON CON CON CON CON CON CON CON		4700 4750 4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% 1t brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal, trc fine sulfides; trc smokey chert; sli granular; mostly dense; some chalk; no visible porosity; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lesser lime as before. Shale: various & lesser lime as before. Shale: various & lesser lime as before. Shale: various & lime as above. Shale: various & lime as above. Shale: various & lime as above; includes gray to tan limey mudstones; trc siltstones; 4760. Shale: areous & lime as before. Shale: mostly black, some green fissile; 4780. Shale: mostly black, so										
		00 4750 4700 4650 4600	dense; no visible porolsky; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-V xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported ooilte w/much gray ooiltic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4860. LS: dk gray-brown; mic-V xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile, 4596-stop. LS: grayish-brown, sli motted and/or spotted; w/considerable off-white soft chalk; some dense sli oolific to fes-frag; trc chert; no apparent porosity; N.S. 496-40, 60 min LS: It & md gray-brn mixed; mic-Vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; wic-Vf xtal; few if any grains; mostly dense to sli chalky; N.S. LS: mostly It brown; mic-Vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: green, gray; trace glauconitic siltstone; Shale: various & lime as above. Shale: various & lime as before. Shale: various & lime as before. Shale: various & lime as before. Shale: arious & lime as before. Shale: arious & lime as before. Shale: mostly black, some green fissile; 4780. Shale: white; very sandy; chalky; pure; non-porous; N.S.; poorly represented 4790. MSSISSIPPI 4772 (-1645) LS: white; very sandy; chalky; pure; non-porous; N.S., few chips 4790. LS: white; very sandy; chalky; pure; non-porous; N.S., few chips 4790. LS: white; verx sandy; chalky; pure; non-porous;						5, FIL				
CON CON CON CON CON CON CON CON CON CON		00 4750 4700 4650 4600	dense; no visible porolsky; N.S. Shale: black; carbonaceous; 4550. LS: It brown; mic-vf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (-1427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4570 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (-1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal; fre if any grains; mostly dense to sli chalky; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. EX: mostly It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: various & lime as above. Shale: various & lime as before. Shale: arious & lime as before. Shale: various & lime as before. Shale: arious & lime as before. Shale: various & lime as before. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Sis white; very sandy & chalky; non-porous; N.S.; poorly represented 4790. MSSISSIPPI 4772 (-1645) LS: white; very sandy, chalky; pure; non-porous; N.S., few chips 4790. LS: white; very sandy;										
		00 4750 4700 4650 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; micv/ xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (+427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4500 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (+456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli motted and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to for-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal; free lif any grains; mostly dense to sli chalky; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: various: grays, green, maroon; mixed with minor It-dk brown limestones which are dense w/N.S. Shale: various & lime as above. Shale: various & lime as before. Shale: an unimey mudstones; trc siltstones; 4760. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. LS: white; very sandy & chalky; pure; non-porous; N.S.; poorly represented 4790. LS: white; very sandy & chalky; pure; non-porous; N.S.; fwite; vixtal; sli sandy to finely colitic; no-porous; N.S. 4810. LS: white; to very It brown; mic-xtal; chalky; few if any						5, FIL				
		4800 4750 4700 4650 4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; micvf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (1427) LS: It-md brown; grain supported oolite w/much gray oolite chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It bro spotted dry stains at 4750 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal; few if any grains; mostly dense to sli chalky; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. EASE / JOHNSON ZONE 4659 (-1532) Shale: various & lime as above. Shale: various & lime as before. Shale: anious; grays, green and maroon; Shale various & lime as before. Shale: anious; grays, green shal maroon; Shale various & lime as before. Shale: anious; grays, green shalmaroon; Shale various & lime as before. Shale: anious & lime as before. Shale: anious; grays, green fissile; 4780. Shale: mostly black, some green fissile; 4780. SissiSSIPPI 4772 (-1645) LS: white; very sandy; chalky; pure; non-porous; N.S.; por/y represented 4790. LS: white; very sandy; chalky; pure; non-porous; N.S.; 90% at 4800. LS: white; very sandy; chalky; pure; non-porous; N.S.; 90% at 480						5, FIL				
		4800 4750 4700 4650 4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; micv/ xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (+427) LS: It-md brown; grain supported oolite w/much gray oolitic chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It brn spotted dry stains at 4500 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (+456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli motted and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to for-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal; free lif any grains; mostly dense to sli chalky; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. BASE / JOHNSON ZONE 4659 (-1532) Shale: various: grays, green, maroon; mixed with minor It-dk brown limestones which are dense w/N.S. Shale: various & lime as above. Shale: various & lime as before. Shale: an unimey mudstones; trc siltstones; 4760. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. Shale: mostly black, some green fissile; 4780. LS: white; very sandy & chalky; pure; non-porous; N.S.; poorly represented 4790. LS: white; very sandy & chalky; pure; non-porous; N.S.; fwite; vixtal; sli sandy to finely colitic; no-porous; N.S. 4810. LS: white; to very It brown; mic-xtal; chalky; few if any						5, FIL				
		4800 4750 4700 4650 4600 4600	dense; no visible poroisty; N.S. Shale: black; carbonaceous; 4550. LS: It brown; micvf xtal; dense to sli chalky; no visible porosity; N.S. Shale: black; carbonaceous; fissile. FT. SCOTT 4554 (1427) LS: It-md brown; grain supported oolite w/much gray oolite chert; some oolites are darker than matrix; hard; tight int ool por; trace pin-pt oil; 1% It bro spotted dry stains at 4750 does not fluor; cloudy cut; ool & show almost absent at 4580. LS: dk gray-brown; mic-vf xtal; looks silty; w/green shales; no visible porosity; N.S. LOWER CHEROKEE SH 4583 (1456) Shale: black; carbon; fissile; 4596-stop. LS: grayish-brown, sli mottled and/or spotted; w/considerable off-white soft chalk; some dense sli oolitic to fos-frag; trc chert; no apparent porosity; N.S. 4596-40, 60 min LS: It & md gray-brn mixed; mic-vf xtal; no apparent porosity; N.S.; w/dk gray shales; LS & Shale as above. LS: It-md brown; vf-xtal; few if any grains; mostly dense to sli chalky; N.S. LS: It brown; mic-vf xtal; faded oolite in part; mostly dense; N.S. EASE / JOHNSON ZONE 4659 (-1532) Shale: various & lime as above. Shale: various & lime as before. Shale: anious; grays, green and maroon; Shale various & lime as before. Shale: anious; grays, green shal maroon; Shale various & lime as before. Shale: anious; grays, green shalmaroon; Shale various & lime as before. Shale: anious & lime as before. Shale: anious; grays, green fissile; 4780. Shale: mostly black, some green fissile; 4780. SissiSSIPPI 4772 (-1645) LS: white; very sandy; chalky; pure; non-porous; N.S.; por/y represented 4790. LS: white; very sandy; chalky; pure; non-porous; N.S.; 90% at 4800. LS: white; very sandy; chalky; pure; non-porous; N.S.; 90% at 480						5, FIL				