

ORIGINAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

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 # 48996
Name: Mid continent Resources Inc.
Address 1: P.O. Box 399
Address 2: _____
City: Garden City State: Ks. Zip: 67846 + _____
Contact Person: Jody Smith
Phone: (620) 275-2963
CONTRACTOR: License # 5822
Name: Val Energy Inc.
Wellsite Geologist: Jeff Lawler
Purchaser: NCRA

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil WSW SWD SLOW
 Gas D&A ENHR SIGW
 OG GSW Temp. Abd.
 CM (Coal Bed Methane)
 Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:
Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to ENHR Conv. to SWD
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____

8/23/11 9/3/11 10/27/11
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 193-20812 • 00 • 00

Spot Description: _____
NW SW SE SE Sec. 36 Twp. 10 S. R. 32 East West
370 Feet from North / South Line of Section
1,086 Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW

County: Thomas

Lease Name: Nichols Well #: 4-36

Field Name: Campus Northwest

Producing Formation: Kansas City

Elevation: Ground: 3045 Kelly Bushing: 3054

Total Depth: 4745 Plug Back Total Depth: 4600

Amount of Surface Pipe Set and Cemented at: 265' Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: 2575 Feet

If Alternate II completion, cement circulated from: 2575'

feet depth to: Surface w/ 325sx sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 15,000 ppm Fluid volume: 180 bbls

Dewatering method used: Evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature: [Signature]
Title: Foreman Date: 11/2/11

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: Dig Date: 11/3/11

Operator Name: Mid continent Resources Inc. Lease Name: Nichols Well #: 4-36
 Sec. 36 Twp. 10 S. R. 32 East West County: Thomas

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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Mico, Porosity, Sonic, Induction and bond.	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Anhy</td> <td>2575'</td> <td>479</td> </tr> <tr> <td>B/Anhy</td> <td>2604'</td> <td>450</td> </tr> <tr> <td>Heebner</td> <td>4020'</td> <td>-966</td> </tr> <tr> <td>Lansing</td> <td>4059'</td> <td>-1005</td> </tr> <tr> <td>Marm</td> <td>4365'</td> <td>-1311</td> </tr> <tr> <td>Ft.Scott</td> <td>4494'</td> <td>-1440</td> </tr> <tr> <td>Johnson</td> <td>4745'</td> <td>-1535</td> </tr> </table>	Name	Top	Datum	Anhy	2575'	479	B/Anhy	2604'	450	Heebner	4020'	-966	Lansing	4059'	-1005	Marm	4365'	-1311	Ft.Scott	4494'	-1440	Johnson	4745'	-1535
Name	Top	Datum																							
Anhy	2575'	479																							
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Marm	4365'	-1311																							
Ft.Scott	4494'	-1440																							
Johnson	4745'	-1535																							

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, 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
Surface	121/4	85/8	23#	265'	Common	200	3%CC, 2%gel
Production	77/8	41/2	10.5	4744'	EA-2	225sx	

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth
4	4126'to 4136'	500 gal 15%MCA	4126
	4600' CIBP		
4	4630'to 4638'	500 gal 15%MCA	4630

TUBING RECORD: Size: <u>23/8</u> Set At: <u>4596</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. NA		Producing Method: <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls. 17	Gas Mcf 0	Water Bbls. 15
Gas-Oil Ratio		Gravity	

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: <u>4126'to 4136</u>
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ALLIED CEMENTING CO., LLC. 039856

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: OAKLEY

DATE <u>8-24-11</u>	SEC <u>36</u>	TWP. <u>105</u>	RANGE <u>S2W</u>	CALLED OUT	ON LOCATION <u>7:15 AM</u>	JOB START <u>9:00 AM</u>	JOB FINISH <u>9:30 AM</u>
LEASE <u>NICHOLS</u>	WELL # <u>4-36</u>	LOCATION <u>OAKLEY 1N-1/2E-E+N 1/4</u>			COUNTY <u>THOMAS</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR VAL DRUG REG#

TYPE OF JOB SURFACE

HOLE SIZE 12 1/4" T.D. 270'

CASING SIZE 8 5/8" DEPTH 270'

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. 15'

PERFS. _____

DISPLACEMENT 16 1/4 BBLs

OWNER SAME

CEMENT AMOUNT ORDERED 200 SKS COM 3% CC 290981

COMMON	<u>200 SKS</u>	@ <u>16.25</u>	<u>3250.00</u>
POZMIX		@	
GEL	<u>4 SKS</u>	@ <u>21.25</u>	<u>85.00</u>
CHLORIDE	<u>7 SKS</u>	@ <u>59.20</u>	<u>407.40</u>
ASC		@	
RECEIVED			
NOV 03 2011			
KCC WICHITA			
HANDLING	<u>211 SKS</u>	@ <u>2.25</u>	<u>474.75</u>
MILEAGE	<u>114 PER SK / mile</u>		<u>46.42</u>
TOTAL			<u>4263.57</u>

EQUIPMENT

PUMP TRUCK CEMENTER TERRY

422 HELPER FARI

BULK TRUCK DRIVER CHRIS

394 DRIVER _____

REMARKS:

MIX 200 SKS COM 3% CC 290981
Displace with 16 1/4 BBLs WATER
CEMENT CHECK CTRC.

THANK YOU

CHARGE TO: MID-CONTINENT RESOURCES INC.

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<u>270'</u>		
PUMP TRUCK CHARGE			<u>1125.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>2 MIX</u>	@ <u>7.00</u>	<u>14.00</u>
MANIFOLD	<u>Head Rental</u>	@	<u>200.00</u>
	<u>Light Vehicles 2x2</u>	@ <u>4.00</u>	<u>16.00</u>
TOTAL			<u>1369.00</u>

PLUG & FLOAT EQUIPMENT

<u>8 5/8 wooden plug</u>			<u>82.00</u>
	@		
	@		
	@		
	@		
TOTAL			<u>82.00</u>

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment 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 contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME _____

SIGNATURE [Signature]

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS



CHARGE TO: MID CONTINENT
 ADDRESS: _____
 CITY, STATE, ZIP CODE: _____

Attn: Joe
 3 pages

TICKET
 20270

PAGE 1 OF 2

1. SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. HAYS	436	NICHOLS	THOMAS	KS		09-04-11	
2. NESS	TICKET TYPE	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
	<input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES		VAZ DRILL 44	ET	NE DAILEY		
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
	DIL	DEVELOP	25 STAGE	15-193-00812	S36.710-R32		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY		UNIT		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF			UM		UM			
575		1			MILEAGE #112	80		MI		6.00	480	00
579		1			PUMP SERVICE	1		EA		1850.00	1850	00
021		1			LIQUID WCL	4		BAR		25.00	100	00
281		1			MUD FLUSH	500		YAL		1.25	625	00
290		1			DAIR	4		YAL		35.00	140	00
402		1			CENTRALIZER	11		EA	1/2 IN	65.00	715	00
403		1			BASKETS	3		EA		250.00	750	00
407		1			TRUSS FRONT SHOE 1/2 AUTO FALL	1		EA		300.00	300	00
408		1			DR. TOOL	1		EA		2700.00	2700	00
417		1			D. V. L. K. H. W. N. P. V. G. B. A. S. F. E. E.	1		EA		200.00	200	00
419		1			R. S. T. A. N. G. H. O. R. S. R. E. N. T. A. L.	1		EA		200.00	200	00

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LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X
 DATE SIGNED: 09-04-11
 TIME SIGNED: 0730
 A.M.
 P.M.

REMIT PAYMENT TO:
 SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE		
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				86.1	8060 00
WE UNDERSTOOD AND MET YOUR NEEDS?				PAGE TOTAL	14,370 00
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				sub	
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				TOTAL	22,430 00
ARE YOU SATISFIED WITH OUR SERVICE?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO		Thomas TAX 7.3%	1201 58
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	23,631 58

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR: DAVID APPROVAL: _____

Thank You!

P. 0017003
 (FAX) 785 798 2384
 11/02/2011 10:45 Swift Services



PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. **20270**

CUSTOMER: **IND. CONTINENT** WELL: **436, NICHOLES** DATE: **09-01-11** PAGE: **2** OF **2**

Item	QTY	UNIT	Description	Rate	Unit	Amount	Total	Unit
305	2		STD CR2 CMT	205	S4	410	3037	50
330	2		STD CMT	325	S4	650	6187	50
276	2		FLORES	150	L3	300	300	00
283	2		SKY	1100	L3	2200	220	00
284	2		CALSEAL	71	S4	142	325	00
285	2		CER-1	150	L3	300	600	00
581	2		SPRUEGIC CMT	600	S4	1200	1200	00
583	2		DRAVAGE	2440	TR	4880	2440	00
SERVICE CHARGE				CUBIC FEET				
TOTAL WEIGHT				LOADED MILES		TON MILES		

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14370.00

P. 002/003
(FAX) 785 798 2384
11/02/2011 10:45 Swift Services

JOB LOG

SWIFT Services, Inc.

DATE 09-04-11 PAGE NO. 1

CUSTOMER MO CONTINENT WELL NO. 4-46 LEASE WICHITA JOB TYPE 2 STAGE TICKET NO. 20070

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0730							ON LOCATION CMT: 30250 22550 STD EA 2 TOP 375.545 SMD RTD 4745 SET P/A 4743 S.J. 17.0 MASSIT 4726 4 1/2" ID 5" I/A, D.V. ON TOP # 64, 2566 FT CENT 1, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63 13550 LBS. 30VT.
	0815							START CULO FLOATED
	1000							TAG BITTEN - DRIP 3" PL
	1030							BRANCHING & ROTARY PIPE
	1130	5.0	12				200	SODER MAKE FLUSH
			20					20 BBL KCL FLUSH
			54.5					22550 EA 2
								DRIP E.O. PLUG WASHOUT PL
		5.5	0				200	START ASD 1/2" H2O
			35.0					" " 1/2" H2O
			55.0					" " 1/2" KCL FLUSH
			65.0				200	
			70.0				600	
	1200	4.5	75.2				1300	LAND LD. PLUG
								RELEASE D.V., DROP DIV. OPENING PLUG
			7.5					DRUG RHEAD MHEAD
	1213						1000	OPEN D.V.
	1215	6.0	0				200	START CMT 30250 SMD
	1245	5	175				300	END
								DROP DIV. CASING PLUG
	1250	5.5	0				400	START DISA - CIRC CMT TO PIT!
			15				500	
			35				600	
	1300	4.5	40.8				1100	CLOSE D.V. LAND-PLUG
								DATE SET
	1330							JOB COMPLETE.
								THANK YOU!
								DAVE JERRE

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22550
DATE SET

OPERATOR

Company: MID-CONTINENT RESOURCES, INC.
 Address: P.O. BOX 399
 GARDEN CITY, KS 67846

Contact Geologist: CECIL O'BRATE
 Contact Phone Nbr: (620) 275-7461
 Well Name: NICHOLS 4-36
 Location: NW SW SE SE 36-10S-32W
 Pool:
 State: KANSAS

API: 15-193-20812-00-00
 Field: CAMPUS NORTHWEST
 Country: USA

Scale 1:240 Imperial

Well Name: NICHOLS 4-36
 Surface Location: NW SW SE SE 36-10S-32W
 Bottom Location:
 API: 15-193-20812-00-00
 License Number: 8996
 Spud Date: 8/23/2011 Time: 3:34 PM
 Region: THOMAS
 Drilling Completed: 2/2/2011 Time: 5:50 PM
 Surface Coordinates: 370 FSL & 1086 FEL
 Bottom Hole Coordinates:
 Ground Elevation: 3045.00ft
 K.B. Elevation: 3054.00ft
 Logged Interval: 0.00ft To: 0.00ft
 Total Depth: 0.00ft
 Formation:
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -100.8384757 Latitude: 39.1341825
 N/S Co-ord: 370 FSL
 E/W Co-ord: 1086 FEL

LOGGED BY

Company: SOLUTIONS CONSULTING
 Address: 108 W 35TH
 HAYS, KS 67601

Phone Nbr: (785) 259-3737
 Logged By: Geologist

Name: JEFF LAWLER
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CONTRACTOR

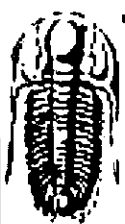
Contractor: VAL ENERGY, INC.
 Rig #: 4
 Rig Type: MUD ROTARY
 Spud Date: 8/23/2011 Time: 3:34 PM
 TD Date: 2/2/2011 Time: 5:50 PM
 Rig Release: Time:

ELEVATIONS

K.B. Elevation: 3054.00ft Ground Elevation: 3045.00ft
 K.B. to Ground: 9.00ft

NOTES

DST #1 LANSING-KANSAS CITY 'I, J, K'

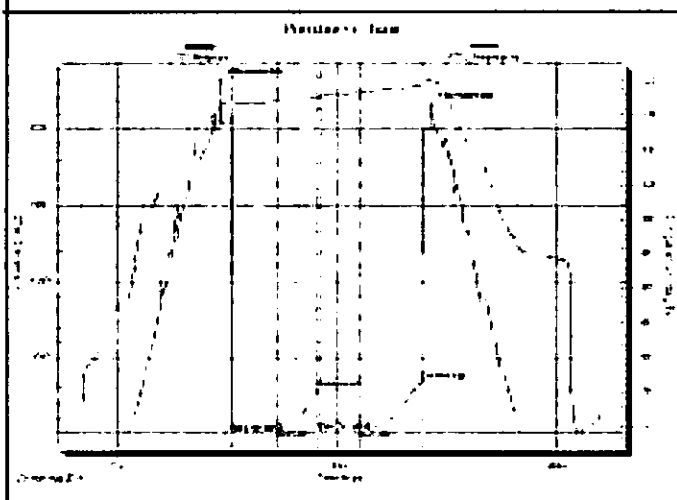
 <p>TRIOBITE TESTING, INC.</p>	DRILL STEM TEST REPORT	
	Mid-Continent Resources P.O. Box 399 Garden City Ks. 67846 ATTN: Jeff Lawler	Nichols 4-36 36 10 32 Thomas Job Ticket: G41943 DST#: 1 Test Start: 2011.08.29 @ 14:22:00

GENERAL INFORMATION:

Formation: LMC-I,JK	Test Type: Conventional Bottom Hole
Deviated: No Whipstock: 1 (KB)	Tester: Chuck Kreuzer Jr.
Time Tool Opened: 16:33:30	Unit No: 36
Time Test Ended: 21:35:00	Reference Elevation: 3054.00 ft (KB)
Interval: 4228.00 ft (KB) To 4815.00 ft (KB) (TVD)	3045.00 ft (CP)
Total Depth: 4315.00 ft (KB) (TVD)	KB to GRCP: 9.00 ft
Hole Diameter: 7.89 inches - hole Condition: Good	

Serial #: 6752 Inside	Capacity: 9000.00 psig
Pressure Run Depth: 18.74 psig @ 4228.00 ft (KB)	Last Call: 2011.08.29
Start Date: 2011.08.29 End Date: 2011.08.29	Time On Bore: 2011.08.29 @ 16:04:00
Start Time: 14:32:05 End Time: 20:35:59	Time Off Bore: 2011.08.29 @ 19:17:53

TEST COMMENT: F: Weak blow. Died in 3 mins.
 1st No blow back over 45 mins.
 FF: No blow over 30 mins.
 FSE: No blow back over 45 mins.

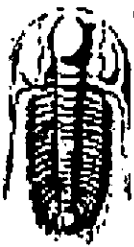


PRESSURE SUMMARY			
Time (Min)	Pressure (psig)	Temp (deg F)	Annotation
0	2309.59	116.27	Initial Hydro-static
10	16.01	116.59	Open To Flow (1)
46	17.11	117.10	Shut-in (1)
81	292.05	117.79	End Shut-in (1)
81	17.73	117.73	Open To Flow (2)
114	16.74	118.44	Shut-in (2)
166	346.07	119.28	End Shut-in (2)
174	2147.49	119.92	Final Hydro-static

Recovery		
Volume (bbl)	Description	Volume (bbl)
10.00	mud with oil specs	3.14

Gas Rates			
Core Count	Pressure (psig)	Gas Rate (MFC)	

DST #2 PAWNEE, FT SCOTT



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mid-Continent Resources

Nichols 4-36

P.O. Box 399
Garden City Ks.
67846
ATTN: Jeff Lawler

36 10 32 Thomas
Job Ticket: 43573 DST# 2
Test Start: 2011.08.30 @ 21:59:00

GENERAL INFORMATION:

Formation: Pawnee / Ft. Scott
Deviated: No Whipsaws: ft (KB)
Time Tool Opened: 23:57:00
Time Test Began: 04:29:00

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

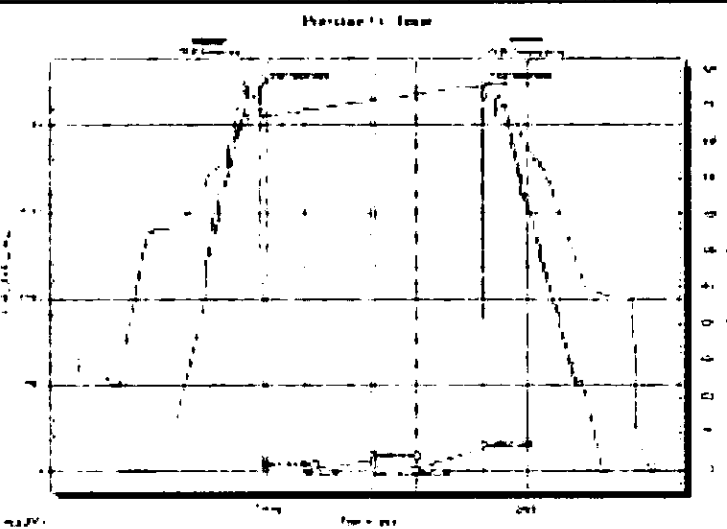
Interval: 4448.00 ft (KB) To 4610.00 ft (KB) (TVD)
Total Depth: 4510.00 ft (KB) (TVD)
Hole Diameter: 7.99 inches - hole Condition: Good

Reference Elevations: 3054.00 ft (KB)
3045.00 ft (CF)
KB to GRCP: 5.00 ft

Serial #: 8018 Inside
Pressure Run Depth: 15.85 psig @ 4452.00 ft (KB)
Start Date: 2011.08.30 End Date: 2011.08.31
Start Time: 21:51:00 End Time: 04:29:00

Capacity: 8000.00 psig
Last Call: 2011.08.31
Time On Bore: 2011.08.30 @ 23:56:00
Time Off Bore: 2011.08.31 @ 02:30:00

TEST COMMENT: FF: 1.5" Blow died @ 25 min.
ISB No return.
FF: 1.5" blow.
F&E No return.



PRESSURE SUMMARY

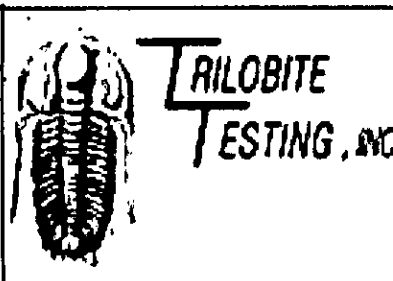
Time (Min)	Pressure (psig)	Temp (deg F)	Annotation
0	2207.91	119.35	Initial Hydro-static
1	17.99	116.11	Open To Flow (1)
31	20.95	119.42	Shut-in (1)
78	65.53	120.77	End Shut-in (1)
78	14.73	120.75	Open To Flow (2)
105	15.95	120.79	Shut-in (2)
154	122.53	122.95	End Shut-in (2)
155	2219.94	123.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	OGA/100 c	3.28

Gas Rates

Code (Inlet)	Pressure (psig)	Gas Rate (Mcf/D)



DRILL STEM TEST REPORT

Mid-Continent Resources

Nichols 4-36

P.O. Box 399
Gardner City, KS
67345

36 10 32 Thomas
Job Name: 43674 G378:3

ATTN: Jeff Lawler

Test Start: 2011 09 02 @ 12:20:33

GENERAL INFORMATION:

Formation: Cherokee Sand
Deviation: No (Vertical) 7' KB
Time Tool Opened: 12:41:00
Time Test Began: 12:30:33

Test Type: Conventional Bottom Hole
Tester: Chuck Smith
Unit No: 37

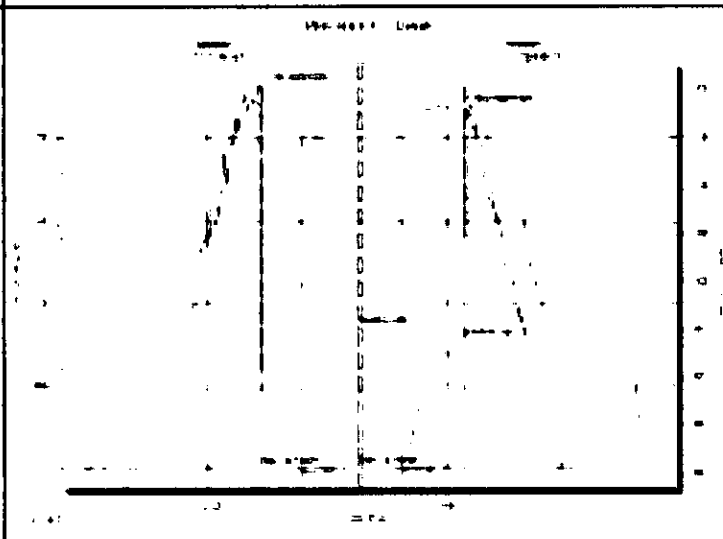
Interval: 4684.00 ft (KB) To 4844.00 ft (KB) (TVD)
Test Depth: 4644.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches hole condition: Good

Reference Elevations: 3054.32 ft (KB)
3045.32 ft (CF)
KB to CF: 9.00 ft

Serial #: 6751 Outside
Press @ Run Depth: 24 51 psig @ 4555.00 ft (KB)
Start Date: 2011 09 02 End Date: 2011 09 02
Start Time: 12:30:00 End Time: 12:32:40

Capacity: 8000.00 gal
Last Call: 2011 09 02
Time On Btm: 2011 09 02 @ 12:19:40
Time Off Btm: 2011 09 02 @ 15:15:00

TEST COMMENT: IF: 1-4" Blow dead @ 15 min.
IS: No return
FF: No blow.
FC: No return.



PRESSURE SUMMARY

Time (min)	Pressure (psig)	Temp (deg F)	Annotation
0	2257.26	115.13	Initial Hydrostatic
1	17.93	112.93	Open To Flow 1
31	21.54	114.62	Churn 1
76	672.24	116.28	End Churn 1
77	22.40	115.97	Open To Flow 2
105	24.51	117.19	Churn 2
164	789.54	119.85	End Churn 2
165	2173.53	119.85	Final Hydrostatic

Recovery

Length (ft)	Core Description	Volume (cu ft)
20.00	7.88 in. dia. core	3.28

GAS RATES

Core Interval	Pressure (psig)	Gas Rate (SCF)

2680
2700
2720
2740
2760
2780
2800
2820
2840
2860
2880

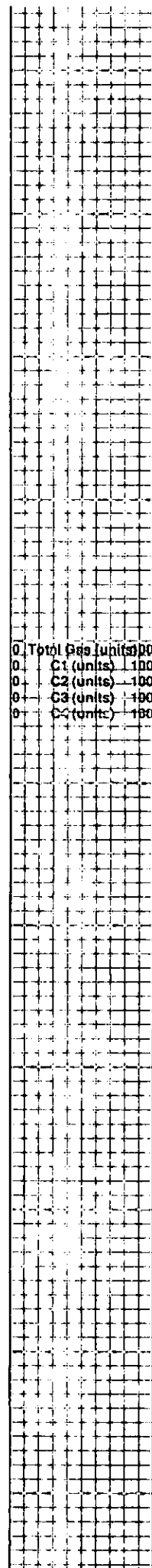
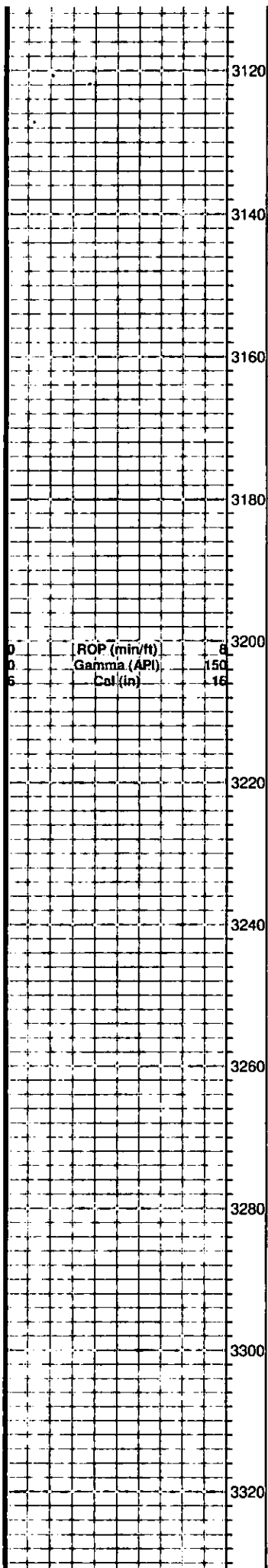
0	ROP (min/ft)	8
0	Gamma (API)	150
6	Cal (in)	16

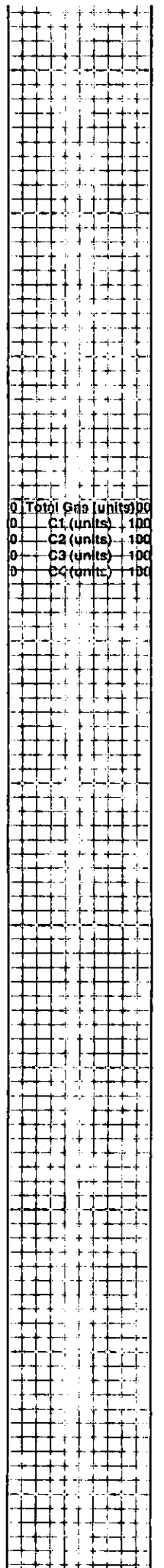
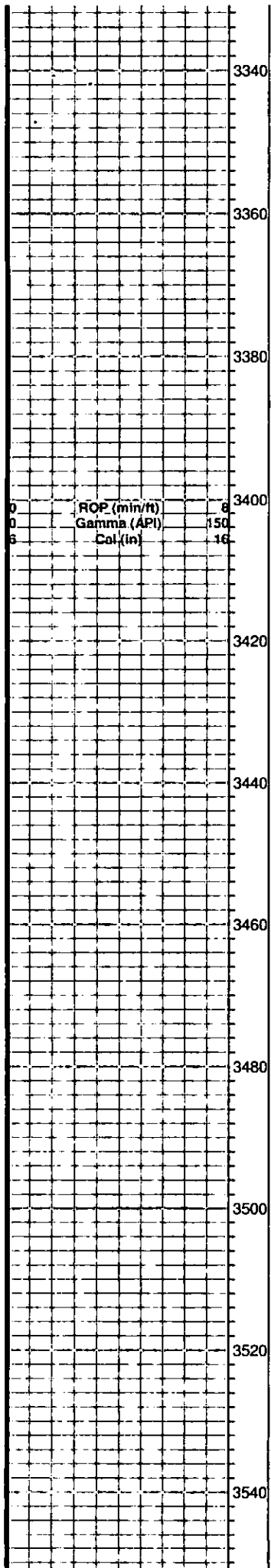
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

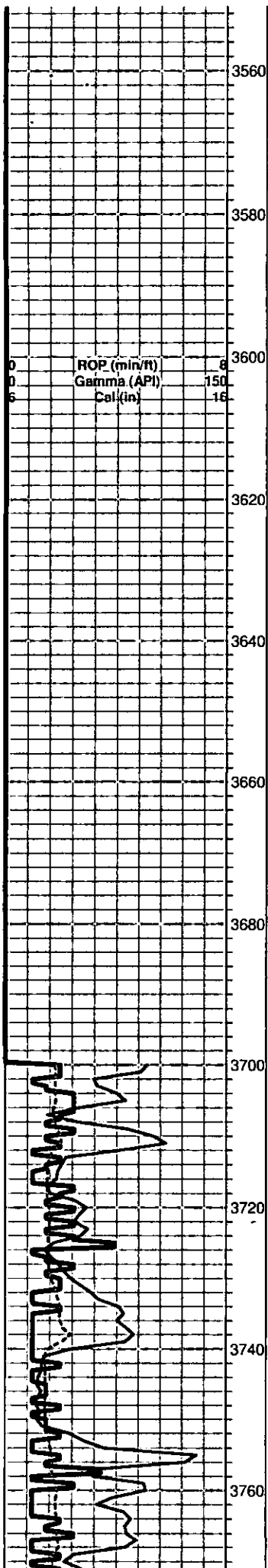
2900
2920
2940
2960
2980
3000
3020
3040
3060
3080
3100

0 ROP (min/ft) 8
0 Gamma (API) 150
5 Col. (in) 16

0 Total Gas (units) 100
0 C1 (units) 100
0 C2 (units) 100
0 C3 (units) 100
0 C4 (units) 100







0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

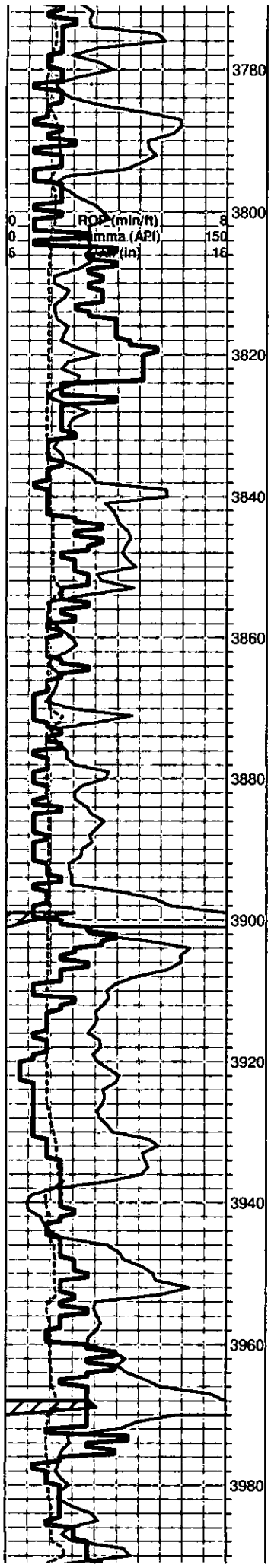
Lm- Cream Tan, granular w/ consistent porosity throughout, well rounded & sorted, slightly fossiliferous w/ crinoids, clean & barren NO ODR, NSO, NO STN

Sh- Gray Black Red, blocky & dense to rounded & silty, chalky sticky matrix, chips of clear well cemented rounded dolomite

Lm- Cream Tan, good porosity, well rounded & sorted, few chips of drk gray trashy Ls, clean & barren

Lm- Drk Tan Lt Gray, trashy, some reworked w/ fossil fragments, slightly fossiliferous w/ crinoids & fusulinids, more Sh & few chips of large grained, rounded & cemented Qtz clusters

Sh- Gray Red Black Maroon Pea Green, fissile, mostly blocky & well compacted, few chips of clear cemented rounded dolomite



clusters of clear, rounded, cemented & glauconite speckled

Lm- Tan Cream, silicious & oolitic, good development & porosity, clean & barren, more glauconite speckled clusters

Sh- Red Maroon Pea Green Lime Green Gray Black, dense, blocky, fissile, soft, flaky, chalky in part

Lm- Tan Cream, fine to medium grained, dolomitic w/ good micro vugular porosity, silicious & moderately dense w/ pinpoint porosity, oolitic, some less dense & partly chalky, few chips of gray dense microcrystalline w/ no visible porosity, clean & barren, few interbedded shales

Sh- Red Maroon Brown Gray Black, gritty & earthy, less compacted, argillaceous, red quartzose & argillaceous

Lm- Cream Tan, VF-F grained, moderately dense to fair pinpoint porosity, well consolidated & clean, some chalky in part, clean & barren

Lm- Cream Tan, silicious & oolitic, moderately dense, chalky in part

Lm- Cream Tan, slightly dolomitic & gritty, silicious, slightly fossiliferous w/ plant remains,

Sh- Black Red Maroon, fissile, dense, blocky, carbonaceous, gritty,

Ss- Dove Gray, fine grained well sorted & rounded, glauconite speckled, friable, clean & barre

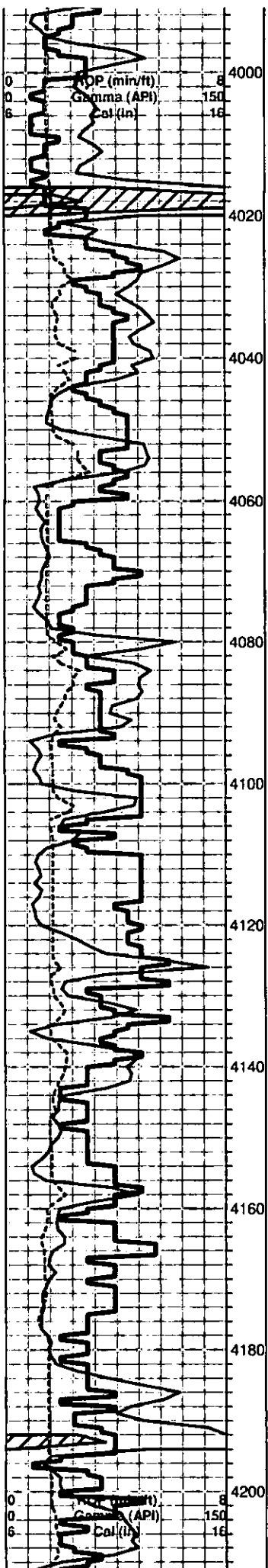
Lm- Cream Tan, gritty, dolomitic, siliceous & oolitic, moderately dense to micro vugular, clean & barren

Sh- Brown Maroon, gritty & soft

Lm- Cream Tan Lt Gray, VF-F XLN, micro to pinpoint porosity,

Lm- Cream Tan, mottled, bioturbated & slightly unconsolidated w/ pebbles, oolitic,

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



fossiliferous w/ fusulinds, chalky & silty in part

Lm- Cream Tan Buff, dolomitic & grainy, well developed w/ consistent micro vugular porosity throughout, clean & barren

HEEBNER 4020' (-966) E-LOG Sh- Black Gray, abundant carbonaceous fissile Sh, argillaceous & sticky white chalky

Lm- Buff Tan Cream, reworked bioclastic, unconsolidated, silicious w/ fossil fragments, moderately dense w/ pinpoint porosity

Sh- Black Gray Lime Green Brown, fissile & blocky, gritty brown & earthy,

TORONTO 4048' (-996) E-LOG Lm- Tan Cream Buff, bioturbation toward top, cleaning up to poorly developed, moderately dense VF XLN, silicious & fossiliferous w/ fauna casts

LKC 4059' (-1005) E-LOG Lm- Off White Tan, very oolitic, silicious, w/ good consistent pinpoint porosity throughout, clean & barren, abundant silty, chalky, sticky matrix

Lm- Cream Tan, Medium to coarse XLN, little to no visible porosity, poorly developed & moderately tight, clean & barren

Lm- Cream Tan, Coarse XLN, well developed w/ good interstitial porosity throughout, few specks FO upon crush, FNT ODR, BRIGHT FLOR & STRM WET CUT

Lm- Off White Cream, Fine to medium XLN, poorly developed w/ little to no visible porosity, crypto crystalline, moderately dense, chips speckled w/ pyrite, siltyed & chalky in part

Lm- Cream Tan Lt Gray, little visible to pinpoint porosity w/ good vuggy edge porosity & recrystallization, DRK HVY STN, SPKS OF FO UPON CRUSH, BRIGHT FLOR & STRM WET CUT

Lm- Off White Cream, coarse XLN, well developed w/ good interstitial porosity, DRK HVY SCATTERED STN, FEW GLOBULES OF FO UPON CRUSH, BRIGHT FLOR & WET CUT, SOME FLAKES OF RESIDUAL DO

Lm- Tan Cream, VF to coarse XLN, dense crypto crystalline w/ little to no visible porosity, reworked coarse XLN, compacted & friable, transitioning into clean white dolomitic Ls w/ consistent well developed interstitial porosity near bottom of bench, all clean & barren

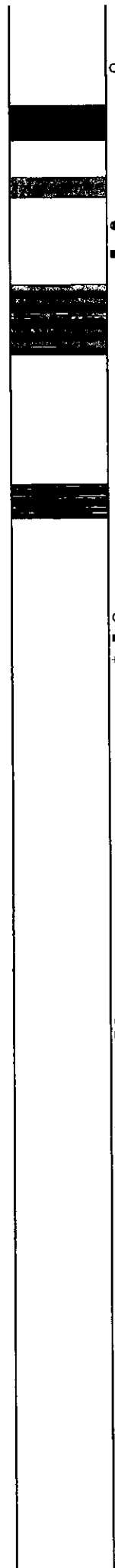
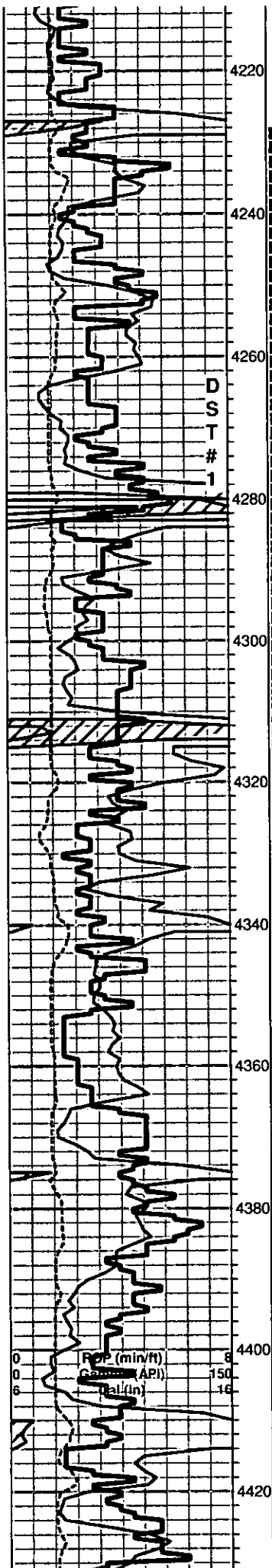
MUNCIE CREEK SHALE: Black Gray Lime Green Brown Maroon, fissile, earthy, blocky, smooth

0 Total Gas (units) 100
 0 C1 (units) 100
 0 C2 (units) 100
 0 C3 (units) 100
 0 C4 (units) 100

CFS @ 4115'

CFS @ 4145'

0 Total Gas (units) 100
 0 C1 (units) 100
 0 C2 (units) 100
 0 C3 (units) 100
 0 C4 (units) 100



○ Lm- Cream Tan, Fine to Medium XLN, scattered pinpoint porosity, some moderately dense, white chalk & siltstone, VRY FNT ODR, 2-3 chips w/ scattered LT RESIDUAL STN, NFO

Lm- Gray Cream Tan, reworked bioclastic trashy mix, fossiliferous w/ fusulinids

● Lm- Cream Off White, clean medium to coarse XLN, well developed w/ good vuggy porosity, both edge & consistent porosity throughout, SCATTERED LGT GSY STN, FO UPON CRUSH IN EACH CHIP w/ STN, FNT ODR, LIVELY GSY FO, SLOW STRM BRIGHT WET CUT

■ Lm- Tan Cream Buff, VF grained, cryptocrystalline, poorly developed & dense, little to no visible porosity, pyrite, chalky & silted in part toward bottom of bench,

○ Sh- Black Red Maroon Gray Dove Gray, abundant black carbonaceous & fissile shale, some gritty & earthy, smooth & well compacted, dove gray soft & very friable, silty, Ss

● Lm- Cream Tan Lt Gray, Fine to medium XLN, pinpoint porosity, oolitic, some slightly dolomitic, LT GSY STN, STRNG ODR, LT GSY SFO, SLOW WET CUT & FLOR, some moderately dense cryptocrystalline, development & stain diminishes w/ depth, semi-translucent & smokey gray bedded angular chert

* Sh- Black Maroon Red Gray, abundant black carbonaceous shale, some gritty & earthy, some smooth & blocky

Lm- Lt Brown Gray Tan Cream, reworked & trashy unconsolidated at the top, cleans up to a consolidated silicious VF-F XLN, little to no visible porosity, tight & poorly developed, w/ minimal scattered edge recrystallization, silty & chalky in part, clean & barren

○ BKC 4338' (-1284) E-LOG Sh- Black Red Maroon Purple, smooth & blocky, gritty earthy, pebbly unconsolidated siltstone, chalky & sticky

● Ss- Marron Lime Green Clear, frosted to clear, Ca cemented & highly effervescent w/ HCL, well rounded & sorted, VF grained, semi-friable, SFO UPON CRUSH, few floating semi-lively globules in cup, BRIGHT WET CUT UPON CRUSH, FNT ODR

○ MARMATON - 4365' (-1311) E-LOG Lm- Off White Cream Tan, VF-Coarse XLN, partial recrystallization & pinpoint porosity SCATTERED LT GSY STN, FEW CHIPS W/ FO UPON CRUSH, VRY FNT ODR some moderately dense w/ little to no visible porosity

Sh- Black Brown Maroon Red Lime Green, fissile, blocky, smooth edged gritty & smooth

Lm- Off White Cream, Coarse crystalline, all re-reworked clastic, mottled, good interstitial porosity, silted in w/ red wash shale, interbedded shale lenses

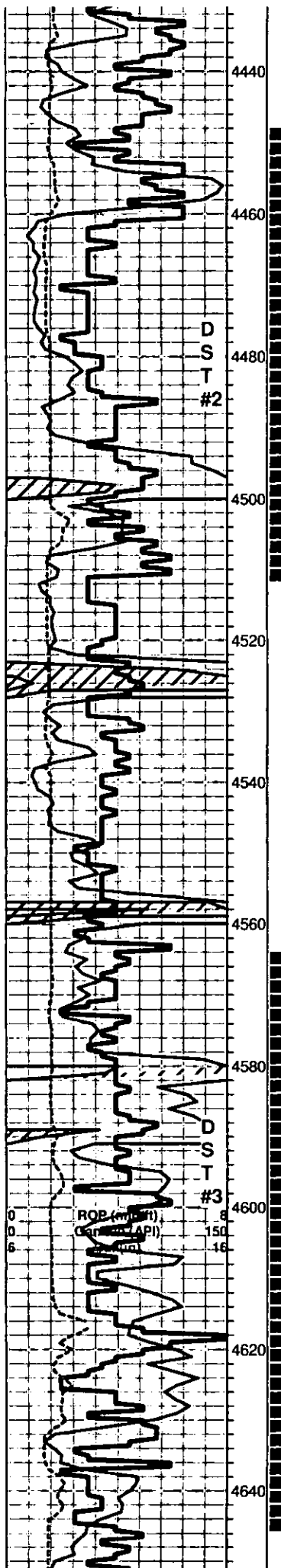
Sh- Red Gay Mint Green Maroon, fissile, mottled, blocky & dense, some flaky & micaceous.

CFS @ 4230'

CFS @ 4255'

CFS @ 4315'
DST #1
4228' - 4315'
SLOPE 3/4 dgr
STRAP 4326.62
BOARD 4324.51
STRAP + 2.11

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



Lm- Off White Cream, VF-Medium XLN, siliceous, little to no visible porosity, some chips w/ edge pinpoint porosity, LT SCATTERED STN, DO FLAKES, CLOUDY CUT, NO ODR

Lm- Tan Gray Lt Brown, unconsolidated reworked bioclastic, pebbles & fragments of fossils

Sh- Black Gray Green, slivers of well compacted fissile shale

Lm- Off White Cream, Coarse-Very Coarse crystalline, very well developed w/ consistent vuggy porosity throughout & some recrystallization in vugs, VRY LT GSY INTERSTITIAL STN, GOOD ODR, INSTANT BRIGHT FLOR & STREAMING WET CUT

Lm/Chert- Tan Cream Brown, reworked clastic, fossiliferous w/ fusulinds, unconsolidated & pebbly, some cryptocrystalline & dense w/ no visible porosity. Tan Semi-Translucent, angular & reworked chert, oolitic, some eroded & trashy

Sh- Black, abundant black shale

FT SCOTT - 4494' (-1440) E-LOG Lm- Lt Gray Tan Cream, Medium grained XLN, moderately dense w/ little to no visible porosity, few chips w/ edge solution porosity & recrystallization w/ VRY SCATTERED STN, NO ODR, NFO ,

Sh- Black Gray Red Maroon, abundant various colors, carbonaceous, blocky & smooth, fissile & brittle, gritty & earthy

Lm- Off White Cream, VF XLN, off white dense siltstone, several chips w/ DO FLAKES, ODR. Chert- Bone White Honey Brown, angular bedded

Lm- Cream Tan Lt Gray, some unconsolidated & pebbly, FXLN, w/ pinpoint porosity w/ silicious fossil remnants, clean & barren

Sh- Black, Abundant carbonaceous, fissile, flaky shale

Lm- Cream Tan, VF grained, silicious cherty Ls., dense cryptocrystalline, little to no visible porosity, poorly developed

Sh/Ls- Black carbonaceous shale interbedded w/ Fine to medium XLN w/ pinpoint porosity, chalky & silty in part, few pieces of reworked oolitic white chert

JOHNSON 4589' (-1535) E-LOG Lm- Cream Tan, medium XLN, clean, no visible porosity, bedded Lt Gray & Honey Brown chert, angular

Lm- Cream Tan Lt Gray, Fine to Coarse XLN, poorly developed w/ little visible porosity to pinpoint, small chips w/ pinpoint porosity & w/ LT SCATTERED STN, FNT ODR, MINIMAL FO UPON CRUSH, CLOUDY WET CUT

Sh- Black Gray Maroon Red Brown, blocky & well compacted, smooth

Ss - VF grained clusters, consolidated & well rounded, very friable, some silted in & better cemented, few clusters speckled w/ DO, few clusters had VRY LITTLE FO UPON crush, VRY FNT ODR,

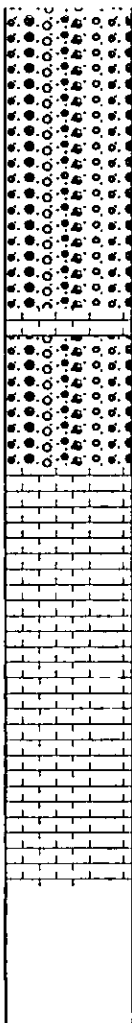
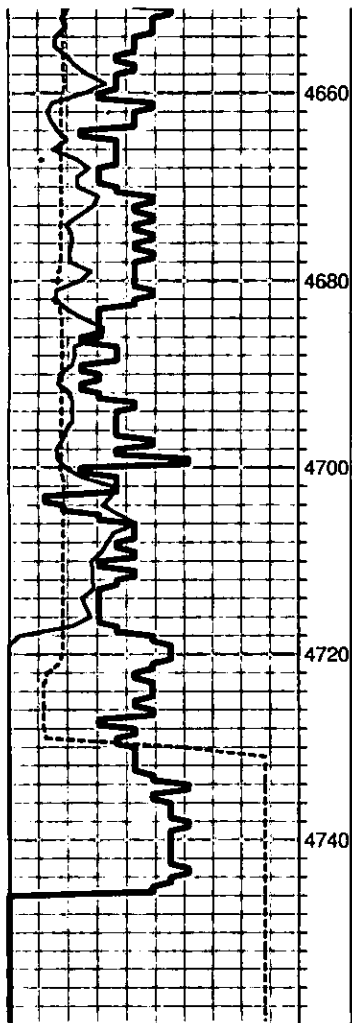
Conglomerate - Various colors, argillaceous & sticky, blocky & well compacted, gritty, blocky & waxy, mottled, some unconsolidated & pebbly, clear & frosted sub-rounded large individual quartz grains

DST #2
4448' - 4510'

Total Gas (units) 100
C1 (units) 100
C2 (units) 100
C3 (units) 100
C4 (units) 100

LOST PUMP
MOTOR @ 4605'

LOST 2nd PUMP
MOTOR @ 4644'



4660
 Conglomerate- various colored gritty shales A/A, silted quartz clusters w/ sub-rounded grains, eroded chert

4680
 Conglomerate- Yellow, Purple, Maroon, various colored eroded chert, some unconsolidated & silted in, some well compacted & dense. Ls- few pieces of cryptocrystalline & dense tan and buff. Ss- VF grained, well-rounded, some unconsolidated w/ shale matrix, some clean & very friable w/ silty matrix.

Lm- Cream Buff, Medium XLN w/ pinpoint porosity, moderately dense, clean & barren

4700
 Conglomerate- Various colored eroded & reworked chert. Slightly dolomitic Ls, Tan, Cream, medium grained, consolidated w/ pinpoint porosity throughout. Sh- Various colored, mottled, grainy, dense & blocky, slivers. All clean & barren.

Lm- Cream Buff, A/A, oolitic, dolomitic, medium grained, loosely cemented w/ consistent pinpoint porosity, few chips of bedded golden brown chert

4720
 Lm- A/A, silty, chalky matrix, Sh- Black Maroon Gray, Fissile, gritty & earthy

Lm- Gray Brown, oolitic & fossiliferous mud supported matrix, bioclastic mudstone, trashy

RTD 4745' (-1691) LTD @ 11:31 AM 9/3/2011