



KANSAS CORPORATION COMMISSION 1091813  
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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- 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 #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_- Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

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



1091813

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ 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

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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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 type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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**PAID**  
4-30-12  
FNB SP# 8414

PAGE 1 of 1	CUST NO 1004072	INVOICE DATE 04/17/2012
INVOICE NUMBER 1718 - 90881190		

Pratt (620) 672-1201  
 B STRATA EXPLORATION  
 I PO Box: 401  
 L FAIRFIELD  
 L IL US 62837  
 T  
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Aaron Einsel 3-4  
 O LOCATION  
 B COUNTY Kiowa  
 S STATE KS  
 I JOB DESCRIPTION Cement-New Well Casing/Pi  
 T  
 E JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40452784	27463		Net - 30 days	05/17/2012

For Service Dates: 04/13/2012 to 04/13/2012

0040452784

171806126A Cement-New Well Casing/Pi 04/13/2012  
 Cement 8 5/8" Surface

LEASE 4/20 A. EINSEL # 3-4	LEV 5	P/P 4/20
DES CEMENT SURE CASING		A/P 4/25
DRL X	COM X	LOE G/L 71730/9239 06

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
A-Serv Lite	175.00	EA	10.40	1,820.00 T
Common	175.00	EA	12.80	2,240.00 T
Cello-flake (POLEFLAKE-C)	88.00	EA	2.96	260.48 T
Calcium Chloride	825.00	EA	0.84	693.00 T
"Top Rubber Cmt Plug, 8 5/8""	1.00	EA	180.00	180.00
"8 5/8"" Guide Shoe (Red)"	1.00	EA	440.00	440.00
Flapper Type Insert Float Valve, 8 5/8"	1.00	EA	224.00	224.00
"8 5/8"" Basket (Blue)"	1.00	EA	252.00	252.00
"Unit Mileage Chg (PU, cars one way)"	30.00	MI	3.40	102.00
Heavy Equipment Mileage	60.00	MI	5.60	336.00
"Proppant & Bulk Del. Chgs., per ton mil	495.00	EA	1.28	633.60
Depth Charge; 501'-1000'	1.00	EA	960.00	960.00
Blending & Mixing Service Charge	350.00	BAG	1.12	392.00
Plug Container Util. Chg.	1.00	EA	200.00	200.00
"Service Supervisor, first 8 hrs on loc.	1.00	EA	140.00	140.00

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	8,873.08
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	365.98
PO BOX 841903	PO BOX 10460	INVOICE TOTAL	9,239.06
DALLAS, TX 75284-1903	MIDLAND, TX 79702		



Customer <i>Shale Exploration</i>		Lease No.		Date	
Lease <i>Aspen Energy</i>		Well # <i>3-4</i>		<i>4-13-12</i>	
Field Order # <i>6126</i>	Station <i>Plant</i>	Casing <i>8 5/8</i>	Depth <i>580</i>	County <i>Kiowa</i>	State <i>KS</i>
Type Job <i>C New 8 5/8 Surface</i>			Formation	Legal Description <i>4-28-18</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <i>5 7/8</i>	Tubing Size	Shots/Ft	<i>175</i>	Acid <i>A-5012 L-10</i>	<i>0.17</i>	RATE	PRESS	ISIP
Depth <i>580</i>	Depth	From	To <i>175</i>	Pre Pad <i>Common</i>	Max <i>1.00</i>			5 Min.
Volume <i>36.81</i>	Volume	From	To	Pad	Min			10 Min.
Max Press <i>300</i>	Max Press	From	To	Frac	Avg			15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth <i>580</i>	Packer Depth	From	To	Flush <i>35.7</i>	Gas Volume			Total Load

Customer Representative			Station Manager <i>Dave Scott</i>			Treater <i>Steve Wilcox</i>		
Service Units	<i>27283</i>	<i>27463</i>	<i>19826</i>	<i>19860</i>				
Driver Names	<i>Wilson</i>	<i>M. Hill</i>	<i>P. 500</i>					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>5:00 AM</i>					<i>On location - Safety meeting</i>
					<i>Run 14 7/8 8 5/8 casing</i>
					<i>guide shoe + float collar 1st 51'</i>
					<i>Basket 80' from surface</i>
					<i>Casing on bottom</i>
					<i>Break circulation with Rin</i>
<i>8:15</i>	<i>300</i>		<i>77</i>	<i>5</i>	<i>Mix 175 lbs A-5012 L-10 @ 10<sup>2</sup>/gal</i>
<i>8:40</i>	<i>300</i>		<i>37</i>	<i>5</i>	<i>Mix 175 lbs Common @ 15.6<sup>2</sup>/gal</i>
					<i>Shut Down</i>
					<i>Release plug</i>
<i>8:52</i>	<i>0</i>		<i>0</i>	<i>5</i>	<i>Start H<sub>2</sub>O Displacement</i>
<i>8:57</i>	<i>300</i>		<i>24</i>	<i>4</i>	<i>Concent to surface</i>
<i>9:00 AM</i>	<i>300</i>		<i>36</i>	<i>4</i>	<i>plug down hold</i>
					<i>Circulation T. New Job</i>
					<i>circulated 12 bbls cement to surface</i>
					<i>Job Complete</i>
					<i>Thank Steve</i>



**PAID**  
 3-15-12  
 FNB SP # 8518

PAGE 1 of 1	CUST NO 1004072	INVOICE DATE 04/24/2012
INVOICE NUMBER <b>1717 - 90886459</b>		

**Liberal** (620) 624-2277  
 B STRATA EXPLORATION  
 I PO Box: 401  
 L FAIRFIELD  
 L IL US 62837  
 T  
 O **ATTN:** ACCOUNTS PAYABLE

J **LEASE NAME** Aaron Einsel #3-4  
 O **LOCATION**  
 B **COUNTY** Kiowa  
 S **STATE** KS  
 I **JOB DESCRIPTION** Cement-New Well Casing/Pi  
 T  
 E **JOB CONTACT**

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
40455392	38111		Net - 30 days	05/24/2012

**For Service Dates: 04/23/2012 to 04/23/2012**

0040455392

171702850A Cement-New Well Casing/Pi 04/23/2012  
 5 1/2" Longstring

LEASE 4/26	A. EINSEL		3-4	5	P/P 5/7
DES	CEMENT LONGSTRING				A/P 5/14
DRL	COM X	LOE	G/L 73.551/11943	34	D/D

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
50/50 POZ	250.00	EA	8.25	2,062.49 T
Gypsum	1,050.00	EA	0.56	590.63 T
KCL, Potassium Chloride	566.00	EA	1.13	636.75 T
C-15	126.00	EA	9.38	1,181.25 T
Celloflake	63.00	EA	2.78	174.83 T
Gilsonite	1,500.00	EA	0.50	753.75 T
"Latch Down Plug & Baffle, 5 1/2" (Blu	1.00	EA	300.00	300.00
"Auto Fill Float Shoe 5 1/2" (Red)"	1.00	EA	506.25	506.25
Econimizer Hinged Centralizer, 5 1/2"	12.00	EA	56.25	675.00
Cement Baskets, Canvas, 5 1/2"	1.00	EA	716.25	716.25
Mud Flush	1,000.00	EA	0.65	645.00 T
Heavy Equipment Mileage	60.00	MI	5.25	315.00
Blending & Mixing Service Charge	250.00	BAG	1.05	262.50
"Proppant & Bulk Del. Chgs., per ton mil	315.00	EA	1.20	378.00
Depth Charge; 4001'-5000'	1.00	EA	1,890.00	1,890.00
Plug Container Util. Chg.	1.00	EA	187.50	187.50
"Unit Mileage Chg (PU, cars one way)"	30.00	MI	3.19	95.63
"Service Supervisor, first 8 hrs on loc.	1.00	EA	131.25	131.25

<b>PLEASE REMIT TO:</b>	<b>SEND OTHER CORRESPONDENCE TO:</b>	<b>SUB TOTAL</b>	<b>11,502.08</b>
<b>BASIC ENERGY SERVICES, LP</b>	<b>BASIC ENERGY SERVICES, LP</b>	<b>TAX</b>	<b>441.26</b>
<b>PO BOX 841903</b>	<b>PO BOX 10460</b>	<b>INVOICE TOTAL</b>	<b>11,943.34</b>
<b>DALLAS, TX 75284-1903</b>	<b>MIDLAND, TX 79702</b>		

✓  
x



**BASIC**<sup>SM</sup>  
ENERGY SERVICES  
PRESSURE PUMPING & WIRELINE

1700 S. Country Estates Rd.  
P.O. Box 129  
Liberal, Kansas 67905  
Phone 620-624-2277

FIELD SERVICE TICKET  
1717 02850 A

DATE \_\_\_\_\_ TICKET NO. \_\_\_\_\_

DATE OF JOB 4-23-12		DISTRICT Liberal # 1717		NEW WELL <input checked="" type="checkbox"/>		OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/>		INJ <input type="checkbox"/>		WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:	
CUSTOMER Strata Exploration				LEASE Aaron Einsel				WELL NO. 3-4							
ADDRESS				COUNTY Kiowa				STATE KS							
CITY				STATE				SERVICE CREW Kirby, Ruben, Scott							
AUTHORIZED BY Tyce Davis JRB				JOB TYPE: 5 1/2 Production 2-42											
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	PM	TIME					
21755	11	38111	11	30464	11		4-23-12			0130					
		19919	11	37547	11	ARRIVED AT JOB				1100					
						START OPERATION				1650					
						FINISH OPERATION				1800					
						RELEASED				1830					
						MILES FROM STATION TO WELL									

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: \_\_\_\_\_  
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CL104	50/50 Poz	Sk	250		2750 00
CC103	Gypsum	lb	1050		787 50
C700	KCL	lb	566		849 00
CC103	C-15	lb	126		1575 00
CC102	Cells/Flake	lb	63		233 10
CC201	Gilsonite	lb	1500		1005 00
CF607	Latch Down Plug + Baffle Plate	EA	1		400 00
CF1201	Auto 11 float shoe	EA	1		675 00
CF4452	Turbobits	EA	12		900 00
CF4552	Cement Basket	EA	1		955 00
CF4005	Scratchers	EA	0		
CC151	Mud flush	Gal	1000		860 00
C704	Claymax	Gal	0		
E101	Heavy Vehicle Mileage	MI	60		420 00
CE240	Blending + mixing service charge	SK	250		350 00
E113	Bulk delivery charge	Tm	315		504 00
CE205	Depth Charge 4001-5000	4hrs	1		2520 00
CE504	Plug Container Utilization Charge	Job	1		250 00
					<b>250 00</b>

SUB TOTAL 11,502 08

SERVICE & EQUIPMENT %TAX ON \$  
MATERIALS %TAX ON \$

TOTAL

CHEMICAL / ACID DATA:			

SERVICE REPRESENTATIVE Kirby Hopper

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: \_\_\_\_\_  
(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

ATTN: Jon Christensen

Job Ticket: 47483

**DST#: 1**

Test Start: 2012.04.18 @ 10:26:02

## GENERAL INFORMATION:

Formation: **Lansing "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:42:47

Time Test Ended: 18:21:32

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 45

**Interval: 4218.00 ft (KB) To 4234.00 ft (KB) (TVD)**

Reference Elevations: 2207.00 ft (KB)

Total Depth: 4234.00 ft (KB) (TVD)

2196.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6798 Inside**

Press @ Run Depth: 75.40 psig @ 4219.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.18

End Date:

2012.04.18

Last Calib.:

2012.04.18

Start Time: 10:26:03

End Time:

18:21:32

Time On Btm:

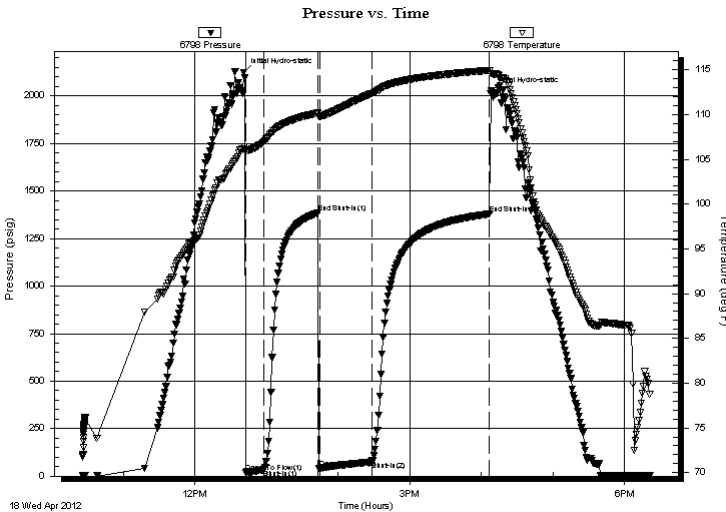
2012.04.18 @ 12:40:47

Time Off Btm:

2012.04.18 @ 16:08:02

**TEST COMMENT:** IF: Fair Blow , BOB in 15 minutes  
IS: No Blow back  
FF: Fair Blow , Built To 10 1/2 inches  
FS: No Blow Back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.06	106.18	Initial Hydro-static
2	21.04	105.97	Open To Flow (1)
18	34.05	106.99	Shut-In(1)
63	1384.10	110.16	End Shut-In(1)
64	39.19	109.78	Open To Flow (2)
108	75.40	112.37	Shut-In(2)
206	1379.83	114.93	End Shut-In(2)
208	2025.18	114.57	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	MCW 5%M 95%W	0.30
62.00	WOCM 26%W 30%O 44%M	0.30
2.00	Oil	0.01
0.00	372 GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

Job Ticket: 47483

**DST#: 1**

ATTN: Jon Christensen

Test Start: 2012.04.18 @ 10:26:02

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

49000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	MCW 5%M 95%W	0.305
62.00	WOCM 26%W 30%O 44%M	0.305
2.00	Oil	0.010
0.00	372 GIP	0.000

Total Length: 126.00 ft      Total Volume: 0.620 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

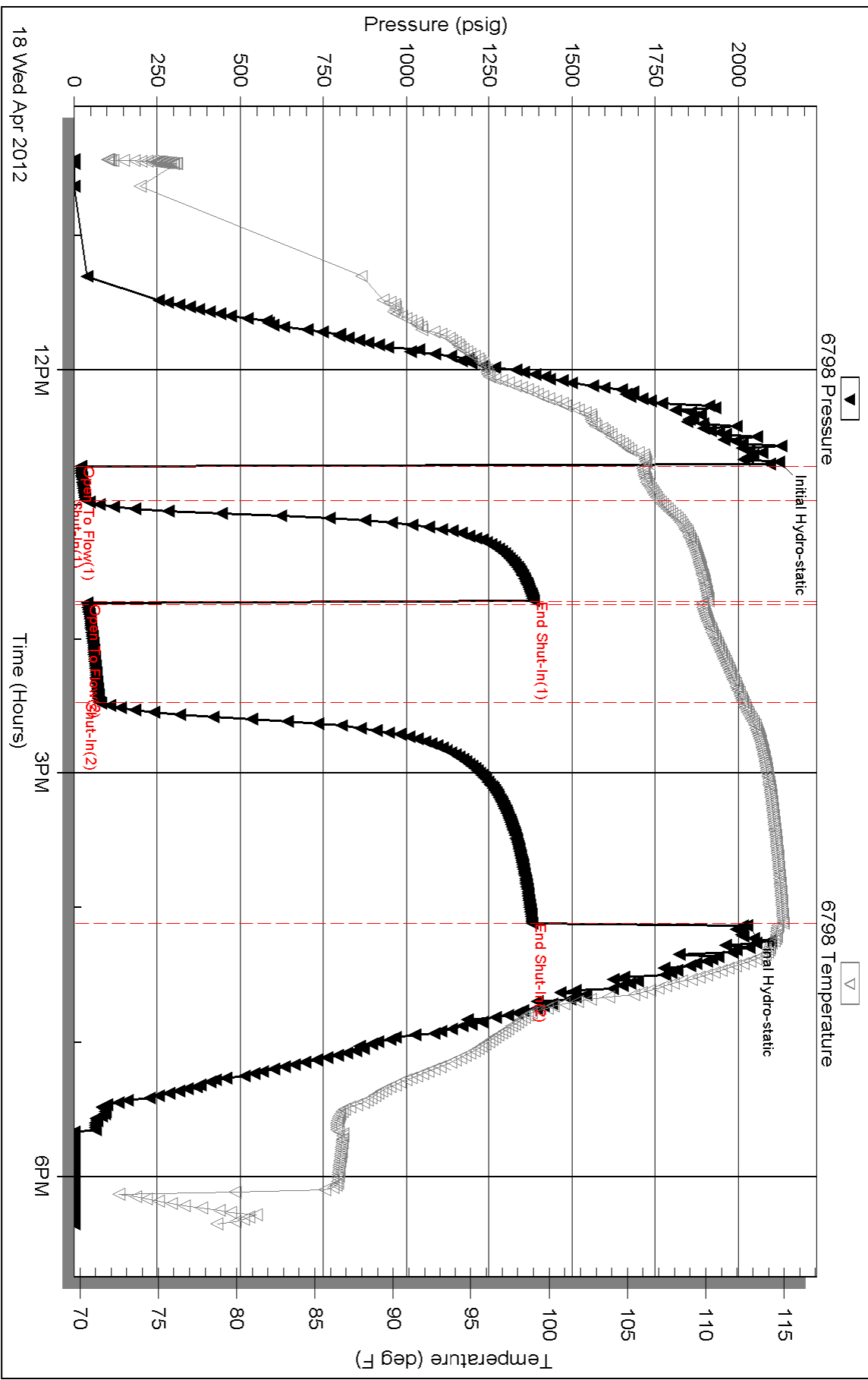
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .14 @ 79 degrees

# Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

ATTN: Jon Christensen

Job Ticket: 47484

**DST#: 2**

Test Start: 2012.04.20 @ 20:00:02

## GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:58:47

Time Test Ended: 05:15:47

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 45

**Interval: 4765.00 ft (KB) To 4783.00 ft (KB) (TVD)**

Reference Elevations: 2207.00 ft (KB)

Total Depth: 4783.00 ft (KB) (TVD)

2196.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6798 Inside**

Press @ Run Depth: 16.33 psig @ 4766.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.20

End Date:

2012.04.21

Last Calib.: 2012.04.21

Start Time: 20:00:03

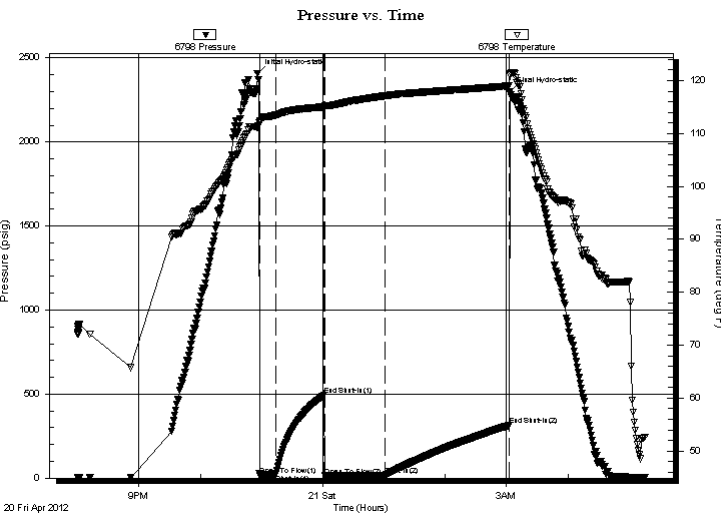
End Time:

05:15:47

Time On Btm: 2012.04.20 @ 22:56:02

Time Off Btm: 2012.04.21 @ 03:03:02

**TEST COMMENT:** IF: Strong Blow , BOB in 3 minutes  
IS: 2 inch Blow Back  
FF: Strong Blow , BOB Immediate  
FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2408.51	111.21	Initial Hydro-static
3	17.81	112.20	Open To Flow (1)
18	23.71	113.45	Shut-In(1)
66	493.14	115.03	End Shut-In(1)
66	13.45	115.05	Open To Flow (2)
125	16.33	117.10	Shut-In(2)
246	312.63	118.98	End Shut-In(2)
247	2297.93	121.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	1364 GIP	0.00
5.00	Mud	0.02

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

Job Ticket: 47484

**DST#: 2**

ATTN: Jon Christensen

Test Start: 2012.04.20 @ 20:00:02

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	1364 GIP	0.000
5.00	Mud	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

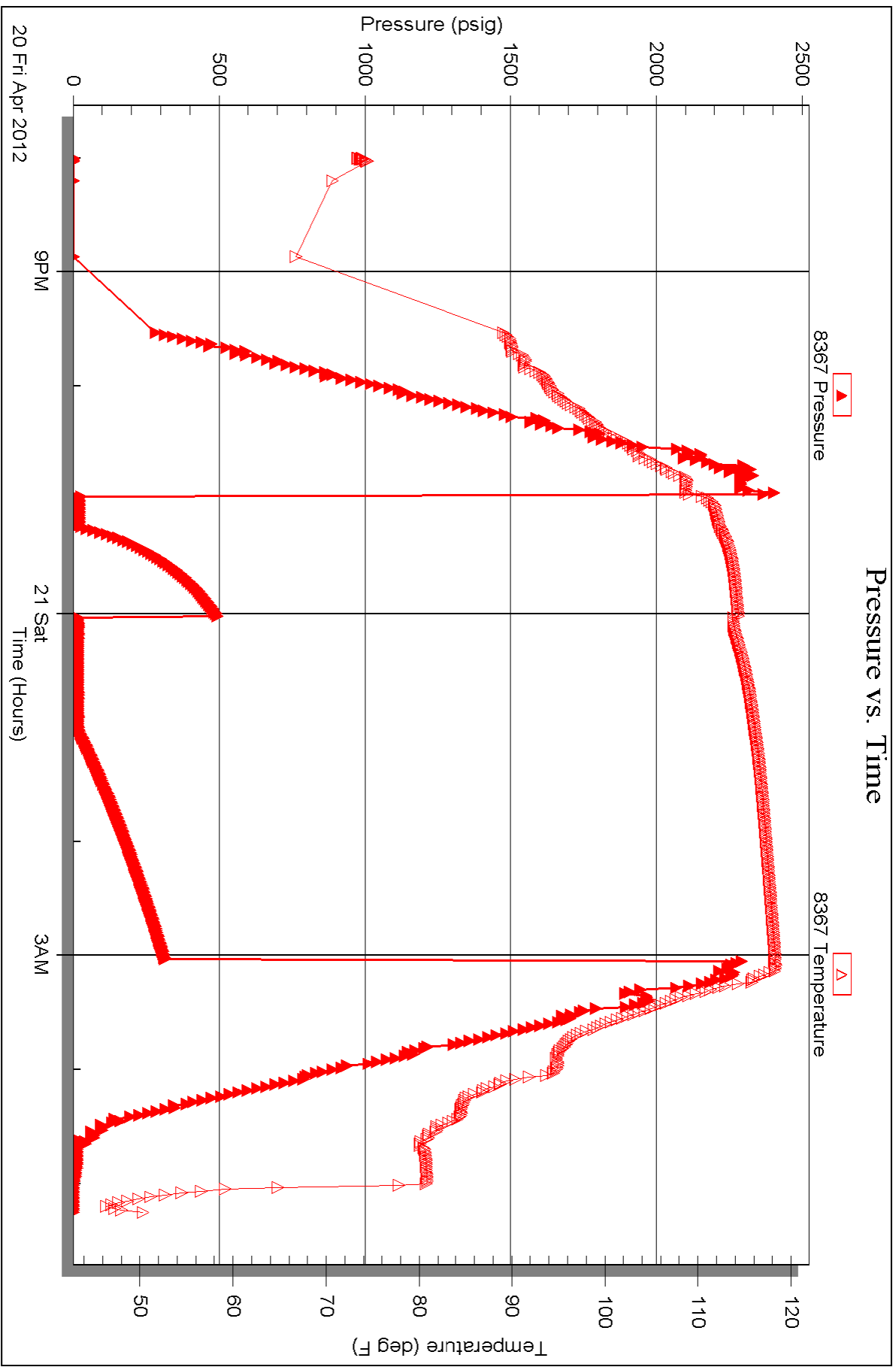
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







# LITHOLOGY STRIP LOG

## WellSight Systems

Scale 1:240 (5"=100') Imperial

Well Name: Aaron Einsel #3-4  
Location: 1582' FNL & 667' FEL, Sec. 4-T28S-R18W, Kiowa Co., KS.  
Licence Number: 15-097-21723-0000 Region: Greensburg SW  
Spud Date: 4/12/2012 Drilling Completed: 4/22/2012  
Surface Coordinates: 1582' FNL & 667' FEL, Sec. 4-T28S-R18W

Bottom Hole Same as above  
Coordinates:  
Ground Elevation (ft): 2196' K.B. Elevation (ft): 2207'  
Logged Interval (ft): 3400' To: 4900' Total Depth (ft): 4900'  
Formation: Kinderhook at Total Depth  
Type of Drilling Fluid: Freshwater/Gel to 3160'; Chemical Gel 3160' to 4900'

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

### OPERATOR

Company: Strata Exploration, Inc.  
Address: P.O. Box 401  
Fairfield, IL. 62837-0401

### GEOLOGIST

Name: Jon D. Christensen  
Company: Consulting Petroleum Geologist  
Address: 9002 W. Silver Hollow St.  
Wichita, KS. 67205-8856

### Cores

None Taken

### DSTs

DST #1(Lansing 'A') 4214' - 4230'(Corrected Depths to LOG) Test Times 15"-45"-45"-90" IFP Fair Blow built to BOB/15", FFP Fair Blow built to 10.5", no Blowback on SI's; REC: 372' Gas in Pipe, 2' Clean Oil, 62' WOCM(30%O, 26%W, 44%M), 62' MSW(95%W, 5%M), CI 70,000, Mud 8000; IFP 21-34#, ISIP 1384#, FFP 39-75#, FSIP 1380#, IHP 2123#, FHP 2025#, BHT 115 Deg. F.

DST #2(Basal Cherokee Lmst.) 4761' - 4779'(Corrected Depths to LOG) Test Times 15"-45"-60"-120" IFP Strong Blow BOB/3", 2" Blowback on ISI, FFP Strong Blow BOB/As soon as Tool Open, no Gas to Surface, no Blowback on FSI; REC: 1364' Gas in Pipe, 5' Drlg. Mud, no oil, no water; IFP 18-24#, ISIP 493#, FFP 13-16#, FSIP 313#, IHP 2408#, FHP 2298#, BHT 121 Deg. F.

DST #3(Mississippi Chert) 4896' - 4811'(Corrected Depths to LOG) Test Times 15"-45"-45"-90" IFP Strong Blow BOB/10 Sec. Gas to Surface in 12 Min., Gauged 353 MCFG in 15 Min; FFP Gas to Surface throughout, decreased to 178 MCFG in 45" of FFP, no Blowback on SI's; REC: 4777' GIP, 5' Drlg. Mud, no oil, no water; IPF 50-77#, ISIP 1358#, FFP 55-42#, FSIP 1278#, IHP 2417#, FHP 2306#, BHT 115 Deg. F.

## Comments

4/12/12 MIRU Sterling Drilling Rig #2, Spud at 6:15PM.; 4/13/12 TD. 580' - Running 8 5/8" Surface Casing; 4/14/12 Drilling at 1495'; 4/15/12 Drilling at 2708'; 4/16/12 Drilling at 3377'; 4/17/12 Drilling at 3752'; 4/18/12 TD. 4234' - CCH for DST #1; 4/19/12 Drilling at 4394'; 4/20/12 TD. 4722' - CFS; 4/21/12 TD. 4783' - TIH after DST #2; 4/22/12 Drilling at 4890' - reached TD. at 7:15 AM. - CCH, TOH for Logs(Halliburton) - LTD. 4896'; 4/23/12 RTD. 4900', LTD. 4896' - LDDP for setting new 5 1/2" Production Casing.

Set new 8 5/8"(23#) Surface Casing at 580' w/350 sx. Cement did Circulate(Basic Energy Services). PD. 9:00 AM. 4/13/12.

Set new 5 1/2"(15.5#) Production Casing at 4894' w/200 sx.(Basic Energy Services). PD. 5:30 PM. 4/23/12.

Surveys: 0.5 Deg. at 580'(Surface Casing); 0.75 Deg. at 3477'(Bit Trip); 0.75 Deg. at 4234'(DST #1); 1.25 Deg. at 4783'(DST #2); 1 Deg. at 4900' RTD.

No Pipe Strap was taken on the well, windy conditions prevailed during DST's.

After review of the Halliburton Logs, DST data, structural position and shows of commercial amounts of hydrocarbons, the operator elected to set new 5 1/2" Production Casing for completion in the Mississippi Chert.

LOG TOPS: Blaine Gypsum 1130(+1077), Chase 2448(-241), Stotler Lmst. 3410(-1203), Howard 3612(-1405), Heebner Shale 4047(-1840), Toronto 4059(-1852), Brown Lmst. 4202(-1995), Lansing 'A' 4214(-2007), Lansing/KC. 'H' 4373(-2166), KC. 'I' 4421(-2214), Stark Shale 4511(-2304), Base Kansas City 4608(-2401), Pleasanton 4629(-2422), Marmaton 4654(-2447), Pawnee 4697(-2490), Cherokee Shale 4735(-2528), Miss. Chert 4792(-2585), Kinderhook Shale 4840(-2633), Kinderhook Sand 4870(-2663).



































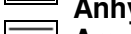




































NOTE: This log was shifted upward by 3' to 5' for correlation purposes with the Halliburton LOGS.

Prior to abandonment of the Aaron Einsel #3-4, the Cherokee Lmst. zone should be perforated and tested from 4769' - 4772'. Also, the Altamont section of the Marmaton exhibited minor oil shows with a gas kick, and should be tested from 4666' - 4670'. The Lansing 'A' zone should be tested from 4217' - 4222'(see DST #1) log depths.

### ROCK TYPES

 Anhy	 Clyst	 Gyp	 Mrlst	 Shgy
 Bent	 Coal	 Igne	 Salt	 Sltst
 Brec	 Congl	 Lmst	 Shale	 Ss
 Cht	 Dol	 Meta	 Shcol	 Till

### ACCESSORIES

<b>MINERAL</b>		<b>FOSSIL</b>	
 Anhy	 Gyp	 Algae	 Ostra
 Arggrn	 Hvymin	 Amph	 Pelec
 Arg	 Kaol	 Belm	 Pellet
 Bent	 Marl	 Bioclst	 Pisolite
 Bit	 Minxl	 Brach	 Plant
 Brecfrag	 Nodule	 Bryozoa	 Strom
 Calc	 Phos	 Cephal	<b>STRINGER</b>
 Carb	 Pyr	 Coral	 Anhy
 Chtdk	 Salt	 Crin	 Arg
 Chtlt	 Sandy	 Echin	 Bent
 Dol	 Silt	 Fish	 Coal
 Feldspar	 Sil	 Foram	 Dol
 Ferrpel	 Sulphur	 Fossil	 Gyp
 Ferr	 Tuff	 Gastro	 Ls
 Glau		 Oolite	 Mrst
			 Sltstrg
			 Ssstrg
			<b>TEXTURE</b>
			 Boundst
			 Chalky
			 Cryxln
			 Earthy
			 Finexln
			 Grainst
			 Lithogr
			 Microxln
			 Mudst
			 Packst
			 Wackest

**OTHER SYMBOLS**

- POROSITY**  
 [E] Earthy  
 [B] Fenest  
 [F] Fracture  
 [X] Inter  
 [M] Moldic  
 [O] Organic  
 [P] Pinpoint

- [V] Vuggy  
**SORTING**  
 [W] Well  
 [M] Moderate  
 [P] Poor

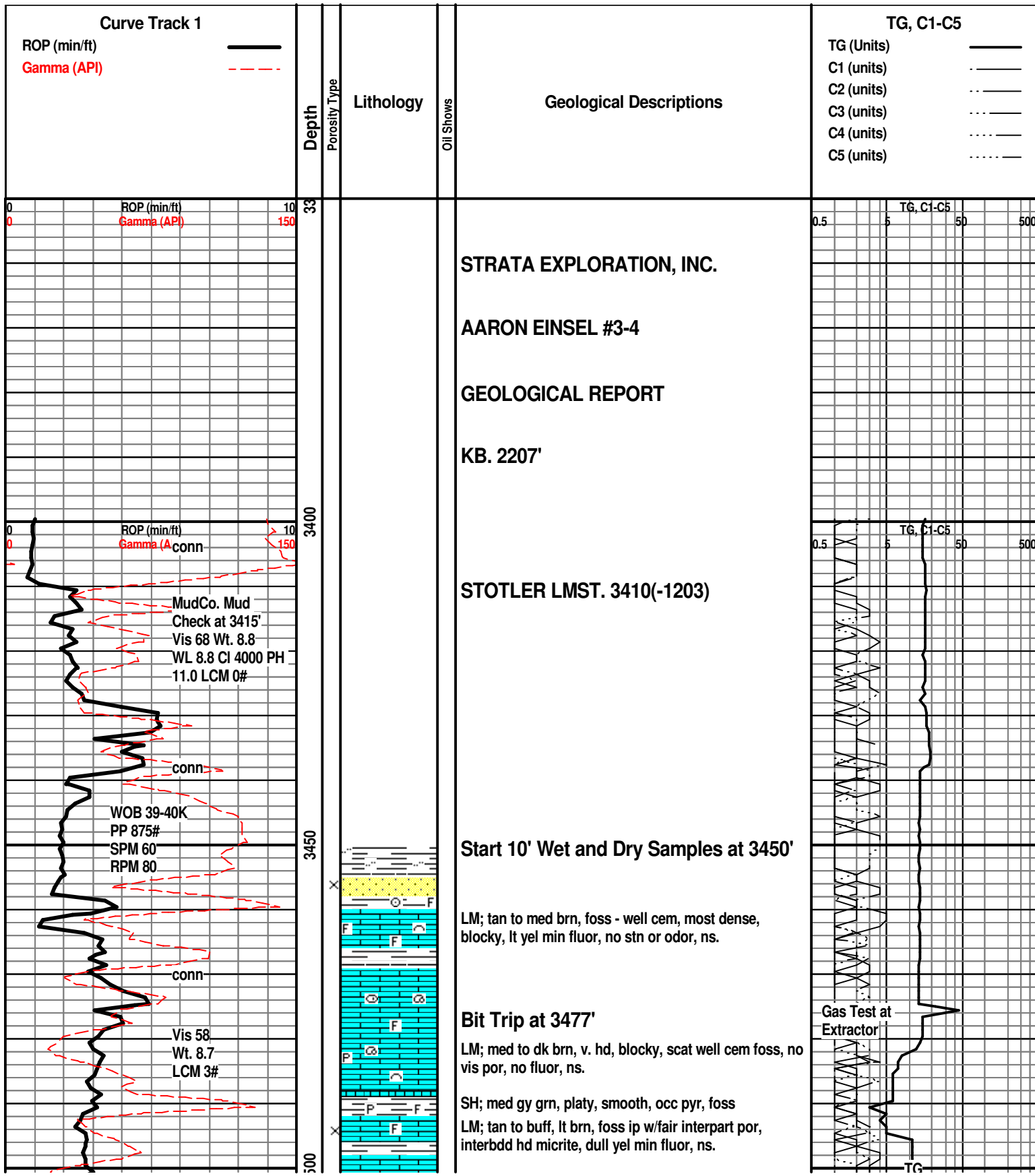
- ROUNDING**  
 [R] Rounded  
 [r] Subrnd  
 [a] Subang  
 [A] Angular

- [S] Spotted  
 [Q] Ques  
 [D] Dead

- EVENT**  
 [Rft] Rft  
 [Sd] Sidewall

- INTERVAL**  
 [C] Core  
 [D] Dst

- OIL SHOW**  
 [E] Even



**Curve Track 1**

ROP (min/ft) ———  
 Gamma (API) - - - - -

**TG, C1-C5**

TG (Units) ———  
 C1 (units) - - - - -  
 C2 (units) . . . . .  
 C3 (units) . . . . .  
 C4 (units) . . . . .  
 C5 (units) . . . . .

STRATA EXPLORATION, INC.

AARON EINSEL #3-4

GEOLOGICAL REPORT

KB. 2207'

STOTLER LMST. 3410(-1203)

MudCo. Mud  
 Check at 3415'  
 Vis 68 Wt. 8.8  
 WL 8.8 CI 4000 PH  
 11.0 LCM 0#

WOB 39-40K  
 PP 875#  
 SPM 60  
 RPM 80

Start 10' Wet and Dry Samples at 3450'

LM; tan to med brn, foss - well cem, most dense, blocky, lt yel min fluor, no stn or odor, ns.

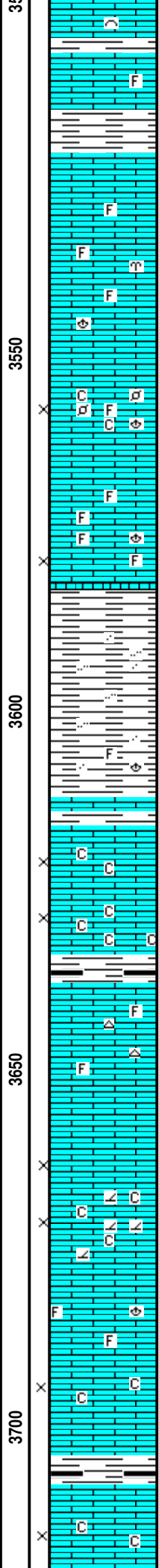
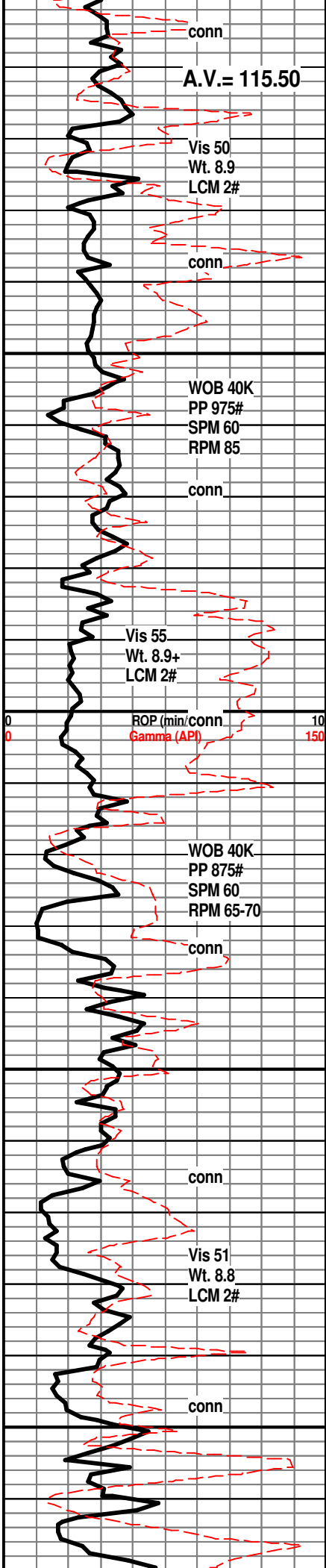
Bit Trip at 3477'

LM; med to dk brn, v. hd, blocky, scat well cem foss, no vis por, no fluor, ns.

SH; med gy grn, platy, smooth, occ pyr, foss

LM; tan to buff, lt brn, foss ip w/fair interpart por, interbdd hd micrite, dull yel min fluor, ns.

Gas Test at  
 Extractor



LM; med brn, gy brn, hd, blocky, dense, rare foss mat, tite

LM; med to dk brn, micritic, v. hd, tite, rare foss.

SH; med gy, grn, brn, platy, smooth

LM; tan to lt brn, lt gy brn, most micritic, blocky, rare foss mat, no vis por, dull yel fluor, no stn or odor, ns,

LM; tan to cream, buff, foss ip, most well cem, hd, lt yel min fluor, ns.

LM; off wh, cream, highly foss - some med xln, gd interpart por, occ soft chalky mtz, lt yel fluor, no stn or odor, no gas kick, ns.

LM; tan to lt brn, fxl n w/occ foss mat, interbdd hd blocky micrite, poor to no vis por, scat lt yel min fluor, no stn or odor, ns.

SH; med gy, silty to occ sandy, firm

SH; lt to med gy, firm, silty, foss ip.

**HOWARD 3612(-1405)**

LM; off wh, wh, buff, f to med xln, some gran text, fair to gd interxln por, much soft chalky mtz, lt yel min fluor, no stn or odor, no gas kick, barren, ns.

SH; dk gy, trc blk, platy

LM; lt gy to lt brn, most v. hd, micritic, scat well cem foss, no vis por, minor off wh cht, ns.

LM; tan to off wh, buff, fxl n w/occ sucrosic text, partly dolomitic, fair to gd interxln por, interbdd fairly soft chalky lmst, lt yel fluor, no stn or odor, no gas kick, ns.

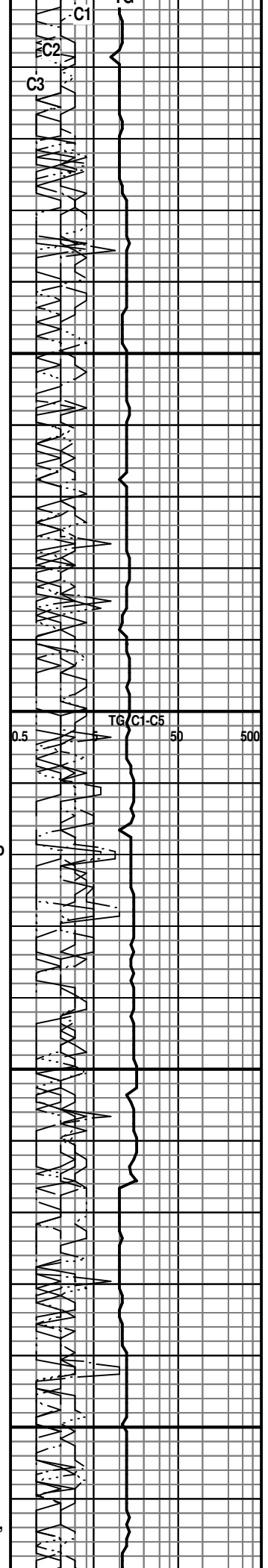
LM; lt brn, foss, well cem, blocky, hd

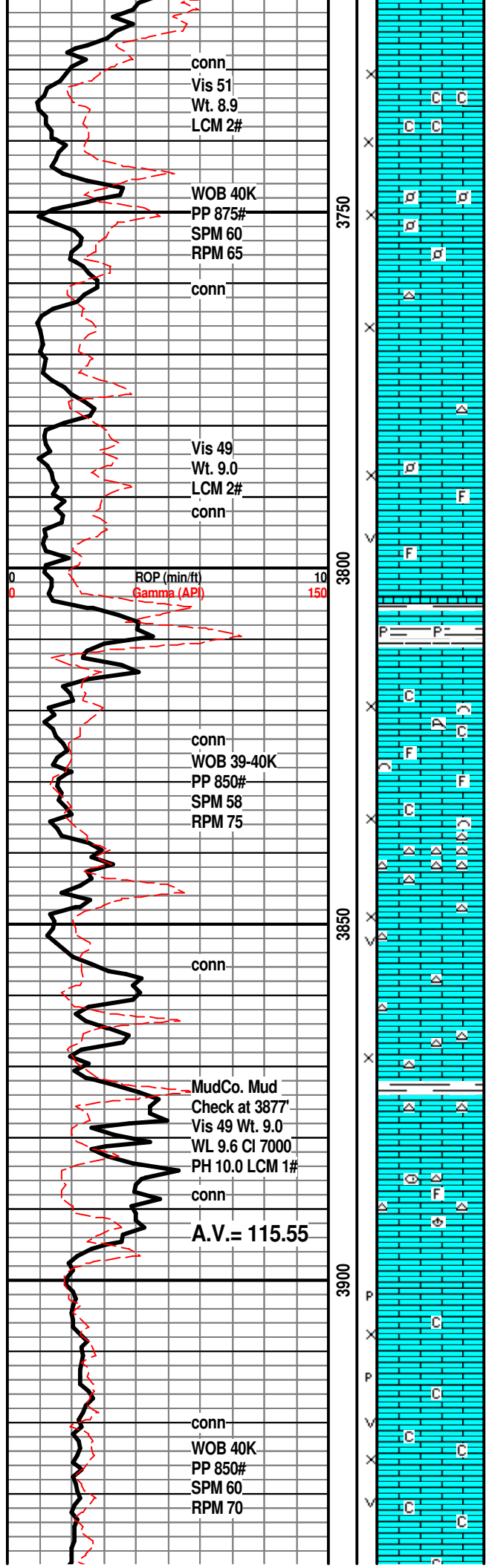
LM; off wh, buff, med xln to occ gran text, fair interxln por, rarely chalky mtz, dull yel min fluor only, ns.

SH; dk gy, trc blk, platy

**TOPEKA 3708(-1501)**

LM; off wh, tan, lt brn, f to occ med xln, fair interxln por, minor chalky mtz, no fluor, ns.





LM; tan to cream, fxln, v. gd interxln por, occ soft chalky mtx, lt yel fluor, no stn or odor, ns.

LM; tan to cream, buff, foss to med xln, fair to gd interxln/interpart por, rare lt gy cht, no fluor, no stn or odor, ns.

LM; tan to lt brn, buff, med to occ cse xln, gd interxln w/scat vug por, occ foss mat, dull yel min fluor, no stn, ns.

SH; med to dk gy, firm, pyr, interbdd tan lmst

LM; tan to lt brn, med to occ cse xln, spar calc xtals w/occ foss frags, fair interpart por, minor soft chalky mtx, no fluor, no stn or odor, ns.

LM; tan, off wh, f to med xln, abnt wh/gy cht, no vis por, hd

LM; tan to lt brn, buff, med xln to occ gran, fair interxln w/occ vug por, rare gy cht, lt yel min fluor, ns.

LM; lt brn, lt gy, med xln, scat gy to off wh cht, poor to fair interxln por, no fluor, ns.

SH; med gy grn, platy

LM; lt to med gy brn, foss ip, hd, well cem, blocky, scat gy cht, tite

LM; tan to lt brn, buff, off wh, f to med xln, gd interxln por, scat cse opaque spar calc xtals, fair p-p and interxln por, lt yel min fluor, no stn or odor, ns.

LM; tan to cream, buff, med xln, scat hd cherty lmst, interbdd soft chalky lmst, occ vug por, lt to occ med yel min fluor, no stn or odor, ns.

Gas Test at Extractor

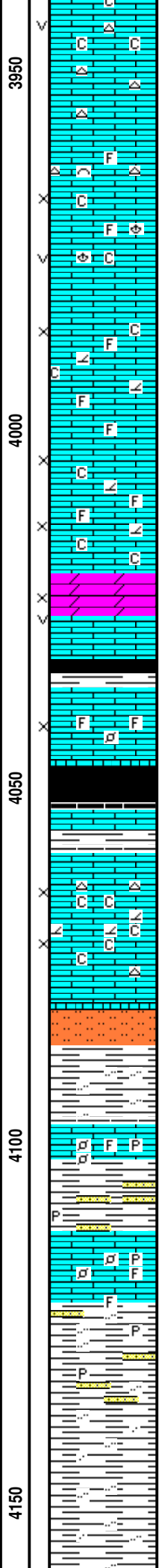
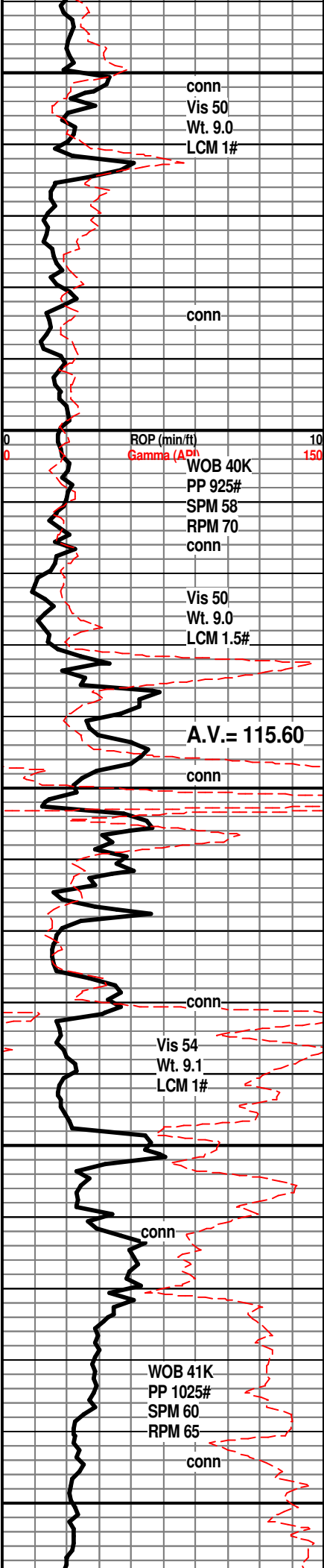
TG, C1-C5

TG

C1

C2

C3



LM; tan to cream, lt brn, foss to med xln, gd interxln w/scat vug por, minor chalky mtx, dull yel min fluor, no stn, ns.

LM; tan to buff, lt brn, med to cse xln, scat foss mat, fair interpart/interxln por, trc sucrosic text dolomitic lmst, lt yel min fluor, ns.

LM; tan, off wh, buff, fxln w/occ sucrosic text, chalky ip, interbdd dolomitic lmst, lt yel fluor, ns.

DOL; tan to lt brn, sucrosic, gd interxln w/scat vug por, trc finely rhombic, lt yel min fluor, no stn or odor, ns,

SH; dk gy - blk, platy, carb ip.

LM; tan to lt brn, fxln w/occ foss mat, poor to fair interxln por, no fluor, no stn or odor, ns.

**HEEBNER SHALE 4047(-1840)**

SH; blk, carb ip, platy

LM; med brn, hd, micritic, tite

**TORONTO 4059(-1852)**

LM; off wh, lt gy, fxln w/scat sucrosic text - partly dolomitic, much soft chalk and chalky mtx, occ wh cht, fair interxln por, lt yel fluor, no stn or odor, no gas kick, ns.

**DOUGLAS SHALE 4081(-1874)**

SLTST; lt gy, mica ip, firm, platy

SH; lt gy, silty ip, platy

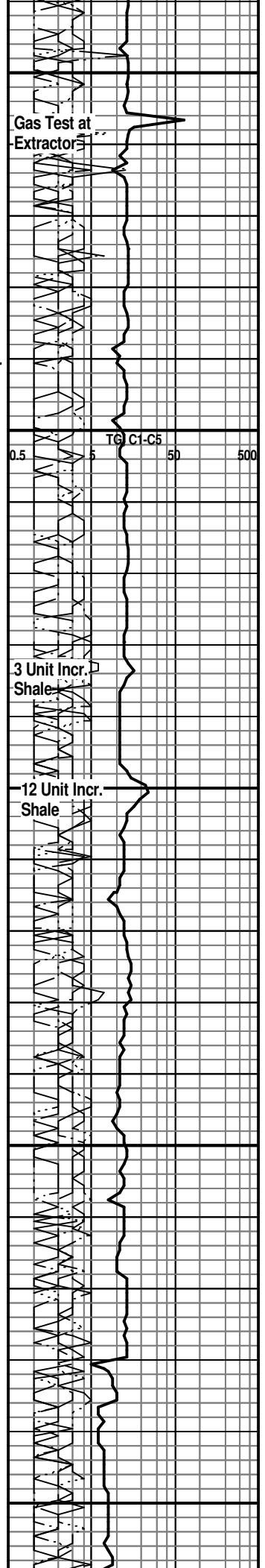
LM; med brn, v. foss - finely pelletal, hd, occ pyr

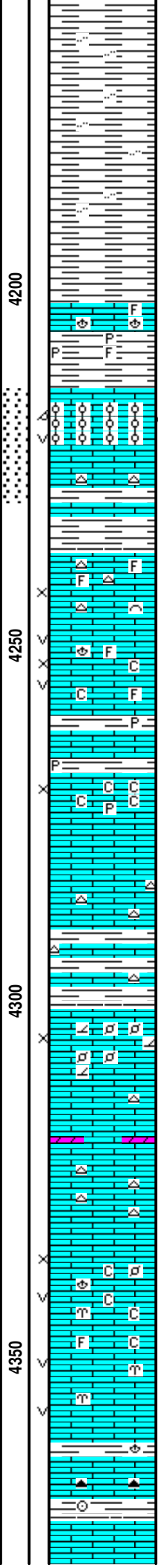
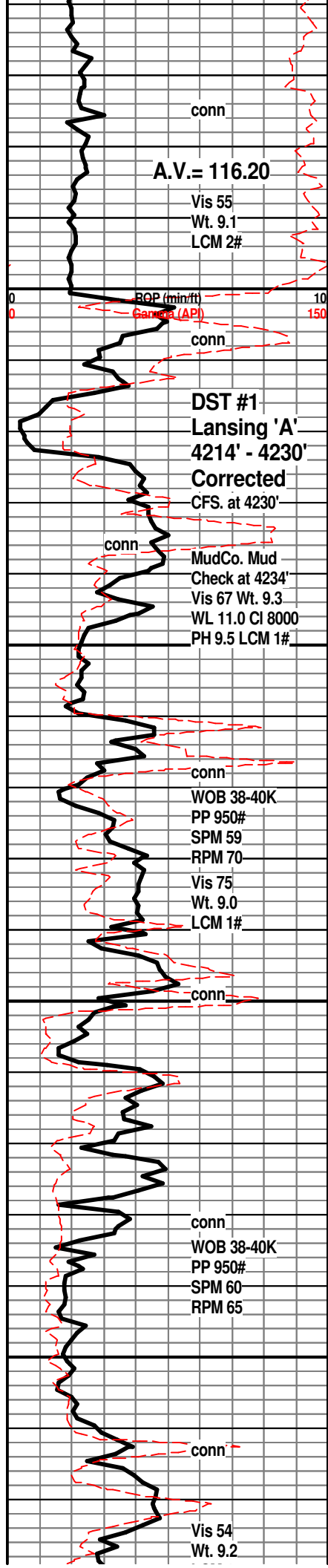
SH; lt to med gy, fiss, interbdd vf gr qtz ss strngs.

LM; med to occ dk brn, foss, hd, well cem, scat gritty sandy text, no vis por, dull yel min fluor, no stn or odor, ns.

SH; lt gy, gy grn, silty ip, platy, scat pyr, scat vf gr ss strngs.

SH; lt to med gy, silty to sandy, most smooth





SH; lt to med gy, silty ip, platy

**BROWN LMST. 4202(-1995)**  
LM; med brn, dense, blocky, hd, foss ip.  
SH; med gy, foss/pyr, v. firm

**LANSING 'A' 4214(-2007)**  
LM; lt to med brn, oolitic, med to lrg molds, v. gd oomoldic por, occ vug por, med to occ brite yel fluor, gas bubbles, SSFO - light brn, faint to fair odor, spotted to occ even lt brn stn, fair cut, some barren por

**DST #1: Lansing 'A' 4214' - 4230'**

**LANSING 'B' 4237(-2030)**  
LM; tan to lt brn, foss ip, most well cem, scat off wh cht, poor - no vis por, lt yel fluor, no stn or odor, no gas kick

LM; lt gy, tan, med xln w/scat foss mat, vug and interxln por, occ soft chalky mtz, lt yel min fluor only, no stn or odor, no gas kick, ns.

SH; med gr grn, firm, occ pyr

LM; off wh, buff, tan, f to med xln, fair interxln por, much soft chalky mtz, dull yel min fluor only, no stn or odor, ns.

LM; med to kd brn, most dense, micritic, blocky, occ brn foss cht, tite

LM; med gy brn, hd, scat gy cht, tite

LM; tan to off wh, buff, foss- finely pelletal ip, fair interpart por, scat sucrosic text - partly dolomitic, sparse lt yel min fluor, no stn or odor, ns.

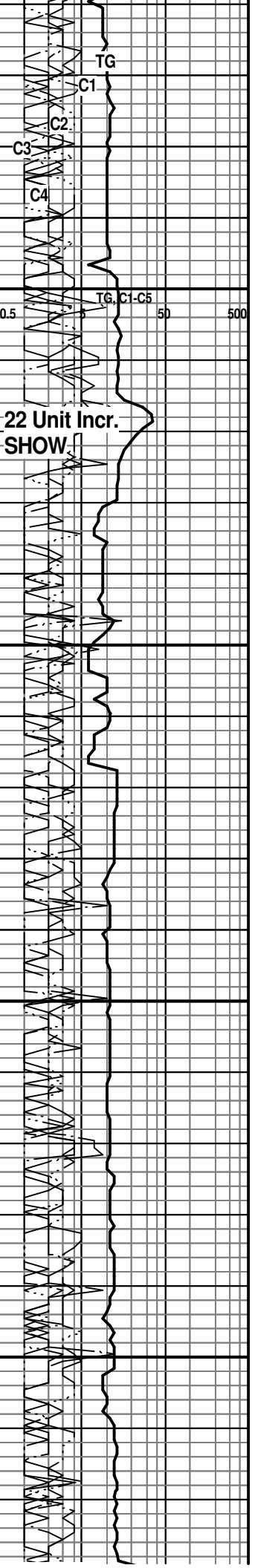
LM; lt brn, foss ip, occ finely pelletal, minor sucrosic text, trc. dolomitic lmst, most tite, cherty ip, dull yel fluor, no stn, ns.

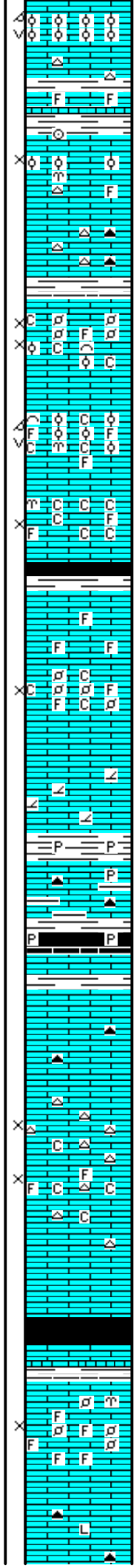
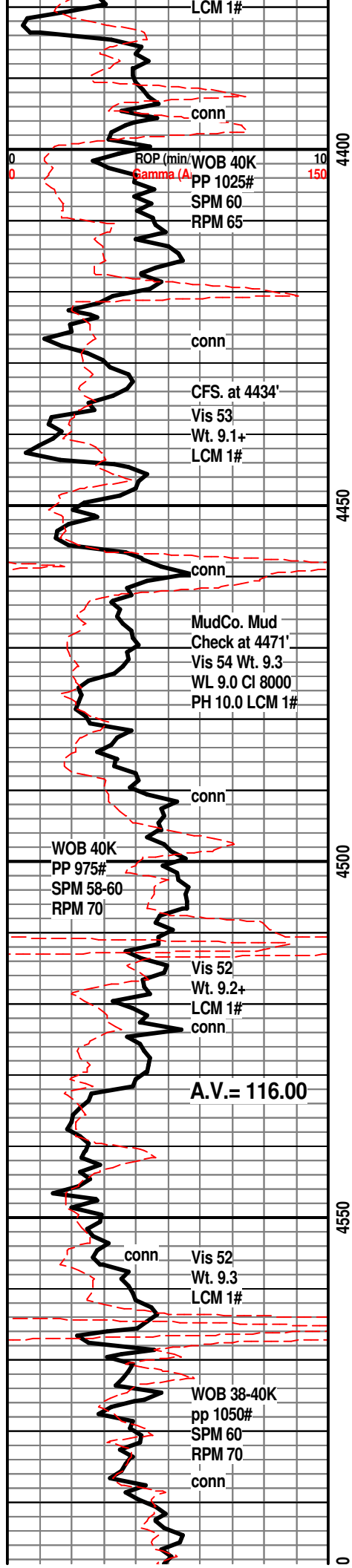
LM; off wh, wh, f to med xln, scat fair interxln w/occ vug por, minor foss mat, interbdd fairly soft chalky lmst, lt yel min fluor only, no stn or odor, no gas kick, ns.

LM; off wh, wh, foss, well dev. vug por ip, no stn or odor, barren, ns.

LM; med brn, dense, scat dk gy cht, tite

**LANSING/KC. 'H' 4373(-2166)**  
LM; lt brn, foss - oolitic, small to med size molds, gd





oolimoldic w/rare vug por, brittle ip, v. dull yel to no fluor, no stn or odor, no vis gas, no real gas kick(gas test at extractor/change filter caused gas increase not the formation)

SH; med gy, grn, foss ip.

LM; tan to lt brn, foss, oolitic ip, most well cem, poor interpart por, no fluor, no stn or odor, ns.

LM; tan to lt brn, hd, micritic, scat med/dk brn cht, tite

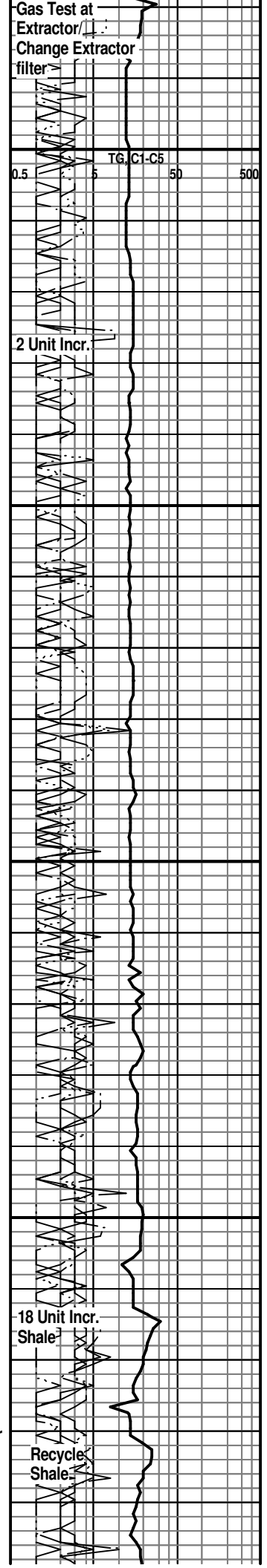
**KC. 'I' ZONE 4421(-2214)**  
LM; off wh, tan, v. foss, finely pelletal to oolitic, fair to gd interpart por in some, occ soft chalky mtx, dull yel min fluor only, no vis stn, no odor, no vis gas bubbles, no sample shows  
LM; off wh, tan, buff, highly foss - oolitic, scat well dev. oomoldic por, vug por also, minor chalky mtx, v. dull yel fluor, no stn or odor, barren, ns.  
LM; off wh, wh, buff, med xln w/scat foss mat, much soft wh chalk and chalky mtx, poor to fair interpart por, dull yel min fluor, ns.  
SH; blk, fiss, soft

**KC. 'J' DENNIS 4462(-2255)**  
LM; tan to lt brn, buff, fxln, scat well cem foss, most dense, blocky, no vis por, ns.  
LM; tan to cream, buff, foss, scat fair interpart por, occ soft chalky mtx, lt yel min fluor, no stn or odor, no gas kick, ns.  
LM; med gy brn, gritty text, partly dolomitic, hd, no vis por, ns.  
SH; med to dk gy, v. firm, occ pyr  
LM; med to dk brn, hd, argil ip, scat dk gy/blk cht, tite

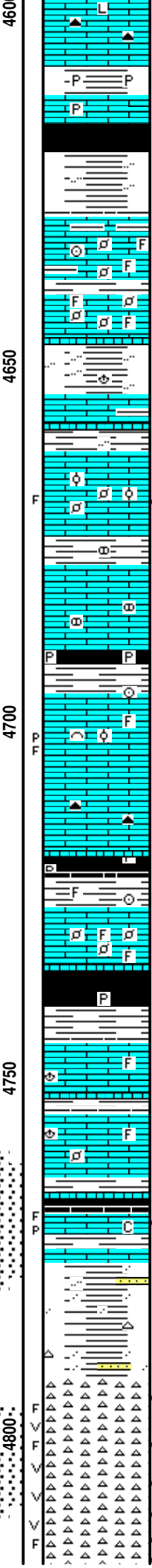
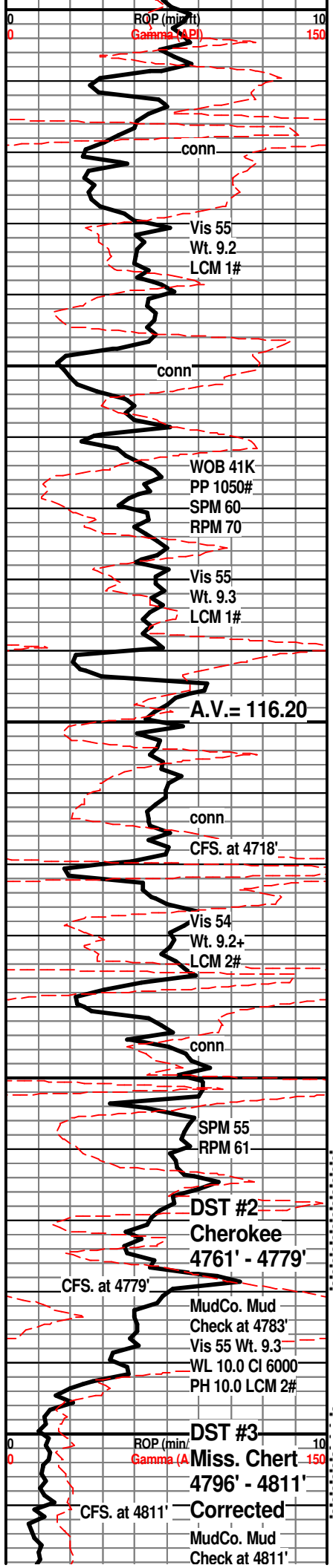
**STARK SHALE 4511(-2304)**  
SH; blk, platy, soft ip, occ pyr

**SWOPE 4518(-2311)**  
LM; lt gy, gy brn, dense, hd, micritic, scat blk cht  
LM; off wh, wh, buff, med xln, abnt opaque to transl. spar calc xtals, fair to gd interxln por, interbdd wh/off wh foss cht, dull yel min fluor, no stn or odor, no gas kick  
LM; off wh, tan, buff, foss ip, much soft chalky mtx, interbdd wh foss cht, no stn or odor, ns.  
SH; blk, carb, platy, trc gas

**HERTHA 4573(-2366)**  
LM; tan to lt brn, foss, scat foss pellets and hash, most well cem - poor interpart por, occ cherty, lt yel min fluor only, no stn or odor, ns.  
LM; med to dk brn, hd, micritic to litho, interbdd dk brn cht. hd







**BASE KANSAS CITY 4608(-2406)**

SH; varic, red, grn brn, fiss, occ pyr

LM; lt to med gy, pyr ip, hd

SH; varic, grn, rust red, brn, yel, lavender, blk, fiss to flakey, occ silty

**PLEASANTON 4629(-2422)**

LM; off wh, tan, lt brn, foss ip, scat pale grn argil lmst, hd, no vis por, no stn or odor, ns.

LM; off wh, tan, foss w/small pellets, some dense - micritic, no vis por, ns.

SH; varic, grn, maroon, brn, silty ip, foss

**MARMATON 4654(-2447)**

LM; tan, lt brn w/grn tint, hd, micritic, blocky

LM; off wh, wh, buff, fxln, trc frags, trc v. light to dk brn hvy oil stn, much brite yel fluor, scat well cem oolites and pellets, no odor, no cut, poss. gas bubbles, v. weak show in samples

LM; tan to off wh, buff, most dense, micritic, scat lt yel fluor, occ nodular, no vis por, no stn or odor, ns.

SH; dk gy - blk, platy, occ pyr

**PAWNEE 4697(-2490)**

LM; lt brn, foss ip, most dense, few pcs. w/dk brn heavy residual oil stn, no odor, poor p-p w/some frac por, scat lt yel fluor, no vis gas bubbles, weak cut, looks tite

LM; med brn, most dense, micritic, scat brn foss cht, tite

SH; blk, blocky, pyr, trc gas

SH; grn, foss, firm

LM; tan to buff, lt brn, foss - abnt small pellets and hash, well cem, dense, lt yel min fluor, ns.

**CHEROKEE SHALE 4735(-2528)**

SH; blk, dk gy, platy, carb ip, rarely pyr

LM; tan to lt brn, fxln, scat well cem foss mat, no vis por, no fluor, trc blk tar/gilsonite, no live shows, no odor, looks tite

LM; lt to med brn, hd, micritic, rare well cem foss mat, no vis por, no fluor, no stn, ns.

SH; dk gy, blk, fiss

LM; off wh, f to med xln, spar calc xtals, frags w/live edge stn, scat p-p por w/med brn stn, med yel fluor, SSFO, no odor, minor chalky mtx, gd cut, tar/gilsonite, trc gas bubbles

**DST #2: Cherokee Lmst. 4761' - 4779'**

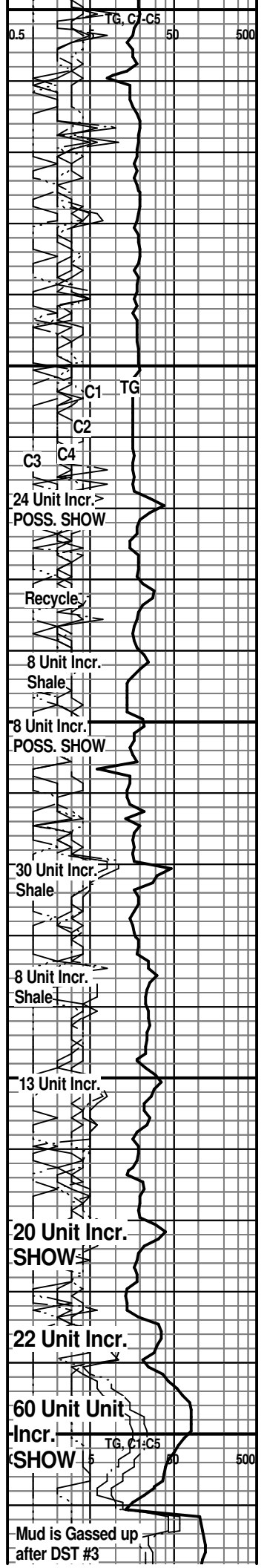
SH; varic, grn, rust red, maroon, yel, w/weath lmst, some varic cht, trc med gr rnd qtz ss

**MISSISSIPPI CHERT 4792(-2585)**

CHT; wh, fresh and tripolite, frags w/scat weathered bands w/vug por, med brn spotted to occ even oil stn, SSFO, faint oil/gas odor, scat med to brite yel fluor, gas bubbles

**DST #3: Miss. Chert 4796' - 4811'**

CHT; wh, fresh and trip, much med to brite yel fluor, SFO, scat frags and vuq por, gd odor, few gas bubbles.



Vis 53 Wt. 9.3  
WL 8.8 CI 5000  
PH 10.5 LCM 1#

conn

Vis 80  
Wt. 9.2  
LCM 1#

conn

CFS. at RTD.

4850

4900

4950



bands of well weathered cht-SFO

CHT; wh, pred fresh, scat vug por, occ dk brn stn, no odor, abnt varic sandy shales and occ varic. cherts

LM: med red brn, hd, cherty ip, some nodular, weathered/oxidized, tite

**KINDERHOOK SHALE 4840(-2633)**

SS; wh, occ grn, f gr qtz, fri ip, clusters, fair intergran por, occ glau, subrnd, no fluor, no stn or odor, ns.

SH; med gy grn, platy, sandy ip, scat grn vf to f gr qtz ss strngs

**KINDERHOOK SAND 4870(-2663)**

SS; wh, clr, pale grn, all f gr qtz, clusters, fri, fair to gd intergran por, trc glau, subrnd to subang gr, calc cmt, no fluor, no stn or odor, barren, ns.

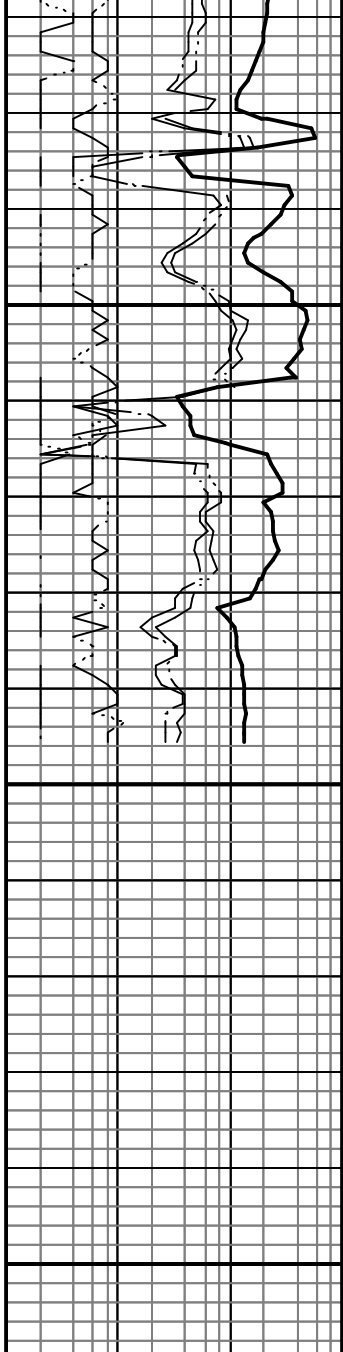
SS; lt gy, wh, pale grn, f gr qtz, clusters, some v. hd - siliceous, most fri w/fair to gd intergran por, occ glau, no fluor, no stn or odor, barren, ns.

RTD. 4900' at 7:15 AM. 4/22/12

LTD. 4896'

Halliburton DIL, NEU/DEN w/PE,  
Microlog, MIRL

**NOTE: This log was shifted upward by 3 to 5' for correlation purposes with the Halliburton LOGS.**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

ATTN: Jon Christensen

Job Ticket: 47485

**DST#: 3**

Test Start: 2012.04.21 @ 13:29:44

## GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:55:14

Time Test Ended: 21:34:14

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 45

**Interval: 4800.00 ft (KB) To 4815.00 ft (KB) (TVD)**

Reference Elevations: 2207.00 ft (KB)

Total Depth: 4815.00 ft (KB) (TVD)

2196.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

**Serial #: 6798 Inside**

Press @ Run Depth: 41.75 psig @ 4801.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.21

End Date:

2012.04.21

Last Calib.: 1899.12.30

Start Time: 13:29:45

End Time:

21:34:14

Time On Btm: 2012.04.21 @ 15:53:44

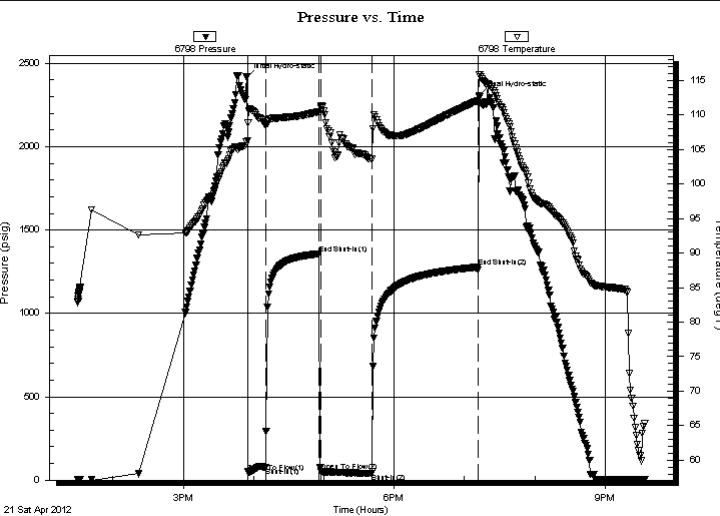
Time Off Btm: 2012.04.21 @ 19:12:29

**TEST COMMENT:** IF: Strong Blow , BOB in 10 seconds, GTS in 12 minutes, Gauged Gas

IS: No Blow Back

FF: Strong Blow , BOB & GTS Immediate, Gauged Gas & Caught Sample

FS: No Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2417.37	106.07	Initial Hydro-static
2	49.83	108.87	Open To Flow (1)
17	77.49	108.56	Shut-In(1)
63	1358.06	110.51	End Shut-In(1)
64	54.94	111.11	Open To Flow (2)
108	41.75	103.57	Shut-In(2)
198	1278.12	112.08	End Shut-In(2)
199	2306.16	115.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	4777 GIP	0.00
5.00	Mud	0.02

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	38.00	353.47
Last Gas Rate	0.50	12.00	178.09
Max. Gas Rate	0.50	38.00	353.47





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

Job Ticket: 47485

**DST#: 3**

ATTN: Jon Christensen

Test Start: 2012.04.21 @ 13:29:44

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	4777 GIP	0.000
5.00	Mud	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

Strata Exploration Inc

**4-28S-18W Kiowa**

PO Box 401  
Fairfield, IL 62837

**3-4 Aaron Einsel**

Job Ticket: 47485

**DST#: 3**

ATTN: Jon Christensen

Test Start: 2012.04.21 @ 13:29:44

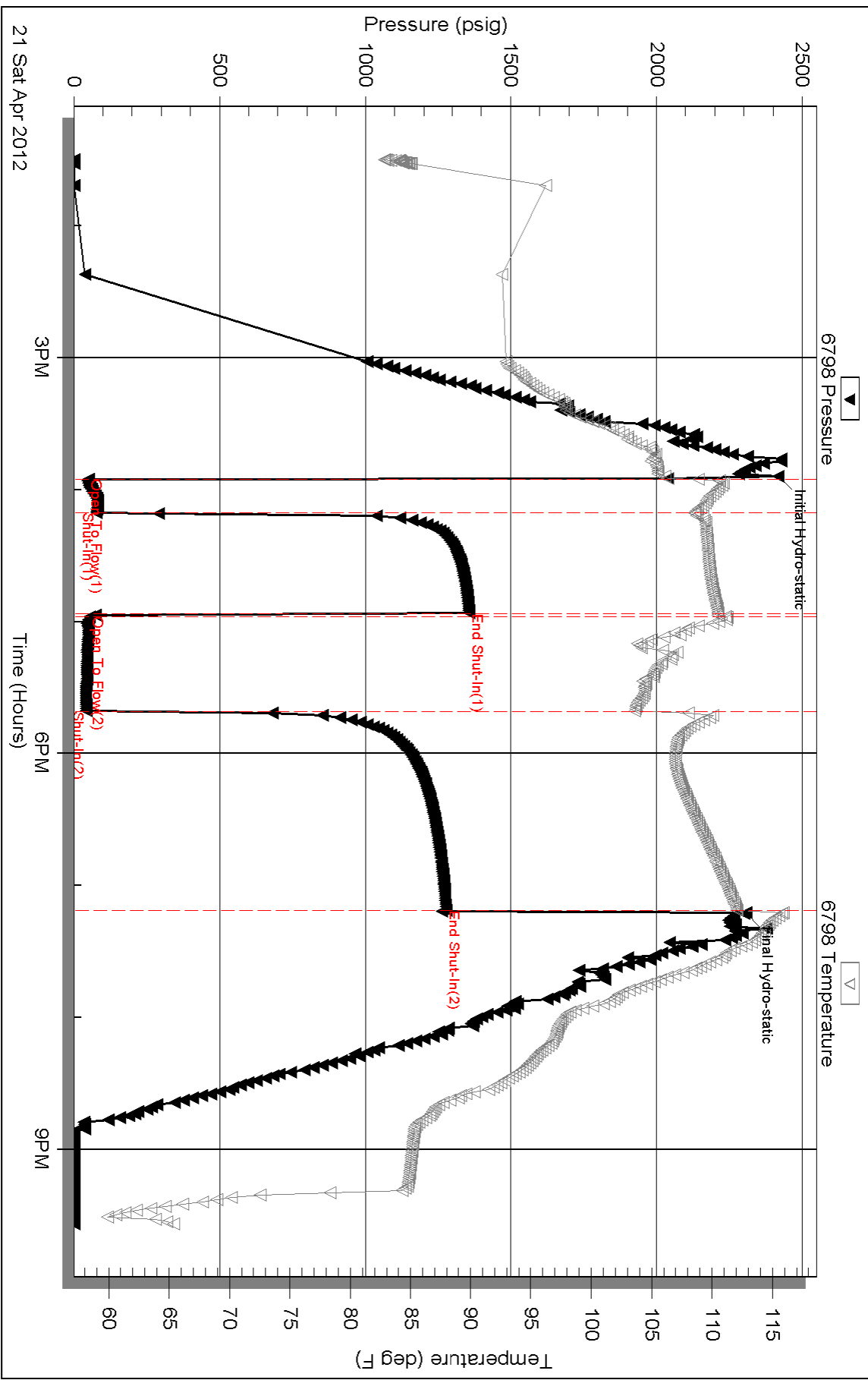
### Gas Rates Information

Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
1	15	0.50	38.00	353.47
2	10	0.50	18.00	218.56
2	20	0.50	16.00	205.07
2	30	0.50	14.00	191.58
2	40	0.50	12.00	178.09
2	45	0.50	12.00	178.09

# Pressure vs. Time

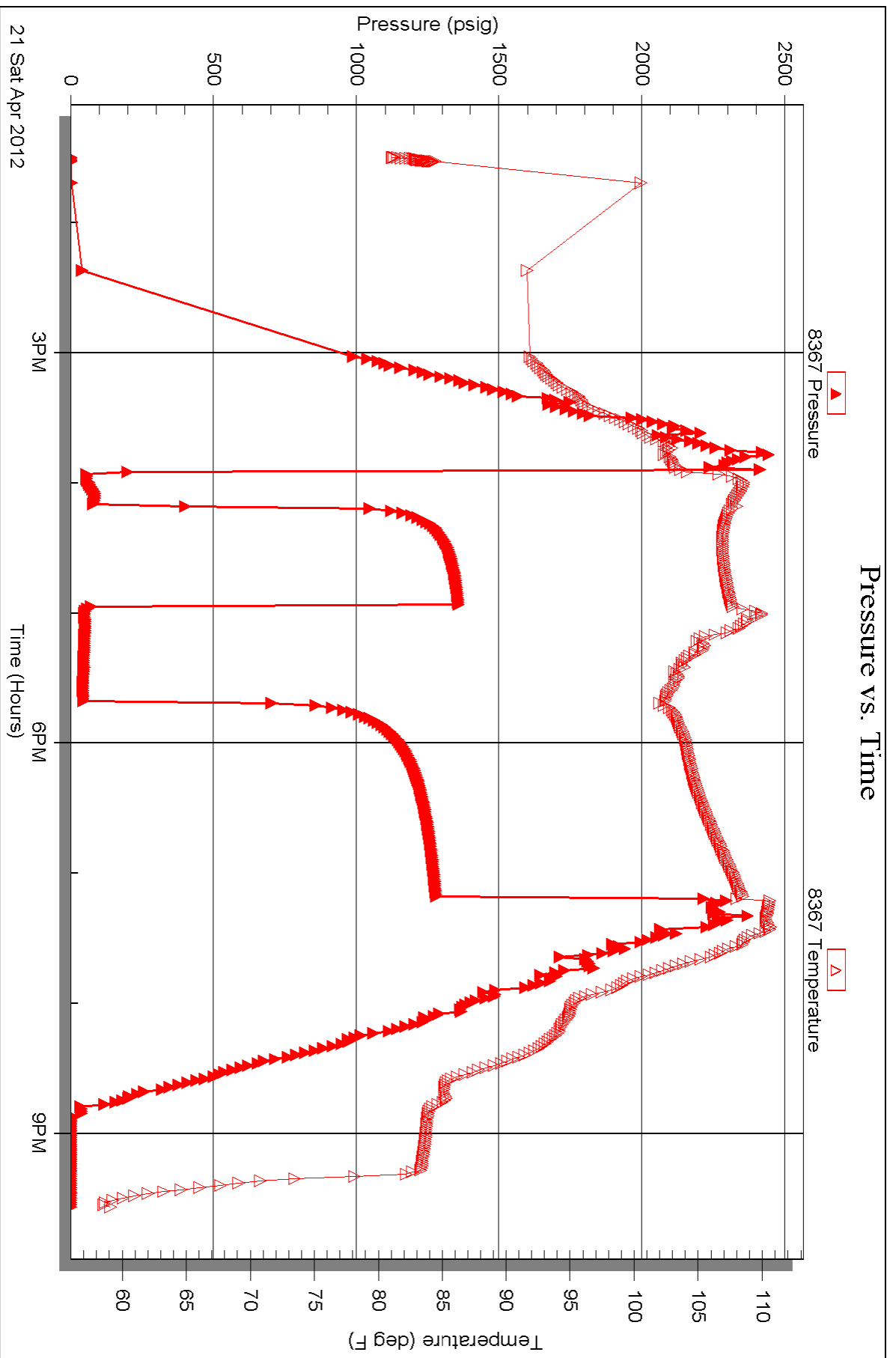


Serial #: 8367

Outside Strata Exploration Inc

3-4 Aaron Ensel

DST Test Number: 3





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



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

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

August 25, 2012

John R Kinney  
Strata Exploration, Inc.  
PO BOX 401  
FAIRFIELD, IL 62837-0401

Re: ACO1  
API 15-097-21723-00-00  
Aaron Einsel 3-4  
NE/4 Sec.04-28S-18W  
Kiowa County, Kansas

Dear Production Department:

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

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

Respectfully,  
John R Kinney

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



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

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

August 27, 2012

John R Kinney  
Strata Exploration, Inc.  
PO BOX 401  
FAIRFIELD, IL 62837-0401

Re: ACO-1  
API 15-097-21723-00-00  
Aaron Einsel 3-4  
NE/4 Sec.04-28S-18W  
Kiowa County, Kansas

Dear John R Kinney:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 04/13/2012 and the ACO-1 was received on August 25, 2012 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department