

Confidentiality Requested:

Yes No

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1077675

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

# WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	SecTwpS. R
Address 2:	Feet from
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.xxxxxx) (e.gxxx.xxxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:
□ Oil □ WSW □ SHOW   □ 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:	Producing Formation: Kelly Bushing: Total Vertical Depth: Plug Back Total Depth: Feet Multiple Stage Cementing Collar Used? Yes No  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 ENHR Conv. to SWD  Plug Back Conv. to GSW Conv. to Producer  Commingled Permit #:  Dual Completion Permit #:  SWD Permit #:	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:
☐ ENHR         Permit #:           ☐ GSW         Permit #:	Operator Name:
GSW Permit #:	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	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
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT

Page Two



Operator Name:			L	ease Name: _			Well #:	
Sec Twp	S. R	East We	est C	County:				
INSTRUCTIONS: Shopen and closed, flow and flow rates if gas to	ring and shut-in pres	sures, whether sh	ut-in pressur	e reached stati	c level, hydrosta	tic pressures, bott		
Final Radioactivity Lo files must be submitted					gs must be ema	iled to kcc-well-log	gs@kcc.ks.go	. Digital electronic log
Drill Stem Tests Taker (Attach Additional		Yes	No	L		n (Top), Depth an		Sample
Samples Sent to Geo	logical Survey	Yes	No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes Yes	No No					
List All E. Logs Run:								
		(	CASING REC	ORD Ne	w Used			
		· ·		ıctor, surface, inte	ermediate, producti		T	
Purpose of String	Size Hole Drilled	Size Casin Set (In O.D		Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
		ADD	ITIONAL CEN	MENTING / SQL	JEEZE RECORD			
Purpose:	Depth Top Bottom	Type of Cem	ent #	Sacks Used		Type and Pe	ercent Additives	
Perforate Protect Casing	100 20111111							
Plug Back TD Plug Off Zone								
1 lag on zono								
Did you perform a hydrau	ulic fracturing treatment	on this well?			Yes	No (If No, ski)	o questions 2 ar	nd 3)
Does the volume of the to		•				_	o question 3)	(" 100 ")
Was the hydraulic fractur	ing treatment information	on submitted to the c	hemical disclo	sure registry?	Yes	No (If No, fill o	out Page Three	of the ACO-1)
Shots Per Foot		ION RECORD - Bri Footage of Each Int				cture, Shot, Cement		d Depth
	, ,				,		,	
TUBING RECORD:	Size:	Set At:	Pa	acker At:	Liner Run:			
						Yes No		
Date of First, Resumed	Production, SWD or Ef		cing Method: owing	Pumping	Gas Lift C	ther (Explain)		
Estimated Production Per 24 Hours	Oil	Bbls. G	as Mcf	Wate	er Bl	ols. G	ias-Oil Ratio	Gravity
DIODOCITI	ON OF CAS:		, 4 CT - 1		TION:		DRODUCTIO	AN INTEDVAL.
Vented Solo	ON OF GAS:  Used on Lease	Open Ho		IOD OF COMPLE $\Box$		nmingled	PHODUCIIC	ON INTERVAL:
	bmit ACO-18.)	Other (S	necify)	(Submit		mit ACO-4)		

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/

Sam Brownback, Governor

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner

April 03, 2012

Jack Renfro Credo Petroleum Corporation 1801 BROADWAY # 900 DENVER, CO 80202-3858

Re: ACO1 API 15-145-21666-00-00 SPRINGER TRUST 1-18 SE/4 Sec.18-20S-19W Pawnee 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, Jack Renfro



Credo Petroleum Corporation

1801 Broadway Suite 900 Denver, CO. 80202 ATTN: Bruce Ard

18-20s-19w-Pawnee

Springer Trust #1-18

Job Ticket: 46430

DST#: 1

Test Start: 2012.02.15 @ 23:57:59

GENERAL INFORMATION:

Formation:

Cherokee Sand

Deviated:

Whipstock:

0.00 ft (KB)

Time Tool Opened: 01:52:44 Time Test Ended: 04:31:44

Interval:

4217.00 ft (KB) To 4259.00 ft (KB) (TVD)

Total Depth:

4279.00 ft (KB) (TVD)

Hole Diameter:

7.80 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester:

Jason McLemore

Unit No:

54

Reference Elevations:

2213.00 ft (KB)

2208.00 ft (CF)

KB to GR/CF:

5.00 ft

Serial #: 6755

Press@RunDepth:

Inside

391.71 psig @

4254.00 ft (KB)

Capacity:

8000.00 psig

Start Date: Start Time:

2012.02.15 23:58:01 End Date: End Time: 2012.02.16 04:31:44

Time

(Min.)

Last Calib.: Time On Btm: 2012.02.16

Time Off Btm:

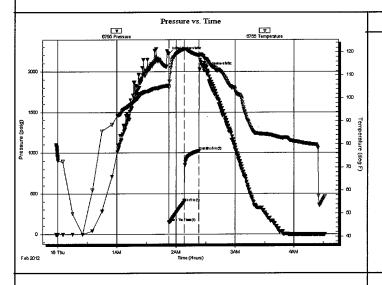
Pressure

(psig)

2012.02.16 @ 01:52:29 2012.02.16 @ 02:23:59

TEST COMMENT: IFP-Strong, BOB in 1 Min.

ISI-Slight Surface Blow back



0	2221.61	105.27	Initial Hydro-static
1	147.18	104.70	Open To Flow (1)
16	391.71	121.17	Shut-In(1)
31	1021.85	118.57	End Shut-In(1)
32	2032.11	118.72	Final Hydro-static

Temp

(deg F)

PRESSURE SUMMARY

Annotation

Recovery

Length (ft)	Description	Volume (bbi)
750.00	Muddy Water-95%W-5%M	9.40

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 46430

Printed: 2012.02.16 @ 08:37:51



**FLUID SUMMARY** 

Credo Petroleum Corporation

18-20s-19w-Pawnee

1801 Broadway

Springer Trust #1-18

Suite 900 Denver, CO. 80202 ATTN: Bruce Ard

Job Ticket: 46430

DST#: 1

Test Start: 2012.02.15 @ 23:57:59

### **Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: Viscosity:

9.00 lb/gal

Cushion Length:

Water Salinity:

37000 ppm

58.00 sec/qt

Cushion Volume:

ft bbl

Water Loss:

8.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity:

ohm.m

Gas Cushion Pressure:

psig

Salinity: Filter Cake: 7400.00 ppm inches

### **Recovery Information**

### Recovery Table

Length ft	Description	Volume bbl
750.00	Muddy Water-95%W-5%M	9.400

Total Length:

750.00 ft

Total Volume:

9.400 bbl

Num Fluid Samples: 0

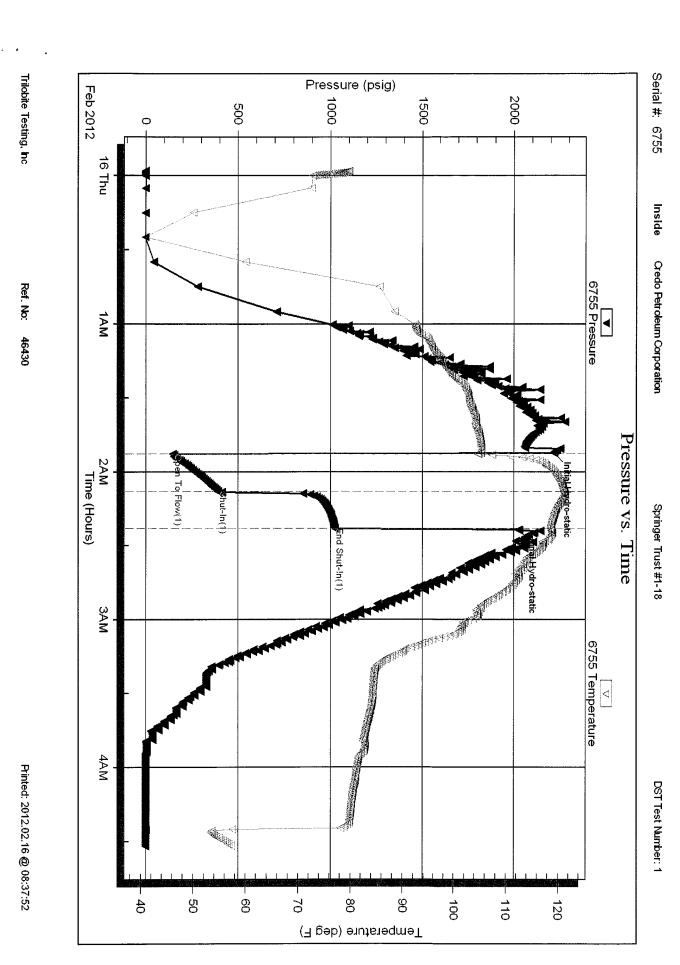
Num Gas Bombs:

Serial#:

Laboratory Name:

Laboratory Location:

Recovery Comments:





Credo Petroleum Corporation

18-20s-19w-Pawnee Springer Trust #1-18

1801 Broadway Suite 900 Denver, CO. 80202

Job Ticket: 46431

DST#: 2

ATTN: Bruce Ard

Test Start: 2012.02.16 @ 22:29:45

### GENERAL INFORMATION:

Formation:

p. . . ~ ~

Mississippi

Deviated: No Whipstock: 0.00 ft (KB)

Time Tool Opened: 00:11:45

Time Test Ended: 04:17:45

Test Type: Conventional Bottom Hole (Reset)

Tester:

Jason McLemore

Unit No:

54

Reference Elevations:

2213.00 ft (KB)

2208.00 ft (CF)

KB to GR/CF:

5.00 ft

Interval: Total Depth:

Start Date:

Start Time:

Hole Diameter:

ft (KB) To

ft (KB) (TVD)

4342.00 ft (KB) (TVD) 7.80 inches Hole Condition: Good

Serial #: 6755

Press@RunDepth:

Inside

168.53 psig @ 2012.02.16

22:29:47

4336.00 ft (KB) End Date:

End Time:

2012.02.17

Capacity:

8000.00 psig

04:17:45

Last Calib.: Time On Btm:

2012.02.17 2012.02.17 @ 00:11:30

Time Off Btm:

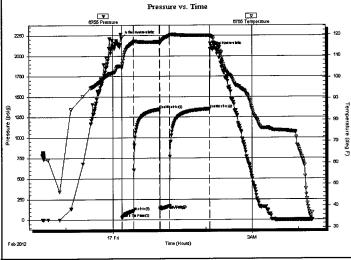
2012.02.17 @ 02:05:30

TEST COMMENT: IFP-Strong Blow ,BOB in 7-1/2 Min.

ISI-Dead

FFP-Good Blow, BOB in 9 Min.

FSI-Dead



# PRESSURE SUMMARY

1	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	2219.04	105.04	Initial Hydro-static
	1	25.84	104.29	Open To Flow (1)
	15	109.78	116.27	Shut-In(1)
4	49	1344.37	116.44	End Shut-In(1)
	49	129.36	115.85	Open To Flow (2)
7	61	168.53	119.43	Shut-In(2)
6	114	1351.16	119.46	End Shut-In(2)
פ	114	2083.47	119.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	Muddy Water- 95%W-5%M	2.39

Gas Rates

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

Trilobite Testing, Inc.

Ref. No: 46431

Printed: 2012.02.17 @ 09:16:45



**FLUID SUMMARY** 

Credo Petroleum Corporation

18-20s-19w-Pawnee

Springer Trust #1-18

1801 Broadway Suite 900

Job Ticket: 46431

DST#: 2

Denver, CO. 80202 ATTN: Bruce Ard

Test Start: 2012.02.16 @ 22:29:45

**Mud and Cushion Information** 

Mud Type: Gel Chem

9.00 lb/gal

deg API

Mud Weight:

58.00 sec/qt

Cushion Type: Cushion Length: Oil API: Water Salinity:

30000 ppm

Viscosity: Water Loss: 8.39 in<sup>3</sup>

Cushion Volume:

ft bbl

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: Salinity:

7400.00 ppm

Filter Cake:

inches

ohm.m

### **Recovery Information**

### Recovery Table

Length ft	Description	Volume bbl
250.00	Muddy Water- 95%W-5%M	2.386

Total Length:

250.00 ft

Ref. No: 46431

Total Volume:

2.386 bbl

Num Fluid Samples: 0

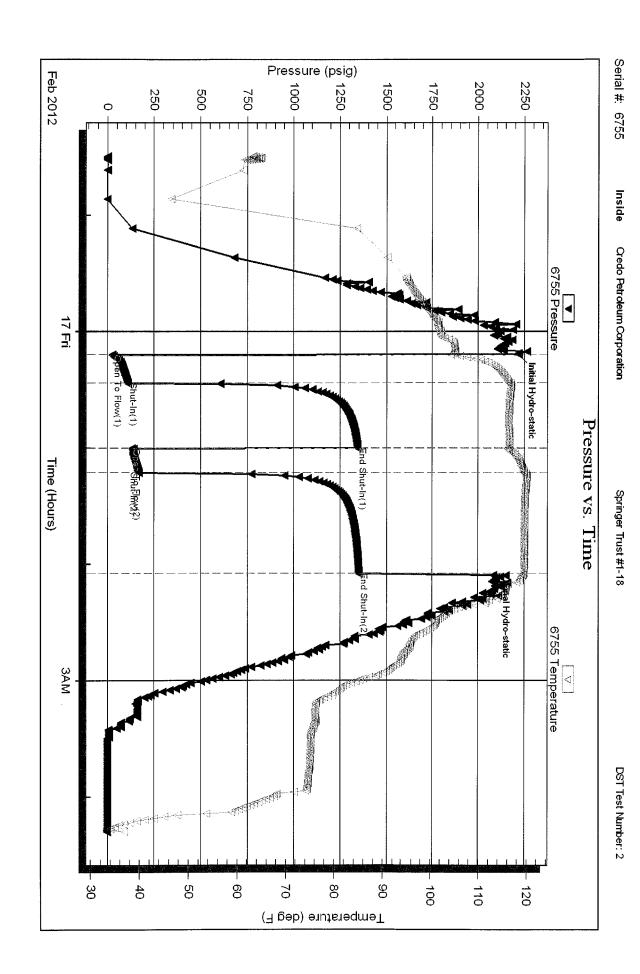
Num Gas Bombs:

Serial#:

Laboratory Name:

Laboratory Location:

Recovery Comments:



Trilobite Testing, Inc

Ref. No:

46431

Printed: 2012.02.17 @ 09:16:47

# ALLIED CEMENTING CO., LLC. 042435

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

SERVICE POINT:

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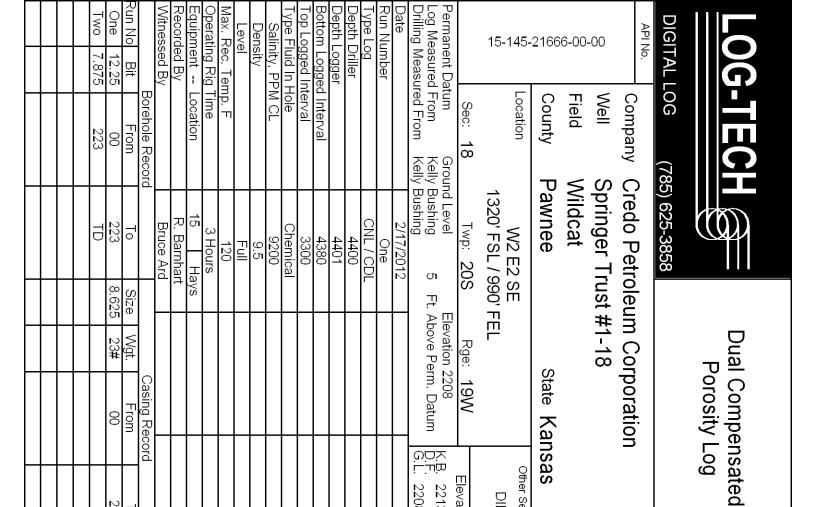
•	SIGNATURE X 994/11/18
5047.50	
JOTAL CHARGES 1963: 25 IF PAID IN 30 DAYS	PRINTED NAME X Mun 1) M. 12
<u> </u>	TERMS AND CONDITIONS" listed on the reverse side.
TOTAL	done to satisfaction and supervision of owner agent or
0	To Allied Cementing Co., LLC.  You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or
(a)	
PLUG & FLOAT EQUIPMENT	CITYSTATEZIP
TOTAL / 855.	STREET
	CHARGE TO: Lee do Persoleum
MANIFOLD @ 4.00 200.45	Ed Rec
HUM SO	by the Joseph 1200
ARGE /	17 play 60 fr. 2050
ľ	F TX
JOIAL SEATT	REMARKS:
X 30 X 11	
HANDLING 246 @ 2.25 5%.68	# DRIVER
8	# 74/ DRIVER Tierry H
(a)	- 12
8	G
Plassel 58 @2.70 /36.60	EQUIPMENT
ORIDE @	PERFS.
POZMIX 42 @ 8.55 782.50 GEL 8 @ 21.25 /26.50	MEAS. LINE SHOE JOINT CEMENT LEFT IN CSG.
5 2242.	PRES. MAX MINIMUM
	412
MOUNT ORDERED 230 607-6/25 A  WOY-02 47-901 14 610-5001	CASING SIZE 46 5/49 DEPTH TUBING SIZE DEPTH
	12 /4 P/3
OWNER CIEdo Persoleum	R WW Polling
11/09 /2 south	(31.77 × Kd)
COUNTY COUNTY	1777 16 205 19W
CALLED OUT ON LOCATION JOB START JOB FINISH	

hont You!

# ALLIED CEMENTING CO., LLC. 042431

Federal Tax I.D.# 20-5975804

SERVICE POINT: REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665 Coreal Berolks JOB START JOB FINISH CALLED OUT ON LOCATION TWP. RANGE SEC. STATE STATE 945pm COUNTY DATE 2-10-12 205 19w LEASE Trust LOCATION Rush Center South to LRd Pawnee WELL# OLD OR NEW (Circle one) 8 west to Rd 310 15 West and OWNER (see de CONTRACTOR WAT REST 10 TYPE OF JOB Surface HOLE SIZE 12 14 CASING SIZE 85/8 223 CEMENT AMOUNT ORDERED 1/2 Sx Com 390ce 7/090 DEPTH ZZ3 **TUBING SIZE** DEPTH 41/2 DRILL PIPE DEPTH DEPTH TOOL @ 16.25 2.762. 5C COMMON\_170 **MINIMUM** PRES. MAX MEAS. LINE SHOE JOINT **POZMIX** @ @ 21-25 CEMENT LEFT IN CSG **GEL** @58.20 CHLORIDE DISPLACEMENT Wedwar (a) ASC (a) **EQUIPMENT** @ @ CEMENTER BOOK **PUMP TRUCK** (a) 398 HELPER VINCE P (a) **BULK TRUCK** (a) 482-188 DRIVER Lewing **BULK TRUCK** (a) HANDLING 179 402. @ 984.50 MILEAGE 179 X REMARKS: Cape an bosom break Crownation with Oramud Ma 17062 can 3/oce 2/agel SERVICE Shutin. week washer and DEPTH OF JOB 223 Coment Drd Gran ate PUMP TRUCK CHARGE **EXTRA FOOTAGE** @ 50 MILEAGE @ (a) MANIFOLD @4.00 CHARGE TO: Credo Petroleum TOTAL 1675.00 STREET ZIP CITY\_ STATE PLUG & FLOAT EQUIPMENT (a) (a) To Allied Cementing Co., LLC. (a) 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 TOTAL done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL SALES TAX (If Any). TERMS AND CONDITIONS" listed on the reverse side. TOTAL CHARGES 6.237. PRINTED NAME & IF PAID IN 30 DAYS



<<< Fold Here >>>

223  $\overline{C}$ 

Casing Record From 00

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

State Kansas

Other Services

 $\Box$ 

19W

Elevation 2213

i Zao

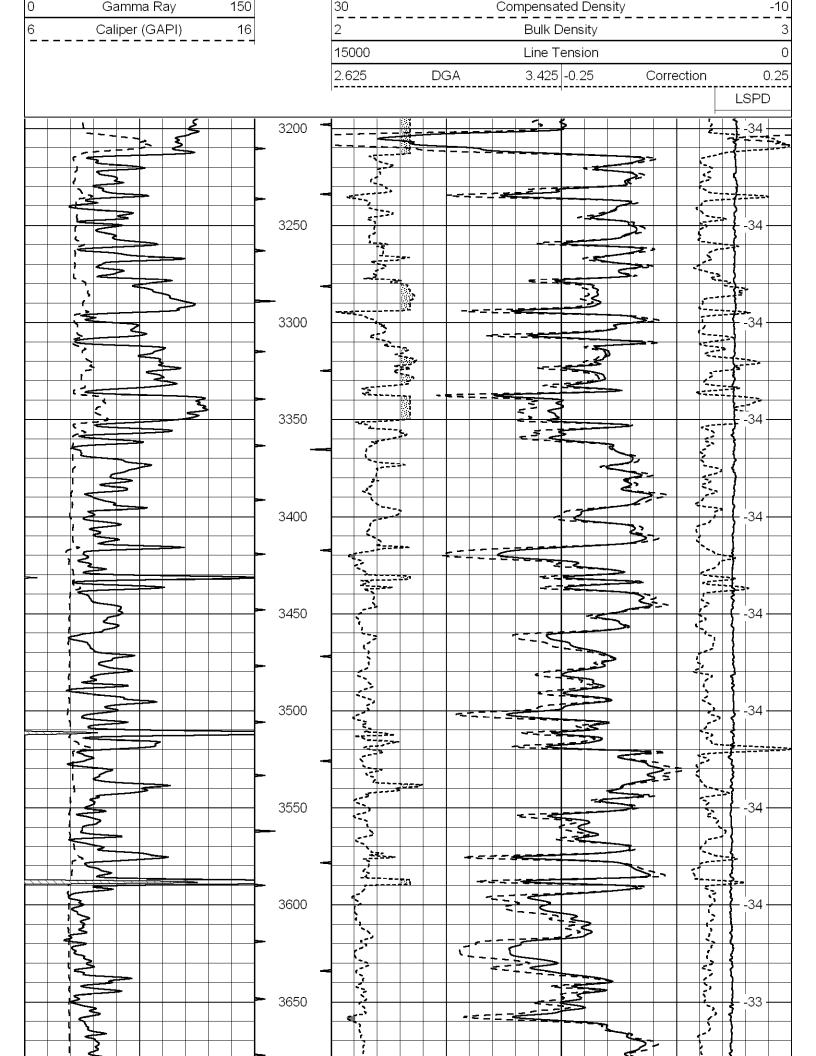
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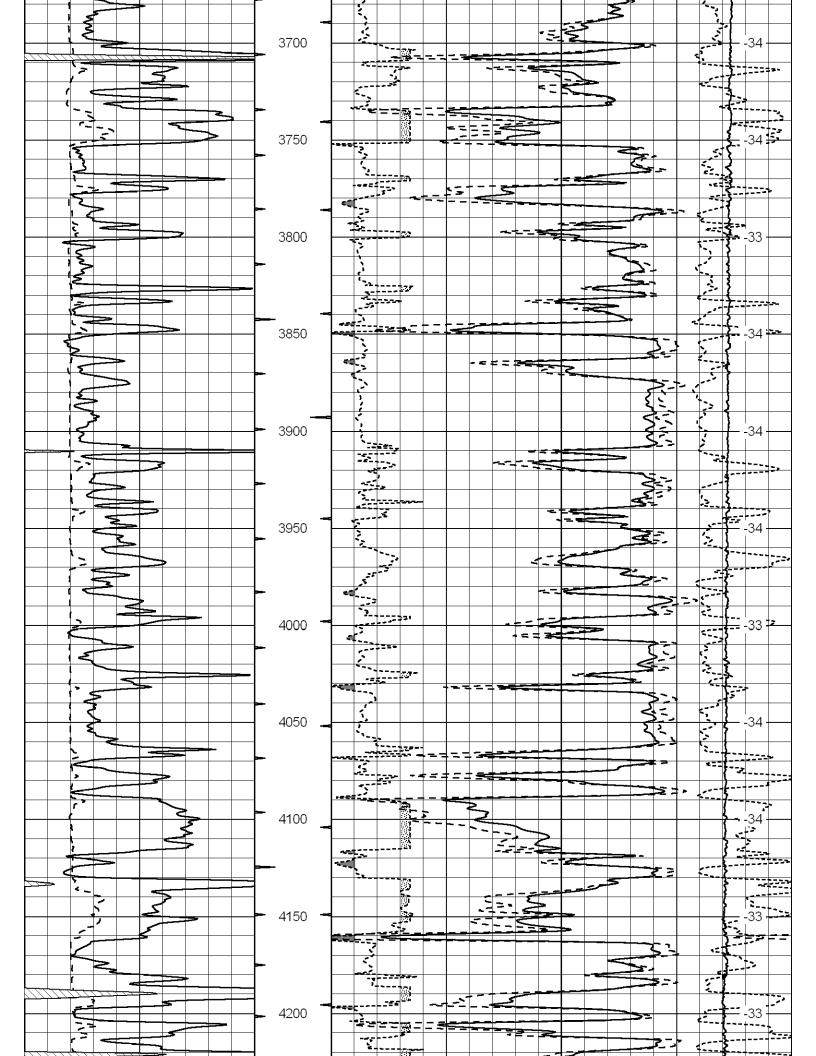
Thank you for using Log-Tech, Inc. (785) 625-3858

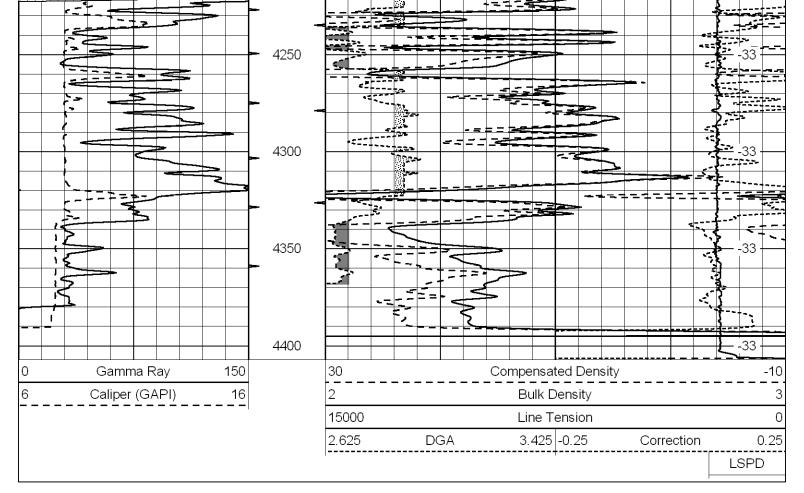
> Rush Center, KS: S to Co. Line, S to X Rd, 8W, 1/2S, W into

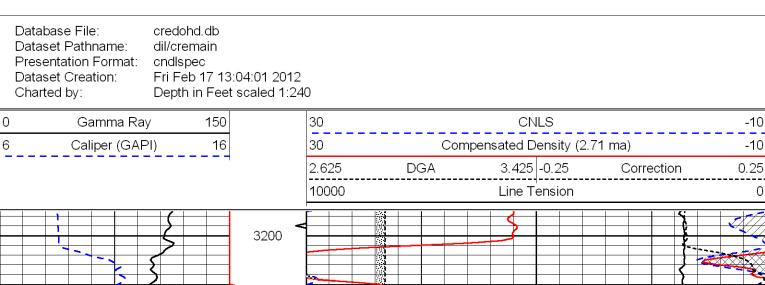
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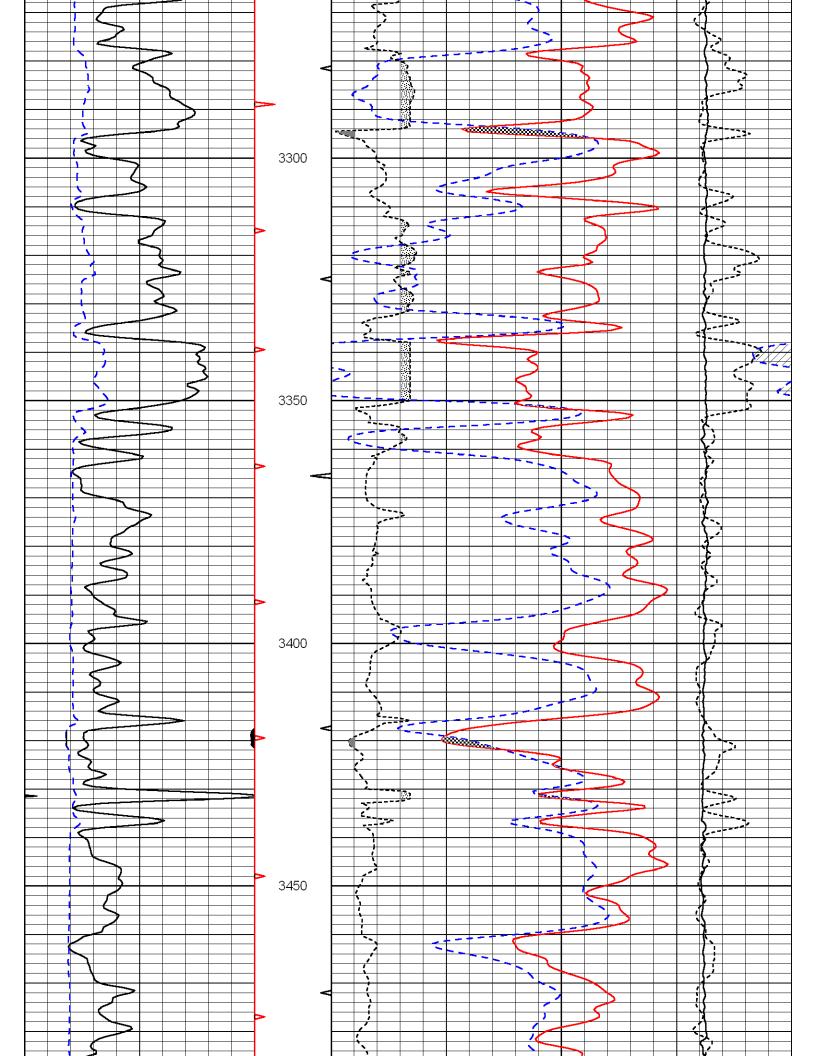
Dataset Creation: Fri Feb 17 13:04:01 2012 Charted by: Depth in Feet scaled 1:600

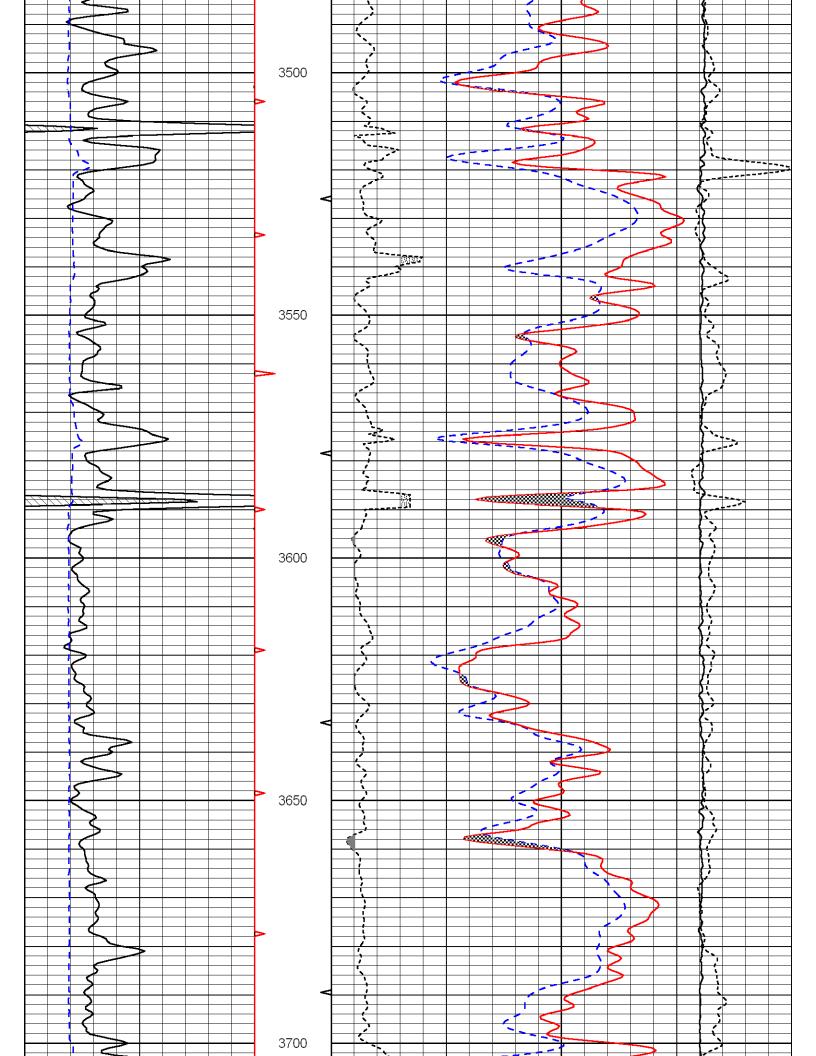


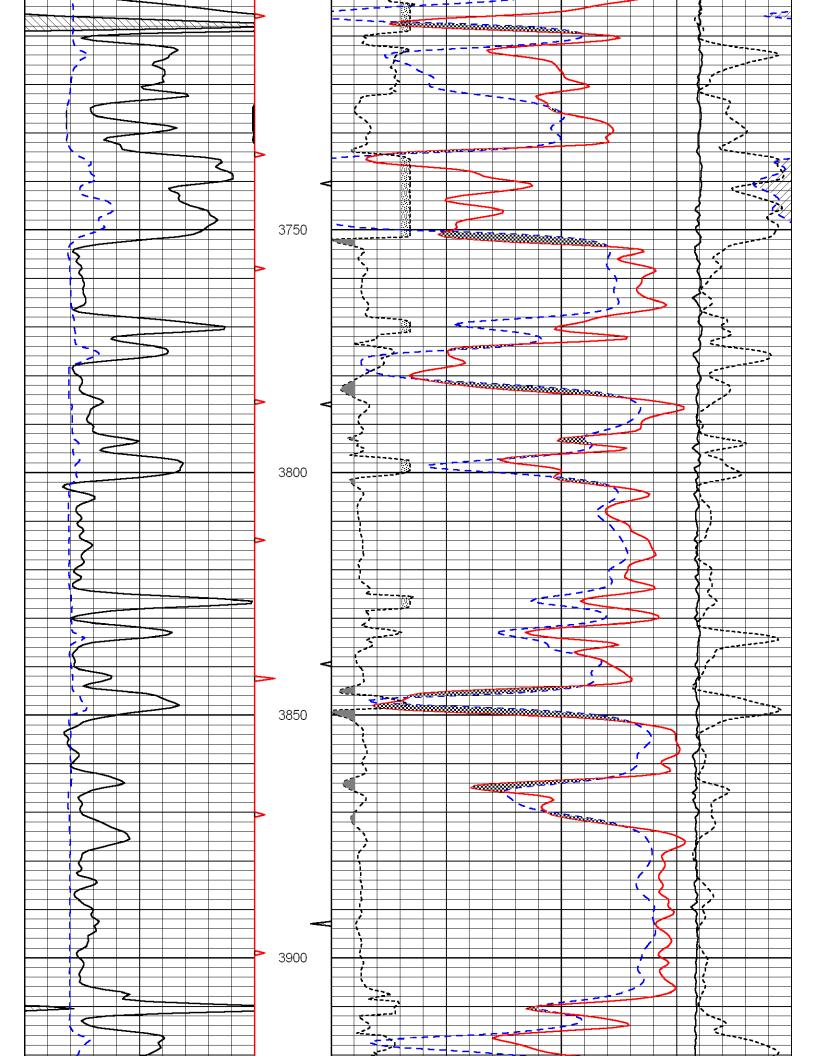


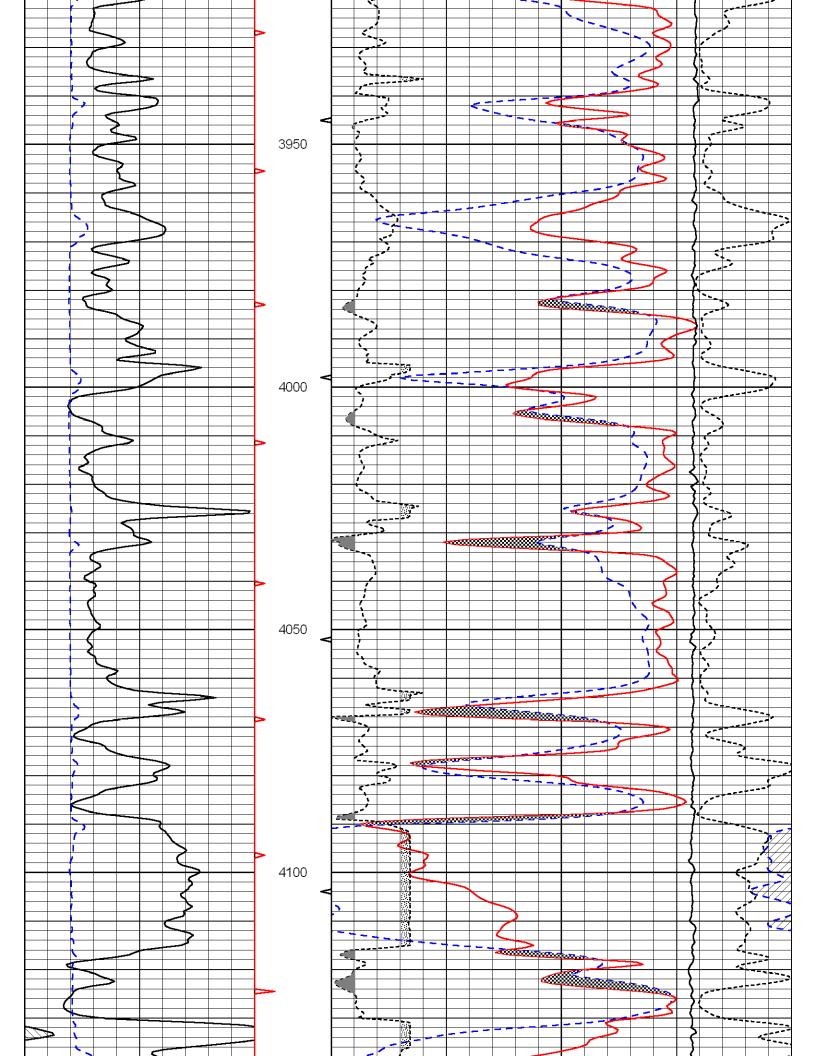


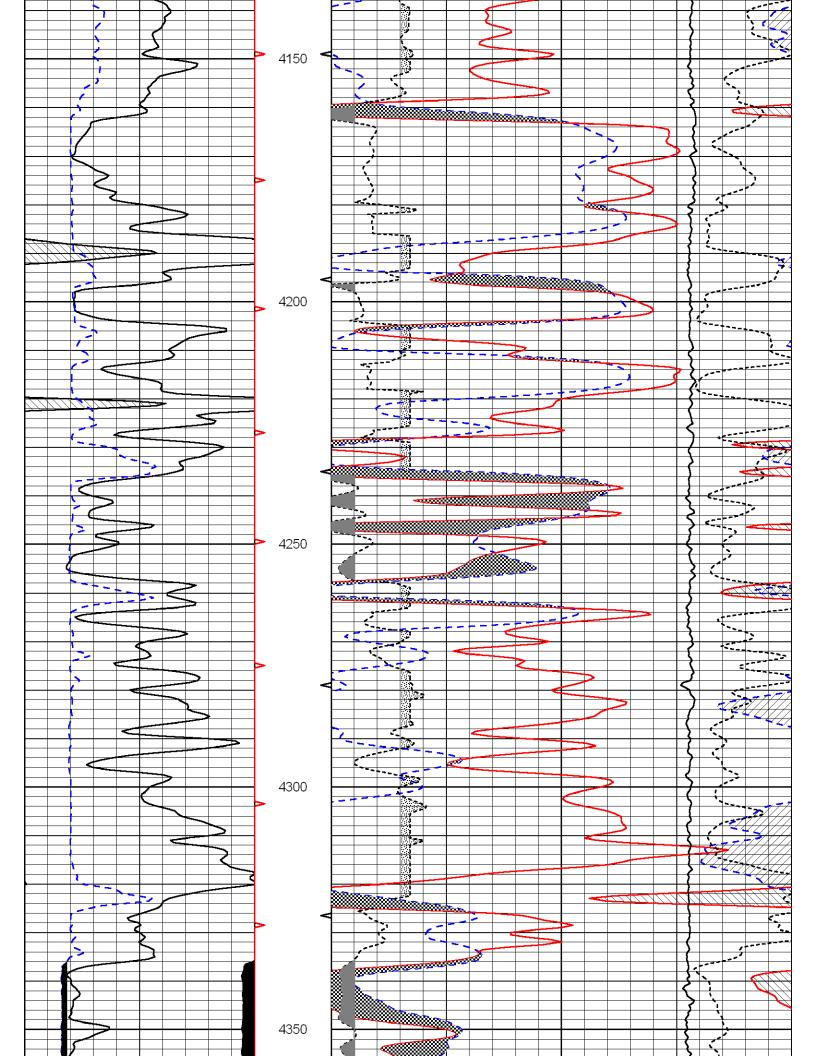


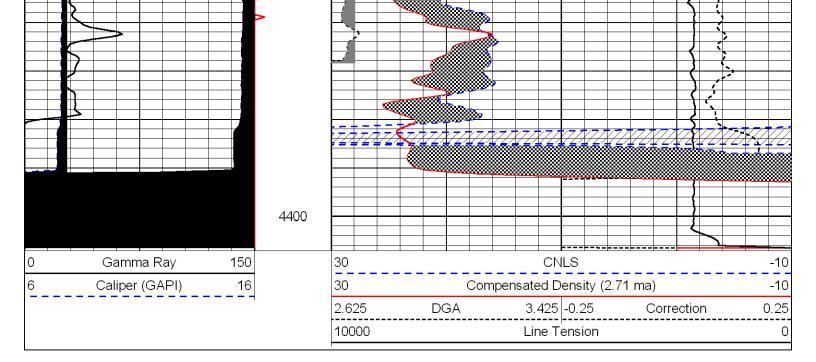












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<<			R Barnhart		Recorded By
F			Hays		Location
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			harts	_ `	Source of Rmf / Rmc
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			(9)	s. Temp	Rm @ Meas.
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			8.0 11.2	SS	pH / Fluid Loss
			9.5 77	cosity	Density / Viscosity
			9200	CL	Salinity, ppm C
			Chemical	Hole	Type Fluid in Hole
			7.875		Bit Size
			222	er	Casing Logger
			8.625 <b>@</b> 223		Casing Driller
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	G.L. 2208		ning	ured From elly Bus	Drilling Measu
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	CNL / CDL		1320' FSI /990' FFI		15-1
	Other Services		12 C∃ C/W	Location	45-
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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

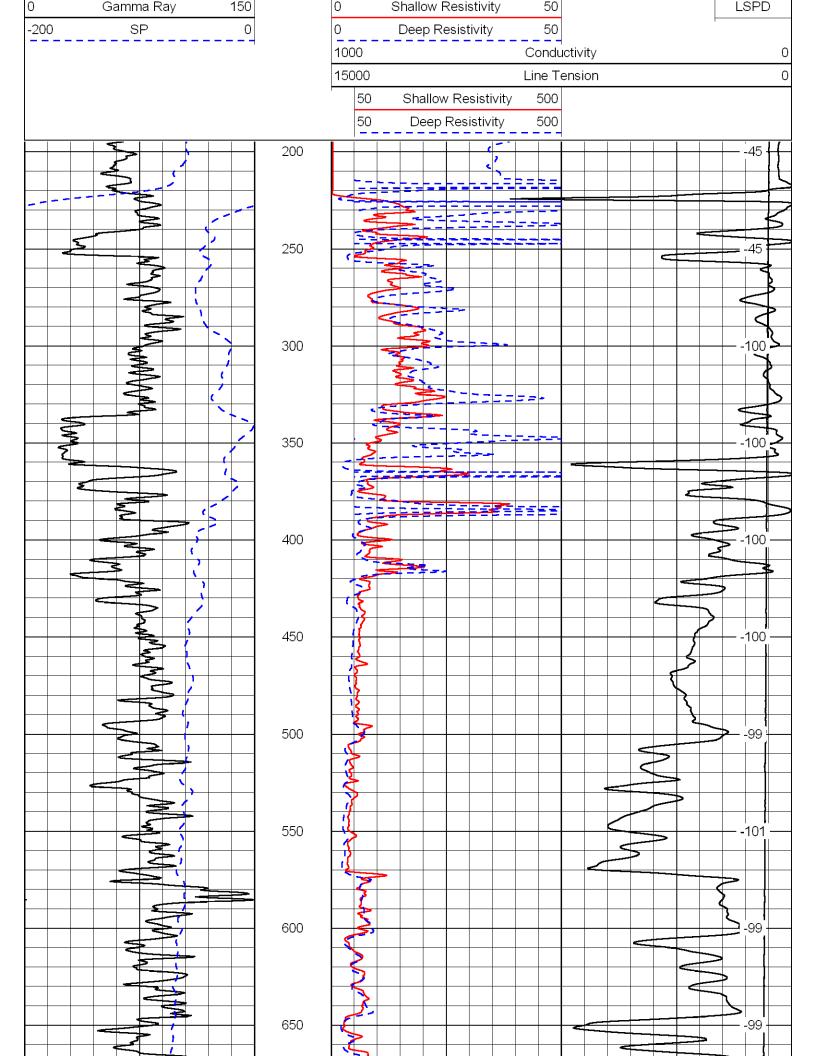
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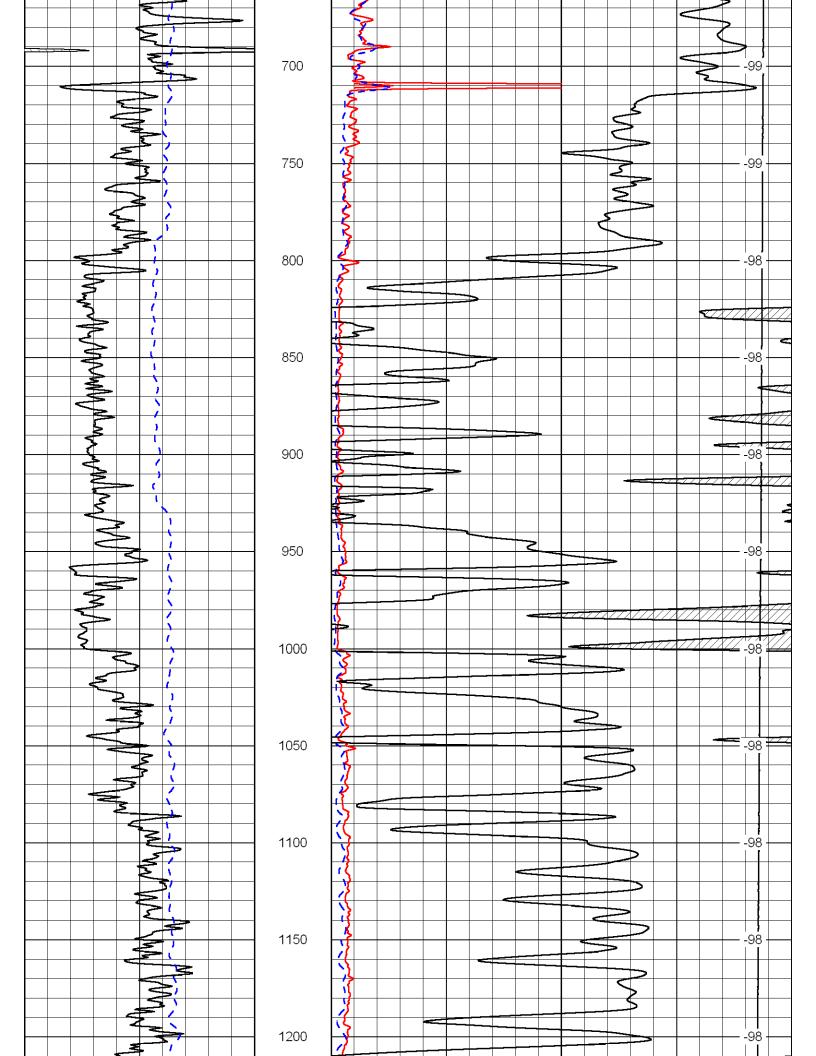
Thank you for using Log-Tech, Inc. (785) 625-3858

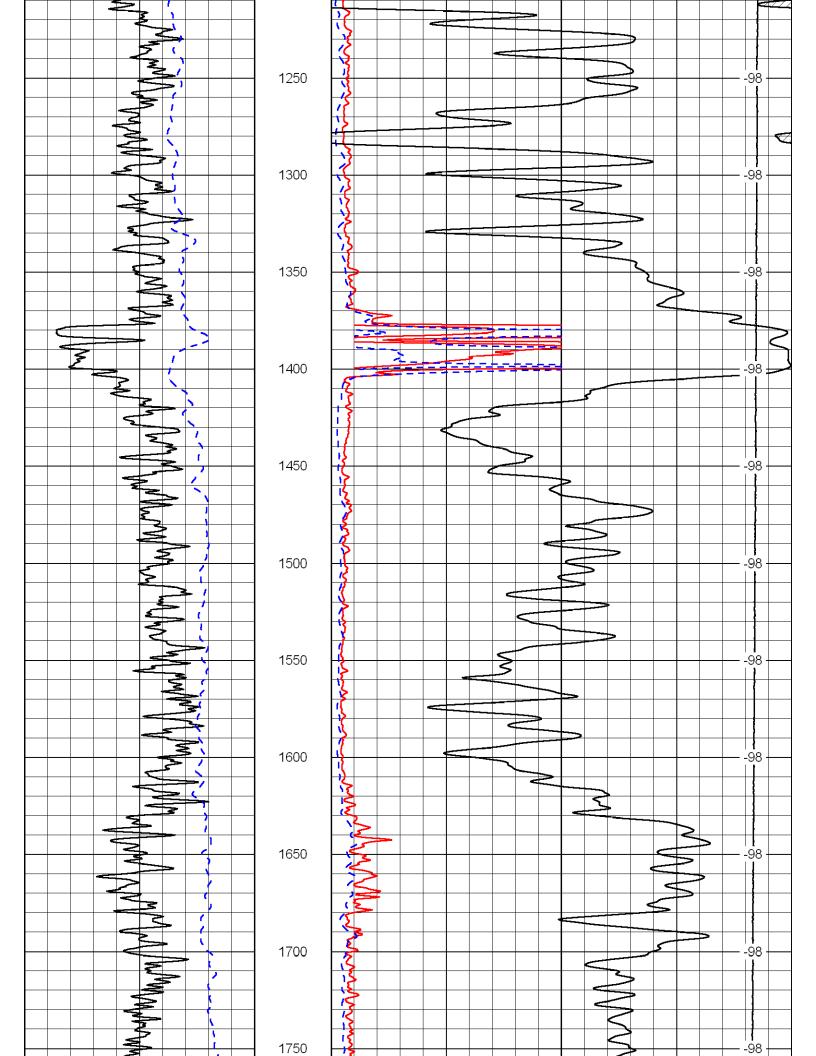
Rush Center, KS: S to Co. Line, S to X Rd, 8W, 1/2S, W into

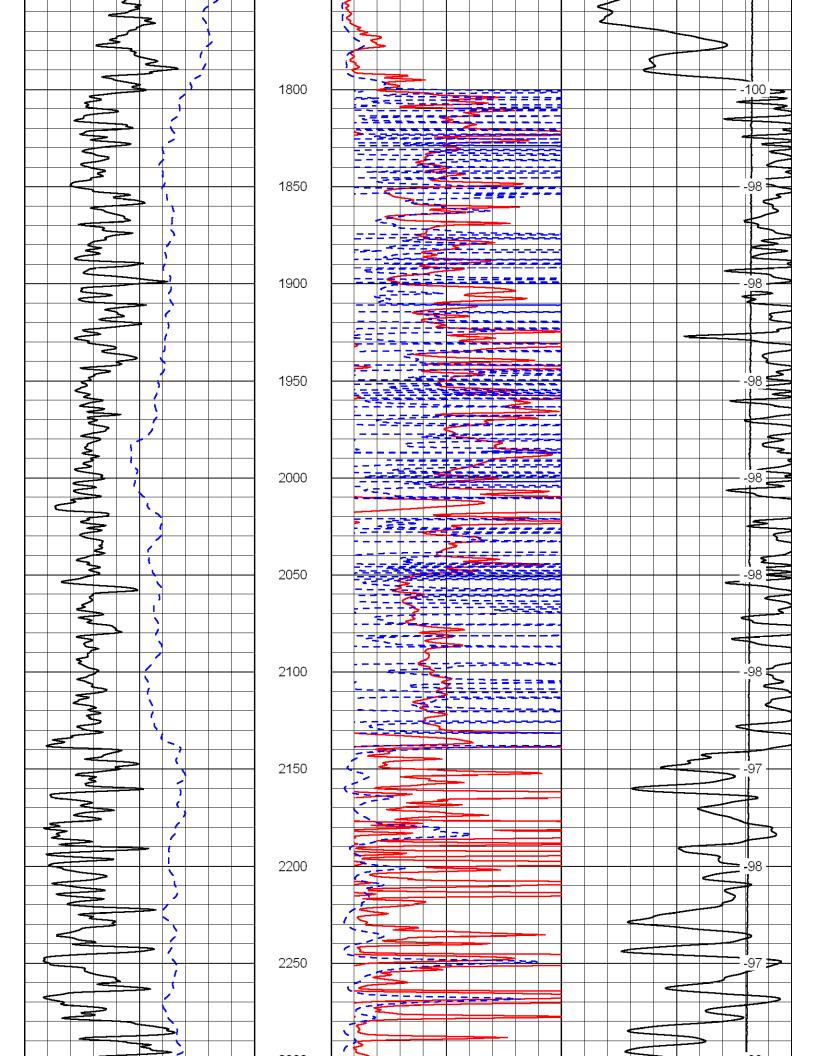
Database File: credohd.db
Dataset Pathname: dil/cremain
Presentation Format: dil2in

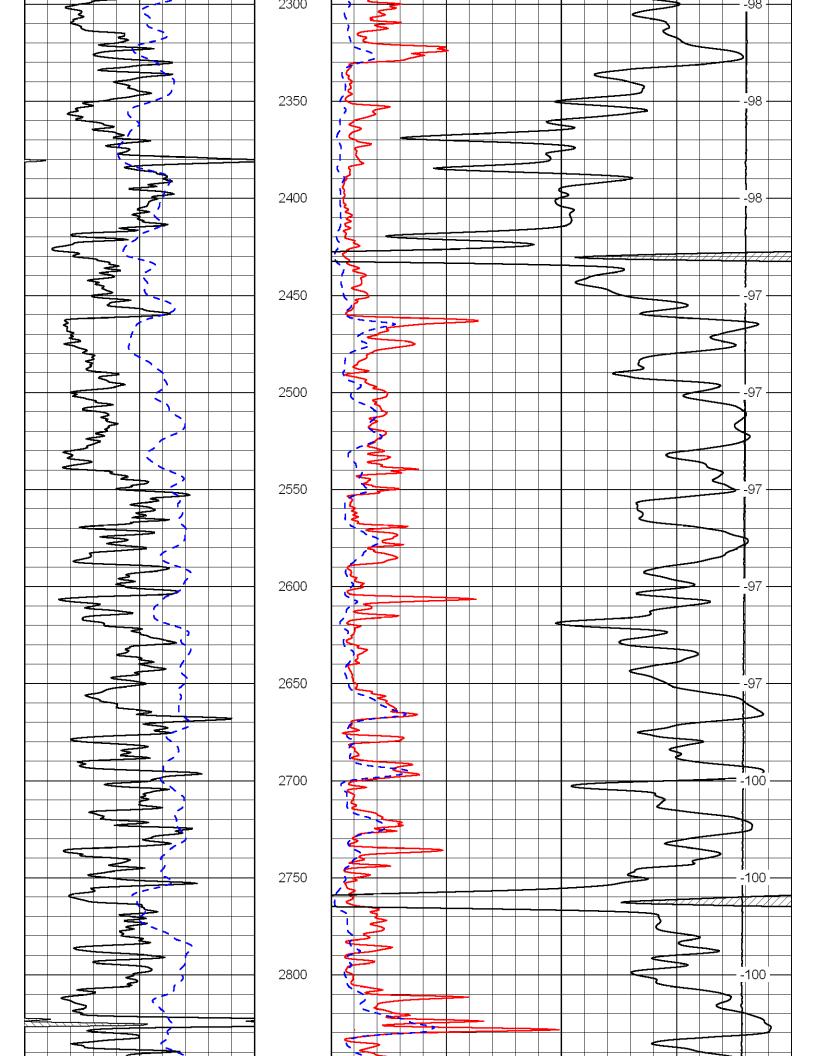
Dataset Creation: Fri Feb 17 13:04:01 2012
Charted by: Depth in Feet scaled 1:600

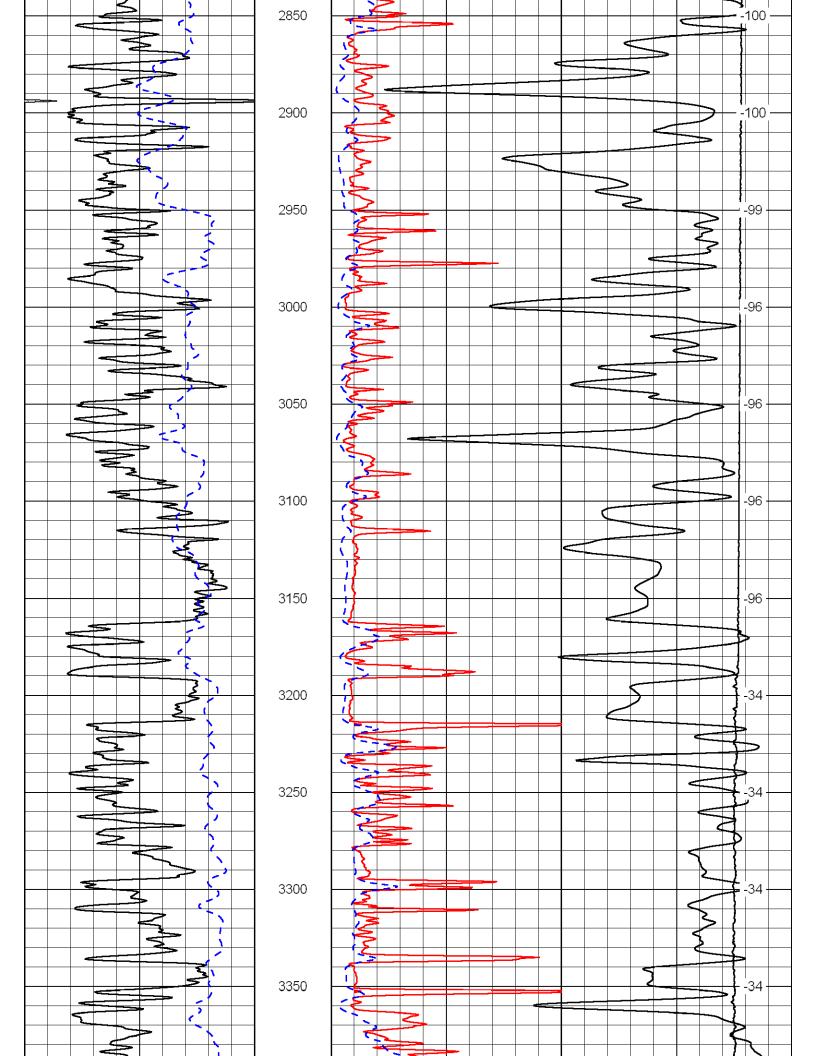


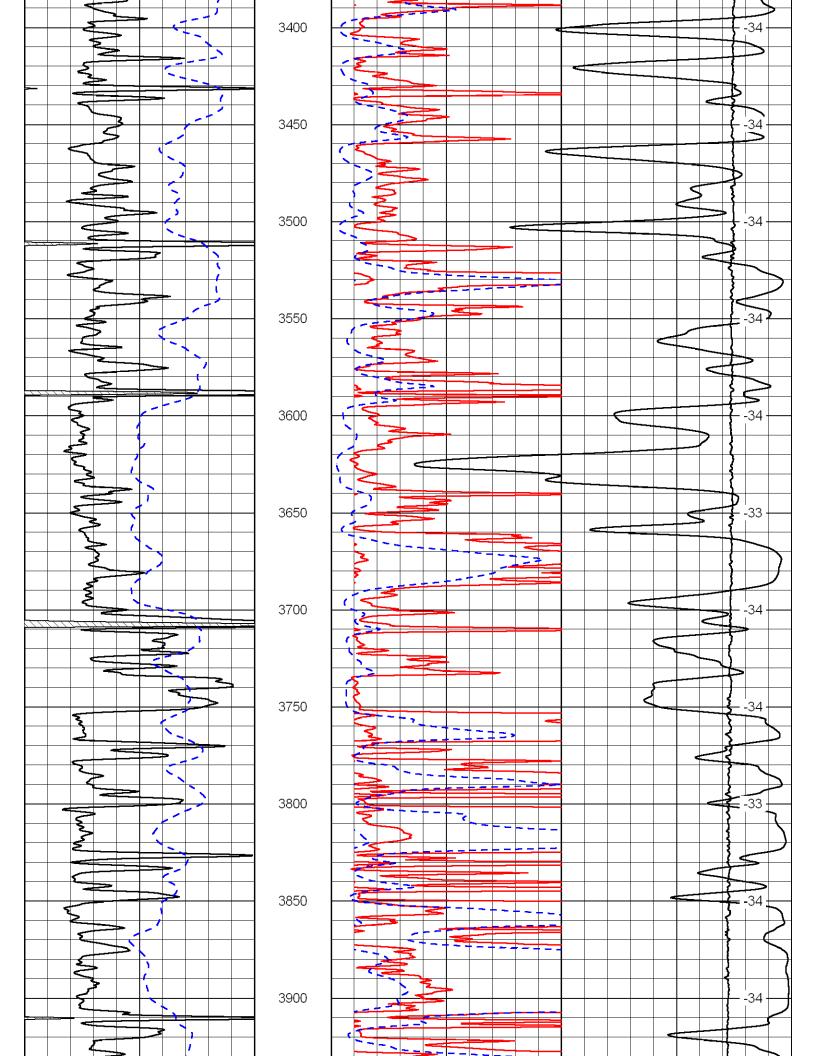


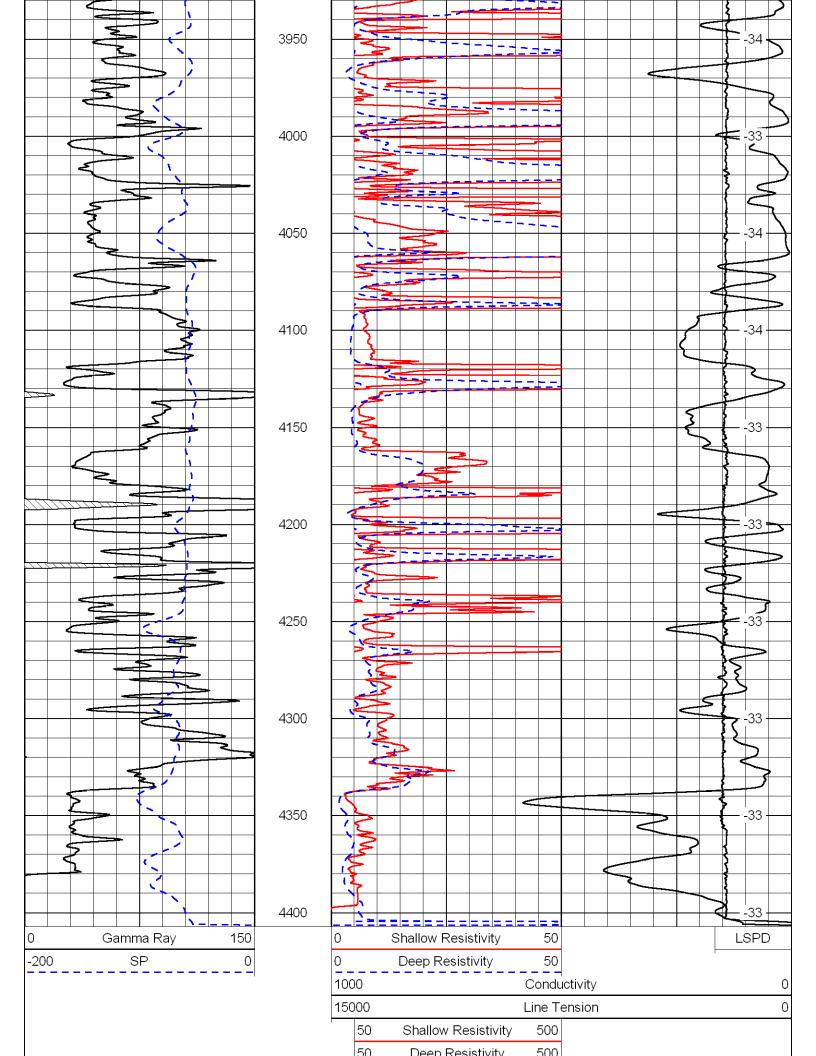


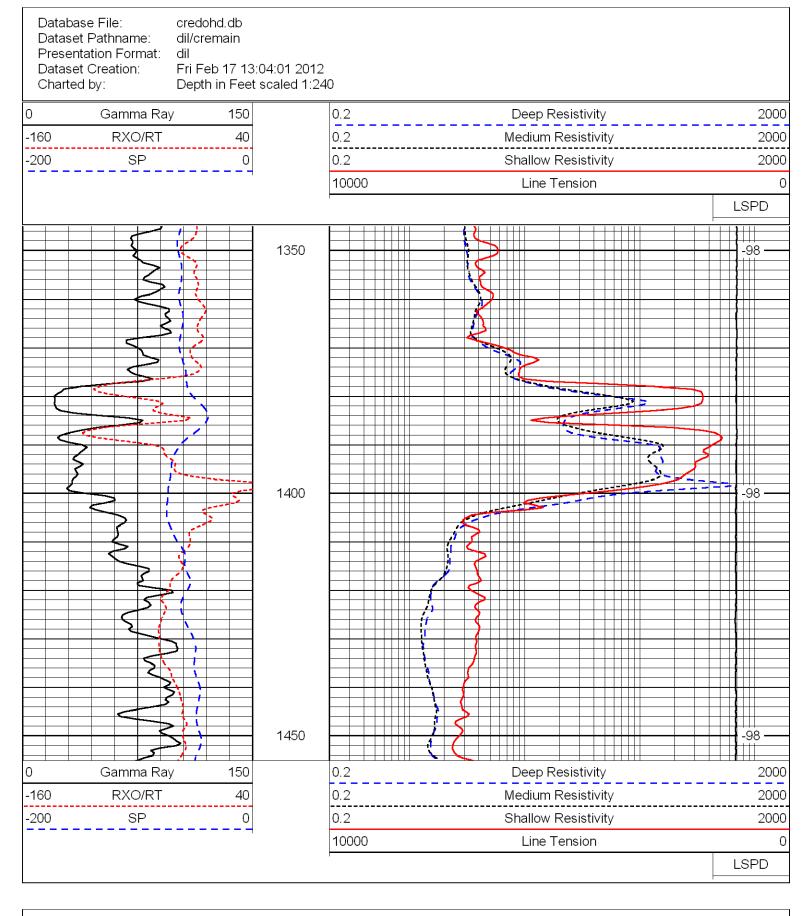












Database File: credohd.db
Dataset Pathname: dil/cremain

Presentation Format: dil

Dataset Creation: Fri Feb 17 13:04:01 2012
Charted by: Depth in Feet scaled 1:240

0 Gamma Ray 150 0.2 Deep Resistivity 2000

