KOLAR Document ID: 1370745

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	SecTwpS. R East West
Address 2:	Feet from North / South Line of Section
City: State: Zip:+	Feet from _ East / _ West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:
□ Oil □ WSW □ SWD	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
☐ OG ☐ GSW	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(Data must be collected from the Reserve Pit)
Described	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
☐ Dual Completion Permit #:	Location of fluid diagonal if bouled offsite.
EOR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	County: Permit #:

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II Approved by: Date:

KOLAR Document ID: 1370745

Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	v. Digital electronic log
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample
Samples Sent to 0	Geological Surv	/ey	Yes No	Na	me		Тор	Datum
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No					
		B	CASING eport all strings set-c		New Used	ion, etc.		
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD			
Purpose:		epth T Bottom	ype of Cement	# Sacks Used		Type and F	Percent Additives	
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a Does the volume Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
Date of first Product Injection:	tion/Injection or R	esumed Production	Producing Meth	nod:	Gas Lift 0	Other (Explain)		
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid,	Fracture, Shot, Cer (Amount and Kind	menting Squeeze I of Material Used)	Record
TUBING RECORD:	: Size:	Set	Δ+-	Packer At:				
TODING RECORD:	. 3126.	Set	n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	Taos Resources Operating Company LLC
Well Name	RICHARDSON 28-1
Doc ID	1370745

Tops

Name	Тор	Datum
Topeka	1189	65
Laton lime	1886	-632
KC Lime	2510	-1255
Marmaton Lime	2715	-1461
Cherokee	2839	-1585
Miss Chart	3090	-1836
Miss Lime	3102	-1848
Kinderhook Shale	3478	-2224
Woodford Shale	3519	-2265

Form	ACO1 - Well Completion
Operator	Taos Resources Operating Company LLC
Well Name	RICHARDSON 28-1
Doc ID	1370745

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight		Type Of Cement	Type and Percent Additives
Surface	12.25	8.625	24.0	235	Class A	3% Gel, 2% CC
Production	7.875	5.50	15.5	3552	Class A	3% Gel, 2% CC



PRESSURE PUMPING LLC

REMIT TO

QES Pressure Pumping LLC Dept:970 P.O.Box 4346 Houston,TX 77210-4346 MAIN OFFICE

P.O.Box884 Chanute,KS 66720 620/431-9210,1-800/467-8676 Fax 620/431-0012

Invoice

Invoice#

811461

Amount Due 7,409.32 If paid after 11/11/17

170.12

4,075.13

Tax:

Total:

Invoice Date:

10/12/17

Terms:

Net 30

Page

1

TAOS RESOURCES OPERATING, LLC

1455 WEST LOOP SOUTH, ST. 600 HOUSTON TX 77027

USA

7139930774

Richardson 28-1

Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	45.000	825.00
CE0002	Equipment Mileage Charge - Heavy Equipment	50.000	7.1500	45.000	196.63
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	45.000	363.00
CC5800A	Class A Cement - Sack	185.000	20.0000	45.000	2,035.00
CC5325	Calcium Chloride	450.000	1.2500	45.000	309.38
CC5965	Bentonite	400.000	0.3000	45.000	66.00
CC6075	Celloflake	100.000	2.0000	45.000	110.00
				Subtotal	7,100.00
			Discounte	ed Amount	3,195.00
		·	SubTotal Afte	r Discount	3,905.00

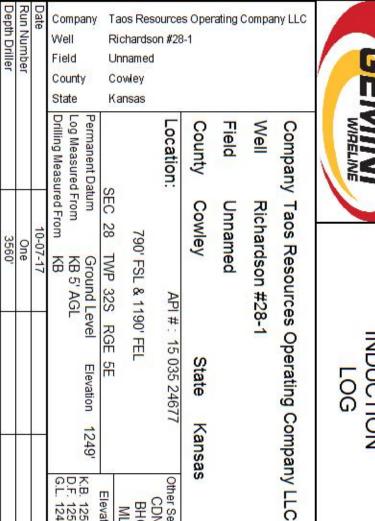


FIELD TICKET & TREATMENT REPORT

	Chanute, KS 667: 0 or 800-467-867			CEMEN	VT	INVOI	心开切	161
DATE	CUSTOMER#		L NAME & NU		SECTION	TOWNSHIP	RANGE	COUNTY
0-4-17	2871	Rick	nard son	0.28-1	1 28	32	5	Couley
USTOMER)		1.				Applicate of	/.
TOOS R	esources	aperat	ing	_	TRUCK#	DRIVER	TRUCK#	DRIVER
	, ,	. ,, .			866	Jerenya		1 1
1455 WE	st Loop.	<i>Jouth St</i> Istate	ZIP CODE	-	446	Jecemin		
		<i>T</i>	1	.,	611	Jude'		
Houston		1101 5 8175	12/25		<u> </u>	_ CASING SIZE & V	VEIGHT & 5/6	24 2
OB TYPE <u> کرد د</u> :ASING DEPTH_		HOLE SIZE DRILL PIPE	14.4	HOLE DEPT TUBING	n	_ CASING SIZE OF	OTHER	
.ASING DEPTH_ :LURRY WEIGHT		SLURRY VOL	UU 8		/sk	CEMENT LEFT in	, -	
SPLACEMENT	/9=	DISPLACEME!		MIX PSI	on	RATE		
	ety mech				دادان المتعادات المستحد المستحد	broke C'r	د ومنامعاليه	
					161 of w		Shut in U	0//2-
anded 13	13 3F2 Ce	MICILY THU	za a spa	1000 /9.7	<u> </u>	7/40 /- 10-10	JAKE 186 (J.	
				72.				
					1,1,1			
· · · · · · · · · · · · · · · · · · ·				, '25				

				•				
				7°.	, ja			
ACCOUNT CODE	QUANITY	Y or UNITS		DESCRIPTION (of SERVICES or P	RODUCT	UNIT PRICE	TOTAL
CE04502	* /		PUMP CHA	RGE			1500,00	1500,00
CE0002	<u> 50</u>		MILEAGE				B. 13	3575.50
CE0711	/ /		m'	n bulk	delivery		660.00	660.00
0088800H	185	·		ASS A Ce			20.00	3 200,0
CC5325	- 43	<u>ර</u>		tleium C	bloride		1.25	1202.
CC5965	400	o	Ca	<u>c/</u>			, 30	120.00
CC6075-1	10	00	Pol	y flake			2,00	200,00
				<i></i>	<u></u>			
			,					
						ubtotal		7100,00
						Scount	451%	\$195.00
						•		
								\$105°
								1110
							1	
						Total	SALES TAX	
avin 3737	//	7/.	11	1		TOTAL	SALES TAX ESTIMATED TOTAL	BEOVETE

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



28

TWP 32S RGE

Ground Level KB 5' AGL

Elevation

KB 1254 DF 1253 GL 1249

Elevation

790' FSL & 1190' FEI

Other Services CDNL BHC ML

API #: 15 035 2467

State

Kansas

0-07-17

8

One

DUAL INDUCTION LOG

<<< Fold Here >>> 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.

Bit Size

ype Fluid in Hole

Chemical 9.5/40

77/8"

10.0/7.6

Pit

Bottom Logged Interval

Casing Driller

8 5/8" @ 235

235

210

356**1**' 3560

Top Log Interval

Casing Logger

Depth Logger

pH / Fluid Loss Density / Viscosity

Rm@BHT

0.78@117degf

9:45 p.m.

12:15 a.m. 117degf

0.96@76degf

.20@76degf

.54@76degf

Calculated

Source of Rmf / Rmc Rmc @ Meas. Temp Rmf @ Meas. Temp Rm @ Meas. Temp Source of Sample

Recorded By

_ocation

Nitnessed By

Mike Pressnall C.Patterson

Ray Dorthy

Hays, KS

1 - 729

Maximum Recorded Temperature

Time Logger on Bottom Time Circulation Stopped

Equipment Number

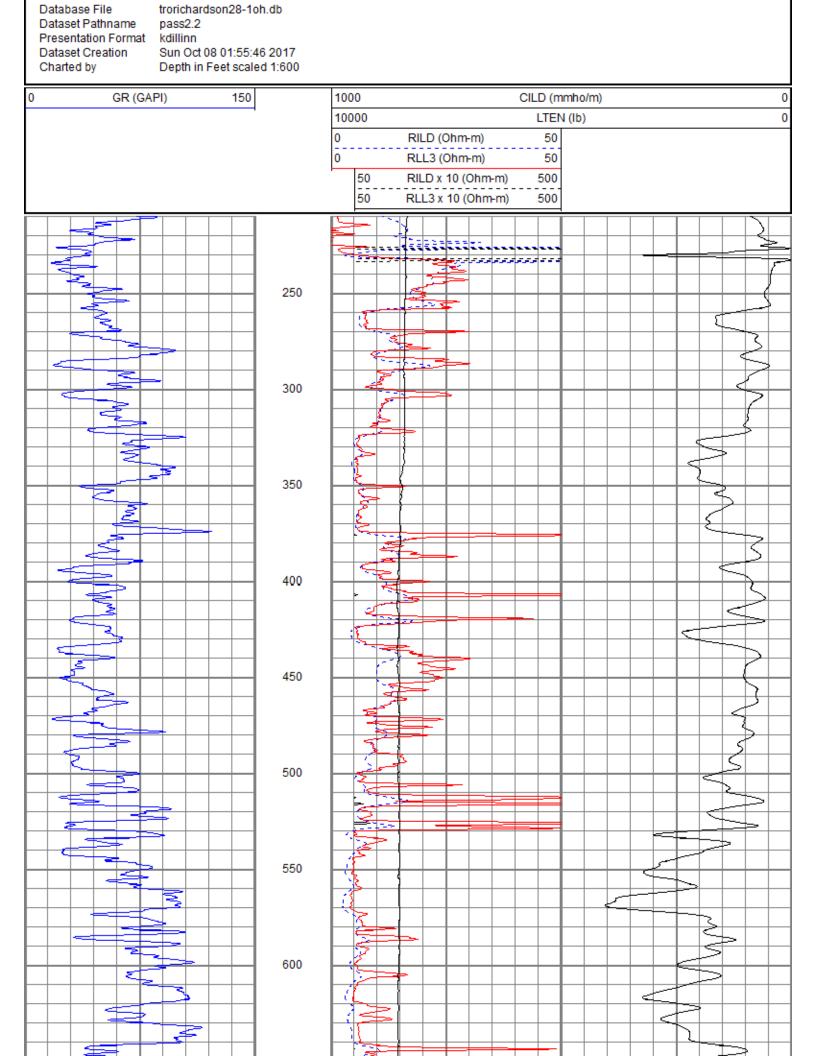
Comments

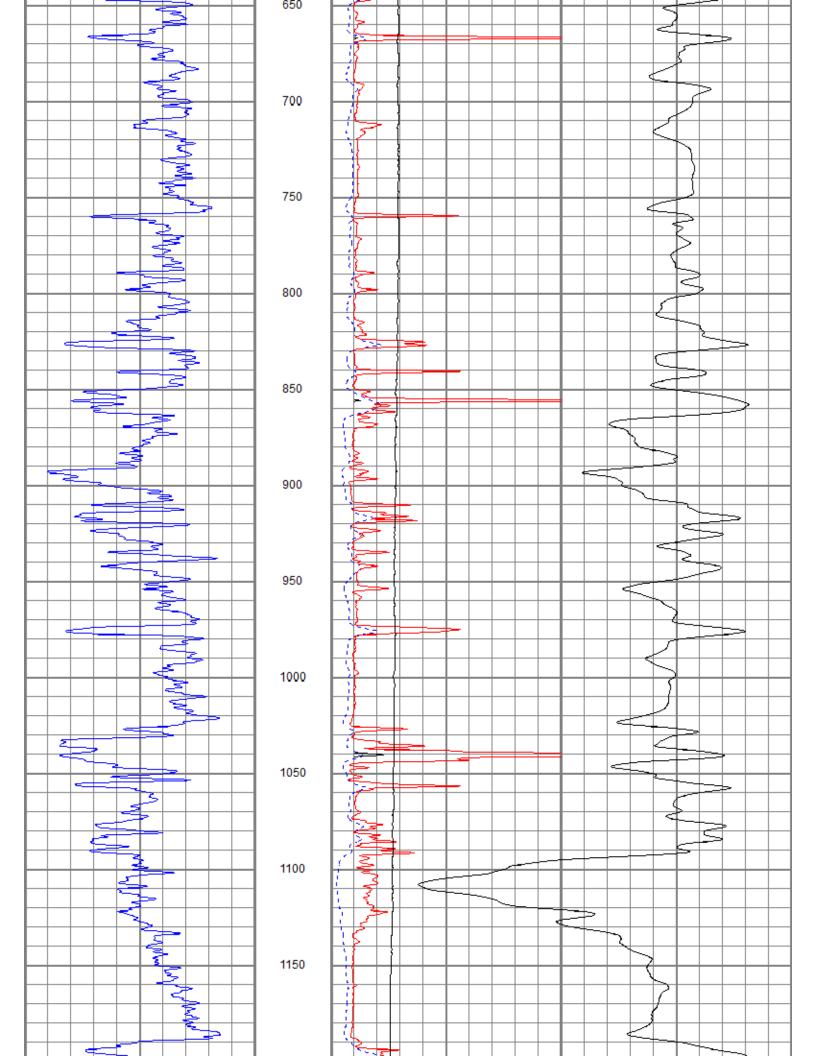
East of Winfield(Main St. and 160 Hwy) 6.5 mi. to 151st rd., 1 south to 172nd Rd., 1/2 West, North into Location

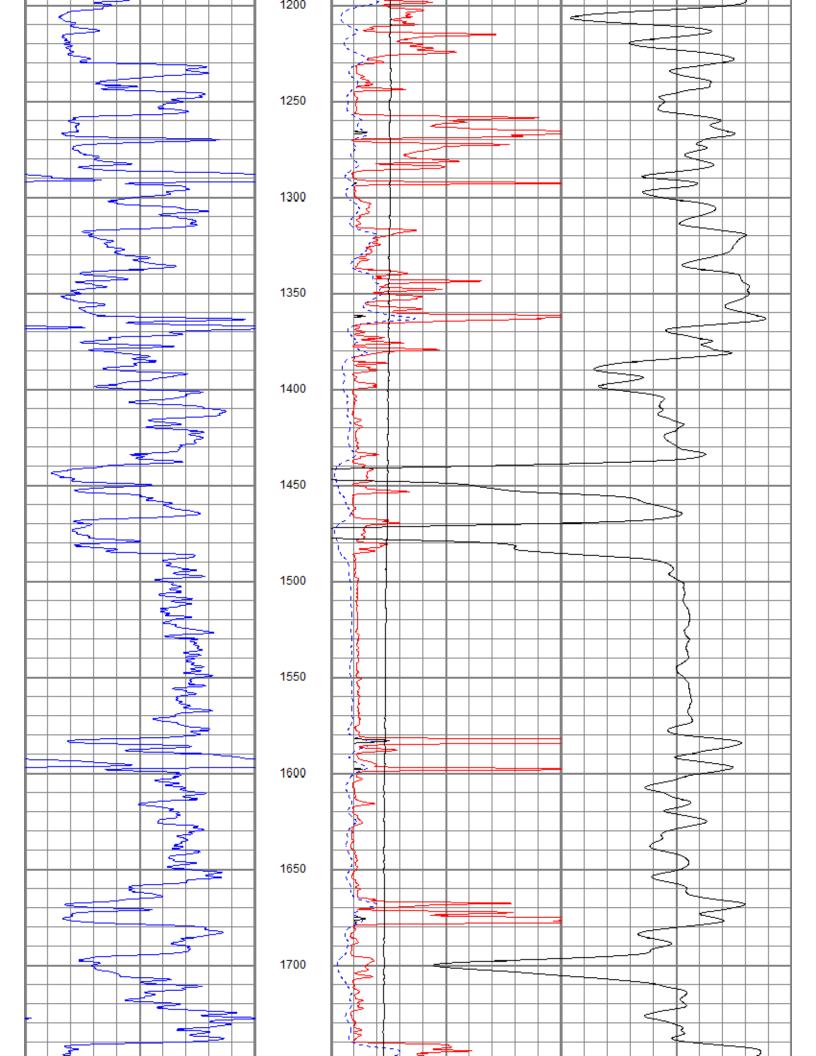
> Thank you for using Gemini Wireline 785-625-1182

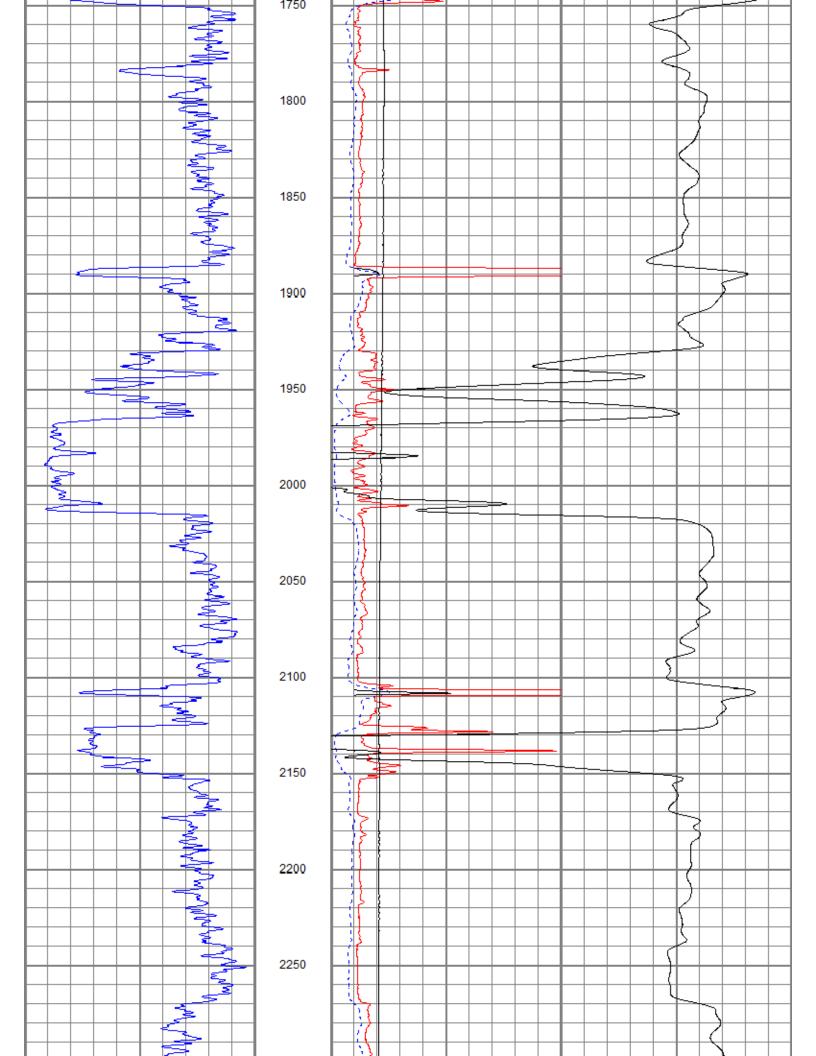


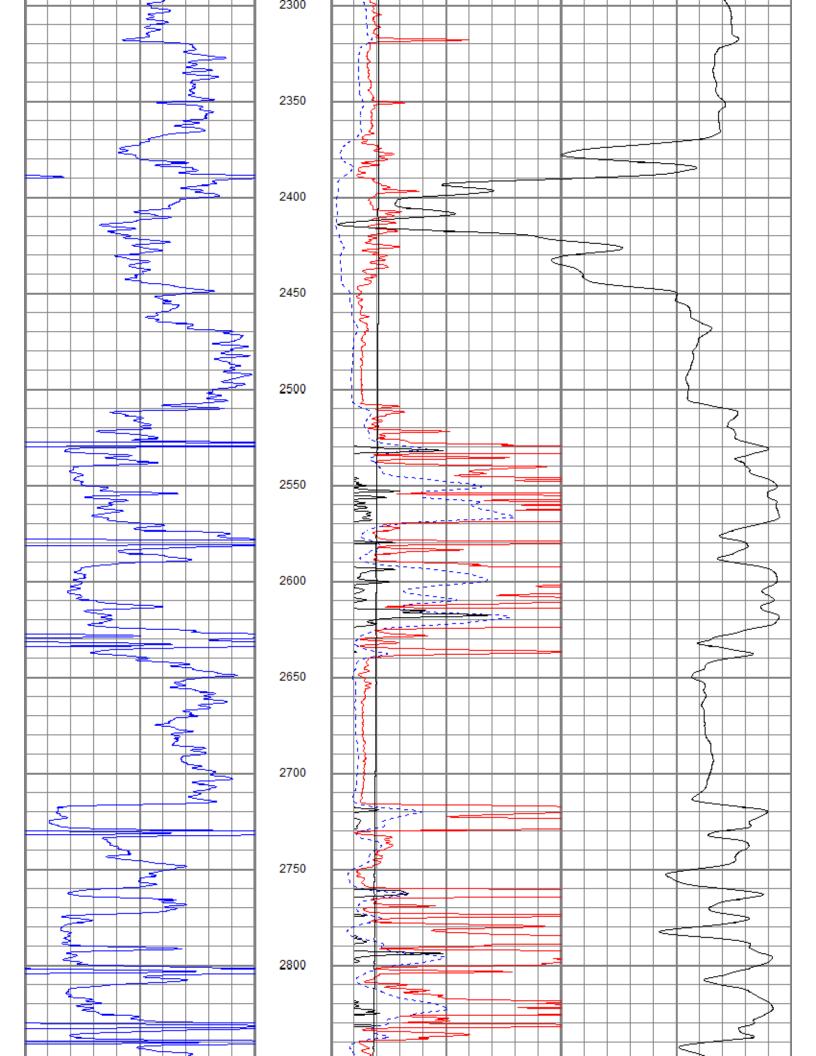
MAIN PASS

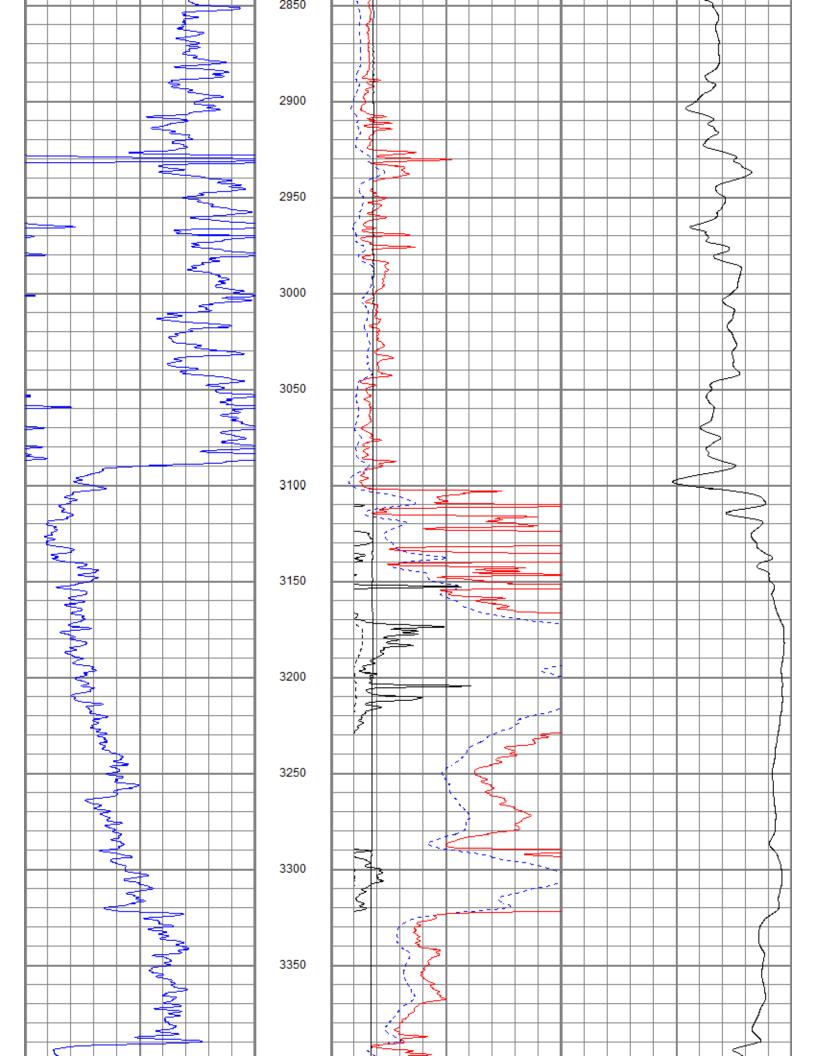


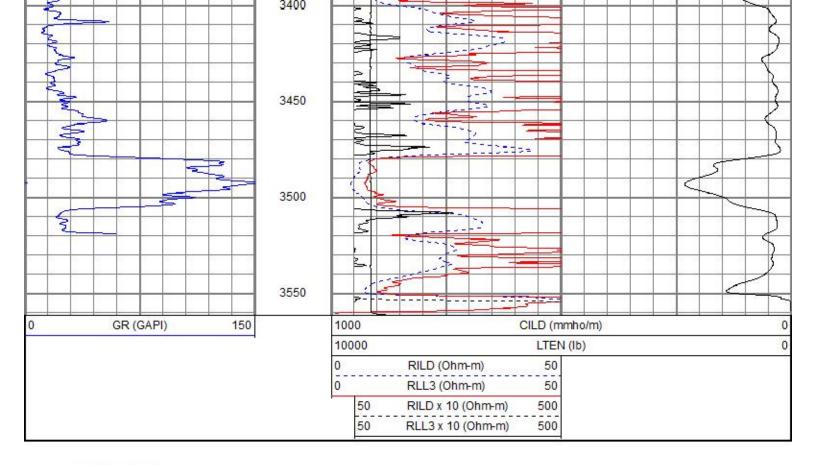














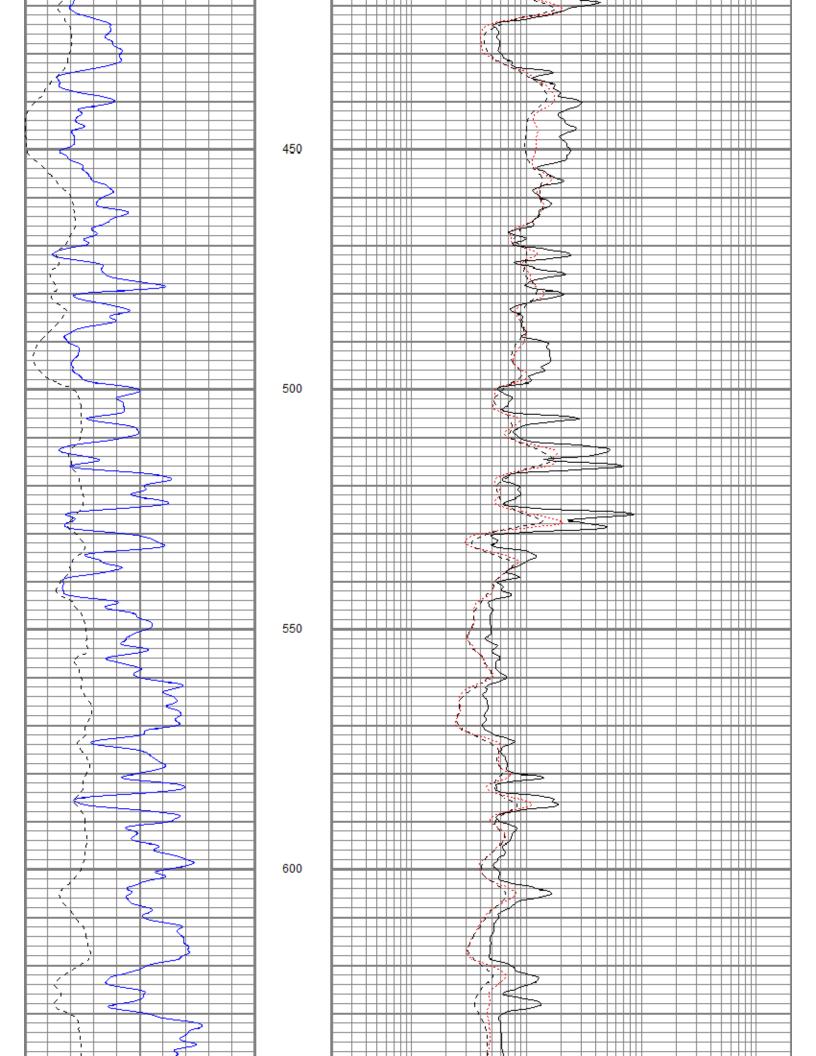
MAIN PASS

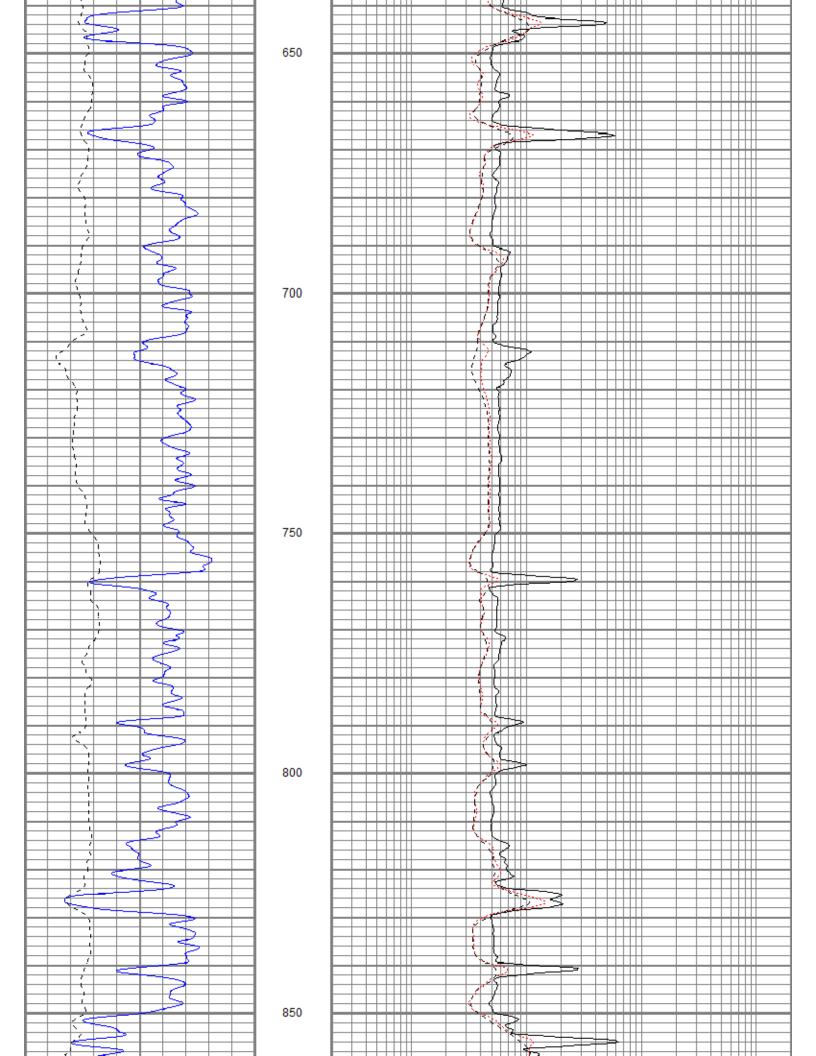
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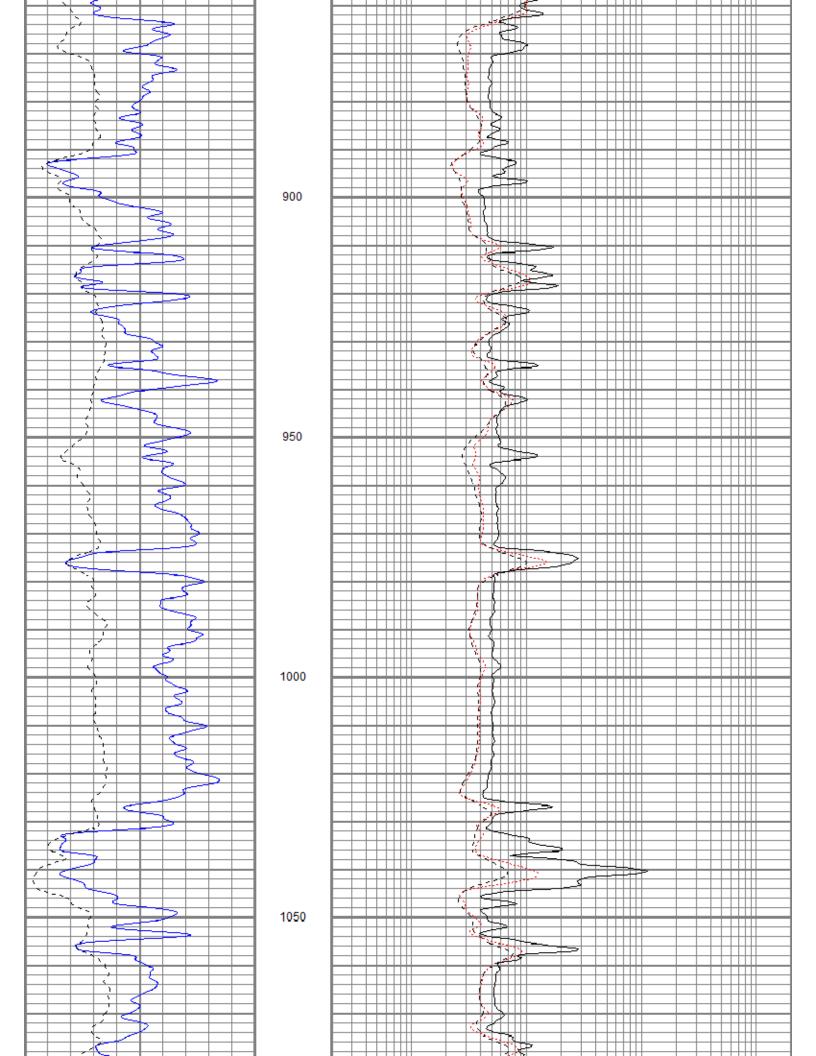
Dataset Pathname pass2.2 Presentation Format kdil

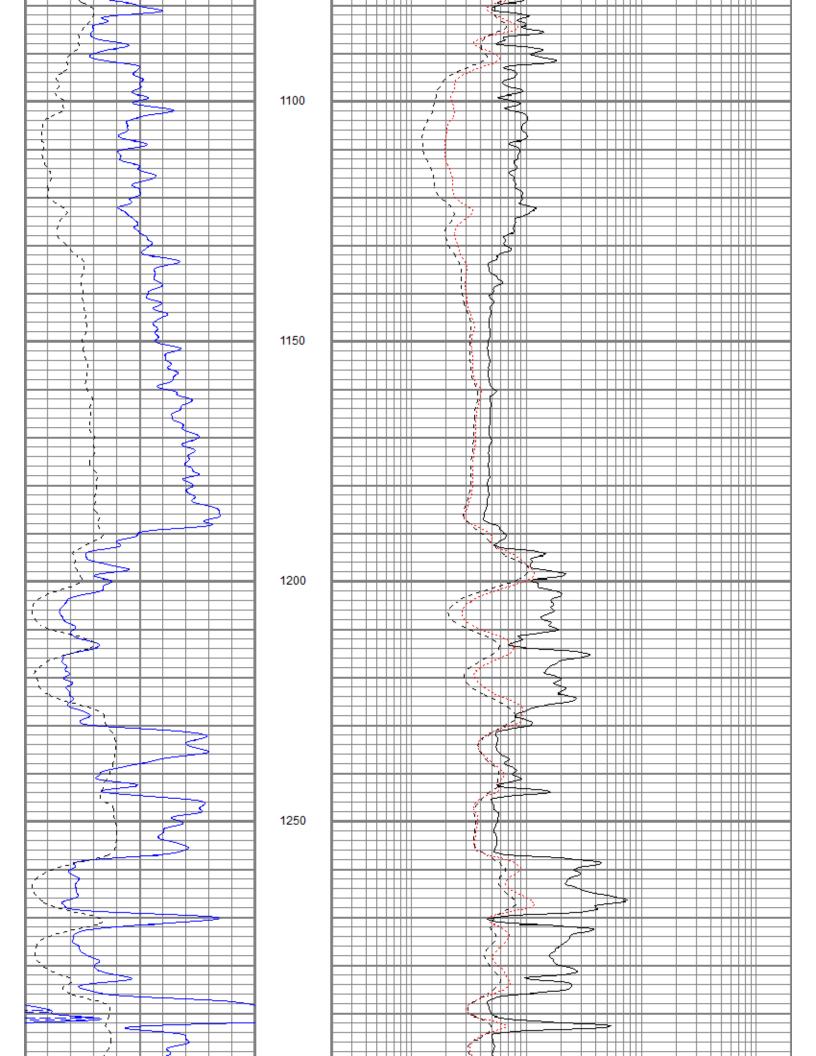
Dataset Creation Sun Oct 08 01:55:46 2017 Charted by Depth in Feet scaled 1:240

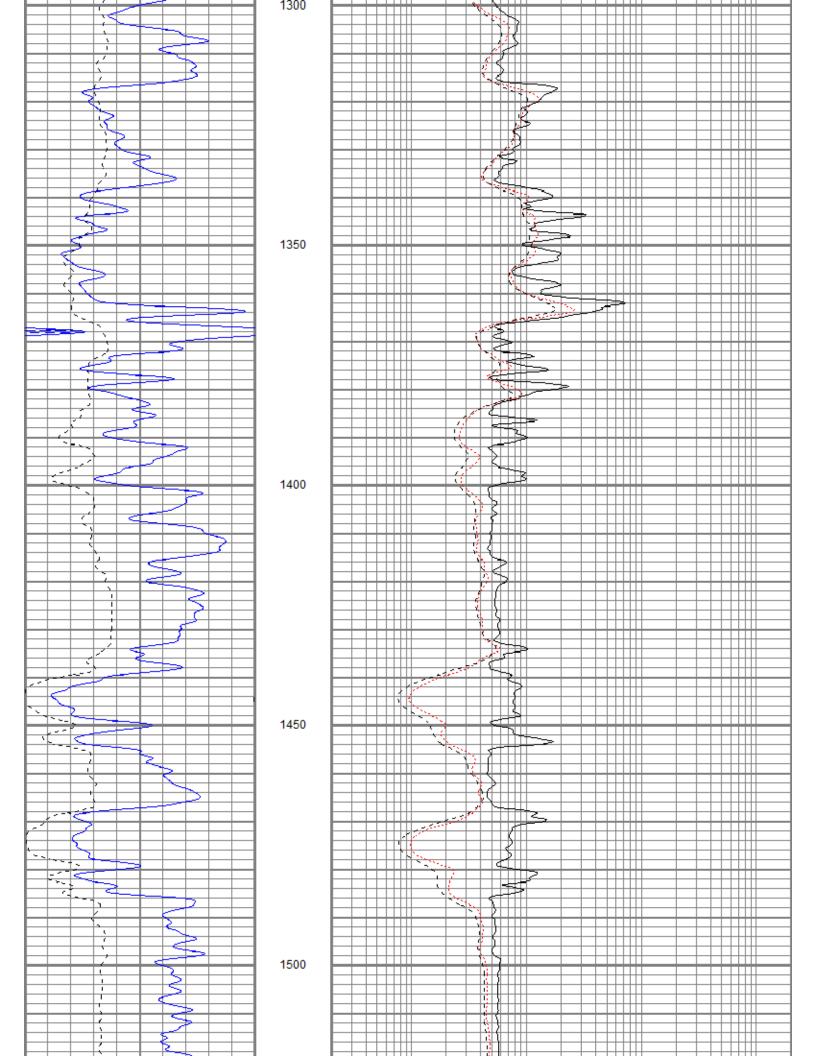
0	GR (GAPI)	150	0.2	RILM (Ohm-m)	2000
-100	SP (mV) 100		0.2	RILD (Ohm-m)	2000
			0.2	RLL3 (Ohm-m)	2000
		40			

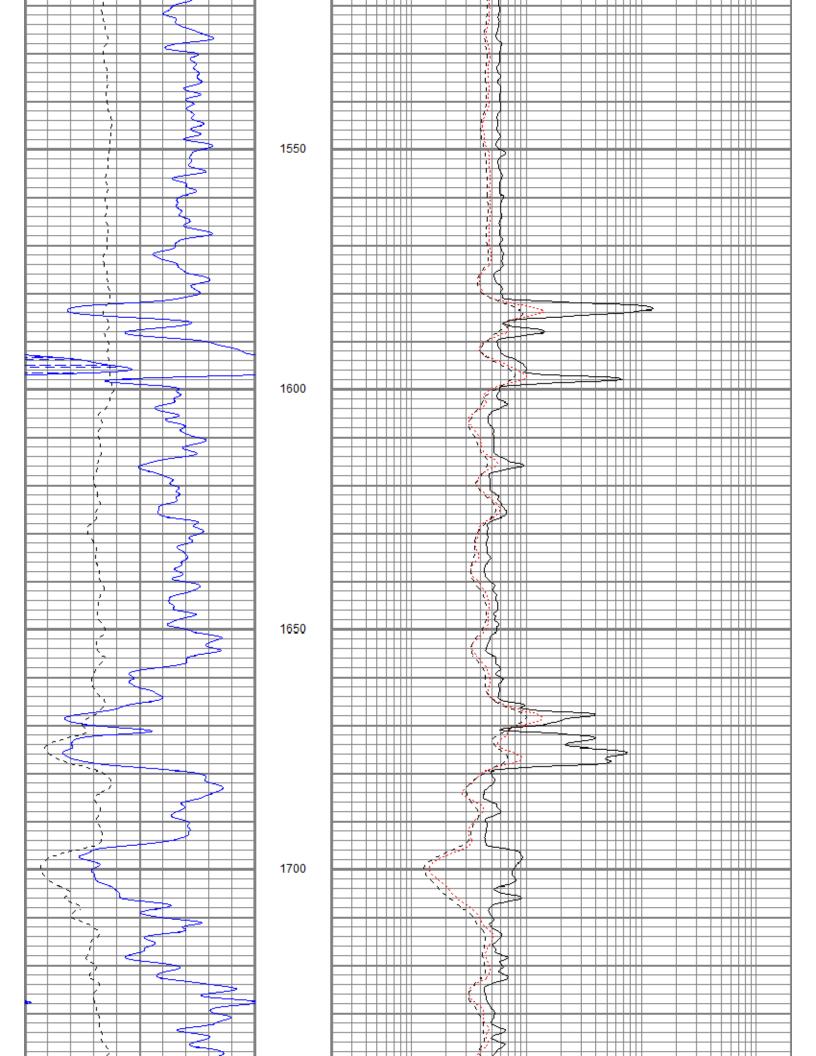


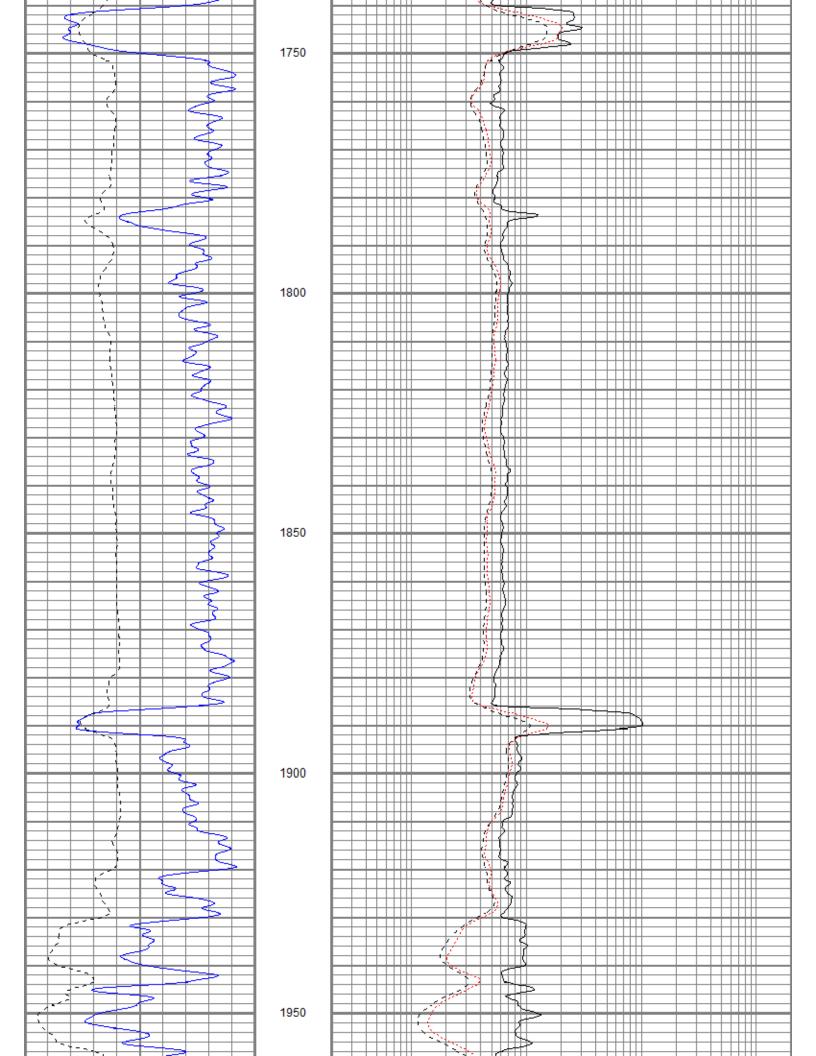


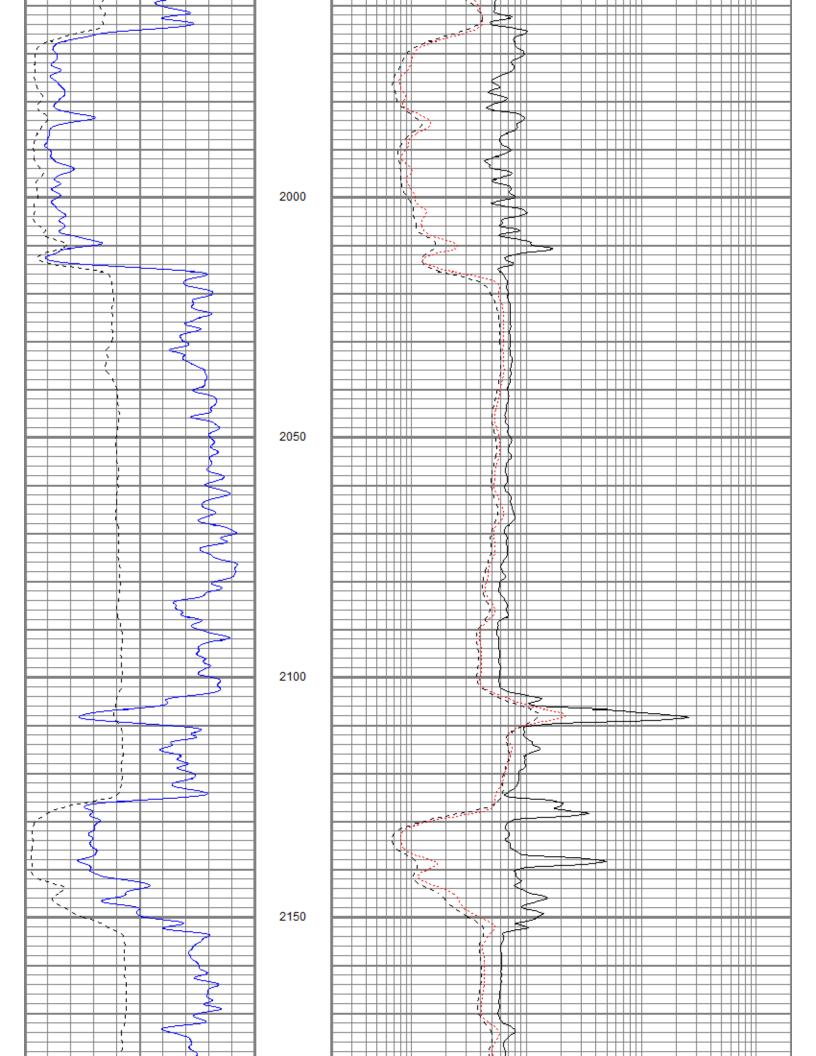


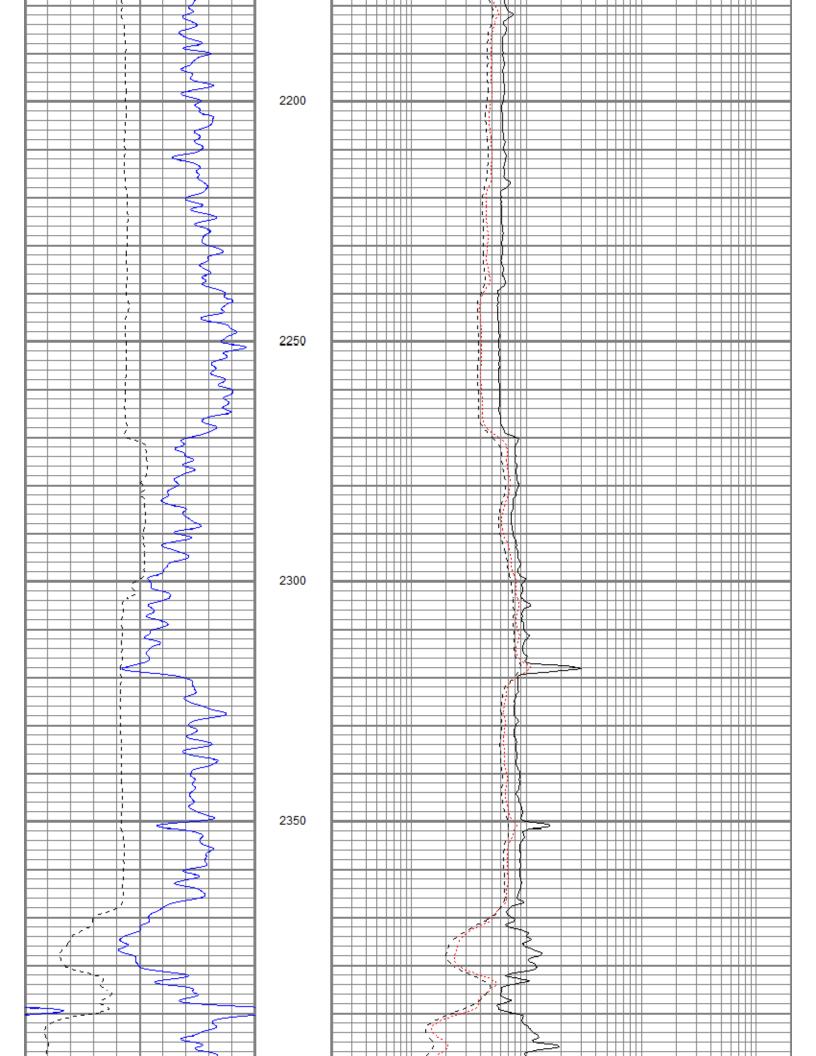


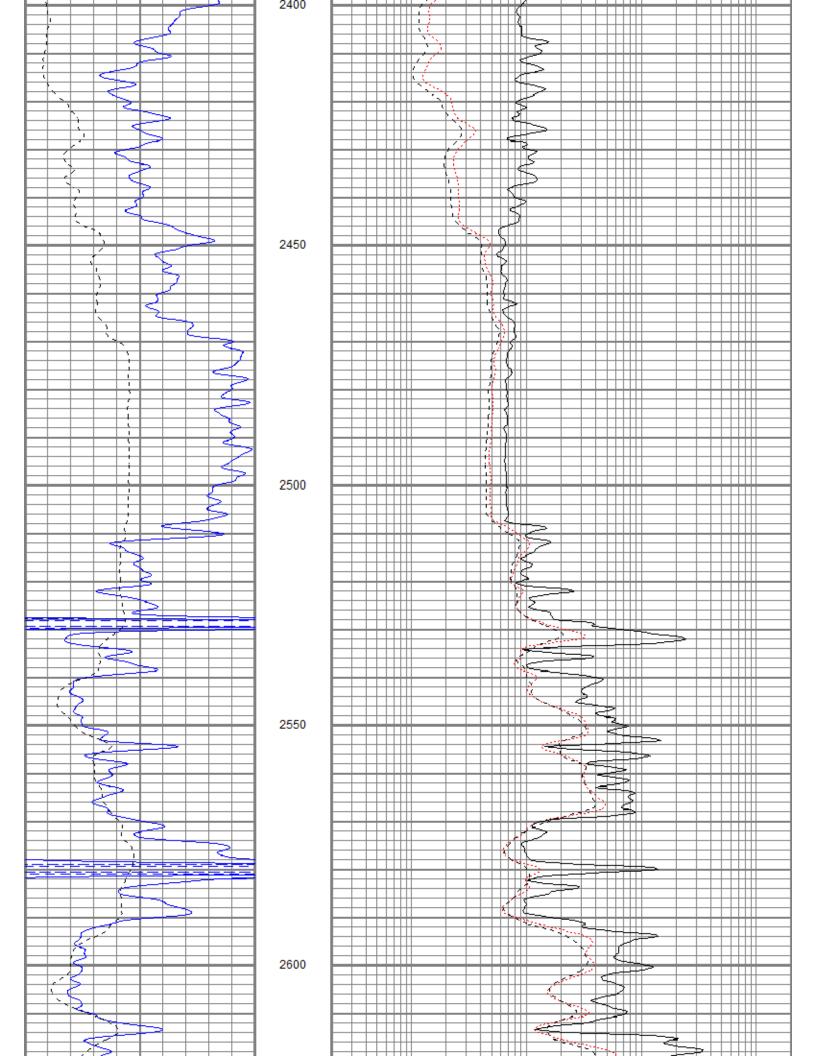


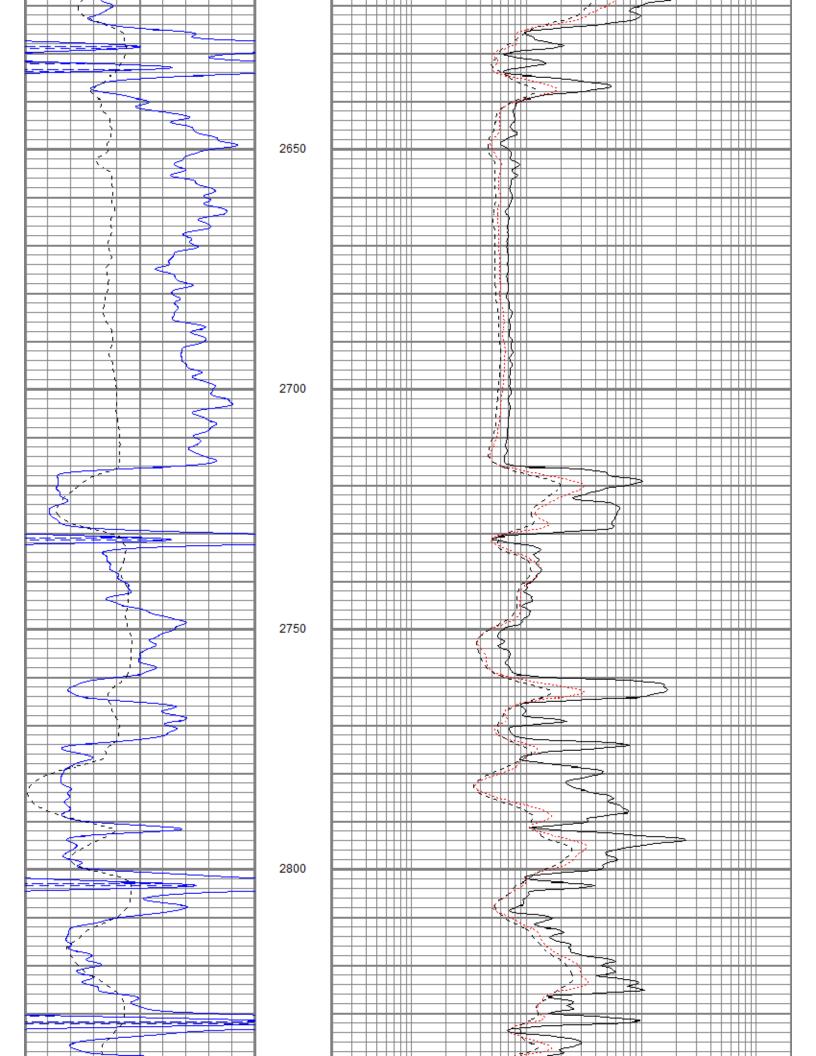


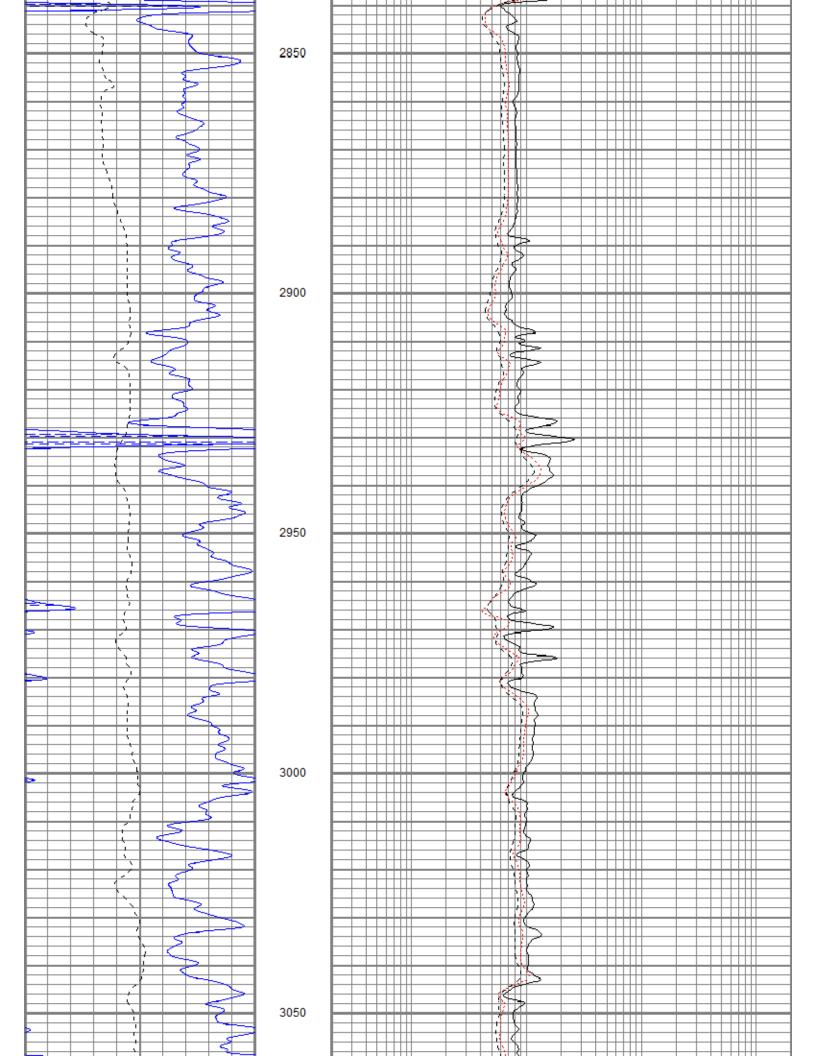


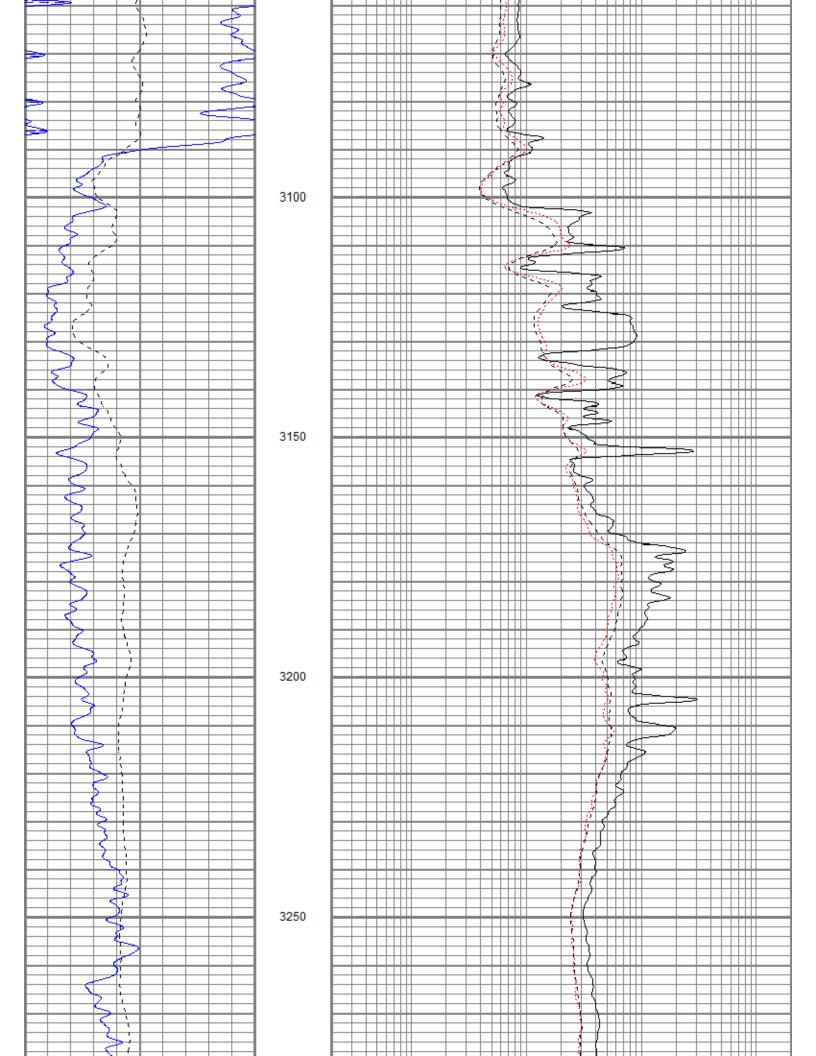


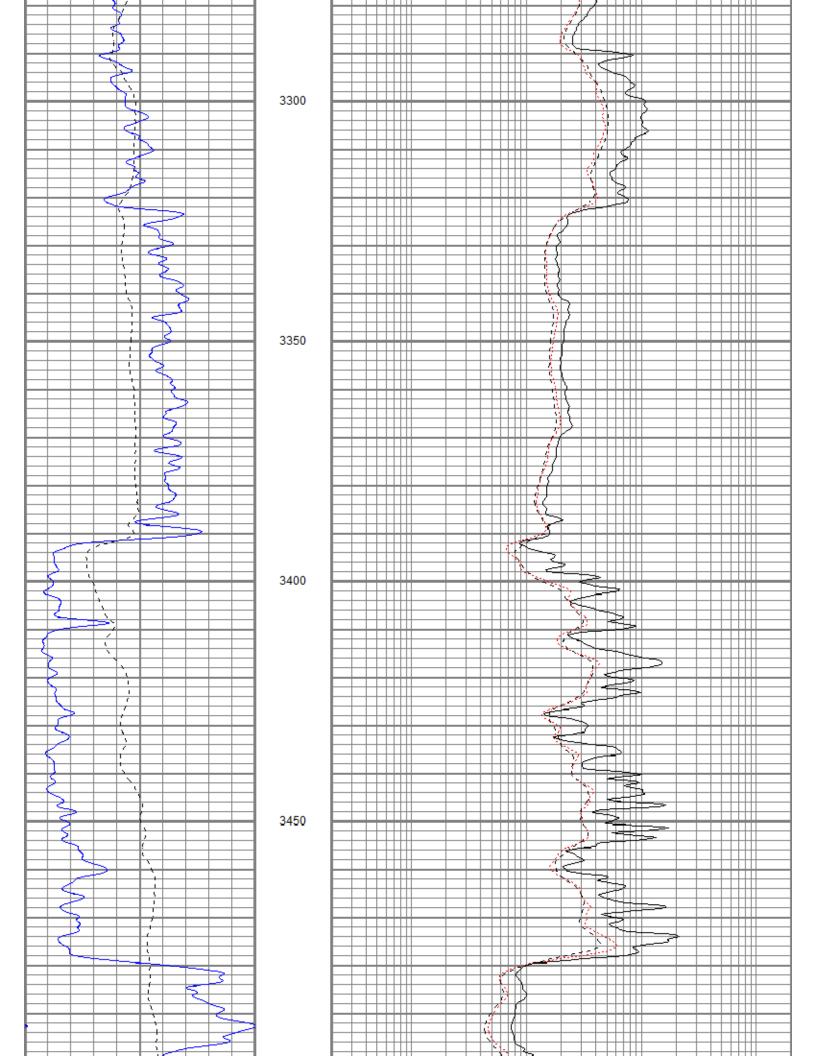


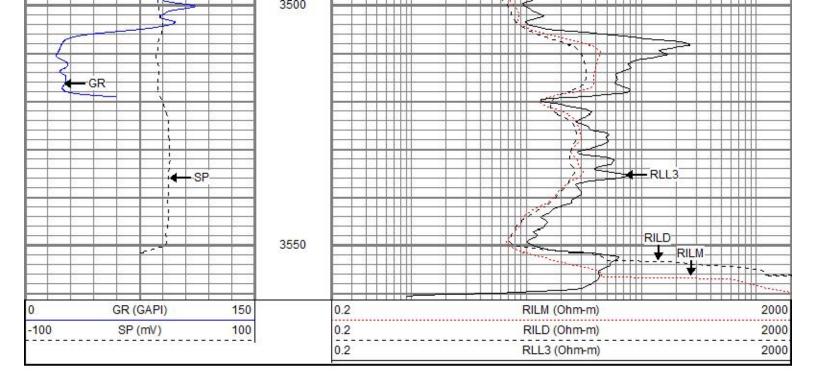














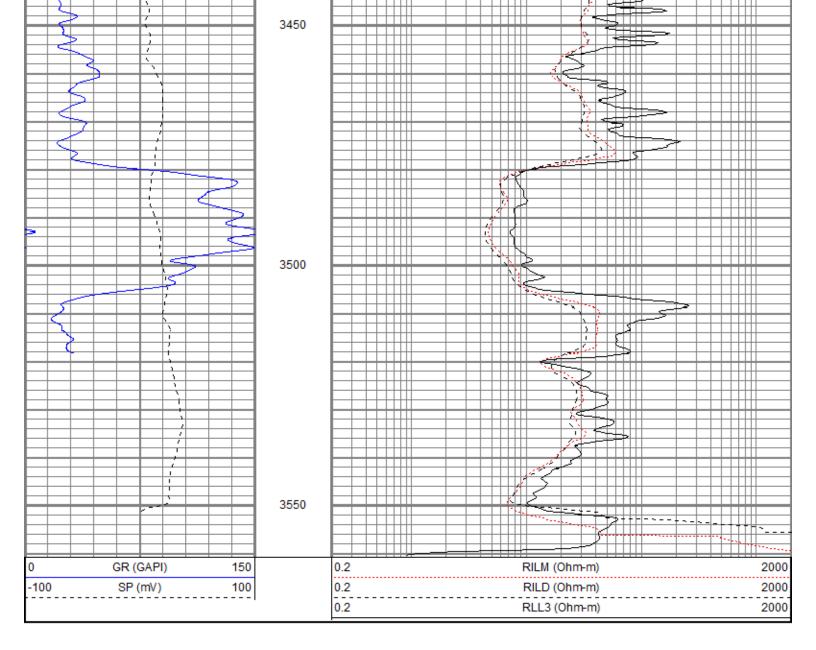
REPEAT SECTION

Database File trorichardson28-1oh.db

Dataset Pathname pass1.1 Presentation Format kdil

Dataset Creation Sun Oct 08 01:17:04 2017 Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150	0.	.2	RILM (Ohm-m)	2000
-100	SP (mV)	100	0.		RILD (Ohm-m)	2000
			0.	.2	RLL3 (Ohm-m)	2000
			3400			



Calibration Report

Database File Dataset Pathname

trorichardson28-1oh.db

pass2.2

Dataset Creation Sun Oct 08 01:55:46 2017

Dual Induction Calibration Report

Serial-Model:

5375-G

Surface Cal Performed: Downhole Cal Performed:

Tue Aug 15 10:21:23 2017 Tue Aug 15 10:22:14 2017

After Survey Verification Performed:

Tue Aug 15 10:22:14 2017

Surface Calibration

Readings				References	Results			
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.003	0.635	V	0.000	350.000	mmho/m	548.445	1.715
Medium	-0.001	0.717	V	0.000	400.000	mmho/m	556.583	0.684
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.003	0.635	V	0.000	350.000	mmho/m	548.268	1.663
Medium	-0.001	0.718	V	0.000	400.000	mmho/m	556.234	0.694

Downhole Calibration

		Readings			References		Resi	ults
Internal:	Zero	Cal		Zero	Cal		m	b
Deep Medium Shallow	0.131 -0.084 2.425	349.928 400.178 0.005	mmho/m mmho/m V	0.052 -0.010 500.000	350.165 400.241 2.000	mmho/m mmho/m Ohm-m	1.001 1.000 205.838	-0.079 0.073 0.894
After Survey Veri	ification							
		Readings			Targets		Resi	ults
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep Medium Shallow	0.000 0.000 0.000	0.000 0.000 0.000	mmho/m mmho/m Ohm-m	0.131 -0.084 500.000	349.928 400.178 2.000	mmho/m mmho/m Ohm-m	1.001 1.000 1.000	-0.079 0.073 0.000
			Neutro	on Calibration	Report			
Serial N	lumber:		2017					
Tool Mo Perform			lithgear (Not Pe	hart rformed)				
Calibrat	tor Value:		1		NAPI			
Calibrat	tor Reading:		1		cps			
Sensitiv	rity:		1		NAPI/cps			
			Tempera	ture Calibratio	n Report			
	Serial Number Tool Model: Performed:	W	/ithMC /MC Not Performed)					
		R	eference	Readir	ng			
l .	Low Reference High Referenc		00 degF 00 degF	0.00 1.00	degF degF			
	Gain: Offset: Delta Spacing		00 00					
			Inclinom	eter Calibratio	n Report			
Perform	ned:	Mon A	ug 07 09:05:18	2017				
		Low R	tead. High Re	ead.	Low Re	f. High Ref.		
X Accel	erometer	205.00	0 1843.00	0	-1.00	1.00	gee	
Y Accel	erometer	205.00	0 1843.00	0	-1.00	1.00	gee	
Z Accel	erometer						gee	
	Gamma Ray Calibration Report							
Serial N Tool Mo Perform	odel:		WithMC WMC (Not Pe	rformed)				
Calibra	tor Value:		1.0		GAPI			
	ound Reading: tor Reading:		0.0 1.0		cps cps			

Sensitivity: 1.0000 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)		Weight (It
GR	40.07	A	—CHD-STD	0.50	1.69	1.00
ACCY	38.91		1.10100			
ACCX	38.91		ADT-WMC (WithMC)	4.58	3.50	120.00
SSTAT	38.49		Admyr Telemetry With Mudcell			
PSTAT	37.66	İ				
ASTAT	37.66			No. 1891		
GRD	36.82		NEU-lithgearhart (2017)	5.65	3.50	85.00
TEMP	36.82		gearhart for litho			
NEU	33.46	III.	\dashv			
LStat	24.30					
LS8	23.64	i.				
LS7	23.64		USP CRITE CONTRACT COLLABORATION	NGF ROME (NCCO)	198,400,000	2000 A
LS6	23.64	g	ADT1LITH-A (1)	9.29	3.50	240.00
LS5	23.64		Admyr Litho Density Tool			
LS4	23.64					
LS3	23.64	<u>I</u>				
LS2	23.64					
LS1	23.64					
LSV	23.64					
LSD	23.62					
SSV	23.43					
SS8	23.43					
SS7	23.43					
SS6	23.43		\$100 to 100 to 1	10.101		11 11 11 11 11 11
SS5	23.43		DIL-G (5375)	21.47	4.00	345.00
SS4	23.43		Gearhart			
SS3	23.43					
SS2	23.43					
SS1	23.43					
DCAL	23.37					
SSD	23.04					
SP	10.60					
CILD	10.60					
CILM	6.89	v .0				
RLL3	1.70	Dataset:	trorichardson28-1oh.db: field/well/run1/pass2.2			200
TR_Mon	0.00	Total length:	41.49 ft			
		Total weight:	791.00 lb			
		O.D.:	4.00 in			



REMIT TO

QES Pressure Pumping LLC Dept:970 P.O.Box 4346 Houston,TX 77210-4346

MAIN OFFICE

P.O.Box884 Chanute,KS 66720 620/431-9210,1-800/467-8676 Fax 620/431-0012

Tax:

Total:

292.08

6,920.97

Invoice# 811464

Invoice Date: 10/12/17 Terms: Net 30 Page 1

TAOS RESOURCES OPERATING, LLC

1455 WEST LOOP SOUTH, ST. 600

HOUSTON TX 77027

USA

7139930774

Richardson 28-1

Part No	Description	Quantity	Unit Price Di	iscount(%)	Total
CE0452	Cement Pump Charge 3001' - 4000'	1.000	2,300.0000	45.000	1,265.00
CE0002	Equipment Mileage Charge - Heavy Equipment	50.000	7.1500	45.000	196.63
WE0853	80 BBL Vacuum Truck (Cement Services)	5.000	100.0000	45.000	275.00
CE0710	Cement Delivery Charge	530.000	1.7500	45.000	510.13
WC6159	City Water	3,000.000	0.0200	45.000	33.00
CC5800A	Class A Cement - Sack	225.000	20.0000	45.000	2,475.00
CC5325	Calcium Chloride	450.000	1.2500	45.000	309,38
CC5965	Bentonite	650.000	0.3000	45.000	107.25
CC6079	PhenoSeal Formica Flakes	200.000	1.3500	45.000	148.50
CC6077	Kolseal	1,150.000	0.5000	45.000	316.25
CP8485	5 1/2" Float Shoe, AFU	1.000	585.0000	45.000	321,75
CP8254	5 1/2" Latch Down Plug & Assembly	1.000	400.0000	45.000	220.00
CP8651	5 1/2" Cement Basket Reciprocating	2.000	360.0000	45.000	396.00
CE1130	Specialized Iron Requirements or Rig . Up	1.000	100.0000	45.000	55.00
			S	Subtotal	12,052.50
			Discounted A	Amount	5,423.63
			SubTotal After D	iscount	6,628.87
				12,583.56 If pai	r

FOREMAN

PRESSURE PUMPING LLC PO Box 884, Chanute, KS 68720 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT CEMENT

								
DATE	CUSTOMER#	WELL	NAME & NUMBER		SECTION	TOWNSHIP	RANGE	COUNTY
10.8.17	2871	Brchan	DSUL 78	P-5	プ も	3 a	S	Couley
CUSTOMER								Some Control
Trees 8	SEQUECES	OPENDEN	1. Co. 414		TRUCK#	DRIVER	TRUCK#	DRIVER
MAILING ADDRE	ESS				760	Chis	•	
१५इ५	w. Lows	5004 L 50	4e 600		713	73		
CITY	1-	STATE	ZIP CODE		637	TUNCOY		
Herosd	(O)	てょ	77027	[725	FU234		
JOB TYPE Pr	2. Due W. 2,2	HOLE SIZE	HO אור ג	LE DEPTH	3540	CASING SIZE & W	EIGHT 5 1/2	15.5
CASING DEPTH	<u>3552'</u>	DRILL PIPE	TÜİ	BING			OTHER	
SLURRY WEIGH	r <u> (ዓ. አ</u>	SLURRY VOL_	52.7 WA	TER gal/sl	7.7	CEMENT LEFT In	CASING (O	
DISPLACEMENT	84.1	DISPLACEMENT	PSIMI)	(PSI		RATE		1
REMARKS: 5,	REMARKS: SASAY meeting in boo House on U. W. 4. Flood egul b							
Contrate	2445 CB	104/0/20	By Evel	0 W v k	3-6-9	1-12-16-	19.22	BASKIS
W 15-24	1. Ragi	o and	chicolate	20	MWS. M	in and,	Lune 2	Saka
yw Rb			Luxyek	<u>(5</u>	-ock 20	15k3@17	2.5 *) ~	l ×
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butsk	@ 14.	à <u>+</u> . w	Mahauin			LADD DIOC	0 8	عمامري
85896 with 750+ Lift press Landeling 1250+ Flankhald								
703 cong/24								
,						Thights	でシュケ	1 Crew
	·····				T	<u> </u>		
ACCOUNT	QUANITY	or UNITS	DESCR	RIPTION of	SERVICES of PRO	DOUCT	UNIT PRICE	TOTAL

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AUTHORIZTION_

avln 9797			SALES TAX ESTIMATED	292.08
Pilotis State Ingel and plicy law years		INTOPEUS		6623 2
·····		disount	45%	542364
		subteda1		1205255
C61130	<u>&</u>	Landrac 3+ Rendal	100 000	1000
CP8254 CP8651	, ,	51/2 - Racin Bugkets	360	720
CP8485	<u> </u>	51/2 A FU Glandshop	585°00	586 00
CC6077	1150#	12015 ea 1	150	575
46079	2004	12 Namosen	<u>1,35</u>	27000
CC5965	650*	Gal	, <u>30</u>	195
CC 537 5	450*	Contain chloride	122	56250
MARKET D	* 225gks	class'B'	3000	1500
WE6159	3000	City under	.02	609
CE0710	(0.6400	Tow Milence ballucay	() 2 5	925 50
L 60853	5 hrs	80 bal uncarock	100	50000
C60002	Souther	PUMP CHARGE	2300°	357 35
ACCOUNT	QUANITY or UNITS	DESCRIPTION of SERVICES of PRODUCT	UNIT PRICE	TOTAL

TITLE

Fracture Start Date/Time:	10/31/17 9:25
Fracture End Date/Time:	10/31/17 11:22
State:	Kansas
County:	Cowley
API Number:	15-035-24677-0000
Operator Number:	Taos Resources Operating Company LLC
Well Name:	Richardson #28-1
Federal Well:	Yes
Tribal Well:	No
Longitude:	-96.883483
Latitude:	37.232078
Long/Lat Projection:	NAD27
True Vertical Depth (TVD):	3,700'
Total Clean Fluid Volume* (gal):	306,516



Additive	Specific Gravity
WATER	1.00
Sand	2.65
Plexslick 986C	1.11
Plexslick 986C	1.11
Plexslick 986C	1.11
Plexsurf 580 ME	0.95
15% HCL	1.07
MCIA-165	0.85
MB-178	1.06
MRAS-10	1.06

Ingredients Section:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**
Water	Operator	Carrier/Base Fluid	Water	7732-18-5	100.00%
Sand	Superior Silica Sand	Proppant	Crystalline Silica in the form of quartz	14808-60-7	100.00%
Plexslick 986C	Chemplex	Friction Reducer	Petroleum Distilate	64742-47-8	20.00%
Plexslick 986C	Chemplex	Friction Reducer	Oleic Acid Diethanolamide	12125-02-9	1.00%
Plexslick 986C	Chemplex	Friction Reducer	Ammonium Chloride	93-83-4	1.00%
Plexsurf 580 ME	Chemplex	Surfactant	Ethylene glycol monobutyl ether	111-76-2	40.00%
Plexsurf 580 ME	Chemplex	Surfactant	Methanol	67-56-1	10.00%
Plexsurf 580 ME	Chemplex	Surfactant	Oleamide Dielhanolamide	61790-66-7	1.00%
Plexsurf 580 ME	Chemplex	Surfactant	D-limonene	5989-27-5	1.00%
Plexsurf 580 ME	Chemplex	Surfactant	Diathanolamone	111-42-2	1.00%
15% HCL	Brainerd	Stimulant	Hydrogen chloride	7647-01-0	36.00%
MCIA-165	Maxidize	Acid Inhibitor	Isopropyl alcohol	67-63-0	1.00%
MCIA-165	Maxidize	Acid Inhibitor	Xylene	1330-20-7	1.00%
MCIA-165	Maxidize	Acid Inhibitor	Prpargyl alcohol	107-19-7	1.00%
MCIA-165	Maxidize	Acid Inhibitor	Methyl alcohol	67-56-1	1.00%
MCIA-165	Maxidize	Acid Inhibitor	Naphtha petroleum, heavy aromatic	64742-94-5	1.00%
MCIA-165	Maxidize	Acid Inhibitor	Pyridine, alkyl derivitives	68391-11-7	1.00%
MB-178	Maxidize	Surfactant	Glutaraldehyde	111-30-8	1.00%
MRAS-10	Maxidize	Acid Anti-Sludge Additive	Methyl alcohol	67-56-1	1.00%
MRAS-10	Maxidize	Acid Anti-Sludge Additive	Isopropyl alcohol	67-63-0	1.00%

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^{*}Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
All component information