

RECEIVED: 9/17/2017	REVIEWER: hAm	TYPE: SWD	APP NO: PMAM/710757523
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505

**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND
 REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Raz Oil and Gas LLC **OGRID Number:** 370507
Well Name: YD STATE B SWD #1 **API:** 30-025-38162
Pool: SWD: Devonian **Pool Code:** 96101

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION
 INDICATED BELOW**

SWD-15^{SY}-B

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
 [I] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☐ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☐ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,
 H. ☒ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application
 Content
 Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Danny Holcomb
 Print or Type Name

Date

4-17-2017

Phone Number

806-471-5628

Signature

e-mail Address

danny@pwhllc.net

Pueblo West, LLC
125 Greathouse Village
Decatur, Texas 76234

April 17, 2017

State of New Mexico
NMOCD Engineering Bureau
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Attn: Mr. Michael McMillan

Request to Amend Administrative Order SWD-1594-A
YO State SWD #1, API 30-025-38162, 660 FNL x 840 FWL
Unit Letter "D", Section 15, T21S, R35E, Lea County, New Mexico

Dear Mr. McMillan,

As you know, administrative order SWD-1594-A on the subject well allows Raz Oil and Gas, LLC authorization to inject into the Devonian formation from approximately **12560 feet to approximately 13000 feet**. Raz has now deepened the well and encountered the Devonian formation much deeper than anticipated. The top of the Devonian formation was found to be at 13490 feet. The well's new TD is now 13968 feet with a Devonian interval of 13490 feet to 13968 feet. Raz respectfully requests an amended administrative order to reflect the Devonian formation as found. The requested amendments to SWD-1594-A include:

- Changing the Devonian disposal interval from 12560 – 13000 feet to 13490 – 13968 feet
- Changing the well completion from open hole to cased hole/perforations
- Changing the maximum disposal pressure from 2512 psi to 2703 psi

Per the requirements in AO SWD-1594-A, attached are copies of the mudlog and open-hole log in the deepened wellbore. Also attached is a copy of the CBL for the 7" casing string. No hydrocarbon shows in the Devonian formation occurred during drilling. An estimated insitu water salinity based on open-hole logs is 30,000 – 40,000 ppm. Attached are two wellbore diagrams, one indicating the current status of the wellbore and one indicating the proposed completion of the well. A summary of formation tops encountered is listed below:

Barnett Shale – 12510'
Mississippi Lime – 12740'
Woodford Shale – 13285'
Devonian – 13490'

Pueblo West, LLC
125 Greathouse Village
Decatur, Texas 76234

Raz Oil and Gas, LLC plans to run a CBL on the liner in the near future. A copy of that CBL will be submitted to the Engineering Bureau and District 1. Raz also plans to perforate the well at 13518 feet – 13718 feet and swab test later this week. If swab test results are good, Raz plans to acidize this interval and perform pump-in tests.

Raz would appreciate your consideration of our request to amend SWD-1594-A as noted above. If you require any additional information, please let me know. Thank you in advance for your consideration.

Sincerely,



Danny J. Holcomb
Pueblo West, LLC
Agent for Raz Oil and Gas, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

Attachments



www.pwllc.net

CURRENT WELLBORE

Wellbore after Drillout #2

Raz Oil and Gas L.L.C.

YO State SWD #1

API# 30-025-38162

660' FNL X 840' FWL, UL 'D' Sec 15, T21S, R35E, Lea County, NM

All Depths KB

KB 3603'

GL 3587'

17-1/2" Hole

13-3/8" 48# H40 Csg

Set @ 850'

Cement to surface: yes

Anhydrite 1850'

Top Salt 1945'

Base Salt 3490'

Top San Andres 4200'

12-1/4" Hole

9 5/8" 40# HCK55 Csg

Set @ 5420'

Cement to surface: yes

Top Del Sand 5530'

Top Bone Spring 7578'

Top Wolfcamp 10156'

Top Barnett Shale 12510'

8-3/4" Hole

7" 26# J55/HCL80 Csg

Set @ 12536'

Cement to surface: yes

Top Miss 12740'

Top Woodford Shale 13285'

Top Devonian 13490'

6-1/8" Hole

5" 15# L80 Liner

Hung @ 12273'

Set @ 13962'

Cement to TOL: yes

TD @ 13968'

DV Tool @ 4166'

ECP @ 4169'

DV Tool @ 5335'

ECP @ 5340'

DV Tool @ 9797'

ECP @ 10002'

Drawing Not to Scale

COMPLETED WELLBORE

Well Configured for SWD Service

Raz Oil and Gas L.L.C.

YO State SWD #1

API# 30-025-38162

660' FNL X 840' FWL, UL 'D' Sec 15, T21S, R35E, Lea County, NM

All Depths KB

KB 3603'

GL 3587'

17-1/2" Hole

13-3/8" 48# H40 Csg

Set @ 850'

Cement to surface: yes

Anhydrite 1850'

Top Salt 1945'

Base Salt 3490'

Top San Andres 4200'

12-1/4" Hole

9 5/8" 40# HCK55 Csg

Set @ 5420'

Cement to surface: yes

Top Del Sand 5530'

Top Bone Spring 7578'

Top Wolfcamp 10156'

Top Barnett Shale 12510'

8-3/4" Hole

7" 26# J55/HCL80 Csg

Set @ 12536'

Cement to surface: yes

Top Miss 12740'

Top Woodford Shale 13285'

Top Devonian 13490'

6-1/8" Hole

5" 15# L80 Liner

Hung @ 12273'

Set @ 13962'

Cement to TOL: yes

DV Tool @ 4166'

ECP @ 4169'

DV Tool @ 5335'

ECP @ 5340'

Tapered Injection Tubing
4-1/2" x 2-7/8" IPC

Pkr Fluid in Annulus

DV Tool @ 9797'

ECP @ 10002'

Injection Packer
5" x 2-7/8" Nickel Plated
Set @ 13493'

Injection Interval - 13518'-13718'
Perfs - 13518'-58' (2SPF)
Perfs - 13558'-658' (4SPF)
Perfs - 13658'-718' (2SPF)

TD @ 13968'

Drawing Not to Scale

2-7/8" Inside
Liner

Company: Raz Oil and Gas, LLC

Well: YO State 15 SWD 1

Field: Osudo South Morrow

County: Lea State: Texas

County: Lea	Field: Osudo South Morrow	Location: 600' FNL x 840' FWL	Well: YO State 15 SWD 1	Company: Raz Oil and Gas, LLC	PEX Compensated Neutron Log Laterolog Resistivity			
Location:		600' FNL x 840' FWL Section 15, Township T21S, Range 35E		Elev.: K.B. 3603.00 ft G.L. 3587.00 ft D.F.				
Permanent Datum:		Ground Level		Elev.: 3587.00 f				
Log Measured From:		Kelly Bushing		16.00 ft above Perm.Datum				
Drilling Measured From:		Kelly Bushing						
API Serial No. 30-025-38162		Section: 15		Township: T21S		Range: 35E		
Logging Date		13-Apr-2017						
Run Number		4A						
Depth Driller		13963.00 ft						
Schlumberger Depth		9854.00 ft						
Bottom Log Interval		9854.00 ft						
Top Log Interval		2648.00 ft						
Casing Driller Size @ Depth		7 in @ 12506.00 ft						
Casing Schlumberger		12508 ft						
Bit Size		6.125 in						
Type Fluid In Hole		Brine						
MUD	Density	Viscosity	9.5 lbm/gal					
	Fluid Loss	PH						
	Source of Sample		Active Tank					
RM @ Meas Temp		0.08 ohm.m @ 68 degF						
RMF @ Meas Temp		0.08 ohm.m @ 68 degF						
RMC @ Meas Temp								
Source RMF		RMC	Calculated					
RM @ BHT		RMF @ BHT	0.03 @ 182	0.03 @ 182				
Max Recorded Temperatures		182 degF						
Circulation Stopped		Time						
Logger on Bottom		Time	13-Apr-2017 18:00:00					
Unit Number		Location:	2140 Midland					
Recorded By		Richard Dowdell						
Witnessed By		Ben Thompson						

Disclaimer

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

Contents

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5. Depth Summary
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 - 6.3 Log (Jim Woods)
 - 6.4 Parameter Listing
7. Tail

Remarks and Equipment Summary

4A: Toolstring

4A: Remarks

Equip name Length MP name Offset
LEH-QT **65.65**
 LEH-QT

AH-369 **62.73**

DTC-H **61.31**
 ECH-KC
 DTC-H

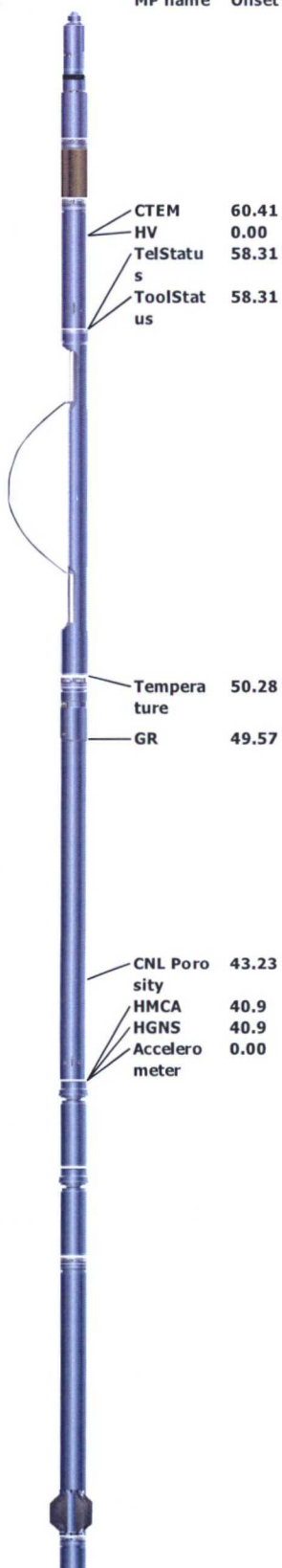
ILE-F **58.31**

HGNS-B **50.31**
 HGNH
 NPV-N
 NSR-F:5027
 HACCZ-B:2
 32
 HMCA-B
 HGNS-B

AH-107[2 **40.9**
]

AH-107[1 **38.9**
]

HRLT-B **36.9**
 HRUH-B
 HRUC-B
 HRLS-B
 HRLH-B
 HRLC-B
 AH-270



Thank you for choosing Schlumberger
 Wireline: Midland TX

Today's Crew: Barakat, Sean, AJ

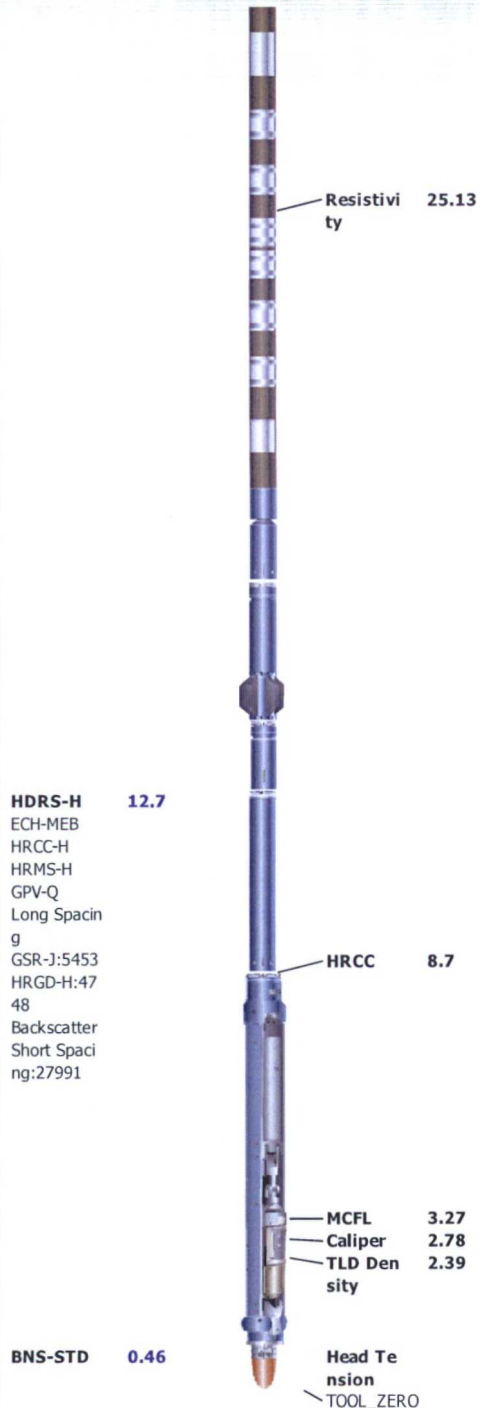
Logging interval from TD to casing shoe

HGNS ran slick due to hole size

Neutron porosity corrected for hole size and
 standoff

5" Future casing used for cement volume

Limestone matrix chosen



Depth Summary

	4A		
--	----	--	--

Depth Measuring Device

Type	IDW-JA		
Serial Number	6483		
Calibration Date	15-Mar-2017		
Calibrator Serial Number			
Calibration Cable Type	7-46P XS		
Wheel Correction 1	-1		
Wheel Correction 2	0		

Tension Device

Type	CMTD B/A		
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Type	CMTD-D/A		
Serial Number	1500		
Calibration Date	14-Mar-2017		
Calibrator Serial Number	13		
Number of Calibration Points	10		
Calibration Root Mean Square Error	14		
Calibration Peak Error	32		

Logging Cable

Type	7-46P-XS		
Serial Number			
Length	19800.00 ft		
Conveyance Type	Wireline		
Rig Type	Crane		

4A:Depth Control Parameters

Depth Control Remarks

Log Sequence	Subsequent Trip To the Well
Reference Log Name	Schlumberger Porosity Print
Reference Log Run Number	3A
Reference Log Date	22-Mar-2016
Subsequent Trip Down Log Correction	-6.00 ft

4A

Main Pass 5"=100'

Integration Summary

Output Channel(s)	Output Description	Input Parameter	Output Value	Unit
IHV	Integrated Hole Volume	GCSE_UP_PASS	334.4	ft3
ICV	Integrated Cement Volume	GCSE_UP_PASS, FCD	133.24	ft3

Pass Summary

Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	DSC Mode	Depth Shift	Include Parallel Data
4A	Main[3]:Up	Up	12275.69 ft	13984.38 ft	13-Apr-2017 5:59:24 PM	13-Apr-2017 6:30:53 PM	ON	1.00 ft	Yes

All depths are referenced to toolstring zero

Log

Company:Raz Oil and Gas, LLC Well:YO State 15 SWD 1

4A: Main[3]:Up:S018

Description: Triple Combo standard resolution template for Platform Express Format: Log (Jim Woods) Index Scale: 5 in per 100 ft Index Unit: ft
Index Type: Measured Depth Creation Date: 13-Apr-2017 19:22:52

TIME_1900 - Time Marked every 60.00 (s)

—ICV - Integrated Cement Volume every 10.00 (ft3)

—ICV - Integrated Cement Volume every 100.00 (ft3)

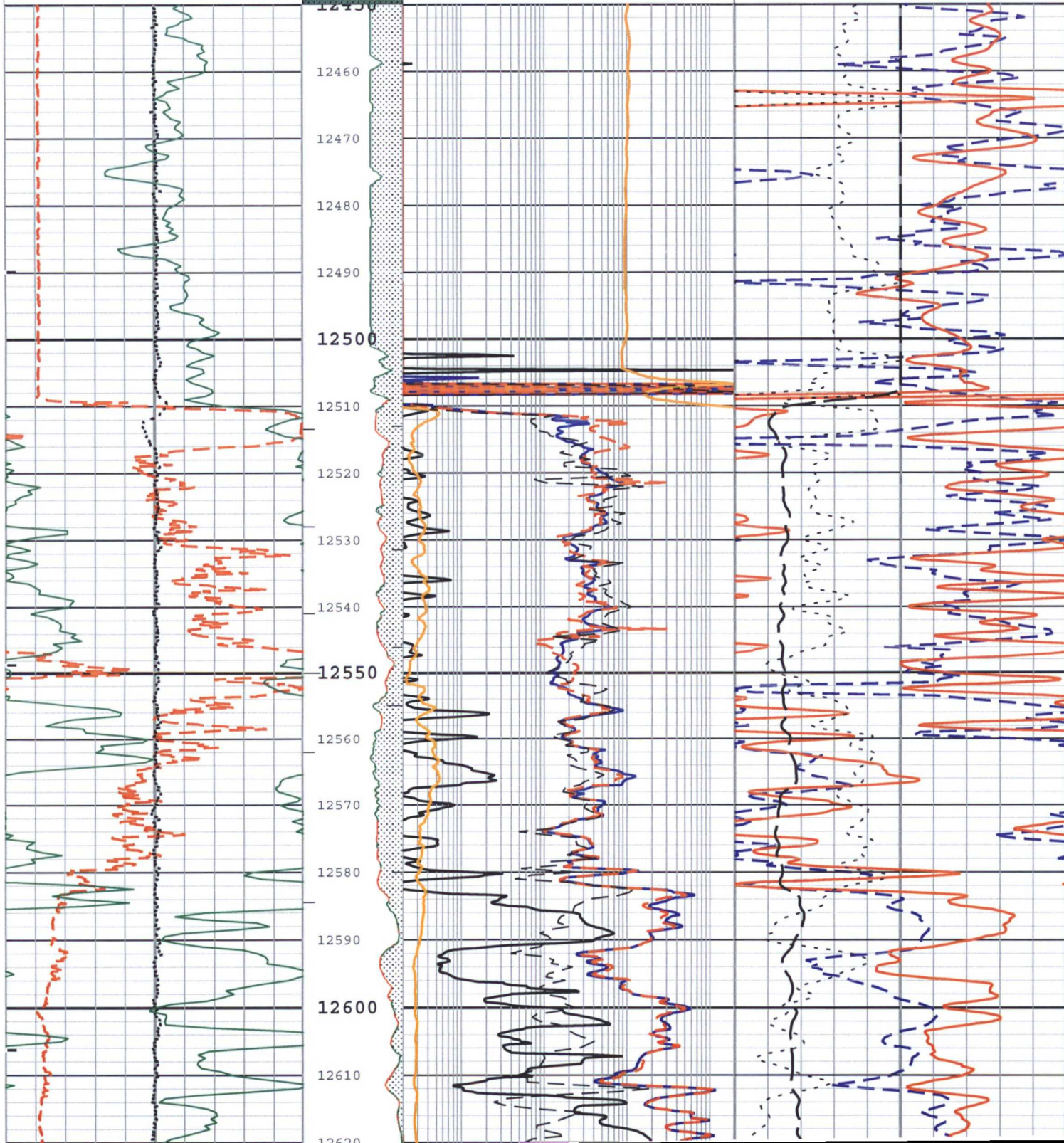
—IHV - Integrated Hole Volume every 10.00 (ft3)

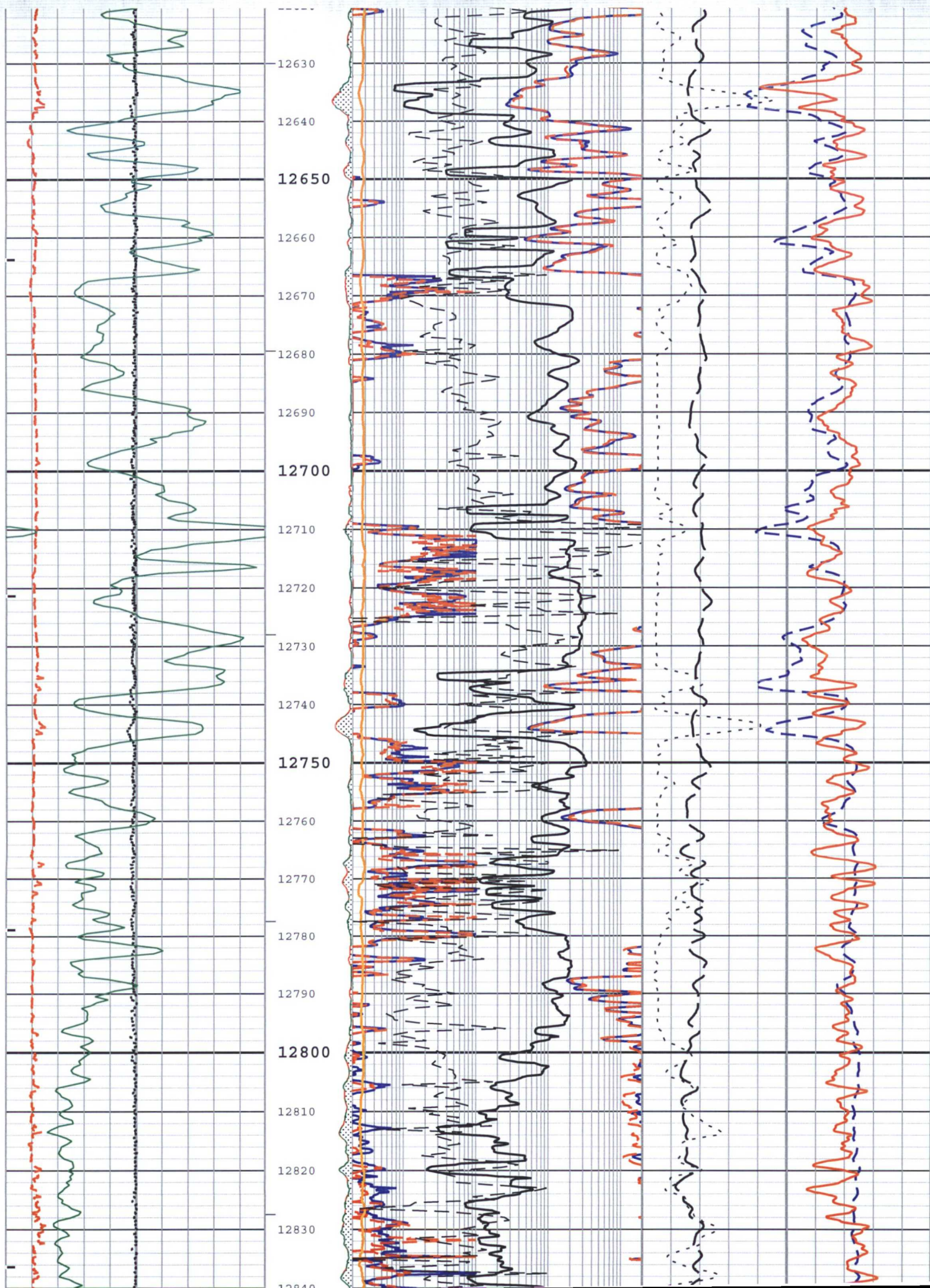
—IHV - Integrated Hole Volume every 100.00 (ft3)

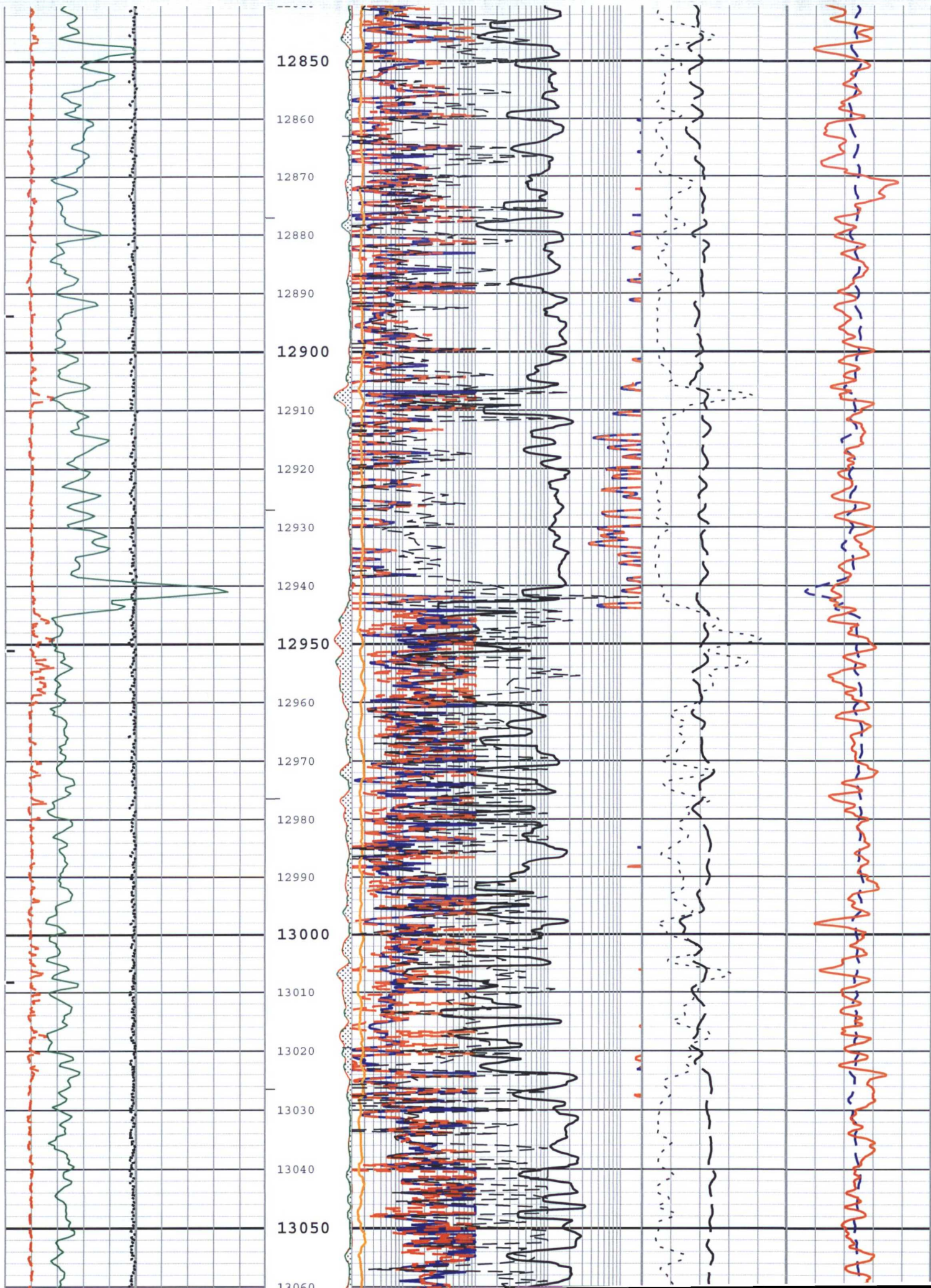
—TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

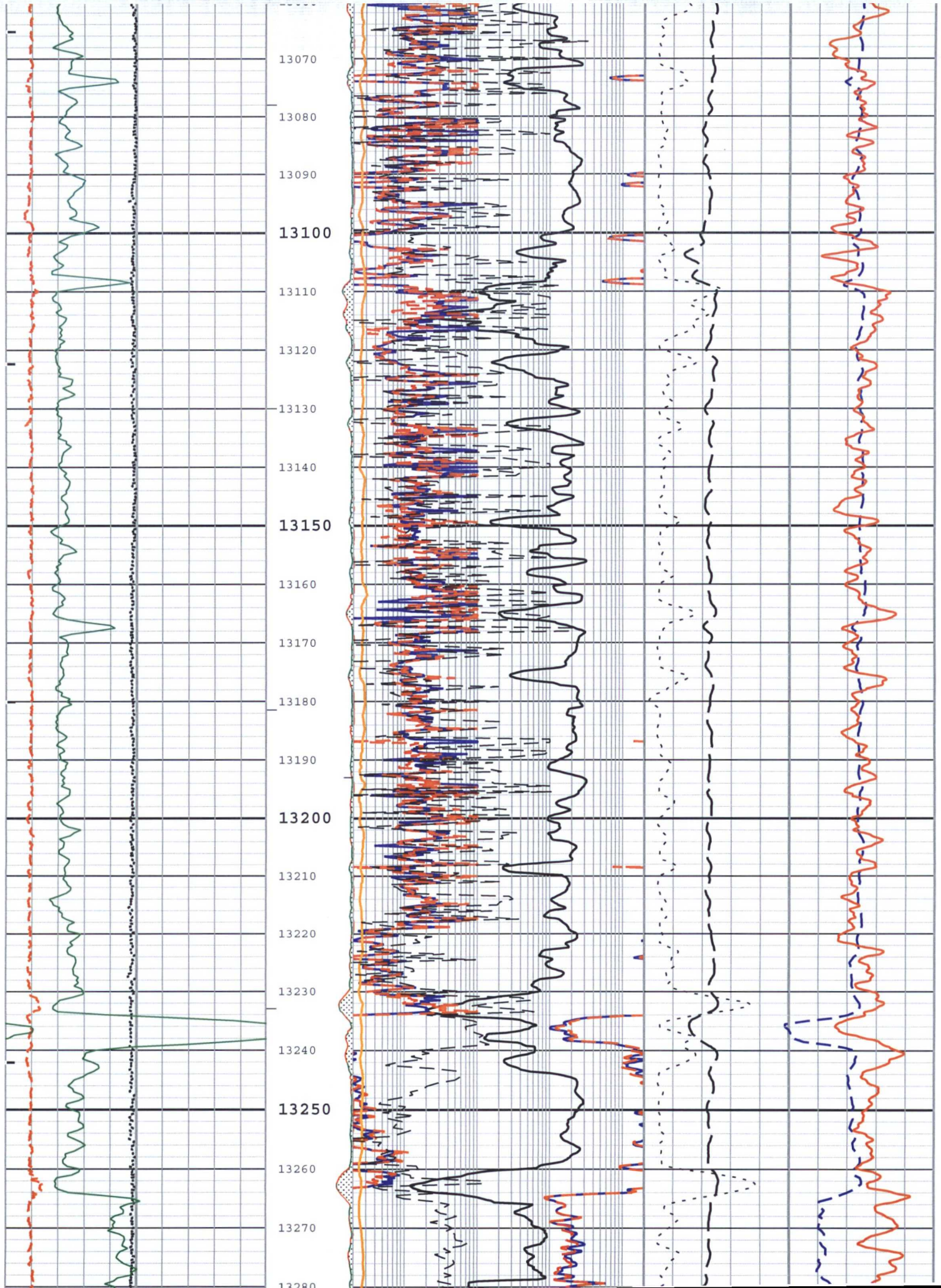
Standard Resolution Density Standoff (DSOZ) HDRS-H	Invaded Formation Resistivity filtered at 18 inches (RXOZ) HDRS-H			Standard Resolution Formation Photoelectric Factor (PEFZ) HDRS-H
	0.2	ohm.m	2000	
	Apparent Resistivity from Computed Focusing			

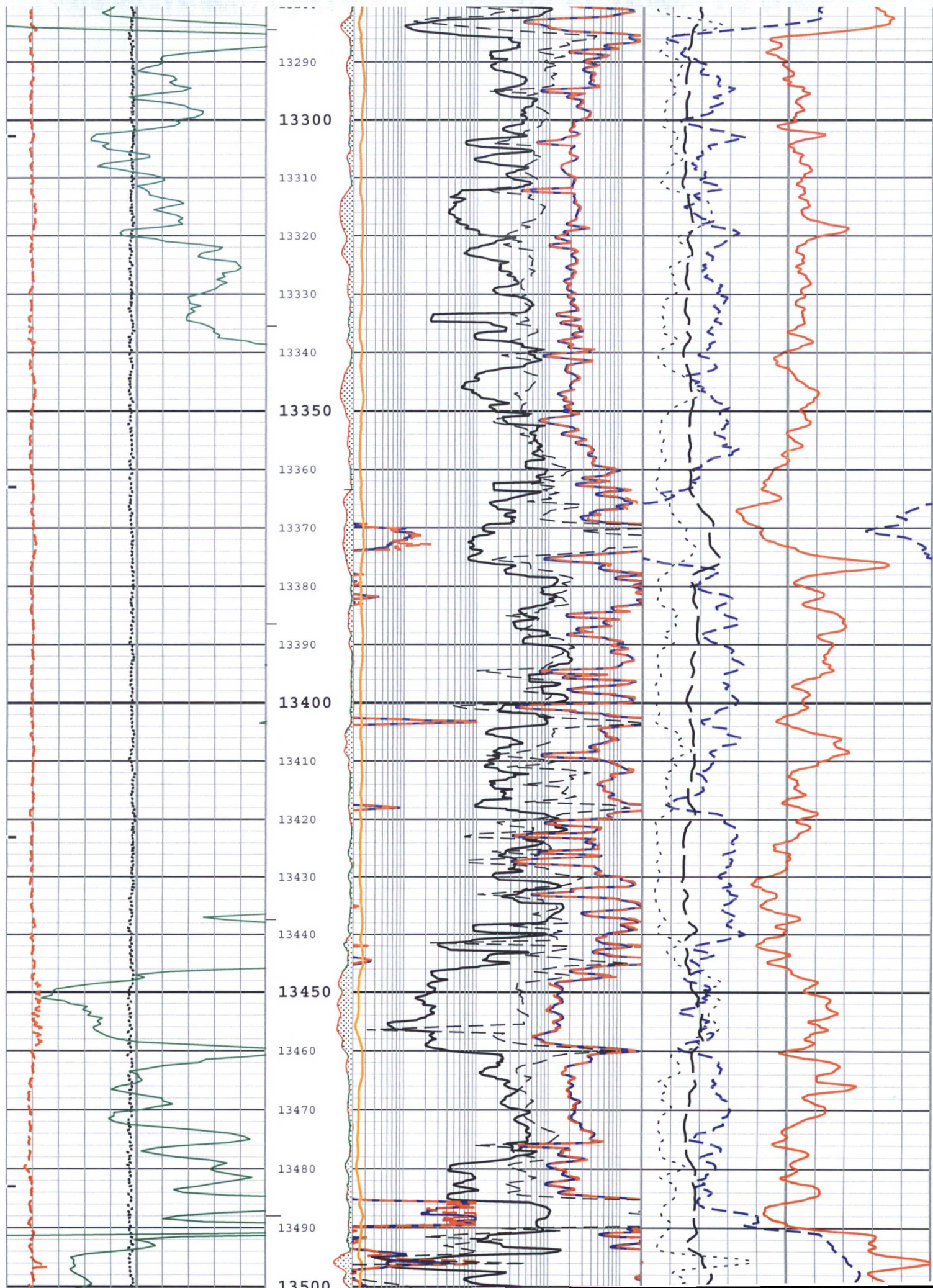
2.5 in 0		Mode 3 (RLA3) HRLT-B		Density Standoff Correction (HDRA) HDRS-H	
Resistivity Standoff Standard Resolution (RSOZ) HDRS-H		0.2	ohm.m	2000	-0.05 g/cm3 0.45
Caliper (HCAL) HDRS-H		Apparent Resistivity from Computed Focusing Mode 3 (RLA3) HRLT-B			
5 in 15		0.2	ohm.m	2000	
Cable Tension (TENS)		Mud Resistivity (RM_HRLT) HRLT-B			
10000 lbf 0		0.02	ohm.m	200	Thermal Neutron Porosity (Ratio Method) in Selected Lithology (TNPH) HGNS-B
Gamma Ray (ECGR) HGNS-B		Apparent Formation Water Resistivity (RWA_HILT)			
0 gAPI 150		0.02	ohm.m	200	Standard Resolution Density Porosity (DPHZ) HDRS-H
		DSOA			0.3 ft3/ft3 -0.1
		RSOA			0.3 ft3/ft3 -0.1

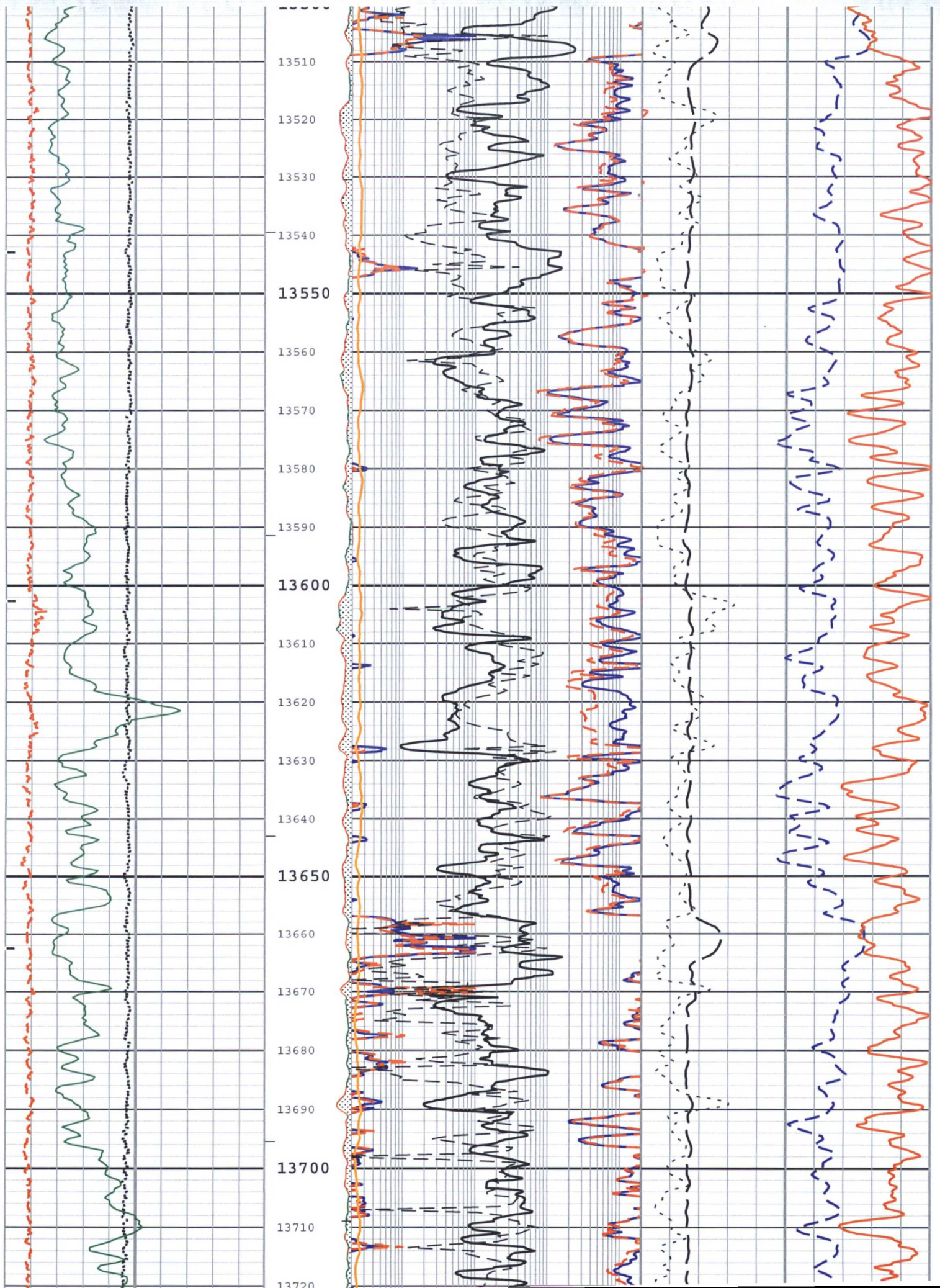


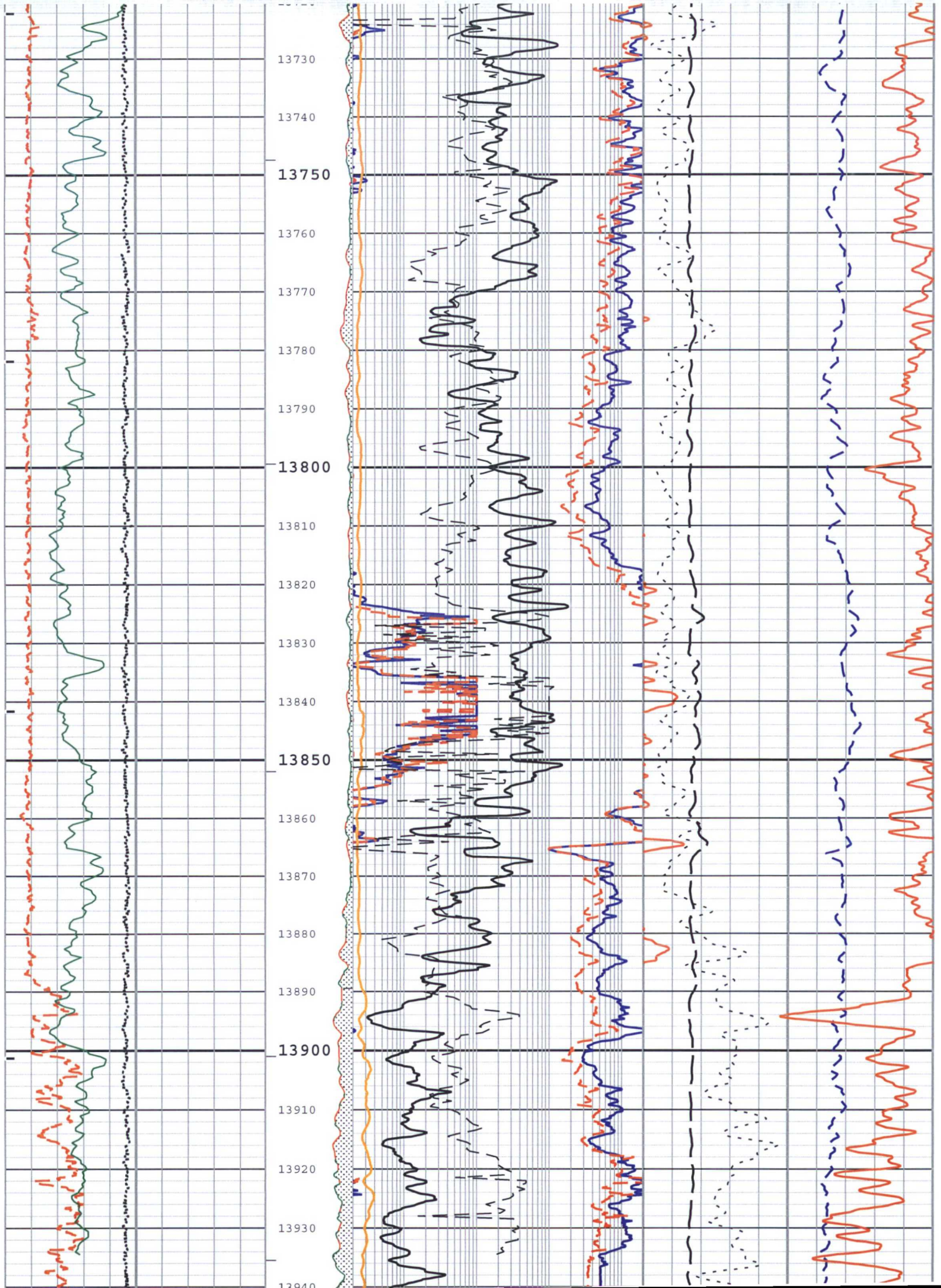


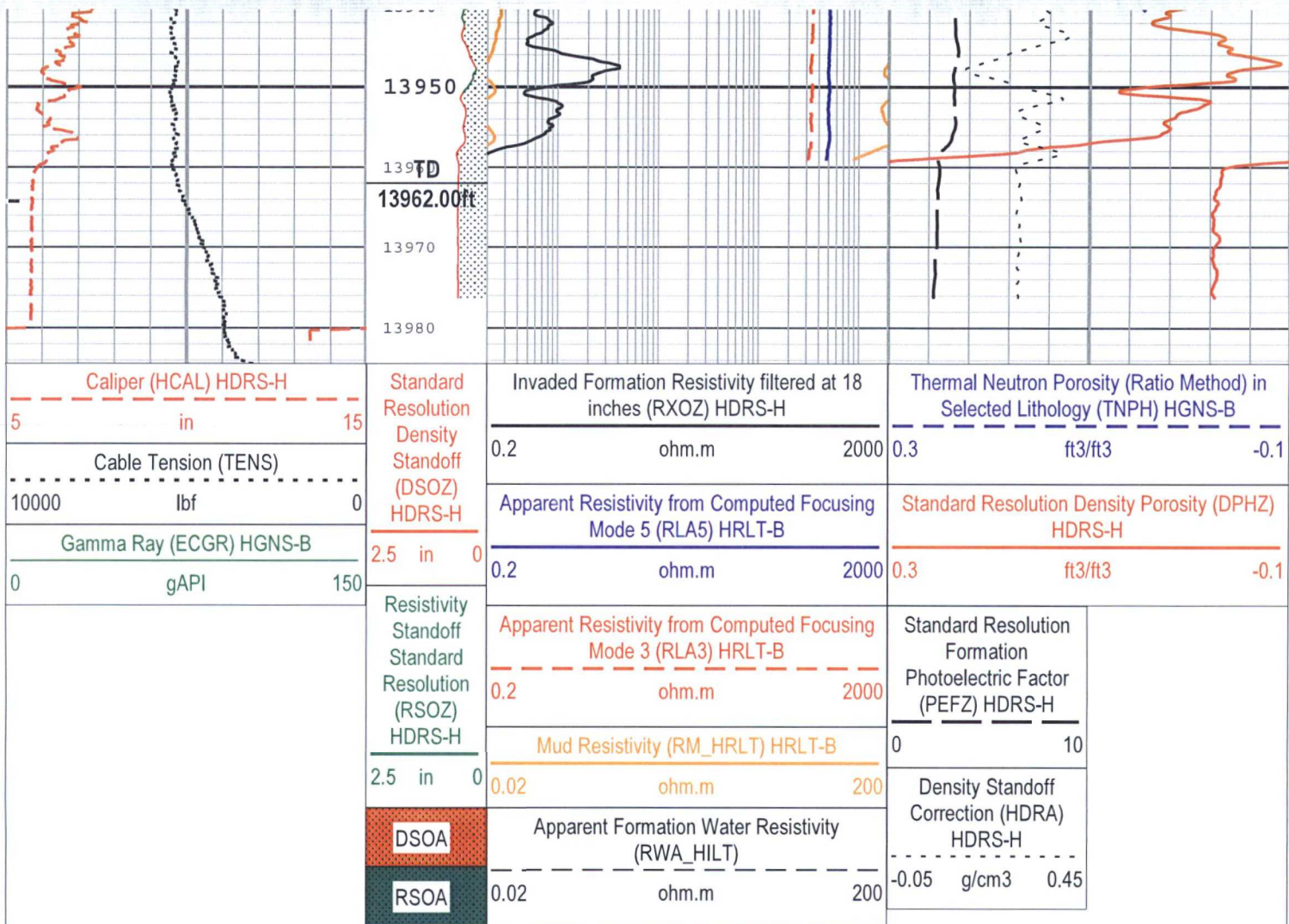












TIME_1900 - Elapsed time since midnight, 30 December 1899 every 60.00 (s)

IHV - Integrated Hole Volume every 100.00 (ft3)

IHV - Integrated Hole Volume every 10.00 (ft3)

ICV - Integrated Cement Volume every 100.00 (ft3)

ICV - Integrated Cement Volume every 10.00 (ft3)

TIME_1900 - Time Marked every 60.00 (s)

Description: Triple Combo standard resolution template for Platform Express Format: Log (Jim Woods) Index Scale: 5 in per 100 ft Index Unit: ft
Index Type: Measured Depth Creation Date: 13-Apr-2017 19:22:52

Channel Processing Parameters

4A: Parameters

Parameter	Description	Tool	Value	Unit
ISSBAR	Barite Mud Presence Flag	Borehole	No	
BHS	Borehole Status (Open or Cased Hole)	Borehole	Open	
BHT	Bottom Hole Temperature	Borehole	182	degF
BS	Bit Size	WLSESSION	6.125	in
BSAL	Borehole Salinity	Borehole	2000	ppm
CALI_SHIFT	CALI Supplementary Offset	HDRS-H	0	in
CBLO	Casing Bottom (Logger)	WLSESSION	12508	ft
CDEN	Cement Density	HGNS-B	2	g/cm3
CSODDRL	Casing Outer Diameter - Zoned along driller depths	WLSESSION	7	in
DC_MODE	Depth Correction Mode	DepthCorrection	Real-time	
DFD	Drilling Fluid Density	Borehole	9.5	lbm/gal
DFT_CATEGORY	Drilling Fluid Type	Borehole	Water	

DFT_WATER	Drilling Fluid Water Type	Borehole	Brine	
DHC	Density Hole Correction	HDRS-H	Bit Size	
FCD	Future Casing (Outer) Diameter	WLSESSION	5	in
FD	Fluid Density	Borehole	1.1	g/cm3
FSAL	Formation Salinity	Borehole	0	ppm
GCSE_DOWN_PASS	Generalized Caliper Selection for WL Log Down Passes	Borehole	BS(RT)	
GCSE_UP_PASS	Generalized Caliper Selection for WL Log Up Passes	Borehole	CALI	
GRSE	Generalized Mud Resistivity Selection, from Measured or Computed Mud Resistivity	Borehole	MRES	
GTSE	Generalized Temperature Selection, from Measured or Computed Temperature	Borehole	CTEM	
PROCRM	Mud Resistivity Select	HRLT-B	HRLT Compute	
HSCO	Hole Size Correction Option	HGNS-B	Yes	
KFAC_HRLT	HRLT Geometrical Factor Option	HRLT-B	Sonde	
M	Exponent M of the Archie Formation Factor - Porosity Equation	Borehole	2	
MATR	Rock Matrix for Neutron Porosity Corrections	Borehole	LIMESTONE	
MDEN	Matrix Density for Density Porosity	Borehole	2.71	g/cm3
MFST	Mud Filtrate Sample Temperature	Borehole	68	degF
N	N Exponent in SW Formula	Borehole	2	
NPRM	HRDD Nuclear Processing Mode	HDRS-H	High Resolution	
PROCMSO	Mechanical Standoff Size	HRLT-B	1.5	in
PROCSP0	Sonde Position	HRLT-B	Eccentered	
RMFS	Resistivity of Mud Filtrate Sample	Borehole	0.08	ohm.m
RW	Connate Water Resistivity	Borehole	1	ohm.m
SOCO	Standoff Correction Option	HGNS-B	Yes	
TWS	Connate Water Temperature	Borehole	68	degF

Tool Control Parameters

4A: Parameters

Parameter	Description	Tool	Value	Unit
HMCA_BOARD_TYPE	HMCA Board Type	HGNS-B	0	
HRGD_BOARD_TYPE	HRGD Board Type	HDRS-H	WITH_HET	
MAX_LOG_SPEED	Toolstring Maximum Logging Speed	WLSESSION	1800	ft/h

Company: Raz Oil and Gas, LLC

Schlumberger

Well: YO State 15 SWD 1

Field: Osudo South Morrow

County: Lea

State: Texas

PEX

Compensated Neutron Log

Laterolog Resistivity

SUTTLES LOGGING, INC.HYDROCARBON WELL LOGGING
GEOLOGICAL CONSULTINGPO Box 10725, Midland, Tx. 79702
(432)687-3148 Fax(432)687-3157

CO - Circulate Out LC - Lost Circulation
CON - Connection NB - New Bit
DC - Depth Correction NR - No Returns
DS - Directional Survey WOB - Weight on Bit

Producer: RAZ OIL AND GAS

Well Name: YO STATE SWD #1

Location: SEC 15, T21S, R35E 660 FNL

API: 30-025-38162

Permit:

Survey: 840 FWL

Field:

County, St: LEA COUNTY, NM.

Logger1: KASEY STEVENS

Logger2: JAMES JOHNSON

Elevation (GL): 3587

(KB): 3603

Depth (Start): 12200

(End): 13968

Date (Start): 3/30/2017

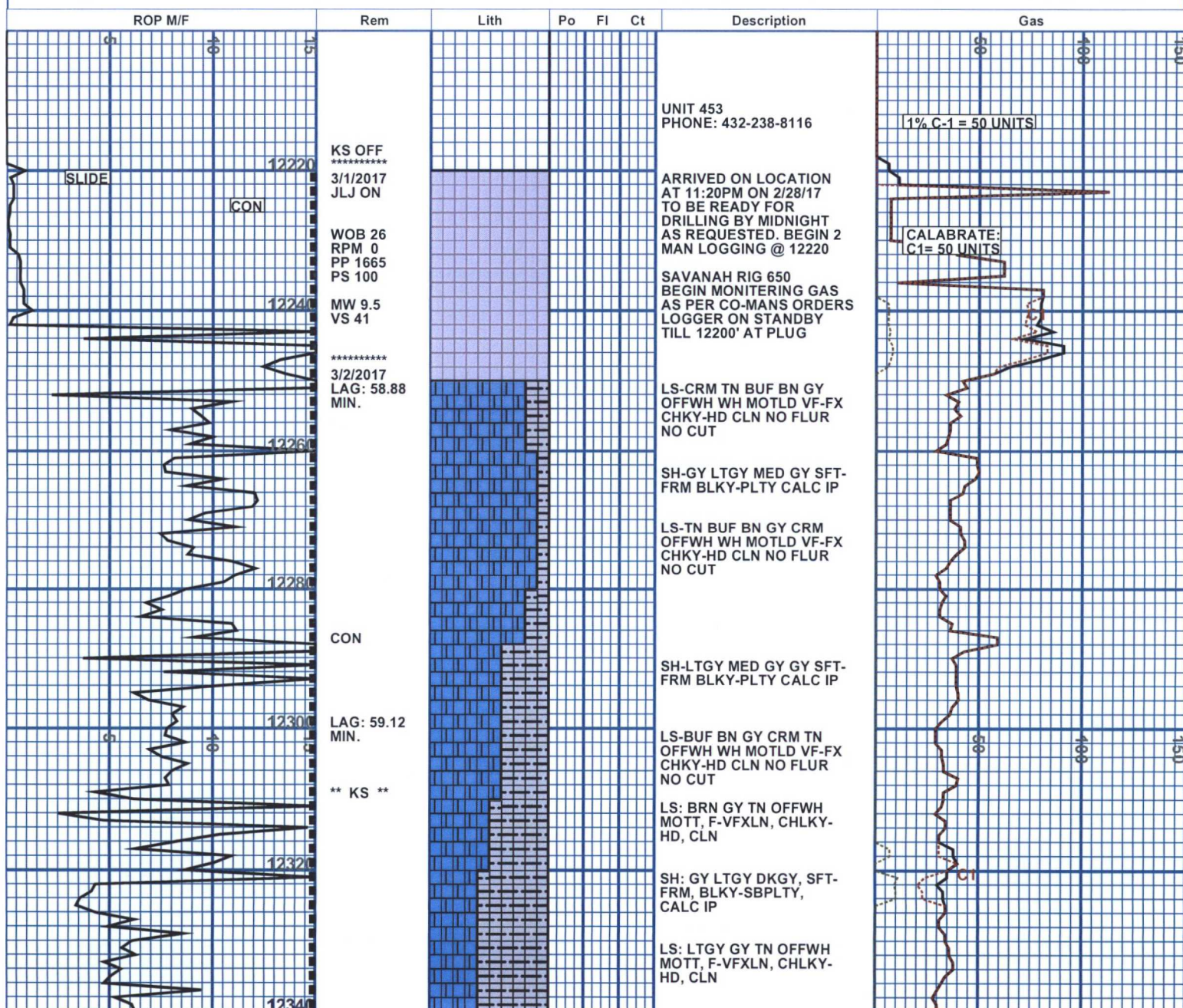
(End): 4/12/2017

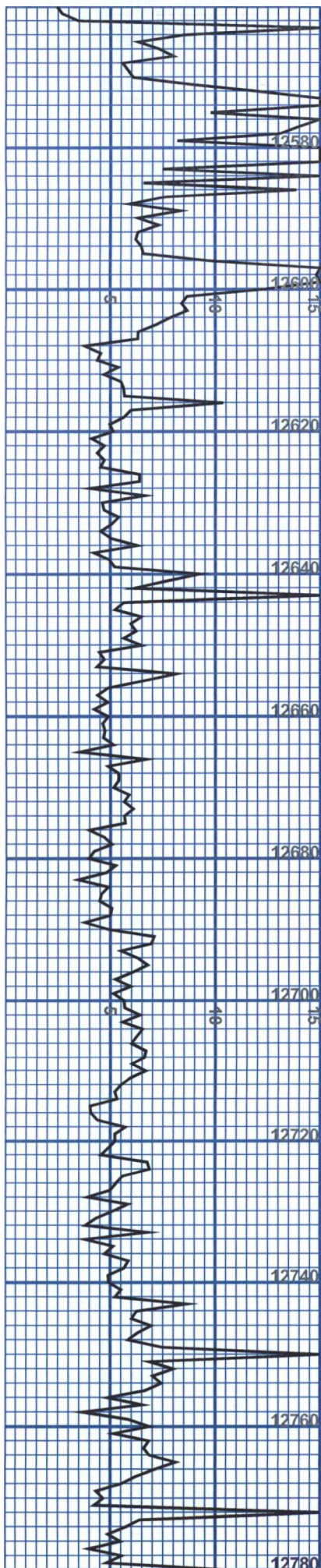
Unit #: 453

SLI Job#: 17052-17-052

Cement
Lime Stone
Shale
Dolomite

Total Gas
Methane C1
Ethane C2
Propane C3
Butane C4
Pentane C5





CONN

3/9/2017

CONN

JLJ ON

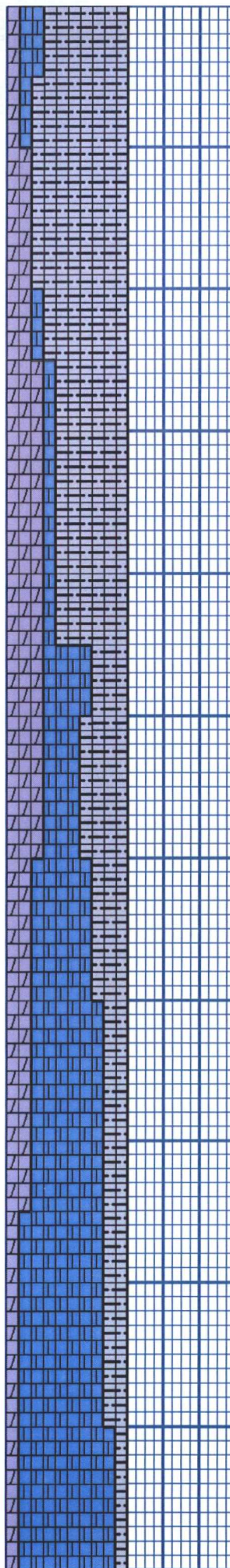
WOB 20
RPM SLIDE
PP 1330
PS 50

MW 8.5
VS 30
PH 10

CON

CON

3/10/2017



LS: LTGY GY TN OFFWH
WH, F-VFXLN, CHLKY-
FRM, CLN

SH: GY LTGY DKGY, SFT-
FRM, BLKY-SBPLTY

DOL: WH OFFWH LTTN
CRM BUFF, F-VFXLN,
CHLKY IP, SFT-MOD HD,
CLN, DNS IP

SH: GY LTGY DKGY, SFT-
FRM, BLKY-SBPLTY

DOL: WH OFFWH LTTN
CRM BUFF, F-VFXLN,
CHLKY IP, SFT-MOD HD,
CLN, DNS IP

SH: GY LTGY DKGY, SFT-
FRM, BLKY-SBPLTY

LS: LTGY GY TN OFFWH
WH, F-VFXLN, CHLKY-
FRM, CLN

DOL: WH OFFWH LTTN
CRM BUFF, F-VFXLN,
CHLKY IP, SFT-MOD HD,
CLN, DNS IP

SH-GY DKGY LTGY SFT-
FRM BLKY-PLTY CALC IP

LS-WH OFFWH GY LTGY
VF-FX CHKY-HD CLN NO
FLUR NO CUT

DOL-WH OFFWH LTTN CRM
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

SH-GY DKGY LTGY SFT-
FRM BLKY-PLTY CALC IP

LS-OFFWH GY LTGY WH
VF-FX CHKY-HD CLN NO
FLUR NO CUT

DOL-OFFWH LTTN CRM WH
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

SH-DKGY LTGY GY SFT-
FRM BLKY-PLTY CALC IP

LS-GY LTGY WH OFFWH
VF-FX CHKY-HD CLN NO
FLUR NO CUT

DOL-LTTN CRM WH OFFWH
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

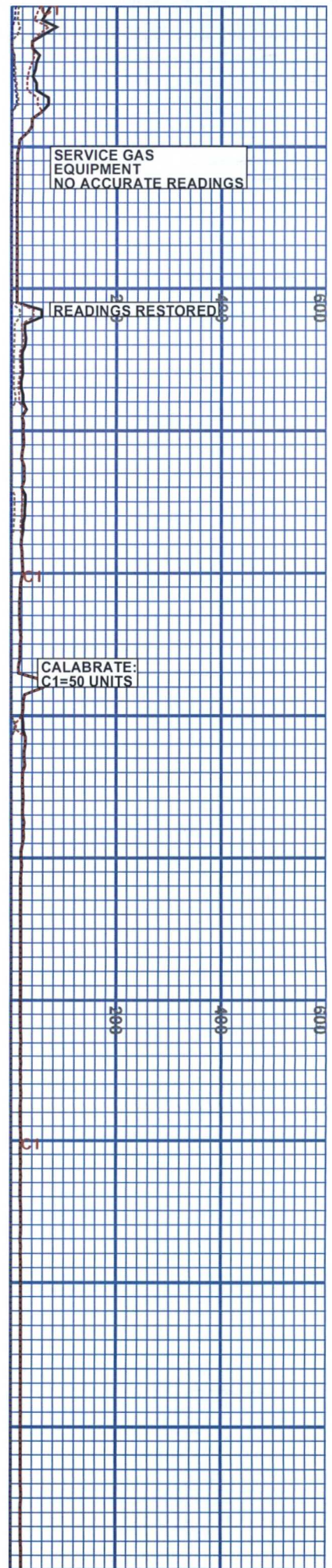
SH-LTGY GY DKGY SFT-
FRM BLKY-PLTY CALC IP

LS-LTGY WH OFFWH GY
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-GY DKGY LTGY SFT-
FRM BLKY-PLTY CALC IP

DOL-CRM WH OFFWH LTTN
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

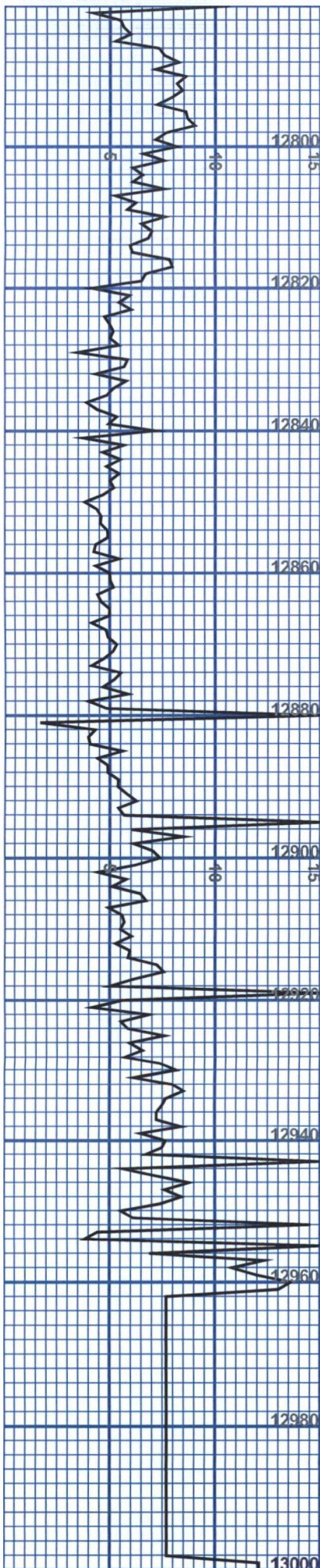
LS-WH OFFWH GY LTGY
VF-FX CHKY-HD CLN NO
FLUR NO CUT



SERVICE GAS
EQUIPMENT
NO ACCURATE READINGS

READINGS RESTORED

CALABRATE:
C1=50 UNITS



CON

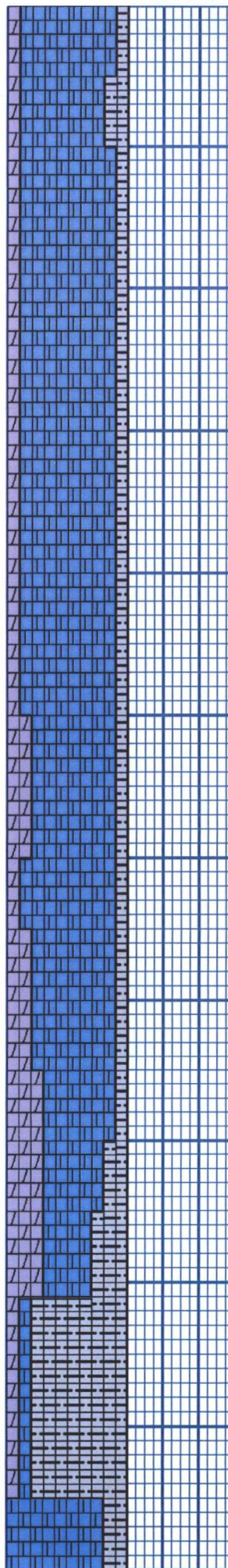
** KS **
CON

CONN

3/11/2017

3/31/2017

NOTE:
SIMULATED
ROP DUE TO
NO PASSON
OR
GELOGRAPH



SH-DKGY LTGY GY SFT-
FRM BLKY-PLTY CALC IP

DOL-WH OFFFWH LTTN CRM
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

LS-OFFFWH GY LTGY WH
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-LTGY GY DKGY SFT-
FRM BLKY-PLTY CALC IP

DOL-OFFFWH LTTN CRM WH
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

LS-GY LTGY WH OFFFWH
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-GY DKGY LTGY SFT-
FRM BLKY-PLTY CALC IP

DOL-LTTN CRM WH OFFFWH
BUF F-MX HD-DNS CLN
NO FLUR NO CUT

LS-LTGY WH OFFFWH GY
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-DKGY LTGY GY SFT-
FRM BLKY-PLTY CALC IP

DOL: WH OFFFWH CRM BUFF
LTTN, MED-FXLN, HD,
DNS, CLN

SH: LTGY GY DKGY,
SBBLY-SBPLTY, FRM,
CALC IP

LS: LTGY OFFFWH WH GY
F-VFXLN, CHLY-HD, CLN

DOL: WH OFFFWH CRM BUFF
LTTN, MED-FXLN, HD,
DNS, CLN

SH: LTGY GY DKGY,
SBBLY-SBPLTY, FRM,
CALC IP

LS: LTGY OFFFWH WH GY
F-VFXLN, CHLY-HD, CLN

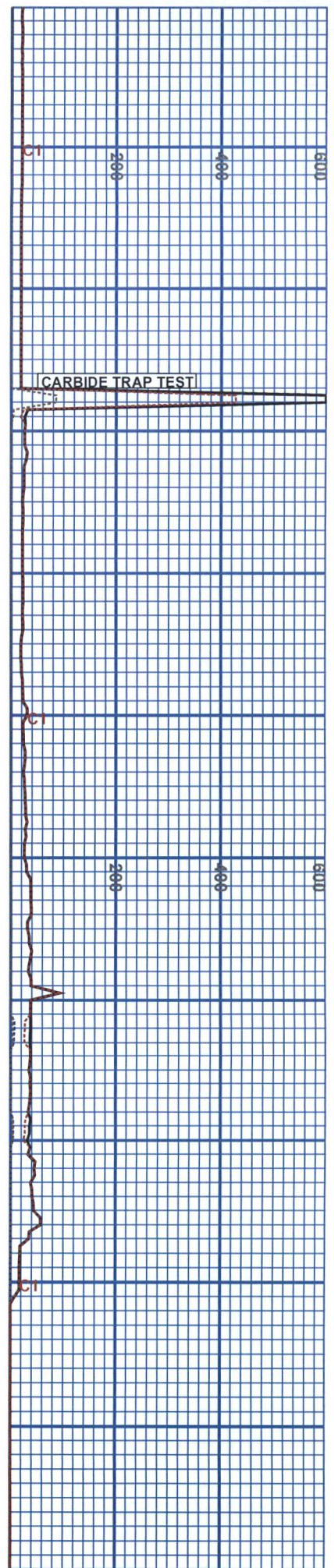
*** **
TD @ 12962' ON 3/10/17
RELEASED 3/11/17 AM
AFTER B/U AND RIG
DOWN AS PER CO-MAN
REQUEST.
THANK YOU FOR USING
SUTTLES LOGGING.
*** **

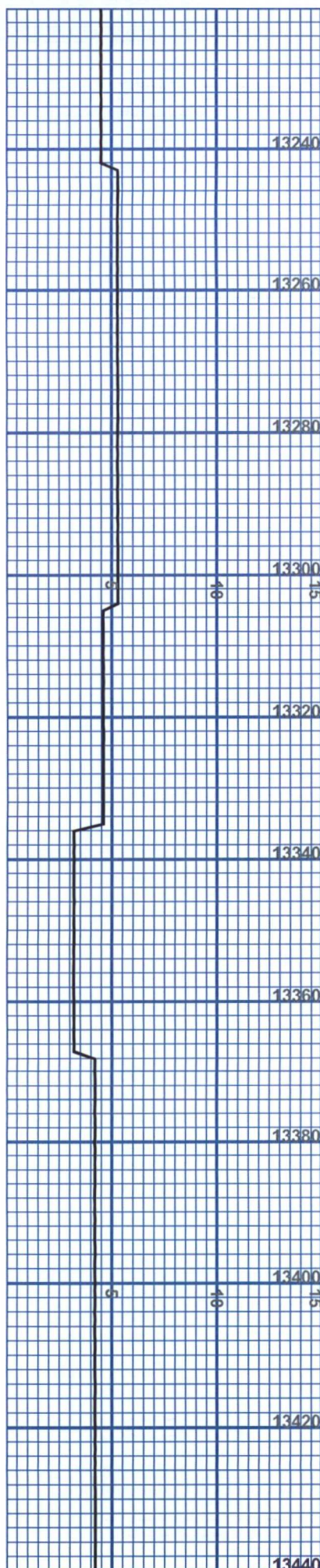
START 2 MAN LOGGING @
12962 TO DEEPEN WELL
3/30/2017
DRILLING WITH PULLING
UNIT.

NOTE: NO GAS READINGS
DUE TO SHAKER HAS NO
WAY TO USE GAS
CATCHER.

USING LAG OF 79 MIN

LS-CRM TN BUF LTTN
MOTLD OFFFWH LTGY VF-
FX CHKY-HD CLN NO
FLUR NO CUR





CON

CON

LAG 78 MIN

CON

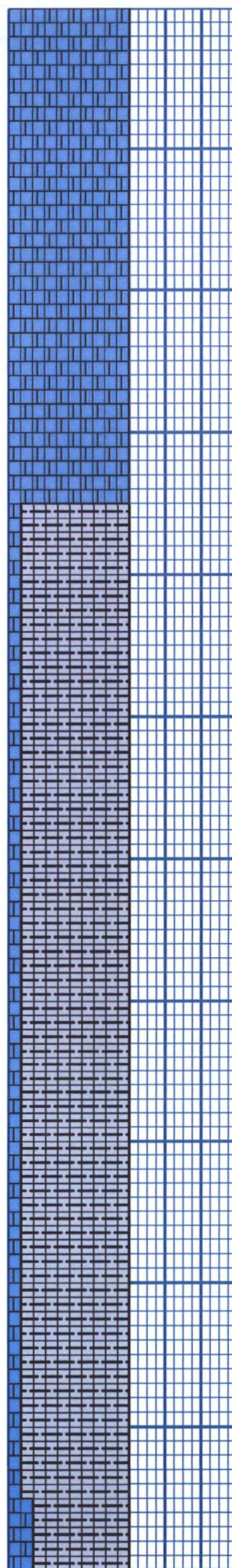
CON

CON

CON

LAG 79 MIN

4/10/2017
CON



LS-OFFWH CRM TN BUF
WH VF-FX CHKY-HD CLN
NO FLUR NO CUT

LS-CRM TN BUF OFFWH
WH VF-FX CHKY-HD CLN
NO FLUR NO CUT

LS-WH OFFWH CRM TN BUF
VF-FX CHKY-HD CLN NO
FLUR NO CUT

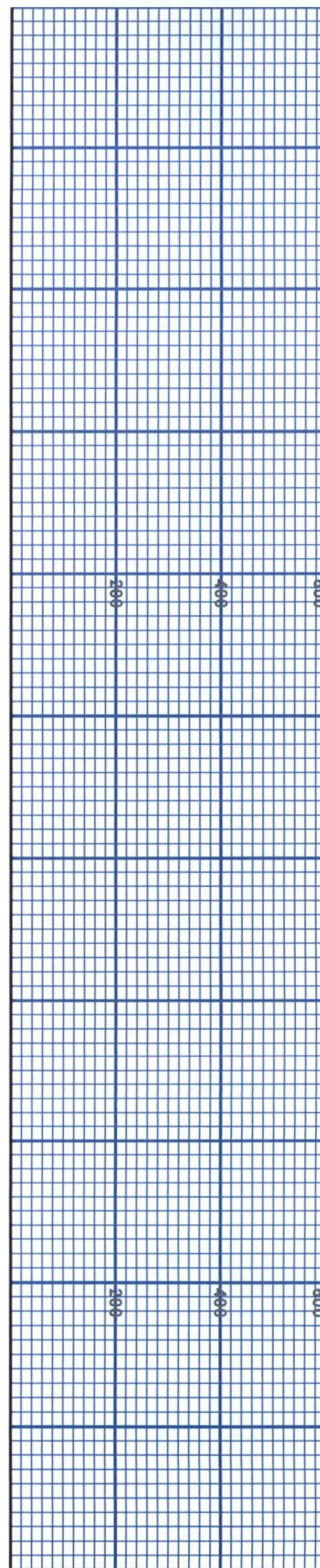
SH-LTBN BN GYBN GY
LTGY SFT-FRM MSTLY
BLKY SLI CALC

LS-OFFWH CRM TN BUF
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-BN GYBN GY LTBN
LTGY SFT-FRM MSTLY
BLKY SLI CALC

LS-CRM TN BUF OFFWH
VF-FX CHKY-HD CLN NO
FLUR NO CUT

AT 7:00 PM 4/8/17
C.O. @ 13430. COME
BACK MON 4/10/17 AT
9 AM TO FINISH
DRILLING WELL.
LOGGER ON LOCATION AT
8 AM CST 4/10/2017



200

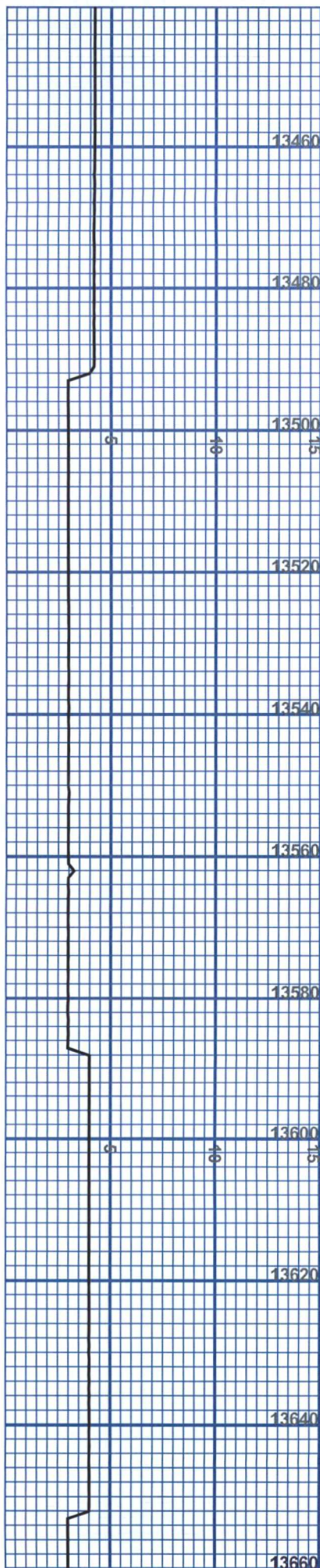
400

600

200

400

600



CON

CON

LAG 80 MIN

CON

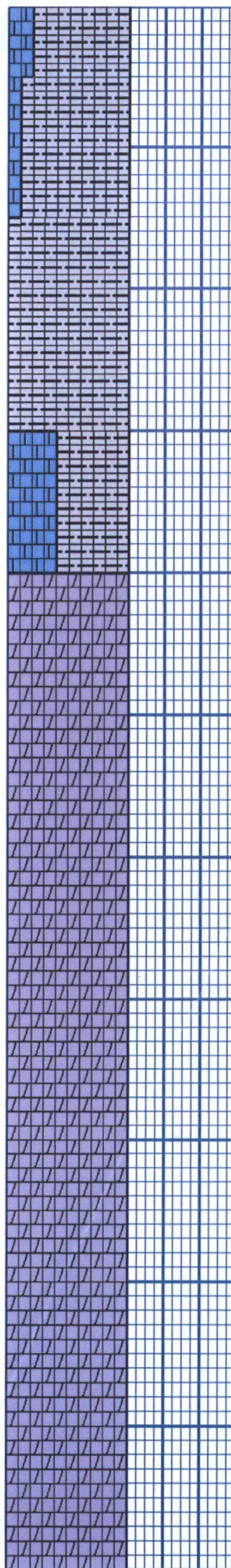
CON

CON

LAG 81 MIN

CON

CON



SH-GYBN GY LTBN BN
LTGY SFT-FRM MSTLY
BLKY SLI CALC

LS-OFFWH CRM TN BUF
VF-FX CHKY-HD CLN NO
FLUR NO CUT

SH-MSTLY LTBN BN SM
GYBN SFT-FRM BLKY

LS-WH OFFWH HD-DNS VF-
FX CLN NO FLUR NO CUT

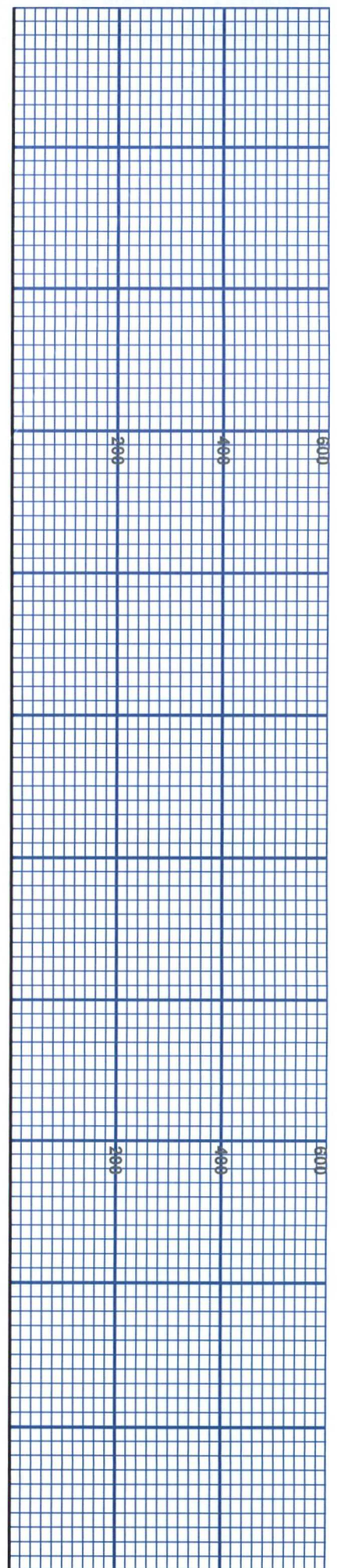
DOL-WH OFFWH CRM VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

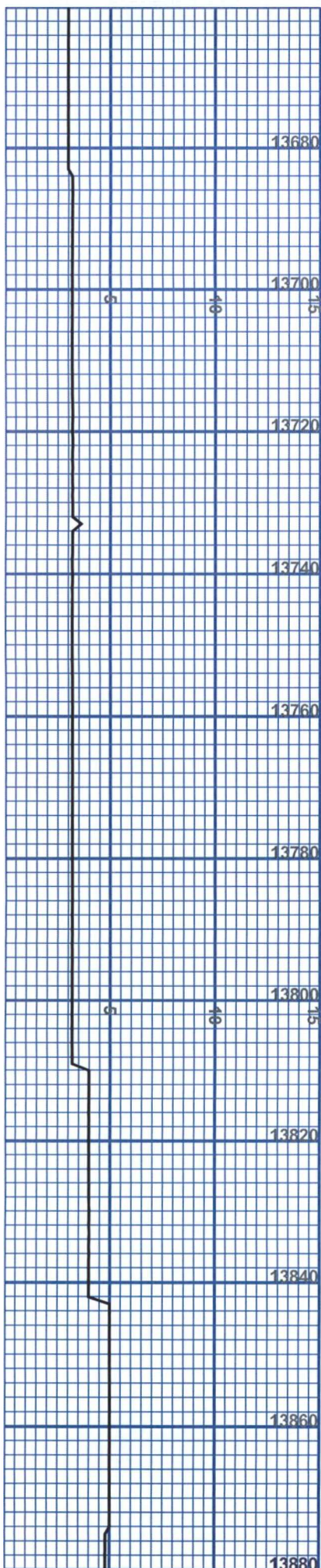
DOL-OFFWH CRM WH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-CRM WH OFFWH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-WH OFFWH CRM VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-OFFWH CRM WH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN





CON

4/11/2017
LAG 83 MIN

CON

CON

CON

CON

CON

DOL-CRM WH OFFWH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-WH OFFWH CRM VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

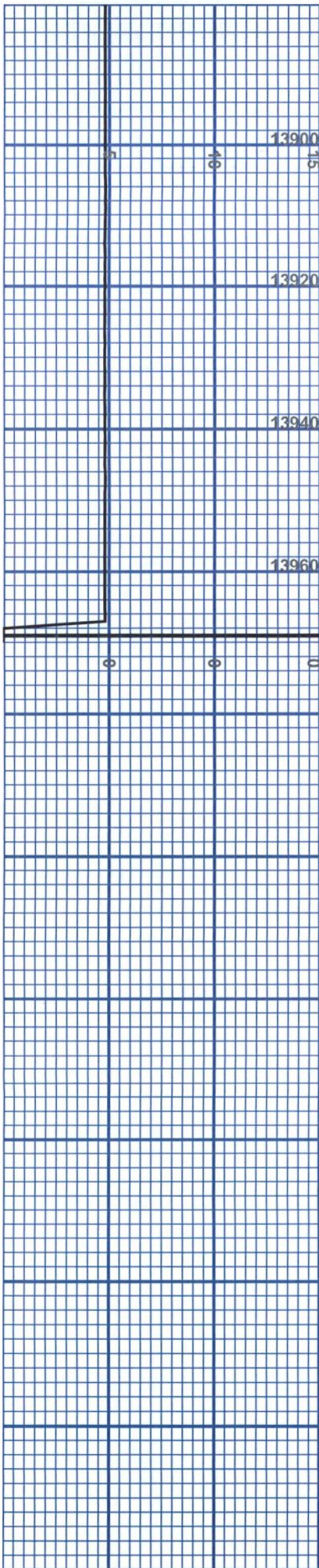
DOL-OFFWH CRM WH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-CRM WH OFFWH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-WH OFFWH CRM VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-OFFWH CRM WH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-CRM WH OFFWH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

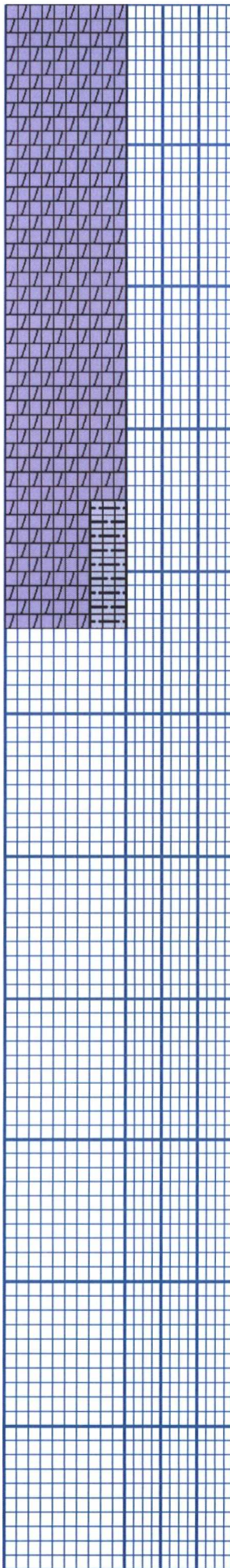


LAG 85 MIN
CON

CON

4/12/2017

LAG:
85.49 MIN

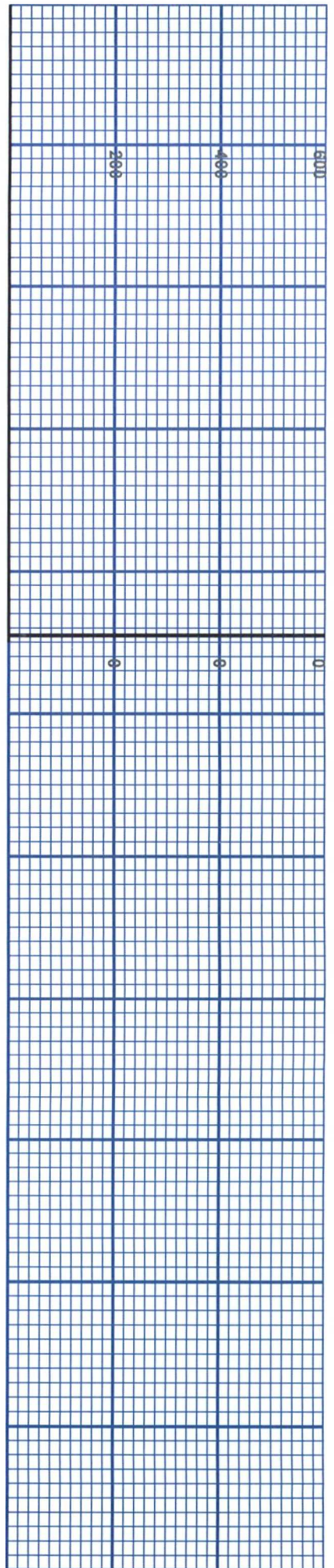


DOL-WH OFFWH CRM VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

DOL-OFFWH CRM WH VF-MX
SUCR INTERXLN POR SL
LMY HD-DNS CLN

SH-BK DKGY BN DKBN
FRM-HD PLTY-BLKY

TD 13968
C.O. AND PRPARE TO
RUN CASING.
THANKS FOR USING
SUTTLES LOGGING. INC.



McMillan, Michael, EMNRD

From: danny@pwllc.net
Sent: Monday, April 17, 2017 3:39 PM
To: McMillan, Michael, EMNRD
Cc: Bill Prichard
Subject: RE: YO State SWD #1 (30-025-38162) AO SWD-1594-A

Thank you Michael. You are correct, there is not change in AOR.

Danny J. Holcomb
Pueblo West, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

----- Original Message -----

Subject: RE: YO State SWD #1 (30-025-38162) AO SWD-1594-A
From: "McMillan, Michael, EMNRD" <Michael.McMillan@state.nm.us>
Date: Mon, April 17, 2017 4:19 pm
To: "danny@pwllc.net" <danny@pwllc.net>
Cc: Bill Prichard <billy@pwllc.net>, "Goetze, Phillip, EMNRD" <Phillip.Goetze@state.nm.us>, "Lowe, Leonard, EMNRD" <Leonard.Lowe@state.nm.us>, "Jones, William V, EMNRD" <WilliamV.Jones@state.nm.us>

I assume there is no change in AOR.

Since the well ran low to prognosis, It will be an amendment.

David Catanach is out this week, and I would prefer he sign it, I will submit next Monday

Mike

From: danny@pwllc.net [mailto:danny@pwllc.net]
Sent: Monday, April 17, 2017 1:16 PM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Cc: Bill Prichard <billy@pwllc.net>
Subject: YO State SWD #1 (30-025-38162) AO SWD-1594-A

Michael,
Raz Oil and Gas, LLC has deepened this well to the Devonian formation per the referenced order. They initially deepened the well to 12536' and set 7" casing there with the plans to drill out the open hole interval. The open hole interval was TD'd at 12962 feet. Unfortunately, the Devonian formation was not found in this open hole interval. So Raz filed a new C-101 on 3/30/17 to deepen the well to 13900' to locate the Devonian. The well was deepened a second time with a new TD of 13968'. The top of the Devonian was encountered at 13490'.

Attached is a letter request to amend SWD-1594-A to identify the Devonian injection interval at 13490'-13968'. This request also changes the maximum disposal pressure and the well completion to cased hole. Attached are copies of the electronic logs, mudlog, CBL on the 7" casing, and current/proposed wellbore diagrams.

If you have any questions concerning this request for an amended order, please contact me. Thank you in advance for considering this request.
Sincerely

McMillan, Michael, EMNRD

From: danny@pwllc.net
Sent: Thursday, April 20, 2017 9:32 AM
To: McMillan, Michael, EMNRD
Subject: RE: SWD-1594-A Raz Oil and Gas L.L.C. YO State SWD Well No. 1 API 30-025-38162

Yes sir.

Danny J. Holcomb
Pueblo West, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

----- Original Message -----

Subject: RE: SWD-1594-A Raz Oil and Gas L.L.C. YO State SWD Well No. 1
API 30-025-38162
From: "McMillan, Michael, EMNRD" <Michael.McMillan@state.nm.us>
Date: Thu, April 20, 2017 10:16 am
To: "danny@pwllc.net" <danny@pwllc.net>

Is the x 2-7/8" through the liner?

From: danny@pwllc.net [mailto:danny@pwllc.net]
Sent: Thursday, April 20, 2017 9:12 AM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: RE: SWD-1594-A Raz Oil and Gas L.L.C. YO State SWD Well No. 1 API 30-025-38162

Michael,
The plan is to taper the injection string with 4-1/2" x 2-7/8". See proposed wellbore diagram attached. If you have any other questions, please let me know.
Thank you,
Danny J. Holcomb
Pueblo West, LLC
Cell: 806-471-5628
Email: danny@pwllc.net

----- Original Message -----

Subject: RE: SWD-1594-A Raz Oil and Gas L.L.C. YO State SWD Well No. 1
API 30-025-38162
From: "McMillan, Michael, EMNRD" <Michael.McMillan@state.nm.us>
Date: Thu, April 20, 2017 9:21 am
To: "danny@pwllc.net" <danny@pwllc.net>

Danny:
Can you clarify the well construction for me.
Is the tubing 4-1/2 inch from top to bottom or is there a taper.
David Catanach is out until Monday, and I would like to submit on Friday.
Mike