



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1165058
OIL & GAS CONSERVATION DIVISION

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 # _____

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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



1165058

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

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
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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

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> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Samuel Gary Jr. & Associates, Inc.
Well Name	TUZICKA 1-12
Doc ID	1165058

All Electric Logs Run

DEN-NEUT
INDUCTION
MICRO
SONIC
SPECTRAL

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
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 25, 2013

CHRISTOPHER MITCHELL
Samuel Gary Jr. & Associates, Inc.
1515 WYNKOOP, STE 700
DENVER, CO 80202

Re: ACO1
API 15-165-22033-00-00
TUZICKA 1-12
NE/4 Sec.12-16S-16W
Rush 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,
CHRISTOPHER MITCHELL



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone: 785-324-1041 fax: 785-483-1087
 Email: cementing@ruraltel.net

Date: 7/6/2013
 Invoice # 7923

P.O.#:
 Due Date: 8/5/2013
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1815 11th Street
 Great Bend, KS 67530

RECEIVED

JUL 12 2013

**SAMUEL GARY JR.
 & ASSOCIATES, INC.**

<input type="checkbox"/> DRLG	<input type="checkbox"/> COMP	<input type="checkbox"/> W/O	<input type="checkbox"/> LOE	<input type="checkbox"/> GG
Account	8200.138			
Well/Prospect				
Deck				
AFE				
Approval	AB			
Description				

Reference:
 TUZIKA 1-12

Description of Work:
 LONG SURFACE JOB

Services / Items Included:	Quantity	Price	Taxable	Item	Quantity	Price	Taxable
Labor		\$ 950.65	No				
Common-Class A	350	\$ 4,569.37	Yes				
8 5/8" Basket	3	\$ 986.96	Yes				
Bulk Truck Matl-Material Service Charge	370	\$ 770.41	No				
Calcium Chloride	13	\$ 645.04	Yes				
Pump Truck Mileage-Job to Nearest Camp	24	\$ 249.36	No				
8 5/8" Centralizer	3	\$ 199.89	Yes				
Bulk Truck Mileage-Job to Nearest Bulk Plant	24	\$ 145.92	No				
Premium Gel (Bentonite)	7	\$ 118.64	Yes				
8 5/8" Top Rubber Plug	1	\$ 110.36	Yes				
Baffle Plate Aluminum, 8 5/8"	1	\$ 93.70	Yes				

Invoice Terms:

Net 30

SubTotal: \$ 8,840.30

Discount Available ONLY if Invoice is Paid & Received within listed terms of invoice: \$ (1,326.04)

SubTotal for Taxable Items: \$ 5,715.37

SubTotal for Non-Taxable Items: \$ 1,798.89

Total: \$ 7,514.26

Tax: \$ 360.07

6.30% Rush County Sales Tax

Thank You For Your Business!

Amount Due: \$ 7,874.33

Applied Payments:

Balance Due: \$ 7,874.33

Past Due Invoices are subject to a service charge (annual rate of 24%)

This does not include any applicable taxes unless it is listed.

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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7923

Date	7-6-18	Sec.	12	Twp.	16	Range	16	County	Rush	State	Ks	On Location		Finish	3-30 AM	
Lease	Tuzika							Well No.	1-12	Location Gocham, Ks - S to C.L., 1/2 W, 15						
Contractor	Val #6							Owner to Curue W + S / Into								
Type Job	Surface							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.								
Hole Size	12 1/4"		T.D.	824'		Charge To		Sam Gary Inc Assoc								
Csg.	8 5/8"		Depth	824'		Street										
Tbg. Size			Depth			City		State								
Tool			Depth			The above was done to satisfaction and supervision of owner agent or contractor.										
Cement Left in Csg.			Shoe Joint	40'		Cement Amount Ordered		350 SX Common 3% CC								
Meas Line			Displace	49 3/4 BLS		2 1/2 Gal										
EQUIPMENT										Common 350						
Pumptrk	16	No.	Cementer	Lonnie W		Poz. Mix										
Bulktrk	13	No.	Driver	Lonnie M		Gel.		7								
Bulktrk	p.w.	No.	Driver	Rick		Calcium		13								
JOB SERVICES & REMARKS										Hulls						
Remarks	Cement did Circulate										Salt					
Rat Hole											Flowseal					
Mouse Hole											Kol-Seal					
Centralizers											Mud CLR 48					
Baskets											CFL-117 or CD110 CAF 38					
D/V or Port Collar											Sand					
											Handling 370					
											Mileage					
FLOAT EQUIPMENT																
											Guide Shoe					
											Centralizer 3					
											Baskets 3					
											AFU Inserts					
											Float Shoe					
											Latch Down					
											1- Baffle plate					
											1- Rubber plug					
											Pumptrk Charge					
											Mileage 24					
										Tax						
Signature										Discount						
X										Total Charge						



QUALITY OILWELL CEMENTING, INC.
 PO Box 32 - 740 West Wichita Ave, Russell KS 67665
 Phone:785-324-1041 fax:785-483-1087
 Email: cementing@ruraltel.net

Date: 7/11/2013
 Invoice # 7416
 P.O.#:
 Due Date: 8/10/2013
 Division: Russell

Invoice

Contact:
 Samuel Gary Jr & Associates Inc
Address/Job Location:
 Samuel Gary Jr & Associates Inc
 1815 11th Street
 Great Bend, KS 67530

RECEIVED

JUL 18 2013

**SAMUEL GARY JR.
 & ASSOCIATES, INC.**

Reference:
 TUZICKA 1-12

Description of Work:
 PROD LONG STRING

DRLG COMP W/O LOE GG

Account	8300.238
Well/Prospect	
Deck	
AFE	
Approval	JB
Description	

Services / Items Included:

	Quantity	Price	Taxable
Labor		\$ 991.39	No
Common-Class A	150	\$ 2,042.23	Yes
Gilsonite	1057	\$ 1,721.40	Yes
CFL 117	176	\$ 1,177.09	Yes
5 1/2" Basket	3	\$ 1,120.46	Yes
CD-110	176	\$ 764.34	Yes
Bulk Truck Matl-Material Service Charge	254	\$ 551.54	No
5 1/2" Turbolizer	8	\$ 503.77	Yes
Mud Clear	500	\$ 401.71	Yes
Defoamer A or CAF-38	50	\$ 380.00	Yes
Auto Fill Float Shoe, 5 1/2"	1	\$ 332.23	Yes

Item	Quantity	Price	Taxable
Salt (Fine)	19	\$287.97	Yes
Pump Truck Mileage-Job to Nearest Camp	24	\$260.05	No
Latch Down Plug & Baffle, 5 1/2"	1	\$243.20	Yes
Bulk Truck Mileage-Job to Nearest Bulk Plant	24	\$152.17	No
Flo Seal	56	\$121.60	Yes
KCL	2	\$64.84	Yes

Invoice Terms:

Net 30

SubTotal:	\$ 11,116.00
Discount Available <u>ONLY</u> if Invoice is Paid & Received within listed terms of invoice:	\$ (1,667.40)
SubTotal for Taxable Items:	\$ 7,786.72
SubTotal for Non-Taxable Items:	\$ 1,661.88
Total:	\$ 9,448.60
Tax:	\$ 490.56

6.30% Rush County Sales Tax

Thank You For Your Business!

Amount Due: \$ 9,939.16
Applied Payments:
Balance Due: \$ 9,939.16

Past Due Invoices are subject to a service charge (annual rate of 24%)
 This does not include any applicable taxes unless it is listed.
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QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 7416

Date	7-11-13	Sec.	12	Twp.	16	Range	16	County	Rush	State	KS	On Location		Finish	12:30p
Location													Garham S to CL. 1/2 W, 1s to west End of		

Lease Tuzicka Well No. 1-12 Owner Curve, Sn 2

Contractor Val #6
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job long string Charge To Sam Gary Jr & Assoc

Hole Size 7 7/8 T.D. 3582 Street

Csg. 5 1/2 15 1/2 # Depth 3574.12 City State

Tbg. Size Depth City State

Tool Depth The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 42.26 Shoe Joint 4226 Cement Amount Ordered 225 Q pro-c 10% salt

Meas Line Displace 84661 5% gilconite 1/4 # flow, 20bbl KCL

EQUIPMENT

Pumptrk 16 No. Cementer Helper Lonnie W Poz. Mix

Bulktrk 8 No. Driver Claton Gel CD 110 - 117 #

Bulktrk PU No. Driver Travis Calcium KCL 2 gal

JOB SERVICES & REMARKS

Remarks: Halls

Rat Hole 30 sx Salt 19

Mouse Hole 15 sx Flowseal 56

Centralizers 1, 3, 5, 7, 9, 11, 13, 16 Kol-Seal 1059

Baskets 3, 9, 15 Mud CLR 48 500 gal

D/V or Port Collar Sand CFL-117 or CD110 CAF 38 50#

pipe on bottom broke circulation. Pumped Handling 254

500 gal Mud CLR 48 with 10 bbl fw behind it Mileage

plugged Rat hole with 30 sx and Mouse

hole with 15 sx. Hooked to 5 1/2 mixed 180 sx

shut down washed pump and lines Released

plug and displaced with 20bbl KCL and 64

bbl fw plug landed and held.

lift pressure 500 psi

plug landed at 1400 psi

lift pressure 500 psi

plug landed at 1400 psi

lift pressure 500 psi

plug landed at 1400 psi

lift pressure 500 psi

plug landed at 1400 psi

lift pressure 500 psi

plug landed at 1400 psi

lift pressure 500 psi

plug landed at 1400 psi

X Signature 

Pumptrk Charge	<u>prol Long String</u>
Mileage	<u>24</u>
Tax	
Discount	
Total Charge	



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr & Associates

12-16s-16w

1515 Wynkoop ste 700
Denver Co 80202

Tuzicka 1-12

ATTN: Christopher Mitchell

Job Ticket: 041057

DST#: 1

Test Start: 2013.07.09 @ 05:16:04

GENERAL INFORMATION:

Formation: **Lansing-C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:12:28

Time Test Ended: 13:54:28

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 67

Interval: **3177.00 ft (KB) To 3207.00 ft (KB) (TVD)**

Reference Elevations: 1892.00 ft (KB)

Total Depth: 3207.00 ft (KB) (TVD)

1882.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8679

Inside

Press @ Run Depth: 254.65 psig @ 3179.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.09

End Date:

2013.07.09

Last Calib.:

2013.07.09

Start Time: 05:16:05

End Time:

13:46:28

Time On Btm:

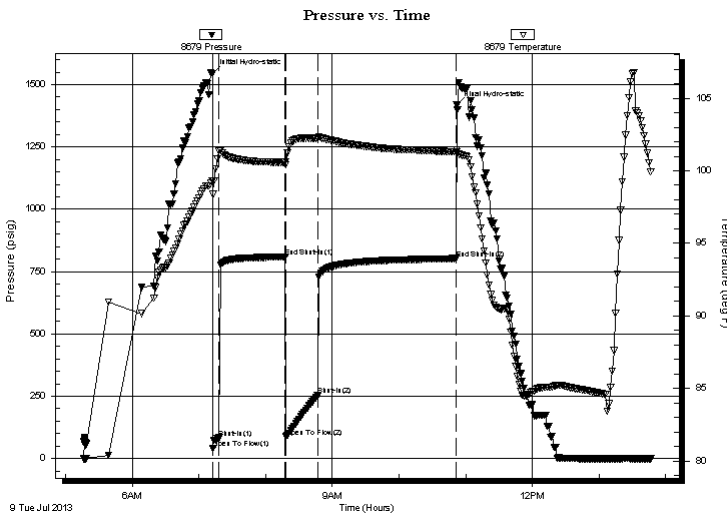
2013.07.09 @ 07:11:58

Time Off Btm:

2013.07.09 @ 10:51:58

TEST COMMENT: IFP=5-Min=Strong blow BOB in 5 min
ISI=60-min=Weak surface blow back Died out in 12 min
FFP=30-min=Strong blow BOB in 4 min
FSI=120-min=Good blow back BOB in 16 min

PRESSURE SUMMARY



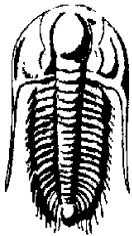
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1545.35	99.31	Initial Hydro-static
1	40.12	98.38	Open To Flow (1)
6	82.93	101.40	Shut-In(1)
66	808.49	100.60	End Shut-In(1)
66	86.75	100.40	Open To Flow (2)
95	254.65	102.22	Shut-In(2)
220	802.10	101.33	End Shut-In(2)
220	1417.66	101.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
378.00	MW with a scum of oil 5%M 95%W	5.30
86.00	GOCMW 20%G 10%O 25%M 45%W	1.21
40.00	GMCWO 10%G 5%M 25%W 60%O	0.56
0.00	315-GIP	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Samuel Gary Jr & Associates

12-16s-16w

1515 Wynkoop ste 700
Denver Co 80202

Tuzicka 1-12

ATTN: Christopher Mitchell

Job Ticket: 041057

DST#: 1

Test Start: 2013.07.09 @ 05:16:04

GENERAL INFORMATION:

Formation: **Lansing-C-D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:12:28

Time Test Ended: 13:54:28

Interval: **3177.00 ft (KB) To 3207.00 ft (KB) (TVD)**

Total Depth: 3207.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester: Jeff Brown

Unit No: 67

Reference Elevations: 1892.00 ft (KB)

1882.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8167

Fluid

Press @ Run Depth: psig @ 3143.00 ft (KB)

Start Date: 2013.07.09

End Date:

2013.07.09

Start Time: 05:16:29

End Time:

13:48:23

Capacity: 8000.00 psig

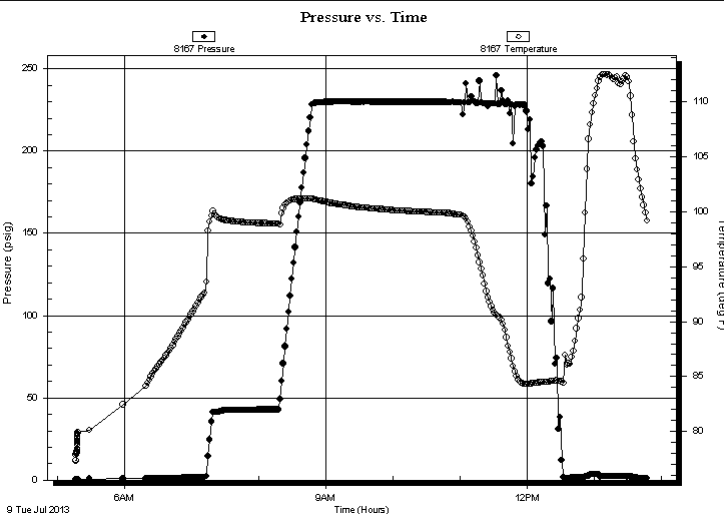
Last Calib.:

2013.07.09

Time On Btm:

Time Off Btm:

TEST COMMENT: IFP=5-Min=Strong blow BOB in 5 min
 ISI=60-min=Weak surface blow back Died out in 12 min
 FFP=30-min=Strong blow BOB in 4 min
 FSI=120-min=Good blow back BOB in 16 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
378.00	MW with a scum of oil 5%M 95%W	5.30
86.00	GOCMW 20%G 10%O 25%M 45%W	1.21
40.00	GMCWO 10%G 5%M 25%W 60%O	0.56
0.00	315-GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Samuel Gary Jr & Associates

12-16s-16w

1515 Wynkoop ste 700
Denver Co 80202

Tuzicka 1-12

Job Ticket: 041057

DST#: 1

ATTN: Christopher Mitchell

Test Start: 2013.07.09 @ 05:16:04

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
378.00	MW with a scum of oil 5%M 95%W	5.302
86.00	GOCMW 20%G 10%O 25%M 45%W	1.206
40.00	GMCWO 10%G 5%M 25%W 60%O	0.561
0.00	315-GIP	0.000

Total Length: 504.00 ft Total Volume: 7.069 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

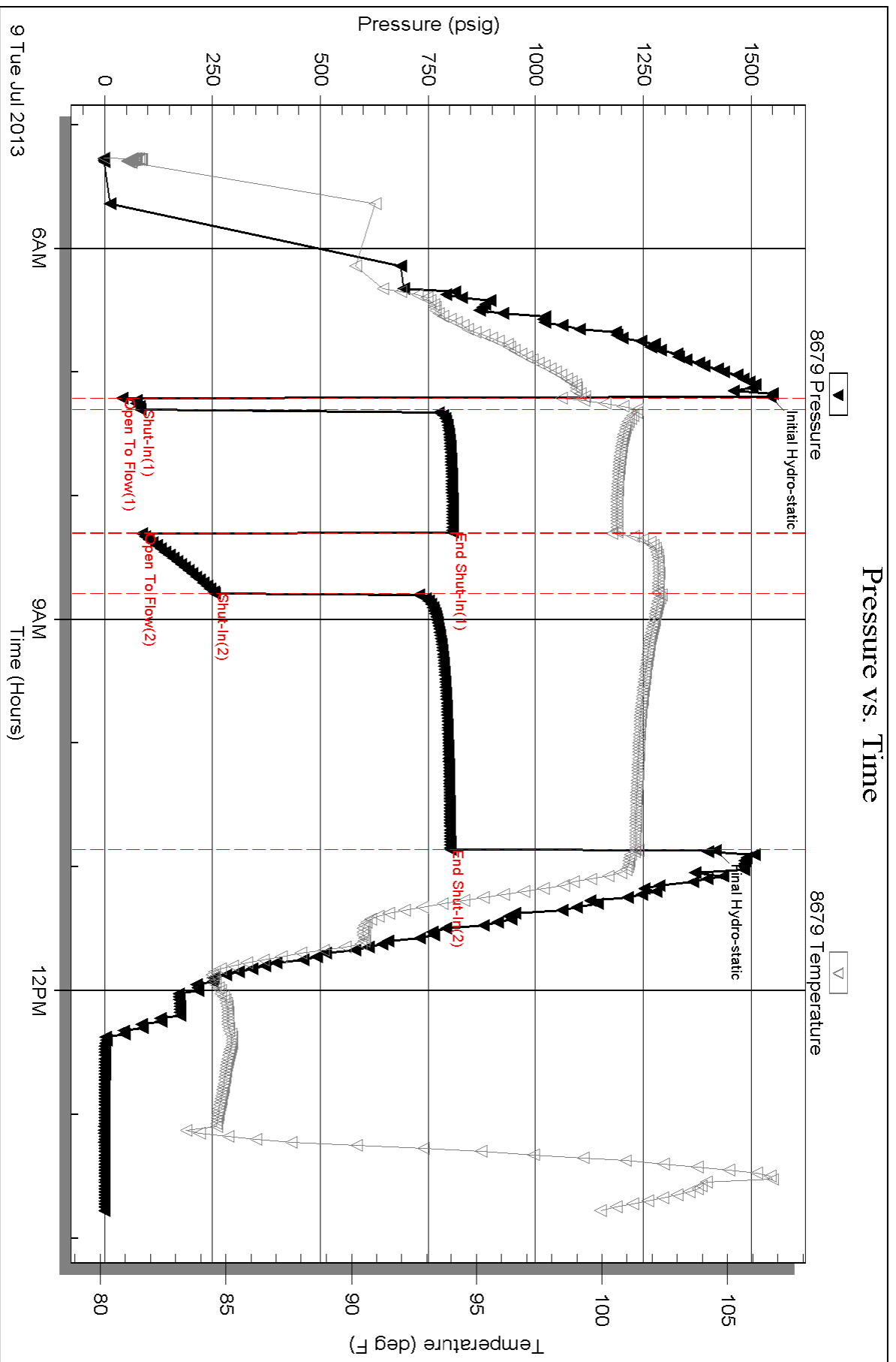
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2000 MI of total fluid. 300 PSI
2000 MI Of oil. 2000 MI of Gas

Pressure vs. Time



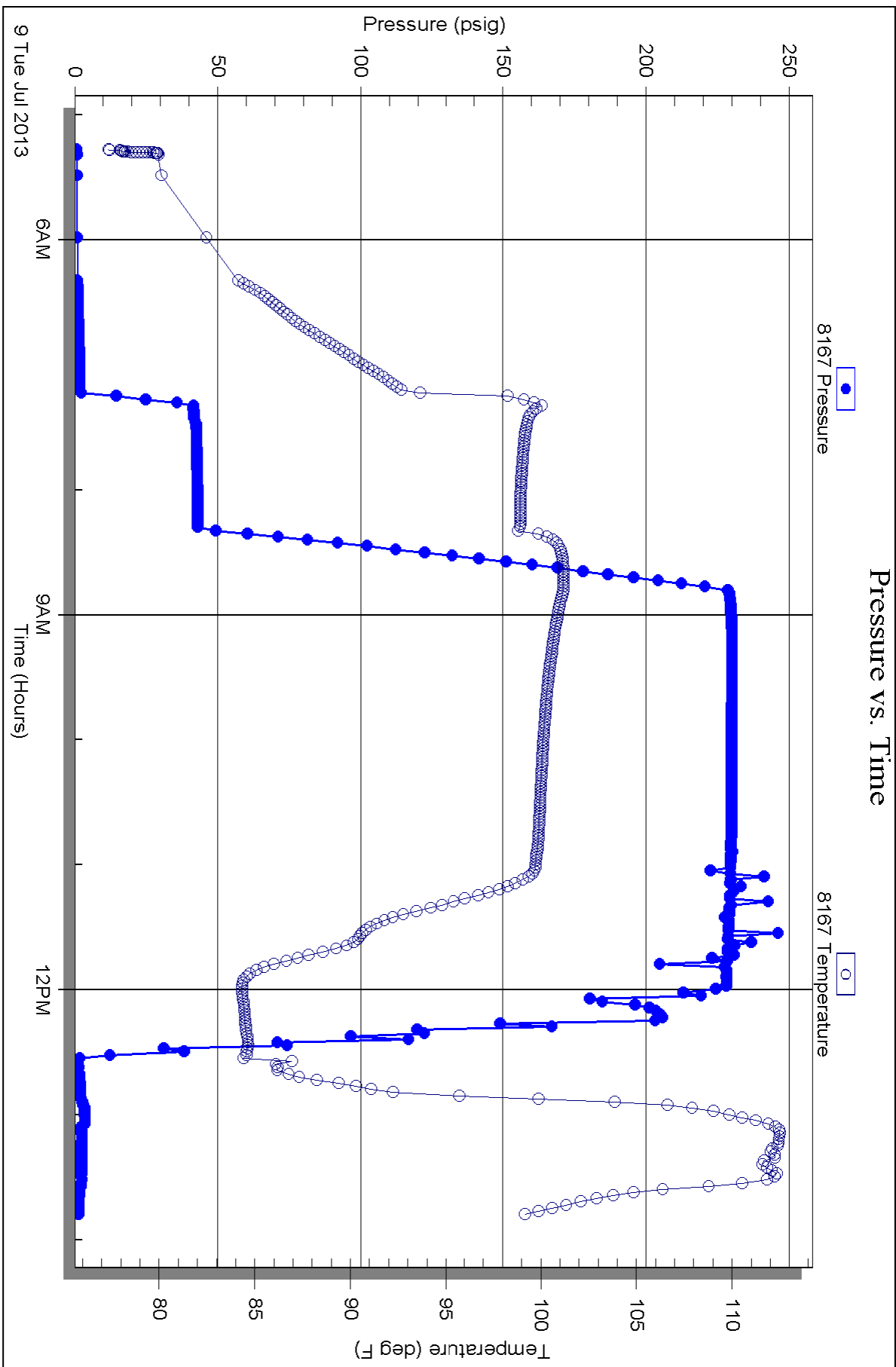
Serial #: 8167

Fluid

Samuel Gary Jr & Associates

Tuzicka 1-12

DST Test Number: 1





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

Well Name: Tuzicka 1-12
 Location: Sec. 12-16S-16W Rush County, Kansas
 License Number: 15-165-22033-0000
 Spud Date: 07/05/13
 Surface Coordinates: 1180' FNL, 350' FWL
 Region: Wildcat
 Drilling Completed: 07/10/13

Bottom Hole Coordinates:
 Ground Elevation (ft): 1882' K.B. Elevation (ft): 1892'
 Logged Interval (ft): 1800' To: 3582' Total Depth (ft): 3582'
 Formation:
 Type of Drilling Fluid:

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Samuel Gary Jr. & Assoc.
 Address: 1515 Wynkoop, Ste. # 700
 Denver, Colo. 80202
 Geo: Chris Mitchell

GEOLOGIST

Name: Jeff Quimby
 Company: Earth Tech OGL, Inc.
 Address: PO Box 683
 Hooker, Okla . 73945
 Off. 888-543-8378 Cell: (580)754-0411

DST's Report

DST #1 3177'-3207' 5 60 30 120
 IF-ST BLO/ ISI-WK SRFC BLO DIED IN 12MIN/ FF-ST BLO/ FSI-GD BLO
 IH-1545, FH-1418/ IF-40 TO 83/ IS 87 TO 255/ ISI-808/ FSI-802
 RECOVERY- 378' MW W/SCUM OF O 25%M 45%W, 86' GOCMW 20%G 10%O 25%M 45%W, 40' GMCWO 10%G
 5%M 25%W 60%O
 PIT CHLORIDES 4600 PPM/ SAMPLER 2000ML GAS 2000ML OIL 3000ML PSI

DST's Report

DST's Report

ROCK TYPES

	Anhy		Gyp		Shgy		Sandylms
	Bent		Igne		Sltst		Shale
	Brec		Lmst		Ss		Sltstn
	Cht		Meta		Till		Shlyslts
	Clyst		Mrlst		Carb sh		Sltyslts
	Coal		Salt		Dol		Lms
	Congl		Shale		Dtd		
	Dol		Shcol		Gry sh		

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brefracg
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram

- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh

- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandyms
- Sh
- Sltstn

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang

- Angular

OIL SHOWS

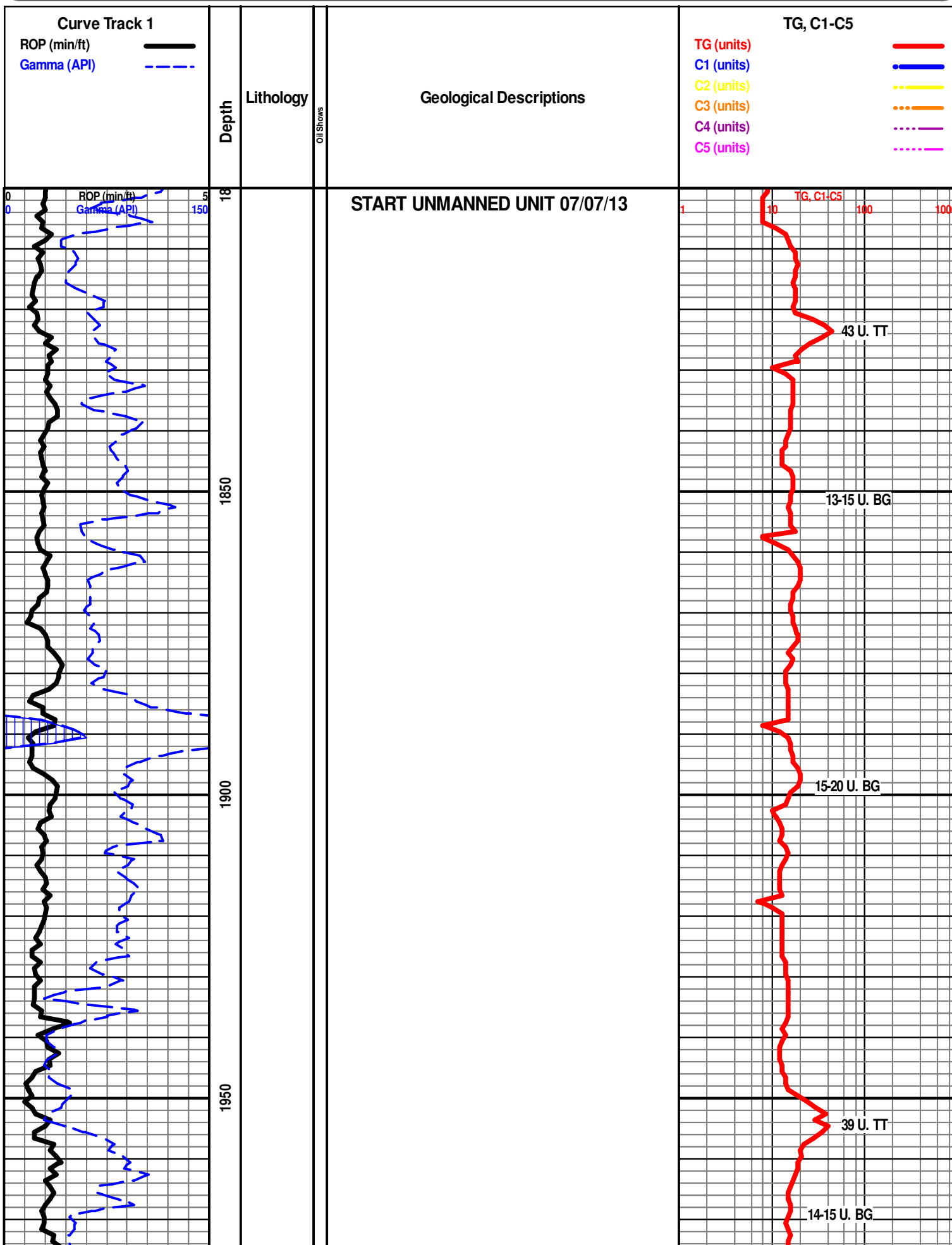
- Even
- Spotted
- Ques
- Dead
- Gas show

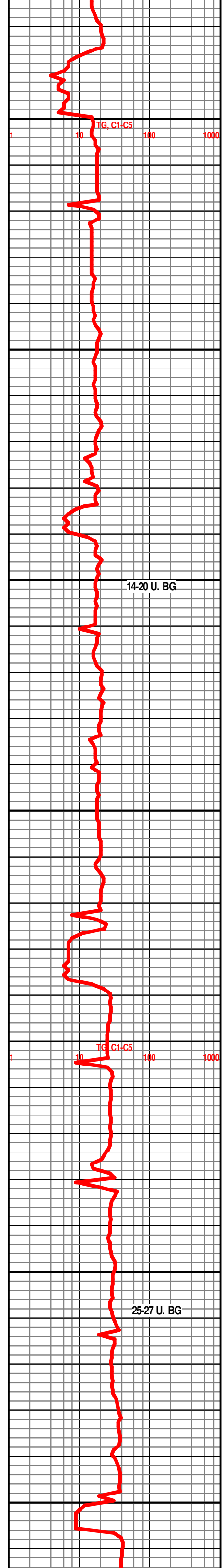
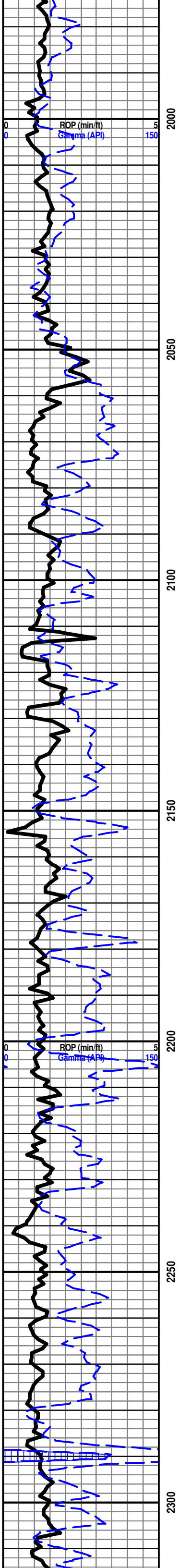
INTERVALS

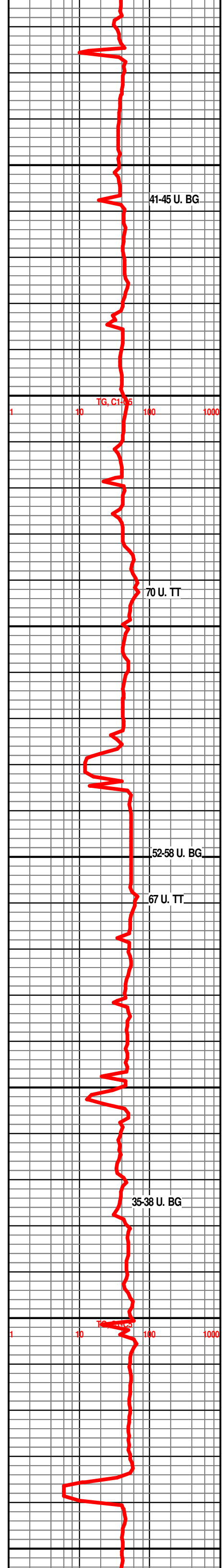
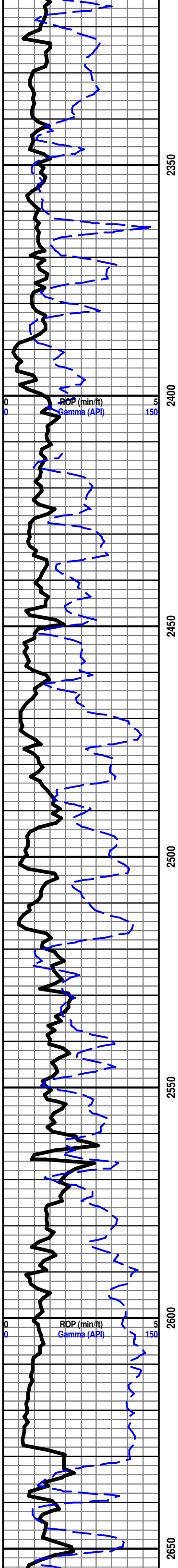
- Core
- Dst
- Dst

EVENTS

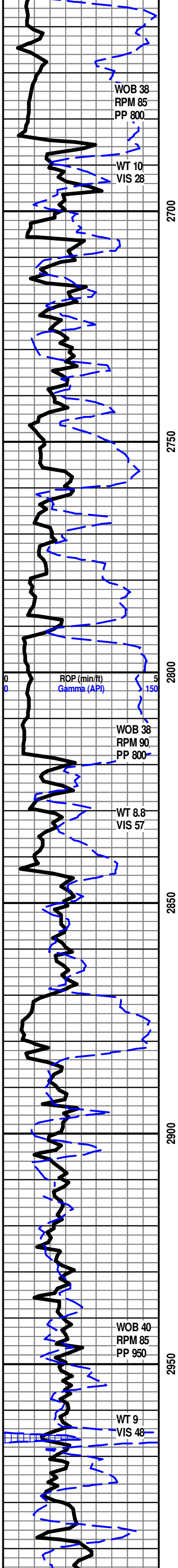
- Rft
- Sidewall







BASE ROOT SHALE 2628' -736'



WOB 38
RPM 85
PP 800

WT 10
VIS 28

ROP (min/ft)
Gamma (API)

WOB 38
RPM 90
PP 800

WT 8.8
VIS 57

WOB 40
RPM 85
PP 950

WT 9
VIS 48

2700

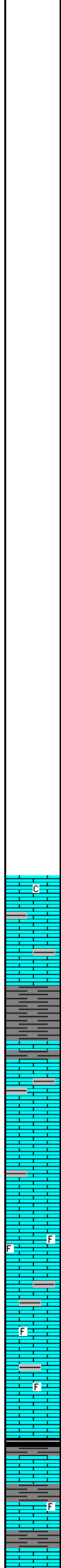
2750

2800

2850

2900

2950



HOWARD 2818' -926'

START 24 HOUR MANNED UNIT 7/7/13

LS- OFF WHT LT TN TO LT GRY, HD DNSE, FN-XLN TO SLI RE-XLN MTRX IP, SCATT IMBD LT GRY SH IP, SLI TRS IMBD WHT CHLK, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GRY LT GRY, FRM TO SFT BRITT, SLI BLKY TO SPLNTY THRU

TOPEKA 2884' -992'

SH- GRY, FRM TO BRITT, SMTH BLKY TO SPLNTY

LS- OFF WHTTO MOTTED LT GRY GRY, HD DNSE TO SLI BRITT IP, FN-XLN TO MD-XLN, RE-XLN MTRX IP, SCATT IMBD LT GRY SH IP, TRS FREE CALC XLS IN TRAY IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

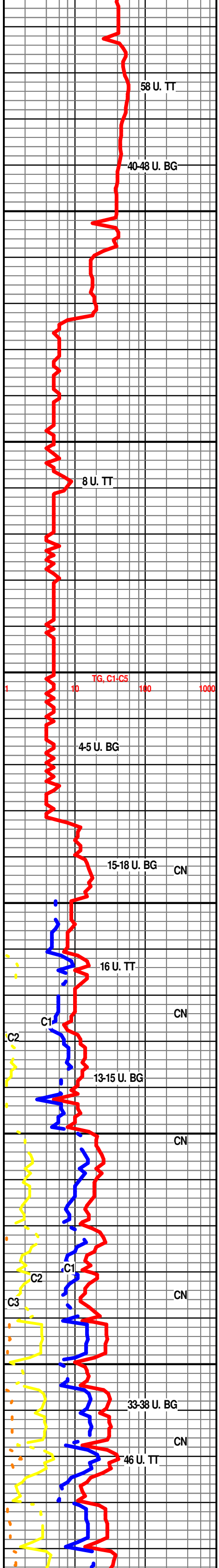
LS- OFF WHT TO SCATT IMBD LT GRY SH, HD DNSE TO SLI BRITT IP, MD-FN-XLN, SLI SUCRO MTRX IP, SCATT IMBD FOSS FRGS, TRS DISS LT GRY SH, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- LT GRY TO OFF WHT IP, HD DNSE TO BRITT IP, FN-XLN TO SLI MD-XLN RE-XLN MTRX, TRS IMBD FOSS FRGS, SCATT IMBD LT GRY GRY SH, TRS LT DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- BLK TO DRK GRY, SFT BRITT TO V/BRITT, BLK CARB IN TRAY, BLKY TO SMTH BLKY

LE COMPTON 2989' -1097'

LS- OFF WHT CRM HD DNSE MD-FN-XLN TO V/ FN-XLN



58 U. TT

40-48 U. BG

8 U. TT

4-5 U. BG

15-18 U. BG CN

16 U. TT

13-15 U. BG

33-38 U. BG

46 U. TT

TG, C1-C5

C1

C2

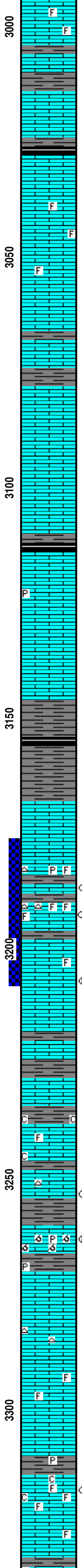
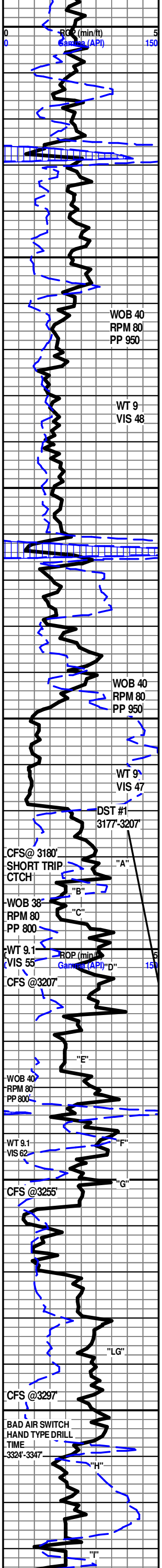
C2

C3

C1

C2

C3



LS- OFF WHT CRM, HD DNSE, LRG IMBD FOSS FRGS IP, DLL YEL MIN FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GRY LT GRY, FRM TO SFT BRITT IP, SPLNTY

LS- CRM TO LT GRY IP, HD DNSE TO BRITT IP, FN XLN RE-XLN MTRX, TRS IMBD FOSS FRGS, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- OFF WHT CRM TO TRS LT GRY, HD DNSE, FN-XLN RE-XLN MTRX, IMBD FOSS FRGS IP, TRS LMND LT GRY GRY SH, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

SH- GRY LT GRY, FRM BRITT, BLKY TO SPLNTY

LS- OFF WHT CRM, HD DNSE TO SLI BRITT, FN-XLN TO CRS SUCRO IP, TRS IMBD CALC XLS IP, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

HEEBNER 3111' -1219'

LS- OFF WHT WHT TO CRM (W/ TRS TN OIL STAIN ON 3%), HD DSNE TO BRITT IP, MD-FN-XLN TO FN-XLN, RE-XLN MTRX, TRS IMBD PYR IP, TRS IMBD CALC XLS IP, DLL YEL FLO IN 10% TO NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

DOUGLAS 3147' -1255'

SH- LT GRY GRY TO GRN MOTTED, SFT BRITT TO V/V/ GMMY, SMTH BLKY TO BLKY

LANSING 3169' -1277'

LS- OFF WHT WHT, HD DNSE, FN-XLN TO MD-FN-XLN, SLI RE-XLN MTRX, TRS IMBD CALC XLS IP, TRS CHLK IN TRAY, DLL YEL FLO IN 20% TO NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LANSING "C" 3191' -1299'

3188'-3189' LS- OFF WHT WHT (W/ V/ LT BRWN OIL STAIN ON 10%), HD BRITT, FN-XLN TO MD-FN-XLN, RE-XLN MTRX TO SUB-SUCRO MTRX, IMBD CALC XLS IP, SCATT WHT OFF WHT CHRT W/ IMBD FOSS FRGS TRS IMBD PYR, BRIT YEL GLD FLO IN 55%, MD TO SMLL VUG POR IN 25% TRS INTER XLN POR IN 15%, FR FLUSH CUT IN 40%, FR SLW STRM CUT IN 30%

3191'-3194' LS- OFF WHT LT CRM (W/ LT TN OIL STAIN ON 25%), HD DNSE TO BRITT IP, FN-XLN TO CRYPTO XLN IP TRS RE-XLN MTRX, IMBD CALC XLS IP, TRS IMBD FOSS FRGS, OFF WHT WHT TO LT CRM CHRT IN TRAY W/ IMBD FOSS FRGS THRU, BRIT YEL GLD FLO IN 35%, MD VUG POR IN 5% TRS INTER XLN POR IN 24%, PR FLUSH CUT IN 28% GD SLW STRM CUT IN 20%, PR OIL ODOR

3205'-3207' LS- OFF WHT CRM TO LT TN (W/ TN LT TN OIL STAIN ON 35%), HD DNSE TO SLI BRITT IP, FN-XLN RE-XLN MTRX TO SUC-SUCRO MTRX IP, IMBD CALC XLS, BRIT YEL GLD FLO IN 20% DLL YEL GLD IN 5%, VUG POR IN 15% (W/ TN OIL STAIN) SCATT TRS INTERXLN POR IN 7%, V/ PR FLUSH CUT EXCEL SLW STRM CUT IN 28%, GD OIL ODOR

LANSING "F" 3239' -1347'

LS- OFF WHT WHT CRM TO LT TN IP, HD TO BRITT, FN-XLN TO MD-XLN SUB-CHLKY THRU IP, SCATT IMBD SFT WHT CHLK, TRS GMMY SFT WHT CHLK IN TRAY, TRS IMBD FOSS FRGS THRU IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

3252'-3255' LS- OFF WHT CRM (W/ TN OIL ON 9%), HD DNSE TO SLI BRITT IP, FN-XLN SLI RE-XLN SUB-SUCRO MTRX, TRS IMBD FOSS FRGS IP, LT CRM CHRT (W/ OIL STAIN ON 7%) DLL YEL GLD IN 15%, VUG POR IN 10%, NO VIS FLUSH CUT GD TO EXCEL SLW STRM CUT IN 5%, PR OIL ODOR, SAMPLE V/ GROUND UP

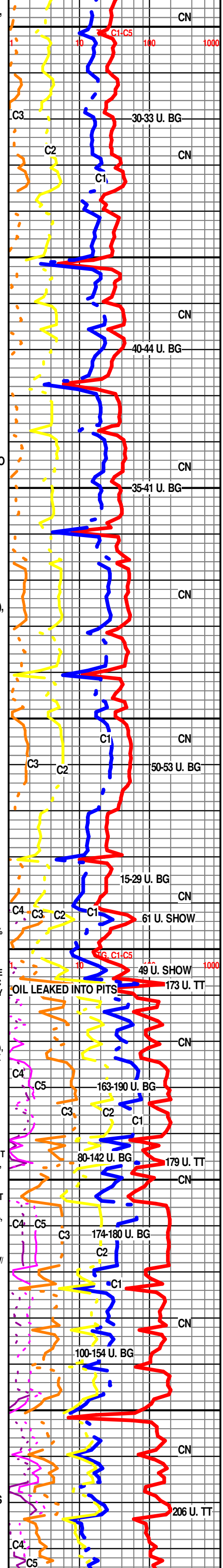
3264'-3266' LS- CRM TO TN (W/ BRWN OIL STAIN ON 20%), HD DNSE TO V/ BRITT, MD-XLN TO MD-FN-XLN IP, ABDT IMBD OOLMLDS THRU IP, TRS IMBD PYR IP, TRS PYR CLUSTERS IN TRAY, DLL YEL GLD FLO IN 100%, TRS OOLMLD POR IN 33% (W/ LIVE BRWN OIL), GD FLUSH CUT IN 50%, GD SLW STRM CUT IN 25%, BRWN TO LT BRWN LCH ON DISH

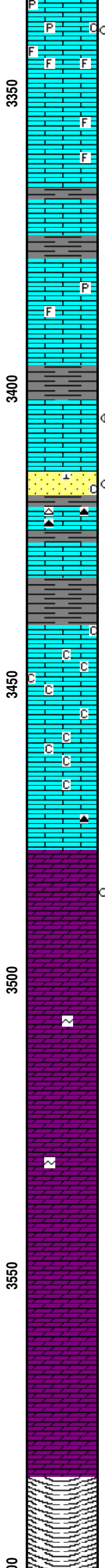
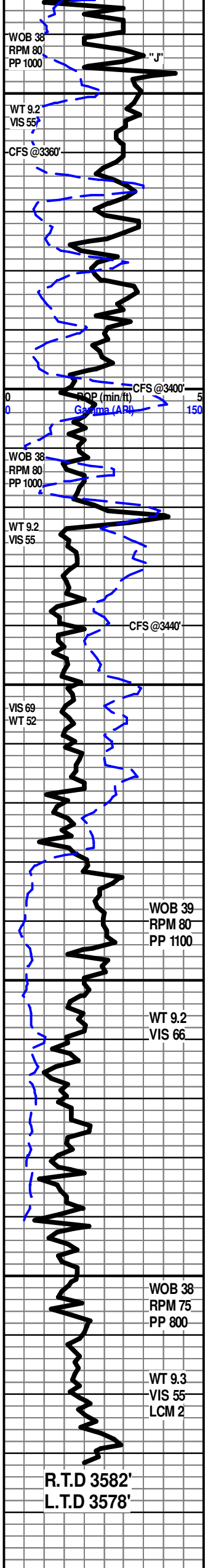
LS- OFF WHT CRM, HD DNSE, FN-XLN RE-XLN MTRX THRU, TRS IMBD FOSS FRGS IP, TRS OFF WHT CRM CHRT IN TRAY, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- GRY TO MOTTED CRM, HD DNSE, FN-XLN SLI MD-XLN IP, RE-XLN MTRX IP, IMBD FOSS FRGS IP, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LANSING "H" 3312' -1420'

3318'-3323' LS- OFF WHT WHT (W/ DOS ON 50%), HD TO BRITT, SUB-CHLKY IP, ABDT IMBD FOSS FRGS IP, NO VIS FLO, TRS MICRO PP POR TO NO VIS POR, NO VIS CUT OR SHOW, PR OIL ODOR





3340'-3343' LS- OFF WHT TO CRM (W/ 45% BRWN OIL STAIN 10% DOS), HD TO BRITT, MD-XLN SUB-SUCRO MTRX TO SLI SUB-CHLKY IP, IMBD PYR IP, SCATT IMBD CALC XLS, IMBD FOSS FRGS THRU IP, DLL YEL GLD FLO IN 20%, TRS INTER XLN POR, PR FLUSH CUT PR TO FR SLW STRM CUT IN 15%, GD OIL ODOR

LS- OFF WHT WHT CRM, HD DNSE TO SLI BRITT IP, FN-XLN TO FN-MD-XLN, RE-XLN MTRX, TRS IMBD FOSS FRGS, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LS-OFF WHT TO LT GRY, FRM TO BRITT IP, TRS IMBD CALC XLS IP, SLI TRS IMBD PYR, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

BKC 3401' -1509'

3404'-3406' LS- CRM TO LT TN (W/ DRK BRWN TO BLK OIL ON 15%), HD TO BRITT, MD-XLN SLI RE-XLN, IMBD FOSS FRGS THRU, IMBD CALC XLS IP, DLL YEL GLD FLO IN 20% BRIT YEL GLD FLO IN 5%, SMLL VUG PO IN 10% (W/ LIVE OIL) TO INTER XLN POR IN 5%, FR FLUSH CUT GD SLW STRM CUT IN 30%, FR OIL ODOR

SS- CLR FRSTY TO LT GRY MOTTED GRY(W/ DOS IN 10% TRS LT TN OIL STN ON 11%), V/ FRI, SML TO MD GRNS, TRS CLR QRTZN GRNS IN TRAY, SUB-RND TO SLI SUB-ANG, CALC CMNT, TRS IMBD SFT WHT CHLK, TRS RED TO MOTTED YEL CHRT W/ IMBD FOSS FRGS THRU IP, NO FLO, TRS INTER XLN POR, NO VIS FLUSH CUT

LS- OFF WHT CRM TO LT TN, HD TO BRITT, MD-XLN TO FN-XLN SUB-CHLKY THRU IP, SFT GMMY WHT CHLK IN TRAY, NO VIS FLO, NO VIS POR, NO VIS CUT OR SHOW

LS- OFF WHT TO CRM, HD DNSE TO BRITT IP, FN TO MD-XLN RE-XLN IP, SUB-CHLKY IP, SFT GMMY WHT CHLK IN TRAY, TN CHRT IN TRAY, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

ARBUCKLE 3482' -1590'

DOL- CRM TO TN (W/ DOS IN 20%), HD DNSE, MD-XLN TO CRS SUCRO, IMBD DOL GRNS THRU, DLL YEL GLD FLO THRU, TRS INTER XLN POR, GD FLUSH CUT FR SLW STRM CUT IN 20%

DOL- OFF WHT WHT (W/ TRS DOS ON 12%), HD DNSE, FN-V/FN-XLN, IMBD DOL GRNS IP, IMBD GLAUC IP, DLL YEL GLD FLO THRU, NO VIS POR, NO VIS CUT OR SHOW

DOL- WHT, HD DNSE, MD-XLN TO CRS SUCRO MTRX IP, SCATT IMBD DOL GRNS IP, IMBD GLAUC IP, DLL YEL GLD FLO THRU, SLI TRS INTER XLN POR IP, NO VIS CUT OR SHOW

DOL- OFF WHT WHT, HD DNSE, FN-XLN TO V/ CRS SUCRO MTRX, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

DOL- WHT CRM, HD DNSE, FN-V/FN-XLN, TRS CRS SUCRO MTRX IP, DLL YEL FLO, NO VIS POR, NO VIS CUT OR SHOW

R.T.D 3582' @4:49 P.M 07/10/13
CTCH FOR LOGS

