



WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

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



1158736

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

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	H & D Exploration LLC
Well Name	Charles 1
Doc ID	1158736

Tops

Name	Top	Datum
Heebner	3451	-1542
Toronto	3469	-1560
Douglas	3486	-1577
Brown Lime	3601	-1692
Lansing	3614	-1705
Base KC	3914	-2005
Mississippi	4030	-2121
Viola	4084	-2175
Simpson Shale	4148	-2239
Simpson Sand	4160	-2251
Arbuckle	4220	-2311



Musgrove

**PETROLEUM
CORPORATION**
Claflin, Kansas

COMPANY: H&D Exploration LLC

LEASE: Charles #1

FIELD: wildcat

LOCATION: W2-NE-SW-NE 1,650 FNL & 1,680' FEL

SEC: 19 **TWSP:** 25s **RGE:** 12w

COUNTY: Stafford **STATE:** Kansas

KB: 1911 **GL:** 1899

API # 15-185-23822-00-00

CONTRACTOR: Southwind Drilling Company (Rig #70)

Spud: 07-17-2013 **Comp:** 07-26-2013

RTD: 4260' **LTD:** 4258

Mud Up: 2800' **Type Mud:** Chemical was displaced

Samples Saved From: 3200'to RTD
Drilling Time Kept From: 3200'to RTD
Samples Examined From: 3200'to RTD
Geological Supervision From: 3400'to RTD
Geologist on Well: Josh Austin

Surface Casing: 8 5/8" @ 757
Production Casing: 5 1/2" @ 4232

Electronic Surveys: By Pioneer Energy Services

NOTES

On the basis of the drill stem test and after reviewing the electric logs, it was recommended by all parties involved in the Charles #1 to set 5 1/2" production casing to further test the Simpson Sand and Mississippi.

H&D Exploration, LLC

Sample and Log Tops

DRILLING WELL				
Charles #1				
W2-NE-SW-NE				
Sec: 19 Twp:25s Rge: 12w				
1909 KB				
Formation	Sample	Sub-Sea	Log	Sub-Sea
Heebner	3453	-1544	3451	-1542
Toronto	3477	-1568	3469	-1560
Douglas	3491	-1582	3486	-1577
Brown Lime	3606	-1697	3601	-1692
Lansing	3620	-1711	3614	-1705
Base KC	3923	-2014	3914	-2005
Mississippi	4036	-2127	4030	-2121
Viola	4071	-2162	4084	-2175
Simpson Shale	4120	-2211	4148	-2239
Simpson Sand	4163	-2254	4160	-2251
Arbuckle	4222	-2313	4220	-2311
Total Depth	4260	-2351	4258	-2349



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: charles1dst1

TIME ON: 14:14:00
TIME OFF: 21:43:00

Company H&D Exploration LLC Lease & Well No. Charles #1
Contractor Southwind #70 Charge to H&D Exploration LLC
Elevation 1911 KB Formation Lansing B-F Effective Pay _____ Ft. Ticket No. K008
Date 7-23-13 Sec. 19 Twp. 25 S Range 12 W County Stafford State KANSAS
Test Approved By _____ Diamond Representative Jason McLemore

Formation Test No. 1 Interval Tested from 3645 ft. to 3725 ft. Total Depth 3725 ft.
Packer Depth 3640 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3645 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3633 ft. Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3642 ft. Recorder Number 13338 Cap. 4950 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 57 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.4 Water Loss 10.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 4500 P.P.M. Drill Pipe Length 3620 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out _____ Anchor Length 80 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 50' Drillpipe in Anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: BOB in 8 Min. No Return Blow

2nd Open: BOB in 17 Min. No Return Blow

Recovered 200 ft. of SOCWM 5%O, 23%W, 72%M

Recovered 180 ft. of VSOCMW 2%O, 68%W, 30%M

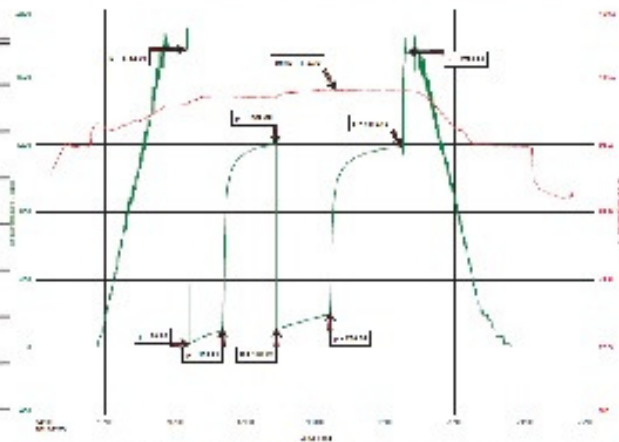
Recovered 380 ft. of Total Fluid

Recovered ft. of CHLORIDES 18000

Recovered ft. of PH 7

Recovered ft. of RW .14 @ 76

Remarks: Tool Sample VSOCW, 1%O, 99%W



Time Set Packer(s) 4:13 PM A.M. P.M. Time Started Off Bottom 7:13 PM A.M. P.M. Maximum Temperature 112

Initial Hydrostatic Pressure..... (A) 1763 P.S.I.
 Initial Flow Period..... Minutes 30 (B) 20 P.S.I. to (C) 105 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 1205 P.S.I.
 Final Flow Period..... Minutes 45 (E) 109 P.S.I. to (F) 204 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 1190 P.S.I.
 Final Hydrostatic Pressure..... (H) 1751 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



DIAMOND TESTING
 P.O. Box 157
 HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: charles1dst1

TIME ON: 1:04:00
 TIME OFF: 8:10:00

Company H&D Exploration LLC Lease & Well No. Charles #1
 Contractor Southwind #70 Charge to H&D Exploration LLC
 Elevation 1911 KB Formation Mississippi Effective Pay Ft. Ticket No. K009
 Date 7-23-13 Sec. 19 Twp. 25 S Range 12 W County Stafford State KANSAS
 Test Approved By Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 3957 ft. to 4065 ft. Total Depth 4065 ft.

Packer Depth 3952 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Packer Depth 3957 ft. Size 6 3/4 in. Packer depth ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3945 ft. Recorder Number 5513 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 3954 ft. Recorder Number 13338 Cap. 4950 P.S.I.

Below Straddle Recorder Depth ft. Recorder Number Cap. P.S.I.

Mud Type CHEMICAL Viscosity 46 Drill Collar Length 0 ft. I.D. 2 1/4 in.

Weight 9.5 Water Loss 11.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 5500 P.P.M. Drill Pipe Length ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in

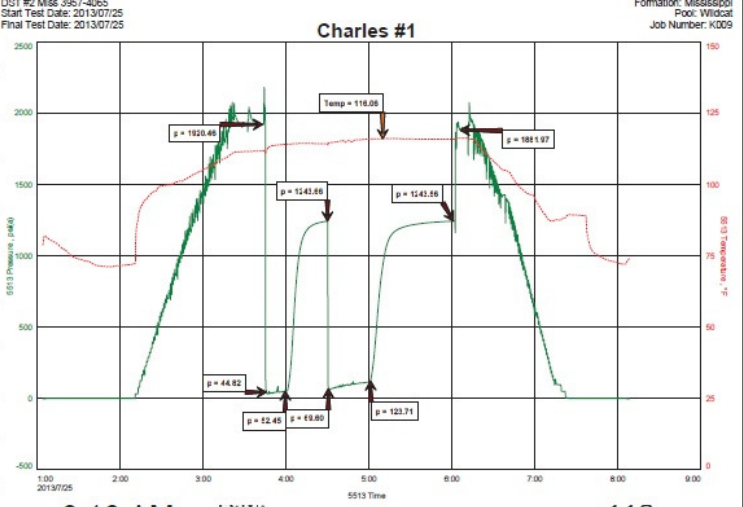
Did Well Flow? Reversed Out Anchor Length 108 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: Strong BOB in 2 Min. No Return Blow

Blow: 2nd Open: Strong, BOB in 2 Min. No Return Blow

Recovered 25 ft. of Drilling Mud
 Recovered 180 ft. of VSOCWM 2%O, 2%W, 96%M
 Recovered 205 ft. of TOTAL FLUID
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Remarks: TOOL SAMPLE 2%O, 46%W, 52%M
Chlorides 14000
PH 7 RW .510@76



Time Set Packer(s) 3:46 AM A.M. P.M. Time Started Off Bottom 6:16 AM P.M. Maximum Temperature 116

Initial Hydrostatic Pressure..... (A) 1927 P.S.I.
 Initial Flow Period..... Minutes 15 (B) 45 P.S.I. to (C) 53 P.S.I.
 Initial Closed In Period..... Minutes 45 (D) 1243 P.S.I.
 Final Flow Period..... Minutes 30 (E) 70 P.S.I. to (F) 116 P.S.I.
 Final Closed In Period..... Minutes 60 (G) 1244 P.S.I.
 Final Hydrostatic Pressure..... (H) 1882 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



DIAMOND TESTING
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (800) 542-7313
DRILL-STEM TEST TICKET
 FILE: charles1dst3

TIME ON: 19:38
 TIME OFF: 4:20

Company H&D Exploration LLC Lease & Well No. Charles #1
 Contractor Southwind #70 Charge to H&D Exploration LLC
 Elevation 1911 KB Formation Simpson Sand Effective Pay _____ Ft. Ticket No. K010
 Date 7-25-13 Sec. 19 Twp. _____ 25 S Range _____ 12 W County Stafford State KANSAS
 Test Approved By _____ Diamond Representative Jason McLemore

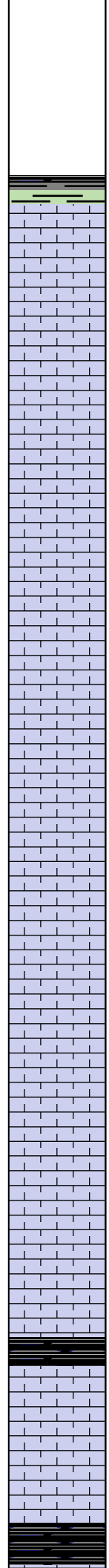
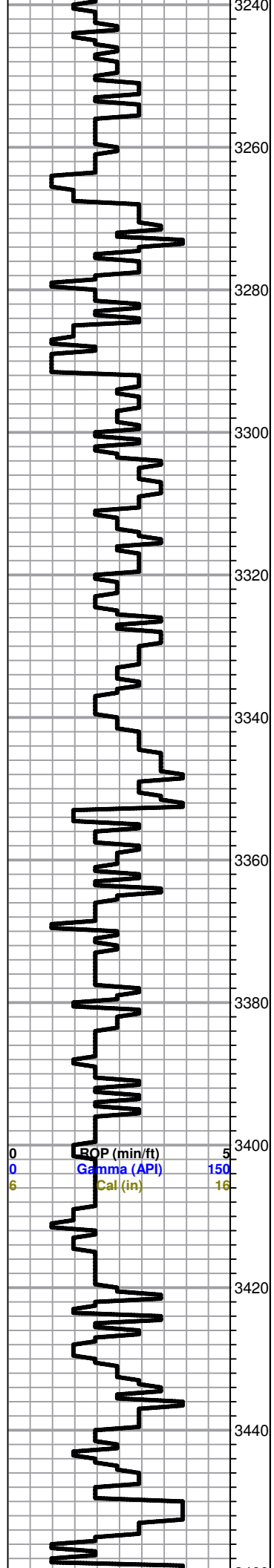
Formation Test No. 3 Interval Tested from 4115 ft. to 4183 ft. Total Depth 4183 ft.
 Packer Depth 4110 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
 Packer Depth 4115 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4103 ft. Recorder Number 5513 Cap. 5000 P.S.I.
 Bottom Recorder Depth (Outside) 4112 ft. Recorder Number 13338 Cap. 4950 P.S.I.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 53 Drill Collar Length _____ ft. I.D. 2 1/4 in.
 Weight 9.5 Water Loss 10.8 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
 Chlorides 4000 P.P.M. Drill Pipe Length 4090 ft. I.D. 3 1/2 in.
 Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
 Did Well Flow? NO Reversed Out NO Anchor Length 68 ft. Size 4 1/2-FH in.
 Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 31" drillpipe in anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong, BOB in 3-1/2 Min. No Return Blow
2nd Open: Strong, BOB On Open, No Return Blow



grey-black shale

Limestone; cream-grey, fine xln, chalky, fossiliferous in part

Limestone; cream-buff, fine-medium xln, sandy/granular, poor visible porosity, no shows, fossiliferous-oolitic, no shows

Limestone; as above

Limestone; tan-cream, fine-medium xln, granular, dense, oolitic in part, no shows, plus white, translucent, grey Chert

Limestone; cream-buff, fine-medium xln, slightly fossiliferous, dense, plus grey-white boney Chert

Limestone; cream-lt. grey, fine xln, chalky, oolitic in part, dense, poorly developed porosity, no shows, plus white-cream boney chert

Limestone; cream, fossiliferous, chalky, fair-good scattered porosity

black carboniferous shale

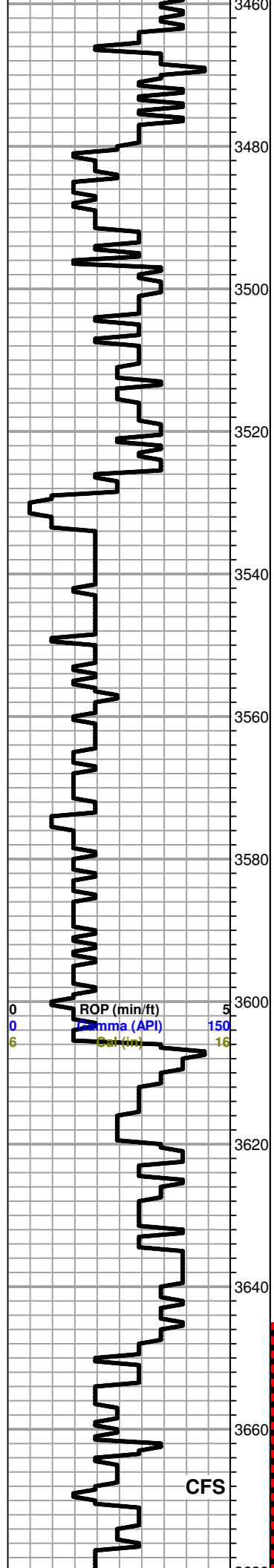
Limestone; cream-lt. grey, fine xln, chalky, dense, plus white chalk

HEEBNER 3453 (-1544)

Black Carboniferous Shale

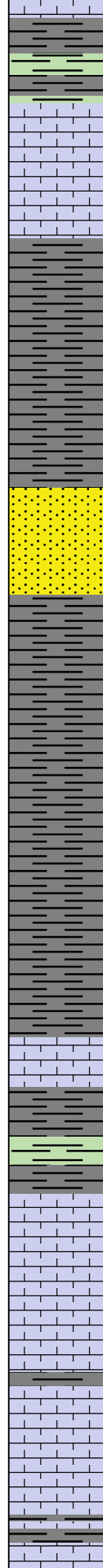
0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

KB 1909
GL 1897



0 ROP (min/ft) 5
 0 Gamma (API) 150
 6 Cal (in) 16

CFS



Black Carboniferous Shale

grey-maroon-green shale

TORONTO 3477 (-1568)
 Limestone; cream-white, fine xln, chalky, dense, plus white chalk, few inter xln-pin point porosity, no shows

DOUGLAS 3491 (-1582)

grey-green, silty, shale

DOUGLAS SAND

Sand; grey, fine-medium grained, sub angular, sub rounded, dense, friable in part, poorly developed inter granular porosity, no shows

Shale; grey-greish green, silty in part, micaceous, plus sand as above

Sand and Shale as above

Shale; grey-greish green, silty in part, micaceous, soft

Shale; as above

BROWN LIME 3606 (-1697)
 Limestone; tan-brown, fine xln, dense, cherty in part, slightly fossiliferous

grey-green shale

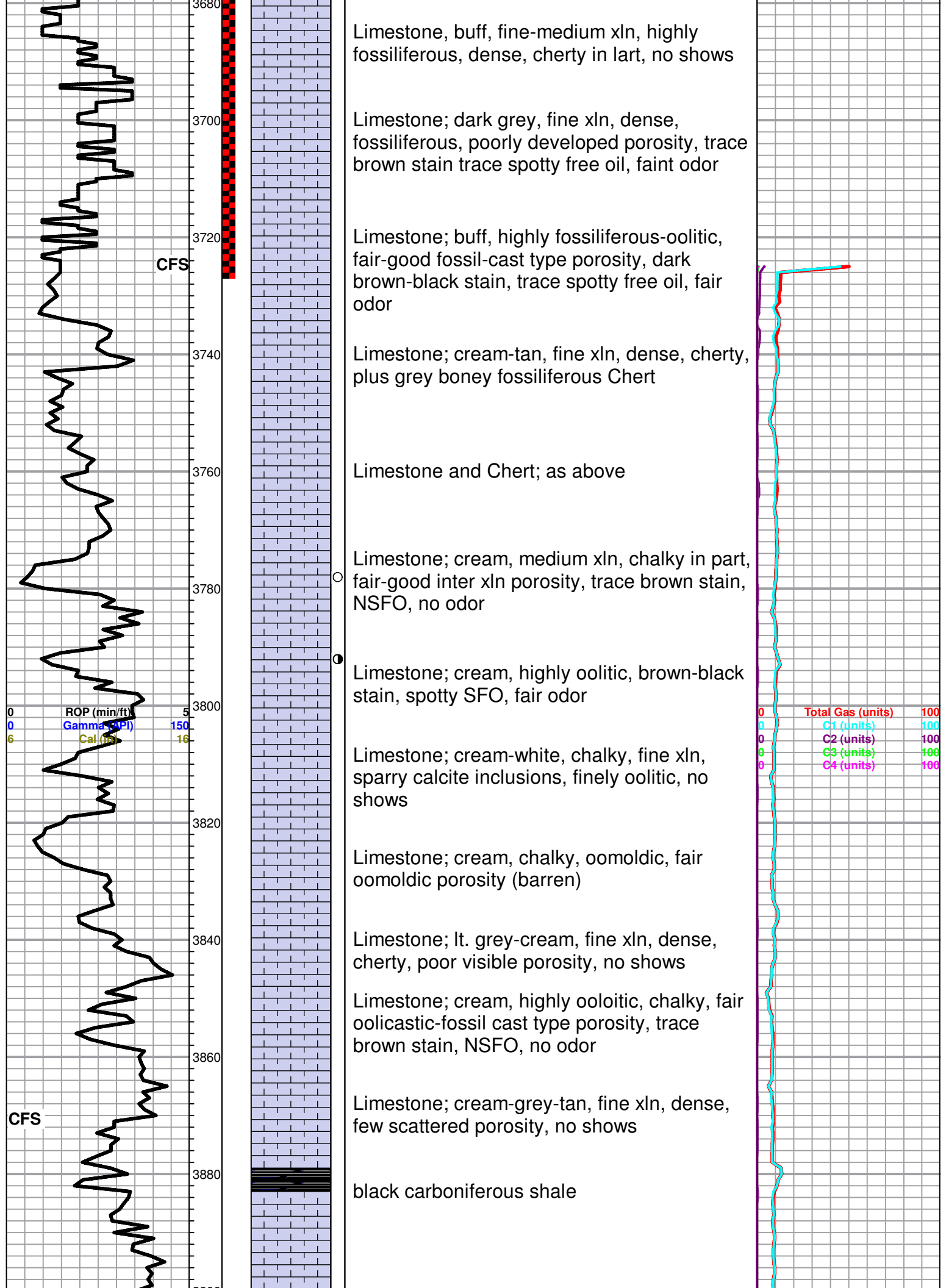
LANSING 3620 (-1711)

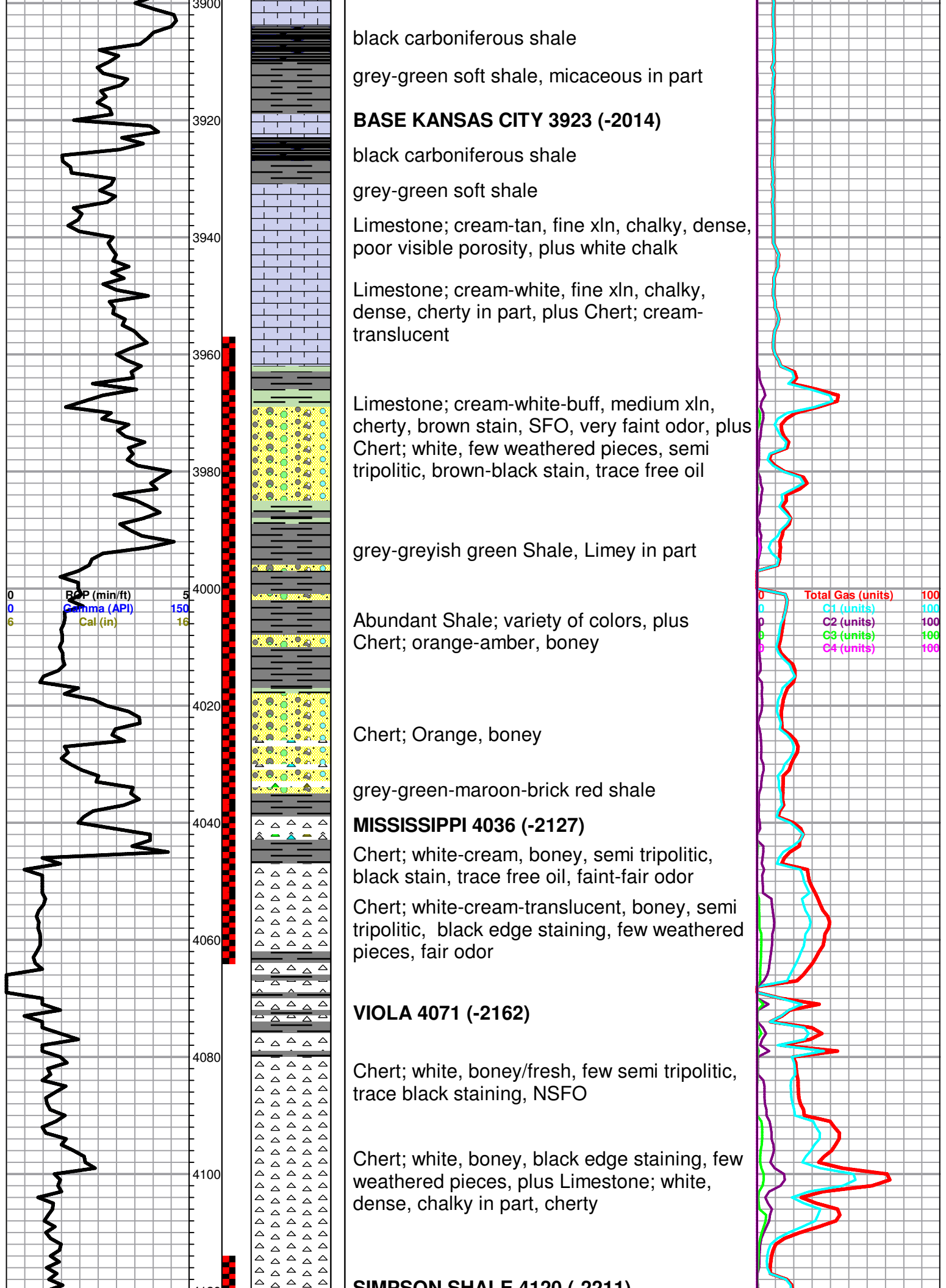
Limestone; tan-buff, highly fossiliferous-oolitic, fair-good porosity, no shows

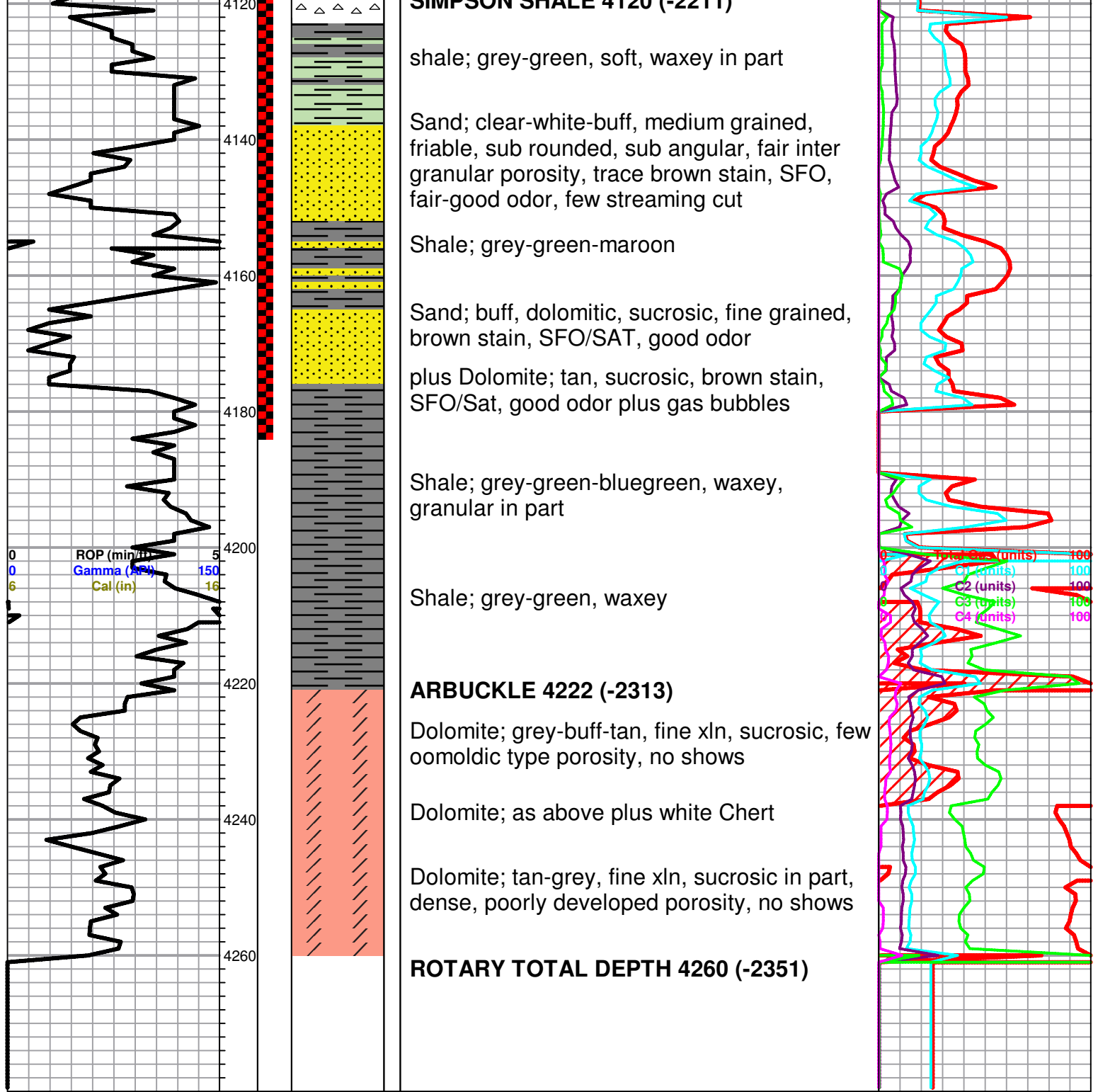
Limestone; grey-cream, oomoldic-vuggy type porosity, trace brown-grey stain, trace free oil, fair odor

Limestone; cream-lt. grey, fine xln, dense, chalky, few scattered porosity, no shows

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100



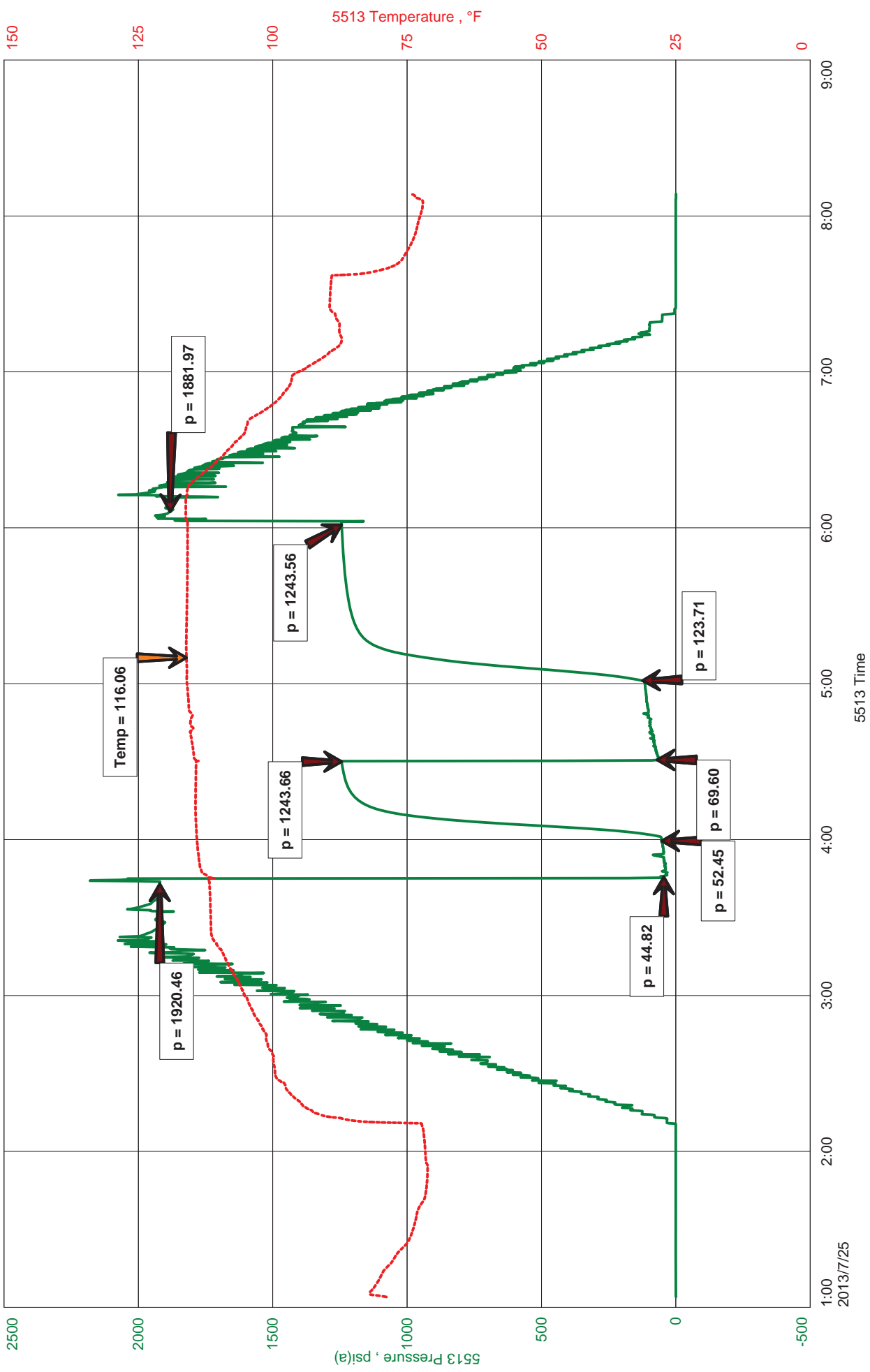




H&D Exploration LLC
DST #2 Miss 3957-4065
Start Test Date: 2013/07/25
Final Test Date: 2013/07/25

Charles #1
Formation: Mississippi
Pool: Wildcat
Job Number: K009

Charles #1





JASON MCLEMORE

CELL # 620-6170527

General Information

Company Name	H&D Exploration LLC	Job Number	K009
Contact	Alan Hoffman	Representative	Jason McLemore
Well Name	Charles #1	Well Operator	H&D Exploration LLC
Unique Well ID	DST #2 Miss 3957-4065	Prepared By	Jason McLemore
Surface Location	19-25s-12w-Stafford	Qualified By	Josh Austin
Field	Wildcat	Test Unit	#7
Well Type	Vertical		

Test Information

Test Type	Drill Stem Test	Representative	Jason McLemore
Formation	Mississippi	Well Operator	H&D Exploration LLC
Well Fluid Type	01 Oil	Report Date	2013/07/25
Test Purpose (AEUB)	Initial Test	Prepared By	Jason McLemore
Start Test Date	2013/07/25	Start Test Time	01:04:00
Final Test Date	2013/07/25	Final Test Time	08:10:00

Test Results

Recovered	
25'	Drilling Mud
180'	VSOCWM 2%O, 2%W, 96%M
205'	Total Fluid
Chlorides	14000
PH	7
RW	.510@76
Tool Sample	2%O, 46%W, 52%M



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: charles1dst1

TIME ON: 1:04:00
TIME OFF: 8:10:00

Company H&D Exploration LLC Lease & Well No. Charles #1
Contractor Southwind #70 Charge to H&D Exploration LLC
Elevation 1911 KB Formation Mississippi Effective Pay _____ Ft. Ticket No. K009
Date 7-23-13 Sec. 19 Twp. 25 S Range 12 W County Stafford State KANSAS
Test Approved By _____ Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 3957 ft. to 4065 ft. Total Depth 4065 ft.
Packer Depth 3952 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3957 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 3945 ft. Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 3954 ft. Recorder Number 13338 Cap. 4950 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 46 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.5 Water Loss 11.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 5500 P.P.M. Drill Pipe Length _____ ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? _____ Reversed Out _____ Anchor Length 108 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 93' drillpipe in anchor Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong, BOB in 2 Min. No Return Blow
2nd Open: Strong, BOB in 2 Min. No Return Blow

Recovered 25 ft. of Drilling Mud
Recovered 180 ft. of VSOCWM 2%O, 2%W, 96%M
Recovered 205 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: <u>TOOL SAMPLE 2%O, 46%W, 52%M</u>	
<u>Chlorides 14000</u>	
<u>PH 7 RW .510@76</u>	Total

Time Set Packer(s) 3:46 AM A.M. P.M. Time Started Off Bottom 6:16 AM A.M. P.M. Maximum Temperature 116

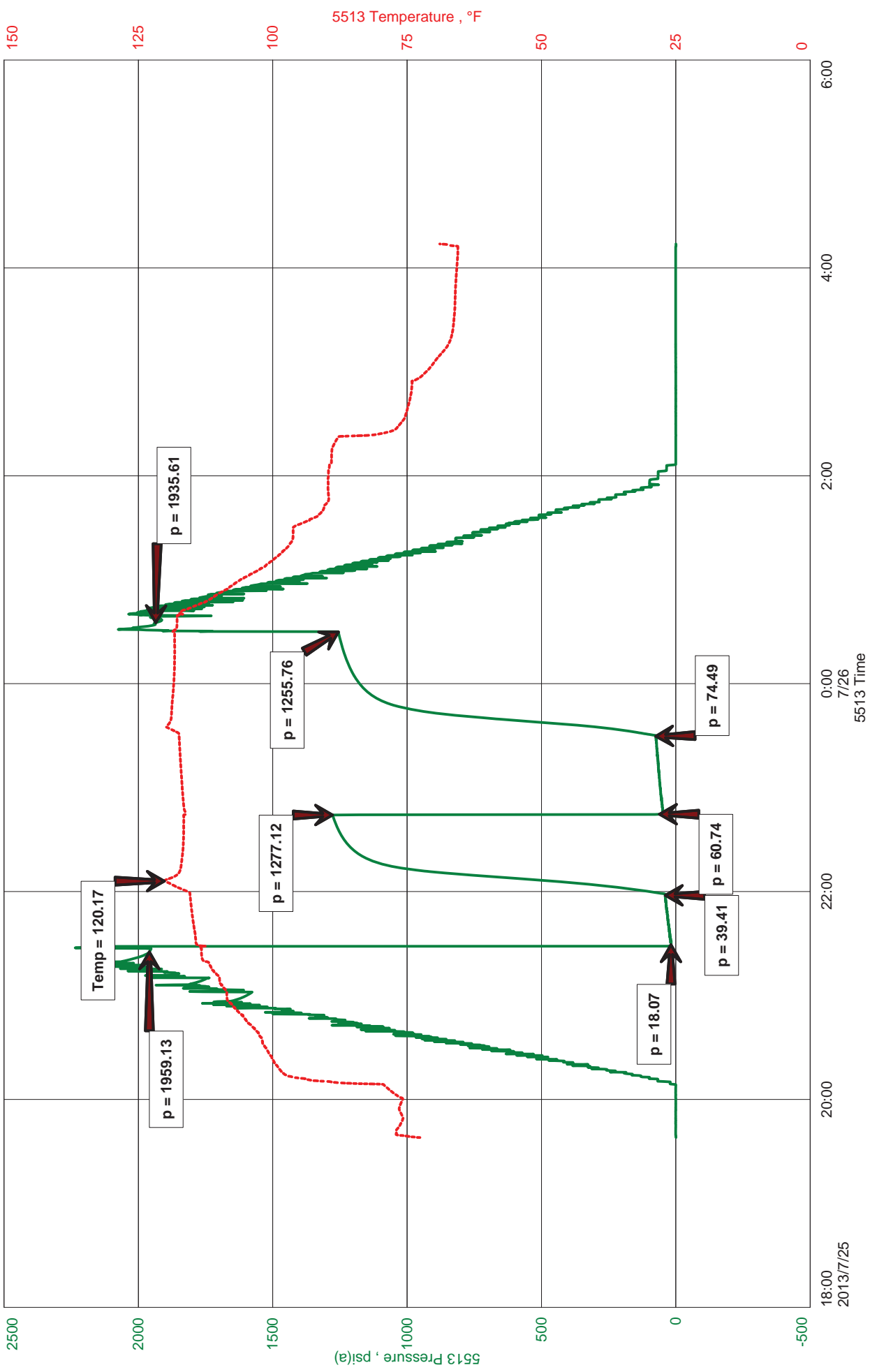
Initial Hydrostatic Pressure..... (A) 1927 P.S.I.
Initial Flow Period..... Minutes 15 (B) 45 P.S.I. to (C) 53 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1243 P.S.I.
Final Flow Period..... Minutes 30 (E) 70 P.S.I. to (F) 116 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1244 P.S.I.
Final Hydrostatic Pressure..... (H) 1882 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

H&D Exploration LLC
DST #3 Simpson 4115-4183
Start Test Date: 2013/07/25
Final Test Date: 2013/07/26

Charles #1
Formation: Simpson Sand
Pool: Wildcat
Job Number: K010

Charles #1





JASON MCLEMORE

CELL # 620-6170527

General Information

Company Name	H&D Exploration LLC	Job Number	K010
Contact	Alan Hoffman	Representative	Jason McLemore
Well Name	Charles #1	Well Operator	H&D Exploration LLC
Unique Well ID	DST #3 Simpson 4115-4183	Prepared By	Jason McLemore
Surface Location	19-25s-12w-Stafford	Qualified By	Josh Austin
Field	Wildcat	Test Unit	#7
Well Type	Vertical		

Test Information

Test Type	Drill Stem Test	Representative	Jason McLemore
Formation	Simpson Sand	Well Operator	H&D Exploration LLC
Well Fluid Type	01 Oil	Report Date	2013/07/26
Test Purpose (AEUB)		Prepared By	Jason McLemore

Start Test Date	2013/07/25	Start Test Time	19:38:00
Final Test Date	2013/07/26	Final Test Time	04:20:00

Test Results

Recovered

145 Frothy Muddy Oil, 70%G, 20%O, 10%M
145 TOTAL FLUID

3825 Gas In Pipe

TOOL SAMPLE 100% Oil



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: charles1dst3

TIME ON: 19:38
TIME OFF: 4:20

Company H&D Exploration LLC Lease & Well No. Charles #1
Contractor Southwind #70 Charge to H&D Exploration LLC
Elevation 1911 KB Formation Simpson Sand Effective Pay _____ Ft. Ticket No. K010
Date 7-25-13 Sec. 19 Twp. 25 S Range 12 W County Stafford State KANSAS
Test Approved By _____ Diamond Representative Jason McLemore

Formation Test No. 3 Interval Tested from 4115 ft. to 4183 ft. Total Depth 4183 ft.
Packer Depth 4110 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4115 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4103 ft. Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4112 ft. Recorder Number 13338 Cap. 4950 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 53 Drill Collar Length 0 ft. I.D. 2 1/4 in.
Weight 9.5 Water Loss 10.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 4000 P.P.M. Drill Pipe Length 4090 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number NA Test Tool Length 25 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 68 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{31' drillpipe in anchor} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Strong, BOB in 3-1/2 Min. No Return Blow
2nd Open: Strong, BOB On Open, No Return Blow

Recovered 145 ft. of Frothy Muddy Oil, 70%G, 20%O, 10%M
Recovered 145 ft. of TOTAL FLUID
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Recovered _____ ft. of <u>TOOL SAMPLE 100% Oil</u>	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
_____	Total

Time Set Packer(s) 9:29 PM A.M. P.M. Time Started Off Bottom 12:29 AM A.M. P.M. Maximum Temperature 120

Initial Hydrostatic Pressure..... (A) 1959 P.S.I.
Initial Flow Period..... Minutes 30 (B) 18 P.S.I. to (C) 39 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1277 P.S.I.
Final Flow Period..... Minutes 45 (E) 61 P.S.I. to (F) 74 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1256 P.S.I.
Final Hydrostatic Pressure..... (H) 1936 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

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. 7933

Date	7-17-13	Sec.	19	Twp.	25	Range	12	County	Stafford	State	Ks	On Location		Finish	11:00 AM
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Lease **Charles** Well No. **1** Location **281+50 Jet, 3E, 6S, 1E, 1/2 S** Owner **w/into**

Contractor	Southwind #70	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	Surface		

Hole Size	12 1/4"	T.D.	757'	Charge To	H+D Exploration
Csg.	8 3/8"	Depth	757'	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.	42'	Shoe Joint	42'	Cement Amount Ordered	4505x Common 3%CC
Meas Line		Displace	45 1/2 BLS	2% Gel 1/2# Flo-seal	

EQUIPMENT

Pumptrk	15	No.		Cementer	Billy	Helper		Common
Bulktrk	12	No.		Driver	Doug	Driver		Poz. Mix
Bulktrk	p.u.	No.		Driver	Rick	Driver		Gel.
								Calcium

JOB SERVICES & REMARKS

Remarks	Cement did Circulate	Hulls
Rat Hole		Salt
Mouse Hole		Flowseal
Centralizers		Kol-Seal
Baskets	210' from Surface	Mud CLR 48
D/V or Port Collar		CFL-117 or CD110 CAF 38
		Sand
		Handling
		Mileage

FLOAT EQUIPMENT

		Guide Shoe
		Centralizer
		Baskets
		AFU Inserts
		Float Shoe
		Latch Down
		1 - Baffle plate
		1 - Rubber plug
		Pumptrk Charge
		Mileage

		Tax
		Discount
		Total Charge

X Signature *[Signature]*

