KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1094473

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 7076
Name: Black Diamond Oil, Inc.
Address 1: PO BOX 641
Address 2:
City: HAYS State: KS Zip: 67601 + 0641
Contact Person: Kenneth Vehige
Phone: (785) 625-5891
CONTRACTOR: License # 33575
Name: WW Drilling, LLC
Wellsite Geologist: Jeff Lawler
Purchaser: Coffeyville

Designate Type of Completion:

- [x] New Well
- [ ] Re-Entry
- [ ] Workover

- [x] 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 #:

5/21/2012	5/26/2012	6/19/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-163-24044-00-00
Spot Description:
SW - SE - SW - SE Sec. 6 Twp. 6 S. R. 19 [ ] East [x] West
140 Feet from [ ] North / [x] South Line of Section
1910 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [x] SE [ ] SW
County: Rooks
Lease Name: Brewer Well #: 3
Field Name: Unnamed
Producing Formation: Lansing KC
Elevation: Ground: 2042 Kelly Bushing: 2047
Total Depth: 3527 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 217 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 3527
feet depth to: 0 w/ 525 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 2000 ppm Fluid volume: 500 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Black Diamond Oil, Inc.
Lease Name: Vehige SWD License #: 7076
Quarter SW Sec. 33 Twp. 7 S. R. 20 [ ] East [x] West
County: ROOKS Permit #: D-23315

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:**
- [x] **Wireline Log Received**
- [x] **Geologist Report Received**
- [ ] **UIC Distribution**

ALT [ ] I [x] II [ ] III **Approved by:** Deanna Garrison **Date:** 10/25/2012

Side Two

1094473

Operator Name: Black Diamond Oil, Inc. Lease Name: Brewer Well #: 3

Sec. 6 Twp. 6 S. R. 19 ☐ East ☑ West County: Rooks

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Anhydrite	1633	418
Topeka	3030	-979
Heebner	3228	-1172
Lansing KC	3268	-1217
Arbuckle	3519	-1468

CASING RECORD ☑ New ☐ 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
Surface Pip	12.25	8.625	23	217	Common	170	3%cc, 2% gel
Production String	7.875	5.5	15.5	3527	QMCD	495	.25# flow

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:
☐ Perforate
☐ Protect Casing
☐ Plug Back TD
☐ Plug Off Zone

Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
-			
-			

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
1	3525.5-3528.5	500 g, 15% MCA	
	3500	Bridge Plug	
1	3393,3415,3419,3436	1500 g, 15% MCA	

TUBING RECORD: Size: 2 7/8 Set At: 3457 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 06/21/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	8	0	10		

DISPOSITION OF GAS:
☑ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
3393-3436

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Black Diamond Oil, Inc.
Well Name	Brewer 3
Doc ID	1094473

All Electric Logs Run

Neutron/Density
Dual Induction
Micro
Gamma Ray Correlation

API # 15-163-24044-00-00
Operator: Black Diamond Oil, Inc Well Name & No: Brewer #3
Location: 104' FSL & 1910' FEL Section 6-6S-19W County: Rooks State: Kansas
Rig No.: 6 Contractor: WW Drilling, LLC Tool Pusher: John Mayers 785-259-4392
Drill Collars: 14 Size: 6 1/4 x 2 1/4 Rig Phone: 785-259-6941
Make Pump: National K-380 Liner & Stroke: 6 x 14 Spud 5/21/2012 @ 3:45 pm
Approx. TD: 3600 Elevation: 2046 K.B. 2051 KB Hole Complete: 5/25/12 @ 7:00 pm
Mud Co.: Andy's Mud Engineer: Ken Rupp Water Pond

Date	05/21/12	05/22/12	05/23/12	05/24/12	05/25/12	05/26/12	05/27/12			
Days	1-spud	2-drlg	3-drlg	4-cfs	5-ctch	6-woo	7-done			
Depth		524	2646	3362	3465	3527	3527			
Ft. Cut		524	2122	716	103	62	0			
D.T.				2-pump						
D.T.		8-woc								
C.T.					18.75	20.5	18			
Bit Wt.	all	25,000	35,000	38,000	38,000	38,000				
RPM	100	90	85	85	85	85				
Pressure	450	600	750	750	750	750				
SPM	60	60	60	60	60	60				
Mud Cost				8357	9132	9688				
Mud Wt.		8.7	9.3	9.2	9.2	9.2				
Viscosity		28	29	58	56	59				
Water Loss				7.6	7.6	8.8				
Chlorides				500	1000	2000				
L.C.M.				3#	2#	4 #				
Dev. Sur		3/4°-218			1.5°@3430	1.75°-3527				
Dev. Sur										
Fuel	891	1863	1539	3159	2997	2754	2650			
Water-Pit		4'	1.5'	2'	3.5'	3.5'				
ACC Bit Hrs.		3.5	26.5	46.25	52.25	55.5				
Formation	sd-sh	sd-sh	sd-sh	sh-lm	sh-lm	dol				
Weather	clear	clear	clear	cloudy	cloudy	cloudy	windy			

No.	Size	Type	Out	Ft.	Hrs.	Cum Hrs.	Bit Cond	Serial #	Tops
1	12 1/4	Smith	218	218	2.25	2.25	RR	BR 1549	
2	7 7/8	Sm - F-27	3527	3309	55.5	57.75	New	PX 4335	61 fph
3									
4									

DEPTH	SIZE	SACKS	CEMENT MATERIAL	PLUG DOWN	DRILLED OUT	REMARKS
217	8 5/8	170	Common, 3% cc, 2% gel	7:30 PM	3:30 AM	Allied Cem. Did circulate
3525	5 1/2	495	QMDC	11:00 PM	5/26/2012	Quality Cementing

NO	INTERVAL	OPEN	SHUT	OPEN	SHUT	RECOVERY
1	3378-3430	30	30	flush	out	5' oil spec mud
2	3427-3465	30	30	10-flush	out	10' oil cut mud
3	3498-3527					Packer Failure
4	3461-3527	30	30	30	30	125' OSM
5						
6						
7						
8						
9						

Surface Casing Furnished by: Milden delivered 5 joints of 23#, 8 5/8 tally 211.39 set @ 217'.

Remarks: Strap & weld surface by Tyler. Anhydrite 1631'-1661', Displaced @ 2765' (580 bbls), Short trip 40 stands @ 3430' (1.75 Hrs), Pipe strap @ 3430' (.039 long), short trip @ 3527(10 std)(.5 hr). RTD 3527', LTD 3529 by Superior, logged 3.75 hrs. Ran 5 1/2 casing set @ 3525'. Plug down @ 11:00 pm, 5/26/12. Rig released @ 1:00 am, 5/27/12.

ALLIED OIL & GAS SERVICES, LLC 056122

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Russell

DATE 5-12-21	SEC. 6	TWP. 6	RANGE 19	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE Brewer	WELL # 3		LOCATION Stockton 9N to Rd 1W to Rd 1.3 w into			COUNTY Phillips	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR WW #6
TYPE OF JOB surface
HOLE SIZE 12¼ T.D. 214'
CASING SIZE 8⅝ DEPTH 208'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 15'
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 12¾ bbl

OWNER

CEMENT

AMOUNT ORDERED 175 sx Class A 3% CC 2% Gel

COMMON	175	@ 16.25	2762.50
POZMIX		@	
GEL	3	@ 21.25	63.75
CHLORIDE	6	@ 58.20	349.20
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	193	@ 2.25	403.75
MILEAGE	14,141	.11	1555.51
		TOTAL	5133.76

EQUIPMENT

PUMP TRUCK CEMENTER Todd
HELPER Tony
BULK TRUCK
DRIVER River Y.
BULK TRUCK
DRIVER

REMARKS:

Established Circulation
mix 175 sx 3% CC 2% Gel
Displace 12¾ bbl H2O
Cement Circulating to surface
Thanks!

SERVICE

DEPTH OF JOB
PUMP TRUCK CHARGE 1125.00
EXTRA FOOTAGE @
MILEAGE MHV 79 @ 7.00 553.00
MANIFOLD @
MHV 79 @ 4.00 316.00
@
TOTAL 1994.00

CHARGE TO: Black Diamond Oil
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@

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. 969

	Sec.	Twp.	Range	County	State	On Location	Finish
Date 5-26-12	6	6	19	Rooks	Kansas		11:00pm

Lease Brewer Well No. 3 Location Stockton SW 10W 3N

Contractor Duke Drilling Rig 6

Type Job Long String

Hole Size 7 7/8 T.D. 3527

Csg. 5½ 15.50 Depth 3525

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 42 Shoe Joint 42

Meas Line Displace 83 Bbl

Owner

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.

Charge To Black Diamond

Street

City State

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

Cement Amount Ordered 525 Q 60/40 6% Gel 1/4# Flo-Seal

EQUIPMENT

Pumptrk 15	No.	Cementer	Kyle
		Helper	Steve
Bulktrk 14	No.	Driver	Chris
		Driver	
Bulktrk 13	No.	Driver	Mick
		Driver	Brian

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30sx

Mouse Hole

Centralizers 1, 3, 6, 8, 12, 48

Baskets 2, 10, 49

D/V or Port Collar

Land Pipe @ 1410 PSI

Float Held

Cement did circulate

Thank You

Joe Mullens

Jeff Wagner

X Signature

Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	
Mileage	
FLOAT EQUIPMENT	
Guide Shoe	
Centralizer 6	
Baskets 3	
AFU Inserts	
Float Shoe 1	
Latch Down 1	
Pumptrk Charge	
Mileage	
Tax	
Discount	
Total Charge	

OPERATOR

Company:	BLACK DIAMOND OIL, INC		
Address:	P.O. BOX 641 HAYS, KS 67601		
Contact Geologist:	KENNETH VEHIGE		
Contact Phone Nbr:	(785) 625-5891		
Well Name:	BREWER #3		
Location:	SW SE SW SE 6-6S-19W	API:	15-163-24044-0000
Pool:		Field:	BREWER
State:	KANSAS	Country:	USA

Scale 1:240 Imperial

Well Name:	BREWER #3		
Surface Location:	SW SE SW SE 6-6S-19W		
Bottom Location:			
API:	15-163-24044-0000		
License Number:	7076		
Spud Date:	5/21/2012	Time:	12:34 PM
Region:	ROOKS		
Drilling Completed:	5/25/2012	Time:	7:50 PM
Surface Coordinates:	140' FSL & 1910' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2046.00ft		
K.B. Elevation:	2051.00ft		
Logged Interval:	217.00ft	To:	3529.00ft
Total Depth:	3527.00ft		
Formation:			
Drilling Fluid Type:	FRESH WATER/CHEMICAL GEL		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	140' FSL		
E/W Co-ord:	1910' FEL		

LOGGED BY

SOLUTIONS CONSULTING

Company:	SOLUTIONS CONSULTING		
Address:	108 W 35TH HAYS, KS 67601		
Phone Nbr:	(785) 259-3737		
Logged By:	Geologist	Name:	JEFF LAWLER

CONTRACTOR

Contractor:	WW DRILLING, LLC		
Rig #:	#6		
Rig Type:	MUD ROTARY		
Spud Date:	5/21/2012	Time:	12:34 PM
TD Date:	5/25/2012	Time:	7:50 PM
Rig Release:	5/26/2012	Time:	12:00 PM

ELEVATIONS

K.B. Elevation:	2051.00ft	Ground Elevation:	2046.00ft
K.B. to Ground:	5.00ft		

NOTES

DUE TO LOG ANALYSIS, STRUCTURAL POSITION CORRECTION, AND RECOVERY ON DST #4 DECISION WAS MADE TO RUN PRODUCTION CASING AND PERFORATE UPPER LANSING-KANSAS CITY ZONES THAT HAD AN OIL SHOW AND HAD AN ECONOMICAL Sw CALCULATION AND PERMEABILITY INDICATED ON THE MICRO LOG.

RESPECTFULLY SUBMITTED,
JEFF LAWLER

WELL COMPARISON SHEET

	BREWER #3				BLACK DIAMOND OIL BREWER #2 OWWO NE NW 7-6-19						BLACK DIAMOND OIL BREWER/RTF UNIT #1 SE NE NE NE 7-6-19						BLACK DIAMOND OIL ROCKEN 3 FARMS #1 E2 N2 NW NW 8-6-19						FALCON EXPL. BROBST #1 E2 SE SW 6-6-19					
	KB	2051			KB	2083					KB	2097					KB	2079					KB	2046				
	LOG TOPS		SAMPLE TOPS		LOG		LOG CORR.		SMPL. CORR.		GEO-REPORT		LOG CORR.		SMPL. CORR.		LOGS		LOG CORR.		SMPL. CORR.		WELL COMP. REPORT		LOG CORR.		SMPL. CORR.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM					DEPTH	DATUM					DEPTH	DATUM					DEPTH	DATUM				
ANHYDRITE TOP	1633	418	1631	420	1667	416	+	2	+	4	1671	426	-	8	-	6	1658	421	-	3	-	1	1607	439	-	21	-	19
BASE	1661	390	1661	390	1693	390	+	0	+	0							1681	398	-	8	-	8	1656	390	+	0	+	0
TARKIO																												
TOPEKA	3030	-979	3031	-980	3060	-977	-	2	-	3	3075	-978	-	1	-	2	3050	-971	-	8	-	9	3030	-984	+	5	+	4
OREAD																												
HEEBNER SHALE	3228	-1177	3231	-1180	3256	-1173	-	4	-	7	3275	-1178	+	1	-	2	3247	-1168	-	9	-	12	3227	-1181	+	4	+	1
TORONTO	3253	-1202	3258	-1207	3283	-1200	-	2	-	7	3300	-1203	+	1	-	4	3271	-1192	-	10	-	15	3252	-1206	+	4	-	1
LKC	3268	-1217	3276	-1225	3297	-1214	-	3	-	11	3314	-1217	+	0	-	8	3287	-1208	-	9	-	17	3267	-1221	+	4	-	4
BKC	3475	-1424	3476	-1425	3507	-1424	+	0	-	1	3523	-1426	+	2	+	1	3496	-1417	-	7	-	8						
MARMATON			3493	-1442																								
ARBUCKLE	3519	-1468	3520	-1469	3588	-1505	+	37	+	36	3563	-1466	-	2	-	3												
REAGAN			3526	-1475							3611	-1514			+	39												
GRN WASH											3630	-1533					3540	-1461										
RTD			3527	-1476							3575	-1478			+	2	3551	-1472			-	4	3585	-1539			+	63
LTD	3529	-1478									3575	-1478	+	0			3541	-1462	-	16								

DST #1 LKC "H-I"

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil inc.

PO Box 641
Hays Ks. 67601+0641

ATTN: Jeff Lawler

6-6s-19w Rooks

Brewer 3

Job Ticket: 47333 **DST#: 1**

Test Start: 2012.05.24 @ 16:09:05

GENERAL INFORMATION:

Formation: **LKC"H-I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:39:50
Time Test Ended: 20:03:10

Test Type: Conventional Bottom Hole (Initial)
Tester: Andy Carreira
Unit No: 39

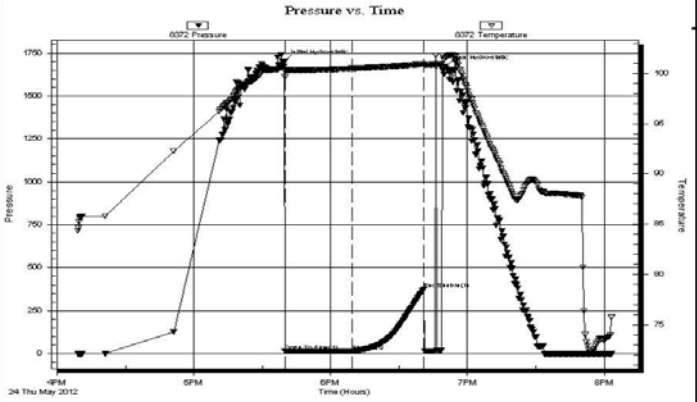
Interval: 3378.00 ft (KB) To 3430.00 ft (KB) (TVD)
Total Depth: 3430.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2051.00 ft (KB)
2046.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8372 **Outside**
Press@RunDepth: 15.10 psig @ 3381.00 ft (KB)
Start Date: 2012.05.24 End Date: 2012.05.24
Start Time: 16:09:05 End Time: 20:03:10

Capacity: 8000.00 psig
Last Calib.: 2012.05.24
Time On Btm: 2012.05.24 @ 17:39:40
Time Off Btm: 2012.05.24 @ 18:50:20

TEST COMMENT: IF:(30min) Blow Died in 5 min.
ISI:(30min) No Blow, Flushed, Surge, No Blow, Pulled Tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1700.61	100.68	Initial Hydro-static
1	13.32	99.63	Open To Flow (1)
30	15.10	100.48	Shut-In(1)
62	373.50	100.92	End Shut-In(1)
71	1670.82	101.55	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOSM	0.02

Gas Rates

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

DST #2 LKC "J-K"

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Black Diamond Oil inc.

PO Box 641
Hays Ks. 67601+0641

ATTN: Jeff Lawler

6-6s-19w Rooks

Brewer 3

Job Ticket: 47334 **DST#: 2**

Test Start: 2012.05.25 @ 01:34:05

GENERAL INFORMATION:

Formation: **LKC"J-K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:43:00
Time Test Ended: 05:07:20

Test Type: Conventional Bottom Hole (Reset)
Tester: Andy Carreira
Unit No: 39

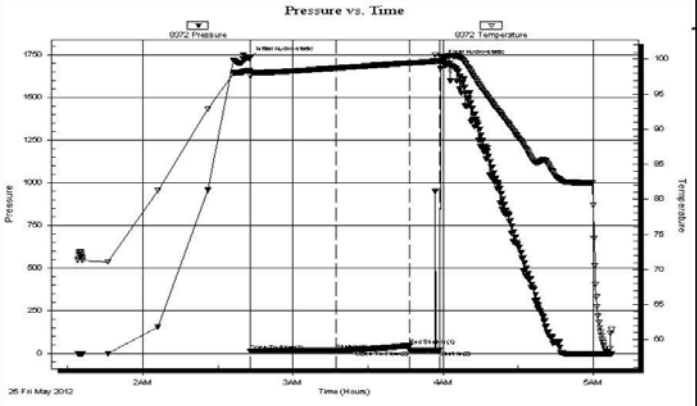
Interval: 3427.00 ft (KB) To 3465.00 ft (KB) (TVD)
Total Depth: 3465.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2051.00 ft (KB)
2046.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8372 **Outside**
Press@RunDepth: 17.01 psig @ 3430.00 ft (KB)
Start Date: 2012.05.25 End Date: 2012.05.25
Start Time: 01:34:05 End Time: 05:07:20

Capacity: 8000.00 psig
Last Calib.: 2012.05.25
Time On Btm: 2012.05.25 @ 02:42:20
Time Off Btm: 2012.05.25 @ 03:59:20

TEST COMMENT: IF:(30min) Blow Died in 7 min.
ISI:(30min) No Return
FF: No Blow, Flushed, Surge, No Blow, Pulled Tool.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1730.59	98.40	Initial Hydro-static
1	14.25	97.64	Open To Flow (1)
35	17.01	98.72	Shut-In(1)
64	46.28	99.44	End Shut-In(1)
65	16.71	99.44	Open To Flow (2)
77	19.46	99.74	Shut-In(2)
77	1713.35	100.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud	0.05

* Recovery from multiple tests

Gas Rates

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

DST #3 ARBUCKLE - REAGAN MISRUN

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Black Diamond Oil inc.

PO Box 641
Hays Ks. 67601+0641

ATTN: Jeff Lawler

6-6s-19w Rooks

Brewer 3

Job Ticket: 47335 **DST#: 3**

Test Start: 2012.05.25 @ 22:08:05

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened:
Time Test Ended: 01:23:40

Test Type: Conventional Bottom Hole (Reset)
Tester: Andy Carreira
Unit No: 39

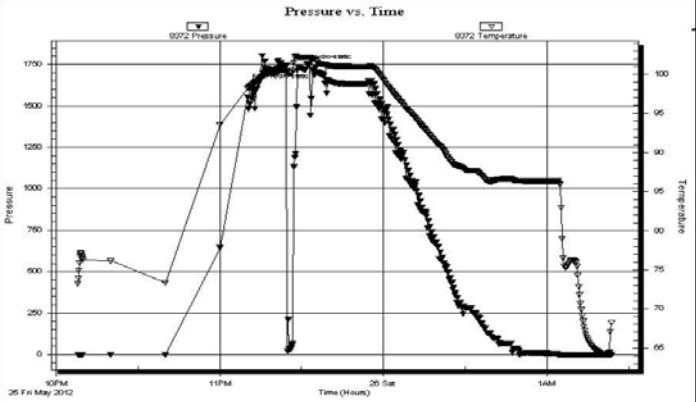
Interval: 3499.00 ft (KB) To 3527.00 ft (KB) (TVD)
Total Depth: 3527.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2051.00 ft (KB)
2046.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8372 **Outside**
Press@RunDepth: psig @ 3500.00 ft (KB)
Start Date: 2012.05.25 End Date: 2012.05.26
Start Time: 22:08:05 End Time: 01:23:40

Capacity: 8000.00 psig
Last Calib.: 2012.05.26
Time On Btm: 2012.05.25 @ 23:24:30
Time Off Btm: 2012.05.25 @ 23:35:10

TEST COMMENT: Misrun. Packer Failure.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1742.56	100.49	Initial Hydro-static
11	1732.75	101.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
500.00	Mud	5.91

* Recovery from multiple tests

Gas Rates

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

Trilobite Testing, Inc Ref. No: 47335 Printed: 2012.05.26 @ 08:16:51

DST #4 ARBUCKLE - REAGAN

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Black Diamond Oil inc.

PO Box 641
Hays Ks. 67601+0641

ATTN: Jeff Lawler

6-6s-19w Rooks

Brewer 3

Job Ticket: 47336 **DST#: 4**

Test Start: 2012.05.26 @ 03:10:05

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:24:50

Test Type: Conventional Bottom Hole (Reset)
Tester: Andy Carreira

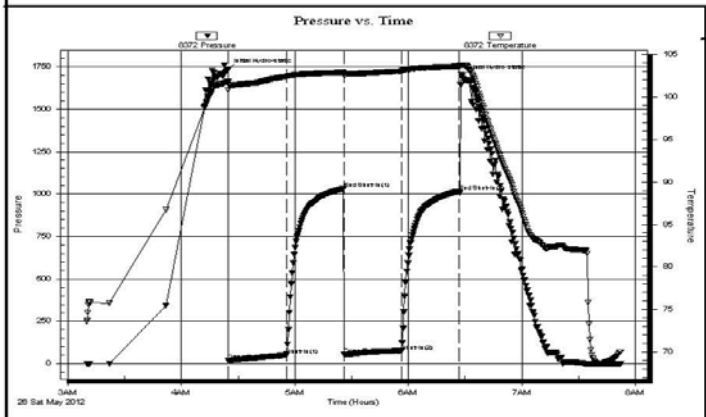
Time Test Ended: 07:52:20 Unit No: 39

Interval: **3461.00 ft (KB) To 3527.00 ft (KB) (TVD)** Reference Elevations: 2051.00 ft (KB)
Total Depth: 3527.00 ft (KB) (TVD) 2046.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 8372 **Outside**

Press@RunDepth:	75.89 psig @	3466.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2012.05.26	End Date:	2012.05.26	Last Calib.:	2012.05.26
Start Time:	03:10:05	End Time:	07:52:20	Time On Btm:	2012.05.26 @ 04:24:10
				Time Off Btm:	2012.05.26 @ 06:28:20

TEST COMMENT: IF:(30min) Slow building blow , 2" in 5 min. built to 3"
ISI:(30min) No return
FF"(30min) 1" in 5 min. 2" in 15 min. built to 2.5"
FSI:(30min) No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1730.33	101.73	Initial Hydro-static
1	17.95	100.81	Open To Flow (1)
32	51.02	102.36	Shut-In(1)
62	1032.24	102.85	End Shut-In(1)
63	53.86	102.46	Open To Flow (2)
93	75.89	103.00	Shut-In(2)
123	1016.02	103.57	End Shut-In(2)
125	1693.89	103.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	SOSM	0.65

* Recovery from multiple tests

Gas Rates

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

Trilobite Testing, Inc Ref. No: 47336 Printed: 2012.05.26 @ 08:15:34

ROCK TYPES

Cht, Cht vari, Congl, Chtcongl, Dolprim, Lmst fw<7, Lmst fw7>, shale, grn, shale, gry, Shblck, Carbon Sh, shale, red, Shcol, Ss, Lscongl, Cht gy

ACCESSORIES

MINERAL
- Breccia, fragment
- Sandy

STRAT./SED. STRUCTS
- Stylolites

STRINGER
- Chert
- red shale

TEXTURE
- Chalky

OTHER SYMBOLS

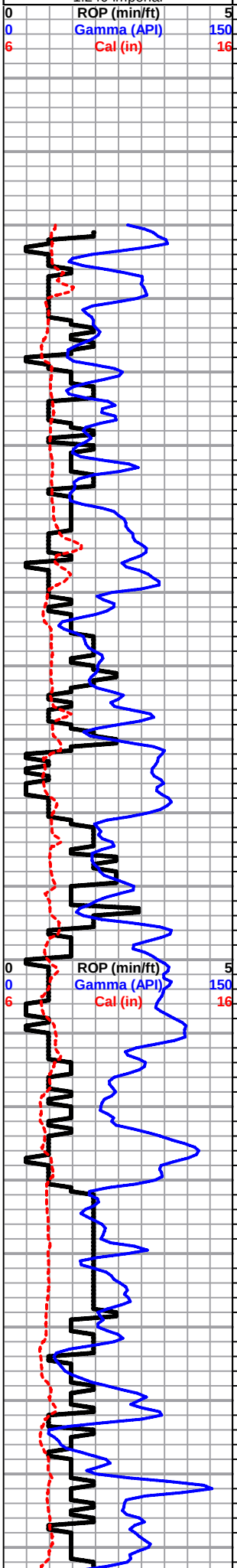
DST
- DST Int
- DST alt
- Core

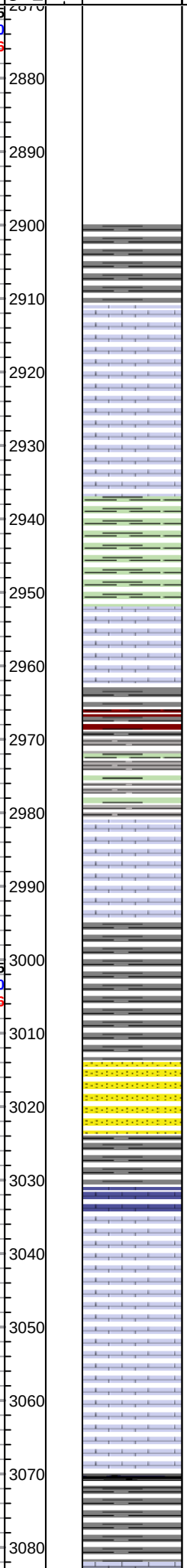
Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

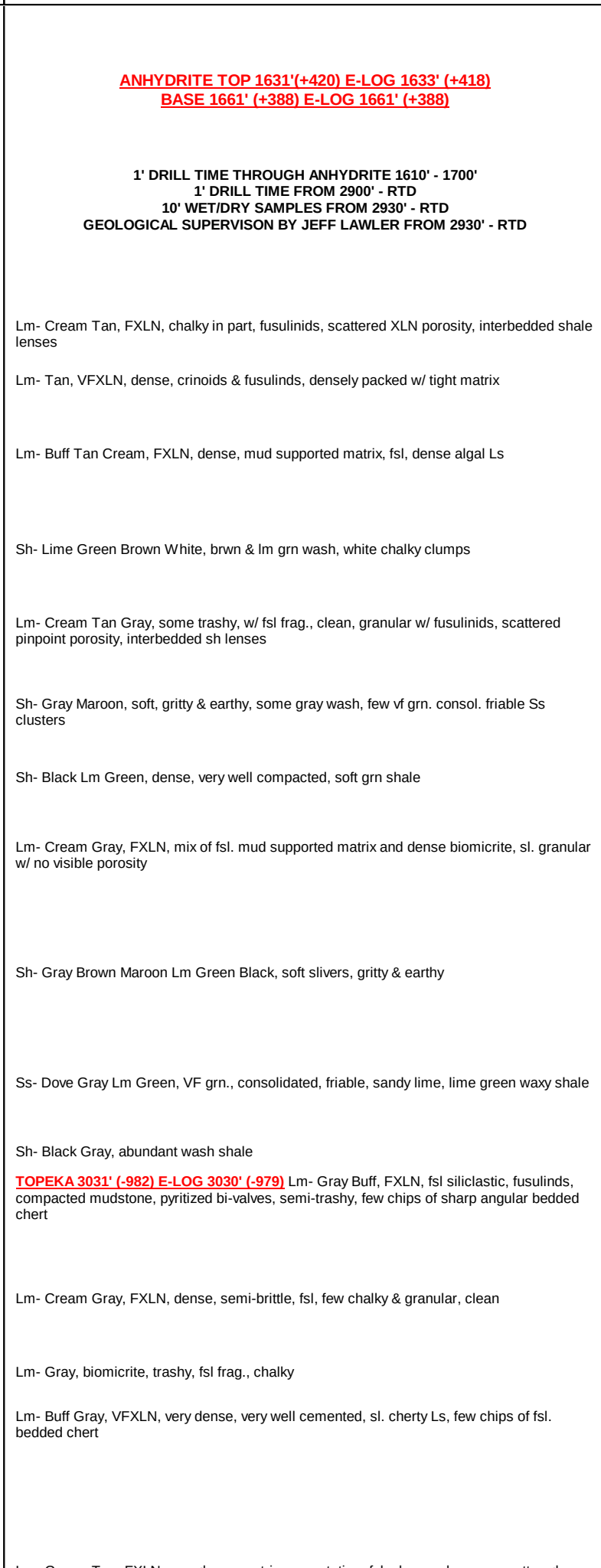
Curve Track #1
ROP (min/ft)
Gamma (API)
Cal (in)

Depth | Intervals | DST | Lithology | Oil Show | Geological Descriptions

TG, C1 - C5
Total Gas (units)
C1 (units)
C2 (units)
C3 (units)
C4 (units)







ANHYDRITE TOP 1631'(+420) E-LOG 1633' (+418)
BASE 1661' (+388) E-LOG 1661' (+388)

1' DRILL TIME THROUGH ANHYDRITE 1610' - 1700'
1' DRILL TIME FROM 2900' - RTD
10' WET/DRY SAMPLES FROM 2930' - RTD
GEOLOGICAL SUPERVISON BY JEFF LAWLER FROM 2930' - RTD

Lm- Cream Tan, FXLN, chalky in part, fusulinids, scattered XLN porosity, interbedded shale lenses

Lm- Tan, VFXLN, dense, crinoids & fusulinds, densely packed w/ tight matrix

Lm- Buff Tan Cream, FXLN, dense, mud supported matrix, fsl, dense algal Ls

Sh- Lime Green Brown White, brwn & lm grn wash, white chalky clumps

Lm- Cream Tan Gray, some trashy, w/ fsl frag., clean, granular w/ fusulinids, scattered pinpoint porosity, interbedded sh lenses

Sh- Gray Maroon, soft, gritty & earthy, some gray wash, few vf grn. consol. friable Ss clusters

Sh- Black Lm Green, dense, very well compacted, soft grn shale

Lm- Cream Gray, FXLN, mix of fsl. mud supported matrix and dense biomicrite, sl. granular w/ no visible porosity

Sh- Gray Brown Maroon Lm Green Black, soft slivers, gritty & earthy

Ss- Dove Gray Lm Green, VF grn., consolidated, friable, sandy lime, lime green waxy shale

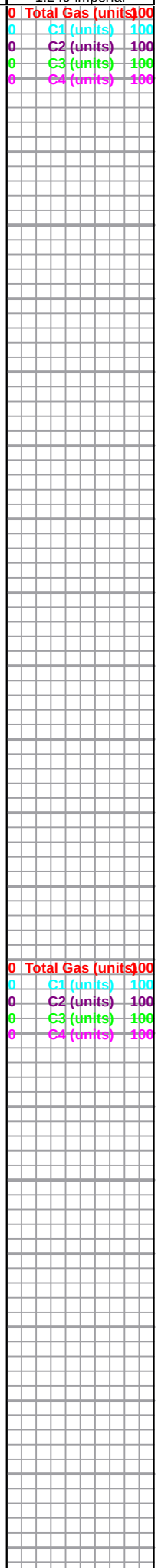
Sh- Black Gray, abundant wash shale

TOPEKA 3031' (-982) E-LOG 3030' (-979) Lm- Gray Buff, FXLN, fsl siliclastic, fusulinds, compacted mudstone, pyritized bi-valves, semi-trashy, few chips of sharp angular bedded chert

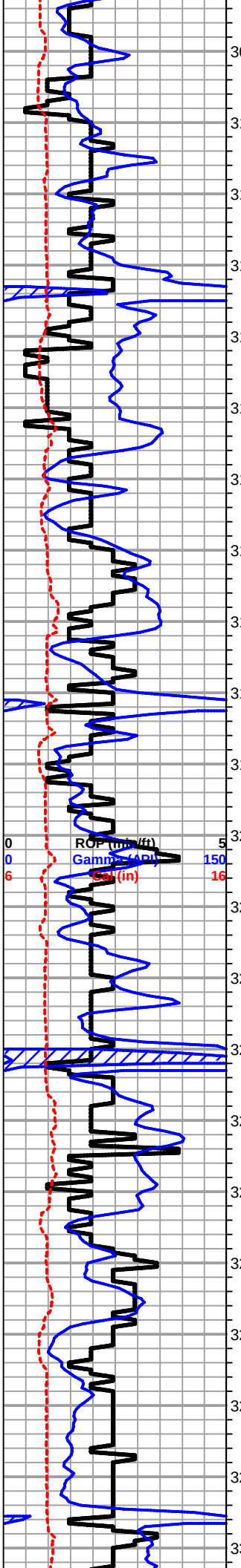
Lm- Cream Gray, FXLN, dense, semi-brittle, fsl, few chalky & granular, clean

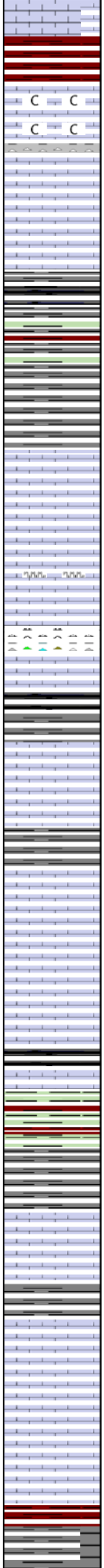
Lm- Gray, biomicrite, trashy, fsl frag., chalky

Lm- Buff Gray, VFXLN, very dense, very well cemented, sl. cherty Ls, few chips of fsl. bedded chert



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





Lm- Cream Tan, FXLN, very dense matrix cementation, fsl, sl. granular, very scattered developement w/ scattered very fine pinpoint porosity, clean & barren

Sh- Maroon Gray White, soft, chalky clumps

Lm- A/A, abundant chalk, very dense XLN matrix, granular, some crumbly

Lm/Chert- Cream Tan Smokey Gray, VFXLN, cryptocrystalline, fsl. bedded chert, no visible porosity

Lm- Buff Cream, VFXLN, mix of algal Ls and cryptocrystalline w/ scattered recrystallization inclusions

Lm- Cream Tan, FXLN, sl. granular, well cemented, chips of fsl. gray bedded chert

Sh- Black Gray Maroon Lm Green, fissile, carbonaceous, soft smooth

Lm- Cream Tan, FXLN, few sl. oolicastic-oolitic, mostly sub-cryptocrystallline, poorly developed w/ limited visible porosity, clean & barren

Lm- Cream Tan Buff, FXLN, fsl. w/ densely packed oolites, tight siliceous matrix, few dense algal Ls w/ scattered micro-stylolites

Lm- Cream, F-Med XLN, A/A. dense siliceous matrix, few w/ very dense XLN secondary porosity (possible fracturing), golden brown & smokey gray bedded chert, few gritty & grainy, dolomitic Ls, al clean & barren

Sh- Black Gray, fissile, carbonaceous, slatey

Lm- Cream Tan, FXLN, sl. fsl, mostly sub-crptocrystalline, few fine granular, all w/ limited visible porosity, chalky in part, clean & barren

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

Lm- Cream Tan, FLXN, few fusulinids, pyrite, sl. fsl. tight, scattered XLN porosity, few w/ very dense secondary porosity, clean & barren

Lm- Cream Buff, FXLN, sl. fsl w/ crinoids, mottled, chalky in part, mostly dense & well cemented, few gritty & vry. fn. grn sl. dolomitic Ls,

HEEBNER 3238' (-1181) E-LOG3228' (-1182) Sh- Black Red Lm Green, fissile, carbonaceous, very slatey, gritty & earthy, soft sticky clumps

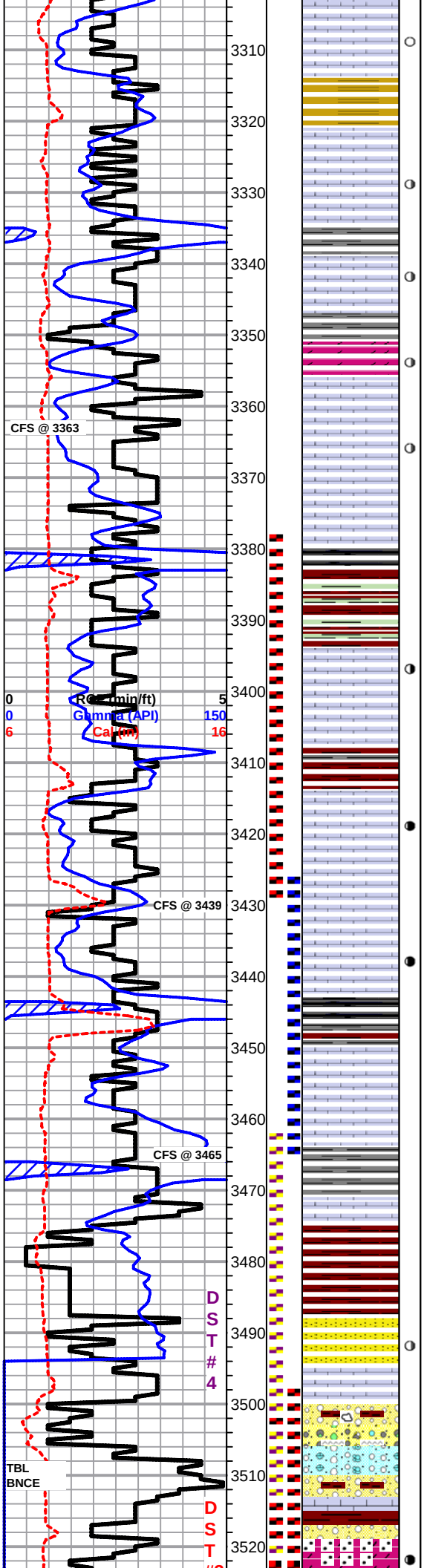
TORONTO 3258' (-1209) E-LOG 3253' (-1202) Lm- Cream Peach Off White, FXLN, dense, gritty & grainy, mostly tightly cemetented matrix, dolomitic Ls & cherty Ls, no visible porosity, PNPT SCTRD STN, NSFO, NO ODR

Sh-Chert-Red Maroon Black Smokey Gray, gritty & earthy, sharp angular bedded chert

LKC 3276' (-1227) E-LOG 3268' (-1217) Lm- Off White, FXLN, sl fsl, oolitic, sctrd interstitial porosity, SCTRD GSY STN, NSFO, SL GSY SHN UPON CRUSH, NO ODR

Lm- Cream Buff, FXLN, gritty, sl. dolomitic Ls, chalky in part, dense well cemented matrix, limited visible porosity

Sh- Red Gray, soft, smooth



Lm- Cream Gray, F-Med XLN, sl oolitic, mostly dense matrix, few chips of bio-micrite few w/ scattered inter oolitic pinpoint porosity, sl. recrystallization w/in, LT STN, NOSFO, NO ODR

Lm- Cream Off White, F-Med XLN, fsl, scttrd. developement w/ scttrd. fine interparticle porosity, few chips w/ consistant ppt. porosity, LT GSY STN, NO SFO, FNT ODR

Lm- Cream Tan, Med XLN, chalky in part, fsl., sl. oolitic, moderately developed, good inter oolitic porosity, crumbly, LT GSY STN, GSY SHN, FNT ODR

Dolomite- Tan, FXLN, sucrosic, tight well cemented, matrix, vf ppt consistant porosity, LT STN, SL SFO, BRIGHT FLOR. UPON CRUSH, GSY ODR

Lm- Cream Tan, FXLN, oolitic, scattered inter particle porosity, speckled w/ pyrite, vry fine ppt porosity, LT SCTTRED GSY STN, NSFO, FNT ODR

Lm- Cream Tan, VFXLN, dense, well cemented algals Ls

Sh- Black Maroon Lm Green, fissile, carbonaceous, smooth soft

Lm- Cream Off White, fsl, oolitic, scttrd developement, few chips w/ consistant vf ppt. porosity throughout, mostly w/ ppt to scttrd sub-vugular, LT GSY STN, FR GSY SHN, NSFO, ODR

SHORT TRIP
SURVEY 1 1/2 dgr.
STRAP 3456.70
BOARD 3456.31
STRAP +0.39

DST #1 LKC
"H-I"
3378 - 3430

Sh- Red Gray, soft, smooth, blocky

Lm- Tan, Med XLN, well developed, fsl, oolitic, some w/ consistant vry fine ppt. porosity, LT SAT STN, SL. SFO, FEW GSY DISSOLUTION BUBBLES, 1 CHP W/ BLEEDING FO UNDER LAM, FNT HVY ODR

Lm- Cream Tan, Med XLN, fsl. oolitic, sl. chalky, moderately well developed, scattered pinpoint porosity, good inter oolitic porosity, DRK HVY SAT. STN, THIN SCUM, SL ODR UPON CRUSH, SL SFO

Sh- Black Gray Red Maroon Lm Green, dense, well compacted, gritty & earthy

DST #2
LKC "J-K"
3427 - 3465

Lm- Tan Off White, VFXLN, dense tight matric, cryptocrytalline to massive well cemented siltstone, no visible porosity, chalky

Lm- Tan, VFXLN, dense siliceous matrix, well cemented, densely packed oolites, no visible porosity

BKC 3476' (-1425) E-LOG 3475' (-1424) Sh- Red Gray Lm Green, soft, smoth, sl. unconsolidated, abundant gray shale

Sh- Brown wash

MARMATON 3493' (-1442)Lm/Ss- Cream Tan, F-Med XLN, oolitic, sparsely scttrd inter oolitic porosity, SCTTRD DRK STN, NSFO, NO ODR Ss- Clear, Sl. Frosted, mostly pebble size grns. sub-angular, few fine gr. clusters, friable, clear cementation, eff. w/ HCL, 1 cluster spkld w/ glaucoite, 2-3 CLUSTERS W/ LT BRWN STN, SL SFO UPON CRUSH, DULL FLOR. NO CUT

Sh Congl.- Red Brown, abundant sh and massive granular/nodular Ls concretions

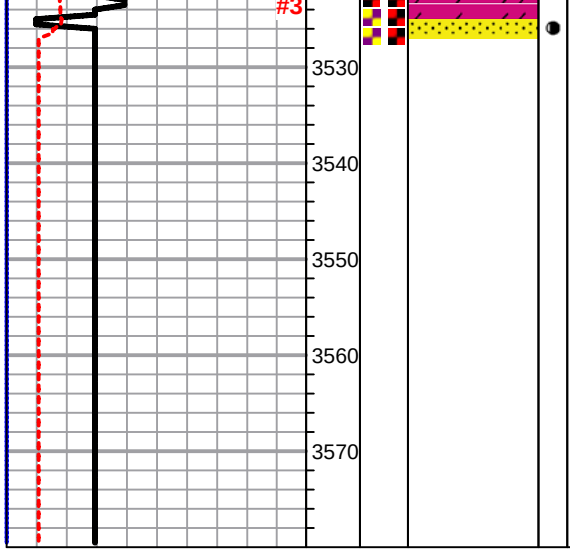
Cherty Conglomerate- A/A, few chps of fsl chert and cherty conglomerate

Ls Cong.- Red/Purple tint w/ soft sandy lime

Sh/Ls Cong.- dark colored shales and unconsolidated w/ Ls intraclasts, fsl fragments Lm/ Sh- red wash, Tan VFLXN, densely packed oolitic w/ clear siliceous cementation, no visible porosity, clean & barren

ARBUCKLE 3520' (-1469) 3519' (-1468) Dolomite- Cream Tan Lm Green Tint- mostly VF

CFS @ 3500
CFS @ 3503
CFS @ 3506
CFS @ 3510
CFS @ 3513
CFS @ 3517
CFS @ 3522



grn., sandy dolomite, friable, well consolidated, 1-3 CHIPS W/ SCTRD STN, 1-2 SAT DRK STN W/ BLDNG FO, NO ODR, INSTANT BRIGHT FLOR. UPON CRUSH, some VFXLN, dense, well cemented, sucrosic w/ vry fine ppt porosity, mostly barren, 1-2 w/ SCTRD DRK STN

3525' 40"-Dolo.- Cream Salmon White, mix of coarse grn. sandy dolomite w/ glauconite inclusions, F-Coarse XLN, mostly dense & sucrosic w/ visible euhedral rhombs on edges, VF XLN consol. very well cemented sl. cherty w/ minimal visible porosity and Lm Green/Gray argillaceous clumps, SPARSELY SCTRD DRK HVY STN, FO, FR ODR, PROMINENT AMOUNT OF BARREN POROSITY

3527' 30"- **REAGAN SAND 3526' (-1475)** Sand- Clear, Clear - Sl Frosted, rounded to sub-angular, anhedral qtz. grains, mostly well cemented w/ dolomitic cementation, some w/ white siliceous cementation, vry slow HCL effer., consolidated, glauconite spkld, mix of good interparticle porosity to tightly cemented, HVY DRK STN, GD SFO, HVY ODR

RTD 3527' (-1476) LTD 3529' (-1478) MAY 25, 2012

CFS @ 3525

SLOPE 1 3/4 dgr.
DST #3
ARBUCKLE-REAGAN
(MISRUN)
3499 - 3527

DST #4
ARBUCKLE-REAGAN
3461 - 3527