



# CHISHOLM — PARTNERS —

Scale 1:240 Imperial

Well Name: CHANDLER #1-1  
Surface Location: SW SW SW Sec. 1 - 6S -22W  
Bottom Location:  
API: 15-065-24045-00-00  
License Number: 34622  
Spud Date: 6/3/2014 Time: 2:15 PM  
Region: GRAHAM COUNTY KANSAS  
Drilling Completed: 6/8/2014 Time: 5:23 PM  
Surface Coordinates: 330' FSL & 330' FWL  
Bottom Hole Coordinates:  
Ground Elevation: 2206.00ft  
K.B. Elevation: 2211.00ft  
Logged Interval: 3100.00ft To: 3770.00ft  
Total Depth: 3770.00ft  
Formation: OREAD, LANSING-KANSAS CITY  
Drilling Fluid Type: Chemical/Fresh Water Gel

## OPERATOR

Company: CHISHOLM PARTNERS II, LLC  
Address: 1010 10TH ST  
GOLDEN, CO 80401  
Contact Geologist: RICHARD MCKEE  
Contact Phone Nbr: (620) 968-7741  
Well Name: CHANDLER #1-1  
Location: SW SW SW Sec. 1 - 6S -22W API: 15-065-24045-00-00  
Pool: ALMENA  
State: Kansas Country: USA

## SURFACE CO-ORDINATES

Well Type: Vertical  
Longitude: -99.7308764 Latitude: 39.5543789  
N/S Co-ord: 330' FSL  
E/W Co-ord: 330' FWL

## LOGGED BY

Company: BIG CREEK CONSULTING, INC  
Address: 1909 MAPLE  
ELLIS, KS 67637  
Phone Nbr: (785) 259-3737  
Logged By: Geologist Name: JEFF LAWLER

## CONTRACTOR

Contractor: WW DRILLING, LLC  
Rig #: 6  
Rig Type: MUD ROTARY  
Spud Date: 6/3/2014 Time: 2:15 PM

**ELEVATIONS**

K.B. Elevation: 2211.00ft  
K.B. to Ground: 5.00ft  
Ground Elevation: 2206.00ft


**NOTES**

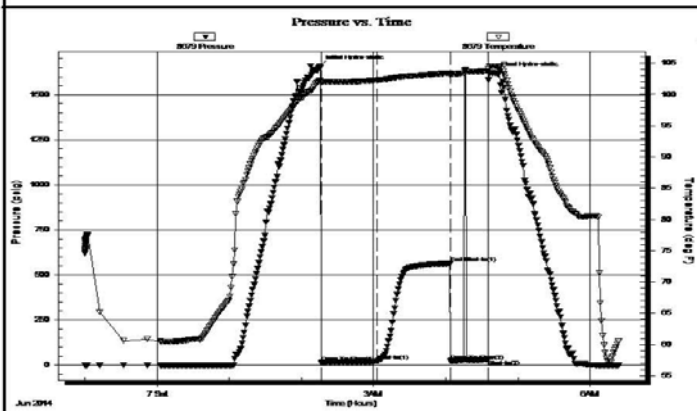
THE CHANDLER #1-1 RAN LOW THROUGH THE ANHYDRITE THEN BEGAN AND CONTINUED TO THICKEN THROUGHOUT. CORRELATION WELL WAS NORTHERN LIGHT'S MARIE #1 IN SECTION 12 - 6S - 33W. ONCE THROUGH GORHAM SAND SECTION A THICK CONGLOMERATE SHALE BENCH WAS ENCOUNTERED. THE MARIE #1 PENETRATED GRANITE WASH BELOW THE GORHAM SAND INDICATING A HIGH BASEMENT RIDGE WITH AN EAST-WEST TREND RESULTING IN THE SPRINGBIRD, MARIE, & BOYS WEST FIELDS SOUTH OF THE CHANDLER #1-1.

DUE TO STRUCTURAL POSITION AND LACK OF ECONOMICAL RECOVERY ON 3 DST'S IT WAS SUGGESTED AND ELECTED TO PLUG AND ABANDON THE CHANDLER #1-1.

RESPECTFULLY SUBMITTED,  
JEFF LAWLER

**DST #1 LKC C \_D 3494' - 3530'**

	<b>DRILL STEM TEST REPORT</b>	
	Chisolm Partners II L.L.C.  1010 TENTH ST. GOLDEN COLORADO 80401 ATTN: Jeff Lawler / Richar	SEC. 1 - 06 s. - 22 w./Graham  <b>Chandler # 1 - 1</b> Job Ticket: 55288 <b>DST#: 1</b> Test Start: 2014.06.06 @ 23:00:00
<b>GENERAL INFORMATION:</b>		
Formation: <b>L.K.C. "C &amp; D"</b> Deviated: No Whipstock      ft (KB) Time Tool Opened: 02:16:30 Time Test Ended: 06:23:30 Interval: <b>3494.00 ft (KB) To 3530.00 ft (KB) (TVD)</b> Total Depth: 3530.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair		
Test Type: Conventional Bottom Hole (Initial) Tester: Bob Hamel Unit No: 67 Reference Elevations: 2211.00 ft (KB) 2206.00 ft (CF) KB to GR/CF: 5.00 ft		
<b>Serial #: 8679      Inside</b> Press@RunDepth: 21.29 psig @ 3497.00 ft (KB)      Capacity: 8000.00 psig Start Date: 2014.06.06      End Date: 2014.06.07      Last Calib.: 2014.06.07 Start Time: 23:00:01      End Time: 06:23:30      Time On Btm: 2014.06.07 @ 02:15:00 Time Off Btm: 2014.06.07 @ 04:40:30		
<b>TEST COMMENT:</b> I.F. - 45 - 1/4" INT. BLOW W/ NO BUILD I.S.I - 60 - NO B.B. F.F. - 30 - NO BLOW FLUSHED TOOL @ TEN MIN WAITED 15 MIN FOR BLOW PULLED TEST TOOL F.S.I. - N/A -		



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	A annotation
0	1658.88	102.21	Initial Hydro-static
2	15.24	101.99	Open To Flow (1)
48	21.29	102.32	Shut-In(1)
109	564.34	103.44	End Shut-In(1)
109	23.31	103.06	Open To Flow (2)
140	29.85	103.77	Shut-In(2)
146	1619.73	104.51	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbt)
15.00	S,O,C,M 3%O 97%M	0.07
0.00	G.I.P. 45'	0.00

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


**DST #2 LKC H - I 3585' - 3632'**

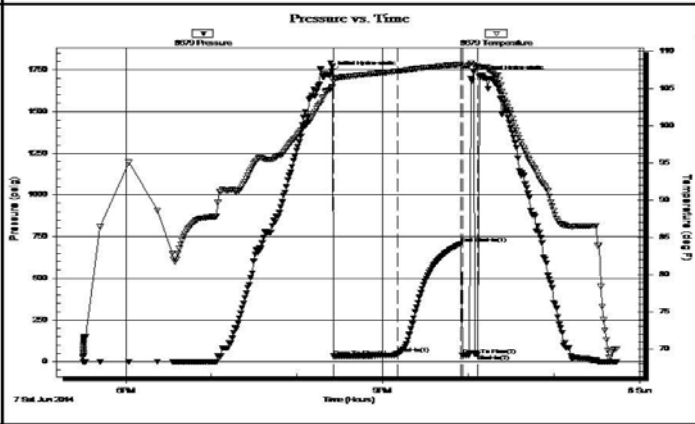
 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>	
	Chisolm Partners II L.L.C. 1010 TENTH ST. GOLDEN COLORADO 80401 ATTN: Jeff Lawler / Richar	<b>SEC. 1 - 06 s. - 22 w./ Graham</b>  <b>Chandler # 1 - 1</b> Job Ticket: 55289 <b>DST#: 2</b> Test Start: 2014.06.07 @ 17:30:00

**GENERAL INFORMATION:**

Formation: <b>L.K.C. "H &amp; I"</b>	Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)	Tester: BOB HAMEL
Time Tool Opened: 20:25:30	Unit No: 67
Time Test Ended: 23:43:30	Reference Elevations: 2211.00 ft (KB)
<b>Interval: 3585.00 ft (KB) To 3632.00 ft (KB) (TVD)</b>	2206.00 ft (CF)
Total Depth: 3632.00 ft (KB) (TVD)	KB to GR/CF: 5.00 ft
Hole Diameter: 7.88 inches	Hole Condition: Fair

<b>Serial #: 8679</b>	<b>Inside</b>	Capacity: 8000.00 psig
Press@RunDepth: 45.56 psig @ 3623.00 ft (KB)	Start Date: 2014.06.07	Last Calib.: 1899.12.30
Start Time: 17:30:01	End Date: 2014.06.07	Time On Btm: 2014.06.07 @ 20:24:00
	End Time: 23:43:30	Time Off Btm: 2014.06.07 @ 22:08:00

**TEST COMMENT:** I.F. - 40 - W.S.B DIED IN 36 MIN.  
 I.S.I - 45 - NO B.B.  
 F.F. - 15 - NO BLOW FLUSHED TOOL @ 5 MIN. THEN PULLED TEST  
 F.S.I. - N/A



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1738.87	105.12	Initial Hydro-static
2	31.63	105.89	Open To Flow (1)
46	45.56	107.32	Shut-In(1)
91	709.18	108.24	End Shut-In(1)
92	39.54	108.01	Open To Flow (2)
103	42.76	108.01	Shut-In(2)
104	1707.33	107.86	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	MUD 100%	0.02

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

**DST #3 CONGLOMERATE SAND 3700' - 3740'**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Chisolm Partners II L.L.C

1010 TENTH ST.  
GOLDEN COLORADO  
80401  
ATTN: Jeff Lawler / Richar

**SEC. 1 - 06 s. - 22 w./ Graham**

**Chandler # 1 - 1**

Job Ticket: 55290 **DST#: 3**

Test Start: 2014.06.08 @ 09:15:00

## GENERAL INFORMATION:

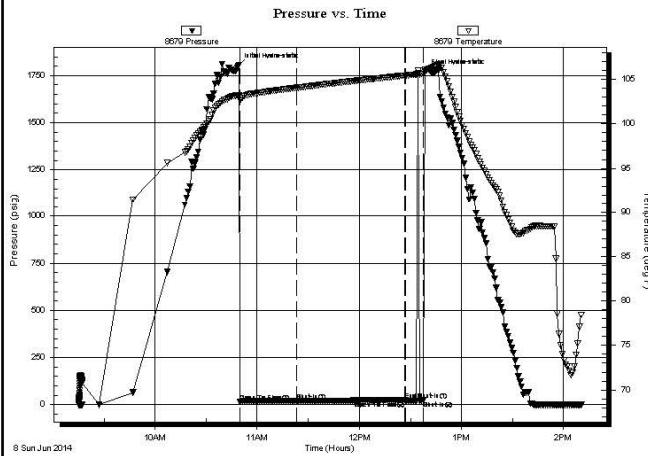
Formation: **Cong. Sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:50:00  
 Time Test Ended: 14:11:00  
 Interval: **3700.00 ft (KB) To 3740.00 ft (KB) (TVD)**  
 Total Depth: 3740.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Bob Hamel  
 Unit No: 67  
 Reference Elevations: 2211.00 ft (KB)  
 2206.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8679

Inside

Press@RunDepth: 20.35 psig @ 3734.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.06.08 End Date: 2014.06.08 Last Calib.: 1899.12.30  
 Start Time: 09:15:00 End Time: 14:11:00 Time On Btm: 2014.06.08 @ 10:49:00  
 Time Off Btm: 2014.06.08 @ 12:38:30

TEST COMMENT: I.F. - 30 - 1/4" INT BLOW DIED IN 30 MIN.  
 I.S.I. -60 - NO B.B.  
 F.F. - 10 - FLUSHED TOOL @ 5 MIN. NO BLOW PULLED TOOL



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1800.09	103.22	Initial Hydro-static
1	16.25	102.67	Open To Flow(1)
35	20.35	104.07	Shut-In(1)
98	24.91	105.43	End Shut-In(1)
98	20.32	105.44	Open To Flow(2)
109	21.99	105.62	Shut-In(2)
110	1769.90	106.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	MUD 100%	0.02

\* Recovery from multiple tests

## Gas Rates

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

Trilobite Testing, Inc

Ref. No: 55290

Printed: 2014.06.08 @ 15:14:50

## WELL COMPARISON SHEET

		CHANDLER #1-1				MARIE #1				HENRY #1				ALMENA STATE BANK #1-1				MIKELARY #1					
		N2 NW SW NW 12-6-22				NESE NE 12-6-22				SE NW SW NW 1-6-22				NE NE SW 12-6-22									
		KB		GL		KB		2221		KB		2228		KB		2299		KB		2240			
		LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG		SMPL.		GEOREPORT		LOG		SMPL.		COMP. CARD		LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	
ANHYDRITE TOP	1876	335	1876	335	1874	347	-12	-12	1883	345	-10	-10	1960	339	-4	-4	1898	342	-7	-7			
BASE	1909	302	1909	302	1907	314	-12	-12	1915	313	-11	-11	1989	310	-8	-8	1930	310	-8	-8			
HOWARD	3206	-995	3202	-991																			
TOPEKA	3233	-1022	3235	-1024	3216	-995	-27	-29	3224	-996	-26	-28	3312	-1013	-9	-11	3269	-1029	+7	+5			
OREADA	3395	-1184	3391	-1180	3369	-1148	-36	-32															
OREAD B	3410	-1199	3408	-1197	3384	-1163	-36	-34															
HEEBNER	3435	-1224	3436	-1225	3413	-1192	-32	-33	3423	-1195	-29	-30	3508	-1209	-15	-16	3460	-1220	-4	-5			
TORONTO	3461	-1250	3461	-1250	3437	-1216	-34	-34	3447	-1219	-31	-31	3534	-1235	-15	-15	3485	-1245	-5	-5			
LKC	3479	-1268	3481	-1270	3455	-1234	-34	-36	3463	-1235	-33	-35	3551	-1252	-16	-18	3501	-1261	-7	-9			
BKC	3670	-1459	3674	-1463	3646	-1425	-34	-38	3654	-1426	-33	-37	3740	-1441	-18	-22	3689	-1449	-10	-14			
CONG. SAND	3727	-1516	3725	-1514	3694	-1473	-43	-41	3704	-1476	-40	-38	3792	-1493	-23	-21							
GRANITE					3712	-1491																	
TOTAL DEPTH	3769	-1558	3770	-1559	3717	-1496	-62	-63	3731	-1503	-55	-56	3845	-1546	-12	-13	3717	-1477	-81	-82			

### ROCK TYPES

	Cht		Lmst fw>7		Shblk		Ss
	Congl		shale, gry		shale, red		
	Lmst fw<7		Carbon Sh		Shcol		

### ACCESSORIES

#### MINERAL

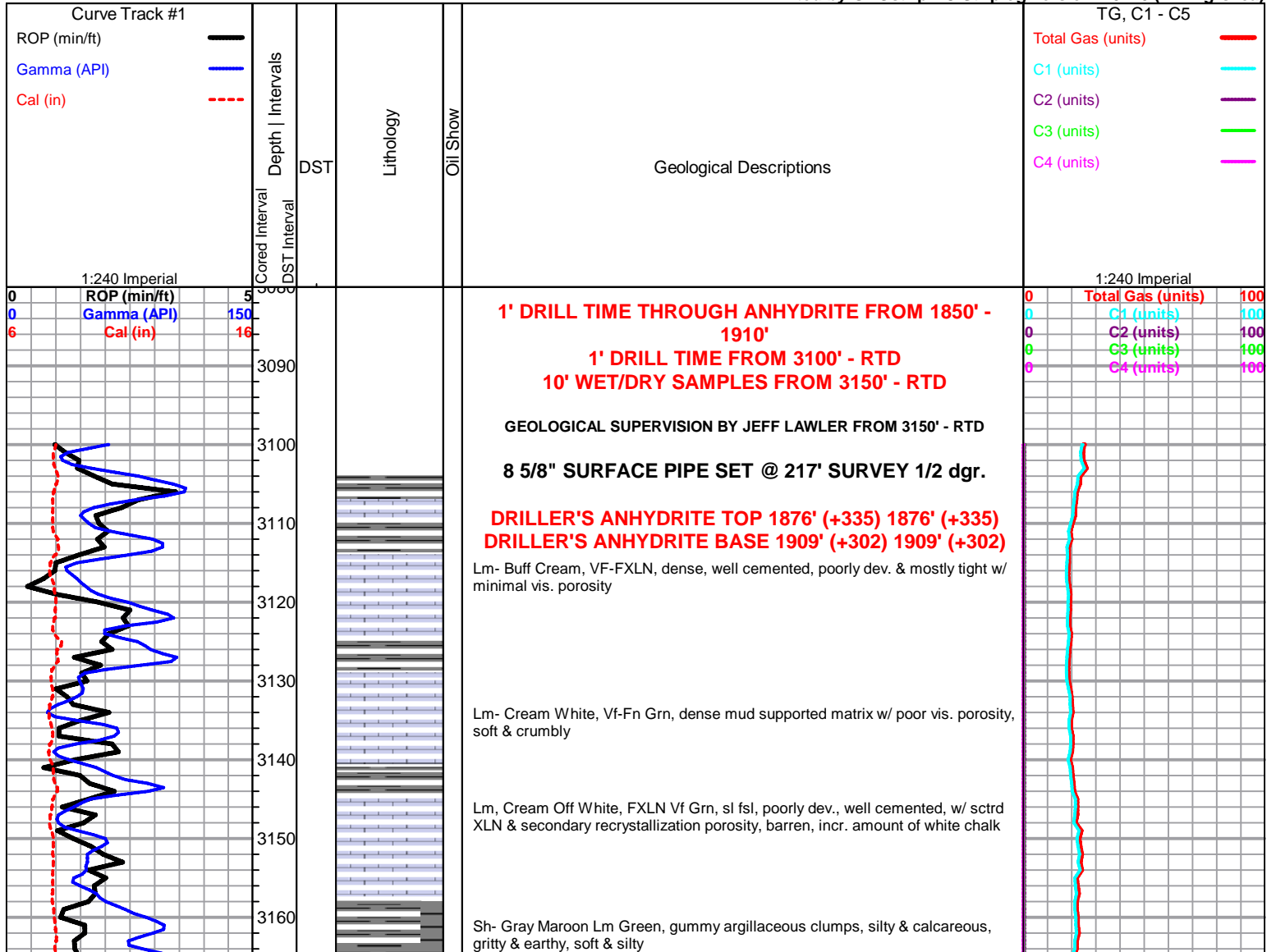
\* Sandy

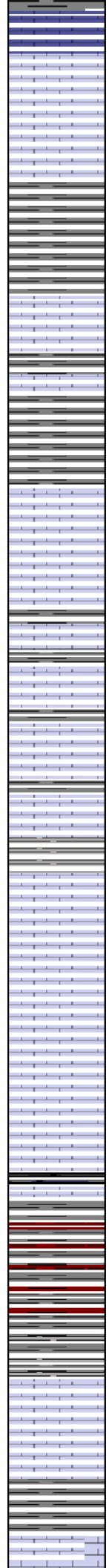
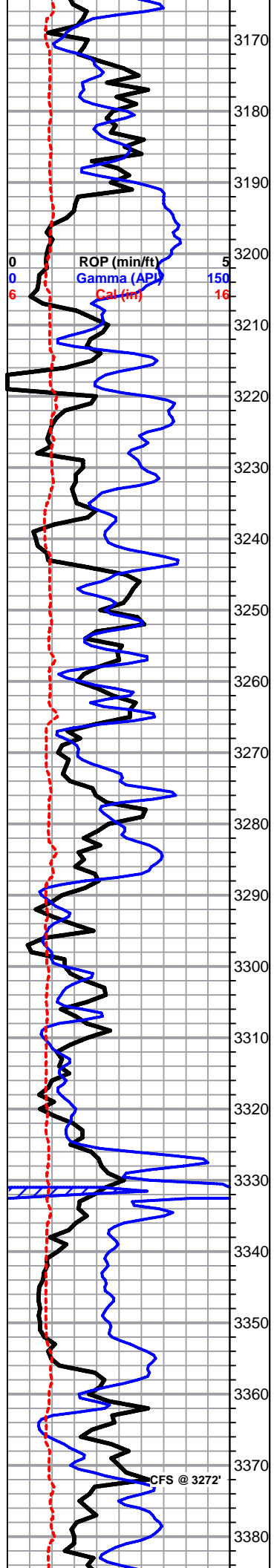
### OTHER SYMBOLS

#### DST

- DST Int
- DST alt
- Core

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





Lm- Buff Cream, mostly fn grn mud supported matrix, some sl unconsolidated & trashy, poor vis. porosity, several pcs of VFXLN, dense, brittle w/ no vis. porosity

Lm- Cream Buff, FXLN, fsl w/ fusulinids, sctrd XLN & vry fn ppt porosity & trashy high-energy bioclastic w/ fsl fragments, poor vis. porosity

Sh- Gray Maroon, dense & blocky, silty & calcareous, gritty & earthy

Sh- Gray Maroon Lm Green, gummy wash, sl sandy lime, silty & calcareous, maroon wash, dense & silty Ss- Fn Grn, angular, sl micaceous spkng, friable w/ consistant intergranular porosity, barren

**HOWARD 3202' (-991) E-LOG 3206' (-995)** Lm- Cream Tan, FXLN, fsl, sl dev., some chalky in part, poor vis. porosity, few bioclastic w/ sctrd XLN & secondary recrystallization porosity, all barren

Sh- Gray, gummy argillaceous clumps & wash, micaceous

**TOPEKA 3235' (-1024) E-LOG 3233' (-1022)** Lm- Gray, Fn Grn, fsl trashy mix, crumbly w/ poor vis. porosity

Lm- Cream Off White, Fn Grn, sl arenaceous ls, loosely cemented, granular, chalky in part, poor vis. porosity Ss- Frosted, Fn Grn, consolidated & well sorted, spkld w/ gluaconite, angular, consistant intergranular porosity, vry clean, barren

Sh- Gray, gummy arillgaceous clumps & wash

Lm- Cream Buff, FXLN, fsl w/ fusulinids, w/ sctrd micro XLN & XLN porosity, some sctrd secondary recrystallization, sl granular & massive, minimal effective porosity, mixed w/ dense well cemented mud supported matrix w/ minimal vis. porosity & soft white chalk

Lm- Gray, VF-FXLN, mostly sl trashy bioclastic w/ XLN porosity, mixed w/ VFXLN, dense, well cemented & tight w/ minimal vis. porosity, incr. amount of white chalk

Sh- Black Gray Maroon, silty, sl sandy lime, silty & calcareous, much soft white chalk

Lm- Gray White, Vf Grn, dense, silty & soft, vry loosely cemented, much soft white chalk

Lm- Cream, Vf-Fn Grn, dense, loosely cemented & crumbly, poorly dev., much soft white chalk, vry clean, barren, several massive & sl granular, poorly dev. w/ poor vis. porosity, & few pcs of cryptoXLN cherty ls w/o vis. porosity

Sh- Black Gray, silty & carbonaceous, silty & calcareous

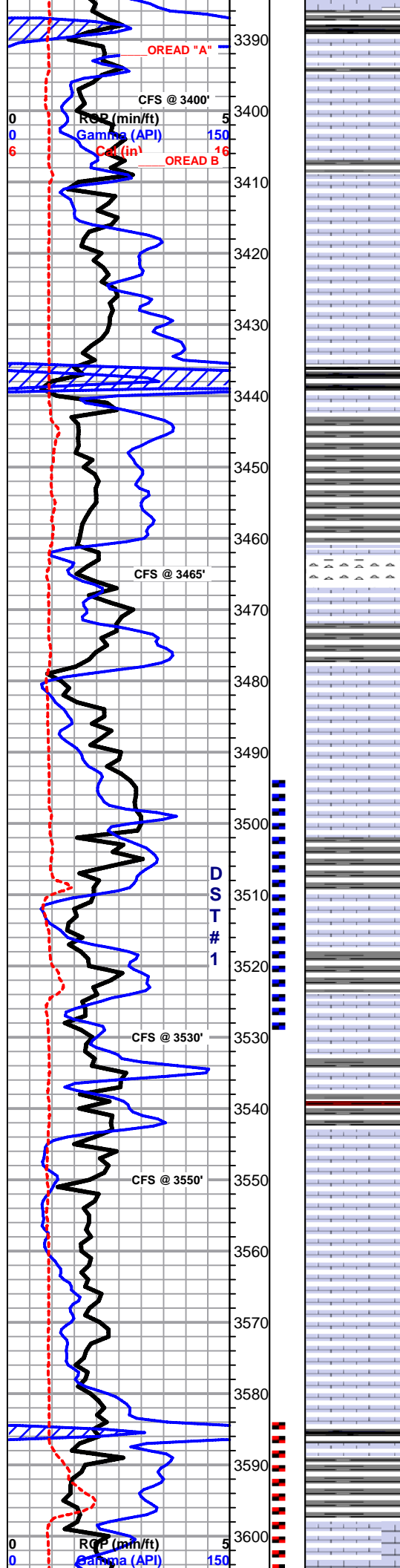
Sh- Gray Maroon Lm Green, silty & calcareous, wash, silty & soft

Sh- Black Gray, fissile, silty & soft

Lm- Cream Off White, sl oolitic w/ fusulinids, sctrd dev. w/ sctrd-dense micro XLN & XLN porosity, most well cemented, poor effective porosity, some w/ dense recrystallization secondary porosity, clean & barren

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





Sh- Gray Maroon Lm Green, silty, soft & calcareous, gritty & earthy, soft lime

Lm- Cream Off White, FXLN, fsl, few fusulinids, poorly dev., mostly tight w/ sctrd XLN & secondary recrystallization porosity, well cemented, barren, some soft white chalk, 2 pcs sl oolitic w/ sctrd inter oolite porosity, WK EDGE STN, NSFO, NO ODR

Lm- Cream Off White, VFXLN, dense, well cemented & tight w/ minimal vis. porosity

Lm- Cream Tan, FXLN, fsl w/ fusulinids, few loose crinoids, sctrd XLN porosity, sctrd recrystallization, some loosely cemented, some sl chalky in part, 1 PCS W/ DRK GILSONITE STN ALONG ADGE, NSFO, NO ODR

Lm- Tan, FXLN, fsl, poorly dev. & mostly tight w/ sctrd XLN & secondary recrystallization porosity, well cemented w/ sctrd sparry replacement cementation, barren

Lm- Lt Gray, Crypto-VFLXN, dense, vry well cemented, some lithographic, all w/ no-poor vis. porosity

**HEEBNER 3436' (-1225) E-LOG 3435' (-1224)** Sh- Black Gray, fissile & carbonaceous, dense & blocky, some gray wash

Sh- Gray Maroon Lm Green, silty & calcareous, gritty & earthy, soft & silty

**TORONTO 3461' (-1250) E-LOG 3461' (-1250)** Chert- Tan Milky White Golden Brown, mix of fresh bedded angular chert, some sl fsl, all cryptoXLN w/o vis. porosity

Lm- Cream Tan, VF-FXLN, dense, well cemented, poorly dev. & mostly tight w/ poor vis. porosity

Sh- Gray Maroon Lm Green, silty & calcareous, gritty & earthy

**LKC 3481' (-1270) E-LOG 3479' (-1268)** Lm- Cream Tan, VF-FXLN, mix of poorly dev. fsl w/ sctrd-dense XLN porosity w/ replacement sparry cementation & tight vry clean VFXLN w/ minimal vis. porosity, all barren

Lm- Cream Tan, FXLN, dense, well cemented, bioclastic w/ XLN porosity, sl trashy

Sh- Gray Lm Green, silty & dense, some calcareous, gritty & earthy

Lm- Cream Off White, FXLN, oolitic, mod. well dev. w/ mostly consistant ppt inter oolite porosity, LT SCTRD STN, 1 PCS W/ TR GSY FO, DULL YLW FLOR., NO STRM WET CUT

Lm- Cream Off White, VF-FXLN Vf Grn, oolitic mix or mod well dev., w/ few sctrd fusulinids & fn ppt & ppt inter fsl porosity, LT SCTRD STN, TR SFO, TR ODR, some soft white chalk

Lm- Cream Tan, VFXLN, dense, well cemented, tight sl cherty ls w/ poor vis. porosity, several pcs w/ rare ppt-semi-vugular porosity, some w/ possible fractures??, 4-5 pcs w/ DRK EDGE STN, SL TR FO, TR ODR, 1-2 CHALKY W/ GILSONITE STN

Lm- Cream Off White, FXLN, mix of sl-mod oomoldic w/ no intervugular connectivity, well cemented, clean & barren, grading into poorly dev. oolitic ls w/ sctrd micro XLN & XLN porosity, barren

Lm- Cream Off White, VFXLN Vf Grn, dense, tight w/ minimal vis. porosity, much soft white chalk, all vry clean

Lm- A/A w/ buff VFXLN, dense, no vis. porosity

Lm- incr. amount of buff ls A/A

Sh- Black Maroon Lm Green, fissile & carbonaceous, gritty & earthy, loose & waxy

Lm- White Cream, FXLN, mod. well dev. oolitic ls w/ XLN fsl int. oolite

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

**\*\*LOST ~40-60 BBL OF FLUID\*\***

**SHORT TRIP STRAP SURVEY**

DST #1 LKC  
3494' - 3530'

45-60-30-0

45' GIP  
15' SOCM (3%O, 97%AM)

IFP: 15-21#  
FFP: 23-30#  
SIP: 564-N/A

DST #2  
LKC H-I  
3585' - 3632'

0	Total Gas	40-45-15-0
0	C1 (units)	

