

**OPERATOR**

Company: TDI, INC  
 Address: 1310 BISON ROAD  
 HAYS, KANSAS

Contact Geologist: TOM DENNING  
 Contact Phone Nbr: 785-259-3141  
 Well Name: DINGES FAMILY # 1  
 Location: N2 NE SE NW Sec.8-15s-19w  
 Pool: WILDCAT  
 State: KANSAS

API: 15-051-26,346-00-00  
 Field: UNNAMED  
 Country: USA



**TDI, Inc.**  
 1310 BISON ROAD  
 HAYS, KANSAS 67601  
 (785) 628-2593

Scale 1:240 Imperial

Well Name: DINGES FAMILY # 1  
 Surface Location: N2 NE SE NW Sec.8-15s-19w  
 Bottom Location:  
 API: 15-051-26,346-00-00  
 License Number: 4787  
 Spud Date: 8/31/2012 Time: 2:15 PM  
 Region: ELLIS COUNTY  
 Drilling Completed: 9/9/2012 Time: 12:41 PM  
 Surface Coordinates: 1425' FNL & 2310' FWL  
 Bottom Hole Coordinates:  
 Ground Elevation: 0.00ft  
 K.B. Elevation: 2037.00ft  
 Logged Interval: 2200.00ft To: 3704.00ft  
 Total Depth: 3704.00ft  
 Formation: LANSING-KANSAS CITY  
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: Latitude:  
 N/S Co-ord: 1425' FNL  
 E/W Co-ord: 2310' FWL

**LOGGED BY**

Company: SOLUTIONS CONSULTING  
 Address: 108 W 35TH  
 HAYS, KS 67601

Phone Nbr: (785) 639-1337  
 Logged By: Geologist Name: HERB DEINES

**CONTRACTOR**

Contractor: SOUTHWIND DRILLING, INC.  
 Rig #: 1  
 Rig Type: MUD ROTARY

Rig Type: MUD ROTARY  
Spud Date: 8/31/2012  
TD Date: 9/9/2012  
Rig Release: 9/10/2012

Time: 2:15 PM  
Time: 12:41 PM  
Time: 6:00 PM

### ELEVATIONS

K.B. Elevation: 2037.00ft  
K.B. to Ground: 2037.00ft

Ground Elevation: 0.00ft

### NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON FAVORABLE STRUCTURE AND RESULTS OF DST # 1.

WELL LOGGED BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG

WELL TESTING DONE BY TRILOBITE TESTING, INC. 4 DSTS

### FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY

#### DINGES FAMILY # 1

1425' FNL & 2310' FWL, NW/4

Sec.8-15s-19w

2027' GL 2037' KB


<u>FORMATION</u>	<u>SAMPLE TOPS</u>	<u>LOG TOPS</u>
Anhydrite	1276+761	1275+ 762
B-Anhydrite	1313+ 724	1312+ 725
Topeka	3022- 985	3024- 987
Heebner Shale	3295-1258	3295-1258
Toronto	3313-1276	3315-1278
LKC	3340-1303	3340-1303
BKC	3600-1563	3588-1551
Conglomerate Sand	3672-1635	3665-1628
Arbuckle	NONE	NONE
Reagan Sand	NOT CALLED	NOT CALLED
RTD	3704-1667	
LTD		3703-1666

### SUMMARY OF DAILY ACTIVITY

8-31-12 RU, Spud, set 8 5/8" surface casing to 213' w/ 150 sxs Common, 2%Gel, 3%CC  
9-01-12 215', shut down for holiday  
9-02-12 215', shut down for holiday

9-03-12 215', shut down for holiday  
 9-04-12 215', drilling plug  
 9-05-12 1500', drilling  
 9-06-12 2580', drilling, displace 2898'-2928'  
 9-07-12 3375', DST # 1 3355'-3377' "C" zone  
 9-08-12 3424', DST # 2 3377'-3414' "D-G", DST #3 3428'-3540' "H,I,J"  
 9-09-12 3560', drilling, DST #4 3658'-3704' Congl Sand, Log behind test  
 9-10-12 3704, finish logging, run production casing, rig down

### DST # 1 TEST SUMMARY

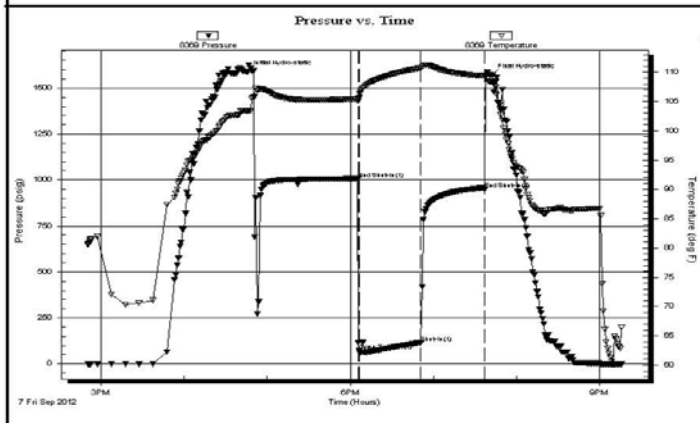
 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>	
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	<b>8-15S-19W Ellis</b> <b>Dinges Family #1</b> Job Ticket: 48679 <b>DST#: 1</b> Test Start: 2012.09.07 @ 14:50:24

**GENERAL INFORMATION:**

Formation: <b>LKC "C"</b>	Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)	Tester: Ray Schwager
Time Tool Opened: 18:06:19	Unit No: 42
Time Test Ended: 21:16:18	Reference Elevations: 2037.00 ft (KB)
<b>Interval: 3355.00 ft (KB) To 3377.00 ft (KB) (TVD)</b>	2027.00 ft (CF)
Total Depth: 3377.00 ft (KB) (TVD)	KB to GR/CF: 10.00 ft
Hole Diameter: 7.85 inches	Hole Condition: Fair

<b>Serial #: 8369</b>	<b>Inside</b>	Capacity: 8000.00 psig
Press@RunDepth: 116.52 psig @ 3356.00 ft (KB)	Start Date: 2012.09.07	End Date: 2012.09.07
Start Time: 14:50:24	End Time: 21:16:18	Last Calib.: 2012.09.07
		Time On Btm: 2012.09.07 @ 16:45:19
		Time Off Btm: 2012.09.07 @ 19:41:48

**TEST COMMENT:** 30-IFP-w k to a fr bl 1/2" to 4 1/4" bl  
 45-ISIP-no bl  
 45-FFP-strg bl in 2 min  
 45-FSP-strg bl bk in 7 min


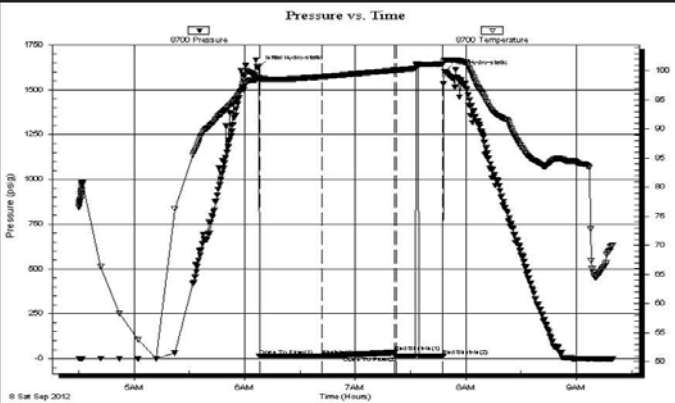


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1589.48	103.45	Initial Hydro-static
80	1007.58	105.48	End Shut-In(1)
81	72.71	105.61	Open To Flow (1)
126	116.52	110.74	Shut-In(1)
172	949.13	109.34	End Shut-In(2)
177	1571.73	108.34	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	870'GIP	0.00
5.00	O&GCM 10-%G10&O80%M	0.07
62.00	GMO 50%G20%M30%O	0.87
62.00	GMO 40%G10%M50%O	0.87
124.00	OO	1.74

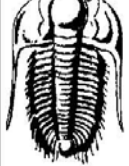
Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

**DST # 2 TEST SUMMARY**

 <p><b>TRILOBITE TESTING, INC.</b></p>	<b>DRILL STEM TEST REPORT</b>																																				
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	<b>8-15S-19W Ellis</b> <b>Dinges Family #1</b> Job Ticket: 49468 <b>DST#: 2</b> Test Start: 2012.09.08 @ 04:30:00																																			
<b>GENERAL INFORMATION:</b> Formation: <b>LKC - "D- F", top o</b> Deviated: No Whipstock: ft (KB) Time Tool Opened: 06:08:00 Time Test Ended: 09:19:30 Test Type: Conventional Bottom Hole (Reset) Tester: Cody Bloedorn Unit No: 42 Interval: <b>3377.00 ft (KB) To 3414.00 ft (KB) (TVD)</b> Total Depth: 3414.00 ft (KB) (TVD) Reference Elevations: 2037.00 ft (KB) Hole Diameter: 7.85 inches Hole Condition: Fair      KB to GR/CF: 10.00 ft 2027.00 ft (CF)																																					
<b>Serial #: 8700      Outside</b> Press@RunDepth: 14.74 psig @ 3378.00 ft (KB)      Capacity: 8000.00 psig Start Date: 2012.09.08      End Date: 2012.09.08      Last Calib.: 2012.09.08 Start Time: 04:30:05      End Time: 09:19:29      Time On Btm: 2012.09.08 @ 06:07:30 Time Off Btm: 2012.09.08 @ 07:48:30																																					
<b>TEST COMMENT:</b> 30 - IF- 1/4" Blow and Dying 45 - IS- No blow back 20 - FF- Waited 10 Min, no blow , Flushed tool, surged and died, w aited 10 Min. Pulled tool																																					
 <p style="font-size: small;">Pressure vs. Time graph showing Pressure (psig) on the left y-axis (0 to 1750) and Temperature (deg F) on the right y-axis (80 to 100). The x-axis is Time (Hours) from 5AM to 9AM. The graph shows a pressure curve that rises to a peak of approximately 1600 psig at 8:00 AM, then drops sharply to near zero by 9:00 AM. A temperature curve shows a similar trend, rising to a peak of about 101.93 deg F at 8:00 AM before dropping.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;">PRESSURE SUMMARY</th> </tr> <tr> <th style="width:10%;">Time (Min.)</th> <th style="width:15%;">Pressure (psig)</th> <th style="width:15%;">Temp (deg F)</th> <th style="width:60%;">Annotation</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1628.63</td> <td>98.87</td> <td>Initial Hydro-static</td> </tr> <tr> <td>1</td> <td>12.55</td> <td>98.55</td> <td>Open To Flow (1)</td> </tr> <tr> <td>35</td> <td>14.74</td> <td>98.99</td> <td>Shut-In(1)</td> </tr> <tr> <td>74</td> <td>35.15</td> <td>100.11</td> <td>End Shut-In(1)</td> </tr> <tr> <td>75</td> <td>13.41</td> <td>100.13</td> <td>Open To Flow (2)</td> </tr> <tr> <td>100</td> <td>14.10</td> <td>101.21</td> <td>End Shut-In(2)</td> </tr> <tr> <td>101</td> <td>1600.40</td> <td>101.93</td> <td>Final Hydro-static</td> </tr> </tbody> </table>	PRESSURE SUMMARY				Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation	0	1628.63	98.87	Initial Hydro-static	1	12.55	98.55	Open To Flow (1)	35	14.74	98.99	Shut-In(1)	74	35.15	100.11	End Shut-In(1)	75	13.41	100.13	Open To Flow (2)	100	14.10	101.21	End Shut-In(2)	101	1600.40	101.93	Final Hydro-static
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**DST # 3 TEST SUMMARY**

 <p><b>TRILOBITE TESTING, INC.</b></p>	<b>DRILL STEM TEST REPORT</b>		



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

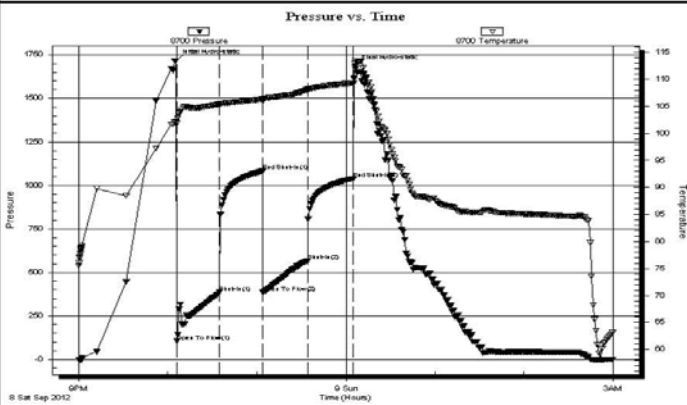
TDI Inc **8-15S-19W Ellis**  
 1310 Bison Rd **Dinges Family #1**  
 Hays Ks 67601-9696 Job Ticket: 49469 **DST#: 3**  
 ATTN: Tom Denning Test Start: 2012.09.08 @ 21:00:00

**GENERAL INFORMATION:**

Formation: **H,I,J**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:06:00  
 Time Test Ended: 02:59:30  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Cody Bloedorn  
 Unit No: 42  
 Interval: **3428.00 ft (KB) To 3540.00 ft (KB) (TVD)**  
 Total Depth: 3540.00 ft (KB) (TVD)  
 Hole Diameter: 7.85 inches Hole Condition: Fair Reference Elevations: 2037.00 ft (KB)  
 2027.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 8700 Outside**  
 Press@RunDepth: 567.39 psig @ 3527.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.09.08 End Date: 2012.09.09 Last Calib.: 2012.09.09  
 Start Time: 21:00:05 End Time: 02:59:29 Time On Btm: 2012.09.08 @ 22:05:30  
 Time Off Btm: 2012.09.09 @ 00:06:00

**TEST COMMENT:** 30 - IF- B.O.B. in 2 Min.  
 30 - IS- No blow back  
 30 - FF- B.O.B. in 3 Min.  
 30 - FS- No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1716.38	102.19	Initial Hydro-static
1	105.15	101.92	Open To Flow (1)
29	385.20	105.37	Shut-In(1)
58	1081.52	106.35	End Shut-In(1)
59	385.71	106.07	Open To Flow (2)
89	567.39	108.10	Shut-In(2)
120	1039.66	109.31	End Shut-In(2)
121	1685.09	112.96	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
186.00	Mud, 100% M	2.61
682.00	MV, 5% M, 95% W	9.57
124.00	Mud, 100% M	1.74

**Gas Rates**

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

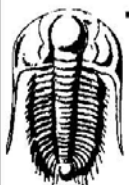
\* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 49469

Printed: 2012.09.09 @ 06:56:20

**DST # 4 TEST SUMMARY**



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

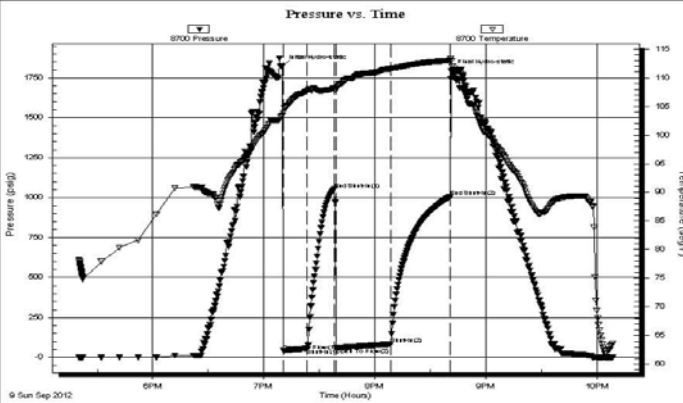
TDI Inc **8-15S-19W Ellis**  
 1310 Bison Rd **Dinges Family #1**  
 Hays Ks 67601-9696 Job Ticket: 49470 **DST#: 4**  
 ATTN: Tom Denning Test Start: 2012.09.09 @ 17:20:00

**GENERAL INFORMATION:**

Formation: **CG Sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:10:30  
 Time Test Ended: 22:08:30  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Cody Bloedorn  
 Unit No: 42  
 Interval: **3658.00 ft (KB) To 3704.00 ft (KB) (TVD)**  
 Total Depth: 3704.00 ft (KB) (TVD)  
 Reference Elevations: 2037.00 ft (KB)  
 2027.00 ft (CF)

**Serial #: 8700** **Outside**  
 Press@RunDepth: 83.03 psig @ 3695.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.09.09 End Date: 2012.09.09 Last Calib.: 2012.09.09  
 Start Time: 17:20:05 End Time: 22:08:29 Time On Btm: 2012.09.09 @ 19:10:00  
 Time Off Btm: 2012.09.09 @ 20:41:30

**TEST COMMENT:** 15 - IF- 5" blow  
 15 - IS- No blow back  
 30 - FF- 3" Blow  
 30 - FSI- Noblow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1822.48	103.40	Initial Hydro-static
1	42.24	103.89	Open To Flow (1)
14	56.17	107.69	Shut-In(1)
28	1052.45	108.09	End Shut-In(1)
29	60.99	107.82	Open To Flow (2)
59	83.03	111.56	Shut-In(2)
91	1004.70	112.99	End Shut-In(2)
92	1793.71	112.93	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
92.00	Mud - Oil Scum, 100%M	1.29

\* Recovery from multiple tests

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

Trilobite Testing, Inc

Ref. No: 49470

Printed: 2012.09.09 @ 23:37:34

**ROCK TYPES**

Clystgy	Lmst fw7>	Carbon Sh	Dol Lime
Chtcong1	shale, grn	shale, red	Lscong1
Lmst fw<7	shale, gry	Ss	CglSandy

**ACCESSORIES**

<b>MINERAL</b>	<b>FOSSIL</b>
P Pyrite	⊕ Oolite
⊕ Varicolored chert	⊕ Oomoldic
△ Chert White	

**OTHER SYMBOLS**

<b>DST</b>
■ DST Int
■ DST alt
■ Core

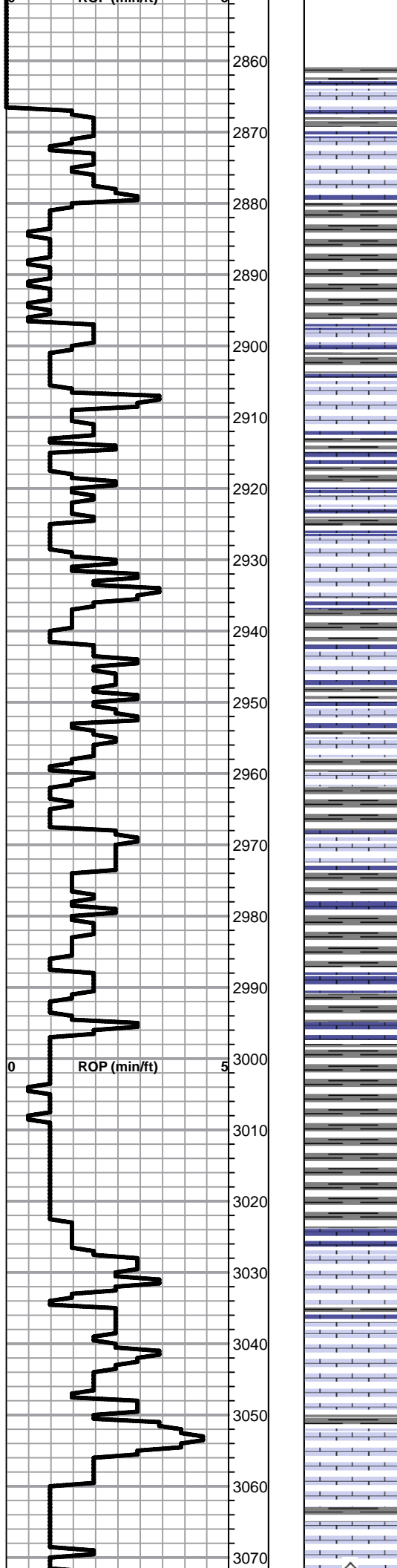
Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #1 ROP (min/ft)	Depth   Intervals Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	TG, C1 - C5
1:240 Imperial	1:240 Imperial					1:240 Imperial

BEGIN 1' DRILL TIME FROM 2850' TO RTD  
BEGIN 10' WET AND DRY SAMPLES FROM 3000' TO RTD

8 5/8" SURFACE CASING SET  
TO 213' W/ 150 SACKS  
COMMON, 2%Gel, 3%CC

**ANHYDRITE SPL TOP 1276+761 ELog 1275+762**  
**ANHYDRITE SPL BASE 1313+724 ELog 1312+725**



Shale, med gray forming soft mud clusters  
Lime, med brn, fnxln, slightly fossiliferous with mix of gray, fnxln lime

Lime, grayish brn, fnxln  
Shale, lt-med gray, soft blocky

Lime, brn-gray, fnxln, slightly fossiliferous  
Shale, lt gray forming soft mud

Shale, lt-med brn, soft blocky to soft mud clusters

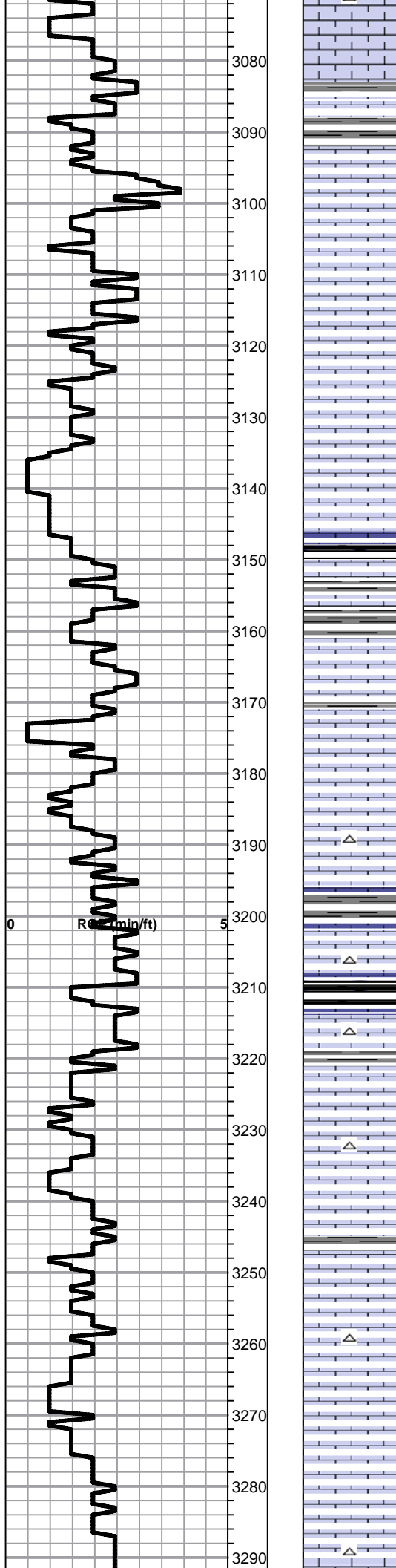
**TOPEKA SPL 3022-985 ELog 3024-987**

Lime, crm-tan, fnxln, soft on crush, bedded chalk, slightly fossiliferous

Lime, crm-lt brn-grayish brn, fnxln, chalk in part, slightly fossiliferous

Lime, lt-med brn-gray, fnxln

Lime, crm-lt-med brn, granular, slightly fossiliferous, bedded chalk in part, NS



Lime, offwhite-lt grayish brn, fnxln-granular in part

3080

Lime, offwhite-lt-med brn, fnxln, slightly fossiliferous

3090

Lime, lt-med brn-grayish brn, fnxln

3100

Lime, lt-med brn, fnxln-granular, slight chalk, NS

3110

Lime, lt-med brn, fnxln-granular in part

3120

Lime, med brn-med gray, fnxln, fossiliferous in part

3130

Lime, lt-med brn, granular, bedded chalk in part, slightly fossiliferous

3140

Shale, gray-black carbonaceous

3150

Lime, lt-med brn, fnxln  
Shale, med gray, calcareous

3160

Lime, tan-lt brn, fn-vfxln, very clean in appearance

3170

Lime, lt brn-lt grayish brn, fnxln-granular, slightly fossiliferous, NS

3180

Lime, lt brn, fnxln-granular, bedded chalk, lt gray fossiliferous chert

3190

Lime, lt brn, shale inclusions in part, fnxln

3210

Shale, gray-black carbonaceous  
Lime, crm-lt brn, fn-vfxln micritic in part  
Shale, lt gray, calcareous

3220

Lime, lt-med brn-grayish brn, fnxln, lt bedded chalk in part

3230

Lime, lt-med brn-grayish brn, fnxln-granular, NS

3240

Lime, lt-med brn, most fnxln w/ granular in part, lt bedded chalk in part, NS

3250

Lime, lt brn, fnxln-granular, bedded chalk in part NS

3260

Lime, lt-med brn, fnxln-granular, bedded chalk

3270

Lime, lt brn, fnxln-granular, bedded chalk, slight fossiliferous

3280

Lime, lt brn, fnxln-granular, bedded chalk, slightly fossiliferous

3290

0 RC (min/ft) 5



**HEEBNER SHALE SPL 3295-1258 ELOG 3295-1258**

Shale, black carbonaceous, fissile, blocky  
Lime, med brn, fnxln

Shale, lime green, soft to lt gray, soft mud

**TORONTO SPL 3313-1276 ELog 3315-1278**

Lime, white-crm, fn-vfxln, bed chalk in part, NS

Lime, white ,fnxln, micrite in part  
Shale, red wash grading into lt gray soft mud

**LKC SPL 3340-1303 ELog 3340-1303**

Lime, grayish brn, fnxln

Lime, tan-lt brn, fnxln with bedded chalk in part

Lime, lt brn-lt gray, fnxln, lt bedded chalk in part

Lime, lt brn, oolitic-oolimoldic, scattered to saturated stain, lt odor, show of lt gassy oil on break

DST # 1 3355' TO 3377' SEE HEADER FOR TEST SUMMARY

Slope @ 3375' 3/4 degree

Lime, lt brn, fnxln

Lime, crm-tan, fnxln, scattered oolitic-oolimoldic with interoolitic and vuggy porosity, V Lt Odor, Lt stain

DST # 2 3377' TO 3414' SEE HEADER FOR TEST SUMMARY

Lime, tan-lt brn, fnxln  
Shale, med gray-black carbonaceous

Lime, tan-lt brn, oolitic in part with lt staining, V Lt Odor, NFO

Lime, lt-med brn, mostly fnxln, scattered vuggy porosity with lt gassy oil on break

Lime, crm-tan, fnxln-granular, bed chalk with sticky clusters in part, white chalk wash

Lime, crm-tan, fnxln with bedded chalk

Lime, tan, fn-vfxln, bedded chalk

Lime, crm-tan, fn-vfxln, chalky

Shale, gray-black carbonaceous  
Lime, lt-dark brn, fn-vfxln, hard on crush

Shale, dove gray, soft mud

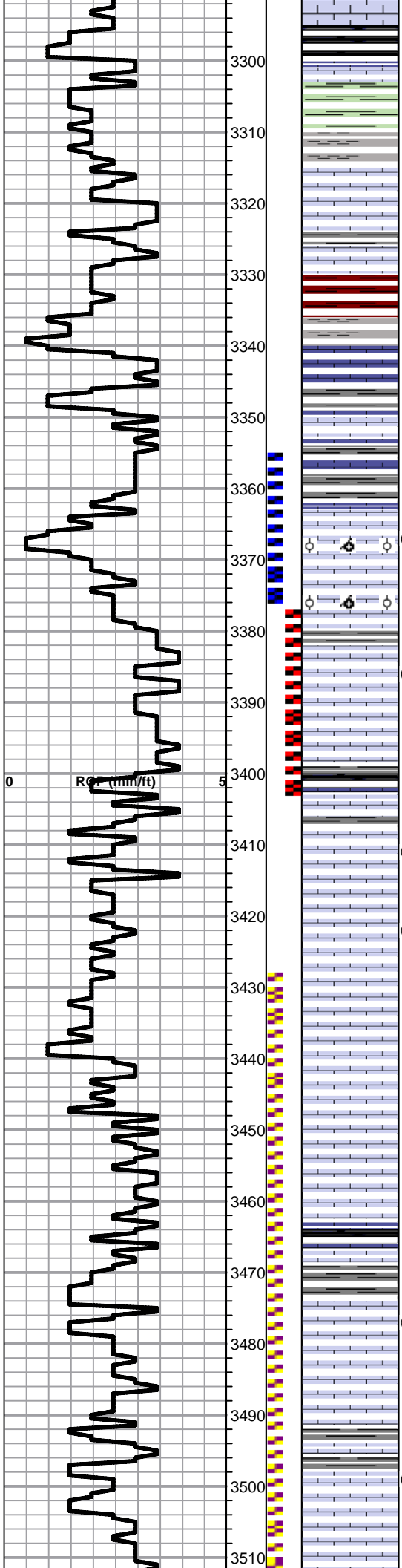
Lime, tan-lt brn, mostly fnxln with 2 pieces with poorly developed vuggy porosity, scattered stain, NFO, No Odor

DST # 3 3428' TO 3540' SEE HEADER FOR TEST SUMMARY

Lime, crm-tan, fnxln, bedded chalk

Lime, lt-med brn, fnxln, few chips of oolitic with fossil fragments, scattered to saturated staining, gilsonitic

Lime, crm-offwhite, fn-vfxln, bedded chalk



RCI (mm/ft)

0

5

3300

3310

3320

3330

3340

3350

3360

3370

3380

3390

3400

3410

3420

3430

3440

3450

3460

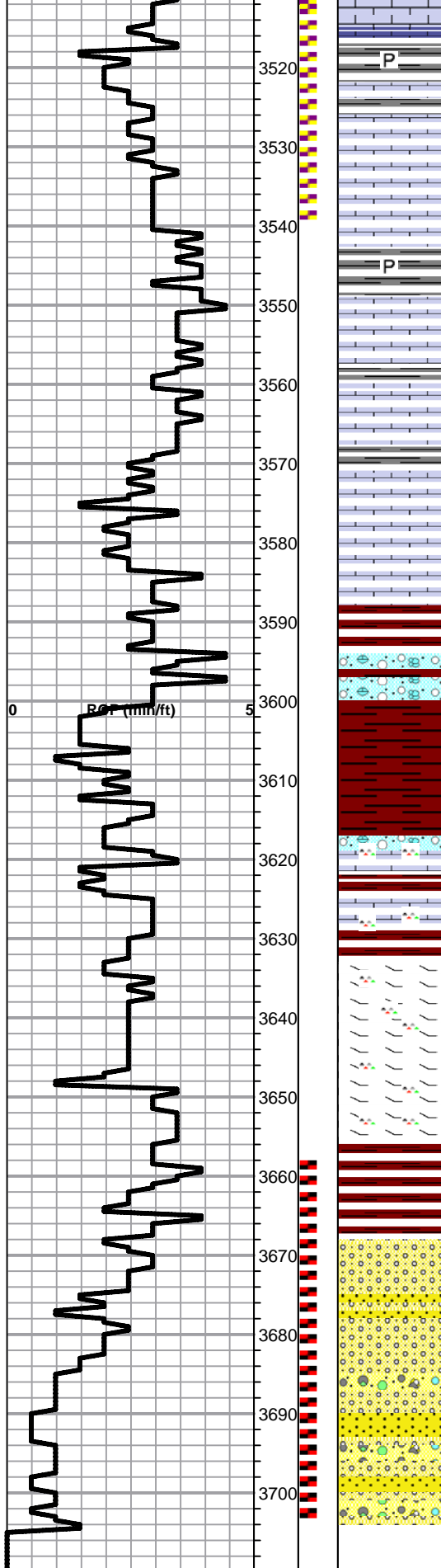
3470

3480

3490

3500

3510



Shale, gray, soft, pyrite clusters

Lime, offwhite-tan-lt brn, fn-vfxln, light bedded chalk, trace of staining in scattered vuggy porosity

Lime, lt-med brn, fnxln

Shale, gray-grayish brn, soft blocky, pyrite clusters

Lime, tan-med brn, fnxln

Lime, lt brn-lt grayish brn, fn-vfxln, bedded chalk

Lime, offwhite-lt brn, fn-vfxln, chalk in part

Lime, lt-med brn, fnxln, light bedded chalk in part

**BKC SPL 3600-1563 ELog 3588-1551**

Shale, red wash with mix of clastic lime rubble

Shale, lt red-gray with lt red wash

Shale, red wash, soft

Lime, crm-tan, fnxln with clastic lime mix in part

**MARMATON MARKER ELog 3633-1596**

Lime, crm-tan-lt brn, dolomitic, hard on crush, cherty

Lime, crm-tan, fn-vfxln, hard with orange chert in part

Shale, red wash, soft sticky in part

**CONGLOMERATE SAND ELog 3665-1628**

Sandy well cemented mix, poorly sorted with mix of chert

Scattered clusters of well sorted sand with show of lt oil on break mixed with mostly cemented, poorly developed sand

Mix of soft white clay, vari colored cherts and poorly developed sandstone

**RTD 3704-1667 LTD 3703-1666**

**DST # 4 3658' TO 3704' SEE HEADER FOR TEST SUMMARY**

**RAN 14# 5 1/2" PRODUCTION CASING TO 3702' WITH 150 SXS EA2. DV IN ANHYDRITE CEMENTED WITH 155 SXS SMD**

# 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. 5036

Date	8-31-12	Sec.	8	Twp.	15	Range	19	County	Ellis	State	Ks	On Location		Finish	8:00 AM
Lease	Dinges			Well No.	1			Location	Antonio, Ks - 3 W, 15, 12 W						
Contractor	Southwind #1							Owner	Sinto						
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.	215'			Charge To	TDI Inc.						
Csg.	8 5/8"			Depth	213'			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.	15'			Shoe Joint	15'			Cement Amount Ordered 150 sk Common 3 1/2 cc							
Meas Line				Displace	12 1/2 BCS										

**EQUIPMENT**

Pumptrk	15	No.	Cementer		2% Gel
			Helper	Nick	Common 150
Bulktrk	13	No.	Driver	Levy	Poz. Mix
			Driver		Gel. 3
Bulktrk	pu.	No.	Driver	Rick	Calcium 5
			Driver		

**JOB SERVICES & REMARKS**

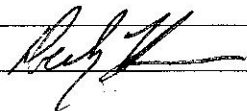
Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Cement did Circulate.	Sand
	Handling 158
	Mileage

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	
Mileage	14

Tax	
Discount	
Total Charge	

X Signature 

JOB LOG

SWIFT Services, Inc.

DATE 9-10-12 PAGE NO. 1

CUSTOMER TDI WELL NO. #1 LEASE Diggs Family JOB TYPE 2-stage TICKET NO. 21886

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1030							on loc <del>start</del> FE
								RTD 3704' 5 1/2" x 14" x 3703' x 44' Cent. 1, 3, 5, 9, 2, 8, 10, 11, 56 Back 2, 93, 57, 76 DV 57 @ 1266'
	1320							Start FE
	1510							Break Circ
	1600	5	0				200	<del>1500</del> Start Pre-flushes 500 gal Mud/Flush 20 bbl KCL Flush
	1605	5	32/0				200	Start 150 sks EA-2
	1612		36					End Cement Wash P&L
	1618	6	0				200	Drop & D Plug Start Displacement wtr
	1628	6	60				200	Mud
	1631	5	78				250	KCL Flush
	1633		89				400/1200	Lead Plug Release Pressure/Float Hold
	1638							Drop Opening Plug
	1645	2.5	7					Plug RHM 30 sks SMD / 15 sks SMD
	1655						1100	Open DV
	1656	6	0				150	Start 150 sks SMD
	1715		86					End Cement Drop Closing Plug
	1720	5	0				150	Start Displacement
	1725	4	24				300	Circ Cement
	1727		31				400/1200	Lead Plug Close DV Release Pressure/DV Closed
								Circ 25 sks to Pit
								Thank you Nick, David E, & Son