**OPERATOR** 

Company: TDI, INC.

1310 BISON ROAD Address: HAYS, KANSAS 67601

TOM DENNING Contact Geologist: Contact Phone Nbr: 785-628-2593 Well Name: ALVIN # 1

Location: SW SW NE NW Sec.27-10s-17w API: 15-163-24,185-00-00 Pool: **WILDCAT** Field: UNNAMED

**KANSAS** Country: State: USA



Scale 1:240 Imperial

Well Name: ALVIN #1

SW SW NE NW Sec.27-10s-17w Surface Location:

**Bottom Location:** API:

15-163-24,185-00-00

License Number: 4787 Spud Date: 4/4/2014 Time: 8:28 PM Region: **ROOKS COUNTY** 

**Drilling Completed:** 4/10/2014 Time: 10:05 AM 1235' FNL & 1400' FWL

Surface Coordinates: **Bottom Hole Coordinates:** 

Ground Elevation:

2065.00ft K.B. Elevation: 2075.00ft

2900.00ft Logged Interval: To: 3750.00ft 3750.00ft

Total Depth: Formation: CONGLOMERATE

Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

#### SURFACE CO-ORDINATES

Well Type: Vertical Longitude: -99.2091033 Latitude: 39.1582372

N/S Co-ord: 1235' FNL E/W Co-ord: 1400' FWL

#### LOGGED BY



SOLUTIONS CONSULTING, INC. Company:

Address: 108 W 35TH

HAYS, KS 67601

Phone Nbr: (785) 639-1337

Logged By: **GEOLOGIST** Name: HERB DEINES

CONTRACTOR

SOUTHWIND DRILLING, INC. Contractor:

Rig #:

Rig Type: **MUD ROTARY** 

4/4/2014 8:28 PM Spud Date: Time: TD Date: 4/10/2014 Time: 10:05 AM Rig Release: 4/11/2014 2:00 PM Time:

#### **ELEVATIONS**

Ground Elevation: K.B. Elevation: 2075.00ft 2065.00ft

K.B. to Ground: 10.00ft

**FORMATION** 

### **NOTES**

DECISION TO PLUG AND ABANDON WELL BASED ON NEGATIVE RESULTS OF FOUR DSTS.

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG

DRILL STEM STEM TESTING BY TRILOBITE TESTING INC: TWO (2) CONVENTIONAL TESTS AND TWO (2) STRADDLE TESTS

# FORMATION TOPS COMPARISON AND CHRONOLOGY OF DAILY ACTIVITY

ALVIN # 1	COLBY # 1	<b>MARSTON A 1-27</b>
SW SW NE NW	NE NE SW	<b>SW NE NE NE</b>
SEC.27-10S-17W	SEC.27-10-17W	SEC.27-10-17W
2065'GL 2075'KB	KB 2070'	KB 2073'

LOG TOPS

**LOG TOPS** 

**Anhydrite** 1318 +757 + 755 +763 **B-Anhydrite** 1354 +721 NG +725 Topeka 3026 -951 - 948 - 947

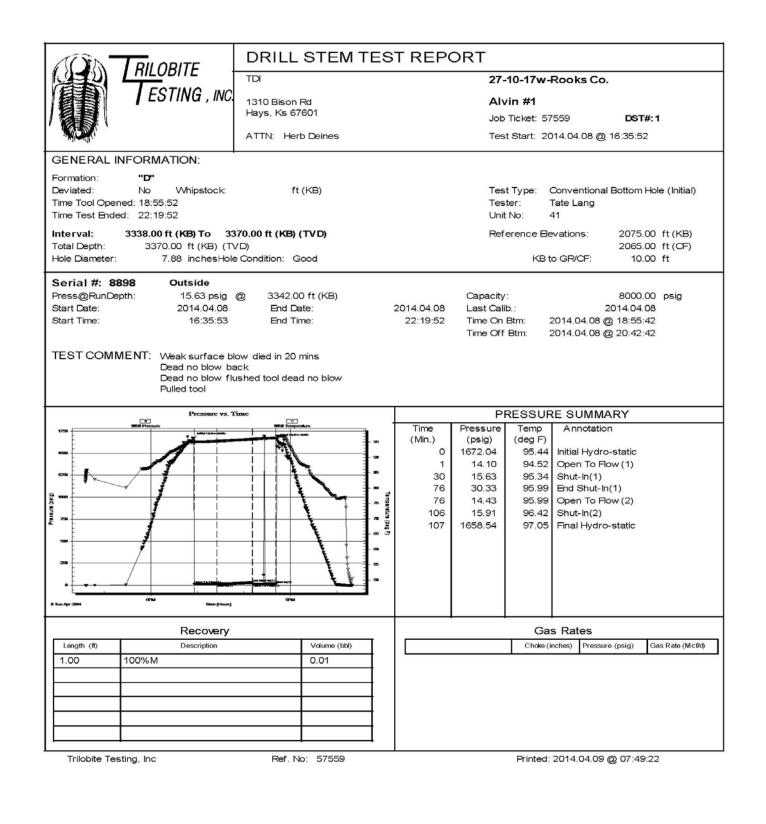
LOG TOPS

Heebner Sh.	3248-1173	-1173	-1170
Toronto	3277-1202	-1195	-1193
LKC	3292-1217	-1214	-1213
ВКС	3526-1451	-1455	-1457
Conglomerate	3576-1501	-1513	-1500
Simpson Shale	3647-1572	-1568	-1573
Simpson Dol.	3656-1581	-1572	-1583
Arbuckle	3679-1604	-1604	-1601
RTD	3750-1675	-1608	-1652

#### **SUMMARY OF DAILY ACTIVITY**

4-04-14	RU, Spud 6:00 PM
4-05-14	222', set 8 5/8" surface casing to 221' w/ 160 sxs Common 2%Gel
	3%CC, slope 3/4 degree, plug down 12:30AM, WOC 8 hrs
4-06-14	1850', drilling
4-07-14	2630', drilling, displaced 2668' to 2699'
4-08-14	3269', drilling, CFS 3370', short trip, TOWB, DST # 1 3338'-3370' "D"
4-09-14	3489', drilling, CFS 3685', DST # 2 3534'- 3685' Cg and Simpson
4-10-14	3685', finish DST # 2 , TIWB, RTD 3750' @10:05AM, CCH, TOWB,
	logs, DST # 3 straddle test 3464' to 3552' "J" to "Marmaton", start
	DST # 4 straddle test 3460'-3540' "K" – Marmaton
4-11-14	3750', finish DST # 4, P&A

#### DST # 1 3338' TO 3370' "D" ZONE LKC





DRILL STEM TEST REPORT

1310 Bison Rd

Hays, Ks 67601

27-10-17w-Rooks Co.

Alvin #1

Job Ticket: 57560 DST#: 2

Test Start: 2014.04.09 @ 22:37:01

ATTN: Herb Deines

GENERAL INFORMATION:

Cong. Simpson Sand Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:36:21 Time Test Ended: 05:33:40

Formation:

3534.00 ft (KB) To 3685.00 ft (KB) (TVD) Interval:

Total Depth: 3368.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good Test Type: Conventional Bottom Hole (Reset)

Tate Lang Tester: Unit No: 49

Reference Bevations: 2075.00 ft (KB)

2065.00 ft (CF) KB to GR/CF: 10.00 ft

Outside Serial #: 8898

Press@RunDepth: 64.50 psig @ 3539.00 ft (KB) Capacity: 8000.00 psig Start Date: 2014.04.09 End Date: 2014.04.10 Last Calib.: 2014.04.10 Start Time: 05:33:41 2014.04.10 @ 00:36:11 22:37:02 End Time: Time On Btm:

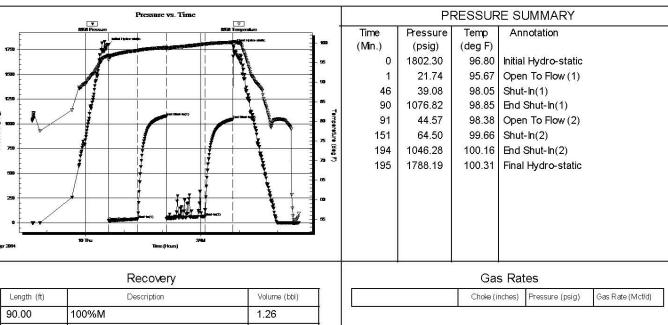
2014.04.10 @ 03:51:01 Time Off Btm:

TEST COMMENT: Weak surface blow built to 3 in

Dead no blow

Weak surface blow built to 3 in

Dead no blow



\* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 57560

Printed: 2014.04.10 @ 08:02:05

## **DST # 3 STRADDLE TEST 3534' TO 3685'**



#### DRILL STEM TEST REPORT

TDI 27-10-17w-Rooks Co.

1310 Bison Rd Hays, Ks 67601

Alvin #1 Job Ticket:

ATTN: Herb Deines

DST#: 3 Test Start: 2014.04.10 @ 17:30:30

GENERAL INFORMATION:

"J-L" Formation: Whipstock ft (KB) Deviated: No

Time Tool Opened: 19:22:40

Time Test Ended: 22:33:39 Interval: 3464.00 ft (KB) To 3552.00 ft (KB) (TVD) Total Depth: 3750.00 ft (KB) (TVD) Hole Diameter: 7.88 inchesHole Condition: Good

Test Type: Conventional Straddle (Reset)

Tester: Tate Lang Unit No: 49

KB to GR/CF

Reference Bevations: 2075.00 ft (KB) 2065.00 ft (CF)

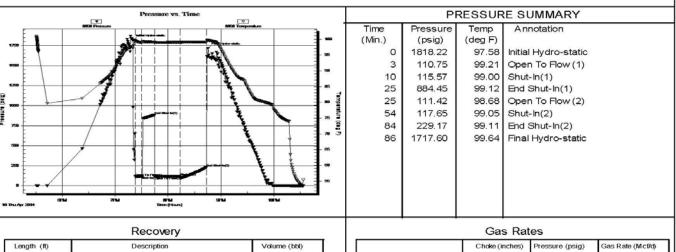
10.00 ft

Serial #: 8898 Outside

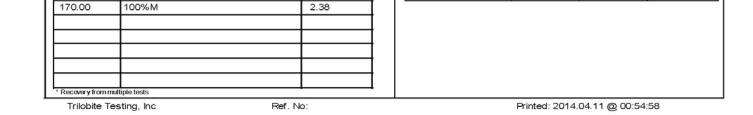
Press@RunDepth: 117.65 psig @ 3465.00 ft (KB) Capacity: 8000.00 psig 2014.04.10 Start Date: End Date: 2014.04.10 Last Calib.: 2014.04.10 Start Time: 17:30:31 End Time: 22:33:40 Time On Btm: 2014.04.10 @ 19:20:00 Time Off Btm: 2014.04.10 @ 20:45:30

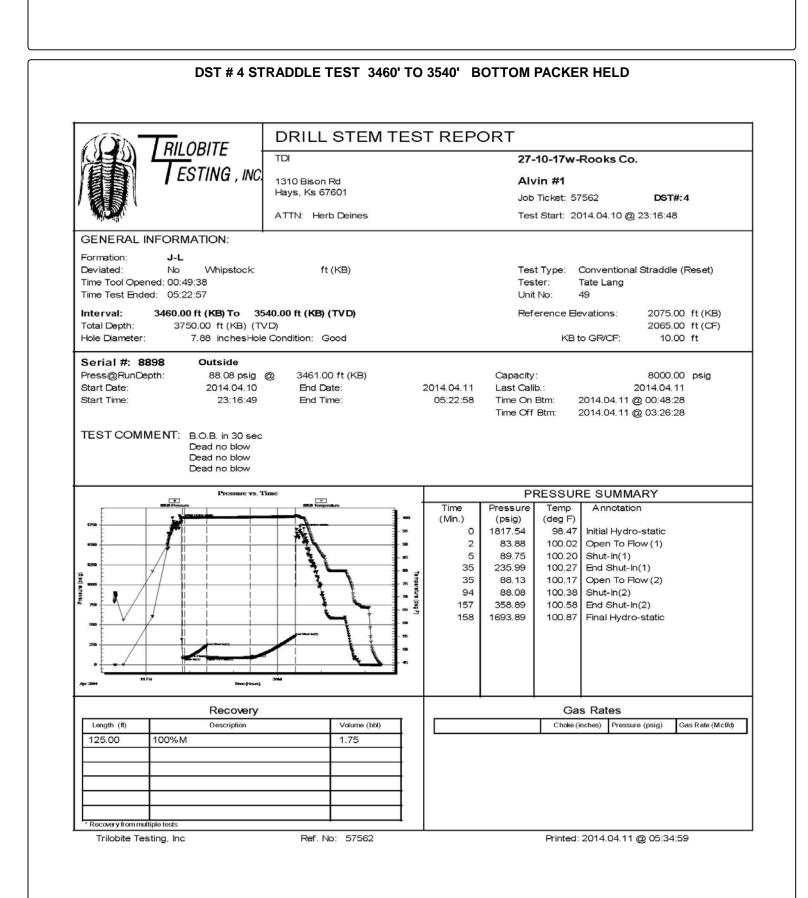
TEST COMMENT: B.O.B. In 1 min

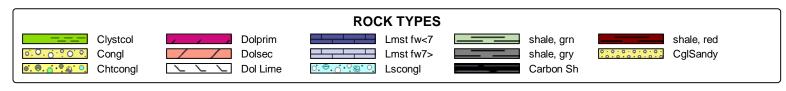
Dead no blow back Dead no blow Dead no blow back



Volume (bbl)







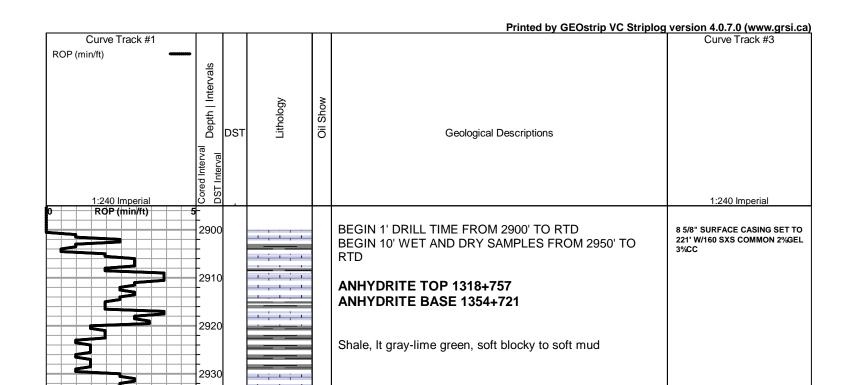
MINERAL

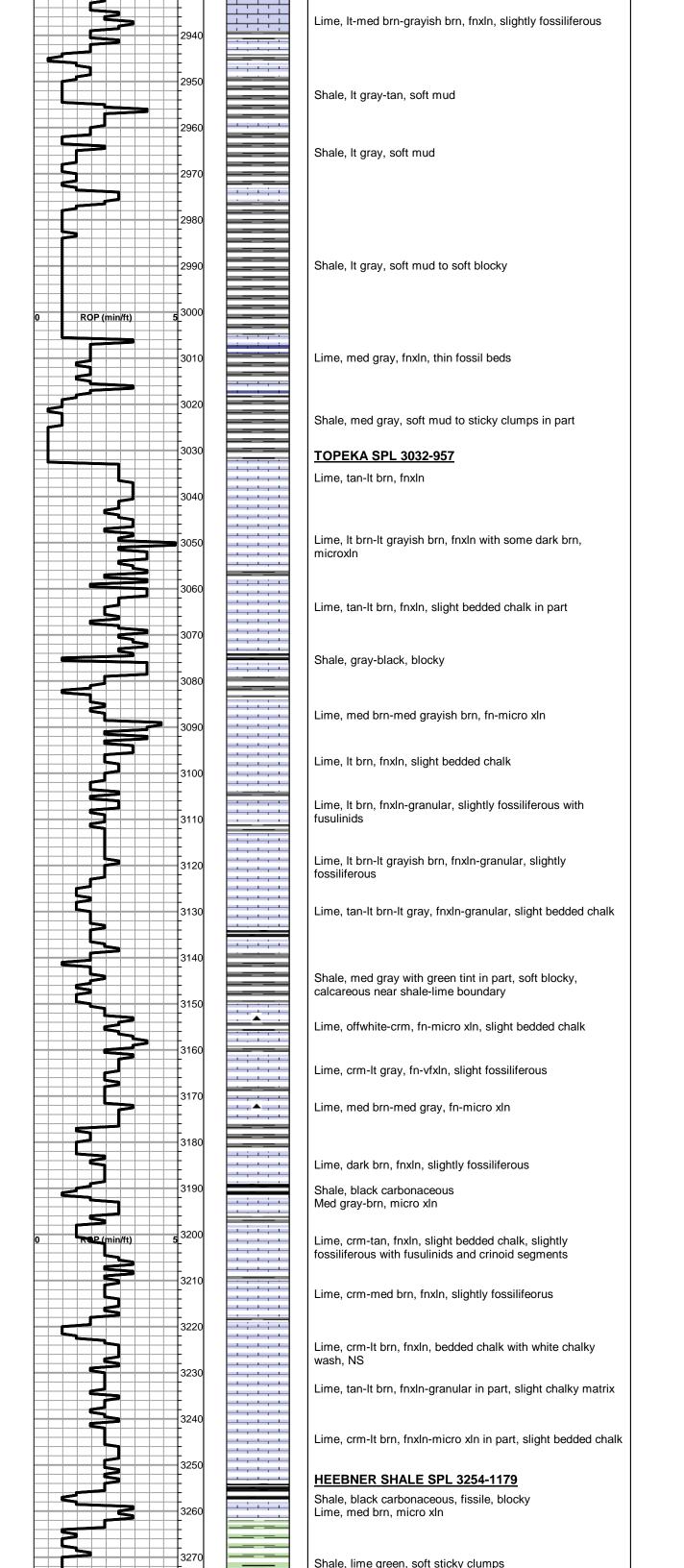
▲ Chert, dark

P Pyrite

△ Chert White

# ACCESSORIES





3280 **TORONTO SPL 3282-1207** Lime, crm-tan-lt brn, fnxln, NS 3290 LKC SPL 3297-1222 3300 Lime, crm, fn-vfxln Lime, tan-It brn, fn-micro xln, slight bedded chalk, NS 3310 Lime, It brn-It gray, fnxln, thin fossil beds, NS В 3320 Shale, lime green-lt gray, soft sticky in part grading into calcareous lime near lime-shale boundary 3330 C Lime, crm-tan, fn-micro xln, bedded chalk in part, NS 3340 Lime, crm, mostly fnxln, few chips with scattered vugs with DST#1 SAMPLE TOP INTERVAL 3338' TO 3370' "D" LKC SEE HEADER FOR TEST SUMMARY PACKERS SET OFF It stain and fine oil specks, very It odor -D \_\_\_ **DRILL TIME** Lime, crm, fn-micro xln Shale, black carbonaceous, blocky 337 Lime, It gray, fn-micro xln E Lime, crm-lt brn, fnxln, bedded chalk, NS **F** 3380 Lime, crm, fnxln with It of bedded chalk, NS 3390 Lime, tan-lt brn, fn-micro xln, bedded chalk Chert, white, fresh, sharp **3**400 P (min/ft) G \_\_\_\_ Lime, tan-lt brn, fn-vfxln, bedded chalk \_\_\_\_ -- $\Delta$  $^{\perp}$ Lime, crm-offwhite near shale boundary, fn-micro xln 3420 Shale, black carbonaceous, blocky Lime, med grayish brn, vfxln, slightly fossiliferous grading into soft sticky gray shale 3430 Lime, crm, fnxln, lot of bedded chalk with white chalk wash Lime, crm, fn-vfxln, bedded chalk, NS 3450 Lime, tan, fn-vfxln, bedded chalk, trace of spotty staining, 0 \_\_\_\_ NFO, very It odor, appears poorly developed Shale, med gray-grayish brn, soft-firm blocky Lime, tan-lt brn, fn-micro xln, bedded chalk, NFO, trace spotty stain, very It odor Lime, tan-lt brn, fn-micro xln DST #3 STRADDLE TEST LOG INTERVAL 3464' TO 3552' SEE HEADER FOR TEST SUMMARY Shale, black carbonaceous, fissile, blocky lime, It gray, vfxln Lime, It gray, fn-vfxln, mottling near shale boundary Lime, It-med gray, fn-vfxln, slightly fossiliferous, well cemented NOTE:DST # 3 RECOVERY AND CHART LEFT QUESTION OF BOTTOM PACKER SEAT INTEGRITY DST # 4 RAN Lime, crm-lt brn, fn-micro xln, slight bedded chalk, hard on DIFFERENT PACKER SEATS. BKC SPL 3531-1456 Lime, tan, fnxln-granular, oolitic in part, slight chalk in part with sticky clumps, NS 3560 --3570 -3580 --3590 Lime, crm, fnxln, bedded chalk. slight clastic mix in part Shale, dark red wash, soft mud Shale, brn-gray, firms blocky grading into soft sticky red shale Sandstone, vf grained, gritty, saturated stain, NFO, No Odor **DST#2** SAMPLE TOP INTERVAL 3534' TO 3685' SEE HEADER FOR TEST Shale, red with with vari colored chert, NS SUMMARY PACKERS SET OFF DRILL TIME ROP (min/ft) Shale, red wash, vari colored cherts, few chips with gilsonite, NFO, no odor

CFS 3612'

