



## GEOLOGIST'S REPORT

OPERATOR **MURFIN DRILLING COMPANY, INC.**

LEASE **URBAN # 1-32**

LOCATION **1000 FNL & 1650 FWL**

SEC. **32** TWS **1S** RGE **29W**

COUNTY **DECATUR** STATE **KANSAS**

FIELD **WILDCAT**

CONTRACTOR Murfin Drilling Company RIG NO. 8

COMMENCED 3 Feb. 2011 COMPLETED 11 Feb. 2011

MUD DISPLACED 2896 MUD TYPE Chemical

DRILLING TIME KEPT FROM 3000 TO 4015

SAMPLES SAVED FROM 3000 TO 4015

SAMPLES EXAMINED FROM 3000 TO 4015

GEOLOGICAL SUPERVISION FROM 3005 TO 4015

GEOLOGIST ON WELL Paul Gunzelman

### ELEVATIONS

KB **2758 Ft.**

GL **2753 Ft.**

ALL MEASUREMENTS FROM K.B.

### CASING RECORD

Conductor None

Surface 8 5/8" @ 304'

Production None

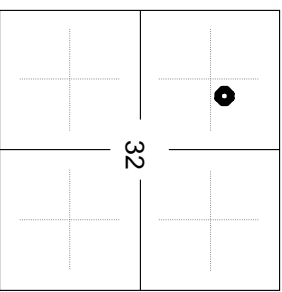
### ELECTRICAL SURVEYS:

Log-Tech, Inc.

Comp. Neutron Density

Dual Induction

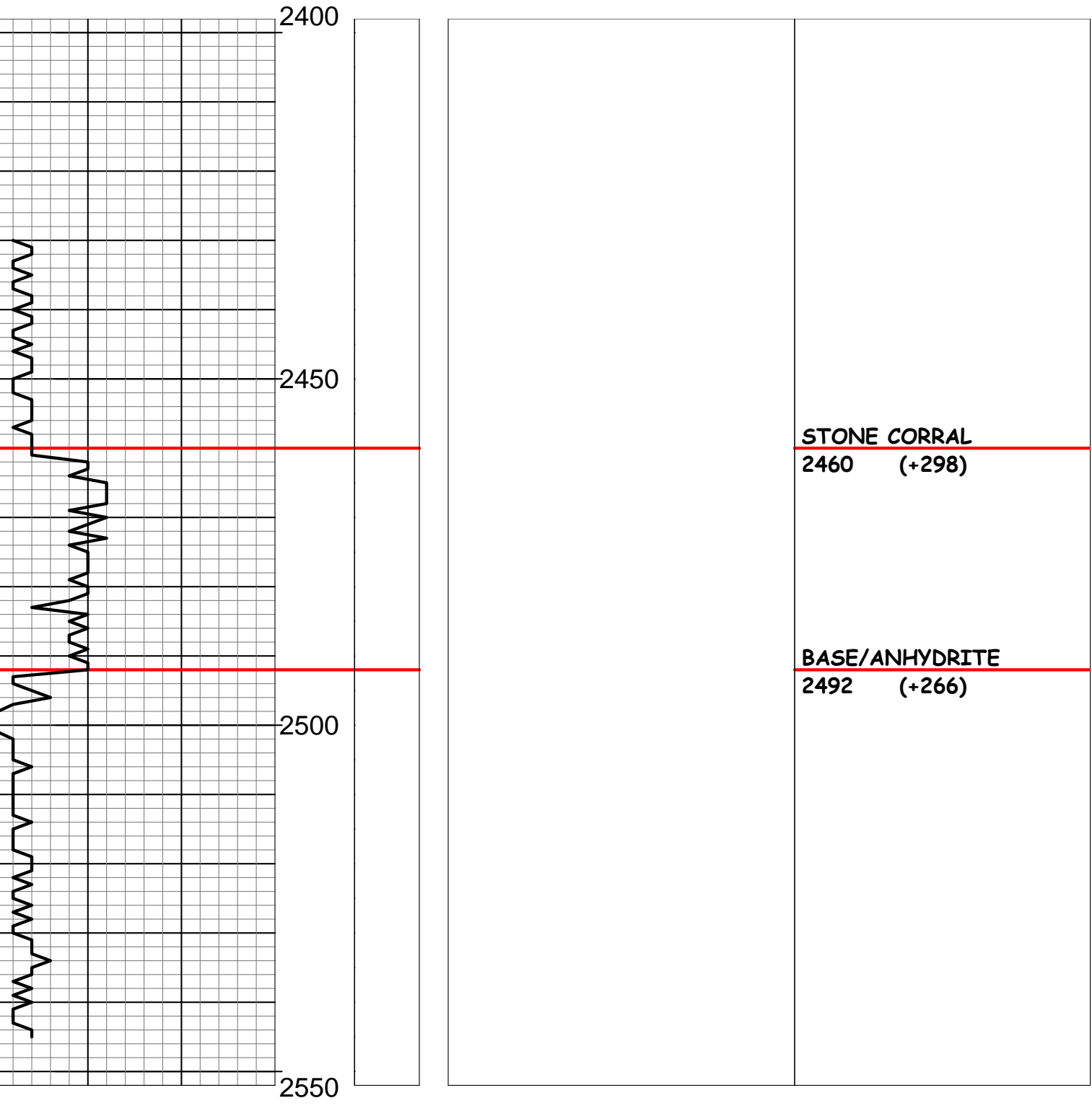
FORMATION NAME	LOG DATUM		SAMPLE TOP DATUM	
	TOP	DATUM	TOP	DATUM
Stone Corral	2458	+300	2460	+298
Base/Anhydrite	2488	+270	2492	+266
Neva	3124	-366	3128	-370
Foraker	3246	-488	3246	-488
Topoka	3508	-750	3511	-753
Heebner Shale	3670	-912	3670	-912
Lansing	3712	-954	3714	-956
Stark Shale	3888	-1130	3893	-1135
Base/Kansas City	3939	-1181	3941	-1183
Total Depth	4013	-1255	4015	-1257

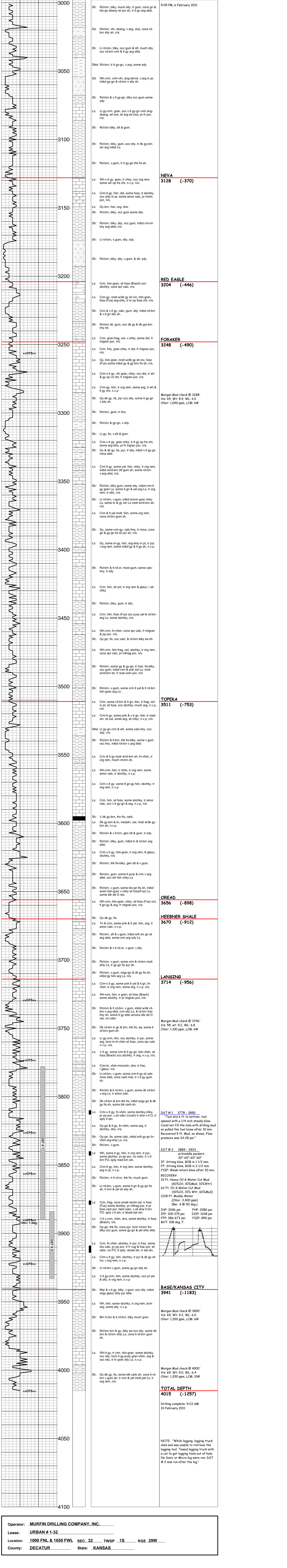


### REMARKS

API 15-039-21124-00-00  
 Drilling Fluids: Morgan Mud, Inc. (David Lines, engineer)  
 Drill Stem Testing: Trilobite Testing, Inc. (Chuck Kreutzer, tester)  
 Gas Trailer: No gas trailer  
 Reserve Pit Chlorides: 700 PPM

REMARKS	SAMPLE DESCRIPTIONS	SHOWS	LITHOLOGY	DEPTH	DRILL TIME (MIN/FT)
---------	---------------------	-------	-----------	-------	---------------------





5:05 PM, 6 February 2011

**NEVA**  
3128 (-370)

**RED EAGLE**  
3204 (-446)

**FORAKER**  
3248 (-490)

Morgan Mud check @ 3288'  
Vis: 65, Wt: 8.9, WL: 6.0  
Chlor: 1,000 ppm, LCM: 6#

**TOPEKA**  
3511 (-753)

**OREAD**  
3656 (-898)

**HEBNER SHALE**  
3670 (-912)

**LANSING**  
3714 (-956)

Morgan Mud check @ 3746'  
Vis: 58, wt: 9.2, WL: 6.8  
Chlor: 1,100 ppm, LCM: 6#

**DST # 1 3778 - 3890**

\*Tool slid 6 ft to bottom, tool opened with a 1/4 inch steady blow. Could not fill the hole with drilling mud so pulled the tool loose after 10 min. Recovered 5 ft. Mud, no shows, Flow pressure was 24-28 psi."

**DST # 2 3884 - 3933**

w/staddle packers  
30"-60"-60"-60"  
IF: Strong blow, BOB in 1 1/2 min.  
FF: Strong blow, BOB in 2 1/2 min.  
FSP: Weak return blow after 20 min.  
RECOVERY:  
10 Ft. Heavy Oil & Water Cut Mud (60%Oil, 30%Mud, 10%Wtr)  
62 Ft. Oil & Water Cut Mud (30%Oil, 10% Wtr, 60%Mud)  
1228 Ft. Muddy Water (Chlor: 3,400 ppm) (Rw: 4 @ 50 deg.)  
IHP: 2046 psi FHP: 2080 psi  
IFP: 109-375 psi ISIP: 1038 psi  
FFP: 386-673 psi F5IP: 890 psi  
BHT: 108 deg. F.

**BASE/KANSAS CITY**  
3941 (-1183)

Morgan Mud check @ 3890'  
Vis: 69, Wt: 9.2, WL: 6.0  
Chlor: 1,200 ppm, LCM: 6#

Morgan Mud check @ 4000'  
Vis: 69, Wt: 9.0, WL: 6.0  
Chlor: 1,200 ppm, LCM: 10#

**TOTAL DEPTH**  
4015 (-1257)

Drilling complete: 9:23 AM  
10 February 2011

NOTE: "While logging, logging truck died and was unable to retrieve the logging tool. Towed logging truck with a cat to get logging tools out of hole. No Sonic or Micro-log were run. DST # 2 was run after the log."

Operator: MURFIN DRILLING COMPANY, INC.  
 Lease: URBAN # 1-32  
 Location: 1000 FNL & 1650 FWL SEC. 32 TWSP 1S RGE 29W  
 County: DECATUR State: KANSAS