



GEOLOGISTS' REPORT

OPERATOR **MURFIN DRILLING COMPANY, INC.**
LEASE **ISON # 1-28**

ELEVATIONS
KB **2000 Ft.**

LOCATION **1500 FNL & 1440 FEL**

GL **1995 Ft.**

SEC. **28** TWPSP. **9S** RGE. **15W**
COUNTY **OSBORNE** STATE **KANSAS**

FIELD **WILDCAT**

ALL MEASUREMENTS FROM N.B.

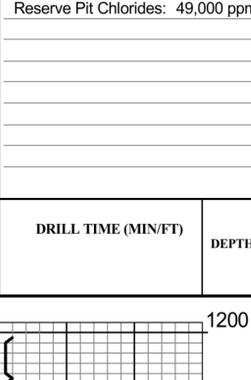
CONTRACTOR **Murfin Drilling Company** RIG NO. **8**
COMMENCED **12 AUG 2011** COMPLETED **20 AUG 2011**
MUD DISPLACED **2475** MUD TYPE **Chemical**
DRILLING TIME (KEPT FROM) **220** TO **3850**
SAMPLES SAVED FROM **2800** TO **3850**
SAMPLES EXAMINED FROM **2800** TO **3850**

CASING RECORD
Casing None
Surface **8.58' @ 217'**
Production None

GEOLOGICAL SUPERVISION FROM **2791** TO **3850**
GEOLOGIST ON WELL **Paul Guizelhan**

ELECTRICAL SURVEYS:
Log-Tech, Inc.
Comp. Neutron Density

FORMATION	LOG NAME	TOP DATUM	LOG NAME	TOP DATUM	SAMPLE	TOP DATUM
Stone Corral		1212	+788		1215	+785
Base/Anhydrite		1248	+752		1250	+750
Topeka		2834	-934		2832	-932
Heebner Shale		3166	-1166		3164	-1164
Lansing		3216	-1216		3215	-1215
Base/Kansas City		3480	-1480		3478	-1478
Viola		3674	-1674		3673	-1673
Simpson		3744	-1744		3738	-1738
Arbuckle		3792	-1792		3790	-1790
Total Depth		3852	-1852		3850	-1850



DEPTH	LITHOLOGY	STONES	SAMPLE DESCRIPTIONS	REMARKS
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REMARKS
API 15-141-20435-00-00
Drilling Fluids: Mud-Co/Service Mud, Inc. (Gary Schmidtberger, engineer)
Drill Stem Testing: Trilobite Testing, Inc. (Cody Bloedorn, tester)
Gas Trailer: Earth Tech OGL, Inc. (unmanned)
Reserve Pit Chlorides: 49.000 ppm.

STONE CORRAL
1215 (+785)

BASE/ANHYDRITE
1250 (+750)

HOWARD
2904 (-904)

TOPEKA
2932 (-932)

DST # 1 2957 - 2974
30°-30'-30"-30"
IF: Weak surface blow, died in 6 min.
FF: No blow
RECOVERY:
5 Ft. Mud, w/oil scum
IHP: 1451 psi. FHP: 1446 psi.
IFP: 14-15 psi. ISIP: 924 psi.
FFP: 17-18 psi. FSIP: 873 psi.
BHT: 96 deg. F.

HEEBNER SHALE
3164 (-1164)

TORONTO
3184 (-1184)

LANSING
3215 (-1215)

DST # 2 3196 - 3314
30°-60'-60"-90"
IF: Weak surface blow, died in 27 min.
FF: No blow
RECOVERY:
15 Ft. Mud
IHP: 1724 psi. FHP: 1649 psi.
IFP: 79-89 psi. ISIP: 924 psi.
FFP: 91-99 psi. FSIP: 733 psi.

STARK SHALE
3419 (-1419)

Mud-Co mud check @ 3517'
Vis: 69, Wt: 9.3, WL: 5.4
Chlor: 3,500 ppm, LCM: 2#

BASE/KANSAS CITY
3478 (-1478)

DST # 3 3370 - 3481
30°-60'-60"-90"
IF: Strong blow, BOB in 14 min.
FF: Good blow, BOB in 20 min.
RECOVERY:
279 Ft. Water Cut Mud
310 Ft. Muddy Water
(Chlor. 30,000 ppm)
IHP: 1800 psi. FHP: 1701 psi.
IFP: 82-216 psi. ISIP: 863 psi.
FFP: 218-342 psi. FSIP: 827 psi.
BHT: 104 deg. F.

VIOLA
3673 (-1673)

SIMPSON
3738 (-1738)

ARBUCKLE
3790 (-1790)

TOTAL DEPTH
3850 (-1850)

Operator: **MURFIN DRILLING COMPANY, INC.**
Lease: **ISON # 1-28**
Location: **1500 FNL & 1440 FEL SEC. 28 TWPSP. 9S RGE. 15W**
County: **OSBORNE** State: **KANSAS**