

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

GRAND MESA OPERATING CO.

WELL: G. ANDERSEN #2-26

**LOC.: NE-SE-SE-SW
356' FSL & 2585' FWL
SEC. 26-12-32W
LOGAN COUNTY, KANSAS
API: 15-109-20950-00-00**

**DRILLING CONTR.: MURFIN RIG #24
SPUD: 9-30-10 COMP: 10-10-10
MUD UP: 3500' TYPE MUD: CHEM.
DRILL TIME: 3600-RTD
RTD: 4664' LTD: 4660'
SAMPLES SAVED: 3800'-RTD
GEOLOGIST: ROBERT J. PETERSEN**

ELEVATION

**KB: 2995'
GL: 2990'
LOG MEASURED
FROM: KB**

SURFACE CASING

**23# 8 5/8" Set @ 220' KB.
Cem. w/165sx Comm.,
3% CC, 2% Gel.**

PRODUCTION CASING

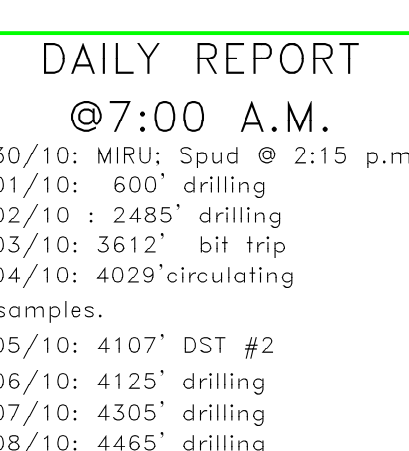
**5 1/2 15.50# casing set
@ 4653 w/175SX**

WELL LOG SURVEYS

DIL/CDL w/micro

FORMATION TOPS

Formation	Sample Top	Datum	Elev. Log	Datum	Pos.
Stone Corral	2511	484	2508	487	-6
Bs/Stone Corral	2534	481	2530	465	-4
Heebner	3979	-984	3973	-978	-4
Lansing	4018	-1023	4012	-1017	-4
Muncie Creek	4185	-1170	4180	-1165	-4
Stark	4247	-1252	4242	-1247	-3
Marmaton	4344	-1349	4341	-1346	-5
Little Osage	4479	-1484	4474	-1479	-6
Johnson	4577	-1582	4572	-1577	-5
Morrow	4597	-1602	4598	-1603	-6
Mississippian	4629	-1634	4631	-1636	-23



REFERENCE WELL:

**GRAND MESA
G. ANDERSEN #1-26
26-12-32W
480' FSL & 2010' FEL
EL. 2997KB**

REMARKS AND RECOMMENDATIONS

The operator has run production casing to further test this well for commercial production.

Respectfully submitted,

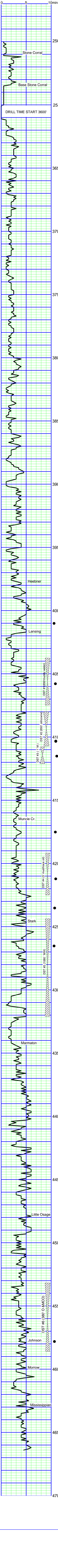
Robert J. Petersen

DAILY REPORT

@ 7:00 A.M.

09/30/10: MURU Spud @ 2:15 p.m.
10/01/10: 600' drilling
10/02/10 : 2485' drilling
10/03/10: 3612' bit trip
10/04/10: 4029' circulating for samples.
10/05/10: 4107' DST #2
10/06/10: 4125' drilling
10/07/10: 4305' drilling
10/08/10: 4465' drilling
10/09/10: 4585' DST #6
10/10/10: 4664' Laying down drill pipe.

DRILL TIME



**DST #1
4037-4075'
LANSING "C" FORMATION
30-45-45-60'**
1st open: Fair blow btm of bucket in 9 1/2 mins. No blow back.
2nd open: Fair blow btm of bucket in 13 mins. No blow back.
REC: Total Fluid 850';
60 MCO (50%AM, 50%W)
60 MW (20%M, 80%W)
370 W. tr. mud (5%M, 95%W)
180 MCO (40%AM, 60%W)
180 M. show wtr (35%M, 5%W)
IFP: 83-236#;
FFP: 241-421#;
ISIP: 1275-1270#;
Temp. 115 deg.

**DST #2
4080-4107'
LANSING "E" FORMATION
30-40-60-60'**
1st open: Good blow btm of bucket in 2 mins. No blow back.
2nd open: Good blow btm of bucket in 4 mins. Very weak surface blow.
REC: Total Fluid 1380';
120 WCGO (15%G, 55%O, 30%W)
240 GO. tr. wtr (5%G, 85%O, 10%W)
480 WCGO (15%G, 60%O, 35%W)
120 OCW (40%G, 60%W)
420 CW (100%W)
IFP: 124-304#;
FFP: 327-652#;
ISIP: 1225-1194#;
Temp. 124 deg.

**DST #3
4108-4121'
LANSING "F" FORMATION
30-30-10'-out:
1st open: Very weak surface blow died after 3 mins. No blow back.
2nd open: Very weak surface blow died after 2 mins.
REC: Total Fluid 1';
1' M (100%M)
IFP: 34-35#;
FFP: 37-36#;
ISIP: 101#;
Temp. 110 deg.**

**DST #4
4192-4225'
LANSING "I" FORMATION
30-30-20'-out:
1st open: Very weak surface blow died after 11 mins. No blow back.
2nd open: No blow.
REC: Total Fluid 5';
5' M. tr. oil (100%M)
IFP: 43-51#;
FFP: 54-57#;
FSIP: 324#;
Temp. 115 deg.**

**DST #5
4244-4321'
LANSING "K-L" FORMATIONS
30-45-45-60'**
1st open: Good blow btm of bucket in 7 mins. No blow back.
2nd open: Good blow btm of bucket in 7 mins. No blow.
REC: Total Fluid 1080';
1080 Muddy Water
IFP: 89-329#;
FFP: 338-585#;
ISIP: 1328-1314#;
Temp. 121 deg.

**JOHNSON ZONE
DST #6
4532-4586'
30-45-60-90'**
1st open: Good Blow Bottom of Bucket 5', Fair Blow Back
2nd open: Good Blow Bottom of Bucket 5', Fair Flow Back
REC: Total Fluid 380'
140' GIP
320 GO
60' MCO
IFP: 67-124#;
FFP: 136-209#;
SIP: 371-373#
BHT: 124 deg

SS; Gray/dark gray, mottled, calcareous, fine grained, subangular, well-cem + LS; Tan, fine crystalline + SH; Gray (3810)
SS; Gray, fine grained, subangular, friable (cleaner, less silty than above) + LS; Tan, fine crystalline, chalky (20)
LS; Cream, fine crystalline, oolitic, chalky (30)
SH; Dark gray, silty + LS; Cream/gray, fine crystalline, ool, dolomitic, fossil-in part, chalky (40)
LS; Cream, fine crystalline, ool, chalky w/good interool por, very chalky, dolomitic + LS; Gray (3850-3860)
Trace SH; Black (60)
LS; Cream/tan gray, fine crystalline to dense, ool, chalky, dolomitic (70)
SH; Black (80)
LS; Cream/brown, fine crystalline, chalky, mealy, trace stain (80)
SS; Gray, fine grained, subangular, friable (80)
SS; Brown, fine grained, subangular, friable + LS; Cream, chalky + SH; Gray (90)
SS; Brown, fine grained, subangular, friable, silty + SH; Brown + LS; Cream/tan gray, fine crystalline, chalky (00)
LS; Cream/tan gray, fine crystalline to dense, fossil, silty chalky (10)
LS; Cream/tan gray, fine crystalline to dense, fossil, silty + SH; Gray, blocky (20)
LS; Cream/tan gray, fine crystalline to dense, fossil, silty, trace black chert (30)
LS; Tan/tan gray, fine crystalline to dense, chalky, trace SH; Black (40)
LS; LS; Cream/tan gray, fine crystalline to dense, fossil, chalky, cherty (50)
LS; Gray, dense, fossil + LS; Cream, fine crystalline, chalky, cherty + SH; Gray (60)
LS; Cream/tan gray, fine crystalline to dense, fossil, chalky, cherty (70)
LS; Cream/tan gray/tan, fine crystalline to dense, fossil, chalky, cherty, trace ppt por, trace stain (90)
SH; Black (90)
LS; Cream/gray, fossil-mottled, fine crystalline to dense, chalky, trace ppt por, tr stain (00)
SS; Gray, silty, very fine grained, well-cem (00)
SH; Red, silty, sandy + SS; Gray, fine grained + LS; Cream/gray, fine crystalline to dense (10)
LS; Cream/white, fine crystalline to dense, fair to good intercrystalline and vug por, spot to full sat med brown sat on dry, sfo, no odor (20)
LS; Cream/tan gray, fine crystalline, ool, granular w/trace inter-gran por w/sso (29)
SH; Gray, sandy, hard (29) SH; Red/gray. Silty, sandy (29/20')
LS; Tan, fine crystalline, oolitic/oolitic w/good oom. , por, very chalky (white soft) (29/20')
LS; Tan/gray, fine crystalline, ool, chalky + SH; Gray (29/40')
LS; Cream/tan, fine crystalline, ool, chalky, silty (40)
LS; Cream/tan gray, fine crystalline to dense, ool, chalky, cherty (50)
LS; Tan/gray, dense, fossil, chalky, cherty (60)
SH; Red/gray (70)
LS; White, fine crystalline, ool w/fair intercrystalline por, odor, sfo, patchy stain to full sat on dry (70)
LS; Cream/tan, fine crystalline to dense, w/trace poor vug por., Ir stain (75)
LS; Cream, fine crystalline to dense, ool w/trace poor ppt por, trace stain, mostly dense, silty cherty (brown/translucent/blocky)(75/20') LS; Tan/cream, dense, silty fossil (75/40')
LS; Cream, fine crystalline, fossil, dol w/fair intercrystalline/vug por, sfo, ft odor, patchy stain (75/60')
LS; Cream, fine crystalline, fossil, dolomitic, chalky
SH; Dark gray (tr 4100/07)
LS; Cream/tan/tan gray, fine crystalline to dense, fossil, silty, w/fair to good vug por, deep saturation, good odor, gsfso (07) increase vug por+inter-ooloom por/interxin por
SH; Black (07/40') SH; Red (07/60')
LS; Cream/white, fine crystalline to dense, fair vug/ppt por, sfo, odor, Ir even brown stain on dry (16/20')
LS; Cream, fine crystalline to dense +cse granular fair intercrystalline/vug por, sfo, odor, light brown stain on dry (16/40' -21)
LS; Cream, coarse crystalline/dense, w/fair to good vug por + frac or, sfo, odor, even amber stain on dry (21/40-60')
SH; Black/gray/red (30)
LS; Cream/white, dense, oolitic/bolitic w/ fair to good oom por, tr stain, very chalky(white-soft), cherty(blocky-white-ool) (40)
LS; Cream, fine crystalline, dol, ool, chalky + tr SH; Gray (50)
LS; Cream/tan gray, fine crystalline, very chalky (soft) (60)
LS; Lt gray/cream, medium crystalline to dense, fossil, chalky (70)
SH; Black (80)
LS; Tan/gray, fine crystalline, fossil, fine crystalline to dense, dolomitic w/fair to good intercrystalline por, sfo, even stain, odor, med to dark brown full sat on dry(80) LS; Cream/tan, fine crystalline, fossil, chalky/mealy, chalky, trace stain (90)
SH; Gray, soft, gummy (90) SH; Gray/red (95)
LS; Cream/tan, fine crystalline, fossil, chalky, cherty, trace poor intercrystalline por, stain (95)
LS; Cream/tan gray, fine to med crystalline + dense, ool, chalky (95/20')
SH; Black, mushy (10)
SH; Brown, dense, silty (20)
SH; Gray, sandy (20)
LS; Lt gray, fine crystalline, ool/fossil, granular w/good inter-gran vug por., sfo, odor, Ir to medium brown patchy to full sat on dry (25)
LS; Tan, fine crystalline, fossil, sub-granular to granular, w/fair to good inter-crys por, sfo, odor, Ir brown even stain & ppt vug por in dry sample (25/20")
SH; Red, silty, sandy (25/40')
LS; Cream, med crystalline, ool w/tr oom por/fair intercrystalline por, Ir brown stain on dry, sfo, odor (40)
LS; Cream/tan gray, dense, ool, cherty, trace vug por, Ir gray stain on dry, sfo, odor (50)
SH; Black (60)
SH; Gray, sandy (63/20')
LS; Cream/tan gray, fine crystalline to dense, hard, oolitic/fossil, granular w/dense intergran por+vug por, sfo, odor, medium brown stain on dry, odor, increase hard/dens w/depth (63-20/40")
SH; Red/gray (63/40')
LS; Gray, fine crystalline, hard, fossil-granular, w/fair intergran por/moldic por, sfo, odor, patchy light stain on dry (70)
LS; Gray, fine crystalline, fossil, granular w/fair intergran/moldic por, sfo, odor, light to med brown stain on dry (80)
LS; Cream/gray, fine crystalline to dense, fossil, w/trace intercrystalline por, sso, odor (SH; Black (00)
LS; Cream/gray, dense, fossil, dolomitic, chalky, silty cherty+ mealy/trace stain, tr edge stain on dry (00)
LS; Chalky gray, fine crystalline, fossil, subgranular, dolomitic +LS; Brown, dense, + chalk (10)
LS; Cream, very dolomitic, very fine crystalline to dense (20) LS; Cream/tan gray, fine crystalline to dense, fossil, chalky + SH; Gray (21/20') LS; Tan, very fine crystalline, dolomitic +LS; Cream/gray, fine (21/40')
SH; Gray + SS; Gray, very fine grained, hard (21/60")
SH; Gray + SS; Lt gray, fine grained, calc (40)
SH; Maroon/gray + SS; Brown, fine grained, friable (50)
SH; Red/gray (60)
LS; Cream/tan gray, dense, chalky, silty (60/70)
SH; Red/gray (70/80)
LS; Cream/tan gray, fine crystalline to dense, silty chalky + SS; Gray, fine grained, well-cem, tr orange chert (80)
LS; Gray/cream, dense, cherty + SS; Gray, silty + SH; Gray(90)
LS; Gray, dense, argillaceous + SS; Gray, silty + LS; Cream, dense, chalky + SH; Gray (00)
SH; Gray + LS; Cream, fine crystalline to dense, fossil, chalky (10)
SH; Black (tr 10/flood 20)
SH; Green gray (20)
LS; Tan/tan gray, dense, silty, subchalky (20/30)
SH; Gray/red, silty, sandy (30)
LS; Lt gray, dense, silty chert + SH; Red/gray (40)
LS; Lt gray, dense, silty, silty dol (50)
LS; Black, dense, argillaceous (60)
SH; Gray (60)
SH; Gray, silty, sandy (60)
LS; Cream/gray/tan-brown, dense, subchalky, silty fossil + Chert; White, angular (70-80)
LS; Gray/cream, dense, silty, subchalky, cherty (90)
SH; Black (flood 90)
SH; Gray, silty + LS; Brown/cream, dense, fossil, brittle + Chert; White (00)
LS; Cream/gray, very fine crystalline, fossil, chalky, silty dolomitic(10/20")
SH; Black (flood 10/20")
LS; Cream/tan/gray, dense, fossil, granular in part, calcareous-pebbly + SS; Gray, fine grained, friable (20)
LS; Cream, fine crystalline to dense, chalky + LS; Gray/brown, dense (30)
LS; Cream/gray, fine crystalline to dense, chalky, cherty (40)
SH; Black (50)
LS; Cream/gray, fine crystalline to dense, chalky + SH; Gray/brown (50)
LS; Cream/tan/gray, dense, fossil, silty, dol, chalky, cherty + SH; Black(60)
LS; Cream/gray, fine crystalline to dense, fossil, silty, chalky, cherty, ppt por/poor intercrystalline por; trace edge stain, no odor, vss/sfo + SH; Black(70)
LS; Gray, dense, (87)
SH; Gray, silty (87)
LS; Brown, fine crystalline, fossil, cherty w/good fossiliferous por, sfo, odor, brown sat on dry(87) increase fossiliferous por, sfo, odor (87/20")
LS; Tan, fine crystalline, dolomitic, cherty+ SH; dark gray (86/60")
LS; Cream/tan gray, fine crystalline to dense, fossil, blocky + SH; Black/green (95/20-60")
LS; Cream/gray, dense, chalky, silty fossil+SH; Black (10)
LS; Cream, dense, silty, chalky + SH; Gray/olive/dark gray+tr SS; White, fine grained, calc (20)
SH; Black/olive + SH; Gray, sandy + SS; Gray, fine grained, silty + LS; Tan/cream, dense, chalky (25)
SS; Gray, fine to coarse, rounded, friable, calc-few loose cse grains + SH; Red/green/maroon + LS; Cream/tan gray, fine crystalline to dense, silty fossil (25/20") SH; Red, sandy, med-cse. poorly sorted (25/40") SH; Olive+LS; Cream/tan gray, dense, blocky (25/60")
SH; Gray/olive/red/black + Chert; White/cream/blocky/fossil/translucent to opaque, trace sfo cluster; Clear, coarse, friable + LS; Gray, dense (40)
LS; Gray/tan, dense, hard, silty chalky, trace angular chert (50)
LS; Gray/tan, dense, hard, silty cherty, trace glauconite stain +SH; Gray/green(60)
LS; Tan/tan gray, dense hard + LS; Cream, fine crystalline, chalky w/trace embedded sd (64)
LS; Lt Gray/cream, fine crystalline, fossil, w/sd grains (cse rounded) + trace SH; Gray (64/20")
LS; Cream/tan gray, fine crystalline, silty fossil, chalky, w/sd grains + sharp chert (64/40") +SH; Green, sandy (64/60")