



**Scale 1:240 (5"=100') Imperial  
Measured Depth Log**

**Well Name: Harting #1**  
**Location: 7-4S-22W**  
**License Number: API: 15-137-20732**  
**Spud Date: 05/26/15**  
**Surface Coordinates: 435' FSL, 1390' FWL**

**Region: Norton Co., KS**  
**Drilling Completed: 06/01/15**

**Bottom Hole  
Coordinates:**  
**Ground Elevation (ft): 2302**                      **K.B. Elevation (ft): 2307**  
**Logged Interval (ft): 2800**              **To: 3800**                      **Total Depth (ft): 3800**  
**Formation: Granite**  
**Type of Drilling Fluid: Chemical**

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

**OPERATOR**

**Company: White Explortation, Inc**  
**Address: 1635 N. Waterfront Pkwy, Ste. 100**  
**Wichita, KS 67206**

**GEOLOGIST**

**Name: Andrew White**  
**Company: White Explortation, Inc**  
**Address:**

**Remarks**

**Due to positive DST results, the decision was made to run production casing and perforate the Lansing 'J'**

**General Info**

**Drilling Contractor: WW Rig 8**  
**Logs: Open Hole Solutions/Nabors**  
**Compensated Density/Neutron, Dual, Micro, Sonic**  
**Drilling Mud: Mudco/Service Mud, Inc.**  
**Surveys: 304'-1/2, 3494'-1, 3630'-1, 3800'-1.25**

### Daily Status

05/26/15: Spud @ 5:45 P.M. Drill 12-1/4" Surface hole to 304' Ran 7 Joints 8-5/8" 23# Surface Casing, cemented w/ 225 sacks of Common cement, 3% CC, 2% gel

05/27/15: Waiting on Cement @ 7, Start drilling out @7:30 A.M

05/28/15: Drilling ahead @ 2435'

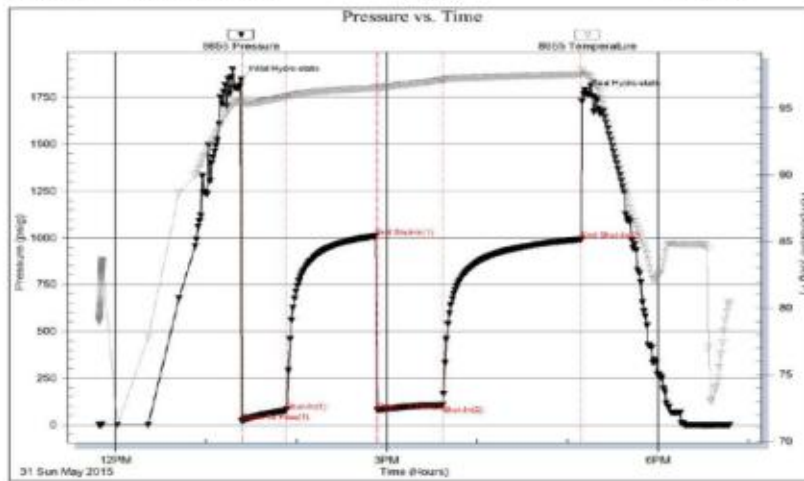
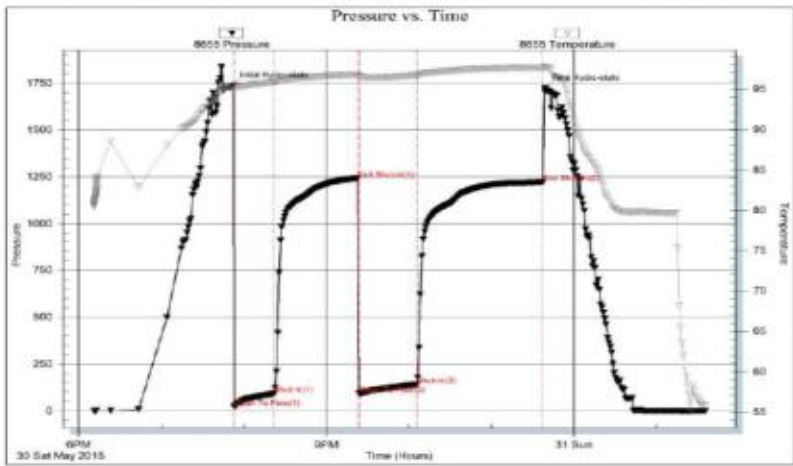
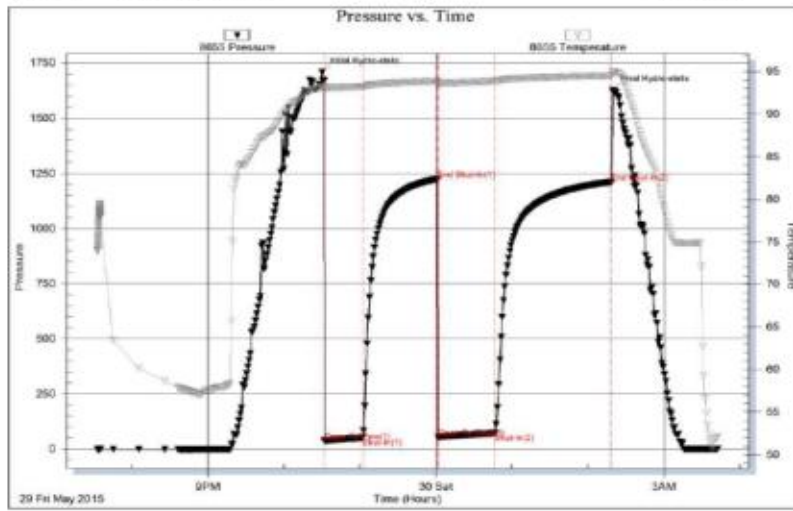
05/29/15: Drilling ahead @ 3365'

05/30/15: Drilling ahead @ 3520'

05/31/15: Drilling ahead @ 3682'


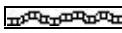
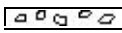

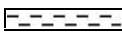

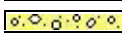
06/01/15: Logging well, Ran 5-1/2" guide Shoe and 91 Joints of new 5-1/2", 14#, S-55 Production Casing. mix and pump 12 bbls Super Flush and 140 Sacks of Allied Special Blend Class A Cement with 6# of CA-200, 5.5% CA-500, 2% gel, and 5# Kol-Seal/sack.






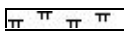

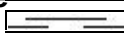
White Exploration, Inc.				Hummon		Great Plains		William and Keller	
Harting #1				Harting #1		Hill #1		Steffel #1	
Sec 7-4S-22W				Sec 8-4S-22S		Sec 20-4S-22W		Sec 7-4S-22W	
435' FSL, 1490' FWL				C-NE-NE-SW		375' FNL, 1070' FWL		4620' FSL, 660' FEL	
KB: 2307				KB: 2368		KB: 2296		KB: 2380	
Sample	Log	Datum		Relationship		Relationship		Relationship	
Anhydrite	1921	1926	381	+27		+11		+16	
B. Anhydrite	1951	1958	349	+22		+8		+14	
Heebner	3430	3430	-1123	+28		+15		+17	
Toronto	3457	3460	-1153	+20		+12		+19	
Lansing	3470	3476	-1169	+23		+13		+15	
BKC	3656	3660	-1353	+29		+19		+17	
Arbuckle	3720	3718	-1411	+41		NA		NA	
Reagan Sand	NA	0		NA		NA		NA	
Granite Wash	3745	3736	-1429	+64		+39		+37	


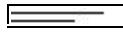






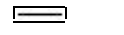







### ROCK TYPES

#### LITHOLOGY

-  Anhy
-  Bent
-  Brec
-  Cht
-  Clyst
-  Black shale
-  Congl





-  Dol
-  Gyp
-  Igne
-  Lmst
-  Meta
-  Mrlst
-  Salt
-  Shale

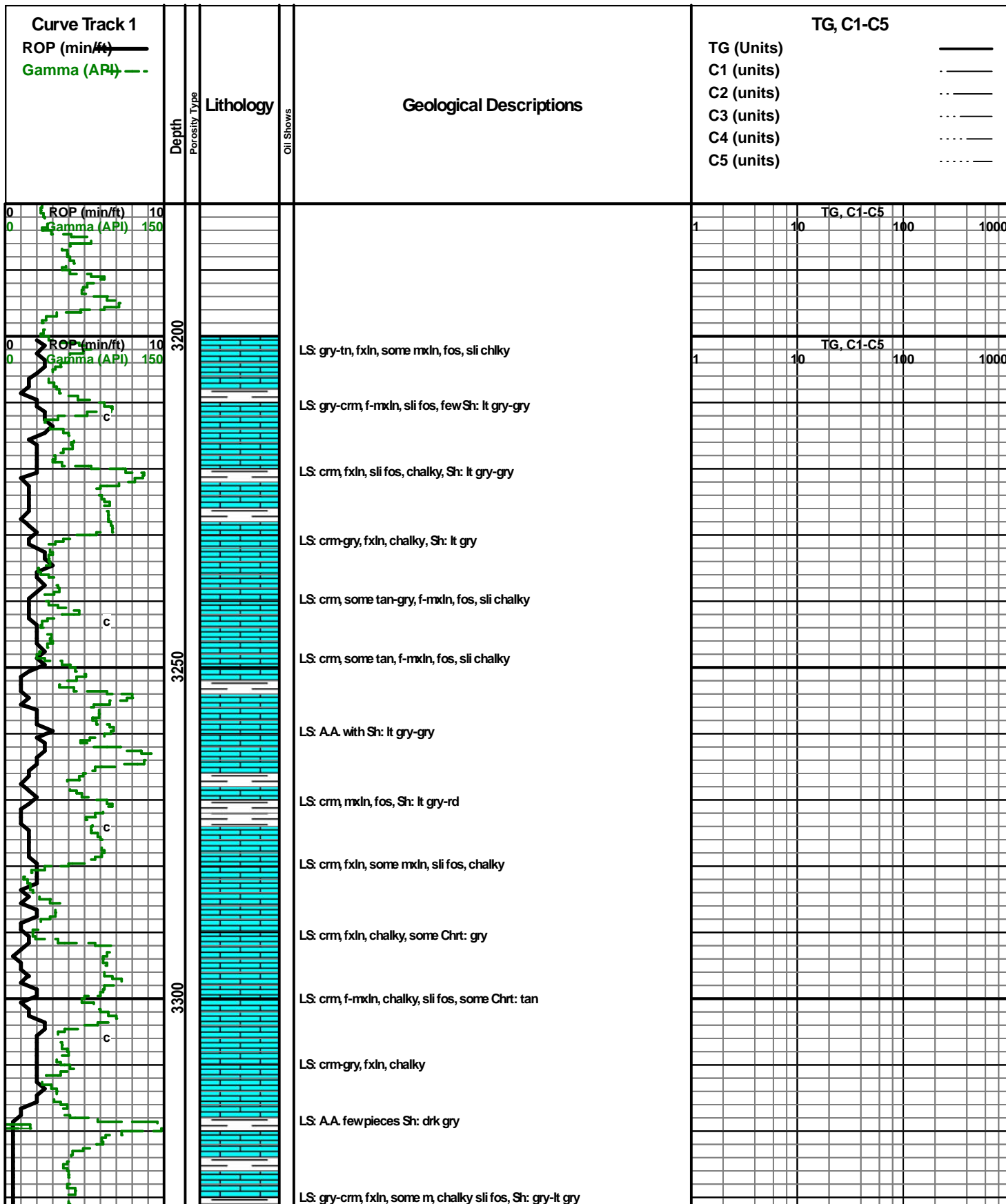
-  Shcol
  -  Shgy
  -  Slstst
  -  Ss
  -  Till
- STRINGER**
-  Anhy

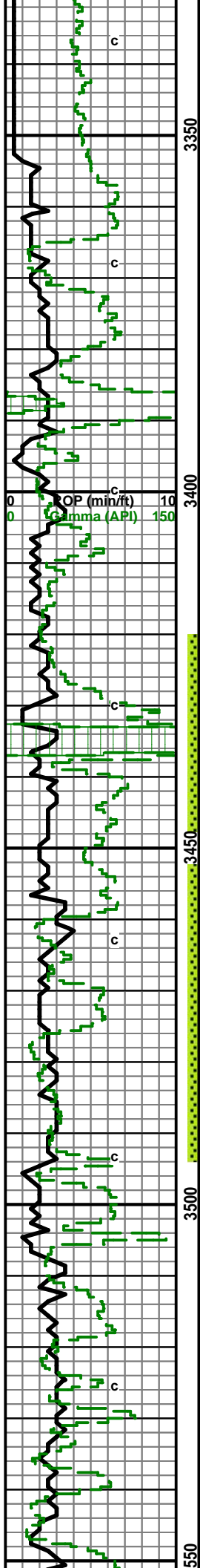
-  Arg
-  Bent
-  Coal
-  Dol
-  Gyp
-  Ls
-  Mrst
-  Slststrg

 Ssstrg

#### OIL SHOW

-  Even
-  Spotted
-  Ques
-  Dead





LS: AA. with Sh: lt gry-gry

LS: crm-gry, fxl, fos, sli chalky, some Sh: lt gry-brwn

LS: crm-gry, fxl, fos, sli chalky, Sh: brwn-rd, lt gry

LS: gry, some crm, fxl, few mxln, sli fos, chalky, some Sh: gry-brwn/rd, few drk gry/blk

LS: crm-gry, fxl, few mxln, sli fos, sli chalky, Sh: AA.

LS: crm-gry, f-mxln, fos, Sh: gry-drk gry

LS: crm, some gry, fxl, sli fos, sli chalky

LS: AA. with some Sh: gry-drk gry

LS: crm, mcr-fxl, sli chalky

Sh: blk

LS: crm-gry, f-mxln, sli fos, chalky, some Sh: lt gry-gry-red

LS: crm-tan, f-mxln, fos, sli dense,

LS: crm-tan, f-mxln, sli fos, some ool, vssfo, pr pp por, sli light stain on few pieces, no odor, no fluor, few friable pieces

LS: crm-tan, f-mxln, some ool, some fos, tight, no show

LS: crm, f-mxln, sli fos, light-drk stain, SFO, sli odor, sli fluor, fr pp por

LS: crm, f-mxln, sli fos, sli staining, sli SFO, no odor, sli fluor, pr-fr pp por,

Sh: rd-lt gry-gry, some pieces LS: crm-tan, mcrxln, dense no show

LS: crm-gry, fxl, some mxln, sli ool, pr pp por, some pieces drk stn, with vssfo, no odor, no fluor,

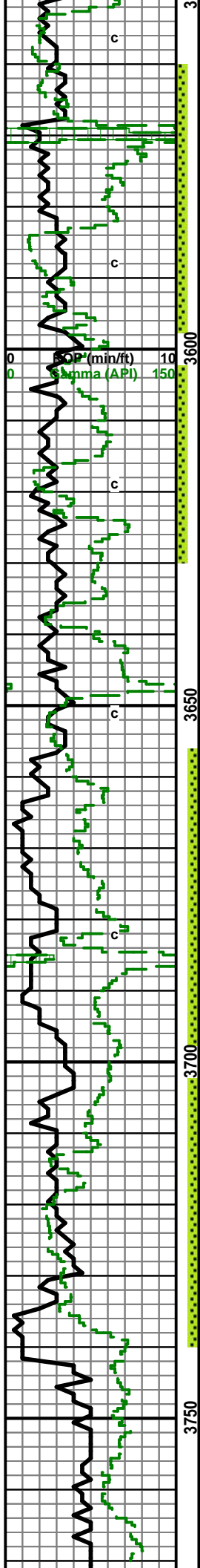
LS: crm-gry, fxl, sli ool, dense, Chert: gry, no show

LS: crm, mcr-fxl, dense, with Sh: red-gm-gry, some purple

LS: crm, some gry, mcr-fxl, dense

TG, C1-C5		1	10	100	1000
Mudco mdck Wt: 8.9 Vis: 60+ pH: 11.0 Fil: 5.8 LCM: 2#					
<b>Heebner: 3430 (-1123)</b>					
<b>Toronto: 3457 (-1150)</b>					
CFS 60 min					
<b>Lansing: 3470 (-1163)</b>					
DST #1 3420-3494 30-60-45-90 IF: Surface blow build to 1/2" FF: Surface Blow					
CFS 60 min Rec: 75' M IFP: 37-52 ISIP: 1225 FFP: 55-72 FSIP: 1211					
Tool Slide 4-5 Ft on first open					
CFS 60 min					
Mudco mdck Wt: 9.1 Vis: 50 pH: 11.0 Fil: 6.8 LCM: 2#					





LS: crm, fxln, dense, sli fos, few pieces of chert

LS: crm-gry, mxln, sli gran, dense, Sh: gry-bck

LS: crm-tan, f-mxln, some friable, SSFO, few pieces fr pp por, no odor, sli fluor, drk brwn stain on edges,

LS: crm-tan-gry, fxln, sli fos, no show, Chert: white

LS: A.A. with Sh: gry-rd

LS: crm f-mxln, SFO, dark edge stain, fr pp por, sli friable, sli dull yell fluor, dead oil stain, some gas bubbles,

LS: crm, f-mxln, sli dark edge stain, sli SFO, pr-fr pp por, Poor Sample

Sh: red-gry, some LS: crm-gry, fxln, dense,

LS: crm-gry, mcr-fxln, dense, NSFO

Sh: rd-gry, some gm

LS: crm-gry, fxln, dense

Sh: rd-gry-lt gry-gm

LS: crm-gry, f-mxln, dense, Sh: red-gry

Sh: red-gm-lt gry, LS: crm-tan, some gry, f-mxln, dense

LS: crm-gry, f-mxln, dense, Sh: red-gm few pieces of SS: wht-gry, gran-mgrn, dense, sub ang, pr sort, no show

Dolo: gry-white, f-mxln, scat por, spot dark stain, SFO

SS: clear-white, f-mgrn, sub ang, pr sort, dark stain, dull fluor, no odor, SF black tarry oil, Sh: red, with granite quartz, and some felds

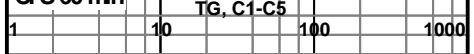
Granite, quartz, biotite,

CFS 60 min

DST #2 3560-3630  
 30-60-45-90  
 IF: BOB in 18min  
 ISI: No blow  
 FF: BOB in 14min  
 FSI: 1" in 16min, died in 77min  
 Rec: 495' GIP, 320' GMCO  
 10% G, 55% O, 35% M  
 IFP: 20-92 ISIP: 1240  
 FFP: 91-139 FSIP: 1221

CFS 60 min

TG, C1-C5



BKC: 3656 (-1349)

CFS 60 min

DST #3 3656-3740  
 30-60-45-90  
 IF: built to 1.5"  
 ISI: no blow  
 FF: built to 2.25"  
 FSI: no blow  
 Rec: 150' mud  
 IFP: 22-76 ISIP: 1009  
 FFP: 78-105 FSIP: 992

Arbuckle: 3720 (-1413)

Granite Wash: 3745 (-1438)

Mudco mdck  
 Wt: 9.3 Vis: 54  
 pH: 10.5 Fil: 6.4  
 LCM: 1#

