

# ***CARMEN SCHMITT, INC.***

Scale 1:240 (5"=100') Imperial

Well Name: Ney Unit #7  
Location: Sec. 32 - T15S - R12W, Russell County, KS  
Licence Number: API No.: 15-167-23821-0000  
Spud Date: August 23, 2012  
Surface Coordinates: 2518' FNL & 2300' FWL; 3-D Location

Region: Hall-Gurney  
Drilling Completed: August 29, 2012

## Bottom Hole Coordinates:

Ground Elevation (ft): 1854'                      K.B. Elevation (ft): 1859'  
Logged Interval (ft): 2600'              To: 3450'              Total Depth (ft): 3452' (LTD)  
Formation: Lansing, Precambrian Quartzite  
Type of Drilling Fluid: Chemical Gel/Polymer

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

Company: Carmen Schmitt, Inc.  
Address: P.O. Box 47  
Great Bend, KS 67530

## GEOLOGIST

Name: Derek W. Patterson  
Company: Valhalla Exploration, LLC  
Address: 133 N. Glendale  
Wichita, KS 67208

## REMARKS

After review of the open hole logs, sample evaluation, and DST results for the Ney Unit #7, it was decided upon by operator to run 5 1/2" production casing to further evaluate the multiple Lansing zones encountered while drilling said well. Should well prove to be non-commercial, it will be completed as a saltwater disposal well in the Precambrian Quartzite.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Derek W. Patterson

# CARMEN SCHMITT, INC.

## General Information

### Service Companies

Drilling Contractor: Mallard, J V - Rig #1  
Tool Pusher: Lavon Urban  
Daylight Driller: Mark Elsen  
Evening Driller: Justin McDonald  
Morning Driller: Frank Symank  
Relief: Kyle Stout

Gas Detector: None

Drilling Fluid: Mud-Co/Service Mud  
Engineer: Rick Hughes

Logging Company: Pioneer Energy Services  
Engineers: Daniel Martin/Chris Desaire  
Logs Ran: DI, CDNL, Micro

Testing Company: Trilobite Testing, Inc.  
Tester: Jim Svaty

### Deviation Survey

Depth	Survey
572'	1/2°
3072'	2°
RTD - 3450'	1 3/4°

### Pipe Strap

Depth	Pipe Strap
3072'	0.8' Short to Board

### Bit Record

Bit #	Size	Make	Type	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	Smith	RT	RT	0'	572'	572'	8.25
2	7 7/8"	Smith	F27	PX0863	572'	3450'	2878'	74

### Surface Casing

8.24.2012 Ran 14 joints of new 23 #/ft 8 5/8" casing, tallying 565', set @ 572' KB.  
Cemented with 250 sacks common (2% gel, 3% calcium chloride). Cement did circulate.  
Plug down @ 1045 hrs 8.24.12. By Quality Oil Well Cementing, Inc.

### Production Casing

8.30.2012 Ran 82 joints of new 14 #/ft 5 1/2" production casing, tallying 3529.33', laid 1 down, set @ 3437.43' KB.  
Cemented with 70 sacks SMD followed by 100 sacks. Cement did circulate.  
By Swift Services, Inc.

# CARMEN SCHMITT, INC.

## Daily Drilling Report

Date	7:00 AM Depth	Previous 24 Hours of Operations
8.27.2012	2900'	<p>Drilling and connections Topeka. Geologist Derek W. Patterson on location, 2230 hrs 8.26.12. Drilling and connections Topeka, King Hill, Queen Hill, and into Plattsmouth zone. CFS @ 2900' (Plattsmouth).</p> <p>Made 660' over past 24 hrs of operations.</p> <p>WOB: 30-32k RPM: 65 PP: 800 SPM: 60</p> <p>DMC: \$3,766.60 CMC: \$6,051.90</p>
8.28.2012	3112'	<p>Resume drilling and connections Plattsmouth, Heebner, Toronto, Douglas, Brown Lime, and into Lansing. CFS @ 3050' (LKC 'B'). Resume drilling and connections Lansing. CFS @ 3072' (LKC 'C'). Decision made to run DST to evaluate the Douglas Sand and upper Lansing zones. CTCH, short trip (20 stands). CTCH, drop survey, strap out for DST #1, 1840 hrs 8.27.12. TIH with tool. Conducting DST #1, test successful. TIH with bit, CTCH, resume drilling following DST #1, 0500 hrs 8.28.12. Drilling and connections Lansing.</p> <p>Made 212' over past 24 hrs of operations.</p> <p>WOB: 32k RPM: 65 PP: 800-900 SPM: 60</p> <p>DMC: \$924.75 CMC: \$6,976.65</p>
8.29.2012	3318'	<p>Drilling and connections Lansing. CFS @ 3136' (LKC 'G'). Resume drilling and connections Lansing. CFS @ 3219' (LKC 'J'). Decision made to run DST to evaluate Lansing 'G' - 'J' zones. CTCH, TOH for DST #2, 1420 hrs 8.28.12. TIH with tool. Conducting DST #2, test successful. TIH with bit, CTCH, resume drilling following DST #2, 2345 hrs 8.28.12. Drilling and connections lower Lansing, Base Kansas City, and into Basal Penn Conglomerate. CFS @ 3300' (BPCG). Resume drilling Basal Penn Conglomerate. CFS @ 3307' (BPCG). Resume drilling and connections Basal Penn Conglomerate. CFS @ 3318' (Conglomerate).</p> <p>Made 206' over past 24 hrs of operations.</p> <p>WOB: 32k RPM: 65 PP: 900 SPM: 60</p> <p>DMC: \$999.60 CMC: \$7,976.25</p>
8.30.2012	RTD - 3450' LTD - 3452'	<p>CFS @ 3318' (BPCG). Resume drilling Basal Penn Conglomerate. CFS @ 3328' (BPCG). Resume drilling Basal Penn Conglomerate and into Precambrian Quartzite. CFS @ 3340' (Precambrian). Resume drilling and connections Precambrian Quartzite ahead to RTD of 3450'. Production casing on location. RTD reached, 1800 hrs 8.29.12. CTCH, drop survey, TOH for open hole logging operations, 1945 hrs 8.29.12. Rig up loggers. Commence open hole logging operations, 2115 hrs 8.29.12. Open hole logging operations complete, 0045 hrs 8.30.12. Orders received to run 51/2" production casing for further evaluation of the Ney Unit #7. If well proves to be non-commercial, it will be completed as a saltwater disposal well in the Precambrian Quartzite.</p> <p>Geologist Derek W. Patterson off location, 0110 hrs 8.30.12.</p> <p>Made 132' over past 24 hrs of operations.</p> <p>WOB: 32k RPM: 65 PP: 900 SPM: 60</p> <p>DMC: \$304.15 CMC: \$8,280.40</p>

# CARMEN SCHMITT, INC.

## Well Comparison Sheet

Formation	Drilling Well				Comparison Well				Comparison Well			
	Carmen Schmitt, Inc. - Ney Unit #7 2518' FNL & 2300' FWL Sec. 32 - T15S - R12W				Rock Island - Hilgenberg #6 NW NE SW Sec. 32 - T15S - R12W				Rock Island - Hafeman #1 'OWWO' SE SW NW Sec. 32 - T15S - R12W			
	1859 KB				Oil - LKC 'G' & 'J' 1860 KB		Structural Relationship		Oil - LKC 'A', 'C', 'H' 1871 KB		Structural Relationship	
	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	798	1061	798	1061								
Topeka	2661	-802	2661	-802	2651	-791	-11	-11	2673	-802	0	0
King Hill	2786	-927	2786	-927	2773	-913	-14	-14	2799	-928	1	1
Queen Hill	2852	-993	2853	-994	2838	-978	-15	-16	2865	-994	1	0
Plattsmouth	2875	-1016	2874	-1015	2860	-1000	-16	-15	2887	-1016	0	1
Heebner	2938	-1079	2939	-1080	2926	-1066	-13	-14	2951	-1080	1	0
Toronto	2956	-1097	2956	-1097	2944	-1084	-13	-13	2969	-1098	1	1
Douglas	2970	-1111	2969	-1110	2957	-1097	-14	-13	2981	-1110	-1	0
Brown Lime	3022	-1163	3023	-1164	3010	-1150	-13	-14	3038	-1167	4	3
Lansing	3031	-1172	3034	-1175	3020	-1160	-12	-15	3047	-1176	4	1
LKC 'B'	3036	-1177	3039	-1180	3024	-1164	-13	-16	3054	-1183	6	3
LKC 'C'	3060	-1201	3064	-1205	3048	-1188	-13	-17	3077	-1206	5	1
LKC 'D'	3078	-1219	3083	-1224	3068	-1208	-11	-16	3094	-1223	4	-1
LKC 'F'	3100	-1241	3103	-1244	3088	-1228	-13	-16	3114	-1243	2	-1
LKC 'G'	3121	-1262	3119	-1260	3104	-1244	-18	-16	3135	-1264	2	4
Muncie Creek	3162	-1303	3162	-1303	3149	-1289	-14	-14	3178	-1307	4	4
LKC 'H'	3170	-1311	3168	-1309	3159	-1299	-12	-10	3184	-1313	2	4
LKC 'I'	3185	-1326	3186	-1327	3176	-1316	-10	-11	3205	-1334	8	7
LKC 'J'	3204	-1345	3204	-1345	3195	-1335	-10	-10	3226	-1355	10	10
Stark	3228	-1369	3227	-1368	3218	-1358	-11	-10	3244	-1373	4	5
LKC 'K'	3241	-1382	3242	-1383	3233	-1373	-9	-10	3258	-1387	5	4
Hushpuckney	3264	-1405	3264	-1405	3254	-1394	-11	-11	3282	-1411	6	6
LKC 'L'	3271	-1412	3270	-1411	3262	-1402	-10	-9	3291	-1420	8	9
Base Kansas City	3282	-1423	3282	-1423	3270	-1410	-13	-13	3298	-1427	4	4
Basal Penn Conglomerate	3293	-1434	3293	-1434	3276	-1416	-18	-18	3316	-1445	11	11
Arbuckle	Not Present				Not Present				Not Present			
Precambrian Quartzite	3335	-1476	3336	-1477	3281	-1421	-55	-56	3368	-1497	21	20
Total Depth	3450	-1591	3452	-1593	3289	-1429	-162	-164	3378	-1507	-84	-86

Precambrian tops are sample tops; no log coverage across zone.



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Carmen Schmitt Inc  
P.O. Box 47  
Great Bend KS 67530-0047  
ATTN: Derek Patterson

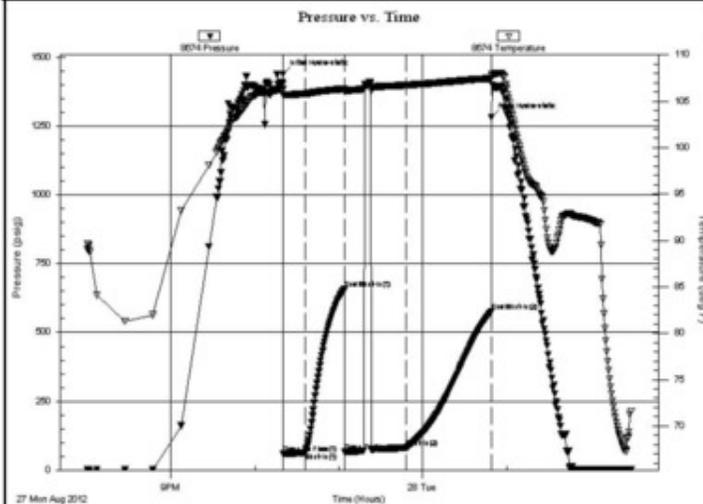
**32 15s 12w Russell**  
**Ney Unit # 7**  
Job Ticket: 47649 **DST#: 1**  
Test Start: 2012.08.27 @ 20:00:00

## GENERAL INFORMATION:

Formation: **Douglas Sand & LKC "**  
Deviated: No Whipstock: 1859.00 ft (KB) Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened: 22:20:20 Tester: Jim Svaty  
Time Test Ended: 02:30:00 Unit No: 58  
Interval: **2968.00 ft (KB) To 3072.00 ft (KB) (TVD)** Reference Elevations: 1859.00 ft (KB)  
Total Depth: 3072.00 ft (KB) (TVD) 1854.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

**Serial #: 8674 Outside**  
Press@RunDepth: 81.13 psig @ 2974.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2012.08.27 End Date: 2012.08.28 Last Calib.: 2012.08.28  
Start Time: 20:00:05 End Time: 02:29:20 Time On Btm: 2012.08.27 @ 22:20:00  
Time Off Btm: 2012.08.28 @ 00:49:20

**TEST COMMENT:** 15-IFP- Surface Blow Building to 3in  
30-ISIP- No Blow  
45-FFP- No Blow in 12min Flushed Surface Blow Died in 38min  
60-FSP- No Blow



## PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1440.14	106.24	Initial Hydro-static
1	59.60	105.63	Open To Flow (1)
16	62.89	105.81	Shut-In(1)
44	658.17	106.32	End Shut-In(1)
45	66.48	105.99	Open To Flow (2)
89	81.13	106.73	Shut-In(2)
150	577.56	107.47	End Shut-In(2)
150	1283.52	107.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
122.00	Oil Speck Mud	0.60

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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# DRILL STEM TEST REPORT

Carmen Schmitt Inc  
P.O. Box 47  
Great Bend KS 67530-0047  
ATTN: Derek Patterson

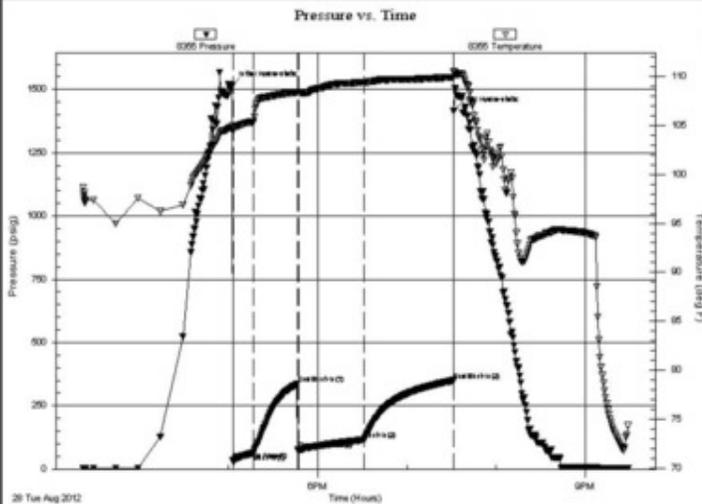
**32 15s 12w Russell**  
**Ney Unit # 7**  
Job Ticket: 47650      **DST#: 2**  
Test Start: 2012.08.28 @ 15:22:00

## GENERAL INFORMATION:

Formation: **LKC "G-J"**  
Deviated: No Whipstock: 1859.00 ft (KB)  
Time Tool Opened: 17:02:45  
Time Test Ended: 21:29:00  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jim Svaty  
Unit No: 58  
Interval: **3116.00 ft (KB) To 3219.00 ft (KB) (TVD)**  
Total Depth: 3219.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Reference Elevations: 1859.00 ft (KB)  
1854.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8355      Inside**  
Press@RunDepth: 116.46 psig @ 3121.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2012.08.28      End Date: 2012.08.28      Last Calib.: 2012.08.28  
Start Time: 15:22:05      End Time: 21:28:29      Time On Btm: 2012.08.28 @ 17:02:30  
Time Off Btm: 2012.08.28 @ 19:31:30

**TEST COMMENT:** 15-IFP- BOB in 11min  
30-ISIP- No Blow  
45-FFP- BOB in 5 1/2 min  
60-FSP- Weak Surface Blow Died in 5min



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1515.55	104.93	Initial Hydro-static
1	32.82	104.36	Open To Flow (1)
14	62.69	105.33	Shut-In(1)
44	335.68	108.37	End Shut-In(1)
45	75.19	108.33	Open To Flow (2)
89	116.46	109.39	Shut-In(2)
149	350.28	109.89	End Shut-In(2)
149	1417.17	110.50	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
205.00	OCM 12%o 88% m	1.01
0.00	464 GP	0.00

\* Recovery from multiple tests

## Gas Rates

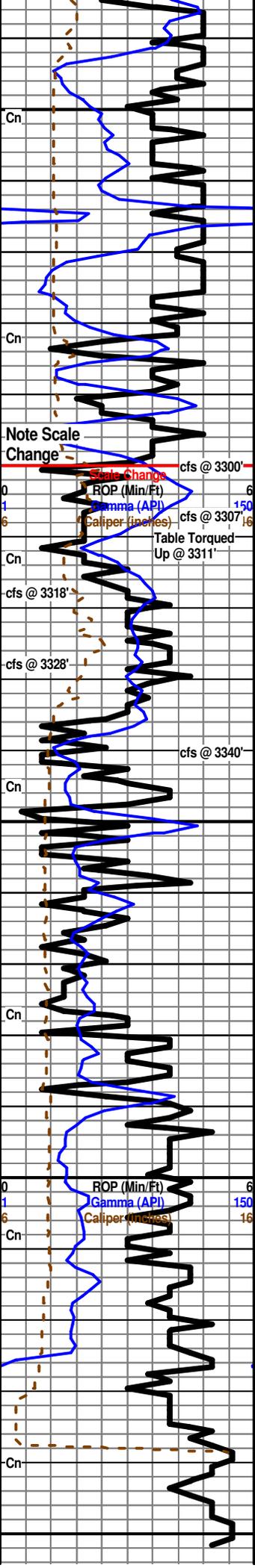
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)











Predominately Shale: gray dk gray lt green, mostly rounded and softer with some scattered blocky fissile material, silty in part.

Limestone: cream lt cream off white tan, dense tight matrix, microxln, sub-fossiliferous to barren, heavy amount of 2ndary xln along edges, poor visible porosity, no shows noted, no fluorescence, no odor.

Limestone: cream lt tan, dense tight matrix, microxln, sub-fossiliferous to barren, heavy amount of 2ndary xln along edges, poor visible porosity, no shows noted, no fluorescence, no odor.

**Hushpuckney 3264 (-1405)**

Shale: trace black, carbonaceous, blocky, hard and waxy, slight show bleeding gas bubbles upon break, with Shale: gray dk gray dk green, blocky to rounded, hard to softer and waxy, silty/pyritic in part.

Limestone: cream lt tan, dense tight matrix, microxln, sub-fossiliferous to barren, fair amount of 2ndary xln fill, poor visible porosity, no shows noted, no fluorescence, no odor.

**Base Kansas City 3282 (-1423)**

Shale: gray dk gray brick red dk green, blocky to rounded, most softer, silty/pyritic.

Limestone: tan brown, dense tight cherty matrix, micro-vfxln, barren, poor visible porosity, no shows noted, no fluorescence, no odor.

**Basal Penn Conglomerate 3293 (-1434)**

3300' cfs 20"/40" - INFLUX Conglomerate -- Shale: as above, with Limestone: tan lt cream, dense tight cherty matrix, micro-vfxln, barren, poor visible porosity, no shows noted, no fluorescence, and scattered Clay: red, round and soft, some sandy.

3307' cfs 20"/40" - Continued Conglomerate as above, with scattered Limestone: lt cream off white, dense, microxln, barren, small vugs, 2ndary xln along edges, fair porosity, slight stain in vugs, poor show heavy brown oil with fair increase upon break, even lt yellow fluorescence, fair bluish-white cut fluorescence, no odor.

3318' cfs 20"/40" - Conglomerate -- Mixed Shale, Chert, and Limestone, no shows noted, with scattered erosional Quartzite: pink lt pink red gray lt gray clear, dense and hard, fractured, fair-good amount of magnetite and shale/mica inclusions, poor visible porosity, no live shows noted, no fluorescence, no cut fluorescence, no odor, samples washes reddish-brown.

3328' cfs 20"/40"/60" - Conglomerate -- Mixed Shale, Chert, Limestone, and continued scattered erosional Quartzite, no shows noted, no odor, samples washes reddish-brown.

3340' cfs 20" - Conglomerate -- Mixed as above, no shows noted, no fluorescence.

**Precambrian Quartzite 3336 (-1477)**

3340' cfs 40"/60" - INFLUX - Quartz/Quartzite: loose clear grains, most large and uncemented, angular to sub-rounded, poorly sorted, fair-good intergranular porosity in cemented clusters, no shows noted, no fluorescence, no cut fluorescence, no odor.

INFLUX - Quartzite: clear/white lt pink lt gray lt red, dense and hard, heavily fractured, fair amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white lt pink lt gray lt red, dense and hard, heavily fractured, fair amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white lt pink lt gray lt red, dense and hard with some granular surface texture, heavily fractured, fair amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor, with scattered Schist: metallic lt red gray lt gray maroon, mostly hard, flakey.

Quartzite: predominately clear/white with some scattered lt pink, dense and hard with some granular surface texture, heavily fractured, heavy amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white, dense and hard with some granular surface texture, heavily fractured, heavy amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white, dense and hard, heavily fractured, heavy amount of magnetite and shale/mica inclusions, fair surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white, dense and hard, heavily fractured, heavy amount of magnetite and shale/mica inclusions, fair-poor surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Quartzite: clear/white, dense and hard, heavily fractured, heavy amount of magnetite and shale/mica inclusions, fair-poor surface porosity and scattered fracture porosity, no shows noted, no fluorescence, no odor.

Car 20  
Sol 5.5  
LCM: 1 #/bbl  
DMC: \$999.60  
CMC: \$7,976.25

Vis: 48  
Wt: 9.2  
LCM: 1 #/bbl

Mud-Co Mud Ck  
@ 3386'  
1255 hrs 8.29.12  
Vis 49 Wt 9.2  
PV 15 YP 12  
WL 9.2  
Cake 1/32  
pH 10.0  
CHL 5,000 ppm  
Cal 20  
Sol 6.1  
LCM: 1 #/bbl  
DMC: \$304.15  
CMC: \$8,280.40

Vis: 50  
Wt: 9.1  
LCM: 1 #/bbl

**LTD 3452 (-1593)**

**RTD 3450 (-1591)**

Orders Received to Run 5 1/2" Production Casing For Further Evaluation

Geologist Derek W. Patterson Off Location, 0115 hrs 8.30.12

**Respectfully Submitted,  
Derek W. Patterson**