



W. H. PATTISON

PETROLEUM GEOLOGIST  
1919 APPLEWOOD DRIVE  
DENVER 15, COLO.  
7-10-56

FINAL REPORT

Chandler-Musgrove Inc.  
No. 3 Durland-Phillips  
Elev. 4804 Gr. 4811 K.B.  
Comm. 6-28-56.  
Comp. 7-8-56.

Logan County Colorado  
Sec. 20-12N-55W  
550' S of N line &  
1970' E of W line of section.  
8 5/8" at 390'  
T.D. 6206'. D&A.  
No shows.

Samples on the above well were examined from 5100 feet to the total depth of 6206 feet and the following formations were encountered with their tops adjusted to Schlumberger correlations. All depths used are based on Schlumberger measurements;

Niobrara	5162'
Fort Hays	5500'
Carlile	5538'
Greenhorn	5739'
Brown Lime	5908'
'D' Sand	6011'
'J' Sand	6120'
Skull Creek	6198'
T.D.	6206'



Page 2. Chandler-Musgrove Inc.  
No. 3 Darland-Phillips

'D' Sand Section 6011-6036'

As this test was structurally low it was decided not to core the 'D' Sand section. Samples were saved each 5' while drilling. Drilling samples were not good through this section. A very small amount of white fine grained silty sandstone was noted in the samples but not enough to evaluate the section from drilling samples. The Schlumberger log indicated the section to be tight except for approximately 8' at the bottom (6027-6035'). This however had relatively low resistivity on the electric log. No drill stem tests were made.

'J' Sand Section 6120-6206'

Core #1 6097' to 6127' Corrected depth. This core was started higher than necessary because it was necessary to change bits at 6097'.

We had expected to core 50' but the head was damaged at ~~XXXXX~~ 6127'.

Core 6097'-6127' Recovered 30'.

6097-6118' 21' Dark gray shale.  
6118-6119' 1' Interbedded silty sand and shale.  
6119-6120' 1' Dark gray shale.  
6120-6123' 3' Argillaceous Xbedded sand. No por. No show.  
6123-6125' 2' Dark gray shale.  
6125-6127' 2' Gray sandy shale.

No show oil or gas in above core.

Five foot drilling samples through the remaining 'J' sand indicated very little sand. No staining or fluorescence was noted.



Page 3. Chandler-Musgrove Inc.  
No. 3 Durland-Phillips.

The Schlumberger log indicated the top bench of the 'J' section to be very poorly developed with little if any porous sand. The lower part of this section contained approximately 35' of porous sand. The resistivity curve indicated all the sands to be water bearing. No drill stem tests were made.

The sands that produce in the wells directly to the west were not developed in this well. There were no shows of oil or gas in this well. At this time I would not recommend additional drilling on this lease.

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Serious thought should be given to improving the quality of the drilling samples on this rig. Proper correlation of upper beds is difficult and intelligent evaluation of sand sections from drilling cuttings is impossible.



Page 4. Chandler-Musgrove Inc.  
No. 3 Durland-Phillips.

Bit Record.

1.	Hughes	7 7/8"	OSC 3 J	390-3154'
2.	"	"	"	3154-4332'
3.	"	"	"	4332-5149'
4.	"	"	"	5149-5722'
5.	"	"	"	5722-6015'
6.	"	"	WTR	6015-6103'
7.	"	6 3/4"	WTR	6103-6206' T.D.

Cored 6103-6133' drillers measurements with 6 5/8" diamond head.  
6097-6127' Schlumberger measurements.

Coring Time

24,16,23,24,31,28,22,30,26,30,23,27,36,25,36,22,29,19,32,19,  
19,19,17,8,6,10,13,19,15.

Core head damaged on last foot of core. Had to be salvaged.