

Newman & Harvest Queen Mills
 Plains Townsite #1
 Sec. 16-32S-30W
 Meade County, Kansas

TIME LOG

<u>From</u>	<u>To</u>	<u>Minutes</u>	<u>Remarks</u>
4300 -	4310	5-7-6-6-7-7-8-9-9-8	
	4320	9-7-6-8-7-6-5-4-5-4	
	4330	4-4-4-4-4-4-3-4-4-4	
	4340	4-3-4-4-4-4-3-4-5-5	
	4350	5-5-6-4-5-5-4-4-4-4	
	4360	4-5-4-5-6-5-4-4-4-4	
	4370	3-3-4-3-3-3-4-4-4-4	
	4380	4-2-4-4-4-4-5-5-5-8	
	4390	8-8-10-9-9-10-13-10-6-5	
4390 -	4400	4-3-2-3-3-4-3-3-5-5	
	4410	3-2-8-12-10-10-7-6-11-15	
	4420	16-15-14-5-4-4-6-4-5-3	
	4430	3-10-16-11-13-4-4-4-4-4	
	4440	7-7-4-6-5-6-12-11-10-10	
	4450	10-10-11-13-10-10-9-5-6-8	
	4460	12-16-6-6-6-5-4-5-5-5	Trip @ 4452
	4470	3-4-3-3-6-4-6-9-7-4	
	4480	6-5-6-5-5-6-6-6-3-4	
	4490	6-4-6-3-3-4-3-3-4-4	
4490 -	4500	7-3-4-5-8-7-6-4-5-4	
	4510	6-4-3-4-4-4-4-4-4-4	
	4520	6-6-6-8-7-7-7-7-7-3	
	4530	4-4-4-4-4-5-5-10-8-6	
	4540	7-5-6-6-6-8-5-9-6-5	
	4550	3-6-6-6-9-7-9-9-11-13	
	4560	13-6-7-7-7-10-11-13-16-11	
	4570	12-9-10-10-11-14-18-26-23-14	
	4580	9-8-8-5-3-5-4-5-2-4	Trip @ 4571 Circ @ 4577
	4590	3-8-10-10-10-15-12-5-13-12	
4590 -	4600	14-11-10-9-7-9-10-11-10-4	
	4610	8-4-6-10-6-5-3-4-6-5	
	4620	5-4-5-5-5-6-5-5-6-6	
	4630	6-6-6-7-7-7-7-7-7-5	
	4640	4-4-6-4-5-9-6-9-11-6	
	4650	4-5-8-11-11-5-9-8-8-8	
	4660	5-5-9-11-6-5-11-9-11-10	
	4670	10-8-8-10-11-11-11-10-9-12	
	4680	8-10-9-9-10-10-6-5-6-4	
	4690	7-8-9-12-10-13-15-12-9-8	
4690 -	4700	2-8-9-8-13-8-8-7-9-10	Trip @ 4694
	4710	8-7-12-3-10-8-4-5-8-10	
	4720	5-7-3-2-2-2-4-3-3-3	

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<u>From</u>	<u>To</u>	<u>Minutes</u>	<u>Remarks</u>
4720 -	4730	4-3-5-5-5-5-4-4-3-4	
	4740	5-4-4-4-3-5-4-5-3-4	
	4750	4-3-4-3-4-4-4-4-4-4	
	4760	6-9-12-11-10-9-12-14-13-8	
	4770	9-13-12-14-13-12-8-10-8-7	
	4780	7-9-6-5-5-4-4-9-14-16	
	4790	14-12-15-13-10-10-9-19-16-9	
4790 -	4800	5-5-10-14-2-2-4-8-11-2	
	4810	7-8-11-10-10-11-17-13-14-14	
	4820	10-14-10-13-12-11-11-15-11-5	
	4830	5-6-10-9-9-9-8-8-5-7	
	4840	5-8-15-9-13-8-8-12-8-14	
	4850	16-12-15-14-13-13-8-7-9-9	Trip @ 4846
	4860	8-9-8-8-7-7-8-8-8-8	
	4870	9-9-11-10-11-11-12-9-13-7	
	4880	12-7-9-8-7-8-5-8-10-16	
	4890	12-14-13-7-6-9-8-6-7-12	
4890 -	4900	7-6-7-8-13-14-18-18-18-16	
	4910	9-12-15-16-15-16-14-8-6-7	
	4920	5-6-11-8-8-8-10-12-14-9	
	4930	13-12-15-12-15-10-15-13-15-7	
	4940	9-10-10-11-13-15-16-16-16-15	
	4950	13-15-15-18-17-15-12-15-14-15	
	4960	13-15-14-7-6-6-7-6-6-7	Trip @ 4953
	4970	5-4-5-5-7-6-6-7-8-6	
	4980	6-7-7-7-8-7-7-5-5	
	4990	6-4-5-5-5-5-4-3-4-4	
4990 -	5000	3-6-5-7-7-8-7-7-6-6	
	5010	7-5-7-5-3-4-4-3-4-6	
	5020	5-6-10-10-6-9-5-8-9-9	
	5030	8-10-11-5-5-7-7-7-7-6	
	5040	6-6-10-7-14-9-4-6-12-12	
	5050	9-10-12-11-11-9-11-9-9-9	
	5060	13-11-13-15-13-8-13-5-16-14	
	5070	13-14-13-8-5-5-5-15-14-16	
	5080	13-12-15-17-13-10-11-18-18-18	
	5090	14-20-13-19-18-19-5-7	Trip @ 5088
5090 -	5100	5-5-5-6-5-7-6-5-6-7	
	5110	6-4-5-6-5-6-5-5-5-5	
	5120	5-5-5-5-4-5-5-5-4-4	
	5130	4-5-6-7-7-7-7-6-6-6	
	5140	6-5-7-6-7-7-6-4-5-5	
	5150	5-4-1-2-3-2-2-2-4-4	
	5160	7-7-11-17-9-8-7-7-8-8	
	5170	8-7-5-6-5-5-4-4-5-4	
	5180	3-4-3-3-5-5-6-9-7-7	
	5190	6-6-6-11-5-7-8-8-9-12	

<u>From</u>	<u>To</u>	<u>Minutes</u>	<u>Remarks</u>
5190 -	5200	11-9-10-11-8-12-11-10-11-10	
	5210	10-11-8-13-12-13-14-11-14-11	
	5220	10-15-11-11-13-10-15-15-16-9	
	5230	8-10-6-7-9-10-6-5-18-10	
	5240	18-18-7-7-9-10-11-10-9-9	Trip @ 5232
	5250	8-7-6-6-5-6-8-8-9-9	
	5260	9-9-9-9-9-10-9-11-13-12	
	5270	12-9-10-7-10-7-10-6-4-4	
	5280	5-6-6-7-15-13-7-8-12-10	
	5290	19-6-10-12-12-11-7-10-8-7	
5290 -	5300	7-10-10-9-10-11-11-7-8-7	
	5310	12-11-14-16-18-18-15-20-15-13	
	5320	7-6-9-9-14-4-4-19-12-9	
	5330	14-23-15-16-18-22-19-22-13-17	
	5340	17-17-6-6-9-11-11-12-18-18	Trip @ 5340
	5350	6-11-10-8-9-9-7-10-8-8	
	5360	8-8-7-9-8-7-7-7-7-7	
	5370	8-8-8-10-9-10-7-7-10-11	
	5380	10-9-14-16-17-16-12-17-13-8	
	5390	4-3-5-14-16-14-13-17-18-17	
5390 -	5400	16-15-18-12-14-13-16-12-18-14	
	5410	9-9-12-8-7-8-10-10-16-13	
	5420	16-14-14-17-17-14-15-17-15-17	
	5430	16-15-18-13-22-18-27-5-5-8	Trip @ 5427
	5440	6-8-7-7-5-6-6-4-4-3	
	5450	14-10-8-6-7-7-9-13-6-7	
	5460	7-8-9-10-9-9-4-6-6-9	
	5470	8-6-6-6-5-10-7-12-15-12	
	5480	6-8-10-8-8-10-9-8-10-12	
	5490	15-11-10-13-16-8-15-13-10-13	
5490 -	5500	10-12-13-14-12-16-20-15-15-17	
	5510	13-8-15-13-11-13-14-18-12-10	
	5520	16-12-16-18-16-13-17-13-10-11	
	5530	12-14-9-15-15-12-11-13-14-9	
	5540	12-12-13-9-10-8-9-8-6-9	
	5550	14-14-14-14-16-16-15-19-15-8	
	5560	7-6-4-9-19-8-7-8-22-16	
	5570	16-17-17-18-19-11-6-4-6-13	
	5580	19-18-22-11-14-20-15-14-12-18	
	5590	23-17-15-5-4-6-14-23-18-9	
5590 -	5600	17-23-11-17-10-6-5-8-21-19	
	5610	16-19-21-20-13-19-20-15-16-19	Circ @ 5610
	5620	20-14-13-9-15-10-7-7-6-6	Circ. @ 5615
	5630	6-6-7-7-9-2-8-14-12-6	
	5640	5-4-4-6-14-8-7-7-10-8	
	5650	3-2-5-2-2-2-2-2-1-1	

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<u>From</u>	<u>To</u>	<u>Minutes</u>	<u>Remarks</u>
5650 -	5660	3-2-5-6-11-10-4-6-2-9	Circ @ 5660
	5670	7-3-2-5-3-6-5-2-3-4	
	5680	6-6-7-7-9-2-8-14-12-6	
	5690	5-4-4-6-14-3-7-7-10-8	
5690 -	5700	1-3-4-	No time from 5694-5700
	5710	2-1-1-1-4-5-5-5-5-8	Circ @ 5705
	5720	8-6-6-5-5-4-4-4-7-5	Circ @ 5715
	5730	6-4-7-6-4-3-3-3-6-7	Circ @ 5730
	5740	4-5-7-8-6-6-7-6-7-7	
	5750	7-7-7-8-6-7-6-7-8-8	
	5760	7-5-6-7-6-7-7-10-9-8	
	5770	4-6-8-5-5-6-7-7-7-6	
	5780	7-5-7-6-6-6-6-6-6-7	
	5790	8-6-6-6-6-6-7-5-4-7	
5790 -	5800	8-9-8-9-10-9-8-9-9-11	
	5806	11-11-10-14-11-12	Circ @ 5806 T.D.

Diamond Core #1

5615-40

100% Recovery

5615-16 inc.	black shale
16-19 "	black hard dense ls. w/shale laminations
19-20 "	black shale w/streaks hard lime
20-24 "	black hard lime
24-26 "	black carbonaceous shale
26-27 "	" " " w/hard limey shale
27-30 "	hard black shaley dense lime
30-31 "	" " " " " w/black shale
31-32 "	6" black shale, bottom 6" coal
32-34 "	black shale
34-36 "	black dense microcrystalline limestone
36-37 "	" " " " " w/ thin shale laminations.
37-38 "	thin streaks black shale & hard lime
38-40 "	hard black dense crystalline limestone

Diamond Core #2

5640-59

100% Recovery

5640-41	black hard lime
41-43	brown limey shale
43-44	brown hard lime
44-46	green waxy limey shale
46-47	glauconitic tan crystalline shaley lime
47-48	green waxy limey shale
48-49	brown shaley lime
49-53	black shale
53-55	black carbonaceous shale
55-56	glauconitic & limey shaley sandstone
56-59	tan coarse xln glauconitic & fossiliferous lime

Morrow Shale

5644

Diamond Core #3

5660-85

100% Recovery

5660-62	tan medium xln slightly fossiliferous lime w/glauconite, poor porosity
62-63	sdv lime, odor, light saturation
63-64	sandy dolomite lime, light odor, fluorescence & saturation, poor porosity
64-65	medium grained limey sand w/odor, fluorescence & light saturation, poor porosity
65-66	glauconitic & limey sand, poor porosity some light odor & saturation
66-67	white fine to medium grained glauconitic slightly shaley sand, increase in visual porosity, spotted saturation & fluorescence

Diamond Core #3 Cont'd

67-68	white fine grained colorless glauconitic sand, fair porosity, saturation & odor
68-69	ditto
69-70	"
70-71	" increase in porosity, decrease in saturation
71-72	limey fossiliferous sand, decrease in stain, fair porosity
72-73	limey-fossiliferous conglomeratic sand. Poor porosity, possible light odor & scattered stain.
73-74	ditto, increase in porosity, light scattered saturation in vug porosity.
74-75	limey conglomeratic sand glauconitic poor porosity, poor scattered stain.
75-76	limey sand, very shaley
76-82	black carb. shaley very slightly silty
82-83	Conglomeratic lime, sand & shale nodules. Lime is glauconitic.
83-84	hard black shale
84-85	hard sandy & limey shale

Drill Stem Test #1

5660-85	open 4", gauge 4 MCF building rapidly, Recovered 160' mud 30 Min IBHP-1890#, 30 MFBHP-1890# IFP-1110#, FFP 1160#
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Diamond Core #4

5685-5705

100% Recovery

5685-85.5	black shale
85.5-86.5	fossiliferous & limey shale
86.5-91	black rotten shale
91-95	thin sand lentils laminated w/rotten black shale
95-02	rotten black shale
02-03	black hard fossil ls.
03-05	black rotten shale
5705-27	shale and sandy shale w/thin streaks of sand and lime, trace of saturation, light odor in sand. <u>Tested in D.S.T. #2.</u>

Chester

5723-30

cherty and glauconitic limestone, possible light trace of stain in lime. Tested in D.S.T. #2.

Drill Stem Test #2

5711-30

Packer failure, weak blow 4 minutes before packer failure. No BHP data and no recovery except mud. (Since the tool was open 4 Min. before failure and the blow was slight, it was the opinion of the tester and the undersigned that the interval was not capable of commercial production.)

Chester

5730-60

very fossiliferous tan limestone, some porosity, show of gas in wet samples from around fossils, light scattered stain. Test this interval when drilled in. See Remarks.

5760-78

abundant fossiliferous limestone, chalky, trace porosity, some light fluorescence, possible trace odor, light scattered stain in dry samples. Test this interval.

5678-92

shale

5692-5806 T.D.

hard dense tan slightly cherty limestone.

REMARKS

Structural Comparison:	Newman Plains Townsite #1	Thomas & Brewer Daty #1	Joe Champlin Collinwood #1
Heebner	4384 (-1621)	4381 (-1610)	4235 (-1469)
Lansing	4522 (-1759)	4520 (-1749)	4377 (-1611)
Marmaton	5114 (-2351)		5018 (-2252)
Cherokee Shale	5258 (-2495)		5184 (-2418)
Atoka Shale	5430 (-2667)		5362 (-2596)
Morrow Shale	5649 (-2886)	5656 (-2887)	5529 (-2763)
Morrow Sand	5667 (-2904)	5690 (-2921)	5542 (-2776)
Chester	5727 (-2964)	5696 (-2927)	5574 (-2808)
R.T.D.	5810 (-3047)	5753 (3042)	5758 (3012)

Panhandle Development
#1 Angell, 21-32-30

Heebner	4390 (-1619)
Lansing	4633 (-1862)
Marmaton	5164 (-2393)
Cherokee	5342 (-2571)
Morrow	5703 (-2932)
Chester	5750 (-2979)
R.T.D.	5835 (-3064)

The following intervals should be tested in completing the well.

<u>Chester</u>	<u>Calculated Porosity</u>	<u>Calculated % Water</u>
5763-72	9%	37-42%
5741-43	9%	37%
5736-38	14%	28%
5730-32	13%	18%

500 MAcid - 2000# - back to 1400# - \$ acid 4201
 2000 acid - 1400# - pumped out @ 1400# - 32' - fullup of
 rotary cutting - 5590s -
 4000 - acid - \$ back small show gas

Morrow Sand

5670-76

See Core Analysis

It is believed that the Chester intervals mentioned above are probable gas productive and offer an excellent chance to produce commercially. If the intervals are commercial a dual completion with the Morrow Sand is assured.

Approximately 800 barrels of mud and lost circulation material were lost in the hole when pipe was run. It is assumed to have been taken by a zone near the bottom of the hole. For this reason a satisfactory test of lower zone should be made and the zones given a chance to clean up to prevent missing possible commercial zones.

Excellent commercial gas is assured from core observations, analysis and will drill stem test results from the Morrow sand interval 5662-74.

Respectfully submitted,



Robert D. Gensch
Petroleum Geologist

DEPTH RECORD

<u>Date</u>	<u>Depth 7 A.M.</u>	<u>Footage</u>	<u>Remarks</u>
1-23-60	0		
1-24	1265	1265	
1-25	1590	325	
1-26	1590	-	W.O.C.
1-27	1600	10	Repairs
1-28	2160	560	
1-29	2500	340	
1-30	2743	243	
1-31	2940	197	
2-1	3124	184	
2-2	3360	236	
2-3	3653	293	
2-4	3867	214	
2-5	4013	146	Stuck
2-6	4013	-	"
2-7	4013	-	"
2-8	4021	8	"
2-9	4173	152	
2-10	4353	180	
2-11	4537	184	
2-12	4653	116	
2-13	4778	125	
2-14	4896	118	
2-15	5012	116	
2-16	5153	141	
2-17	5271	118	
2-18	5374	103	
2-19	5444	70	
2-20	5555	111	
2-21	5615	60	Coring
2-22	5659	44	"
2-23	5685	26	"
2-24	5694	9	" D.S.T.
2-25	5730	36	D.S.T.
2-26	5758	28	
2-27	5806	48	Electric Log