

A. W. Adams M-2  
Meade County, Kansas  
Section 33-34-30  
NE NE SW

New Location - Adams Ranch Area - Mississippian test. Net interest to Columbian 40.625%. Working interest Columbian 50% United 50%. Staked 10-28-57 W. W. Wentz, Meade County Surveyor. Elevation 2562.3 G.L. Contractor Gabbert-Jones, Wichita, Kansas.

- 10-29-57 Digging pits. Levelling location.
- 10-30-57 Rigging up.
- 10-31-57 Rigging up rotary. Will spud this A. M.
- 11- 1-57 Spudded at 4 P. M. 10-31-57. Drilling at 991'. Reaming.
- 11- 2-57 Drilling at 1400' in anhydrite.
- 11 -3-57 Elevation 2574 K. B. Sample top of Cimarron anhydrite 1308 (+1266). Running approximately 50' higher than in our A. W. Adams M-1 one mile to the Southeast. Temporary total depth 1425'. Ran 45 joints of 9-5/8" casing to 1425' and cemented with 900 sacks of posmix with 2% calcium chloride. Plug down at 8:30 P. M. 11-2-57. Cement circulated. Waiting on cement.
- 11- 4-57 Drilled plug at 4:30 A. M. Drilling at 1555'.
- 11- 5-57 Drilling at 2245 in red beds.
- 11- 6-57 Drilling at 2468' in lime.
- 11- 7-57 Drilling at 2800' in lime.
- 11- 8-57 Temporary total depth 2963'. Preparing to run DST. *2941-66*
- 11- 9-57 DST #1, <sup>*2941-66*</sup> Open 2 hours closed 1/2 hr. Fair blow throughout. Recovered 210' gas cut mud - 90' gas cut water. IFP 170# FFP 140#. B. H. P. 525#. Lost circulation at 3043'.
- 11-10-57 Drilling at 3290'. Stuck drill pipe at 1:30 A. M.
- 11-11-57 Drilling at 3540'. No shows.
- 11-12-57 Drilling at 3675 in Chalky lime.
- 11-13-57 Drilled to 4046' in white tite gray chalky lime tite to dark gray dense limestone. No shows. Started out of hole at 5:30 A. M. for new bit.
- 11-14-57 Drilled to 4401. Preparing to run DST #2 at 4371-4401.
- 11-15-57 DST #2 4371-4401. Open 2 hours. Weak steady blow throughout. Recovered 210' very slightly gas cut, slightly salty drilling mud. FP 70-140#. Shut in pressure 1 hour 1245#. Drilled to 4516. Preparing to run DST #3 at 4496-4516. Formation has fair flourescence and cut. Small show of gas.

- 11-16-57 DST #3 4496-4516. Open 1-1/2 hours. Fair blow throughout Recovered 180' gas. 180' heavy gas cut salty mud. 360' heavily oil gas cut salty mud. 180' oil and gas cut muddy salt water. 1530' salt water. Flow Pressures 285# - 1145#. Initial shut in pressure 20 minutes 1480#. Final shut in pressure 1420#. Top of Lansing 4480 (-1906). 18' high to Adams M-1 56' high to Fox. Drilling at 4645'.
- 11-17-57 Drilling at 4730' in lime and shale.
- 11-18-57 Temporary TD 4806. Preparing to run DST #4 to test 6' drilling break at 4790-4796.
- 11-19-57 DST #4 4780-4806 (Upper Kansas City) Open 90 minutes. Strong blow easing in 8 minutes. Gas gauged 84 MCF in 15 minutes. 42 MCF in 30 minutes, to small to measure in 45 minutes. Recovered 1650' - 30' highly gas cut mud - 810' very heavy oil gas and salt water cut mud (Estimated 25% oil - 5% salt water) Chloride 125,000 parts per minute - 480' oil (estimated 20% salt water) Gravity 42 deg. - 330' (In collars) Gas cut salt water, chlorides 135,000 parts per min. Flow Pressures 185-465#. Bottom hole pressure 30 minutes 1400#. Drilling at 4896' in lime.
- 11-20-57 Temporary TD 4992'. Preparing to run DST #5. Approximate interval 4968-4992'.
- 11-21-57 DST #5 4968-4992. Open 90 minutes. Weak blow throughout remainder of test. Recovered 360' slightly gas cut mud. 3060' salt water. Initial shut in pressure (20min.) 1700#. Flow pressure 1035-1715#. Final shut in pressure (30 min.) 1725#. Drilling at 5114'.
- 11-22-57 DST #6 5177-5196. Open 90 minutes. Strong blow. Gas to surface in 3 minutes.
- 10 min. gas gauged 377 MCF
  - 20 min. gas gauged 400 MCF
  - 30 min. gas gauged 400 MCF
  - 45 min. gas gauged 377 MCF
  - 60 min. gas gauged 358 MCF
  - 75 min. gas gauged 348 MCF
  - 90 min. gas gauged 348 MCF
- Recovered 50' gas cut drilling mud. No salt water. FP 130-100#. ISIP (30 min.) 1825#. FSIP (30 min.) 1485#  
No maximum. Drilling ahead.
- 11-23-57 DST #7 5220 - 5238. Open 90 minutes. Weak blow for 30 minutes and died. Recovered 30' drilling mud. No show. Flow pressures 0-0#. ISIP 30 min. 0#. Final shut in pressure 770#.
- 11-24-57 Drilling at 5238'.
- 11-25-57 Drilling at 5368' in lime and shale. Some cherp. Making approx. 1' in 8 min.
- 11-26-57 DST #8 5417-5432. Open 60 minutes. Weak blow for 10 minutes then died. Attempted to shut in tool. Would not close. Tool stuck. Fishing.
- 11-27-57 Backed off at 2641'. Washed over to 2946'. Running drill pipe to fish.

- 11-28-57 Backed off at 2940'. Washed over to 3450' and backed off. Preparing to wash over.
- 11-29-57 Washed over 3450' and backed off. Washed over 3756' and backed off. Preparing to wash over approx. 300'.
- 11-30-57 Washing over drill pipe at 4506'.
- 12- 1-57 Washed over drill pipe to 4833'. Coming out of hole to run free point.
- 12- 2-57 Washing over drill pipe to 5039'.
- 12- 3-57 Washed over to 5275'. Preparing to check free point.
- 12- 4-57 Washed over to 5358'.
- 12- 5-57 Recovered stuck drill pipe and test tool. DST #8 reported Nov. 26, 1957 is revised and completed as follows: DST #8 5417-5432 (Upper Cherokee) Open 3 hours 30 minutes - weak blow for 10 minutes then died. Attempted to shut in tool after 60 minutes to record final bottom hole pressure. Would not shut in. Recovery unknown. FP 0-0#. Initial BHSIP 30 min. 0#. Preparing to drill ahead.
- 12- 6-57 Drilled to 5527'. Making trip for bit.
- 12- 7-57 Drilling at 5687'.
- 12-8 -57 Drilled to 5752' Preparing to run core barrel.
- 12- 9-57 Core #1 5752-5766. Recovered 14'. 9' dark brown dark grey tite shaly limestone. 2' gray tite shaly siltstone. 3' gray rotten shale. Preparing to core ahead.
- 12-10-57 Core #2 5766-5776. Recovered 10' 9-1/2' gray to dark gray rotten shale. 1/2' dark brown tite shaly limestone. Coring at 5781'.
- 12-11-57 Core #3 5776-5810 Recovered 34' interbedded tite crinoidal limestone and dark gray shale. No shows. Preparing to ream core hole.
- 12-12-57 Lost circulation at 5861'. Recovered returns. Drilling at 5909'. Drilling approx. 1 foot every 6 to 8 minutes. Reached 5935' at 9:20 A.M. Will be at 5950' at 10:00 A.M.
- 12-13-57 Drillers TD 5980'. Ran Schlumberger Elec. logs. (TD 5977') Preparing to DST.
- 12-14-57 DST #9 5810-5977 Open 2 hours. Good blow decreased to fair Recovered 122' drilling mud no shows. ISIP 30 min. 280#. FSIP 30 minutes 240#. Flow Pressures 0-0#.
- 12-15-57 Ran 161 joints of 5-1/2" to 5250'. Cemented with 285 sacks common cement. Plug down at 3:00 P.M. 12-15-57. WOC.
- 12-16-57 Waiting on cement.
- 12-17-57 Waiting on cement.
- 12-18-57 Moved in Cable Tool. Rigging up.

- 12-19-57      Ran Temperature Survey 12-17-57. Top of cement at 4360'.  
Instrument reached 5215'. Swabbed hole. Hole is dry.  
Running R. A. log.
- 12-20-57      Ran R. A. Log. PBT 5209'. Perforated with 24 jets from  
5176 - 5182. No shows. Preparing to treat with 500 gallons  
mud. Cleanout agent.
- 12-21-57      Released Cable Tool.

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Completion on Columbian Fuel Corporation A. W. Adams M-2

Date 1-2-58

Sec. 33, T 34S, R 30W

*NENE SW*

This well was perforated from 5176' to 5182' with 24 jet shots (4 shots per ft.) December 19, 1957; there was a very small show of gas after perforating with no fluids.

At 8:00 A. M. on the 20th of December the well was treated with 500 gallons of MCA and flushed with 5160 gallons water; maximum pumping pressure was 400#; minimum pressure 200#, the well then went on vacuum. The treatment was completed at 9:00 A. M.

Swabbing was commenced after acid had been in well approx. 2 hours. The swab was pulled 5 times before gas started passing. After approx. 30 minutes blowing, gas was gauged with mercury manometer and showed to be passing 11,400 MCFPD through 5-1/2". Well was making quite a bit of mist; pH check showed 2.0.

Well was then shut-in after 45 minutes and a 2" x 1/4" positive choke was installed; for 3 hours well gauged an average 2,000 MCFPD with a back pressure of 1475#. Well was shut-in at 3:30 P. M. to install Critical Flow Prover, after 30 minutes shut-in pressure was taken with dead wt. and a pressure of 1534# was recorded.

At 4:00 P. M. well was allowed to flow through 1/4" plate on Critical Flow Prover until 9:00 P. M. at which time plate was changed to 3/16".

12-21-57

<u>Time</u>	<u>Length of time flowed</u>	<u>Well head pressure (Gauge)</u>	<u>Gas MCFPD</u>
8:45 A. M.	16-3/4 hrs.	1444#	1,084
1:00 P. M.	21 hrs.	1433#	1,075
2:00 P. M.	22 hrs.	1430#	1,073
3:00 P. M.	23 hrs.	1428#	1,067
4:00 P. M.	24 hrs.	1426#	1,052

Using an estimated shut-in pressure of 1560# and the above mentioned data calculated on an .85 slope, the well showed to have a deliverability of 2,410 MCFPD and an A. O. F. of 5,779 MCF.

The following shut-in pressures were recorded to determine build up.

<u>Date</u>	<u>Shut In Time</u>	<u>W. H. S. I. P.</u> <u>P. S. I. G.</u>	<u>B. H. S. I. P.</u> <u>P. S. I. G.</u>
10:00 A. M., 12-23-57	42 hrs.	1520#	
9:00 A. M., 12-24-57	64 hrs.	1528#	
10:00 A. M., 12-26-57	114 hrs.	1541#	
10:00 A. M., 1- 2-58	168 hrs.	1545#	
	12 days		1834

As a means of comparison the 30 minute initial B. H. S. I. P. on DST for this zone was 1831#.

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