The McAlester Fuel Company - Alfred Larson #1 located in C NW SE of
Section 22, T. 163N., R. 90W. Elevation 1940 G.L., 1952 K.B.

The McAlester Fuel Company - Alfred Larson #1 was spudded July 25, 1958
and 8 5/8" casing was set at 530 feet with 270 sacks of cement. The well was
drilled to a total depth of 5675 feet and completed as a producer on August
22, 1958. 5 1/2" casing was set at 5674 with 250 sacks of cement. The casing
was perforated between 5600 feet - 5610 feet, acidized with 4,250 gallons and
had an initial production flow of 91 barrels of oil per day through a 14/64"
choke. The oil was 38 gravity. (Corrected to 60° API).

NOTE: As of December 1, 1958, McAlester Fuel Company resigned as operators of
this well and Signal Drilling and Exploration, Inc. - Wilhite-Northern
Brokerage took over the operations.

LOGS:
Schlumberger Induction Electric 503'-5669'
Schlumberger Microlog 4850'-5674'
Wireline Inc. Radioactivity 5300'-5631'

CORES:
5573'-5588' recovered 15 feet
5588'-5612' recovered 24 feet
5638'-5652' recovered 14 feet

TESTS:
DST #1 - 5570'-5588', open 3 hours, shut-in 1 hour, good blow, recovered
3500 feet gas, 204 feet heavily gas cut and slightly oil cut mud. Initial
shut-in pressure 495#. Final shut-in pressure 927#. Initial flow pressure 75#.
Final flow pressure 102#. Initial hydrostatic pressure 3175#. Final
hydrostatic pressure 3080#.

DST #2 - 5595-5612. Tool open 126 minutes shut-in 1 hour. Gas to surface
in 19 minutes. Recovered 140 feet of clean green oil, 244 feet of heavily oil
and gas cut mud. Initial shut-in pressure 2684#. Final shut-in pressure 2632#.
Initial flow pressure 41#. Final flow pressure 114#. Initial hydrostatic
pressure 3337#. Final hydrostatic pressure 3187#.

PERFORATIONS:
5600'-5610' with 4 shots per foot. Acidified with 4,250-gallons of acid.

Formation tops were determined from samples and the induction-electric
log. Doubtful or obscure formation tops were not picked. Colors and
identifying numbers are taken from the Rock-color chart distributed by the
Geological Society of America.
FORMATION TOPS

Cretaceous System
- Pierre formation 1129
- Niobrara formation 2857
- Greenhorn formation 3183
- Mowry formation 3548
- Fall River formation 3740

Jurassic System
- Rierdon formation 4390
- Piper formation 4530
- Piper "lime" 4690

Triassic System
- Spearfish formation 4939

Mississippian System
- Charles formation 5230
- Midale marker 5576
- Nesson marker 5600

0-270 Samples missing.
270-310 Shale, very light gray, spongy. Some compact.
310-330 Lignite.
330-350 Shale, very light gray, spongy-compact. Some sand grains.
350-370 Shale, as above. Interbedded lignite.
370-410 Shale, very light gray, lumpy-spongy, calcareous.
410-430 Glacial gravels, shale, light gray, spongy.
430-450 Shale, light gray, spongy, some gravel.
450-480 Shale, light gray, sandy, calcareous.
480-490 Shale, light gray. Sandy, slightly calcareous, lumpy. Loose sand grains.
490-510 Shale as above.
510-540 Shale, medium light gray, slightly calcareous, lumpy.
540-600 Shale, as above. Some lignite.
600-720 Shale and lignite as above. Some limestone, pinkish gray fine grained.
720-930 Shale, medium light gray lumpy.
930-960 Shale, as above. Shale, medium dark gray, lumpy.
960-1170 Shale, medium light gray, lumpy.
1170-1200 Shale, medium gray, medium light gray, lumpy-compact.
1200-1490 Shale, medium gray, medium light gray, lumpy.
1490-2100 Shale, medium gray, medium light gray, spongy, lumpy. Some scattered bentonite.
2100-2480 Shale as above, small amounts of limestone, brownish gray, very fine grained.
2480-2860 Shale, medium gray, medium light gray, spongy-lumpy. Some bentonite.
2860-2920 Shale as above. Some shale, medium dark gray, “white specks.”
2920-3040 Shale, medium gray, spongy-compact. Some shale white lumpy calcareous.
3040-3200 Shale, dark gray, medium light gray compact. Some Inoceramus prisms and pyrite.
3200-3210 Shale, dark gray, compact, some “white specks.”
3210-3220 Shale, medium gray, compact abundant “white specks.” Shale as above.
3220-3240 Shale, dark gray, compact, carboniferous.
3240-3250 Shale, as above. Some shale, medium light gray, spongy. Inoceramus fragments.
3250-3300 Shale, medium dark gray, medium light gray, compact, “white specks”. Some limestone, medium gray-yellowish gray.
3300-3310 Shale as above. Inoceramus prisms.
3310-3430 Shale, dark gray-medium light gray, compact-fissile.
3430-3440 Shale, grayish black-medium light gray, compact-fissile.
3440-3740 Shale, dark gray-medium light gray, compact-fissile.
3740-3800 Shale, medium light gray, compact. Some sandstone, fine-medium grained well cemented.
3800-4100 Shale, as above. Small amounts of sandstone, as above, and some siltstone brownish gray (5YR4/1).
4100-4230 Shale, medium dark gray-medium light gray fissile, lumpy. Some quartz grains, medium-coarse grained, angular, clear. Some sandstone, very light, gray, very fine grained, calcareous.
4230-4300 Shale and sand as above, some limestone, white, sandy.
4300-4330 Shale and sand, as above.
4330-4390 Shale, medium dark gray-medium light gray, lumpy-fissile, pyrite, poor samples.
4390-4440 Shale, as above, some shale, greenish gray (5GY6/1), splintery.
4440-4480 Limestone, medium grained, very fine grained, dense, argillaceous, shale as above.
4480-4530 Shale, as above.
4530-4550 Sandstone, white, fine grained, slightly calcareous. Shale, as above and some shale, moderate reddish brown (10R4/6) splintery.
4550-4590 Shale, dark gray-medium light gray, fissile-compact.
4590-4620 Shale, as above. Some shale moderate reddish brown, splintery. Small amount of limestone, brownish gray-white medium grained.
4620-4700 Shale, variegated. Minor amounts of sandstone, white, fine grained.
4700-4720 Limestone, yellowish gray (5Y8/1) pinkish gray, fine grained, shale as above.
4720-4740 Samples missing.
4740-4800 Limestone and shale, medium gray compact.
4800-4850 Limestone and shale, as above. Some limestone, brownish gray, fine grained, dense.
4850-4870 Shale, variegated, splintery.
4870-4910 Shale, medium dark gray, medium light gray, compact-fissile. Some shale as above.
4910-4950 Shale, as above. Some anhydrite and gypsum, white.
4950-5000 Shale, variegated, splintery.
5000-5040 Sandstone, pale reddish brown, fine grained, shale as above.
5040-5130 Sandstone as above. Shale, grayish black medium gray, compact-fissile.
5130-5230 Shale and sandstone, as above.
5230-5250 Limestone, light red (5R6/6) - white, medium grained, shale dark gray-medium gray, splintery, some gypsum.
5250-5265 Limestone, light red, fine grained, limestone and shale, as above.
5265-5270 Limestone, moderate pink (5R7/4), fine grained, dense. Shale, as above.
5270-5280 Limestone, white, sublithographic, limestone and shale, as above.
5280-5330 Limestone, yellowish gray (5Y8/1) fine grained. Limestone and shale, as above.
5330-5340 Shale, dark gray-greenish gray, splintery. Small amount of limestone, as above. Some shale, moderate brown, splintery.
5340-5360 Shale and limestone, as above. Some gypsum, white.
5360-5385 Anhydrite, very light gray, dense. Shale, as above.
5385-5390 Anhydrite, as above, limestone, yellowish gray-brownish gray, fine grained.
5390-5410 Limestone, as above. Some shale, medium gray.
5410-5420 Limestone, yellowish gray-light brownish gray, fine-medium grained. Anhydrite, white, very light gray, dense.
5420-5445 Shale, dark gray-medium light gray, splintery-fissile. Small amounts of anhydrite, white.
5445-5480 Shale, as above, anhydrite, light gray-white, dense.
5480-5495 Limestone, light brownish gray, medium grained, crystalline. Some shale, as above.
5495-5515 Shale, as above. Anhydrite, white soft-dense.
5515-5530 Shale and anhydrite, as above. Some limestone, light brownish gray (5YR6/1) fine-coarse grained, crystalline.
5530-5550 Anhydrite, light gray, dense, shale, medium gray, splintery-fissile.
5550-5555 Limestone, yellowish gray (5Y8/1) fine grained. Some anhydrite, as above.
5555-5560 Sample, as above. Some shale, medium gray, splintery.
5560-5570 Anhydrite, yellowish gray, light gray, dense. Shale and limestone as above.

Core Chip Description
5573-5575 Anhydrite, light brownish gray, dense.
5575-5576 Limestone, pinkish gray, fine grained dull. Interbedded anhydrite, as above.
5576-5581 Limestone, as above, upper part dolomitic, some porosity. Some spotty oil stain.
5581-5582 Limestone, light brownish gray, fossiliferous.
5582-5585 Limestone, light brownish gray, crystalline.
5585-5586 Limestone, as above, good fluorescence and cut.
5586-5587 Limestone, light brownish gray, medium grained.
5587-5589 Limestone, yellowish gray, fine grained.
5589-5591 Limestone, light brownish gray, fine grained, good cut.
5591-5592 Limestone, light brownish gray, fine grained, anhydritic.
5592-5593 Limestone, yellowish gray fine grained, slight cut with carbon tetrachloride.
5593-5594 Limestone, as above.
5594-5595 Limestone, light brownish gray, coarsely crystalline. Anhydritic.
5595-5596 Limestone, light brownish gray, medium grained.
5596-5598 Limestone, medium gray, fine grained, fossiliferous.
5598-5601 Limestone, light brownish gray, fragmental, poor porosity.
5601-5603 Limestone, light brownish gray, fragmental, fair cut.
5603-5606 Limestone, brownish gray, fine-coarse grained, some anhydrite filling.
5606-5607 Limestone, brownish gray, recrystallized.
5607-5610 Limestone, as above, “pelletoidal” and vuggy, Slight cut.
5610-5612 Anhydrite, white, medium gray, dense.
End of Core
5612-5638 Anhydrite and limestone, as above. Shale cavings.
5638 Circulate 1 hour.

Core Chip Description
5638-5639 Limestone brownish gray, dolomite anhydritic.
5639-5641 Anhydrite, medium gray, dense.
5641-5642 Anhydrite, white sucrosic-dense.
5642-5643 Limestone, light brownish gray, fine grained, dense.
5643-5644 Limestone, light brownish gray, anhydritic.
5644-5645 Limestone, light brownish gray oolitic, hard, dense.
5645-5648 Limestone, yellowish gray, medium grained, anhydrite fillings.
5648-5650 Limestone, light brownish gray, fine grained, dense.
5650-5651 Limestone, medium light gray, fine grained.
5651-5652 Limestone, light brownish gray, fine grained dense, hard, anhydrite fillings.

End of Core

5655-5672 Limestone, light brownish gray, fine-medium grained, anhydrite fillings.
5672 Circulate 1/2 hour.
5675 Total Depth.