

#1 Monnahan



01889003

005-06026

CORE ANALYSIS

*adjusted to log

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS		POROSITY PERCENT	RESIDUAL SATURATION		PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL		OIL % VOLUME	TOTAL WATER % PORE		
1	5937-38	0.1	0.1	1.7	0.0	94.2		ss lt bn fg wh cly cmt
2	5938-39	42	42	12.7	0.0	61.4		ss lt bn fg wh cly cmt
3	5941-42	30	29	11.1	0.0	56.8		ss lt bn fg wh cly cmt
4	5944-45	72	65	11.5	0.0	40.0		ss lt bn fg wh cly cmt
5	5947-48	38	33	9.6	0.0	49.0		ss lt bn fg wh cly cmt
6	5954-55	0.1	0.1	12.9	0.0	73.6		ss lt gy vfg wh cly cmt

NOTE:

(*) REFER TO ATTACHED LETTER.

(1) INCOMPLETE CORE RECOVERY-INTERPRETATION RESERVED

(2) OFF LOCATION ANALYSES-NO INTERPRETATION OF RESULTS.

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CORE NO. 1
(5936-5996)

CORING TIME: 10", 10", 10", 17", 19", 13", 13", 14", 17", 5", 21", 17",
18", 16", 10", 12", 4", 4", 5", 11", 16", 18", 14", 18",
21", 18", 19", 25", 25", 15", 20", 20", 15", 9", 8", 16",
10", 7", 11", 12", 11", 13", 14", 9", 10", 8", 10", 10",
9", 12", 12", 14", 15", 12", 12", 12", 13", 15", 14", 14".

CORE DESCRIPTION:

5936	-	5937½	(1½')	Sandstone, grey, very fine grained, sub-rounded, clay-filled, tight, very low porosity and permeability, no shows.
5937½	-	5946	(8½')	Sandstone, gray-buff, very fine grained, sub-rounded to sub-angular, poorly sorted, clay-filled in part with trace mica and disseminated carbonaceous material, low porosity and permeability, no shows, wet.
5946	-	5950	(4')	Sandstone, grey-buff, very fine to fine grained, sub-rounded, fair porosity and permeability, no shows, wet.
5950	-	5951	(1')	Sandstone as above with thinly interbedded hard, tight grey siltstone, no shows.
5951	-	5955½	(4½')	Sandstone, grey-buff, very fine grained, sub-angular to sub-rounded, with occasional disseminated mica and carbonaceous material, low porosity and permeability, no shows, wet.
5955½	-	5967	(11½')	Shale, black, hard, with thinly interbedded hard grey siltstone, no shows.
5967	-	5995½	(28½')	Siltstone, grey-hard, tight with occasional traces of mica and disseminated carbonaceous material, with thin quartzite zones of re-worked shale and siltstone, no shows.

LITHOLOGY

"D" SANDSTONE: (5868-5885)

5868	-	5876	(8')	Siltstone, grey, sub-rounded, clay-filled with disseminated mica, with occasional black shale partings, no shows, very low to no porosity and permeability.
5876	-	5885	(9')	Shale, black, fissile with streaks grey, hard, siltstone as above.

"J" SANDSTONE: (5913-6047)

5913	-	5924	(11')	Sandstone, grey, very-fine grained, sub-rounded, clay-filled with trace glauconite and mica, very low porosity and permeability, no shows, with occasional black shale partings.
5924	-	5936	(12')	Shale black, fissile, with occasional streaks hard, grey siltstone, no shows.
5936	-	5996	(60')	See core description.
5996	-	6025	(29')	Siltstone, grey, hard, tight with trace of mica and carbonaceous material with streaks of black shale, no shows.
6025	-	6047	(22')	Shale, black, fissile with thinly interbedded siltstone as above, no shows.

DRILL STEM TEST

No tests were run on this well

PLUGGING DATA

The hole was plugged as recommended by the Colorado Oil and Gas Conservation Commission. The hole was filled with 10# mud; a 15 sack cement plug was set in and out of the base of the surface casing at 180'. A 10 sack cement plug was set in the top of the surface casing (30'-0').

MUD DATA

The basic mud was a low pH caustic, quebracho mud. In the upper hole and to a depth of 4400' weight and viscosity were controlled by the addition of water and by the jetting of pits. From 4400' to total depth, mud properties were controlled by the addition of quebracho, caustic soda and gel.