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UNITED STATES

DEPARTMENT OF THE INTERIOR

EOLOGICAL SURVEY

DIST. 3

OG OF OIL OR GAS WELL Company Magnelia Petroleum Company Address P. O. Box 633, Midland, Texas Lessor or Tract Jicarilla "F" Field Blanco (Ext.) State New New 160 Well No. ____ Sec. 12 T. 27M R. . M. Meridian . N. M. P. M. County . Rio Arriba Location ____990 ft. S. of _H _ Line and 1650ft. W. of _H _ Line of Section 12 ______ Elevation 7050. The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records. Signed R. T. GERION, Title Division Superinte Date _July_31,_1956____ The summary on this page is for the condition of the well at above date. Reached Total Depth Commenced drilling ______, 19.56 Finished drilling ______, 19.56. OIL OR GAS SANDS OR ZONES (Denote gas by G) No. 4, from _____ to ____ No. 1, from 5598! to 6009! "G" No. 5, from _____ to ____ No. 2, from _____ to ____ No. 6, from _____ to ____ No. 3, from _____ to ____ IMPORTANT WATER SANDS No. 1, from _____ to _____ No. 3, from _____ to ____ No. 4, from _____ to ____ CASING RECORD Weight per foot Cut and pulled from Make Amount Kind of shoe Purpose From-10-3/4" 327! 32.75 n. If the well has been dynamited, give date, size, position and number state kind of material used, position, and results of pumping or builing. made in the easing to nate a dorage a listery of the well. Please state in det HISTORY OF OIL OR GAS WELL MUDDING AND CEMENTING RECORD Number sacks of cement Method used Mud gravity Size Where set 10-3/4" 327.1. 250 **Gireulated** .5/8* 200 7/2" mp & Plug 350 1,04 1300 PLUGS AND ADAPTERS Length Depth set Heaving plug—Material Adapters-Material Size SHOOTING RECORD Depth shot Depth cleaned out Shell used Explosive used Quantity Size TOOLS USED Rotary tools were used from _____ feet to 61001(79) feet, and from _____ feet to _____ feet Cable tools were used from ______ feet to _____ feet, and from _____ feet to _____ feet DATES Put to producing ------, 19-----, 19-----The production for the first 24 hours was _____ barrels of fluid of which ____ was oil; _____ % emulsion; 103-% water; and 1---% sediment. Gravity, °Bé. Rock pressure, lbs. per sq. in. TP 9246. **EMPLOYEES** Paul E. Ruthedge Drilling Co., Driller, Driller P. 0. Bcx2239 , Driller Santa Fe, New Mexico FORMATION RECORD TOTAL FEET FORMATION OJO Alamo 121' 32841 34051 Kirtland-Fruitland 185' 35901 34051 Pictured Cliff Cliff House 55981 20081 35901 55981 381 56361 Henaffee 56361 2821 59181 182' 591A1 6100' (79) Point Lookout 4-8-56 Spudded 4-10-56 After cementing 10-3/4" casing on bottom at 327' w/250 sx. cement, circulated, tested w/500# for 30 min. before drilling plug and w/250# for 30 min. after drilling plug, tested 0%, no break. 4-24-56 Set 7-5/8" casing on bottem w/200 sx. cement, temp. survey top cement \$ 3695'. Casing on bottom @ 3875'.
Ran Temp. Survey, top cement @ 3640. 4-25-56 Perf. 7-5/8" casing @ 3630' w/2 holes per ft. Set Retainer 4-26-56 a 3606', squeezed w/50 sx., 1500# to 0#. 4-27-56 Drilled out squeeze plug to 3873', test perf. 3630', pump in a 200#, Re-Squeeze perf. @ 3630' w/50 sx., survey top cement @ 35401. Tested w/1300# for 30 min. before drilling plug, tested OK, no break. 5-11-56 Set 5-1/2" liner on bottom @ 6100' w/150 sx. cement, did not circulate, reversed out 35 sx., top of liner @ 3747'. 5-14-56 Ran temp. survey to 5615', found no cement. Drilled out cement to 6054' Plug Back Total Depth. Ran temp. survey after 56 hrs, showed cement 5360-5510' & 5890'. Set Retainer @ 3655'. Squeese top of liner 3747' w/200 sx. TP 1000-1500#. Drilled out coment 3730-3747', Ran temp. survey coment 37'7-4120'. Tested w/1060#, tested OK, no break.
5-16-56 Ran elec. logs. Perf. 5-1/2" liner 6004-6009', 5977-5987',

5947-59571, 4 5920-59301 Perforated 5-1/2" liner 5890-5912' w/4 shots per foot. 5-17-56 5-18-56 Ran 3" tubing & packer, Waterfrac all perforations w/40,000 gals, max. pressure 300-1000#, shut-in 1 hr, flow back 110 bbls load water 3 hrs & died. Pulled 3" tubing & packer. Ran 2" tubing & packer. Swab 296 bbls load water in 15 hrs. Flow 9 bbls load water in 12 hrs thru open 2" tubing. Flow 228 bbls load water in 29 hrs open 2" tubing. Flow gas at rate of 470 MCF per day. Attempted to pull packer at 5843'. 5-22-56 Ran free-point indicator to 5846', Free point 5800', backed off 2" tubing @ 5785', left 2 joints & packer in hole. 5-23-56 Washed over & recovered 2 joints drill pipe & packer.
5-24-56 Perforated 52" liner 5685-5693', 5708-5716', 5727-5732',
5788-5796' & 5808-5814' w/6 shots per ft. Ran tubing with Bridge Flug @ 5840', ran 3" tubing & packer. Waterfrac 5 sets perforations with 40,000 gals, TP 2250-4000#. Shutin 4000#. Flowing load water to pits. 5-25-56. From perf. 5685-5693', 5708-5716', 5727-5732', 5788-5796' & 5808-5814', flow load water to pits 5 hrs. Pulled 3" tubing & packer. Ran 2" tubing & packer, swab 65 bbls load water 4 hrs. 5-28-56 Swab 100 bbls load water 13 hrs, swab 261 bbls load water 43 hrs, slight show gas, 300' FIH. 5-29-56 Pulled the & pkr & Bridge plug @ 5840'. Perf 52" liner 5616-5635' & 5644-5650' w/4 shots per ft.
5-31-56 Set Bridge Plug @ 5673', ran 3" tubing & packer, sandfrae
5616-5635' & 5644-5650' w/30,000 gals, TP 2400-4950#.

Loaded up, flow water & sand to pits 5 hrs, died. Pull 3" tubing, ran 2" tubing & packer, swab load water to pits 20 hrs, 1500' fluid in hole, no gas.
6-1-56 From perf. 5616-5635' & 5644-5650', swab 300 bbls load & formation water 24 hrs. Pulled tbg & packer & Bridge Plug 3 5673'. Found 300' Sand in hole. Ran bit, conditioned

bottom. From all perf. swab 168 bbls load water to pits
14 hrs, 5100 load water in hole, no gas. Est. 957 bbls load
water to recover.
6-5-56 From all perf. swab estimated 90 bbls load water 6 hrs, swab
& flow est. 170 bbls load water in 18 hrs, last hr good show

6-5-56 From all perf. swab estimated 90 bbls load water o his, swab & flow est. 170 bbls load water in 18 hrs, last hr good show gas.
6-6-56 From all perf, swab & flow 200 bbls load water to pits in 20 hrs, flow to pits 4 hrs epen 2" tubing, gas at rate of 2680

MCF per day. Lack 497 bbls load water
6-7-56 Pull tubing & packer. Perf. 7-5/8" casing in Pictured Cliff
@ 3591-3610' & 3624-3648'. Set Bridge Plug @ 3975'.

6-8-56 Sand water-frac perf 3591-3610' & 3624-2648' w/6000gals down casing, CP 1200#. Opened well, did not flow. Ran 2" tubing & packer, swab est. 140 bbls load water 12 hrs, 1700' fluid in helw, no gas.
6-11-56 Sumb 500 bbls load water 24 hrs, 2700' fluid in hole. Sumb

hole.
6-12-56 Swab 250 bbls load water 16 hrs, 1000' fluid in hole, slight show gas.
6-13-56 Smab 375 bbls lead water 19 hrs, slight show gas, 1800' fluid

475 bbls load water 34 hrs, slight show gas, 1000' fluid in

- 2500! fluid in hole, no gas.
- 6-15-56 Swab 550 bbls formation water 24 hrs, 2700' fluid in hole, very slight show gas.
- 6-18-56 Swab 550 bbls formation water 24 hrs, 2700' fluid in hole, very slight show gas. Pulled tubing, packer & bridge plug @ 3975'. Set Magnesium Bridge Plug @ 3967'. Set Retainer @ 3502'. Squeezed perforations 3591-3610' & 3624-3648' w/200 sx, max. pressure 1000#, cleared perforations. WCC 6 hrs, re-squeezed perf w/200 sx, mas. pressure 5000#.
- 6-20-56 Drilled out cement in 7-5/8" casing to 3645', tested perf. 3591-3610' & 3624-3648' w/1000#, 30 min., tested OK.
- 6-21-56 Drilled out cement to 3645', re-perf. 7-5/8" casing 3624-3640' w/6 shots per ft.
- 6-22-56 Waterfrac perforations 3624-3640' down casing w/40,000 gals, CP 900-1200#, 30 min. shut-in pressure 600#. Ran tubing & packer & swab 120 bbls load water 9 hrs, no gas, 2000' fluid in hole.
- 6-25-56 Swab 160 bbls load water 24 hrs, no gas, 2000' fluid in hole. swab 960 bbls load water 48 hrs, very slight show gal, 2500' fluid in hole.
- 6-26-56 Swab 120 bbls black load water 6 hrs. Squeeze perforations w/200 sx., max. pressure 3000#.
- 6-28-56 Drilled out plug & cement to 3650' on squeeze of perforations, 3624-3640'. Test perf. no hold. Re-set squeeze Retainer 3 3507', re-squeezed w/200 sx., max. pressure 1000#.
- 6-29-56 Re-squeeze perf. 3624-3640' w/200 sx., Max. pressure 3000#, reversed out 23 sx.
- 7-2-56 Drilled out cement to 36501. Broke perf. with 400#. Re-Squeezed perf. with 90 sx., max. pressure 2000#, tool failed.
- 7-3-56 Drilled out retainer in 7-5/8" casing to 3655', tested perf. 3624-3640' w/1000#, 30 min., tested OK.
- 7-5-56 Drilled out bridge plug @ 3967', washed to 6054', ran tubing and packer. Released rige
- 7-9-56 Moved in swab unit. Swab 80 bbls load water 4 hrs, flow 105 bbls load water 7 hrs on 3/4" choke. Flow 25 bbls load water 7 hrs thru open 2" tubing, gas at rate of 150 to 526 MCF per day, after 15 hrs. Shut in 26 hrs, Tubing Pressure 1365%. Flow 10 bbls load water 4 hrs. Open 2" tubing, gas at rate of 600 to 970 MCF per day. Shut-in.
- 7-10-56 From 12 sets Mesa Verde perforations, shut in 20 hrs, flow on open 2" tubing, estimated 20 bbls slightly salty water 14 hrs. Gas Volume after 14 hrs, estimated 500 MCF per day, heading. Shut-in for 12 hrs.
- 7-11-56 From all perforations, flow thru open 2" tubing, estimated 25 bbls slightly salty water 7 hrs. Gas at rate of 500 MCF to 600 MCF per day, heading. Shut in for 12 hrs.
- 7-13-56 Shut in 50 hrs, Tubing Pressure 1225#. Opened 7 hrs, flowed 15 BSW 3 hrs. from all perf, at end of 3 hrs, gas at rate of 526 MCF per day thru open 2" tubing, spray of water. Shut-in for build up.
- 7-16-56 Shut in 14 hrs. Tubing Pressure 1100#. Opened, flow est.
 16 bbls salt water 42 hrs thru open 2" tubing, gas at rate of
 263 MCF per day. Shut in 20 hrs. Tubing Pressure 1125#.
 Opened & flowed 27 bbls salt water 7 hrs thru open 2" tubing.
 Gas at rate of 263 MCF per day. Shut in for build up.
- 7-17-56 Shut in 18 hrs. Tubing Pressure 1150#. Flow 10 Bbls salt water 3 hrs thru open 2" tubing, @ ent of 3 hrs gas at rate of 456 MCF per day. Shut in for build up.
- 7-18-56 Shut in 19 hrs. Tubing Pressure 1125#. Flow 12 bbls salt water 4 hrs thru open 2" tubing, gas volume at end of 4 hrs 300 MCF per day. Shut in for Potential.
- 7-25-56 From all perf, after 7 days shut-in, tubing pressure 924#.

 On Potential test after 3 hrs blow down, gas at rate of £26

 MCF per day thru open 2" tubing. Flowed estimated 7 bbls salt