

MAGMA ENERGY, INC.

631 SOUTH WITMER STREET
LOS ANGELES, CALIFORNIA 90017
(213) 483-8542
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WELL HISTORY

MAGMA - LA GRANDE Well No. 1

- * Location: 1150' South of the North Line and 1900' East of the West Line in SW4, NE4, NW4 of Section 9, Township 4 South, Range 39 East, W.B. & M.
- Date: Oct. 8, 1974 Signed Edward Zajac Agent
- 8/27/74 Moved in and rigged up Taylor Drilling Co. Rig #5, Drilled rathole and mouse hole. Spudded in w/ 17 1/2" Bit at 6:30 P.M. Drilled to 170' K.B. to Grd. 12'.
- 8/28/74 Drld. 17 1/2" Hole to 642'. Survey 1/4° at 560'
- 8/29/74 Drld. 17 1/2" hole to 712', Circulate hole clean, Prepare to run 13 3/8" Csg.
- 8/30/74 Rigged & Ran 711' of 13 3/8" O.D. 54.5 J-55 casing and cmt'd same W/950 Sx. class G Premixed W/3% Ca.Cl. Bumped 1 top rubber plug W/500# C.I.P. 6 PM. No Cmt. returns to surface, W.O.C. 3 Hrs. W/wire line located top of cut in annulus at 62' prepared to cement.
- 8/31/74 Ran 1" pipe in annulus to 62' mixed and pump in 80 Sx. class G Premixed 3% Ca. Cl. C.I.P. 12°. Good cmt. returns to surface. Landed 13 3/8" csg. installed Class III B.O.E. test W/500 #15 Min. (Approved by Dept. Geology and Mineral Ind.) R.I.H. W/ 12 1/4" Bit to top of plug. Drill out plug, Cmt. and Drld. 12 1/4" hole 711' to 715'. P.O.H.
- 9/1/74 R.I.H. W/ 7 7/8" Drill to 953' Survey 1° @ 835'
- 9/2/74 Drilled 7 7/8" Hole to 1031' Survey 1 1/4° @ 1009'
- 9/3/74 Drilled 7 7/8" Hole to 1334' Survey 1° @ 1300'
- 9/4/74 Drilled 7 7/8" hole to 1657', Hole caved, Stuck drill pipe and freed same after 15 min. Lost circulation, pulled up into surface pipe at 850'. Mixed Gel & water, pumped into annulus and filled hole. R.I.H., Cleaned out bridges 1160' and 1562' Ran into bottom 1657'. Survey 1° @ 1594'.

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- 9/5/74 Drilled F/1657' to 1670' Lost complete circulation @ 11:15 A.M.. Pulled bit up to 1350' Mixed LCM and regained circ. Ran back to 1670'. Drilled 7 7/8" hole to 1785' and at 11:45 A.M. lost circulation. Mixed and pump in 200 BBLs. LCM W/ no success in getting mud returns.
- 9/6/74 Mixed and pumped in approx. 1500 BBLs LCM W/no success on returns. Drld. 1785' to 1816' W/No mud returns, mixing and pumping LCM.
- 9/7/74 Mixed and pump in approx. 1600 BBLs. LCM and drilled 1816' to 1873' W/no returns. Pulled bit up to 1300' Wait on cement truck to cement lost circ. zones.
- 9/8/74 P.O.H. RIH open ended D.P. to 1560' plug #1 Mixed and pumped 50 Sx. Class G Cmt. Premixed W/ 3 Sx. high seal 3% CA. Cl. CIP 8:30 P.M. P.O.H. W.O.C. 3 Hrs. Filled hole F/ Surface W/ Mud (OK) R.I.W. W/ 7 7/8" bit. Tagged top of plug 1652' drld. Firm cmt. to 1747 Losing some fluid Pulled up to 665', circ. W/full returns. Stage into 1810' circ. out cmt. Contaminated mud.
- 9/9/74 Drld. Firm CMT 1810' to 1821', Lost circ. R.I.H. to BTM 1873' P.O.H. R.I.H. opened D.P. to 1838'. Plug #2. Mixed and pumped in 75 Sx. Class G 3% Ca.Cl. CIP 4:00 P.M. W.O.C. 3 Hrs. Filled hole F/Surface W/Mud (OK) R.I.H. W/ 7 7/8" bit to 1533' circ. W/full returns. R.I.H. located top of plug @ 1785', circ. at this point and lost complete returns. P.O.H. R.I.H. Open ended D.P. to 1782' plug #3 Mixed & pumped in 75 Sx. Class G W/3% Ca. Cl. CIP 1:15 A.M. P.O.H. W.O.C. 3 Hrs. Filled hole F/Surface W/Mud (OK) R.I.H. W/Bit to 1533' circ. W/good returns, R.I.H. to 1650' Broke circ. & lost returns. R.I.H. to 1785' No sign of cmt.
- 9/10/74 R.I.H. open ended D.P. to 1738' Plug #4 mixed & pumped in 50 Sx. Class G W/ 3% Ca. Cl. CIP 11:30 A.M. W.O.C. 2 Hrs. Filled Hole (OK) R.I.H. W/ bit staged in to 1760' Drld. Cmt. to 1850' Started losing drilling fluid @ 1830'. Lost complete returns at 1840' R.I.H. tag Btm. 1873' P.O.H. R.I.H. Open ended D.P. to 1842' Plug #5 Mixed & Pumped 25 Sx. Class G. 4% Gel Pulled up to 1500' Plug #6 Mixed & pumped 50 Sx. Class 6 3% Ca. Cl. CIP 1:00 A.M. P.O.H., W.O.C. 4 Hrs. RIH W/Bit to 1313' W.O.C. 2 Hrs. Circ.@ 1313-1652' Tag plug @ 1750' Drld. to 1790 losing returns.

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- 9/11/74 P.O.H R.I.H W/open ended D.P. to 1712' Plug #7 mixed and pumped 50 Sx. Cmt. W/ 3% Ca. Cl. CIP 2:00 P.M. W.O.C. 3 hrs. RIH W/ Bit Tag Plug @ 1714'. Drld. Cmt. to 1790' to 1865' Fell through plug & lost returns. P.O.H. R.I.H. open ended D.P. to 1839' Plug #8 mixed & pumped in 50 Sx. Cmt. W/3% Ca.Cl. CIP 8:45 AM.
- 9/12/74 RIH W/ 7 7/8" bit tag top of cmt. plug @ 1775' Drld. Cmt. to 1854'. Fell out of plug & cleaned out to 1873' w/Full mud returns. Drld. F/ 1873' to 1913' very fractured formation, started losing a small amount of fluid. Mixed LCM, Drld. to 2003' W/Full returns Survey 3° @ 1999'.
- 9/14/74 Drilled 7 7/8" hole to 2110' W/ full mud returns.
- 9/15/74 Drilled to 2215'. Survey 2 1/2° @ 2124'.
- 9/16/74 Drilled to 2218' POH Installed 3 pt Reamer, Reamed hole 1050' to 2218'. Lost some drlg. fluid. Survey 3° @ 2184'.
- 9/17/74 Regained Circ. @ 2218' drld. to 2219' Very Hd. drilling F/ 1 Ft. POH Made run W/ Magnet to check for junk in hole. No recovery RIH W/ New 7 7/8" bit. Drilled to 2230'.
- 9/18/74 Drld. to 2318' Lost & regained circ. 2284' and 2291'. Survey 3 1/4° @ 2287'.
- 9/19/74 Drld. 7 7/8" to 2442' losing approx. 8/10 BBL mud P/hr.
- 9/20/74 Drld. to 2546' w/ full returns. Survey 3° @ 2475'.
- 9/21/74 Drld. to 2592'.
- 9/22/74 Drld. to 2676'.
- 9/23/74 Drld. to 2729'.
- 9/24/74 Drld. to 2929' T.D. P.O.H. Ran Schlumberger comp. Neutron formation. Density, dual induction lateral, Temp Log. B.H.T. 129° F After well static 9 Hrs. R.I.H. Open ended D.P. to 778'. Mixed and pumped in 52 Sx. Class G Cmt. W/3% Ca.Cl. CIP 12:30 AM. W.O.C. 3 Hrs. R.I.H. W/ 7 7/8" bit to 1063' No cmt. plug. P.O.H. R.I.H. open ended D.P. to 778' Mixed and pumped 55 Sx. Cmt. 3% Ca.Cl. CIP 7:50 A.M. W.O.C. 3 Hrs.

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- 9/25/74 R.I.H. W/ Bit to 914'. No Cmt. Plug. POH RIH open ended D.P. to 776'. Mixed & pump 55 Sx. Cmt. W/3% Ca. Cl. CIP 2:15 P.M. W.O.C. 3 Hrs. RIH W/bit located CMT. plug @ 660'. Plug witness by D.O.G.AMI. Layed Down D.P. D.C. Clean mud tanks.
- 9/26/74 Installed 20' CMT. Plug in 13 3/8" 6' below GRD. level, capped 13 3/8" casing 6' below Grd. Level W/ 1/2" steel plate, removed cellar boards and filled cellar W/ dirt. Released rig to contractor. Moved equipment out.

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Note:

The corrected well site location is -

1150' South of the North Line and 1900' East of the West Line in SW4, NE4, NW4 of Sec. 9, T-4-5, R-39-E, W.B.&.M. Union County, Oregon.

Department of Geology and Mineral Application shows 250' South of the North Line 1040' East of the West in NW4, NW4, Sec. 9 T-4-S, R-39-E, W.B. & M. Union County Oregon.

Location was moved after Magma Energy, Inc. received approval from the Dept. of Geology and Mineral Industries.