

**Gerrity Oil & Gas**  
**State 16-13**  
**05-123-07146**

**Proposed Re-entry Procedure**

- 1 Survey and locate abandoned well, mark with stake
- 2 Excavate to expose top of surface casing
- 3 Weld 2" collar to top of 8 5/8" surface casing cap. Make up to collar, pneumatic drill with non-sparking bit. Drill out cap venting possible trapped gas.
- 4 Once verified that no gas exists beneath top of surface casing plate, cut off surface casing below plate with torch, dress up smooth.
- 5 Butt weld 8 5/8" casing to dressed cut, bringing threaded end of casing to ground level.
- 6 Make up to 8 5/8" casing, one 8 5/8" collar and 8 5/8" starter well head
- 7 NU flange adaptor and 5k BOP, test BOP.
- 8 MU drilling BHA w/ 7-7/8" cone bit and drill out cement to ~140'.
- 9 Pressure test surface casing up to 500psi
- 10 If pressure holds, drill out to 2000'
- 11 Circulate well clean.

**Proposed Plugging Procedure**

- 12 Pump 155 sacks of G cement with 2% CC and flake and fiber LCM from 1800'-1400'.

Length (ft)	OD (in)	ID (in)	ft <sup>3</sup> /ft	Volume (ft <sup>3</sup> )	Field (ft <sup>3</sup> /sk)	Cement (sk)	Nearest 5sk
400	9.000	0.000	0.442	177	1.150	153.661	155

- 13 POOH to 920' and reverse off.
- 14 WOC 4 hours (or until samples have set up) and tag TOC
- 15 Pump 225 sacks of G cement with 2% CC and flake and fiber LCM from 600' to surface

Length (ft)	OD (in)	ID (in)	ft <sup>3</sup> /ft	Volume (ft <sup>3</sup> )	Field (ft <sup>3</sup> /sk)	Cement (sk)	Nearest 5sk
450	9.000	0.000	0.442	199	1.150	172.868	175
149	8.100	0.000	0.358	53	1.150	46.363	50
						Total	225

- 16 Top off cement if needed.
- 17 ND BOP
- 18 RDMO