

Stroh O 02-17
05-123-29998

Well History

Action	Date	Notes
Spud Date	8/19/2006	NA
Recompletions	11/17/2009	Doc#2610604
Repairs	none	
P&A Date	7/15/2020	DOC#402416469
MIT	3/16/2018	Failed: Doc#401577229 blew down to zero continuous water flow at end of test.
	8/03/2018	Passed: Doc#401723992 initial surface casing pressure 40 psi/40 psi at 5, 10, and 15min.

Additional Well Info

Depth of Surface Casing	636 ft below ground surface (bgs)
Base of Laramie Fox Hills	119 ft bgs
LFH Aquifer Covered?	Yes
Pressure at shoe (calculated)	315 psi (conservatively assumes a full column of liquid is present)
Shoe Breakdown PSI (calculated)	635 psi
Surface Casing Shoe integrity?	Confirmed by calculations
water wells within ¼-mile	3 wells
water wells from ¼ - ½-mile	2 wells

Form 17 Summaries:

12/18/2017, Document # 401492100:

Initial pressures at 38 psi, instantaneous bradenhead pressure at end of test 3 psi; continuous flow of water rest of test.

7/26/2019, Document #402126116:

Initial pressure at surface casing 40, instantaneous bradenhead pressure at end of test 0 psi

Summary

There is one water well within 1/4-mile radius that is cross dip (receipt #9063380) of the Stroh O 02-17 location. Noble proposes to sample this water well. In addition, Noble proposes to install a shallow monitoring adjacent to the Stroh O2-17 location and collect a sample from this well also.

Noble plans to analyze samples for pH, specific conductance, total dissolved solids (TDS), dissolved gases (methane, ethane, propane), alkalinity (total bicarbonate and carbonate as CaCO₃), major anions (bromide, chloride, fluoride, sulfate, nitrate and nitrite as N, phosphorus), major cations (calcium, iron, magnesium, manganese, potassium, sodium), other elements (barium, boron, selenium and strontium), presence of bacteria (iron related, sulfate reducing, slime forming), total petroleum hydrocarbons (TPH) and BTEX compounds (benzene, toluene, ethylbenzene and xylenes). Field observations such as odor, water color, sediment, bubbles, and effervescence will also be documented.

If dissolved gas concentrations are detected at concentrations greater than 1 mg/L, or if free gases are observed, a gas compositional analysis and stable isotope analysis of the methane (carbon and hydrogen – 12C, 13C, 1H and 2H) will be performed.