

Please note that the following responses estimate the use of inventory, field/well pressures and release rate. At any given time without a shut-in and allowing the field pressure to stabilize, different pressures may exist in the various parts of the reservoir. In addition, working gas inventory values listed below are not adjusted for leakage from well SS 25; therefore, estimated reservoir pressures may not be representative of current reservoir conditions.

Question 11:

Please provide SoCalGas' estimate of the relationship between field pressure and inventory.

Response 11:

Based on the last two inventory shut-ins, the bottom hole pressure (BHP) in the storage reservoir versus Working-Gas-in-Ground relationship is:

$$\text{BHP (psi)} = 1094 + 26.6066 \times \text{Working-Gas-in-Ground (bcf)}$$

this means at BHP = 1094 psi, Working-Gas-in-Ground is zero.

Question 12:

What is estimate of inventory level that will reduce Aliso field pressure to 1000 psig? 750 psig? Please explain how this is estimated and provide calculations.

Response 12:

Using the equation in Response 11:

$$\text{at BHP} = 1000 \text{ psi, Working-Gas-in-Ground} = \text{negative } 3.53 \text{ bcf}$$

$$\text{at BHP} = 750 \text{ psi, Working-Gas-in-Ground} = \text{negative } 12.93 \text{ bcf}$$

(negative means working inventory is completely depleted and we are into cushion gas).

Question 13:

What are the high and low estimates for Aliso Canyon inventory levels projected at current withdrawal rates on January 1, January 15, February 1 and February 15?

Response 13:

Please see Response 14.

Question 14:

What are the associated withdrawal rates achievable at those projected inventory levels?

Response 14:

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Question 15:

What is the current reservoir pressure compared October 23, 2015 and each day since then. What are the projections for the pressure associated with the inventory projections above?

Response 15:

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Question 40:

Provide a detailed Heat Exclusion zone calculations and its fire suppression contingency plan in case the reservoir engulfs in flame.

Response 40:

Below is an example of the ground level radiation calculation performed to establish a Heat Exclusion Zone. The data used in this analysis takes into account the released gas rate and site wind conditions present at the time this calculation was done. For this analysis an estimated 40 MMSCFD released gas rate is used; this gas rate is reported by CARB and is based on their latest measurement made from plane flight on December 23, 2015. Please note that this response is preliminary in nature, intended to address the inquiry at hand, and a more accurate estimate can likely be achieved at such time subsequent to stopping the gas leak, and shutting in the reservoir for at least 2 weeks and taking accurate measurements of the before and after inventory and any residual gas left in the surrounding geologic formation.

In the unlikely event of a fire, the safe zone would be determined based on the conditions present at the time. It is likely that it would be limited to the SS25 well pad area. SoCalGas has contracted emergency responder and fire protection services on site, in addition to coordinating with LA County and LA Fire as described in the IAP Plan to address the fire.