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14 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
15 **FOR THE COUNTY OF LOS ANGELES**

16 PEOPLE OF THE STATE OF CALIFORNIA,

17 Plaintiff,

18 v.

19 SOUTHERN CALIFORNIA GAS COMPANY

20 Defendant.

CONFORMED COPY
ORIGINAL FILED
Superior Court of California
County of Los Angeles

OCT 18 2016

John A. Clarke, Executive Officer/Clerk

BY: , DEPUTY

Case No. 6SC00433

**VICTIMS' REQUEST FOR JUDICIAL
NOTICE; DECLARATION OF R. REX
PARRIS IN SUPPORT THEREOF**

COPY

1 **I. INTRODUCTION**

2 Pursuant to Evidence Code sections 452 and 453, Victims Demetrius Crump, et al.
3 (“Victims”) request that the court take judicial notice of records and documents filed in support of
4 Victim’s Petition for Withdrawal of Plea Agreement in the criminal misdemeanor action filed
5 against Defendant Southern California Gas Company (“SoCalGas”). The Victims request judicial
6 notice for the contents of the records and the public statements by SoCalGas, not for the truth of
7 the statements made by SoCalGas. See, e.g., Ragland v. U.S. Bank Nat’l Ass’n (2012) 209 Cal.
8 App. 4th 182, 193 (holding that court may take “Judicial Notice of the existence of the audit
9 report, Web sites and blogs, but may not accept their contents as true”). Taking judicial notice of
10 the documents leaves the proper interpretation open to dispute in the litigation. Id.

11 **II. DOCUMENTS AND RECORDS**

12 The Victims ask the court to take judicial notice of the following types of documents:
13 (A) records submitted by SoCalGas to the California Division of Oil, Gas, and Geothermal
14 Resources (“DOGGR”), the agency responsible for permitting the gas storage well that blew out
15 (SS25); (B) statements made by SoCalGas, including statements on their website, about the Aliso
16 Canyon gas “leak” and well SS25; (C) records regarding the health impact of blowout;
17 (D) DOGGR’s order concerning safety of all the SoCalGas storage wells in Aliso Canyon; and
18 (E) pleadings filed in this criminal action. These records are described in detail below.

19 **A. Records Submitted by SoCalGas to DOGGR Showing the Presence of a**
20 **Subsurface Safety Valve**

21 1. Exhibit 1 is the casing diagram for SS25 submitted by SoCalGas to the Division of
22 Oil, Gas, and Geothermal Resources (“DOGGR”), located on the official DOGGR website at
23 https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_DATA_03-19-2008.pdf
24 at page 9. It shows the subsurface safety valve (“SSSV”) on the casing diagram at 8451 below
25 ground and a note from “2/16/79-2/20/79” indicating SoCalGas “Replaced safety system.”

26 2. Exhibit 2 is the survey temperature report submitted to DOGGR for identifying
27 leaks in the casing diagrams for SS25, located on the official DOGGR website in the records for
28 SS25, <https://secure.conservation.ca.gov/WellRecord/037/03700776/>. The survey temperature for

1 SS25 for over ten years showed the presence of the SSSV at 8451 feet below ground. The
2 temperature logs from the early period are difficult to read and the casing diagram is not clearly
3 shown, and a sample is provided for purposes of comparison.

4 **B. Public Statements by SoCalGas about Removal of the Subsurface Safety**
5 **Valve and the Safety of the Community during the "Leak"**

6 3. Exhibit 3 contains statements from an executive from SoCalGas who was
7 interviewed on December 15, 2015 by Gene Maddaus, a description of which appeared in the
8 news article "What Went Wrong at Porter Ranch?," published in the LA Weekly on December
9 22, 2015, and located on the internet at [http://www.laweekly.com/news/what-went-wrong-at-](http://www.laweekly.com/news/what-went-wrong-at-porter-ranch-6405804)
10 [porter-ranch-6405804](http://www.laweekly.com/news/what-went-wrong-at-porter-ranch-6405804). Judicial Notice is requested only of the statements made by the SoCalGas
11 executive (Rodger Schweck) who said SoCalGas "removed the valve in 1979."

12 4. Exhibit 4 are copies of the Aliso Canyon Updates from SoCalGas from its website,
13 dated October 28, 2015 and December 15, 2015, [https://www.socalgas.com/](https://www.socalgas.com/newsroom/aliso-canyon-updates/archive) [newsroom/aliso-](https://www.socalgas.com/newsroom/aliso-canyon-updates/archive)
14 [canyon-updates/archive](https://www.socalgas.com/newsroom/aliso-canyon-updates/archive). During this time period, SoCalGas repeatedly made the following
15 representation:

16 *"However, the leak does not pose an imminent threat to public safety. The well is*
17 *located in an isolated, mountain area more than a mile away from and more than*
18 *1,200 feet higher than the closest home or public area. Scientists agree natural*
19 *gas is not toxic and that its odorant is harmless at the minute levels at which it is*
20 *added to natural gas. In outdoor locations such as this, natural gas quickly*
21 *dissipates into the air, greatly reducing the possibility for ignition and further*
22 *diluting the gas as it reaches the public."*

23 5. Exhibit 5 is a copy of the Aliso Canyon Update from SoCalGas from its website,
24 dated November 15, 2015, <https://www.socalgas.com/newsroom/aliso-canyon-updates-11-15-15>.
25 SoCalGas made the following representation regarding the presence of oily mist:

26 *"On Friday, some of the brine solution did come back up, and it created a mist in*
27 *the air over the facility. Out of an abundance of caution, we assumed the mist*
28 *could contain oily residues (The storage field is a depleted oil field.) and could*
travel beyond the facility. As a result, we immediately alerted the residents in
nearby communities to stay indoors. As soon as we recognized the mist would not
travel beyond the facility, we advised residents there was no reason to stay
indoors."

29 **C. Relocation Order and Photos Showing Migration of Gas and Oily Mist**

30 6. Exhibit 6 is the relocation order issued by the Los Angeles County Department of

1 Public Health (“DPH”) on November 19, 2015, located on the official DPH website,
2 <http://publichealth.lacounty.gov/eh/docs/AlisoCanyonBoard.pdf> at page 6, that required:

3 *“Southern California Gas Company to offer free, temporary relocation to any area*
4 *residents affected by odors from the Aliso Canyon site.”*

5 7. Exhibit 7 is a screenshot of the video evidence gathered by attorneys for the victim
6 showing the gases and toxins entering the residential areas of Porter Ranch on December 9 and
7 10, 2015. The video clips can be found online at [http://www.porterranchlawsuit.com/new-porter-](http://www.porterranchlawsuit.com/new-porter-ranch-gas-leak-video/)
8 [ranch-gas-leak-video/](http://www.porterranchlawsuit.com/new-porter-ranch-gas-leak-video/); <https://www.youtube.com/watch?v=N8FwDgRv9tk>.

9 8. Exhibit 8 is a news report describing errors on the SoCalGas website regarding the
10 health risks, “In Porter Ranch, ongoing gas leak seeps the joy out of Christmas,” by Louis
11 Sahugun and published by the LA Times on December 25, 2015. He reported that: “The tests
12 had found hydrogen sulfide levels of 183 parts per billion — six times the state standard for a
13 chemical that can be poisonous.” This article can be found at:
14 <http://www.latimes.com/science/la-me-porter-ranch-christmas-20151225-story.html>.

15 9. Exhibit 9 is another news report describing errors on the SoCalGas website
16 regarding the health risks, “Utility May Have Understated Health Threat from Porter Ranch Gas
17 Leak,” by Brian Melley and Ellen Knickmyer (of the Associated Press) and published by CBS
18 Local on January 1, 2016. This article can be found at:
19 [http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-](http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-porter-ranch-gas-leak/)
20 [porter-ranch-gas-leak/](http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-porter-ranch-gas-leak/).

21 10. Exhibit 10 contains statements by a SoCalGas representative who subsequently
22 admitted the presence of an oily mist in an interview with Louis Sahagun of the LA Times, as
23 described in the article, “Utility is installing screens to contain oily mist at leaking well near
24 Porter Ranch,” published on January 6, 2016, [http://www.latimes.com/local/california/la-me-](http://www.latimes.com/local/california/la-me-porter-ranch-20160105-story.html)
25 [porter-ranch-20160105-story.html](http://www.latimes.com/local/california/la-me-porter-ranch-20160105-story.html). The SoCalGas representative (Trisha Muse) described the
26 installation of the screens because the blowout “may have contained trace amounts of oil naturally
27 occurring within the leaking well's reservoir.” The SoCalGas website also purportedly
28 acknowledged that residents were asking about “dark brown spots on their property.”

1 11. Exhibit 11 is a news report describing presence of the oily mist on a playground
2 that forced the closure of a Porter Ranch park in March of this year, "Oily slime from Porter
3 Ranch well temporarily closes nearby park," by Alice Walton and published in the LA Times on
4 March 8, 2016 [http://www.latimes.com/local/lanow/la-me-porter-ranch-oil-slime-closes-park-](http://www.latimes.com/local/lanow/la-me-porter-ranch-oil-slime-closes-park-20160308-story.html)
5 [20160308-story.html](http://www.latimes.com/local/lanow/la-me-porter-ranch-oil-slime-closes-park-20160308-story.html).

6 **D. DOGGR Orders New Tests for all of the 114 Other Gas Storage Wells**

7 12. Exhibit 12 is an order to SoCalGas from DOGGR on its official website in which
8 DOGGR "ordered all 114 gas storage injection wells be thoroughly tested for safety and
9 competence before injection resumes into the Aliso Canyon natural gas storage field." See, e.g.,
10 DOGGR website description of problems at <http://www.conservation.ca.gov/dog/AlisoCanyon>
11 and March 4, 2016 Order at <http://www.conservation.ca.gov/index/Documents/1109.pdf>.

12 **E. Criminal Complaint and Proposed Settlement**

13 13. Exhibit 13 – Criminal Complaint in Case No. 6SC00433, filed by the LADA
14 against Defendant Southern California Gas Company on February 2, 2016.

15 14. Exhibit 14 – Proposed Settlement Agreement between the People of the State of
16 California and Defendant Southern California Gas Co. filed on September 13, 2016.

17 **III. ARGUMENT**

18 The court may take judicial notice of all of these exhibits under Evidence Code sections
19 452 (h) which provides for judicial notice of "[f]acts and propositions" that are not reasonably
20 subject to dispute and are capable of immediate and accurate determination by resort to sources of
21 reasonably indisputable accuracy." Similarly, these records are subject to judicial notice under
22 section 452(g) "[f]acts and propositions that are of such common knowledge within the territorial
23 jurisdiction of the court that they cannot reasonably be the subject of dispute." Scott v. JPMorgan
24 Chase Bank, N.A. (2013) 214 Cal. App. 4th 743, 753 (taking judicial notice of agreement posted
25 on official government website).

26 The order from the Department of Public Health (Exhibit 6) and the Division of Oil, Gas
27 and Geothermal Resources (Exhibit 10) regarding the problems at Aliso Canyon are also subject
28 to judicial notice under Evidence Code section 452(e) as an official act of an executive

1 department of the State of California, and the pleadings in this action (Exhibits 11 and 12) are
2 court records subject to judicial notice under section 452(d). As mentioned above, notice is
3 sought only of the existence of these records and statements and not for the truth of the matters
4 contained in these records. Ragland, 209 Cal. App. 4th at 193. The court retains the discretion to
5 take judicial notice of these records and statements if they are “not reasonably subject to dispute.”
6 Scott, 214 Cal. App. 4th at 760.

7 These records demonstrate that there are facts not reasonably subject to dispute including
8 the following:

- 9 • SoCalGas submitted reports to a public agency identifying the presence of a
10 subsurface safety valve (SSSV);
- 11 • SoCalGas admitted to a reporter that the subsurface safety valve was removed;
- 12 • SoCalGas issued public statements indicating gas and the oily mist did not migrate
13 into Porter Ranch;
- 14 • Residents obtained proof gas and oily mist migrating into Porter Ranch;
- 15 • The health problems from the blowout led the Department of Public Health to
16 issue an order requiring SoCalGas to pay for that relocation.
- 17 • After the purported fixing of the blowout in SS25, DOGGR issued further orders
18 because of the safety related problems after the blowout was purportedly stopped.

19 It is not clear whether SoCalGas will agree that its statements and records should be
20 subject to judicial notice, but in light of the repeated nature of many of the statements, it would be
21 unreasonable for SoCalGas to retract the statements. As to the official agency records, SoCalGas
22 cannot deny the agencies took the actions described in these documents, and there is no evidence
23 that SoCalGas sought any court order to block the agency actions. These official records should
24 be indisputable. And finally, with respect to the pleadings in this criminal action, there is no basis
25 for any dispute that the court can and should take judicial notice of the misdemeanor complaint
26 and proposed settlement.

27 **IV. CONCLUSION**

28 This is no ordinary criminal case – the SoCalGas blowout caused unprecedented damage

1 to an entire community that resulted in thousands of victims who had to move out of their homes
2 to protect themselves from exposure to unknown toxins in the gas and oily mist that migrated into
3 the areas near Porter Ranch. Justice requires that the court hear the concerns of the victims
4 impacted by the blowout. This is especially important in light of the misrepresentations by
5 SoCalGas that it was safe to stay, forcing the Department of Public Health to intervene to protect
6 the victims. The court should take judicial notice of these records when considering the request
7 by the victims for the withdrawal of the plea agreement.

8 DATE: October 18, 2016

Respectfully submitted,

9 PARRIS LAW FIRM

10 

11
12 R. Rex Parris, Esq.
13 Attorneys for Victims

Declaration of R. Rex Parris

I, R. Rex Parris, declare:

I am an attorney duly licensed to practice before all courts of the State of California, and I am a principal in, and founding partner of, the Parris Law Firm, attorneys of record for Mr. Demetrius Crump and the victims listed in Exhibit 1. The facts set forth in this declaration are within my personal knowledge and, if called as a witness, I could and would competently testify as follows:

1. Attached hereto and incorporated herein by this reference as Exhibit 1 is a true and correct copy of the casing diagram for Gas Storage Well that blew out, SS25, printed from the internet records of the Division of Oil, Gas, and Geothermal Resources, https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_DATA_03-19-2008.pdf at page 9 (last accessed on October 17, 2016).

2. Attached hereto and incorporated herein by this reference as Exhibit 2 are true and correct copies of the survey temperature reports submitted by SoCalGas to DOGGR and located on DOGGR's website as follows (last accessed on October 17, 2016):

a. 2014: [https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_10-21-2014\(SS25\).pdf](https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_10-21-2014(SS25).pdf).

b. 2013: [https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_10-02-2013\(SS25\).pdf](https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_10-02-2013(SS25).pdf).

c. 2012: [https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_05-29-2012\(SS25\).pdf](https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_05-29-2012(SS25).pdf)

d. 2011: https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_09-12-2011.pdf

e. 2010: [https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_12-14-2010\(SS25\).pdf](https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_Survey_Temperature_12-14-2010(SS25).pdf)

f. 2009: https://secure.conservation.ca.gov/WellRecord/037/03700776/03700776_TEMPERATURE_10-05-2009.pdf

- 1 g. 2006: <https://secure.conservation.ca.gov/WellSearch/Details?api=03700776> under
2 Temperature_7-25-2006.tif.
- 3 h. 2005: <https://secure.conservation.ca.gov/WellSearch/Details?api=03700776> under
4 Temperature_8-10-2005.tif.
- 5 i. 2004: <https://secure.conservation.ca.gov/WellSearch/Details?api=03700776> under
6 Temperature_7-27-2004.tif.
- 7 j. 2001: <https://secure.conservation.ca.gov/WellSearch/Details?api=03700776> under
8 Temperature_8-7-2001.tif.
- 9 k. 1994: <https://secure.conservation.ca.gov/WellSearch/Details?api=03700776> under
10 Temperature_9-21-1994.tif.

11 3. Attached hereto and incorporated herein by this reference as Exhibit 3 is a true and
12 correct copy of the article, "What Went Wrong at Porter Ranch?" by Gene Maddaus, published in
13 LA Weekly on December 22, 2015 and available on the internet at
14 <http://www.laweekly.com/news/what-went-wrong-at-porter-ranch-6405804> (last accessed on
15 October 17, 2016).

16 4. Attached hereto and incorporated herein by this reference as Exhibit 4 is a true and
17 correct copy of Aliso Canyon Updates from SoCalGas, dated October 28, 2015 and December 15,
18 2015, located on the SoCalGas website, [https://www.socalgas.com/newsroom/aliso-canyon-](https://www.socalgas.com/newsroom/aliso-canyon-updates/archive)
19 [updates/archive](https://www.socalgas.com/newsroom/aliso-canyon-updates/archive) (last accessed on October 17, 2016).

20 5. Attached hereto and incorporated herein by this reference as Exhibit 5 is a true and
21 correct copy of the Aliso Canyon Update from SoCalGas dated November 15, 2015 and located
22 on the SoCalGas website, <https://www.socalgas.com/newsroom/aliso-canyon-updates-11-15-15>
23 (last accessed on October 17, 2016).

24 6. Attached hereto and incorporated herein by this reference as Exhibit 6 is a true and
25 correct copy of the Los Angeles County Department of Public Health ("DPH") order dated
26 November 19, 2015, and located on the DPH website, [http://publichealth.lacounty.gov/](http://publichealth.lacounty.gov/eh/docs/AlisoCanyonBoard.pdf)
27 [eh/docs/AlisoCanyonBoard.pdf](http://publichealth.lacounty.gov/eh/docs/AlisoCanyonBoard.pdf) at page 6 (last accessed on October 17, 2016).
28

1 7. Attached hereto and incorporated herein by this reference as Exhibit 7 is a true and
2 correct copy of a still shot of the video image showing the gas blowout entering the residential
3 areas of Porter Ranch on December 9 and 10, 2015. The videos can be seen on the internet at
4 <http://www.porterranchlawsuit.com/new-porter-ranch-gas-leak-video/> or [https://www.youtube](https://www.youtube.com/watch?v=N8FwDgRv9tk)
5 [.com/watch?v=N8FwDgRv9tk](https://www.youtube.com/watch?v=N8FwDgRv9tk).

6 8. Attached hereto and incorporated herein by this reference as Exhibit 8 is a true and
7 correct copy of a newspaper report dated January 6, 2016, "Utility is installing screens to contain
8 oily mist at leaking well near Porter Ranch," by Louis Sahagun of the LA Times,
9 <http://www.latimes.com/local/california/la-me-porter-ranch-20160105-story.html> (last accessed
10 on October 17, 2016). The article refers to a posting by SoCalGas on its updates website on
11 December 21, 2015 that residents are reporting the presence "dark brown spots" on their homes.

12 9. Attached hereto and incorporated herein by this reference as Exhibit 9 is a true and
13 correct copy of a newspaper report dated December 25, 2015, "In Porter Ranch, ongoing gas leak
14 seeps the joy out of Christmas," by Louis Sahagun and published by the LA Times,
15 <http://www.latimes.com/science/la-me-porter-ranch-christmas-20151225-story.html> (last accessed
16 on October 17, 2016).

17 10. Attached hereto and incorporated herein by this reference as Exhibit 10 is a true
18 and correct copy of a news report describing errors on the SoCalGas website regarding the health
19 risks, "Utility May Have Understated Health Threat from Porter Ranch Gas Leak," by Brian
20 Melley and Ellen Knickmyer (of the Associated Press) and published by CBS Local on January 1,
21 2016, [http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-](http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-porter-ranch-gas-leak/)
22 [porter-ranch-gas-leak/](http://losangeles.cbslocal.com/2016/01/14/utility-may-have-understated-health-threat-from-porter-ranch-gas-leak/) (last accessed on October 17, 2016).

23 11. Attached hereto and incorporated herein by this reference as Exhibit 11 is a true
24 and correct copy of a newspaper reported dated March 8, 2016, "The presence of oily mist from
25 the SoCalGas blowout led to the closure of local park for clean-up after the blowout stopped as
26 reported by the LA Times on March 8, 2016, [http://www.latimes.com/local/california/la-me-](http://www.latimes.com/local/california/la-me-porter-ranch-20160105-story.html)
27 [porter-ranch-20160105-story.html](http://www.latimes.com/local/california/la-me-porter-ranch-20160105-story.html) (last accessed on October 17, 2016).

28 ///

1 12. Attached hereto and incorporated herein by this reference as Exhibit 12 is a true
2 and correct copy of the March 4, 2016 order found on DOGGR's website in a hyperlink in the
3 following statement "ordered all 114 gas storage injection wells be thoroughly tested for safety
4 and competence before injection resumes into the Aliso Canyon natural gas storage field." See,
5 <http://www.conservation.ca.gov/dog/AlisoCanyon> and <http://www.conservation.ca.gov/index/>
6 [Documents/1109.pdf](http://www.conservation.ca.gov/index/Documents/1109.pdf).

7 13. Attached hereto and incorporated herein by this reference as Exhibit 13 is a true
8 and correct copy of the Criminal Complaint in this action, Case No. 6SC00433, filed by the
9 LADA against Defendant Southern California Gas Company on February 2, 2016.

10 14. Attached hereto and incorporated herein by this reference as Exhibit 14 is a true
11 and correct copy of the Proposed Settlement Agreement between the People of the State of
12 California and Defendant Southern California Gas Co. filed on September 13, 2016.

13 I declare under penalty of perjury under the laws of the State of California that the
14 foregoing is true and correct.

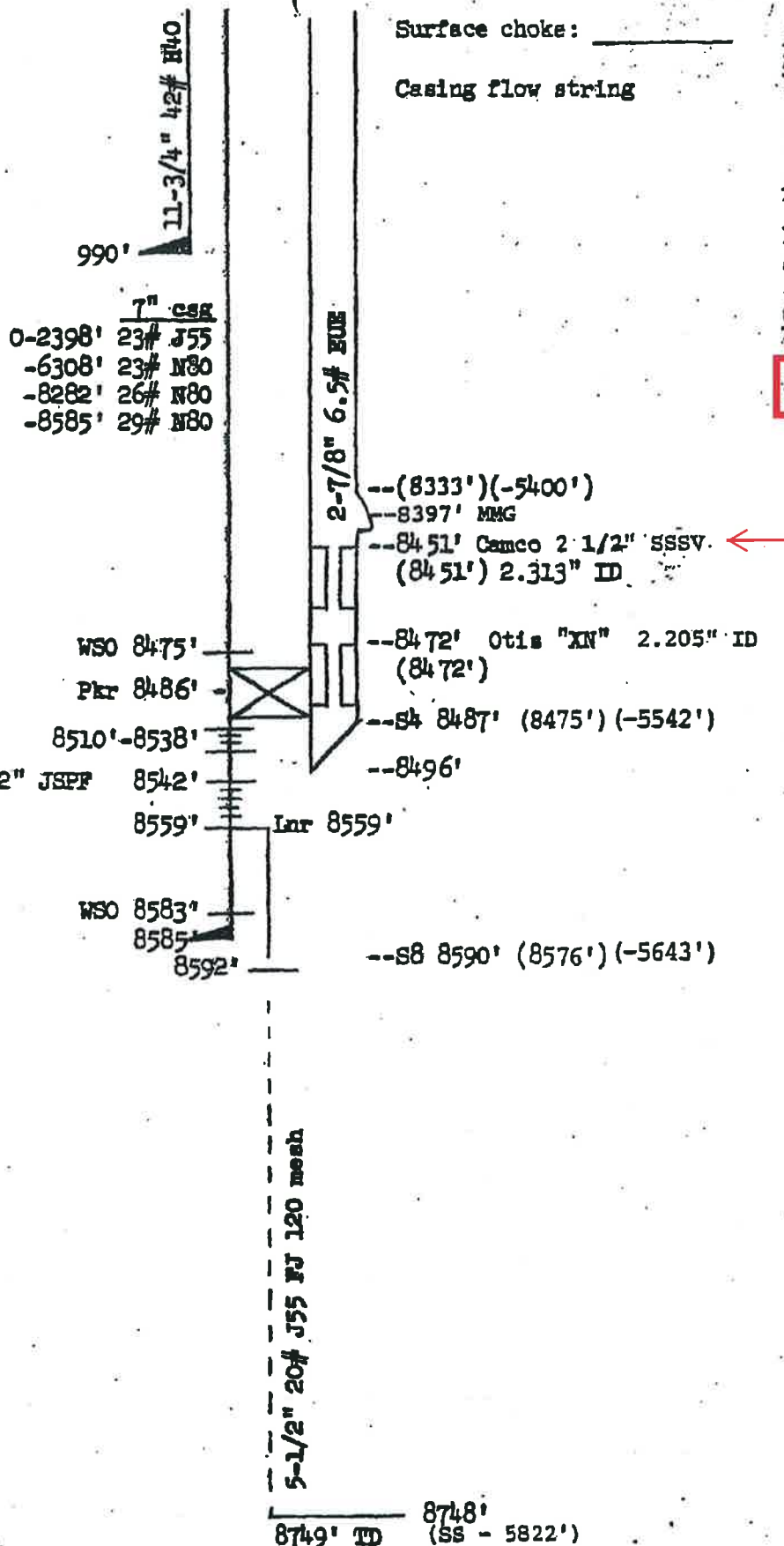
15 Executed this Tuesday, October 18, 2016, in Laguna Beach, California.

16
17 

18 R. Rex Parris, Esq.
19 Attorneys for Victims
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21
22
23
24
25
26
27
28

Elevation 2927" G.L.
DF: 6'

Standard Sesnon 25



10/1/53 - Well spud
2/25/54 - Well completed
893' of 4-1/2" drill pipe + Johnston tester side tracked - old TD 4948' plugged back 3860'
5/24/73 - 6/6/73 Cleaned out to 8748', pressure tested csg, perforated for conversion to gas storage, ran tbg with gas lift valves.
6/25/76 - 7/9/76 Cleaned out to 8748', ran tbg with SSSV
2/16/79-2/20/79 Replaced safety system

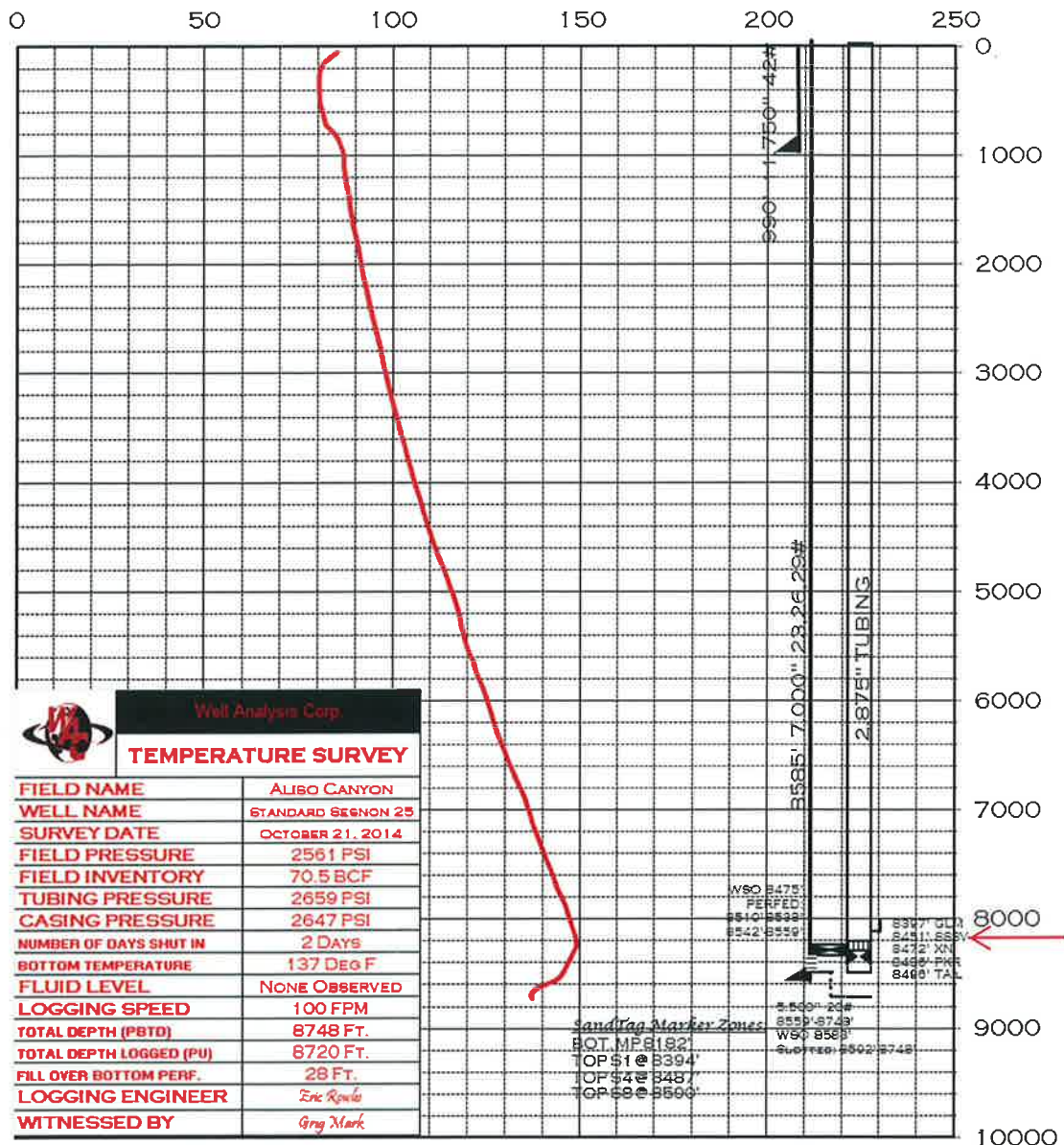
NOTE: Unable to use lower nipple - use M-lock for SSSV nipple. See wireline tickets.

WELL VOLUME

	Cu.Ft.	Bbl.
Tubing	276	49
Csg/Lnr.	37	7
Annulus	1469	262

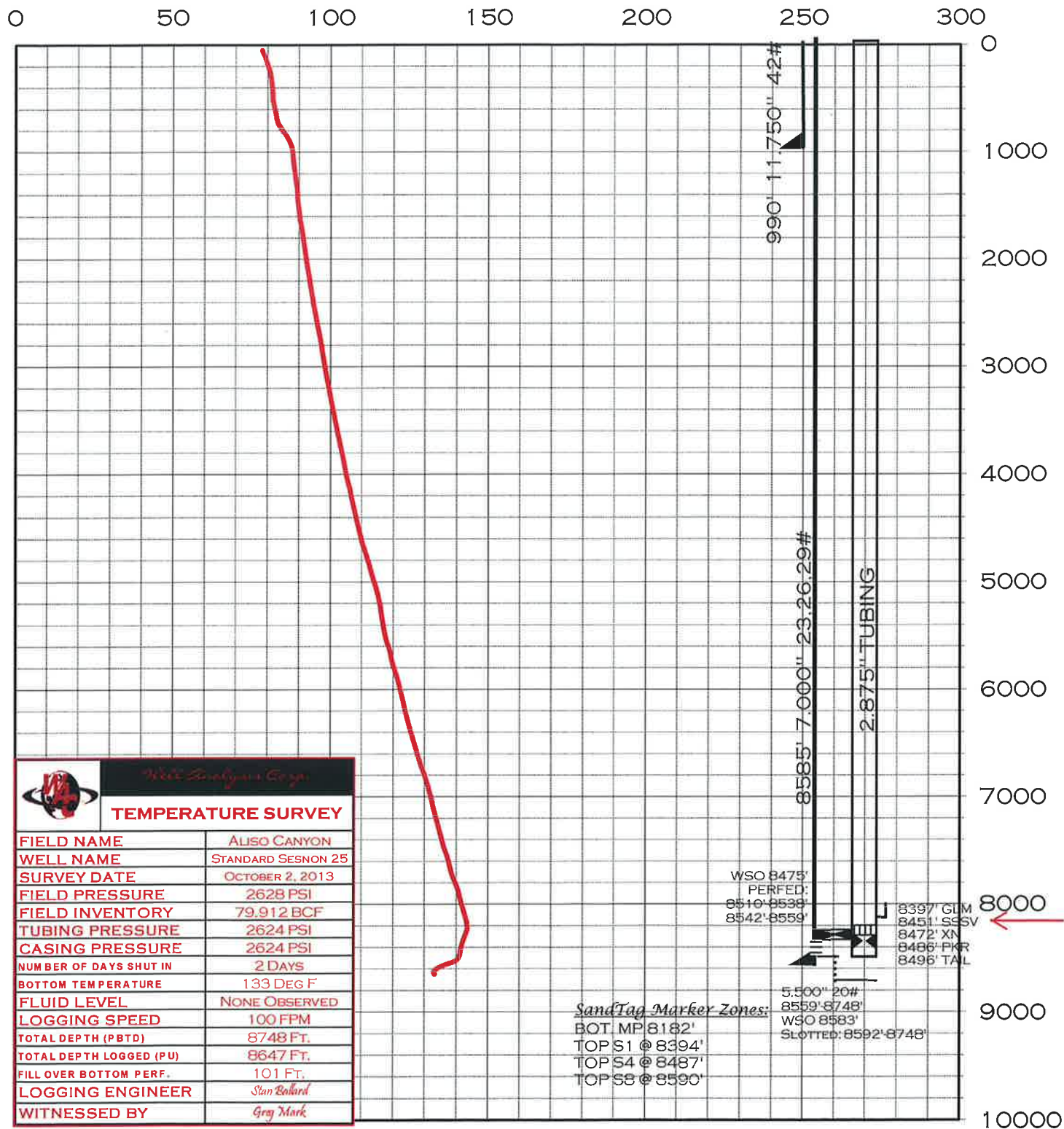


03700776_SURVEY_TEMPERATURE_10-21-2014(SS25)



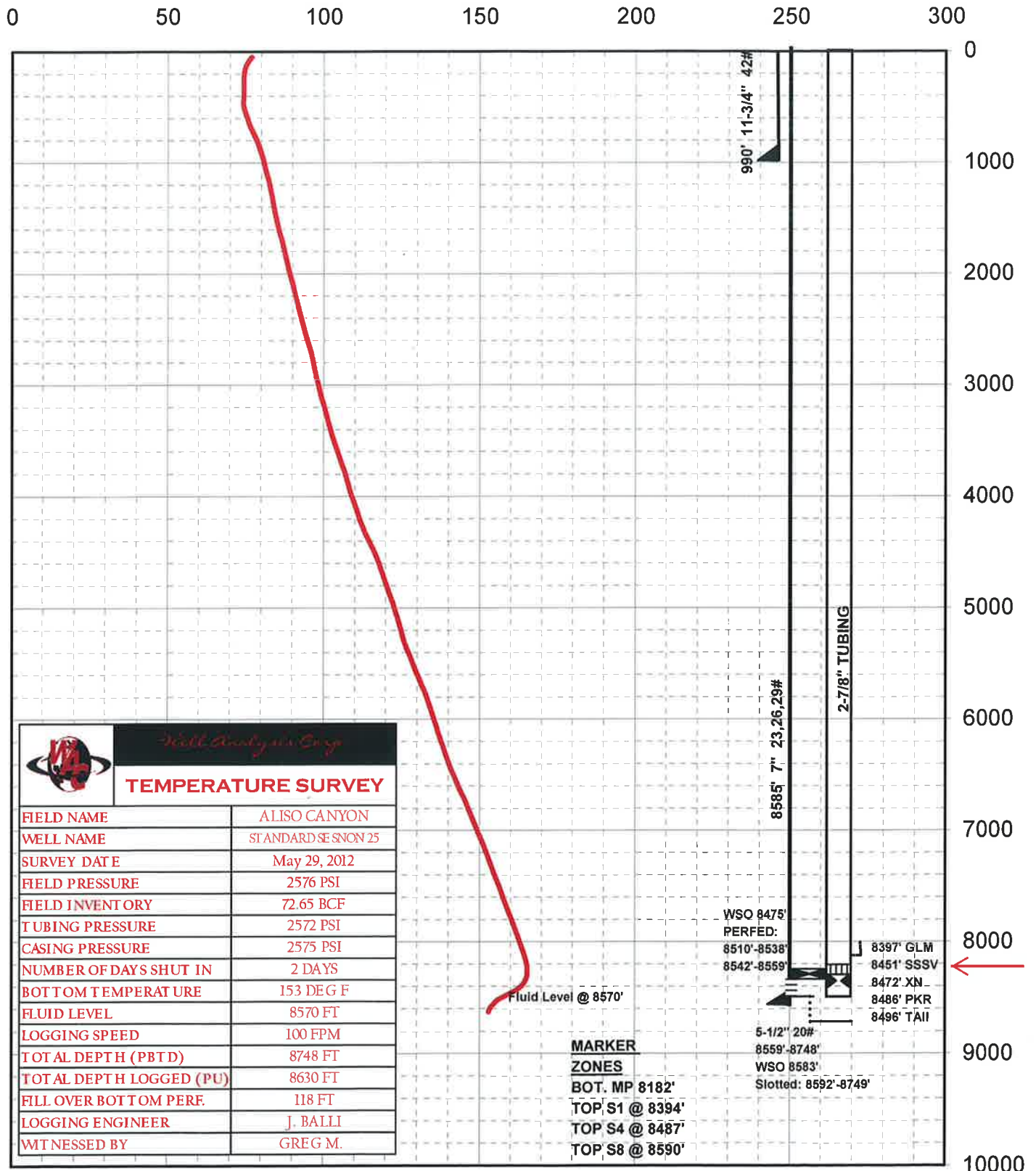


03700776_SURVEY_TEMPERATURE_10-02-2013(SS25)



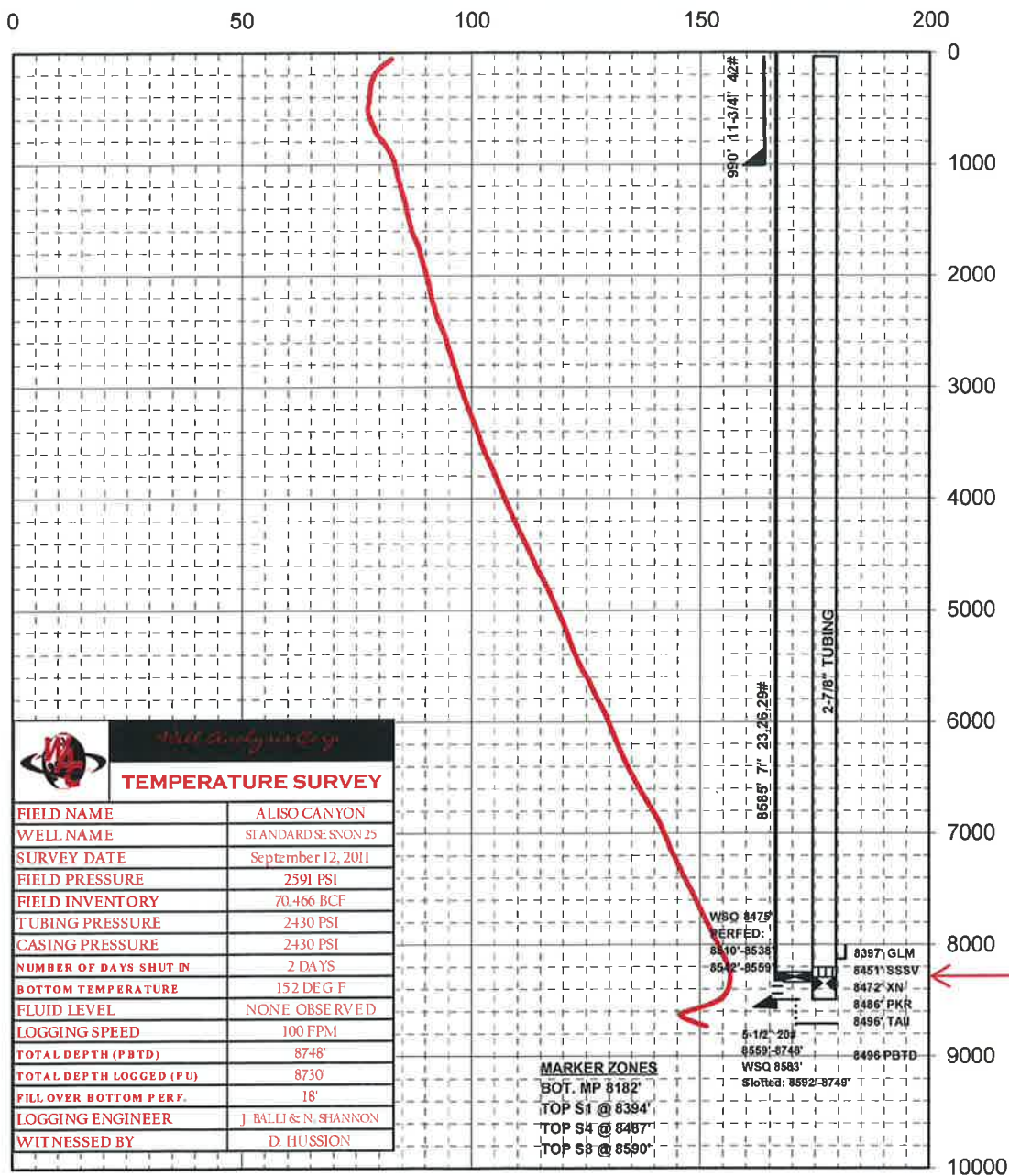


03700776_SURVEY_TEMPERATURE_05-29-2012(SS25)





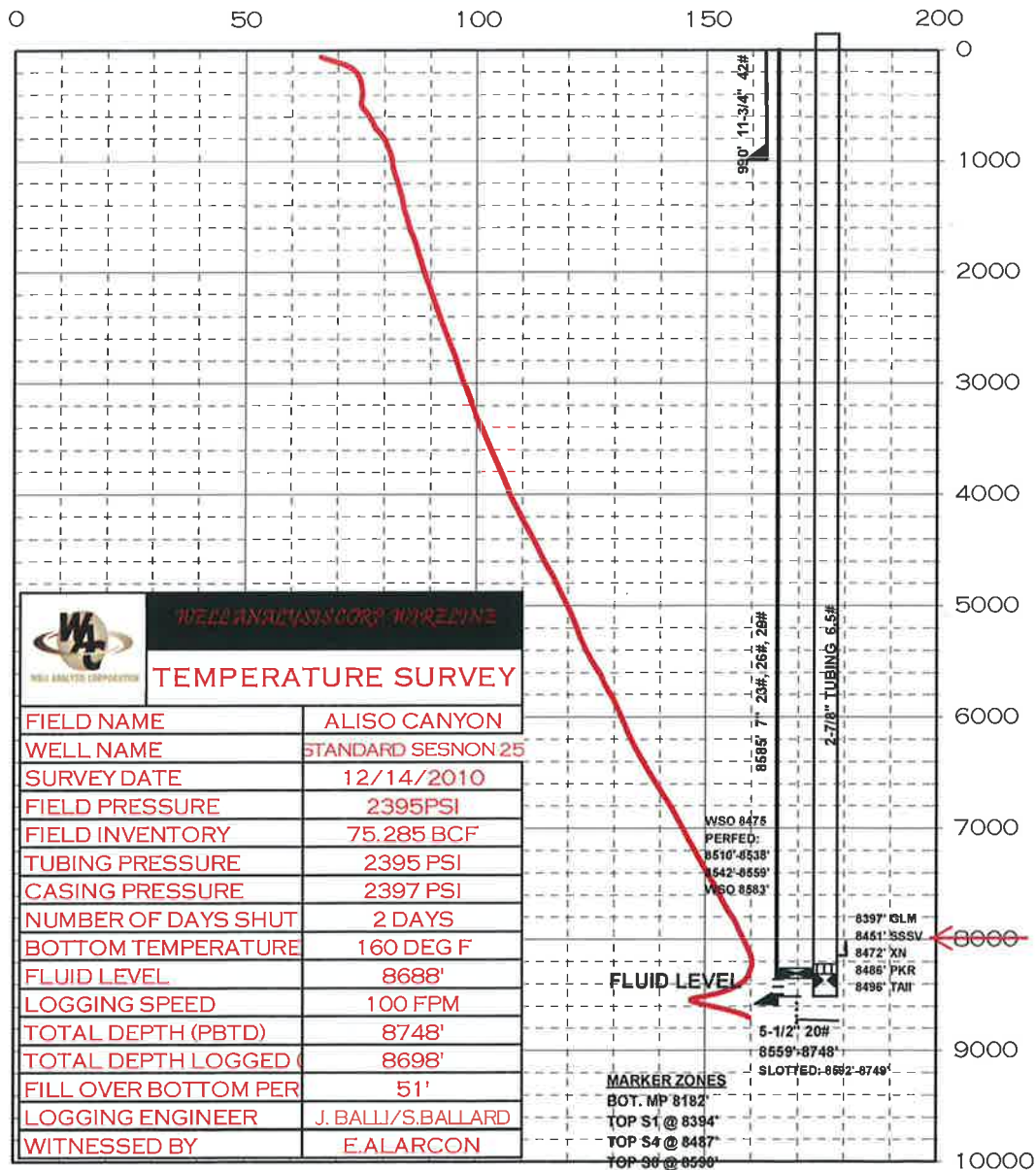
03700776_SURVEY_TEMPERATURE_09-12-2011(SS25)





WELL ANALYSIS CORPORATION

03700776_SURVEY_TEMPERATURE_12-14-2010(SS25)





WELACO WIRELINE	
TEMPERATURE SURVEY	
COMPANY NAME	GAS COMPANY
WELL NAME	STANDARD SESNON 25
FIELD	ALISO CANYON
SURVEY DATE	10/5/2009
FIELD INVENTORY	59.822 BCF
TUBING PRESSURE	2490 PSI
CASING PRESSURE	2490 PSI
NUMBER DAYS SHUTIN	2 DAYS
BOTTOM TEMPERATURE	144 DEG F
FLUID LEVEL	N/A
LOGGING SPEED	100 FPM
TOTAL DEPTH (PBTB)	8748
TOTAL DEPTH LOGGED (PU)	8470
FILL OVER BOTTOM PERF.	278
LOGGING ENGINEER	DJ BEBOUT
WITNESSED BY	E. ALARCON

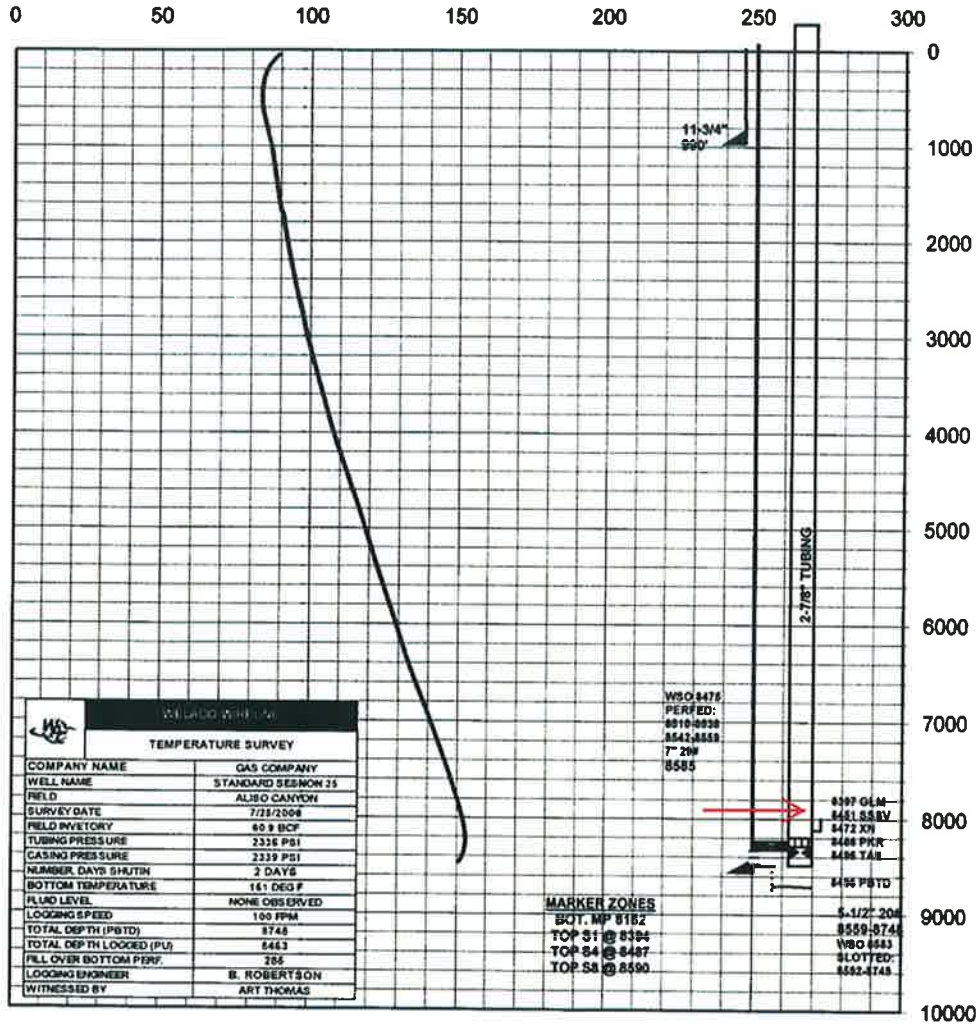
MARKER ZONES

DEPTH (FT)	TEMP (F)	TEMP (C)
801	8162	27.0
TOP 81	8134	25.7
TOP 34	8137	25.9
TOP 38	8139	26.1

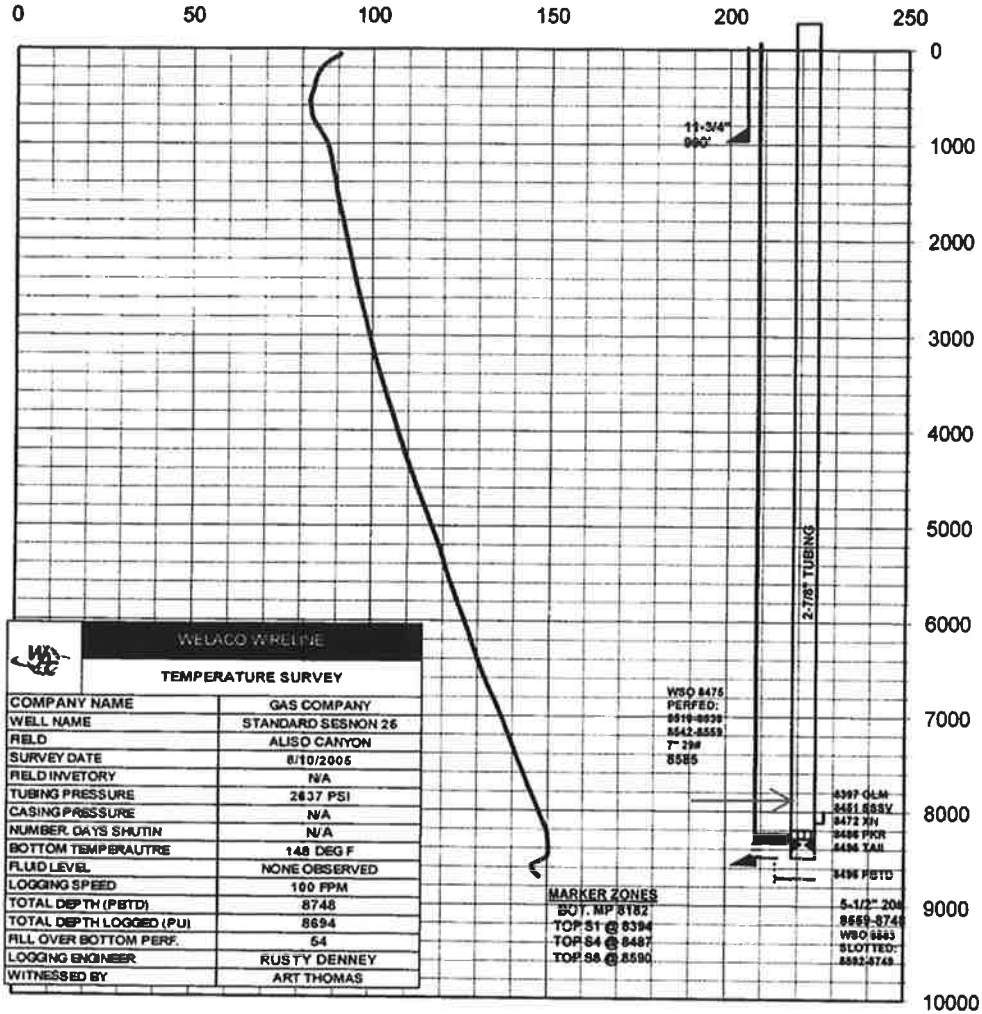
WELL DATA

DEPTH (FT)	TEMP (F)	TEMP (C)
8337	8143	27.5
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8472	8171	28.2
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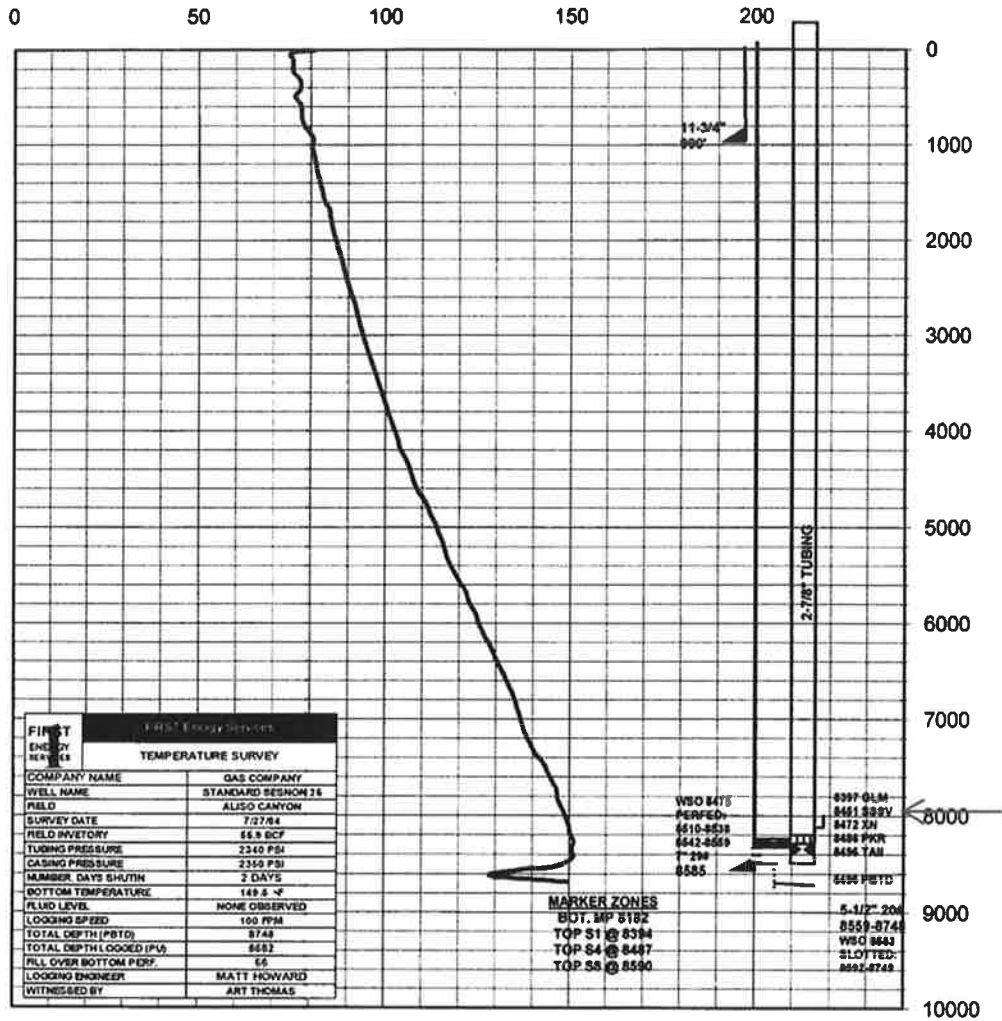
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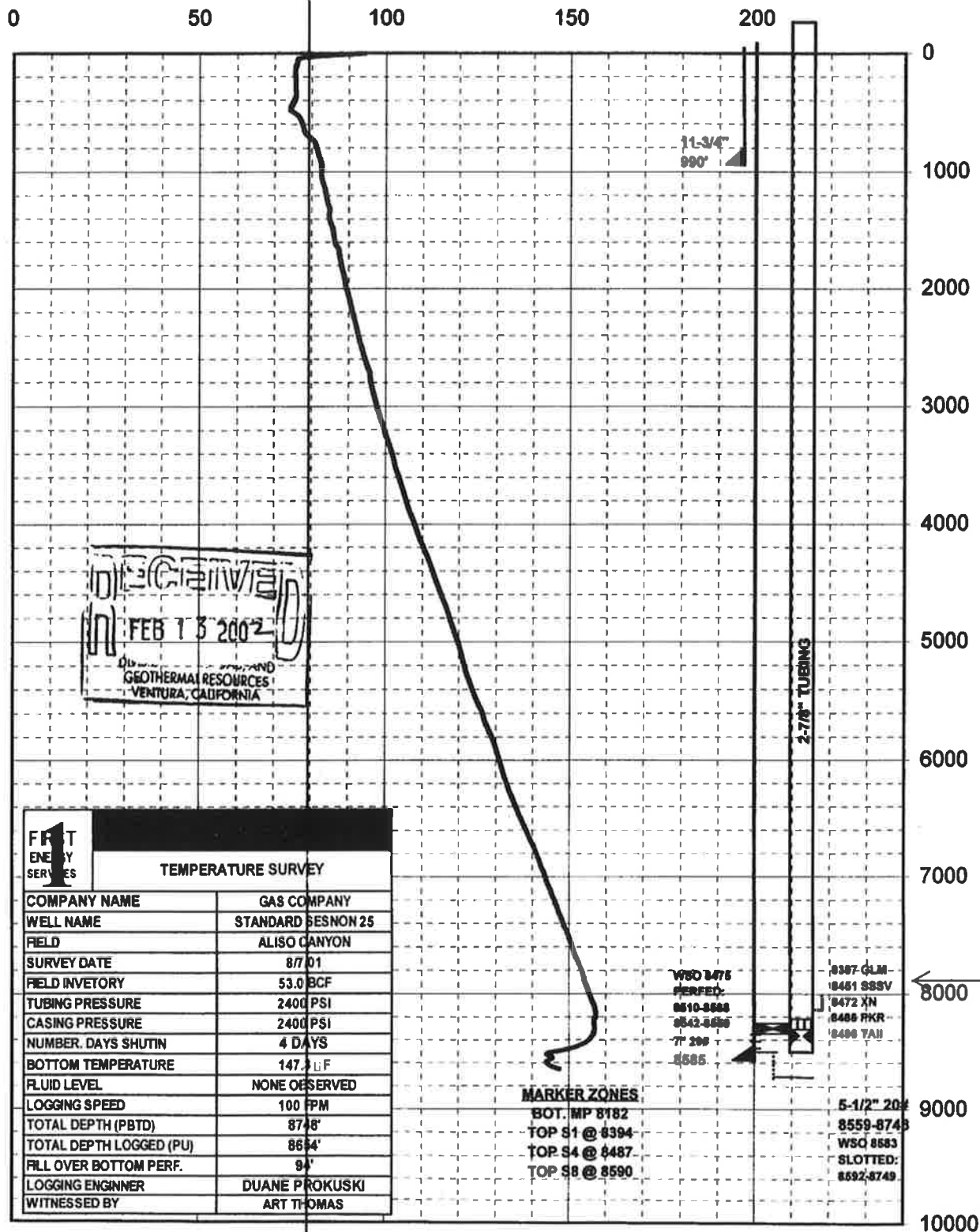


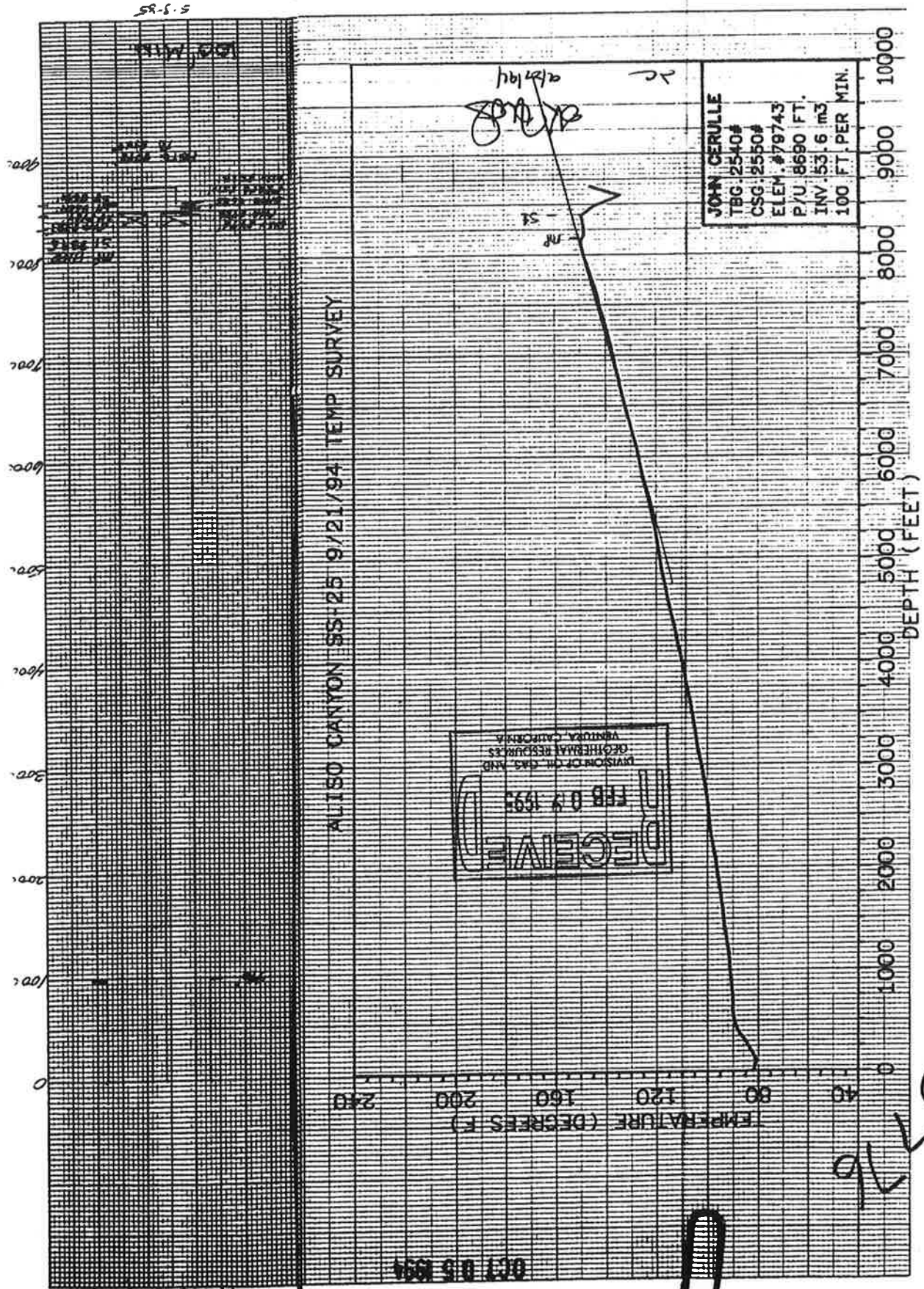
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03700776

TEMPERATURE (°F)





JOHN GERULLE
 TBG-2540#
 CSG-2550#
 ELEM-#79743
 P/U 8690 FT.
 INV-53.6 m3
 100 FT PER MIN.

RECEIVED
 DIVISION OF OIL, GAS, AND
 GEOTHERMAL RESOURCES
 FEB 09 1993
 VENTURA, CALIFORNIA

ALISO CANYON SS 25

REC'D S.O.

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10 X 10 TO THE CENTIMETER 16 X 25 CM
 KLUFFEL & ESSER CO. MADE IN U.S.A.

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What Went Wrong at Porter Ranch?

BY GENE MADDAUS

TUESDAY, DECEMBER 22, 2015 AT 8:52 A.M.



Matt Pakucko, president of Save Porter Ranch, has called for the closure of the Aliso Canyon storage site.

Photo by Danny Liao

Before she retired in 2014, Anneliese Anderle was a field engineer for the Division of Oil, Gas and Geothermal Resources, which regulates oil drilling. She worked out of offices in Bakersfield, Cypress and Ventura, and for a while she was responsible for monitoring the massive natural gas storage field at Aliso Canyon.

Southern California Gas owns the facility, which distributes gas to 14 power plants and 21 million customers. In her years monitoring wells at Aliso Canyon, Anderle says she got to know the gas company as "a first-class operation."

The company tended to be conservative, and to do things rigorously and by the book. But the wells at Aliso Canyon were aging, and many were starting to wear out.

"They have a beautiful facility," she says. "It's gleaming. They have great roads and well-marked pipelines. Everything's painted. But just below the surface, it's junk."

On Oct. 23, gas company employees noticed a leak out of the ground near a well called SS-25. It was late afternoon, so they decided to come back in the morning to fix it.

The next day, however, their efforts were unsuccessful. Gas was now billowing downhill into Porter Ranch, an upscale community on the northern edge of the San Fernando Valley. Customers were beginning to complain about the smell.

Gas leaks are not uncommon, and it took a couple weeks for this one to become news. When Anderle heard about it, in early November, she pulled up the well record on a state website. The file dates back to when the well was drilled in 1953. As she looked it over, she zeroed in on a piece of equipment 8,451 feet underground called a sub-surface safety valve.

If it were working properly, the gas company would be able to shut down the well. The fact that SoCalGas hadn't meant, to her, that it must be broken. The records indicated that it had not been inspected since 1976.

"That's almost 40 years," she says. "It's a long time to leave it in the well."

As weeks went by and further efforts to stop the leak failed, it became clear that the company was dealing with an unprecedented catastrophe.

On Dec. 15, the *Weekly* interviewed Rodger Schwecke, a SoCalGas executive who is helping to coordinate the response to the leak. Asked about the safety valve, he said it wasn't damaged. It actually wasn't there.

"We removed that valve in 1979," he said.

He pointed out that the valve was old at that time and leaking. It also was not easy to find a new part, so the company opted not to replace it. If SS-25 were a "critical" well – that is, one within 100 feet of a road or a park, or within 300 feet of a home – then a safety valve would be required. But it was not a critical well, so it was not required.

"Now there's definitely going to be a push for changing the regulations," Anderle said, when told of the missing valve. "You get rid of a safety valve because it wasn't working? A safety valve would have shut the damn well down! They're in a bunch of trouble."

Gas has now been spewing out of the ground at Aliso Canyon for two months. The gas company expects it to continue for up to another three months. Methane is a potent contributor to climate change. By one estimate, the leak is producing greenhouse gas emissions equivalent to the tailpipes of 2.3 million cars.

The Aliso Canyon leak has increased the state's methane emissions by 21 percent. As of now, 2.3 percent of the state's entire carbon footprint is coming from one hole in the ground above Porter Ranch.

"This is an environmental disaster," said Mayor Eric Garcetti, who stopped by Porter Ranch Community School in November, just before flying to Paris for the United Nations climate change conference. "It's devastating. It makes you question the long-term sustainability of a carbon-based power system."

**"You have a home that you used to love. People move to Porter Ranch for the views, the camaraderie and the community. Now we're seeing it be destroyed."
-Ellen Oppenberg, a resident of Porter Ranch for 22 years**

The local impact also has been severe. About 30,000 people live in Porter Ranch, a bedroom community of gated developments with 4,000-square-foot homes that sell for \$1 million or more. The neighborhood offers good schools, clean air and a sense of security. All of that has been disrupted. Many residents have experienced headaches, nosebleeds, nausea or other symptoms. Some 2,000 families have been moved to hotels or short-term rentals to escape the gas.

"It's frightening," says Ellen Oppenberg, a resident of Porter Ranch for 22 years. "You have a home that you used to love. People move to Porter Ranch for the views, the camaraderie and the community. Now we're seeing it be destroyed."

Families have agonized about whether to allow their children to play outdoors. The school district has opted to relocate two schools starting in January. Some parents have rushed their babies to the emergency room with shortness of breath. Some say their pets are throwing up. Whenever anyone gets sick they wonder, *Is it the gas?*

"I'm in the frame of mind of, 'What do I gotta do to protect my family?'" says Pete Adams, a longtime Porter Ranch resident who has not left but is thinking about it. "Did I cause irreversible damage to my family by being ignorant?"

Public health officials have tried to be reassuring. The air readings are not so bad as to require a mandatory evacuation. But officials also have said that people's symptoms are real, and have forced the gas company to pay for relocations.

Lawyers are coming in from around the country to sign up clients to sue the gas company. The first class-action suit was filed on Nov. 23, and at least two more have followed. A massive crowd came out to a megachurch on a Wednesday night to hear Erin Brockovich, the celebrity environmental crusader, give a pitch for yet another law firm.

So far, officials have not faulted the gas company's efforts to stop the leak, nor have they cited conditions that may have caused it. But outside experts have identified several concerns. Among them is the missing safety valve. Some also have questioned why it's taking so long to drill a relief well to seal the leak.

For a company that is generally so cautious, SoCalGas seems to have been unprepared for a leak of this magnitude. That's especially troubling because SS-25 is far from unique. Many other wells are just as old, or older, and according to SoCalGas they also lack sub-surface safety valves. If one of them were to crack, this disaster could easily happen again.

When they bought their homes in Porter Ranch, few people had any idea they were moving so close to one of the largest gas-storage facilities in the country. Aliso Canyon is a massive natural reservoir – about one cubic mile, buried a mile and a half below ground.

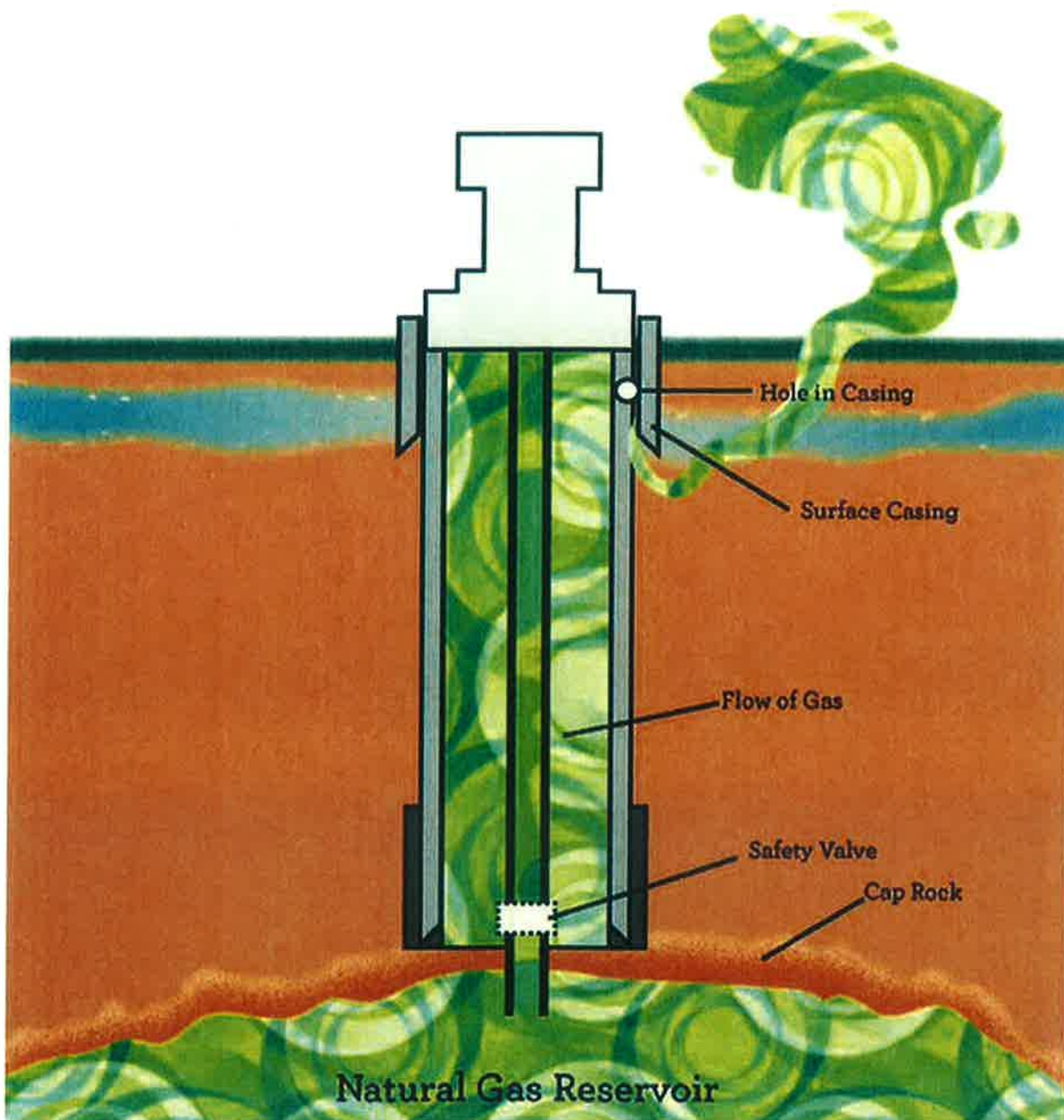
Oil was discovered there in 1938. The Tidewater Associated Oil Company, owned by J. Paul Getty, produced oil and gas from the field until it was depleted in the early 1970s. Getty Oil sold the field to Pacific Lighting Corp. (a gas company formed in the 19th century, when gas was used to light homes), which converted it to storage in 1972.

Sempra Energy, the successor to Pacific Lighting Corp. and the parent company of Southern California Gas, now owns the field. It is quite common for gas to be stored in depleted oil fields. In addition to Aliso Canyon, Sempra owns three smaller storage fields in Southern California: Playa del Rey, La Goleta and Honor Rancho.

Most of the wells at these fields were drilled many decades ago. In filings with the Public Utilities Commission in 2014, the company noted that of 229 wells at its facilities, half were at least 57 years old. Fifty-two of them were at least 70 years old.

Steel corrodes after decades underground. In 2008, the company had to do three costly workovers to repair leaking wells. By 2013, that number had grown to nine.

The older wells were not built to modern standards. New wells typically are sealed to the surrounding rock formation with cement from the surface of the ground to the bottom of the well. That makes the casings stronger and protects them from water. Older wells were not cemented from top to bottom.



SS-25 is made of three cylinders one inside the other. Gas is escaping from a vast underground "reservoir" via a hole in the inner, 7-inch casing at 470 feet deep. The gas is traveling down to the end of the outer casing at 990 feet, then out through the rock. Modern wells are cemented from the surface to the reservoir to stop corrosion, but the 7-inch casing of this well, circa 1953-1954, was only cemented from a depth of 6,600 feet down to 8,500 feet. The hole from which gas is spewing occurred far above this safety cementing.

Illustration by Darrick Rainey

SS-25 was cemented only from the bottom up to a depth of 6,600 feet. The rest – more than a mile of steel pipe – was left exposed to the rock formation. At the top, the 7-inch casing is surrounded by an 11¾-inch surface casing, which is cemented to the rock. But a new well also would have a layer of cement between those casings to provide greater strength and protection from corrosion.

Gas is now leaking through a hole in the 7-inch casing at 470 feet down to the bottom of the outer casing at 990 feet, and out through the rock to the surface.

The corporate culture of SoCalGas is nothing if not deliberate. And so, in 2014, the company proposed a methodical effort to check each well for corrosion. It would take about seven years and cost tens of millions of dollars. The plan was part of a request to the Public Utilities Commission to increase customers' monthly gas bills by 5.5 percent. The alternative was to fix leaks only as they occurred, which one executive warned could be dangerous and lead to "major situational or media incidents."

The SoCalGas plan went well beyond the requirements imposed by the state Division of Oil, Gas and Geothermal Resources, or DOGGR. Steve Bohlen, the outgoing head of DOGGR, has said several times that it does not appear that Southern California Gas violated any regulations.

"He said there was nothing in the record that the gas company did where they broke the rules, which is true," says Anderle, who worked for DOGGR for 21 years. "The trouble is, the rules are so soft and undemanding."

Pressure tests must be done every five years, in addition to annual temperature surveys. But that would detect only an active leak, not one that was about to happen.

At this point, Brandon Ly is ready to go. He lives in Porter Ranch Estates, in a three-bedroom house about a mile and a half south of SS-25. He says that since the leak started he's had rashes, body aches and blurred vision.

His bigger concern is for his wife, Judy. She's a breast cancer survivor. Her doctor has advised her to avoid carcinogens. They're worried about benzene, which is a carcinogen and is found in trace amounts in natural gas.

The Lys keep the windows closed and they don't take walks anymore. Still, he worries that she's exposed to something that could cause long-term damage. Her cancer has been in remission long enough that they can try to have a baby.

"I just want to get out of here," Ly says.



Brandon Ly and his wife, Judy, live just a mile and a half from the leak. They have requested to be relocated.

Photo by Danny Liao

He has called the gas company for a temporary relocation. But he really wants to sell his house. Even after this leak is plugged, there are 114 other wells at Aliso Canyon. Who's to say one of them won't fail? He called a real estate agent and was told that, because of the leak, it's a bad time to sell.

"I feel like I'm trapped," he says. "I'm stuck in a poisonous house."

Arlene Stein lives on the next street over.

"You can smell it really bad on our cul de sac," she says. "When it's bad, it's nauseating. I've had headaches almost continuously for the last couple of months."

She has lived there since 1994. She moved in just before the Northridge earthquake, which damaged homes across Porter Ranch. She also was there for the Sesnon Fire in 2008, which came right up to the edge of her street.

That lasted only a few days. The gas leak has gone on for two months, with no end in sight. At first, the gas company said it would be over relatively quickly. But each attempt to kill the well failed. Finally, the company announced it was drilling a relief well, which would intercept the leaking well 8,000 feet below ground. It would take three to four months to drill.

"They just keep saying it's very complicated and they have to go slow," Stein says. "Why does it take four months to drill into the ground?"

As the weeks went on, more and more of her neighbors decided to relocate. The gas company will pay up to \$250 per room per night, for up to 90 days. After calling around for several days, Stein found a vacation rental in Sherman Oaks that would allow her dogs.

"It feels like a cover-up that they didn't tell us right away," says Stein, one of about 200 demonstrators who recently picketed outside the entrance to Aliso Canyon, calling for its closure. "I would like them to shut down the whole facility."

Natural gas is invisible. But heat-sensing cameras have been able to capture a plume of gas erupting out of the hillside. The situation is particularly dangerous for the 100 to 200 workers who are at the site at any given time trying to kill the well. The hillside could be undermined by flowing gas, or the gas could ignite.

For the gas company, the motto has been "work slow to work fast," Schwecke says. They are proud that so far no workers have been injured. "If you try to rush things, that's when something happens," he says.

The company has taken a very cautious and deliberate approach to killing the well, starting with the most conservative option and then proceeding to more aggressive steps.

SoCalGas has made six "kill attempts," in which brine or heavier liquid is poured down the well in an effort to stop the flow of gas. All of those efforts have failed.

The peak demand for natural gas comes during the winter. So in the fall, the company filled the reservoir almost to its capacity. When the leak started, the reservoir was near its peak pressure.

The gas flowing out of SS-25 is moving at high velocity. Each time the gas company tries to stop it with liquid, the liquid is either blasted out the hole in the casing or back up to the top.

The last kill attempt was on Nov. 25. Though the company hasn't come out and said so, it appears to have essentially given up on that option. On Dec. 4, six weeks after the leak began, SoCalGas began drilling the relief well.

**"They really should have started drilling that well as soon as they found out it was leaking. They would be well on their way to being able to control the well."
-Greg McCormack, an expert in petroleum engineering**

The company has brought in Boots & Coots, a subsidiary of Halliburton, which is globally renowned in the field of well control. Once its workers intercept SS-25 at a depth of 8,000 feet, they will pour liquid and cement into the well, sealing it off.

Outside experts agree that this is a surefire way to kill the leaking well. But they have criticized both the delay in setting up the relief well and the time estimate for completing it.

"They really should have started drilling that well as soon as they found out it was leaking," says Greg McCormack, an expert in petroleum engineering based in Houston. "They would be well on their way to being able to control the well."

Steve Vorenkamp, a former executive at Wild Well Control, says it was his company's practice to drill two relief wells, as was done on the Deepwater Horizon leak in the Gulf of Mexico.

"If one causes problems or breaks down, you have a backup," Vorenkamp says.

The gas company is planning to drill a second relief well. But first it must grade a new well pad and bring in a drill rig from off-site. Schwecke estimates the drilling on the second well won't begin until later in January.

He also says the company drilled the first relief well as fast as it could. He says the planning and site preparation began about two weeks after the leak was discovered.

"You can't just set up a rig and start drilling tomorrow," Schwecke says. "We probably did that month and a half of work in what would usually take three months."

Yet outside experts suggest that four months is a very conservative estimate for how long the relief well ought to take.

"Oh my word," Vorenkamp says, when told of the estimate. "I question why so long for an 8,000-foot well."

McCormack says it should take closer to two months.

Some experts have suggested more creative ways to kill the well, such as inserting cement between the 7-inch and 11¾-inch casing. Schwecke says the company does have an easy way to do that — and says it wouldn't work. "You can't plug on the outside and expect it to hold," he says. "That's like putting a finger in a dike."

There's also a chance that a creative solution could unintentionally increase the flow of gas and thus make the situation worse. Such a risk would be out of character for Southern California Gas.

On Dec. 9, Erin Brockovich addressed 2,000 people at Shepherd of the Hills Church in Porter Ranch. She said she had heard the complaints of nosebleeds, rashes, headaches, nausea and vomiting. She warned them not to trust the gas company when its officials say the air is safe.

"I definitely want all of us to stay united," she said. "When we all stick together, things will go better."

In the back, people were picking up retainer agreements for Weitz & Luxenberg, the firm that works with Brockovich to file environmental suits. They planned to file the first suit within a week.

"We think it's important that each person has his or her voice," attorney Robin Greenwald said, "to be able to say this is how you hurt me and this is what I want in return for you hurting me."

By the time of the meeting, R. Rex Parris, a plaintiff's attorney and the mayor of Lancaster, had already filed a class-action lawsuit. Parris represents Save Porter Ranch, the activist group that had been raising alarms about oil drilling in the hills before the leak began.

Patricia Oliver, an attorney with the Parris firm, notes that they would bring a local perspective to the case.

"We're trying to work with the best trial lawyers in L.A.," she says, noting that Greenwald is from New York.

Matt Pakucko, the president of Save Porter Ranch, says that Brockovich's presentation offered little new information. At one point, a presenter showed a map with an inaccurate location of the leak.

"They don't even know where the fucking thing is," he says.

There's also the firm of McCuneWright, which filed a class-action suit on Nov. 23.

"We were the first firm to act and move on this, long before anybody else," says David Wright, a partner in the firm. "We have an extensive amount of experience in class-action and complex litigation."

Each firm will take a significant chunk of any settlements, ranging from 30 to 40 percent. The damages could end up being substantial. In securities filings, Semptra has said it has more than \$1 billion in insurance policies.

The attorneys have given voice to a lot of people who have been deeply frustrated with the gas company. "SoCalGas has lied about absolutely every fucking thing that has come out of their mouth since the beginning," Pakucko says. "I don't believe a goddamn thing they say."

But for others, there's a concern that the lawyers are just interested in signing up as many clients as possible, and not necessarily considering what's best for the community.

"It's all a big money grab," says Pete Adams, who lives about two miles from the leak along Aliso Canyon. Right now, he says he's not interested in suing. He just wants some answers. "I don't need an activist, a lawyer and a con man," he says. "What I need is a doctor, a real estate agent and a moving company."



On Dec. 4, SoCalGas began drilling a relief well, but it may take months to halt the leak

Courtesy Southern California Gas

Sean O'Rourke lives in the Tuscany development, about two and a half miles from the leak. He can't smell the gas at his house. He's also looked at the air readings and doesn't see anything that alarms him. His biggest concern is about the disruption involved in closing his children's school.

The lawyers, he says, "may be moving too fast for the neighborhood."

"What if all this commotion and this craziness – what if it wasn't handled in the best way?" he asks. "What if the disruption to our property values is more the cause of the hysteria and not what the actual leak was doing?"

Steve Bohlen, who just stepped down as head of DOGGR, has avoided issuing any criticism of SoCalGas. He has often said that no one has a greater incentive to stop the leak than the gas company.

"They have been very agreeable to the things we've requested," he tells the *Weekly*. "They have some of the best talent in the world to try to solve this problem."

Bohlen won't comment on the causes of the leak, saying a full investigation will begin once the leak is stopped. Nor is he prepared to say whether the missing safety valve would be a focus of the investigation.

"We will have to wait for post-closure investigation for technical experts to evaluate whether that would have played a role either in the leak or in making it more difficult to seal the well," he says.

DOGGR was formed 100 years ago to facilitate the production of oil and gas. Though its mission now includes protecting public health and the environment, it is still seen as being friendly to the petroleum industry.

"It has been a permitting agency," says Sen. Fran Pavley, who chairs the committee that oversees DOGGR. "They don't see themselves as a regulatory agency."

Pavley has said she will hold hearings on the leak, which could result in new regulations. But new regulations are unlikely to satisfy activists who want Aliso Canyon closed.

"The regulatory system is broken," says Alexandra Nagy of Food & Water Watch. "We're not playing that game. Adding more laws on the books – we're not falling for that."

At least in the foreseeable future, however, closing Aliso Canyon seems unlikely. Over the next decade, the Los Angeles Department of Water & Power will be transitioning away from electricity generated from coal. That will force the utility to rely even more heavily on natural gas. The gas company has argued it's essential to have storage close to its customer base. If Aliso Canyon were to close, the company says, it would have to get gas from faraway sources, which could lead to price spikes and blackouts.

Anderle believes there are new regulations that would prevent a similar leak from happening again. And since there are so many other old wells at Aliso Canyon, she says it's worth strengthening the rules.

"You have kids that are sick. People are being displaced from their homes during Christmas and Hanukkah and New Year's, and they won't have their life back until maybe March. Property values are going to take a huge hit," she says.

That could have been prevented if regulations had been tighter. "These regulations would not give you a hint that you had trouble," she says. "When you have a well this old, you ought to pull it every once in a while and check down hole."

Sponsor Content



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Aliso Canyon Updates

Updated October 28, 2015

Background

On October 23, SoCalGas crews discovered a leak at one of the natural gas storage wells at its Aliso Canyon storage field. In response, we activated the appropriate procedures to begin to address the leak.

We regret that the smell of the odorant in natural gas is unpleasant and that some people are sensitive to the odor, and we sincerely apologize for the annoyance and concern this odor is causing the neighboring communities. However, the leak does not pose an imminent threat to public safety. The well is located in an isolated, mountain area more than a mile away from and more than 1,200 feet higher than the closest home or public area. Scientists agree natural gas is not toxic and that its odorant is harmless at the minute levels at which it is added to natural gas. In outdoor locations such as this, natural gas quickly dissipates into the air, greatly reducing the possibility for ignition and further diluting the gas as it reaches the public. The human nose is amazingly sensitive and can detect the smell of the odorant at levels much lower than any level of concern.

We have assembled a world-class team of experts, and we are working as quickly as safety will allow to stop the leak. In addition, we are in regular communication with L.A. City and County Fire and Hazmat Departments, the L.A. County Department of Health, the California Division of Oil, Gas & Geothermal Resources, and the South Coast Air Quality Management District.

Update on Activities – November 5

- Our team of well management experts completed the thorough test of the specialized equipment, called a coiled tubing rig, needed to carry out the next steps toward stopping the flow of gas. The tests demonstrated the equipment was safely assembled and ready for final preparations.

On Friday, November 6, the crews will conduct final preparations and plan to start the next phase of the work to stop the flow of the natural gas. If time were to allow, the crew will attach special tools to the end of the tubing and feed it down the well in an attempt to clear the ice that has formed inside the well pipe and to learn more about the condition of the rest of the well pipe below. If we are successful in breaking through the blockage and the evaluations return positive results, then our next step would be to extend the special tubing, essentially a long hose, all the way down the well pipe. We will then fill the pipe with a brine solution, which would prevent the natural gas in the ground from even entering the well pipe. Once full of fluid, the gas would no longer be able to enter the well, and the flow of the gas would be stopped.

If after using this equipment we are unable to break through the blockage, or if the well pipe evaluation were to find other issues, then we would determine the appropriate strategy and next steps. As this work continues, we will continue to monitor the leak 24/7 to ensure conditions remain safe.

To receive updates on Aliso Canyon via phone and email, please fill out a form here (<https://www.socalgas.com/news-room/form/>).

Safety at Aliso Canyon

The safety of our employees, contractors and people in the communities we serve continues to be our top priority. We continue to work alongside multiple agencies such as L.A. County and City Fire, The Department of Public Health, CAL-OES, DOGGR and CPUC, to oversee the operation and worker safety.

Connecting with SoCalGas

For guidance on securing temporary accommodations, how to file a claim, and how to get free home air filtration and weather stripping to reduce odor, and other questions, the Community Resource Center is open from 10 a.m. to 8 p.m. Monday through Friday and from 10 a.m. to 4 p.m. on weekends.

Holiday hours for the center are:

December 24, Christmas Eve:	10 AM to 4 PM
December 25, Christmas Day:	Closed
December 31, New Year's Eve:	10 AM to 4 PM
January 1, New Year's Day:	Closed

It is located at **19731 Rinaldi St.**

(<https://www.google.com/maps/place/19731+Rinaldi+St,+Porter+Ranch,+CA+91326/@34.2757711,-117.83114b1!4m2!3m1!1s0x80c284b365b8b449:0x79640995b672c1c4>) just south of Ralphs grocery store in the Porter Ranch Town Center.

Relief Well

Relief well crews continued Phase 2 drilling by reaching over 2,800 feet below the surface. During this and subsequent phases, the team of relief well experts will positively identify the leaking well with electromagnetic ranging technology, follow it down to more than 8,000 feet deep and intercept it near its bottom. Once we intercept the well, we will pump heavy mud and fluids into the leaking well to stop the flow of gas from the reservoir and into the well. Once the flow of gas has been stopped, we will pump cement into the bottom of the well to permanently seal it. The drilling process continues around the clock, and is expected to take three to four months to complete.

FAA Notice

The FAA issued a temporary localized no-fly zone near the leaking well. What this means is planes and helicopters can fly over the well as long as they are at least 2000 feet above the well. This was done to prevent any safety issues at the well site, and in the air.

Air Samples & The Environment

Aliso Canyon Archive

Aliso Canyon Updates

- Aliso Canyon Updates - 12/17/15 (</cs/ContentServer?c=Page&pagename=SoCalGas%2Fscg%2FLayout&rendermode=preview&cid=1443738040068>)
- Aliso Canyon Updates - 12/16/15 (</cs/ContentServer?c=Page&pagename=SoCalGas%2Fscg%2FLayout&rendermode=preview&cid=1443738039386>)
- Aliso Canyon Updates - 12/15/15 (</cs/ContentServer?c=Page&pagename=SoCalGas%2Fscg%2FLayout&rendermode=preview&cid=1443738038564>)
- Aliso Canyon Updates - 12/14/15 (</cs/ContentServer?c=Page&pagename=SoCalGas%2Fscg%2FLayout&rendermode=preview&cid=1443738037613>)
- Aliso Canyon Updates - 12/13/15 (</cs/ContentServer?c=Page&pagename=SoCalGas%2Fscg%2FLayout&rendermode=preview&cid=1443738004962>)
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- Aliso Canyon Updates - 12/5/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates/archive/120515>)
- Aliso Canyon Updates - 12/4/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates/archive/120415>)
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- Aliso Canyon Updates - 11/30/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates-11-30-15>)
- Aliso Canyon Updates - 11/29/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates-11-30-15>)
- Aliso Canyon Updates - 11/28/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates-11-28-15>)
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- Aliso Canyon Updates - 11/25/15 (<https://www.socalgas.com/newsroom/aliso-canyon-updates-11-25-15>)

Aliso Canyon Updates

Updated December 15, 2015

If you feel you have suffered harm or injury as a result of this incident, please complete this [online form](http://www.socalgas.com/documents/scg_claims.pdf) (http://www.socalgas.com/documents/scg_claims.pdf) or call us at **213-244-5151 (tel:1-213-244-5151)** and one of our claims processors will help you. For residents in neighboring communities who wish to relocate, we are providing free, temporary housing accommodations, including locations that can accommodate residents with disabilities and people with access and functional needs. And for residents with pets, we have arranged pet-friendly locations. To receive temporary housing accommodations, please call us at **404-497-6808 (tel:1-404-497-6808)** and indicate that you are a SoCalGas customer calling about an Aliso Canyon claim. This call center is staffed 24 hours a day, 7 days a week.

If you are interested in receiving updates on Aliso Canyon, you can fill out a form [here](https://www.socalgas.com/news-room/form/) (<https://www.socalgas.com/news-room/form/>).

For those residents who have been temporarily relocated, you can download a [reimbursement package](https://www.socalgas.com/documents/news-room/aliso-canyon-reimbursement-package.pdf) (<https://www.socalgas.com/documents/news-room/aliso-canyon-reimbursement-package.pdf>).

Update on Activities: December 15

Connecting with SoCalGas

The Porter Ranch Community Resource Center is opening on December 16, and will be located at the Porter Ranch Town Center, located at 19731 Rinaldi Street, Porter Ranch, CA. SoCalGas® staff will be there to help with information on: Temporary Housing, Claims, Air Filtration and Air Quality. The center is open M-F 10am to 8pm and Sat and Sun 10am-4pm.

Air Filtration & Air Purification

We have created a program to offer air purification and weatherization services to local residents to deal with the odor problem. The goal of the new service we are providing is to reduce and potentially eliminate – the odor in your home.

We are working with a licensed Heating Ventilation and Air Conditioning (HVAC) contractor to provide whole-house air purification by replacing the standard air filter(s) in your HVAC system with a specially designed activated carbon filter that can remove the compounds found in natural gas and its odorant from the air in your home.

Relief Well

We completed Phase 1 on the first relief well with the installation of the well head. Phase 2 began as we resumed drilling 1,350 feet below the surface. In subsequent phases, our team of relief well experts will positively identify the leaking well with electromagnetic ranging technology, follow it down to more than 8,000 feet deep and intercept it near its bottom. Once we intercept the well, we will pump heavy mud and fluids into the leaking well to stop the flow of gas from the reservoir and into the well. Once the flow of gas has been stopped, we will pump cement into the bottom of the well to permanently seal it. The drilling process continues around the clock, and is expected to take three to four months to complete.

Safety at Aliso Canyon

The safety of our employees, contractors and people in the communities we serve continues to be our highest priority. We continue to work alongside multiple agencies such as L.A. County and City Fire, The Department of Public Health, CAL-OES, DOGGR and CPUC, to oversee the operation and worker safety.

FAA Notice

The FAA issued a temporary localized no-fly zone near the leaking well. What this means is planes and helicopters can fly over the well as long as they are at least 2000 feet above the well. This was done to prevent any safety issues at the well site, and in the air.

Air Samples & The Environment

A team of our environmental specialists and retained experts will continue conducting daily air sampling and monitoring at several representative sites both within the leak site and the community. Although experts agree that natural gas is not toxic and that the levels of the odorant in the natural gas are too low to be a long-term health concern, we are continuing to conduct this sampling to provide the community with more information. The samples we are taking are in addition to those being taken by South Coast Air Quality Management District (SCAQMD). Click here for a </newsroom/aliso-canyon-updates/air-sample-results>ir sampling </newsroom/aliso-canyon-updates/air-sample-results>updates </newsroom/aliso-canyon-updates/air-sample-results>).

Background

On October 23, SoCalGas crews discovered a leak at one of the natural gas storage wells at its Aliso Canyon storage field. In response, we activated the appropriate procedures to begin to address the leak.

We regret that the smell of the odorant in natural gas is unpleasant and that some people are sensitive to the odor, and we sincerely apologize for the annoyance and concern this odor is causing the neighboring communities. However, the leak does not pose an imminent threat to public safety. The well is located in an isolated, mountain area more than a mile away from and more than 1,200 feet higher than the closest home or public area.

Scientists agree natural gas is not toxic and that its odorant is harmless at the minute levels at which it is added to natural gas. In outdoor locations such as this, natural gas quickly dissipates into the air, greatly reducing the possibility for ignition and further diluting the gas as it reaches the public. The human nose is amazingly sensitive and can detect the smell of the odorant at levels much lower than any level of concern.

We have assembled a world-class team of experts, and we are working as quickly as safety will allow to stop the leak. In addition, we are in regular communication with L.A. City and County Fire and Hazmat Departments, the L.A. County Department of Health, the California Division of Oil, Gas & Geothermal Resources, and the South Coast Air Quality Management District.

We apologize for how this incident may be affecting you, and we appreciate the community's ongoing patience as we work as quickly and safely as possible to resolve this situation. If you believe you have suffered harm or injury as a result of this incident, please complete this online form (http://www.socalgas.com/documents/scg_claims.pdf) or call **213-244-5151**. For temporary housing accommodations, call us at **404-497-6808**.

Aliso Canyon Updates

Updated November 15, 2015

Background

On October 23, SoCalGas crews discovered a leak at one of the natural gas storage wells at its Aliso Canyon storage field. In response, we activated the appropriate procedures to begin to address the leak.

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We have assembled a world-class team of experts, and we are working as quickly as safety will allow to stop the leak. In addition, we are in regular communication with L.A. City and County Fire and Hazmat Departments, the L.A. County Department of Health, the California Division of Oil, Gas & Geothermal Resources, and the South Coast Air Quality Management District.

Update on Activities – November 14

- SoCalGas' team of well-management experts resumed the multi-day process of pumping fluids down the well to stop the flow of gas. (<http://www.socalgas.com/documents/news-room/aliso-canyon-recent-activity.pdf>) The goal is to fill the well pipe with enough brine solution to outweigh the pressure of the gas coming up out of the ground. The brine solution will act like a plug. (See page three of our brochure (<http://www.socalgas.com/documents/news-room/aliso-canyon-recent-activity.pdf>) for more information on this process.) Once the flow of natural gas is stopped, we will begin the effort to place a permanent seal at the bottom of the well pipe.
- We have some of the world's best experts advising us, and one of the reasons they are so successful is they are very cautious in their approach. The way we are addressing this incident is the best practice for situations such as this.
- As a result of this procedure which may take a few days, there is a potential for residents in the community to hear unusual noises and smell additional odors. In addition, some of the fluid being pumped down the well may come back up and spray into the air.
- On Friday, some of the brine solution did come back up, and it created a mist in the air over the facility. Out of an abundance of caution, we assumed the mist could contain oily residues (The storage field is a depleted oil field.) and could travel beyond the facility. As a result, we immediately alerted the residents in nearby communities to stay indoors. As soon as we recognized the mist would not travel beyond the facility, we advised residents there was no reason to stay indoors.
- We sent samples of the liquid that generated the mist to an outside laboratory for analysis. The laboratory analysis determined that the liquid is non-hazardous.
- During these operations, we were monitoring and sampling the air both at the work site and down in the community. This information will be available as normal on our web site.
- As this work continues, SoCalGas will continue to monitor the well pressures 24/7 to ensure conditions remain safe.
- To update state and local officials and elected representatives on the progress and conditions at the site, SoCalGas participated in the regular, daily briefing with representatives of the local health, fire and hazmat agencies. We also informed community representatives about the issues related to the mist.
- A team of our environmental specialists and retained experts continued conducting daily air sampling and monitoring at several representative sites both within the leak site and the community. Although experts agree that natural gas is not toxic and that the levels of the odorant in the natural gas are too low to be a long-term health concern, we are continuing to conduct this sampling to provide the community with more information. The samples we are taking are in addition to those being taken by the SCAQMD. Air sampling results ([/newsroom/aliso-canyon-updates/air-sample-results](http://www.socalgas.com/newsroom/aliso-canyon-updates/air-sample-results)) from our tests are available at: <http://www.socalgas.com/newsroom/aliso-canyon-air-sample-results> ([/newsroom/aliso-canyon-updates/air-sample-results](http://www.socalgas.com/newsroom/aliso-canyon-updates/air-sample-results))
- We also continued meeting with neighbors at our public information booth, which we staff as weather permits. In the event of inclement weather, please remember, neighbors can check updates on this website, email us at AlisoCanyon@SoCalGas.com (<mailto:AlisoCanyon@SoCalGas.com>) or call us at (818) 435-7707. The booth is located near the gates of our facility at 12801 Tampa Avenue in Porter Ranch, and its hours (weather permitting) are from 10 a.m. to 5 p.m. Today we will have an additional public information booth at Holly Berson Park at Sesnon Blvd. and Porter Ranch Drive, and its hours are from 10:00 a.m. to 1:00 p.m.

We apologize for how this incident may be affecting you, and we appreciate the community's ongoing patience as we work as quickly as safety as possible to resolve this situation. If you believe you have suffered harm or injury as a result of this incident, please complete this online form ([/about-us/claims](#)) or call 213-244-5151.



CYNTHIA A. HARDING, M.P.H.
Interim Director

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November 19, 2015

Bret Lane, Chief Operating Officer
Southern California Gas Company
555 West 5th Street
Los Angeles, California 90013

RE: NATURAL GAS LEAK AT ALISO CANYON STORAGE FIELD

Dear Mr. Lane:

The Los Angeles County Department of Public Health is issuing the following Public Health Directive to the Southern California Gas Company:

Southern California Gas Company should continue the abatement process to characterize and repair the subject gas leak, and eliminate odorous emissions, on an expedited basis in consultation with the appropriate regulatory agencies. All mitigation plans should cite public health protection as the highest priority.

In the interim, Southern California Gas Company is to offer free, temporary relocation to any area residents affected by odors from the Aliso Canyon site. Please find attached our Preliminary Environmental Assessment on this matter. If you have any questions, or need additional information, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "Angelo J. Bellomo". The signature is fluid and cursive, with a long horizontal stroke at the end.

Angelo J. Bellomo, REHS, QEP
Deputy Director for Health Protection
Los Angeles County Department of Public Health

AJB/

Attachment



In Porter Ranch, ongoing gas leak seeps the joy out of Christmas



Peter Rabadi carries Christmas gifts out of his home in Porter Ranch. He and his wife, Danielle, will be staying with relatives until the leak from a nearby Southern California Gas Co. well is fixed. (Brian van der Brug / Los Angeles Times)



By **Louis Sahagun**

DECEMBER 25, 2015, 3:00 AM

Signs of Christmas along Danielle Rabadi's eerily quiet street have made her wistful for noel parties she has enjoyed in the Porter Ranch neighborhood, with families and neighbors sharing dinner tables and gifts.

"I think about it every day," said Rabadi, 29, a real estate agent, as she returned to her home this week to pick up unwrapped Christmas presents. "But this holiday, we're all living in hotel rooms or with relatives and don't know when we'll be moving back into our homes."

Rabadi is among thousands of Porter Ranchers who have moved out since Oct. 23, when a nearby Southern California Gas Co. natural gas well began leaking at a rate of 110,000 pounds an hour.

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SoCal Gas expects to have the leak fixed in three to four months. Until then, the company is paying to relocate and house residents and pets sickened by fumes that health officials and independent experts say can cause headache, nosebleed, nausea and other short-term ailments but pose no long-term health risks.

During Rabadi's stop at her house, she also gathered up important documents and family photos, fearful that burglars will see vacant neighborhoods as an opportunity. She took everything to the home of relatives she and her husband, Peter, 28, have moved in with, about 10 miles away.

Her own anxieties aside, in recent weeks Rabadi has been helping find temporary boarding for other Porter Ranch residents at a time when most nearby hotel and motel rooms and rental homes have been snapped up.

The shortage has pushed rental rates as high as \$8,500 a month as landlords, who prefer leases of a year or longer, seek compensation for much shorter terms.

"My phone is exploding with requests from people trying to get the heck out of here," Rabadi said.

Porter Ranch is a 30-year-old master-planned community of 30,000 people, schools, businesses, parks and hiking trails tucked beneath the Santa Susana Mountains at the northwestern tip of the San Fernando Valley. It has survived wildfires, hurricane-force winds and a massive earthquake, but none of those matches the body blow dealt by the leak.

Ben Kaczor, who moved to Porter Ranch almost exactly 30 years ago, is hearing stories about declining property values and homes falling out of escrow — and it is changing his future. Kaczor is vice president of a women's apparel company and, at 62, he planned to take early retirement.

"A great portion of my retirement income was going to come from the equity in my home," he said.

"But now, I'm not sure. No one can guarantee that another well won't blow, or a third, and we'll have to do this all over again."

Two weeks ago he was supposed to give the company's end-of-the-year speech at a downtown restaurant. Instead, he said he spent the day in bed with headaches and a nosebleed.

"Each year for the past 29 years, we've hosted Thanksgiving and Hanukkah celebrations for family, friends and neighbors," Kaczor said. "But this year, my wife and I couldn't bear burdening our loved ones with the gas."

Kaczor and his wife have relocated to an apartment at a cost to SoCal Gas of \$3,500 a month. But they still pay for their mortgage, utilities, property taxes, gardening and homeowner association fees. "That's not fair," he said.

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Wendy Corell, 60, who is totally paralyzed with multiple sclerosis and shares her Porter Ranch home with two full-time caregivers, said she asked SoCal Gas on Oct. 25 to find her alternative housing because noxious chemicals leaking from the well were drifting into her home through ventilation ducts, door frames and windowsills.

"The smell put a sore throat, headaches and terrible nosebleeds on top of my disease," she said. "But the company never called me back."

On Wednesday, Corell and her caregivers and companion dog Benji moved into a Van Nuys hotel room outfitted to accommodate severely handicapped people. The accommodations were located and arranged by Corell's father and Rabadi.

"I still plan to live in my house for the rest of my life, then hand the property over to my daughter as a nest egg," Corell said. "But who would want to buy a home in Porter Ranch?"

The Southland Regional Assn. of Realtors has amended residential purchase disclosure agreements for the San Fernando Valley to advise that "there is no definitive time frame for controlling the gas leak."

Despite repeated assurances that the fumes pose no serious health risks, many residents are skeptical and say they have reason not to trust SoCal Gas. The company's formal summary of tests taken Nov. 12 in the community said that levels of hazardous sulfur compounds were "intermittent, very low" and below state standards.

That isn't true. The tests had found hydrogen sulfide levels of 183 parts per billion — six times the state standard for a chemical that can be poisonous.

The company said the hydrogen sulfide was released during an early attempt to stop the leak at the wellhead, one of several methods SoCal Gas tried before giving up and embarking on the lengthy process of drilling relief wells to intercept and plug the damaged well.

Lisa Larroque Alexander, director of technology solutions at SoCal Gas, described the omission in report as an "oversight" and said, "We are making the correction."

But the damage to the company's credibility has been done.

"Fear, uncertainty and doubt are leaking out of that failed well faster than methane gas," Los Angeles City Councilman Mitch Englander said. "The situation has ripped a sense of comfort out of people's primary investment: homes they bought to raise a family, pay for their children's college education and support their retirement."

Brian and Christine Katz and their five children spent their days before Christmas dealing with physical problems caused by the fumes and the hassle of relocating to a house that SoCal Gas has agreed to lease at a rate of \$8,000 a month.

Their 21/2-year-old daughter, Ava, spent four nights in the emergency room of a local hospital for upper respiratory symptoms, her mother said.

A week ago, the family learned their Porter Ranch home was built near an idle oil well. "Do you think [we would have] bought this house if we knew there was an idle well a few blocks away?" Christine Katz asked while packing up personal belongings and gifts for the move.

Gonzalo Cerda, 54, a physical therapist who has lived in Porter Ranch for 21 years, said he "would prefer to see the gas company's facility shut down."

"The company says 'Calm down, these are simply annoying odors,' " said Cerda, who lives beneath ridgelines bristling with injection well derricks and scaffolding. "No one can guarantee what the long-term impacts of this disaster might be 20 years from now. They may shock us."

Rabadi would not argue with any of that.

"I didn't even buy a Christmas tree this year — how could I?" she said. "It just doesn't feel like Christmas."

louis.sahagun@latimes.com

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A version of this article appeared in print on December 25, 2015, in the News section of the Los Angeles Times with the headline "Joy seeps out of the holidays - Gas fumes in Porter Ranch force Christmas relocations" — Today's paper | Subscribe

This article is related to: Jerry Brown, Porter Ranch Gas Leak

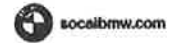
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Utility May Have Understated Health Threat From Porter Ranch Gas Leak

January 14, 2016 6:28 PM

Filed Under: Benzene, Gas Leak, Health Risk, Porter Ranch, SoCalGas, Southern California Gas Co.

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LOS ANGELES (CBSLA.com/AP) — The utility whose leaking natural gas well has driven thousands of Los Angeles residents from their homes has publicly understated the number of times airborne levels of the cancer-causing chemical benzene have spiked over the past three months, the company's own data suggests.

In trying to reassure the public there's no long-term health risk from the leak, Southern California Gas Co. has said in news releases and FAQs on its website that since the crisis began, just two air samples briefly showed elevated concentrations of the substance.

But a closer look at the online data by The Associated Press and outside experts actually shows that a dozen samples from the Porter Ranch community contained at least twice the amount of benzene that Southern California air regulators consider the normal background level.

The possible reason for the discrepancy: SoCalGas apparently uses a different background level.

The company was given repeated opportunities to explain its conclusions but couldn't.

"I don't know what would explain it," spokeswoman Melissa Bailey said.

Public health officials have sided with SoCalGas in saying they do not anticipate any long-term health problems. But some outside experts say the data is too scant to say that with any certainty. For one thing, it is unclear whether the benzene persisted long enough to exceed state exposure limits.

Seth Shonkoff, executive director of the energy science and policy institute at University of California, Berkeley, said he is surprised officials were so quick to discount the health risks.

"I have not seen anything convincing that it's been proven to be safe," Shonkoff said. "I'm not going on record as saying this is absolutely an unsafe situation; I'm saying there are a number of red flags."

The leak at the biggest natural gas storage facility west of the Mississippi River was reported Oct. 23. The cause is unknown, but the leak has spewed huge amounts of methane, a potent greenhouse gas, and occasionally blanketed neighborhoods about a mile away with a sickening rotten-egg odor.

SoCalGas has run up more than \$50 million in costs so far in trying to contain the leak and relocate families. Gov. Jerry Brown has declared an emergency, and some environmentalists are calling it the worst environmental disaster since the BP oil spill in the Gulf of Mexico in 2010.

Health officials and SoCalGas have said most of the gas has dissipated, though the odor from the chemical additive that makes the gas detectable is blamed for nausea, headaches and nosebleeds.

Natural gas also contains smaller amounts of other compounds, such as benzene, which is of greatest concern because it causes cancer as well as anemia and other blood disorders.

In the Los Angeles area, benzene is typically detected in minuscule levels between 0.1 and 0.5 parts per billion, according to the South Coast Air Quality Management District. But SoCalGas says on its website that typical community levels are 2 parts per billion.

Apparently relying on that standard, SoCalGas said that benzene was found in amounts slightly higher than background levels in just two samples, both on Nov. 10, and returned to normal the next day. The suspect readings were 5.6 parts per billion in one gated development near the facility and 3.7 parts per billion in the Porter Ranch Estates neighborhood of 1,100 homes.



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However, a more detailed look at the data shows 10 other instances over seven days in November when benzene exceeded 1 part per billion. The clean-air agency also detected a reading of 3 parts per billion on Oct. 26.

Dr. Cyrus Rangan, a medical toxicologist from the Los Angeles County Department of Public Health, said the gas company's website was incorrect.

"Don't take cues from the gas company website of where the monitoring is and what the health risk is," Rangan said.

The World Health Organization and U.S. government classify benzene as an undisputed cause of leukemia and other cancers. "No safe level of exposure can be recommended," according to WHO.

California's Office of Environmental Health Hazard Assessment in 2014 set a series of limits for the amount of benzene people could be exposed to without risking anemia and other noncancerous disorders.

Those limits are 8 parts per billion for a one-time exposure, 1 part per billion for repeated exposures for eight hours at a stretch, and 1 part per billion for several years or a lifetime.

Michael Jerrett, chairman of the environmental health department at the University of California, Los Angeles, said that because of the limited testing done by SoCalGas early on, it is impossible to know for sure whether there was repeated exposure in parts of the community. He said he believes there is a "high probability" the eight-hour standard was violated.

One problem with the testing is that it was done over very short periods that can indicate spikes but can't provide meaningful data on long-term exposure.

Rangan, the county toxicologist, said it is unlikely state safety levels were exceeded because spot testing didn't turn up a larger, more consistent pattern of such readings.

"You can't take a 10-minute sample that's 5.6 parts per billion and make any long-term risk assessment," Rangan said. "If that was sustained over several months in a row, I'd be concerned about that, but we know that's not happening."

More comprehensive testing is underway. Not as much gas is being released because the pressure inside the field has subsided as the volume has dropped.

Since Dec. 21, the air district has been taking samples around the clock, and all but one showed benzene at 0.1 parts per billion, said spokesman Sam Atwood. One sample was 0.2 parts per billion.

The health department began more extensive testing at six sites on Monday and plans to add three more.

KCAL9's Jennifer Kastner spoke to residents Thursday night who were angry that SoCalGas might have underestimated the health risk.

"We've been getting sick, we know plenty of other people getting sick," said Matt Pacucko who runs Save Porter Ranch.

He said the continuing gas leak has disrupted his entire life.

And he added, "No one can seem to come to a consensus on how bad it is so we, the residents, would rather just get the hell out."

Resident Mark Sheehan told Kastner the entire ordeal has left him unsure if people who live in Porter Ranch can trust the utility.

"I think they're lying about a lot of things, I really do," Sheehan said.

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Utility is installing screens to contain oily mist at leaking well near Porter Ranch



Fixing the gas leak in Porter Ranch is expected to take several more months. (Brian van der Brug / Los Angeles Times)



By Louis Sahagun

JANUARY 4, 2016, 11:11 PM

Southern California Gas Co. crews are erecting mesh screens around the utility's leaking natural gas injection well to prevent an oily mist from drifting off the site and across the nearby community of Porter Ranch, company officials confirmed on Monday.

The move comes as the company continues to fix a leaking natural gas well that has displaced thousands of residents, a process that is expected to take several more months.

The structures under construction on the west side of the well head are designed to capture airborne droplets of a brine solution that “may have contained trace amounts of oil naturally occurring within the leaking well's reservoir,” said Trisha Muse, a spokeswoman for SoCal Gas.

FOR THE RECORD:

An earlier version of this article said the mesh screens are 100 feet tall. The screens actually lie flat over the well site. The article also misidentified spokeswoman Trisha Muse as Tracy Muse.

The mist, she said, “may have been carried by the wind to properties immediately adjacent to the facility, particularly when very strong winds blow in that direction.”

The gas company used a massive crane Sunday to install a 60-foot section of the mesh, said Don Drysdale, a spokesman for the state Division of Oil, Gas, and Geothermal Resources.

The problem first arose Nov. 13, when SoCal Gas used an automated call system to advise local residents to stay indoors because fluids pumped into the well had returned to the surface and created a mist. The company issued an all-clear the following day.

Now, a mixture of brine water and oil is rising up into the gas company's natural gas storage zone, then traveling up the well and into the air.

As a result, local residents are finding droplets of dark brown residue on their homes, vehicles, fish ponds and gardens. Some are collecting samples on dinner plates, then forwarding photographs of the material to their lawyers.

On Dec. 21, the company posted an update on the massive gas leak that began Oct. 23, pointing out that it was spewing mostly methane, which is not considered to be toxic. It also acknowledged that some residents had asked about “dark brown spots on their property.”

“We sampled it and, according to our retained toxicologist and medical expert,” the company said, “the residue contained heavier hydrocarbons (similar to motor oil) but does not pose a health risk.”

The company has offered to provide cleaning services and reimburse property owners for cleanup costs.

SoCal Gas expects to have the leak fixed in about three months. Until then, the company is paying to relocate and house thousands of residents and pets sickened by fumes that health officials and

independent experts say can cause headache, nosebleed, nausea and other short-term ailments but pose no long-term health risks.

On Monday, plaintiffs' attorneys sent a letter to state regulatory officials demanding that they issue an emergency order requiring SoCal Gas to stop all injections, including gas injections and water disposal injections, into the 3,600-acre Aliso Canyon field it acquired in the northern San Fernando Valley in 1972.

With capacity to store 86 billion cubic feet, it is one of the largest natural gas storage facilities in the United States.

The attorneys also demanded that state regulators "explain what is happening with the petroleum now surfacing."

"There is a complete lack of information in the well files," their letter says, "to show where the gas and petroleum migrates underground and the risk for creating sink holes and geysers."

Also on Monday, Gov. Jerry Brown met with members of the Porter Ranch Neighborhood Council.

"We told him we needed him to organize an oversight group of regulatory agencies that will address the most pressing issues with one voice — now and in the future," Paula Cracium, president of the group, said.

Muse, the spokeswoman for SoCal Gas, said the new structure is one of several things the company is doing to "help minimize impacts to the community."

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ALSO

El Niño is bringing days of rain to L.A., prompting intense preparations

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A version of this article appeared in print on January 05, 2016, in the News section of the Los Angeles Times with the headline "Utility acts to contain oily mist - It puts up screens after residents complain of dark brown droplets at Porter Ranch." — Today's paper | [Subscribe](#)

UPDATE

11:11 p.m.: This article was updated with additional information

This article was first published at 8:30 p.m.

This 'attr(data-c-typename)' is related to: Porter Ranch Gas Leak

Oily slime from Porter Ranch well temporarily closes nearby park



L.A. City Councilman Mitch Englander, right, inspects playground equipment with a park official after Holleigh Bernson Memorial Park was closed because an oily residue was found on the playground in Porter Ranch. (Gina Ferazzi / Los Angeles Times)



By Alice Walton

MARCH 8, 2016, 5:19 PM

A park in Porter Ranch was closed Tuesday after city officials discovered playground equipment covered in an oily residue that likely came from a leaking well in Aliso Canyon.

The playground at Holleigh Bernson Memorial Park had been given the all-clear by county health officials Sunday, but staff members with Councilman Mitch Englander's office revisited the park Tuesday and found the small brown droplets of oil, which can cause skin irritations.

The park was temporarily closed so crews with the Southern California Gas Co. could clean the equipment.

Crews are expected to clean Palisades Park, Viking Park and Porter Ranch Park tomorrow, according to the gas company.

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County health officials visited the park this weekend after receiving complaints about the oily residue. But after inspecting "playground equipment, picnic tables, baseball field bleachers, drinking fountains, restrooms, and walkways," officials determined "no visible oily residue on any of these surfaces," according to a statement from the Environmental Health Division.

"It certainly brings into question exactly what methods they're using and how they're making these determinations," Englander said. "Certainly even a visual check will tell you it's there."

Several hours before the playground was closed, a spokeswoman with the Department of Parks and Recreation said there had not been any complaints about oil on the swings, slide and other equipment.

"At this point, with everything we've been through and this community has been through, I'm not taking anybody's word," Englander said.

The oil is likely from SS-25 in Aliso Canyon, a well that caused the largest methane leak in U.S. history. The leak was first reported Oct. 23. Crews began drilling a relief well in December and ultimately capped the leak Feb. 18.

Thousands of households in Porter Ranch and surrounding communities temporarily relocated to get away from the smell of the gas leak, which was described as rotten eggs. Two public schools were relocated and small businesses saw their customers disappear.

Many residents suffered from headaches, upset stomachs and nosebleeds during the leak. Health officials blamed mercaptans, an odorant added to the methane, for those symptoms.

In January, gas crews installed mesh screens in Aliso Canyon to prevent an oily mist from flowing out of the canyon and into the nearby community. Now that families are returning to their homes, many are finding the oil droplets on their homes and cars that may have fallen before the screens were installed.

The gas company announced this week it would assess and clean at least 140 homes covered in the residue.

In the weeks since officials from 10 local and state agencies stood next to SoCalGas executives to announce that leak had been sealed, more than 150 people have complained of continued problems with headaches, upset stomachs and skin irritations.

The Los Angeles County Department of Public Health received 150 health complaints from residents returning home between Feb. 18 and March 3, according to a new report. During the 16 weeks that the well was leaking, the department received a total of 700 complaints.

It is unclear why returning residents are still feeling ill, according to the department.

As of March 6, 2,706 households remained in temporary accommodations. SoCalGas will stop paying the expenses of relocated families on March 18, a date the gas company was forced to accept after attorneys for Los Angeles County took legal action to provide customers with more time to move home.

On Tuesday, County Counsel Mary Wickham told the Board of Supervisors it may file for another extension if the experts in the field find "pertinent issues" that would warrant it.

Two air quality agencies are continuing to monitor the Porter Ranch community. Data from the South Coast Air Quality Management District found methane levels there exceeded 3 parts per million on at least seven days at multiple different locations after the leaking well was repaired.

Residual methane in the soil near the well may have caused the spikes at some of those locations but the cause of the other readings is "unclear," according to AQMD. The agency and the state Air Resources Board are investigating.

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ALSO

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How an emergency declaration over L.A.'s homeless became a game of 'hot-potato keep-away'

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This article is related to: Porter Ranch Gas Leak

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7 **STATE OF CALIFORNIA**
8 **NATURAL RESOURCES AGENCY**
9 **DEPARTMENT OF CONSERVATION**
10 **DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES**

11 **ORDER TO**
12 **TAKE SPECIFIED ACTIONS RE:**
13 **ALISO CANYON GAS STORAGE FACILITY**
14 [Pub. Resources Code, §§ 3013, 3106, 3219, 3224, 3226, 3300, and 3403.5.]
15 [Cal. Code Regs., tit. 14, §§ 1724, 1724.6, 1724.7, subd. (e), and 1724.10]

16 **Order No. 1109**

17 **March 4, 2016**

18 **Operator: Southern California Gas Company (\$4700)**

19 **Aliso Canyon Field**

20 **Los Angeles County**

21 **BY**

22 **Kenneth A. Harris, Jr.**

23 **STATE OIL AND GAS SUPERVISOR**

1 I. Introduction

2 Under the authority of the Public Resources Code (PRC), the State Oil and Gas
3 Supervisor (Supervisor) may order tests and remedial work concerning oil field operations
4 which, in his judgment, are necessary to prevent damage to life, health, property, and natural
5 resources. (See Pub. Resources Code, §§ 3106 and 3224.) Further, the Supervisor is to ensure
6 that “no damage occurs to the environment by reason of injection and withdrawal of gas” in
7 underground gas storage facilities. (Pub. Resources Code, § 3403.5.) To that end, the
8 Supervisor may request from the operator any data that are pertinent and necessary for the
9 Division of Oil, Gas, and Geothermal Resources (Division), and its District Deputy, to properly
10 evaluate underground injection projects. (See, e.g., Cal. Code Regs., tit. 14, §§ 1724.6 and
11 1724.7, subd. (e).) The operator must maintain those data and make them available to Division
12 personnel to show, among other things, that no damage to life, health, property, or natural
13 resources is occurring by reason of the project. (Cal. Code Regs., tit. 14, § 1724.10, subd. (h).)

14 At all times relevant to this Order, **Southern California Gas Company¹** (SoCal Gas or
15 Operator) is the “operator,” as defined in PRC section 3009, of certain “wells,” as defined in
16 PRC section 3008, subdivision (a), and is conducting “operations” as defined in California Code
17 of Regulations, title 14, (Regulations) section 1720, subdivision (f), at a gas storage project (see
18 Regulations section 1724.9) in the Aliso Canyon Field in Los Angeles County (Field).

19 Based on data in Division files, discussions with Operator, and Division site visits, the
20 Supervisor determined that there was an uncontrolled flow of fluids (see Regulations
21 section 1722.5) from well “Standard Sesnon” 25 (API no. 037-00776) and a waste of gas in the
22 Field, which Operator has addressed. On February 18, 2016, the Division confirmed that the
23 lead was under control. Operator’s response to the uncontrolled flow of fluids from well
24 “Standard Sesnon” 25 included halting all injection into the gas storage injection project in the
25 Field. On December 10, 2015, the Supervisor issued Order 1106, ordering Operator to continue
26 to not inject gas into the gas storage project until injection is authorized by the Division.

27 ¹ The Operator Code for Southern California Gas Company is S4700.

1 (Supervisor's Emergency Order 1106, p. 9.) Order 1106 is a final order of the Supervisor and
2 currently remains in effect.

3 The uncontrolled flow of fluids from well "Standard Sesnon" 25 has brought into
4 question the integrity and safety of all of the wells in the gas storage injection project in the
5 Field. The Storage Integrity Management Plan submitted to the Public Utilities Commission in
6 connection with 2016 General Rate Case Proceeding A.14-11-XXX also raises concerns about
7 the integrity and safety of the wells in the gas storage injection project. In order to protect life,
8 health, property, and natural resources, it is necessary to demonstrate the integrity and safety of
9 each of the wells in the gas storage project in the Field. **Therefore, in accordance with PRC**
10 **sections 3013, 3106, 3219, 3224, 3300, and 3403.5, and Regulations sections 1724, 1724.6,**
11 **1724.7, subdivision (e), and 1724.10, subdivisions (a), (h), and (k), the Supervisor hereby**
12 **orders Operator to take the actions identified below.** This order does not supplant previous
13 orders of the Supervisor, and the actions ordered herein shall be in addition to the actions that
14 the Supervisor has previously ordered Operator to take.

15 16 **II. Definitions**

17 The following definitions apply to the terms used in this Order:

18 **PRC section 3008, subdivision (a), defines "Well" to include "any well drilled for the**
19 **purpose of injecting fluids or gas for stimulating oil or gas recovery, repressuring or pressure**
20 **maintenance of oil or gas reservoirs, or disposing of waste fluids from an oil or gas field; [and]**
21 **any well used to inject or withdraw gas from an underground storage facility[.]"**

22 **PRC section 3009 defines "Operator" to mean "a person who, by virtue of ownership,**
23 **or under the authority of a lease or any other agreement, has the right to drill, operate, maintain,**
24 **or control a well or production facility."**

25 **Regulations section 1720, subdivision (f), defines "Operations" to mean "any one or all**
26 **of the activities of an operator covered by Division 3 of the Public Resources Code [i.e., the oil**
27 **and gas law, commencing with PRC section 3000]."**

1
2 **III. Statutory and Related Authority**

3 **PRC section 3013** states that the oil and gas law (Division 3 of the PRC, commencing
4 with section 3000) “shall be liberally construed to meet its purposes” and grants the Supervisor
5 “all powers” that may be necessary to carry out those purposes.

6 **PRC section 3106, subdivision (a)**, authorizes the Supervisor to “supervise the drilling,
7 operation, maintenance, and abandonment of wells and the operation, maintenance, and removal
8 or abandonment of tanks and facilities attendant to oil and gas production ... so as to prevent, as
9 far as possible, damage to life, health, property, and natural resources ... [and] loss of oil, gas, or
10 reservoir energy[.]”

11 **PRC section 3219** requires the operator of a well wherein high pressure gas is known to
12 exist to equip the well with casings of sufficient strength, and with such other safety devices as
13 may be necessary, in accordance with methods approved by the Supervisor, and to use every
14 effort and endeavor effectually to prevent blowouts, explosions, and fires.

15 **PRC section 3224** requires the Supervisor to “order such tests or remedial work as in his
16 judgment are necessary to prevent damage to life, health, property, and natural resources[.]”

17 **PRC section 3300** states that “[t]he blowing, release, or escape of gas into the air shall be
18 prima facie evidence of unreasonable waste.”

19 **PRC section 3403.5** states that “[t]he supervisor is required to maintain surveillance over
20 [underground gas storage] facilities to insure that the original reserves are not lost, that drilling
21 of new wells is conducted properly, and that no damage occurs to the environment by reason of
22 injection and withdrawal of gas.”

23 **Regulations section 1724** specifies the types of well records that an operator must
24 maintain and includes “[s]uch other information as the Supervisor may require for the
25 performance of his or her statutory duties.”

1 **Regulations section 1724.6** allows the Supervisor to require from an operator “any data
2 that, in the judgment of the Supervisor, are pertinent and necessary for the proper evaluation of
3 the proposed project.”

4 **Regulations section 1724.7, subdivision (e)**, requires the following, where applicable:
5 “Other data as required for large, unusual, or hazardous projects, for unusual or complex
6 structures, or for critical wells. Examples of such data are: isogor maps, water-oil ratio maps,
7 isobar maps, equipment diagrams, and safety programs.”

8 **Regulations section 1724.10, subdivision (a)**, requires that any changes to an injection
9 project “shall not be carried out without Division approval.”

10 **Regulations section 1724.10, subdivision (h)**, states: “Data shall be maintained to show
11 performance of the [injection] project and to establish that no damage to life, health, property or
12 natural resources is occurring by reason of the project. Injection shall be stopped if there is
13 evidence of such damage ... or upon written notice from the Division. Project data shall be
14 available for periodic inspection by Division personnel.”

15 **Regulations section 1724.10, subdivision (k)**, authorizes the Supervisor to request
16 “[a]dditional data requirements or modifications [as] necessary to fit specific circumstances and
17 types of projects.”

18 **SoCal Gas’s Aliso Canyon gas storage project approval letter** (dated April 18, 1989,
19 revised July 26, 1989) conditions 6, 10, 11, and 12, among others, require SoCal Gas to provide
20 data, conduct testing, and perform remediation that the Division deems necessary to ensure and
21 demonstrate that no damage is resulting from operations of the gas storage project.

22 23 **IV. Actions Required of Operator**

24 Based on the facts, and in accordance with the legal authorities described in this Order,
25 the Supervisor has determined that Operator must take the following actions to demonstrate the
26 integrity and safety of each of the wells in the gas storage injection project in the Field.

27 **Therefore, IT IS HEREBY ORDERED, pursuant to PRC sections 3013, 3106, 3219, 3224,**

3300, and 3403.5, and Regulations sections 1724, 1724.6, 1724.7, subdivision (e), and 1724.10 that Operator take all of the following actions:

(1) For each of the wells in the gas storage injection project in the Field that have not been properly plugged and abandoned in accordance with Public Resources Code section 3208, follow the comprehensive safety review detailed in Attachment 1 of this order (Safety Review).

Division staff shall be provided an opportunity to witness testing as specified in the Safety Review. Documentation of testing under the Safety Review shall be provided to the Supervisor in an electronic format within the timeframe specified in the Safety Review Testing Regime. The Safety Review shall be undertaken with all reasonable haste and with the understanding that until all of the actions required under the Safety Review are complete, the Supervisor will not lift the prohibition against injection imposed under Order 1106.

(2) Provide the Division with regular reports on progress towards completion of the Safety Review. Progress reports shall be provided to the Division every first and third Friday of the month until the Supervisor has confirmed in writing that the Safety Review is complete.

(3) Properly plug and abandon in accordance with Public Resources Code section 3208 all wells in the gas storage injection project in the Field that have not been tested and remediated to the Division's satisfaction within one year after completion Step 6b of the Safety Review.

(4) In order to facilitate Division staff witnessing to ensure the effectiveness of testing under the Safety Review, provide an on-site trailer for use as a base of operation for Division staff while the Safety Review is being carried out.

(5) Equip all wells to be employed in the gas storage injection project with tubing and packer completions that isolate the tubing-casing annulus. If and/or when injection in the gas storage injection project in the Field resumes, all injection and production shall be through tubing only.

(6) Equip all wells to be employed in the gas storage injection project with real-time pressure monitors that provide immediate notification to the operator when pressures in the well's production tubing or tubing-casing annular space deviate from normal.

1 (7) If and/or when injection in the gas storage injection project in the Field resumes, all
2 wells shall be operated with lowest possible operating pressure on the tubing-casing annulus.

3 (8) For all wells to be employed in the gas storage injection project, all downhole
4 devices, including but not limited to any installed subsurface safety valve systems, shall be
5 function tested prior to initial injection or withdrawal and every six months after that.

6 (9) Comply with all requirements of sections 1724.6 through 1724.10.

7 (10) Ensure that the spill contingency plan filed under section 1722, subdivision (b), is
8 complete and up-to-date.

9 (11) Ensure that the Risk Management Plan filed under section 1724.9, subdivision (g),
10 includes an effective facility-wide emergency response plan and effective geologic and
11 geotechnical hazard mitigation protocols.

12 13 V. Operator's Appeal Rights

14 Operator may appeal this Order to the Director of the Department of Conservation by
15 filing a written notice of appeal with the Supervisor as described in PRC section 3350. The
16 Legal Office for the State Oil and Gas Supervisor (801 K Street, MS 24-03, Sacramento,
17 California 95814-3530; Facsimile (916) 445-9916) accepts appeal notices on the Supervisor's
18 behalf. Failing to file a notice of appeal within the timeframe prescribed in PRC section 3350,
19 subdivision (a), waives Operator's right to challenge this Order and makes the Order final. If
20 Operator timely files a notice of appeal, Operator will be informed of the appeal hearing date,
21 time, and place. After the close of the hearing, Operator will receive a written decision that
22 affirms, sets aside, or modifies the Order.

23 24 VI. Court Order and Other Potential Actions to Enforce This Order

25 Failing to comply with Sections IV (Actions Required of Operator) of this Order will
26 subject Operator to potential significant further enforcement action. **Such enforcement action**
27 **can include a civil penalty of up to \$25,000 per violation (PRC section 3236.5) and/or**

1 criminal prosecution, as a misdemeanor, punishable by a fine up to \$1,000, imprisonment
2 up to six months, or both, for each offense (PRC section 3236). Similarly, the Supervisor
3 could deny approval of proposed well operations until compliance is achieved and/or order the
4 plugging and abandonment of wells. (Pub. Resources Code, §§ 3203, subd. (c), and 3237, subd.
5 (a)(3)(C).)

6 DATED: March 4, 2016

7
8 Kenneth A. Harris, Jr.
9 State Oil and Gas Supervisor

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13 Certified mail receipt number: 70121010000092699623
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**ATTACHMENT 1
TO DOGGR ORDER 1109**

**SAFETY REVIEW TESTING REGIME
FOR THE ALISO CANYON NATURAL GAS STORAGE FACILITY**

This document identifies the requirements of this comprehensive safety review that shall be completed by the Southern California Gas Company (Operator) and verified by the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (Division). The Operator shall use accepted industry practices and procedures.

The Division has consulted with independent technical experts from the Lawrence Berkeley, Lawrence Livermore, and Sandia National Laboratories ("National Laboratories") to develop the requirements of this facility safety review. The National Laboratories experts independently reviewed and concurred with the testing requirements for the safety review detailed below.

This comprehensive safety review requires that each of the active injection wells in the Aliso Canyon Storage facility either pass a thorough battery of tests in order to resume gas injection or be taken out of operation and isolated from the underground gas storage reservoir. Several steps, detailed below, are required in this safety review. Documentation of all testing required under this comprehensive safety review shall be provided electronically to the Division within 72 hours of completion of a test in digital (i.e. LAS) and printed (i.e. pdf) form. All pressure tests required under this comprehensive safety review shall be witnessed by Division staff. A well that is properly plugged and abandoned in accordance with Public Resources Code section 3208 is not subject to testing under this comprehensive safety review. A well that does not pass all tests must be repaired, retested, and pass all tests, or be plug and abandoned.

REQUIRED TESTS FOR EACH WELL IN THE FACILITY

Step 1: The Operator shall perform an initial casing assessment on the well consisting of temperature and noise logs.

a. **Temperature Log:**

A temperature survey shall be run from the surface to the packer to measure the temperature within the wellbore. A temperature survey that demonstrates no unexplained anomalous temperature changes in the well is one indication of casing integrity.

b. **Noise Log:**

An acoustic sensor survey capable of detecting the sound of fluid flow will be conducted the length of the well above the packer to the surface. The survey will include stops at least every 250 feet and at the midpoint of any anomaly detected by the temperature survey. The absence of anomalous sound above the packer is an indication of well integrity

Step 2: The results of the Temperature Logs and Noise Logs will be independently reviewed by Division engineers. Any unexplained abnormal findings in this set of tests shall be addressed by the Operator in one of the following ways:

- a. Conduct further investigation and demonstrate to the Division's satisfaction that the abnormal finding is not an indicator of a lack mechanical integrity;
- b. Remediate the well to the Division's satisfaction; or
- c. With Division review and approval, remove the well from operation and isolate the well from the underground gas storage reservoir in accordance with Steps 4b through 7b below.

Necessary actions to remediate any abnormalities revealed by these tests will be reviewed by Division engineers. Once repairs or mitigations are completed, the Temperature Log and Noise Log must then be repeated on the well and reviewed by Division engineers to ensure that there are no additional abnormal test results and to confirm the issue was repaired.

Step 3: After these tests are completed on the well, and all required action has been completed, the operator shall either:

- a. Conduct the additional tests and evaluations on the well, outlined in Steps 4a through 7a below, in order to gain approval for injecting gas through that well; or
- b. Remove the well from operation and isolate the well from the underground gas storage reservoir in accordance with Steps 4b through 7b below.

REQUIRED TESTS IF A WELL IS INTENDED TO RESUME OPERATIONS

If Temperature and Noise Logs have been completed on a well and they indicate well integrity, and the Operator designates the well to return to injection operations, then the Operator shall perform the additional testing outlined in Steps 4a through 7a. The results of these tests will be independently reviewed by Division engineers and posted publicly. Each of the following tests requires that the production tubing be removed from the well.

Step 4a: The Operator shall conduct a **Casing Inspection log**.

The Operator shall conduct a Casing Inspection log of the well that measures the thickness of the production casing, from the surface to the bottom of the gas storage reservoir cap rock. If the Inspection reveals a reduction in wall thickness, the current minimum strength of the casing will be calculated. If the current minimum strength of the casing has diminished to the point that it cannot withstand authorized operating pressures for the well plus a built-in additional safety factor of pressure, the well has failed this test. *A passing test for a casing inspection log would show no thinning of the casing that diminishes the casing's ability to contain at least 115% of the well's maximum allowable operating pressure as authorized in the current Project Approval Letter.*

Step 5a: The Operator shall conduct a **Cement Bond Log** for the well.

The Operator shall conduct a Cement Bond Log (CBL) that measures the bonding between cement and the production casing of the well, and also the bonding between the annular cement and the formation. Cement should be solidly bonded to both the well's production casing and the geologic formation to ensure a seal that prevents fluids from migrating up or down the outside of the well. *A passing test for a cement bond log shows definitive bond, as demonstrated by sonic waveform,*

between cement and casing and between cement and the gas storage formation and/or cap rock for at least 100 feet above the top of the gas storage reservoir.

Step 6a: The Operator shall conduct a **Multi-Arm Caliper Inspection** of the well.

The operator shall conduct an inspection that measures any internal degradation or significant changes to the well's geometry from the surface to the top of the gas storage reservoir, using a minimum 32-arm caliper tool. If the inspection reveals a thinning or deformity of the casing, the current strength of the casing will be calculated. If the current strength of the casing has diminished, such that it cannot withstand authorized operating pressures plus a built-in safety factor of additional pressure, the well fails this inspection. *A passing test for a Multi-Arm Caliper Inspection would show no deformation or thinning of the casing that diminishes the casing from being able to properly contain at least 115% of each well's maximum operating pressure.*

Step 7a: The Operator will conduct a **Pressure Test** of the production casing and of the well once the production tubing has been reinstalled. The Operator may conduct the casing pressure test prior to reinstalling the production tubing. Using a digital recorder, the operator will conduct a liquid-filled positive pressure test within the production tubing of the well, and in the annular space between the production tubing and the casing, to determine the well's ability to withstand normal operating pressures. The production tubing will be isolated and then pressure tested. The annular space between tubing and casing will be pressure tested. This testing also evaluates the integrity of any packers, which seal the annular space between the tubing and casing. The pressure test will be one hour and begin at a pressure of 115% of the maximum operating pressure or the minimum yield strength of the casing and tubing, whichever is less. *A passing pressure test is a pressure loss not exceeding 10% for any 30 minute period during the hour long test.*

After conducting the above tests, the Operator will conduct any indicated remediation so that the well can pass these tests. All remediation will be subject to the review of Division engineers. The well would then be required to undergo the tests once again to demonstrate well integrity.

If the well passes the Casing Wall Thickness Inspection, the Cement Bond Log, the Multi-Arm Caliper inspection and the Pressure Test to the Division's satisfaction, then the Division may clear the well for use for gas injections and withdrawal, once the Division has authorized resumption of injection into the gas storage reservoir. As noted below, wells approved for operation will only be permitted to inject or withdraw gas through the production tubing.

REQUIRED ACTIONS IF THE WELL IS TO BE TAKEN OUT OF OPERATION AND ISOLATED FROM THE GAS STORAGE RESERVOIR:

If the operator elects to take a well out of service, then the following steps shall be taken to isolate the well from the gas storage reservoir:

Step 4b: The Operator shall confirm the presence of cement outside the well's external casing in the section of the well that prevents the movement of gas from the underground gas storage reservoir to shallower geologic zones above the gas storage reservoir. Existing cement bond logs and well construction

records may be used to make this confirmation. This confirmation requires concurrence from Division engineers.

Step 5b: The Operator shall install a mechanical seal or "packer" within the well's production casing and install a mechanical plug within the well's production tubing, if applicable. These seals shall be set in place near the bottom of the well, within the portion of the well surrounded by cement. This kind of seal is an industry standard practice for isolating a well from reservoir gases or fluids and will further protect the casing from internal gas pressure.

Step 6b: The Operator shall fill the well with fluid to the well's surface in order to create appropriate downward hydrostatic pressure in the well that further contributes to the integrity of the well seal.

These measures will isolate a well from the underground gas reservoir, as confirmed by National Laboratory experts. Each of the above actions is subject to review and approval by Division Engineers.

Step 7b: Once the Operator has completed steps 4b, 5b, and 6b, and the seal is in place at the bottom of the well and the well is filled with fluid above the seal, the operator shall:

- a. Conduct daily gas monitoring at the surface of the non-operational well, including monitoring the area around the well perimeter and in the annular space between the plugged casing string and the outmost casing;
- b. Conduct noise log, temperature log and positive pressure test every six months;
- c. Conduct weekly monitoring of fluid levels in the well or, install and operate real-time pressure monitors that provide immediate notification to the operator when pressures deviate from normal in the well's interior tubing and its annular space.

The above monitoring shall be reported to Division engineers and maintained as a part of the well file. Division engineers will review all submitted information for evaluation on a regular basis to ensure that the well taken out of service has maintained safety, and the operator shall take all necessary steps maintain the safety of the well.

Any well taken out of operation cannot be approved to resume operations and gas injection until the successful completion of the battery of tests outlined above in Steps 4a through 7a (Casing Wall Thickness Inspection, the Cement Bond Log, the Multi-Arm Caliper Extension and the Pressure Test) is completed. Those tests must be successfully completed within one year of completing step 6b. If a well cannot successfully complete all necessary steps required in this safety review after one year of completing step 6b, then the well shall be properly plugged and abandoned in accordance with Public Resources Code section 3208.

REQUIREMENTS FOR WELLS RESUMING OPERATIONS IN ALISO CANYON

The Division's authorization to resume injection in the Aliso Canyon Storage Facility will be contingent on the successful completion of this comprehensive safety review. The State Oil and Gas Supervisor must confirm in writing that all wells in the facility have either completed and passed the full battery of tests required in the safety review, been taken out of service and isolated from the underground gas storage reservoir, or been properly plugged and abandoned in accordance with Public Resources Code Section 3208.

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Superior Court of California
County of Los Angeles

FEB 02 2016

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

Sherril R. Carter, Executive Officer/Clerk
By Laura Robles, Deputy

THE PEOPLE OF THE STATE OF CALIFORNIA,
Plaintiff,

v.

SOUTHERN CALIFORNIA GAS COMPANY
Defendant.

CASE NO.

65C00433

MISDEMEANOR COMPLAINT

The undersigned is informed and believes that:

COUNT 1

On or about October 23, 2015 to October 26, 2015, in the County of Los Angeles, the crime of FAILURE TO REPORT RELEASE OF HAZARDOUS MATERIAL, in violation of HEALTH AND SAFETY CODE SECTION 25510(a), a Misdemeanor, was committed by SOUTHERN CALIFORNIA GAS COMPANY, which failed, upon discovery, to immediately report a release or threatened release of hazardous material, to wit: NATURAL GAS OR ITS COMPONENTS (including, but not limited to, METHANE, METHYL MERCAPTAN, BUTYL MERCAPTAN, BENZENE AND BUTANE) to the California Emergency Management Agency and to the unified program agency.

* * * * *

COUNT 2

On or about October 23, 2015 to October 26, 2015, in the County of Los Angeles, the crime of FAILURE TO REPORT RELEASE OF HAZARDOUS MATERIAL, in violation of LOS ANGELES COUNTY CODE SECTION 12.56.030, a Misdemeanor, was committed by SOUTHERN CALIFORNIA GAS COMPANY, which had knowledge of an unauthorized release or threatened release of hazardous material, to wit: NATURAL GAS OR ITS COMPONENTS (including but not limited to, METHANE, METHYL MERCAPTAN, BUTYL MERCAPTAN, BENZENE AND BUTANE) and failed to take all necessary steps to insure the discovery, containment and cleanup of such release or threatened release and failed to notify the health hazardous materials division of the forester and fire warden.

* * * * *

COUNT 3

On or about October 23, 2015 to October 26, 2015, in the County of Los Angeles, the crime of FAILURE TO REPORT RELEASE OF HAZARDOUS MATERIAL, in violation of TITLE 19 OF THE CALIFORNIA CODE OF REGULATIONS SECTION 2703(a), a misdemeanor, was committed by SOUTHERN CALIFORNIA GAS COMPANY, which had knowledge of a release or threatened release of hazardous material, to wit: NATURAL GAS OR ITS COMPONENTS (including, but not limited to, METHANE, METHYL MERCAPTAN, BUTYL MERCAPTAN, BENZENE AND BUTANE) and failed to provide an immediate verbal report to the administering agency and the California Emergency Management Agency.

* * * * *

COUNT 4

On or about October 23, 2015 to the present, in the County of Los Angeles, the crime of DISCHARGE OF AIR CONTAMINANTS, in violation of HEALTH AND SAFETY CODE SECTION 41700(a), a Misdemeanor, was committed by SOUTHERN CALIFORNIA GAS COMPANY, which discharged air contaminants and other materials, to wit: NATURAL GAS OR ITS COMPONENTS (including, but not limited to, METHANE, METHYL MERCAPTAN, BUTYL MERCAPTAN, BENZENE AND BUTANE) that caused injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or that endangered the comfort, repose, health, or safety of any of those persons or the public, or that caused or had a natural tendency to cause, injury or damage to business or property.

♦ ♦ ♦ ♦ ♦

NOTICE: Conviction of this offense will require the defendant to provide DNA samples and print impressions pursuant to Penal Code sections 296 and 296.1 if the defendant has suffered a prior felony conviction. Willful refusal to provide the samples and impressions is a crime.

NOTICE: The People of the State of California intend to present evidence and seek jury findings regarding all applicable circumstances in aggravation, pursuant to Penal Code section 1170(b) and *Cunningham v. California* (2007) 549 U.S. 270.

NOTICE: A Suspected Child Abuse Report (SCAR) may have been generated within the meaning of Penal Code §§ 11166 and 11168 involving the charges alleged in this complaint. Dissemination of a SCAR is limited by Penal Code §§ 11167 and 11167.5 and a court order is required for full disclosure of the contents of a SCAR.

Further, attached hereto and incorporated herein are official reports and documents of a law enforcement agency which the undersigned believes establish probable cause for the arrest of defendant SOUTHERN CALIFORNIA GAS COMPANY for the above-listed crimes.

I DECLARE UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT AND THAT THIS COMPLAINT CONSISTS OF 4 COUNTS.

Executed at LOS ANGELES, County of Los Angeles, on February 2, 2016.


THOMAS DOAN
DECLARANT AND COMPLAINANT

JACKIE LACEY, DISTRICT DEPUTY

BY: DANIEL J. WRIGHT, DEPUTY

AGENCY: LACO FIRE DEPT I/O: FERNANDO FLOREZ ID NO.: 0000 PHONE: (323) 890-4085
DR NO.: OPERATOR: ESM

DEFENDANT	CIL NO.	CITATION NO.	BOOKING NO.	BAIL RECOM'D	CUSTODY RTN DATE
SOUTHERN CALIFORNIA GAS COMPANY					02/17/2016

Pursuant to Penal Code Section 1054.5(b), the People are hereby informally requesting that defense counsel provide discovery to the People as required by Penal Code Section 1054.3.

1 JACKIE LACEY
District Attorney of the County of Los Angeles
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Deputy-In-Charge
3 DANIEL J. WRIGHT, SBN 129309
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7 *Attorneys for Plaintiff,*
The People of the State of California
8

9 SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

10 THE PEOPLE OF THE STATE OF
11 CALIFORNIA,

12 Plaintiff,

13 v.

14 SOUTHERN CALIFORNIA GAS
COMPANY.

15 Defendant.
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OF ORIGINAL FILED
Los Angeles Superior Court

SEP 13 2016

Sherri R. Carter, Executive Officer/Clerk
By N. Nikbakhsh, Deputy

Case No. 6SC00433

**PROPOSED SETTLEMENT
AGREEMENT BETWEEN THE
PEOPLE OF THE STATE OF
CALIFORNIA AND DEFENDANT
SOUTHERN CALIFORNIA GAS CO.**

Complaint Filed February 2, 2016

NCD: September 13, 2016
8:30 a.m.
Department 3
Hon. Judge Alan S. Rosenfield

1. Attachment A to this submission to the Court contains the proposed Settlement Agreement ("Agreement") between the Los Angeles County District Attorney's Office and Defendant Southern California Gas Company in case 6SC00433.
2. All the terms and conditions of the proposed Agreement are set forth in Attachment A, which is 6 pages in length total (including a signature page for the Court).

DATED: 9/13/16

JACKIE LACEY
District Attorney, County of Los Angeles

BY: 

Christopher D. Curtis
Deputy District Attorney

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ATTACHMENT

“A”

Settlement Agreement

1. This Settlement Agreement ("Agreement") is entered into as of the 13th day of September 2016 ("Agreement Date"), by the People of the State of California, acting through the District Attorney's Office for Los Angeles County (hereinafter referred to as the "LADA") and Southern California Gas Company (hereinafter "SoCalGas" or "Company") (hereinafter, jointly referred to as the "Parties"). The Parties enter into this Agreement in resolution of all criminal claims that have been brought by the LADA against SoCalGas in case 6SC00433. The LADA's claims arose out of an investigation into the natural gas leak (the "Leak") which occurred at SoCalGas' Aliso Canyon Natural Gas Storage Facility ("Aliso Canyon Facility"), located in Los Angeles County, that began on or around October 23, 2015.
2. The LADA filed a Misdemeanor Complaint ("Complaint") in the Superior Court of the State of California for the County of Los Angeles on February 2, 2016, charging SoCalGas with misdemeanor violations of Health and Safety Code Section 25510(a) (Count 1); Los Angeles County Code Section 12.56.030 (Count 2); Title 19 of the California Code of Regulations Section 2703(a) (Count 3); and Health and Safety Code Section 41700(a) (Count 4) in case 6SC00433. SoCalGas pled not guilty at arraignment to the charges alleged in the Complaint.
3. In consideration of the proceeding and for the mutual promises and considerations set forth herein, the sufficiency of which are hereby acknowledged, the Parties agree as follows:

- a. SoCalGas will plead no contest to Count 1 in the Complaint, a misdemeanor violation of Health and Safety Code Section 25510(a) for failing to timely report the natural gas leak to the proper authorities, specifically the California Office of Emergency Services ("OES") and the local Certified Unified Program Agency ("CUPA"), which in this case was the Los Angeles County Fire Department.

It is also acknowledged by both Parties that a plea to this count is "priorable" pursuant to Health and Safety Code Section 25515.3 and any subsequent violation of this section may be charged as a felony.

- b. The Court will impose, and SoCalGas will pay, at sentencing the maximum fine of \$75,000 in exchange for their plea to Count 1. This represents the maximum fine of \$25,000 per day of violation pursuant to Health and Safety Code Section 25515.3(a) multiplied by the three days the LADA alleges the Company failed to timely report the leak as alleged in the Complaint.
- c. The Court will impose, and SoCalGas will pay at sentencing, state penalty assessments on top of the fine described above pursuant to Penal Code Sections 1464 and 1465.7 and Government Code Sections 76000 and 70372. These penalty assessments are currently estimated to be approximately \$232,500.

d. The Court will impose, and SoCalGas will pay at sentencing, \$246,672.88 for the cost of the response by the Los Angeles County Fire Department's Health and Hazardous Materials Division pursuant to Health and Safety Code Section 25515.3.

e. The Court will impose, and SoCalGas will pay at sentencing, all mandatory fines and fees as required by the court, including any restitution fine to the State Restitution Fund ordered pursuant to Penal Code Section 1202.4.

f. In exchange for the LADA's decision to enter into this Agreement, SoCalGas has agreed to install, prior to sentencing, an Infrared Methane Leak Detection System along the southern border or fence-line of the Aliso Canyon Facility that will include 8 pairs of infrared methane monitors situated in strategic locations near or at the southern facility border capable of detecting methane crossing from the Aliso Canyon Facility and into the community. The total costs are anticipated to be approximately between \$1.2 million and \$1.5 million dollars. This money will go towards the purchase of the equipment, its installation and integration into the Company's infrastructure and networking systems, as well as for project support, upkeep, and maintenance. This methane monitoring system is currently not required by any agency or regulator and will be installed and maintained pursuant to the terms of this Agreement.

g. In exchange for the LADA's decision to enter into this Agreement, SoCalGas will, prior to sentencing, enter into a binding agreement to hire and maintain 6 full-time employees responsible for operating and maintaining the equipment and systems designed to promptly detect gas leaks at the Aliso Canyon Facility for at least 3 years. The anticipated costs for these 6 positions will be approximately \$750,000 annually. The anticipated total costs for these positions for a 3 year period will be approximately \$2.25 million dollars.

The equipment and systems these employees will monitor include the Infrared Methane Leak Detection Monitors placed at the fence-line, the Real-Time Pressure Monitors installed on each natural gas storage well in operation at the Aliso Canyon Facility, and the monitoring systems present in the Operations Room which monitor the methane and real time pressure monitors. SoCalGas intends the 6 employees referenced in this paragraph to consist of 5 station operations specialists and 1 instrument specialist. These employees, with potential assistance from other employees and resources, will maintain Operations Room coverage on a 24 hours/7 days a week basis.

h. In exchange for the LADA's decision to enter into this Agreement, SoCalGas will, prior to sentencing, install Real-Time Pressure Monitors at each natural gas storage well in operation at the Aliso Canyon Facility as required by DOGGR Emergency Order 1109 and the Requirements of the Comprehensive Safety Review of the Aliso Canyon Natural Gas Storage Facility.

- i. In exchange for the LADA's decision to enter into this Agreement, SoCalGas will, prior to sentencing, be required to test and certify that the new monitoring systems, including the Infrared Methane Leak Detection System and the Real-time Pressure Monitoring System, are working properly by using an outside third party company. This requirement of certification of the new monitoring systems is solely a product of the terms of settlement in this case, as such certification is not required by any other regulator or agency.
 - j. In exchange for the LADA's decision to enter into this Agreement, SoCalGas will, prior to sentencing, revise and adopt new reporting policies regarding releases or threatened releases of hazardous materials to OES and the applicable CUPA. These revised reporting policies will be explicit and consistent with the requirements of Health and Safety Code Section 25510. These policies have been adopted in anticipation of this Agreement and submitted to the LADA.
 - k. In exchange for the LADA's decision to enter into this Agreement, SoCalGas will, prior to sentencing, provide proof to the LADA that it conducted training courses for employees responsible in whole or in part for leak detection or reporting at all of their Los Angeles County natural gas storage facilities (Aliso Canyon, Playa del Rey, Honor Rancho, and Montebello) on the proper notification procedures to agencies in the event of a leak or suspected leak, including OES and CUPA, in addition to creating messaging from SoCalGas senior management to all said employees on the importance of promptly reporting incidents to OES and CUPA.
- l. Provided the terms of this Agreement are complied with by SoCalGas, the LADA agrees to dismiss the remaining three counts contained within the Complaint pursuant to Penal Code Section 1385 at the time of sentencing.
- m. Given that all of the terms and conditions of this agreement will be required to be completed at or prior to the date of sentencing, including payment of the maximum fine and assessments, as well as the work specified above, the LADA agrees not to seek or require probation as a condition of the Agreement.
 - n. In total, SoCalGas will be required to pay and commit approximately \$4,004,172 to \$4,304,172 to fully complete and satisfy the complete terms of this settlement agreement.
- 4. This Agreement contains the complete agreement between the Parties and supersedes any previous agreement between them. This Agreement may not be modified, amended, or terminated except by written agreement signed by the Parties and specifically referring to this Agreement.
 - 5. All of the terms and conditions contained within this Agreement required of SoCalGas will be completed to the satisfaction of the LADA's Office prior to or on the date of sentencing by the Court.

6. This Agreement may be executed in counterparts, each of which shall be deemed original and all of which, when taken together, shall constitute one and the same instrument. Signatures exchanged by facsimile or email shall be acceptable as originals.

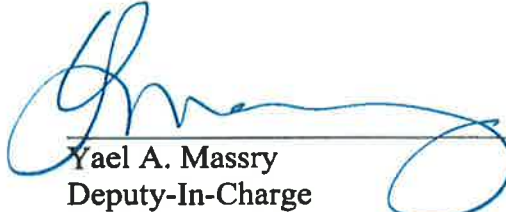
ACKNOWLEDGEMENTS

I have reviewed the above Agreement carefully and hereby certify that I fully understand and agree to its terms.

9-13-16
Date



Sharon Tomkins
General Counsel
Southern California Gas Company

9.13.16
Date


Yael A. Massry
Deputy-In-Charge
Environmental Crimes/OSHA Section
Los Angeles County District Attorney's Office

I am Southern California Gas Company's counsel. I have carefully reviewed every part of this Settlement Agreement with my client Southern California Gas Company. To my knowledge the decision of Southern California Gas Company to enter into this Agreement is an informed and voluntary one.

9-13-16
Date


Manuel A. Abascal, Esquire
Counsel for Southern California Gas Company

9-13-16
Date


Nathan Hochman, Esquire
Counsel for Southern California Gas Company

The Court, having reviewed this Agreement in total, hereby approves its terms of settlement between the LADA's Office and Defendant Southern California Gas Company, in relation to case 6SC00433.

Date

Hon. Alan S. Rosenfield
Superior Court Judge