SED-250

Master Document Index (6.3.19) Entry for 2016.0126.DR01

I.19-06-016

ALJs: Hecht/Poirier

Date Served: April 5, 2021

SED DR DATE	SED DR NO.	QUESTION NO.	QUESTION	BATES RANGE	CONFIDENTIAL	RESPONSE DATE
1/26/2016 1/26/2016	2016.0126.DR01 2016.0126.DR01	A A1	A. Detailed Well Data – "Standard Sesnon" 25 (SS-25) (API 037-00776) All well records.	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389		2/5/2016 6/3/2016 11/18/2016
				AC_CPUC_0206158 - AC_CPUC_0208846		3/11/2019
1/26/2016	2016.0126.DR01	A2	Complete history of well SS-25 from drilling to the date of the well failure; including, but not limited to, all permanent and non-permanent alteration of casing, all tubing, packer, subsurface safety valves, plugs, sliding sleeve, perforations, cementing and remedial operations, logs.	AC_CPUC_0000023 - AC_CPUC_0000759		2/6/2016 2/16/2016
				AC_CPUC_0012338 - AC_CPUC_0012389		3/18/2016 6/3/2016 10/27/2017
1/26/2016	2016.0126.DR01	А3	A description of all remedial operations, when conducted, and for what purpose. (include all non-permitted and permitted operations.) Provide copies of the daily report of well operations (engineer's log) for each well operation.			2/6/2016 2/16/2016
				AC_CPUC_0012338 - AC_CPUC_0012389		3/18/2016 6/3/2016
1/26/2016	2016.0126.DR01	A4	Information on the current subsurface safety valve (SSSV) installed in the well. a. Depth and date the current SSSV was installed. If the SSSV was installed in 1979, provide the history. If a SSSV was required, please provide documentation. b. A recorded description of the purpose and function of the current SSSV. Document description of the current SSSV. c. Manufacturers specification/design sheet of all SSSVs assemblies used historically on SS-25 d. The narrative reason for installation of a SSSV in SS-25. e. Manufacturer's specifications of the SSSV currently in the well.			2/16/2016 3/18/2016 10/27/2017
			Historical operational narrative overview of ALL SSSVs a. Include original SSSVs installed or removed, decommissioned in place, replaced, and repaired. b. Why	AC_CPUC_0000061, AC_CPUC 0000116-AC_CPUC_0000122 and		10/27/2017
	2016.0126.DR01	A5	are SSSVs installed in SS-25? c. Manufacture specifications All SSSVs installed or removed, decommissioned in place, replaced, and repaired. d. maintenance history and issues e. Functionality or improvements needed	AC_CPUC_0000132, AC_CPUC_0000613, AC_CPUC_0000609 - AC_CPUC_0000612, AC_CPUC_0000631-AC_CPUC_0000633, AC_CPUC_0000073-AC_CPUC_0000134.		2/16/2016 3/18/2016 10/27/2017
			The operational history of the current SSSV, including maintenance history and any problems. a. Whether or not the SSSV was functioning as designed prior to the well failure. If not, reason why. b. Provide all correspondence between			
1/26/2016	2016.0126.DR01	A6	SoCalGas and DOGGR related to the SSSV since 1977.	AC_CPUC_0000023 - AC_CPUC_0000759		2/5/2016 2/16/2016
				AC_CPUC_0012338 - AC_CPUC_0012389		6/3/2016

1/26/2016	2016.0126.DR01	A7	Describe the operational design of injection and withdrawal mechanisms for well SS-25. a. What was the injection/withdrawal plan for the past 10 years? b. Was gas injected through tubing and packer? c. Was gas injected through tubing and tubing/casing annulus simultaneously? Describe the mechanism for gas withdrawal in well SS-25. Was gas withdrawn through tubing and casing? e. Provide technical analysis for injection and withdrawal through the tubing/casing annulus. Why is this injection and withdrawal method used instead of tubing only? Was this method approved for injection? If so, provide documentation. f. Describe the stress on the casing of annual cycles of injection and withdrawal through casing?		3/18/2016
1/26/2016	2016 0136 DD01	AS	Casing diagram detailing the physical condition of the well at the time of the well failure (October 23, 2015) including all subsurface equipment, tubing, packers, subsurface safety valves (SSSV), sleeves, etc. a. Details should include, and not limited to: size and depth of holes, casing, tubing, packer, perforations, casing centralizers, cement ports, cement, fish, stubs, plugs, etc. Casing diagram shall include the location of corrosion, well failures, repairs, remedial cementing operations, base of fresh water, base of USDW, lost circulation zones, tops of formations, markers, faults, etc. b. All data shall be clearly marked on the wellbore drawing and at a scale that is proportional and easy to read. The wellbore diagram shall be in pdf format no less than 300dpi. c. Detailed information should be listed in a column next to the wellbore	AC CRUC 0000033 AC CRUC 0000750	2/5/2016
1/26/2016	2016.0126.DR01	A8	schematic.	AC_CPUC_000023 - AC_CPUC_0000759 AC_CPUC_0001635-AC_CPUC_0001637	2/5/2016 2/16/2016
				AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
1/26/2016	2016.0126.DR01	A9	Details of surface wellhead, pressure gauges, and valves, and their function. Include: a. Wellhead equipment schematics, include manufacture's specifications. b. Recent, within 3 years, wellhead equipment changes c. Type and purpose of safety valves. Their testing schedule and results of tests.	AC_CPUC_0000023 - AC_CPUC_0000759	2/5/2016
			History of all well leaks, surface and subsurface, since SS-25 was placed on production and later on injection/withdrawal. a. Provide depth of casing	AC_CPUC_0001638-AC_CPUC_0001639  AC_CPUC_0012338 - AC_CPUC_0012389  AC_CPUC_0000023 - AC_CPUC_0000759,  AC_CPUC_0000058 to AC_CPUC_0000061;  AC_CPUC_0000065 to AC_CPUC_0000066;  AC_CPUC_0000070 to AC_CPUC_0000073;  AC_CPUC_0000096; AC_CPUC_0000104;  AC_CPUC_0000106 to AC_CPUC_0000107;	2/16/2016 3/18/2016 6/3/2016
1/26/2016	2016.0126.DR01	A10	collars, and problems with casing threads. b. Documentation of the location of the leak on the 7" casing and cause.	AC_CPUC_0000134; AC_CPUC_0000176; AC_CPUC_0000177; and AC_CPUC_0000194.	2/5/2016
1, 20, 2010	2010/0120/01/01	7.20	die leaf on die 7 taamgana aase.	AC_CPUC_0012338 - AC_CPUC_0012389	3/18/2016 6/3/2016
			B. Abnormal Conditions Data – "Standard Sesnon" 25 (SS-25) (API 037-00776)		
			A narrative identifying, describing and analyzing any problems encountered	AC_CPUC_000056-AC_CPUC_0000061, AC_CPUC_0000102, AC_CPUC_0006726, AC_CPUC_0006735, AC_CPUC_0006746; and	
1/26/2016	2016.0126.DR01	B1	during operational history of the well.	AC_CPUC_0006753	3/18/2016 10/27/2017
1/26/2016	2016.0126.DR01	B2	Any casing failures, ruptures, holes, corrosion and their location on the well.	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
1/26/2016	2016.0126.DR01	В3	History of all well leaks, surface and subsurface, since SS-25 was placed on production	AC CPUC 0000023 - AC CPUC 0000759	2/5/2015
-,, 2010	,			AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
1/26/2016	2016.0126.DR01	В4	Records of history of safety concerns, near misses, upset conditions, outside forces near misses, incidents, failures or any concerns for the operational safety and integrity of SS25.	y AC CPUC 0000023 - AC CPUC 0000759	2/5/2016
1,20,2010	2020.0120.0101	D-7	and meeging 5: 5525.	s. 55_555555	2,3,2010

			C. Construction - SS-25, S-25A, SS-25	AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
			C. Construction 33 23, 3 237, 33 23		
1/26/2016	2016.0126.DR01	C1	For well sites SS-25, S-25A, SS-25, provide any and all design and construction records for since well inception.	AC_CPUC_0000023 - AC_CPUC_0000759. AC_CPUC_0012338 - AC_CPUC_0012389 As to Well SS-25A, please see AC_CPUC_000001-AC_CPUC_0000011 and AC_CPUC_0000760- AC_CPUC_0001198 and AC_CPUC_0208847 - AC_CPUC_0212127. As to Well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587 and AC_CPUC_0212128 - AC_CPUC_0213917.	2/5/2016 6/3/2016 3/11/2019
1/26/2016	2016.0126.DR01	C2	SS-25, S-25A, SS-25B: Provide any and all well drilling logs since well inception	AC_CPUC_000023 - AC_CPUC_0000759.	2/5/2016 6/3/2016
1/26/2016	2016.0126.DR01	C3	SS-25: Provide any and all well packer seating and unseating(s), changes, reworks, replacements, etc., whether required for DOGGR inspection or not.  D. Tests	AC_CPUC_000023 - AC_CPUC_0000759. AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
1/26/2016	2016.0126.DR01	D1	All mechanical integrity tests run on well SS-25 since 1976, including, but not limited to, casing pressure test, noise logs, temperature logs and radioactive tracer surveys. Include whether or not each test was required by DOGGR. a. Provide the date of each MIT run and results of the test. Include all Temperature and noise logs for SS-25; include an explanation of all acronyms used. Include the smoothing and sample rate of each log. If available, provide the temperature logs in ASCII/LAS files. b. Provide records of MIT evaluations for SS-25. c. Provide all documentation of monitoring from 1979 to October 2015. (Refer to remarks on the 1989 temperature survey.) d. In the 1989 temperature log there is an anomaly. Provide information on the anomaly and steps taken to identify the cause. Describe the relationship between the anomaly and the SSSV in the well at the time. e. In 1991 noise log there is reading. Provide record information on the anomaly and record of steps taker to identify the cause and further investigation and/or mitigation. Describe the relationship between the anomaly and the SSSV in the well at the time.	AC_CPUC_0000023 - AC_CPUC_0000759	2/5/2016 3/18/2016
				AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016

			AC_CPUC_0012389 As to Well SS-25A, please see	
			AC CPUC 0000001-AC CPUC 0000011 and AC CPUC 0000760-	
			AC CPUC 0001198. As to Well SS-	
			25B, please see AC CPUC 0000012 - AC CPUC 0000022 and	
			AC CPUC 0001199 AC CPUC 0001587.	
		All mechanical integrity tests run on gas storage wells, including idle and	AC_CPUC_0003229- AC_CPUC_0006600. AC_CPUC_0009479;	
		abandoned, located within 1/4 mile of well SS-25, and the results of the tests.	AC_CPUC_0009485; AC_CPUC_0009492; AC_CPUC_0009498;	
		If available, provide the tests in ASCII/LAS files. a. What was the required	AC_CPUC_0009504; AC_CPUC_0009510; AC_CPUC_0009516;	
		frequency for conducting temperature surveys and other MITs? b. What were		
		the reasons for running a particular type of survey? c. What is the frequency for	or AC_CPUC_0009546; AC_CPUC_0009552; AC_CPUC_0009558;	
		measuring annulus pressure? Provide a history of annulus pressures. d. What	AC_CPUC_0009564; AC_CPUC_0009570; AC_CPUC_0009576;	
		is the requirement for running noise logs and radioactive tracer (RA) surveys?	AC_CPUC_0009582; AC_CPUC_0009588; AC_CPUC_0009594;	
		Provide a history of noise logs and RA surveys. e. What is the required	AC CPUC 0009600; AC CPUC 0009606; AC CPUC 0009612;	
		frequency of reservoir shut-in periods to measure static bottom-hole pressure	? AC CPUC 0009618: AC CPUC 0009624: AC CPUC 0009630:	
		Provide a history of reservoir shut-in period and static bottom-hole pressure	AC CPUC 0009679; AC CPUC 0009680; AC CPUC 0009683;	
		measurements. f. Who runs and provides oversight of the MIT field test? Wha	/ / /	
		are their qualifications? g. How MITs were evaluated during and after the field		
		test (provide any written report). h. For failed or questionable MITs, at what	AC_CPUC_0009704; AC_CPUC_0009708; AC_CPUC_0009712;	
		depth and date were anomalies determined? i. Were wells remediated if the	AC_CPUC_0009713; AC_CPUC_0009716; AC_CPUC_0009717;	
		MIT failed? If DOGGR was notified, please provide date, contact person, and	AC_CPUC_0009720 ; AC_CPUC_0009724; AC_CPUC_0009728;	
		type of communications. j. Most recent fluid levels for wells within ¼ mile of SS		
		25. Include the method used to determine fluid level. k. Data detailing	AC_CPUC_0009737; AC_CPUC_0009740; AC_CPUC_0009744;	
		pressure communication between wells. I. Any data collected or study	AC_CPUC_0009748; AC_CPUC_0009749 ; AC_CPUC_0009752;	
		conducted by SoCalGas on the effects of wells subject to expansion and	AC_CPUC_0009753; AC_CPUC_0009756; AC_CPUC_0009757;	
		contraction during gas cycling in Aliso Canyon Gas Storage project. Provide	AC CPUC 0009762; AC CPUC 0009766; AC CPUC 0009767;	
		findings and recommendations for evaluating integrity of wells in the project	AC_CPUC_0009769; AC_CPUC_0009771; AC_CPUC_0009772;	
1/26/2016 2016.0126.DR01	D2	and risks of long term use of wells.	AC CPUC 0009775; AC CPUC 0009776; AC CPUC 0009779;	2/5/2016
1,20,2010 2010:0120:0101	-	and hold of long term use of wells.	//c_c/ 00_0003//3///c_c/ 00_0003//0///c_c/ 00_0003//3/	3/18/2016
				6/3/2016
				0/3/2010
			AC_CPUC_0000023 - AC_CPUC_0000759.	
			AC_CPUC_0012389 As to Well SS-25A, please see	
			AC_CPUC_0000001-AC_CPUC_0000011 and AC_CPUC_0000760-	
			AC_CPUC_0001198. As to Well SS-	
		Tests for corrosion potential of all fluids encountered in well SS-25 and	25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and	
		corrosion management plan incorporated into the design and operation of	AC_CPUC_0001199 AC_CPUC_0001587. AC_CPUC_0011635	
1/26/2016 2016.0126.DR01	D3	wells in the GS projects with 1 mile of well SS25.	through AC CPUC 0011670	2/5/2016
• •		• •	°	3/18/2016
				6/3/2016
			AC CPUC 0000171 through AC CPUC 0000173; AC	0/3/2010
		CC 25 C 25A CC 25D Davids and all call call calls and a last in calls and all calls are called a call and a ca	_CPUC_0000176 through AC _CPUC_0000178; AC _CPUC_0000454	
		SS-25, S-25A, SS-25B: Provide any and all well water noise logs in scale readabl		-11
1/26/2016 2016.0126.DR01	D4	format (1"=200)	AC_CPUC_0009417	3/18/2016
			AC_CPUC_0000023 - AC_CPUC_0000759. AC_CPUC_0012338	
			AC_CPUC_0012389 As to well SS-25A, please see	
			AC_CPUC_0000001-AC_CPUC_0000011 and AC_CPUC_0000760-	
			AC_CPUC_0001198. As to well SS-	
			25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and	
			AC CPUC 0001199 AC CPUC 0001587. AC CPUC 0003229	
		SS-25, S-25A, SS-25B: Provide any and all well water temperature logs in scale		
1/26/2016 2016.0126.DR01	D5	readable format (1"=200)	AC CPUC 0009449	2/5/2016
_, _0, _010 _010.0120.0101	23		=0000 (10	3/18/2016
				6/3/2016
				6/3/2016

			AC_CPUC_0000023 - AC_CPUC_0000759.	
		SS-25, S-25A, SS-25B: Provide any and all well ion logs in scale readable format	AC_CPUC_0001198. As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and	
1/26/2016 2016.0126.DR01	D6	(1"=200)	AC_CPUC_0001199 AC_CPUC_0001587	2/5/2016 3/18/2016
		E. Injection Pressure		6/3/2016
		Surface injection pressure (preferably daily) and flow rate for well SS-25 for the		
		past 10 years. a. Wellbore deviation angle (from directional survey) b. Pipe	AC_CPUC_0000023 - AC_CPUC_0000759, AC_CPUC_0011671-	
		inside diameter c. Temperature of the gas injected at the surface d. Reservoir		
1/26/2016 2016.0126.DR01	E1	temperature and depth e. Gas gravity	AC_CPUC_0000275, AC_CPUC_0011682	2/5/2016 3/18/2016
		For SS-25, is the pressure gauge permanently installed or portable type? Please		
1/26/2016 2016.0126.DR01	E2	provide calibration schedule and any calibration documentation.	AC_CPUC_0008808-AC_CPUC_0008826	2/16/2016
				3/18/2016
		Did SS-25 well ever inject above MASP? What is the design pressure limit of		
1/26/2016 2016.0126.DR01	E3	the reservoir, wells, and wellhead?		2/16/2016
		For the monthly surface injection pressure data for gas storage wells,		3/18/2016
		submitted to DOGGR: a. How is the rate calculated? Is it based on 30-day		
1/26/2016 2016.0126.DR01	E4	average? b. Is the Tubing or Casing pressure?		3/18/2016
			AC CPUC 0009679; AC CPUC 0009683; AC CPUC 0009687;	
			AC_CPUC_0009700; AC_CPUC_0009704; AC_CPUC_0009708;	
			AC_CPUC_0009712; AC_CPUC_0009720; AC_CPUC_0009724;	
			AC_CPUC_0009728; AC_CPUC_0009736; AC_CPUC_0009744;	
			AC_CPUC_0009748; AC_CPUC_0009752; AC_CPUC_0009756;	
			AC_CPUC_0009766; AC_CPUC_0009769; AC_CPUC_0009771;	
			AC_CPUC_0009775; AC_CPUC_0009779; AC_CPUC_0009783; AC_CPUC_0009787; AC_CPUC_0009791; AC_CPUC_0009799;	
			AC_CPUC_0009802; AC_CPUC_0009810; AC_CPUC_0009814;	
			AC CPUC 0009818; AC CPUC 0009826; AC CPUC 0009830;	
			AC_CPUC_0009841; AC_CPUC_0009844; AC_CPUC_0009848;	
			AC_CPUC_0009850; AC_CPUC_0009854; AC_CPUC_0009856;	
			AC_CPUC_0009858; AC_CPUC_0009860; AC_CPUC_0009862;	
			AC_CPUC_0009864; AC_CPUC_0009866; AC_CPUC_0009870;	
			AC_CPUC_0009872; AC_CPUC_0009874; AC_CPUC_0009876; AC_CPUC_0009878; AC_CPUC_0009880; AC_CPUC_0009882;	
			AC_CPUC_0009884; AC_CPUC_0009888; AC_CPUC_0009890;	
			AC CPUC 0009892; AC CPUC 0009896; AC CPUC 0009898;	
			AC_CPUC_0009900; AC_CPUC_0009902; AC_CPUC_0009904;	
			AC_CPUC_0009906; AC_CPUC_0009910; AC_CPUC_0009912;	
			AC_CPUC_0009914; AC_CPUC_0009916; AC_CPUC_0009918;	
			AC_CPUC_0009920; AC_CPUC_0009922; AC_CPUC_0009924;	
			AC_CPUC_0009926; AC_CPUC_0009928; AC_CPUC_0009930; AC_CPUC_0009936; AC_CPUC_0009938; AC_CPUC_0009940;	
			AC_CPUC_0009938, AC_CPUC_0009938, AC_CPUC_0009946; AC_CPUC_0009942; AC_CPUC_0009944; AC_CPUC_0009946;	
		Provide daily and monthly injection tubing and casing pressure and rate for SS-		
1/26/2016 2016.0126.DR01	E5	25 since initial injection.	AC_CPUC_0009956; AC_CPUC_0009958; AC_CPUC_0009960;	2/5/2016
				6/3/2016
				11/18/2016
1/26/2016 2016 0126 DD01	F1	F. Gas Storage Monitoring Program:	AC CRUC 00016E0 AC CRUC 00017E2	2/16/2016
1/26/2016 2016.0126.DR01	F1	Provide a copy of the gas storage project well monitoring program.	AC_CPUC_0001650 - AC_CPUC_0001752	2/16/2016
1/26/2016 2016.0126.DR01	F2	Has the monitoring program changed over time? If so, describe the changes.		2/16/2016
		5. 5 5 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3/18/2016

1/26/2016 2016.0126.DR01	F3	SS-25: Provide any and all well pumping logs for life of well	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
		G. Communication History:	AC_CFOC_0012336 - AC_CFOC_0012389	0/3/2010
1/26/2016 2016.0126.DR01 1/26/2016 2016.0126.DR01	G1 G2	All correspondence between SoCalGas and the DOGGR Ventura district office, related to Aliso Canyon GS project, including, but not limited to, field inspections, well integrity testing, rework operations, notices, permits, remova and installation of the SSSV and the sliding sleeve.  Provide dates MIT survey results were submitted to the DOGGR Ventura office since 1989.	AC_CPUC_0006768 - AC_CPUC_0008806	3/18/2016 3/18/2016
1/26/2016 2016.0126.DR01 1/26/2016 2016.0126.DR01	G3 G4	How did SoCalGas communicate with DOGGR before, during, and after running MITs for GS wells? If DOGGR was notified, please provide date, contact person subject, and type of communications (e-mails, letters, phone-calls, etc.). Provide list of communications (e-mails, letters, and phone calls) made by SoCalGas to the DOGGR Ventura district office specific to the SS-25 well failure, prior to start of remedial operations. Include the date, time, subject, contacts and message.  H. Operations and Maintenance:		3/18/2016 3/ <sup>*</sup> 8/2016
1/26/2016 2016.0126.DR01	Н1	SS-25, S-25A, SS-25B: Provide any and all maintenance, repair and improvement records since well inception	AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389	2/16/2016 3/18/2016 6/3/2016
1/26/2016 2016.0126.DR01	H2	SS-25, S-25A, SS-25B: Provide any and all well Operations and Maintenance records since well inception	AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS- 25A, please see AC_CPUC_0000001-AC_CPUC_0000011 and  AC_CPUC_0000760-AC_CPUC_0001198.  As to well SS-25B, please see AC_CPUC_0000012 -  AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587  AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS-	2/5/2016 6/3/2016
1/26/2016 2016.0126.DR01	НЗ	SS-25, S-25A, SS-25B: Provide any and all well related management directives, analysis, investigations	25A, please see AC_CPUC_0000001-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_0001198.  As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587  AC_CPUC_0000023 - AC_CPUC_0000759.	2/5/2016 6/3/2016
1/26/2016 2016.0126.DR01	Н4	SS-25, S-25A, and SS-25B: Provide any and all well water circulation, fluid levels and annular reading records for life of each well.	AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS- 25A, please see AC_CPUC_0000001-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_0001198.	2/5/2016
		SS-25: Provide any and all well records cathodic, sacrificial plan and corrosion		6/3/2016
1/26/2016 2016.0126.DR01	Н5	monitoring records of life of well	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
1/26/2016 2016.0126.DR01	Н6	SS-25: Provide any and all well cathodic, sacrificial plan and monitoring records of life of well	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016

1/26/2016 2016.0126.DR01	Н7	SS-25: Provide any and all well fluid compatibility records of life of well	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
		SS-25: Provide any and all well fluids, formation fluids, corrosion due to fluid monitoring records of life of well	Ne_cr	0/3/2010
1/26/2016 2016.0126.DR01	Н8		AC_CPUC_0000023 - AC_CPUC_0000759	2/5/2016
		I. Materials	AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
		Explain and show historical documents that convey procedures for:		
		a. Provide record of review for integrity of SS-25 casing, concrete casing for		
		<ul> <li>well surface casing and production casing as inherited by SoCalGas circa 1973.</li> <li>b. Provide record of review for inherited surface casing, circa 1973 forward,</li> </ul>		
		establishing set elevation as functionally sound set at approximately 990'. c.		
		When setting casing, what determines the set depth? Provide a specific example sourced from records you provide to us as requested elsewhere,		
		herein. d. How does the depth depend on the loss of circulation?		
		[SS25.RPT.20160118.WH01.29] e. Explain difference between casing material		
		wt.42-47#/T&C/H-40/J-55 f. What is grade(s) of steel are presently used for outer casing? g. If different from aged wells, when did the industry change and	d	
		why (cite all factors, technology/reference new codes and regulations/new		- /- /
1/26/2016 2016.0126.DR01	I1	standards of practice)?	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0009418-AC_CPUC_0009449	2/5/2016 3/18/2016
			AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
		Explain the historical mixing and setting of casing mix. [DR] SS-25, S-25A, SS-25	AC_CPUC_0000950 through AC_CPUC_0000956;	
		a. 1 dry sack of Diamix(or equal) cement = (equals) how many cf wet (casing)	AC_CPUC_0000151; AC_CPUC_0000040 through	
		cement mix. b. Neat cement same? c. Installation/pumping records d. Specify	y AC_CPUC_0000041; AC_CPUC_0000151 through AC_CPUC_0000157; AC_CPUC_0000949; AC_CPUC_000957;	
1/26/2016 2016.0126.DR01	12	equipment used, hose size to install casing cement e. Hole fill methodology; how is the cement mixture installed based on casing depth?	AC_CPUC_0000157; AC_CPUC_0000949; AC_CPUC_000957; AC_CPUC_0001415	3/18/2016
		Describe acceptive identifying each aire and describing "cidetection a help" in		
		Provide narrative identifying, analyzing and describing "sidetracking a hole" in gas and oil terms? Provide records referenced to complete narrative. a. Identii		
		historical narrative of events of this occurring in SoCalGas drilling operations of		
1/26/2016 2016.0126.DR01	13	SS-25, SS-25A, SS-25B since inception of these wells. b. Identify elevations of occurrence. c. What corrective actions took place?	AC_CPUC_0000152; AC_CPUC_0000950-AC_CPUC_0000956; AC_CPUC_0001401-AC_CPUC_0001403	3/18/2016
-,,		J. Well Life		5, =5, ===
		SS-25 historical decommission plans and monitoring a. Prior to October of		
1/26/2016 2016.0126.DR01	J1	2015, provide records of how well was to be permanently inoperable and sealed. b. Provide narrative and records of projected well abandonment plan.	AC CPUC 0000023 - AC CPUC 0000759	2/5/2016
, ,,		, , , , , , , , , , , , , , , , , , ,		3/18/2016
			AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
		Provide evaluation records of well facility as inherited. What expected lifespar		
1/26/2016 2016.0126.DR01	J2	was given based on the age of well, former operation as an oil well.	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0009450-AC_CPUC_0009473	2/5/2016 3/18/2016
			AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
4 /25 /2045, 2045, 0425 PR04	12	Provide record of well diagnostics at time of SoCalGas conversion. Condition o		2/5/2016
1/26/2016 2016.0126.DR01	J3	casings, concrete, corrosion, etc.	AC_CPUC_0000023 - AC_CPUC_0000759 AC_CPUC_0012338 - AC_CPUC_0012389	2/5/2016 6/3/2016
		Provide menitoring cleaning and numbing records of steams conductors		
		Provide monitoring, cleaning and pumping records of storage sands, tag sands fill sands, etc. a. Provide diagnostics and analysis of sand draw b. Provide	o,	
1/26/2016 2016.0126.DR01	J4	critical events signaling beginning well decommissioning phase.	AC_CPUC_0000023 - AC_CPUC_0000759	2/5/2016
		K. Geology-Topography	AC_CPUC_0012338 - AC_CPUC_0012389	6/3/2016
		57 - F-0 - F-7		

1/26/2016 2016.0126.DR01	K1	Provide all recorded seismic event records at Site SS-25, SS-25A, SS-25B since inception	AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS-25A, please see AC_CPUC_0000011-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_0001198.  As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587  AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS-25A, please see AC_CPUC_000001-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_000001198.	2/5/2016 6/3/2016
1/26/2016 2016.0126.DR01	K2	Provide all seismic event related inspections at Site SS-25, SS-25A, SS-25B. a. Standard SoCalGas inspections b. Third party inspections c. Contractors – tools used, contracts, scope of d. Expert consultants – scope, reports	As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587.	2/5/2016 3/18/2016 6/3/2016
1/26/2016 2016.0126.DR01	К3	Provide records for all seismic repairs and replacements	AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS-25A, please see AC_CPUC_0000001-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_0001198.  As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587	2/5/2016 3/18/2016 6/3/2016
1/26/2016 2016.0126.DR01	К4	Provide all topographic surveys at SS-25, SS-25A, SS-25B.	AC_CPUC_0000023 - AC_CPUC_0000759.  AC_CPUC_0012338 - AC_CPUC_0012389 As to well SS-25A, please see AC_CPUC_000001-AC_CPUC_0000011 and AC_CPUC_0000760-AC_CPUC_0001198.  As to well SS-25B, please see AC_CPUC_0000012 - AC_CPUC_000022 and AC_CPUC_001199 - AC_CPUC_0000587.  AC_CPUC_6603. AC_CPUC_0011676 - AC_CPUC_11678	2/5/2016 2/16/2016 3/18/2016
1/26/2016 2016.0126.DR01	K5	A type log showing the character and depth of the formations, formation tops, marker beds, correlations, fault picks, other geologic features. a. Preferably of an SP and resistivity curve. b. Include Gamma Ray, density, neutron, and sonic curves, if available.		6/3/2016 3/18/2016
1/26/2016 2016.0126.DR01	K6	All logs, including but not limited to, e-logs (SP and resistivity), gamma, and density neutron, in pdf (300dpi). If available, log data in LAS format on an exce spreadsheet, of any e-log and gamma ray logs run on the SS-25 well or any wells in the vicinity. All logs shall have elevation references, preferably in mear sea level.	As to well SS-25B, please see AC_CPUC_0000012 -	2/5/2016 6/3/2016
1/26/2016 2016.0126.DR01	K7	Geologic structure map of the area within a 1 mile radius of well SS-25, including faults, and other geologic features.	AC_CPUC_0009399-AC_CPUC_0009401	3/18/2016
1/26/2016 2016.0126.DR01	K8	Geologic cross-section clearly detailing the geology, formations, structure, faults, and identifying base of freshwater, base of USDWs, all oil and gas bearing zones, and wells. The cross-section shall be drawn incorporating the S 25 well and include the gamma or elog traces used for correlation.	S AC_CPUC_0009402-AC_CPUC_0009404	3/18/2016

		Contour map (1 mile radius of well SS-25) of the top of the gas storage reservo	ir .	
1/26/2016 2016.0126.DR01	К9	(Sesnon Frew formation).	AC_CPUC_0009405	3/18/2016
		Isopach map of the gas storage reservoir extending in a 1 mile radius of well SS	5-	
1/26/2016	K10	25.	AC_CPUC-0008827-AC_CPUC_0008828	3/18/2016
		A surface map identifying all (active and inactive) wells within a 1 mile radius of	of Control of the Con	
		well SS-25, labeled with the API number and current operational status, such		
		as: OG (oil/gas producer), GS (Gas storage), idle, abandoned, OB (observation)		
		WF (water flood), WD (water disposal). Including any other wells types not		
1/26/2016 2016.0126.DR01	K11	listed.	AC_0009401	3/18/2016
		Was SS-25 affected by the Northridge earthquake? What analysis was		
		conducted to evaluate whether the earthquake affected the well. Were any		
1/26/2016 2016.0126.DR01	K12	wells in the area affected?		2/16/2016
				3/18/2016
		All maps and cross-sections shall include direction, scale, elevation and		
		references clearly marked. Submitted in electronic pdf format (300dpi) so it		
		can be expanded without blurring details. Most useful scale must show		
		locations and distances accurately and small enough to read data for the		
1/26/2016 2016.0126.DR01	K13	purpose it was intended.		3/18/2016
		Provide reports of all Geotechnical studies conducted in the Aliso Storage		
1/26/2016 2016.0126.DR01	K14	Reservoir	AC_CPUC_0006604-AC_CPUC_0006635	2/16/2016
			AC_CPUC-0009001-AC_CPUC_0009024	3/18/2016
1/26/2016 2016.0126.DR01	K15	Provide SCG analysis of the study and subsequent actions	AC_CPUC_0009397	3/18/2016
			AC CRUIC 0000033 AC CRUIC 00007F0	
			AC_CPUC_0000023 - AC_CPUC_0000759.	
			AC_CPUC_0012338 - AC_CPUC_0012389 As to well	
			SS-25A, please see AC_CPUC_0000001-AC_CPUC_0000011 and	
			AC_CPUC_0000760-AC_CPUC_0001198.	
4 /25 /2045 2045 0425 DD04	V4.6	Provide and all order land by the latter land and for CC 25 CC 25 A CC 25	As to well SS-25B, please see AC_CPUC_0000012 -	2/5/2016
1/26/2016 2016.0126.DR01	K16	Provide any and all water level/circulation log records for SS-25, SS-25A, SS-25	B AC_CPUC_0000022 and AC_CPUC_0001199 AC_CPUC_0001587.	2/5/2016
				6/3/2016