

State of California • Natural Resources Agency
Department of Conservation
Division of Oil, Gas, and Geothermal Resources
801 K Street • MS 18-05
Sacramento, CA 95814
(916) 445-9686 • FAX (916) 319-9533

Edmund G. Brown Jr., Governor
Kenneth A. Harris Jr., State Oil and Gas Supervisor

January 3, 2017

SENT VIA EMAIL

Mr. Rodger Schwecke
Vice President
Transmission and Storage
Southern California Gas Company
RSchwecke@semprautilities.com

FINDING THAT WELL PORTER 42B (API NO. 03721877) HAS PASSED THE FIRST BATTERY OF TESTS AND WAS TAKEN OUT OF SERVICE AND ISOLATED FROM THE UNDERGROUND GAS STORAGE RESERVOIR

Dear Mr. Schwecke:

I am writing regarding the safety review results of one of the 114 wells at the Aliso Canyon gas storage facility (Facility). Each of the wells are subject to the comprehensive safety review that State Oil and Gas Supervisor Order 1109 and SB 380¹ require to be completed before the Division of Oil, Gas, and Geothermal Resources (Division) may authorize resumption of injection operations at the Facility. Order 1109 describes two batteries of well tests. To complete the review, each well must (1) pass both batteries of tests, (2) pass the first battery of tests and be taken out of service and isolated from the underground gas storage reservoir, or (3) be properly plugged and abandoned.

The first battery of tests assesses the casing using temperature and noise logs to ensure that there is no migration of fluids near the wellbore. If a well passes those tests, it may (1) undergo the second battery of tests for potential approval to use for injection if and when injections may resume, or (2) be taken out of service and isolated from the underground gas storage reservoir as specified in Steps 4b through 7b of the Safety Review Testing Regime of Order 1109 (Testing Regime). The Division posts the current status and testing results for each of the 114 wells on its website at <http://www.conservation.ca.gov/dog/AlisoCanyon/Pages/Well-Detail.aspx>.

After receiving and evaluating all test results and other data concerning the well, I find for purposes of Order 1109 and SB 380, that well Porter 42B (API No. 03721877) has completed the first battery of the Testing Regime and was taken out of service and, on October 3, 2016, the well was isolated from the underground gas storage reservoir as specified in Step 6b of the Testing Regime. Monitoring and testing of the well must continue as required by Order 1109 and any applicable law. If the well does not pass the second battery of tests within one year of being isolated from the reservoir, then the well must be plugged and abandoned in accordance with Public Resources Code section 3208.

Sincerely,

Kenneth A. Harris Jr.,
State Oil and Gas Supervisor

¹ Senate Bill 380 (Pavley, Chapter 14, Statutes of 2016) codified in part at Public Resources Code section 3217.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-13-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
(Person submitting report) (President, Secretary, or Agent)
Date 9/27/2016
(Month, day, year)
Signature 
Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300 Telephone Number 714-398-5020

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Daily Operation Period: 1/20/2016 - 1/21/2016

Operations this Report Period (DOGGR)

Spot in kill tanks.

Daily Operation Period: 1/21/2016 - 1/22/2016

Operations this Report Period (DOGGR)

Kill well.

Daily Operation Period: 4/20/2016 - 4/21/2016

Operations this Report Period (DOGGR)

none

Daily Operation Period: 5/11/2016 - 5/12/2016

Operations this Report Period (DOGGR)

Spot in equipment.

Daily Operation Period: 5/12/2016 - 5/13/2016

Operations this Report Period (DOGGR)

SITP = 1300 psi, SICP = 1300 psi, Field pressure 1078 psi.

Pump 64 bbl 8.5 ppg high vis polymer and displace with 64 bbls of 8.5 ppg HEC polymer. Kill well and circulated clean with 432 bbls of 8.5 ppg HEC polymer, gas was ran from separator through the carbon filter unit. Rig down gas separator and carbon filter unit. Monitor well for 30 minutes while RD pump, carbon filter and separator. Remove 9-1/16" 5M master valve. Install 9-1/16" 5M X 11-1/16" 5M cross over, 11-1/16" 5M double gate BOP and 11-1/16" 5M annular preventer. Pressure test BOP stack to 2000 psi with mud pump, good. Secure well til AM.

Daily Operation Period: 5/13/2016 - 5/14/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1075 psi.

Fill well with 38 bbls 8.5 ppg HEC polymer. Pressure test BOPE as per Gas Company Standard 224.05: Pressure test pipe and blind rams, all lines and connections at 300 psi low / 5000 psi high for 20 min. each test. Annular preventer at 300 psi low / 3500 psi high for 20 min each test. Good test. Bleed off pressure and R/D Weatherford test unit. BOP equipment was inspected by DOGGR Ernie Blevins. Back out hanger lock screws. Release Arrowset packer. Pull out of the well with (11) joints of 3-1/2" L80 EUE 8rd tubing. Fill well with 14 bbls of 8.5 ppg HEC polymer. Secure well til AM.

Daily Operation Period: 5/14/2016 - 5/15/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1050 psi.

Fill well with 33 bbls 8.5 ppg HEC polymer. Continue to pull out of the well with (214) joints of 3-1/2" L80 EUE 8rd tubing, 3-1/2" X 4' L80 EUE 8rd pup joint, 3-1/2" mandrel, 3-1/2" X 2' L80 EUE 8rd pup joint, (1) joint of 3-1/2" L80 EUE 8rd tubing, 3-1/2" WXN profile nipple, (1) joint 3-1/2" L80 EUE 8rd tubing and laid down 8-5/8" Arrowset packer. Had to hammer every connection, very tight, fill hole every 10 joints pulled. PU and run in the well with 8-5/8" 36 # scraper, 3-3/4" bumper sub, (231) joints of 3-1/2" L80 EUE 8rd tubing, tagged top of liner @ 7222'. Reverse circulate two tubing volumes 130 bbls of 8.5 ppg polymer. Pull out of the well with (160) joints of 3-1/2" L80 EUE 8rd tubing. Secure well til Monday.

Daily Operation Period: 5/16/2016 - 5/17/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1085 psi.

Fill well with 33 bbls 8.5 ppg HEC polymer. Continue pulling out of the well with (70) joints of 3-1/2" L80 tubing. Laid down 3-3/4" bumper sub and 8-5/8" 36# scraper. P/U, run in the well with mechanical 3-5/8" OD cutter for 5" liner, stabilizer, (2) cross overs, (12) 2-1/16" PH 6 tubing, 2-1/16" pin X 2-7/8" EUE 8rd box cross over, 2-7/8" EUE pin X 3-1/2" EUE box cross over on (210) joints of 3-1/2" L80 tubing, Tagged @ 7252', Attempt to work cutter past 7252', unable to work past. Pull out of the well with (210) joints of 3-1/2" L80 tubing. Laid down (13) joints of 2-1/16" PH6 tubing and BHA. Run in the well with (50) joints of 3-1/2" L80 tubing. Secure well til AM.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-13-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
Date 9/27/2016 (Person submitting report) (President, Secretary, or Agent)
(Month, day, year)
Signature _____
Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300 Telephone Number 714-398-5020

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Daily Operation Period: 5/17/2016 - 5/18/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1080 psi.

Fill well with 9 bbls 8.5 ppg HEC polymer. Pull out of the well with (50) joints of 3-1/2" L80 tubing. P/U, run in the well with 5" 18# scraper, 3-1/8" bumper sub, 2-3/8" EUE x 2-3/8" PH6 cross over, (19) joints of 2-3/8" PH6 tubing, 2-3/8" PH6 X 2-7/8" EUE cross over, 2-7/8" EUE X 3-1/2" EUE cross over on (230) joints of 3-1/2" L80 tubing. Tagged @ 7774', tight spot @ 7455', 15K down weight and 20K overpull to get through. Worked through tight area til it took 8K down weight and 8K overpull to get through. Pull out of the well with (230) joints of 3-1/2" L80 tubing, (2) cross overs, (19) joints of 2-3/8" PH6 tubing. Laid down bumper sub and 5" scraper. Run in the well with 2-3/8" X 2' PH6 mule shoe pup joint, (19) joints of 2-3/8" PH6 tubing, 2-3/8" PH6 pin X 2-7/8" EUE box and 2-7/8" EUE pin X 3-1/2" EUE box cross overs on (198) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 5/18/2016 - 5/19/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1080 psi.

Fill well with 9 bbls 8.5 ppg HEC polymer.

Run in the well with (32) joints of 3-1/2" L80 tubing, tagged @ 7774'. Install 11-1/16" 5M x 7-1/16" 5M spool and 7-1/16" circulating head. Rig up por boy. Reverse circulate clean from 7774' to 7795', not making hole. Remove circulating head and spool. Pull out of the well with (230) joints of 3-1/2" L80 tubing, cross overs, (19) joints of 2-3/8" PH6 tubing and laid down mule shoe pup joint. Run in the well with 3-5/8" OD cutter, 4-1/8" stabilizer, 2-3/8" regular pin X 2-3/8" EUE box and 2-3/8" EUE pin X 2-3/8" PH6 box cross overs, (12) joints of 2-3/8" PH6 tubing, 2-3/8" PH6 pin X 2-7/8" EUE box and 2-7/8" EUE pin X 3-1/2" box cross overs on (74) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 5/19/2016 - 5/20/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1082 psi.

Fill well with 9 bbls 8.5 ppg HEC polymer.

Continue running in the well with (146) joints of 3-1/2" L80 tubing. Tagged with cutter @ 7245', attempt to work through, unable. Rig up power swivel, attempt to rotate / work through, unsuccessful. Hang back power swivel. Pull out of the well with (220) jts 3-1/2" L80 tubing, (2) covers, (12) joints of 2-3/8" PH6 tubing, lay down 4-1/8" stabilizer and cutter. Run in the well with 3-5/8" OD cutter, 2-3/8" regular pin X 2-3/8" EUE box and 2-3/8" EUE pin X 2-3/8" PH6 box cross overs, (12) joints of 2-3/8" PH6 tubing, 2-3/8" PH6 pin X 2-7/8" EUE box and 2-7/8" EUE pin X 3-1/2" box cross overs on (230) joints of 3-1/2" L80 tubing. No restrictions noted. Secure well til AM.

Daily Operation Period: 5/20/2016 - 5/21/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1076 psi.

Fill well with 10 bbls 8.5 ppg HEC polymer. Install circulating head, PU 2.5 power swivel, position tubing to put cutter @ 7,560', pump down tubing, 1 BPM @ 400 psi, cut 5" liner @ 7,560'. Final pump pressure was 2.5 BPM @ 400 psi. Hung back 2.5 power swivel and remove circulating head. Pull out of the well with (230) joints of 3-1/2" L80 tubing, (2) cross overs, (12) joints of 2-3/8" PH6 tubing, (2) cross overs, 2-3/8" IF X 2-3/8" Reg cross over and 3-5/8" mechanical cutter. PU / run in the well with (1) spear w/ 4.320 grapple, (1) spear extension, (1) 6-1/8" spear stop, (1) bumper sub, (1) 4-3/4" jar, (4) 4-3/4" drill collars, (1) intensifier, (1) 3-1/2" IF X 3-1/2" EUE cross over, (1) 3-1/2" pup joint and (226) joints of 3-1/2" L-80 tubing, engage 5" liner with spear @ 7,237". Jar @ 120K, pull free with 10K gain on the weight indicator. Pull out of the well with (12) joints of 3-1/2" L-80 tubing, dragging 10K over string weight. Secure well til AM.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

HISTORY OF OIL OR GAS WELL

Rec'd 10-13-16 DOGGR Ventura.

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
 Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
 A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
(Person submitting report) (President, Secretary, or Agent)
 Date 9/27/2016
(Month, day, year)
 Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300 Telephone Number 714-398-5020
 Signature _____

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Daily Operation Period: 5/21/2016 - 5/22/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1078 psi.

Fill well with 8 bbls 8.5 ppg HEC polymer. Continue to pull out of the well with (214) joints of 3-1/2" L-80 tubing, 3-1/2" pup joint, (1) 3-1/2" IF X 3-1/2" EUE cross over, (1) 4-3/4" intensifier, stand back (4) 4-3/4" drill collars, (1) 4-3/4" jar, (1) 4-5/8" bumper sub, (1) 6-1/8" spear stop, (1) spear extension and spear with 4.320" grapple. Rig up casing tongs. Lay down (1) 8-5/8" hangar packer followed by 232.67 ft of 5" 18# liner, (1) 7" X 5" overshot with seals and 4' of 5" liner inside overshot. (Note: Cut was made @ 7,560' which is 338' of 5" liner, liner recovered to 7,458' leaving 102' ft of 5" liner from recovered pipe to the cut.) Rig down casing tongs. Run in the well with (1) spear w/ 4.320" grapple, (1) spear extension, (1) 6-1/8" spear stop, (1) bumper sub, (1) 4-3/4" jar, (4) 4-3/4" drill collars, (1) intensifier, (1) 3-1/2" IF X 3-1/2" EUE cross over, (1) 3-1/2" pup joint and (188) joints of 3-1/2" L-80 tubing. Secure well til Monday.

Daily Operation Period: 5/23/2016 - 5/24/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1086 psi.

Fill well with 17 bbls of 8.5 HEC polymer.

Run in the well with (46) joints of 3-1/2" L-80 tubing, tag 5" liner @ 7,455' (tubing measured depth). Engage spear with 5" liner, pull free 15K over string weight and weight drop off to original string weight of 80K. Lay down (2) joints of 3-1/2" L-80 tubing, pull out of the well with (232) joints of 3-1/2" L-80 tubing, (1) 3-1/2" pup joint, (1) 3-1/2" IF X 3-1/2" EUE cross over, (1) intensifier, (4) 4-3/4" drill collars, (1) jar, (1) bumper sub, (1) spear stop, (1) spear extension and spear w/ 4.320" grapple. Rig up casing tongs and hydrocrane. Pull out of the well and lay down 107.56 ft of 5" liner, all liner was recovered to cut. Rig down casing tongs. Pick up and broke out fishing tools. Run in the well with 8-5/8" 36# positive casing scraper, bumper sub and (232) joints of 3-1/2" L-80 tubing, Pick up (10) joints of 3-1/2" L-80 tubing, tag 5" liner stub @ 7,564' (tubing measured depth). Note: no restrictions encountered from 7,221' to 7,564'. Pull out of the well with (20) joints of 3-1/2" L-80 tubing. Secure well til AM.

Daily Operation Period: 5/24/2016 - 5/25/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1083 psi.

Fill well with 7 bbls of 8.5 HEC polymer.

Cameron energized spool secondary seal assembly, pressure test and chart record to 2700 psi for 20 minutes, good. Pull out of the well with (222) joints of 3-1/2" L80 tubing and L/D 8-5/8" scraper. N/U 11-1/16" X 7" cross over spool. Rig up wireline and run multifinger caliper log from 7572' (WL tag depth) to surface. Run in the well with (50) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 5/25/2016 - 5/26/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1080 psi.

Fill well with 7 bbls of 8.5 HEC polymer.

Pull out of the well with (50) joints of 3-1/2" L80 tubing. N/U 11-1/16" X 7" cross over spool. Rig up wireline and run HRVRT log from 7568' (WL correlated depth) to surface. Run in the well with (50) joints of 3-1/2" L80 tubing. Rig out power swivel. Secure well til AM.

Daily Operation Period: 5/26/2016 - 5/27/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1084 psi.

Fill well with 9 bbls of 8.5 HEC polymer.

Pull out of the well with (50) joints of 3-1/2" L80 tubing. N/U 11-1/16" X 7" cross over spool. Rig up wireline and run USIT log from 7562' (WL correlated depth) to surface. Run in the well with 8-5/8" Arrowset packer on (32) joints of 3-1/2" L80 tubing. Set packer @ 1000' and pressure test to 1200 psi, 5 minute hold, good. Bled down pressure. Release Arrowset packer and continue running in the well with (199) joints of 3-1/2" L80 tubing. Set packer @ 7230' (tubing measured depth to center of elements) and pressure test to 1000 psi, 10 minute hold, good. Bled off pressure. Secure well til AM.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-13-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
 Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
 A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
(Person submitting report) (President, Secretary, or Agent)
 Date 9/27/2016
(Month, day, year) Signature _____
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Daily Operation Period: 5/27/2016 - 5/28/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1050 psi.

Fill well with 9 bbls of 8.5 HEC polymer.

Release Arrowset packer @ 7230' and continue running in the well with (10) joints of 3-1/2" L80 tubing. Set packer @ 7540' and pressure test to 1100 psi, 100 psi drop in 15 minutes. Release Arrowset packer and pull out of the well to 7340'. Pressure test to 1100 psi, 100 psi drop in 15 minutes. Pull out of the well and set packer @ 7230' pressure test to 2200 psi, held.

Rig up PROS.

DOGGR Curtis Welty and Jay Huff witnessed pressure testing,

With packer @ 7230' pressure test to 2650 psi, record pressure 1 hour, good.

Bled off pressure. Release packer, pull out of the well with (160) joints of 3-1/2" L80 tubing.

Set packer @ 2250'. Pressure test to 3510 psi, record pressure 1 hour, good.

Bled off pressure. Release packer, pull out of the well with (11) joints of 3-1/2" L80 tubing.

Set packer @ 1900'. Pressure test to 3650 psi, record pressure 1 hour, good.

Bled off pressure and release packer. Secure well til Tuesday.

Daily Operation Period: 5/31/2016 - 6/1/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1190 psi.

Fill well with 18 bbls of 8.5 HEC polymer.

Pull out of the well with (62) joints of 3-1/2" L80 tubing. Laid down Arrowset packer. Pick up Arrowset RBP (retrievable bridge plug) and run in the well with (40) joints of 3-1/2" L80 tubing set retrievable bridge plug @ 1260'. Pressure test to 500 psi, good. Bled off pressure. Release RBP and continue to run in the well with (202) joints of 3-1/2" L80 tubing. Tag liner top @ 7562' (tubing measured depth). Set RBP @ 7552'. Pulled (2) joints of 3-1/2" L80 tubing. Dump 10' of sand and displace with 65 bbls 8.5 ppg HEC polymer. Pull out of the well with (240) joints of 3-1/2" L80 tubing broke out retrieving head. Pick up and run in the well with 8-5/8" Arrowset packer on (40) joints of 3-1/2" L80 tubing, set @ 1265'. Pressure test to 500 psi, good. Bled off pressure. Release packer and continue to run in the well with (114) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 6/1/2016 - 6/2/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1190 psi.

Fill well with 7 bbls of 8.5 HEC polymer.

Continue to run in the well with (121) joints of 3-1/2" L80 tubing. Set, move 8-5/8" Arrowset packer and test as follows:

Packer depth	Test to	Test Pressure	Results
7358'	RBP @ 7552'	2650 psi	Held
7358'	Surface	1500 psi	Leak off to 1175 psi in 10 minutes
7327'	RBP @ 7552'	2650 psi	Held
7265'	RBP @ 7552'	2650 psi	Held
7234'	RBP @ 7552'	1500 psi	Leak off to 1000 psi in 10 minutes
7234'	Surface	2650 psi	Held
7244'	RBP @ 7552'	2650 psi	Held

Release packer and pull out of the well with (231) joints of 3-1/2" L80 tubing and laid down 8-5/8" Arrowset packer. Pick up and run in the well with RBP retrieving head on (62) joints of 3-1/2" L80 tubing. Secure well til AM.

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HISTORY OF OIL OR GAS WELL

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Daily Operation Period: 6/2/2016 - 6/3/2016

Operations this Report Period (DOGGR)

SITP = 0 psi, SICP = 0 psi, Field pressure 1184 psi.

Fill well with 5 bbls of 8.5 ppg HEC polymer.

Continue to run in the well with (179) joints of 3-1/2" L80 tubing. Reverse circulate sand off of RBP. Work to release RBP. Rig up power swivel. Install circulating head. Circulate and work to release Lockset retrievable bridge plug. Hang back power swivel. Pull out of the well with (241) joints of 3-1/2" L80 tubing and laid down Lockset retrievable bridge plug. Make up 7-3/4" concave mill, 4-1/2 reg X 3-1/2" IF cross over, (4) 4-3/4" drill collars and run in the well with (50) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 6/3/2016 - 6/4/2016

Operations this Report Period (DOGGR)

Complete & Review JSP & JSA. No charge to So Cal Gas. SITP=0 PSI. SICP=0 PSI. Field pressure 1180 PSI. Fill annulus with 7 BBLS of 8.5 ppg

polymer fluid. Continue to RIH with (188) jts 3-1/2" L80 tubing, tagged top of liner @ 7568', Rig up

Weatherford 2.5 power swivel. Redress top of liner f/7568' t/7569', Rig out Weatherford 2.5 power swivel. N/D 11-1/16" x 7-1/16" xover spool with circulating head. POOH with (238) jts 3-1/2" L80 tubing, (4) 4-3/4" Drill Collars, L/D 7-1/2" concave mill. P/U & RIH with 4-1/4" tapper mill, 3-1/8" xover, 3-1/16" xover on (9) jts 2-3/8" PH6, (2)

xovers, (50) jts 3-1/2" L80 tubing. Closed in well & secure rig.

Daily Operation Period: 6/4/2016 - 6/5/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=PSI. Fill annulus with 5 BBLS of 8.5 ppg polymer fluid. Continue to RIH with (183) jts 3-1/2" L80 tubing. Tagged top of liner @ 7569', Rig up 2.5 Weatherford power swivel. Ream f/7568' t/7588' Rig out 2.5 power swivel. Continue to rih with (7) jts tagged @ 7792'. Rig up swivel, clean out to 7796', unable to work mill past 7796', pumped total of 438 BBLS of 8.5 ppg polymer @ 3.1 bpm, @ 500 psi. Rig out swivel. POOH with (240) jts 3-1/2" L80 tubing L/D (9) jts 2-3/8" Ph6 tubing, tapered mill. P/U & RIH with 7-5/8" sizing shoe, (2) 4-3/4" drill collars, (44) jts 3-1/2" L80 tubing. Closed in well & secure rig.

Daily Operation Period: 6/5/2016 - 6/6/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1185.

Fill well with 12 bbls of 8.5 ppg HEC polymer.

Continue to run in the well with (196) joints of 3-1/2" L80 tubing, tag with sizing mill @ 7569' (tubing measured depth). Rig up circulating head and power swivel. Mill down with sizing mill to 7575' (tubing measured depth). Pull out of the well with (240) joints of 3-1/2" L80 tubing, (2) 4-3/4" drill collars and laid down sizing mill. Run in the well with (50) joints of 3-1/2" L80 tubing. Secure well til AM.

Daily Operation Period: 6/9/2016 - 6/10/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1190 psi.

Fill well with 17 bbls of 8.5 ppg HEC polymer.

Pull out of the well with (50) joints of 3-1/2" L80 tubing. Run in the well with over shot, lower mill out ext, packer, setting tool, cross over, 3-1/2" L80 pup joint on (212) joints of 3-1/2" L80 tubing. Secure well.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-13-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
(Person submitting report) (President, Secretary, or Agent)
Date 9/27/2016
(Month, day, year) Signature _____
Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300 Telephone Number 714-398-5020

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, balling tests, and initial production data.

Daily Operation Period: 6/11/2016 - 6/12/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1190 psi.

Fill well with 11 bbls of 8.5 ppg HEC polymer.

Continue to run in the well with (28) joints of 3-1/2" L80 tubing, 3-1/2" X 10' L80 pup joint and pick up (1) joint of 3-1/2" L80 tubing, Engage overshot on 5" liner at 7569', set down 20K and over pull 5K over string weight. Baker dropped ball, Rig up king swivel. Pressure up with mud pump on tubing to 500 psi, 1400 psi and 2200 psi, held each for 5 minutes setting SC1 Packer top @ 7555', bled off tbq. Pull test to 20K and was set / good. Close BOP and pressure up on casing to 1500 psi and maintain for 5 minutes, bled off casing, Open BOP. Release from SC1 packer at 14K over. pulled 10' high, and pressured up on tubing to 3400 psi and sheared ball out to ball catcher, Laid down (1) joint of 3-1/2" L80 tubing, 3-1/2" X 1-0' L80 pup joint. Pull out of the well with (240) joints of 3-1/2" L80 tubing and laid down SC1 setting tool. Run in the well with Baker SB plug on (241) joints of 3-1/2" L80 tubing. Set @ 7555', Pull out of the well with (11) joints of 3-1/2" L80 tubing. Attempt to pressure test from liner hanger to surface @ 1000 psi, bleeding down no test. Secure well til Monday.

Daily Operation Period: 6/13/2016 - 6/13/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1193 psi.

Fill well with 10 bbls of 8.5 ppg HEC polymer.

Continue to pull out of the well with (230) joints of 3-1/2" L80 tubing and lay down SB setting tool. Run in the well with Baker 8-5/8" Retrievmatic packer on (232) joints of 3-1/2" L80 tubing and set packer @ 7260'. Pressure test from packer to liner hanger @ 1000 psi, chart record 20 minute test (held). Bled off pressure and release packer. Pull out of the well with (232) joints of 3-1/2" L80 tubing and lay down packer. Make up and run in the well with 7-5/8" gauge mills, (2) 4-3/4" drill collars, (50) joints of 3-1/2" L80 tubing. Secure well til morning.

Daily Operation Period: 6/14/2016 - 6/14/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1195 psi.

Fill well with 6 bbls of 8.5 ppg HEC polymer.

Continue to run in the well with (189) joints of 3-1/2" L80 tubing, tagged with mill @ 5935', Dump (5) sacks, 10' cubic feet sand. Pull out of the well with (189) joints of 3-1/2" L80 tubing, (2) 4-3/4" drill collars, removed extension and lower 7-5/8" gauge mill. Run in the well with 7-11/16" mill, (2) 4-3/4" drill collars, (189) joints 3-1/2" L80 tubing, stopped @ 5931'. Pull out of the well with (2) joints of 3-1/2" L80 tubing. Secure well til morning.

Daily Operation Period: 6/15/2016 - 6/15/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1194 psi.

Fill well with 7 bbls of 8.5 ppg HEC polymer.

Rig down and load out power swivel. Continue to pull out of the well with (187) joints of 3-1/2" L80 tubing. Lay down (2) 4-3/4" drill collars and 7-11/16" gauge mill. Make up 5-3/4" overshot loaded with 2.62" grapple, bumper sub, cross over and run in the well on (241) joints of 3-1/2" L80 tubing. Reverse circulate out sand. engage SB plug and pull out of the liner hanger. Pull out of the well with (17) joints of 3-1/2" L80 tubing. Secure well til morning.

Daily Operation Period: 6/16/2016 - 6/16/2016

Operations this Report Period (DOGGR)

SITP=0 PSI. SICP=0 PSI. Field pressure 1194 psi.

Fill well with 7 bbls of 8.5 ppg HEC polymer.

Pull out of the well with (224) joints of 3-1/2" L80 tubing, lay down 4-3/4" bumper sub, 5-3/4" over shot and SB plug. Run in the well with 8-5/8" Lokset retrievable bridge plug on (40) jts 3-1/2" L80 tubing set @ 1270', pressure test to 500 psi, held for 5 minutes (good). Bled off pressure. Release retrievable bridge plug. Continue to run in the well with (190) joints of 3-1/2" L80 tubing. Set Lokset retrievable bridge plug @ 7191' COE (center of element), top 7185', pressure test to 1000 psi, chart record for 20 minutes (good). Lay down (2) joints of 3-1/2" L80 tubing. Dump 7 sacks of sand, top of sand @ 7181'. Pull out of the well laying down (40) joints of 3-1/2" L80 tubing. Secure well til morning.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 10-13-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
 Well Porter 42 B Sec 28 T3N R16W S.B.B.M.
 A.P.I. No. 03721877 Name Tom McMahon Title SIMP Project Manager
(Person submitting report) (President, Secretary, or Agent)
 Date 9/27/2016
(Month, day, year)
 Signature _____
 Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300 Telephone Number 714-398-5020

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Daily Operation Period: 6/17/2016 - 6/17/2016

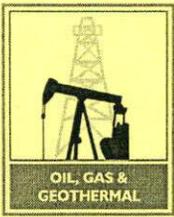
Operations this Report Period (DOGGR)
SITP=0 PSI. SICP=0 PSI. Field pressure 1198 psi.
Pull out of the well laying down (198) joints of 3-1/2" L80 tubing and RBP retrieving head. Remove BOPE. Remove tubing spool. Riser too short. Install tubing spool and pressure test to 500 psi. Secure well til morning.

Daily Operation Period: 6/18/2016 - 6/18/2016

Operations this Report Period (DOGGR)
SITP=0 PSI. SICP=0 PSI. Field pressure 1198 psi.
Remove tubing spool. Install riser spool and pressure test to 1000 psi, chart record 20 minute hold, good. Rig down and load out equipment. Rig down and move hoist. Secure well.
Rig released to Porter 26C.

Daily Operation Period: 8/1/2016 - 8/1/2016

Operations this Report Period (DOGGR)
MIRU 5000 psi test truck and iron to tubing wing valve. RU choke manifold to casing wing valve. RU vac truck to manifold and carbon canisters to vac truck.
Opened casing valve and topped off well with fluid by slowly pumping down tubing. With DOGGR representative on location, shut-in casing and pressured-up tubing to 1000 psi.
Tested packer, tubing plug and casing for 1 hour. Test recorded digitally and with circle-chart. Test witnessed approved by DOGGR. Bled down pressure, shut-in well, RDMO



RAL RESOURCES AGENCY OF CALIFORNIA
PARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T 216-0483

REPORT ON OPERATIONS

GAS STORAGE PROJECT
"Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Amy Kitson
Southern California Gas Company (S4700)
12801 Tampa Ave., SC9382
Northridge, CA 91326

Ventura, California
October 18, 2016

Your operations at well "**Porter**" 42B, A.P.I. No. 037-21877, Sec. 28, T. 03N, R. 16W, SB B.&M., **Aliso Canyon** field, in **Los Angeles** County, were witnessed on 7/21/2016, by **Randall Morlan**, a representative of the supervisor.

The operations were performed for the purpose of **determining casing integrity**.

DECISION:

APPROVED

RM/TKC

Kenneth A. Harris Jr.

State Oil and Gas Supervisor

By 

Patricia A. Abel, District Deputy

MD106.

State of California
Department of Conservation
Division of Oil, Gas, and Geothermal Resources

No. T 216-0483
16,1

**INTERNAL MECHANICAL INTEGRITY TEST (MIT)
(Standard Annulus Pressure Test-SAPT)**

Operator: Southern California Gas Co.				Well: "Porter" 42B	
Sec. 28	T. 03N	R. 16W	B.&M. SB	API No.: 037-21877	Field: Aliso Canyon
County: Los Angeles				Witnessed/Reviewed on: 7/21/2016	

Randall Morlan, representative of the supervisor, was present from 1400 to 1530
 Also present were: Mike Giuliani, Interact

Casing record of the well:

The Internal MIT was performed for the purpose of pressure testing the 8-5/8" casing above 7191'.

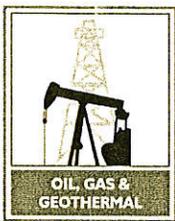
The Internal MIT is approved since it indicates that the 7" casing has mechanical integrity above 7191' at this time.

The Internal MIT is not approved due to the following reasons: (specify)

INDICATE WHERE PACKER WAS SET AND HOW LONG PRESSURE WAS HELD ALONG WITH ANY BLEEDOFF DATA.

Start time: 14:18
 Start pressure: 1050 psi
 End Time: 15:18
 End pressure: 1040 psi

Bridge Plug: 7191'
 No tubing in well



STATE OIL AND GAS RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T 216-0198

REPORT ON OPERATIONS

GAS STORAGE PROJECT
"Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Amy Kitson
Southern California Gas Company (S4700)
12801 Tampa Ave., SC9382
Northridge, CA 91326

Ventura, California
June 06, 2016

Your operations at well "**Porter**" 42B, A.P.I. No. 037-21877, Sec. 28, T. 03N, R. 16W, SB B.&M., Aliso Canyon field, in **Los Angeles** County, were witnessed on 5/27/2016, by Jay Huff, a representative of the supervisor.

The operations were performed for the purpose of **determining casing integrity**.

DECISION:

APPROVED

JH/TKC

Kenneth A. Harris Jr.

State Oil and Gas Supervisor

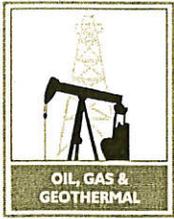
By 

Patricia A. Abel, District Deputy

No. T 216-0198
16,1

**INTERNAL MECHANICAL INTEGRITY TEST (MIT)
 (Standard Annulus Pressure Test-SAPT)**

Operator: <u>Socal Gas</u>				Well: <u>Porter 42B</u>					
Sec. <u>28</u>	T. <u>3R</u>	R. <u>16W</u>	B.&M. <u>5B</u>	API No.: <u>037-21877</u>	Field: <u>Aldo Canyon</u>				
County: <u>Los Angeles</u>				Witnessed/Reviewed on: <u>5/27/2016</u>					
Richard M. [unclear] <u>Curt Welby & Jay Huff</u> representative of the supervisor, was present from <u>1245</u> to <u>1915</u>									
Also present were: <u>[unclear] Roger Lefler - DSM</u>									
Casing record of the well: <u>-13-3/8" 54.5# K-SS (Cemented to Surface)</u> <u>-8-5/8" 36# K-SS (C-4082'), 36# N-80 (4082' - 7598')</u> <u>Cemented, WSO @ 7510'</u> <u>-5" 15# 7400-7823' WWS 7587' - 7823', Gravel Packed w/484</u> <u>CF 20-40 sd. TD = 7823'</u>									
The Internal MIT was performed for the purpose of pressure testing the <u>8 5/8"</u> casing above <u>7,230'</u> (2) (prior to injecting fluid)									
<input checked="" type="checkbox"/> The Internal MIT is approved since it indicates that the <u>8-5/8"</u> casing has mechanical integrity above <u>7,230'</u> at this time.									
<input type="checkbox"/> The Internal MIT is not approved due to the following reasons: (specify)									
INDICATE WHERE PACKER WAS SET AND HOW LONG PRESSURE WAS HELD ALONG WITH ANY BLEEDOFF DATA. Packer = Aero Set 8 5/8"									
Test 1		Packer @ <u>7,230'</u>		$P_i = 2,654$		$T_i = 1:17$		$P_f = 2641, T_f = 2:17$	
Test 2		Packer @ <u>2,250'</u>		$P_i = 3,510$		$T_i = 4:32$		$P_f = 3506, T_f = 5:32$	
Test 3		Packer @ <u>1,900'</u>		$P_i = 3,650$		$T_i = 6:07$		$P_f = 3,643, T_f = 7:07$	



JRAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003-4458
Phone:(805) 654-4761 Fax:(805) 654-4765

No. T 216-0179

REPORT ON OPERATIONS

GAS STORAGE PROJECT
"Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Amy Kitson
Southern California Gas Company (S4700)
12801 Tampa Ave., SC9382
Northridge, CA 91326

Ventura, California
June 06, 2016

Your operations at well "**Porter**" **42B**, A.P.I. No. **037-21877**, Sec. **28**, T. **03N**, R. **16W**, **SB B.&M.**, **Aliso Canyon** field, in **Los Angeles** County, were witnessed on **5/13/2016**, by **Ernest Blevins**, a representative of the supervisor.

The operations were performed for the purpose of **inspecting the blowout prevention equipment and installation.**

DECISION:

APPROVED

EB/TKC

Kenneth A. Harris Jr.

State Oil and Gas Supervisor

By 

Patricia A. Abel, District Deputy

API No. 037-21877

VISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

T 216-0179
#12, 1

BLOWOUT PREVENTION EQUIPMENT MEMO

Operator So CA Gas Well "Porter" 42B Sec. 28 T. 3N R. 16W
 Field Aliso Canyon County Los Angeles Spud Date _____
 VISITS: Date 5-13-16 Engineer Ernie Blevins Time (1100 to 1130) Operator's Rep. _____ Title _____
 1st _____ (_____ to _____)
 2nd _____ (_____ to _____)
 Contractor Ensign Rig # 342 Contractor's Rep. & Title Consultant - Roger Leifer
 Casing record of well: _____

OPERATION: Testing (inspecting) the blowout prevention equipment and installation. Critical well? Y N
 DECISION: The blowout prevention equipment and its installation on the 8 5/8" casing are approved.

Proposed Well Ops: Re Work . MACP: _____ psi
 Hole size: _____ " fr. _____ ' to _____ ' & _____ " to _____ ' REQUIRED BOPE CLASS: III 5M

CASING RECORD OF BOPE ANCHOR STRING					Cement Details		Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at			Casing	Annulus

BOP STACK						TEST DATA							
API Symb.	Ram Size (in.)	Manufacturer	Model or Type	Vert. Bore Size (in.)	Press. Rtg.	Date Last Overhaul	Gal. to Close	Recov. Time (Min.)	Calc. GPM Output	psi Drop to Close	Secs. to Close	Test Date	Test Press.
A	Vari	Shaffer		11"	5K		18.6					5-13-16	3500
Rd	3/2						3.0						5K
Rd	50						3.0						5K

ACTUATING SYSTEM				TOTAL:	AUXILIARY EQUIPMENT						
Accumulator Unit(s) Working Pressure <u>3000</u> psi				<u>24.6</u>	No.	Size (in.)	Rated Press.	Connections			Test Press.
Total Rated Pump Output _____ gpm		Fluid Level _____						Weld	Flange	Thread	
Distance from Well Bore <u>50</u> ft.											
Accum. Manufacturer		Capacity	Precharge	Fill-up Line							
1	Weatherford	80 gal.	1500 psi	Kill Line		2"	5K				5K
2	Koomey	gal.	psi	Control Valve(s)	2		5K				

CONTROL STATIONS				Elec.	Hyd.	Pneu.	
<input checked="" type="checkbox"/>	Manifold at accumulator unit				<input checked="" type="checkbox"/>		
<input checked="" type="checkbox"/>	Remote at Driller's station					<input checked="" type="checkbox"/>	
	Other:						

EMERG. BACKUP SYSTEM				Press.	Wkg. Fluid	
6	N ₂ Cylinders	1	L= 55 "	2500	9.0 gal.	Pressure Gauge
	Other:	2	L= 55 "	2650	9.9 gal.	Adjustable Choke(s)
		3	L= 55 "	2700	10.2 gal.	Bleed Line
		4	L= 55 "	2650	9.9 gal.	Upper Kelly Cock
		5	L= 55 "	2650	9.9 gal.	Lower Kelly Cock
		6	L= 55 "	2700	10.2 gal.	Standpipe Valve
						Standpipe Press. Gau.
						Pipe Safety Valve
						Internal Preventer
						3/2 5K
						3/2 5K

HOLE FLUID MONITORING		Alarm Type		Class	Hole Fluid Type	Weight	Storage Pits (Type & Size)
Audible	Visual						
				A	HEC Polymer	8.5#	424 bbls in hole / 720 bbls Tank

REMARKS AND DEFICIENCIES:
Screwy w/ weatherford = 3rd Party Tester

DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

CHECK LIST-RECORDS RECEIVED AND WELL STATUS

Operator: Southern California Gas Company WELL DESIGNATION "Porter" 42B

API No. 03721877 SE 28 T: 3N R.: 16W , SB B. and M.

County: Los Angeles FIELD: Aliso Canyon

Type of Notice: Rework Date 5/3/2016 Report Number: P216-0063

RECORDS RECEIVED (ATTACH PAGES IF REQUIRED)

NEW STATUS

	Date	OK	NEED	Remarks
Well Summary (OG100)				
History (OG103)				
E-Log				
Mud Log				
Dipmeter				
Directional				
Core and/or SWS				
<i>BOPE Ins</i>	<i>5/15/16</i>	<i>✓</i>		
<i>Press. Test</i>	<i>5/27/16</i>	<i>✓</i>		<i>Electronic Data Received</i>

DATE: _____

NOTICE OF RECORDS DUE

DATE: _____

DATE: _____

DATE: _____

DATE: _____

WELL STATUS INQUIRY

DATE: _____

DATE: _____

Well Stat

Change Required: _____

Change Done: _____

ABANDONMENTS/REABANDONMENTS/DRILLS/REDRILLS

CalWims Abandonment Form: _____ SURFACE INSPECTION NEEDED _____ COMPLETED _____

Date and Inspector

FINAL LETTER NEEDED _____ COMPLETED _____ Calwims DRILL/REDRILL Form _____

(Date)

ENGINEER'S CHECK LIST

T-REPORT(S) ✓ OPERATOR'S NAME _____ WELL DESIGNATION ✓ SIGNATURE ✓

Calwims Location _____ Calwims ELEVATION: _____ CONFIDENTIAL RELEASE DATE: _____ PERMIT REQUIREMENTS MET _____

CLERICAL CHECK LIST

LOCATION CHANGE (OG165) _____ ELEVATION CHANGE (OG165) _____ RELEASE OF BOND (OG150) _____

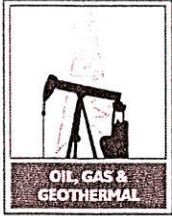
REMARKS

RECORDS SCANNED: _____

(Date)

RECORDS APPROVED: D.O. 8-16-16

(Date and Engineer)



NATURAL RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF CONSERVATION
 DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
 1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. P 216-0063

PERMIT TO CONDUCT WELL OPERATIONS

<u>Old</u>	<u>New</u>
010	010
FIELD CODE	
00	00
AREA CODE	
30	30
POOL CODE	

Gas Storage
 "Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Ventura, California
 May 10, 2016

Amy Kitson, Agent
 Southern California Gas Company (S4700)
 12801 Tampa Ave., SC9382
 Northridge, CA 91326

Your proposal to Rework well "Porter" 42B, A.P.I. No. 037-21877, Section 28, T. 03N, R. 16W, SB B. & M., Aliso Canyon field, Any area, Sesnon-Frew pool, Los Angeles County, dated 5/3/2016, received 5/3/2016 has been examined in conjunction with records filed in this office. (Lat: 34.310000 Long: -118.554655 Datum:83)

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. M07, shall be installed and maintained in operating condition and meet the following minimum requirements:
 - a. Class III 5M on the 8 5/8" casing.
2. Hole fluid of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts shall be used.
3. Blowout prevention practice drills are conducted at least weekly and recorded on the tour sheet. A practice drill may be required at the time of the test/inspection.
4. A Temperature and Noise log are run on the well from the packer to surface.
5. A Casing Wall Thickness Inspection, Cement Bond Log, and a Multi-Arm Caliper Inspection shall be performed to demonstrate that the 8 5/8" casing has integrity.
6. Prior to commencing injection, a pressure test is conducted to demonstrate the mechanical integrity of the 8 5/8" casing.
7. Injection shall be through tubing and packer only. Injection or withdrawal through the casing is not permitted.
8. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
9. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.
 - b. Witness a pressure test of the tubing and 8 5/8" casing prior to commencing injection.

Continued on Next Page

Blanket Bond Dated: 7/6/1999
 UIC Project No. 0100006
 cc:

Engineer Clifford R. Knight
 Office (805) 654-4761

CRK/crk

Kenneth A. Harris Jr.
 State Oil and Gas Supervisor

By 
 Patricia A. Abel, District Deputy

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.

Page 2
Well #: "Porter" 42B
API #: 037-21877
Permit : P 216-0063
Date: May 10, 2016

NOTE:

1. The base of the freshwater zone is at 800'±.
2. No operation shall be undertaken or continued that will contaminate or otherwise damage the environment.
3. This permit is being issued as part of Division Order No. 1109 dated March 4, 2016. Any well that fails any of the testing must be taken out of service and isolated from the storage reservoir pursuant to the Safety Review Testing Regime.
4. The required History of Oil or Gas Well (OG103) shall include a complete description of the required pressure testing. **An updated casing and tubing diagram shall be included with the well history.**
5. **A Well Summary Report (Form OG 100)** and **Well History (Form OG 103)** shall to be submitted to the Division within 60 days after the well is drilled, reworked, plugged and abandoned, or if the work is suspended. Any additional well work will require an additional notice to be submitted to this office prior to resuming well operations.

Enclosure: Attachment 1 to DOGGR Order 1109. Safety Review Testing Regime for the Aliso Canyon Natural Gas Storage Facility

cc:

**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:
- Conduct further investigation and demonstrate to the Division's satisfaction that the abnormal finding is not an indicator of a lack mechanical integrity;
 - Remediate the well to the Division's satisfaction; or
 - 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:
- 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
 - 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.



NATURAL RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF CONSERVATION
 DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY		
Forms		
Bond	OGD144	OGD121
	CAL V WIMS	115V

P216-0063

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to

rework / redrill well Porter 42B, API No. 04-03721877
(Check one)

Sec. 28, T. 3N, R. 16W, SB B.&M., Aliso Canyon Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

13-3/8", 54.5# K55 at 1020' (cemented to surface)

8-5/8" 36# K55 (0-4082'), 36# N80 (4082'-7598') cemented, WSO at 7510'

5" 15# L80 Hyd 513 (7222'-7588'), 5" 15# Wire Wrapped Shrouded Screen (7588'-7822') Gravel packed with 484 cf of 20-40 sand

TD = 7823

The total depth is: 7823 feet.

The effective depth is: 7823 feet.

Present completion zone(s): Sesnon (Storage) Anticipated completion zone(s): Sesnon (Storage)
(Name) (Name)

Present zone pressure: 1100 psi. Anticipated/existing new zone pressure: 3625 psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes No

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency?
 Yes No If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

(See Attached Program)

MIRU workover rig, circulate overbalance fluid, nipple down tree and nipple up and test Class III 5M BOPE

Remove existing completion and uppermost ~350' of 5" liner

Perform SIMP inspection (Gyro Survey, Magnetic Flux Leakage, Multi-Arm Caliper, Ultrasonic Inspection, Cement Bond Log & pressure tests)

Remediate casing damage

Install new liner top, rerun completion equipment, pressure test completion, RDMO and prep for return to injection

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth

at total depth: N/A feet N/A and N/A feet N/A Estimated true vertical depth: N/A
(Direction) (Direction)

Will the Field and/or Area change? Yes No If yes, specify New Field: N/A New Area: N/A

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator Southern California Gas Company			
Address 12801 Tampa Ave		City/State Northridge, CA	Zip Code 91326-1045
Name of Person Filing Notice Jacob Zachry	Telephone Number: (805) 256-5401	Signature 	Date 5/3/2016
Individual to contact for technical questions: Jacob Zachry	Telephone Number: (805) 256-5401	E-Mail Address: jzachry@semprautilities.com	

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

Rec'd 05-03-16 DOGGR Ventura.

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the *Notice of Determination* or *Notice of Exemption* with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, re-drilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

WORKOVER PROJECT

Porter 42B – Well Inspection & Repair

DATE: May 3, 2016

OPERATOR: SOUTHERN CALIFORNIA GAS COMPANY

FIELD: ALISO CANYON

WELL: Porter 42B

API NUMBER: 037-21877

ELEVATION: All depths based on original KB, 22' above GL

SURFACE LOCATION: SEC 28, T3N, R16W, S.B. B&M

OBJECTIVE

The intent of this program is to inspect the well integrity and remediate identified conditions as part of the Storage Integrity Management Program (SIMP). This project will include pulling 3-1/2" completion string, running casing inspection logs, remediating casing leaks, pressure testing casing and well laterals, installing a new completion string, converting well to tubing flow, and installing pressure monitors. Baseline assessment data will be gathered on vertical casing pipe and other well components.

WELL RECORD

Current Status:	Active
TD:	7823'

Special Conditions:	Recompleted in 2014 with new liner top at 7221'. Suspect leak near shoe
Casing Record:	13-3/8", 54.5# K55 at 1020' (cemented to surface) 8-5/8" 36# K55 (0-4082'), 36# N80 (4082'-7610') cemented w/ 1853 cu-ft, Estimated TOC @ 3120' WSO at 7510' 5" 15# L80 Hyd 513 (7222'-7588'), 5" 15# Wire Wrapped Shrouded Screen (7588'-7822') Gravel packed with 484 cf of 20-40 sand
Tubing Record:	See attached tubing detail as run 10/01/2014

GEOLOGIC MARKERS

MP	7332' md	7185' tvd
S1	7524' md	7367' tvd
S2	7555' md	7397' tvd
S4	7596' md	7435' tvd
S6	7632' md	7470' tvd
S8	7695' md	7529' tvd

Estimated Field Pressure: 917 psi on 9/3/2016 (Variable)

PROJECT NOTES

1. BOPE requirements in Gas Company Standard 224.05 shall be fully implemented at all times.
2. The storage reservoir pressures shall be monitored during the workover with a minimum of 300 psig overbalance for well control fluids.
3. Prepare the location by removing all relevant landscaping/lighting fixtures as well as surface piping and electrical components as needed. Locate rig anchors, reinstall if necessary.
4. DOGGR permit must be posted on site. Notify the DOGGR as required for BOPE testing as stated on permit.

PRE-RIG WORK

1. De-energize and remove all laterals. Install companion flanges for circulating the well
 - a. See Task 1 of Well Work Program.

WELLWORK PROGRAM

1. ISOLATE LATERALS

- 1.1. Storage Ops to isolate, blow-down laterals
- 1.2. Instrumentation Group to remove instrumentation and lines
- 1.3. Storage Ops to remove laterals
- 1.4. Onyx to install companion flanges for circulating well

2. MIRU WORKOVER RIG AND EQUIPMENT

- 2.1. Conduct JSA prior to MIRU
- 2.2. Spot 500 bbl storage tanks and load with 3% KCl fluid
 - 2.2.1. Treat all brine with Biocide at 5 gal / 100 bbl
 - 2.2.2. Use HEC as necessary to control lost circulation
- 2.3. MIRU Workover rig and following ancillary equipment:
 - 2.3.1. Pump
 - 2.3.2. Power Swivel
 - 2.3.3. PGSR Head
 - 2.3.4. Shaker Bin
 - 2.3.5. 11" Class III 5M BOPE

3. CIRCULATE WELL CONTROL FLUID

- 3.1. Conduct JSA
- 3.2. Rig up surface equipment and lines
 - 3.2.1. Rig up to pump down tubing and take returns from annulus, through separator
 - 3.2.2. Gas returns will be taken to the gathering system
 - 3.2.3. Fluid returns will be diverted to storage tank
- 3.3. Pump Hi-Visc pill down tubing
 - 3.3.1. Pill must be 40 bbl minimum
- 3.4. Displace pill to liner with KCL
 - 3.4.1. Displacement to liner top is 65 bbl
- 3.5. Overbalance well with KCl per schedule
 - 3.5.1. Casing volume above sleeve is 340 bbl
 - 3.5.2. Use attached template to complete overbalance pump schedule

4. ND TREE, NU & TEST BOPE

- 4.1. Conduct JSA
- 4.2. Set back pressure valve in tubing hanger
- 4.3. Nipple down production tree
 - 4.3.1. Send tree and associated equipment to Cameron for inspection and refurb
- 4.4. NU & Test 11" Class III 5M BOPE
 - 4.4.1. Perform a 300 psig low pressure test on the annular preventer, blind rams and pipe rams for 20 minutes.
 - 4.4.2. Test all lines and connections to 300 psig
 - 4.4.3. Perform 3500 psig HIGH pressure test on annular preventer for 20 minutes
 - 4.4.4. Perform a 5000 psig HIGH pressure test on the 3-1/2" pipe rams and blind rams for 20 minutes
 - 4.4.5. Consider installing spacer spool below BOPE to facilitate blind ram test
 - 4.4.6. All BOP equipment and processes must comply with Gas Company Standard 224.05, DOGGR Permit and DOGGR M07
 - 4.4.7. All tests are to be charted and witnessed by a DOGGR Representative

5. PULL COMPLETION

- 5.1. PU 3-1/2" EUE Landing Joint with FOSV installed and MU to Tubing Hanger
 - 5.1.1. Remove back pressure valve
- 5.2. Unseat Tubing Hanger
- 5.3. Release Packer
- 5.4. POH LD Production Tubing
 - 5.4.1. Monitor fluid level and fill as necessary to maintain a minimum 300 psi overbalance at uppermost open interval

6. SCRAPE 8-5/8" CASING

- 6.1. Conduct JSA
- 6.2. PU & MU 8-5/8" 36# Positive Scraper w/ bumper sub and crossover
- 6.3. RIH with scraper to current liner top at 7222'
- 6.4. Reverse circulate 3 tubing volumes or until clean
- 6.5. POH standing back tubing, LD Scraper

7. CLEAN OUT LINER

- 7.1. Conduct JSA
- 7.2. PU approximately 650' of 2-3/8" Hydril work string to clean out 5" liner

- 7.2.1. If desired a 5" 18# scraper and 3-1/8" bumper sub could be made up on bottom of Hydril Work String
- 7.2.2. Scraper Blades will collapse to pass 4.276" (5" 18#) and expand to scrape 4.560"
- 7.3. RIH to TD with clean-out assembly on 3-1/2" production tubing
- 7.4. Reverse circulate a minimum of 3 tubing volumes on bottom
- 7.5. POOH and LD BHA

8. GYRO SURVEY WELL

- 8.1. Conduct JSA
- 8.2. MIRU Wireline Truck and Gyro Equipment
 - 8.2.1. Rig up full lubricator and test to 5000 psi
 - 8.2.2. Retest lubricator each time connection is broken
- 8.3. RIH and gyro survey well from TD to surface
- 8.4. RDMO Wireline truck

9. CUT LINER BELOW PATCH

- 9.1. Conduct JSA
- 9.2. MIRU Wireline truck
- 9.3. RIH with RCT to approx 7560'
- 9.4. Make cut in 5" liner at 7560' (10' below connection on first joint of blank above screen)
- 9.5. POH with cutter
- 9.6. RDMO Wireline truck

10. REMOVE UPPER TIEBACK

- 10.1. Conduct JSA
- 10.2. PU Weatherford Retrieving Tool for 8-5/8" Hydraulic Hanger Packer
- 10.3. RIH to 7222' and engage retrieving tool
- 10.4. Release packer and POH
- 10.5. LD Packer and Liner (approx 340' fish)

11. DRESS LINER STUB

- 11.1. Conduct JSA
- 11.2. Inspect cut on 5" 18# pipe pulled from well
 - 11.2.1. Based on the condition of the cut, select mills to dress off stub to remove restrictions
- 11.3. PU and RIH with dress-off BHA
- 11.4. Dress liner stub
- 11.5. Reverse circulate a minimum of 3 tubing volume or until clean
- 11.6. POH and LD dress-off BHA

11.6.1. Inspect mills and make decision to move forward or continue dressing liner top

12. SCRAPE 8-5/8" CASING

12.1. Conduct JSA

12.2. PU & MU 8-5/8" 36# Positive Scraper w/ bumper sub and crossover

12.3. Scrape 8-5/8" Casing to 5-1/2" casing stub at 7560'

12.3.1. Install 7-5/8" mill tooth workover bit on bottom of scraper to avoid damaging liner top

12.3.2. Slow down when approaching previous liner top depth of 7221'

12.3.3. Slowly scrape casing from 7221' to liner stub at 7560'

12.3.4. Reciprocate and rotate each joint from 7221' to 7560'

12.3.5. Lightly tag liner stub. DO NOT set any weight on liner stub. Stop at first indication of tag

12.4. Reverse circulate a minimum of 3 tubing volumes on bottom

12.5. POOH and LD Scraper BHA

13. RUN CASING CALIPER & MAG FLUX LEAKAGE LOG

13.1. Conduct JSA

13.2. MIRU Logging Truck

13.2.1. Rig up full lubricator and test to 5000 psi

13.2.2. Retest lubricator each time connection is broken

13.3. Run Magnetic Flux Log from 5" liner stub to surface

13.4. Run Multi-Arm Caliper from 5" liner stub to surface

13.5. RDMO Logging Truck

13.6. Provide Logs to Engineering Team ASAP for evaluation and determination of plan forward

14. PRESSURE TEST CASING

14.1. Conduct JSA

14.1.1. Notify DOGGR of pressure test if required by permit

14.2. PU & MU 8-5/8" Retrieval Mechanical Test Packer on 3-1/2" tubing

14.3. RIH to liner stub at 7560'

14.3.1. Do not exceed RIH speed as specified by packer manufacturer

14.3.2. Slow down 1 stand above liner stub

14.3.3. Lightly tag liner top, pick up 10' and set packer

14.3.4. Do not set weight on stub. Stop after slightest indication of tag

14.4. Fill hole

14.4.1. Pump down tubing and take returns from casing until hole is full

14.5. Set packer under direction of Packer Service Supervisor

14.6. Rig up test pump and recorder

14.7. Pressure Test 1:

14.7.1. Apply 2650 psi to casing

14.7.2. Chart test for 60 minutes

14.8. Move packer to 2250'

14.8.1. Bleed down test pressure

14.8.2. Open packer unloading valve

14.8.3. Allow pressure and fluid to equalize across packer

14.8.4. Release packer and allow elements to relax for a minimum of 1 hr

14.8.5. Move packer to 2250'

14.8.6. Circulate down the tubing and take returns from the casing until the hole is full

14.8.7. Set packer under direction of Packer Service Supervisor

14.9. Pressure Test 2:

14.9.1. Apply 3470 psi to casing

14.9.2. Chart test for 60 minutes

14.10. Move packer to 1900'

14.10.1. Bleed down test pressure

14.10.2. Open packer unloading valve

14.10.3. Allow pressure and fluid to equalize across packer

14.10.4. Release packer and allow elements to relax for a minimum of 1 hr

14.10.5. Move packer to 1900'

14.10.6. Circulate down the tubing and take returns from the casing until the hole is full

14.10.7. Set packer under direction of Packer Service Supervisor

14.11. Pressure Test 3:

14.11.1. Apply 3625 psi to casing

14.11.2. Chart test for 60 minutes

14.12. Equalize and release test packer

14.12.1. Bleed down test pressure

14.12.2. Open packer unloading valve

14.12.3. Allow pressure and fluid to equalize across packer

14.12.4. Release packer and allow elements to relax for a minimum of 1 hr

14.13. POH and LD packer

15. SET 8-5/8" RBP ABOVE LINER STUB

- 15.1. Conduct JSA
- 15.2. PU 8-5/8" Mechanical RBP with retrieving head on 3-1/2" tubing
- 15.3. RIH to 7560' (top of liner stub)
 - 15.3.1. Do not exceed RIH speed as specified by packer manufacturer
 - 15.3.2. Slow down 1 stand above liner stub
 - 15.3.3. Lightly tag liner top, pick up 10' and set packer
 - 15.3.4. Do not set weight on stub. Stop after slightest indication of tag
- 15.4. Pick approximately 5' and set bridge plug under direction of Service Supervisor
- 15.5. Release retrieving head
- 15.6. Fill and test casing to 500 psi for 20 minutes
- 15.7. Dump 3 cu-ft of well-sorted sand on top of plug and allow to fall
 - 15.7.1. This will provide 9' of sand in 8-5/8" casing alone; with H-Valve displacement sand will be 10'+ above RBP
- 15.8. POH standing back tubing, LD retrieving head

16. REMOVE 11" WELLHEAD

- 16.1. Conduct JSA
- 16.2. Top-off hole with kill fluid
- 16.3. ND 11" 5M BOPE
- 16.4. ND 11" tubing head and 11" 5M x 13-5/8" 3M DSA
 - 16.4.1. Send wellhead equipment to Cameron for refurbishment
- 16.5. NU 13-5/8" 3M x 11" 5M temporary DSA, 11" spacer spool and 11" Double Gate
 - 16.5.1. Shell test BOPE and casing to 500 psi for 20 minutes
 - 16.5.2. This test can be performed against the bridge plug in the 8-5/8" casing

17. RUN USIT LOG

- 17.1. Conduct JSA
- 17.2. MIRU Logging Truck
 - 17.2.1. Rig up shooting flange
- 17.3. Run USIT & CBL from top of sand (approx 7540') to surface
- 17.4. RD Wireline Truck
- 17.5. Send logs to Engineering Team ASAP for review

18. NU & TEST BOPE

- 18.1. Conduct JSA
- 18.2. ND 11" 5M Double Gate, 11" 5M Spacer Spool & 13-5/8" 3M x 11" 5M DSA

- 18.3. Replace Primary Seals and NU 13-5/8" 3M x 11" 5M DSA
- 18.4. NU 11" 5M Tubing Head
- 18.5. Test all wellhead connections to 3625 psi

- 18.5.1. Note: Test pressure exceeds 8-5/8" 36# K55 API Collapse. However, this pressure is allowable for P-Seal test.

18.6. NU & Test Class III 5M BOPE

- 18.6.1. Perform a 300 psig low pressure test on the annular preventer, blind rams and pipe rams for 20 minutes.
 - 18.6.2. Test all lines and connections to 300 psig
 - 18.6.3. Perform 3500 psig HIGH pressure test on annular preventer for 20 minutes
 - 18.6.4. Perform a 5000 psig HIGH pressure test on the 3-1/2" pipe rams and blind rams for 20 minutes
 - 18.6.5. Consider installing spacer spool below BOPE to facilitate blind ram test
 - 18.6.6. All BOP equipment and processes must comply with Gas Company Standard 224.05, DOGGR Permit and DOGGR M07
 - 18.6.7. All tests are to be charted and witnessed by a DOGGR Representative

19. **REMEDiate CASING**

- 19.1. Remediate casing based on logs and pressure tests
- 19.2. OPTION 1: Localized corrosion or damage may be repaired with an expandable casing patch
- 19.3. OPTION 2: If corrosion/damage is not localized, a cemented inner liner may be run
- 19.4. OPTION 3: If insufficient cement bond is discovered, the casing may be perfed and squeezed
- 19.5. OPTION 4: Any combination of the above

20. **REMOVE RBP**

- 20.1. Conduct JSA
- 20.2. MU 8-5/8" RBP Retrieving Head on work string
- 20.3. RIH with retrieving head to top of sand at 7540'
- 20.4. RU pump and power swivel
- 20.5. Wash down over H-Valve and engage with retrieving tool
- 20.6. Open unloader valve and allow pressure & fluid to equalize across bridge plug
- 20.7. Release RBP
- 20.8. Allow packing elements to relax prior to POH
- 20.9. POH standing back work string. LD bridge plug

21. **INSTALL NEW LINER TOP**

- 21.1. Conduct JSA
- 21.2. MIRU Tongs
- 21.3. PU & MU new liner top assembly as follows:
 - 21.3.1. Sealed casing bowl overshot for 5" 18" Pipe

- 21.3.2. Blank 5" 18# as required for new liner top location
- 21.3.3. New Liner Top depth will be determined by remediation method from Task 19
- 21.3.4. Proposed liner top depth is between 7221' and 7490'
- 21.4. RIH with liner top assembly on work string
- 21.5. Engage 5" liner stub at 7560'
- 21.6. Set new liner top packer under direction of Service Supervisor
- 21.7. Release packer running tool and POH, LD running tool

22. DRIFT STUB & CASING BOWL SEAL

- 22.1. Conduct JSA
- 22.2. PU & MU 5" 18# scraper and bumper sub on small tubing tail
 - 22.2.1. Use enough tubing so that casing bowl seal and liner stub can be drifted with scraper
- 22.3. RIH with tubing from derrick
- 22.4. Work scraper across seal area
 - 22.4.1. If problems are encountered, consider running a string mill to clean up this area
- 22.5. POH with tubing and scraper
- 22.6. LD small tubing, bumper sub and scraper

23. PRESSURE TEST LINER TOP

- 23.1. Conduct JSA
- 23.2. MIRU Wireline Truck
- 23.3. MU 5" 18# Wireline-Set, Tubing-Retrievable Bridge Plug and collar locator
- 23.4. RIH with bridge plug on wireline to 7570'
- 23.5. Set bridge plug
- 23.6. POH with Wireline
- 23.7. Rig Down Wireline Truck
- 23.8. PU & MU 8-5/8" Mechanical Test Packer with tailpipe and retrieving head for 5" Bridge Plug
 - 23.8.1. Run enough small tubing below packer that the bridge plug can be retrieved
- 23.9. RIH to 5000'
- 23.10. Set packer under direction of Service Supervisor
- 23.11. Pressure test bridge plug with 1000 psi surface pressure
- 23.12. Release test packer
- 23.13. RIH and engage RBP with retrieving head
- 23.14. Release RBP
 - 23.14.1. Allow fluid and pressure to equalize across bridge plug
 - 23.14.2. Allow packing elements to relax (per vendor recommendation) prior to POH

23.15. POH, lay down test packer and bridge plug

24. RECOMPLETE WELL

24.1. Conduct JSA

24.2. Pick up completion equipment as follows:

- 24.2.1. Wireline Entry Guide
- 24.2.2. 8-5/8" Production Packer
- 24.2.3. 10' Pup Joint
- 24.2.4. No-Go Seating Nipple
- 24.2.5. 1 Tubing Joint
- 24.2.6. Sliding Sleeve
- 24.2.7. Tubing to surface
- 24.2.8. Space-out Pup Joints
- 24.2.9. Fatigue Nipple
- 24.2.10. Tubing Hanger

24.3. RIH with completion equipment to packer setting depth

24.4. Space out and set packer under direction of Service Supervisor

24.5. Land tubing hanger and pressure test casing

24.6. MIRU Wireline

24.7. Set PXN Plug in seating nipple

24.8. Pressure test tubing

- 24.8.1. Notify DOGGR to witness pressure test
- 24.8.2. Pressure test tubing to 3625 psi
- 24.8.3. Chart test for 1 hour

24.9. Pressure test casing

- 24.9.1. Notify DOGGR to witness pressure test
- 24.9.2. Pressure test casing to 1000 psi
- 24.9.3. Chart test for 1 hour

24.10. Shift sleeve to OPEN position

24.11. RDMO Wireline

25. ND BOPE, NU& TEST PRODUCTION TREE

25.1. Conduct JSA

25.2. Set back pressure valve in tubing hanger

25.3. ND 11" Class III 5M BOPE

25.4. NU Production tree and pressure test to 3625 psi

26. RDMO WORKOVER RIG

- 26.1. Conduct JSA
- 26.2. RDMO Workover rig and associated equipment

27. UNLOAD KILL FLUID

- 27.1. Conduct JSA
- 27.2. MIRU Equipment
 - 27.2.1. Separator
 - 27.2.2. Deodorizer vessel
 - 27.2.3. Charcoal Filters
 - 27.2.4. Nitrogen Unit
 - 27.2.5. Flow lines and manifolds
- 27.3. Unload well with Nitrogen
- 27.4. Turn well over to Storage Ops for recommission

WELL LATERAL HYDROTESTING

1. Per Gas Company Standard 182.0170, pressure test the tubing and casing pump-in laterals from the wellhead to the remote tie in to 3625 psig. Pressure test the tubing and casing withdrawal/injection laterals from wellhead to operating valves to 3625 psig.
2. Reinstall the hydro-tested laterals.
3. Install the well safety systems and instrumentation. Install pressure transmitters on tubing, casing, and surface casing.
4. Release well to operations.

EXTERNAL CORROSION PROTECTION

Per Gas Company Standard 167.30, remove any lead based paint and recoat wellhead, production tree, and laterals.

APPENDIX:

Current WBD

Current Tubing Detail Weatherford

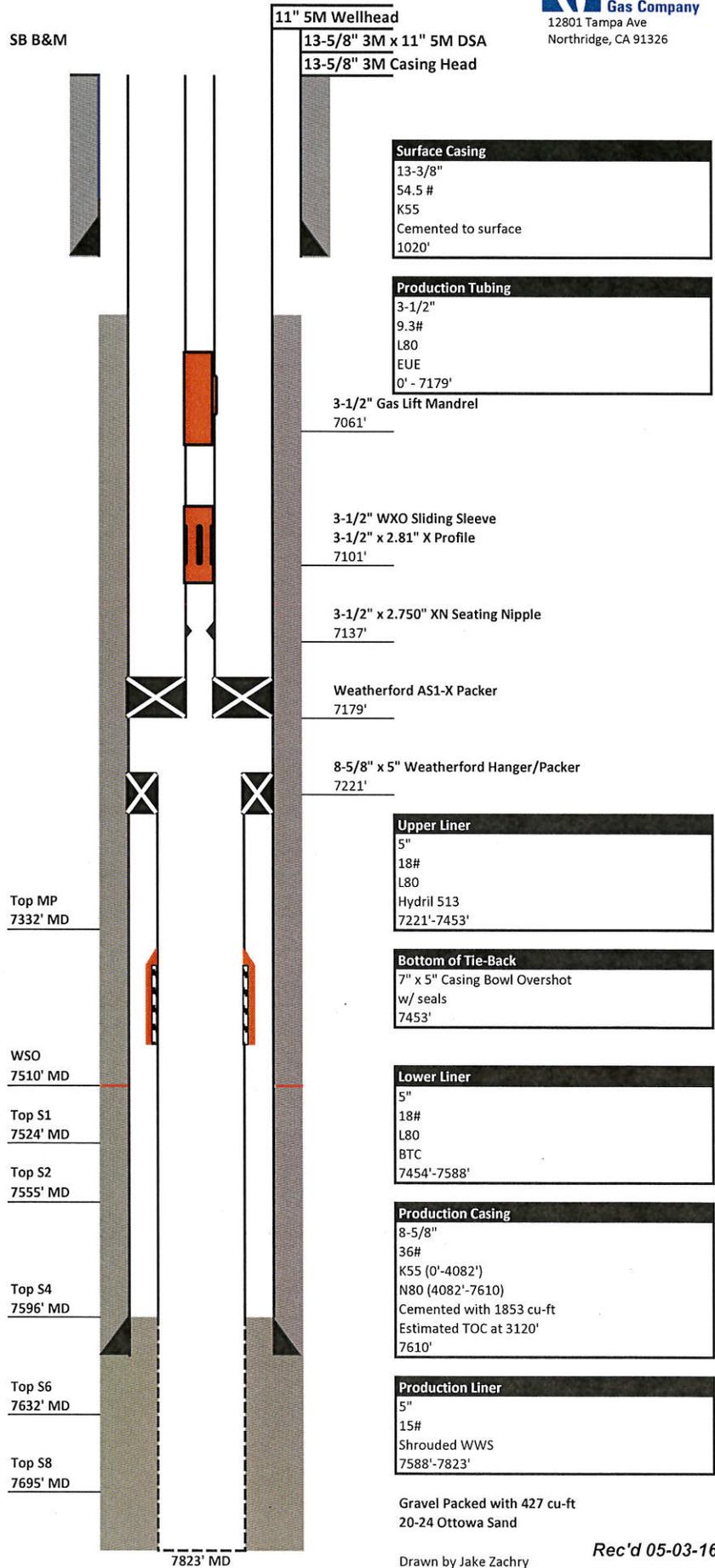
Proposed WBD

Southern California Gas Co.
 Aliso Canyon Field
 Porter Lease
 Well 42B
 API: 037-21877
 S- T-3N R-16W SB B&M

CURRENT
 5/3/2016



GL: 1639' ASL
 OKB: 22'



Surface Casing
 13-3/8"
 54.5 #
 K55
 Cemented to surface
 1020'

Production Tubing
 3-1/2"
 9.3#
 L80
 EUE
 0' - 7179'

Upper Liner
 5"
 18#
 L80
 Hydril 513
 7221'-7453'

Bottom of Tie-Back
 7" x 5" Casing Bowl Overshot
 w/ seals
 7453'

Lower Liner
 5"
 18#
 L80
 BTC
 7454'-7588'

Production Casing
 8-5/8"
 36#
 K55 (0'-4082')
 N80 (4082'-7610)
 Cemented with 1853 cu-ft
 Estimated TOC at 3120'
 7610'

Production Liner
 5"
 15#
 Shrouded WWS
 7588'-7823'

Gravel Packed with 427 cu-ft
 20-24 Ottawa Sand

Drawn by Jake Zachry
 5.3.16

Rec'd 05-03-16 DOGGR Ventura.

Southern California Gas Company
 Aliso Canyon Field
 Porter Lease
 Well 42B
 API: 037-21877
 S- T-3N R-16W SB B&M

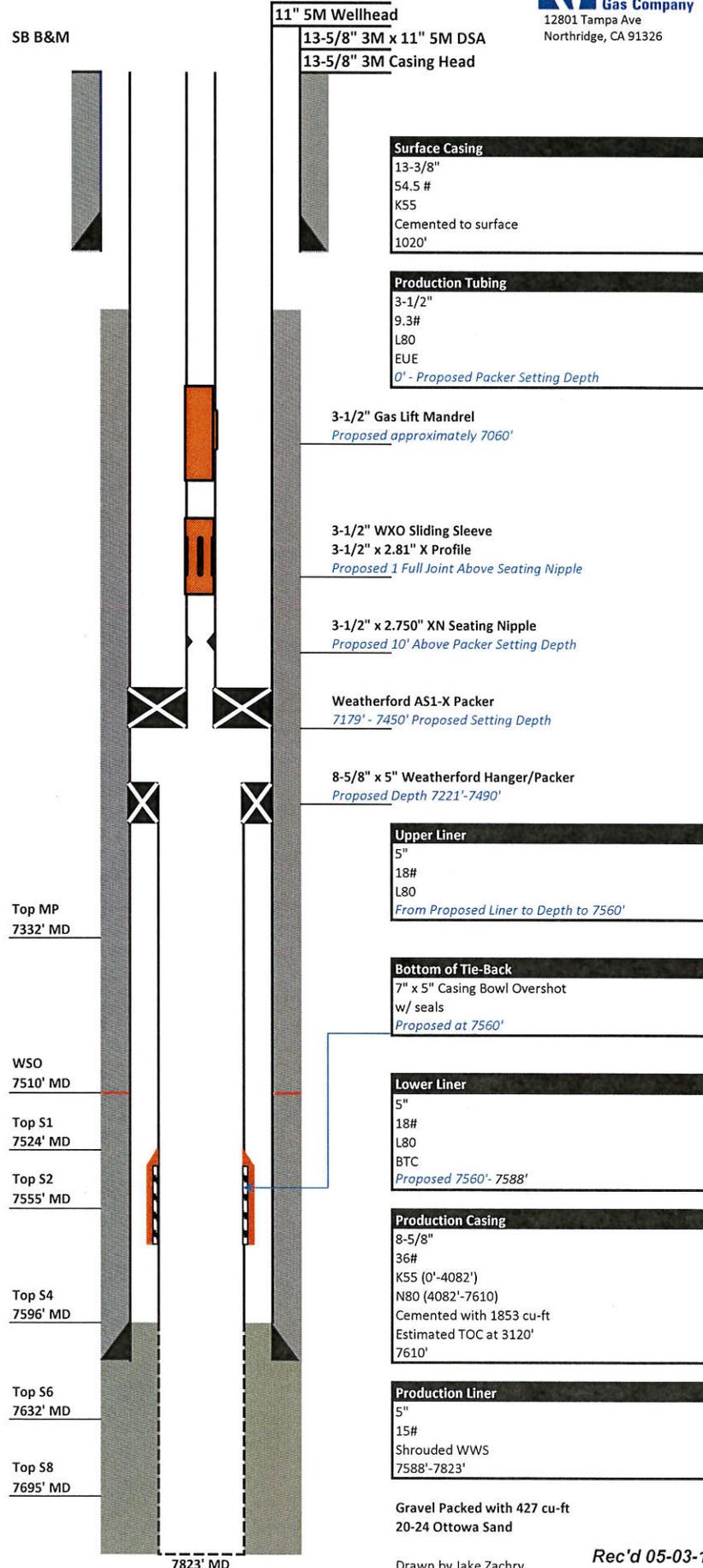
PROPOSED

5/3/2016

Blue text indicates proposed changes



GL: 1639' ASL
 OKB: 22'



Drawn by Jake Zachry
 5.3.16

Rec'd 05-03-16 DOGGR Ventura.

Fluid Wt	8.5 ppg
Derate	100%

TEST #1			
Surface Test Pressure	2647.8	psi	
Depth (psi)	Hydrostatic Pressure (psi)	API Burst (psi)	Test Pressure (psi)
0	0	4460	2648
50	22.1	4460	2670
100	44.2	4460	2692
150	66.3	4460	2714
200	88.4	4460	2736
250	110.5	4460	2758
300	132.6	4460	2780
350	154.7	4460	2803
400	176.8	4460	2825
450	198.9	4460	2847
500	221	4460	2869
550	243.1	4460	2891
600	265.2	4460	2913
650	287.3	4460	2935
700	309.4	4460	2957
750	331.5	4460	2979
800	353.6	4460	3001
850	375.7	4460	3024
900	397.8	4460	3046
950	419.9	4460	3068
1000	442	4460	3090
1050	464.1	4460	3112
1100	486.2	4460	3134
1150	508.3	4460	3156
1200	530.4	4460	3178
1250	552.5	4460	3200
1300	574.6	4460	3222
1350	596.7	4460	3245
1400	618.8	4460	3267
1450	640.9	4460	3289
1500	663	4460	3311
1550	685.1	4460	3333
1600	707.2	4460	3355
1650	729.3	4460	3377
1700	751.4	4460	3399
1750	773.5	4460	3421
1800	795.6	4460	3443
1850	817.7	4460	3466
1900	839.8	4460	3488
1950	861.9	4460	3510
2000	884	4460	3532
2050	906.1	4460	3554
2100	928.2	4460	3576
2150	950.3	4460	3598
2200	972.4	4460	3620
2250	994.5	4460	3642
2300	1016.6	4460	3664
2350	1038.7	4460	3687
2400	1060.8	4460	3709
2450	1082.9	4460	3731
2500	1105	4460	3753
2550	1127.1	4460	3775
2600	1149.2	4460	3797
2650	1171.3	4460	3819
2700	1193.4	4460	3841
2750	1215.5	4460	3863
2800	1237.6	4460	3885
2850	1259.7	4460	3908
2900	1281.8	4460	3930
2950	1303.9	4460	3952
3000	1326	4460	3974
3050	1348.1	4460	3996
3100	1370.2	4460	4018
3150	1392.3	4460	4040
3200	1414.4	4460	4062
3250	1436.5	4460	4084
3300	1458.6	4460	4106
3350	1480.7	4460	4129
3400	1502.8	4460	4151
3450	1524.9	4460	4173

Legend			
Below 3625 psi	Above 3625 psi	Exceeds Burst	
Packer Setting Depth			
TEST #2			
Surface Test Pressure	3465.5	psi	
Depth (psi)	Hydrostatic Pressure (psi)	API Burst (psi)	Test Pressure (psi)
0	0	4460	3466
50	22.1	4460	3488
100	44.2	4460	3510
150	66.3	4460	3532
200	88.4	4460	3554
250	110.5	4460	3576
300	132.6	4460	3598
350	154.7	4460	3620
400	176.8	4460	3642
450	198.9	4460	3664
500	221	4460	3687
550	243.1	4460	3709
600	265.2	4460	3731
650	287.3	4460	3753
700	309.4	4460	3775
750	331.5	4460	3797
800	353.6	4460	3819
850	375.7	4460	3841
900	397.8	4460	3863
950	419.9	4460	3885
1000	442	4460	3908
1050	464.1	4460	3930
1100	486.2	4460	3952
1150	508.3	4460	3974
1200	530.4	4460	3996
1250	552.5	4460	4018
1300	574.6	4460	4040
1350	596.7	4460	4062
1400	618.8	4460	4084
1450	640.9	4460	4106
1500	663	4460	4129
1550	685.1	4460	4151
1600	707.2	4460	4173
1650	729.3	4460	4195
1700	751.4	4460	4217
1750	773.5	4460	4239
1800	795.6	4460	4261
1850	817.7	4460	4283
1900	839.8	4460	4305
1950	861.9	4460	4327
2000	884	4460	4350
2050	906.1	4460	4372
2100	928.2	4460	4394
2150	950.3	4460	4416
2200	972.4	4460	4438
2250	994.5	4460	4460
2300	1016.6	4460	4482
2350	1038.7	4460	4504
2400	1060.8	4460	4526
2450	1082.9	4460	4548
2500	1105	4460	4571
2550	1127.1	4460	4593
2600	1149.2	4460	4615
2650	1171.3	4460	4637
2700	1193.4	4460	4659
2750	1215.5	4460	4681
2800	1237.6	4460	4703
2850	1259.7	4460	4725
2900	1281.8	4460	4747
2950	1303.9	4460	4769
3000	1326	4460	4792
3050	1348.1	4460	4814
3100	1370.2	4460	4836
3150	1392.3	4460	4858
3200	1414.4	4460	4880
3250	1436.5	4460	4902
3300	1458.6	4460	4924
3350	1480.7	4460	4946
3400	1502.8	4460	4968
3450	1524.9	4460	4990

Aliso Canyon
Porter 42B Pressure Test

TEST #3			
Surface Test Pressure	3625	psi	
Depth (psi)	Hydrostatic Pressure (psi)	API Burst (psi)	Test Pressure (psi)
0	0	4460	3625
50	22.1	4460	3647
100	44.2	4460	3669
150	66.3	4460	3691
200	88.4	4460	3713
250	110.5	4460	3736
300	132.6	4460	3758
350	154.7	4460	3780
400	176.8	4460	3802
450	198.9	4460	3824
500	221	4460	3846
550	243.1	4460	3868
600	265.2	4460	3890
650	287.3	4460	3912
700	309.4	4460	3934
750	331.5	4460	3957
800	353.6	4460	3979
850	375.7	4460	4001
900	397.8	4460	4023
950	419.9	4460	4045
1000	442	4460	4067
1050	464.1	4460	4089
1100	486.2	4460	4111
1150	508.3	4460	4133
1200	530.4	4460	4155
1250	552.5	4460	4178
1300	574.6	4460	4200
1350	596.7	4460	4222
1400	618.8	4460	4244
1450	640.9	4460	4266
1500	663	4460	4288
1550	685.1	4460	4310
1600	707.2	4460	4332
1650	729.3	4460	4354
1700	751.4	4460	4376
1750	773.5	4460	4399
1800	795.6	4460	4421
1850	817.7	4460	4443
1900	839.8	4460	4465
1950	861.9	4460	4487
2000	884	4460	4509
2050	906.1	4460	4531
2100	928.2	4460	4553
2150	950.3	4460	4575
2200	972.4	4460	4597
2250	994.5	4460	4620
2300	1016.6	4460	4642
2350	1038.7	4460	4664
2400	1060.8	4460	4686
2450	1082.9	4460	4708
2500	1105	4460	4730
2550	1127.1	4460	4752
2600	1149.2	4460	4774
2650	1171.3	4460	4796
2700	1193.4	4460	4818
2750	1215.5	4460	4841
2800	1237.6	4460	4863
2850	1259.7	4460	4885
2900	1281.8	4460	4907
2950	1303.9	4460	4929
3000	1326	4460	4951
3050	1348.1	4460	4973
3100	1370.2	4460	4995
3150	1392.3	4460	5017
3200	1414.4	4460	5039
3250	1436.5	4460	5062
3300	1458.6	4460	5084
3350	1480.7	4460	5106
3400	1502.8	4460	5128
3450	1524.9	4460	5150

3500	1547	4460	4195
3550	1569.1	4460	4217
3600	1591.2	4460	4239
3650	1613.3	4460	4261
3700	1635.4	4460	4283
3750	1657.5	4460	4305
3800	1679.6	4460	4327
3850	1701.7	4460	4350
3900	1723.8	4460	4372
3950	1745.9	4460	4394
4000	1768	4460	4416
4050	1790.1	4460	4438
4100	1812.2	4460	4460
4150	1834.3	6490	4482
4200	1856.4	6490	4504
4250	1878.5	6490	4526
4300	1900.6	6490	4548
4350	1922.7	6490	4571
4400	1944.8	6490	4593
4450	1966.9	6490	4615
4500	1989	6490	4637
4550	2011.1	6490	4659
4600	2033.2	6490	4681
4650	2055.3	6490	4703
4700	2077.4	6490	4725
4750	2099.5	6490	4747
4800	2121.6	6490	4769
4850	2143.7	6490	4792
4900	2165.8	6490	4814
4950	2187.9	6490	4836
5000	2210	6490	4858
5050	2232.1	6490	4880
5100	2254.2	6490	4902
5150	2276.3	6490	4924
5200	2298.4	6490	4946
5250	2320.5	6490	4968
5300	2342.6	6490	4990
5350	2364.7	6490	5013
5400	2386.8	6490	5035
5450	2408.9	6490	5057
5500	2431	6490	5079
5550	2453.1	6490	5101
5600	2475.2	6490	5123
5650	2497.3	6490	5145
5700	2519.4	6490	5167
5750	2541.5	6490	5189
5800	2563.6	6490	5211
5850	2585.7	6490	5234
5900	2607.8	6490	5256
5950	2629.9	6490	5278
6000	2652	6490	5300
6050	2674.1	6490	5322
6100	2696.2	6490	5344
6150	2718.3	6490	5366
6200	2740.4	6490	5388
6250	2762.5	6490	5410
6300	2784.6	6490	5432
6350	2806.7	6490	5454
6400	2828.8	6490	5477
6450	2850.9	6490	5499
6500	2873	6490	5521
6550	2895.1	6490	5543
6600	2917.2	6490	5565
6650	2939.3	6490	5587
6700	2961.4	6490	5609
6750	2983.5	6490	5631
6800	3005.6	6490	5653
6850	3027.7	6490	5676
6900	3049.8	6490	5698
6950	3071.9	6490	5720
7000	3094	6490	5742
7050	3116.1	6490	5764
7100	3138.2	6490	5786
7150	3160.3	6490	5808
7200	3182.4	6490	5830
7250	3204.5	6490	5852
7300	3226.6	6490	5874
7350	3248.7	6490	5897
7400	3270.8	6490	5919
7450	3292.9	6490	5941
7500	3315	6490	5963
7550	3337.1	6490	5985
7600	3359.2	6490	6007

3500	1547	4460	5013
3550	1569.1	4460	5035
3600	1591.2	4460	5057
3650	1613.3	4460	5079
3700	1635.4	4460	5101
3750	1657.5	4460	5123
3800	1679.6	4460	5145
3850	1701.7	4460	5167
3900	1723.8	4460	5189
3950	1745.9	4460	5211
4000	1768	4460	5234
4050	1790.1	4460	5256
4100	1812.2	4460	5278
4150	1834.3	6490	5300
4200	1856.4	6490	5322
4250	1878.5	6490	5344
4300	1900.6	6490	5366
4350	1922.7	6490	5388
4400	1944.8	6490	5410
4450	1966.9	6490	5432
4500	1989	6490	5454
4550	2011.1	6490	5477
4600	2033.2	6490	5499
4650	2055.3	6490	5521
4700	2077.4	6490	5543
4750	2099.5	6490	5565
4800	2121.6	6490	5587
4850	2143.7	6490	5609
4900	2165.8	6490	5631
4950	2187.9	6490	5653
5000	2210	6490	5676
5050	2232.1	6490	5698
5100	2254.2	6490	5720
5150	2276.3	6490	5742
5200	2298.4	6490	5764
5250	2320.5	6490	5786
5300	2342.6	6490	5808
5350	2364.7	6490	5830
5400	2386.8	6490	5852
5450	2408.9	6490	5874
5500	2431	6490	5897
5550	2453.1	6490	5919
5600	2475.2	6490	5941
5650	2497.3	6490	5963
5700	2519.4	6490	5985
5750	2541.5	6490	6007
5800	2563.6	6490	6029
5850	2585.7	6490	6051
5900	2607.8	6490	6073
5950	2629.9	6490	6095
6000	2652	6490	6118
6050	2674.1	6490	6140
6100	2696.2	6490	6162
6150	2718.3	6490	6184
6200	2740.4	6490	6206
6250	2762.5	6490	6228
6300	2784.6	6490	6250
6350	2806.7	6490	6272
6400	2828.8	6490	6294
6450	2850.9	6490	6316
6500	2873	6490	6338
6550	2895.1	6490	6361
6600	2917.2	6490	6383
6650	2939.3	6490	6405
6700	2961.4	6490	6427
6750	2983.5	6490	6449
6800	3005.6	6490	6471
6850	3027.7	6490	6493
6900	3049.8	6490	6515
6950	3071.9	6490	6537
7000	3094	6490	6560
7050	3116.1	6490	6582
7100	3138.2	6490	6604
7150	3160.3	6490	6626
7200	3182.4	6490	6648
7250	3204.5	6490	6670
7300	3226.6	6490	6692
7350	3248.7	6490	6714
7400	3270.8	6490	6736
7450	3292.9	6490	6758
7500	3315	6490	6781
7550	3337.1	6490	6803
7600	3359.2	6490	6825

3500	1547	4460	5172
3550	1569.1	4460	5194
3600	1591.2	4460	5216
3650	1613.3	4460	5238
3700	1635.4	4460	5260
3750	1657.5	4460	5283
3800	1679.6	4460	5305
3850	1701.7	4460	5327
3900	1723.8	4460	5349
3950	1745.9	4460	5371
4000	1768	4460	5393
4050	1790.1	4460	5415
4100	1812.2	4460	5437
4150	1834.3	6490	5459
4200	1856.4	6490	5481
4250	1878.5	6490	5504
4300	1900.6	6490	5526
4350	1922.7	6490	5548
4400	1944.8	6490	5570
4450	1966.9	6490	5592
4500	1989	6490	5614
4550	2011.1	6490	5636
4600	2033.2	6490	5658
4650	2055.3	6490	5680
4700	2077.4	6490	5702
4750	2099.5	6490	5725
4800	2121.6	6490	5747
4850	2143.7	6490	5769
4900	2165.8	6490	5791
4950	2187.9	6490	5813
5000	2210	6490	5835
5050	2232.1	6490	5857
5100	2254.2	6490	5879
5150	2276.3	6490	5901
5200	2298.4	6490	5923
5250	2320.5	6490	5945
5300	2342.6	6490	5968
5350	2364.7	6490	5990
5400	2386.8	6490	6012
5450	2408.9	6490	6034
5500	2431	6490	6056
5550	2453.1	6490	6078
5600	2475.2	6490	6100
5650	2497.3	6490	6122
5700	2519.4	6490	6144
5750	2541.5	6490	6167
5800	2563.6	6490	6189
5850	2585.7	6490	6211
5900	2607.8	6490	6233
5950	2629.9	6490	6255
6000	2652	6490	6277
6050	2674.1	6490	6299
6100	2696.2	6490	6321
6150	2718.3	6490	6343
6200	2740.4	6490	6365
6250	2762.5	6490	6388
6300	2784.6	6490	6410
6350	2806.7	6490	6432
6400	2828.8	6490	6454
6450	2850.9	6490	6476
6500	2873	6490	6498
6550	2895.1	6490	6520
6600	2917.2	6490	6542
6650	2939.3	6490	6564
6700	2961.4	6490	6586
6750	2983.5	6490	6609
6800	3005.6	6490	6631
6850	3027.7	6490	6653
6900	3049.8	6490	6675
6950	3071.9	6490	6697
7000	3094	6490	6719
7050	3116.1	6490	6741
7100	3138.2	6490	6763
7150	3160.3	6490	6785
7200	3182.4	6490	6807
7250	3204.5	6490	6830
7300	3226.6	6490	6852
7350	3248.7	6490	6874
7400	3270.8	6490	6896
7450	3292.9	6490	6918
7500	3315	6490	6940
7550	3337.1	6490	6962
7600	3359.2	6490	6984

HISTORY OF OIL OR GAS WELL

Operator. Southern California Gas Company
Well Porter 42 B
A P I No 03721877

Field: Aliso Canyon County. Los Angeles
Surface Location. Sec 28 3N 16W S.B.B M.
Title: Senior Storage Field

Todd Van de Putte

(President, Secretary, or Agent)

Date: 2/17/2015

Signature 

(Person Submitting Report)

Address PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number. 818-701-3339

History must be complete in all detail Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Start Date	Ops. DOGGR Rpt
6/23/2014	Opened the well with 2024 psig surface pressure on the tubing and the casing. Rigged up and pumped 50 bbl of Hi-vis HEC polymer and displaced with 65 bbls of 8.5 ppg KCl brine Killed the well per schedule with 350 bbl of 8.5 ppg KCl brine The well had no surface pressure on the tubing and the casing. Installed the BPV and nipped down the production tree Rigged up the Class III 5M BOPE and secured the well
6/24/2014	Opened the well with 50 psig on the casing and 0 psig on the tubing Rigged up the 3" choke line and function tested the Class III 5M BOPE Rigged up the WEA test truck and pressure tested the blind rams to 300 psig (low) and 5000 psig (high) for twenty minutes (test good) Pressure tested the pipe rams to 300 psig (low) and 5000 psig (high) for twenty minutes (test good) Pressure tested the Hydril annular preventer to 300 psig (low) and 3600 psig (high) for twenty minutes (test good) Tested all the control valves and the choke manifold to 300 psig (low) and 5000 psig (high) for twenty minutes (test good) Rigged up the working floor and the tubing equipment Backed out the hold down studs and pumped 50 bbl of 8.6 ppg KCl brine down the tubing and the casing. Unlanded the completion tubing at 68,000lb and attempted to release the production packer Attempted to release from the On/Off tool and secured the well
6/25/2014	Opened the well with 0 psig surface pressure on the tubing and 50 psig surface pressure on the casing. Moved in and rigged up the Tiger wireline unit and made up a 3-1/2" Plasma cutter on the wireline Ran in the well, correlated and cut the 3-1/2" completion tubing at 7315'. Rigged down and moved out the Tiger wireline unit Pulled out of the well and laid down the 3-1/2" completion tubing to a kill string at 2300' and secured the well
6/26/2014	Filled the well with 30 bbl of 8.5 ppg KCl brine Pulled out of the well, laid down the 3-1/2" completion tubing, the GLMA, the sliding sleeve and the cut off 3-1/2" tubing Changed the pipe rams from 3-1/2" to 2-7/8" Measured and picked up one joint 2-3/8" wash pipe with shoe. Measured and picked up 2-7/8", 6.5# P-110 workstring tubing to 5000' and secured the well
6/27/2014	Measured and picked up the 2-7/8" workstring tubing to 7306' and tagged Rigged up and pumped 8.5 ppg KCl brine at 4.5 bpm and attempted to work through Pulled out of the well to 6500' The rig was down for repairs (Lost power) and secured the well
6/30/2014	Opened the well with 0 psig surface pressure and pumped 50 bbl of 8.5 KCl brine down the casing Pulled out of the well to 1864' (took gas kick with 700 psig surface pressure on the casing) Rigged up and bled down the casing pressure and pumped 50 bbl of 8.5 ppg KCl brine down the tubing and the casing Circulated out the gas cut brine and shut in the well with 250 psig on the casing, 350 psig on the tubing and secured the well.
7/1/2014	Opened the well with 0 psig surface pressure on the tubing and 250 psig on the casing Pumped 20 bbl of KCl brine down the tubing and bleeding off the casing Opened the BOPE and filled the well with 38 bbl of KCl brine Ran in the well to 6000' and circulated the well with 350 bbl of KCl brine Pulled out of the well and laid down the wash pipe Made up an 8-5/8" casing scraper and a bumper sub on the 2-7/8" workstring Ran in the well to 5800' and secured the well
7/2/2014	Opened the well with 0 psig surface pressure on the tubing and the casing Filled the well with 42 bbl of KCl brine Ran in the well with the 8-5/8" casing scraper to 7306', rigged up and reverse circulated with 100 bbl of KCl brine Pulled out of the well and laid down the casing scraper Made up a 5-3/4" over shot and bumper sub with 2.875" grapple on the 2-7/8" workstring Ran in the well to 7306', worked over the fish and attempted to release from the on/off tool. Released from the fish, pulled to 7200' and secured the well
7/3/2014	Filled the well with 42 bbl of 8.5 ppg KCl brine Ran in the well, engaged the fish and attempted to release from the on/off tool. Attempted to release the packer Released from the fish, pulled out of the well and laid down the overshot Made up the 7-3/8" wash pipe and crossovers on the 2-7/8" workstring, ran in the well to 6100' and secured the well
7/7/2014	Filled the well with 50 bbl of KCl brine Nipped up PGSR and ran in the well with the 7-3/8" wash pipe to 7308' Rigged up the power swivel, cleaned out to the top of the packer at 7344' and circulated the well clean Pulled to 7300', then ran in to 7344' and laid down the power swivel Pulled out of the well and laid down the 7-3/8" wash pipe Made up a 5-3/4" over shot with 3.5" grapple, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring Ran in the well to 3100' and secured the well
7/8/2014	Filled the well with 50 bbl of KCl brine Ran in the well to 7306', engaged the fish, attempted to release the WEA packer at 7340', jarred once at 100,000lb and came free Pulled out of the well and stood back BHA/tools (recovered a 15' cut off and the top half of the on/off tool). Made up a 5-3/4" overshot with 3.75" grapple, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring Ran in the well to 7000' and secured the well

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company
Well: Porter 42 B
A.P.I No 03721877

Todd Van de Putte

Field: Aliso Canyon

Surface Location: Sec 28 3N 16W S.B B.M.

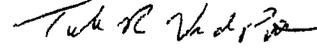
Title Senior Storage Field.

County: Los Angeles

(President, Secretary, or Agent)

Date 2/17/2015

Signature



(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

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Start Date	Ops. DOGGR Rpt
7/9/2014	The well required 50 bbl of KCl brine to fill. Ran in the well, engaged the fish and worked the packer free Pulled out of the well and laid down the fish (recovered the bottom half of the on/off tool, the WEA packer and the no/go nipple). Laid down the fishing tools and made up an 8-5/8" casing scraper and a bumper sub on the 2-7/8" workstring. Ran in the well to the top of the liner at 7400', pulled out of the well to a kill string at 2900' and secured the well
7/10/2014	Filled the well with 50 bbl of 8.5 ppg KCl brine Pulled out of the well with the kill string and laid down the 8-5/8" scraper and the bumper sub Made up an 8-5/8" WEA retrieveable bridge plug on the 2-7/8" workstring and ran in the well to 7380' Set and released from the bridge plug Pressure tested the bridge plug to 500 psig surface pressure for ten minutes (test good) Dumped 5 cuft of sand (top of the sand at 7365') Pulled out of the well to a kill string at 2557' and secured the well
7/11/2014	The well was standing full of 8.5 ppg KCl brine Pulled out of the well with the kill string and nipped up the shooting flange. Moved in and rigged up the Schlumberger wireline unit and made up the USIT/CBL combo tools Ran in well to 7365' and started log (Tools failed) Pulled out of the well with the USIT tool, rigged down and moved out the Schlumberger wireline unit. Ran in the well to 2400' with the 2-7/8" kill string and secured the well
7/14/2014	The well was standing full of 8.5 ppg KCl brine Pulled out of the well with the 2-7/8" kill string and nipped up the shooting flange. Moved in and rigged up the Schlumberger wireline unit and made up the 8-5/8" USIT/CBL combo tools on wireline Ran in the well to 7365' and logged to the surface. Rigged down and moved out the Schlumberger wireline unit Made up an 8-5/8" test packer on the 2-7/8" workstring, ran in the well to 2943' and secured the well
7/15/2014	The well was standing full of KCl brine Ran in the well with the 8-5/8" test packer to 6800' and set the test packer Pressure tested below the test packer to 750 psig surface pressure (bled down to 300 psig in 20 minutes) Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig for 20 minutes (test good) Ran in the well and tagged the sand, picked up 5' and set the test packer at 7364' Pressure tested below to 750 psig surface pressure for 20 minutes (test good) Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig surface pressure for 20 minutes (bled down 100 psig in 20 minutes) Released the test packer and pulled to 7330', set the test packer, and pressure tested below to 700 psig surface pressure for 20 minutes (test good) Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig (bled down 100 psig in 20 minutes). Pulled to 7275', set the test packer and tested below the packer to 700 psig surface pressure for 20 minutes (test good) Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig (bled down 100 psig in twenty minutes) Released the test packer and pulled to 7244' Set the test packer, tested below the test packer to 700 psig surface pressure for 5 minutes (test good) Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig (bled down 100 psig in 20 minutes) Released the test packer and pulled to 7177' Pressure tested the 2-7/8" x 8-5/8" annulus to 700 psig surface pressure for 20 minutes (test good) Released the test packer and ran in the well to 7210' Set the test packer and tested annulus to 700 psig for 20 minutes (good) Tested below the packer to 700 psig for twenty minutes (Bled down 100 psig in 20 minutes) Released packer ran in the well and set packer at 7227' Tested below packer to 700 psig for 20 minutes (bled down 100 psig in 20 minutes) Tested annulus to 700 psi for 20 minutes (test good) Leak between 7227' and 7244', casing collar at 7242') Released the test packer, pulled to 6000' and secured the well
7/16/2014	Filled the well with 6 bbl of 8.5 ppg KCl brine Set the test packer at 6000' and pressure tested the 2-7/8" x 8-5/8" annulus to 1000 psig surface pressure for 20 minutes (test good) Released the test packer, pulled to 4700', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 1500 psig for 20 minutes (test good) Released the test packer, pulled to 3350', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 2000 psig for 20 minutes (test good) Released the test packer, pulled to 2000', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 2500 psig for 20 minutes (test good). Released the test packer, pulled to 1500', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 2700 psig for 20 minutes (test good). Released the test packer, pulled to 1000', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 2900 psig for 20 minutes (test good). Released the test packer, pulled to 500', set the test packer and pressure tested the 2-7/8" x 8-5/8" annulus to 3000 psig for 20 minutes (test good) All pressure tests good and charted Pulled out of the well and laid down the 8-5/8" test packer Made up the 8-5/8" bridge plug retrieving tool on the 2-7/8" workstring, ran in the well to 2550' and secured the well
7/17/2014	Held safety meeting with the rig crew and worked as directed, labor only
7/18/2014	Filled the well with 6 bbl of 8.5 ppg KCl brine Ran in the well with the bridge plug retrieving tool to the top of the sand at 7364'.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company
Well: Porter 42 B
A.P.I. No. 03721877

Field. Aliso Canyon

County: Los Angeles

Surface Location Sec 28 3N 16W S.B B.M.

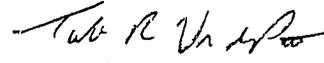
Todd Van de Putte

Title Senior Storage Field.

(President, Secretary, or Agent)

Date 2/17/2015

Signature



(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

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Start Date	Ops. DOGGR Rpt
7/21/2014	Filled the well with 15 bbl of 8.5 ppg KCl brine. Pulled out of the well and laid down the bridge plug retrieving tool. Moved in and rigged up the Tiger wireline unit. Made up a 4" perforating gun with 4, 1/2" spf. Ran in the well to 7353', correlated, and shot (8) 1/2" holes (39 gram charges). Rigged down and moved out the Tiger wireline unit. Made up (11) joints of tubing tail and a WEA squeeze packer on the 2-7/8" workstring. Ran in the well to 7342' and secured the well.
7/23/2014	Moved in and rigged up the HES cementing equipment. With the tubing tail at 7357', pressure tested the lines to 3000 psig. Pumped 5 bbls of water ahead, mixed and pumped 16 bbl of 14.9 ppg Class "G" cement (50 sacks) and displaced with 40 bbl of 8.5 ppg KCl brine. Pulled to 7000', rigged up and reverse circulated with 50 bbl of KCl brine (Trace of cement to the surface). Set the test packer and down squeezed at 1942 psig with approximately 1 bbl of cement out of the holes. Closed in the well with 1900 psig surface pressure and secured the well.
7/24/2014	Opened the well with 1200 psig surface pressure on the tubing and 500 psig on the casing. Bled down the tubing and the casing pressure. The well was standing full of KCl brine. Released the test packer, ran in the well and tagged the top of the cement at 7165'. Pulled out of the well and laid down the test packer. Made up a 7-3/8" bit, a bit sub, (4) 4-3/4" drill collars on the 2-7/8" workstring. Ran in the well to 7165', nipped up the PGSR and the power swivel. Cleaned out the cement to 7172', circulated the well clean and secured the well.
7/25/2014	Opened the well with 0 psig surface pressure on the tubing and the casing. The well was standing full of KCl brine. Cleaned out the cement from 7172' to 7366' and circulated the well clean. Rigged down power swivel, pulled out of the well to 7000' and secured the well.
7/28/2014	The well was standing full of KCl brine. Pulled out of the well with the bit. Made up an 8-5/8" casing scraper on the 2-7/8" workstring. Ran in the well to 7365', picked up the power swivel and cleaned out cement to 7342'. Circulated the well clean and secured the well.
7/29/2014	The well was standing full of KCl brine. Circulated down to the top of the sand at 7367' and reverse circulated the well clean. Pulled out of the well and laid down the 8-5/8" casing scraper. Made up a WEA 8-5/8" test packer on the 2-7/8" workstring. Ran in the well to 7245', set the test packer and pressure tested below the test packer to 1000 psig for 20 minutes (test good). Rigged up and pressure tested the 2-7/8" x 8-5/8" annulus to 1000 psig for 20 minutes (test good). Released the 8-5/8" test packer, pulled out of the well to 5400' and secured the well.
7/30/2014	The well was standing full of 8.5 ppg KCl brine. Pulled out of the well and laid down the 8-5/8" test packer. Made up the 8-5/8" bridge plug retrieving tool on the 2-7/8" workstring. Ran in the well to 7365', nipped up the PGSR, rigged up and reverse circulated 12' of sand to the top of the bridge plug. Released the 8-5/8" bridge plug and filled well with 20 bbl of 8.5 ppg KCl brine. Pulled out of the well to 5340'. The well flowed back through the tubing and circulated out the gas cut brine. Pulled out of the well to a kill string at 2640' and secured the well.
7/31/2014	Filled the well with 59 bbl of 8.5 ppg KCl brine. Pulled out of the well with a kill string and laid down the 8-5/8" bridge plug. Measured and picked up (18) joints of 2-1/16" Hydrill tubing with a mule shoe on the 2-7/8" workstring. Ran in the well and tagged sand at 7409'. Rigged up the PGSR, cleaned out sand to 7451', circulated the well clean, pulled to 7375' and secured the well.
8/1/2014	The well required 61 bbl of KCl brine to fill. Ran in the well with the 2-1/16" tubing tail to 7451', reverse circulated out the sand to 7768'. Reverse circulated the well clean, pulled out of the well to 7324' and secured the well.
8/4/2014	Filled the well with 84 bbl of 8.5 ppg KCl brine. Ran in the well to 7770', rigged up and reverse circulated sand to 7823' and circulated the well clean. Pulled to 7256', waited two hours, ran in the well to 7823' (no fill). Rigged down the PGSR, pulled out of the well to a kill string at 3112' and secured the well.
8/5/2014	Filled the well with 69 bbl of KCl brine. Pulled out of the well with a kill string. Made up a 5" retrievable bridge plug on the 2-7/8" workstring. Ran in the well to 7500', set the bridge plug and pressure tested the 2-7/8" x casing annulus to 500 psig surface pressure (Bled down 300 psig in 6 minutes). Released the 5" bridge plug and moved up the hole to 7490'. Set the bridge plug and pressure tested to 500 psig (bled down 300 psig in 6 minutes). Dumped two sacks of sand on top of the bridge plug, pulled out of the well to a kill string at 2700' and secured the well.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company
Well: Porter 42 B
A.P.I. No 03721877

Todd Van de Putte

Field: Aliso Canyon

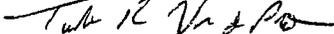
Surface Location: Sec 28 3N 16W S B.B.M.

Title: Senior Storage Field

County: Los Angeles

(President, Secretary, or Agent)

Date: 2/17/2015

Signature: 

(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number 818-701-3339

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Start Date	Ops DOGGR Rpt
8/6/2014	Filled the well with 63 bbl of 8.5 ppg KCl brine Pulled out of the well with the kill string and laid down the 5" bridge plug retrieving tool. Made up a WEA 5" test packer on the 2-7/8" workstring and ran in the well to 7455' Filled the well with 20 bbl of KCl brine Set the test packer and pressure tested below the 5" test packer to 500 psig for 20 minutes (test good) Pressure tested the 2-7/8" x casing annulus to 500 psig (Bled down 300 psig in 3 minutes) Released the 5' test packer, pulled out of the well and laid down the test packer. Made up a seal assembly on the 2-7/8" workstring, ran in the well to a kill string at 2600' and secured the well
8/7/2014	Filled the well with 67 bbl of 8.5 ppg KCl brine Ran in the well with the liner seals to the PBR at 7390', filled the well with 20 bbl of KCl brine and engaged the seal with 10,000 lb compression Pumped down the 2-7/8" tubing at 3 bpm to 500 psig (Bled down to 0 psig immediately) Rigged up and pressure tested the 2-7/8 tubing x casing annulus to 1000 psig with chart recorder (Lost 300 psig in 20 minutes) Unstabbed from the PBR, pulled out of the well and laid down the seal assembly Made up the 5" bridge plug retrieving tool on the 2-7/8" workstring, ran in well to 7365' and secured the well
8/8/2014	The well required 68 bbl of 8.5 ppg KCl brine to fill Ran in the well to 7473', rigged up PGSR and reverse circulated the sand from the top of the bridge plug Released the 5" bridge plug, pulled out of the well and laid down the 5" bridge plug Ran in the well with a kill string to 2600' and secured the well
8/11/2014	Filled the well with 73 bbl of KCl brine Pulled out of the well with the kill string and rigged up the shooting flange Moved in and rigged up the Schlumberger wireline unit with a full lubricator Made up the CCI/gravel density tool on wireline and ran in the well to 7823'. Ran log from 7823' to 7587' and pulled out of the well and laid down the logging tools Rigged down and moved out the Schlumberger wireline unit Made up a 3-3/8" casing cutter and a stabilizer on the 2-7/8" workstring, ran in the well to 7370' and secured the well
8/12/2014	Filled the well with 50 bbl of 8.5 ppg KCl brine Rigged up the PGSR, ran in the well to 7457' and rigged up the power swivel Attempted to cut the 5" liner at 7457' (no torque on cutter) Laid down the power swivel Pulled out of the well and laid down the casing cutter Ran in the well with a kill string to 2600' and secured the well
8/13/2014	The well required 71 bbl of KCl brine to fill Pulled out of the well with the kill string. Made up a 3-5/8" casing cutter with a stabilizer on the 2-7/8" workstring. Ran in the well to the 5" liner top at 7390' (Could not enter the liner due to cutter blades opening) Pulled out of the well laid down the casing cutter Ran in the well with a kill string to 2600' and secured the well
8/14/2014	Filled the well with 64 bbl of 8.5 ppg KCl brine Pulled out of the well with the kill string Rigged up a shooting flange and moved in and rigged up the Tiger wireline unit with full lubricator Made up a 3-5/8" plasma cutter on wireline. Ran in the well to 7460', correlated and cut the 5" liner at 7460' Rigged down and moved out the Tiger wireline unit and rigged down the shooting flange. Made up a casing spear with 4 8" grapple, 4" drill collar, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring. Ran in the well to 7390', engaged 5" liner top and jarred free Moved up the hole 200' with the cut liner and jarred on the liner at 150,000lb and secured the well
8/15/2014	Filled the well with 67 bbl of 8.5 ppg KCl brine Jarred on the liner/fish at 150,000lb and the intensifier quit working Released from the fish and pulled out of the well Replaced fishing jars and the intensifier and ran in the well to top of fish at 7180'. Engaged liner/fish and jarred the on fish at 120,000lb and secured the well
8/18/2014	Filled the well with 75 bbl of KCl brine Continued to jar on the fish at 140,000 lb and jarred free (did not pick up weight) Pulled out of the well, took a gas kick and circulated out the gas cut brine Pulled out of the well and laid down the fishing tools (Found the bumper sub parted). Ran in the well with a kill string to 2600' and secured the well
8/19/2014	The well required 62 bbl of KCl brine to fill Pulled out of the well with the kill string Made up an over shot with a 4-3/4" grapple, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring Ran in the well to the top of the fish/cut liner top at 7178', engaged the fish and attempted to release the casing spear. Pulled out of the well and laid down the fishing tools (no recovery; broken grapple) Ran in the well with a kill string to 2600' and secured the well
8/20/2014	Filled the well with 67 bbl of 8.5 ppg KCl brine Pulled out of the well with the kill string Made up a new overshot with 4-3/4" left handed grapple, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring Ran in the well to the top of the fish at 7180', engaged the fish, attempted to release from the spear and overshot and secured the well

HISTORY OF OIL OR GAS WELL

Operator. Southern California Gas Company
Well: Porter 42 B
A P I No. 03721877

Field. Aliso Canyon County. Los Angeles
Surface Location Sec 28 3N 16W S B.B.M.
Title: Senior Storage Field

Todd Van de Putte

(President, Secretary, or Agent)

Date. 2/17/2015

Signature



(Person Submitting Report)

Address. PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number. 818-701-3339

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data

Start Date	Ops. DOGGR Rpt
8/21/2014	Filled the well with 47 bbl of KCl brine. Moved in and rigged up the Tiger wireline unit. Made up a 1" string shot on wireline. Ran in the well to to 7180', correlated and shot across the spear from 7180' to 7174' with 8 rounds of torque in the 2-7/8" workstring tubing. Pulled out of the well with the wireline. Attempted to release the spear. Made up a 1" sting shot on wireline. Ran in the well to 7173' correlated and attempted to back off at the bumper sub with 6 rounds of left hand torque in the 2-7/8" workstring tubing. The tubing backed off with 38,000 lb string weight. Screwed back into the 2-7/8" workstring tubing and torqued up. Pulled out of the well with the wireline. Rigged down and moved out the Tiger wireline unit (spear released). Pulled out of the well to a kill string at 5687' and secured the well.
8/22/2014	Filled the well with 50 bbl of KCl brine. Pulled out of the well (recovered the bumper sub and the spear) and laid down the fishing tools. Made up a spear, a bumper sub, a set of drilling jars (up/down jars), (4) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring. Ran in the well to the top of the fish at 7180', engaged the fish, jarred on the fish/the cut liner at 140,000 lb with no movement and secured the well.
8/25/2014	Filled the well with 48 bbl of 8.5 ppg of KCl brine. Jarred on the fish with no movement (up or down) released the spear, pulled out of the well and laid down the fishing tools. Made up a 7-5/8" shoe, a junk basket, a set of jars, (4) 4-3/4" drill collars on the 2-7/8" workstring. Ran in the well to 6100' and secured the well.
8/26/2014	Filled the well with 54 bbl of 8.5 ppg of KCl brine. Ran in the well to 7168', rigged up the PGSR and picked up the power swivel. Milled the liner top from 7168' to 7171' and stopped making hole. Laid down the power swivel and rigged down the PGSR. Pulled out of the well to 7100' and secured the well.
8/27/2014	The well required 45 bbl of 8.5 ppg KCl brine to fill. Pulled out of the well, stood back the fishing tools and replaced the 7-5/8" mill shoe. Picked up the new set of tools and ran in the well with the new mill shoe to the top of the fish at 7168'. Rigged up the PGSR, picked up the power swivel and started milling on the liner top (power swivel down for repairs) and secured the well.
8/28/2014	Filled the well with 45 bbl of KCl brine. Picked up the power swivel and reverse circulated above the fish at 7168', milled down to 7178' (milling on slips), circulated the well clean, and secured the well.
8/29/2014	Filled the well with 45 bbl of 8.5 ppg KCl brine. Worked over the fish and started milling on the fish and moving down the hole to 7188'. Laid down the power swivel and rigged down the PGSR. Pulled out of the well to 4500' and secured the well.
9/2/2014	Opened the well with 60 psig surface pressure on the tubing and the casing. Filled the well with 44 bbl of KCl brine. Circulated the gas cut brine from the well. Pulled out of the well and laid down the mill shoe and the boot baskets. Made up a spear, a bumper sub, a set of jars, (2) 4-3/4" drill collars and an intensifier on the 2-7/8" workstring. Ran in the well to the top of the fish at 7162' and secured the well.
9/4/2014	Opened the well with 0 psig surface pressure on the tubing and the casing. Filled the well with 45 bbl of 8.5 ppg KCl brine. Ran in the well to 7405' and engaged the fish (dragging up the hole). Pulled up the hole and worked through a tight spot at 4438'. Pulled out of well with no recovery. Redress the spear and made up the fishing tools on the 2-7/8" workstring. Ran in the well to 5515' and secured the well.
9/5/2014	Filled the well with 44 bbl of 8.5 ppg KCl brine. Pulled out of the well and laid down the fishing tools and the fish (recovered 26'; cut off 5" blank liner and liner top and the gravel pack assembly). Made up an 8-5/8" casing scraper and a bumper sub on the 2-7/8" workstring. Ran in the well to 7314' and secured the well.
9/8/2014	Opened the well with 150 psig surface pressure on the tubing and the casing. Bled down the well and filled the well with 56 bbl of KCl brine. Ran in the well and tagged the 5" liner stub at 7456' with the 8-5/8" casing scraper. Pulled out of the well and laid down the 8-5/8" casing scraper. Made up a WEA bridge plug on the 2-7/8" workstring. Ran in the well to 7441', set and released from the bridge plug. Pressure tested the 2-7/8" workstring x casin annulus to 500 psig for 10 minutes (test good). Dumped 3 cuft of sand (top of sand at 7432'). Pulled out of the well and laid down the bridge plug retrieving tool. Made up a WEA test packer on the 2-7/8" workstring. Ran in the well to 4300' and secured the well.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company
Well: Porter 42 B
A P I. No 03721877

Field: Aliso Canyon
Surface Location Sec 28 3N 16W S.B.B.M.
Todd Van de Putte Title: Senior Storage Field...

County Los Angeles

(President, Secretary, or Agent)

Date 2/17/2015

Signature 
(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data.

Start Date	Ops DOGGR Rpt
9/9/2014	Filled the well with 68 bbl of 8.5 ppg KCl brine. Ran in the well to 7366', set the test packer and pressure tested the 2-7/8" x casing annulus to 500 psig for 5 minutes. Pressure tested below the test packer at 7432' to 500 psig for 10 minutes. Released the test packer and pulled to 7240', set the test packer and pressure tested the 2-7/8" x casing annulus to 500 psig for 10 minutes. Pressure tested below the test packer from 7240' to 7432' at 750 psig for 20 minutes and charted the test (All tests good). Released the test packer, pulled out of the well and laid down the test packer. Made up the bridge plug retrieving tool on the 2-7/8" workstring. Ran in the well to a kill string at 2430' and secured the well.
9/10/2014	The well was standing full of KCl brine. Ran in the well to 7432', rigged up the PGSR and rigged up and reverse circulated the sand out of the well. Engaged the retrieveable bridge plug and equalized the pressure. Released the bridge plug and filled the well with 45 bbl of KCl brine. Pulled out of the well and laid down the bridge plug. Made up the sizing mill assembly on the 2-7/8" workstring. Ran in the well to a kill string at 3800' and secured the well.
9/11/2014	Filled the well with 34 bbl of 8.5 ppg KCl brine. Ran in the well with the milling assembly to the top of the fish at 7440'. Nipped up the PGSR, picked up the power swivel and dressed the top of the 5" liner. Laid down the power swivel and rigged down the PGSR. Pulled out of the well to a kill string at 2800' and secured the well.
9/12/2014	Filled the well with 44 bbl of KCl brine. Pulled out of the well and laid down the tools (found the mill shoe split and missing pieces). Ran in the well with a kill string to 2500' and secured the well.
9/15/2014	Opened the well with 75 psig surface pressure on the tubing and the casing. Filled the well with 49 bbl of KCl brine. Pulled out of the well with the kill string. Made up a 7-3/8" skirted mill with 6 1/2" concave mill with junk baskets, (4) 4-3/4" drill collars on the 2-7/8" workstring. Ran in the well to 1500' and well the flowed up the tubing. Circulated the gas cut brine from the well. Ran in the well to 7450', picked up the power swivel and milled from 7450' to 7452', circulated the well clean and secured the well.
9/16/2014	Filled the well with 47 bbl of 8.5 ppg KCl brine. Milled the 5" liner top from 7452' to 7453' and circulated the well clean. Pulled out of the well and laid down the milling assembly. Made up a 6-3/8" sizing mill, (4) 4-3/4" drill collars on the 2-7/8" workstring. Ran in the well to the top of the 5" liner, worked over the liner top and cleaned outside of the liner to 5'. Laid down the power swivel, pulled out up the hole to 5600' and secured the well.
9/17/2014	The well required 45 bbl of KCl brine to fill. Pulled out of the well with the kill string. Wrong lifting plug for the liner and shut down for the proper equipment. Ran in the well to 2600' and secured the well.
9/18/2014	Filled the well with 56 bbl of KCl brine. Pulled out of the well with the kill string. Rigged up the casing tongs and the casing equipment. Made up 5' casing bowl over shot, 5" LT&C x Hydril 513 crossover, (4) joints of 5" Hydril blank liner, 5" Hydril x LT&C crossover, 8-5/8" x 5" WEA liner hanger/packer on the 2-7/8" workstring. Rigged down and moved out the casing tongs and equipment. Ran in the well to the top of the 5" liner stub at 7454'. Worked over the liner stub, dropped the ball, set the hanger/packer with 1700 psig (top of liner at 7221'). Released from the hanger, pulled out of the well to 4200' and secured the well.
9/19/2014	Filled the well with 48 bbl of KCl brine. Pulled out of the well and laid down the liner running tools. Made up a 5" casing scraper and a bumper sub on the 2-7/8" workstring. Ran in the well to 7454' and tagged. Worked through a tight spot, pulled 6 klb over string weight pulling back through. Pulled to 7200' and secured the well.
9/22/2014	Filled the well with 48 bbl of KCl brine. Pulled out of the well and laid down the casing scraper. Made up a 4-1/8" string mill and (21) joints of 2-1/16" tubing tail on the 2-7/8" workstring. Ran in the well to the tight spot at 7454', picked up a power swivel, cleaned out the tight spot and laid down the power swivel. Ran in the well and tagged at 7800'. Pulled out of the well to 5200' and secured the well.
9/23/2014	The well required 43 bbl of 8.5 ppg KCl brine to fill. Pulled out of the well and laid down the milling assembly. Made up a 5" WEA retrieveable bridge plug on the 2-7/8" workstring. Ran in the well to 7519', set the 5" bridge plug, and filled the well with 10 bbl of KCl brine. Pressure tested the 2-7/8" x casing annulus to 500 psig (bled down 200 psig in 3 minutes). Bled down and dumped 1 cuft of sand. Pulled out of the well to a kill string at 3000' and secured the well.

HISTORY OF OIL OR GAS WELL

Operator Southern California Gas Company
Well: Porter 42 B
A.P.I. No 03721877

Field: Aliso Canyon County: Los Angeles
Surface Location: Sec 28 3N 16W S.B.B.M
Title Senior Storage Field

Todd Van de Putte

(President, Secretary, or Agent)

Date: 2/17/2015

Signature: 

(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

History must be complete in all detail Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, and initial production data

Start Date	Ops DOGGR Rpt
9/24/2014	Rig down for 3 hours for repairs Filled the well with 41 bbl of KCl brine. Pulled out of the well with a kill string and laid down the bridge plug retrieving tool Made up a WEA 5" test packer on the 2-7/8" workstring Ran in the well to 7481', filled the well with 10 bbl of KCl brine, set the test packer, pressure tested from 7418' to the bridge plug at 7510' to 500 psig for 10 minutes (test good) Released the test packer and pulled to 7418', set the test packer and pressure tested from 7418' to 7510' to 500 psig (No test, bleed to 0 psig) Rigged up and pressure tested the 2-7/8" x casing annulus to 500 psig for 20 minutes (test good) Released the test packer, pulled to 7100' and secured the well
9/25/2014	Filled the well with 40 bbl of KCl brine Pulled out of the well and laid down the 5" WEA test packer Made up a bridge plug retrieving tool on the 2-7/8" workstring Ran in the well to 7497', reverse circulated the sand from the top of the bridge plug and released the bridge plug Pulled out of the well to 4600' and secured the well
9/26/2014	Filled the well with 42 bbl of KCl brine. Pulled out of the well and laid down the 5" bridge plug. Made up a 45 degree collar, (21) joints of 2-1/16" CS hydril tubing on the 2-7/8" workstring Ran in the well to 7795, rigged up and reverse circulated to 7800' Pulled to 7123' and secured the well
9/29/2014	Opened the well with 50 psig surface pressure on the tubing and the casing Filled the well with 43 bbl of 8.5 ppg KCl brine Pulled out of the well to 5000' with the well flowing and circulated the gas cut brine from the well Pulled out of the well and laid down the 2-7/8" workstring and laid down the (21) joints of the 2-1/16" tubing Ran in the well to a kill string at 2800' and secured the well
9/30/2014	Filled the well with 29 bbl of KCl brine Pulled out of the well and laid down the 2-7/8" workstring and laid down (4) 4-3/4" drill collars Changed the pipe rams from 2-7/8" to 3-1/2" Measured and picked an WEA 8-5/8" AS1X production packer, a 6' 3-1/2" pup jt, (1) jt of 3-1/2", 9.3# L-80 tubing, a WEA No/Go nipple, (1) jt of 3-1/2", 9.3# L-80 tubing, a WEA sliding sleeve, (1) jt of 3-1/2", 9.3# L-80 tubing, and a gas lift mandrel Measured and picked up the 3-1/2", 9.3#, L-80 completion tubing to 4210' and secured the well
10/1/2014	Filled the well with 28 bbl of 8.5 ppg KCl brine. Swapped the tubing trailers, measured and picked up the 3-1/2", 9.3# L-80 tubing to 7182' Spaced out the completion string and landed the 3-1/2" tubing in the tubing hanger with 14,000 lb compression Filled the tubing x casing annulus and pressure tested to 500 psig surface pressure for 20 minutes (test good) Rigged down the working floor, rigged down the rig and associated equipment and secured the well
10/2/2014	Opened the well with 0 psig surface pressure on the tubing Installed the back pressure plug in the tubing hanger and nipped down the Class III 5M BOPE Rigged up the production tree and secured the well. Loaded rig the Ensign #321 equipment and rigged down the hoist for move to P-50C
10/17/2014	Opened the well 0 psig surface pressure on the tubing and the casing Wellhead seals will not pressure test. Installed the BPV and removed the production tree Checked the tubing hanger neck seal and re-torqued the hold down studs Nipped up the production tree and attempted to pressure test tubing hanger seals (Tubing hanger leaking) and secured the well
12/9/2014	Moved in and rigged up the Rival Rig #12 hoist Opened the well with 0 psig surface pressure on the tubing and the casing The well standing full of KCl brine Nipped down the production tree Unlanded the tubing hanger at 61,000 lb Redressed the tubing hanger and replaced neck seals with rope packing and nipped up the production tree Rigged up and pressure tested the production tree to 300 psig (low) and 3000 psig (high) (No pressure test; broke down at 3000 psig and bled to 0 psig). Nipped down the production tree and found the neck seal cut Replaced the tubing hanger seal, nipped up the production tree and attempted to pressure test (No test) Nipped the down production tree, unlanded the tubing hanger and redressed the tubing hanger with teflon packing and relanded the tubing hanger. Nipped up the production tree, rigged up and pressure tested the production tree to 300 psig (low) and 4000 psig (high) for 20 minutes (Test good) Removed the BPV, rigged down the Rival Rig #12 hoist and secured the well



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. **P 214-0232**

PERMIT TO CONDUCT WELL OPERATIONS

<u>Old</u>	<u>New</u>
010	010
FIELD CODE	
00	00
AREA CODE	
30	30
POOL CODE	

Gas Storage
"Sesnon-Frew" - Modelo (Miocene-Eocene) Formation

Ventura, California
July 23, 2014

Thomas W. Schroeder, Agent
Southern California Gas Company (S4700)
9400 Oakdale Avenue
Chatsworth, CA 91313

Your proposal to **Rework** well "**Porter**" **42B**, A.P.I. No. **037-21877**, Section **28**, T. **03N**, R. **16W**, **SB B. & M.**, **Aliso Canyon** field, **Sesnon-Frew** pool, **Los Angeles** County, dated **7/21/2014**, received **7/22/2014** has been examined in conjunction with records filed in this office. (Lat: **34.310000** Long: **-118.554655** Datum:**83**)

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be maintained in operating condition and meet the following minimum requirements: **Class III 5M**
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
4. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.

Blanket Bond Dated: 7/6/1999
UIC Project No. 0100006
cc:

Engineer Bruce Hesson
Office (805) 654-4761

Steven Bohlen
State Oil and Gas Supervisor

By 
Bruce Hesson, District Deputy

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 07-22-14 DOGGR D2-Ventura

FOR DIVISION USE ONLY		
Bond	Forms	
		OGM 4
	CAL WIMS	115V

010/00/30

NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

P214-0232

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework / redrill well "Porter" 42B, API No. 037-21877
(Check one)

Sec. 28, T. 3N, R. 16W, S.B. B.&M., Aliso Canyon Field, Los Angeles County

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

13-3/8", 54.5# K-55 at 1020' (cemented to surface)
8-5/8", 36# K-55 (0-4082'), 36# N-80 (4082'-7598') (cemented) WSO @ 7510'
5", 15#, N-80 from 7400'-7823' 0.012" WWS from 7587'-7822'. Gravel packed with 484 cf of 20-40 sand., TD = 7823'

The total depth is: 7823 feet.

The effective depth is: 7823 feet.

Present completion zone(s): Sesnon (Storage)
(Name)

Anticipated completion zone(s): Sesnon (Storage)
(Name)

Present zone pressure: Varies psi.

Anticipated/existing new zone pressure: Variable psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes No

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes No If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

(See Attached Program) : Nipple up a Class III 5M BOPE
Pull the 3-1/2" tubing string/scrape the 8-5/8" production casing
Run USIT log, pressure test 8-5/8" production casing, perforate and attempt to squeeze the 8-5/8" production casing at 7355'(+/-)
Clean out fill to the bottom of the 5" liner at 7823'(+/-)
Run a new 3-1/2" completion string and test.
Nipple down the Class III 5M BOPE

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth at total depth: _____ feet and _____ feet Estimated true vertical depth: _____
(Direction) (Direction)

Will the Field and/or Area change? Yes No If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator Southern California Gas Company		
Address 12801 Tampa Ave.	City/State Northridge, CA	Zip Code 91326-1045
Name of Person Filing Notice Todd Van de Putte	Telephone Number: 661-305-5387	Signature
Individual to contact for technical questions: Todd Van de Putte	Telephone Number: 661-305-5387	E-Mail Address: tvandeputte@semprautilities.com
Date 7-21-2014		

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the *Notice of Determination* or *Notice of Exemption* with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, re-drilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

WORKOVER PROGRAM

Porter 42B – Replace Completion Equipment/Cement Squeeze

DATE: July 21, 2014

OPERATOR: Southern California Gas Company

FIELD: Aliso Canyon

WELL: Porter 42B

API #: 037-21877

CONTRACTOR: Ensign #321

OBJECTIVE: Remove the 3-1/2" completion string, prepare the well, run logs and pressure test the production casing. Squeeze cement, if necessary, clean out the 5" liner and run the 3-1/2" completion.

ELEVATION: 1963' ASL, All measurements from the original KB = 22' above GL.

PRESENT WELLBORE CONDITIONS: (See attached wellbore schematic)

0' – 1020'	13-3/8"	54.5#	K-55	Surface Casing
0' – 4082'	8-5/8"	36 #	K-55	Production Casing / WSO holes at 7510'
4082' - 7598'		36#	N-80	
7400' - 7823'	5"	15#	K-55	0.012" Wire wrapped screen w/ 484 cuft of 20-40 gravel, 5" OD, blank from 7515'-7565', wire wrapped screen from 7566' - 7804'

Zone Tops:

M-P: 7330' MD / 7183' TVD
 S-1: 7524' MD / 7367' TVD
 S-4: 7600' MD / 7439' TVD
 S-8: 7695' MD / 7529' TVD

Current Field Pressure (Surface): 2200 psig (variable)

BOP requirements in 224.05 should be fully implemented. Class IIIB 5M (minimum) requirements should be followed. The storage reservoir pressures should be monitored during the workover with a minimum of 200 psig overbalance on the well control fluids.

WELL WORK PROGRAM**Pre Rig Work:**

1. De-energize and remove the laterals. Install companion flanges for killing the well.
2. Move in pump with the tank, shaker and mixer. The well crew to provide the labor for killing the well and installing the kill equipment.
3. Spot the 500 barrel Baker tanks and fill the same with 8.6 ppg KCl brine.
 - 3.1. Treat all brine with biocide, 5 gal/100 barrels concentration.
 - 3.2. Connect the pump to the tubing and vent the casing through the choke manifold to the Gas Co. system.
 - 3.3. Verify the field pressure and confirm the correct weight of the kill fluid.
4. Pump a hi-vis HEC polymer pill in the 5-1/2" gravel packed liner from the surface. Displace the HEC pill with one tubing volume, approximately 64 bbl.
5. Kill the well per schedule: Fill the 8-5/8" x 3-1/2" annulus with KCl brine. The annulus is volume approximately 353 bbl.
 - 5.1. All the annulus valves should be bled of all pressure and standing full of brine before proceeding with the rig work.

Rig Work:

1. Move in the Ensign #321 production rig and associated equipment.
2. Install a BPV. Install an 11" Class IIIB – 5M BOPE (minimum) as per Gas Company Procedure. A cross over may be required to install the BOPE on the tubing head.
 - 2.1. Fit the BOPE with 3-1/2" pipe rams and CSO.
 - 2.2. The BOPE must have connection and valve below the blind rams. Fit with a 5000 psig minimum rated valve.
3. Pressure test the BOPE system to assure the integrity of the connections.
 - 3.1. Pressure test the pipe rams and the blind rams to 5000 psig minimum for 20 minutes. Pressure test the Hydril annular preventer to 3600 psig for 20 minutes. Perform a 300 psig low pressure test on the pipe rams, the blind rams, and the annular preventer for 20 minutes.
4. Install a 3-1/2" pup jt in the tubing hanger with a Safety valve in the top. Back out the tubing hanger pins and unland the 3-1/2" tubing/completion string.
 - 4.1. Un-land the 3-1/2" completion tubing from the 8-5/8" Weatherford Arrowset 1-X mechanical set packer which is located at 7344'.
5. Pull out of the well with the 3-1/2" tubing string and lay down all tubing and completion accessories.

6. Pick up the 2-7/8", 6.5#, P-110 workstring and pick up an 8-5/8" casing scraper on the 2-7/8" workstring and run in the hole to the top of the liner at 7400'. Pull out of the hole with 8-5/8" casing scraper.
7. Pick up a 2-1/16" tubing tail on the 2-7/8" workstring and run to 7823' (+/-). Tag fill and clean out any fill, hole conditions permitting. Collect a sample of any fill material circulated to the surface. Pull out of the hole and lay down the 2-1/16" tubing tail.
8. Pick up a set of 4-3/4" seals on the 2-7/8" workstring and set into the 5" x 8-5/8" liner top (4.75" ID) and pressure test the liner top to 1000 psig surface pressure for 15 minutes. Pull out of the hole with the 4-3/4" seal assembly.
9. Pick up an 8-5/8" retrievable bridge plug on the 2-7/8" workstring, run in the well to approximately 7380' (+/-) and set the bridge plug. Pressure test to 500 psig. Spot approximately 10-20 lineal feet of sand on top of the bridge plug.
10. Make sure the hole is full of 8.6 KCl brine. Rig up a lubricator or a shooting flange and run a USIT/Neutron/CBL log in the 8-5/8" production casing from 7400' (+/-) to the surface. Rig down the lubricator and move out the wireline equipment.
11. Pick up an 8-5/8" test packer on the 2-7/8" workstring and pressure test the 8-5/8" production casing per testing schedule.
12. Evaluate the wireline logs and 8-5/8" production casing pressure test results and determine if any immediate corrective action is required.
13. Rig up the wireline unit and run a perforating gun, correlate the depth and shoot 8, 1/2" holes/per foot in the 8-5/8" production casing at 7355' (+/-). Notify the DOGGR of the squeeze/ perforation depth. Perform a pump in test to determine the effectiveness of the perforations. Do not exceed the estimated 0.80 psi/ft formation fracture gradient.
14. Even if no pump in rate can be established on the perforations at 7355' (+/-), then continue to Step 15
15. Pick up and run a 8-5/8" test packer on 2-7/8" tubing and squeeze (50 sxs/minimum delivery) 14.8 ppg, Class "G" cement with gas migration additives into the perforations at 7355'. Release the 8-5/8" test packer and pull 1500' above the squeeze holes and clear the tubing. Apply 300-500 psig surface pressure on the remaining cement (if possible) and wait on the cement at least 12 hrs or overnight.
16. Lay down the 8-5/8" test packer and pick up and run a 7-1/2" mill tooth bit on a cleanout BHA and clean out the cement from the 8-5/8" production casing. Circulate the sand from the top of the 8-5/8" retrievable bridge plug.

17. Pressure test the 8-5/8" production casing to 1000 psig surface pressure to verify the cemented perforation integrity.
18. Run the 3-1/2" completion tubing, and the 3-1/2" completion accessories and space out as required.
 - 18.1. Run tube move calculation to verify the landing weight for the retrievable packer and completion string. Land the completion string as per the recommended calculation.
 - 18.2. Pressure test the tubing/casing annulus to 1000 psig for 20 minutes to confirm the integrity of the production packer and the completion string.
19. Install a BPV and remove the BOPE. Install the tree and test to 5000 psig. Remove the BPV.
20. Clean the mud pits, the location and dispose of any solids and excess well work fluids.

Post Rig Work:

1. Replace laterals and instrumentation.
2. Unload the 8.6 ppg KCl brine from the wellbore.
3. Place well on tubing withdrawal to clean up water from completion interval. Clean up location.



Weatherford®
Completion Systems
 West Coast Region

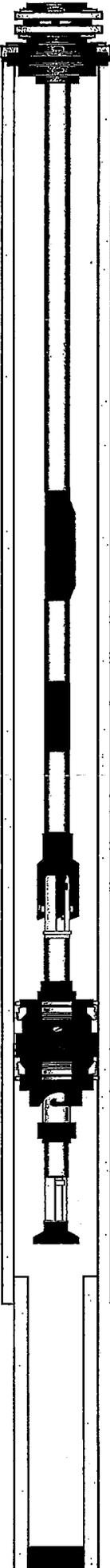
Wellbore Installation Schematic

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Operator:	SoCal Gas Company	Packer Depth:	7344.00' CoE
Well Location:	Porter # 42 B	Up Wt:	63,000#
Date:	22-Jan-13	Dwn Wt:	61,000#
Casing Size:	8-5/8"36#	Force:	+10,000 Compression
Liner Size:	5" / 15#	KB:	22.00' GL
Tubing Data:	3-1/2" / 9.3# L80 8rd EUE	Test Casing:	600 psi
Tool Type:	8-5/8"/36# x 4-1/2" Arrowset 1-X		

Item	Coating	Joints	Description	Length	Top Depth	OD	ID
			KB	22.00	0.00		
			Compression/ Buckling	-1.33	22.00		
1			8-1/2" x 3-1/2" Tubing Hanger	0.45	20.67	8.500	2.992
2			3-1/2" L80 Fatigue Nipple	0.59	21.12	3.500	2.992
3			3-1/2" x 8',4' L80 Pup Jts	12.45	21.71	4.500	2.992
4		231	3-1/2" Tubing (corrected length)	7218.44	34.16	4.500	2.992
5			3-1/2" x 4' L80 8rd Pup Joint	4.23	7,252.60	4.500	2.992
6			3-1/2" Side Pocket Mandrel	6.63	7,256.83	5.250	2.992
7			3-1/2" x 2' L80 8rd Pup Joint	1.72	7,263.46	4.500	2.992
8		1	3-1/2"/9.3# 8rd L80 Tubing	31.24	7,265.18	4.500	2.992
9			3-1/2" x 2.81" 'WXO' Sliding Sleeve	3.45	7,296.42	4.500	2.813
10		1	3-1/2"/9.3# 8rd L80 Tubing	31.23	7,299.87	4.500	2.992
11			5-7/8" x 3-1/2" T2 On/Off Over-shot w/ 2.81" 'WX' Seal Nipple	2.10	7,331.10	5.875	2.813
12			3-1/2" x 6' L80 8rd Pup Joint	6.22	7,333.20	4.500	2.992
13			3-1/2" EUB x 4-1/2" EUP L80 XO	0.86	7,339.42	4.750	2.992
14			8-5/8" x 4-1/2" AS1-X Packer	7.98	7,340.28	7.500	3.984
15			4-1/2" EUB x 3-1/2" EUP L80 XO	0.87	7,348.26	5.563	2.992
16			3-1/2" x 8' L80 8rd Pup Joint	8.11	7,349.13	4.500	2.992
17			3-1/2" x 2.750" 'WXN' profile-nipple w/ 2.635" No-Go	1.39	7,357.24	4.500	2.635
18			3-1/2" 8rd Bell Collar	0.48	7,358.63	5.000	3.000
			EoT		7,359.11		

LT 7400'

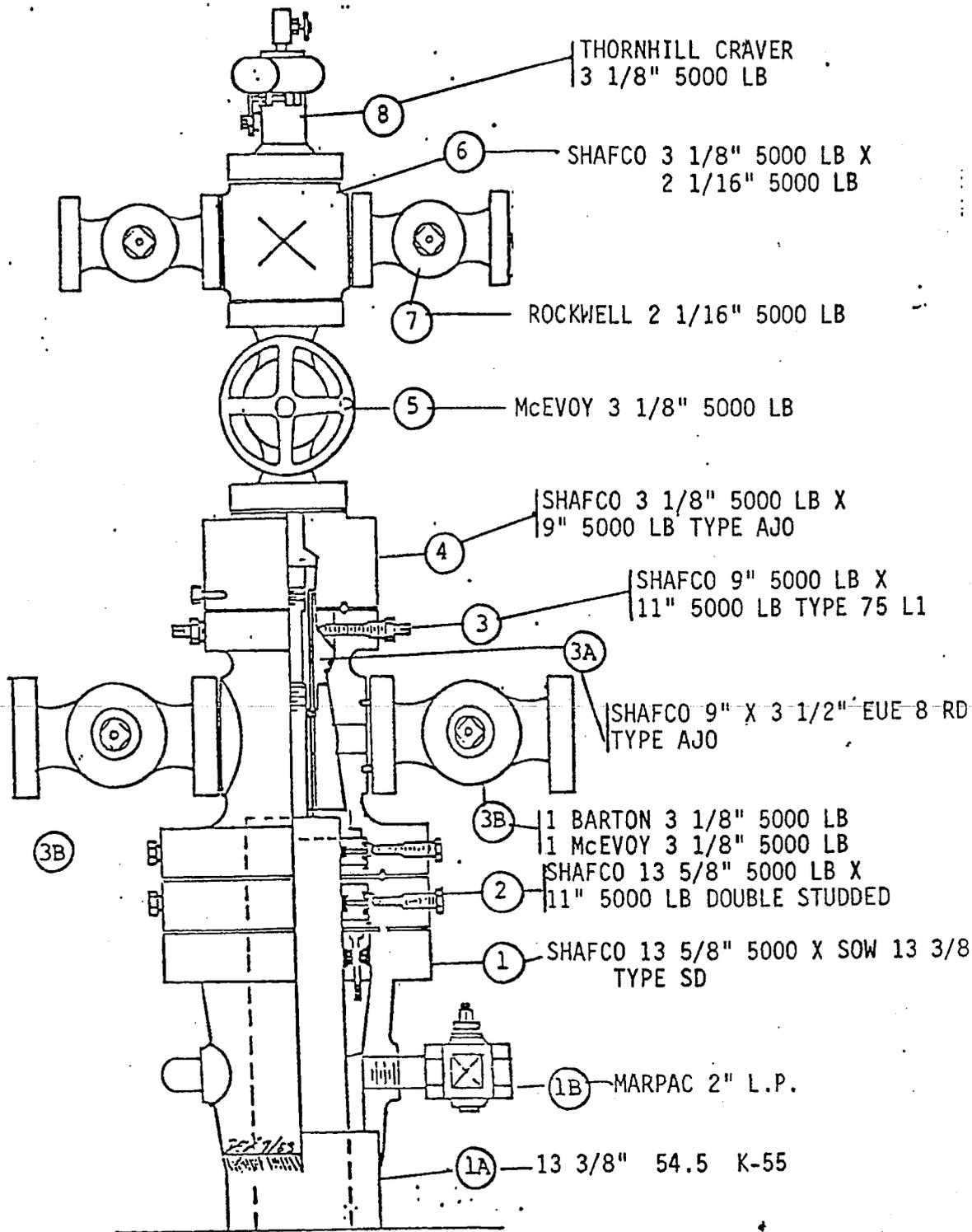


PBTD

Prepared For: Mike Volkmar Location: Aliso Canon
 W.C.S. Rep: N.Marin/ J. Fike Location: Signal Hill

TYPE IV

Rec'd 07-22-14 DOGGR D2 Ventura



Well Name: PORTER 42 B

Mfgr: SHAFCO

Date Prepared: 1/15/93

Well No: PORTER 42 B

Rec'd 07-22-14 DOGGR D2 Ventura

Field: ALISO CANYON

Date Prepared: 1/15/93

Wellhead Mfr: SHAFCO

1. Casing Head SHAFCO Size 13 5/8" 5000 LB X SOW 13 3/8"
 - Slips & Pack-off 13 5/8" X 8 5/8" TYPE "SD"
 - A. Surface Csg Size 13 3/8" Wt 54.5 Grade K-55
 - B. Casing Head Valve MARPAC Size 2" L.P. 3000 LB Fig CSB-790-JN
2. Seal Flange SHAFCO Size 13 5/8" 5000 LB X 11" 5000 LB DBL. STUDDED
Type Seal 8 5/8" "PS" Ring BOTTOM BX 160 & TOP RX 54
3. Tubing Head SHAFCO Type Seal 8 5/8" "PS"
Size 9" 5000 LB X 11" 5000 LB TYPE 75 L1 Outlets 3 1/8" 5000 LB
Sec. Seal PS Valve Thrd 2 1/2" L.P. Ring Type Btm RX 54 Top RX 50
 - A. Tubing Hanger SHAFCO Size 9" X 3 1/2" EUE 8 RD Bore 2.952
Type AJO Thread 3 1/2" EUE 8 RD
 - B.P.V. Size & Thrd SHAFFER 3 1/2"
1 BARTON
 - B. Tubing Head Valves 1 McEVOY Size 3 1/8" 5000 LB
 - C. Automatic Csg Valve N/A Size N/A
4. Adapter Seal Flange SHAFCO Size 3 1/8" 5000 LB X 9" 5000 LB TYPE AJO
 - A. Ring Size TOP RX 35 & BOTTOM RX 50 Bore 3 1/8"
5. Master Valve McEVOY Size 3 1/8" 5000 LB
6. Xmas Tree Cross SHAFCO Size 3 1/8" 5000 LB X 2 1/16" 5000 LB
7. Tbg Wing Valves ROCKWELL Size 2 1/16" 5000 LB
Auto Tbg. Prod Valve N/A Size N/A
8. Unibolt CRAVER Size 3 1/8" 5000 LB Inside Thrds N/A
THORNHILL
9. Csg Size 8 5/8" Wt 36 LB Grade K-55
10. Tubing Head to Ground Level 27" ABOVE GROUND LEVEL
11. Wt. Landed on Doughnut N/A Tubing Size 3 1/2" EUE Type N-80

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

Rec'd 03-22-13 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Field: Aliso Canyon

County: Los Angeles

Well: Porter 42 B

Surface Location: Sec 28 3N 16W S.B.B.M.

A.P.I. No. 03721877

Todd Van de Putte

Title: Senior Storage Field...

(President, Secretary, or Agent)

Date: 3/22/2013

Signature: 

(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, balling tests, and initial production data.

Start Date	Ops. DOGGR Rpt
11/27/2012	Opened the well with 2800 psig surface pressure on the tubing and the casing. Rigged up and pumped 80 bbls XC polymer down the tubing and killed the well per schedule with 355 bbl of 10 ppg polymer mud. Circulated the well and installed the back pressure plug in the tubing hanger. Nipped down the production tree and nipped up the Class III 5M BOPE. Secured the rig and the well.
11/28/2012	Opened the well with 0 psig surface pressure on the tubing and the casing. Filled the well with 19 bbl of 10 ppg mud. Rigged up the WEA testing equipment. Pressure tested the blind rams to 300 psig (low) and 5000 psig (high) for twenty minutes. Pressure tested the pipe rams to 300 psig (low) and 5000 psig (high) for twenty minutes. Pressure tested the Hydril annular preventer to 300 psig (low) and 3500 psig (high) for twenty minutes. Pressure tested the choke manifold and all the control valves to 300 psig (low) and 5000 psig (high) for twenty minutes. (All BOPE tests were good W. Biel DOGGR waived inspection of BOPE.) Rigged up the working floor and the flow line. Attempted to release from HES "WB" packer at 7306' and secured the rig and the well.
11/29/2012	Opened the well with 0 psig surface pressure on the tubing and the casing. Filled the well with 11 bbl of 10 ppg NaCl Polymer mud. Rigged up the Tiger wireline unit, made up a 2' RCT cutter and ran in the well to 7303'. Correlated and cut the 3-1/2", 9.3#, L-80 production tubing. Rigged down the Tiger wireline unit. Pulled out of the the well and laid down the 3-1/2" tubing to a kill string at 3100'. Loaded the 3-1/2' tubing and secured the well.
11/30/2012	The well required 2 bbl of 10 ppg mud to fill. Pulled out of the well, laid down 100 joints of 3-1/2" tubing and the production equipment. Rigged down the tubing equipment and rigged up the 3-1/2" drill pipe equipment. Made up a 7-5/8" shoe, (2) junk subs, a set of jars, (6) 4-3/4" drill collars, an intensifier. Measured and picked up 3-1/2", 13.3# S-135 drill pipe to 3500'. Secured the rig and the well.
12/1/2012	The well required 1 bbl of 10 ppg mud to fill. Measured and picked up the 3-1/2" drill pipe to 7283' and tagged fill (Otis packer at 7306') Rigged up the dead lines for the power swivel. Rigged up to mill out the Otis permanent packer and picked up the power swivel and stripped on the PGSR. Secured the well.
12/2/2012	Filled the well with 4 bbl of 10 ppg polymer mud. Ran in the well to 7275', tagged fill and clean out the fill to 7315'. Circulated the well clean. Milled on the Otis packer and made 1.5'. Circulated the well clean (Rig down for repairs at 1:30pm). Secured the well.
12/3/2012	The well required 3 bbl of 10 ppg mud to fill. Ran in the well to 7315', milled on the Otis packer and started moving the down hole. Circulated the well clean, pulled out of the well and laid down the milling assembly. Made up an over shot, bumper sub, a set of jars, (2) 4-3/4" drill collars on 3-1/2" drill pipe. Ran in the well to 4000' and secured the well.
12/4/2012	Held crew safety meeting. Repaired a rig hydraulic hose. Opened the well with 0 psig surface pressure on the tubing and the casing, 3.5 bbl were required to fill the well. Ran in the well to 7325', worked over the packer. Pulled out of the well to a kill string at 3000' and secured the well.
12/5/2012	Pulled out of the well (repaired the rig - down for 2 hours). Pulled out of the well (no packer recovery). Laid down the overshot and made up a 3" spear, bumper sub, a set of jars, (2) 4-3/4" drill collars, an intensifier on 3-1/2" drill pipe. Ran in the well to top of the fish at 7332'. Engaged the permanent packer, dragged up the hole and worked through the collars to 7222'. Secured the well.
12/6/2012	Continued to pull out of the well with the permanent packer (dragged up the hole and worked through the collars). Pulled to 4950', dragged 50,000lb over string weight and swabbed. Sheared out of the seals and pulled out of the well. Changed out the spear on the BHA from 3" to 2". Ran in the well to 4950', engaged the permanent packer, and attempted to work up the hole (dragged and swabbed). Attempted to circulate and released from the spear. Secured the well.
12/7/2012	Rigged up and circulated the well. Started pulling out of the well with 40,000lb over string weight but no swabbing. Pulled out of the well and laid down the Otis permanent packer (One bottom slip missing) and the spear/BHA. Made up a 4-3/4" tapered mill assembly. Ran in the well to the top of the 5-1/2" scab liner at 7419' and tagged. Rigged up the power swivel and cleaned out the damaged liner top to 7428'. Laid down the power swivel and secured the well.
12/8/2012	Pulled out of the well and laid down the 4-3/4" tapered mill. Made up a spear with a 4-3/4" grapple, a bumper sub, a set of jars, (4) 4-3/4" drill collars on 3-1/2" drill pipe. Ran in the well to the top of the scab liner at 7419' and secured the well.

RESOURCES AGENCY OF CALIFORNIA
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Rec'd 03-22-13 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Field: Aliso Canyon

County: Los Angeles

Well: Porter 42 B

Surface Location: Sec 28 3N 16W S.B.B.M.

A.P.I. No. 03721877

Todd Van de Putte

Title: Senior Storage Field...

(President, Secretary, or Agent)

Date: 3/22/2013

Signature: 

(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

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Start Date	Ops. DOGGR Rpt
12/9/2012	Ran in the well with a spear to 7419' and engaged the 5-1/2" scab liner. Jarred the liner loose and drug up hole with 20,000lb over string weight. Pulled out of the well with the 5-1/2" scab liner top/liner. Rigged up the casing tongs. Laid down the SLP packer, seal bore, (3) joints 5-1/2" liner and a cup assembly. Rigged down the casing tongs and made up an 8-5/8" casing scraper and a bumper sub on 3-1/2" drill pipe. Ran in the well to 7432', tagged the 5-1/2" gravel pack liner top and secured the well.
12/10/2012	Rigged up the Western wireline slick line unit. Ran in the well with a 1-11/16" bailer to 7516' unable to get into the 5-1/2" gravel packed liner. Rigged down and moved out the wireline unit. Rigged up and circulated the hole clean well for the USIT/Neutron log. Pulled out of the well to kill string at 3400' and secured the well.
12/11/2012	Pulled out of the well with a kill string and laid down the casing scraper. Nipped up a shooting flange and rigged up the Schlumberger wireline unit. Made up the USIT tools and ran in the well to the 5-1/2" gravel packed liner top at 7532'. Ran the USIT log from 7532' to the surface. Laid down the USIT tool and made up the gravel pack density tools. Ran in the well to the liner top at 7532' (could not get into the liner). Pulled out of the well with the density tools. Rigged down and moved out the Schlumberger wireline unit. Made up a 4-3/4" mill tooth bit, a bit sub, (15) joints of 2-1/16" tubing on 3-1/2" drill pipe and ran in the well to 7565' and tagged fill. Rigged up the power swivel, broke circulation and cleaned out fill from 7565' to 7690 at 6:00 am.
12/12/2012	Circulated and cleaned out fill to 7819'. Circulated the well clean and pulled to 7400'. Waited one hour and ran in the well to 7819' (no fill). Pulled out of the well to a kill string at 3300' and secured the well.
12/13/2012	Filled the well with 3 bbls of 10 ppg NaCl polymer mud. Pulled out of the well and laid down the 4-3/4" bit. Made up and 8-5/8" WEA test packer and ran in the well to 7520'. Filled the well and pressure tested drill pipe x 8-5/8" casing annulus to 1000 psig surface pressure (4900 psig bottom hole) for twenty minutes (pressure held). Released the test packer and pulled up to 6500', set the test packer and filled the well with 10 ppg mud. Pressure tested the drill pipe x 8-5/8" casing annulus to 1000 psig surface pressure (4300 psig bottom hole) for twenty minutes (pressure held). Released the test packer and pulled up to 5500', set the test packer and filled the well with 10 ppg mud. Pressure tested the drill pipe x 8-5/8" casing annulus to 1000 psig surface pressure (3900 psig bottom hole) for twenty minutes (pressure held). Released the test packer and pulled up to 4500', set the test packer and filled the well with 10 ppg mud. Pressure tested the drill pipe x 8-5/8" casing annulus to 1000 psig surface pressure (3340 psig bottom hole) for twenty minutes (pressure held) Released the test packer and secured the well.
12/14/2012	Pulled to up 3520', set the test packer and filled the well with 10 ppg mud. Pressured tested the drill pipe x 8-5/8" casing annulus to 1350 psig surface pressure (3150 psig bottomhole) for twenty minutes (pressure held). Released the test packer and pulled up the well (while pulling up the test packer, the test packer set and sheared out). Pulled out of the well and recovered the H-valve from the test packer. Changed out the weight indicator on the rig. Made up a 4-3/4" overshot, a bumper sub, a set of jars, (2) 4-3/4" drll collars on 3-1/2" drill pipe. Ran in the well to 3470' and attempted to work over the test packer. Secured the well.
12/15/2012	Filled the well with 6 bbl of 10 ppg NaCl polymer mud. Pulled out of the well (no packer recovery). Made up a 5-3/4" over shot with a 3-1/16" grapple on 3-1/2" drill pipe. Ran in the well to 3470' and engaged the test packer and drug up the hole. Pulled out of the well with no recovery test packer recovery. Made up a 5-3/4" over shot and 3-3/32" grapple on 3-1/2" drill pipe. Ran in the well to 3035', engaged the test packer and secured the well.
12/16/2012	Filled the well with 3 bbl of 10 ppg mud. Pulled out of the well laid down the test packer and the fishing tools. Made up a WEA 8-5/8" lok-set test packer ran in well to 3500'. The packer would not set. Pulled out of the well and laid down the test packer. Made up a 5-1/2" casing cutter, (1) jt of 2-7/8" drill pipe, and a crossover on 3-1/2" drill pipe. Ran in the well to 5000' and secured the well.
12/17/2012	Filled the well with 4 bbl of 10 ppg polymer mud. Ran in the well to 7566', rigged up the power swivel and cut the 5-1/2" liner at 7566'. Rigged down the power swivel pulled out of the well to a kill string at 3000'. Slipped and cut the drilling line and secured the well.
12/18/2012	Pulled out of the well and laid down the casing cutter. Made up a 4.961" spear, a bumper sub, a set of jars, (4) 4-3/4" drill collars, and an intensifer on 3-1/2" drill pipe. Ran in the well to 5100'. Replaced the drilling line. Ran in the well to 7566', engaged the 5-1/2" liner top, jarred free and pulled out of the well to 6000'. Secured the well.

RESOURCES AGENCY OF CALIFORNIA
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Rec'd 03-22-13 DOGGR D2 Ventura

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Field: Aliso Canyon

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Surface Location: Sec 28 3N 16W S.B.B.M.

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Start Date	Ops: DOGGR Rpt
12/19/2012	Pulled out of well and laid down the fish (recovered liner hanger/packer and 30' of blank 5-1/2" liner). Laid down the fishing tools. Made up an WEA 8-5/8" lok-set packer, ran in well to 3500', set the test packer and filled the annulus with 10 ppg NaCl polymer mud. Pressured tested the drill pipe x 8-5/8" casing annulus to 1650 psig surface pressure (3470 psig bottom hole) for twenty minutes. Released the test packer and ran in well to 7560'. Set the test packer and filled the drill pipe x 8-5/8" casing annulus with 10 ppg polymer mud. Pressure tested the annulus to 1000 psig surface pressure for twenty minutes (4900 psig bottom hole) All pressure tests held pressure. Released the test packer, pulled out of the well to 7400' and secured the well.
12/20/2012	Pulled out of well to 2500', set the test packer and filled the well with 10 ppg mud. Pressure tested the drill pipe x 8-5/8" casing annulus to 2150 psig surface pressure (3450 psig bottom hole) for twenty minutes. Released the test packer and pulled out of the well to 1500', set the test packer and filled the well with 10 ppg mud. Pressure tested the annulus to 2670 psig surface pressure (3450 psig bottom hole) for twenty minutes. All pressure tests held pressure. Released the test packer, pulled out of the well and laid down the test packer. Made up a spear with a 4.961" grapple with pack off, a bumper sub, a set of jars, (4) 4-3/4" drill collars and and an intensifier on 3-1/2" drill pipe. Ran in the well to 7530' and secured the well.
12/21/2012	Nipped up the PGSR and ran in the well to 7566'. Engaged the fish and rigged up and circulated the well for two hours. Started working the fish(5-1/2" wirewrapped screen liner). Worked and jarred up the hole 19' (lost weight on weight indicator). Pulled out of the well to a kill string at 3300' and secured the well.
12/22/2012	Pulled out of the well and replaced the spear and added a 5' extention. Made up the fishing tools on 3-1/2" drill pipe and ran in the well to 7547'. Engaged fish/liner top and jarred on the fish at 60,000lb over string weight. Moved up the hole 40' (Rig clutches slipping, shut the rig down for repairs) Secured the well.
12/23/2012	Repaired the rig. Opened the well with 0 psig surface pressure on the tubing and the casing. The well required 4 bbl to fill the well. Jarred on the fish, came free and pulled out of the well and laid down the fish and the tools. Rigged up the casing tongs and laid down the 5-1/2" blank liner and (8) joints of the wirewrapped screen liner (recovered all of the 5-1/2" liner). Rigged down the casing tongs and rigged up the drill pipe equipment. Made up a 7-5/8" mill tooth bit, bit sub, (4) 4-3/4" drill collars on 3-1/2" drill pipe and ran in the well to 4000'. Secured the well.
12/24/2012	Ran in the well and tagged fill at 7723'. Pulled out of the well to a kill string at 7400' and secured the well.
12/26/2012	Filled the well with 6 bbl of 10 ppg mud. Ran in the well to 7723', tagged fill and rigged up the power swivel. Cleaned out fill to 7835', circulated the well clean. Pulled out of the well to 6600' and secured the well.
12/27/2012	Pulled out of the well and laid down the 7-5/8" bit and the bit sub. Made up a 7-5/8" junk mill and (2) junk baskets. Ran in the well to 7440', nipped up the PGSR and secured the well.
12/28/2012	Filled the well with 4 bbl of 10 ppg polymer mud. Ran in the well with a mill to 7835' (no fill) and milled junk from 7835' to 7845'. Circulated the well clean, pulled to 6740' and secured the well.
12/31/2012	Filled the well with 6 bbl of 10 ppg polymer mud. Ran in the well to 7845' (no fill). Rigged up and circulated and conditioned the mud. Pulled to shoe to 7400' and secured the well.
1/2/2013	Filled the well with 4.4 bbl of 10 ppg polymer mud. Pulled out of the well and laid down the mill and the junk baskets. Made up a 7-5/8" reverse circulating junk sub on 3-1/2" drill pipe. Ran in the well to 7500', nipped up the PGSR and secured the well.
1/3/2013	Ran in the well with the reverse circulating junk sub and tagged at 7834'. Rigged up the power swivel and cleaned out fill and junk to 7858'. Circulated the well clean and rigged down the power swivel. Pulled out of the well to 3357' and secured the well.
1/4/2013	Filled the well with 4.5 bbl of 10 ppg polymer mud. Pulled out of the well and laid down the junk sub. Made up a 7-5/8" bit and bit sub on 3-1/2" drill pipe. Ran in the well to 7846', rigged up the power swivel and cleaned out to 7850'. Circulated the well clean and rigged down the power swivel. Pulled out of the well to 6000' and secured the well.
1/5/2013	Filled the well with 6 bbl of 10 ppg polymer mud. Pulled out of the well and laid down the 7-5/8" bit and the bit sub. Made up a Smith 7-1/4" x 13" XTU under reamer, a cross over, (6) 4-3/4" drill collars on 3-1/2" drill pipe. Ran in the well to 7598', nipped up the PGSR and picked up the power swivel. Opened the XTU underreamer and opened hole to 13" from 7598' to 7693'. Laid down the power swivel and pulled to 7468', and secured the well.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company
Well: Porter 42 B
A.P.I. No. 03721877

Field: Aliso Canyon
Surface Location: Sec 28 3N 16W S.B.B.M.
Title: Senior Storage Field...
Todd Van de Putte

County: Los Angeles
(President, Secretary, or Agent)

Date: 3/22/2013

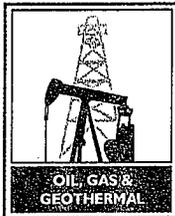
Signature: 
(Person Submitting Report)

Address: PO Box 2300, SC9365, Chatsworth, CA, 91313-2300

Telephone Number: 818-701-3339

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment, with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, balling tests, and initial production data.

Start Date	Ops. DOGGR Rpt
1/6/2013	Ran in the well to 7648', rigged up the power swivel and under reamed hole to 13" from 7648' to 7850'. Circulated the hole clean and laid down the power swivel. Pulled out of the well laid down the bit and nipped up a shooting flange. Moved in and rigged up the Schlumberger wireline unit and made up the 4 arm caliper tool. Ran in the well and logged from 7848' to 7598'. Rigged down and moved out the Schlumberger wireline unit. Made up a 7-5/8" bit on 3-1/2" drill pipe. Ran in the well to 7848', rigged up and pumped 90 bbl hi-vis polymer and displaced with 50 bbl of 10 ppg filtered NaCl brine. EOT
1/7/2013	Pulled up the hole to 7300', rigged up and changed over with 350 bbl of 10 ppg filtered NaCl brine. Pulled out of the well and laid down the 7-5/8" bit. Rigged up the casing tongs. Measured and picked up a 5" bull nose, (6) joints 5" 15#, K-55 (0.012" wirewrapped screen) liner with 6" OD shroud (w/88 - 0.38" hpf), 4 joints or 5" 15#, K-55 blank liner, lower extension, seal bore, sliding sleeve, upper extension, picked up the tail pipe and 8-5/8" x 4-3/4" seal bore packer. Ran in the well to 7822' with the packer at 7400'. Rigged up and circulated a tubing volume, dropped the ball and set the packer at 7400'. EOT
1/8/2013	Opened the sliding sleeve and started the gravel pack with 300 psig circulating pressure. Gravel packed with 284 cuft of 20-40 carbolite ceramic gravel and the surface pressure increased to 500 psig (60 percent over calculated hole volume) Reversed circulated 100 bbl of 10 ppg NaCl brine with no gravel returns to the surface. Pull the gravel pack tools out of the liner. EOT. Waited on the gravel and re-started the gravel pack. Pumped 66 cuft of 20/40 Ottawa sand at 500 psig. Reverse circulated with 100 bbl of 10 ppg NaCl brine with no gravel returns to the surface. (Total gravel volume pumped at 200 percent of the calculated hole volume). Pulled out of the well to 6940' and waited on the gravel.
1/9/2013	Filled the well with 6 bbl of 10 ppg NaCl brine. Ran in the well and engaged the 5" liner top with the gravel pack tools. Pressure tested the annulus to 500 psig and opened the port. Started circulating at 3 bpm and 400 psig surface pressure and pumped 93 cu ft of 20-24 Ottawa Sand and pressured to 1000 psig. Reverse circulated with 100 bbl of 10 ppg NaCl brine (16 cuft of gravel returns to the surface). Waited 30 minutes and re-stressed gravel pack at 1000 psig (Total of 482 cuft of 20-40 gravel/Carbolite/Ottawa) in place at 262% of calculated volume). Released from the 5" liner and rigged down the gravel pack equipment. Pulled out of the well to kill string and secured the well.
1/10/2013	Opened the well with 0 psig surface pressure on the drill pipe and the casing. Filled the well with 7 bbl of 10 ppg NaCl brine. Pulled out of the well and laid down the gravel pack tools and the tail pipe. Made up the WEA Arrowset 1X 8-5/8" production packer with no-go and PXN plug in place, lower half of the on/off tool with perforated sub. Ran in the well to 7343', set the production packer and pressure tested the drill pipe x 8-5/8" casing annulus to 500 psig surface pressure for twenty minutes. Released from on/off tool and pulled out of the well and laid down the 3-1/2" drill pipe to 5613'. Secured the well.
1/11/2013	Pulled out of the well and continued to lay down the 3-1/2" drill pipe. Laid down (6) 4-3/4" drill collars. Rigged down the tubing equipment, working floor and secured the well.
1/14/2013	Nipped down the Class III 5M BOPE. Nipped down the tubing head and replaced the primary wellhead seals (Sent the tubing head in for refurbishment/repairs). Nipped up the Class III 5M BOPE and secured the well.
1/18/2013	Nipped down the Class III 5M BOPE. Installed refurbished tubing head and tested all the tubing head seals to 5000 psig for twenty minutes. Reinstalled the Class III 5M BOPE. Rigged up the working floor and the tubing equipment. Measured and picked up the top half of the on/off tool, 1 joint 3-1/2" tubing, sliding sleeve, 1 joint 3-1/2" tubing, GLMA. Measured and picked up 3-1/2", 9.3#, L-80 tubing to 2725' and secured the well.
1/22/2013	Measured and picked up the 3-1/2", 9.3#, L-80 tubing to 7343'. Engaged the on/off tool, spaced out the tubing and landed the donut in the tubing hanger with 10,000lb compression. Pressure tested the 3-1/2" tubing x 8-5/8" casing annulus to 500 psig surface pressure for twenty minutes (held pressure). Rigged down the pipe wrangler and rigged down the working floor. Rigged down the drilling mud pump and mud pit. Secured the location.
1/23/2013	The well was standing full of 10 ppg of NaCl brine. Installed the BPV and removed the Class III 5M BOPE. Installed the production tree and removed the BPV. Rigged down and moved out the rig hoist. Rigged down the rig equipment and secured the well.



NATURAL RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF CONSERVATION
 DIVISION OF OIL, GAS & GEOTHERMAL RESOURCES
 1000 S. Hill Rd, Suite 116 Ventura, CA 93003 - 4458

No. **P 212-0368**

PERMIT TO CONDUCT WELL OPERATIONS

Gas Storage

Old	New
010	010
FIELD CODE	
00	00
AREA CODE	
30	30
POOL CODE	

Ventura, California
 October 30, 2012

James D. Mansdorfer, Agent
 Southern California Gas Company (S4700)
 9400 Oakdale Avenue
 Chatsworth, CA 91313

Your proposal to **Rework** well "**Porter**" **42B**, A.P.I. No. **037-21877**, Section **28**, T. **03N**, R. **16W**, **SB B. & M.**, **Aliso Canyon** field, Sesnon-Frew pool, **Los Angeles** County, dated **10/15/2012**, received **10/16/2012** has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED:

1. Blowout prevention equipment, as defined by this Division's publication No. MO7, shall be installed on the 7" casing and maintained in operating condition and meet the following minimum requirements: Class III 5M
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. No program changes are made without Division approval.
4. **THIS DIVISION SHALL BE NOTIFIED TO:**
 - a. Inspect the installed blowout prevention equipment prior to commencing downhole operations.

Blanket Bond Dated: 7/6/1999
 UIC Project No. 0100006

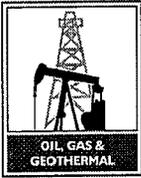
 Tim Kustic
 State Oil and Gas Supervisor

Engineer Bruce Hesson
 Office (805) 654-4761

By 
 Bruce Hesson, District Deputy

BH/bh

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended. Issuance of this permit does not affect the Operator's responsibility to comply with other applicable state, federal, and local laws, regulations, and ordinances.



NATURAL RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

FOR DIVISION USE ONLY		
Bond	Forms	
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NOTICE OF INTENTION TO REWORK / REDRILL WELL

Detailed instructions can be found at: www.conservation.ca.gov/dog/

0212-0368

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework / redrill well "Porter" 42B, API No. 037-21877
(Check one)

Sec. 28, T. 3N, R. 16W, S.B. B.&M., Aliso Canyon Field, Los Angeles County.

The complete casing record of the well (present hole), including plugs and perforations, is as follows: (Attach wellbore schematics diagram also.)

13-3/8", 54.5#, K-55 at 1020' (cemented to surface)

8-5/8", 36#, K-55 and N-80 at 7598' (cemented) WSO @ 7510'

5-1/2", 17#, N-80 from 7419'-7879', blank from 7515'-7575', 0.012" WWS from 7566'-7804' / Gravel packed with 20-40 sand.

The total depth is: 7879 feet.

The effective depth is: 7879 feet.

Present completion zone(s): Sesnon (Storage)
(Name)

Anticipated completion zone(s): same
(Name)

Present zone pressure: Varies psi.

Anticipated/existing new zone pressure: Varies psi.

Is this a critical well as defined in the California Code of Regulations, Title 14, Section 1720(a) (see next page)? Yes No

For redrilling or deepening only, is a California Environmental Quality Act (CEQA) document required by a local agency? Yes No If yes, see next page.

The proposed work is as follows: (A complete program is preferred and may be attached.)

(See Attached Program) : Nipple up a Class III 5M BOPE

Pull the completion string

Remove the 8-5/8" Permatrieve Packer at 7306'/Scrape the 8-5/8" casing/Run a USIT log in the 8-5/8" production casing

Cut and recover the 5-1/2" WWS liner. Gage the open hole section and clean out to TD. Run a open hole caliper log.

Run a new 0.012", 5" WWS liner and regravell pack the well with 20-40 gravel

Run a new 3-1/2" completion string and test

Nipple down the Class III 5M BOPE

If well is to be redrilled or deepened, show proposed coordinates (from surface location) and true vertical depth

at total depth: _____ feet and _____ feet Estimated true vertical depth: _____
(Direction) (Direction)

Will the Field and/or Area change? Yes No If yes, specify New Field: _____ New Area: _____

The Division must be notified immediately of changes to the proposed operations. Failure to provide a true and accurate representation of the well and proposed operations may cause rescission of the permit.

Name of Operator

Southern California Gas Company

Address

9400 Oakdale Ave.

City/State

Chatsworth, CA

OCT 16 2012

Zip Code

91313

Name of Person Filing Notice

Todd Van de Putte

Telephone Number:

661-305-5387

Signature

Todd Van de Putte
Div. of Oil, Gas & Geothermal Resources

Date

10-15-2012

Individual to contact for technical questions:

Todd Van de Putte

Telephone Number:

661-305-5387

E-Mail Address:

tvandeputte@semprautilities.com

This notice and an indemnity or cash bond must be filed, and approval given, before the workover begins. (See the reverse side for bonding information.) If operations have not commenced within one year of the Division's receipt of the notice, this notice will be considered cancelled.

INFORMATION FOR COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT OF 1970 (CEQA)

If an environmental document has been prepared by the lead agency, submit a copy of the *Notice of Determination* or *Notice of Exemption* with this notice. Please note that a CEQA determination by a local jurisdiction, if required, must be complete, or the Division may not issue a permit.

CRITICAL WELL DEFINITION

As defined in the California Code of Regulations, Title 14, Section 1720 (a), "Critical well" means a well within:

- (1) 300 feet of the following:
 - (A) Any building intended for human occupancy that is not necessary to the operation of the well; or
 - (B) Any airport runway.
- (2) 100 feet of the following:
 - (A) Any dedicated public street, highway or the nearest rail of an operating railway that is in general use;
 - (B) Any navigable body of water or watercourse perennially covered by water;
 - (C) Any public recreational facility such as a golf course, amusement park, picnic ground, campground or any other area of periodic high-density population; or
 - (D) Any officially recognized wildlife preserve.

WELL OPERATIONS REQUIRING BONDING

1. Drilling, re-drilling, or deepening any well.
2. Milling out or removing a casing or liner.
3. Running and cementing casing or tubing.
4. Running and cementing liners and inner liners.
5. Perforating casing in a previously unperforated interval for production, injection, testing, observation, or cementing purposes.
6. Drilling out any type of permanent plug.
7. Reentering an abandoned well having no bond.

This form may be printed from the DOGGR website at www.conservation.ca.gov/dog/

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WORKOVER PROGRAM

Porter 42B – Gravel Pack Replacement

DATE: October 15, 2012
OPERATOR: Southern California Gas Company
FIELD: Aliso Canyon
WELL: Porter 42B
API #: 037-21877
CONTRACTOR: Ensign #321
OBJECTIVE: Remove tubing, packer and the recover the 5-1/2" liner, install a new armored wire wrapped screen liner and re-gravel pack with 20-40 Carboceramic gravel. Inspect and repair the well head equipment, if necessary.
ELEVATION: 1963' ASL, All measurements from the original KB = 22' above GL.

PRESENT WELLBORE CONDITIONS: (See attached wellbore schematic)

0' – 1020'	13-3/8"	54.5#	K-55	Surface Casing
0' – 4082'	8-5/8"	36 #	K-55	Production Casing / WSO holes at 7510'
4082'-7598'		36#	N-80	
7419'- 7879'	5-1/2"	17#	K-55	0.012" Wire wrapped screen w/ 20-40 gravel pack , 5-1/2" OD, blank from 7515'-7565', wire wrapped screen from 7566'- 7804'

Zone Tops:

M-P: 7330' MD / 7183' TVD
S-1: 7524' MD / 7367' TVD
S-4: 7600' MD / 7439' TVD
S-8: 7695' MD / 7529' TVD

Field Pressure (Surface): 2600 psig

BOP requirements in 224.05 should be fully implemented. Class IIIB 5M (minimum) requirements should be followed. The storage reservoir pressures should be monitored during the workover with a proper overbalance on well control fluids.

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WELL WORK PROGRAM

Pre Rig Work:

1. De-energize and remove the laterals. Install companion flanges for killing the well.
2. Move in pump with the tank, shaker and mixer. The well crew to provide the labor for killing the well and installing the kill equipment.
3. Spot the 500 barrel Baker tanks and fill the same with 8.6 ppg KCl brine.
 - 3.1. Treat all brine with biocide, 5 gal/100 barrels concentration.
 - 3.2. Connect the pump to the tubing and vent the casing through the choke manifold to the Gas Co. system.
 - 3.3. Verify the field pressure and confirm the correct weight of the kill fluid.
4. Pump a HEC polymer pill in the 5-1/2" gravel packed liner from the surface. Displace the HEC pill with one tubing volume, approximately 64 bbl.
5. Kill the well per schedule: Fill the 8-5/8" x 3-1/2" annulus with KCl brine. The annulus is volume approximately 353 bbl.
 - 5.1. All the annulus valves should be bled of all pressure and standing full of brine before proceeding with the rig work.

Rig Work:

1. Move in the Ensign #321 production rig with a top drive/power swivel and mud pit and shale shaker.
2. Install a BPV. Install Class IIIB – 5M BOPE (minimum) as per Gas Company Procedure.
 - 2.1. Fit the BOPE with 3-1/2" pipe rams and CSO.
 - 2.2. The BOPE must have connection and valve below the blind rams. Fit with a 5000 psig minimum rated valve.
3. Test the BOPE system to assure the integrity of the connections.
 - 3.1. Test the pipe rams and the blind rams to 5000 psig minimum. Test the Hydril annular preventer to 3600 psig for 15 minutes. Perform a 300 psig low pressure test on the the pipe rams, the blind rams, and the annular preventer.
4. Install a 3-1/2" pup jt in the tubing hanger with a Safety valve in the top. Back out the tubing hanger pins and unland the 3-1/2" tubing/completion string.
 - 4.1. Un-latch the tubing from the 8-5/8" Otis Permatrieve packer which is located at 7306'.
5. Pull out of the well with the 3-1/2" tubing string and lay down all tubing and completion accessories.

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6. Pick up 3-1/2", 13.3#, S-135 drill pipe and RIH with the drill pipe, jars and the HES packer recovery tool and remove the 8-5/8" Permatrieve packer from the well at 7306'. Lay down the 8-5/8" permanent packer profile and the BHA.
7. Pick up a 5-1/2" casing cutter on 3-1/2" drill pipe and RIH with casing cutter and make cut in blank 5-1/2" liner at approximately 20' below the upper liner hanger top. Pull out of the hole and lay down the casing cutter.
8. Pick up an 8-5/8" casing scraper and and run in the hole to the top of the liner. Pull out of the hole with 8-5/8" casing scraper.
9. Rig up a lubricator and run a USIT/Neutron log in the 8-5/8" production casing from 7415' (+/-) to the surface. Rig down the lubricator and move out the wireline equipment.
10. Pick up the casing spear, RIH, engage and retrieve the 5-1/2" liner the Baker SLP hanger packer. Pull out of the hole and lay down the fish.
11. RIH and wash the 5-1/2" liner from the top to bottom with XC polymer/KCl brine to remove sand from the outside of the liner. Pump a hi viscosity sweep and circulate the hole clean. Pull out of the hole and lay down the wash tool.
12. RIH with the spear, 4-3/4" drill collars, jars and an accelerator. Engage the remaining 5-1/2" liner, jar as necessary and retrieve the remaining liner.
 - 12.1. If unsuccessful with first cut, pull out of the hole with the spear, jars. Lay down tools.
 - 12.2. Pick up casing cutter, RIH and make a second cut. The cut depth should locate the cut just above the top collar of the WWS (wire-wrapped screen liner). Pull out of the hole.
13. RIH with spear, and jars. Engage remaining liner, jar as necessary to retrieve liner.
14. Pick up 6" bit, drill collars and clean out to 7879' MD. Circulate the hole clean. Condition drilling fluids. Pull out of the hole lay down 6-1/8" bit and the cleanout BHA.
15. Pick up a 13" underreamer or hole opener and RIH.
16. Clean out the open hole section from 7879' to the 8-5/8" casing shoe at 7598'. Clean out the fill from the open hole to 7879' (+/-). Circulate the hole clean.
17. Spot a XC/KCl pill (clean, filtered viscosified brine) across the cleaned open hole and 200 ft above the 8-5/8" casing shoe.
18. Pick up to the top of the pill and circulate clean filtered KCl brine.
19. Pull out of the hole and lay down the hole opener.
20. Run collar locator log in cased hole portion and caliper log in open hole interval of well to verify the Carboceramic sand volume for the gravel pack. Pull out of the hole with the wireline tools.
21. Make up new 5" WWS armored liner (12 ga./0.012" slot size) and gravel pack tools. Use circulating shoe per Weatherford running procedure.
 - 21.1. Verify screen size openings with feeler gage or equivalent.

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- 21.2. RIH on 3-1/2" drill pipe with liner top in the 8-5/8" casing at 7400' or just above the previous liner top at 7419'. Verify that top of liner is located near the middle of an 8-5/8" casing joint.
22. Gravel pack the new 5" liner with 20-40 Carboceramic gravel.
- 22.1. With the 0.012" slot size liner use re-screened 20/40 gravel size for the gravel pack. Collect gravel sample and analyze sieve size for QA purposes.
- 22.2. All fluids used in the during the gravel packing to be filtered as per the Weatherford requirements and isolated until used to avoid solids contamination. Use biocide at a concentration of 5 gal/100 barrels.
- 22.3. Displace viscous pill from the liner. Avoid circulation through the screen utilizing the shoe circulation tools. Set the liner on bottom and release the tail pipe from the circulating shoe for packing.
- 22.4. Pump the 20/40 gravel over the top into place utilizing pump and clean, filtered brine carrier fluid.
- 22.5. Re-stress until completely packed off. Reverse out the excess, wait (Bump liner to settle pack) and restress. Release from the liner with right hand rotation. Pull out of the hole with the Gravel pack tools and the tail pipe.
- 22.6. Set the seal and slips on the hanger/packer. Overpull to confirm the setting of adapter as recommended by Weatherford. Pressure test the seals to 1500 psig for 20 minutes.
23. Run tubing, accessories as follows and latch into packer and space out as required:
- 23.1. 1 – 45 degree guide shoe
- 23.2. 1 – 8-5/8" Retrieveable Packer
- 23.3. 1 - 3-1/2", L-80 pup jt
- 23.4. 1 – HES LH release On/Off tool with XN No-Go profile
- 23.5. 1jt – 3-1/2", L-80 tubing
- 23.6. 1 – 3-1/2" XD sliding sleeve
- 23.7. 1 jt – 3-1/2", L-80 tubing
- 23.8. 1 – 3-1/2", L-80 pup jt
- 23.9. 1 – 3-1/2" MMA Gas Lift Mandrel with dummy valve in place
- 23.10. 1 – 3-1/2" L-80 pup jt
- 23.11. 234jts – 3-1/2" L-80 8rd tubing
- 23.12. 1 – 3-1/2" L-80 pup jts (as required for spacing)
- 23.13. 1 - 3-1/2" Donut
- 23.14. Run tube move calculation to verify the landing weight for the retrieveable packer and completion string. Land the completion string as per the recommended calculation.

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- 23.15. Pressure test the tubing/casing annulus to 1000 psig for 20 minutes to confirm the integrity of the packer.
24. Install a BPV and remove the BOPE. Install the tree and test to 5000 psig. Remove the BPV.
25. Clean the mud pits, the location and dispose of any solids and excess well work fluids.

Post Rig Work:

1. Replace laterals and instrumentation.
2. Unload well, replace valves in gas lift mandrels as required to unload.
3. Place well on tubing withdrawal to clean up water from completion interval. Clean up location.

Todd Van de Putte

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Montana

SUMMIT Col.
 0'-1020'
 13-3/8" 54.5', K55
 CMC P928
 (12.615" I.D.)

1020'

Production Csg:
 0'-7598'
 8-7/8" 36', (7.825" I.D.)
 0-4082': K55, LT;C
 82'-7610': N80, BUTTRESS

8 7/8" 24.49' WB PAK.
 W/ 4.00" BORE N/C 7006

TEC DETAIL:

0'-2030': 3 1/2" 9.3' N80 Bore
 (2.742" I.D.)
 -7196' : 3 1/2" 9.3' N55 Bore
 (2.992" I.D.)
 -7310' : 5 1/2" 9.3' N80 Bore
 (2.942" I.D.)

WELL NAME: Porter 42B
FIELD: Aliso Canyon
STATUS: Injection/Withdrawal
FLOW REGIME: Casing Flow
ELEVATION: 1963' G.L. 22' K.B.

SURFACE LOCATION: 2666.68' S. &
 2519.60' W. from station 84, Sec.
 28, T3N, R16W S. B.

BOTTOM-HOLE LOCATION: 982' N. &
 232' E. of surface location at 7648'
 TVD.

12/09/78: Well spudded.

02/11/79: Well completed.

12/10/92-01/21/93: Workover to
 replace gravel pack and isolate WSO
 holes. Removed 5-1/2" liner.
 Milled 8-5/8" casing from 7598' to
 7618'. Opened hole to 15" from
 7598' to 7801'. Ran 296' 5-1/2"
 liner and landed w/bottom at 7819',
 top at 7516'. Gravel packed liner
 through port collar with 310 sx 20-
 40 sand. Completed as shown to
 isolate WSO holes.

01/12/94-1/20/94: Workover to recover wireline
 fish stuck in tubing at 7361'. Discovered 16 jts.
 corkscrewed tubing. Installed Otis packer at
 7603'. Completed as shown.

7200' (7066') 3 1/2" T.P.D. 6UM
 W 1 1/2" RA LATCH
 7240' (7098') OTIS 2.750" XD
 550
 7272' (7129') OTIS 2.635" XN
 NIPPLE W/ 2.750"
 PACKER BORE I.D.
 7310' 45" BURE SHOE

ALL 8 7/8" SLK LK 142'
 1' LATCH W/ 1" LATCH @ 7415'
 5.750" BORE I.D.
 4.750" MIN. I.D.
 1/2" 17" N80 BORE CSG 7419'-
 7516' (4.892" I.D.)
 BORE 8 7/8" 7516'
 CLP Hdr. PAK. C
 (6.362" BORE I.D.)
 BOT COLLAR W 5 1/2" LINER
 @ 7522'
 8 7/8" CSB.
 SPAC @ 7598'

LINER DETAIL
 7516' - 7819'
 5 1/2" 17" N80, LT;C
 .012" WWS. GRAVEL
 PACKED 15" HOLES
 W/ 310 SX 10-40
 SAND
 (4.892" LINER I.D.)

7419' - 7516' 5 1/2" 17"
 N80 CSG (4.892" I.D.)
 TO ISOLATE W.S.O. HOLES
 @ 7510'.
 7516' T. SLOTS

Volume	Cu. Ft.	Bbls
Tbg.	362	64
Csg./Liner	52	9
Annulus	1980	353
	2394	426

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ZONE	M.D.	TVD.
M-P	7330'	7183'
S-1	7524'	7367'
S-A	7600'	7439'
S-B	7695'	7529'

Reviewed By Date
 Drilling J. K. [Signature] 2/11/94
 Pct. Eng. R. [Signature] 2/16/94
 Region W. [Signature] 3/15/94

C.S. T.D. 7819'

TUBING DETAIL

WELL: Porter 42B
FIELD: Aliso Canyon

STATUS: Injection/Withdrawal
DATE: 1/15/94

DIAGRAM	TUBING	TUBING	TUBING	TUBING	
	SIZE	3-1/2	3-1/2		
	WEIGHT	9.3	9.3		
	GRADE	N80	J55		
	THREAD	EUE	EUE		
	DEPTH	2030	7306		
	I.D.	2.992	2.992		
	DRIFT	2.867	2.867		
	O.D.	4.500	4.500		
		DESCRIPTION	LENGTH	DEPTH	
	1	K.B.	22.00	22.00	
2	Tubing Hanger to Ground	-3.00	19.00		
3	Tubing Hanger 3-1/2" x 3-1/2" EUE	.45	19.45		
4	3-1/2" Fatigue Nipple (3.5" O.D.)	.60	20.05		
5	3-1/2" N80 pup jt.	7.90	27.95		
6	3-1/2" N80 pup jt.	9.98	37.93		
7	3-1/2" N80 pup jt.	8.27	46.20		
8	3-1/2" N80 pup jt.	2.13	48.33		
9	65 Jts. 3-1/2" N80 tubing	1981.50	2029.83		
10	168 Jts. 3-1/2" J55 tubing	5165.89	7195.72		
11	3-1/2" N80 pup jt.	4.20	7199.92		
12	3-1/2" T.P.D. GLM w/ 1-1/2" RA latch	8.95	7208.87		
13	3-1/2" N80 pup jt.	.55	7209.42		
14	1 Jt. 3-1/2" J55 tubing	30.88	7240.30		
15	Otis 2.750" XD SSD	3.60	7243.90		
16	1 Jt. 3-1/2" J55 tubing	28.52	7272.42		
17	Otis 2.635" XN nipple w/ 2.750" packing bore I.D.	1.40	7273.82		
18	1 Jt. 3-1/2" J55 tubing	31.73	7305.55		
19	Otis J-latch (above packer)	.45	7306.00		
20	Otis J-latch (inside packer)	.73	7306.73		
21	2 seal units	2.00	7308.73		
22	Otis 45° guide shoe	.95	7309.68		
	A. Otis 8-5/8" 24-49# WB packer w/1 set @ with 4.00" bore I.D.		7306.00		
	up. wt. 60,000#				
	dn. wt. 58,000#				
	Landed tubing w/ 12,000# on packer				

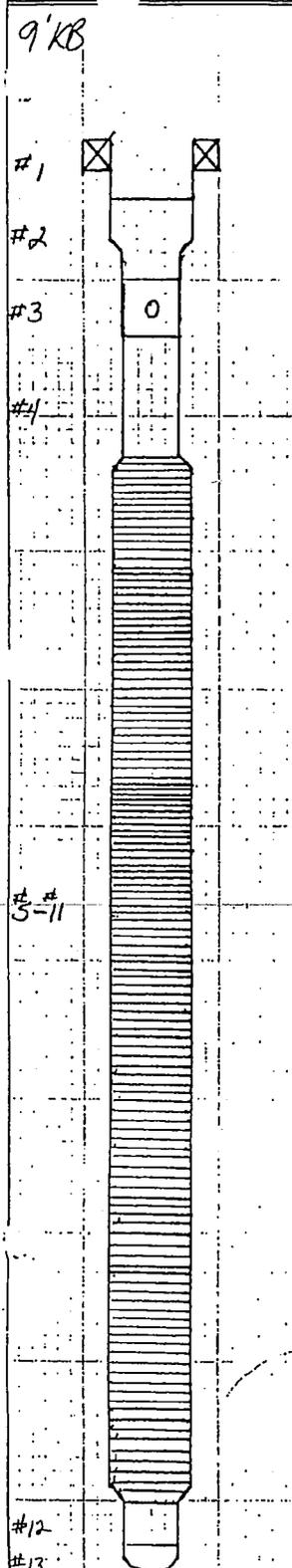
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Div. of Oil, Gas & Geothermal Resources
 Ventura

#720 BAK

FIELD 805 834 2844



OPERATOR SO. CAL. GAS
 COMPANY REP JIM DAYTON
 WELL NO #42 PORTER
 FIELD ALISO CANYON
 COUNTY LA
 STATE CALIF.
 DATE 11/13/92

	SIZE	WEIGHT	GRADE	THREAD
CASING	8 5/8"	36#	—	—
LINER	5 1/2"	17#	K 55 N 80	8 RD
TUBING	LONG STRING			
	SHORT STRING			

NEW COMPLETION WORKOVER

NO.	DEPTH	LENGTH	OD	ID	DESCRIPTION
					NOTE: 6" OD ON SCREEN
1	7515.74	3.37	7.625	6.362	SLP HANGER PKR. B.S.T. EQUIP
2	7519.11	2.76	7.375	4.892	X DUER 7" LHC BOX X 5 1/2" V.F.J. PIN
3	7521.87	2.71	5.937	↑	PORT COLLAR 5 1/2" V.F.J. BOX X 5 1/2" EVE BRD
4	7524.58	41.91	5.800		BLANK K55
5	7566.49	42.19	↑		JOHNSON SCREEN .012 90 WIRE STAINLESS K55
6	7608.68	40.75			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
7	7649.43	38.79			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
8	7688.22	40.03			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
9	7728.25	37.37			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
10	7766.62	38.51			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
11	7804.13	13.25			JOHNSON SCREEN .012 60 WIRE STAINLESS N80
12	7817.38	2.02			BLANK PUP
13	7819.40	1.60	↓	↓	BULL NOSE W/BAILING PLATE
	T.D.	7821.00			

7" LHC BOX			
7 3/8"	#2	.86	2.76 O/A
5 1/2"		1.90	
5 1/2" V.F.J. PIN			
5 1/2" V.F.J. BOX			
5 15/16"	0	1.48	2.71 O/A
5 1/2"	#3	1.23	
5 1/2" EVE BRD PIN			

INITIAL T.D. @ 7821.00
 FINAL

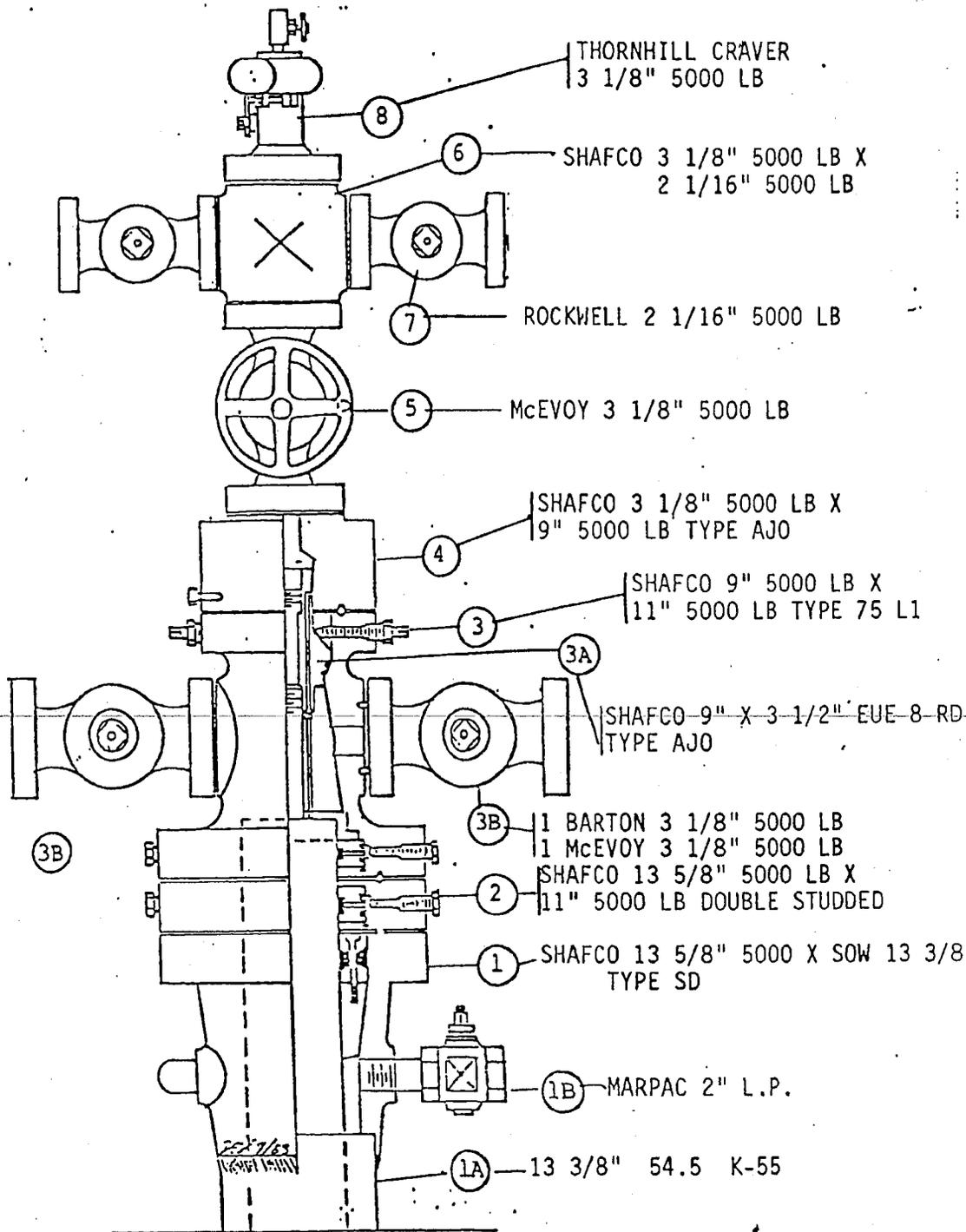
PREPARED BY *Stan Law*

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TYPE IV



Well Name: PORTER 42 B

Mfgr: SHAFCO

Date Prepared: 1/15/93

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**DIV. OF OIL, GAS &
Geothermal Resources**
Venture

Well No: PORTER 42 B
Field: ALISO CANYON
Date Prepared: 1/15/93
Wellhead Mfr: SHAFCO

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OCT 16 2012

Div. of Oil, Gas &
Geothermal Resources
Ventura

1. Casing Head SHAFCO Size 13 5/8" 5000 LB X SOW 13 3/8"
Slips & Pack-off 13 5/8" X 8 5/8" TYPE "SD"
A. Surface Csg Size 13 3/8" Wt 54.5 Grade K-55
B. Casing Head Valve MARPAC Size 2" L.P. 3000 LB Fig CSB-790-JN
2. Seal Flange SHAFCO Size 13 5/8" 5000 LB X 11" 5000 LB DBL. STUDDEN
Type Seal 8 5/8" "PS" Ring BOTTOM BX 160 & TOP RX 54
3. Tubing Head SHAFCO Type Seal 8 5/8" "PS"
Size 9" 5000 LB X 11" 5000 LB TYPE 75 L1 Outlets 3 1/8" 5000 LB
Sec. Seal PS Valve Thrd 2 1/2" L.P. Ring Type Btm RX 54 Top RX 50
A. Tubing Hanger SHAFCO Size 9" X 3 1/2" EUE 8 RD Bore 2.952
Type AJO Thread 3 1/2" EUE 8 RD
B.P.V. Size & Thrd SHAFFER 3 1/2"
1 BARTON
B. Tubing Head Valves 1 McEVOY Size 3 1/8" 5000 LB
C. Automatic Csg Valve N/A Size N/A
4. Adapter Seal Flange SHAFCO Size 3 1/8" 5000 LB X 9" 5000 LB TYPE AJO
A. Ring Size TOP RX 35 & BOTTOM RX 50 Bore 3 1/8"
5. Master Valve McEVOY Size 3 1/8" 5000 LB
6. Xmas Tree Cross SHAFCO Size 3 1/8" 5000 LB X 2 1/16" 5000 LB
7. Tbg Wing Valves ROCKWELL Size 2 1/16" 5000 LB
Auto Tbg. Prod Valve N/A Size N/A
8. Unibolt THORNHILL
CRAVER Size 3 1/8" 5000 LB Inside Thrds N/A
9. Csg Size 8 5/8" Wt 36 LB Grade K-55
10. Tubing Head to Ground Level 27" ABOVE GROUND LEVEL
11. Wt. Landed on Doughnut N/A Tubing Size 3 1/2" EUE Type N-80

OPERATOR Lo. Cal. Dept
 LSE & NO SFZU P-42B
 MAP 254

() () () () () ()

INTENTION	<i>Drill</i>	REWORK	CHANGE OUT PAPER & TUBING			
NOTICE DATED	<i>9-1-78</i>	<i>11-17-92</i>	—			
REPORT NUMBER	<i>278-245</i>	<i>292-350</i>	—			
CHECKED BY/DATE						
MAP LETTER DATED	<i>9-15-79</i>					
SYMBOL						

REC'D NEED REC'D NEED REC'D NEED REC'D NEED REC'D NEED REC'D NEED

NOTICE	<i>9-5-78</i>	<i>11-18-92</i>				
HISTORY	<i>9-20-79</i>	<i>1-29-92</i>	<i>2-17-94</i>			
SUMMARY	<i>9-20-79</i>					
IES/ELECTRIC LOG <i>IEL</i>	<i>2-21-79</i>					
DIRECTIONAL SURV	<i>9-20-79</i>					
CORE/SWS DESCRIP	—	ULTRASONIC 4-28-93				
OTHER <i>Mass. Lin. LCH Comp Density log Photo Caliper</i>	<i>2-21-79</i>	CASING INSPEL LOG CALIPER ULTRA- SONIC LOG	Rec'd 3/26/93			
RECORDS COMPLETE	<i>JK</i>	FMN 4/14/93	<i>2-18-94 SPV</i>			

ENGINEERING CHECK		CLERICAL CHECK	
T-REPORTS	_____	POSTED TO 121	170 MAILED
OPERATOR'S NAME	_____		FINAL LETTER MAILED
WELL DESIGNATION	_____		
LOC & ELEV	_____		RELEASED BOND
SIGNATURE	_____		
SURFACE INSPECTION	_____		
FINAL LETTER OK	_____		

REMARKS:

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

History of Oil or Gas Well

Operator: Southern California Gas Company

Field: Aliso Canyon

County: Los Angeles

Well: Porter #42-B

Sec: 28 **T:** 3N

R: 16W, S.B. **B. & M.**

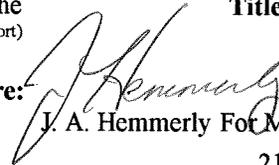
A.P.I. No.: 037-21877

Name: M.A. Woienberghe
(Person submitting report)

Title: Agent
(President, Secretary or Agent)

Date: February 15, 1994

Signature:



J. A. Hemmerly For Mike Woienberghe

P.O. Box 3249, Los Angeles, California, 90051-1249
(Address)

213-244-2657
(Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked hunk, bailing tests and initial production data.

Date

- 1994
- 01/12 Moved in and rigged up on Porter 42B. Killed well. Installed back pressure valve. Nippled down production tree. Nippled up and tested BOPE.
- 01/13 Filled well with 150 Bbls. 2% KCl. Released tubing from packer and pulled out of well. Laid down 17 joints of bent 3-1/2" tubing. Recovered wireline tools. Ran in well with kill string to 5000'.
- 01/14 Pulled out of well. Ran in well with Baker latch tool and stabbed in to liner hanger. Pulled 12,000 lbs. over string weight. Pulled out of hanger. Pulled out of well to 3000'.
- 01/15 Pulled out of well. Wireline set Otis WB Packer @ 7306'. Ran in well with 3-1/2", 9.3#, N80, EUE 8rd production tubing as follows: wireline guide shoe, Otis J-latch and two seal units, 1 jt. 3-1/2" tubing, Otis 2.635" XN nipple, 1 jt. 3-1/2" tubing, Otis 2.750" XD SSD, 1 jt. 3-1/2" tubing, 3-1/2" MMA GLM w/ 1-1/2" RA latch, 3-1/2" N80 tubing to surface. Stabbed into packer @ 7306' and landed tubing with 12,000 lbs. compression on packer. Tubing landed with 38,000 lbs. hanging on donut.
- 01/20 Filled annulus with 25 Bbls of 2% KCl. Tested seals to 1500 psi for 20 minutes. Removed BOPE. Installed and tested xmas tree to 5000 psi. Released rig at 1:00 p.m.

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FEB 17 1994

DIVISION OF OIL, GAS, AND
GEOTHERMAL RESOURCES
VENTURA, CALIFORNIA

DOG-2/16/94

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
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JAN 29 1993

History of Oil or Gas Well

VENTURA, CALIFORNIA

Operator Southern California Gas Company Field Aliso Canyon County Los Angeles
Well Porter 42B, Sec. 28, T. 3N, R. 16W, S. BB. & M.
A.P.I. No. 037-21877 Name R. D. Phillips Title Agent
Date January 28, 1993 (Person submitting report) (President, Secretary or Agent)

Signature

J. A. Hemmerly
J. A. Hemmerly for R. D. Phillips

P. O. Box 3249 Los Angeles, CA 90013-1011 (213) 244-2687
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date

1992

- | | |
|-------|--|
| 12-10 | Move in. Rig up. |
| 12-11 | Pressure tested choke manifold and pump lines to tubing head to 3000 psi. Killed well. Lost 159 Bbls to zone. Installed back pressure valve. Removed xmas tree. Installed Class III 8" 5000 psi BOPE. |
| 12-12 | Replaced 3-1/8" 3000 psi McEvoy valve on tubing head. Tested choke manifold, valve, blind rams and pipe rams to 4000 psi. Tested annular preventor to 3000 psi. Capped seal on leaking bag. Replaced cap seal rubber. Circulated well. BOPE test witnessed by Stephen Mulqueen with D.O.G. |
| 12-14 | Filled well with 70 Bbls. Released from packer at 7400'. Pulled out laying down 3-1/2" EUE 8RD tubing. Made up 7-5/8" bit on 8-5/8" casing scraper. Measured and picked up 3-1/2" drill pipe. |
| 12-15 | Ran in well to 7400' with bit and scraper. Changed well over to 63 pcf polymer. Pulled out of well to 4223'. |
| 12-16 | Pulled out of well. Ran in well with Baker pulling tool to 7400'. Latched into packer and pulled 30,000 lbs over string weight. Released packer. Pulled out of well. Recovered Baker packer. Ran in well with 4-5/8" bit on 5-1/2" casing scraper and 435' of 2-3/8" drill pipe crossed over to 3-1/2" drill pipe. |
| 12-17 | Ran in well with 4-5/8" bit and 5-1/2" casing scraper. Tagged fill at 7604' (207' of fill). Cleaned out fill to 8711'. Circulated well clean. Gravel packed sand in returns. Pulled out of well. Ran in well with section mill on 152' of 2-3/8" drill pipe, stop sub and crossed over to 3-1/2" drill pipe. |

D.O.G. 1/28/93

- 12-18 Ran in well with section mill. Cut 5-1/2" liner at 7579' and 7455'. Pulled out of well. Ran in well with 5-1/2" spear, 5' extension, stop sub, bumper sub, jars, 123' of 6" OD drill collars to 7329'.
- 12-19 Speared liner hanger at 7443'. Jarred on hanger pulling 20,000 lbs over string weight for 1-1/2 hours. Spear pulled free. Pulled out of well with no recovery. Ran in well with 5-1/2" spear to 7443'. Jarred on hanger at 60,000 lbs over string weight. Pulled free. Pulled out of well.
- 12-21 Pulled out of well. Recovered burns hanger, port collar and 3.38' of ~~3~~-1/2" liner. Ran in well with 5-1/2" spear to 7453'. Pulled out of well. Recovered 121.03' of 5-1/2" liner. Ran in well with 4-5/8" OD junk mill on 372' of 2-3/8" drillpipe.
- 12-22 Ran in well with 4-5/8" mill. Tagged fill at 7781' (30' fill). Cleaned out to 7811'. Attempted to mill out bottom of liner unsuccessfully. Pulled out of well. Ran in well with 5-1/2" spear, bumper sub, jars and 123' of 6" OD drill collars to 7579'. Jarred on 5-1/2" liner.
- 12-23 Jarred on liner. Pulled out of well. Recovered 100% of liner. Ran in well with 7-5/8" bit on 123' of 6" drill collars to 7481'.
- 12-28 Ran in well to 7610'. Cleaned out from 7610' to 7797'. Pulled up to 7610'.
- 12-29 Cleaned out from 7797' to 7816'. Drilled from 7816' to 7821' (5'). Circulated well clean. Pulled out of well. Ran in well with 7-1/4" x 15" TriState rock hole opener to 7610'.
- 12-30 Gauge reamed hole from 7610' with TriState 7-1/4" x 15" hole opener. Gauge reamed from 7610' to 7814'. Unable to open hole to 7821' due to junk in well. Circulated well clean. Pulled to kill string.
- 12-31 Pulled out of well. Installed shooting flange. Ran Neutron/Gamma Ray/collar log from 7808' to 7278'. Ran in well with TriState 7-1/4" x 8-5/8" Model D section mill to 7547'.
- 01-02 Tagged fill with section mill at 7814'. Pulled up and located 8-5/8" shoe. Rig down for 3 hours working on mud pump. Mill at 7608'. Milled 6". Mill torqueing up. Worked pipe trying to free mill. Pulled 30,000 lbs over string weight to free mill. Pulled out of well to check section mill.
- 01-04 Pulled out of well. Ran in well with new section mill to 7608'. Milled from 7608' to 7618'. Pulled out of well.
- 01-05 Pulled out of well. Ran in well with new section mill and tag fill at 7795'. Circulated fill out to 7814', pulled up to 7598'. Section mill 8-5/8" casing at 7598'.

- 01-06 Section mill 8-5/8" casing from 7598'. Milled from 7598' to 7608'. Ran in well to 7811' (3' of fill). Pulled out of well. Ran in well with 7-5/8" x 15" hole opener.
- 01-07 Ran in well with hole opener. Hole opener stopped at 7441'. Unable to work past this point. Pulled out of well. Ran in well with 7-5/8" bit. Cleaned out bridge at 7441'. Circulated well clean at 7811'. Pulled up to 3227'.
- 01-08 Pulled out of well. Ran in well with TriState 7-1/4" x 15" hole opener. Ran in well. Opened hole to 15" from 7598' to 7618'. Gauge reamed from 7618' to 7801' (13' fill). Circulated well clean at 7801'. Pulled up to 7441'.
- 01-09 Attempted to run hole opener past 7441' unsuccessfully. Pulled out of well. Installed 7" shooting flange. Rigged up HLS logging service. Ran 4 arm caliper log. Tool failed. Ran HLS CIT casing inspection tool from 7590' to 5600'. Discovered possible casing damage at 7441' and bad spot at 7480', driller depth. Ran in well with kill string.
- 01-11 Pulled kill string. Installed lubricator. Ran 4-arm caliper log from 7808' to 7520'. Ran Schlumberger Ultrasonic Imaging tool from 7590' to 6020' which detected minor casing damage from 7488' to 7490'. Ran in well with 7-5/8" bit, 122' 6" OD drill collars to kill string. Shut in well.
- 01-12 Ran in well and tagged fill at 7801'. Cleaned out to 7814'. Circulated well clean. Pulled up inside 8-5/8" casing shoe. Cleaned mud pits. Shut rig down. Unable to get Baker sand control pump truck.
- 01-13 Ran in well to 7814' (no fill). Changed wellbore fluid over to 3% KCl water. Pulled out of well. Made up and ran 296.42' of 5-1/2" liner with 215.28' of screen area, Baker port collar, crossover from 5-1/2" to 7" EUE 8rd and Baker SLPR hanger. Ran in well with liner bottom at 7819'. Set Baker SLPR hanger at 7516'. Pumped 112 Bbls of 10 ppg slurry with 324 sx 20-40 sand. Pumped 310 cu.ft. of sand (109% calculated sand volume) out port collar. Pressured up to 2100 psi. Closed port collar. Backscuttled out 14 cu.ft. sand estimated. Waited for 2 hours. Pressure up on pack to 2600 psi. Waited an additional 2 hours and pressured up to 2600 psi. Closed port collar at 7519'. Pressure tested port collar to 2600 psi. Pulled out of well.
- 01-14 Pulled out of well. Laid down gravel packing tools. Ran in well with 325' of 2-3/8" CS tubing on 3-1/2" drill pipe. Ran in well to 7821'. Circulated well. Pulled up above liner top.

- 01-15 Pulled out of well. Made up Baker cup type seals with stop sub, 6.125" OD seals (4.892" ID), 2 joints of 5-1/2" 17# N-80 EUE 8rd casing, one 5-1/2" 17# K-55 casing pup, Baker P.B.R. seal bore ext (10' long, 4.750" ID), crossover from 5-1/2" LTC to 6-5/8" EUE 8rd, Baker S.L.P.R. liner hanger. Ran in well to 7516'. Stabbed seals into Baker S.L.P.R. hanger at 7516'. Pressure tested seals to 800 psi. Set Baker S.L.P.R. hanger at 7414'. Pressure tested hanger to 1200 psi. Released from hanger. Pulled out of well laying down drill pipe.
- 01-16 Pulled out of well laying down 3-1/2" drill pipe. Made up Baker seals (4.750" OD, 2.998" ID), J-Latch with locator sub (7.750" OD), 1 joint of 3- 1/2" J-55 9.30# tubing, Otis 2.635" No-Go nipple, one joint of 3-1/2" J-55 9.30# tubing, Otis 2.750" XD sliding sleeve ID, one joint of 3-1/2" 9.30# J-55 tubing, BST MMG mandrel (5.875" OD). Ran in well picking up 3-1/2" tubing. Picked up 167 joints.
- 01-18 Ran in well with production string. Could not J into Baker J latch. Pulled out of well. Recovered tubing seal assembly and J latch, upper S.L.P.R. packer, seal bore extension, 2 joints and pup joints of 5-1/2" liner with bottom seal assembly. Laid down upper SLPR assembly. Ran in well to 3720' with kill string.
- 01-19 Pulled out of well with kill string. Picked up and ran in well with packer assembly. Stabbed seal units into lower SLPR packer. Pressure tested seals and 8-5/8" casing to 800 psi. Set Baker SLPR liner hanger and packer at 7414'. Pulled 15,000 lbs over string weight to confirm packer set. Pump down casing and released setting assembly from packer. Secured well.
- 1-20 Pulled out of well with kill string. Ran in well with production string. Stabbed into Baker SLPR liner hanger packer, with Baker J latch. Pulled 20,000 lbs over string weight. Tested 8-5/8" casing and seals to 1500 psi. Removed BOPE. Installed xmas tree. Shifted sliding sleeve open. Pulled dummy valve. Installed 1-1/2" side pocket valve in GLM. Released rig.
- 1-21 Tested xmas tree to 5000 psi. Rig down. Move out.

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. T292-243

REPORT ON OPERATIONS

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
December 18, 1992

Your operations at well "Porter" 42-B, API No. 037-21877,
Sec. 28 T. 3 N, R. 16W, S.B.B.&M. Aliso Canyon Field, in Los Angeles
County, were witnessed on 12-12-92. Stephen Mulqueen, representative of
the supervisor, was present from 1200 to 1300. There were also present
Jim Dayton, Drilling Foreman.

Present condition of well: 13 3/8" cem 1020'; 8 5/8" cem 7610', perf 7498'
WSO, cp 7500'; 5 1/2" ld 7441'-7811', perfs 7461'-7498' & 7585'-7799'. TD
7816'.

The operations were performed for the purpose of testing the blowout
prevention equipment and installation.

DECISION:

The blowout prevention equipment and its installation on the 8 5/8" casing are
approved.

PK:SM:nr

WILLIAM F. GUERARD, Jr.
Acting State Oil and Gas Supervisor

By Patrick J. Kinnear
Patrick J. Kinnear
Deputy Supervisor

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

No. P292-350
Field Code 010
Area Code 00
New Pool Code 30
Old Pool Code 30

PERMIT TO CONDUCT WELL OPERATIONS
GAS STORAGE

R.D. Phillips, Agent
Southern Calif. Gas Company
810 S. Flower St.
Los Angeles, CA. 90017

Ventura, California
December 1, 1992

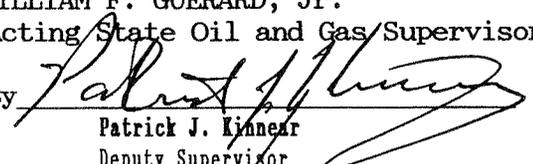
Your _____ proposal to rework well "Porter" 42-B _____,
A.P.I. No. 037-21877, Section 28, T. 3 N, R. 16W, S.B. B.&M.,
Alsio Canyon field, --- _____ area, Sesnon-Field pool,
Los Angeles County, dated 11-17-92, received 11-18-92, has been
examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Blowout prevention equipment conforming to DOG Class III 5M requirements shall be installed and maintained in operating condition at all times.
2. Hole fluid of a quality and in sufficient quantity is used to control all subsurface conditions in order to prevent blowouts.
3. A diligent effort shall be made to clean out the well to at least 5'.
4. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.

Blanket Bond
SF:nr

Engineer Steve Fields
Phone (805) 654-4761

WILLIAM F. GUERARD, Jr.
Acting State Oil and Gas Supervisor
By 
Patrick J. Kinnear
Deputy Supervisor

A copy of this permit and the proposal must be posted at the well site prior to commencing operations. Records for work done under this permit are due within 60 days after the work has been completed or the operations have been suspended.
OG111

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura _____, California

November 6, 1991

R. D. Phillips, Agent
SOUTHERN CALIFORNIA GAS COMPANY
P.O. Drawer 3249 Mail Location 22G0
Los Angeles, CA 90051-1249

Your request, dated July 24, 1991, proposing to change the designation of well(s) in Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon field, Los Angeles County, District No. 2, has been received.

The proposed change in designation, in accordance with Section 3203, Public Resources Code, is authorized as follows:

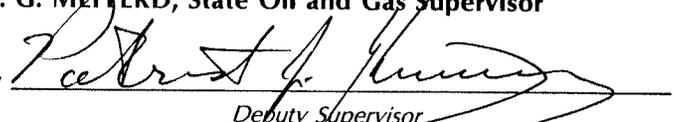
FROM

TO

"SFZU" P-42A (037-21876)	"Porter" 42A (037-21876)
✓ "SFZU" P-42B (037-21877)	"Porter" 42B (037-21877)
"SFZU" P-42C (037-21878)	"Porter" 42C (037-21878)
"SFZU" P-69A (037-22051)	"Porter" 69A (037-22051)
"SFZU" PS-42 (037-00753)	"Porter Sesnon" 42 (037-00753)
"SFZU" SS-1 (037-00754)	"Standard Sesnon" 1 (037-00754)
"SFZU" SS-2 (037-00755)	"Standard Sesnon" 2 (037-00755)
"SFZU" SS-3 (037-00756)	"Standard Sesnon" 3 (037-00756)
"SFZU" SS-5 (037-00758)	"Standard Sesnon" 5 (037-00758)
"SFZU" SS-6 (037-00759)	"Standard Sesnon" 6 (037-00759)
"SFZU" SS-7 (037-00760)	"Standard Sesnon" 7 (037-00760)
"SFZU" SS-8 (037-00761)	"Standard Sesnon" 8 (037-00761)
"SFZU" SS-9 (037-00762)	"Standard Sesnon" 9 (037-00762)

M. G. MEFFERD, State Oil and Gas Supervisor

By


Deputy Supervisor

PATRICK J. KINNEAR

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
RECEIVED
NOV 18 1992
VENTURA, CALIFORNIA

Notice of Intention to Rework Well

This notice and indemnity or cash bond shall be filed, and approval given, before rework begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

FOR DIVISION USE ONLY		
BOND	FORMS	
	OGD 114	OGD 121
BB	11-20-92 ✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework well Porter #42B (Well designation), API No. 037-21877 Sec. 28, T. 3N, R. 16W, SB B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth 7816'
- Complete casing record, including plugs and perforations (present hole)

See Attachment

- Present producing zone name Sesnon; Zone in which well is to be recompleted _____
- Present zone pressure 3350 psig; New zone pressure _____
- Last produced Gas Storage Project (Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
- (or) Last injected _____ (Date) (Water, B/D) (Gas, Mcf/D) (Surface pressure, psig)
- Is this a critical well according to the definition on the reverse side of this form? (Yes) (No)

The proposed work is as follows:

See Attachment

Note: If well is to be redrilled, show proposed new bottom-hole coordinates and true vertical depth.

It is understood that if changes in this plan become necessary, we are to notify you immediately.

Address P. O. Box 3249 (Street)
Los Angeles, CA 90051-1249 (City) (State) (Zip)
Telephone Number (213) 244-2665

Southern California Gas Co. (Name of Operator)
By E. S. Sinclair for R. D. Phillips (Agent) (Name - Printed)
[Signature] (Name - Signature) 11-17-92 (Date)

Type of Organization Corporation (Corporation, Partnership, Individual, etc.)

NOV 1 8 1992

VENTURA, CALIFORNIA

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

NOTICE OF INTENTION TO REWORK WELL
PORTER #42B

ATTACHMENT

2. Complete casing record, including plugs and perforations
(Present Hole)

0' - 1020'	13-3/8"	54.5#	K-55 at 1020'
0' - 4082'	8-5/8"	36#	K-55
4082' - 7610'	8-5/8"	36#	N-80, packer at 7400'
7443' - 7811'	5-1/2"	20#	Perforations: 7582'-7801' and 7458'-7499'

The proposed work is as follows:

1. Move in, rig up and test BOPE.
2. Pull tubing.
3. Retrieve packer.
4. Recover 5-1/2" liner.
5. Mill off bottom 11" of 8-5/8" casing and open hole to 15" down to 7811'.
6. Install new 5-1/2" liner and regravels pack.
7. Install packer in 8-5/8" casing.
8. Install production tubing, remove BOPE and install wellhead.
9. Return well to service.

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

Operator Southern California Gas Co, Well No. Porter 42-B, API No. 037-21877,

Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

Location 2,666.68' South and 2,519.60' West from Station 84
(Give surface location from property or section corner, or street center line and/or Lambert coordinates)

Elevation of ground above sea level 1963 feet.

All depth measurements taken from top of Kelly Bushing which is 22 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, Division 3 of the Public Resources Code, the information given herewith is a complete and correct record of the present condition of the well and all work done thereon, so far as can be determined from all available records.

Date June 30, 1979

Signed P. S. Magruder, Jr.
Title Agent

D. S. Smiley
(Engineer or Geologist)

Commenced drilling December 9, 1978

Completed drilling February 11, 1979

Total depth (1st hole) 7,816' (2nd) - (3rd) -

Present effective depth 7,816'

Junk None

GEOLOGICAL MARKERS

DEPTH

S-4

7600'

DIVISION OF OIL AND GAS
RECEIVED

SEP 20 1979

SANTA PAULA, CALIFORNIA

Formation and age at total depth Miocene

Commenced producing - Flowing/gas lift/pumping
(Date) (Cross out unnecessary words)

Name of producing zone Sesnon

Initial production

Production after 30 days

Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
Gas Storage Well					

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	Grade and Type of Casing	New or Second Hand	Size of Hole Drilled	Numbers of Sacks or Cubic Feet of Cement	Depth of Cementing if through perforations
3-3/8"	1020'	Surf.	54.5	K-55 Buttress	New	17-1/2"	1058 CF	-
8-5/8"	7610'	Surf.	36	N-80 Buttress & K-55 LT&C	New	12-1/4"	1853 CF	-
5-1/2"	7811'	7441'	20	K-55 LT&C Screen Liner	New	7-5/8" Opened To 15"	Gravel Packed	-

PERFORATED CASING

(Size, top, bottom, perforated intervals, size and spacing of perforation and method.)

8-5/8" - Jet perforated four 1/2" HPF 7500' cp'd, and 7498' WSO
5-1/2" - .010" wire wrapped screen 7461'-7498' and 7585'-7799'

Was the well directionally drilled? Yes If yes, show coordinates at total depth 982' North and 232' East

Electrical log depths 7575', 7610' & 7816' Other surveys Density and Neutron Logs

SUBMIT IN DUPLICATE
RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS
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SEP 20 1979

History of Oil or Gas Well

SANTA PAULA, CALIFORNIA

Operator... Southern California Gas Co. Field or County ... Aliso Canyon
Well... Porter #42-B , Sec. 28 , T. 3N. , R. 16W. , SB. B. & M.
A.P.I. No. 037-21877 Name... P.S. Magruder, Jr. Title Agent
Date... February 27, 1979, 19
(Person submitting report) (President, Secretary or Agent)

PSM
Signature... *P.S. Magruder Jr.*
P.S. Magruder Jr.

... P.O. Box 3249 Terminal Annex, Los Angeles, Ca. 90051 (213) 689-3561
(Address) (Telephone Number)

History must be complete in all detail. Use this form to report all operations during drilling and testing of the well or during redrilling or altering the casing, plugging, or abandonment with the dates thereof. Include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests and initial production data.

Date
1978

Program: Move Kenai-Camrich drilling Co. rig #23 onto wellsite which is 2,666.68' South and 2,519.6' West of Station #84, Aliso Canyon gas storage field.

Drill and complete as a gas storage well in the S-4 and S-8 sands with an approximate bottom hole location of 980' North and 230' West of surface location.

- 12-4 12-4 through 12-8-78, moved Kenai-Camrich Rig #23 onto wellsite and rigged up.
- 12-9 ODay. Completed rig up. Mixed mud and drilled rat hole with Dyna-drill. Spudded in at 4:00 p.m., December 9, 1978. Drilled 17 1/2" hole to 206'.
Mud wt. 64#, Vis. 58 sec.
- 12-10 1st Day. Drilled 17 1/2" hole from 206' to 581' with bit #1 and to 737' with bit #2.
Mud wt. 72#, Vis. 52 sec., W.L. 14.8cc., solids 14%.
- 12-11 2nd Day. Drilled 17 1/2" hole from 737' to 995' with bit #2 and to 1,020' with bit #3. Circulated hole clean and pulled out to run 13 3/8" casing. Ran 26 joints of 13 3/8" K-55 Buttress casing equipped with a B & W float guide shoe, 3 scratchers, 2 centralizers and a stop ring in top of first collar. Total on hook 1,023.26' including shoe.
- 12-12 3rd Day. With 13 3/8" casing shoe at 1,020' and stop ring at 984', Dowell cementers pumped 100 cu.ft. of water with green dye ahead of

History of Well Report for Porter #42-B, Aliso Canyon

1978
12-12

continued

438 sacks of class "G" cement plus 8% gel and 3% calcium chloride, and followed by 200 sacks of class "G" cement plus 3% calcium chloride. Displaced with 857 cu.ft. of mud. Bumped plug with 750 psi. Cement in Place at 4:10 a.m.. Had approximately 200 cu.ft. of cement return to surface. Landed casing, welded on casing head and X-rayed same.

12-13

4th Day. Installed BOPE and tested blank rams to 2,700 psi with water and nitrogen for 20 minutes, ok. Made up drilling assembly and ran in hole. Pressure tested pipe rams, "GK" Hydril, upper and lower Kelly cocks, standpipe valves, and manifold to 2,700 psi with water and nitrogen for 20 minutes, ok. Witnessed and approved by D.O.G.

Mud wt. 71#, Vis. 40 sec., W.L. 14.4cc., solids 14%, sand 2%.

12-14

5th Day. Drilled 12 1/4" hole from 1,020' to 1,363' with bit #4 and to 1,630' with bit #5.

Mud wt. 75#, Vis. 42 sec., W.L. 8.4cc., sand 2%, solids 14%.

12-15

6th Day. Drilled 12 1/4" hole from 1,630' to 1,840' with bit #5 and to 2,093' with bit #6. Down three hours packing swivel.

Mud wt. 73#, Vis. 45 sec., W.L. 8.7cc., sand 1%, solids 14%.

12-16

7th Day. Drilled 12 1/4" hole from 2,093' to 2,150' with bit #6 and to 2,405' with bit #7. Down three hours repairing main drive sprocket.

12-17

8th Day. Drilled 12 1/4" hole from 2,405', to 2,763' with bit #8 and to 2,991' with bit #9.

Mud wt. 71#, Vis 42 sec., W.L. 9.2cc., sand 1/2%, solids 11%.

12-18

9th Day. Drilled 12 1/4" hole from 2,991' to 3,031' with bit #9, to 3,279' with bit #10, and to 3,390' with bit #11.

Mud wt. 73#, Vis 42 sec., W.L. 9.2cc., sand 1/2% solids 11%.

12-19

10th Day. Drilled 12 1/4" hole from 3,390' to 3,529' with bit #11 and to 3,778' with bit #12.

Mud wt. 72#, Vis 40 sec., W.L. 8.6cc., sand 1/2% solids 9%.

12-20

11th Day. Drilled 12 1/4" hole from 3,778' to 4,155' with bit #13. Dyna-drilled 12 1/4" hole from 4,155' to 4,180' with bit #14 on Dyna-drill #1.

Mud wt. 72#, Vis 39 sec., W.L. 8.4cc., Sand 1/2%, solids 8%.

12-21

12th Day. Dyna-drilled 12 1/4" hole from 4,180' to 4,208' with bit #15 and to 4,244' with bit #16 on Dyna-drill #1-B.

Mud wt. 72#, Vis. 40 sec., W.L. 7.6cc., sand 1/2%, solids 7%.

History of Well Report for Porter #42-B, A so Canyon

- 12-22 13th Day. Dyna-drilled 12 1/4" hole from 4,244' to 4,305' with bit #17 and to 4,312' with bit RR#16 on dyna-drills #1-C and #1-D guided by Eastman "DOT" tool.
- Mud wt. 71#, Vis, 38 sec., W.L. 7.5cc., sand 1/4%, solids 7%.
- 12-23 14th Day. Dyna-drilled 12 1/4" hole from 4,312' to 4,367' with RR bit #16 on Dyna-drill #1-D. Directionally drilled 12 1/4" hole to 4,394' with bit #18.
- Mud wt. 71#, Vis 40 sec., W.L. 6.8cc., sand 1/4%, solids 6%.
- 12-24 15th Day. Directionally drilled 12 1/4" hole from 4,393' to 4,463' with bit #18. Ran in with Dyna-drill #2 and bit #19.
- Mud wt. 70#, Vis. 38 sec., W.L. 6.9cc., sand 1/45, solids 6%.
- 12-25 16th Day. Dyna-drilled 12 1/4" hole from 4,463' to 4,514' with bit #19 on Dyna-drill #2. Directionally drilled 12 1/4" hole from 4,514' to 4,553' with bit #20.
- 12-26 17th Day. Directionally drilled 12 1/4" hole from 4,553' to 4,804' with bit #20 and to 5,075' with bit #21. Reamed from 4,800' with bit #22.
- Mud wt. 70#, Vis. 40 sec., W.L. 7.2cc., sand 3/4%, solids 8%.
- 12-27 18th Day. Reamed from 4,831' to 5,075'. Directionally drilled 12 1/4" hole from 5,075' to 5,337' with bit #22 and to 5,451' with bit #23.
- Mud wt. 70.5#, Vis. 43 sec., W.L. 6.4cc., sand 3/4%, solids 8%.
- 12-28 19th Day. Directionally drilled 12 1/4" hole from 5,451' to 5,714' with bit #23 and to 5,929' with bit #24.
- Mud wt. 72#, Vis 42 sec., W.L. 7.0cc., sand 1/2% solids 8%.
- 12-29 20th Day. Dyna-drilled 12 1/4" hole from 5,929' to 5,953' with bit #25 and to 5,955' with bit #26 on Dyna-drill #3 guided by Eastman "DOT" tool.
- Mud wt. 72.5#, Vis. 42 sec., W.L. 7.7cc., sand 1/2%, solids 8%.
- 12-30 21st Day. Dyna-drilled from 5,955' to 5,977' with bit #26 and to 6,002' with bit #27 on Dyna-drill #3 guided by Eastman "DOT" tool.
- Mud wt. 72.5#, Vis. 47 sec., W.L. 7.4cc., sand 1/2%, solids 8%.
- 12-31 22nd Day. Directionally drilled 12 1/4" hole from 6,002' to 6,435' with bit #28.
- Mud wt. 72.5#, Vis. 44 sec., W.L. 6.4cc., sand 1/2%, solids 8%.

History of Well Report for Porter #42-B, Aliso Canyon

1-1

23rd Day. Directionally drilled 12 1/4" hole from 6,435' to 6,836' with bit #29.

Mud Wt. 72#, Vis. 36 sec.

1-2

24th Day. Directionally drilled 12 1/4" hole from 6,836' to 6,991' with bit #30. While running directional survey at 6,991', piano wire survey line parted leaving over 6,000' of wire inside drill pipe. Started to pull drill pipe and main drive in gear box failed. Shut down for repairs.

Mud wt. 72#, Vis. 40 sec., W.L. 6.6cc., sand 1/2%, solids 8%.

1-3

25th Day. Repairing rig

1-4

26th Day. Repairing rig.

1-5

27th Day. Repairing rig.

1-6

28th Day. Repairing rig.

1-7

29th Day. Finished repairing rig at 9:00 p.m.. Circulated through stuck pipe at 6,950' for 2 hours. Spotted 3 barrels of Baroid "XMDL" and "Torque Trim" around bottom hole drilling assembly.

Mud wt. 72#, Vis. 46 sec., W.L. 8.6cc., sand 1/2%, solids 9%.

1-8

30th Day. Worked stuck pipe. Pumped 140 bbls of oil down drill pipe and displaced with 525 cu.ft. of drilling fluid. Top of oil at 5,750'. Rigged up Archer Reed to retrieve .092" wireline from inside 4 1/2" drill pipe. Retrieved only 300' and could not find wireline again. At 9:00 p.m., pumped 634 cu.ft. of drilling fluid down drill pipe and moved top of oil to 4,400', bottom of oil at 5,750'. Rigged up Dia-Log and ran spear which became stuck at 6,730'.

1-9

31st Day. Continued jarring on spear and pulled out of rope socket. Ran overshot and latched onto spear. Pulled out of rope socket and left fishing tools inside drill collars. Ran free point but could not go past 3,920'. Retrieved approximately 3,000' of .092" wireline. Ran overshot and could not pull tools out. Top of wireline fish at 6,855'. Ran free point. 4 1/2" pipe stuck at 5,274'. Circulated and conditioned mud.

Mud wt. 71#, Vis. 40 sec., W.L. 6.4cc., sand 1/2%, solids 9%, oil 6%.

1-10

32nd Day. Circulated and conditioned mud. Spotted 70 bbls of oil around drill collars and heavy wall drill pipe. Ran a free point and backed off drill pipe at 5,240'. Ran jars and bumper sub with screw in sub on bottom of six drill collars.

1-11

33rd Day. Jarred on fish and ran Dia-Log "freepoint". Pipe free at 5,955'. Backed off at 5,933' wireline measurement. Recovered 692' of fish. Made up and ran new fishing tools. Found top of fish at 5,841' drillers depth.

History of Well Report for Porter #42-B, All Canyon

1979

1-12

34th Day. Jarred on fish and ran a "feeler" on Dia-Log freepoint. Would not go past 5,955'. Ran an "Impression" block on Dia-Log wireline, results inconclusive. Ran a wireline spud bit and drilled on obstruction to 6,208'. Ran a Cavins wireline junk bailer to 6,208'. First run okay. Second run bailer came off sinker bars. Chased bailer to top of other fish inside 4 1/2" drill pipe. Top of inside fish now at 6,835'.

1-13

35th Day. Ran Dia-Log wireline "freepoint" and backed off at 6,264'. Recovered 336' of heavy wall drill pipe. Ran back in and jarred on fish now at 6,264'.

1-14

36th Day. Jarred on fish and had a slight movement at 2:00 a.m. Fish came free at 4:00 a.m. Pulled out of hole with fish. Made up drilling assembly.

1-15

37th Day. Ran bit #31. Circulated and conditioned mud at 6,000'. Reamed from 6,000' to 6,991'. Circulated and conditioned mud at 6,991'. Directionally drilled 12 1/4" hole from 6,991' to 7,156' with bit #31.

Mud wt. 70#, Vis. 46 sec., W.L. 5.8cc., sand 1/2%, solids 8%.

1-16

38th Day. Wiped hole four stands at 7,156'. Directionally drilled 12 1/4" hole from 7,156' to 7,185' with bit #31 and to 7,344' with bit #32. Wiped hole four stands at 7,265'.

Mud wt. 72#, Vis. 48 sec., W.L. 5.6cc., sand 1/2%, solids 9%.

1-17

39th Day. Directionally drilled 12 1/4" hole from 7,344' to 7,575' with bit #33.

Mud wt. 72#, Vis. 47 sec., W.L. 5.8cc., sand 1/2%, solids 9%

1-18

40th Day. Circulated well clean. Pulled out with bit #33 to 1,000' and ran in to 7,575'. Circulated and conditioned drilling fluid. Pulled out. Ran Welex Induction Log and Caliper from 7,575' to 1,000'.

Mud wt. 72#, Vis. 44 sec., W.L. 5.8cc., sand 1/2%, solids 9%.

1-19

41st Day. Directionally drilled 12 1/4" hole from 7,575' to 7,610' with bit #33. Circulated and conditioned mud at 7,610'. Pulled up to 6,780' and ran back to 7,610'. Circulated hole clean (no fill). Pulled out and ran Welex Induction and Caliper Log from 7,610' to 5,500'.

1-20

42nd Day. Circulated and conditioned mud at 7,610'. Wiped hole from 7,610' to 6,780'. Pulled out and laid down all 12 1/4" tools. Changed rams to 8 5/8" and pulled bit guide. Rigged up and ran 8 5/8" casing as follows: 86 joints of 8 5/8" N-80 36# buttress which measured 3,527.81' and 98 joints of 8 5/8" K-55 36# LT&C which measured 4,104.73', for a total on hook measurement of 7,632.54'. The bottom 24 joints were grit blasted. There were two centralizers and three scratcher clusters installed on the bottom three joints and centralizers were installed on every other joint up to the shoe of the 13 3/8" surface casing. A B&W guide shoe was installed on the bottom and a float collar on top of the first three joints which were treated with thread lock compound.

Mud wt. 72#, Vis 48 sec., W.L. 5.8cc., sand 1/2%, solids 9%.

1979

- 1-21 43rd Day. Finished running 8 5/8" casing to 7,610'. Circulated and reciprocated pipe. Added inhibitor while circulating. Cemented 8 5/8" casing shoe at 7,610' as follows: 500 cu.ft. of "CWT" wash followed with 1,200 cu.ft. of 1.1 class "G" cement treated with "Litepoz 7" premixed with 1.0% "D-65" and 0.5% "D-60", followed with 350 sacks of class "G" cement with 0.75% "D-65" and 0.5% "D-60", followed with 250 cu.ft. of "Self Stress" with 0.5% "D-65" and 0.2% "D-108". Used top and bottom plugs. Reciprocated pipe while displacing cement. Cement in Place at 2:33 p.m. Set slips with hook load of 270,000# and cut off 8 5/8" casing. Installed 8" 5,000# seal flange and tubing head. Reinstalled BOPE.
- 1-22 44th Day. Tested blank rams, choke manifold and Kelly cock to 4,000 psi with water and nitrogen for 20 minutes, tested ok.
- 1-23 45th Day. Pressure tested BOPE, pipe rams to 4,000 psi for 20 minutes with water and nitrogen. Tested "GK" Hydril to 2,700 psi with water and nitrogen and all tested ok. Drilled out cement from 7,401' to 7,590' with bit #34. Circulated and pulled out of well to run Cement Bond Log.
- Mud wt. 72#, Vis. 40 sec., W.L. 8.6cc., sand trace, solids 8%.
- 1-24 46th Day. Ran Welex Neutron Cement Bond Log and recorded from 7,594' to 3,110'. Ran in well with casing scraper and displaced clay-water drilling fluid with 72# "HEC" brine-polymer completion fluid. Shot four 1/2" holes at 7,500' and pressure tested holes. Had 600 psi build up then pressure fell back to zero. Pumped away 50 cu.ft. per minute.
- Mud wt. 72#, Vis. 38 sec., W.L. 9.0cc., solids 8%.
- 1-25 47th Day. Ran in well with Halliburton "E-Z" drill retainer to 7,512' and spotted 100 cu.ft. of water. Pulled up to 7,392' and set packer. Obtained breakdown of 1 cu.ft. per minute at 2,500 psi. Squeezed away 40 cu.ft. of 13% acid (10% HCL and 3% HF) with a final breakdown of 10 cu.ft. per minute at 1,800 psi. Squeezed away 89 cu.ft. of class "G" cement with 0.75% "D-65". Final squeeze pressure was 2,500 psi.
- 1-26 48th Day. Ran in well and drilled out retainer and cement from 7,390' to 7,463' with bit #35 and to 7,478' with bit #36.
- Mud wt. 72#, Vis. 41 sec., W.L. 9.2cc., solids 9%, sand trace.
- 1-27 49th Day. Drilled on "E-Z" drill retainer and cement from 7,493' to 7,520' with bit #37. Pressure tested shot holes from 7,500' to 7,501' at 2,500 psi for 20 minutes, OK. Shot four 1/2" holes 7,498' - 7,499'. Pressure tested holes on two tests to 2,500 psi for 20 minutes each with Dowell cementing truck. Ran WSO with Lynes test tools. Packer set at 7,434' with tail to 7,452'. Opened tool at 11:00 p.m. Had a two minute blow then dead for balance of one hour test, Witnessed and approved by D.O.G. Had 20' fluid rise. Initial pressure 50 psi, final flow pressure, 50 psi. Hydrostatic pressure 3,700 psi.

1979

History of Well Report for Porter #42-B, Aiso Canyon

- 1-28 50th Day. Ran in and drilled out remaining cement and cement guide shoe at 7,610'. Drilled 7 5/8" hole from 7,610' to 7,712' with bit #38.
Mud wt. 73#, Vis. 39 sec., W.L. 8.8cc., solids 9%.
- 1-29 51st Day. Drilled 7 5/8" hole from 7,712' to 7,763' with bit #39 and to 7,799' with bit #40.
Mud wt. 72#, Vis. 41 sec., W.L. 8.6cc., solids 9%.
- 1-30 52nd Day. Drilled 7 5/8" hole from 7,799' to 7,816' T.D. with bit #40. Ran "IES" Log and Density Neutron Log. Opened 7 5/8" hole to 15" from 7,610' to 7,630' with hole opener #1.
Mud wt. 72#, Vis 38 sec., W. L. 9.6cc., solids 9%.
- 1-31 53rd Day. Opened 7 5/8" hole to 15" from 7,630' to 7,642' with hole opener #2, and to 7,655' with hole opener #3.
Mud wt. 72#, Vis. 43 sec., W.L. 9.2cc., solids 9%.
- 2-1 54th Day. Opened 7 5/8" hole to 15" from 7,655' to 7,704' with hole opener #3, and to 7,747' with hole opener #4.
Mud wt. 72#, Vis. 40 sec., W.L. 9.2cc., solids 8%.
- 2-2 55th Day. Opened 7 5/8" hole to 15" from 7,747' to 7,764' with hole opener #5 and to 7,789' with hole opener #6.
Mud wt. 72#, Vis. 45 sec., W.L. 9.2cc., solids 8%.
- 2-3 56th Day. Opened 7 5/8" hole to 15" from 7,789' to 7,798' with hole opener #7. Made a clean out run and cleaned out fill from 7,798' to 7,816' with rerun 7 5/8" bit #38.
Mud wt. 72#, Vis. 42 sec., W.L. 9.4cc., solids 8%.
- 2-4 57th Day. Ran in hole with hole opener #8 and could not get through casing shoe at 7,610'. Ran 7 5/8" bit #RR38 and cleaned out through 8 5/8" casing shoe. Ran hole opener #8, tool would not open at 7,798'. Pulled out for new hole opener.
Mud wt. 72#, Vis. 45 sec., W.L. 9.4cc., solids 8%.
- 2-5 58th Day. Opened 7 5/8" hole to 15" from 7,798' to 7,816' with hole opener #9. Ran a sharp 15" hole opener #10 and gage reamed from 7,610' to 7,816'. Ran Dresser Atlas Caliper Log with bore hole volume integretor and recorded from 7,816' to 7,560'.

DIVISION OF OIL AND GAS
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SEP 20 1979

SANTA PAULA, CALIFORNIA

1979

History of Well Report for Porter #42-B, Aliso Canyon

- 2-6 59th Day. Ran 7 5/8" bit to 7,816'. Pulled up to 8 5/8" casing shoe and cleaned mud tanks. Changed over completion fluid to 63# filtered polymer-brine gravel pack fluid. Ran 10 joints of 5 1/2" 20# liner as follows: 1 blank 10' pup joint with a bull plug on bottom followed by 5 joints of wire wrap for 218.68' followed by 2 blank joints for 83.25' followed by 1 wire wrap for 41.50' and 10' pup joint on top with a 7' Burns Liner Hanger with lead seal for a total of 367'. Liner equipped with five 5 1/2" x 15" centralizers and the 2 blanks with weld on centralizers. Hung liner 5' off bottom. Top of liner at 7,443' and bottom at 7,811'.
- Mud wt. 63#, Vis. 38 sec., W.L. 10.6cc., solids 4%.
- 2-7 60th Day. Tested port collar to 1,000 psi. Opened port collar and circulated before gravel packing. Gravel packed with 30 sacks and pressured up to 900 psi. Reverse circulated out approximately 10 sacks of gravel. Gravel packed at 15 to 20 sacks per hour. Gravel packed liner with 272 sacks of 20 x 40 Monterey gravel and had a pack off of 1,000 psi. Reverse circulated and tested port collar to 900 psi.
- Mud wt. 63#, Vis. 36 sec., W.L. 10.4cc., solids 4%.
- 2-8 61st Day. Pulled out gravel packing tools and ran in with wash tool and washed liner. Laid down wash tool and ran gravel packing tool. Had a pack off of 1,000 psi, unable to displace more gravel. Ran Dresser Atlas "photon" log.
- 2-9 62nd Day. Finished running Dresser Atlas "photon" log. Ran A Baker "Retrieva-D" packer on Wellex wireline and set at 7,400'. Laid down 4 1/2" drill pipe and 6" drill collars.
- 2-10 63rd Day. Unloaded and measured 3 1/2" tubing. Changed 4 1/2" pipe rams in BOPE to 3 1/2". Changed collars on 30 joints of 3 1/2" N-80 tubing. Picked up and ran tubing with 2 seals and locator sub. Set 20,000# on 8 5/8" 36# packer at 7,403'. Closed pipe rams and tested packer to 1,500 psi for 20 minutes, test was ok.
- 2-11 64th Day. Hydrotested tubing to 5,000 psi. Spaced out and landed 65 joints of 3 1/2" N-80 EUE tubing and 175 joints of J-55, 3 1/2" tubing and an 8' J-55 pup joint on top. Landed with 20,000# on packer at 7,403' tubing measurements and 7,400' wireline measurements. Installed xmas tree and tested to 5,000 psi for 20 minutes. Displaced brine-polymer completion fluid with 450 bbls of waste lease brine. Retightened all xmas tree nuts. Released rig at 11:59 p.m., 2-11-79.

SOUTHERN CALIF. GAS CO. --- PORTER 42-B ---EASTMAN SINGLE SHOT
ALISO CANYON FIELD, CA.
SEC BEAR: N 13 30 E
DECL: 16 0 E
DECEMBER 1978-JANUARY 1979
JOB NO: P-1278-D0304
SURVEY BY: EASTMAN WHIPSTOCK, INC.
FILE: F132-10
HANDLY

VERTICAL SECTION CALCULATED IN PLANE OF PROPOSAL.
DIRECTION: N 71 DEG. 0 MIN. E

RECORD OF SURVEY

ANGLE AVERAGING METHOD

DIVISION OF OIL AND GAS
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SEP 20 1979

SANTA PAULA, CALIFORNIA

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	SUBSEA TVD FEET	R E C T A N G U L A R C O R D I N A T E S FEET	DOG LEG SEVERITY DG/100FT
0.	0 0	0	0.00	0.00	-1986.00	0.00	0.00
146.	0 45	S 56 W	146.00	-0.92	-1840.00	0.53 S	0.79 W
238.	1 15	S 59 W	237.98	-2.48	-1748.02	1.40 S	2.15 W
386.	1 30	N 81 W	385.94	-6.00	-1600.06	2.07 S	5.63 W
598.	1 45	N 88 W	597.86	-11.47	-1388.15	1.50 S	11.62 W
782.	1 15	S 57 W	781.79	-16.28	-1204.21	2.79 S	16.26 W
935.	1 0	S 71 W	934.76	-19.26	-1051.24	4.10 S	18.96 W
1020.	0 45	N 67 W	1019.75	-20.47	-966.25	4.06 S	20.26 W
1220.	1 0	S 70 W	1219.73	-23.33	-766.27	3.98 S	23.31 W
1437.	3 0	S 43 W	1436.60	-30.67	-549.40	8.16 S	29.62 W
1530.	2 45	S 39 W	1529.48	-34.71	-456.52	11.68 S	32.68 W
1630.	2 45	S 39 W	1629.36	-38.77	-356.64	15.41 S	35.70 W
1810.	2 15	S 49 W	1809.19	-45.77	-176.81	21.05 S	41.16 W
1976.	1 45	S 56 W	1975.09	-51.26	-10.91	24.58 S	45.75 W
2145.	1 45	S 66 W	2144.01	-56.35	158.01	27.08 S	50.27 W
2314.	1 15	S 59 W	2312.96	-60.72	326.96	29.13 S	54.19 W
2405.	1 15	S 79 W	2403.93	-62.71	417.93	29.84 S	56.04 W
2593.	1 0	S 74 W	2591.90	-66.38	605.90	30.70 S	59.63 W
2763.	0 45	S 66 W	2761.88	-68.98	775.88	31.59 S	62.07 W
3003.	0 45	S 81 W	3001.86	-72.11	1015.86	32.48 S	65.09 W
3190.	0 45	N 77 W	3188.84	-74.40	1202.84	32.39 S	67.53 W
3388.	0 45	N 84 W	3386.82	-76.68	1400.82	31.97 S	70.09 W
3529.	0 30	N 83 W	3527.82	-78.06	1541.82	31.79 S	71.62 W
3715.	0 45	N 81 W	3713.81	-79.87	1727.81	31.51 S	73.63 W
3934.	0 45	N 76 W	3932.79	-82.34	1946.79	30.94 S	76.43 W
4117.	1 0	N 77 W	4115.77	-84.70	2129.77	30.29 S	79.15 W
4148.	1 0	S 81 W	4146.76	-85.20	2160.76	30.27 S	79.69 W
4179.	2 0	N 79 W	4177.75	-85.97	2191.75	30.25 S	80.50 W
4261.	5 0	N 31 W	4259.60	-88.91	2273.60	27.38 S	84.60 W
4325.	5 30	N 2 W	4323.33	-88.65	2337.33	21.77 S	86.27 W

MEASURED DEPTH FEET	DRIFT ANGLE D M	DRIFT DIRECTION D	TRUE VERTICAL DEPTH FEET	VERTICAL SECTION FEET	SURSEA TVD FEET	R E C T A N G U L A R C O O R D I N A T E S FEET	D O G L E G S E V E R I T Y D G / 1 0 0 F T
4401.	7 15	N 1 E	4398.86	-85.98	2412.86	13.33 S 86.34 W	2.34
4463.	8 45	N 1 W	4460.26	-83.17	2474.26	4.70 S 86.34 W	2.46
4553.	10 45	N 11 E	4548.96	-76.97	2562.96	10.48 N 85.01 W	3.16
4647.	12 0	N 11 E	4641.11	-67.70	2655.11	28.68 N 81.48 W	1.33
4804.	14 30	N 14 E	4793.93	-48.90	2807.93	63.81 N 73.69 W	1.65
4898.	16 0	N 16 E	4884.62	-35.07	2898.62	87.70 N 67.29 W	1.69
4990.	17 15	N 17 E	4972.77	-19.79	2986.77	112.94 N 59.81 W	1.39
5083.	19 0	N 19 E	5061.16	-2.37	3075.16	140.45 N 50.87 W	2.00
5182.	18 45	N 21 E	5154.84	17.78	3168.84	170.55 N 39.92 W	0.70
5335.	18 0	N 22 E	5300.04	49.10	3314.04	215.42 N 22.24 W	0.53
5460.	17 15	N 26 E	5419.17	74.92	3433.17	250.00 N 6.85 W	1.14
5589.	16 30	N 25 E	5542.61	101.16	3556.61	283.80 N 9.27 E	0.62
5712.	16 15	N 25 E	5660.62	125.25	3674.62	315.22 N 23.93 E	0.20
5803.	18 0	N 28 E	5747.59	144.36	3761.59	339.20 N 35.89 E	2.15
5929.	21 0	N 28 E	5866.36	175.12	3880.36	376.34 N 55.63 E	2.38
5967.	20 30	N 18 E	5901.90	184.13	3915.90	388.73 N 60.89 E	9.40
6060.	20 30	N 14 E	5989.01	202.81	4003.01	420.04 N 69.87 E	1.51
6214.	21 0	N 15 E	6133.02	232.93	4147.02	472.86 N 83.53 E	0.40
6375.	20 45	N 16 E	6283.45	265.42	4297.45	528.15 N 98.86 E	0.27
6528.	20 15	N 18 E	6426.76	296.92	4440.76	579.39 N 114.53 E	0.56
6739.	20 0	N 16 E	6624.88	339.59	4638.88	648.81 N 135.75 E	0.35
6867.	19 0	N 16 E	6745.54	364.10	4759.54	689.89 N 147.53 E	0.78
6991.	19 15	N 15 E	6862.69	387.11	4876.69	729.03 N 158.39 E	0.33
7185.	18 45	N 16 E	7046.12	422.88	5060.12	789.90 N 175.27 E	0.31
7344.	18 45	N 16 E	7196.69	452.20	5210.69	839.03 N 189.35 E	0.00
7575.	18 45	N 16 E	7415.43	494.79	5429.43	910.40 N 209.82 E	0.00
7600.	18 45	N 16 E	7439.10	499.40	5453.10	918.13 N 212.04 E	0.00
7712.	18 0	N 17 E	7545.39	519.90	5559.39	951.98 N 222.06 E	0.73
7816.	17 15	N 18 E	7644.51	538.63	5658.51	982.01 N 231.53 E	0.78

FINAL CLOSURE - DIRECTION: N 13 DEGS 16 MINS E
 DISTANCE: 1008.94 FEET

Eastman
Whipstock

SCALE

DEPTH - 7816'
NORTH - 982.01'
EAST - 231.53'
CLOSURE - 1008.94' N 13° 16' E

4117'
3003'
2145'

JOB N° P-0279-00304

PORTER 40 B

DIVISION OF OIL AND GAS

Report on Operations

Mr. P. S. Magruder, Jr., Agent
Southern Calif. Gas Co.
P.O. box 54790 Terminal Annex
Los Angeles, CA 90054

Santa Paula, Calif.
Feb. 2, 1979

Your operations at well "SFZU" P-42B, API No. 037-21877, Sec. 28 T. 3NR.16W
S.B., B. & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 1/28/79 by T. E. Adams, representative of the supervisor, was
present from 0200 to 0600. There were also present Al Colbert, contract foreman

Present condition of well: additions to the casing record since Report No. T278-396:
8 3/4" cem. 7610' perf. 7498' WSO, T.D. 7610'.

The operations were performed for the purpose of demonstrating a water shut-off on the 8 3/4"
casing by means of a formation tester.

DECISION:

THE 8 3/4" SHUT-OFF AT 7498' IS APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor
By John L. Hardin
Deputy Supervisor
John L. Hardin

DIVISION OF OIL AND GAS

Report on Operations

Mr. P. S. Magruder, Jr., Agent
Southern Calif. Gas Co.
P.O. Box 54790 Terminal Annex
Los Angeles, CA 90054

Santa Paula, Calif.
Dec. 18, 1978

Your operations at well "SEZU" P-42B, API No. 037-21877, Sec. 28, T 3N, R. 16W
S.B.B. & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 12/13/78 by T. E. Adams, representative of the supervisor, was
present from 1130 to 1530. There were also present Al Colbert, contract foreman

Present condition of well: 13 3/8" cem 1020', T.D. 1020'.

The operations were performed for the purpose of testing the blowout prevention equipment and installation.

DECISION:

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

b

M. G. MEFFERD
State Oil and Gas Supervisor
By John L. Hardoin
Deputy Supervisor
John L. Hardoin

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Sept. 6, 1978

Mr. P. S. Magruder, Jr., Agent
Southern Calif. Gas Co.
P.O. Box 54790, Terminal Annex
Los Angeles, CA 90054

Your proposal to drill well "SFZU" P-12B
(Name and number)
A.P.I. No. 037-21877, Section 28, T. 3N, R. 16W
S.B. B. & M., Aliso Canyon field, Los Angeles County,
dated 9-1-78, received 9-5-78, has been examined in conjunction

with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. Sufficient cement shall be pumped back of the 13 3/8" casing to fill to the surface.
2. Hole fluid of sufficient quality and quantity shall be maintained in the hole to control any subsurface condition, and a reserve supply shall be on hand for emergencies.
3. Unlined sumps, if they contain harmful waters, shall not be located over fresh water bearing aquifers.
4. Any sump used during these operations shall be thoroughly cleaned and filled with earth as soon as operations are completed.
5. Blowout prevention equipment of at least DOG Class III B-5M shall be installed on the 13 3/8" casing and maintained in operating condition at all times.
6. Blowout prevention practice drills shall be conducted at least weekly for each crew, and recorded in the log book.
7. This office shall be consulted before initiating any changes or additions to this proposed operation, or if operations are to be suspended.
8. The spacing provisions of Section 3606 shall be followed, and a directional survey shall be made.
9. THIS DIVISION SHALL BE NOTIFIED:
 - a. TO INSPECT the installed blowout prevention equipment before drilling below 1000'.
 - b. TO WITNESS a test of the 8 5/8" shut-off above the Seaman zone.

NOTE: A COPY OF THIS APPROVAL SHALL BE AVAILABLE AT THE WELL SITE DURING THE PROPOSED OPERATIONS.

Blanket Bond
JLH:b

M. G. NEFFED
State Oil and Gas Supervisor

By

John L. Hardoin
Deputy Supervisor

John L. Hardoin

SEP 5 1978

DIVISION OF OIL AND GAS
Notice of Intention to Drill New Well

This notice and indemnity or cash bond shall be filed, and approval given, before drilling begins. If operations have not commenced within one year of receipt of the notice, this notice will be considered cancelled.

SANTA PAULA, CALIFORNIA

FOR DIVISION USE ONLY					
MAP	MAP BOOK	CARDS	BOND	FORMS	
				114	121
254	99-78	✓	BB	✓	✓

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to commence drilling well No. Porter 42-B, API No. 037-21877,
(Assigned by Division)

Sec. 28, T. 3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County.

Legal description of mineral-right lease, consisting of _____ acres, is as follows: _____
(Attach map or plat to scale)

Previously submitted

Do mineral and surface leases coincide? Yes _____ No _____ If answer is no, attach legal description of both surface and mineral leases, and map or plat to scale.

Location of well _____ feet _____ along section _____ line and _____ feet _____
(Direction) (Direction)

at right angles to said line from the _____ corner of section _____ or
2715' south and 2524' west from station 84

If well is to be directionally drilled, show proposed coordinates at total depth 2069' east and 878' north
from surface location

Elevation of ground above sea level 1963 feet.

All depth measurements taken from top of Kelly Bushing which is 21 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

GAS STORAGE WELL PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS	CALCULATED FILL BEHIND CASING
13-3/8"	54.5	K-55, Butt.	Surf.	1000'	1000'	Surf.
8-5/8"	36	K-55, LT&C	Surf.	7612'	7612'	1000'
5-1/2"	20	N-80, Butt.	7485'	7810'	Gravel pack screen liner	-

(A complete drilling program is preferred and may be submitted in lieu of the above program)

Intended zone(s) of completion Seson (S-4 and S-8) 3120 psi Estimated total depth 7810'
(Name, depth and expected pressure)

It is understood that if changes in this plan become necessary we are to notify you immediately.

Address P.O. Box 3249 Term Annex Southern California Gas Company
(Street) (Name of Operator)
Los Angeles California 90051
(City) (State) (Zip)
Telephone Number (213) 689-3561
By P. S. Magruder, Jr. 9/1/78
(Name) (Date)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)