



State of California • Natural Resources Agency
Department of Conservation
Division of Oil, Gas, and Geothermal Resources
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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 44 (API NO. 03700731) PASSED TESTS REQUIRED TO ENSURE MECHANICAL INTEGRITY

Dear Mr. Schwecke:

I am writing in regard to the safety review test results for one of the 114 wells at the Aliso Canyon gas storage facility (Facility). Each of these 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 is an initial casing assessment that uses temperature and noise logs to ensure that there is no migration of fluids near the wellbore. The second battery of tests consists of a casing inspection using electromagnetic and ultra-sonic technologies, a multi-arm caliper inspection, a cement bond log, and a positive pressure test to ensure well integrity and the prevention of fluid and gas migration. 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 for the well, I find for purposes of Order 1109 and SB 380, that well Porter 44 (API No. 03700731) passed the first and second batteries of the comprehensive safety review testing regime and, as of October 11, 2016, the mechanical integrity of the well has been ensured. Accordingly, this well may be used for injection if and when I authorize injection operations to resume at the Facility, and if the well is in compliance with all other applicable requirements. I make this finding as of the date of this letter, and underscore that ongoing monitoring and testing are necessary to ensure the continued integrity of the well.

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.

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

Rec'd 12-12-16 DOGGR Ventura.

Workover SIMP
Start Date: 1/26/2016 - End Date: 3/16/2016

WELL SUMMARY REPORT

API No. 03700731

Operator Southern California Gas Company		Well Porter 44	
Field (and Area, if applicable) Aliso Canyon		County Los Angeles	Sec 28 T3N 16W S.B.B.&M.
Location of well (Give surface location from property or section corner, street center line) N/S Dist (ft): , E/W Dist (ft):			Elevation of ground above sea level:
Lat./Long. in decimal degrees, to six decimal places, NAD 83 format: Lat: 34.31260925 Long: 118.55621192			
Was the well directionally drilled? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, show coordinates (from surface location) and true vertical depth at total depth.			

Commenced drilling (date) 11/11/1955	Total depth			Depth measurements taken from top of: <input type="checkbox"/> Derrick Floor <input type="checkbox"/> Rotary Table <input checked="" type="checkbox"/> Kelly Bushing
	(1st hole)	(2nd)	(3rd)	
Completed drilling (date) 1/6/1956	** See attached report			Which is feet above ground.
Commenced production/injection (date) ** See attached report	Present effective depth			GEOLOGICAL MARKERS
Production mode: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas lift	Junk? Describe:			DEPTH
Name of production/injection zone(s) ** See attached report				** See attached report
			Formation Name	Geologic Age
			Base of fresh water	

	Clean Oil (bbl per day)	API Gravity (clean oil)	Percent Water (including emulsion)	Gas (Mcf per day)	Tubing Pressure	Casing Pressure
Initial Production						
Production After 30 days						

CASING AND CEMENTING RECORD (Present Hole)

Size of Casing (Inches API)	Top of Casing	Depth of Shoe	Weight of Casing	Grade and Type of Casing	New (N) or Used (U)	Size of Hole Drilled	Number of Sacks or Cubic Feet of Cement	Depth of Cementing (if through perforations)	Top(s) of Cement in Annulus
** See attached report for CASING RECORD**									

PERFORATED CASING (Size, top, bottom, perforated intervals, size and spacing of perforations, and method.)

** See attached report

Logs/surveys run? Yes No If yes, list type(s) and depth(s).

** See attached report

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.

Name of person filing report Tom McMahon	Telephone Number 714-398-5020	Signature <i>Thomas McMahon</i>	Date 11-14-16
Address PO Box 2300, SC9365		City/State Chatsworth, CA	Zip Code 91313-2300
Individual to contact for technical questions: Tom McMahon	Telephone Number 714-398-5020	E-Mail Address:	

OG100 (3/09)

SUBMIT IN DUPLICATE

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

Rec'd 12-12-16 DOGGR Ventura.

Workover SIMP

Start Date: 1/26/2016 - End Date: 3/16/2016

WELL SUMMARY REPORT

API No. 03700731

Operator
Southern California Gas Company

Well
Porter 44

Field (and Area, if applicable)
Aliso Canyon

County
Los Angeles

Sec 28 T3N 16W S.B.B.&M.

WELLBORES

Total Hole & Present Effective Depth

Wellbore Name Unassigned Directional Surveys		PBTD (All) (ftKB)	
Size (In)	Section Des	Act Btm (ftKB)	Act Btm (TVD) (ftKB)

PRODUCTION METHOD

Method

PRODUCTION/INJECTION DETAILS

Start Date	Activity Type	Zone

ZONES

Zone Name	Wellbore	Top (ftKB)	Btm (ftKB)

FORMATIONS

Formation Name	Geologic Age	Final Top MD (ftKB)	Final Btm MD (ftKB)

CASING RECORD (Present Hole)

Csg. Des	Run Date	OD (in)	ID (in)	Wt/Len (lb/ft)	Grade	Top Thread	Top (ftKB)	Set Depth (ftKB)	Set Depth (TVD) (ftKB)
Surface casing	1/6/1956	11 3/4	11.084	42.00	H-40		11	530	
Intermediate	3/5/2016	6.235	5.583	17.58			3,972	4,032	
Intermediate	3/4/2016	6.235	5.488	17.49			7,599	7,620	
Production casing		7	6.366	23.00	J-55		11	7,805	
Liner		5	4.408	15.00			7,636	8,042	

PERFORATIONS

Nom Hole Dia (in)	Btm - Top (ftKB)	Top (ftKB)	Btm (ftKB)	Calculated Shot Total	Zone	Wellbore	Type

LOGS

Date	Run #	Type	Top (ftKB)	Btm (ftKB)	Wellbore

SURVEYS

Wellbore Name	Description	Date	Definitive?	Job

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WELL SUMMARY REPORT

API No. 03700731

Operator Southern California Gas Company	Well Porter 44
Field (and Area, if applicable) Aliso Canyon	County Los Angeles
Sec 28 T3N 16W S.B.B.&M.	

WELLBORES

Total Hole & Present Effective Depth

Wellbore Name Unassigned Directional Surveys	PBTD (All) (ftKB)
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CASING RECORD (Present Hole)

Surface casing, Run Date: 1/6/1956

Wellbore Unassigned Directional Surveys	OD (in) 11 3/4	ID (in) 11.084	Wt/Len (lb/ft) 42.00	String Grade H-40	Top Connection	Top Depth (ftKB) 11	Set Depth (ftKB) 530	Set Depth (TV...)
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)			
Surface casing	11 3/4	11.084	42.00	H-40	519.00			

Intermediate, Run Date: 3/5/2016

Wellbore Unassigned Directional Surveys	OD (in) 6.235	ID (in) 5.583	Wt/Len (lb/ft) 17.58	String Grade	Top Connection	Top Depth (ftKB) 3,972	Set Depth (ftKB) 4,032	Set Depth (TV...)
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)			
Casing Patch	6.235	5.583	17.58		60.18			

Intermediate, Run Date: 3/4/2016

Wellbore Unassigned Directional Surveys	OD (in) 6.235	ID (in) 5.488	Wt/Len (lb/ft) 17.49	String Grade	Top Connection	Top Depth (ftKB) 7,599	Set Depth (ftKB) 7,620	Set Depth (TV...)
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)			
Casing Patch	6.235	5.488	17.49		21.27			

Production casing, Run Date: <Run Date?>

Wellbore Unassigned Directional Surveys	OD (in) 7	ID (in) 6.366	Wt/Len (lb/ft) 23.00	String Grade J-55	Top Connection	Top Depth (ftKB) 11	Set Depth (ftKB) 7,805	Set Depth (TV...)
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)			
Casing Joints			7	6.366	23.00	N-80		662.00
Casing Joints			7	6.366	23.00	J-55		3,942.00
Casing Joints			7	6.366	23.00	S-95		404.00
Casing Joints			7	6.366	23.00	N-80		1,779.00
Casing Joints			7	6.276	26.00	N-80		1,007.00

Liner, Run Date: <Run Date?>

Wellbore Unassigned Directional Surveys	OD (in) 5	ID (in) 4.408	Wt/Len (lb/ft) 15.00	String Grade	Top Connection	Top Depth (ftKB) 7,636	Set Depth (ftKB) 8,042	Set Depth (TV...)
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)			
Blank Liner			5	4.408	15.00			166.00
Slotted Liner			5	4.408	15.00			240.00

TUBING STRING (Present Hole)

Tubing, Run Date: 3/14/2016

Wellbore Unassigned Directional Surveys	Set Depth (ftKB) 7,614	String Production casing, 7,805ftKB	Cut Pull Date	Depth Cut Pull (ftKB)
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Tubing Components

Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)
Depth Correction		7	2.441		-1.50
Tubing Hanger		7	2.441		0.65
Landing Nipple	2 7/8		2.441	6.50 L-80	1.66
Tubing Pup Joint	3 11/16		2.441	6.50 L-80	18.25
Cross Over	3 3/4		2.441	L-80	1.08
Tubing	4 1/2		2.992	9.30 L-80	7,521.91
Tubing Pup Joint	4 1/2		2.992	9.30 L-80	6.17
Cross Over	4 1/2		2.441	L-80	1.10
Sliding Sleeve	3 11/16		2.312		3.07
Tubing	3 11/16		2.441	6.50 L-80	30.12
Profile Nipple	3 11/16		2.250		1.06
Tubing Pup Joint	3 11/16		2.441	6.50 L80	10.15

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

Rec'd 12-12-16 DOGGR Ventura.

WELL SUMMARY REPORT

API No. 03700731

Operator Southern California Gas Company	Well Porter 44	
Field (and Area, if applicable) Aliso Canyon	County Los Angeles	Sec 28 T3N 16W S.B.B.&M.

Tubing Components					
Item Des	OD (in)	ID (in)	Wt (lb/ft)	Grade	Len (ft)
Packer	5 1/4	2.441			7.40
Mule Shoe Guide	3 11/16	2.875			0.44

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

Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

Field: Aliso Canyon County: Los Angeles

Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon

Title: SIMP Project Manager

(President, Secretary, or Agent)

Telephone Number: 714-398-5020

Signature: 

(Person Submitting Report)

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 this Report (DOGGR)
1/26/2016	Move in rig and equipment.
1/27/2016	Kill well.
1/28/2016	Remove master valve. Install BOPE.
1/29/2016	Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure = 977 psi. Repositioned choke and M/U 4" stainless steel return line to choke manifold from BOP and function test. Filled well with 23 bbls 8.5 ppg HEC polymer and circulated with 50 bbls. Held safety meeting with Weatherford tester and R/U BOP testing equipment. BOP equipment was inspected by DOGGR personnel. 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 equipment. Inspect all wellhead lock screws. All good. Secure well and hoist for the weekend. R.G. —
2/1/2016	Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure = 985 psi. Filled well with 27 bbls 8.5 ppg HEC polymer and circulated with 50 bbls. Well dead. Backed out hanger lock screws. R/U tubing equipment. Installed tubing pup joints and attempted to work seals free from packer, unsuccessful. Run in wellhead lock screws. Secure well until AM. Scheduled to cut tubing in the AM.
2/2/2016	Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure = 981 psi. Filled well with 9 bbls 8.5 ppg HEC polymer and circulated with 50 bbls. Well dead. Backed out hanger lock screws. R/U wireline. ran 1.75" tandem chemical cutter and attempted cut @ 7596' in 2-7/8" blast joint. Pulled chemical cutter and worked pipe to 80,000#, unable to work free. Ran 2.125" chemical cutter and cut tubing joint @ 7550' (wireline measurement). R/D wireline. Pulled out of the well laying down 111 joints of 2-7/8" J-55 EUE 8rd tubing. Secure well until AM.
2/3/2016	Held safety meeting. Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure = 981 psi. Filled well with 17 bbls 8.5 ppg HEC polymer and circulated with 25 bbls. Well dead. Continued pulling out of the well laying down 130 joints of 2-7/8" J-55 EUE 8rd tubing, (1) 2-7/8" X 4' N-80 pup joint, Camco MMG mandrel 5.250" OD, (1) 2-7/8" X 2' N-80 pup joint and chemically cut joint of 2-7/8" J-55 EUE 8rd tubing. Cleared work area. Assist in offloading tubing and fishing tools. Measure / pick up and ran in the well with (56) joints of 2-7/8" P-110 TKC tubing. Secure well until AM.
2/4/2016	Held safety meeting. Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure = 978 psi. Filled well with 10 bbls 8.5 ppg HEC polymer. Well dead. Pulled out of the well with 56 joints of 2-7/8" P-110 KCCTR tubing. M/U 3-1/2" spear assembly to stop loaded with 5.461" grapple, 3-1/2" IF box X 3-1/2" FH pin cross-over, 4-3/4" lubricated bumper sub, 4-3/4" jar, (2) 4-3/4" drill collars, 4-3/4" intensifier, 3-1/2" IF box X 2-7/8" EUE 8rd pin cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC cross-over and ran in well with (124) joints of 2-7/8" P-110 TKC tubing. Engage fish @ 3967'. Jar on fish to 80K, pulled free. Pulled out of the well with tubing and BHA. Laid down spear with the casing patch top cone. P/U ITCO spear assembly loaded with 5.461" grapple, 2-3/8" regular box X 2-7/8" regular pin, (1) 3-1/8" regular extension, 3-1/8" drill collar, 2-7/8" regular box X 2-3/8" pin cross-over, stop sub, 4-3/4" lubricated bumper sub, 4-3/4" jar, (2) 4-3/4" drill collars, 4-3/4" intensifier, 3-1/2" IF box X 2-7/8" EUE 8rd pin cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC cross-over and ran in well with (120) joints of 2-7/8" P-110 TKC tubing. Secure well until AM.
2/5/2016	Held safety meeting. Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure 978 PSI. Filled well with 5 bbls 8.5 ppg HEC polymer. Well dead. Ran in the well with (3) joints of 2-7/8" P-110 TKC tubing. Engage fish @ 3937'. Jarred @ 80K, pulled free. Pulled out of the well and L/D 30' of casing patch. Ran in the well with ITCO spear assembly loaded with 5.461" grapple, 2-3/8" regular box X 2-7/8" regular pin, (1) 3-1/8" regular extension, 2-7/8" regular box X 2-3/8" pin cross-over, stop sub, 4-3/4" lubricated bumper sub, 4-3/4" jar, (2) 4-3/4" drill collars, 4-3/4" intensifier, 3-1/2" IF box X 2-7/8" EUE 8rd pin cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC cross-over and ran in well with on (124) joints of 2-7/8" P-110 TKC tubing. Engage fish @ 3998'. Jarred @ 80K, pull free. Pulled out of the well and L/D 10' of casing patch. M/U 3-1/2" spear assembly to stop loaded with 5.461" grapple, 3-1/2" IF box X 3-1/2" FH pin cross-over, 4-3/4" lubricated bumper sub, 4-3/4" jar, (2) 4-3/4" drill collars, 4-3/4" intensifier, 3-1/2" IF box X 2-7/8" EUE 8rd pin cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC cross-over and ran in well with (124) joints of 2-7/8" P-110 TKC tubing. Engage fish @ 4008'. Jarred @ 80K, pulled free. Pulled out of the well, L/D 1' of casing patch and lower cone. P/U and ran in the well with 7" all weight casing scraper on (40) joints 2-7/8" P-110 TKC tubing. Secure well for the weekend..

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

Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

Field: Aliso Canyon County: Los Angeles

Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon

Title: SIMP Project Manager

(President, Secretary, or Agent)

Telephone Number: 714-398-5020

Signature: _____

(Person Submitting Report)

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 this Report (DOGGR)
2/8/2016	Held safety meeting. Check well pressures: SITP = 0 psi & SICP = 0 psi. Field pressure 976 PSI. Filled well with 10 bbls 8.5 ppg HEC polymer. Well dead. Ran in the well with (84) joints of 2-7/8" P-110 TKC tubing. Continued P/U (114) joints of 2-7/8" P-110 TKC tubing, tagged top of fish @ 7541' (tubing measured depth) cut was @ 7550' (wireline measured depth). Pulled out of the well with (238) joints of 2-7/8" P-110 TKC tubing and L/D 7" all weight casing scraper. Installed 11-1/16" X 7-1/16" 5M spool. R/U rotary tongs, spider slips and bowl. P/U and ran in the well with 5-3/4" wash shoe, 5-3/4" wash pipe, 5-3/4" X 4-3/4" cross-over, 4-3/4" X 2-7/8" cross-over and (41) joints of 2-7/8" P-110 TKC tubing. Secure well until AM.
2/9/2016	Held safety meeting. Check well pressure SICP=0 PSI, SITP=0 PSI. Field pressure was 961 PSI. Fill well with 10 bbls of 8.5 ppg HEC polymer. Ran in well with (194) joints of 2-7/8" P-110 TKC tubing. Went over fish (tubing measured depth) @ 7541', Ran down to top of packer. Install 7" 1-16" 5M circulating head, rig up king swivel and 2" hose to kill pump. Circulate 88 BBLS of 8.5 ppg polymer @ 3.1 BPM getting clean returns over shaker. Pulled out of the well with (238) jts 2-7/8" P-110 TKC tubing. Rig up rotary tongs, hand slips & bowl. B/O, L/D cross-overs, 5-3/4" wash pipe and rig out handling tools. Pick up, ran in the well with 5-3/4" over shot with 2-7/8" grapple, 4-3/4" bumper sub, 4-3/4" jars, (2) 4-3/4" drill collars, 4-3/4" slinger, 4-3/4" IF X 4-3/4" EUE 8rd cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC box and (215) joints of 2-7/8" TKC tubing. Secure well until AM.
2/10/2016	Held safety meeting. Check well pressure SITP=0 PSI. SICP=0 PSI. Field pressure was 934 PSI. Fill annulus with 5 bbls of 8.5 ppg HEC polymer. Ran in the well with (21) joints of 2-7/8" P-110 TKC tubing and engaged fish @ 7541' (tubing measured depth), Worked fish from 80K to 100K. Worked pipe until it pulled free. Pulled out of the well with (238) joints of 2-7/8" P-110 TKC tubing, 2-7/8" TKC to 4-3/4" IF cross-overs, 4-3/4" slinger, (2) 4-3/4" drill collars, 4-3/4" jars, 4-3/4" bumper sub, 5-3/4" over shot with 2-7/8" grapple. B/O, L/D 2-7/8" pup joints, (2) 2-7/8" SSSV, blast jts and seal assembly. Rig out circulating head. P/U, ran in well with 4-1/8" shifting / retrieving tool, cross-over, 4-3/4" bumper sub, 4-3/4" jars, (2) 4-3/4" drill collars, 4-3/4" slinger, cross-overs back to 2-7/8" TKC tubing, (238) joints of 2-7/8" TKC tubing. Engage 7" packer @ 7600', Worked packer @ 70K - 80K, packer pulled free, Packer worked up to 7575' and down to 7628', Unable to work up past 7575'. Released from packer. Pulled out of the well with (10) joints of 2-7/8" TKC tubing. Secure well until AM.
2/11/2016	Held safety meeting. Check well pressure SITP=0 PSI. SICP=0 PSI. Field pressure was 890 PSI. Fill annulus with 4 bbls of 8.5 ppg HEC polymer. Continued running in the well with (10) joints of 2-7/8" TKC tubing. Engage packer @ 7628', Worked packer @ 80K. Rig up king swivel with 2" hose, pumping 1.3 bpm @ 200 psi, while working packer. Removed king swivel and worked packer to 120K, pulled free 20 - 40K over string weight. Pulled out of the well with (238) joints of 2-7/8" TKC tubing. L/D fishing hole assembly and 7" Baker packer. Ran in the well with 7" all weight scraper and 4-3/4" bumper sub on (241) joints of 2-7/8" TKC tubing. Tagged liner top @ 7636' (tubing measured depth). Reverse circulated with 90 bbls of 8.5 ppg HEC polymer @ 3.4 bpm, 600 psi. Pulled out of the well with (10) joints of 2-7/8" P-110 TKC tubing. Secure well until AM.
2/12/2016	Held safety meeting. Check well pressure SITP=0 PSI. SICP=0 PSI. Field pressure 910 PSI. Fill annulus with 5 BBLS of 8.5 ppg HEC polymer. Pull out of the well with (231) joints of 2-7/8" P110 TKC tubing L/D bumper sub and 7" all weight casing scraper. Install 7-1/16" 5M shooting flange. R/U SDI wireline unit. Log with Gyro from 8015' to surface. R/D SDI. Ran in the well with (40) joints of 2-7/8" TKC tubing. Secure well until AM.
2/13/2016	Held safety meeting. Check well pressure SITP=0 PSI. SICP=0 PSI. Field pressure 920 PSI. Fill annulus with 10 BBLS of 8.5 ppg HEC polymer. Pull out of the well with (20) joints of 2-7/8" P110 TKC tubing. Install 7-1/16" 5M shooting flange. R/U Tiger wireline unit. Ran MIT caliper log from 7639' to surface. R/D Tiger wireline unit and shooting flange. Ran in the well with (40) joints of 2-7/8" TKC tubing. Secure well until Monday AM.

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 DEPARTMENT OF CONSERVATION
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Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

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Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

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Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon Title: SIMP Project Manager
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Start Date	Ops this Report (DOGGR)																		
2/15/2016	Held safety meeting. Check well pressure SITP=0 PSI. SICP=0 PSI. Field pressure 948 PSI. Fill annulus with 5 BBLS of 8.5 ppg HEC polymer. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. Install 7-1/16" 5M shooting flange. R/U BHI wireline unit. Ran HVRT log from 7639' to 1700'. Surfaced and repaired tools string. Re-ran to 1700' and log to surface. Repairs to unit. R/D shooting flange. Ran in the well with (40) joints of 2-7/8" TKC tubing. Secure well until AM.																		
2/16/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 924 PSI. Fill annulus with 5 BBLS of 8.5 ppg HEC polymer. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. Install 7-1/16" 5M shooting flange. R/U BHI wireline unit. Ran CBT log from 7630' to 3800'. R/D BHI wireline and shooting flange. Ran in the well with 7" retrievable bridge plug on (33) joints of 2-7/8" P110 TKC tubing and set @ 1050'. Pressure test to 500 PSI, held for 5 minutes (good). Released bridge plug and continued running in the well with (208) joints of 2-7/8" TKC tubing. Tagged top of liner @ 7639', pulled up and set retrievable bridge plug @ 7635'. Pressure tested to 500 PSI, held for 5 minutes (good). Dumped 4 sacks of sand down tubing and displaced with 44 BBLS of 8.5 ppg HEC polymer. Pulled out of the well with (10) joints of 2-7/8" P110 TKC tubing. Secure well until AM.																		
2/17/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 927 PSI. Pull out of the well with (230) joints of 2-7/8" P110 TKC tubing and RBP retrieving tool. M/U, ran in the well with 7" packer on (21) joints of 2-7/8" P110 TKC tubing and set packer @ 650'. Pressure test to 3400 PSI, charted for 30 minutes (good). Released packer and continued running in the well with (90) joints of 2-7/8" TKC tubing. Set packer @ 3500'. Pressure tested between packer @ 3500' and bridge plug @ 7635' gradually built pressure to 1000 PSI, (bled down). Pressure test annulus between packer @ 3500' and surface to 2200 PSI, charted for 30 minutes (good). Pressure between packer @ 3500' and bridge plug @ 7635' gradually built pressure to 1640 PSI, (charted pressure dropped to 1100 PSI in 30 minutes). Released packer and continued running in the well with (16) joints of 2-7/8" TKC tubing. Set packer @ 4010'. Pressure tested between packer @ 4010' and bridge plug @ 7635' to 1760 PSI, charted for 30 minutes (good). Released packer and pulled up to 3970' Pressure tested between packer @ 3970' and surface to 1760 PSI, charted for 30 minutes (good). Released packer and pulled out of the well with (4) joints of 2-7/8" P110 TKC tubing. Secure well until AM. Set depths, test start and end pressures were as follows: <table border="0"> <tr> <td>Depth</td> <td>Start PSI</td> <td>End PSI</td> </tr> <tr> <td>650' to surface</td> <td>3400 PSI</td> <td>3400 PSI</td> </tr> <tr> <td>7635'- 3500'</td> <td>1640 PSI</td> <td>1100 PSI</td> </tr> <tr> <td>3500' to surface</td> <td>2200 PSI</td> <td>2200 PSI</td> </tr> <tr> <td>7635'- 4010'</td> <td>1760 PSI</td> <td>1760 PSI</td> </tr> <tr> <td>3970' to surface</td> <td>1760 PSI</td> <td>1760 PSI</td> </tr> </table>	Depth	Start PSI	End PSI	650' to surface	3400 PSI	3400 PSI	7635'- 3500'	1640 PSI	1100 PSI	3500' to surface	2200 PSI	2200 PSI	7635'- 4010'	1760 PSI	1760 PSI	3970' to surface	1760 PSI	1760 PSI
Depth	Start PSI	End PSI																	
650' to surface	3400 PSI	3400 PSI																	
7635'- 3500'	1640 PSI	1100 PSI																	
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7635'- 4010'	1760 PSI	1760 PSI																	
3970' to surface	1760 PSI	1760 PSI																	

ANNUALS TESTS

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

Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

Field: Aliso Canyon County: Los Angeles

Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon

Title: SIMP Project Manager

(President, Secretary, or Agent)

Telephone Number: 714-398-5020

Signature: _____

(Person Submitting Report)

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 this Report (DOGGR)
2/18/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 969 PSI. Pull out of the well with (28) joints of 2-7/8" P110 TKC tubing. Set 7" packer and pressure test from 3000' to surface @ 2700 PSI, charted for 30 minutes (good). Released packer and pulled out of the well with (36) joints of 2-7/8" TKC tubing. Set packer and pressure test from 2000' to surface @ 3000 PSI, charted for 30 minutes (good). Released packer and pulled out of the well with (16) joints of 2-7/8" TKC tubing. Set packer and pressure test from 1500' to surface @ 3300 PSI, charted for 30 minutes (good). Released packer and ran in the well with (90) joints of 2-7/8" P110 TKC tubing. Set packer and pressure test from 4010' to 7635' @ 2050 PSI charted for 30 minutes (good). Release and pull out of the well with (2) joints 2-7/8" P110 TKC tubing, Set packer and pressure test from 3970' to surface @ 2150 PSI charted for 30 minutes (good). Release packer, Pull out of the well with (16) joints 2-7/8" P110 TKC tubing. Set packer and pressure test from 3500' to surface @ 2400 PSI, charted for 30 minutes (good). Release packer. Pull with (32) jts 2-7/8" P110 TKC tubing, Set packer and pressure test from 2500' to surface @ 2800 PSI, charted for 30 minutes (good). Release packer. Pull out of the well with (47) joints 2-7/8" P110 TCK tubing. Set packer and tested from 1000' to surface @ 3550 PSI, charted for 30 minutes (good). Release packer. Pull out of the well with (11) joints 2-7/8" P110 TKC tubing. Set packer and test from 650' to surface @ 3650 PSI, charted for 30 minutes (good). Release packer. Secure well until AM. Final CIT results were as follows: 650' to surface 3650 PSI, 1000' to surface 3550 PSI, 1500' to surface 3300 PSI, 2000' to surface 3000 PSI, 2500' to surface 2800 PSI, 3000' to surface 2700 PSI, 3500' to surface 2400 PSI, 3970' to surface 2150 PSI, 4010' to 7635' 2050 PSI, 3500' to 7635' pressured to 1640 PSI, bled to 1100 PSI in 30 minutes.
2/19/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 999 PSI. Pull out of the well with 2-7/8" TKC tubing and laid down 7" packer. R/D tubing equipment and work floor. R/D annular preventer and double gate BOPE. Installed 2-7/8" pup joint with hanger in wellhead and ran in lock screws. Break out tight well head bolts. Welder cut off well head bolts with chop saw. Worked wellhead spool off. Installed 11" 5M riser spool and 11" 5M double gate BOP. Tested with rig pump to 1000 PSI. Secure well until Monday.
2/22/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1013 PSI. R/D 11" double gate BOPE and riser spool. Install 11" 5M X 9 -1/16" 5M spool with casing valves, 9-1/16" X 11" 5M cross-over spool, 11" 5M double gate BOP and 11" 5M annular preventer. Packed void with plastic packing. Tested P seals and void to 300 psi low, 3100 psi high for 30 minutes (good). Continued nipping up choke line, kill line, hoses and function test BOP. Landed tubing hanger and test connections to 1500 psi (good). Pulled the tubing hanger. M/U RBP retrieving head and ran in the well with (230) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
2/23/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 955 PSI. Continued running in the well with RBP retrieving head, P/U (11) joints of 2-7/8" P110 TKC tubing. R/U king swivel and 2" hose. Reverse circulate, clean out sand with HEC polymer. Engage and release retrievable bridge plug @ 7635'. Pull out of the well with (241') joints of 2-7/8" TKC tubing and laid down 7" RBP. R/U Tiger W/L unit and 7-1/16" threaded flange. Ran 6.2" outside diameter gauge ring to 4005' (W/L measured depth) unable to work past. Changed gauge ring to 6.1" outside diameter and ran in the well, worked pst 4005' to 7639'. Pulled out of the well with 6.1" gauge ring. (Tiger needed to rehead their line). R/D wireline. Ran in the well with 2-7/8" saw tooth collar on (40) joints of 2-7/8" TKC P110 tubing. Secure well until AM.
2/24/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 908 PSI. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. R/U Tiger W/L unit and 7-1/16" threaded flange. Ran (2) MIT caliper logging tools, neither tool read correctly. R/D wireline. Ran in the well with 2-7/8" saw tooth collar on (40) joints of 2-7/8" TKC P110 tubing. Secure well until AM.
2/25/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 968 PSI. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. R/U BHI W/L unit and 7-1/16" threaded flange. Ran 60 arm multi finger caliper log from 7639' to surface. R/D wireline and flange. Ran in the well with 6.213" string mill, bit sub, (2) 4-3/4" drill collars, 4-3/4" lubricated bumper sub, 3-1/2" IF pin X 2-7/8" EUE 8rd box cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC box cross-over on (148) joints of 2-7/8" TKC P110 tubing. Secure well until AM.

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

Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

Field: Aliso Canyon County: Los Angeles

Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon

Title: SIMP Project Manager

(President, Secretary, or Agent)

Telephone Number: 714-398-5020

Signature: _____

(Person Submitting Report)

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Start Date	Ops this Report (DOGGR)
2/26/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 968 PSI. Continued running in the well with (80) joints of 2-7/8" TKC P110 tubing. R/U 2.5 power swivel and circulating head. Rotate with 6.213" string mill from 7550' to 7639' without restriction. Hung back power swivel. Pull out of the well with (238) joints of 2-7/8" P110 TKC tubing, 2-7/8" EUE 8rd pin X 2-7/8" TKC box cross-over, 3-1/2" IF pin X 2-7/8" EUE 8rd box cross-over, 4-3/4" lubricated bumper sub, (2) 4-3/4" drill collars and removed 6.213" string mill. M/U 6.303" string mill, bit sub, (2) 4-3/4" drill collars, 4-3/4" lubricated bumper sub, 3-1/2" IF pin X 2-7/8" EUE 8rd box cross-over, 2-7/8" EUE 8rd pin X 2-7/8" TKC box cross-over on (122) joints of 2-7/8" TKC P110 tubing. P/U power swivel. Rotate from 3971' to 4034' (worked through restriction @ 3998' - 4000', cleared restriction). R/D power swivel. Pull out of the well with (82) joints of 2-7/8" P110 TKC tubing. Secure well until Monday.
2/29/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 984 PSI. Continue pulling out of the well with (40) joints of 2-7/8" P110 TKC tubing, 2-7/8" EUE 8rd pin X 2-7/8" TKC box cross-over, 3-1/2" IF pin X 2-7/8" EUE 8rd box cross-over, 4-3/4" lubricated bumper sub, (2) 4-3/4" drill collars and removed 6.303" string mill (gauged mill- good). R/U Schlumberger W/L unit and 7-1/16" threaded flange. Ran Neutron/USIT log from 7639' to surface. R/D wireline and flange. Ran in the well with (40) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/1/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 964 PSI. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. P/U (1) mule shoed pup joint of 2-1/16" 4.5# CS Hydril tubing, (17) joints of 2-1/16" 4.5# CS Hydril tubing, CS Hydril pin X 2-7/8" EUE 8rd cross-over and ran in the well on (237) joints of 2-7/8" P110 TKC tubing. Reverse circulate clean from 8028' to 8039' with 90 barrels of HEC polymer. Pull out of the well with (237) joints of 2-7/8" P110 TKC tubing. Laid down CS Hydril pin X 2-7/8" EUE 8rd cross-over, (17) joints of 2-1/16" 4.5# CS Hydril tubing and mule shoe pup joint. Ran in the well with (40) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/4/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 984 PSI. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. Hydrocrane offload casing patches and setting tools. P/U and run in the well with cone/cone mandrel, MCL anchor joint, MCL standard joint, MCL isolation joint, MCL top cap, liner stop, split bushing spacers, GS spear, inner string, 2-3/8" reg X 3-1/2" EUE cross-over, extension bars, profile sub, polished rod coupling, hydraulic setting tool, additional hold down, cross-over, (2) joints of 2-7/8" P110 TKC tubing, cross-over, bumper sub, slide valve, cross-over, shear pin drain, cross-over and (237) joints of 2-7/8" P110 TKC tubing. Fill tubing with 8.5 ppg HEC polymer. R/U Weatherford test unit and pressure up to 5000 psi. Pull cone through, setting casing patch from 7620' to 7,598.73'. Pull out of the well with (144) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/5/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1006 PSI. Fill the well with 5 bbls of 8.5 ppg HEC polymer. Pull out of the well with (95) joints of 2-7/8" P110 TKC tubing and L/D BHA. P/U cone/cone mandrel, MCL anchor joint, MCL standard joint, MCL isolation joint, MCL top cap, liner stop, split bushing spacers, GS spear, inner string, 2-3/8" reg X 3-1/2" EUE cross-over, extension bars, profile sub, polished rod coupling, hydraulic setting tool, additional hold down. R/U Weatherford tongs, M/U 60' of casing patch and R/D tongs. Continue to run in the well with, cross-over, (2) joints of 2-7/8" P110 TKC tubing, cross-over, bumper sub, slide valve, cross-over, shear pin drain, cross-over and (124) joints of 2-7/8" P110 TKC tubing. Fill tubing with 8.5 ppg HEC polymer. R/U poor boy and 2" hose and pressure up to 3000 psi. Pull cone through, setting casing patch from 4032' to 3,971.82'. Pull out of the well with (10) joints of 2-7/8" P110 TKC tubing. Secure well until Monday AM.
3/7/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1023 PSI. Fill the well with 10 bbls of 8.5 ppg HEC polymer. Pull out of the well with (114) joints of 2-7/8" P110 TKC tubing and L/D casing patch setting assembly. L/D 4-3/4" drill collars. P/U Weatherford arrowset retrievable bridge plug and run in the well on (240) joints of 2-7/8" P110 TKC tubing, unable to work into casing patch @ 7598'. Pull out of the well with (240) joints of 2-7/8" P110 TKC tubing and L/D RBP. Run in the well with (40) joints of 2-7/8" P110 TKC tubing. Secure well until AM.

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

Rec'd 08-15-16 DOGGR Ventura.

HISTORY OF OIL OR GAS WELL

Operator: Southern California Gas Company

Well: Porter 44

A.P.I. No. 03700731

Date: 7/25/2016

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

Field: Aliso Canyon County: Los Angeles

Surface Location: Sec 28 T3N 16W S.B.B.&M.

Name: Tom McMahon

Title: SIMP Project Manager

(President, Secretary, or Agent)

Telephone Number: 714-398-5020

Signature: _____

(Person Submitting Report)

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 this Report (DOGGR)
3/8/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1039 PSI. Fill the well with 5 bbls of 8.5 ppg HEC polymer. Pull out of the well with (40) joints of 2-7/8" P110 TKC tubing. P/U Weatherford arrowset retrievable bridge plug and run in the well on (241) joints of 2-7/8" P110 TKC tubing. Set and release from RBP, top @ 7609'. Pressure test (good) to 1000 psi. Dump 4 sacks of sand down tubing and displace with 44 barrels of 8.5 ppg HEC polymer. Pull out of the well with (241) joints of 2-7/8" P110 TKC tubing and RBP retrieving head. M/U and run in the well with Weatherford packer on (125) joints of 2-7/8" P110 TKC tubing. Set packer top @ 3961'. R/U Pros digital recorder, pressure test down tubing from packer to RBP @ 2435 psi. Recorded build up and pressure for 1 hour. Bled off pressure and release packer. Pull out of the well with (2) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/9/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1048 PSI. Fill the well with 5 bbls of 8.5 ppg HEC polymer. Pull out of the well with (123) joints of 2-7/8" P110 TKC tubing and L/D packer. Run in the well with Weatherford RBP retrieving head on (241) joints of 2-7/8" P110 TKC tubing. Reverse circulate clean with 8.5 ppg HEC polymer. Release RBP @ 7609'. Pull out of the well with (241) joints of 2-7/8" P110 TKC tubing and L/D retrievable bridge plug. Run in the well with (200) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/10/2016	Held safety meeting. Check well pressure SITP= 0 PSI. SICP= 0 PSI. Field pressure 1145 PSI. Fill the well with 8 bbls of 8.5 ppg HEC polymer. Pull out of the well laying down (196) joints of 2-7/8" P110 TKC tubing. Assist hydrocrane loading out tubing. Clean location. Run in the well with (42) joints of 2-7/8" P110 TKC tubing. Secure well until AM.
3/11/2016	SITP=0 PSI. SICP=0 PSI. Fill annulus with 5 BBLs of 8.5 Polymer. Field pressure 1044 PSI. Pull out of the well L/D (42) jts 2-7/8" P110 TKC tubing. Changed pipe rams from 2-7/8" to 3-1/2" and pressure test rams (good). Assist hydrocrane off load (250) jts 3-1/2" L-80 tubing. M/U 6-5/8" arrow set completion packer, 2-7/8" X 10' L-80 pup jt, 2-7/8"WXN profile nipple, (1) jt 2-7/8" L-80 tubing, 2-7/8" WXO sliding sleeve with 2.312" profile, 2-7/8" x 3-1/2" L-80 xover, 3-1/2" X 6' L-80 pup jt. R/U Weatherford hydrotest truck. Plug test BHA to 5000 PSI, good. Removed bull plug and installed mule shoe coupling on the bottom of the packer. RIH on (2) joints of 3-1/2" L-80 tubing. P/U drag tools. Continue running in the well hydrotesting (96) joints of 3-1/2" L-80 tubing to 5000 psi. Secure well until AM.
3/12/2016	SITP=0 PSI. SICP=0 PSI. Fill annulus with 5 BBLs of 8.5 Polymer. Field pressure 984 PSI. Continue running in the well with completion packer BHA, hydrotesting (145) joints of 3-1/2" L-80 tubing to 5000 psi. R/D test tools. Plug tested 3-1/2" X 2-7/8" L-80 cross-over, (3) 2-7/8" L-80 pup joints (2', 8', 10') and extended neck tubing hanger to 5000 psi. All connections were made up according to specs using seal lube. Set 6-5/8" metal skin Arrowset 1X packer landed in 12K compression, assembly as follows: (1) 2-7/8" tubing hanger (1) each (2', 8', 10') 2-7/8" 6.5# L-80 pup joints (1) 2-7/8" box X 3-1/2" L-80 crossover (106) joints of 3-1/2" 9.3# L-80 tubing with regular full size collars (135) joints of 3-1/2" 9.3# L-80 tubing with beveled collars (1) 3-1/2" X 6' 9.3# L-80 pup joint (1) 3-1/2" box X 2-7/8" L-80 crossover (1) 2-7/8" X 2.312" WXO sliding sleeve top @7561.45' (1) joint of 2-7/8" 6.5# L-80 tubing (1) 2-7/8" X 2.312" WXN profile nipple with 2.25" no go top @7594.64' (1) 2-7/8" X 10' 6.5# L-80 pup joint (1) 6-5/8" metal skin Arrowset 1X packer with the center of packer elements @ 7609' and 2-7/8" mule shoe re-entry collar with end of tubing @ 7613.69' Ran in tubing hanger rams and tested annulus between the packer and tubing hanger @ 2100 psi for 15 minutes (good). Bled off pressure. Secure well until Monday.

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DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES

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HISTORY OF OIL OR GAS WELL

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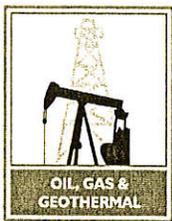
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Start Date	Ops this Report (DOGGR)
3/14/2016	SITP=0 PSI. SICP=0 PSI. Field pressure 1022 PSI. R/U Western Wireline. Ran in the completion tubing with 2.30" gauge ring to WXN profile nipple 7591' (wireline measurement), Set PXN plug (2 trips) in the WXN profile nipple. Pressured up tubing to 1000 psi (held 5 minutes-good). R/D wireline. R/U Pros digital recorder. DOGGR Cliff Knight witnessed pressure test of annulus from packer top @ 7609' to tubing hanger @ 2050 psi (for a 1 hour hold - good) and down the completion tubing to the PXN plug in the WXN profile nipple @ 7594' to 3800 psi (1 hour hold - good). R/D recorder. R/D tubing equipment and work floor. Remove 11-1/16" class III BOPE. Secure well until AM.
3/15/2016	SICP=0 PSI. SITP=0 PSI. Field pressure 1055 PSI. Removed 2-7/8" pup jt with TIW valve. Install 9-1/16" 5M Master Valve. Spot Cameron pressure test and chart record tree / spool connection 300 psi low, 5000 psi high, for 20 minutes (good). Pressure test and chart record between neck seals 300 psi low, 5000 psi high, for 20 minutes (good). Bled off pressure. Close in well. Rig down rigs mud pump, mast and equipment. Clean location. Release rig to Porter 69 B.
4/15/2016	Rig up Western Wireline. Held safety meeting. Ran in the well with a B-Shifting Tool. Shifted sliding sleeve at 7,561' to the open position. Pulled out of the well. Rigged down. Rigged up Schlumberger to pump nitrogen down the casing to unload the well. Rigged up Onyx separator to the tubing to take returns back to a 500 bbl tank. Pressure test the pump and lines to 1,000 psi low and 4,500 psi high. Good test. Beginning tubing pressure was 44 psi and the casing pressure was 60 psi. Calculated well volume was 275 bbls. Pumped nitrogen down the tubing at 1,890 SCF/Min. Pressure steadily increased while displacing kill fluid from the wellbore via the tubing. With 233 bbls recovered the casing pressure was 2,180 psi and the tubing pressure was 36 psi. At 289 bbls recovered the casing pressure began to drop and the tubing pressure began to increase. We continued pumping nitrogen at 1,890 SCF/Min controlling the flow to the tank with a choke until we received nitrogen to the surface. Shut the nitrogen pump down. Closed the well in with 2,150 on the tubing and casing. Bled the well down to 1,100 psi on the tubing and casing. Closed the well in. Rigged SLB down.
4/16/2016	HSM with Western Wireline. Tubing and Casing pressure were 1,050 psi. Ran in the well with a B-Shifting tool and closed the sliding sleeve at 7,561'. Ran in the well with a 2" JDC pulling tool and recovered the prong at 7,594'. Ran in the well with a 2-1/2" GS pulling tool and recovered the 2-313 PXN plug body. Closed the well in. Rigged down.



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
REPORT ON OPERATIONS

No. T216-0031

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

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

Ventura, California
February 05, 2016

Your operations at well "**Porter**" 44, A.P.I. No. **037-00731**, Sec. **28**, T. **03N**, R. **16W**, **SB B. & M.**, **Aliso Canyon** field, in **Los Angeles** County, were witnessed on **2/1/2016**. **Kris Gustafson**, a representative of the supervisor.

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

DECISION:

APPROVED

Kenneth A. Harris Jr.
State Oil and Gas Supervisor

By 

Bruce Hesson
District Deputy

KG/tkc
OG109

BLOWOUT PREVENTION EQUIPMENT MEMO

12,1

Operator SCG Well "Porter" 44 Sec. 28 T. 03N R. 16W
Field Aliso Cyn County Los Angeles Spud Date _____

VISITS: Date 2/3/86 Engineer K. Gustafson Time 1030 to 1100 Operator's Rep. Not Present Title _____
2nd _____ (_____ to _____) _____

Contractor Erign Rig # 342 Contractor's Rep. & Title Roger Lefer - Pusher
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 7 " casing are approved.

Proposed Well Opns: Rework & Test . MACP: _____ psi
Hole size: _____ " fr. _____ " to _____ " to _____ " & _____ " to _____ " **REQUIRED BOPE CLASS: III SM**

CASING RECORD OF BOPE ANCHOR STRING					Cement Details		Top of Cement	
Size	Weight(s)	Grade(s)	Shoe at	CP at			Casing	Annulus
<u>7</u>	<u>23#</u>	<u>K-55</u>						

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.
<u>A</u>	<u>C50</u>	<u>Cameron</u>	<u>Spherical</u>	<u>11</u>	<u>5M</u>		<u>18.6</u>					<u>1/29/86</u>	<u>5M</u>
<u>21</u>	<u>27/8</u>	<u>Schuffler</u>	<u>LWS</u>	<u>↓</u>	<u>↓</u>		<u>3.5</u>						<u>↓</u>
<u>21</u>	<u>150</u>		<u>"</u>	<u>↓</u>	<u>↓</u>		<u>3.5</u>						<u>↓</u>

ACTUATING SYSTEM				TOTAL:	AUXILIARY EQUIPMENT						
Accumulator Unit(s) Working Pressure <u>3000</u> psi				<u>24.60</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.		Precharge _____		Fill-up Line							
Accum. Manufacturer		Capacity		Kill Line							<u>5M</u>
1	<u>Rooney Type</u>	<u>80</u> gal.	<u>1000</u> psi	Control Valve(s)	<u>2</u>						
2		gal.	psi	Check Valve(s)	<u>1</u>						
CONTROL STATIONS				Aux. Pump Cnnct.							
Manifold at accumulator unit		Elec. <u>X</u> Hyd. _____ Pneu. _____		Choke Line							
Remote at Driller's station		Other: _____		Control Valve(s)	<u>2</u>						
EMERG. BACKUP SYSTEM				Pressure Gauge	<u>1</u>						
N2 Cylinders	1	L= <u>51</u> "	Press. <u>2600</u> Wkg. Fluid <u>8.51</u> gal.	Adjstble Choke(s)	<u>2/8</u>						
Other:	2	L= <u>51</u> "	<u>2500</u> <u>7.99</u> gal.	Bleed Line							
	3	L= <u>51</u> "	<u>2500</u> <u>7.98</u> gal.	Upper Kelly Cock							
	4	L= <u>51</u> "	<u>2550</u> <u>8.26</u> gal.	Lower Kelly Cock							
	5	L= <u>51</u> "	<u>2500</u> <u>7.98</u> gal.	Standpipe Valve							
	6	L= <u>51</u> "	<u>2450</u> <u>7.70</u> gal.	Stndpipe Pres. Gau.							
TOTAL: <u>OK</u> gal.				Pipe Safety Valve	<u>27/8</u>						
HOLE FLUID MONITORING EQUIPMENT				Internal Preventer							
Alarm Type		Class		Hole Fluid Type	Weight	Storage Pits (Type & Size)					
Calibrated Mud Pit	Audible	Visual	A	<u>HEC Poly</u>	<u>8.5</u>	<u>700 vlds (tanks)</u>					
Pit Level Indicator			B	REMARKS AND DEFICIENCIES:							
Pump Stroke Counter											
Pit Level Recorder											
Flow Sensor			C								
Mud Totalizer											
Calibrated Trip Tank											
Other:											

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

Operator: <u>So. Cal Gas</u>				Well: <u>Porter 44</u>	
Sec. <u>28</u>	T. <u>3N</u>	R. <u>16W</u>	B.&M. <u>SB</u>	API No.: <u>037-00731</u>	Field: <u>Aliso Canyon</u>
County: <u>Los Angeles</u>				Witnessed/Reviewed on: <u>C. Knight 13-14-16</u>	

C. Knight, representative of the supervisor, was present from 1000 to 1300.

Also present were: Mike Wilkmar, Roger Lefler, Jovy Kroh (SCG), Tom McMohan (SCG)

Casing record of the well:

	(psi) Burst		Burst (psi)	
(7") 0 - 673' N-80	6340	6798 - 7609' (7") (C&E Packer)	7240	4032 - 3971.8 7" Casing patch
(7") 673 - 4615' J-55	4360			7620 - 7598.7 7" Setting patch for Packer
(7") 4615 - 5019' S-95	7530			Retrieved 3971 - 4012" Go Patch"
(7") 5019 - 6798' N-80	6340	7639 Top of liner 5" 15#		3623 = 115% of MDP

*Note: Sliding Sleeve closed during Casing Test.
 MDP: 3150 psi for field
 burst rate: 2320 psi Max to apply w/ hydrostatic in place
 2050 psi = 93% of burst rate on J-55 7" Casing, Burst rate 23# 7" = 4360 psi Ch

The Internal MIT was performed for the purpose of pressure testing the 7" casing above 7609(PKR) COE (2) (prior to injecting fluid)

The Internal MIT is approved since it indicates that the 7" casing has mechanical integrity above 7609(PKR) COE 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. Test Being recorded by PROS, Inc.

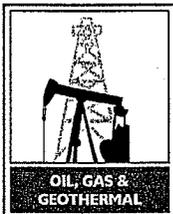
2053psi 11:50am (7" casing)
 2041 12:20pm
 2040 12:50pm

The 5" Casing, packer at 7609' and sliding sleeve (closed) held ~2,050psi for 60 minutes.

* The 3 1/2" tubing was separately tested for 60 minutes at 3,500+ psi

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

Operator: <u>So Cal Gas</u>				Well: <u>Porter 44</u>	
Sec. <u>28</u>	T. <u>3N</u>	R. <u>16W</u>	B.&M. <u>5B</u>	API No.: <u>03700731</u>	Field: <u>Aliso Canyon</u>
County: <u>Los Angeles</u>				Witnessed/Reviewed on: <u>C. Knight 13-14-16</u>	
<u>C. Knight</u> , representative of the supervisor, was present from <u>1300</u> to <u>1500</u> .					
Also present were: <u>Mike Vullmar, Tom McMahon (SCG), Roger LeAer, Jovy Kroh (SCG)</u>					
Casing record of the well: <u>XM plug 7594'</u> <u>sliding sleeve 7561' (closed)</u> <u>3 1/2" tubing</u> <u>Test being recorded by PROS, Inc.</u>					
The Internal MIT was performed for the purpose of pressure testing the <u>3 1/2</u> " ^{tubing} casing above <u>7594</u> ' (2) (prior to injecting fluid)					
<input checked="" type="checkbox"/> The Internal MIT is approved since it indicates that the <u>3 1/2</u> " ^{tubing} casing has mechanical integrity above <u>7594</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.					
<u>13:20</u>	<u>3,856 psi</u>	The XM tubing plug at 7594', 3 1/2" tubing and sliding sleeve at 7561' held 3,500+ psi for 60 minutes			
<u>13:40</u>	<u>3709</u>				
<u>14:20</u>	<u>3536</u>				



() JRAL 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 216-0012

PERMIT TO CONDUCT WELL OPERATIONS

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

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

Ventura, California
 January 25, 2016

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

Your proposal to **Rework** well "Porter" 44, A.P.I. No. 037-00731, Section 28, T. 03N, R. 16W, SB B. & M., Aliso Canyon field, Any area, Sesnon-Frew pool, Los Angeles County, dated 1/20/2016, received 1/21/2016 has been examined in conjunction with records filed in this office. (Lat: 34.312609 Long: -118.556233 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 7" 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 **USIT** test shall be performed to demonstrate that the 7" casing has integrity. If the casing does not have integrity, the well shall be shut in and no injection operations shall be undertaken until the casing is repaired to Division satisfaction.
5. Prior to commencing injection, a pressure test is conducted to demonstrate the mechanical integrity of the 7" casing. The minimum test pressure shall be **1000 psi**.
6. Injection shall be through tubing and packer only. Injection or withdrawal through the casing shall not be permitted due the casing patch at 3971'-4012'.
7. This office shall be contacted by phone prior to making any program changes and no changes are made without Division approval.
8. **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 7" casing and casing patch prior to commencing injection.
 - c. Review the **USIT** log prior to commencing injection.
 - d. Inspect the electronic monitoring equipment prior to commencing injection.

Continued of Next Page

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

Engineer Kris Gustafson
 Office (805) 654-4761

KG/kg

Kenneth A. Harris Jr.
 State Oil and Gas Supervisor

By 
 Bruce Hesson, Senior Oil and Gas Engineer

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" 44

API #: 037-00731

Permit : P 216-0012

Date: January 25, 2016

- e. Witness a mechanical integrity test within three months after injection has commenced.

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. Laterals that are servicing the well must be tested to ensure their integrity.
4. The required History of Oil or Gas Well (OG103) shall include a complete description of the required pressure test. **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.



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

Rec'd 01-21-16 D2 DOGGR Ventura

FOR DIVISION USE ONLY		
Bond	Forms	
		00D111
	CAL WIMS	115V

NOTICE OF INTENTION TO REWORK / REDRILL WELL

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

P216-0012

In compliance with Section 3203, Division 3, Public Resources Code, notice is hereby given that it is our intention to rework / redrill well Porter 44, API No. 037-00731
(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.)

See attached wellbore schematic

The total depth is: 8100 feet.

The effective depth is: 8042 feet.

Present completion zone(s): Seson
(Name)

Anticipated completion zone(s): Same
(Name)

Present zone pressure: storage psi.

Anticipated/existing new zone pressure: storage 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

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 P. O. Box 2300		City/State Chatsworth
		Zip Code 91313-2300
Name of Person Filing Notice Jovy Kroh	Telephone Number: (818)590-0298	Signature
		Date 01/20/16
Individual to contact for technical questions: Jovy Kroh	Telephone Number: (818)590-0298	E-Mail Address: jkroh@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, redrilling, 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 44 – Well Inspection**

DATE: January 20, 2016
OPERATOR: SOUTHERN CALIFORNIA GAS COMPANY
FIELD: ALISO CANYON
WELL: PORTER 44
API NUMBER: 037-00731
ELEVATION: All depths based on original KB, 11' 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 2-7/8" completion string, running USIT and Gyro surveys, 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:	8100'md
Special Conditions:	n/a
Casing Record:	11-3/4" 42# N-40 T&C casing cemented at 530' 7", 23# & 26#, J-55 & N-80, S-95, and J-55 T&C cemented casing with top of redrill window at 7805' "GO" casing patch 3971-4012'; <i>Leak 3990-4000'</i> 5" liner to 8042'md, 10-mesh wire wrapped from 7802-8039', TOL at 7639' Liner gravel packed with 198 sacks 20-40 mesh gravel
Tubing Record:	See attached tubing detail

GEOLOGIC MARKERS

A1	4011	-1804'VSS	S1	7735	-5508'VSS
A36	4924	-2717'VSS	S2	7767	-5539'VSS
UP	5204	-2997'VSS	S4	7815	-5586'VSS
LP	5694	-3487'VSS	S6	7858	-5628'VSS
UDA1	5989	-3782'VSS	S8	7916	-5685'VSS
UDA2	6311	-4104'VSS	S10	7956	-5724'VSS
MDA	6804	-4597'VSS	S12	7987	-5754'VSS
LDA	6950	-4742'VSS	S14	8025	-5791'VSS
MP	7515	-5293'VSS	CR	8090	-5855'VSS

Estimated Field Pressure: 2277 psi on 12/18/2015 (Variable)

Estimated Bottomhole Temperature: 175°F

PROGRAM 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

De-energize and remove all laterals. Install companion flanges for killing the well.

WELLWORK PROGRAM

1. Move in production rig and rig pump with tank, shaker, and mixer.
2. Spot 500 bbl Baker tanks and fill with 8.6 ppg KCl brine.
 - 2.1 Connect pump to the tubing and vent the casing through the choke manifold to the SoCalGas system.
 - 2.2 Treat all brine with Biocide, 5 gals/100 bbls
3. If the well is not standing full of brine, then kill the well with an HEC polymer pill with approximately 8.6 ppg KCl brine. The liner volume is approximately 10 bbl. The tubing volume is approximately 44 bbl, and the tubing/casing annulus is approximately 237 bbl.

NOTE: Verify field surface pressure to ensure the proper kill fluid density is used prior to killing well and for well control during workover operations.

4. +++Install a Class III 5M BOPE per Gas Company Standard 224.05 and in accordance with the DOGGR permit. All connections and valves must be flanged and at least 5000 psig rated.
 - a.) Pressure test the Class III 5M annular preventer to 3500 psig for 20 minutes. Test blind rams and the 2-7/8" pipe rams to 5000 psig for 20 minutes. Test all lines and connections to 5000 psig.
 - b.) Perform a 300 psig low pressure test on the annular preventer, blind rams and pipe rams for 20 minutes. Test all lines and connections to 300 psig.
 - c.) All tests are to be charted and witnessed by a DOGGR representative.
5. Pick up a 2-7/8", 6.5#, N-80 joint of tubing with safety valve, attempt to unland the 2-7/8" 6.5#, J-55 tubing string, *pull out of Baker Retrieval-"D" packer body*, and POOH with the completion tubing and the Camco mandrel. POOH and lay down completion jewelry.

- 5.1 If tubing does not release, use chemical cutter with two cartridges to cut the tubing in the 20' blast joint 2' above the no-go nipple. POOH with cut tubing.
6. Pick up fishing tools and pull GO (Gearhart Owens) casing patch.
7. Pick up tubing, RIH, and attempt to release the Baker Retrieval-"D" packer as per the vendor recommendation.
8. Pick up 7" 23#-26# casing scraper on tubing and scrape to 5" liner top at 7639', or as deep as possible. Circulate well clean. POOH.
9. Rig up wireline unit and run gyro survey from ECOD at 8039' (or as deep as possible) to surface. Rig down wireline.
10. Make up and run a 7" retrievable bridge plug on 2-7/8" tubing. Set at approximately 7629' (10 ft above liner top, or as deep as possible) pressure test, and sand off.
11. Rig up wireline unit and log USIT/Neutron/CBL in high resolution mode (1.5" vertical measurement) in the 7" production casing from the top of the bridge plug to surface. Rig down wireline.
12. Run Pressure Integrity Test on 7" casing from bridge plug to surface to a minimum of 3400 psi as per schedule.
 - 12.1 Test above and below previously patched casing at 3990-4000'.
 - 12.2 Engineering team to analyze USIT and pressure test results and recommend any additional remediation.
13. Inspect production tree and pressure test the wellhead seals to a minimum of 3400 psig.
 - a.) If the wellhead seals do not test, nipple down the 11" Class III 5M BOPE, crossover spool, and primary pack-off.
 - b.) Replace the pack-off seals and reinstall a tubing head, refurbished as necessary.
 - c.) Pressure test all the wellhead seals to 5000 psig.
 - d.) Reinstall the 11" Class III 5M BOPE on the tubing head and function test.
14. Pick up and run tubing with bridge plug retrieving head to top of sand. Circulate out sand. Release bridge plug at approximately 7629', re-kill the well if necessary. POOH and lay down tubing.
15. Pick up new production packer, RIH on tubing, and set in approximately the same depths as prior production packer, or as deep as possible. POOH with tubing.
 - 15.1 Ensure new production packer depth is at or above depth at which retrievable bridge plug was just pulled from.
16. Pick up and run new casing patch. Set patch approximately the same depths as prior patch (3971-4012').

Note: Leak in 7" casing noted at 3990-4000' in 04/14/1978 DOGGR report.

17. Pick up new completion string:
 - a.) Seal assembly for 3-1/2" tubing x 7" production packer
 - b.) 10' pup joint 3-1/2" 9.3# N-80 EUE 8RD tubing
 - c.) 3-1/2" XN EUE 8RD no-go nipple
 - d.) Full joint 3-1/2" 9.3# N-80 EUE 8RD tubing
 - e.) 3-1/2" EUE 8RD sliding sleeve
 - f.) 3-1/2" 9.3# N-80 EUE 8RD tubing to surface
 - g.) Pup joints 3-1/2" 9.3# N-80 EUE 8RD tubing for space-out
 - h.) Tubing hanger and fatigue nipple
18. RIIH with new completion string and land as per vendor specification. Pressure test the 3-1/2" tubing x 7" casing annulus to 1000 psig surface pressure.
- 18.1 Before pressure testing, notify DOGGR to witness 1000 psi test.
19. Nipple down the Class III 5M BOPE and install the production tree and test to 5000 psig.
20. Release production rig, rig down and move out.
21. Rig up wireline and set a plug in the 3-1/2" XN profile, shift the sliding sleeve open and unload the workover brine from the tubing/casing annulus. Pull the wireline plug from the XN profile. Shift the sliding sleeve closed.

WELL LATERAL HYDROTESTING

22. Per Gas Company Standard 182.0170, pressure test the tubing and casing kill laterals from the wellhead to the remote tie in to 3400 psig. Pressure test the tubing and casing withdrawal/injection laterals from wellhead to operating valves to 3400 psig.
23. Reinstall the hydro-tested laterals.
24. Install the well safety systems and instrumentation. Install pressure transmitters on tubing, casing, and surface casing.
25. 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.

Elevation: 2195' GL
 KB: 1 (Redrill) MV

Porter 44

Rec'd 01-21-16 D2 DOGGR Ventura

11-3/4" 42# H40

Surface choke: _____

530'

Casing flow string

- 7" csg -
- 0-673' 23# N80
- 4615' 23# J55
- 5019' 23# S95
- 6798' 23# N80
- 7805' 26# N80

2-7/8" 6.5# J55 tubing

3971'

7" Go csg patch --

4012'

--7512' MMG

--7557' Camco 2-1/2" SSSV
 (7539') 2.313" ID, 1.125" min ID

Baker Retriever "D"

pkc 7600'

--7592' Camco "D" No-Go 1.812" ID
 (7573')

lnc 7639'

--7614'

--7613' (7595') (-5400')

7676'

Top of redrill window 7805'

--S4 7814' (7790')

195 sacks.
 20-40 mesh
 gravel in
 13" hole --

5" 15# wire wrapped 10 mesh 7802'-8039'

--S8 7916' (7890')

8/13/92' PU @ 8028'

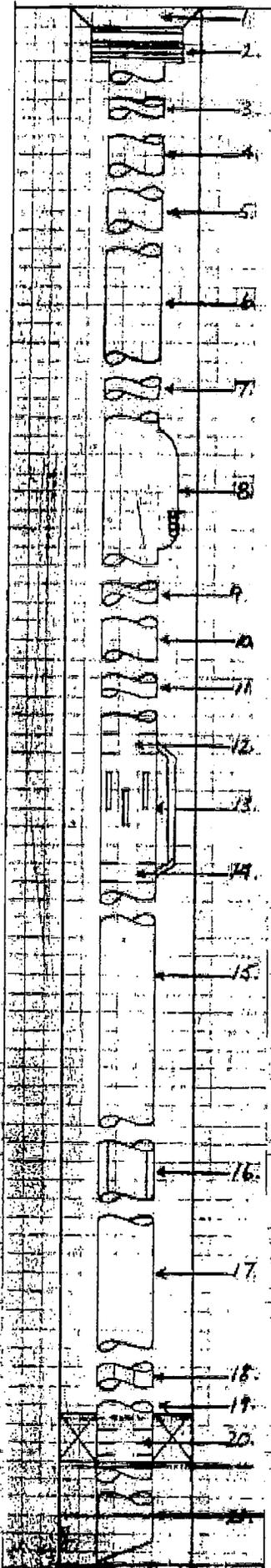
8039'
 TD 8100'
 8042' effective depth
 (SS - 5876')

11/11/55 - Well spud
 1/6/56 - Well completed
 TD 8350', plugged depth
 8090'.
 1/4/73 - 1/19/73 - Cleaned
 out to 8090', pressure
 tested csg, jet perf'd
 & ran tbq.
 6/22/77 - 7/21/77 - Milled
 through tight spot at 4000
 pressure tested csg, & ran
 tubing.
 10/31/77 - 11/11/77 -
 Milled tight csg from
 3975' to 4018', & ran tbq
 with SSSV.
 2/8/78 - 4/18/78 - Redrill
 Plugged back to 7921',
 milled 7" csg 7805'-7870',
 plugged back to 7700'
 drilled out to 7814', di-
 rectionally drilled to
 8100', top of junk 8042',
 ran and gravel packed 5"
 liner 7639'-8039' in 13"
 hole, found leak in 7"
 csg 3990'-4000', squeezed,
 ran 7" Go csg patch 3971'-
 4012', & ran tbq with SSSV.

WELL VOLUME

	Cu.Ft.	Bbl.
Tubing	247	44
Csg/Lnr.	54	10
Annulus	1333	237

WELL PROFILE



SOUTHERN CALIFORNIA GAS COMPANY		Rec'd 01-21-16 D2 DOGGR Ventura	TUBING		
OPERATOR	GAS COMPANY	CASING	LINER	1	2
WELL #	PORTER #44	SIZE			
FIELD	Aliso Canyon	WEIGHT			
COUNTY	Los Angeles	GRADE			
STATE	California	THREAD			
DATE	April 18, 1978	DEPTH			
<input type="checkbox"/> NEW COMPLETION <input checked="" type="checkbox"/> WORKOVER					

ITEM NO.	TUBING DETAILS	LENGTH	DEI
1.	Kelly Bushing	12.00	14
2.	Doughnut	.60	14
3.	Pup Joint 2 7/8" Brd EUE J-55	4.17	16
4.	Pup Joint 2 7/8" Brd EUE J-55	9.81	26
5.	Pup Joint 2 7/8" Brd EUE J-55	10.02	36
6.	241 Joints 2 7/8" Brd EUE J-55 Tubing	7470.78	7507
7.	Pup Joint 2 7/8" Brd EUE N-80	4.12	7511
8.	Cameo MMG Mandrel (empty) 2.347" ID 5.250" OD	8.12	751
9.	Pup Joint 2 7/8" Brd EUE N-80	1.77	752
10.	One Joint 2 7/8" Brd EUE J-55 Tubing	31.57	7553
11.	Pup Joint 2 7/8" Brd EUE N-80	4.00	7557
12.	DS-1 NO-GO Nipple (empty) 2.312" ID 4.750" OD		
13.	Cameo SC-1 Annular Flow Safety System (empty)	15.22	7572
14.	WP-1 Safety Valve Nipple (empty)		
15.	Cameo 20' Blast Joint	19.81	7592
16.	Cameo "D" NO-GO Nipple 1.812" ID 3.625" OD	.83	7593
17.	Cameo 10' Blast Joint	9.81	7602
	Baker Packer set at per wireline measurement		7600
18.	Baker Latch-in Locator	1.00	7603
19.	Baker Packer at top		7603
20.	Baker Seal Assembly	4.30	7608
21.	Baker Production Tube	5.28	7613

- NOTES -

Stabbed into packer with seal assembly on tubing. Pulled 10,000# over tubing weight to check latch. Checked O.K. Spaced out to surface, completed well. Top nipple of SC-1 annular flow safety system is DS-1 - NO-GO nipple takes B-6 NO-GO lock, bottom nipple is WP-1 - selective nipples takes selective type lock.

COMMENTS:

Well No. ~~10~~ P. 44

Rec'd 01-21-16 D2 DOGGR Ventura

Field. Aliso

Date Prepared. 3-19-81

Wellhead Mfgr. Shaffer

1. Casing Head. Shaffer. Size 13-5/8" x 13-3/8" 5000 Type. KD sow

Slips & Pack-off 13-5/8" x 8-5/8" KD 530'

A. Surface Csg. Size 11-3/4" Wt. 42# Grade H-40

B. Casing Head Valve Maypac Size 2" 3000 Fig. No. CSB-790-JN

2. Seal Flange. Shaffer. Size 13-5/8" x 10" 5000

A. Type Seal PS-63 Ring B-160 & R-54

3. Tubing Head. Shaffer. Size 10" x 8" 5000 Type 55-63 L-1

Ring R-54 & Ring R-50

Outlets 2-3" Sec. Seal Lock screw

Valve Removal Thrd 2-1/2" line pipe

A. Tubing Hanger Shaffer Size 8" x 2-7/8" Type. AJS

B.P.V. Size 2-1/2" Thrd

B. Tubing Head Valves Mc Evoy Size 3" 5000 Fig. No. 21055

C. Automatic Csg. Valve WKM Size 3" 5000 Fig. No. 114522

4. Adapter Seal Flange. Shaffer. Size 8" x 2-1/2" Type A-J-S

A. Ring Size R-50 & R-27

5. Master Valve. Mc Evoy Size 2-1/2" 5000 Fig. No. 129

6. Xmas Tree Cross. Shaffer. Size 2-9/16" x 2-1/16" Bore Thru 2-9/16"

Across 2"

7. Tubing Wing Valves. Rockwell. Size 2" 5000 Fig. No. 21055

A. Automatic Tbg. Valve. WKM Size 2" 5000 Fig. No. 110261 5000

8. Unibolt Size 2-1/2" x 3" x 3-1/8" Inside Thrds 2-1/2" API

9. Wt. Landed in Csg. Head 265,000 Wt 36# 8-5/8" Grade K-55 N-80 J-55 S 95

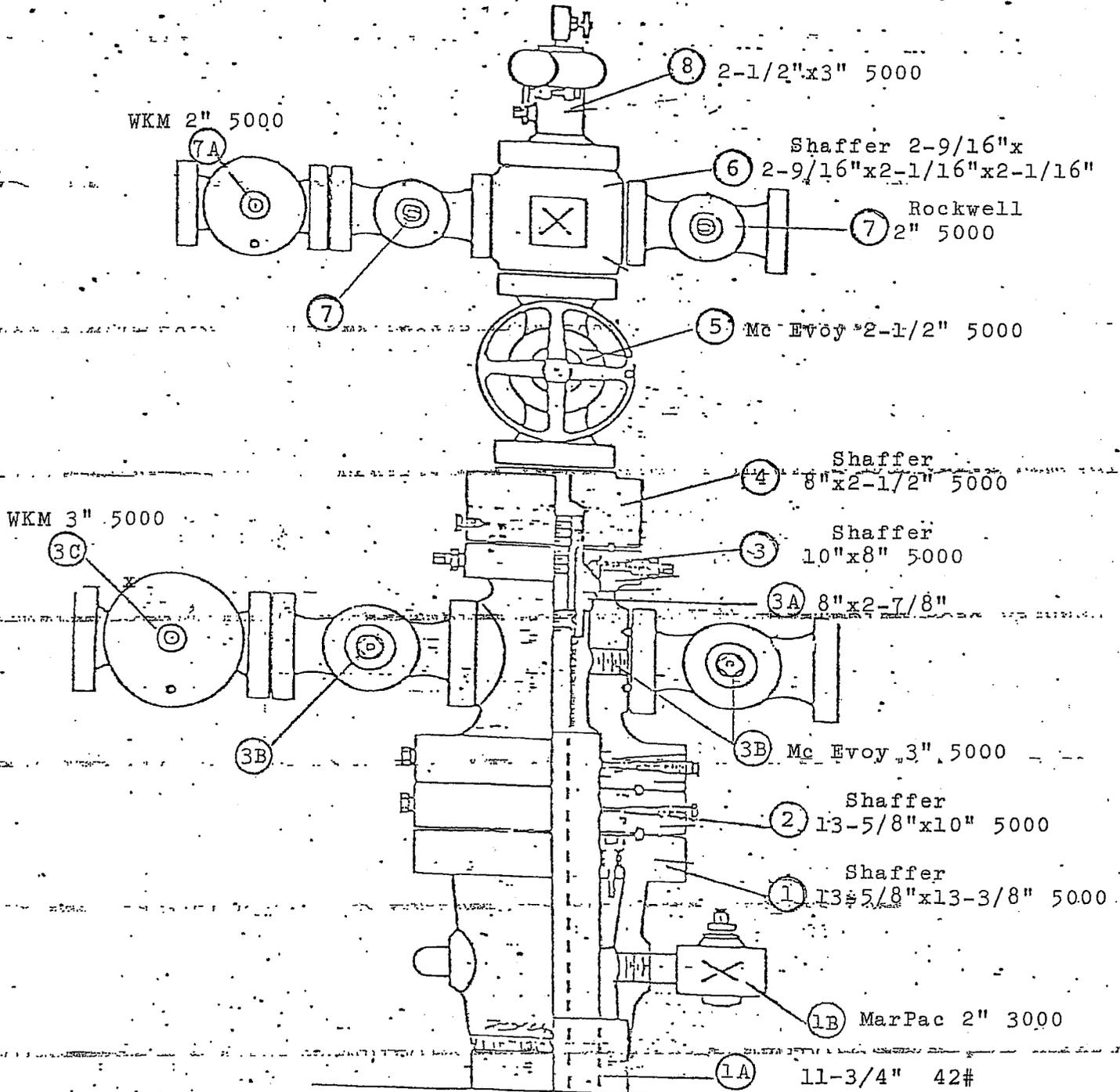
8350' 8000' EUE 8rd J-55

10. Wt. Landed on Doughnut 27,000 Wt 6.5 2-7/8" Grade K-55

11. Tubing Head to Ground Level 2.13 Above

TYPE IV

Rec'd 01-21-16 D2 DOGGR Ventura

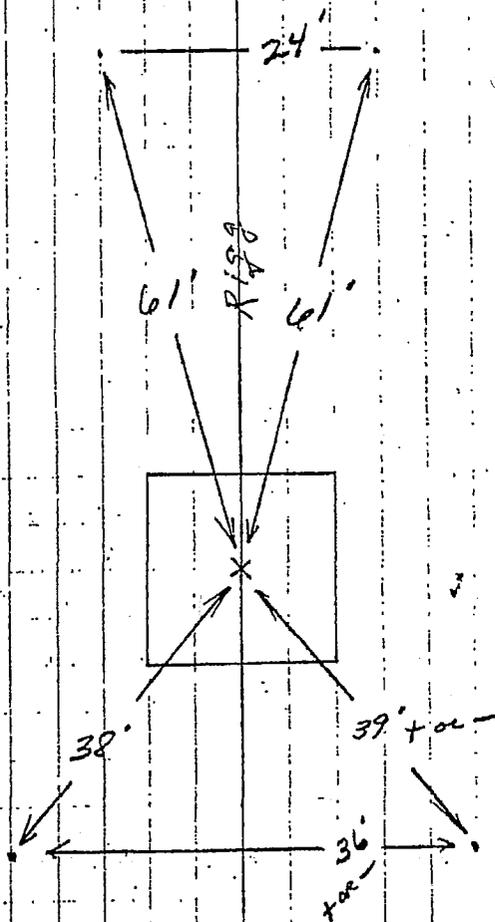


Well Name: P 44 - Aliso Canyon

Mfgr.: Shaffer

Date Prepared: 12-15-82

ANCHORS PORTER # 44
1-26-73



P. 44

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

Ventura, California

November 6, 1991

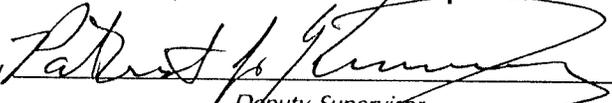
R. D. Phillips, Agent
SOUTHERN CALIFORNIA GAS COMPANY
P.O. Drawer 3249 Mail Location 22G0
Los Angeles, CA 90051-1249

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:

<u>FROM</u>	<u>TO</u>
"SFZU" P-4 (037-00699)	"Porter" 4 (037-00699)
"SFZU" P-25 (037-00712)	"Porter" 25 (037-00712)
"SFZU" P-26 (037-00713)	"Porter" 26 (037-00713)
"SFZU" P-34 (037-00721)	"Porter" 34 (037-00721)
"SFZU" P-35 (037-00722)	"Porter" 35 (037-00722)
"SFZU" P-38 (037-00725)	"Porter" 38 (037-00725)
"SFZU" P-39 (037-00726)	"Porter" 39 (037-00726)
"SFZU" P-40 (037-00727)	"Porter" 40 (037-00727)
"SFZU" P-41 (037-00728)	"Porter" 41 (037-00728)
"SFZU" P-42 (037-00729)	"Porter" 42 (037-00739)
"SFZU" P-43 (037-00730)	"Porter" 43 (037-00730)
"SFZU" P-44 (037-00731)	"Porter" 44 (037-00731)
"SFZU" P-46 (037-00733)	"Porter" 46 (037-00733)
"SFZU" P-47 (037-00734)	"Porter" 47 (037-00734)

M. G. MEFFERD, State Oil and Gas Supervisor

By 
Deputy Supervisor
PATRICK J. KINNEAR

So. Calif. Gas Co.

OPERATOR Paul G. K.
 LSE & NO. 2720 P-44
 MAP NO. 160

INTENTION	<u>Ref + Gas Storage</u>	<u>relocate gas storage</u>	<u>Remove Gas Storage</u>	<u>Plug + Re-drill</u>	
NOTICE DATED	<u>11-29-72</u>	<u>6-17-77</u>	<u>11-1-77</u>	<u>2-8-78</u>	
P-REPORT DATED	<u>172-1407</u>	<u>6-23-77</u> <u>277-217</u>	<u>277-399</u> <u>11-3-77</u>	<u>278-63</u> <u>2-10-78</u>	
CHECKED BY/DATE					
MAP LETTER DATED		<u>No change</u>			
SYMBOL	<u>NC</u>		<u>NC</u>	<u>NC</u>	

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

NOTICE	<u>12-1-72</u>	<u>6-22-77</u> X	<u>11-2-77</u>	<u>2-9-78</u>	
HISTORY	<u>3-5-73</u>	<u>8-8-77</u> X	<u>12-13-77</u>	<u>5-11-78</u>	
SUMMARY	<u>3-5-73</u>			<u>5-11-78</u>	
IES/ELECTRIC LOG				<u>3-16-78</u>	
DIRECTIONAL SURV.				<u>4-5-78</u>	
CORE/SWS DESCRIP.					
DIPMETER RESULTS					
OTHER		<u>T report 7-11-77</u> X		<u>2 Calypso 4-10-78</u>	
RECORDS COMPLETE	<u>3-5-73</u>	<u>18-11-77</u> X	<u>je</u>	<u>2-BGL 4-24-78</u>	

ENGINEERING CHECK

T-REPORTS _____
 OPERATOR'S NAME _____
 WELL DESIGNATION _____
 LOC. & ELEVATION _____
 SIGNATURE _____
 SURFACE INSPECTION _____
 FINAL LETTER OK _____

CLERICAL CHECK

POSTED TO 121 _____ 170 MAILED _____
 FINAL LETTER MAILED _____
 RELEASE _____
 BOND _____

REMARKS _____

DIVISION OF OIL AND GAS

DIVISION OF OIL AND GAS RECEIVED
MAY 11 1978

WELL SUMMARY REPORT

SUBMIT IN DUPLICATE

SANTA PAULA, CALIFORNIA
API No. 037-00731

Operator 037-00731-01 SOUTHERN CALIFORNIA GAS COMPANY, Well No. PORTER 44, API No. 037-00731

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

Location 1720.78 ft. South and 2994.53 ft. 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 2195 feet.

All depth measurements taken from top of Kelly Bushings which is 11' 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 April 21, 1978

Signed P. S. Magruder, Jr.
P. S. Magruder, Jr.
Title Agent

G. C. Abrahamson
(Engineer or Geologist)

	GEOLOGICAL MARKERS	DEPTH
Commenced drilling <u>February 8, 1978</u>		
Completed drilling <u>April 18, 1978</u>	<u>Sl₁</u>	<u>7815'</u>
Total depth (1st hole) <u>8100'</u> (2nd) <u>8100'</u> (3rd) _____	<u>HZ</u>	<u>8020'</u>
Present effective depth <u>8042'</u>		
Junk <u>Two (2) nose cones and one (1) arm off of 6 x 13 hole opener at 8042' to 8045'</u>		

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

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
<u>11 3/4"</u>	<u>530'</u>	<u>Surface</u>	<u>42#</u>					
<u>7"</u>	<u>7805'</u>	<u>Surface</u>	<u>23# and 26#</u>			<u>10 5/8"</u>		

PERFORATED CASING

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

5" 15# top of blank and hanger at 7639' - top of 10-mesh wire-wrap at 7802' with bottom at 8039' (236' total wire wrap - 400' total liner).

Was the well directionally drilled? Yes If yes, show coordinates at total depth 144'S 244'E

Electrical log depths 8100' Other surveys Directional and Photonlog

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
Well No. PORTER #44, Sec. 28, T. 3N, R. 16W, S.B. B. & M.
Date May 2, 19 78 Signed P. S. Magruder, Jr.
P. S. Magruder, Jr.
P.O. Box 3249, Terminal Annex, Los Angeles 90051 Title Agent
(Address) (213) 689-3561 (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

1978

2-7 Moved in California Production Service Rig #D-4 and rigged up. Installed B.O.P.E.

2-8 Tested B.O.P.E. with water and nitrogen as follows:
Blind rams at 4000 psi
Pipe rams " 4000 psi
Hydril bag " 3000 psi
Above tests approved by D.O.G. Rigged up Botech and chemical cut 2 7/8" tubing at 7614'.

2-9 Circulated gas-cut drilling fluid from well. Pulled and laid down 7615' of 2 7/8" tubing. Rigged up and picked up 2 7/8" drill pipe.

2-10 Made up 74' of 5 1/2" wash pipe. Measured and picked up 2 7/8" drill pipe.

2-11 Ran in well to 3991' - 5 1/2" wash pipe stopped at 3991'. Pulled out of well and laid down wash pipe. Made up 6 1/4" tapered mill. Ran in and reamed through tight casing at 3991' to 3993'.

2-12 Rig and crew idle.

2-13 Re-worked tapered mill through tight spot in 7" casing at 3984'. Pulled out and made up 5" wash pipe. Ran in and cleaned out sand from 7546' to 7667'. Made up socket, four drill colarrrs and bumper sub and jars.

2-14 Ran in well and latched on to 2 7/8" tubing fish.....151' fish from top of tubing to packer. Tried to rotate but socket slipped off. Pulled out. Put new slips in shoe.

1978

- 2-15 Ran in well and latched on to 2 7/8" tubing fish at 7614'. Ran McCullough free-point tool but would not go through tubing stop on overshoot at 7614'. Changed overshoot and re-ran free-point tool which stopped at 7615' on fill in 2 7/8" tubing. Pulled up to 2000'.
- 2-16 Pulled out of well with 2 7/8" drill pipe. Made up 7700' of 2 7/8" tubing with overshoot.
- 2-17 Rigged up McCullough circulating tools. Ran in well and circulated out sand from 7614' to 7619' where tool stopped. Pulled out and ran impression block but 2 1/4" tool stopped at top of fish at 7614'. Pulled out and made up 5" wash pipe with sawtooth shoe. Ran in and cleaned out sand from 7634' to 7677' (43'). Circulated hole clean.
- 2-18 Ran in well to top of gas lift mandrel at 7677' with washover shoe. Pulled out and made up Midway outside cutter. Ran in well and cut 2 7/8" tubing at 7655'. Pulled out and recovered 44' of 2 7/8" tubing, leaving 107' of fish in well. Made up 2 7/8" socket on 2 7/8" tubing - ran in and located fill at 7656'. Circulated out fill to 7663'.
- 2-19 Rig and crew idle.
- 2-20 Ran in well and circulated over fish at 7655' - latched on to fish. Rigged up and ran McCullough inside wash tool and washed out 2 7/8" tubing to 7710'. Pulled out and made up chemical cutter. Made cut at 7700' - pulled out, laying down 2 7/8" tubing. Recovered Camco MMG mandrel and 34' of tubing, leaving 65' of fish in well (tubing and safety system). Ran in 20 stands of 2 7/8" drill pipe.
- 2-21 Pulled out of well. Made up two joints of 5 1/2" wash pipe with washover shoe. Ran in and located fill at 7668'. Cleaned out fill and washed over Camco safety system to 7765'. Circulated clean. Pulled to top of fish at 7700' and let stand for one hour. Ran back to bottom and had 2' of fill - circulated clean. Pulled above fish.
- 2-22 Ran in well to top of packer at 7765' and found no fill. Pulled out and made up 2 7/8" socket. Ran in and latched on to fish, but unable to release latch-in. Re-ran socket with different jars. Ran in to top of fish at 7700'.
- 2-23 Ran in well with socket - jarred, released from Baker packer and recovered entire fish (tubing, safety system, tubing, latch-in locator, seals and production tube). Made up Baker retrieving tool. Ran in well and pulled Baker Retrieval-"D" packer. Made up 6 1/8" bit and casing scraper. Ran in 1500' of 2 7/8" drill pipe.

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SANTA PAULA, CALIFORNIA

- 2-24 Ran in well with 6 1/8" bit and casing scraper, but were unable to clean out deeper than 8046' (effective depth 8090'). Circulated well clean. Made up 190' of 2 7/8" tubing on 2 7/8" drill pipe - ran in to 8039'. Pumped in 50 cu.ft. of water, 36 cu.ft. of Class "G" cement, followed by 10 cu.ft. of water and displaced with drilling fluid. Pulled 350' and circulated well.

- 2-25 Ran in and located cement at 7921. Pulled out and laid down 2 7/8" tubing. Made up Servco 5 1/2" x 8 1/2" section mill. Ran in to 7805' - made cut out. Milled section in 26# casing from 7805' to 7823'.

- 2-26 Rig and crew idle.

- 2-27 Ran in well and milled up 7" casing to 7829'. Circulated well clean. Pulled out of well and changed Servco section mills. Ran in and milled 7" casing to 7833'.
Drilling fluid: 76# 45 sec.

- 2-28 Circulated well clean. Pulled out and changed Servco section mill. Ran in and milled 7" casing to 7847'. Changed section mill and running in well.
Drilling fluid: 75# 47 sec.

- 3-1 Milled 7" casing to 7860' with Servco section mill #4. Circulated well clean - pulled out. Ran back in with Servco junk mill - cleaned out metal cuttings to 7860'.
Drilling fluid: 74# 64 sec. 0% sand 1/2% solids.

- 3-2 Circulated well clean with Servco junk mill at 7921'. Pulled out and made up Servco section mill #5 - ran back in and re-milled from 7847' to 7858' - also milled 7" casing from 7858' to 7870'. Ran Servco 5 3/4" x 12" hole opener and opened hole from 7805'.
Drilling fluid: 74# 46 sec. 9.2 calcium chloride 1% solids.

- 3-3 Opened hole to 12" to 7870'. Circulated well clean and pulled out. Made up 90' of 2 7/8" tubing on 2 7/8" drill pipe. Ran in and hung tubing at 7878' and pumped in 50 cu.ft. of water, 60 cu.ft. of Class "G" cement with 20% sand and 10 cu.ft. water. Displaced with 185 cu.ft. of drilling fluid. Pulled 320' and circulated.
Drilling fluid: 74# 45 sec.

- 3-4 Pulled out of well and laid down 90' of 2 7/8" tubing. Made up 6 1/8" bit and casing scraper. Located top of cement at 7820'. Drilled out cement to 7830'. Made up 60' of 2 7/8" tubing and ran in to 7828'. Equalized cement plug, 50 cu.ft. water, 28 cu.ft. Class "G" cement with 20% sand, 10 cu.ft. water and displaced with 185 cu.ft. drilling fluid. Pulled 360' and circulated. Pulled out. Made up bit and casing scraper. Ran in to 7000' and circulated.
Drilling fluid: 74# 50 sec.

- 3-5 Circulated above cement. Ran in and located cement at 7700'. Drilled out cement to 7814'. Using Dyna-Drill, directionally drilled 6 1/8" hole from 7814' to 7835'.
Drilling fluid: 74# 42 sec. 10.2 calcium chloride 1 1/2 solids.
Surveys: 7820' 11045' S790E (original hole 12045' S790E).
- 3-6 Dyna-Drill drilled to 7874' (top 7" 7870'). Circulated well clean. Pulled out and made up drilling assembly. Ran in and reamed from 7809' to 7869'. Drilled from 7869' to 7890'. Circulated clean, surveyed and pulling out.
Drilling fluid: 78# 37 sec.
Survey: 7890' 12030 S800E (Original hole 7913' 12015' S820E).
- 3-7 Finished pulling out of well (lost two cones). Made up 120' of 2 7/8" tubing and picked up 7 joints of 2 7/8" drill pipe. Dropped same in well. Made up Brown Oil Tool overshot. Ran in and recovered all fish. Made up 2 7/8" tubing tail (155') on 2 7/8" drill pipe. Running in well to plug with cement and sand.
- 3-8 Hung tubing at 7885' and pumped 50 cu.ft. water followed by 35 cu.ft. of Class "G" cement with 20% sand and with 10 cu.ft. water. Displaced with 185 cu.ft. drilling fluid. Pulled up 360' and circulated. Ran 6 1/8" bit and casing scraper. Drilled out cement from 7750' to 7808'.
- 3-9 Ran in hole with Dyna-Drill and directionally drilled from 7808' to 7860'. Pulled out of well. Made up 6 1/8" bit and drilling assembly. Ran in to 7816' - reamed to 7860'. Drilled from 7860' to 7927'.
Drilling fluid: 71# 36 sec.
Surveys: 7824' S850E and 7897' 100 S770E (45')
- 3-10 Pulled out of well to change bit. Ran in well with 6 1/8" bit #6. Drilled and surveyed to 7998'.
Drilling fluid: 73# 49 sec.
Survey: 7988' 100 (30') S730E (15')
- 3-11 Pulled out and replaced 6 1/8" bit. Ran in and reamed from 7934' to 7998'. Drilled 6 1/8" hole from 7998' to 8003'. Pulled out and ran back in well with 6 1/8" F-3 button bit #8 - drilled to 8026'.
Drilling fluid: 73# 43 sec.
- 3-12 Drilled from 8026' to 8100' (6 1/8" hole).
Drilling fluid: 73# 46 sec.
Survey: 8100' 100 S770E (15')
- 3-13 Rigged up Schlumberger. Ran in well with Induction Log and recorded from 8100' to 7805' - took sidewall samples. Ran in well with Grant 6" x 13" hole opener.
Drilling fluid: 73# 46 sec.

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MAY 11 1978

SANTA PAULA, CALIFORNIA

1978

History for Well PORTER #44 - Aliso Canyon

PAGE 5.

- 3-14 Unable to open Grant 6" x 13" hole opener. Hole opener stuck in well at 7810', but worked same free and pulled out of well. Ran in well with 6 1/8" x 10" Grant hole opener and opened hole from 7808' to 7818'. Drilling fluid: 73# 46 sec.
- 3-15 Ran in well with new Grant 6" x 13" hole opener and opened hole from 10" to 13" from 7808' to 7818'. Opened 6 1/8" hole to 13" from 7818' to 7853'. Pulled out of well and found nose cone missing from hole opener. Ran back in well with 6 1/8" bit and cleaned out from 7853' to 8090'. Unable to clean out below 8090'.
- 3-16 Ran in well with 6 1/8" x 13" Grant hole opener and opened hole from 7853' to 7857'. Pulled hole opener out of well. Ran in hole with 6 1/8" x 13" Grant hole opener and opened hole from 7857' to 7873' (16'). Pulled out of well - found parted bumper sub. Drilling fluid: 73# 50 sec.
- 3-17 Ran in well with 5 7/16" Brown overshot. Located top of fish at 7555'. Engaged fish and recovered same. Installed new bumper sub. Ran in well with new 6 1/8" x 13" Grant hole opener and opened hole from 7873' to 7900' (28'). Ran in well with new 6 1/8" x 13" Grant hole opener and opened hole from 7901' to 7914' (13'). Circulated. Pulled out of well. Ran in well with new 6 1/8" x 13" Grant hole opener. Drilling fluid: 73# 50 sec.
- 3-18 Opened hole from 7913' to 7938' (15'). Circulated. Pulled out of well. Ran in well with new 6 1/8" x 13" Grant hole opener and opened hole from 7938' to 7954' (16'). Pulled out of well and left one arm and nose cone in well. Ran in well - milled and pushed junk from 7954' to 7994'. Drilling fluid 73# 50 sec.
- 3-19 Pushed junk with 6" mill to 8000'. Pulled out of well. Ran in well with new junk mill and pushed junk to 8014'. Pulled out and changed mills.
- 3-20 Finished running in well. Milled and pushed junk down hole to 8022'. Pulled out and changed mills. Ran in well and reamed from 8014' to 8022'. Drilling fluid: 75# 55 sec.
- 3-21 Milled and pushed junk down to 8091'. Pulled out and made up Tri-State 6" x 13" hole opener. Ran in and reamed from 7808'. Drilling fluid: 74# 53 sec.
- 3-22 Ran in well and reamed 13" hole from 7808' to 7954'. Opened 6 1/8" hole to 13" hole from 7954' to 7975' (21'). Pulled out. Ran back and opened hole from 7975' to 7994'. Circulated clean. Drilling fluid: 74# 57 sec.

- 3-23 Finished pulling out of well. Made up Tri-State hole opener #3. Ran in and opened 6 1/8" hole from 7994' to 7996'. Pulled out. Ran in with hole opener #4 and opened hole from 7996' to 7998'. Pulled out. Ran 6 1/8" junk mill to 7998'.
- 3-24 Milled and pushed junk to 8091'. Pulled out and made up 6" x 13" Tri-State hole opener #5. Ran in and opened hole from 7998' to 8002' - pulled out. Ran in hole with opener #6 and opened hole from 8002' to 8005'. Drilling fluid: 74# 51 sec.
- 3-25 Opened 6 1/8" hole to 13" to 8007'. Pulled out and changed tools. Ran in and opened hole to 8009'. Pulled out and changed tools but could not open hole. Pulled out and ran back with 6" x 11" button-type hole opener. Drilling fluid: 73# 51 sec. 5 calcium chloride 4% solids.
- 3-26 Ran in well with Tri-State 6" x 11" hole opener and opened hole to 11" from 8009' to 8027'. Pulled out and ran back with 6" x 13" hole opener. Opened 11" hole to 13" hole from 8009' to 8025'. Pulled out to change hole opener. Ran back to 8025'. Drilling fluid: 73# 49 sec. 7 calcium chloride 4% solids.
- 3-27 Opened 6 1/8" hole to 13" from 8025' to 8027'. Pulled out and ran back in with 6" junk mill, reamed to 8058' but were unable to clean out any deeper. Pulled up and made up 6" x 13" hole opener. Ran in but could not get deeper than 8023'. Drilling fluid: 74# 53 sec.
- 3-28 Pulled hole opener #11 and made up 6 1/8" junk mill. Ran in and reamed through tight spot at 8017' and reamed to 8042' where mill stopped. Pulled out and made up junk basket. Ran in and milled for two hours at 8042'. Pulled out but recovered no junk. Ran in with 6 1/8" junk mill. Drilling fluid: 74# 49 sec.
- 3-29 Ran in well with 6 1/8" junk mill but were unable to clean out deeper than 8042'. Pulled out and made up 6" x 13" Tri-State hole opener. Ran in and stopped at 8014'. Ran in and reamed through tight spot at 8014 with junk mill (6 1/8"). Drilling fluid: 74# 54 sec.
- 3-30 Circulated well clean from 8042' with 6 1/8" junk mill. Ran Tri-State hole opener and reamed through tight hole at 8014' - opened hole from 8027' to 8029'. Ran new hole opener and opened hole from 8029' to 8033'. Changed drilling line. Drilling fluid: 73# 49 sec.

DIVISION OF OIL AND GAS
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SANTA PAULA, CALIFORNIA

1978

History of Well PORTER #44 - Aliso Canyon

PAGE 7.

- 3-31 Pulled out leaving two drill collars and hole opener on bottom. Made up overshot, jars and bumper sub. Ran in, worked over fish, pulled out and recovered all fish. Ran in and opened 6 1/8" hole to 13" from 8031' to 8036'.
Drilling fluid: 74# 43 sec.
- 4-1 Pulled out to change hold opener. Ran in and opened hole to 13" from 8036' to 8042' and circulated hole clean. Ran Caliper Log - log showed 12" hole. Ran in hole with 6" x 13" hole opener.
Drilling fluid: 74# 50 sec.
- 4-2 Reamed from 7808' to 8042' twice. Pulled out. Rigged up and ran Dresser Atlas Caliper Log (4-arm) which showed the hole 13" or greater. Ran in well with 6 1/8" bit and drill collars to shoe at 7800'. Cleaned pits, ran to bottom, changed over to filtered polymer drilling fluid.
Drilling fluid: 69# 43 sec.
- 4-3 Assembled 5" 10-mesh wire-wrapped liner and ran same to 8042'. Liner hanger malfunctioned. Pulled out of well leaving liner on bottom. Ran Midway Fishing Tool spear and recovered all liner intact. Tryad Service inspected liner and rejected one damaged joint of 5" wire-wrapped liner. Re-assembled 5" liner.
- 4-4 Ran 399.95' of 5" liner, including 236.53' of 5" 15# 10-mesh wire-wrapped screen, Burns lead seal hanger withhold down slips and a Burns port collar. Also fitted on bottom with a 5" bull plug. Hung liner with bottom at 8039' and with top of liner hanger at 7639' - Burns port collar at 7642'. Set lead seal and tested with 1000 psi for 5 minutes - O.K. Pulled out. Replaced Burns setting tool with Burns gravel packing tools. Ran back and tested port collar and gravel packing tools.
- 4-5 Gravel packed liner with 200 sacks of 20-40 mesh gravel. Back-washed two sacks for a total pack of 198 sacks in place. Closed port collar. Pulled gravel pack tools and ran liner washer. Washed liner and pulled liner washer. Ran gravel pack tools and opened port collar. Pulling out of well.
- 4-6 Finishing pulling out of well. Ran Photon Log from 8038' to 7645' which showed good gravel pack. Ran Baker Model "C" bridge plug and set same at 7630'....could pump formation at 1500 psi. Set bridge plug at 7625' but would not hold pressure. Pulled to 3800' - plug held pressure. Ran Model "B" bridge plug and set same at 7630'...could pump into formation at 1500 psi. Pulled out of hole.
- 4-7 Ran in hole with fullbore. Found leak in 7" casing at 3990'-4000'. Obtained breakdown at 2.8 barrels per minute at 1500 psi. Ran and set Model "B" bridge plug at 4100'. Equalized 5 sacks of sand and pulled up - waited for one hour and located sand at 4082'. Pulled out of hole. Ran in open-end

- 4-7
(cont'd) drillpipe and equalized 100 sacks of Class "G" cement. Pulled up to 3200'. Squeezed 72 cu.ft. of cement away through leak with a final pressure of 2200 psi. Closed well in with 2200 psi for one hour. Pulled out. Ran bit and casing scraper to 3522'.
- 4-8 Drilled out cement from 3848' to 4001'. Worked scraper through tight casing from 3996' to 4001'. Leak took fluid under 1500 psi pressure. Pulled out of hole. Ran in open-end drill pipe to 3985'. Equalized 100 sacks of Class "G" cement plus 0.8% Halad 9. Pulled 14 1/2 stands and reversed out 100 cu.ft. drilling fluid. Squeezed 100 cu.ft. cement into casing leak. Closed well in with final pressure of 1800 psi.
- 4-9 Rig and crew idle.
- 4-10 Pulled out of well. Made up 6 1/8" bit and casing scraper. Ran in and tagged cement at 3974'. Cleaned out firm cement to 4013'. Tested hole at 3996' with 1500 psi for 15 minutes - O.K. Pulled out. Ran back in with 6 1/8" tapered mill and worked through bad pipe at 3996'. Pulled out. Ran back in with Baker retrieving tool and pulled bridge plug from 4100'.
- 4-11 Ran in well to 7600' and changed over to fresh water with friction reducer, pulled to 4000' and pressure tested 7" casing as follows:
- | | | |
|-------|-----------|------------------------------|
| 4000' | to 7630' | with 2300 psi for 60 minutes |
| 4000' | " surface | " 2300 psi " 60 " |
| 3500' | " " | " 2600 psi " 60 " |
| 3000' | " " | " 2800 psi " 60 " |
| 2500' | " " | " 3100 psi " 60 " |
| 2000' | " " | " 3400 psi " 60 " |
| 1500' | " " | " 3700 psi " 60 " |
| 750' | " " | " 4000 psi " 60 " |
- All above tests were O.K.
Pulled out. Made up retrieving tool. Running in well.
- 4-12 Finished running in well. Changed over to 69#/cu.ft. polymer drilling fluid. Latched on to bridge plug at 7630'. Pulled out and laid down bridge plug. Rigged up McCullough. Ran in with Baker Retrieva-"D" packer - stopped at 3995'. Pulled out. Ran in and reamed tight spot in 7" casing at 3995'. Pulled up for one hour. Ran back in and did not feel bad casing - pulled up to 120'.
- 4-13 Pulled out with 6 1/4" tapered mill. Re-ran packer and same stopped at 3996'. Ran in with tapered mill and 6 1/8" casing scraper. Ran to 4100' but did not locate any tight casing. Ran in with mill, 6 1/8" stabilizer and 6 1/4" casing scraper. Reamed tight casing from 3996' to 3941'. Pulled out and ran Baker Retrieva-"D" packer and set same at 7600'. Ran in with mill and stabilizer.

MAY 11 1978 PAGE 9.

1978History of Well PORTER #44 - Aliso Canyon

SANTA PAULA, CALIFORNIA

- 4-14 Finished pulling out of well with 6 1/4" tapered mill and 6 1/8" stabilizers. Made up "GO" casing patch with top at 3971' and bottom at 4012' (leak 3990'-4000') - could not release setting tool and while working, tool parted. Made up Midway 3 1/4" socket with jars and bumper sub. Latched on to tools and jarred same loose. Pulled out and laid down "GO" tools. Running in well with bit, bit sub on drill pipe to locate casing patch.
- 4-15 Ran in well and tagged top of 7" casing patch at 3971'. Pulled out. Laid down drill pipe. Loaded out drill pipe, drill collars and Kelly - unloaded 2 7/8" tubing. Ran in well with 40 joints of tubing.
- 4-16 Rig and crew idle.
- 4-17 Pulled 2000' of tubing. Made up Baker seal assembly and Camco safety system and pressure tested. Hydrotested 2 7/8" tubing in well, cleaning threads, changing collars and testing to 5000 psi for one minute.
- 4-18 Stabbed into packer at 7603' and spaced out. Pulled 25,000# over weight of string to check latch and landed tubing with 10,000# on packer. Removed B.O.P.E. and installed Xmas tree. Tested to 5000 psi for 30 minutes. Changed over to lease salt water. Ran Archer-Reed tubing plug and set same in NO-GO nipple at 7592'. Pressure tested seals, packer and 7" casing patch at 2000 psi for 20 minutes. Removed tubing plug.
RELEASED RIG at 10:00 P.M.

1067

DIVISION OF OIL AND GAS
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APR 5 1978

SANTA PAULA, CALIFORNIA

DIRECTIONAL DRILLING REPORT

SOUTHERN CALIFORNIA GAS CO.
"SFZU" ~~WELL NO.~~ 44-REDRILL
ALISO CANYON

JOB NO 750

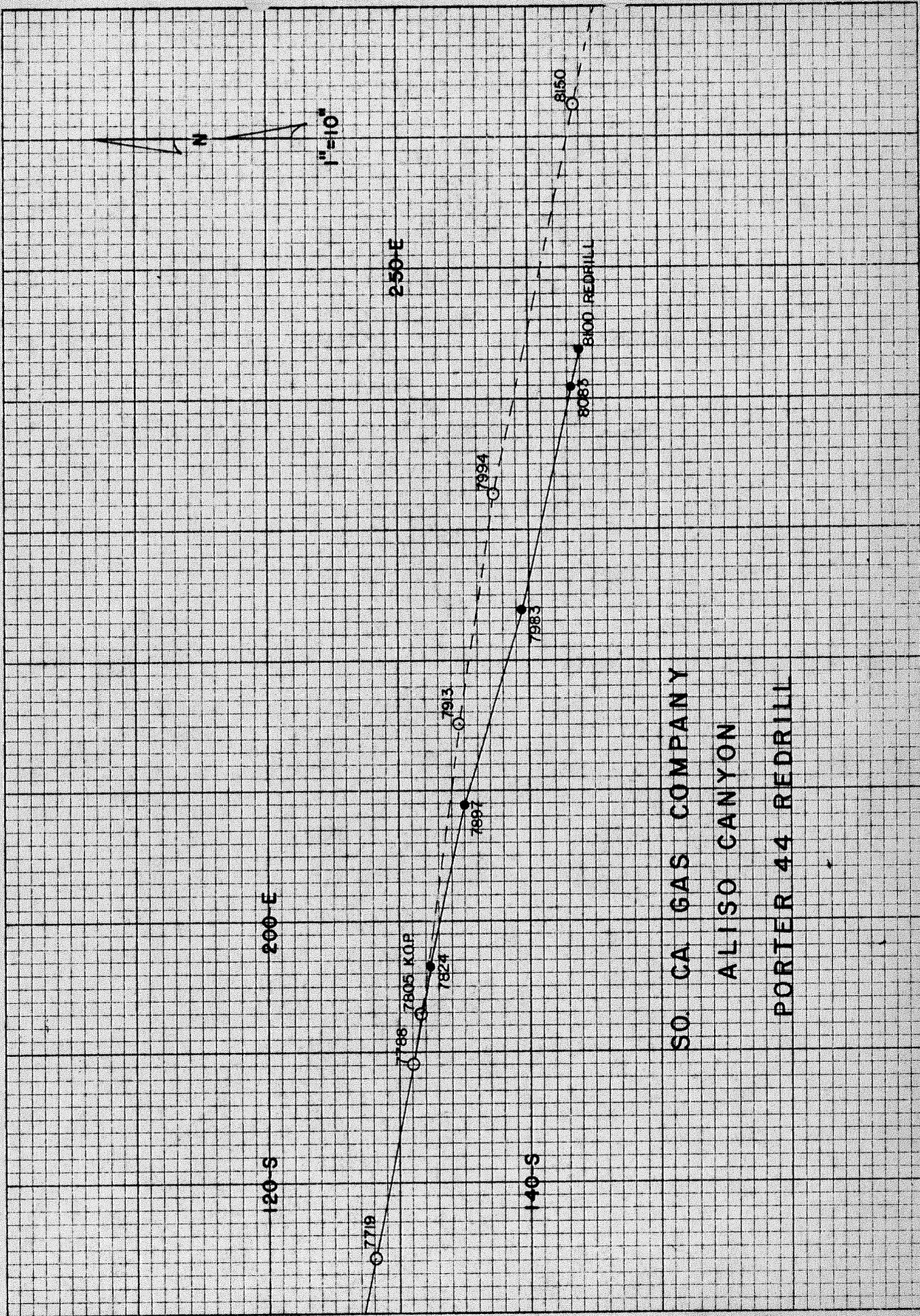
DATE MARCH 1978

U.S.

DIRECTIONAL DRILLING SYSTEMS

8857 GARDENIA AVE.

LONG BEACH, CALIFORNIA



SO. CA GAS COMPANY
ALISO CANYON
PORTER 44 REDRILL

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Feb. 10, 1978

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

Your proposal to plug and redrill well "SPJU" 1-44
(Name and number)
A.P.I. No. 037-00731, Section 28, T. 3S, R. 16E
S.B. B. & M., Aliso Canyon field, Los Angeles County,
dated 2-3-78, received 2-9-78, has been examined in conjunction
with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. 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
2. Blowout prevention equipment of at least DOG Class III, 5M, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE COMMENCING DOWNHOLE OPERATIONS.

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

Blanket Bond
MD:b

M. G. HETTLER

State Oil and Gas Supervisor

By

John L. Hardoin
Deputy Supervisor

John L. Hardoin

DIVISION OF OIL AND GAS

Notice of Intention to Rework Well

SANTA PAULA, CALIFORNIA

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	OGD114	OGD121
	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 rework well No. SFZU PORTER #44, API No. 037-00731, Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8350'
- Complete casing record, including plugs and perforations:
 - 11 3/4" cemented 530'
 - 7" cemented 8350', cement plug 8350'-8314', 8195'-8090'
 - C.P. 4280'
 - WSO 7800', segregation 7855', 7912', 8020'
 - Four holes 7799' cemented
 - Four 1/2" bullet holes per foot 8080'-8068',
 - 8035'-8025', 7994'-7946', 7940'-7922'
 - Four jet holes per foot 8016'-7996', 7890'-7862', 7846'-7818'
- Present producing zone name SESNON Zone in which well is to be recompleted SESNON
- Present zone pressure 3100 psi New zone pressure _____
- Last produced Gas Storage Well _____
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
- or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Kill well and install and test Class IV B.O.P.E.
- Clean out to 8090'.
- Plug with cement from 8090' to 7860'.
- Mill section of 7" casing from 7805' to 7860'.
- Redrill 6 1/8" hole from 7810' to 8080'.
- Open hole to 13" from 7805' to 8080'.
- Install and gravel pack 5" liner from 8075' to 7630'.

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

Address P.O. Box 3249, Terminal Annex
(Street)
Los Angeles, California 90051
(City) (State) (Zip)
 Telephone Number (213) 689-3561

SOUTHERN CALIFORNIA GAS COMPANY
(Name of Operator)
 By John R Melton
(Name) (Date) 2/8/78
 Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

FEB 9 1978

PORTER #44 - Aliso Canyon

SANTA PAULA, CALIFORNIA

Program to Recover Stuck Tubing, Redrill and Gravel Pack - 5" Wire-Wrapped Liner

Take all measurements from original derrick floor 9.5' above ground.

PRESENT CONDITIONS:

11 3/4" cemented 530' (42# H-40)

7" cemented 8350', perforated 8170'-8144'
cement plugs 8350'-8314' and 8195'-8090'
cp'd 4280'

segregation tests 8020' and 7912'
squeezed with cement 7799', WSO 7800'

Perforated four 1/2" holes per foot 8080'-8068', 8035'-8025',
8016'-7996', 7994'-7946', 7940'-7922', 7890'-7862' and 7846'-7818'.
Tight casing 3984' - milled through to set packer.

7" CASING DETAILS:

0' - 673'	23#	N-80	LT&C
673' - 4615'	23#	J-55	ST&C
4615' - 5019'	23#	S-85	LT&C
5019' - 6798'	23#	N-80	LT&C
6798' - 8350'	26#	N-80	LT&C

Well was killed on December 30, 1977 with 295 barrels of 80#/cu.ft. brine-polymer drilling fluid. During killing operations, holes were shot in tubing at 7097' and 6511' but could not circulate, indicating sand in tubing casing annulus above 6511'.

TUBING DETAILS:

2 7/8" tubing landed at 7775'
Baker Retrieval-"D" packer at 7765'
Camco annular flow safety system
0.500" choke 7754'
safety system and tubing plug in place.
Pump-out plug removed from gas lift
mandrel at 7681' - holes shot in tubing
at 7097' and 6511'

FEB 9 1978

SANTA PAULA, CALIFORNIA

PROGRAM:

1. Move in and rig up.
2. Install Class III B.O.P.E. Pressure test blind rams and pipe rams to 4000 psi with water and nitrogen. Also, pressure test Hydril bag to 3000 psi with water and nitrogen.
3. Attempt to establish circulation - may be necessary to shoot holes in tubing above 6500' to circulate. Try to pull tubing. If same is stuck, cut and recover tubing to free point. Use 75#/cu.ft. brine-polymer drilling fluid.
4. Make up 2 7/8" drill pipe and recover tubing (evidence is that tubing is clear inside and sanded in 7" casing to at least 6500'). Also, recover Retrieval-"D" packer from 7765'.
5. Clean out to 8090'.
6. Plug with Class "G" cement from 8090'-7860'.
7. Cut section in 7" 26# N-80 casing from 7805'-7860'. Open hole to 12" from 7805'-7860'. Plug with Class "G" cement mixed with 20% sand from 7860'-7805'.
8. Redrill 6 1/8" hole from 7810'-8080' in Northeasterly direction - following are directional shots:

7719'	13°	S80°E
7788'	12° 45'	S79°E
7913'	12° 15'	S82°E
9. Open 6 1/8" hole to 13" from 7805'-8080'. Run Caliper Log with computer print-out. Re-open hole as required. Circulate hole clean and replace drilling fluid with clean filtered drilling fluid.
10. Run 5" 10-mesh wire-wrapped liner with bull plug on bottom and with centralizers over each joint. Blank casing in lap will have welded centralizers. Liner details as follows:

8075'-7800'	5"	10-mesh wire-wrapped
7800'-7680'	5"	blank
7680'-7640'	5"	10-mesh wire-wrapped Tattle Tale
7640'-7630'		Port collar and lead seal liner hanger

Land and hang liner. Gravel flow pack with 20-40 mesh gravel - estimate 225 sacks. Filter drilling fluid returns. Close port collar, wash perforations and attempt to displace additional gravel. Repeat until no significant amount of gravel can be displaced. Run Photon Log.

FEB 9 1978

Program for PORTER #44 - Aliso Canyon SANTA PAULA, CALIFORNIA PAGE 3.

11. Set Baker Retrieval-"D" packer at 7600' do NOT set packer in a collar. Use wireline setting tool and reference collars.
12. Run 2 7/8" tubing, change collars, clean pins, apply Baker seal and Hydrotest to 5000 psi, holding each tests for one minute. Tubing to include:
 - Baker Production Tube (Used)
 - Baker Seals - 4 (Exchange)
 - Baker Latch-in Locator (Used)
 - Camco 10' Heavy Wall Tube (Used)
 - Camco 1.81" NO-GO with 2 7/8" threads (Used)
 - Camco 20' Heavy Wall Tube (Used)
 - Camco 2 7/8" Annular Flow Safety System (Reconditioned)
 - One Joint 2 7/8" Tubing
 - Camco Gas Lift Mandrel - EMPTY (Reconditioned)
13. Land tubing on packer with up to 10,000# on packer. Pull 25,000# over weight of tubing to check latch.
14. Remove B.O.P.E. and install Christmas tree. Pressure test Christmas tree to 5000 psi.
15. Circulate drilling fluid out of hole with waste lease salt water. Set tubing plug in NO-GO nipple. Pressure test seals and packer with 2000 psi. Pull tubing plug and release rig.

GCA
G. C. ABRAHAMSON
January 24, 1978

cc: Rig Supervisor
Contract Pusher (2)
Relief Rig Supervisor

B. F. Jones
J. L. Melton
D. Justice)
M. Grijalva)

Well File
Book Copy
Spare Copy

D.O.G. ✓

GCA/jp

OFC 13 1977

DIVISION OF OIL AND GAS

History of Oil or Gas Well

SANTA PAULA, CALIFORNIA

OPERATOR SOUTHERN CALIFORNIA GAS COMPANY FIELD Aliso Canyon
 Well No. PORTER #44, Sec. 28, T. 3N, R. 16W, S.B. B. & M.
API #037-00731
 Date December 8, 1977 Signed P. S. Magruder, Jr.
P.O. Box 3249, Terminal Annex P. S. Magruder, Jr.
Los Angeles, California 90051 Title Agent
 (Address) (213) 689-3561 (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date	
<u>1977</u>	
11-2	Killed well with 325 barrels 78#/cu.ft. brine-polymer drilling fluid. Rigged up. Circulated well adding 86#/cu.ft. drilling fluid until drilling weight was 80#/cu.ft.
11-3	Removed Christmas tree. Installed B.O.P.E. Tested blind rams and pipe rams with 4000 psi for 20 minutes using water and nitrogen. Tested Hydril bag with 3000 psi for 20 minutes using water and nitrogen.
11-4	Unlatched from packer and removed tubing hanger. Circulated for 1-1/2 hours. Pulled out of well. Left one tubing centralizer in well. Going in hole with 6" wash pipe to recover centralizer.
11-5	Ran wash pipe to top of packer at 7788'. Pulled out of well - no recovery. Ran retrieving tool. Pins sheared at 13,000# and packer did not come free. Pulled out. Ran new retrieving tool, engaged packer and jarred packer loose. Pulled all but 2000' of pipe.
11-6	Rig and crew idle.
11-7	Pulled out and laid down 7" Baker Retrieval-"D" packer. Ran in hole with 6 1/4" taper mill and rotated through tight casing from 3984' to 4003'. Ran in slowly to 6914' (top of 29# casing). Circulated and conditioned drilling fluid. Pulled up to 2000'.
11-8	Pulled out of well. Installed 8 5/8" shooting flange. Rigged up GO-Wireline Services. Made two junk basket runs to 8043' (tight or fill). Ran 7" Baker Retrieval-"D" packer but could not get below 4004'. Rigged down GO-Wireline Services. Ran in hole with 6 3/16" taper mill, 8' x 4 1/4" drill collar and 5 5/16" stabilizer. Milling tight 7" casing from 3984' to 4015'.
11-9	Continued milling tight casing to 4018'. Pulled up to 3975' and ran mill freely to 4079'. Plug tested seal assembly (seals, latch, 10' blast joint,

1.81" NO-GO nipple, 20' blast joint) under 5000 psi with water for five minutes - O.K. Rigged up GO-Wireline Services. Made junk basket and ran to 8043'. Ran and set 7" Baker Retrieva-"D" packer at 7765'.

11-10 Ran 2 7/8" tubing, changed collars, cleaned pins, applied Baker seal and Hydrotested to 5000 psi, holding each test for one minute.

11-11 Ran tubing and latched onto 7" Baker Retrieva-"D" packer at 7765'. Pulled 25,000# above hook load of 47,000# to check latch. Landed tubing with 8,000# compression. Installed tubing hanger plug. Removed B.O.P.E. Installed Christmas tree and pressure tested tree at 5000 psi for 20 minutes. Circulated brine-polymer drilling fluid out of well with lease salt water. Ran and set Camco "CA" plug in "D" nipple at 7757'. Pressure tested packer and seals under 2000 psi for 20 minutes. Pulled "CA" plug. Installed blind flanges on wellhead valves.
RELEASED RIG at 1:00 A.M. (11-12-77)

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

Report on Operations

No. T. 277-378

Mr. S. Magruder, Jr., Agent
Southern Calif. Gas Co.
P.O. Box 54780 Terminal Annex
Los Angeles, Calif. 90054

Santa Paula, Calif.
Dec. 27, 1977

DEAR SIR:

Operations at well No. "SFZU" P-44, API No. 037-00731, Sec. 28, T. 3N, R. 16W,
S.B., B & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 11/3/77. Mr. P.R. Wyple, representative of the supervisor was
present from 1530 to 1730. There were also present A. Smith, foreman

Present condition of well: No additions to the casing record since proposal dated 11/1/77.

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
xJOHN P. MATTHEWS, JR.
State Oil and Gas Supervisor

By John L. Harboin Deputy
John L. Harboin

REPORT ON PROPOSED OPERATIONS

Santa Paula, California

Nov. 3, 1977

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

Your proposal to rework gas storage well "SFZU" P-44
(Name and number)

A.P.I. No. 037-00731, Section 28, T. 3N, R. 16W

S.B. B. & M., Aliso Canyon field, Los Angeles County,

dated 11-1-77, received 11-2-77, has been examined in conjunction

with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED THAT:

1. 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.
2. Blowout prevention equipment of at least DCG III, 5M, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE COMMENCING DOWNHOLE OPERATIONS.

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

Blanket Bond
MD:b

M. G. MEPPERD

State Oil and Gas Supervisor

By

John L. Hardoin
Deputy Supervisor

John L. Hardoin

DIVISION OF OIL AND GAS
RECEIVED

NOV - 2 1977

DIVISION OF OIL AND GAS 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	OGD114	OGD121
	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 rework well No. PORTER #44, API No. _____, Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8350'
- Complete casing record, including plugs and perforations:
 - 11 3/4" cemented 530'
 - 7" cemented 8350' - plug 8350'-8314', 8195'-8090' perforated 8080'-7818' at intervals

- Present producing zone name SESNON Zone in which well is to be recompleted -
- Present zone pressure 4100 psi New zone pressure -
- Last produced Gas Storage Well
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
 or
- Last injected _____
(Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Kill well. Move in and rig up. Install B.O.P.E. and pressure test.
- Pull tubing. Recover packer. Mill through tight casing at 3984'.
- Run packer on wireline and set near 7800'.
- Run tubing with safety system.
- Return well to gas storage operation.

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

Address P.O. Box 3249, Terminal Annex
(Street)
Los Angeles California 90051
(City) (State) (Zip)
Telephone Number (213) 689-3561

SOUTHERN CALIFORNIA GAS COMPANY
(Name of Operator)
By P.S. Magruder Jr. by G.C.A.
(Name) (Date) 11-1-77
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

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

DIVISION OF OIL AND GAS
RECEIVED
AUG 8 1977

SANTA PAULA, CALIFORNIA

History of Oil or Gas Well

Operator Southern California Gas Company Field or County Aliso Canyon
Well name and No. PORTER #44 Sec. 28, T 3N, R 16W, S. B. & M.
A.P.I. well No. 037-00731 Name P. S. Magruder, Jr. Title Agent
Date July 30, 19 77
(Person submitting report) (President, Secretary or Agent)

Signature *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	
6-22-77	Killed well with 304 barrels of 72# polymer drilling fluid.
6-30-77	Moved California Production Service Rig #M-19 from Porter #40 to Porter #44. Rigged up.
7-1-77	Circulated well. (Gas cut from 72#/cu.ft. to 58#/cu.ft.). Installed back pressure valve in doughnut. Removed Christmas tree. Installed Class III 10" 5000 psi B.O.P.E. Tested blind rams and pipe rams to 4000 psi with water. Tested Hydril bag to 3000 psi with water.
7-2-77	Tested B.O.P.E. with nitrogen. Blind rams and 2 7/8" pipe rams to 4000 psi. Hydril bag to 3000 psi for 20 minutes. Witnessed by D.O.G. Pulled tubing and laid down 1/4" side line.
7-3-77	Rig and crew idle.
7-4-77	
7-5-77	Ran in with 6 1/8" bit and 7" casing scraper - stopped at 4000'. Pulled out. Ran in with 6" bit and casing scraper - tight spot at 4000' - worked bit and scraper through spot, but would not rotate through tight spot. Pulled out. Made up Kelly. Ran in with 6 1/8" Servco tapered mill. Milled through tight spot at 4000'. Ran in to 7700'.
7-6-77	Circulated bottoms up. Pulled out of hole. Ran in with Baker DR plug but were unable to set DR plug in packer. Pulled out of hole. Made up 6" junk basket on 2 7/8" tubing. Ran in to 6800'.
7-7-77	Ran junk basket on top of Baker Model "D" packer. Circulated and pulled out. Recovered one 1/4" tube clamp. Ran in with cut-off 45 degree angle 2 7/8" 9' pup on 2 7/8" tubing. Worked pup through Model "D" packer at 7788'. Circulated bottoms up. Pulled out. Ran in with Baker DR plug - unable to latch in Baker Model "D" packer at 7788'.

- 7-8-77 Pulled out Baker D.R. plug. Installed pitcher nipple and flow line. Off loaded four 4 3/4" D.C. and tools. Picked up and ran in on 2 7/8" tubing four 4 3/4" drill collars, jars, junk sub and Baker packer mill with retrieving tool. Milled on Model "D" packer at 7788'. Milled 3' and worked packer free.
- 7-9-77 Finished pulling out of hole with Baker packer milling tool and retrieving tool. Recovered packer. Laid down tools. Ran in with 6 1/8" big and 7" casing scraper to 8080'. Circulated bottoms up. Pulled out. Ran in with Baker Model "B" Lok-Set bridge plug and set at 7750'. Tested bridge plug at 1200 psi for 15 minutes - O.K.
- 7-10-77 Rig and crew idle.
- 7-11-77 Set Baker Model "B" bridge plug at 60'. Tested bridge plug with rig pump to 2000 psi for 20 minutes - O.K. Removed B.O.P.E. tubing head and seal flange. Unlanded 7" casing with Midway spear and Alco casing jacks.
- 7-12-77 Dug out 36" cement using jack hammers.
- 7-13-77 Welded & cut off conductor; cut off surface casing. Cut and threaded 7" made-up extension and tested under 4000 psi for 20 minutes. Welded 11 3/4" casing head on surface casing.
- 7-14-77 Valley X-Ray inspected 11 3/4" casing head weld - O.K. Relanded 7" casing. Tested seal flange with 5000 psi for 20 minutes - O.K. Installed 8" 5000# B.O.P.E. Tested blind rams with 4000 psi for 20 minutes with water - O.K.
- 7-15-77 Tested blind rams and pipe rams with water and nitrogen to 4000 psi each - O.K. Tested Hydril to 3000 psi for 20 minutes each with water and nitrogen- O.K. Ran Baker retrieving tool and pulled bridge plug from 60'. Ran in with Baker full bore cement squeeze tool. Displaced polymer fluid with fresh water containing a surface tension agent.
- 7-16-77 Pressure tested 7" casing, as follows:
- | | | | | |
|---------|----|-------|------|----------|
| 4500" | to | 7750' | with | 2300 psi |
| Surface | " | 4500' | " | 2400 psi |
| " | " | 4000' | " | 2600 psi |
| " | " | 3500' | " | 2800 psi |
| " | " | 3000' | " | 3000 psi |
| " | " | 2600' | " | 3200 psi |
| " | " | 2300' | " | 3400 psi |
| " | " | 800' | " | 4000 psi |
- Ran in with Baker retrieving tool to 7740'. Changed over from fresh water to polymer drilling fluid.

- 7-17-77 Rig and crew idle.
- 7-18-77 Recovered bridge plug from 7750'. Ran in with GO-International gauge feeler on wireline (6.078") to 7818'. Ran in with Baker Retrieva-"D" packer on wireline and same stopped at 3984'. Ran in with bit and 7" casing scraper to 4100'. Attempted to run packer and same stopped at 3984'. Ran in with bit and two 7" casing scrapers and reamed out tight casing at 3984'.
- 7-19-77 Attempted to set Baker Retrieva-"D" packer on wireline. Stopped at 3984'. Ran packer on 2 7/8" tubing and set at 7788'.
- 7-20-77 Ran in with Camco Safety System on 2 7/8 tubing. Cleaning box & pin, changing collars, applying Baker Seal and hydrotesting to 5000 psi for one minutes on each test.
- 7-21-77 Landed tubing on Packer with 8000#. Pulled 25000# over weight of tubing to check latch. Hook load when tubing landed 42000#. Installed back pressure valve in doughnut. Removed B.O.P.E. Installed Christmas tree and tested to 5000 psi. Circulated drilling fluid out of well with waste salt water. Set plug in NO-GO nipple at 7780' tested seals and packer to 1500 psi. O.K. Recovered tubing plug. Released rig at 5:00 P.M.

n/d

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

pu

Report on Operations

No. T. 277-144

Mr. P. S. McGruder, Jr., Agent
So. Calif. Gas Co.
P.O. Box 54790 Terminal Annex
Los Angeles, Calif. 90054

Santa Paula, Calif.
July 11, 1977

DEAR SIR:

Operations at well No. "SFZU" P-44, API No. 037-00731, Sec. 28, T. 3N, R. 16W,
S.B. B & M. Aliso Canyon Field, in Los Angeles County, were witnessed
on 7/2/77 ~~XXXX~~ Ms. T. M. Callaway, representative of the supervisor was
present from 0600 to 1100. There were also present L. Green, foreman

Present condition of well: No additions to the casing record since proposal dated 5/17/77.

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
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
Acting JOHN F. MATTHEWS, JR.
State Oil and Gas Supervisor

By *John L. Harbin* Deputy

REPORT ON PROPOSED OPERATIONS

....., California

Santa Paula,

June 23, 1977

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

Your proposal to well

....., A.P.I. No. rework gas storage, Section T. 3N20 P-24, R.

..... B. & M., 037-00731 28 3N 16W County,

S.B. Aliso Canyon Los Angeles
dated received has been examined in conjunction

with records filed in this office. 6-17-77 6-22-77

THE PROPOSAL IS APPROVED PROVIDED THAT:

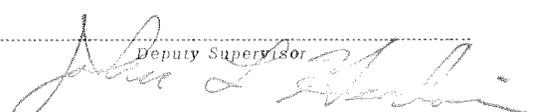
1. The drilling fluid used shall be of a quality and in sufficient quantity to control all subsurface conditions in order to prevent blowouts; and a reserve supply of this material shall be kept on hand to meet any emergency.
2. Blowout prevention equipment, at least of the Division of Oil and Gas Class III, 3M rating, shall be installed and maintained in operating condition at all times.
3. THIS DIVISION SHALL BE NOTIFIED TO WITNESS A PRESSURE TEST OF THE BLOWOUT PREVENTION EQUIPMENT BEFORE COMMENCING DOWNHOLE OPERATIONS.

NOTE: A COPY OF THIS APPROVAL SHALL BE POSTED AT THE WELL SITE PRIOR TO COMMENCING OPERATIONS.

Blanket Bond

MD:b

.....
M. G. MEYER (acting)

By
Deputy Supervisor


John L. Hardoinin

JUN 22 1977

DIVISION OF OIL AND GAS
Notice of Intention to Rework Well

SANTA PAULA, CALIFORNIA

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		
	OGD114	OGD121
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 rework well No. PORTER #44 "SFZU" P-44, API No. _____, Sec. 28, T. 3N, R. 16W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

- Total depth. 8350'
- Complete casing record, including plugs and perforations:
 - Plugged with cement from 8350' to 8090'
 - 11 3/4" cemented 530'
 - 7" cemented 8350'; WSO 8020'; 7912'; 7855' and 7800'
 - Perforated with four 1/2" bullet holes per foot
 - 8080'-8068'; 8035'-8025'; 8016'-7996'; 7994'-7946';
 - 7940'-7922'; 7890'-7862'; and 7846'-7818'
- Present producing zone name SESNON Zone in which well is to be recompleted -
- Present zone pressure 3100 psi New zone pressure -
- Last produced Gas Storage Well (Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)
- or
- Last injected (Date) (Water, B/D) (Gas, Mcf) (Surface pressure, psig.)

The proposed work is as follows:

- Move in and rig up. Kill well. Install B.O.P.E. and pressure test.
- Pull tubing. Clean out to 7788'. Set plug in packer.
- Pressure test 7" casing. Perform any remedial work indicated by pressure testing.
- Clean out to 8090'.
- Run tubing with down-hole safety system.
- Return well to gas storage operations.

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

Address P. O. Box 3249, Terminal Annex
(Street)
Los Angeles California 90051
(City) (State) (Zip)
Telephone Number (213) 689-3561

SOUTHERN CALIFORNIA GAS COMPANY
(Name of Operator)
By P. S. Magruder Jr. (Name) 6-17-77 (Date)
Type of Organization Corporation
(Corporation, Partnership, Individual, etc.)

DIVISION OF OIL AND GAS

MAR 2 1973

History of Oil or Gas Well

LONG BEACH, CALIFORNIA

OPERATOR Pacific Lighting Service Company FIELD Aliso CanyonWell No. SFZU P-44, Sec. 28, T. 3N, R. 16W, SB B. & M.Date February 5, 19 73 Signed P.B. Maguer Jr.P. O. Box 54790, Terminal Annex
Los Angeles, Calif. 90054 (213) 689-3561 Title Agent
(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

1973

Date

- 1-4 Moved in C.P.S. production rig.
- 1-5 to
1-7 Idle
- 1-8 Killed tubing with 80 bbls. brine-polymer workover fluid. Opened Otis XO sliding sleeve at 7711'. Killed and circulated well with total of 305 bbls. (including 80 bbls. above) brine-polymer workover fluid. Installed Class III B.O.P.E. and tested to 2000 psi for 30 minutes OK.
- 1-9 Pulled tubing and Guiberson KV-30 and GW-2 packers. Ran 6-1/8" bit and 7" scraper and circulated hole clean to T.D. at 8090'.
- 1-10 Ran Dresser-Atlas cement bond log 8068' to 4700', density log 8068 to 7450', and neutron lifetime log 8068' to 7300'. Set 7" bridge plug at 7780' and tested plug and casing to 1500 psi 30 minutes OK.
- 1-11 Removed B.O.P.E. and tubing head, leaving in place existing 3000 psi API casing head, welded extension on 7" casing and x-rayed weld OK.
- 1-12 Installed 3000 psi by 5000 psi cross over seal flange and 5000 psi tubing head and valves. Tested primary packing to 3000 psi OK. Tested tubing head packings to 4000 psi OK. Re-installed B.O.P.E. Set packer at 3203' and pressure tested 7" casing from 3203 to 7780' at 2000 psi for 20 minutes OK, and from 3203' to surface at 2500 psi OK. Set packer at 2200' and tested 7" casing from 2200' to surface at 3050 psi for 20 minutes OK.
- 1-13 Retrieved bridge plug from 7780'. Using Dresser-Atlas 4" guns and NCF IV 17 gram golden jets, perforated 7" casing with four 0.45" holes per foot from 8016' to 7996'; 7890' to 7862' and 7846' to 7818'.
- 1-14 Idle

DIVISION OF OIL AND GAS
RECEIVED

MAR 2 1973

LONG BEACH, CALIFORNIA

1973

1-15 Ran and pressure tested tubing to 5000 psi and set bridge plug at 7900' and hung squeeze packer at 7895'. Pumped in 27 bbls. 2% KCL, 10 bbls. 3% HCL and 15 bbls. 2% KCL through 2-7/8" tubing. Pulled up and set packer at 7790' and injected into zones at 7890' to 7862' and 7846' to 7818' the above fluid and 336 bbls. Clay-Lok fluid and 336 bbls. 1% KCL water at 22 cu. ft. per minute at 2000 psi.

1-16 Pulled bridge plug and squeeze packer. Ran 6-1/8" bit and 7" scraper and clean out fill from 8077' to 8090'.

1-17
&
1-18 Set Baker Model D 7" production packer at 7788'. Ran 2-7/8" tubing and 1/4" safety valve control tubing with equipment as listed below:

<u>No.</u>	<u>Jts.</u>	<u>Item</u>	<u>Length</u>	<u>Depth</u>
		Below K. B.	9.50	
		Donut & 2-7/8 EU 8 thd. N-80 Jt.	10.15	
		2-7/8 EU 8 thd. N-80 pup jt.	10.15	
139		2-7/8 EU 8 thd. J-55 tubing	4298.17	
		2-7/8 EU 8 thd. N-80 pup jt.	4.10	4332.07
		2-7/8 Camco Mandril w/1/4" BK Valve 1050#	7.35	4339.42
42		2-7/8 EU 8 thd. J-55 tubing	1301.26	
		2-7/8 EU 8 thd. N-80 pup jt.	4.10	5644.78
		2-7/8 Camco Mandril w/1/4" BK Valve 1025#	7.35	5652.13
35		2-7/8 EU 8 thd. J-55 tubing	1080.25	
		2-7/8 EU 8 thd. N-80 pup jt.	4.10	6736.48
		2-7/8 Camco Mandril w/1/4" BK Valve 1000#	7.35	6743.83
33		2-7/8 EU 8 thd. J-55 tubing	1029.51	
		2-7/8 type XO Otis sliding sleeve (open)	3.15	7776.49
		2-7/8 EU 8 thd. J-55 pup jt.	10.05	7786.54
		Page 3-1/2" RTL tubing safety valve with Non-ported nipple	5.40	7791.94
		3" x 2-7/8" EU 8 thd. crossover	1.15	7793.09
		Baker 2-7/8 Locator sub for Model "D" packer	1.00	7794.09
		5 sets Baker seals for Model "D" packer	4.90	7798.99

Pressure tested 1/4" control line to 5000 psi OK. Connections in 1/4" line at 615' and 3433' from surface. Landed 2-7/8" tubing with 12000# on packer. Removed B.O.P.E. and installed and tested production head to 4500 psi OK. Re-tested 1/4" control line to 4500 psi OK. Displaced brine-polymer work over fluid with lease salt water.

1-19 Rigged out and released rig at 2:00 PM. Unloaded 170 bbls. water down to top gas lift valve at 4339' with nitrogen.

DIVISION OF OIL AND GAS

REPORT ON PROPOSED OPERATIONS No. P 172-1407

SEC. 3606 WELL

GAS STORAGE WELL

Mr. P. S. Magruder, Jr., Agent
PACIFIC LIGHTING SERVICE CO.
P.O. Box 54790, Terminal Annex
Los Angeles, CA 90054

Long Beach, Calif.
Dec. 8, 1972

DEAR SIR:

to gas storage

Your proposal to alter casing & convert/ Well No. "SFZU" P-44 (037-00731)
Section 28, T. 3N, R. 16W, S.B.B. & M., Aliso Canyon Field, Los Angeles County,
dated 11/29/72, received 12/1/72, has been examined in conjunction with records filed in this office.

THE PROPOSAL IS APPROVED PROVIDED BLOWOUT PREVENTION EQUIPMENT WITH A MINIMUM 2000 PSI
WORKING PRESSURE SHALL BE INSTALLED AND MAINTAINED IN OPERATING CONDITION DURING ALL
STAGES OF PERFORATING.

ADS:dr

cc Company

Blanket Bond

JOHN F. MATTHEWS, JR., State Oil and Gas Supervisor

By *W.D. Ingram*, Deputy

DIVISION OF OIL AND GAS

Notice of Intention to Deepen, Redrill, Plug or Alter Casing in Well

DEC 1 1972

This notice must be given before work begins; one copy only

LONG BEACH, CALIFORNIA

Los Angeles, Calif. November 29, 1972

DIVISION OF OIL AND GAS

In compliance with Section 3203, Chapter 93, Statutes of 1939, notice is hereby given that it is our intention to commence the work of ~~deepening, redrilling, plugging or~~ altering casing at Well No. "SFZU" P-44
(Cross out unnecessary words)

(037-00731)

, Sec. 28, T. 3N, R. 16W, SB B. & M.

Aliso Canyon Field, Los Angeles County.

The present condition of the well is as follows:

1. Total depth. 8350', Plug 8090'.

2. Complete casing record, including plugs:

- 11-3/4" - 42# cemented 530'
- 7" - 23# and 26# cemented 8350', C.P. 4280'
- 7" effective to 8090'
- WSO 4 holes 7800'
- Bullet perforations 7922'-7940', 7946'-7994', 8025'-8035', 8068'-8080'
- Four holes 7799' cemented, 4 holes 7855', 7912', 8020'
- Cement plugs 8090' to 8195' and 8314' to 8350'
- Four holes 8110' cemented
- Four holes per foot 8144' to 8170' (below effective casing)

3. Last produced. _____
(Date) (Oil, B/D) (Water, B/D) (Gas, Mcf/D)

The proposed work is as follows:

Perforate and/or re-perforate in the Sesnon Zone from 7814' to 8090' as required, to convert well to a gas storage well.

Alter casing & Convert to Gas Storage

MAP	MAP BOOK	CARDS	ROAD	FORMS	
				114	121
		ARG	B	ARG	ARG

P.O. Box 54790, Terminal Annex
Los Angeles, CA 90054
(Address)
(213) 689-3621
(Telephone No.)

Pacific Lighting Service Company
(Name of Operator)

By *P. B. Magruder*

STATE OF CALIFORNIA
DEPARTMENT OF CONSERVATION
DIVISION OF OIL AND GAS

REPORT ON PROPOSED CHANGE OF WELL DESIGNATION

830 North La Brea Avenue
Inglewood, California

September 26, 1968

Mr. Mr. C. G. Nelson, Agent
Getty Oil Co., Operator
P. O. Box 811
Ventura, California 93001

DEAR SIR:

Your request dated letter dated August 26, 1968, relative to change in designation of well(s) in Sec. 27, 28, 34, T. 3 N., R. 16 W., S. B. B. & M., Aliso Canyon field, Los Angeles County, District No. 1, has been received;

and in accordance with Section 3203, Public Resources Code, reading in part as follows:

"* * * The number or designation by which any well heretofore drilled has been known, and the number or designation specified for any well in a notice filed as required by Section 3203, shall not be changed without first obtaining a written consent of the Supervisor."

the proposed change in designation is hereby authorized as follows: (formerly owned by Getty Oil Co.)

See attached list.

ag
cc: F. E. Kasline
Production Dept.
Conservation Committee

F. E. KASLINE

~~E. R. MURRAY-AARON~~
State Oil and Gas Supervisor

By *Wm. C. Bailey*
Deputy Supervisor

Proposed Changes of Well Designation

Old Designation:

New Designation:

Sec. 27:

"Fernando Fee" 32
"Porter" 12
" 30
" 31
" 32
" 36
" 37
" 45

"SFZU" FF-32 (037-00686)
" P-12 (037-00701)
" P-30 (037-00717)
" P-31 (037-00718)
" P-32 (037-00719)
" P-36 (037-00723)
" P-37 (037-00724)
" P-45 (037-00732)

Sec. 28:

"Porter" 4
" 25
" 26
" 34
" 35
" 38
" 39
" 40
" 41
" 42
" 43
" 44
" 46
" 47
"Porter-Sesnon" 42

"SFZU" P-4 (037-00699)
" P-25 (037-00712)
" P-26 (037-00713)
" P-34 (037-00721)
" P-35 (037-00722)
" P-38 (037-00725)
" P-39 (037-00726)
" P-40 (037-00727)
" P-41 (037-00728)
" P-42 (037-00729)
" P-43 (037-00730)
" P-44 (037-00731)
" P-46 (037-00733)
" P-47 (037-00734)
" PS-42 (037-00753)

Sec. 34:

"Fernando Fee" 31
" 33
" 34
" 35
"Mission-Adrian Fee" 3
" 4
" 5

"SFZU" FF-31 (037-00685)
" FF-33 (037-00687)
" FF-34 (037-00688)
" FF-35 (037-00689)
" MA-3 (037-00693)
" MA-4 (037-00694)
" MA-5 (037-00695)

DIVISION OF OIL AND GAS

WELL SUMMARY REPORT

JUL 16 1956

SUBMIT IN DUPLICATE

Operator TIDEWATER OIL COMPANY Well No. "PORTER" 44 LOS ANGELES, CALIFORNIA

Sec. 20, T. 2N, R. 10W, SB B. & M. Aliso Canyon Field Los Angeles County.

Location 1720.78 feet South and 2994.52 feet West from Station #84
(Give location from property or section corner, or street center lines)

Elevation of ground above sea level 2195 feet

All depth measurements taken from top of Derrick Floor which is 9.5 feet above ground.
(Derrick Floor, Rotary Table or Kelly Bushing)

In compliance with Sec. 3215, 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 4, 1956 Signed T. E. Weaver

R. M. Burns (Engineer or Geologist) W. D. Gould (Superintendent) Title T. E. Weaver, Agent (President, Secretary or Agent)

Commenced drilling	Completed drilling	Total depth	Plugged depth	Junk	GEOLOGICAL MARKERS	DEPTH
<u>11/11/55</u>	<u>12/30/55</u>	<u>8350'</u>	<u>8090'</u>			

Commenced producing Jan. 6, 1956 (Date) Flowing/gas lift/pumping (Cross out unnecessary words)
Geologic age at total depth: Cretaceous
Name of producing zone: Seanon

	Clean Oil bbl. per day	Gravity Clean Oil	Per Cent Water including emulsion	Gas Mcf. per day	Tubing Pressure	Casing Pressure
<u>1/17/56</u> Initial production	<u>21</u>	<u>18.0</u>	<u>12.5</u>	<u>37</u>	<u>100#</u>	<u>750#</u>
<u>4/11/56</u> Production after 30 days	<u>13</u>	<u>16.6</u>	<u>20.0</u>		<u>100#</u>	<u>800#</u>

CASING RECORD (Present Hole)

Size of Casing (A. P. I.)	Depth of Shoe	Top of Casing	Weight of Casing	New or Second Hand	Seamless or Lapweld	Grade of Casing	Size of Hole Drilled	Number of Sacks of Cement	Depth of Cementing if through perforation
<u>20"</u>	<u>25'</u>	<u>0</u>		<u>New</u>					
<u>11 3/4"</u>	<u>530'</u>	<u>0</u>	<u>12#</u>	<u>New</u>	<u>Seamless</u>	<u>H-10</u>	<u>15"</u>	<u>260</u>	
<u>7"</u>	<u>8350'</u>	<u>0</u>	<u>23, 26#</u>	<u>New</u>	<u>Seamless</u>	<u>H-25, H-80</u> <u>S-95</u>	<u>10 5/8"</u>	<u>200 ex</u> <u>600</u>	<u>1200</u> <u>Shoe</u>

PERFORATED CASING

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

<u>7" casing from 7922'-7940', Four 1/2" perf. H/Ft. Gun perforations by Lane Wells</u>
<u>7" casing from 7940'-7948', Four 1/2" perf. H/Ft. " " " " " "</u>
<u>7" casing from 8025'-8035', Four 1/2" perf. H/Ft. " " " " " "</u>
<u>7" casing from 8068'-8080', Four 1/2" perf. H/Ft. " " " " " "</u>
<u>7" casing from 8144'-8170', ineffective, Four 1/2" perf. H/Ft. Gun perf. by Lane Wells</u>

Electrical Log Depths 530' - 8350' (Attach Copy of Log)

DIVISION OF OIL AND GAS

JUL 16 1956

History of Oil or Gas Well

LOS ANGELES, CALIFORNIA

OPERATOR TIDE WATER ASSOCIATED OIL COMPANY FIELD ALISO CANYON

Well No. Porter #41, Sec. 28, T. 3 N, R. 16 W, S. 8. E. B. & M.

Date June 4, 1956, 19 Signed T. E. Weaver

Los Nietos, Calif. Oxford 91051 Title T. E. Weaver, Agent

(Address) (Telephone Number) (President, Secretary or Agent)

It is of the greatest importance to have a complete history of the well. Use this form to report a full account of all important operations during the drilling and testing of the well or during re-drilling, altering of casing, plugging, or abandonment with the dates thereof. Be sure to include such items as hole size, formation test details, amounts of cement used, top and bottom of plugs, perforation details, sidetracked junk, bailing tests, shooting and initial production data.

Date

LOCATION: 1720.78' South and 2994.52' West of Station 81
ELEVATION: 2204.50' Derrick Floor

1955

10/25-26 Graded location.

10/27-31 Installed 25' of 20" conductor pipe, dug cellar and poured concrete, cleaned and leveled rig site.

11/1-6 Idle.

11/7-10 Severns Drilling Contractor moving in, rigging up and digging rat hole.

11/11 Spudded 10-5/8" hole at 12:00 Noon and drilled from surface to 390'. Mud weight 73#, 60 viscosity, gel and water.

11/12 Drilled 10-5/8" hole from 390' to 530'. Opened 10-5/8" hole to 15" to 530'. Ran Homco survey to 530'. Mud weight 73#, 60 viscosity, gel and water.

11/13 Ran and cemented 11-3/4", 42#, N-40, T = C casing at 530' with 260 sacks Colton construction cement, last 100 sacks treated with 2.0% calcium chloride. Had good cement returns to surface. Time 7:30 AM. O.W.C. Landed casing, installed B.O.P. and tested with 1000# for 15 minutes. Mud weight 73#, 60 viscosity, gel and water.

11/14 Drilled 10-5/8" hole from 530' to 948'. Mud weight 76#, 45 viscosity, gel and water.

11/15 Drilled 10-5/8" hole from 948' to 1365'. Mud weight 83#, 42 viscosity, gel and water.

11/16 Drilled 10-5/8" hole from 1365' to 1972'. Mud weight 80#, 48 viscosity, 11.0 c.c. water loss.

11/17 Drilled 10-5/8" hole from 1972' to 2577'. Mud weight 80#, 48 viscosity, 11.0 c.c. water loss.

11/18 Drilled 10-5/8" hole from 2577' to 2942'. Mud weight 78#, 44 viscosity, 9.0 c.c. water loss.

11/19 Drilled 10-5/8" hole from 2942' to 3228'. Mud weight 78#, 48 viscosity, 8.0 c.c. water loss.

11/20 Drilled 10-5/8" hole from 3228' to 3494'. Mud weight 75#, 50 viscosity, 8.0 c.c. water loss. Changed to high pH lime emulsion mud.

11/21 Drilled 10-5/8" hole from 3494' to 3859'. Mud weight 78#, 42 viscosity, 5.0 c.c. water loss.

11/22 Drilled 10-5/8" hole from 3859' to 4189'. Mud weight 79#, 50 viscosity, 3.0 c.c. water loss.

11/23 Drilled 10-5/8" hole from 4189' to 4177'. Mud weight 80#, 45 viscosity, 4.2 c.c. water loss. Shut in Porter Well #51 and #52 while drilling through Aliso Zone.

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- 11/24 Drilled 10-5/8" hole from 4407' to 4519'. Mud weight 82#, 48 viscosity, 3.0 c.c. water loss.
- 11/25 Drilled 10-5/8" hole from 4519' to 4641'. Mud weight 82#, 50 viscosity, 3.0 c.c. water loss.
- 11/26 Drilled 10-5/8" hole from 4641' to 4938'. Mud weight 82#, 45 viscosity, 4.1 c.c. water loss.
- 11/27 Drilled 10-5/8" hole from 4938' to 5402'. Mud weight 81#, 48 viscosity, 4.2 c.c. water loss.
- 11/28 Drilled 10-5/8" hole from 5402' to 5651'. Mud weight 81#, 48 viscosity, 5.3 c.c. water loss.
- 11/29 Drilled 10-5/8" hole from 5651' to 5901'. Mud weight 81#, 50 viscosity, 6.2 c.c. water loss.
- 11/30 Drilled 10-5/8" hole from 5901' to 6063'. Mud weight 82#, 60 viscosity, 6.2 c.c. water loss.
- 12/1 Drilled 10-5/8" hole from 6063' to 6352'. Mud weight 82#, 50 viscosity, 5.4 c.c. water loss.
- 12/2 Drilled 10-5/8" hole from 6352' to 6577'. Mud weight 80#, 57 viscosity, 5.4 c.c. water loss.
- 12/3 Drilled 10-5/8" hole from 6577' to 6752'. Mud weight 82#, 56 viscosity, 6.4 c.c. water loss. Set whipstock at 6752', facing South 87° East. Dug 7-5/8" hole off whipstock from 6752' to 6754'. Opened 7-5/8" hole to 10-5/8". Drilled ahead with 10-5/8" bit to 6764'.
- 12/4 Drilled 10-5/8" hole from 6764' to 6858'. Mud weight 79#, 50 viscosity, 5.2 c.c. water loss.
- 12/5 Drilled 10-5/8" hole from 6858' to 7012'. Mud weight 80#, 50 viscosity, 4.4 c.c. water loss.
- 12/6 Drilled 10-5/8" hole from 7012' to 7114'. Mud weight 81#, 46 viscosity, 3.4 c.c. water loss.
- 12/7 Drilled 10-5/8" hole from 7114' to 7229'. Mud weight 81#, 46 viscosity, 3.4 c.c. water loss.
- 12/8 Drilled 10-5/8" hole from 7229' to 7375'. Mud weight 82#, 48 viscosity, 3.2 c.c. water loss.
- 12/9 Drilled 10-5/8" hole from 7375' to 7468'. Mud weight 82#, 48 viscosity, 3.0 c.c. water loss.
- 12/10 Drilled 10-5/8" hole from 7468' to 7595'. Mud weight 82#, 45 viscosity, 3.0 c.c. water loss.
- 12/11 Drilled 10-5/8" hole from 7595' to 7716'. Mud weight 82#, 48 viscosity, 2.4 c.c. water loss.
- 12/12 Drilled 10-5/8" hole from 7716' to 7913'. Mud weight 81#, 49 viscosity, 3.7 c.c. water loss.
- 12/13 Drilled 10-5/8" hole from 7913' to 7999'. Mud weight 82#, 46 viscosity, 3.0 c.c. water loss.
- 12/14 Drilled 10-5/8" hole from 7999' to 8008'. Ran Schlumberger electric log and Microlog at 8008'. Mud weight 82#, 48 viscosity, 3.0 c.c. water loss.
- 12/15 Drilled 10-5/8" hole from 8008' to 8061'. Mud weight 82#, 48 viscosity, 3.8 c.c. water loss.
- 12/16 Drilled 10-5/8" hole from 8061' to 8098'. Mud weight 82#, 52 viscosity, 3.0 c.c. water loss.
- 12/17 Drilled 10-5/8" hole from 8098' to 8150'. Mud weight 82#, 50 viscosity, 2.4 c.c. water loss. Ran Schlumberger electric log at 8150' and took sidewall samples.
- 12/18 Drilled 10-5/8" hole from 8150' to 8315'. Mud weight 81#, 50 viscosity, 2.8 c.c. water loss.

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12/19 Drilled 10-5/8" hole from 8315' to 8350'. Ran Schlumberger electric log at 8350' (total depth). Conditioned mud for running casing. Mud weight 81#, 48 viscosity, 2.8 c.c. water loss.

12/20 Laid down 4" drill pipe. Ran and cemented 7", 23 and 26#, N-80, S-95 and J-55, T & C casing at 8350' with 600 sacks Colton Hi-temp. cement around shoe. Pressure increased from 700-1500# when plugs bumped. Time 5:10 PM. Opened Baker C.P. collar at 4280' and displaced 200 sacks Colton slow cement through ports. Pressure increased from 250-2000# when sleeve closed ports. Time 6:45 PM. Halliburton. Landed 7" casing. Casing detail as follows:

672.87'	23#, N-80
3942.14'	23#, J-55
403.63'	23#, S-95
1779.54'	23#, N-80
1551.82'	26#, N-80

8350.00' Derrick floor measurement

Casing equipped with Baker differential Fillup shoe and collar on shoe joint and a Baker Model "C" stage cementing collar at 4280'; also 8 centralizers and 12 scratchers.

12/21 Standing cemented. Made up 3-1/2" drill pipe.

12/22 Drilled out C.P. collar at 4280' and cleaned out to 8317'. Conditioned mud. Ran Lane-Wells Gamma Ray and collar locator log from 8317'-7400'. Shot four jet holes at 8110' by Lane-Wells. Ran Johnston tester with 1500' water cushion on 3-1/2" drill pipe and set packer at 8060' with perforated tailpipe to 8074'. Opened tester at 6:05 AM (12-23-55). Had medium strong steady blow for 15 minutes (gas to surface in 5 minutes); light steady blow for 27 minutes. Maximum rate 85 MCF/Day. Water cushion surfaced after total of 42 minutes. Flowed gassy cushion for 1 minute, then pulled tester loose. Tester open a total of 43 minutes. Test was cut short due to heavy fog and fire hazard. Mud weight 81#, 48 viscosity, 2.6 c.c. water loss.

12/23 WNSO 8110' (cont.) Pulled tester. Unable to determine rise due to failure of main valve. Ran Baker Model "K" retainer on 3-1/2" drill pipe and set at 8042'. Applied pressure to holes at 8110' and formation broke down at 3500# and took fluid at rate of 12 cu.ft. per min. at 3200#. Mixed 100 sacks of Victor Hi-temp. cement and displaced all cement through holes and cleared holes with 25 cu.ft. of water and mud. Final pressure 2400#. Time 3:00 AM (12-24-55). Halliburton.

12/24 With Baker Model "K" retainer set at 8042', broke down holes at 8110' with 3000#. Formation took fluid at rate of 11 cu.ft. per min. Mixed 100 sacks Victor Hi-temp. and displaced 90 sacks below retainer. Final pressure 5600#. Time 10:45 AM. Backscuttled estimated 10 sacks. Halliburton. WNSO 7799'. Shot four jet holes at 7799' by Lane-Wells. Ran Johnston tester on 3-1/2" drill pipe with 1500' water cushion and set packer at 7756' with perforated tailpipe to 7774'. Opened 3/4" bean at 8:47 PM. Had faint puff, then dead for 18 min., then light blow with gas to surface in next 2 min. (gas to surface in total of 20 min.), increasing to strong steady blow at end of 25 min. test, at which time cushion surfaced. Test cut short due to heavy fog and fire hazard. Recovered 90' of watery drilling fluid. Charts confirmed results of test.

12/25 Ran Baker Model "K" retainer on 3-1/2" drill pipe and set at 7735'. Applied pressure to holes at 7799'. Formation broke down at 2800# and took fluid at rate of 15 cu.ft. per min. at 2500#. Mixed 100 sacks C.H.T. and displaced all cement through holes. Cleared holes with 25 cu.ft. of mud and water. Final pressure 2100#. Time 9:00 AM. Halliburton. After 3 hours applied pressure to holes at 7799' which broke down at 2400# and took fluid at rate of 12 cu.ft. per min. Mixed 100 sacks C.H.T.

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- 12/25 (cont.) and displaced all cement below retainer. (90 sacks away). Final pressure 2500#. Time 1:50 PM. Pulled tool to 7620' and backscuttled without returns. Halliburton.
- 12/26 Drilled out cement retainers at 7735' and 8042' and cleaned out to 8314'. WSO 8109'. Ran Lane-Wells jet gun and shot four jet holes at 8109'. Ran Johnston tester on 3-1/2" drill pipe with 1500' water cushion and set packer at 8055' with perforated tailpipe to 8102'. Opened tester at 6:10 PM. Had weak blow for 10 minutes, then dead for balance of 1 hour test. Recovered 10' net rise drilling fluid. Pressure bomb charts confirmed results of test. WSO witnessed and approved by Division of Oil and Gas. Pulled tester. WSO 7800'. Ran Lane-Wells jet gun and shot four holes at 7800'. Ran Johnston tester on 3-1/2" drill pipe with 1500' water cushion and set packer at 7777' with perforated tailpipe at 7794'. Opened tester at 5:05 AM (12-27-55). Had weak blow for 5 min., then dead for balance of 1 hour test. Recovered 10' net rise of drilling fluid. Pressure bomb charts confirmed results of test. WSO witnessed and approved by Division of Oil and Gas.
- 12/27 J.C.T. 8144'-8170' (Cretaceous). Ran Lane-Wells bullet gun and shot four 1/2" holes per foot from 8144' to 8170'. Ran Johnston tester on 3-1/2" drill pipe with 1500' water cushion and set packer at 7792' with perforated tailpipe to 7810'. Opened 3/4" bean at 6:07 PM. Had faint steady blow for first hour, then light steady blow for balance of four hour test. Gas to surface in 4 minutes. Recovered 750' net rise of thin gassy drilling mud. Pressure bomb charts confirmed results of test. Initial flow pressure 750#; final flow pressure 1000#.
- 12/28 Hung 3-1/2" drill pipe at 8195' and plugged well with 25 sacks C.H.T. cement. Equalized at 8055'. Pulled drill pipe to 8040' and backscuttled estimated 8 sacks cement. Time 8:30 AM. B.J. Service. Shot four jet holes at 8020' by Lane-Wells. Located top of cement at 8169'. Segregation at 8020'. Ran Johnston straddle tester on 3-1/2" drill pipe with 1500' water cushion and set packers at 7799' and 8027'. Opened 3/4" bean at 2:12 AM (12-29-55). Had faint puff, then dead for balance of 1 hour test. No fluid recovery. Charts confirmed results of test.
- 12/29 Hung 3-1/2" drill pipe at 8166' and plugged well with 45 sacks Victor Hi-temp. cement. Equalized at 7915'. Time 11:05 AM. B.J. Service. After 5 hours and 45 min., located top of plug at 8042'. Pulled drill pipe, shot four jet holes at 7912' by Lane-Wells. Segregation at 7912'. Ran Johnston tester on 3-1/2" drill pipe with perforated tailpipe to 7891'. Opened at 3:05 AM (12-30-55). Had light blow for 2 min., then dead for balance of 1 hour test. Recovered 10' rise of drilling fluid. Charts confirmed results of test.
- 12/30 Ran Lane-Wells jet gun and shot four holes at 7855'. Segregation 7855'. Ran Johnston tester on 3-1/2" drill pipe with 1500' water cushion and set packer at 7813' with perforated tailpipe to 7830'. Opened 3/4" bean at 1:25 PM. Had faint blow for 2 min., then dead for balance of 1 hour test. Recovered 2' net rise of drilling fluid. Charts confirmed results of test. Ran bit and scraper and drilled out cement plug from 8042'-8090'.
- 12/31 Ran Lane-Wells gun and shot four 1/2" bullet holes per foot from 8080'-8068' and 8035'-8025'. J.C.T. 8025'-8080'. Ran Johnston tester on 3-1/2" drill pipe with 1000' water cushion and set packer at 7985' with perforated tailpipe to 8003'. Opened 3/4" bean at 10:42 AM. Had faint blow increasing to light steady blow (5-10 MCF/Day rate) during first 10 min. After next 23 min., blow increased to 25 MCF/Day rate and continued for balance of 1/2 hour and 10 min. test. Gas to surface in 1 hour and 5 min. Made 1/2 min. shut in test. Recovered 653' net rise:
- Top 90' Gassy, muddy oil; 83% oil, 17% mud, 13.3 gravity
 - 180' Oily, gassy mud, 5-10% oil
 - 383' Thin drilling fluid with scum of oil

Charts indicated initial flow pressure 480#; final flow pressure 700#; shut in pressure 2400# and rising.

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1/1

Shot four 1/2" bullet holes per foot from 7994'-7946' and 7940'-7922' by Lane-Wells. J.C.T. 7922'-7994'. Ran Johnston tester on 3-1/2" drill pipe with 1000' water cushion and set packer at 7892' with perforated tailpipe to 7910'. Opened Tester at 10:05 AM. Had light blow for 15 min. increasing to 53 MCF/Day rate for next 10 min. then decreasing to 35 MCF/Day rate for duration of 3 hour 25 min. test. Gas to surface in 20 min. Made 45 min. shut in test. Recovered 1025' net rise of very gassy oily drilling fluid. Estimated percentages - 22% oil, 78% gassy drilling fluid. Detail as follows:

Top 190' Slightly oily, gassy drilling fluid. Est. 5% oil
 190' Oily, gassy drilling fluid. Est. 15% oil
 190' Oily, gassy drilling fluid. Est. 30% oil
 75' Gassy, oily drilling fluid. Est. 45% oil
 190' Gassy, muddy oil. Est. 50% oil
 190' Slightly oily, gassy drilling fluid. Est. 5% oil
 1025'

Charts indicated the following: initial flow pressure 300#; final flow pressure 600#; shut in pressure 2350# and rising. Ran casing scraper to 8090' and laid down 3-1/2" drill pipe.

1/2

Tore out B.O.P. Ran 2-7/8" tubing with five gas lift valves and packer. Circulated out mud with salt water. Set tubing on packer at 7898' with 12,000#. Installed Christmas tree.

1/3

Released contractor at 9:00 AM. Contractor tearing out. Installing injection lines.

1/4

Contractor tearing out. Laying injection line.

1/5

Contractor tearing out.

1/6

Hooked up injection line. Started injecting gas at 11:30 AM at 335 MCF/Day rate. In 18 hours well flowed on gas lift 215 bbls. circulating salt water with trace of oil. 200 tubing pressure, 1000# casing pressure.

1/7

In 18 hours well flowed on gas lift 46 barrels circulating salt water with trace of oil. Injection line frozen for 6 hours. 700/1000# pressures.

1/8

In 22 hours well flowed on gas lift 47 barrels circulating salt water with trace of oil, through 18/64" bean. Pressures 200/800#.

1/9

In 22 hours well flowed on gas lift 16 barrels gross, 8 barrels net 54.0% cut, 12.0 wet gravity, 18/64" bean, 200# tubing pressure, 900# injection pressure. Injecting 200-300 MCF. Down 2 hours repairing gas injection line.

1/10

	Gross	Net	Cut	Gravity	Bean	Tubing Pressure	Injection Pressure	MCF Inj.	MCF Net
	21	12	14.0%	11.0 wet	32/64"	100#	750#	237	- 6
	Changed from 18/64" to 32/64" bean at 10:00 AM.								
1/11	16	9	46.0%	11.2 wet	32/64"	50#	750#	198	-10
1/12	17	12	30.0%	15.2	32/64"	100#	750#	57	13
1/13	25	19	23.0%	15.2	32/64"	100#	750#	393	-22
1/14	20	15	25.0%	15.1	32/64"	100#	750#	382	36
1/15	16	11	32.0%	15.1	32/64"	100#	750#	386	47
1/16	18	12	32.0%	15.5	32/64"	75#	750#	313	72
1/17	24	21	12.5%	18.0	32/64"	100#	750#	415	-37
1/18	19	18	4.0%	19.2	32/64"	50#	800#	316	-39
1/19	14	9	32.0%	19.2	32/64"	50#	800#	354	-28
1/20	19	14	33.0%	19.2	32/64"	50#	800#	350	-30
1/21	11	8	33.0%	19.2	32/64"	50#	800#	107	-11

Injection line frozen for 6 hours.

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1956	Gross	Net	Cut	Gravity	Bean	Tubing Pressure	Injection Pressure	MCF Inj.	MCF Net
1/22	25	17	33.0%	19.2	32/64"	50#	800#	334	-80
1/23	19	13	36.0%	19.2	32/64"	100#	750#	378	-60
1/24	17	13	24.0%	19.2	32/64"	100#	800#	340	-17
1/25	22	16	34.0%	19.2	32/64"	100#	800#	350	-50
1/26	30	21	32.0%	19.2	32/64"	100#	800#	341	-21
1/27	25	19	24.0%	19.2	32/64"	100#	800#	208	-36
1/28	20	15	25.0%	19.2	32/64"	100#	800#	200	-45
1/29	19	13	34.0%	19.2	32/64"	100#	800#	229	-22
1/30	19	13	34.0%	19.2	32/64"	100#	800#	243	30
1/31	19	13	34.0%	19.2	32/64"	100#	800#	313	30
2/1	19	13	34.0%	19.2	32/64"	100#	800#	300	25
2/2	19	13	34.0%	19.2	32/64"	100#	800#	313	30
2/3	19	13	34.0%	19.2	32/64"	100#	800#	315	33
2/4	7	5	34.0%						

Shut in to bleed down.

2/5 Killed well with 200 bbls. of dead oil.

2/6 Contractor moved in (C.P.S.). Pulled and laid down flow valves and tubing.

2/7 Made up 2-7/8" drill tubing and Halliburton straddle tool. Unable to get Halliburton power units.

2/8 Idle. Waiting on power units.

2/9 Ran Halliburton straddle tool and set packers at 7900' and 8000'. Formation broke down at 6500# and took fluid at 8 bbl./min. Mixed 624 gallons Hydrofrac Gel consisting of 624 gallons of Kerosene and 175 lbs. of Nuogel (Napalm), and followed with 300 bbls. of Sesnon crude. Pumped Hydrofrac Gel and approximately 300 bbls. oil into Lower Sesnon Zone at rate of 8 bbls./min. at 6000-6500# pressure with 3 power units (6 pumps). No distinct pressure break was noted. Pressure dropped off in stages. Time 1:00 PM. Halliburton.

210 Ran Halliburton down squeeze tool and set packer at 8015'. Formation broke from 7500-7000# pressure and took oil at 9 bbl./min. rate. Mixed 572 gallons Hydrofrac Gel consisting of 572 gallons of Kerosene and 175 lbs. of Nuogel (Napalm), and followed with 300 bbls. of Sesnon crude. Pumped Hydrofrac Gel and approximately 300 bbls. of oil into Eocene sands at rate of 7 bbls./min. at 7000-7500# pressure with 3 power units (6 pumps). Time 11:30 AM. Halliburton. Laid down drill tubing. Released contractor.

2/11 Ran 2-7/8" tubing with Guiberson packer and flow valves and set at 7898'. Installed Christmas tree. On gas lift at 1:00 PM. In 17 hours well produced 218 barrels circulating oil. Total circulating oil used in fracing operations, 900 barrels.

2/12 In 2 1/2 hours well produced on gas lift as follows (all circulating oil):

	Gross	Net	Cut	Gravity	Bean	Tubing/Casing	MCF Inj.
	113				32/64"	100/800#	325
2/13	38	36			32/64"	100/750#	350
2/14	36	30	18.0%	19.8	32/64"	100/750#	350
2/15	33	27	18.0%	18.6	32/64"	100/750#	325
2/16	30	24	22.0%	17.9	32/64"	100/750#	325 (Off 10 hrs.)
2/17	26	21	5.0%	18.1	32/64"	100/750#	340
2/18	22	15	30.0%	18.1	32/64"	100/750#	349
2/19	22	14	38.0%	17.9	32/64"	100/750#	370
2/20	23	18	22.0%	17.0	32/64"	100/750#	370
2/21	19	14	22.0%	17.8	32/64"	100/750#	370
2/22	16	13	19.0%	17.8	32/64"	100/750#	370

Circulating oil remaining = 354 barrels.

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1956	Gross	Net	Cut	Gravity	Bean	Tubing Pressure	Casing Pressure	MCF Inj.	MCF Net
2/23	Well not on gauge. Estimated 24 hour production:								
	20	16							
2/24	21	17	(Estimated - well not on gauge)						
2/25	30	23	22.0%	20.8	32/64"	100#	800#	370	
2/26	25	20	20.0%	18.2	32/64"	100#	800#	375	
2/27	25	20	20.0%	18.2	32/64"	100#	800#	375	
2/28	25	20	20.0%	18.2	32/64"	100#	800#	375	
2/29	25	20	20.0%	18.2	32/64"	100#	800#	375	
3/1	25	20	20.0%	18.2	32/64"	100#	800#	455	
3/2	30	23	22.0%	16.6	32/64"	100#	800#	458	
3/3	30	23	22.0%	16.6	32/64"	100#	800#	425	
3/4	30	23	22.0%	16.6	32/64"	100#	800#	418	
3/5	30	23	22.0%	16.6	32/64"	100#	800#	453	
3/6	30	23	22.0%	16.6	32/64"	100#	800#	448	
3/7	30	24	20.0%	16.6	32/64"	100#	800#	171	
3/8	22	18	20.0%	16.6	32/64"	100#	800#	302	
3/9	19	15	20.0%	16.6	32/64"	100#	800#	253	
3/10	19	15	20.0%	16.6	32/64"	100#	800#	258	
3/11	19	15	20.0%	16.6	32/64"	100#	800#	308	
	All circulating oil recovered.								
3/12	19	15	20.0%	16.6	32/64"	100#	800#	322	
3/13	19	15	20.0%	16.6	32/64"	100#	800#	368	
3/14	20	16	20.0%	16.6	32/64"	100#	750#	218	
3/15	19	15	20.0%	16.6	32/64"	100#	750#	136	282
3/16	19	15	20.0%	16.6	32/64"	100#	750#	250	
3/17	19	15	20.0%	16.6	32/64"	100#	750#	266	
3/18	19	15	20.0%	16.6	32/64"	100#	750#	282	
3/19	Off 24 hours - injection lines frozen.								
3/20	20	16	20.0%	16.6	32/64"	100#	900#	225	
3/21	30	24	20.0%	16.6	32/64"	100#	800#	255	
3/22	20	16	20.0%	16.6	32/64"	100#	800#	166	
3/23	20	16	20.0%	16.6	32/64"	100#	800#	345	
3/24	20	16	20.0%	16.6	32/64"	100#	800#	366	
3/25	20	16	20.0%	16.6	32/64"	100#	800#	442	
3/26	22	18	20.0%	16.6	32/64"	100#	800#	372	
3/27	23	19	20.0%	16.6	32/64"	100#	800#	384	30) 48
3/28	23	19	20.0%	16.6	32/64"	100#	800#	404) hr
3/29	23	19	20.0%	16.6	32/64"	100#	800#	340	
3/30	23	19	20.0%	16.6	32/64"	100#	800#	429	
3/31	23	19	20.0%	16.6	32/64"	100#	800#	375	
4/1	22	18	20.0%	16.6	32/64"	100#	800#	446	
4/2	22	18	20.0%	16.6	32/64"	100#	800#	425	15) 48
4/3	22	18	20.0%	16.6	32/64"	100#	800#	465) hr
4/4	22	18	20.0%	16.6	32/64"	100#	800#	396	
4/5	22	18	20.0%	16.6	32/64"	100#	800#	363	
4/6	22	18	20.0%	16.6	32/64"	100#	800#	385	
4/7	28	22	20.0%	16.6	32/64"	100#	800#	365	
4/8	16	13	20.0%	16.6	32/64"	100#	800#	362	9) 48
4/9	16	13	20.0%	16.6	32/64"	100#	800#	379) hr
4/10	16	13	20.0%	16.6	32/64"	100#	800#	375	
4/11	16	13	20.0%	16.6	32/64"	100#	800#		

OPERATOR: TIDE WATER ASSOCIATED OIL COMPANY

WELL NO.: Porter #14, Aliso Canyon Field

DIVISION OF OIL AND GAS
RECEIVED

JUL 16 1956

Page 8
LOS ANGELES, CALIFORNIA

CASING RECORD

11-3/4" 42# C 530'
7" 23, 26# C 8350' WSO 8109', 7800'
Segregations 8020', 7912', 7855'
C.P. 4280', 7299', 8110'
Pfs. 7922'-7940'; 7946'-7994';
8025'-8035'; 8068'-8080';
8114'-8170' (ineff.)

TUBING RECORD

2-7/8" H 7898' w/packer and flow valves

DIVISION OF OIL AND GAS

JUL 16 1956

LOS ANGELES, CALIFORNIA

LOG AND CORE RECORD OF OIL OR GAS WELL

Operator TIDE WATER ASSOCIATED OIL COMPANY Field ALISO CANYON
Well No. Porter #44 Sec. 28, T. 3 N, R. 16 W, S.B. B. & M.

FORMATIONS PENETRATED BY WELL

DEPTH TO		Thickness	Drilled or Cored	Recovery	DESCRIPTION
Top of Formation	Bottom of Formation				
<u>SCHLUMBERGER SIDEWALL SAMPLES</u>					
2195'	(4 samples due to multiple detonation)			1-3/4"	(3 samples) Fine to coarse grained brownish gray sand with clay inclusions (1 sample) Light brownish gray, fine grained, silty oil sand with good odor.
3150'				No recovery	
5650'				1-1/2"	Fine to medium grained gray sand. Good odor. Looks wet.
7525'				1-1/4"	Light brownish gray silty oil sand. Excellent odor.
8018'				1-1/4"	Light brownish gray, fine to coarse grained silty oil sand. Good odor.
8030'				1"	Light brownish gray, fine grained, silty oil sand with good odor.
8045'				No recovery	
8062'				1"	Light brownish gray sandy siltstone with vertical stringer of oil sand and pebbles to 3/8".
8073'				1-1/2"	Soft gray shale - pouged pieces
8078'				1-1/2"	Soft brown and gray sandy shale w/carbonaceous material. Possibly pouged.
8098'				3/4"	Light brownish gray fine grained silty sand. Has flat parting, fair odor.
8119'				3/4"	Soft light brownish gray fine grained silty sand. Fair odor.
8145'				3/4"	Sand, as above
8148'				1-1/4"	Soft light gray fine to medium grained sand. Good gas odor.
8149'				1"	Soft light brownish gray fine to medium grained silty sand. Has good amber cut.

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL AND GAS

Special Report on Operations Witnessed

No. T 156-10Mr. Thomas E Weaver
Box Y
Los Nietos California
Agent for TIDE WATER ASSOCIATED OIL COLos Angeles 15 Calif.
January 5 19 56

DEAR SIR:

Operations at your well No. "Porter" 44 Sec. 28, T. 3 N, R. 16 W, S B B. & M.,
Aliso Canyon Field, in Los Angeles County, were witnessed
on November 29, 19 55. Mr. R. Ybarra, Engineer, representative of the supervisor was present
from 2:00 to 2:30 p.m.. There were also present T. Aldbridge, Driller;
M. Craig, Superintendent.
Present condition of well: 11-3/4" cem. 530'. T.D. 5693'.The operations were performed for the purpose of inspecting blowout prevention equipment and installation.Mr. Aldbridge reported:

1. A 15" rotary hole was drilled from the surface to 531'.
2. On November 13, 1955, 11-3/4", 42 lb. casing was cemented at 530' with 250 sacks of cement (2% CaCl₂)
3. Cement returned to the surface.
4. A 10-5/8" rotary hole was drilled from 531' to 5693'.

THE ENGINEER NOTED THAT THE WELL WAS EQUIPPED WITH THE FOLLOWING BLOWOUT PREVENTION EQUIPMENT:

1. A Shaffer double cellar control gate for closing in the well with the drill pipe out of the hole, and for closing around the 4½" drill pipe.
2. A G.K. Hydril Blowout Preventer for closing around the 4½" drill pipe.
3. The controls for the above equipment were located outside the derrick.
4. A 2" mud fill-up line with a 2" high pressure stopcock into the 11-3/4" casing below the above equipment.
5. A high pressure stopcock on the kelly.

THE BLOWOUT PREVENTION EQUIPMENT AND INSTALLATION ARE APPROVED.

RY:OH

cc R M Burns (2)
R S CurlMr F W Hertel
c/o Tide Water Associated Oil Co
79 New Montgomery Street
SAN FRANCISCO 20E. H. MUSSER
State Oil and Gas SupervisorBy E. H. Mussers Deputy

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T 156-127

Mr. Thomas E Weaver

Box Y

LOS NIETOS California

Los Angeles 15

Calif.

January 31

19 56

Agent for TIDE WATER ASSOCIATED OIL CO

SEC. 3606 WELL

DEAR SIR:

Your well No. "Porter" 44, Sec. 28, T. 3 N, R. 16 W, S B B & M.
Aliso Canyon Field, in Los Angeles County, was tested for water shut-off
on December 26, 1955. Mr. W. Polglase, Engineer, designated by the supervisor was present
from 9:30 to 10:30 p.m. as prescribed by law; there were also present D. Humphreys, Engineer;
J. Gilliland, Engineer.

Shut-off data: 7 in. 26 lb. casing was recemented through perforations at 7799 ft.
on December 25, 1955 in 10-5/8 in. hole with 190 ~~xxxxxx~~ sacks of cement
~~xxxxxx~~ calculated to fill behind casing to ~~xxxx~~ ft. below surface.

Casing record of well: 11-3/4" cem. 530'; 7" cem. 8350', c.p. 4280', 8110', 7799', four 1/2"
holes 8109', W.S.O.

Present depth 8350 ft. cmt. bridge ~~xxxx~~ ft. to ~~xxxx~~ ft. Cleaned out cmt. ~~xxxx~~ ft. to 8316 ft. for test.
A pressure of ~~xxx~~ lb. was applied to the inside of casing for ~~xxx~~ min. without loss after cleaning out to ~~xxx~~ ft.
A Johnston tester was run into the hole on 3-1/2 in. drill pipe ~~xxxx~~
with 1500 ft. of water ~~and~~ cushion, and packer ~~xx~~ set at 8085 ft. with tailpiece to 8104 ft.
Tester valve, with 3/4 in. bean, was opened at 7:10 p.m. and remained
open for 1 hr. and ~~xxxx~~ min. During this interval there was a weak blow for 10 min., and no
blow thereafter.

Mr. ~~xxxxxx~~ reported:

ENGINEER M. DOSCH, VISITED THE WELL FROM 2:00 - 2:30 P.M., DECEMBER 23, 1955, AND MR. HUMPHREYS
REPORTED: 1. A 10-5/8" rotary hole was drilled from 530' to 8350'.

2. On December 20, 1955, 7", 26 lb. casing was cemented at 8350', and through a cementing
device at 4280' with 600 and 200 sacks of cement, respectively.

3. The 7" casing was shot-perforated with four 1/2" holes at 8110'.

4. A Johnston tester was run into the hole on 3-1/2" drill pipe and packer set at 8060' with
tailpiece to 8074'.

5. The tester valve was opened at 6:05 a.m. and remained open 43 min. During this interval,
there was a medium strong blow for 15 min., and a light, steady blow thereafter.

THE ENGINEER NOTED:

1. When the drill pipe was removed, a net rise of 8000' of watery, gas-cut drilling fluid
was found in the drill pipe above the tester, equivalent to 58.4 bbl.

2. The recording pressure bomb chart showed that the tester valve was open 43 min.
The operator decided to recement.

THE ENGINEER ARRIVED AT THE WELL AT 9:30 P.M. AND MR. GILLILAND REPORTED:

1. On December 23, 1955, the 7" casing was recemented through perforations at 8110' with 200
sacks of cement of which 190 sacks was squeezed away under a final pressure of 5600 lb.

2. The 7" casing was shot-perforated with four 1/2" holes at 7799', company test, was wet.

3. On December 25, 1955, the 7" casing was recemented through perforations at 7799' with 200
sacks of cement of which 190 sacks was squeezed away under a final pressure of 2400 lb.

4. The 7" casing was shot-perforated with four 1/2" holes at 8109'.

THE ENGINEER NOTED: 1. When the drill pipe was removed, a net rise of 10' of drilling fluid
was found in the drill pipe above the tester, equivalent to 0.1 bbl.

2. The recording pressure bomb chart showed that the tester valve was open 1 hr.

THE 7" SHUT-OFF AT 8109' IS APPROVED.

E. H. MUSSER

State Oil and Gas Supervisor

WP:OH

cc F.W. Hertel, R. S. Curl,
R.M. Burns (2)By *J. M. Halling* Deputy

DIVISION OF OIL AND GAS

Report on Test of Water Shut-off

(FORMATION TESTER)

No. T156-128

Mr. Thomas E WeaverBox Y

LOS NIETOS California

Agent for TIDE WATER ASSOCIATED OIL COLos Angeles 15 Calif.January 31 19 56

SEC. 3606 WELL

DEAR SIR:

Your well No. "Porter" 44, Sec. 28, T. 3 N, R. 16 W, S. B B & M.
Aliso Canyon Field, in Los Angeles County, was tested for water shut-off
 on December 27, 19 55. Mr. V. F. Gaede, Engineer, designated by the supervisor was present
 from 9:00 to 10:00 a.m. as prescribed by law; there were also present J. Gilliland, Engineer;
W. McKim, Drilling Foreman.

Shut-off data: 7 in. 26 lb. casing was re cemented through perforations at 7799 ft.
 on December 25, 19 55 in 10-5/8 in. hole with 190 ~~XXXXX~~ sacks of cement
~~XXXXX~~ calculated to fill behind casing to EXX ft. below surface.

Casing record of well: 11-3/4" cem. 530'; 7" cem. 8350', c.p. 4280', 7799', 8110', four 1/2"
holes 8109', W.S.O., four 1/2" holes 7800', W.S.O.

Present depth 8350 ft. cmt. bridge 8350 ft. to 8316 ft. Cleaned out ~~XXX~~ ~~XXXXXX~~ to 8316 ft. for test.
 A pressure of XXX lb. was applied to the inside of casing for XXX min. without loss after cleaning out to XXX ft.
 A Johnston tester was run into the hole on 3-1/2 in. drill pipe ~~XXXXX~~
 with 1500 ft. of water ~~XXX~~ cushion, and packer XX set at 7777 ft. with tailpiece to 7794 ft.
 Tester valve, with 3/4 in. bean, was opened at 5:05 a.m. and remained
 open for 1 hr. and XXXX min. During this interval there was a weak steady blow for 5 min., then
no blow thereafter.

Mr. Gilliland reported:

1. The 7" casing was shot-perforated with four 1/2" holes at 7800'.
2. A Johnston tester was run as noted above.

THE ENGINEER NOTED:

1. When the drill pipe was removed, a net recovery of 10' of drilling fluid was found in the drill pipe above the tester, equivalent to 0.1 bbl.
2. The recording pressure bomb chart showed that the tester valve was open 1 hr.

THE 7" SHUT-OFF AT 7800' IS APPROVED.

VFG:OH

cc R S Curl
R M Burns (2)

Mr F W Hertel c/o Tide Water Associated Oil Co
 79 New Montgomery Street
 SAN FRANCISCO 20 California

E. H. MUSSER
State Oil and Gas Supervisor

By

R. H. Halling

Deputy

STATE OF CALIFORNIA
DEPARTMENT OF NATURAL RESOURCESDIVISION OF OIL AND GAS
REPORT ON PROPOSED OPERATIONS

No. P155-1660

Mr. Thomas E Weaver
Box Y
Los Nietos California
Agent for TIDE WATER ASSOCIATED OIL COLos Angeles 15 Calif.
OCTOBER 31 1955

SEC. 3606 WELL

DEAR SIR:

Your _____ proposal to drill Well No. "Porter" 44
Section 28, T3 N., R.16 W., S.B.B. & M., Aliso Canyon Field, Los Angeles County,
dated Oct. 24 1955, received Oct. 26 1955, has been examined in conjunction with records filed in this office.

Present conditions as shown by the records and the proposal are as follows:

THE NOTICE STATES

"Legal description of lease Porter LeaseLocation of Well: 2970' feet West & 1690 feet South from Station #84.Well to be drilled under provision of Sec. 3606 due to rugged topography.

Directional survey to be submitted with log and history.

Elevation of ground above sea level approx. 2193 feet - _____ datum.All depth measurements taken from top of derrick floor which is 10 feet above ground."

PROPOSAL

"PROPOSED CASING PROGRAM

Size of Casing

Inches A.P.I.	Weight	Grade and Type	Top	Bottom	Cementing Depths
11-3/4"	42#	H-40	0'	500'	500'
7"	23, 26#	J-55, N-80	0'	8150'	8150'

Intended zone or zones of completion: Lower Sesnon

It is understood that if changes in this plan become necessary we are to notify you before running casing."

DECISION

THE PROPOSAL IS APPROVED PROVIDED THAT

1. The provisions of Sec. 3606 relating to derricks and subsurface spacing shall be followed.
2. A directional survey shall be made and filed with this division.
3. Mud fluid consistent with good drilling practice shall be used and the column of mud fluid maintained at all times to the surface, particularly while pulling the drill pipe
4. Adequate blowout prevention equipment shall be installed and maintained in operating condition at all times.
5. THIS DIVISION SHALL BE NOTIFIED AS FOLLOWS:
 - (a) To inspect the installed blowout prevention equipment before drilling below 2000'.
 - (b) To witness a test of the effectiveness of the 7" shut-off.

FEK:OH

CC R M Burns (2)
R S CurlF W Hertel c/o Tide Water Assoc Oil Co
79 New Montgomery Street
SAN FRANCISCO 20 California

E. H. MUSSER, State Oil and Gas Supervisor

By R. N. Walling, Deputy

OCT 26 1955

LOS ANGELES, CALIFORNIA

DIVISION OF OIL AND GAS

037-00731

Notice of Intention to Drill New Well

This notice and surety bond must be filed before drilling begins

9 (D)

Los Nietos, Calif. October 24 19 55

DIVISION OF OIL AND GAS

In compliance with Section 3203, Division III, Article 4, Public Resources Code, notice is hereby given that it is our intention to commence the work of drilling well No. "Porter #14", Sec. 28, T. 3 N, W. 1/4

R. 16 W, S.B. B. & M., Aliso Canyon Field, Los Angeles County.

Legal description of lease Porter Lease (Attach map or plat to scale)

Location of Well: 2970' feet West & 1690' feet South (Direction)

at right angles to said line from the from Station #84. (Direction)

Well to be drilled under provision of Sec. 3606 due to rugged topography.

Directional survey to be submitted with log and history.

Elevation of ground above sea level approx. 2193 feet datum.

All depth measurements taken from top of Derrick Floor which is 10 feet above ground. (Derrick Floor, Rotary Table or Kelly Bushing)

PROPOSED CASING PROGRAM

SIZE OF CASING INCHES A.P.I.	WEIGHT	GRADE AND TYPE	TOP	BOTTOM	CEMENTING DEPTHS
11-3/4"	42#	N-40	0'	500'	500'
7"	23.26#	J-55, N-80	0'	8150'	8150'

Intended zone or zones of completion: Lower Sanjon

MAP	MAP BOOK	CARDS	BOND	FORMS
18A WLP	WLP	EB	Blanket	114 121

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

Address P.O. Box "Y", Los Nietos, Calif. TIDE WATER ASSOCIATED OIL COMPANY (Name of Operator)

Telephone Number Oxford 91051 By Thomas E. Weaver T. E. Weaver, Agent