

Attachment E-3. Summary of Legacy Geophysical Survey Datasets

Survey Name, Line # Designations on Maps and Digital Files ¹	Navigation Data Shapefile Name, *.shp, FCL 2013	Acquisition Contractor	Client/Owner	Survey Date	Survey Length (km)	Primary Energy Source	CDP Fold or Channels	Record Length (sec)	PG&E Record Type	General Survey Area in Offshore Santa Maria Basin	Comments
AQT AQT4S# AQT-Line-#	AQT-1974	Aquatronics (AQT)	PG&E	1974	479	Sparker	6	1.3	SGY and vellum	Point Arguello to Point San Simeon, within 10 km of coastline	Hi-res data include 3.5 kHz and side-scan sonar
BBN BBN4S#	Shapefile not available	Bolt, Barenek & Newman (BBN)	PG&E	1973 & 1974	?	Sparker (10 kJ)	N/A	1	Vellum and paper	Estero Bay to San Luis Obispo Bay	Hi-res data only. Also acoustipulse (boomer) and side-scan sonar
CGI C76-#	Shapefile not yet available	Consolidated Geotechnical (CGI)	Multiclient	1976	1,340	Sparker (30 kJ)	12	2	Mylar	Point Conception to Cape San Martin	PG&E purchased right to use in LTSP. Hi-res data may also be available
Comap CM86-# Line-#	COMAP 1986	Comap Alaska (COMAP)	PG&E	1986	500	Water guns (160 cu. in.)	24	2	SGY and vellum	San Luis Obispo Bay to Cape San Martin, within 6 km of coastline	Hi-res data include 3.5 kHz, boomer, side-scan sonar and magnetometer
Digicon CSLC 1986 #	Shapefiles not yet available	Digicon Geophysical	CSLC	1986	592	Air guns (3,520 cu. in.)	60	4	Vellum	Point Arguello to San Luis Obispo Bay, within 7 km of coastline	Companion to hi-res survey by Nekton (Nekton 164).
EDGE RU-#	Shapefile not yet available	Digicon Geophysical	EDGE ²	1986	300?	Air guns (6,000 cu. in.)	45	16	Mylar	Point Conception to Cambria, two SW-NE regional lines, two NW-SE lines, one N-S line	Collaborative survey with PG&E 86 to collect deep penetration crustal seismic reflection profiles Used in tsunami study
Fairfield F8SM #	Shapefile not available	Fairfield Industries	Minerals Management Service ³	1979	4,720	Sleeve exploder	12	1	Vellum	Point Conception to Point Estero	High-res data includes 3.5 kHz and side-scan sonar
Fugro Point Buchon 2D #-stbd-mig	fugro_pb	Fugro Consultants	PG&E	2010 & 2011	396.1	Triple-plate boomer (1,500 J)	16 ch	1	SGY	Shoreline Fault, offshore Point Buchon	Data collected on four 16- channel streamers. Far starboard 16-channel streamer was processed for 2D; the other three streamers were not processed
Fugro Point Buchon 3D	Grid Boundaries 3D_Survey Area2011	Fugro Consultants	PG&E	2010 & 2011	17.5 km ²	Triple-plate boomer (1,500 J)	64 ch	1	SGY	Shoreline Fault, offshore Point Buchon	Four 16-channel streamers with final bin size 1.56 by 3.125 m
Fugro San Luis Obispo Bay 2D #>4000	fugro_slb	Fugro Consultants	PG&E	2010 & 2011	73.5	Triple-plate boomer (1,500 J)	16 ch	1	SGY	Shoreline fault in San Luis Obispo Bay	Data collected on four 16- channel streamers. Far starboard 16-channel streamer was processed for 2D; the other three streamers were not processed

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Fugro San Luis Obispo Bay 3D	Grid Boundaries 3D_SLB_Extente	Fugro Consultants	PG&E	2010 & 2011	27.2 km ²	Triple-plate boomer (1,500– 1,750 J)	96–112 ch	0.75	SGY	Shoreline fault in San Luis Obispo Bay	Data collected on twelve to fourteen 8-channel streamers using P-Cable system, with final volume bin size of 3.125 by 3.125 m
Fugro Estero Bay 2D	fugro_eb	Fugro Consultants	PG&E	2012	329.9	Triple-plate boomer (1,500– 1,750 J)	8 ch	1	SGY	Hosgri fault zone in southern Estero Bay NW of Point Buchon	Data collected on twelve to fourteen 8-channel streamers. Far starboard and port 8-channel streamers were processed for 2D. Data from other streamers were not processed for 2D
Fugro Estero Bay 3D	Grid Boundaries 3D_EB_Extents	Fugro Consultants	PG&E	2012	1.8 km ²	Triple-plate boomer (1,500– 1,750 J)	112 ch	0.75	SGY	Hosgri fault zone in southern Estero Bay NW of Point Buchon	Data collected on twelve to fourteen 8-channel streamers using P-Cable system, with final volume bin size of 3.125 by 3.125 m
Fugro Point Sal 2D	fugro_ps	Fugro Consultants	PG&E	2012	296	Triple-plate Boomer (1,500– 1,750 J)	8 ch	1	SGY	Hosgri fault zone, offshore Point Sal	Data collected on twelve to fourteen 8-channel streamers. Far starboard and port 8-channel streamers were processed for 2D. Data from other streamers were not processed for 2D
Fugro Point Sal 3D	Grid Boundaries 3D_PS_Extents	Fugro Consultants	PG&E	2012	12 km ²	Triple-plate Boomer (1,500– 1,750 J)	112 ch	0.75	SGY	Hosgri fault zone, offshore Point Sal	Data collected on twelve to fourteen 8-channel streamers using P-Cable system, with final volume bin size of 3.125 by 3.125 m
GSI 80 G #	Shapefiles not yet available	Geophysical Services, Inc. (GSI)	OGLE Petroleum	1980	1,296	Air guns	48	5	Mylar	Point Pedernales to Point Estero	PG&E purchased right to use in LTSP.
GSI 80-RP (Reprocessed) GSI-1980-#	GSI-1980RP	Geophysical Services, Inc. (GSI)	PG&E	1980	107	Air guns	48	5	SGY	Purisma Point to Point Sal	Seven lines from GSI 80 survey reprocessed for PG&E
GSI 85 GSI-1985-#	1985-GSI	Geophysical Services, Inc. (GSI)	Multiclient, now in public domain	1985	346	Air guns	?	6	SGY	Point Conception to San Luis Obispo Bay	Downloaded from USGS. Not used in any PG&E study
Chevron 1979 H-14-79-#	H1479sc	Unknown	Chevron, now in public domain	1979	~1,064	Air guns	?	6	SGY	Point Arguello to Estero Bay, west of Hosgri fault	Downloaded from USGS. Not used in any PG&E study
JEBCO 88 J-#	Shapefile not available	JEBCO Seismic, Inc.	Multiclient	1988	58	Air guns (3,360 cu. in.)	60	4	Mylar	Point San Luis to Point Piedras Blancas	PG&E Purchased only three lines

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Nekton 45 45-# NEK-#	NEKTON 1984 (partial set)	Nekton	Multiclient	1983	154	Water guns (400 cu. in.)	36	3.5	SGY	Purissima Point to Point San Luis	SGY data not complete survey
Nekton 164 164-#	Shapefile not available	Nekton	CSLC	1986	1,338	Water guns (60 cu. in.)	24	3	Mylar	Point Arguello to San Luis Obispo Bay, within 7 km of coastline	Hi-res data include 3.5 kHz, boomer, and magnetometer
PG&E PGE-# Flec-# or PGE-#	FLEC	Digicon Geophysical	PG&E	1986	298	Air guns (6,000 cu. in.)	45	16	SGY	San Luis Obispo Bay and Estero Bay two regional lines across Santa Maria Basin and one tie line	Collaborative survey with EDGE86 to collect deep penetration crustal seismic reflection profiles
Seiscom SD-#	Shapefile not available	Seiscom Delta	Multiclient	1977	42	Air guns	48	6	Mylar	Southwest of San Luis Obispo Bay	PG&E purchased only a few lines
SMB-#	Shapefile not available	Seisdata	Multiclient	1986	?	Vibroseis	96 ch	5 and 12	Mylar	Onshore Santa Maria Valley	ONSHORE ONLY
USGS-Bartlett B#	Shapefile not available	USGS Reference B-1-72-SC	Public Domain	1972	5,043 w/ mag	Air guns	1	1	Vellum	Point Arguello to Monterey Bay	Other data include boomer, gravity, and magnetometer
USGS-Kelez K#	Shapefile not available	USGS Reference K-4-73-SC	Public Domain	1973	1,200	Sparker (120 kJ)	1	3	Vellum	Point Sal to Carmel Bay	Hi-res data includes boomer, side-scan sonar and magnetometer
USGS-S.P. Lee L#	Shapefile not available	USGS Reference L-3-75-NC	Public Domain	1975	866	Air guns	24 ch	2	Vellum	San Luis Obispo Bay to Monterey Bay	Hi-res data include sparker, boomer, 3.5 kHz
USGS-S.P. Lee L#	L5A79nc	USGS Reference L-5B-79-NC	Public Domain	1979	680	Air guns (1,326 cu. in.)	24 ch	8	Paper +?	Point Conception to Point Sur. Regional E-W lines from deep ocean basin across slope and shelf	Hi-res data include boomer
USGS-S.P. Lee L#	L490sc	USGS Reference L-4-90-SC	Public Domain	1990	170	Airgun	24 ch	12	SGY	Regional coast-parallel lines. Point Conception to Point Buchon	Downloaded from USGS. Not used in any PG&E study. Survey continues to south
USGS Polaris	Shapefile not available	USGS Reference P-7(8)-72-NC	Public Domain	1972	?	Sparker (200 J)	1 ch	3	Vellum	Port San Luis to Cape San Martin	No detail on website. Possibly P-7-72-NC or P-8-72-NC
USGS-Scammon S#	Shapefile not available	USGS Reference S-1-79-CC	Public Domain	1979	?	Boomer	1 ch	0.5	Vellum	Estero Bay to Cape San Martin	Only a few lines
USGS 08-09 PBS-# PBS-#	s608sc, s609sc	USGS Reference S-6-08-SC and S- 6-09-SC	Public Domain	2008 & 2009	1,500	Minisparker 500 J	1 ch	0.45	SGY	Point Sal to Point Piedras Blancas, 0 to 10 km offshore	Data collected by Dr. S Johnson and released by Sliter et al. (2010). Also magnetometer and multibeam bathymetry
Western 74 W-74-# W-4-74-#	w474sc	Western Geophysical, Inc.	Multiclient, now in public domain	1974	~3,683	Air guns	46	5	SGY, films	Point Conception to Point Sur	Downloaded from USGS. PG&E had purchased a total of 570 km from 74, 75, and 82 surveys for LTSP

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Western 75 W-75-# W-5-75-#	w575sc	Western Geophysical, Inc.	Multiclient, now in public domain	1975	~3,543	Air guns	48	6	SGY, films	Point Conception to Point Sur	Downloaded from USGS. PG&E had purchased a total of 570 km from 74, 75, and 82 surveys for LTSP
Western 76 W-12-76-#	w1276sc	Western Geophysical, Inc.	Multiclient, now in public domain	1976	~522	Air guns	?	6	SGY	Point Conception to Point Arguello	Downloaded from USGS. Not used in any PG&E study
Western 78 W-10-78-#	w1078sc	Western Geophysical, Inc.	Multiclient, now in public domain	1978	~1,268	Air guns	?	6	SGY	Point Arguello to Point Sur	Downloaded from USGS. Not used in any PG&E study
Western 79 W-22-79-#	w2279sc	Western Geophysical, Inc.	Multiclient, now in public domain	1979	~5,857	Air guns	?	6	SGY	Point Arguello to Point Estero	Downloaded from USGS. Not used in any PG&E study
Western 82 W-82-# W-32-82-#	w3282sc	Western Geophysical, Inc.	Multiclient, now in public domain	1982	~4,818	Air guns	60	6	SGY, films	Point Buchon to Point Sur	Downloaded from USGS. PG&E had purchased a total of 570 km from 74, 75, and 82 surveys for LTSP
Western 83 W-38-83-#	w3883sc	Western Geophysical, Inc.	Multiclient, now in public domain	1983	~134	Air guns	60	6	SGY	Point Conception to Point San Luis	Downloaded from USGS. Not used in any PG&E study

Notes: This list includes surveys used in whole or in part for PG&E studies, along with surveys downloaded from the USGS and included in the Digital Seismic Legacy Project. Surveys included in the Digital Seismic Legacy Project are indicated by "SGY" in the PG&E Record Type column. A lack of shapefiles indicates that no digital navigation data are currently available in PG&E files.

¹ Top line is abbreviated survey name, if used in reports. Second line (in black) is line number (#) designations on maps. Red line is line number designation in digital (SGY) files, if available.
² A consortium of Universities and the Houston Advanced Research Council.
³ Now Bureau of Ocean Energy Management (BOEM).

Abbreviations:
? = no specific information available
CDP = common depth point
ch = channel
CSLC = California State Lands Commission
cu. in. = cubic inches
J = joules
kHz = kilohertz
kJ = kilojoules
LTSP = Long Term Seismic Program