



HORIZONTAL DIRECTIONAL DRILL (HDD) & GUIDED AUGER BORE (GAB)

PROJECT HISTORY REPORT

1. Chino, CA – HDD – 1,600' of 36" – So Cal Gas
Completed April 2020
2. Bakersfield, California – HDD – 200' of 12" – So Cal Gas
Completed February 2020
3. California – HDD – Beach Approach – Approximately 4,000'
Completed January 2020
4. San Luis Obispo, California – GAB – 40' of 10" – So Cal Gas
Completed January 2020
5. Fort Lupton, Colorado – HDD – Multiple Bores (15 total) Ranging From 444' to 1,185' of 4"
Completed December 2019
6. Enumclaw, Washington – HDD – 1,525' of 6" – City of Enumclaw
Completed December 2019
7. Salinas, California – HDD – 1,206' of 12" – Pacific Gas and Electric
Completed October 2019
8. Pueblo, Colorado – HDD – 1,332' of 4" – Xcel Energy
Completed October 2019
9. American Canyon, California – GAB – 160' & 350' of 24" – Pacific Gas and Electric
Completed August 2019
10. Santa Margarita, California – HDD – 1,391' of 16" – So Cal Gas
Completed August 2019
11. Wasco, California – HDD – 1,848' & 2,661' of 8" - California Rail Builders
Completed August 2019
12. Willows, California – GAB – 130' of 4" – Pacific Gas and Electric
Completed June 2019
13. Hawaii – HDD – Beach Approach (6 total) – Ranging from 3,000' to 6,500'
June 2018 - May 2019
14. Victorville, California – HDD – 1,234' & 1,365' of 10" - Pacific Gas and Electric
Completed February 2019
15. California – HDD – Beach Approach – 4,000'
Completed February 2019
16. Fremont, California – HDD – 4,800' of 36" - Pacific Gas and Electric
Completed December 2018
17. Brighton, Colorado – HDD – 880' of 8" – Xcel Energy
Completed November 2018
18. Aurora, Colorado – HDD – 1,100' of 20" – Xcel Energy
Completed October 2018

19. Thornton, California – HDD – 3,000' of 24" – Pacific Gas and Electric
Completed October 2018
20. Thornton, California – GAB – 1,455' of 24" – Pacific Gas and Electric
Completed October 2018
21. San Mateo, California – HDD – 2,400' of 24" - Pacific Gas and Electric
Completed August 2018
22. San Mateo, California – HDD – 1,800' & 2,900' of 16" - Verizon
Completed August 2018
23. Puerto Rico – HDD – Beach Approach – 2,500'
Completed August 2018
24. Oregon – HDD – Beach Approach (2 total) – 5,500'
Completed July 2018
25. Burnsville-Black Dog, Minnesota – GAB – 150' of 16" – Xcel Energy
Completed March 2018
26. Barstow-Kramer Junction, California – GAB – 130' of 34" – Pacific Gas and Electric
Completed February 2018
27. Pueblo West, Colorado – HDD – 2,400' of 6" – Xcel Energy
Completed January 2018
28. Camas, Washington – HDD – 605' of 6" – NW Natural
Completed November 2017
29. Tracy, California – GAB – 150' of 20 – 380' of 36" – Shell
Completed October 2017
30. La Grande, Oregon – HDD – 1,300' of 6" – Avista Utilities
Completed September 2017
31. Tacoma, Washington – HDD – 13,000' of 16" – Puget Sound Energy
Completed September 2017
32. Turlock, California – HDD – 800' of 12" – Pacific Gas and Electric
Completed September 2017
33. Sacramento, California – HDD – 2,450' of 30" – Pacific Gas and Electric
Completed August 2017
34. Richland-Kennewick, Washington – HDD – 3,790' of 6" – Cascade Natural Gas
Completed – August 2017
35. The Dalles, Oregon – HDD – 677' of 6" – NW Natural Gas
Completed April 2017
36. Buttonwillow, California – HDD – 305' of 12" – SoCal Gas
Completed January 2017
37. Knappa, Oregon – HDD – 1,065' of 10" – NW Natural

Completed October 2016

38. Sonoma, California – HDD – 800' of 6" – Pacific Gas and Electric
Completed September 2016
39. Lemoore, California – HDD – 5,740' of 16" – SoCal Gas
Completed 2016
40. Lemoore, California – GAB – 116' of 16" – SoCal Gas
Completed 2016
41. Bakersfield, California – GAB – 1,054' of 12" – SoCal Gas
Completed 2016
42. Santa Clarita, California – HDD – 1900' of 14" – Plains Pipeline
Completed February 2016 – Various Sandstone Layers
43. Castaic, California – HDD – 2,148' of 14" – Plains Pipeline
Completed February 2016 – Various Sandstone Layers
44. Larkspur, California – HDD – 700' of 30" HDPE – City of Larkspur
Completed September 2015 - Fat Clay
45. Elk Grove, California – HDD – 3600' of 24" – Pacific Gas and Electric
Completed January 2015 - Soft\Fat Clay
46. Elk Grove, California – HDD – 2300' of 24" – Pacific Gas and Electric
Completed December 2014 - Soft\Fat Clay
47. Vacaville, California – HDD – 1708' of 42" – Pacific Gas and Electric
Completed November 2014 – Fat Clay under Wetland with Intersect
48. Roseville, California – HDD – 3300' of 16" – Pacific Gas and Electric
Completed September of 2014
49. Roseville, California – HDD – 3600' of 16" – Pacific Gas and Electric
Completed October of 2014
50. Albany, Oregon – HDD – 3200' of 30" HDPE – City of Albany
October 2012 – Solid Rock under Willamette and Calapooia River
51. Corvallis\Monmouth, Oregon – HDD – 1200',3400',4200',5200' of 12" – NW Natural Gas
Completed May 2012 - Fat Clay under City of Monmouth
52. Sunnyvale, California – HDD – 950' of 24" – Pacific Gas and Electric
Completed July 2012 Fat Clay – Bay Mud
53. Sunnyvale, California – HDD – 2800' of 24" – Pacific Gas and Electric
Completed August 2012 – Fat Clay – Bay Mud
54. Monmouth, Oregon – HDD – 4300' of 12" – NW Natural Gas
Completed April 2012 – Fat Clay under Environmentally Sensitive Farmland
55. Fresno, California – HDD – 2000' of 24" – Pacific Gas and Electric
Completed November 2012

- 56.** Medford, Oregon – HDD – 2800' 12" – Avista Utilities
Completed November 2010 – Sandstone Intersect under Larson Creek
- 57.** Grants Pass, Oregon – HDD – 3000' 6" HDPE – Avista Utilities
Completed November 2010 – Sandstone\Cobble under the Rogue River
- 58.** Cranberry Township, Pennsylvania – HDD
3000' of 12" – Charles Machine Works / Ditch Witch
Completed February 2012 – Fractured Rock
- 59.** Avon, Colorado 2800' of 16" – HDD – Xcel Energy
Completed December 2011 – Cemented Cobble – Emergency Bore