With Hancock's II Corps leading, the Army of the Potomac crossed the James River on 14 June 1864. W. F. Smith's XVIII Corps took transports from West Point on the York River around the Peninsula to Bermuda Hundred.

On June 15th, Smith crossed the Appomattox River and marched on Petersburg. Originally, Smith’s entire corps was to advance. However, one division (under Adelbert Ames) remained, ordered by Army of the James commander Maj. Gen. Ben Butler, and was replaced by a X Corps division of General Hincks. This division was composed entirely of untried United States Colored Troops (USCT) regiments. Smith also had Kautz's division of cavalry, for a total force of between 10,000 to 14,000 soldiers.

The Federals were across the Appomattox River and on the City Point Road by 05:00, about eight miles from Petersburg. They contacted Confederate skirmishers around 06:00, but not until 11:00 did Hincks's division arrive in front of the Petersburg lines, and did not close until almost 14:00 when the last division (Martindale, on the right) arrived. Gen. W.H.T. Brooks's division held the center. Most of the delay was due to defending cavalry under Brig. Gen. James Dearing (the commander of Pickett's artillery at Gettysburg). Dearing and his force of 850 delayed Smith for two hours at the Baylor farm, three and a half miles from Petersburg. Some of the delay is attributed to Smith's caution.

The Petersburg fortifications stretched from the Appomattox River east of town, around to the same river west of town. The line consisted of 55 numbered batteries or redoubts, connected by strong lines of entrenchments. The defenses were labeled the Dimmock Line, in honor of the Confederate engineer who designed, and supervised their construction in 1862. Gen. P.G.T. Beauregard commanded Confederate forces at Petersburg and Bermuda Hundred. When Smith and XVIII Corps arrived, Beauregard had half of Dearing's cavalry brigade and a single infantry brigade under the former Virginia governor, now brigadier general, Henry Wise. Reinforcements from the Bermuda Hundred lines marched to Petersburg, but could not reach the city before late evening. Until then, Wise's 2200 men (plus Dearing's two regiments of cavalry) were all the forces Beauregard had.

Having participated in the debacle at Cold Harbor, Smith was reluctant to assault an obviously strong position. After a lengthy personal reconnaissance, he determined to his satisfaction that the lines were thinly manned, although supported by artillery. Smith decided to attack in open formation, i.e., essentially as a huge skirmish line, minimizing the effect of the Confederate artillery. Smith, suffering from an attack of malaria, delayed until 17:00 his decision to attack. Then he discovered that the corps artillery commander had sent all the horses off to be watered.

The attack finally started at 19:00, seven and half-hours after the Federals first reached the enemy lines. The attack was successful. The Federals seized a stretch of line over a mile wide, containing nine redoubts. The attack was aimed at a salient in the Dimmock Line, projecting from Battery 2 (north of the City Point Railroad) and Battery 8, halfway between the
railroad and the road to Prince George's Courthouse. Batteries 3 through 11 fell to the Federals, along with at least 250 Confederate prisoners, from the 26th and 46th Virginia regiments. Five of the captured battery positions fell to USCT regiments of Hincks's division. The rest of the batteries fell to W.H.T. Brooks's troops.

Despite his success and opportunity to expand his gains before enemy reinforcements arrived, Smith did not press the attack that night. "Deeming that I held the important points of the enemy's line of works, I thought it prudent to make no farther advance." Smith's failure to press his advantage at Petersburg remains a subject of argument and contention. In his post-war writings, Smith was adamant that the failure was not due to an error or caution of his, but instead tried to lay the blame on Grant and Butler.

There was still a chance for decisive success on this day. Grant intended that Hancock's II Corps would join in the attack on Petersburg. However, no one informed Hancock, who crossed the James and paused to feed his troops, and then the corps got lost trying to find a non-existent spot on a map. Informed that he was expected to support Smith, Hancock put his men on the road. They began arriving about the same time as Smith's attack went forward.

Although Hancock's men were tired from the all-day march, they understood the march provided an advantage over Lee and now was the time to use it. Hancock was the senior officer of the two, but deferred to Smith because the XVIII Corps commander had been on the ground all day and was familiar with the tactical situation. Instead of pressing forward with a night attack, Smith asked Hancock to relieve his troops.

Beauregard was astonished that he was not attacked again that night. Writing after the war, he said that "Petersburg at that hour was clearly at the mercy of the Federal commander, who had all but captured it." During the night the Confederates withdrew to a new line and dug in. The only reinforcements Beauregard could find was the division of Robert Hoke, from the Bermuda Hundred position. Hoke arrived just after Smith's attack halted. Lee refused to send help, being convinced that Grant was about to attack east of Richmond.

Beauregard abandoned the Bermuda Hundred lines, pulling out Bushrod Johnson's division to reinforce Petersburg. Vacating the Bermuda Hundred line was a great risk. If Federal troops on the Bermuda Hundred peninsula, Butler's Army of the James, advanced they would be between Lee's army north of James River, and Petersburg. This would force Lee to fight a battle to reinforce Beauregard. Federal troops did move forward, cautiously and not in strength, and Lee forced them aside without much delay.

On the morning of June 16th Beauregard had a force of about 14,000 men, deployed with Hoke's division on the left, next to the river and extending halfway between the Prince George's Court House Road and the Baxter Road. Johnson's division on the right arrived in time to help beat off a Federal attack on the Confederate far right. Confederate forces were now strong enough to hold off Smith and Hancock. However, in late morning of the 16th, Grant and Burnside with IX Corps arrived. This gave the Federals about 50,000 men.
The XVIII Corps on the right, along the river, II Corps in the center between the Prince George's Court House and Baxter Roads, and IX Corps on the left, astride the Baxter Road. A probe was made on Hancock's front, but this attack in part was defeated by Johnson's arrival. To develop the situation, Grant ordered Hancock to attack again at 18:00.

Meanwhile Meade arrived at Petersburg and Grant returned to City Point to coordinate efforts with Butler's Army of the James. Hancock attacked Beauregard's center failing to breach the Confederate defenses. The attack resulted in seizing three more of the Dimmock Line redoubts. IX Corps on the Federal left supported II Corps, but made no major effort to attack. XVIII Corps supported on the right, also doing little to exert pressure on the Confederate position. Federal efforts seemed more disjointed than those of the previous day. The evening attack was half-hearted and only on a portion of the Confederate front.

During the night of June 16th and 17th, Meade received information that Lee's troops were still north of the James. This confirmed information from escaped Federal prisoners. Satisfied that the Army of Northern Virginia was not to his front, Meade ordered a moonlight assault by Burnside's IX Corps. Because of the preparation time, Burnside delayed the attack until dawn. The objective of the attack was a salient occupied by the Shand House, north of the Baxter Road, and defended by Bushrod Johnson's Tennessee brigade. A breakthrough here would rupture the connection between the new Confederate line and the Dimmock Line, possibly giving the Federals access to the Baxter Road as an avenue of attack directly into town.

The attack was led by Brig. Gen. Robert Potter's Second Division, with the other two IX Corps divisions (Ledlie and Willcox) supporting the flanks. The last IX Corps division, under Ferraro, was guarding the James River bridges. During the night, Potter positioned his men behind their own picket line below the hill on which the Shand House stood. The attack began at 03:00. Potter's division achieved one of the great tactical successes of the war, taking another mile of the main line and nearly 600 prisoners. Incredibly, Potter's men were unsupported on either flank, an error that he felt prevented the collapse of the entire Confederate line, "from the Appomattox to the Jerusalem Plank Road," as he later put it. Other Federal attacks were uncoordinated and Beauregard defeated them, one at a time. Beauregard knew he was in trouble. Warren's V Corps arrived that morning extending the Federal left.

Willcox attacked on the left of Potter's division, but not until 14:00, and the attack succeeded only in mangling a Federal brigade. At 18:00 General Ledlie attacked the new Confederate line behind the Shand House Hill. Although initially successful in achieving a lodgement, the attack was unsupported and a Confederate counterattack that night drove Ledlie back with heavy losses. IX Corps had done almost all of the days fighting. In addition, most of the fighting the day before was by the II Corps. On the Federal right, Smith's XVIII Corps accomplished little. Hancock, on Smith's left, did little, although the continued problems he was having with his Gettysburg wound may have contributed to this. An attack by Hancock could well have been decisive, but the II Corps was exhausted from marching and fighting the previous four days.

To this point, the Federal attacks were against the eastern side of the Dimmock line succeeding in pushing the line back quite a ways. The Federals now held a front from the
Appomattox River to the Norfolk and Petersburg Railroad. The Dimmock Line from Battery 3 to Battery 17, was now in Federal hands. Beauregard's right was in danger because of the Federal successes, and the advance, of Warren's V Corps. Beauregard decided to withdraw to a new line.

At 12:30 on the morning of June 18th, the Confederates withdrew and began construction of a new line, from Redoubts 25-29 north to the river. This new line was about a mile to the rear of the original Dimmock Line, and about half a mile from the city. It was a strong line, running along the course of Taylor's Branch. Beauregard still had received no troops from Lee. However, by 03:00 on the 18th, Lee's son Rooney advanced enough to view the Federal pontoon bridge over James River. This and reports from Beauregard, convinced Lee that the Federal Army was indeed south of the river. The divisions of Field and Kershaw marched to reinforce Petersburg.

The previous evening Meade ordered an attack along the entire Federal line at 04:00. This attack found nothing since the Confederates had withdrawn. It was nearly 14:00 before they discovered Beauregard's new line. General Hancock had to be relieved during the night when his Gettysburg wound re-opened and began to hemorrhage. Command of II Corps passed to Maj. Gen. David B. Birney.

June 18th became the most frustrating day in George Meade's command of the Army of the Potomac. Meade knew that Lee's troops had not arrived, and he became increasingly exasperated at the inability of his commanders to close up on each other and the new enemy position. His ultimate frustration occurred at about 07:30 when Kershaw's troops crossed the Appomattox River. These were the first of Lee's divisions to arrive. Field's division followed two hours later. Lee now had divisions positioned on the Confederate right. This had been the weakest point of the new line.

At about 12:00 a series of half-hearted attacks were made along the II Corps front and to its right, by Martindale's division of XVIII Corps. Losses were heavy and gains were slight. This news only increased the Meade’s frustration and temper. Soon after 14:00, Meade essentially lost control. Responding to a dispatch from Warren, Meade reminded Warren that his orders to attack were explicit, and further delays would result in "consequences.” Half an hour later a similar order went to Burnside, and Birney. The attacks made throughout the rest of the day were unsuccessful and bloody.

There was even less coordination than on the 17th. Federal troops were approaching exhaustion after four days of marching and fighting. Warren's attack, made at about 15:00, resulted in heavy losses and the near-fatal wounding of Col. Joshua Chamberlain. Chamberlain was shot through both hips leading his brigade in an assault on the position known as Rives Salient. At 16:00 a final effort was made by Birney, resulting in the loss to the 1st Maine Heavy Artillery of 632 out of 850 men engaged.

Finally, at about 17:30, Willcox's division and part of Potter's made a final attack in the IX Corps sector, securing a position closer to the main Confederate lines. This position was where in a few weeks, Lt. Col. Henry Pleasants and the 48th Pennsylvania would begin digging
the mine that when detonated became the Crater. Meade cancelled all further attacks at 18:30. Federal casualties for the four days were approximately 11,000. Confederate casualties are unknown.

The 15th and 17th should have seen the greatest Federal success, the 15th because of the unpreparedness of the Confederate defenders. The 17th because this was the last day before Lee's troops arrived. Beauregard deserves credit for his skillful defense before Lee's arrival. General Smith's caution, and poor staff-work that made Hancock late on the 15th, combined with the tactical failure of command on the 17th and 18th contributed to the failure to take the city. Adding to the situation was the physical exhaustion of the Federal troops due to the long marches in the June heat. The Federal officers had no sense of urgency in pressing their numerical advantage. Grant deserves some censure for managing the operation from his headquarters at City Point, eight miles away, rather than exercising direct control. Although Meade commanded the Army of the Potomac, this was the most crucial operation of the campaign.