

## Appendix E | Nile and Kaskida

**BP** faced MMS deadlines on the two projects planned for the *Deepwater Horizon* after Macondo—permanent abandonment of a Nile well and spudding of a Kaskida well. The Chief Counsel's team found that these regulatory deadlines did not significantly compound the already existing time pressure at Macondo.<sup>1</sup>

### Schedule When the *Deepwater Horizon* Arrived at Macondo

The high daily cost of employing the *Deepwater Horizon* put pressure not just on the immediate task of drilling, but also on how BP scheduled future projects for the rig. The schedule for a drilling rig should be seamless. Empty days on the calendar waste dollars. BP had to pay Transocean a daily lease fee regardless of whether the *Deepwater Horizon* was drilling or not.<sup>2</sup> Throughout the drilling of the Macondo well, BP focused on how it would keep the rig active after Macondo. Delays at Macondo, equipment delays at another well, and regulatory commitments to MMS complicated the task.

Long before the *Deepwater Horizon* arrived at Macondo, BP began planning work for the rig at future locations.<sup>3</sup> BP's schedule for the *Deepwater Horizon* stretched years into the future, up to 2013.<sup>4</sup> When the *Deepwater Horizon* arrived at Macondo, BP planned to have the rig on location for about 45 days.<sup>5</sup>

BP planned to then send the rig to Nile for 30 days.<sup>6</sup> Nile was in another tract in the Gulf of Mexico, located about a day's voyage from Macondo. BP faced a July 2, 2010 deadline to permanently abandon its well at Nile.<sup>7</sup> Federal regulations require a lease holder to “permanently plug all wells on a lease within 1 year after the lease terminates.”<sup>8</sup> Nile had been a productive well for BP, and it would be BP's first permanent abandonment of a subsea producing well in the Gulf of Mexico.<sup>9</sup> The task would be complex, and the rig crew worried about its challenges.<sup>10</sup>

After Nile, the *Deepwater Horizon* would go to Kaskida, located in yet another tract in the Gulf of Mexico leased by BP.<sup>11</sup> Kaskida is about 250 miles southwest of New Orleans and about a four-day voyage from Macondo.<sup>12</sup> In 2006, the *Deepwater Horizon* drilled an exploration well at Kaskida that proved to be a large discovery.<sup>13</sup> MMS required BP to conduct further activities at Kaskida by May 16, 2010 to keep its lease.<sup>14</sup> Federal regulations require activity on an exploration lease every 180 days.<sup>15</sup> MMS regulation 30 C.F.R. § 250.180 specifies that a lease ends after a certain period “unless you are conducting operations on your lease.”<sup>16</sup> Drilling counts as operations, so long as the “objective of the drilling” is “to establish production in paying quantities on the lease.”<sup>17</sup> Without activity or production, MMS could cancel the lease.<sup>18</sup> BP's original schedule allowed the *Deepwater Horizon* to carry out the abandonment of Nile first and still meet the deadline at Kaskida.<sup>19</sup>

## Request to Suspend Operations at Kaskida

While the *Deepwater Horizon* drilled the Macondo well, BP worried that delays for the Kaskida wellhead would leave the rig with too much time after it completed its current well.<sup>20</sup> BP required a first-of-its-kind wellhead at Kaskida.<sup>21</sup> Delivery of that wellhead proved a headache for BP.<sup>22</sup> The emergency seal for the wellhead failed tests.<sup>23</sup> These failures led to an ever-changing set of delivery dates. In February, BP engineering team leader David Sims expressed his concerns to several managers and executives: “Even with the delays we are experiencing on Macondo, I still feel that there is a significant risk that the Horizon will finish the Nile P&A before the DrilQuip 20K wellhead is delivered.”<sup>24</sup>

Fearing that the rig might be left idle because of the wellhead delays, BP considered several options. The company contemplated extending work at Macondo itself and having the rig stay longer.<sup>25</sup> It explored alternative projects for the *Deepwater Horizon* after the rig completed both Macondo and Nile.<sup>26</sup> And it thought about having the rig undergo maintenance to fill gaps in the schedule.<sup>27</sup>

Toward the end of March, the *Deepwater Horizon* fell far enough behind schedule at Macondo that BP stopped brainstorming additional projects to occupy the rig and determined that the Nile project would likely no longer fit in before the 180-day clock ran out at Kaskida. If the *Deepwater Horizon* were going to spud Kaskida despite the delay, that left BP two primary options. One option was to go to Nile first and ask MMS for an extension at Kaskida. Another option was to go to Kaskida directly and make alternative arrangements for Nile.

BP weighed going to Kaskida directly.<sup>28</sup> Reasons to go to Kaskida included avoiding the hurricane season in the Gulf of Mexico and maintaining the schedule for work on the well after the *Deepwater Horizon*'s spud.<sup>29</sup> Ultimately, BP concluded that it preferred to have the *Deepwater Horizon* do the Nile project first. Reasons to go to Nile included continuing concern about the wellhead: “[g]oing to Kaskida post Macondo assumes wellhead ready to utilize, currently planned ready ca. 23 April.”<sup>30</sup> BP also wanted to complete Nile in time to fit in a previously scheduled crane replacement operation.<sup>31</sup> On April 8, BP vice president of drilling and completions Pat O’Byrne concluded, “Sounds like we should leave [Nile] on the Horizon as originally planned.”<sup>32</sup>

Fitting in Nile before going to Kaskida became impossible from a scheduling perspective. BP anticipated that Nile would take about 30 days.<sup>33</sup> Because BP kept the Nile project on the *Deepwater Horizon*'s schedule, BP had no choice but to ask MMS for an extension of the deadline at Kaskida in order to avoid losing the lease. By April 16, BP had only 30 days until the May 16 deadline at Kaskida, not counting transit time to get from one well to the next.<sup>34</sup> Consequently, BP would need a “suspension of operations” at Kaskida. A suspension of operations “extend[s] the term of a lease.”<sup>35</sup>

On April 9, Sims began to draft BP’s request to MMS for a suspension of operations at Kaskida.<sup>36</sup> On one level, the request to suspend operations was straightforward. A suspension of operations may be granted “when necessary to allow you time to begin drilling or operations when you are prevented by reasons beyond your control, such as unexpected weather, unavoidable accidents, or drilling rig delays.”<sup>37</sup> The primary test on “whether you are ‘prevented beyond your control’ is whether the particular drilling rig was scheduled to conduct operations at your location *before* the lease expiration date.”<sup>38</sup> The *Deepwater Horizon* had been scheduled to conduct operations at the location before the expiration date, and it had faced delays at Macondo.

Nonetheless, a suspension of operations is granted only “on a case-by-case basis” and typically for “a short duration.”<sup>39</sup> Moreover, the delay at Macondo prevented the *Deepwater Horizon*'s timely arrival at Kaskida only because BP had kept Nile first on the *Horizon*'s schedule. Without Nile, there would be no need for a suspension. BP's situation fit the criteria for a suspension, but not definitively. A member of BP's offshore land negotiation team commented, “While the Nile P&A timing is critical path to us, the MMS unit group may not see it that way and suggest that operation be delayed to avoid the issuance of an SOO.”<sup>40</sup> He then remarked that whether MMS would grant the suspension was “anyone's guess.”<sup>41</sup> On April 20, BP sent the request for a suspension of operations to MMS.<sup>42</sup>

While waiting to hear from MMS, BP planned to send the *Deepwater Horizon* to Nile.<sup>43</sup> BP sent a team out to the rig to prepare for the move to Nile.<sup>44</sup> Some members of the BP team may have perceived pressure to complete the Macondo well quickly. Before the MMS request went out, BP subsea wells team leader Merrick Kelley emailed BP drilling engineer Brian Morel: “I know you all are under pressure to finish Macondo so we can get Nile P&A moving and not jeopardize the Kaskida well and IFT.”<sup>45</sup> Uncertainty about internal BP plans, or uncertainty about MMS's decision, may have prompted concern about time pressure.

Nonetheless, if there was concern, the Chief Counsel's team has found no evidence that it was widespread. BP drilling engineer team leader Gregg Walz, BP wells team leader John Guide, BP well site leader Murry Sepulvado, and Sims said that Nile put no pressure on the temporary abandonment of Macondo.<sup>46</sup> Similarly, Transocean offshore installation manager (OIM) Jimmy Harrell testified that he faced no pressure from BP or Transocean to move on to Nile.<sup>47</sup> Moreover, BP planned to send the rig directly to Kaskida if MMS denied the request to suspend operations and then to ask for an extension at Nile.<sup>48</sup> If that happened, the *Deepwater Horizon* would experience downtime, not pressure.<sup>49</sup> BP planned maintenance to “fill any gaps” if the wellhead arrived late.<sup>50</sup>

Though BP's decisions at Macondo appear to have been biased in favor of saving time and money, the rig's next wells do not appear to have been an important contributing factor. BP followed the rig's schedule closely and, when necessary, took action to relieve the pressure of regulatory deadlines.

<sup>1</sup> There has been some suggestion that these deadlines increased the time pressure to finish Macondo. See, e.g., Joel Achenbach, “BP Cost-cutting Measures are Focus of U.S. Inquiry into Gulf Spill,” *Washington Post*, October 8, 2010.

<sup>2</sup> Drilling Contract No. 980249.

<sup>3</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>4</sup> Internal BP document (BP HZN MBI 98347).

<sup>5</sup> Internal BP document (BP-HZN-MBI 125958).

<sup>6</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>7</sup> *Ibid.*

<sup>8</sup> 30 CFR § 250.1710.

<sup>9</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>10</sup> Internal BP document (BP-HZN-MBI 21305).

<sup>11</sup> In its internal plans, BP described Kaskida as “one of the largest Paleogene discoveries to date.” The discovery had the potential to support the Gulf of Mexico division's goal to “sustain production over

450mboed” (million barrels of oil or equivalent daily). BP expected that the project would break even at oil prices over \$55/barrel and that returns would accrue rapidly above those prices. Internal BP document (BP-HZN-MBI 98022).

<sup>12</sup> Press Release, Anadarko Petroleum, BP & Partners Make Discovery at Kaskida Prospect in Gulf of Mexico, August 31, 2006, [http://www.rigzone.com/news/article.asp?a\\_id=35730](http://www.rigzone.com/news/article.asp?a_id=35730).

<sup>13</sup> *Ibid.*

<sup>14</sup> Internal BP document (BP-HZN-MBI 123225). Drilling at Kaskida would be cutting edge and challenging. The test that BP planned there in preparation for production would be a “very, very complicated” completion. Testimony of John Guide (BP), Hearing before the Deepwater Horizon Joint Investigation Team, October 7, 2010, part 2, 213. BP described the work as “the deepest and highest pressure completions ever attempted by the industry globally.” The reservoir was “tight” and the fluids “relatively viscous.” There were also “[s]alt sutures/inclusions” and “salt exit uncertainty.” On top of the difficult geology, the size of the casing limited the “number of contingency strings...imparting drilling complexities normally avoided by early appraisal wells.” And BP worried about the risks of a “poor quality cement job.” To limit the chance of encountering unexpected challenges, BP placed the planned well fewer than five football fields—only 1,400 feet—from the discovery well. BP would also use a relatively large 8½-inch production casing. Internal BP document (BP-HZN-MBI 98022).

<sup>15</sup> 30 CFR § 250.180.

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*

<sup>18</sup> 30 CFR § 256.77.

<sup>19</sup> Internal BP document (BP-HZN-MBI 123225). In early January, BP contemplated a start at Kaskida as early as mid-March if the *Deepwater Horizon* performed well on the earlier projects. Internal BP document (BP-HZN-MBI 98069).

<sup>20</sup> In February, Richard Harland, the drilling engineer for Kaskida, speculated that the timing looked “tight” if the *Deepwater Horizon* delivered the Macondo well early and came in on schedule for Nile. If Nile also came in early, there was a “real schedule issue.” Internal BP document (BP-HZN-MBI 100909).

<sup>21</sup> Internal BP document (BP-HZN-MBI 98027).

<sup>22</sup> Testimony of Gregory Walz (BP), Hearing before the Deepwater Horizon Joint Investigation Team, 105; Pat O’Bryan (BP), interview with Commission staff, December 17, 2010; David Sims (BP), interview with Commission staff, December 14, 2010.

<sup>23</sup> Internal BP document (BP-HZN-MBI 100909).

<sup>24</sup> Internal BP document (BP-HZN-MBI 107569).

<sup>25</sup> Sims wrote Pat O’Bryan, BP vice president of drilling and completions, “Extend work on Macondo (bypass or deepen)...while waiting on 20K wellhead delivery.” Internal BP document (BP-HZN-MBI 108874). He then reiterated the original schedule for the *Deepwater Horizon*: “Do Macondo, Nile, then Kaskida IFT.” *Ibid.* At about the same time, on March 7, Sims explored engineering possibilities to deepen the Macondo well. He wrote BP senior drilling engineer Mark Hafle that he had been exploring whether there might be interest in “deepening or bypass core to buy us some time for Kaskida wellhead to arrive.” Internal BP document (BP-HZN-MBI 109036). He then asked if a liner or a tieback would be better fit if the well went deeper than planned. *Ibid.* A few days later, BP also considered having the rig undergo maintenance to fill gaps in the schedule. Internal BP document (BP-HZN-MBI 113535).

<sup>26</sup> Sims inquired if there was “any work of relatively short duration (+/-1 month) that we could plan and execute if necessary, to allow the wellhead time to be delivered.” Internal BP document (BP-HZN-MBI 107569). In response to Sims’ request, BP engineering manager John Sprague asked another team to evaluate if there was anything in the division’s “[h]opper” that might be available for the *Deepwater Horizon* after Kaskida. Internal BP document (BP-HZN-MBI 108133). On March 1, Sprague heard back that a colleague was “look[ing] through the hopper for any possibilities.” *Ibid.* Without good options forthcoming, Sims asked whether another well might be approved by MMS. He wrote on March 5, “For instance, if we needed to accelerate Tiber to follow Nile P&A because the wellhead equipment is not ready could we have regulatory approval to spud by mid-April?” Internal BP document (BP-HZN-MBI 108827).

<sup>27</sup> Sims asked John Guide if Transocean had “put together a wishlist of work for the rig.” Guide replied that “we do have a high level wish list.” Internal BP document (BP-HZN-MBI 113536).

<sup>28</sup> Sims, interview.

<sup>29</sup> Internal BP document (BP-HZN-MBI 118963).

<sup>30</sup> *Ibid.*

<sup>31</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>32</sup> Internal BP document (BP-HZN-MBI 119027).

<sup>33</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>34</sup> It would take about a day to get to Nile from Macondo.

<sup>35</sup> 30 CFR § 250.169.

<sup>36</sup> Internal BP document (BP-HZN-MBI 123225).

<sup>37</sup> 30 CFR § 250.175.

<sup>38</sup> NTL No. 2000-G17.

<sup>39</sup> *Ibid.*

<sup>40</sup> Internal BP document (BP-HZN-MBI 127785).

<sup>41</sup> *Ibid.*

<sup>42</sup> Internal BP document (BP-HZN-MBI 127785).

<sup>43</sup> Testimony of Brett Cocola (BP), Hearing before the Deepwater Horizon Joint Investigation Team, August 27, 2010, 11; Testimony of Gregory Walz, 104.

<sup>44</sup> Testimony of Ross Skidmore, 210.

<sup>45</sup> Internal BP document (BP-HZN-MBI 126333).

<sup>46</sup> Walz, interview; Sims, interview; Murry Sepulvado, interview; Guide, interview, January 19, 2011.

<sup>47</sup> Testimony of Jimmy Harrell (Transocean), Hearing before the Deepwater Horizon Joint Investigation Team, May 27, 2010, 29.

<sup>48</sup> Internal BP document (BP-HZN-MBI 128990); Sims, interview, December 14, 2010.

<sup>49</sup> Internal BP document (BP-HZN-MBI 128990).

<sup>50</sup> *Ibid.*