



PPC 24-inch Line CA-324, 30-inch Line CA-325A and 30-inch Line CA-325B

Fill Plan and Start Up Procedures

Overall Project Description:

The following is a fill plan and start up procedure to reintroduce crude oil into CA-324, CA-325A and CA-325B. The lines will be filled from Las Flores Station to Gaviota, Gaviota to Sisquoc then Sisquoc to Pentland as crude oil is available. The line fill from Las Flores Station to Gaviota is approximately [REDACTED] barrels, line fill from Gaviota to Sisquoc is approximately [REDACTED] barrels and the line fill from Sisquoc to Pentland is approximately [REDACTED] barrels for a total line fill of [REDACTED] barrels. Once all precheck operations are complete, a daylight restart will occur with advance communications with local emergency response officials in accordance with Appendix D(1)(b)(4) and Appendix D(1)(f)(3) of the Consent Decree.

CA-324 is currently filled with nitrogen in which the pressure is approximately [REDACTED] psig. CA-325A has approximately [REDACTED] psig of air pressure on it and CA-325B has approximately [REDACTED] of treated water in the line as well as five pigs. [REDACTED]

During CA-325B line fill, the air pressure will be monitored at the high point as well as at Pentland to ensure it does not exceed the Maximum Operating Pressure (MOP) of the system.

Station	Max Discharge	DS Segment	MOP @ Low Point
LFC	[REDACTED]	324 (LFC to Gaviota)	[REDACTED]
Gaviota	[REDACTED]	325A (Gaviota to Sisquoc)	[REDACTED]
Sisquoc	[REDACTED]	325B Sisquoc to Pentland)	[REDACTED]

Table 1 – MOP of Line Segment and Max Discharge Pressure at Stations
(Note: Hydrotest Records set MOP of Line)

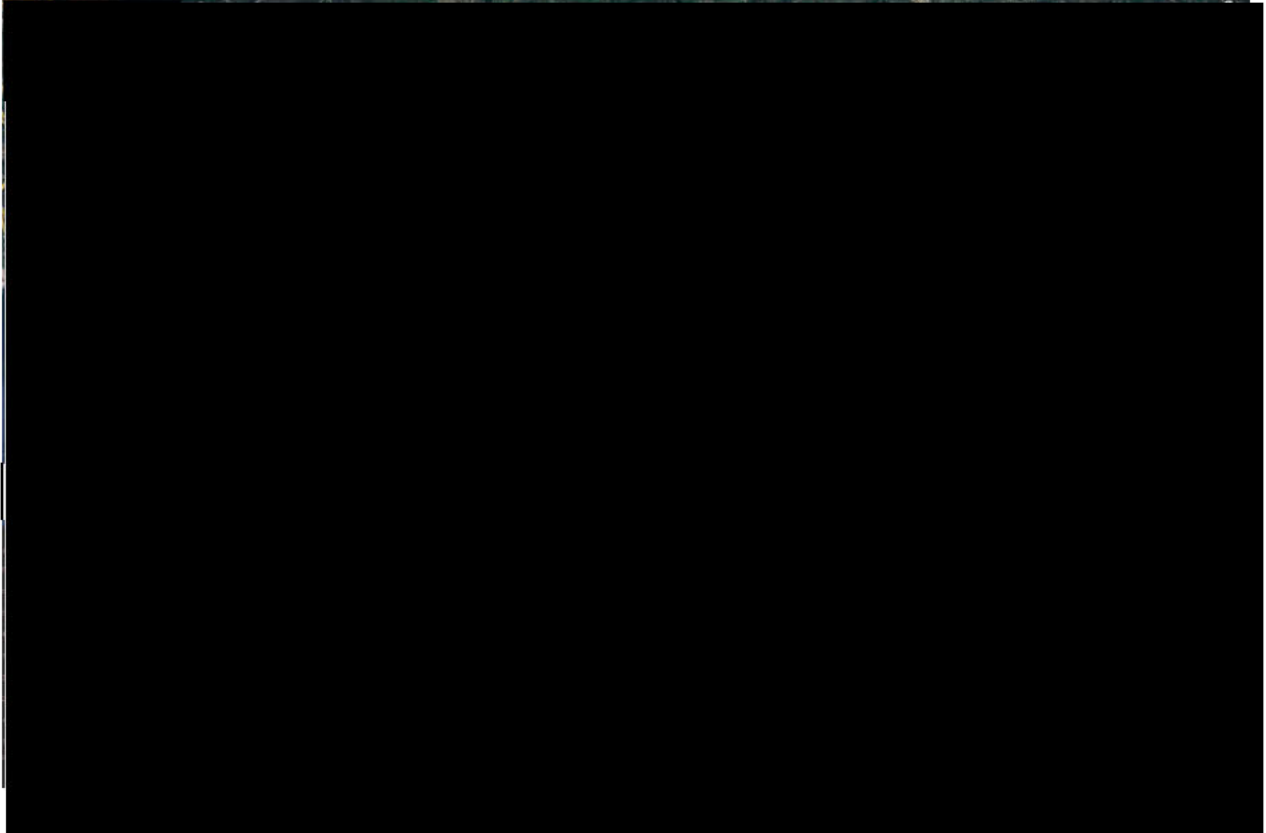
CA-324 Specifics:

Length from the Las Flores Station pig launcher to Gaviota Station is approximately [REDACTED] with a line volume of approximately [REDACTED]. The line segment from Las Flores Station to Gaviota consists of 24 inch outside diameter pipe with wall thickness of primarily [REDACTED] inches. The normal flow rate out of Las Flores Station will be [REDACTED] barrels per hour (BPH) [REDACTED] with a Maximum Operating Pressure (MOP) of [REDACTED] psig. Elevations of the various sites are as follows: Las Flores Station – [REDACTED], High point between Las Flores and Gaviota – [REDACTED] at station [REDACTED]. Low point between Las Flores and Gaviota [REDACTED] at station [REDACTED] and Gaviota Station – [REDACTED]. The maximum pressure leaving Las Flores Station is [REDACTED] to maintain the MOP of [REDACTED].



Project Location:

The initial line fill will start at the Las Flores Pump Station pig launcher and end at Gaviota Station as shown in Exhibit A-1 below:





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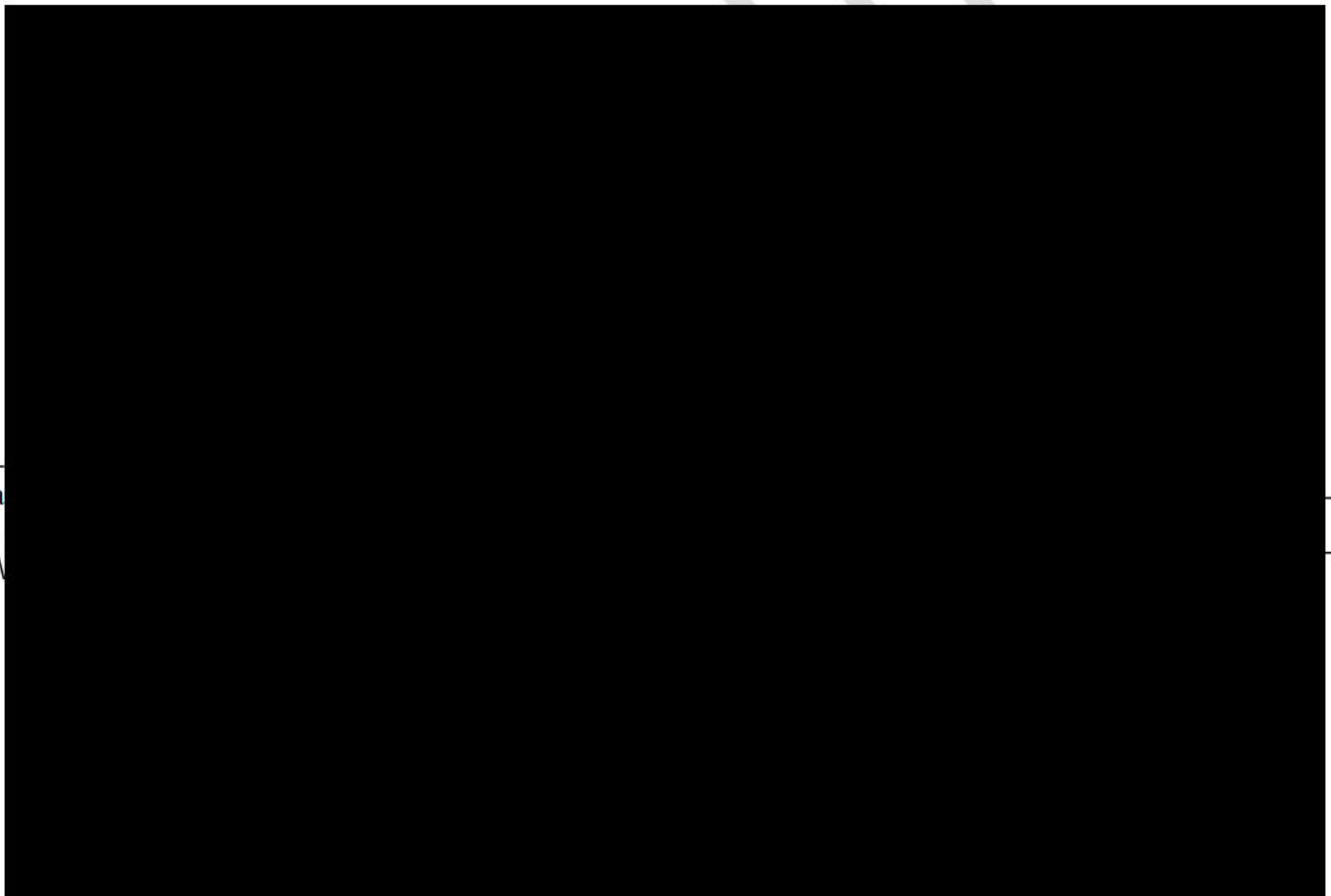


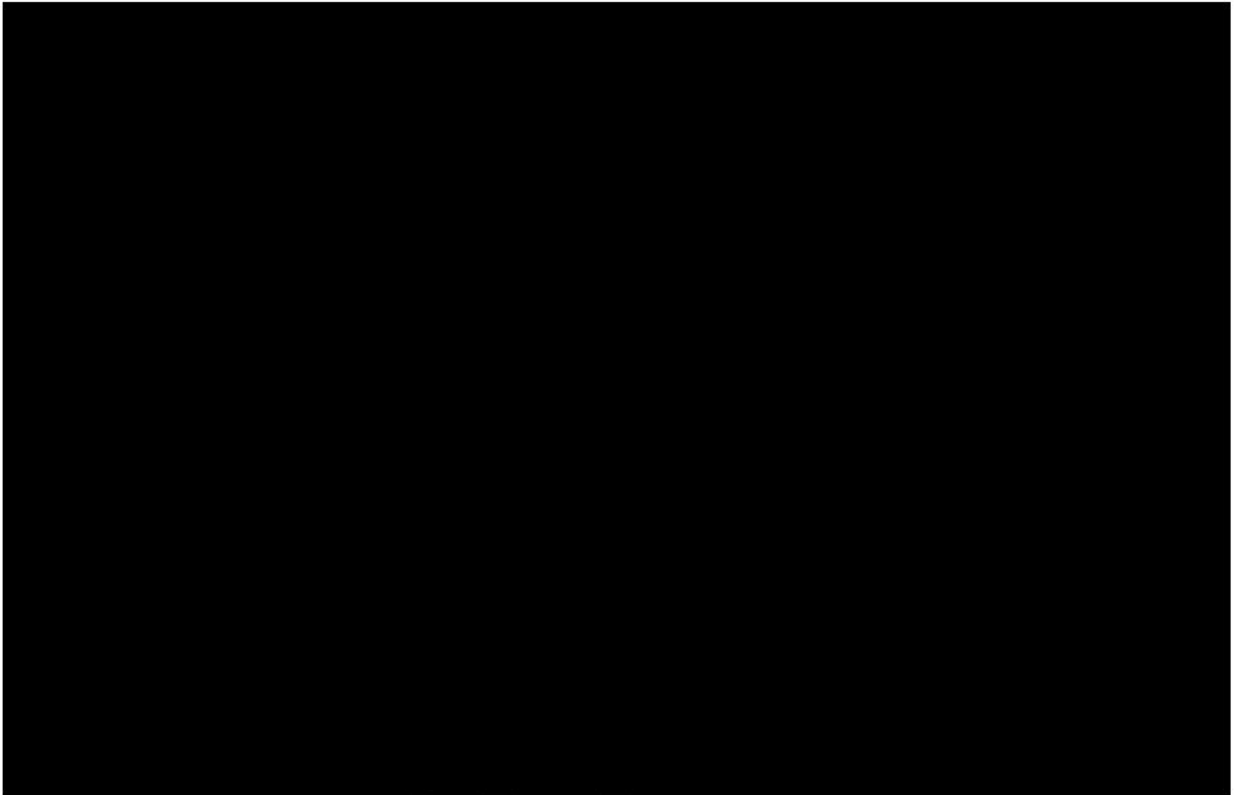
CA-325.A Specifics:

Length from the Gaviota Station pig launcher to Sisquoc Station is approximately [REDACTED]. The line segment from Gaviota Station to Sisquoc consists of 30 inch outside diameter pipe with wall thickness of [REDACTED]. The normal flow rate out of Gaviota Station will be [REDACTED] at the low point of the line. Elevations of the various sites along this segment are as follows: Gaviota Station – [REDACTED], High point between Gaviota and Sisquoc – [REDACTED] at station 1 [REDACTED], Low point between Gaviota and Sisquoc is [REDACTED] and Sisquoc Station – [REDACTED]. The maximum pressure leaving [REDACTED].

Project Location:

The line fill for this segment will start at the Gaviota Pump Station pig launcher and end at Sisquoc Station as shown in Exhibit A-2 below:





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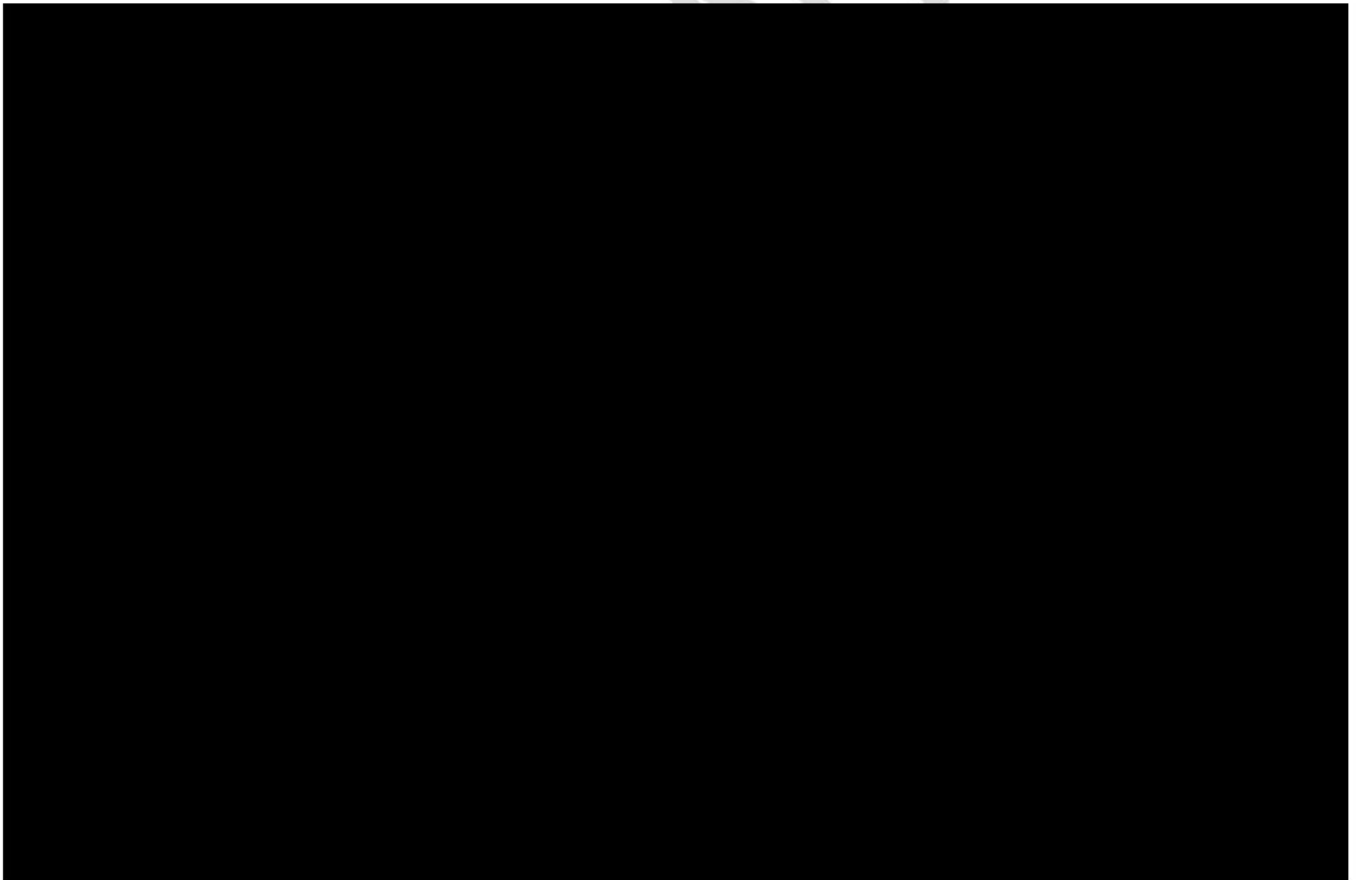


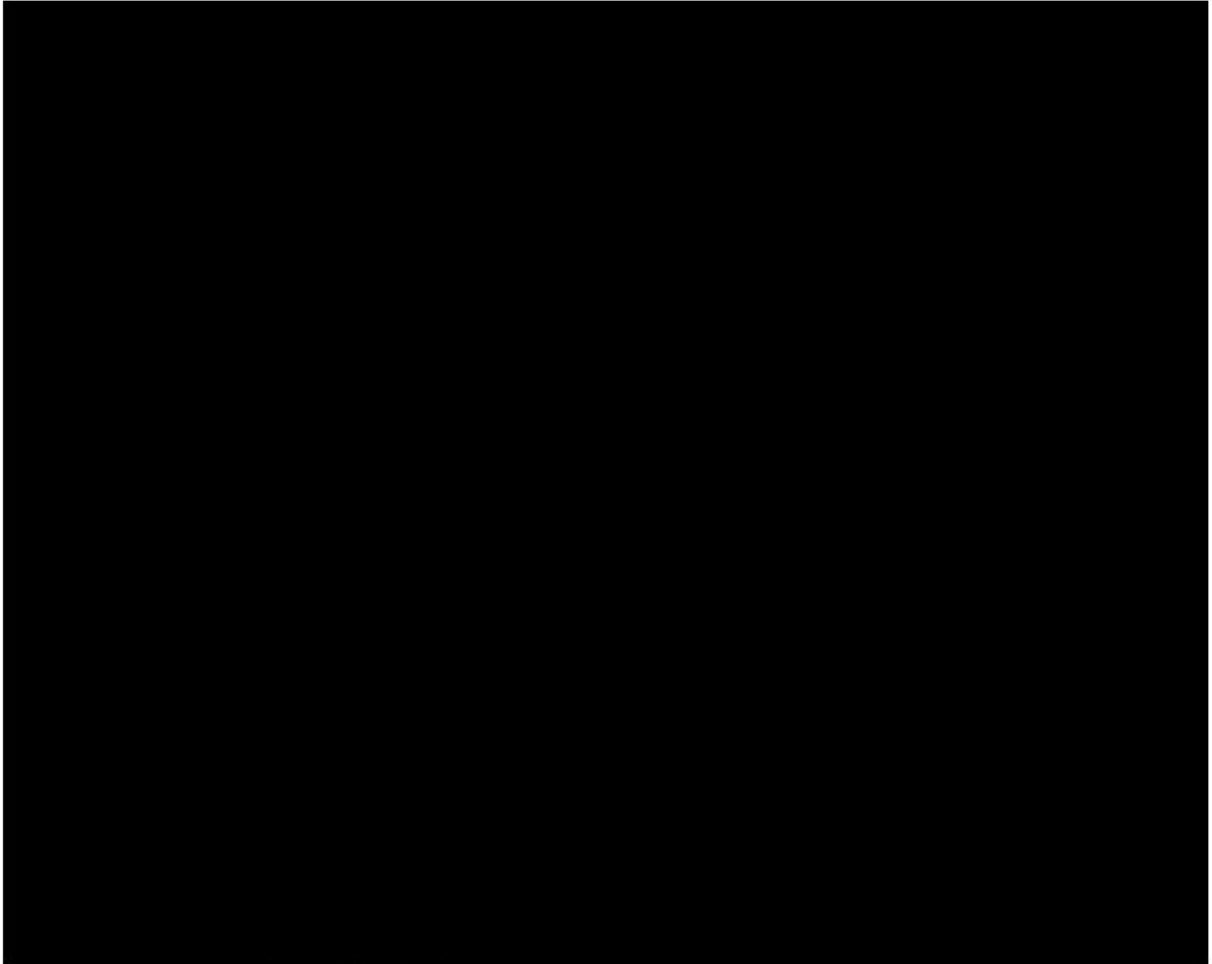
CA-325B Specifics:

Length from the Sisquoc Station pig launcher to Pentland Station is approximately [REDACTED]. The line segment from Sisquoc Station to Pentland consists of 30 inch outside diameter pipe with wall thickness of primarily [REDACTED]. The normal flow rate out of Sisquoc Station will be [REDACTED]. Elevations of the various sites are as follows: Sisquoc Station – [REDACTED], High point between Sisquoc and Pentland – [REDACTED] at station [REDACTED], Low point between Sisquoc and Pentland is [REDACTED].

Project Location:

The line fill for this segment will start at the Sisquoc Pump Station pig launcher and end at Pentland Station as shown in Exhibit A-3 below:





General Safety Precautions:

- All task work shall be completed in accordance with Pacific Pipeline Company (PPC) Operations Engineering Practices or Site-Specific Specifications.
- All Company and Contract personnel will be properly trained and/or OQ qualified for the tasks they have been assigned.
- All crew members possess Stop Work Authority and must immediately stop work and alert Field Representative or immediate supervisor if they detect any unsafe acts/conditions.
- All personnel shall have the appropriate PPE for the task at hand. Pigging operations and line fill shall follow standard operating procedures as well as this document.

Note that the station pressure safety valves are all thermal relief valves and are set for station pressures not pipeline pressures which are different.



Pre-Site Work Items:

- Contractor and PPC personnel to stage all work materials and spill response equipment along the designated areas along the pipeline in the event of a release. Coordinate all work with Pipeline Operations Manager or his designee.

- Purge all station piping of air utilizing nitrogen prior to filling operations. Purging of station piping should be completed from station inlet to station outlet. Verify system has been purged of concentration of air is to a level of 2% or less utilizing proper 4-way monitor with pump or other approved device. [REDACTED] When purging station piping complete at a fast enough rate to sweep the lines but be careful to not spin the PD meters.
- Stage temporary storage tank or vacuum truck at Las Flores and Gaviota Stations as needed. Vacuum truck might be needed to connect to vent points during the station pipe filling operations.

- Obtain pig tracking transmitters and pig tracking receivers as well as geophones for pigging operations.
- Verify pipeline valve line up and all sites are operational. [REDACTED]

- Isolate launcher at Las Flores Station and insert [REDACTED] pig in launcher prior to station fill.
- Isolate launcher at Gaviota Station and insert [REDACTED] pig in launcher prior to starting CA-324 line fill operations. Note that the [REDACTED] will be launched utilizing the nitrogen from CA-324 as the crude oil is displacing the nitrogen in CA-324.
- Isolate launcher at Sisquoc Station and insert [REDACTED] pig in launcher prior to starting CA-325B line fill operations. Note that the [REDACTED] will be launched utilizing crude oil.
- Begin line purging operations as described in the various sections outlined below.



A. Filling of Pipeline

Install PPC-approved pig (pig #1) at Las Flores where the station piping and pumps will be used to push the pig through the line to Gaviota. Install PPC-approved pig at Gaviota Station to prepare for launch into CA-325A. The line (both CA-324 and CA-325) shall be set up for pigging from one end to the other with all valves lined up in the open position. [REDACTED]

[REDACTED] The crude entering the pipeline shall be monitored for rate and recorded, as well as the injection pressure monitored and recorded. [REDACTED]

When the pig reaches Gaviota Station, shut down pumping operations and ensure that the pig #1 has arrived in the pig receiver. Once pig #1 has been verified, conduct a stand-up test during daylight hours maintained from Las Flores Station to Gaviota Station. Once the stand-up test (as defined in B.2), B.4) and B.5) below) is deemed complete and daylight hours are available, line fill can resume by lining up valves at Gaviota to bypass the trap.

B. Pressurizing and Holding Cycles

1) Safety Procedures

In addition to normal safety practices, PPC will institute and enforce safety measures appropriate to the degree of hazard existing along the pipeline during the line fill operation and stand-up pressure monitoring. Only those personnel necessary in executing the work will be present along the right-of-way during the work being performed.

2) Pressurizing and Instrument Recording

Once the entire line segment has been filled (Las Flores to Gaviota) a stand-up test shall be completed. The stand-up test shall be held for two hours in which all pressure-indicating transmitters will be monitored and recorded. The stand-up test shall be held at approximately [REDACTED] for two hours then at approximately [REDACTED] for an additional two hours. During the stand-up tests, the line and valve sites shall be patrolled, monitored and checked for any leaks. The stand-up tests shall only be completed during daylight hours. The stand-up test shall be



completed for each line segment (CA-324, CA-325A and CA-325B). Line segment CA-325B shall be held for only one test at 950 psig measured at Sisquoc Station.

3) **Communications**

Continuous two-way communication, preferably by voice radio or cellular, shall be maintained between stations, valve sites, PPC's Pipeline Control Center (PCC), and all other significant points along the portion of the line being filled and/or tested. Communications with governing agencies (OSFM, County Fire, OES, etc.) shall be set-up prior to any stand-up testing or line fill operations.

Contact list and shift responsibility will be provided to all personnel prior to starting line fill operations.

4) **Pressure Hold Cycle**

Upon bringing a line section to the stand-up pressure, it shall be held for at least two hours at a stable pressure. Temperature compensation might be required depending on crude oil temperature during line fill. A visual inspection of all valves and fittings attached to the segment should be made to ensure a tight test section. Visual inspection shall include fixed wing air patrol, helicopter or drone depending on location, weather and time of operations. Line riders shall also be designated to drive the line during filling operations as well as during stand-up testing. Once the line section has been tested, the pressure should be increased per the plan and tested for an additional two hours except for 325B which will only have one test.

5) **Acceptance of Stand-Up Tests**

To pass the stand-up test satisfactorily, the line shall maintain the test pressure for the specified time with no unexplained drop in pressure and with no indication of potential leaks or breaks. Stand-Up test must be witnessed and accepted by PPC and, as required, inspectors of governmental agencies having jurisdiction. All recordings will be completed using the PCC system. If needed, Crystal gauges can be added at certain points in the system.

Once stand-up test is complete and accepted by operations, the MOV's along the line segment should be function tested remotely from the control center with a technician on site to witness each valve test. All function tests should be documented along with actuation time of the valve.

6) **Records and Reports**

The PPC Control Room shall document all pressures and temperatures that were part of the Stand-Up tests utilizing the [REDACTED] or other methods acceptable to PPC and governing agencies.



Temperature and pressure records should be printed out and shall contain the following additional information:

- The operator's name (Sable Offshore Corp.), the name and approval signature of the person responsible for making the test.
- The signature of PPC's representative and inspectors, if any required, of governmental agencies witnessing the test.
- The date and time of the test.

7) **Comments**

[REDACTED] Please refer to the individual section below for the specific steps then back to this section for the pressuring and hold cycles.

C. **Sequence of Events for Line Fill**

Las Flores Station -Line Fill

- 1) Coordinate with PCC, LFC Operations and Pipeline Operations for work order at least two days prior to starting planned work.
- 2) Verify LFC Operations is ready to supply crude oil into Las Flores station.
- 3) [REDACTED]
- 4) Verify all station valves are in the closed position prior to starting fill process. It should be noted that a System Programmer (PLC program at station) might be needed to allow certain valves to be opened during this process.
- 5) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota & Sisquoc Facilities, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line. Notification and approval to be as documented below.

Directed by PCC _____	Time _____
Executed by _____	Time _____
Approved by _____	Time _____

- 6) LFC Operations to partially open [REDACTED] to begin flooding [REDACTED] to be fully opened. Push crude up to [REDACTED] and bleed nitrogen from high point vent downstream of [REDACTED]. If possible, use tank head to flood station lines. If not feasible, then LFC Operations will need to start the charge pumps.
- 7) Once all nitrogen has been removed from upstream piping then slowly flood meter and prover piping up to pump suction valves [REDACTED]. [REDACTED] Bleed all nitrogen out of system utilizing bleed valves [REDACTED] as needed.



- 8) Once all nitrogen has been removed from suction piping, [REDACTED] to allow oil to flood piping up to the pumps.
- 9) [REDACTED]
- 10) Once all discharge piping is flooded and nitrogen bled, [REDACTED] to flood piping all the way back to the pump discharge. Bleed all nitrogen from high points or vents as needed.
- 11) After all pump suction piping and discharge piping has been bled of nitrogen, then push crude oil to station discharge pressure control system ([REDACTED]) [REDACTED] Bleed all nitrogen up to [REDACTED]
- 12) Once all nitrogen has been bled from the station piping and all connections have been verified then have LFC Operations start booster pumps to pressurize the station piping.
- 13) Once station piping has been pressurized, have LFC Operations shutdown and close in station piping under pressure. Conduct stand-up test on all station piping utilizing just shut-in pressure. Hold and monitor for two hours to verify no station leaks.



CA-324 Line Fill

14) Coordinate with PCC, LFC Operations and Pipeline Operations for work order at least two days prior to starting planned line fill.

15) [REDACTED]

16) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota & Sisquoc Facilities, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line. Notification and approval to be as documented below.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

17) Verify launcher at Las Flores Station is isolated and drained down of any pressure, then load [REDACTED] pig into launcher [REDACTED] Install pig tracker in 24-inch cavity prior to insertion into pig trap if available. Ensure pig is seated in 24-inch pipe section then close trap.

18) LOTO — LFC launcher: Pipeline Field Operations to begin LOTO on pig launcher, ensure safe valve line up and tag/lock launcher isolation valves, vent, and drain per procedure.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

19) Depressurize and drain Las Flores launcher: [REDACTED]

[REDACTED]

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

20) Verify launcher at Gaviota is isolated and drained down of any pressure, then load [REDACTED] pig into launcher [REDACTED] Ensure pig is seated in 30-inch pipe section.

21) LOTO — Gaviota launcher: Pipeline Field Operations to begin LOTO on pig launcher, ensure safe valve line up and tag/lock launcher isolation valves, vent, and drain per procedure.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

22) Depressurize and drain Gaviota launcher: [REDACTED]

[REDACTED]

Directed by PCC _____ Time _____



- Executed by _____ Time _____
Approved by Command _____ Time _____
- 23) Verify line pressure on CA-324 and CA-325A prior to starting operations.
24) Will need at least a [REDACTED] to launch pig at Gaviota.
25) Verify all station valves at Gaviota are in the closed position except for [REDACTED]
[REDACTED] will be opened once the pressure across it is equal or the upstream side is greater than the downstream pressure.
26) Gaviota Launcher/Receiver-Pipeline Field Operations to ensure line up through station from launcher to receiver is "open" and notify PCC.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 27) Verify CA-324 block valves are lined up to allow pig passage and Gaviota Station is ready to receive pig.
Executed by _____ Time _____
Okayed by _____ Time _____
- 28) Verify LFC Operations is ready to supply crude oil to Las Flores Station.
29) Sisquoc Station- Pipeline Field Operations ensure clear path to [REDACTED]
[REDACTED] Stand by and monitor pressure.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 30) PCC to receive field verification that all valves and pump controls are in remote control and lined up from LFC to Gaviota to Sisquoc.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 31) PCC to line up valves and select pump to run.
32) Provide "Permissive" to LFC Operations from PCC.
33) Once LFC Operations has their booster pumps running then [REDACTED]
[REDACTED] enough to fill barrel with crude and purge any remaining nitrogen.
Vent nitrogen to vacuum truck or to drain system.
34) Fill and equalize launcher: Pipeline Field Operations to fill LFC launcher with crude, utilizing tank head pressure or LFC booster pump as needed, purge nitrogen to vac truck/drain, equalize to mainline pressure, confirm no leaks.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 35) Once trap is full of crude then let PCC know that system is ready to run.
36) Verify launch conditions: Check across [REDACTED]
[REDACTED]
Directed by PCC _____ Time _____



- Executed by _____ Time _____
Approved by Command _____ Time _____
- 37) Verify all personnel are ready and in place to monitor the pipeline and regulate flow at Gaviota.
- 38) Verify pig trackers are in place and ready to track the pig beginning at high point vent at LFC.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 39) Verify launch sequence with PPCC. PPCC to notify LFC control room is ready for pig launch.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 40) PCC to start pump at Las Flores Station at low flow of 1000 BPH.
- 41) Launch pig: _____
_____ Notify tracking crews, Gaviota station and Sisquoc Station.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 42) Notify pig trackers when pig launches and flow rate.
- 43) Gaviota to regulate flow through _____

Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 44) Gaviota to launch 30-inch pig once differential pressure allows launching of pig. If additional pressure is needed to launch pig, then reduce opening of _____

- 45) Gaviota: _____ Launch pig _____.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 46) PCC and field to monitor flow, pressure and temperature along CA-324 as well as monitor CA-325A.
- 47) PCC and field to maintain open communications during all work via cellular, radio or other means.
- 48) PCC to adjust flow rate once system is steady and comfortable with system. Line fill should be approximately _____



- 49) If a shutdown is needed, shut system in and isolate the segment that has crude in it by closing the valve closest to [REDACTED] Pig trackers to verify location of pig prior to shutting any valves unless it is an emergency. PCC and field to coordinate timing of shutdowns to minimize the amount of crude through a valve prior to shut down. Once line is shut in, PCC will monitor pressure and temperature for duration of shut in period. Continue process until entire line is filled with crude oil.
- 50) Once [REDACTED] is received in the trap at Gaviota, shut down operations and isolate the pipeline by shutting [REDACTED]
- 51) Pig receipt at Gaviota: When pig is received from 324, notify PCC to stop flow, notify tracking crews, and LFC control room. (PCC to notify LFC control room)
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 52) Conduct stand-up pressure test of CA-324 by [REDACTED]
- [REDACTED]
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 53) CA-324 to be pressured up [REDACTED] during daylight hours and held for two (2) hours. If all looks good, then pressure up [REDACTED] and hold for two (2) hours. Provide monitoring data to regulating agency as needed to continue operations. Utilize pipeline pressure transmitter downstream of launcher at each station for monitoring point. All stand-up tests will be witnessed by a OSFM representative.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 54) Isolate and depressurize receiver: [REDACTED] LOTO depressurize and prepare to open door.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 55) Once CA-324 has been successfully purged of all nitrogen begin the next phase of purging all Gaviota Station piping of nitrogen.
- 56) Provide approval to proceed to next phase of station/line filling operations.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____



Gaviota Station -Line Fill

- 57) Coordinate with PCC, LFC Operations and Pipeline Operations for work order at least two days prior to starting planned work.
- 58) Verify LFC Operations is ready to supply crude oil into Gaviota Station.
- 59) [REDACTED]
- 60) Verify all station valves are in the closed position prior to starting fill process. It should be noted that a System Programmer might be needed to allow certain valves to be opened during this process.
- 61) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota & Sisquoc Facilities, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line. Notification and approval to be as documented below.
- | | |
|---------------------------|------------|
| Directed by PCC _____ | Time _____ |
| Executed by _____ | Time _____ |
| Approved by Command _____ | Time _____ |
- 62) Utilize line pressure from CA-324 if possible, to purge nitrogen from Gaviota Station piping. Station piping should be purged of nitrogen in stages. Pig receiver to upstream side of meter system, meter system, suction piping, then discharge piping. It might be possible to purge the suction and discharge piping at the same time depending on valve line up.
- 63) Bleed all nitrogen up to [REDACTED]
- 64) Once all nitrogen has been removed from upstream piping then slowly flood meter up to pump suction valves [REDACTED]
- 65) Once all nitrogen has been removed from suction piping, open [REDACTED] to allow oil to flood piping up to the pumps.
- 66) Manually open [REDACTED] Bleed all nitrogen from pump piping and all discharge piping.
- 67) Once all discharge piping is flooded and nitrogen bled, [REDACTED] Bleed all nitrogen from high points or vents as needed.
- 68) After all pump, pump suction piping and discharge piping has been bled of nitrogen, then push crude oil to station discharge pressure control system [REDACTED]
- 69) Once all nitrogen has been bled from the station piping and all connections have been verified then have PCC controllers start Las Flores Station pumps to pressurize the Gaviota Station piping.



- 70) Once station piping has been pressurized have PCC shutdown and close in station piping under pressure. Conduct stand-up test during daylight hours on all station piping utilizing just shut-in pressure. Hold and monitor for two hours to verify no station leaks.

CA-325A Line Fill

- 71) Coordinate with PCC, LFC Operations and Pipeline Operations for work order at least two days prior to starting planned line fill.

72) [REDACTED]

- 73) Notify all required parties: Alert PCC, LFC, Gaviota & Sisquoc Stations, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line 324 and 325A.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 74) Verify launcher at Gaviota is isolated and drained down of any pressure, then load [REDACTED] into launcher [REDACTED] Install pig tracker in 30-inch cavity prior to insertion into pig trap if available. Ensure pig is seated in 30-inch pipe section then close trap.

- 75) LOTO — Gaviota launcher: Pipeline Field Operations to begin LOTO on pig launcher, ensure safe valve line up and tag/lock launcher isolation valves, vent, and drain per procedure.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 76) Depressurize and drain Gaviota launcher: [REDACTED]

[REDACTED]

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 77) Load pig into launcher with tracker (correct orientation), close/secure barrel, leak-check closure, maintain LOTO until launch authorized.

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 78) Verify line pressure on CA-324 and CA-325A prior to starting operations.



- 79) If pressure on CA-324 is enough, use to fill Gaviota pig launcher and line up valves to launch pig. If pressure is not enough, then the launcher will need to be filled with crude oil prior to starting, using a vacuum truck. Provide enough pressure on launcher to equalize across [REDACTED]
- 80) Fill and equalize launcher: Pipeline Field Operations to fill Gaviota launcher with crude, utilizing pipeline pressure or vacuum truck as needed, purge nitrogen to vac truck/drain, equalize to mainline pressure, confirm no leaks.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 81) LOTO — Sisquoc receiver: LOTO start, close/tag/lock receiver isolation valves, and prepare [REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 82) Confirm with PPCC pig is loaded at Gaviota Station and ready to flood launcher using existing line pressure from 324 through by-pass to equalize to within 5 psig of 325A line pressure.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 83) Gaviota Station to confirm with Sisquoc Station pig is ready for launch and to stand by for startup
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 84) Once trap is full of crude then let PCC know that pig is ready to launch and system is ready to run.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 85) Plan to push crude from Las Flores and Gaviota Station as needed to Sisquoc during CA-325A line fill operations. If pressure at [REDACTED]
[REDACTED]
- 86) Line up Gaviota station piping to flow through the Bypass system during initial push out of Gaviota. Open valve [REDACTED] Line up to launch [REDACTED] and flow through the pig launcher.
- 87) Verify all station valves at Gaviota are lined up per the planned flow path and one meter is utilized for flow measurement.
- 88) Verify LFC Operations is ready to supply crude oil to Las Flores Station.
- 89) PCC to receive field verification that all valves and pump controls are in remote control.



- 90) PCC to line up valves at Las Flores and Gaviota Stations and select pump at Las Flores Station to run.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 91) PCC to Receive "Permissive" from LFC Operations. Note that Pentland Permissive will need to be bypassed in order to start system.
- 92) PCC to set meter track at Las Flores Station and Gaviota to track barrels pumped.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 93) Once Las Flores Station Operations has their booster pumps running and Las Flores Station has started, verify flow rate and pressures.
- 94) Verify all personnel are ready and in place to monitor the pipeline and regulate flow at Gaviota.
- 95) Verify pig trackers are in place and ready to track the pig [REDACTED] out of Gaviota.
- 96) PCC to start pump at Las Flores Station at [REDACTED]
- 97) Notify pig trackers when pig launches and flow rate.
- 98) Sisquoc to regulate flow through the pig receiver [REDACTED] drain valve. Maintain at least [REDACTED]
[REDACTED]
- 99) Vent and backpressure control Sisquoc Station: Crack vent to confirm control; [REDACTED]
[REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 100) Track pig at all Valve sites and report to PCC of pig passage. Pipeline Field Operations track pressures, temps, flow, and pig location.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 101) PCC and field to monitor flow, pressure and temperature along CA-324 as well as monitor CA-325A as it is filled.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 102) PCC and field to maintain open communications during all work via cellular, radio or other means.
- 103) PCC to adjust flow rate once system is steady and comfortable with system. If Gaviota pump is needed to reduce pressure on Line 324, then verify pump line up at Gaviota and start the appropriate pump. [REDACTED]
[REDACTED]



- 104) If a shutdown is needed, shut system in and isolate the segment that has crude in it by closing the valve closest to [REDACTED] Pig trackers to verify location of pig prior to shutting any valves unless it is an emergency. Once line is shut in, PCC will monitor pressure and temperature for duration of shut in period. Once line fill resumes, continue process until entire line is filled with crude oil.
- 105) Once [REDACTED] is received in the trap at Sisquoc, shut down shipping pumps at LFC and Gaviota then isolate the pipeline by shutting [REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 106) Conduct stand-up pressure test of CA-325A by placing Las Flores and Gaviota in local operation and pressure line using the mainline pump(s) and recirculation system(s) as needed. Station valves will need to be placed in local mode as well to operate as needed to pressure up the lines.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 107) CA-324 and CA-325A to be pressured up during daylight hours to [REDACTED] and held for two (2) hours. If all looks good, then pressure up to [REDACTED] and hold for two (2) hours. Provide monitoring data to regulating agency as needed to continue operations. Utilize pipeline pressure transmitter downstream of launcher at each station for monitoring point. All stand-up tests will be witnessed by a OSFM representative.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 108) Isolate and depressurize receiver: [REDACTED]
LOTO depressurize and prepare to open door.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 109) Once CA-324 and CA-325A have been successfully purged of all nitrogen begin the next phase of purging all Gaviota Station piping of nitrogen.
- 110) Provide approval to proceed to next phase of station/line filling operations.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____



Sisquoc Station -Line Fill

- 111) Coordinate with PCC, LFC Operations and Pipeline Operations for work order at least two days prior to starting planned work.
- 112) Verify LFC Operations is ready to supply crude oil into Sisquoc Station.
- 113) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota, Sisquoc & Pentland Facilities, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line. Notification and approval to be as documented below.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 114) Vacuum truck on standby at Sisquoc Station to bleed nitrogen through. Make sure vacuum truck has carbon canister to vent through.
- 115) Verify all station valves are in the closed position prior to starting fill process. It should be noted that a System Programmer might be needed to allow certain valves to be opened during this process.
- 116) Utilize line pressure from CA-324 and CA-325A if possible, to purge nitrogen from Sisquoc Station piping. Station piping should be purged of nitrogen in stages. Pig receiver to upstream side of meter system, meter system, suction piping, then discharge piping. It might be possible to purge the suction and discharge piping at the same time depending on valve line up. If needed, start one shipping pump at Las Flores station and one shipping pump at Gaviota station in bypass mode to slowly pressurize Sisquoc Station.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 117) Bleed all nitrogen up to _____
- 118) Once all nitrogen has been removed from upstream piping then slowly flood meter up to pump suction valves _____
- 119) Once all nitrogen has been removed from suction piping, _____
- 120) Manually open _____
- 121) Once all discharge piping is flooded and nitrogen bled, _____



- 122) After all pump suction piping and discharge piping has been bled of nitrogen, then push crude oil to station discharge pressure control system [REDACTED]
- 123) Once all nitrogen has been bled from the station piping and all connections have been verified then have PCC controllers start Las Flores Station pumps to pressurize the Sisquoc Station piping.
- 124) Once station piping has been pressurized have PCC shutdown and close in station piping under pressure. Conduct stand-up test on all station piping utilizing just shut-in pressure. Hold and monitor for two hours to verify no station leaks.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____



CA-325B Line Fill

- 125) Coordinate with PCC, LFC Operations, Pipeline Operations and Plains for work order at least two days prior to starting planned line fill.
- 126) Verify launcher at Sisquoc is isolated and drained down of any pressure, then load [REDACTED] pig into launcher [REDACTED]. Install pig tracker in 30-inch cavity prior to insertion into pig trap if available. Ensure pig is seated in 30-inch pipe section then close trap.
- 127) Verify line pressure on CA-324, CA-325A and CA-325B prior to starting operations.
- 128) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota, Sisquoc & Pentland Stations, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line 324, 325A and CA-325B. Notification and approval to be as documented below.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 129) LOTO — Sisquoc launcher: LOTO launcher valves [REDACTED]
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 130) Depressurize and drain launcher: [REDACTED]
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 131) Load pig into launcher: Load fill pig into launcher with tracker, ensure correct orientation, close/secure barrel, leak-check closure, maintain LOTO until launch authorized.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 132) If pressure on CA-324 and CA-325A is enough, use to fill Sisquoc pig launcher and line up valves to launch pig. If pressure is not enough, then the launcher will need to be filled with crude oil prior to starting, using a vacuum truck or by starting/bumping the pump at Las Flores Station and Gaviota Station as needed.
- 133) Fill and equalize launcher: Pipeline Field Operations to fill Sisquoc launcher with crude, utilizing pipeline pressure or vacuum truck as needed, purge nitrogen to vac truck/drain, equalize to mainline pressure, confirm no leaks.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____



- 134) Once trap is full of crude then let PCC know that pig is ready to launch and system is ready to run.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 135) LOTO — Pentland receiver: LOTO start, close/tag/lock receiver isolation valves, [REDACTED]
[REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 136) Once trap is full of crude then let PCC know that system is ready to run.
- 137) Confirm tracker ID and comms: Verify tracker signal, confirm with PPCC and tracking crews ready for launch.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 138) Notify Pentland Station (Plains Operations) that PPC is starting to purge CA-325B of air
[REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 139) Plan to push crude from Las Flores and Gaviota Station as needed to Sisquoc during CA-325B line fill operations. [REDACTED]
[REDACTED]
- 140) [REDACTED]
- 141) Verify all station valves at Gaviota are lined up per the planned flow path and one meter is utilized for flow measurement.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 142) Verify all station valves at Sisquoc are lined up per the planned flow path and one meter is utilized for flow measurement.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 143) Verify LFC Operations is ready to supply crude oil to Las Flores Station.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 144) Verify Pentland Station is ready to receive and regulate air flow into temporary tankage.
Directed by PCC _____ Time _____



- Executed by _____ Time _____
Approved by Command _____ Time _____
- 145) PCC to receive field verification that all valves and pump controls are in remote control.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 146) PCC to line up valves at Las Flores, Gaviota and Sisquoc as well as select pump at LFC and Gaviota to run. PPC to verify Pentland Station is staffed and ready to receive air into temporary tankage.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 147) PCC to Receive "Permissive" from LFC Operations. Note that Pentland Permissive will need to be bypassed in order to start system.
- 148) PCC to set meter track at Las Flores, Gaviota and Sisquoc to track barrels pumped.
- 149) Once LFC Operations has their booster pumps running and Las Flores Station has started, verify flow rate and pressures.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 150) Verify all personnel are ready and in place to monitor the pipeline and regulate flow at Sisquoc.
- 151) Verify pig trackers are in place and ready to track the pig #6 out of Sisquoc.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 152) PCC to start pump at Las Flores Station at [REDACTED] then start Gaviota as needed then start Sisquoc.
- 153) Sisquoc Station: Once confirmed pressure has equalized to within [REDACTED] to launch pig.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 154) Notify pig trackers when pig launches and flow rate.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 155) Pentland to regulate flow through the pig receiver [REDACTED] Maintain at least [REDACTED] to maintain line pack and regulate pig velocity.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____



- 156) Once dewater pig #1 passes through [REDACTED] then close the [REDACTED] to build air pressure between Pentland and [REDACTED] to allow air pressure to build to approximately [REDACTED] valve to regulate flow into [REDACTED]

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 157) PCC and field to monitor flow, pressure and temperature along CA-324, CA-325A as well as monitor CA-325B as it is filled. Sisquoc discharge pressure should be kept below [REDACTED]

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 158) PCC and field to maintain open communications during all work via cellular, radio or other means.

- 159) PCC to adjust flow rate once system is steady and comfortable with system. Line fill from Sisquoc to Pentland should be approximately [REDACTED]

- 160) If a shutdown is needed, shut system in and isolate the segment that has crude in it by closing the valve closest to Pig #6. Pig trackers to verify location of pig prior to shutting any valves unless it is an emergency. Once line is shut in, PCC will monitor pressure and temperature for duration of shut in period. Once line fill resumes, continue process until entire line is filled with crude oil.

- 161) [REDACTED]

- 162) [REDACTED]

Directed by PCC _____ Time _____

Executed by _____ Time _____

Approved by Command _____ Time _____

- 163) [REDACTED]



- 164) [REDACTED]
- 165) [REDACTED]
- 166) Receive pigs [REDACTED] then shut down entire pipeline system.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 167) Apply LOTO to receiver, drain down utilizing [REDACTED] and remove pigs [REDACTED] from receiver.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 168) Close pig receiver, fill pig launcher with fluid, ensure integrity and notify PCC piping is lined up [REDACTED] and ready to resume operations.
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 169) Once pigs [REDACTED] have been removed, pig receiver valves lined up and [REDACTED] resume flow until Pig #5 is approximately [REDACTED] upstream of Pentland.
- 170) [REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 171) Once Pig #6 is received in the trap at Pentland, notify PPC to shut down operations and isolate the pipeline by shutting [REDACTED]
Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 172) Conduct stand-up pressure test of CA-325B by placing Sisquoc in local operation and pressure line using the mainline pump and recirculation system. Station valves will need to be placed in local mode as well to operate as needed to pressure up the line. Verify suction pressure at Sisquoc to allow operation of pump. If needed, Las Flores and Gaviota might need to be started for a short period.
- 173) CA-325B to be pressured up to [REDACTED] (at Sisquoc) and held for two (2) hours. Provide monitoring data to regulating agency as needed to continue operations. Utilize pipeline pressure transmitter downstream of launcher at each station for monitoring point. All stand-up tests will be witnessed by a OSFM representative.



Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____

174) Once CA-325B has been successfully purged of all air/nitrogen/water begin the next phase of purging all Pentland Station piping of nitrogen.

175) Provide approval to proceed to next phase of station filling operations.

Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____

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Pentland Station -Line Fill

- 176) Coordinate with PCC, LFC Operations, Pipeline Operations and Plains for work order at least two days prior to starting planned work.
- 177) Verify LFC Operations is ready to supply crude oil into Pentland Station.
- 178) Vacuum truck on standby at Pentland Station to bleed nitrogen through. Make sure vacuum truck has carbon canister to vent through.
- 179) PCC designated Command to contact all required parties: Alert PCC, LFC, Gaviota, Sisquoc & Pentland Stations, Field Ops, ROW/Tracking crews, HSE, and required agencies that personnel are onsite and ready to take control of the line 324, 325A and CA-325B. Notification and approval to be as documented below.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 180) Verify all station valves are in the closed position prior to starting fill process. It should be noted that a System Programmer might be needed to allow certain valves to be opened during this process.
- 181) Utilize line pressure from CA-325B if possible, to purge nitrogen from Pentland Station piping. Station piping should be purged of nitrogen in stages. Pig receiver to upstream side of meter system, relief system, meter system, pressure control system, Plains piping system. All work will need to be coordinated with Plains prior to starting the purge of nitrogen from the system. Note that head pressure will be approximately [REDACTED] at Pentland Station and that line should be kept packed during station filling process.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 182) Bleed all nitrogen up to [REDACTED]
- [REDACTED]
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 183) Once all nitrogen has been removed from upstream piping then slowly flood meter up to pressure control valves [REDACTED] Bleed all nitrogen out of system utilizing bleed valves and vacuum truck as needed.
- Directed by PCC _____ Time _____
- Executed by _____ Time _____
- Approved by Command _____ Time _____
- 184) Once all nitrogen has been removed from meters, bleed all nitrogen from the pressure control system, all the way up to [REDACTED] at the Plains/PPC ownership demarcation to allow oil to flood piping up to the specification break from [REDACTED]
- [REDACTED]
- Directed by PCC _____ Time _____



- Executed by _____ Time _____
Approved by Command _____ Time _____
- 185) All piping downstream of this demarcation point will need to be coordinated with Plains to bleed all of the air/nitrogen out of the system prior to startup.
- 186) PCC to receive field verification that all valves and pump controls are in remote control. Once all nitrogen has been bled from the station piping and all connections have been verified then have PCC controllers start system pumps to pressurize the Pentland Station piping.
- 187) Once station piping has been pressurized have PCC shutdown and close in station piping under pressure. Conduct stand-up test on all station piping utilizing just shut-in pressure. Hold and monitor for two hours to verify no station leaks. Shut in pressure should be approximately [REDACTED]
- Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 188) Provide monitoring data to regulating agency as needed to continue operations. Utilize Station pressure transmitter [REDACTED] for monitoring point. All stand-up tests will be witnessed by a OSFM representative.
- Directed by PCC _____ Time _____
Executed by _____ Time _____
Approved by Command _____ Time _____
- 189) After completion of line fill and station fill operations, verify all systems and valves are placed back in "normal operating" position with use of line-up sheet to ensure normal operations and have line fill close out meeting. Meeting should include personnel and agencies involved in process to document final approvals and any recommended improvements.

