

TM

BNP Petroleum Corporation

January 7, 2002

Ms. Arlene Wimer
Padre Island National Seashore
PO Box 181300
Corpus Christi, Texas 78480-1300

Re: Lemon/Lemon Seed Unit Plan of Operations, Supplemental information for EA

Dear Arlene,

Attached is the "hot tap" pipeline tie-in procedure from Bryan Brown with Glory Construction. He also provided the API procedure used as the industry guideline. A 15 ft by 15 ft excavation will be required to make the tie-in. Any ground water that seeps into the excavation will be pumped out using PVC well points and diaphragm pumps. The liquids will be diverted and filtered through a silt screen and hay bales before being released on to the surrounding area. Any contaminated liquids or soils will be removed and hauled to an approved disposal site.

You also mentioned you had seen reference to NAD 27 and NAD 83 and needed to know which was correct. I looked through the plan of operations and could not find any reference to NAD 83. I could have easily missed it though. I talked to Charlie Belaire and to Rex Hackett at Frontier and they both used NAD 27. The well site location is based on NAD 27. Let me know if you find the reference to NAD 83 and I'll check it.

I hope this will give you the information you need to finish the EA. Please let us know when it is approved and forwarded to Washington, DC for publication.

As always, we appreciate your help and cooperation. Call me if you need anything else.

Sincerely,

Bowen W. Waters
Vice-President, Engineering

Attachments

NPS DOCUMENT # **492**

PROCEDURES FOR WELDING OF HOT TAPPING ON EQUIPMENT CONTAINING FLAMMABLES

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5.6 Cased Lines

If an underground line runs through a casing, care must be taken to ensure that the welding is done on the line, not on the casing, and that the annular space is gas-free.

5.7 Downstream Equipment

Avoid hot tapping upstream of rotating equipment or automatic control valves, unless such equipment is protected from the cuttings by filters or traps.

SECTION 6—PROCEDURES

6.1 Preliminary

Before proceeding to hot tap, the following conditions should be satisfied:

1. A competent company representative is present during the hot tap procedure.
2. The area to which a connection is to be made has been identified and physically marked.
3. The metal thickness has been measured and the absence of metal imperfections is verified.
4. A hot work permit has been secured if the area in which work is to be done requires such a permit.
5. All necessary gas and toxicity tests have been made to ensure a safe environment.
6. Personnel protective clothing and equipment are used where necessary.
7. A fire watch has been established and equipped with a suitable fire extinguisher, preferably dry chemical or pressurized fire hose.
8. Signs and barriers have been provided, where warranted, to isolate the job site from the public and from unauthorized personnel.
9. A procedure to isolate the work area in the event of a failure should be prepared. Personnel should be trained and familiar with both the procedure and the location of applicable equipment.

6.2 Welding

Upon completion of the steps outlined in 6.1, the following steps should be considered:

1. Exercise care to see that the fitting is properly positioned and supported before welding so that misalignment of the hot tap machine will not occur.
2. If the metal temperature is less than 50° F (10° C), preheating of the weld area prior to welding should be considered.
3. When metal temperatures are below the atmospheric dew point, preheating or other steps may be desirable to reduce the moisture content in the weld area. Moisture inclusion could result in weld porosity and underbead cracking.

4. If blowing dirt, snow, or rain is present, the weld area should be sheltered or protected during cleaning, preparation, and welding.

6.3 Inspecting the Weld

The welded attachment should be inspected during and after welding and before the hot tap machine is installed. Examination by radiograph, dye penetrant, ultrasonic, or magnetic particle is recommended, particularly on the first pass and final weld to check for underbead cracking. If these tests are used after the first pass, the weld area must be thoroughly cleaned of any foreign material or residues. These procedures should not be relied upon to replace hydrostatic or air testing.

6.4 Installing the Hot Tap Machine

Follow the machine installation instructions of the manufacturer and check the following items:

1. The hot tap valve to be used must be of adequate size, proper metallurgy, and be a full opening valve. It should be tested for seat leakage prior to installation (see API Standard 598).
2. During installation, the valve should be centered on the nozzle flange.
3. Run the boring bar through the valve opening to be sure the cutter does not jam or drag.
4. Carefully calculate the travel of the cutter to ensure that the tap can be completed within those dimensional limits, that the cut will be stopped before the cutter touches the opposite side of the tapped pipe, and that the cutter can be retracted far enough to allow unimpeded closure of the tapping valve.
5. Check that the bleed-off valve will hold pressure and is not plugged.
6. Ensure that precautions have been established for safe bleed-off and disposal of material collected in the machine above the hot tap valve.

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6.5 Testing the Weld and Hot Tap Machine

The welded attachment and hot tap machine should be tested before cutting is started.

1. Check tightness of bolts, packing, packing nuts, and bypass line, if required, to avoid possible leakage.
2. If the current temperature of the line or vessel will permit, a hydrostatic test should be conducted in accordance with the applicable code. The new weld and the tapping machine should be pressure tested simultaneously. The test pressure should be at least equal to the operating pressure of the line or vessel to be tapped, but it should not exceed the present internal pressure by more than approximately 10 percent in order to avoid possible internal collapse of the pipe or vessel wall. The temperature of the metal should be considered to prevent brittle fracture.

3. Air or nitrogen with soap solution on the weld can be substituted for a hydrostatic test if the temperature precludes the hydrostatic test. At elevated temperatures, air should be used only after careful consideration to avoid the possibility of a combustible mixture.

6.6 Completion

It is often possible to tell when the cut is complete by the reduced resistance to the hand cranking or by the speedup of the drive motor. The manufacturer's instructions should be followed when retracting the bore and closing the valve.

If the blank or coupon is lost, no attempt should be made to search for it. In some cases it will be necessary to shut down the equipment and depressure the line to recover a lost blank.

Glory Construction Inc.

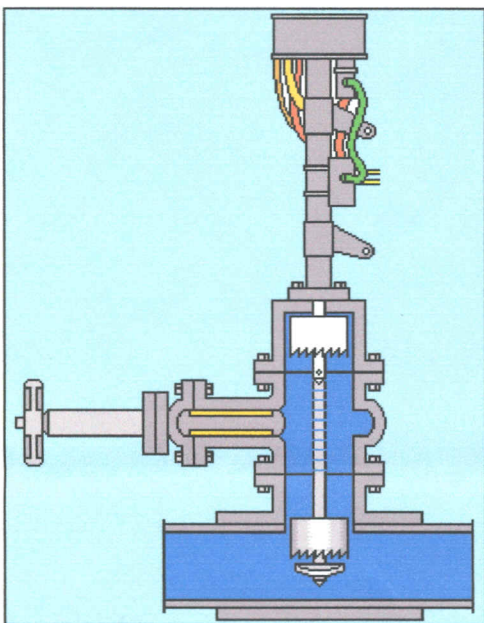
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Corpus Christi Tx.

78410

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Glory Construction Hot Tap Procedures

1. Hot Tap Machine to be set up for Hot Tap at Glory Construction shop. Machine, adapter, shell cutter, and pilot bit to be inspected at this time.
2. Hot Tap Machine and technician to arrive at job site upon customer's request.
3. Before Hot Tap Machine is bolted to Hot Tap valve:
 - ✓ Technician is to inspect valve, nipple, and flange for proper alignment or obstructions.
 - ✓ Shell cutter, pilot bit, and retainer pins to be inspected for final time by technician (customer representative optional to customer).
 - ✓ Measurement from center of pipe to top of valve, to be taken from inside of valve for accurate measurement.
4. Hot Tap permits, pressure, temperature, and flow to be established by customer.
5. Hot Tap to be installed.
6. Shell cutter to be hand cranked to pipe to assure of no obstructions. *A measurement will be taken at that time to assure shell cutter made the measured distance. This will also give the starting measurement for the Hot Tap.
7. Hot Tap will be started with bleeder valve open. Bleeder valve to be closed after pilot bit penetrates pipe and product has removed all oxygen from equipment by its presence from bleeder valve.
8. After Hot Tap is complete—this known by measurement—the shell cutter is to be hand cranked back up to Hot Tap Machine. Hot Tap valve will then be closed.
9. Hot Tap Machine to be removed from valve and coupon to be given to customer representative.
10. All dimensions and work to be done in accordance with operation manual of the model of T.D. Williamson Hot Tap Machine being used.



Install fitting and valve on the existing pipeline.

Install hot tap machine.

Perform hot tap through the open valve. A special device retains the "coupon" removed during the hot tap operation.

Retract cutter assembly.

Close hot tapping valve.

Remove hot tap machine to allow for connection to new pipe.

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