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June 13, 2007

Ref. 4641-24928

James H. Welsh, Commissioner  
State of Louisiana  
Department of Natural Resources  
Office of Conservation  
P.O. Box 94275  
Baton Rouge, LA 70804

Re: Amended Request for Authority to Commingle Gas  
and Liquid Hydrocarbons  
Lake Washington Commingling Facility No. 1  
(CF No. 92727) Lake Washington Field  
Plaquemines Parish, Louisiana

Dear Commissioner Welsh:

In supplement to Swift Energy Company's ("Swift") request for authority to commingle gas and liquid hydrocarbons by application dated October 7, 2005, as amended and supplemented February 10, 2006 and April 3, 2006, Swift requests authority to commingle gas and liquid hydrocarbons in the Lake Washington Commingling Facility No. 1 (CF No. 92727) for the following units/leases:

4700 RB SUA (LUW 049743)  
3800 RA SUA (LUW 049919)  
5400 RA SUA (LUW 049884)  
11350 RA SUA (LUW 049910)  
3000 RB SUA (LUW 614419)  
VUA (LUW 049909)  
SL 17990 (LUW 049768)  
SL 17722 (LUW 049834)  
SL 18907 (LUW 049994)  
SL 18909 (LUW 050032)  
6550 RA SUA (LUW 049971)

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James H. Welsh, Commissioner

June 13, 2007

Page 2

All of Swift's request herein for authority to commingle are in the Lake Washington Commingling Facility (CF 92727) and use the same well test procedure.

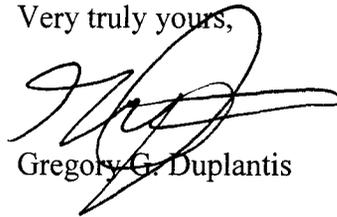
Swift, therefore, request a hearing for authority to commingle gas and liquid hydrocarbons from the above listed properties for which enclosed please find:

- (1) revised list of all interested owners, represented parties, and interested parties;
- (2) revised flow schematic; and
- (3) revised narrative.

Swift has previously paid the \$755.00 to cover the fee for the hearing in this matter. We would appreciate this matter to be put on the next available docket.

If you have any questions or comments please do not hesitate to contact me.

Very truly yours,



Gregory G. Duplantis

GGD:rb

Enclosures

Cc: Mr. Richard Hudson  
Mr. Todd Keating  
Mr. Charles Bradbury  
Ms. Anita Hebert  
Ms. Nancy Fitzwater  
Mr. Scott Hoffman  
All Interested Owners, Represented Parties  
And Interested Parties

**SWIFT ENERGY COMPANY  
LAKE WASHINGTON FIELD  
PLAQUEMINES PARISH, LOUISIANA  
COMMINGLING PROJECT**

## **INTRODUCTION**

Swift Energy Co. (Swift) purchased its portion of the Lake Washington Field from Elysium Oil Co. and took over operations in April 2001. The purchase included several non-operated leases along with the operated State Lease 212 (SL 212), Buras Levee District – Cockrell-Moran (BLD-CM) and Cockrell-Moran (CM) leases.

Swift operated wells are currently serviced by four major facilities; State Lease 212 Platform (SL 212), 6700 Platform (6700), Cockrell Moran #3 Platform (CM3) and the Caseload Platform. Currently, all operated wells flow to the SL 212, 6700 or CM3 platforms with the Caseload platform existing as a gas service platform for the CM3 facility.

Gas is separated from the produced fluids and is discharged into a high-pressure system for various uses; gas lift, compressor fuel, lease use and sales. Gas from the CM3 platform flows to the Caseload platform, basically a gas service platform, via an 8" low-pressure gas line where it is measured and compressed into the high-pressure system. Gas from the 6700 platform is measured at the platform and flows to the SL 212 compressor suction via a 6" low-pressure gas line where it is compressed into the high-pressure system. Gas produced at the SL 212 platform is measured and compressed into the high-pressure system. Gas compressed at both the SL 212 and Caseload facilities enters a common high-pressure system. The primary use of the gas is for gas lift operations. Any excess gas volume not needed for gas lift, compressor fuel or lease use is sold to Tennessee Gas Pipeline via a sales point located at the SL 212 facility. There is independent metering for gas lift, fuel, lease use and sales volumes.

3-phase separation occurs at each platform, with oil pumped into an 8" Swift operated gathering line and on to the Lake Washington Oil Delivery System (ODS) located nearby the SL 212 facility. From the ODS, oil is pumped to an Exxon Mobil (EMPCo) pipeline or to an oil transport barge. Oil flow to the EMPCO pipeline and to the transport barge are measured via separate LACT units. Oil flow is measured leaving the production platforms and measured again at either the LACT unit entering the pipeline or the LACT unit entering the transport barge. Produced water is disposed in one of three Swift operated salt-water disposal wells. Produced water production is measured at the facilities and measured again leaving the respective facilities to the disposal well.

A number of field gathering headers have been installed as the initial gathering point for newly drilled wells. Each of the newly installed headers is connected to a production facility via a six inch bulk production line and a 3" well test line. In normal operations, the wells connected to the field headers flow to the header via a three-inch flow line and on to the production facility through the six inch bulk production line for separation and disposition of the fluids. In well test operations, an individual well is segregated at the header and flows to the production facility via

the 3" test line, where fluids are separated in a designated test train. Each gas lift supply manifold is outfitted with a test meter to measure the gas lift volume used during test.

The general operation of each facility will be described in further detail in the following discussion. It is a near certainty that facility capacity will be expanded to handle increased volumes from planned drilling. Any expansion will be in the form of upsized or added equipment to increase capacity; the process will not change in any material aspect.

## **PROJECT DISCUSSION AND PROCESS DESCRIPTION**

### **State Lease 212 Facility**

#### Project Discussion

The State Lease 212 facility currently services **24** producing wells. All 24 wells are oil wells equipped for gas lift. These are the State Lease 212 #98D, #102, #35, A #3, A #7, #104, #106, #119, #122, #127, #128, #130, #131, #132, #133, #134, #137, #139, #153, #162, the SL 17990 #3, #4 and #10 and SL 18907 #2. The State Lease 212 A #3 and A #7 flow to the SL 212A valve setting. Two flowlines, one 2 7/8" and one 4", connect this valve setting to the SL 212 facility. The State Lease 212 #128, #130, #131, #137, the SL 17990 #3, #4 and #10 and SL18907 #2 flow first to the SL 212 Pad #1 header, with a 6" and 3" flowline connecting the header to the production facility. SL 212 #132, #133, #134 and #139 flow to the SL 212 Pad #2 header which is connected to the production facility with a 6" and a 3" flowline. The SL 212 #35, #98D, #102, #104, #106, #119, #122, #127, #153 and #162 flow directly to the inlet header at the SL 212 facility. All wells will be commingled at the inlet header to the facility except for any well flowing to a test separator for individual well testing.

The proposed commingling facility at the State Lease 212 facility includes the following:

- 1) An inlet header to accept produced fluids from the SL 212 and SL 212A wells.
- 2) A bulk separator handling all bulk produced fluids and acting as the major separation point for the facility.
- 3) Three test separators for SL 212 and SL 212A wells
- 4) Four heater treaters
- 5) Four 1000 bbl liquid tanks: one of which is the initial oil settling tank, one oil storage tank and two water storage tanks. Oil and water will be pumped from the storage tanks to their relative dispositions.
- 6) Two 1000 HP compressors
- 7) One high-pressure 2-phase and low-pressure 3-phase separator initially dedicated for production from 25 RS SUA; SL 212A #2 gas well. Note that this well is inactive.

#### Process Description

The SL 212A #3 and #7 wells produce to the SL 212A valve setting. Two flowlines, one 4" bulk line and one 2 1/2" test line connect this valve setting to the SL 212 facility. The wells can be commingled at the valve setting or flowed individually through the test line. The bulk line will direct well flow to the bulk separator where oil, gas and water will be separated. The test line

flows to a test separator where individual wells can be separated for test. The State Lease 212 #128, #130, #131, #137, the SL 17990 #3, #4 and #10 and SL18907 #2 flow to the SL 212 Pad #1 header. Two flowlines, one 6" bulk line and one 3" test line connect this valve setting to the SL 212 facility. The wells can be commingled at the valve setting or flowed individually through the test line. The bulk line will direct well flow to the bulk separator where oil, gas and water will be separated. The test line flows to a test separator where individual wells can be separated for test. The SL 212 #132, #133, #134 and #139 flow to the SL 212 Pad #2 header. Two flowlines, one 6" bulk line and one 3" test line connect this valve setting to the SL 212 facility. The wells can be commingled at the valve setting or flowed individually through the test line. The bulk line will direct well flow to the bulk separator where oil, gas and water will be separated. The test line flows to a test separator where individual wells can be separated for test. SL 212 wells #35, #98D, #102, #104, #106, #119, #122, #127, #153, and #162 flow through individual flowlines directly to the inlet header at the SL 212 facility. From the inlet header, the wells can be commingled into a bulk flow line that flows to the bulk separator or flow individually through a separate line to a test separator.

The bulk separator separates oil, gas and water from the commingled wells. Gas from the bulk separator is measured and sent to the compressors through a low-pressure line where it is compressed into the high-pressure system for various uses. The primary use of the gas is for gas lift operations. Any excess gas volume not needed for gas lift, compressor fuel or lease use is sold to Tennessee Gas Pipeline via a sales point located at the SL 212 facility. There is independent metering for gas lift, fuel, lease use and sales volumes.

Water from the bulk separator is measured and flows to the water storage tank. Water is pumped from the storage tanks into a 4" line for disposal in company operated disposal wells. The water is measured going into the disposal line. Oil from the bulk separator is sent to the bulk heater treater to reduce any emulsions. Water exiting the heater treater flows to the water storage tanks. Oil is measured exiting the heater treater and flows to the oil storage tank. Any minimal gas separated in the heater treater flows to the low pressure suction line. Oil is pumped from storage through an 8" line to the ODS and on to either the EMPCO pipeline or the oil transport barge. The transferred oil will be measured by a LACT unit as it is pumped into the pipeline or into the oil transport barge.

Individual wells being tested will flow through a separate line from the inlet header to the test separator where oil, gas and water is separated and measured. Gas from the test separator is measured and sent to the compressors through a low-pressure line. Each gas lift supply manifold is outfitted with a test meter to measure the gas lift volume used during test. The gas lift supply volume measured during test is subtracted from the total measured gas test volume to calculate the formation gas production. Water from the test separator is measured and sent directly to the water storage tanks. Oil from the test separator flows to the test heater to reduce any emulsion. Water from the test heater will be sent to the water storage tanks. Oil from the test heater flows to a test tank for a final measurement by tank strapping to ensure accurate test oil volumes and is then pumped to the oil storage tanks. Any minimal gas separated in the heater treater flows to the low pressure compressor suction. The test separators will be maintained at pressures to match normal operating conditions as closely as possible with backpressure applied if necessary.

Each gas lift supply manifold is outfitted with a gas meter to measure the gas lift volume used during test.

There is a train of equipment that was dedicated solely to the 25 RS SUA; SL 212A #2, a high pressure gas well. This train consisted of one high pressure and one low-pressure separator with gas, oil and water measurement. The gas well is now inactive with low probability of returning to production. This equipment will be maintained for the possibility of this well returning to production. Alternately, we could employ this equipment in the event we encounter high-pressure completions in future drilling.

Swift is planning additional drilling in the near future. If produced volumes increase to a level that exceeds the capabilities of the existing facilities, the capacity of the facility would be increased by adding a second bulk separator and heater treater. This would not change the process in any material way. The producing wells would enter the facility through the inlet header and be routed to the bulk or test separators. The producing wells would be distributed to the two bulk separators in such a fashion as to maintain equivalent pressures as nearly as possible.

## **PROJECT DISCUSSION AND PROCESS DESCRIPTION**

### **6700 Facility**

#### Project Description

The 6700 facility currently services **39** producing wells, all being oil wells equipped for gas lift. The BLD-CM #15, #17, #18, #19, the CM #170, #187, #188, #207, #208, #209, #268, #285 and the SL 212 #116 wells flow directly to the inlet header at the 6700 facility through individual flowlines. The BLD-CM #12, #13D and #16 flow through individual flow lines to the BLD-CM valve setting which is connected to the 6700 facility with two flowlines; one 4" and one 2". The CM #220, #221 and #222 wells flow to the 6700 Pad #1 Header which is connected to the 6700 Production Facility with a 6" and a 3" flowline. The CM #223, #224, #226, #227 and SL 17266 #5 wells flow to the 6700 Pad #2 header which is connected to the 6700 Production Facility with a 6" and a 3" flowline. The CM #263, #267, SL 1464 #3, SL 17266 #1, #3, #6, #7, #9, #16 and #19 flow to the CM3 North Header which is connected to the 6700 Production Facility with a 6" and a 3" flowline. The CM #269, #301, the SL 17266 #18 and SL 212 #142 wells flow to the 6700 Southwest Production Header, which is connected to the 6700 Production Facility by 6" and 3" flow lines. The wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. The CM #292 well is connected to Lake Washington Southwest Header which is connected to the 6700 facility with 3" and 6" flow lines. (The CM3 North Header, 6700 Pad #1 and 6700 Pad #2 headers are also connected to the CM3 production facility with 6" and 3" flowlines. Wells tied to these headers can be directed either to the CM3 or 6700 Production Facilities.) All wells will be commingled at the inlet header and flow to the bulk separator; excepting any well that is flowing individually to the test separator.

At the 6700 facility, the proposed commingling facilities include the following:

- 1) An inlet header with separate lines to the bulk and test separators

- 2) A bulk separator handling all produced bulk fluid and acting as the major gas separation point for the facility.
- 3) Four test separators
- 4) Five heater treaters
- 5) Four 1500 bbl production tanks; two for oil and two for water

### Process Description

The BLD-CM wells #12, #13D and #16 are directly connected to the BLD-CM valve setting with individual flowlines. The BLD-CM valve setting is connected to the 6700 facility inlet header with a 4" bulk fluid line and a 2" test line. These wells can be commingled into the bulk line and commingled with the other wells entering the facility at the inlet header. Alternately, an individual well can be flowed through the test line to the inlet header to the facility. The CM #220, #221 and #222 flow to the 6700 Pad #1 Header which is connected to the 6700 Production Facility with a 6" and a 3" flowline. These wells can be commingled into the bulk line and commingled with the other wells entering the facility at the inlet header. Alternately, an individual well can be flowed through the test line to the inlet header to the facility. The CM #223, #224, #226, #227 and SL 17266 #5 wells flow to the 6700 Pad #2 header which is connected to the 6700 Production Facility with a 6" and a 3" flowline. These wells can be commingled into the bulk line and commingled with the other wells entering the facility at the inlet header. Alternately, an individual well can be flowed through the test line to the inlet header to the facility. The CM #263, #267, SL 1464 #3, SL 17266 #1, #3, #6, #7, #9, #16 and #19 flow to the CM3 North Header which is connected to the 6700 Production Facility with a 6" and a 3" flow line. These wells can be commingled into the bulk line and commingled with the other wells entering the facility at the inlet header. Alternately, an individual well can be flowed through the test line to the inlet header to the facility. The CM #269, #301, SL 17266 #18 and SL 212 #142 wells flow to the 6700 Southwest Production Header, which is connected to the 6700 Production Facility with 6" and 3" flow lines. These wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. The CM #292 well flows to the Lake Washington Southwest Header, which is connected to the 6700 Production Facility with a 6" and a 3" flow line. The CM #292 well can flow into the bulk line and be commingled with the other wells entering the facility at the inlet header. Alternately, this well can be flowed through the test line to the inlet header to the facility. The BLD-CM #15, #17, #18, #19, the CM #170, #187, #188, #207, #208, #209, #268, #285 and the SL 212 #116 wells are connected with individual flowlines to the inlet header of the 6700 facility. These wells can be commingled at the inlet header, into the flowline to the bulk separator or flowed individually through a separate flowline to a test separator.

The commingled wells flow to the bulk separator where oil, gas and water are separated. The gas from the bulk separator is measured and sent to the SL 212 compressors through a 6" low-pressure line. The gas is compressed into the high-pressure system for various uses. Water from the bulk separator is measured and is sent to the water storage tanks. Water from the storage tank is pumped into the 4" SWD line for disposal in company operated disposal wells. The water is measured again while pumping into the SWD line. Oil from the bulk separator is sent to a heater treater for reduction of any emulsion. Oil is measured at the outlet of the heater treater and flows to the oil storage tanks. Any minimal gas volumes separated at the heater treater flow to the flare system. Oil is pumped from the storage tank through an 8" gathering line to the ODS

and on to either the EMPCo pipeline or the oil transport barge. Oil pumped from the tanks is measured exiting the facility.

Individual wells being tested will flow through a separate line from the inlet header to a test separator where oil, gas and water is separated and measured. Gas from the test separator is measured and sent to the SL 212 compressors through the 6" low-pressure line. Each gas lift supply manifold is outfitted with a test meter to measure the gas lift volume used during test. The gas lift supply volume measured during test is subtracted from the total measured gas test volume to calculate the formation gas production. Water from the test separator is measured and can be sent directly to the water storage tank. Oil from the test separator flows to the heater treater to reduce any emulsion. Oil from the test heater is measured at the heater treater outlet and flows to a test tank for a final measurement by tank strapping to ensure accurate test oil volumes and is then pumped to the oil storage tanks. Any minimal gas volumes separated in the heater treater flow to the flare system. Water from the test heater flows to the water storage tanks. The test separators are maintained at pressures to match normal operating conditions as closely as possible with backpressure applied if necessary.

Swift is planning additional drilling in the near future that will add wells to the 6700 facility. It may become necessary to increase the capacity of the facility. This will be done by adding bulk production separators and heater treaters. This will not change the process in any material way. Additional wells will enter the platform through the inlet header and be directed to the bulk or test separators or; alternately, connected to one of the field gathering headers connected to the facility. The wells will be distributed in a manner that equalizes the separator pressures as nearly as possible. It may be necessary to add tank capacity to the facility. This will not change the process in any material way.

## **PROJECT DISCUSSION AND PROCESS DESCRIPTION**

### **CM3 Facility**

#### Project Discussion

The CM3 facility currently services 63 producing oil wells. All wells are equipped for gas lift. The CM #133D, #177, #178, #181, #182, #183D, #185D, #186, #194, #195, #198, #199, #202, #243, #245, #281, SL 1464 #1 and SL 18909 #1 are connected directly to the facility through individual flowlines. The CM #175, #206, #248 and #294 are connected through individual flowlines to the north valve setting. These wells can be commingled in a 4" bulk flow line to the CM3 facility or flow individually through a 2-1/2" test line. The CM #157, #172, #192 and #255 are connected directly to the south valve setting. The south valve setting is connected to the CM3 facility with a 4" bulk flow line and a 2 1/2" test line. The wells can be commingled through the 4" bulk line or flowed individually through the 2 1/2" test line. The CM #189, #190, #191 and #254 flow to the Pad #6 Header platform; which is connected to the CM3 Production Facility by 6" and 3" flowlines. The wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. The CM #201, #204, #205, #213, #238, #239, #244, #249, #283, #293 and SL 17722 #2 flow to the CM3 South Header Platform, which is connected to the CM3 Production Facility by 6" and 3" flowlines. The wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. The CM #218, #251, #253, #273, #284,

#304, #309 and SL 17267 #5 flow to the CM3 South Header #2 which is connected to the CM3 Production Facility by 6" and 3" flowlines. The wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. The CM #233, #259, #260, #262 and the SL 17266 #17 and #18 wells flow to the CM3 North Header Platform, which is connected to the CM3 Production Facility by 6" and 3" flowlines. The wells can be commingled through the 6" bulk line or flowed individually through the 3" test line. (The CM3 North Header is also connected to the 6700 production facility with 6" and 3" flow lines. Wells tied to this header can be directed either to the CM3 or 6700 Production Facilities.) The CM #257, #300, SL 212 #100, #108, #156 and #157 wells flow to the 6700 Southwest Production Header, which is connected to the CM3 Production Facility by 4" and 3" flowlines. The wells can be commingled through the 4" bulk line or flowed individually through the 3" test line. (The 6700 Southwest Header is also connected to the 6700 facility with 6" and 3" flow lines. The wells connected to this header can flow to either the CM3 or 6700 facility.) The SL 17721 #1 and #3 wells flow to the Pintail Production Header and are connected to the CM3 Production Facility by 3" and 6" flowlines. The wells can be commingled into the 6" bulk production line or individually through the 3" test line. All wells connect to the inlet header of the CM3 facility. Production can be commingled at the inlet header and flow to the bulk separator or individual wells can be directed through a separate line to a test separator.

The proposed commingling facility at the CM3 platform includes the following:

- 1) An inlet header that directs flow to either the bulk or test separators
- 2) A bulk separator that handles all bulk fluid and acts as the major gas separation point for the facility
- 3) Three 1000 bbl liquid tanks; one for oil, one for water
- 4) Four test separators
- 5) Five heater treaters
- 6) Four 400 bbl test tanks

#### Process Description

All producing wells connected to the facility; either directly or through a field gathering header, will be commingled at the inlet header to the CM3 facility and sent to the bulk separator. Alternately, each individual well can be directed through a separate flowline to a test separator.

Oil, gas and water from commingled production is separated at the bulk separator. The gas from the bulk separator is measured and sent to the compressor at the Caseload platform through an 8" low-pressure line. Water from the bulk separator is measured and is sent to the water storage tank. Water from the storage tank is pumped into the 4" SWD line for disposal in company operated disposal wells. The water is measured again while pumping into the SWD line. Oil from the bulk separator is sent to a heater treater for reduction of any emulsion and on to the oil storage tank after measurement. Any minimal gas separated in the heater treater flows to the flare system. Oil is pumped from the storage tank through an 8" gathering line to the ODS and on to either the EMPCo pipeline or the oil transport barge. Oil pumped from the tanks is measured exiting the facility.

Individual wells being tested will flow through a separate line from the inlet header to a test separator where oil, gas and water is separated and measured. Gas from the test separator is

measured and sent to the compressor at the Caseload platform through the 8" low-pressure line. Each gas lift supply manifold is outfitted with a test meter to measure the gas lift volume used during test. The gas lift supply volume measured during test is subtracted from the total measured gas test volume to calculate the formation gas production. Water from the test separator is measured and can be sent directly to the water storage tank, or sent to a test tank for a second measurement and then transferred to the water storage tanks for final disposition. Oil from the test separator flows to the heater treater to reduce any emulsion. Water from the test heater will be sent to the water storage tanks. Oil from the test heater flows to the test tanks for a final measurement by strapping to ensure accurate test oil volumes and is then pumped to the oil storage tanks. Any minimal gas volume separated in the heater treater flows to the flare system. The test separators will be maintained at pressures to match normal operating conditions as closely as possible with backpressure applied if necessary.

The low-pressure gas from the CM3 facility flows to the compressor at the Caseload facility. This facility is a gas service facility only. The gas exits the second compressor stage through a 4" flowline to the amine plant and then back to the third compressor stage for final compression. The gas exits the final compressor stage through the glycol de-hydrator and into the high-pressure system for various uses.

Swift is planning additional drilling in the near future that will add wells to the CM3 facility. It is a near certainty that it will be necessary to increase the capacity of the facility. Capacity expansion will be achieved by adding bulk separators and heater treaters. This will not change the process in any material way. Additional wells will enter the platform through the inlet header or through the field gathering headers and be directed to the bulk or test separators. The wells will be distributed in a manner that equalizes the separator pressures as nearly as possible. It may be necessary to add tank capacity to the facility. This will not change the process in any material way.

## **WELL TEST AND ALLOCATION METHODOLOGY**

### Well Tests

Each well will be tested monthly, at a minimum and when well conditions are known to have changed. Changes in well conditions that will trigger tests include significant changes in flowing tubing pressure, noted change in oil cut, significant sand production, replacement or design changes in gas lift valves, significant changes in gas lift injection rates and any remedial well work or stimulation.

Well tests will be twenty-four hours in duration where possible, and four hours at a minimum depending on the number of wells flowing to a particular facility. Currently, Twenty-four hour tests are possible at each facility based on the number wells flowing.

Test separator pressures will be regulated for each test to simulate normal well operations; as closely as possible. Flowline sizes have been designed to prevent excessive backpressure on the producing wells. There should be only minimal frictional differential experienced; if any, when the wells are switched from normal operations to test. When necessary, the test separator backpressure will be regulated to approximate well conditions under normal operations.

The meters used for measuring test oil and volumes will be rotated monthly. The test meters will be sent for third party proving and; if necessary, calibration. Gas meters used for test purposes will be inspected monthly and calibrated every quarter. These measures should ensure accurate measurement of well performance.

### Allocation Methods

#### 1) Liquids

Oil will exit each platform via a 4" flowline into the 8" gathering line and be delivered into either the Exxon Mobil pipeline through a LACT unit or into an oil transport barge through a LACT unit. The exit point from each platform will have an oil meter measuring the oil volume leaving the facility. Total oil volume will be measured at the two LACT units. Swift will monitor the volumes measured leaving each platform daily to make sure balance is observed with the total volume measured at the LACT units. The LACT meters will be proved monthly in the beginning; and if volume increases with additional drilling, bi-monthly to ensure accurate measurement.

Exxon Mobil and the transport barge operator will provide total delivered volumes to Swift on a monthly basis. Assuming the volumes provided compare with the checks Swift has in place, these volumes will be used for allocation back to each individual well. Well tests will be normalized with any downtime experienced by individual wells. Once a monthly well volume is calculated, it will be divided by the total of the oil volumes from all well tests. This number will be used as the pro rata percentage to allocate each well by multiplying subject percentage by the total production and sales volume. This method will allocate the sales volumes directly back to individual wells without the intermediate step of first allocating to the platforms.

Water volumes will be allocated to the individual wells in the same manner; but with no sales volumes involved.

#### 2) Gas

All natural gas produced in Swift's Lake Washington Field operations will be sold, utilized in gas lift or as fuel/lease use. All gas separated from well production streams will enter the low-pressure gas line on the particular platform and be measured through an electronic flow meter (EFM) before entering the suction of a compressor. This volume will be used to allocate production back to individual wells. The well test volume will be normalized by the number of days a particular well produced. With run time considered, a total monthly volume based on well tests will be calculated. Normalized individual well test volumes will be divided by the total monthly volume based on well tests, with the resulting percentage used to allocate well production. The calculated percentage will be multiplied by the total measured platform production to calculate individual well production.

Gas lift injection will be allocated in the same manner using total measured gas lift volumes and gas lift volumes measured during well tests. The allocated gas lift volume for an individual well will be subtracted from the allocated actual production for that well to calculate formation production. The gas lift system is considered a closed system with no volumes lost. The only

losses in the overall system will be fuel, flare, fugitives and shrinkage. Fuel and flare volumes will be measured at each platform and allocated back to the individual wells based on throughput. The remaining formation production volumes will be utilized to allocate gas sales.

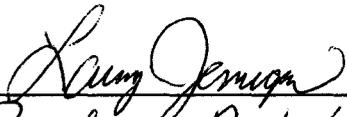
**SWIFT ENERGY COMPANY  
COMMINGLING AUTHORITY  
LAKE WASHINGTON FIELD  
PLAQUEMIENS PARISH, LOUISIANA**

**It is the opinion of Swift Energy Company that the commingling of gas and/or liquid hydrocarbons and the use of well tests for allocation of production in the manner proposed under this application to the State of Louisiana, Office of Conservation, will provide reasonably accurate measurement, will not create inequities, and will afford the owner of any interest the opportunity to recover their just and equitable share of production.**

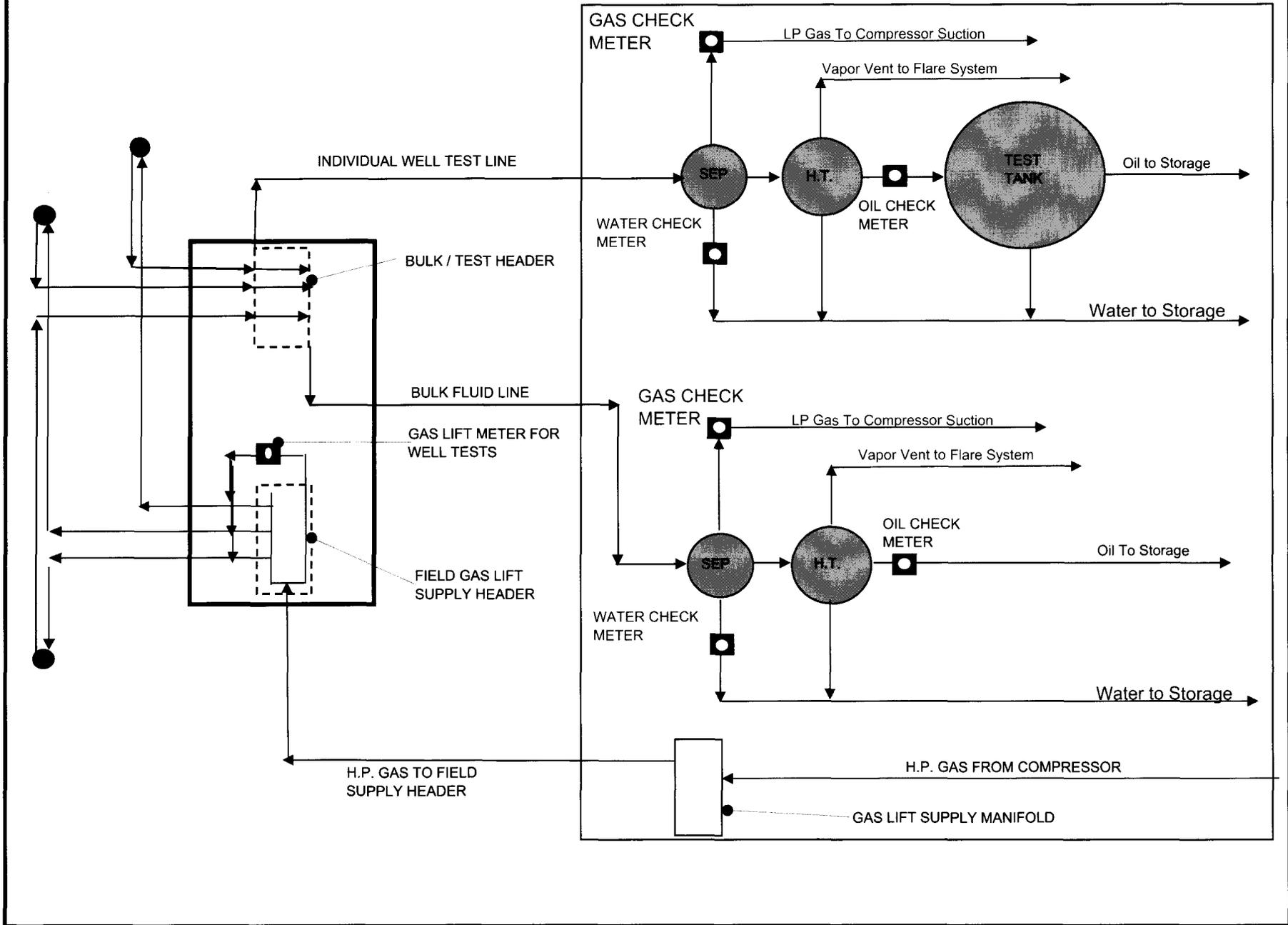
**Larry Jernigan:**

**Title:**

**Date:**

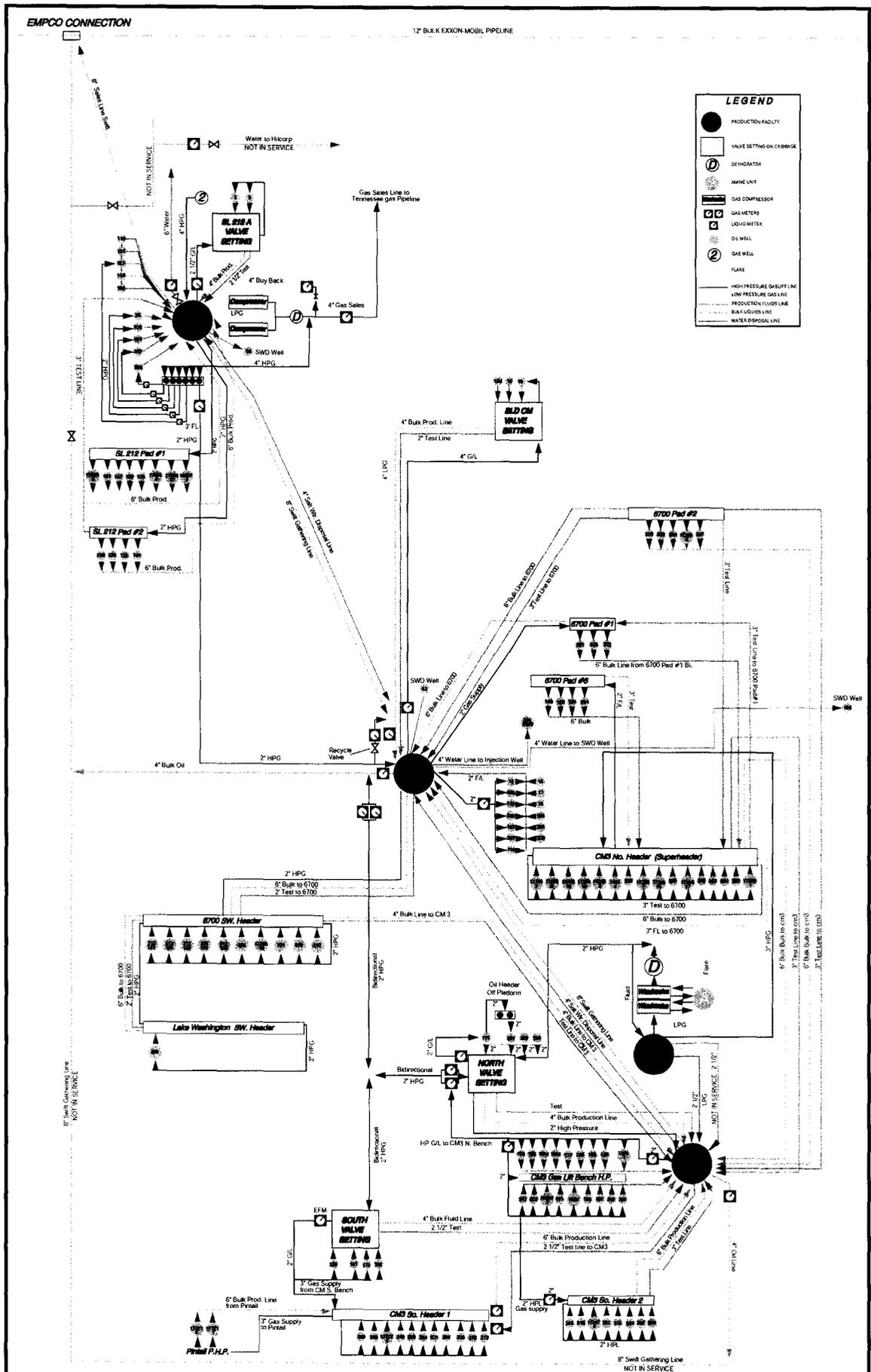
  
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*Director - Production Operations*  
*October 12, 2005*

# TYPICAL WELL FLOW PATH LAKE WASHINGTON FIELD



**LEGEND**

- PRODUCTION FACILITY
- VALVE SET (THRO ON CLOSURE)
- DEGASATOR
- NAME UNIT
- GAS COMPRESSOR
- GAS METERS
- LIQUID METER
- OIL WELL
- GAS WELL
- FLARE
- HIGH PRESSURE GAS LINE
- LOW PRESSURE GAS LINE
- PRODUCTION FLUID LINE
- BULK LIQUID LINE
- WATER DISPOSAL LINE



**LAKE WASHINGTON FIELD**  
 PLAQUEMINES PH, LOUISIANA  
**FIELD FLOW SCHEMATIC**

