



Energy Research Services, Inc.

June 30, 2008

Mr. Scott Hoffman
Office of Conservation
PO Box 94275
Baton Rouge, LA 70804-9275

Re: Fifth Revision to Application for Modification to Existing Surface Commingling Authority
W-8 Commingling Facility (915740) and the W-5 Commingling Facility (955510)
Hilcorp Energy Company, and IG Petroleum, L.L.C.,
Burrwood, West Delta Blocks 83 and 84 Fields
Plaquemines Parish, Louisiana

Dear Scott,

This revision has been prepared to remove the oil sales barge at the W-5 Commingling Facility, and illustrate oil to be sold to a crude pipeline through a LACT.

The following is a summary of the historical commingling approvals relative to the referenced facilities:

- West Delta Block 83 Field: Order 529-2 granted authority to commingle and allocate gas and liquid hydrocarbon production based on monthly well tests at the W-5 Commingling Facility (955510) from certain leases and units. WDB83 10500 RB SU, 10100 RB SUA, M W SNOW, USA 5.
- West Delta Block 83 Field: Reference 29-D-28 granted authority to commingle at the W-5 Commingling Facility hydrocarbons from the SL 1922 (304167), SL 2227 (304939), and the 6500 RA SUA.
- Burrwood Field; Order 850-1 granted authority to commingle and allocate gas and liquid hydrocarbon production based on monthly well tests at the W-8 Commingling Facility (915740) from certain leases and units. BURR 6900 L2 RA NVU, BURR 6900 L2 RC NVU, BURR 6900 L2 RD NVU, BURR T RA SU, BURR 9100 RB NVU, VUA, VUC, SL 1922, SL 2565, SL 2566.
- Burrwood Field: Order 850-3 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the 10500 RA SUA (049712).
- Burrwood Field: Reference 29-D-13 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the Burrwood T RA SU.
- Burrwood Field: Reference 29-D-15 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the 6900 L2 RA VUA.



- Burrwood Field: Reference 29-D-23 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the 6900 L2 RC NVU, 6900 L2 RD NVU, 9100 RC NVU, and VUF.
- Burrwood Field: Reference 29-D-25 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the VUG (049658) and the SL 17381 (SN 229102).
- West Delta Block 84 Field: Reference 29-D-3 granted authority to commingle at the W-8 Commingling Facility hydrocarbons from the IG Petroleum, LLC – OA A0232 (049659).
- Burrwood Field: Reference 29-G-6 granted authority to automatically measure and transfer custody of hydrocarbons at the W-8 Commingling Facility.
- West Delta Block 83 Field: Reference 29-G-3 granted authority to automatically measure and transfer custody of hydrocarbons by methods other than gauge tanks at the W-5 Commingling Facility.

Application has been made on behalf of Hilcorp Energy Company (Hilcorp) for the calling of a public hearing, after legal notice, to consider evidence relative to the issuance of an order approving the commingling in the West Delta Block 83 W-5 Commingling Facility (955510) of gas and liquid hydrocarbons produced from the 10500 VUA: McClellan et al #1 (SN 073417) and the 10500 VUA:Simonin et al #1 (SN 073785) located in the West Delta Block 83 Field. The LUW code for the 10500 VUA is 049923.

This application also requests a consolidated hearing to address the following actions:

1. To consolidate the commingling authority at the Burrwood W-8 Commingling Facility (915740) at the Burrwood - West Delta Block 83 W-5 Consolidated Commingling Facility (955510). The W-8 Facility will continue to serve the W-5 Commingling Facility, as a remote facility. Natural gas separated at the W-8 facility will continue to be metered and sold at W-8, while the hydrocarbon liquids will be metered and sold by LACT at the W-5 Commingling Facility. Therefore, the two historical oil sales locations will be merged into one at W-5. This action should qualify for administrative approval, as the methods of measurement and allocation previously approved at the Burrwood W-8 Commingling Facility are similar to those approved at the West Delta Block 83 W-5 Commingling Facility. Hilcorp proposes to rename the West Delta Block 83 W-5 Commingling Facility as the Burrwood – West Delta Block 83 W-5 Consolidated Commingling Facility.
2. To commingle the liquid hydrocarbon production from the IG Petroleum, LLC (IGP) – West Delta Block 84 Field at the Burrwood – West Delta Block 83 W-5 Consolidated Commingling Facility (955510). IGP's liquid hydrocarbon production is currently approved for commingling at the Burrwood W-8 Commingling Facility. The gas from the West Delta Block 84 Field will continue to be metered and sold at the IGP facility, as previously approved by the Office of Conservation. This action should qualify for administrative approval, as the method of measurement and allocation of the liquid hydrocarbons proposed to be commingled at the Burrwood – West Delta Block 83 W-5 Consolidated Commingling Facility is similar to those approved at the Burrwood W-8 Commingling Facility.

Attached are copies of the following:

- Amended schematic flow diagrams
- Amended description of operations

The applicable authority will be covered pursuant to Title 43, Part XIX, Subpart 6, Statewide Order No. 29-D-1, 1505.2 (Well Test). The allocation and sales meters will be tested and proven monthly for liquid hydrocarbon meters and quarterly for gaseous hydrocarbon meters.

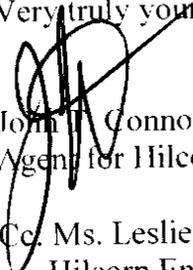
In Hilcorp's opinion, this authorization will promote conservation of the natural resources within the State of Louisiana, will prevent waste, will protect the rights of all parties at interest and will result in substantial economic savings without results that may be in any way inconsistent with conservation policies, statutes or regulations of the State of Louisiana. Further, in the opinion of the applicant, the commingling procedure proposed will provide reasonable, accurate measurement, will not create inequities and will insure that the owner of any interest will have the opportunity to recover his just and equitable share of the reservoir content. Hilcorp requests that these actions be administratively approved or set for hearing at earliest possible date.

Furthermore, Hilcorp is requesting an extension of the administrative 90 day emergency commingling authority, with an effective date of January 25, 2008, to produce the subject leases and units while this formal application is being processed.

A copy of this application and attachments, except the check, is being sent to Mr. Richard D. Hudson, District Manager, Office of Conservation, Lafayette, Louisiana. A copy of the legal notice will be mailed to each Interested Owner, Represented Parties, and Interested Parties having an interest in the various leases and units.

All inquiries concerning this proposal should be directed to Mr. John T. Connolly, Agent for Hilcorp Energy Company, 19345 Point O Wood Court, Baton Rouge, Louisiana 70809. Should you have any questions, please call or email me at 753-4723 / crsses@cox.net.

Very truly yours,


John T. Connolly
Agent for Hilcorp Energy Company

Cc. Ms. Leslie Avioli
Hilcorp Energy Company
PO Box 61229
Houston, Texas 77208

Mr. Richard Hudson
District Manager
Office of Conservation
825 Kaliste Saloom Road
Brandywine III, Suite 220
Lafayette, Louisiana 70508

DESCRIPTION OF OPERATIONS
BURRWOOD – WEST DELTA BLOCK 83 W-5 CONSOLIDATED COMMINGLING FACILITY
(CF 955510)
BURRWOOD, WEST DELTA BLOCK'S 83, AND 84 FIELDS
PLAQUEMINES PARISH, LOUISIANA

Summary

Hilcorp Energy Company (Hilcorp) is the current operator of the Burrwood W-8 Remote Separation Facility (formerly CF 915740) and the Burrwood – West Delta Block 83 W-5 Consolidated Commingling Facility (CF 955510) (W-5 CCF), located in the Burrwood and West Delta Block 83 Fields.

IG Petroleum, Inc. is the operator of the West Delta Block 84 Field, which will deliver oil by pipeline from a single lease to the Burrwood – West Delta Block 83 W-5 Consolidated Commingling Facility (CF 955510), via the Burrwood W-8 Remote Separation Facility.

Explanation of Flow

Hilcorp Energy Company - Burrwood Field Wells

Units and leases approved for commingling in the Hilcorp operated Burrwood Field produce via individual flow lines to the production header at the Burrwood W-8 Remote Separation Facility. The well streams are commingled at the production header for deliver to either a bulk separation system or test separation system. Both the bulk and the test separation systems contain the necessary equipment to separate and measure the volumes of liquid hydrocarbons, gaseous hydrocarbons, and saltwater production.

Bulk low pressure production from individual wells is routed to the three phase low pressure production separator where low pressure gas, oil, and saltwater are separated. The low pressure gas is commingled with other low pressure gas off the three phase low pressure test separator and routed to compression, dehydration, and then to the Tennessee Gas sales meter. The oil is routed to a fixed roof storage tank prior to being transferred to the Burrwood West Delta Block 83 W-5 Consolidated Commingling Facility (W-5 CCF). The produced water is commingled with other water and routed to the SWD system for disposal by underground injection. On a monthly basis, individual wells are directed, via the header manifold, to the three phase test separator. Gas off of the three phase low pressure test separator is metered and combined with gas from the three phase low pressure production separator, compressed, dehydrated, and delivered to the Tennessee Gas sales meter. Oil off of the three phase low pressure test separator is metered and combined with oil from the three phase low pressure production separator and stored in fixed roof tanks. Saltwater off of the three phase low pressure test separator is metered and combined with saltwater from the three phase low pressure production separator and stored in fixed roof tanks prior to disposal by deep well injection.

In the Bulk Separation System, high pressure wells are delivered to a two phase high pressure separator where the gaseous hydrocarbons are separated from the fluids. The gas is commingled with compressed low pressure gas, dehydrated and metered for sales, gas lift, or fuel. The fluids from the two phase high pressure bulk production separator are delivered to the three phase low pressure bulk production separator where gas, oil, and saltwater are separated. Low pressure wells in the Bulk Separation System are routed directly to the three phase low pressure bulk production separator. The gas separated at the low pressure bulk production separator is compressed, commingled with high pressure gas from the high pressure two phase bulk and test separators, dehydrated, and metered for sales, gas lift, or fuel use. The oil from the three phase low pressure bulk production separator is metered and delivered to the fixed roof storage tank to be commingled with oil from the W-5 CCF Test Separation System, the Burrwood W-8 Remote Separation Facility and the IG Petroleum, L.L.C. operated West Delta Block 84 Field. This oil is metered by LACT prior to delivery to a crude oil pipeline. Saltwater from the three phase low pressure bulk separator is metered, commingled with saltwater from the three phase low pressure test separator, and delivered to fixed roof storage prior to disposal by deep well injection.

In the Test Separation System, high pressure wells are delivered to a two phase high pressure separator where the gaseous hydrocarbons are separated from the fluids. The gas is metered and commingled with compressed low pressure gas, dehydrated and metered for sales, gas lift, or fuel. The fluids from the two phase high pressure test separator are delivered to the three phase low pressure test separator where gas, oil, and saltwater are separated. Low pressure wells in the Test Separation System are routed directly to the three phase low pressure test separator. The gas separated at the low pressure test separator is metered, compressed, commingled with high pressure gas from the high pressure two phase bulk and test separators, dehydrated, and metered for sales, gas lift, or fuel use. The oil from the three phase low pressure test separator is metered and delivered to the fixed roof storage tank to be commingled with oil from the W-5 CCF Bulk Separation System, the Burrwood W-8 Remote Separation Facility and the IG Petroleum, L.L.C. operated West Delta Block 84 Field. This oil is metered by LACT prior to delivery to a crude oil pipeline. Saltwater from the three phase low pressure test separator is metered, commingled with saltwater from the three phase low pressure bulk production separator, and delivered to fixed roof storage prior to disposal by deep well injection.

The liquids generated in the scrubbers are minimal, piped to the fixed roof commingled saltwater storage, and not metered at both facilities.

All gas lift gas is individually metered at each well head, for wells on gas lift.

Explanation of Well Test

A wells' production will be determined by monthly well test conducted for a period of not less than twenty-four (24) hours, once per month. The individual well stream is diverted into a test header where it flows into a two phase high pressure and/or three phase low pressure test separator. From there the liquid hydrocarbons are directed to a calibrated turbine meter before going to commingled tankage where it is to be sold. Prior to delivery to the crude oil pipeline, the oil is measured by a LACT unit.

Gaseous hydrocarbons will be metered at the two phase high pressure and/or three phase low pressure test separators by orifice meters. Tests will be conducted for a minimum of twenty-four (24) hours

once per month. Low pressure gas flows from the test separator to compression. The compressed gas is scrubbed, dehydrated, and sold or used for fuel or gas lift. Gas sales will be apportioned from the Tennessee Gas sales meter.

Oil production will be metered at the three phase low pressure test separator by liquid turbine meter. Each liquid meter will be calibrated monthly and a meter factor will be derived from the calibration test. All oil meters will be calibrated on a monthly basis by third party meter calibration services. The sales volume will be allocated to the wells based on the well tests described above.

Water production will be metered at the three phase low pressure test separator by liquid turbine meter.

For gas lift oil wells, input gas is measured and subtracted from output gas to arrive at a net or formation gas production volume for allocation purposes.

Explanation of Allocation

Oil: Total monthly oil sales are based on the volume of oil metered by the Harvest Pipeline LP LACT meter, sold and delivered to the crude oil pipeline at the W-5 CCF, plus the closing inventory volumes less the opening inventory volumes at the W-5 CCF consolidated oil storage tank. Based on the volume of oil measured by the LACT unit at the W-5 CCF, oil will be allocated back to the W-5 CCF production header (Hilcorp – West Delta Block 83 Field wells), the Burrwood W-8 Remote Separation Facility and the IG Petroleum – West Delta Block 84 Field based on the total metered volumes of oil delivered from each facility. Based on the tank strappings at Burrwood W-8 Remote Separation Facility and the LACT volumes from IG Petroleum – West Delta Block 84 Field, and the metered volumes from the Bulk and Test Separation Systems at the W-5 CCF, oil is allocated to each stream entering commingled storage. The liquid hydrocarbon test rates will be adjusted for both BS&W and a flash shrinkage factor to correct the rates to stock tank conditions. The shrinkage factors will be determined semi-annually. BS&W will be determined bi-monthly. These factors will be determined more frequently if dictated by changing well conditions.

The total theoretical oil production for a well during a calendar month will be determined by summing the products of the well test rates by the duration of flow to the corresponding well test rate. This calculation will include adjustments for shut in or down time periods. The IG Petroleum, LLC – West Delta Block 84 Field production and the Hilcorp – Burrwood W-8 Remote Separation Facility theoretical oil volume will be their LACT unit volume and tank gauge volumes, respectively, for the period being delivered to commingled storage at the W-5 CCF.

Once the allocated oil volume is determined for the W-5 CCF, as described above, individual oil production will be allocated to each well producing to the production header, based on the following formula:

$$\frac{\text{Individual Oil Test Volume}}{\text{Sum of Individual Oil Test Volumes}} \times \text{Total Allocated Monthly Oil Volume}$$

Gas: The total monthly gas is measured at the Tennessee Gas meter stations at the Burrwood W-8 Remote Separation Facility and the W-5 CCF. The calibration for gas meters will be monthly.

At the Burrwood W-8 Remote Separation Facility, total gas to be allocated back to each well operated by Hilcorp and producing in the Burrwood Field, is the sum of gas sales, fuel gas, gas lift gas metered volumes, and any estimated volumes flared or vented.

At the W-5 CCF, total theoretical gas to be allocated back to each well operated by Hilcorp and producing in the West Delta Block 83 Field, is the sum of gas sales, fuel gas, gas lift gas metered volumes, and any estimated volumes flared or vented. Gas lift gas is deducted from each well on gas lift by subtracting the gas lift metered volumes at each well on lift, only for wells operated by Hilcorp in the West Delta Block 83 Field. The total gas volumes attributable to each well will be based on each well's proportional fraction of the total theoretical gas production less the well's proportional fraction of the gas volumes consumed as fuel, gas lift, and/or vented or flared.

Individual gas production will be allocated to each Hilcorp operated well in the West Delta Block 83 Field based on the following formula:

$$\frac{\text{Individual Gas Test Volume}}{\text{Sum of Individual Gas Test Volumes}} \times \text{Total Gas Sales Volume} - \text{Fuel Gas} - \text{Metered Well Gas Lift Volume}$$

The total water production will be allocated to the individual Hilcorp – West Delta Block 83 Field wells proportionately based on each well's/stream's fraction of the total water theoretical production.

Measurement

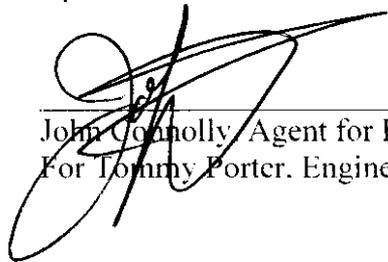
A third party representative will prove the allocation and sales gas meters quarterly and liquid hydrocarbons allocation and sales meters monthly in accordance with Statewide Order No. 29-D-1. The gas and liquid hydrocarbon allocation meters will be proven periodically in accordance with industry standards published in Chapter 20 – Allocation Measurement, Manual of Petroleum Measurement Standards, First Edition, September 1993, American Petroleum Institute.

Royalty

Royalty for gas production will be based on the total sales volume, as measured through the orifice meter prior to delivery to Tennessee Gas Pipeline Company's systems at the respective facilities.

Royalty for liquid hydrocarbon production will be based on the total liquid hydrocarbon sales as gauged by the L.A.C.T. meter located at the W-5 CCF.

In Hilcorp's opinion, this authorization will promote conservation of the natural resources within the State of Louisiana, will prevent waste, will protect the rights of all parties at interest and will result in substantial economic savings without results that may be in any way inconsistent with conservation policies, statutes or regulations of the State of Louisiana. Further, in the opinion of the applicant, the commingling procedure proposed will provide reasonable, accurate measurement, will not create inequities and will insure that the owner of any interest will have the opportunity to recover his just and equitable share of the reservoir content.



John Connolly, Agent for Hilcorp Energy Company
For Tommy Porter, Engineer for Hilcorp Energy Company

**LIST OF UNITS AND LEASE PROPOSED FOR COMMINGLING AT THE
BURRWOOD – WEST DELTA BLOCK 83 FIELD
CONSOLIDATED COMMINGLING FACILITY
(955510)**

Current leases and units approved for commingling at the Hilcorp Energy Company –
West Delta Block 83 Field W-5 Commingling Facility (955510):

<u>LEASE/UNIT NAME</u>	<u>LUW/SN</u>	<u>ORDER NO.</u>	<u>FIELD</u>
WDB83 10500 RB SU	604852	529-2	WDB 83
10100 RB SUA	600194	529-2	WDB 83
M. W. SNOW		529-2	WDB 83
U.S.A. 5		529-2	WDB 83
6500 RA SUA	613893	29-D-28	WDB 83
SL 1922	304167	29-D-28	WDB 83
SL 2227 / ET AL	304939	29-D-28	WDB 83
SL 2227	049612	29-D-28	WDB 83

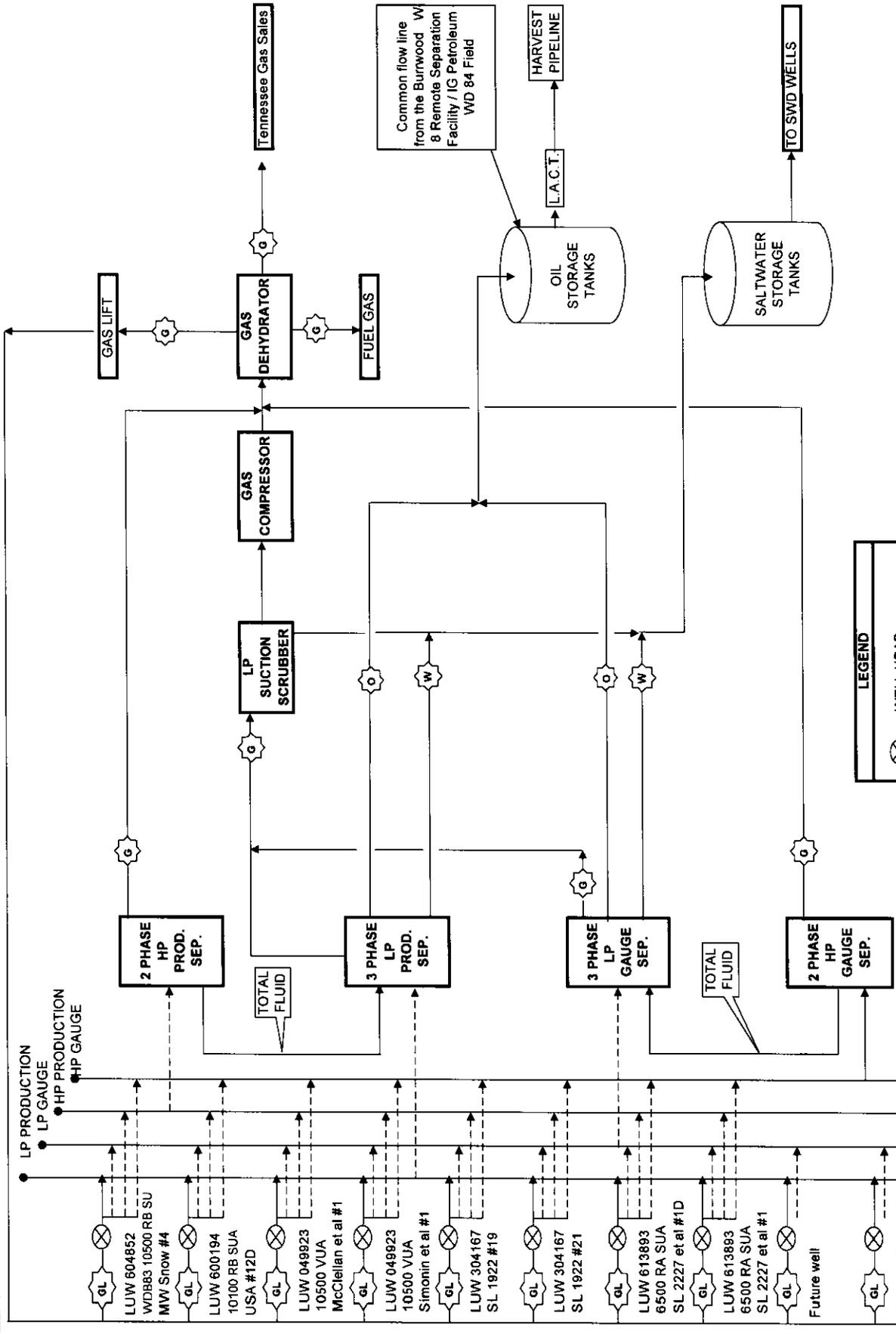
Current leases and units approved for commingling at the Hilcorp Energy Company –
Burrwood W-8 Commingling Facility (915740), and proposed to be consolidated at the
Hilcorp Energy Company – West Delta Block 83 W-5 Consolidated Commingling Facility (955510):

<u>LEASE/UNIT NAME</u>	<u>LUW/SN</u>	<u>ORDER NO.</u>	<u>FIELD</u>
BURR 6900 L2 RA NVU	529879	850-1	BURRWOOD
BURR 6900 L2 RC NVU	042435	850-1	BURRWOOD
BURR 6900 L2 RD NVU	043745	850-1	BURRWOOD
BURR T RA SU	528473	850-1	BURRWOOD
BURR 9100 RB NVU	533154	850-1	BURRWOOD
VUA	513193	850-1	BURRWOOD
VUC	511842	850-1	BURRWOOD
SL 1922	516195	850-1	BURRWOOD
SL 1922	302291	850-1	BURRWOOD
SL 2565	512286	850-1	BURRWOOD
SL 2566	514173	850-1	BURRWOOD
10500 RA SUA	049712	850-3	BURRWOOD
OA AO232 (IG Petroleum)	049659	29-D-3	WDB 84

Current leases and units proposed for commingling at the Hilcorp Energy Company --
West Delta Block 83 Field W-5 Commingling Facility (955510):

<u>LEASE/UNIT NAME</u>	<u>LUW/SN</u>	<u>ORDER NO.</u>	<u>FIELD</u>
10500 VUA;SIMONIN ET AL	049923		WDB 83
USA	303983		WDB 83
Simonin et al	SN 073785		WDB 83
McClellan et al	SN 073417		WDB 83
VUE	511534		Burrwood
SUF	039785		Burrwood
VUG	049658		Burrwood
SL 17381	SN 229102		Burrwood
SL 2227	049665		Burrwood
Tract 44	SN 080545		Burrwood
USA SL 2565	304187		Burrwood
Tract 2	SN 082712		Burrwood

LEASE/UNIT NAME MANIFOLD SYSTEMS



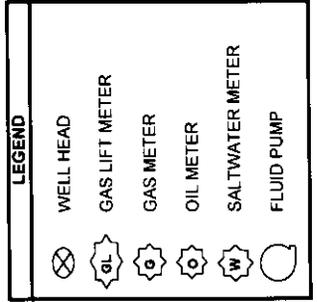
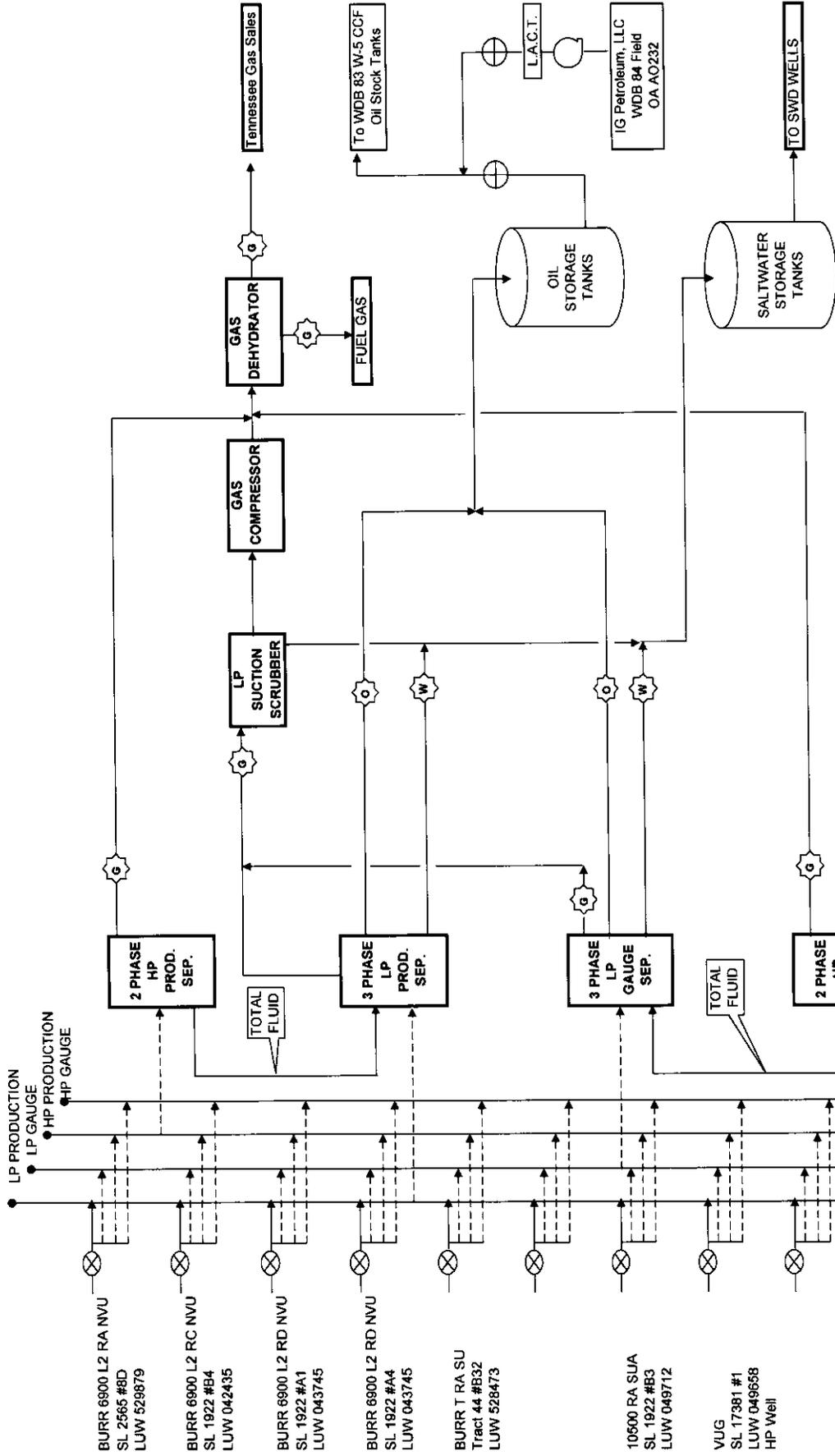
HILCORP ENERGY COMPANY
 Burwood and West Delta Block 83 Fields
 W-5 Consolidated Commingling Facility
 CF Code 955510
 January 21, 2008 (revised)

LEGEND

- ⊗ WELL HEAD
- ⊗ GL GAS LIFT METER
- ⊗ G GAS METER
- ⊗ O OIL METER
- ⊗ W SALTWATER METER
- ⊗ P FLUID PUMP

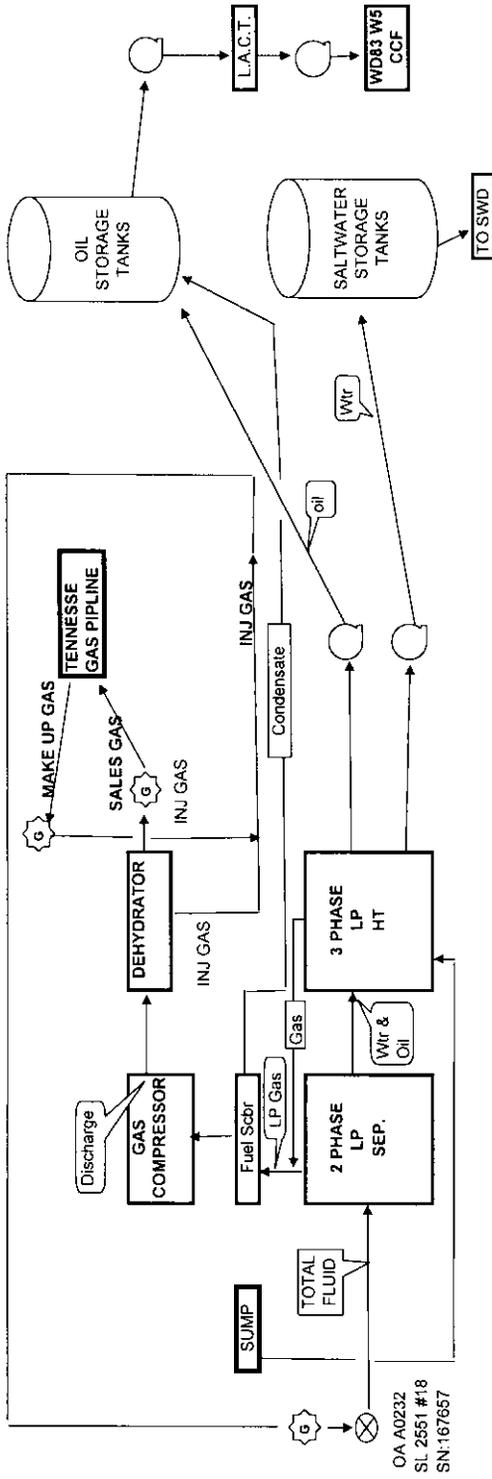
Shut in wells
 MW Snow
 USA 5

LEASE/UNIT NAME MANIFOLD SYSTEMS



HILCORP ENERGY COMPANY
 Burnwood and West Delta Block 83 Fields
 W-5 Consolidated Commingling Facility
 Burnwood W-8 Remote Separator Facility
 November 2007 (revised)

IG Petroleum, LLC
 WDB 84 Field
 OA AO232



OA AO232
 SL 2551 #18
 SNI:167657

LEGEND	
(X)	WELL HEAD
(GL)	GAS LIFT METER
(G)	GAS METER
(O)	OIL METER
(W)	SALTWATER METER
(P)	FLUID PUMP
(+)	OTHER

IG Petroleum, LLC
 WDB 84 Field
 OA AO232