Chapter 7 Liquid and Gas Verification Systems – How to Interpret Information/ Document Requests

The purpose of the Liquid Verification System (LVS) and Gas Verification System (GVS) is to assure the validity of the volumes reported on the Oil and Gas Operations Report (OGOR) and/or the Production Allocation Schedule Report (PASR). The systems are integrated manual and automated processes that were developed for use by the Bureau of Safety and Environmental Enforcement (BSEE) and the Office of Natural Resources Revenue (ONRR).

The LVS/GVS systems verify volumes reported from Federal sales metering points to ensure accurate measurement and to assist in the collection of accurate royalties.

7.1 LVS/GVS Process Overview

This process verifies oil sales (LVS), gas sales (GVS), and quality (API Gravity for LVS and Btu content for GVS) reporting.

The LVS/GVS systems utilize metered sales volume reports (run tickets and gas volume statements) submitted by the facility operator(s) for each sales Facility Measurement Point (FMP) by comparing those volumes to the actual volumes reported on the OGOR-B and OGOR-C, submitted by the lease/agreement operator, and the PASR submitted by the facility operator(s).

7.2 Example Timeframe of the LVS/GVS Process

- Production Month: January 2011
- Run tickets for LVS are due to BSEE the 15th day of the month following production: February 15th
- Gas Volume Statements for GVS are due to BSEE the last day of the month following production: February 28th
- OGOR Reports are due to ONRR 45 days after the production month: March 15th

- Reconciliation of Meter Volume Statements and reported OGOR volume differences (ONRR): April 2011
- Reconciliation of LVS/GVS exceptions can be requested up to 7 years prior to the current production month

7.3 LVS/GVS Responsibilities

FMP and Lease/Agreement Operators:

- FMP operators send run ticket(s) and gas volume statement(s) to BSEE
- FMP operators send the PASR(s) to ONRR
- Lease/Agreement Operator(s) send OGOR(s) to ONRR

BSEE:

- Enters data from the pipeline run tickets and gas volume statements into the Technical Information Management System (TIMS).
- Verifies differences, i.e.; missing reports, data entry errors.
- Downloads ONRR OGOR/PASR data into TIMS.
- Runs the LVS/GVS comparison to generate exceptions.

The LVS/GVS comparison assures the validity of the data collected by BSEE and ONRR by comparing the Gas Volume Statements (GVS), Run Tickets (LVS), Proving Reports (LVS), and Tank Tickets (LVS) to the reported OGOR(s) and PASR(s).

ONRR:

- Runs the Monthly Volume Comparison (MTCMPVOL) and the Monthly Gas Volume Comparison (MTCMPGAS) exception reports.
- Analysts work with FMP operator(s), Lease/Agreement operator(s), and BSEE to resolve the exception(s).
- This process ensures 100% Verification.

Exceptions may be detected for the following reasons.

- An OGOR was accepted in ONRR before TIMS was updated:
 - There may be an exception due to the timing when the OGOR clears and when it is uploaded into the TIMS system.
- OGOR on hold:
 - The OGOR is waiting for corrections and has not been accepted into the ONRR system.

- OGOR(s) missing:
 - OGOR(s) for a facility measurement point (FMP)/lease/agreement have not been received from the operator.
- OGOR(s) volume misreported:
 - Volume is either over- or under-reported on the OGOR.
- OGOR(s) volume reported to a different FMP:
 - Operator erroneously reported the volume to another approved FMP for the property.
- The run ticket(s) or gas volume statement(s) has errors:
 - Data was keyed incorrectly, or
 - The run ticket or gas volume statement may be missing data, or
 - Run ticket or gas volume statement volumes may be missing or not processed in TIMS.
- Revised run ticket(s) or gas volume statement(s) should be submitted to BSEE:
 - A revision to the run ticket(s) or gas volume statement(s) was not received by BSEE and should be corrected in TIMS.
- PASR is on hold or missing that has "Other Sources" volumes:
 - "Other Sources" volume is added to the OGOR volumes for a reported volumes total.

7.4 ONRR's Processes for Working Exceptions

Retrieve the MTCMPVOL / MTCMPGAS report for the production month(s) in question. (See examples located on pages 6 and 10 of this Chapter.)

Verify whether the lease/agreement was active during the production month being worked.

- The MTCMPVOL / MTCMPGAS report may show a "NO OGOR" or "NO FMP" indicator next to the lease/agreement.
- If there is no OGOR:
 - the OGOR accepted after LVS/GVS run, or
 - the OGOR may be on hold.
- Determine if the volume(s) will resolve the exception. The LVS/GVS analyst will contact the appropriate OGOR error correction representative to correct the OGOR.
- Verify that all OGOR volumes are accounted for (new or modified OGORs may have accepted since the exception was generated)

- If there is no FMP:
 - the OGOR volume may be reported to different sales FMP, or
 - If the lease/agreement is approved to flow through a different meter, check the effective date—the volume may be reported to the wrong FMP, or
 - The LVS/GVS analyst will verify the MTCMPVOL or MTCMPGAS to check if volumes were reported to another FMP.

If the Commingling Indicator (CI) is a "3" (see **Chapter 6**), a PASR is required. PASR data is displayed on the MTCMPVOL / MTCMPGAS.

- If the reported PASR and OGOR volume(s) do not match the run ticket or gas volume statement total, the FMP operator will be contacted and requested to modify the PASR to include "Other Sources," if applicable.
- If the PASR matches the run ticket or gas volume statement totals, ONRR uses this as a tool to verify the allocation for the leases in question.

7.4.1 ONRR's Initial Contact with the Operator

If misreporting or non-reporting is discovered, an ONRR LVS/GVS analyst will:

- Identify the sales periods, operator, and FMP(s),
- Verify whether it is continuing into subsequent production month(s),
- Prepare Data Request(s) (example shown on following page) and establish a due date, and
- Prepare an email to the operator(s), attach the Data Request(s), and the MTCMPVOL / MTCMPGAS report(s)

7.4.2 Requirements for Operator Actions

The operator has 10 days from receipt of the Data Request to:

- Submit original or revised run tickets or gas volume statements to BSEE.
- Submit original or revised OGOR volumes, or provide documentation to support reported volumes.
- Submit an original or revised PASR and include "Other Sources" (if applicable).
- Contact the LVS/GVS analyst to request an extension.

7.4.3 ONRR LVS/GVS Analyst Follow-up

The LVS/GVS analyst will:

- Monitor the exceptions, and
- Follow up with the FMP operator and/or lease/agreement operator(s).

If there is no response from the operator(s) within 10 days,

• An Order to Report (OTR) will be sent to the operator(s).

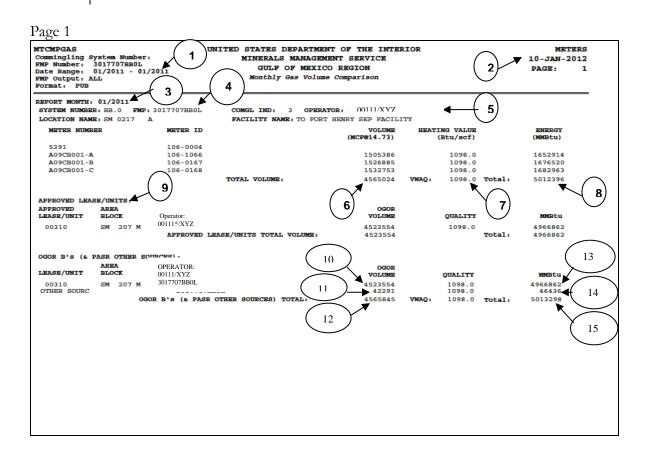
If there is no response to the OTR,

• A Notice of Non-Compliance (NONC) will be sent to the operator.

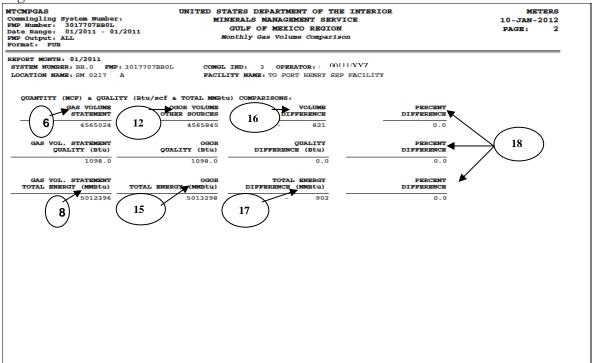
7.5 **GVS Data Request Example**

	Offic	e of Natural Resources Information/Documen	, ,		Legend
		ounting and Verification Exceptions	GVS Internal Tracking:	FMP Number:	1 - Number assigned by
PART II	indicate a discrepance Allocation Schedule if Bureau of Safety and Property: Production Month: Please verify your of no amended gas vo gas volume stateme Reporting (Report	systems have generated a Gas Very between the Oil and Gas Operation Report (PASR MMS Form-4058) an Environmental Enforcement (BSEI gas volume statement against you lume statements. Please revise yent to BSEE. that all BTU factors are correct Gas Volumes (over/und incorrect Gas Volumes (over/und incorrect Gas Volumes (over/und incorrect Gas Volumes). Exception(s). The statement of the Incorrect Gas Gas Volumes (over/und incorrect Gas Volumes). The statement of the Incorrect Gas Volumes (over/und incorrect Gas Volumes). The statement of Gas Volumes (over/und incorrect Gas Volumes). The statement of Gas Volumes (over/und incorrect Gas Volumes) (over/und incorrect Gas Volumes). The statement of Gas Volumes (over/und incorrect Gas Volumes) (over/und incorrect Gas Volumes). The statement of Gas Volumes (over/und incorrect Gas Volumes) (over/und incorrect Gas Volumes) (over/und incorrect Gas Volumes). The statement of Gas Volumes (over/und incorrect Gas Volumes) (over/und in	ons Report (OGOR MMS Fiddor the Gas Volume States E). our reported OGOR volume states are reported OGOR volume states are reported OGOR, if necessary, at before submission of the policy on the OGOR(s) der) on the PASR(s) cas Volume Statement(s) OGOR, PASR, Gas Volume RR. date due. If your compan order to Report or Notice	e or verify that there are or submit an amended of any revised OGORS 3 me Statements and 2014 my does not reply to this of Noncompliance may be	an analyst. 2 – The date corrections are due to ONNR. 3 – Explains the property, month(s) and reason for the exception. 4 – Contact information for questions.

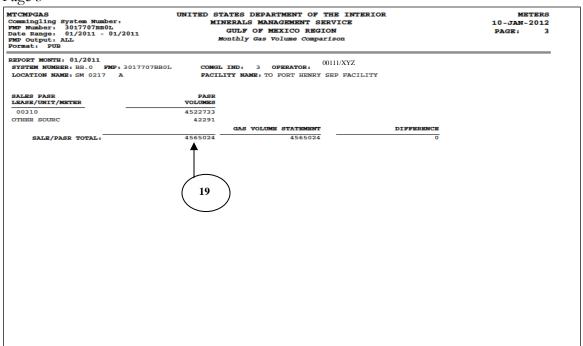
7.6 MTCMPGAS Report Example







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7.6.1 MTCMPGAS Field Descriptions

- 1. Date Range Criteria Dates in report
- 2. Run Date Date the report was generated
- 3. Report Month- Month in which production was measured through the FMP
- 4. FMP assigned by BSEE, unique number for each specific sales meter and location
- 5. Operator Name FMP Operator according to BSEE records
- 6. Total Gas Volume Statement for the FMP
- 7. Volume Weighted Average Btu content of Total Gas Volume
- 8. Total MMBtu of gas measured through the FMP
- 9. Approved Leases/Units to flow through the FMP
- 10. OGOR B reported volumes for this FMP and production month
- 11. Total "OTHER SOURCES" volume from the PASR
- 12. Total reported OGOR/PASR volume(s)
- 13. Calculated MMBtu from OGOR
- 14. Calculated MMBtu from PASR "Other Sources"
- 15. Calculated MMBtu from OGOR/PASR
- 16. Difference between total of the Gas Volume Statement(s) and the combined reported OGOR/PASR volumes MCF
- 17. Difference between total gas MMBtu produced and the combined reported OGOR/ PASR "Other Sources" volumes MMBtu
- 18. Differences shown in percentage
- 19. Combined OGOR and PASR volume (CI 3)

7.7 **Example of LVS Data Request**

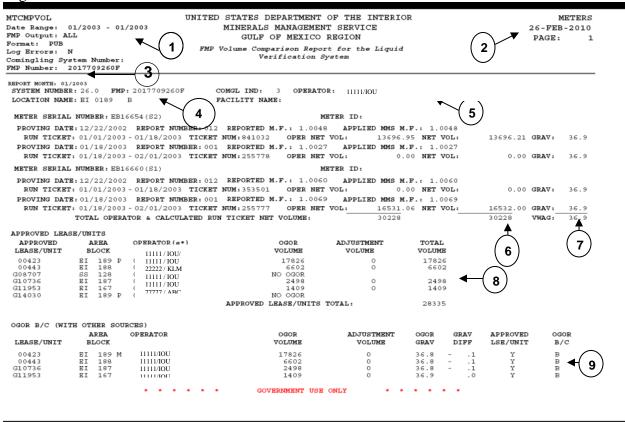
Production Accounting and Verification LVS Exceptions				Internal Tracking 1				
PARTI	Firm Name:	Request Submitted To:	Date	of Request:	Date Information Due			
PARTII	Request Information: The ONRR reporting systems have generated a Liquid Verification System (LVS) Exception. LVS Exception(s indicate a discrepancy between the Oil and Gas Operations Report (OGOR MMS Form-4054), the Production Allocation Schedule Report (PASR MMS Form-4058) and/or the Run Ticket(s) volumes reported to Bureau of Safety and Environmental Enforcement (BSEE). FMP: Property: Sales Month(s): Explanation: It is your company's responsibility to ensure that all OGOR, PASR, Run Tickets and 2014 information is accurately and timely reported to ONRR. The requested information must reach ONRR by the due date shown above. If your company does not reply to this Data Request and correct the LVS Exception(s), an Order to Report or Notice of Noncompliance may be issued. Thank you for your assistance.							
PART III	Name: Phone: Fax: Email:	4 S: Office of Natural Resources Refinancial Management Division Production Accounting and Ver P.O. Box 25165, Mail Stop 633 Denver, CO 80225	ı rification Br	ranch				

7.7.1 Data Request Field Title and Description

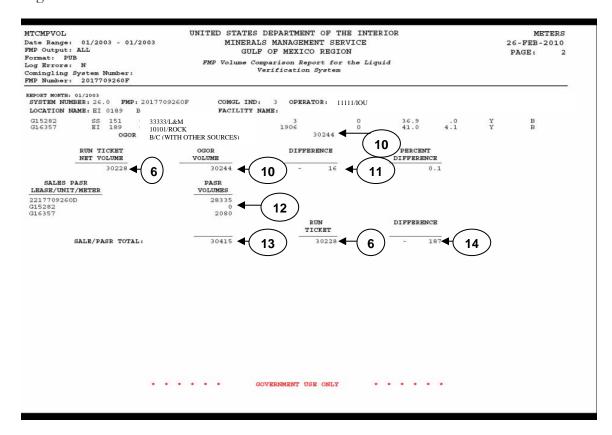
- 1. LVS Internal Tracking Number assigned to each individual Analyst
- 2. Date Information Due Date in which corrections are due to ONRR
- 3. Request Information This will indicate the property, month(s) and reason for the exception
- 4. ONRR Representative Requesting **Data** Contact information for questions

7.8 Example of an MTCMPVOL Report

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7.8.1 MTCMPVOL Field Descriptions

- 1. Date Range Criteria Dates in report
- 2. Run Date Date the report was generated
- 3. Report Month Month in which production flowed through the meter
- 4. FMP assigned by BSEE, unique number for specific sales meter and location
- 5. Operator Name FMP operator according to BSEE records
- 6. Run Ticket Net Volume Sum of all run tickets received for the production month
- 7. Volume Weighted Average Gravity all run tickets received for the production month
- 8. Approved Leases/Units to flow through the FMP
- 9. OGOR B/C (With "Other Sources") reported volumes for this FMP and production month
- 10. Total reported OGOR/PASR volume(s)

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- 11. Difference between total of the run ticket(s) and the combined reported OGOR/PASR volumes
- 12. Sales PASR Lease/Unit/Meter reported PASR Volume(s)
- 13. Sale/PASR total total reported PASR Volume(s)
- 14. Difference between total Sale/PASR Total and Run Ticket(s)