

## State of New Mexico

## Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505

(505) 827-7131

Submit 2 copies to

Appropriate District

Office in accordance

with Rule 116 on

back side of form

## Release Notification and Corrective Action

## OPERATOR

XX

Initial Report

XX

Final Report

Name <b>Phillips Petroleum Company</b>	Contact <b>Patsy Clugston</b>
Address <b>5525 Hwy. 64, Farmington, New Mexico 87401</b>	Telephone Number <b>(505) 599-3454</b>
Facility Name <b>San Juan 32-7 Unit #203R</b>	Facility Type <b>Pipeline</b>

Surface Owner <b>Federal</b>	Mineral Owner <b>Federal</b>	Lease No <b>SF-078459</b>
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## LOCATION OF RELEASE

Unit Letter <b>H</b>	Section <b>22</b>	Township <b>32N</b>	Range <b>7W</b>	Feet from the <b>2428'</b>	North/South Line <b>North</b>	Feet from the <b>857'</b>	East/West Line <b>East</b>	County <b>San Juan</b>
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## NATURE OF RELEASE

Type of Release <b>Produced coalseam water</b>	Volume of Release <b>Approx. 450 bbls</b>	Volume Recovered <b>None</b>
Source of Release <b>Water from the 32-7 #203R</b>	Date & Hour of Occurrence <b>** Unknown exactly (see below)</b>	Date & Hour of Discovery <b>1/18/00 @ 4:30 pm</b>
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <b>Neel McBride with the BLM 1/19/00 @ 8:15 am</b> <b>Denny Foust with the OCD 1/19/00 @ 8:30 am</b>	
By Whom? <b>Patsy Clugston</b>	Date and Hour <b>1/19/00 @ 8:30 am</b>	
Was a Watercourse Reached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	If YES, Volume Impacting the Watercourse <b>approx. 450 bbls</b>	

If a Watercourse was impacted, describe fully (Attach additional sheets if necessary)

**Produced water ran down wash for 1450 feet to the S/SW.**  
**See attached Topo highlighting area involved.**

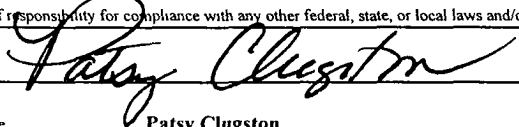
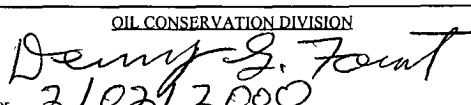
Describe cause of problem and remedial action taken (attach additional sheets if necessary)

**Mechanical failure of the valve assembly - Repairs were made and service restored.**

Describe area affected and cleanup action taken (Attach additional sheets if necessary)

**Samples of water taken at pipeline and soil samples at start of leak, end of leak and around leak. A base line water sample was also take at a stock pond that this arroya could of reach (but didn't). See attached report from Cimarron Environmental for more details. PPCo will monitor quality of water at the stock pond if the BLM requires, but no other cleanup seemed pertinent.**

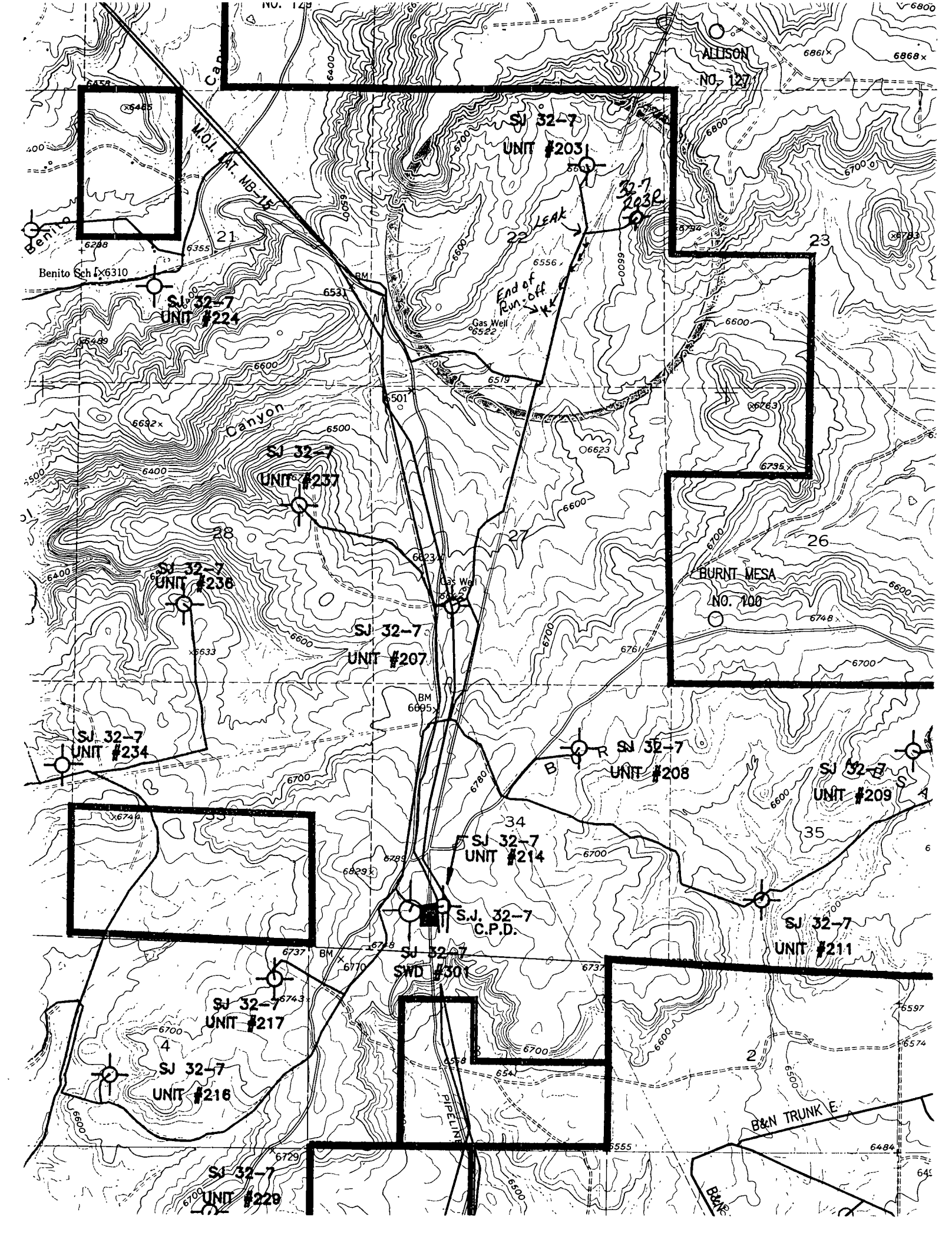
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment In addition, NMOCD acceptance of a C-141 report does not relieve the Operator of responsibility for compliance with any other federal, state, or local laws and/or regulations

Signature 	OIL CONSERVATION DIVISION	
Printed Name <b>Patsy Clugston</b>	Approved by 	
	District Supervisor <b>2/02/2000</b>	
	Approval Date <b>2/02/2000</b>	Expiration Date
Title <b>Sr. Regulatory/Proration Clerk</b>		
Date <b>01/24/2000</b>	Phone <b>(505) 599-3454</b>	Conditions of Approval <input type="checkbox"/>

c141-spillreport

**\*\* The pump from this well's storage tank leading to the pipeline only could of possible ran 2 times (12 hours each) since the pipeline was last visited. This is how the volume was calculated. According to Frank McDonald with Cimmaron, the leak was between 350 & 450 bbls.**

**4JK1217254431**



## **PHILLIPS PETROLEUM COMPANY**

### **32-7 PRODUCED WATER SPILL**

Mr. Jack Mackey reported a produced water spill on the evening of Jan. 18, 2000. Cimarron Environmental was notified on the morning of Jan. 19, 2000.

Bill Twilley and Jerry Loudermilk represented Phillips Petroleum Company and Mr. Jack Mackey as the livestock lessee of the impacted property. Mr. Mackey stated that his cows had consumed the water and had not shown any ill affects from the consumption of the water.

Foutz and Bursum accompanied Mr. Twilley to the site and excavation of the valve can of a produced water line to determine the cause. The cause of the spill was determined to be a crack in a two-inch brass valve. Repair of the valve began immediately.

Mr. Loudermilk stated the spill might extend to 1400 bbls at the most. Cimarron Environmental estimated approximately 400-500 bbls involved. Mr. Twilley stated that two wells (SJ 32-7 # 203R & SJ 32-7 # 206) are contributing water associated with the spill.

The spill began at the valve can and extended directly in to a small ephemeral stream traveling approximately 2600 feet down the ephemeral stream. The spill area varied in width from four feet to six inches. The spill stopped approximately 1300 feet from a water impoundment utilized for domestic livestock and wildlife.

Existing vegetation is primarily rabbit brush, big basin sage, sand drop seed, Indian rice grass, and blue gramma.

There are four tributaries to the ephemeral stream within the spill area.

Five samples were extracted. Three soil samples and two water samples. The soil samples are described as follows:

1. Soil sample extracted above the spill site approximately three inches in depth, and utilized as background.
2. Soil sample extracted approximately three inches in depth from the immediate spill area.
3. Soil sample extracted approximately three inches in depth from the end point of the spill.

The water samples are described as follows:

1. Water sample extracted from the pipeline and utilized as determining the quality of the produced water.

2. Water sample extracted from the existing water impoundment utilized to determine existing water quality.

Samples were delivered to Inter-Mountain Labs and analyzed for Ph, Cation Exchange Capacity, Sodium Absorption Ratio, Exchangeable Sodium Potential, and Bi-Carbonates. Results of the analysis are pending.

On January 20, 2000, Ron Mead met with Mr. Denny Foust of the NMOCD at the spill site. Mr. Foust concluded that any remediation of the spill site might cause more environmental damage than the spill itself. Final conclusion of spill remediation was left to the determination of the BLM.

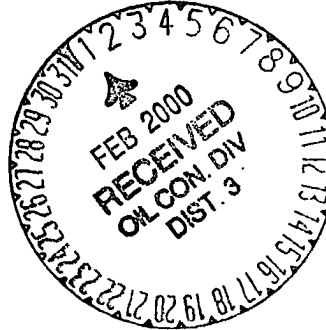
January 21, 2000: Frank McDonald met with Neil McBride and Bill Liess of the BLM. BLM was notified that NMOCD had waived clean-up measures to the BLM. Bill Liess will assume the lead in the clean-up operation. BLM was notified of the extent of the spill and that samples had been extracted. Bill Liess advised that Frank meet with Mr. Bob Wirtanen of PPCo and discuss remedial activities. Frank stated that NMOCD had agreed that any excavation would probably cause more damage than the spill. Bill inquired as to how bad was the spill. Frank stated that it is unknown with the season we are in and that no results have been reported from the samples extracted. Bill states that some clean-up will be necessary due to the spills relation to the Navajo lake, the spill being within an ephemeral stream, and the possible inclusion of the Bureau of Reclamation.

January 25, 2000: Denny Foust contacted Frank McDonald and inquired about the spill. Mr. McDonald went over the previous meeting with Bill Liess. Denny suggested a possible monitoring of the stock pond due to the spill being located within the ephemeral stream. Denny requested that Frank and Bob meet and derive a remediation plan and consult BLM and NMOCD.



## PHILLIPS PETROLEUM COMPANY

FARMINGTON, NEW MEXICO 87401  
5525 HWY. 64 NBU 3004



Action Plan to CBM Water Spill  
32-7 (adjacent to the 203r & 206)  
Discovered 1/18/00

Bill Liess  
BLM - FDO  
1235 La Plata Hwy Suite A  
Farmington, NM 87401

Enclosed is our written submittal form c-141, for the above referenced spill which was telephoned in to both BLM & NMOCD on 1/19/00.

Our action plan in assessing potential damages, is to gather additional lab samples of the water quality at the down gradient stock pond no later than 6/30/00. The future samples will be compared to the enclosed baseline lab reports as differences between the spilled water & the pond water. We will use levels of sodium and electrical conductivity (as a measure of total solids) to confirm if the spilled water migrated into the stock pond. The attached lab reports show sodium & ec as clear distinctions between the two water types. An attached document from the Wyoming Dept. of Agriculture shows suggested water standards for livestock use.

We will also observe the quality of the vegetation in the known spill-zones to determine evidence of damage and if witnessed, or if our future lab reports show commonality between the two water types, we will advise your office and conform to corrective steps as you recommend.

Regards,

R. A. Wirtanen, CSP  
Sr. S&E Specialist

### Attachments

Cc w/o attach: msrs. Jaap, Brooks, McDonald, (D. Faust - NMOCD), Loudermilk  
*1/2 copies*

TO: IML GILLETTE

NOV 13, 1995 2:48PM

Water Standards for Livestock UseGood water should meet the following criteria:

Total Solids	less than 1000 ppm ✓
Hardness	less than 1000 ppm
Sulfates	less than 500ppm
Nitrates	less than 45 ppm ✓
Sodium	less than 500 ppm

Total Solids

Good water	less than 1000 ppm
Fair, Usable	1000 - 3000 ppm
Poor, Usable	3000 - 5000 ppm
Very Poor, Questionable	5000 - 9000 ppm
Not Advised	9000 or more ppm

Maximum recommended for livestock is 5000 ppm.

Horses, however can tolerate a maximum of 6000 ppm.

Sulfates

The maximum recommended level of sulfates for cattle and horses is 1000 ppm.

The desirable level is 500 ppm.

Nitrates

The levels for cattle are:

Safe for use	0 - 45 ppm
Doubtful	45 - 135 ppm
Risky	135 - 225 ppm
Do not use	225 - 450 ppm
Sublethal - toxic	450 - 675 ppm
Lethal	675 ppm or more

Sodium

The maximum level of sodium livestock can tolerate is 2,000 ppm.

ppm = parts per million

Source:

Wyoming Department of Agriculture  
Division of Laboratories  
Apr-73

Ra. 2042



# Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

**Client:** Phillips Petroleum Co.

**Sample ID:** Prod. Water

**Lab ID:** 0300W00218

**Matrix:** Water

**Condition:** Intact

**Date Received:** 01/19/00

**Date Reported:** 01/25/00

**Date Sampled:** 01/19/00

**Time Sampled:** 1124

Parameter	Analytical Result	Units
<b>LABORATORY DATA</b>		
PH	8.4	s.u.
Electrical Conductivity	9,370	µmhos/cm
Bicarbonate (HCO <sub>3</sub> )	6,870	mg/L
Calcium	13.3	mg/L
Magnesium	11.6	mg/L
Sodium	2,950	mg/L
Sodium Absorbtion Ratio	140	

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.  
EPA - "Methods for the Determination of Metals in Environmental Samples" - Supplement I - 600/R-94-111 - May, 1994

Reviewed By. 



# Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

**Client:** Phillips Petroleum Co.

**Sample ID:** Pond Water

**Lab ID:** 0300W00219

**Matrix:** Water

**Condition:** Intact

**Date Received:** 01/19/00

**Date Reported:** 01/25/00

**Date Sampled:** 01/19/00

**Time Sampled:** 1320

Parameter	Analytical Result	Units
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## LABORATORY DATA

PH	8.4	s.u
Electrical Conductivity	121	µmhos/cm
Bicarbonate (HCO <sub>3</sub> )	101	mg/L
Calcium	15.6	mg/L
Magnesium	3.5	mg/L
Sodium	3.0	mg/L
Sodium Absorbtion Ratio	0.2	

Reference. EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

EPA - "Methods for the Determination of Metals in Environmental Samples" - Supplement I - 600/R-94-111 - May, 1994.

Reviewed By