

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Oil Cons. N.M. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
Southwestern Energy Production Company

3a. Address **2350 N. Sam Houston Pkwy. E., Suite 300, Houston, TX 77032**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Section 25, T16S, R29E

3b. Phone No. (include area code)
281-618-4739

5. Lease Serial No.
NM-12764

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.
Lonesome Dove "25" Federal #1

9. API Well No.
30-015-31698

10. Field and Pool, or Exploratory Area
Exploratory; SW Henshaw Morro

11. County or Parish, State
Eddy County, NM

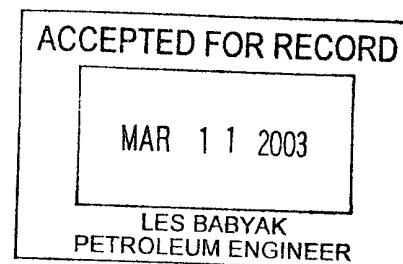
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Primary and Secondary SWD Attachments
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Primary Salt Water Disposal Site - Loco Hills SWD
Secondary Salt Water Disposal Site - Soat SWD

Attachments:
Water Analysis Report
Facility Drawing



14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Vonnie J. Germin

Title **Production / Drilling Analyst**

Signature

Date **March 07, 2003**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Pro-Kem, Inc.

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : **Southwestern Energy**
 Lease : **Lonsome Dove 25 Fed.**
 Well No.: **# 1**
 Location:
 Attention:

Date Sampled : **04-March-2003**
 Date Analyzed: **05-March-2003**
 Lab ID Number: **Mar0503.003- 3**
 Salesperson :

File Name : F:\ANALYSES\Mar0503.003

ANALYSIS

- | | |
|------------------------------|-------------|
| 1. Ph | 7.000 |
| 2. Specific Gravity 60/60 F. | 1.038 |
| 3. CACO3 Saturation Index | @ 80F 0.099 |
| | @140F 1.039 |

Dissolved Gasses

- | | MG/L. | EQ. WT. | *MEQ/L |
|---------------------|----------------|---------|--------|
| 4. Hydrogen Sulfide | 0 | | |
| 5. Carbon Dioxide | 180 | | |
| 6. Dissolved Oxygen | Not Determined | | |

Cations

- | | | | | |
|--------------|--------------------|----------------|----------|--------|
| 7. Calcium | (Ca++) | 1,202 | / 20.1 = | 59.80 |
| 8. Magnesium | (Mg++) | 547 | / 12.2 = | 44.84 |
| 9. Sodium | (Na+) (Calculated) | 14,814 | / 23.0 = | 644.09 |
| 10. Barium | (Ba++) | Not Determined | | |

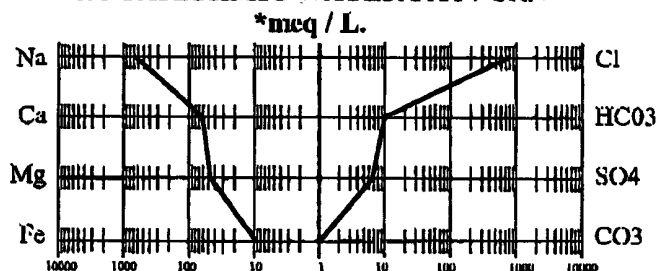
Anions

- | | | | | |
|--------------------------------------|---------|------------|----------|--------|
| 11. Hydroxyl | (OH+) | 0 | / 17.0 = | 0.00 |
| 12. Carbonate | (CO3=) | 0 | / 30.0 = | 0.00 |
| 13. Bicarbonate | (HCO3-) | 586 | / 61.1 = | 9.59 |
| 14. Sulfate | (SO4=) | 315 | / 48.8 = | 6.45 |
| 15. Chloride | (Cl-) | 25,994 | / 35.5 = | 732.23 |
| 16. Total Dissolved Solids | | 43,458 | | |
| 17. Total Iron | (Fe) | 162 | / 18.2 = | 8.90 |
| 18. Total Hardness as CaCO3 | | 5,255 | | |
| 19. Resistivity @ 75 F. (Calculated) | | 0.203 /cm. | | |

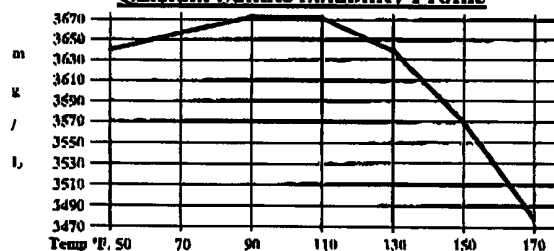
PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X	*meq/L	= mg/L.
Ca(HCO3)2	81.04		9.59	777
CaSO4	68.07		6.45	439
CaCl2	55.50		43.76	2,428
Mg(HCO3)2	73.17		0.00	0
MgSO4	60.19		0.00	0
MgCl2	47.62		44.84	2,135
NaHCO3	84.00		0.00	0
NaSO4	71.03		0.00	0
NaCl	58.46		643.63	37,627

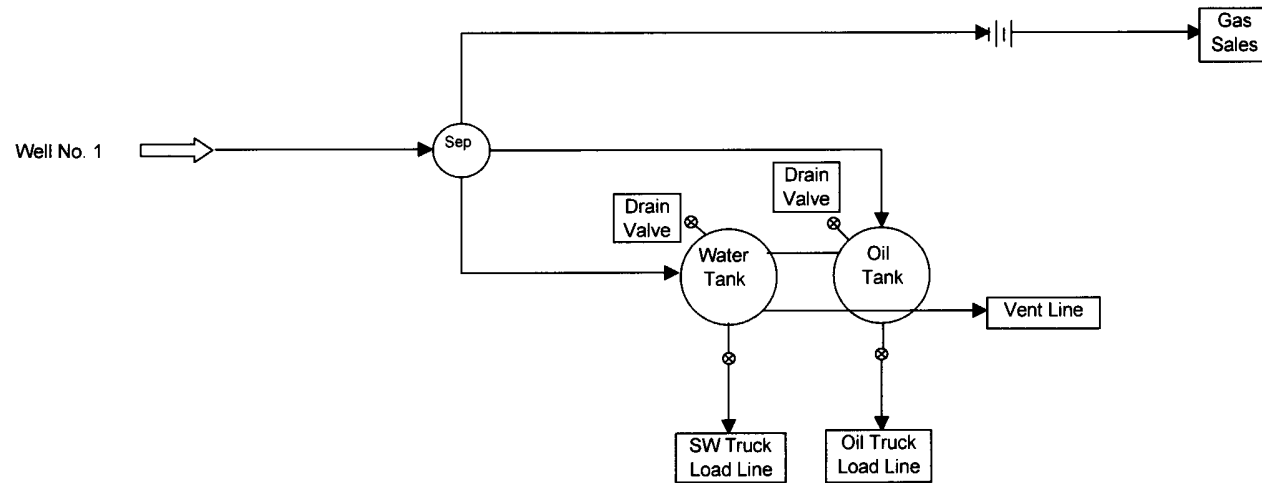
LOGARITHMIC WATER PATTERN



Calcium Sulfate Solubility Profile



LONESOME DOVE "25" FEDERAL COM #1 FACILITY DRAWING



⊗ Sealed Valve

SOUTHWESTERN ENERGY PROD. CO.
2350 N. SAM HOUSTON PKWY E., SUITE 300
HOUSTON, TX 77032

LONESOME DOVE "25" FEDERAL COM #1

BLM LEASE NO.: NMNM 12764

N/2 SEC 25 - T16S- R29E