

OIL CONSERVATION DIVISION  
RECEIVED

194 FEB 10 AM 8 35



February 8, 1994

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Benjamin E. Stone

Re: Downhole commingling  
Desert Rose Federal #1  
Hess, East (Morrow) Field  
Bandana Point (Strawn) Field  
1740' FSL & 660' FEL  
Section 27-23S-23E  
Eddy County, New Mexico

Dear Mr. Stone:

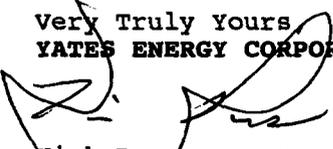
Yates Energy Corporation would like to reintroduce this proposed downhole commingling of the Morrow and Strawn pools in the subject well.

Your letter of December 16, 1993 requests that the bottomhole pressure data be supplied. The best available data on the Morrow formation is from Lonesome Dove Federal #1 located in Sec 26, T-23-s, R-23-E. This well had a bottomhole pressure of 1695 psig on November 30, 1993. A copy of this pressure data is attached and supports our statement that the Strawn and Morrow pools have less than a 50% differential in pressure. As you know, the actual pressure in the Desert Rose Fed #1 cannot be measured due to a leaking packer.

The statement that future gas production will be allocated based on a split of 41% for the Morrow and 59% for the Strawn is based on the current split of this production. This is the same split that has been used since June, 1992. Again, it is impossible at this time to determine a new basis for a split, due to the packer leak.

Again, we would like to emphasize that our request for administrative approval is based on economics. Please re-review our request at your earliest convenience.

Very Truly Yours  
YATES ENERGY CORPORATION

  
Kirk Ross  
Engineer

cc: file  
Desert.oed



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

December 16, 1993

Yates Energy Corporation  
P.O. Box 2323  
Roswell, New Mexico 88202-2323

Attn: Kirk Ross

Re: *Commingling Application  
Desert Rose Federal No.1*

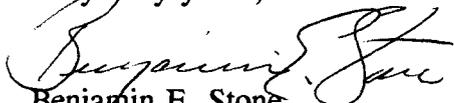
Dear Mr. Ross,

I've enclosed the entire commingling request which you submitted October 11, 1993. If you would like to resubmit it for reconsideration, I recommend the following.

Your latest letter (also enclosed,) stated, "*We believe the Morrow Zone calculation is too high under existing conditions.*" That may be, but we must see the numbers on which you base your belief. The numbers I used were the best data available to me in the general vicinity of the subject well. You estimate the pressure to be approximately 1000 psi. You must have some data to make this estimation. Also, your original request letter states, "*We have determined that the future allocation could be based on a split of 41% for the Morrow zone and 59% for the Strawn.*" Same situation... please supply the data by which the determination was based.

I'm sorry for the inconvenience, but we need the benefit of reviewing the same data that your calculations, estimations and determinations have been made. I'm sure that they are correct, but without data in black and white, we cannot process a commingling [or any other] request through the administrative procedure.

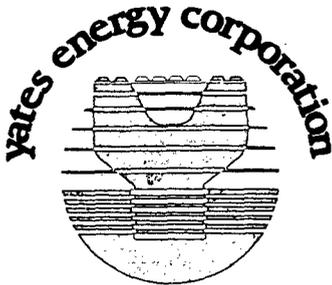
Very truly yours,

  
Benjamin E. Stone  
Engineering Tech II

Enclosures  
cc: David Catanach  
/BES

DEC 20 1993

OIL CONSERVATION DIVISION  
RECEIVED  
'93 DEC 14 AM 8 56



NEW MEXICO OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Benjamin Stone

RE: DOWNHOLE COMMINGLING  
Desert Rose Federal #1  
Hess, East (Morrow) Field  
Bandana Point (Strawn) Field  
Sec. 27 - 23S - 23E  
Eddy County, New Mexico

Dear Mr. Stone:

Your letter of December 7, 1993 states that the calculated bottomhole pressure for the Morrow Zone is 2888 PSI and that of the Strawn Zone is 1130 PSI. We believe that the Morrow Zone calculation is too high under existing conditions. The Morrow Zone in this well has been "DEPLETED" and it is estimated the current pressure is approximately 1000 PSI. We also believe that differential pressure between the two zones are less than 50% and should still qualify for consideration of Administrative approval of our application.

Please reconsider our application based on this information.

Very Truly Yours  
Yates Energy Corporation

*Kirk Ross by:eo*  
Kirk Ross  
Engineer

KR:eo

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

December 7, 1993

Yates Energy Corporation  
P.O. Box 2323  
Roswell, New Mexico 88202

Attn: Kirk Ross

Re: *Desert Rose Federal No.1  
Pressure Requirements for  
Downhole Commingling to be  
Approved Administratively*

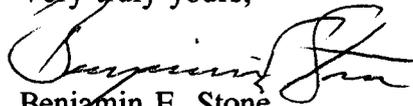
Dear Mr. Ross,

When actual data is not available, we will generally accept inferred data, this case being bottomhole pressure for the subject pools. Calculations based on the best available production data in the general area of your well, resulted in approximate pressures as follows:

Strawn Pool  $\leq 1130 \text{ psi}_{bh}$   
Morrow Pool  $\approx 2888 \text{ psi}_{bh}$

As you can see, these numbers fall outside the 50% pressure differential rule and disqualify your downhole commingling request from administrative approval. If you would like to present your case in public hearing, please advise. Call if you have any questions.

Very truly yours,

  
Benjamin E. Stone  
Engineering Tech II

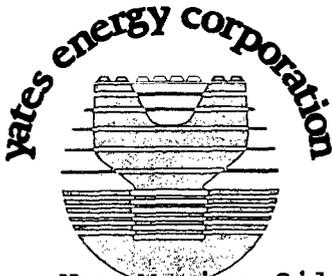
/BES

cc: file

DEC 10 1993

OIL CONSERVATION DIVISION  
RECEIVED

'93 DEC 6 AM 9 27



December 3, 1993

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Benjamin E. Stone

Re: Downhole commingling  
Desert Rose Federal #1  
Hess, East (Morrow) Field  
Bandana Point (Strawn) Field  
1740' FSL & 660' FEL  
Section 27-23S-23E  
Eddy County, New Mexico

Dear Mr. Stone:

I received your letter of November 9, 1993 concerning the referenced application for downhole commingling, and have been trying to reach you by phone for two weeks. I have a question as to what information you are needing to process the application.

I believe you may be requesting the deliverability and bottomhole pressure data for each zone but I cannot be certain. Please note in my original application that we are requesting waivers for this particular data since neither can be done with the packer leaking.

Please contact me at 505-623-4935 if there is other information I can supply to help this application.

Very Truly Yours,  
YATES ENERGY CORPORATION

  
Kirk Ross  
Engineer

cc: file  
Desert.oed

FIVE

COMPANY: YATES ENERGY  
CLIENT: KIRK ROSS  
GAUGE NUMBER: 29353  
WELL NAME: LONESOME DOVE  
WELL NUMBER: #1  
TEST NUMBER: 1  
LOCATION:  
TEST OPERATOR: KELTIC SERVICES  
COMMENTS: STATIC W/ GRAD. STOPS.  
SURF. PRESS. = 650 - 840 psig

RECEIVED  
DEC - 2 1993

PAGE START DATE: 11/30/93

GAUGE S/N: 29353

DATA FILE: 9

TIME	DELTA TIME HRS	DEPTH FEET	DEFLECTION IN	PRESSURE PSIG	COMMENTS
13: 7:35	0.000	0.00	0.2334	688.62	
13:16:39	0.151	2000.00	0.2570	760.34	0.036 PSI/FT
13:25:40	0.301	4000.00	0.3020	895.33	0.068 PSI/FT
13:34:42	0.452	6000.00	0.3730	1110.77	0.108 PSI/FT
13:46: 3	0.641	8000.00	0.4560	1358.75	0.124 PSI/FT
13:52:51	0.754	9000.00	0.5060	1510.30	0.152 PSI/FT
13:59:28	0.865	9968.00	0.5530	1651.91	0.146 PSI/FT
14: 6:18	0.979	10068.00	0.5670	1695.00	0.431 PSI/FT

Fluid Level = 3125 ft.

DEC - 2 1993

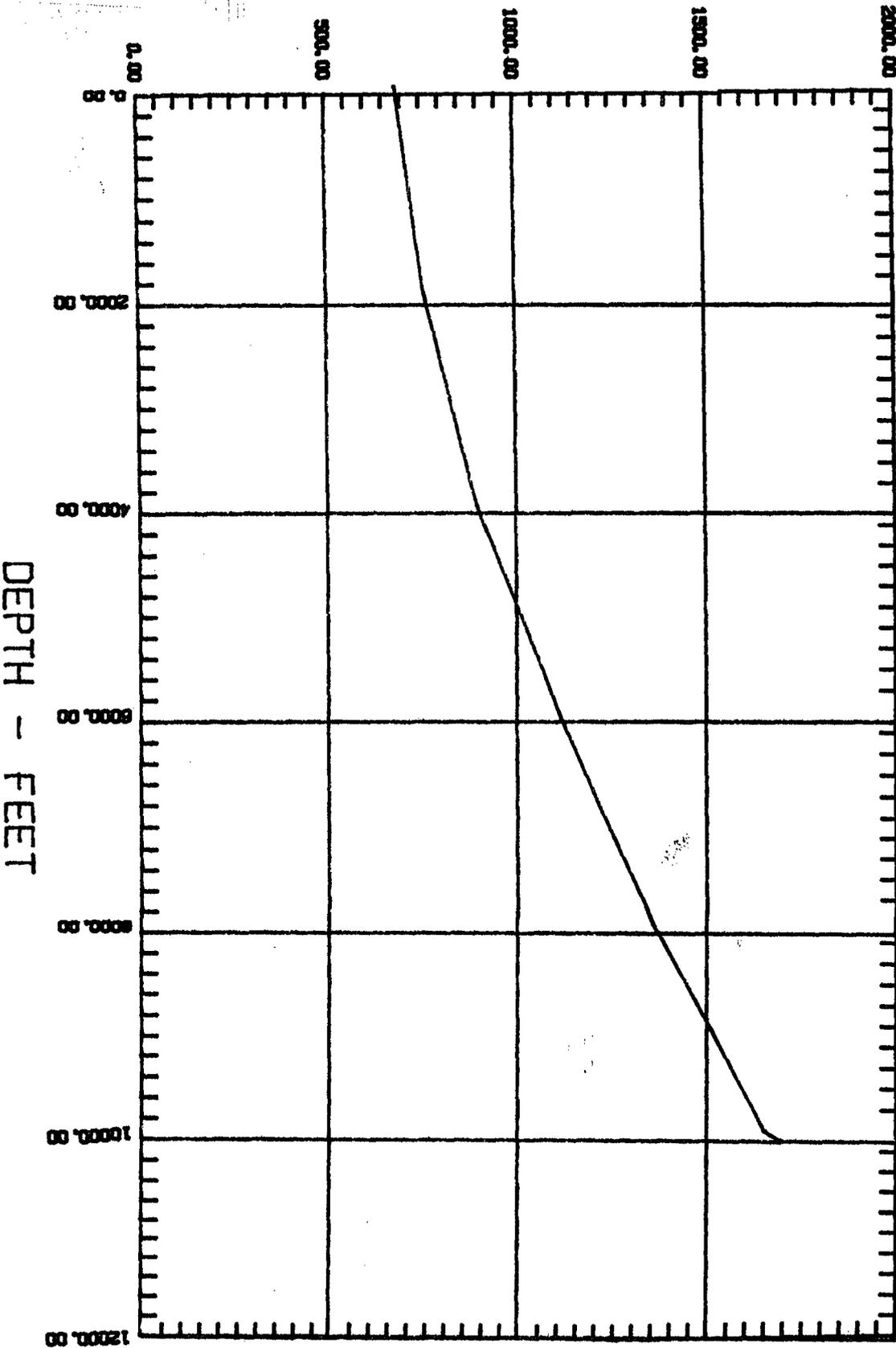
DEC - 2 1993

# PRESSURE - PSIG

Plot starting date: 11/30/93  
Time: 13: 7: 35  
Gauge S/N 29353

Company: YATES ENERGY  
Client: KIRK ROSS  
Well name: LONESOME DOVE  
Well #: #1  
Test #: 1

Location:  
Operator: KELLIC SERVICES  
Comment: STATIC W/ GRAD. STOPS.  
SURF. PRESS. = 650 - 640 psig



DEPTH - FEET

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

November 9, 1993

Yates Energy Corporation  
P.O. Box 2323  
Roswell, New Mexico 88202

Attn: Kirk Ross

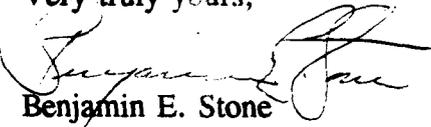
*Re: Additional Information Required for  
Downhole Commingling Application*

Dear Sir:

Please refer to the Rules and Regulations of the Oil Conservation Division, Rule 303-D, located on page E-4. In particular, we need actual numbers when supplying supporting data.

Thank you for your attention. We will expedite the continued processing of your application when we receive the proper information.

Very truly yours,

  
Benjamin E. Stone  
Engineering Tech II

/BES

cc: file

RELEASE 11-2-93 DHC

OIL CONSERVATION DIVISION  
RECEIVED

'93 OCT 14 AM 8 33



October 11, 1993

New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088  
Attn: William Lemay

Re: Downhole commingling  
Desert Rose Federal #1  
Hess, East (Morrow) Field  
Bandana Point (Strawn) Field  
1740' FSL & 660' FEL  
Section 27-23S-23E  
Eddy County, New Mexico

Dear Mr. Lemay:

Yates Energy Corporation respectfully requests administrative approval to downhole commingle the Strawn and Morrow formations in the subject well.

Previous authority to surface commingle the subject zones was granted in 1991 by Order #PC-781. As per that order, we are required to perform annual packer leakage tests. While performing the 1993 test, communication was discovered between the tubing and annulus, indicating either a packer failure or tubing leak. The Artesia office of the OCD notified us 9/15/93 that we have 30 days to repair the leak.

Yates Energy is making this request based on economics. We assert that the costs associated with the repair may not be returned from the remaining gas reserves. If you will notice, gas production has declined to less than 75 MCFPD (for September 1993), and remaining reserves are estimated at only 50 MMCF. Repair costs could be in excess of \$10,000, making the project uneconomic when the time value of money is considered. Also of importance, the well will have to be killed with fluid to repair the leak and there is a possibility that the Morrow formation would be permanently damaged as a result. If however, we were allowed to commingle this production downhole, we would be able to produce the remaining reserves, thus preventing waste.

Current reservoir pressures in both reservoirs are estimated to be reasonably equal and no crossflow between zones is

anticipated. Neither reservoir produces formation water so there will be no compatibility problems. In addition, all ownerships are common for both zones.

Attached are production decline curves showing a stabilized decline on both zones. We have determined that the future allocation could be based on a split of 41% for the Morrow zone and 59% for the Strawn. We have also attached a plat showing that OXY USA Inc. is the only offset operator. Correspondence has been sent to OXY notifying them of our intent and requesting a waiver. The waiver will be forwarded to you after receipt. We have also notified the BLM of our intent.

We also request that you waive your requirement of a current bottomhole pressure test and a current 24 hr deliverability test due to the fact that the tests would be impossible to run under the current circumstances. Please review the attached information at your earliest convenience. Should you require additional information, please advise.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'Kirk Ross', written over a horizontal line.

Kirk Ross  
Engineer

attachments

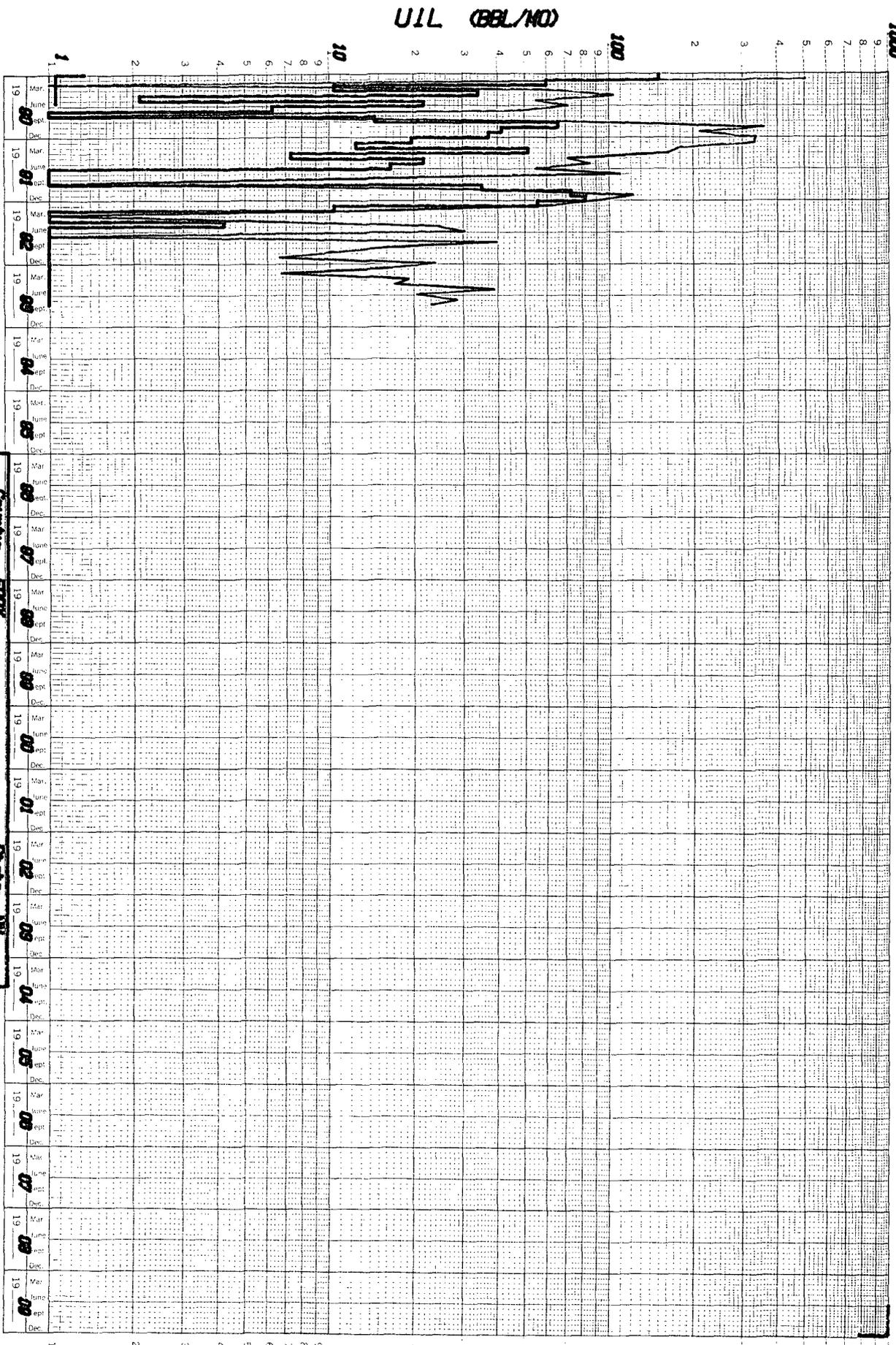
cc: OCD-Artesia  
BLM-Carlsbad



1000  
Leases **DESERT ROSE FEDERAL**

000001 **Dwight's ENERGY** Inc.

Ref-1 Leval Codes **251, 015, 25529E27100PS**



r n n i m m

County **EDDY** Section **NW**  
Field **BANDANA POINT STRAND**  
Reservoirs **STRAND**  
Operator **VATES ENERGY CORP**  
011 Cum 808 Gas Cum 390281

n i m m m

100

1000

GAS (MCF/MO)

10000

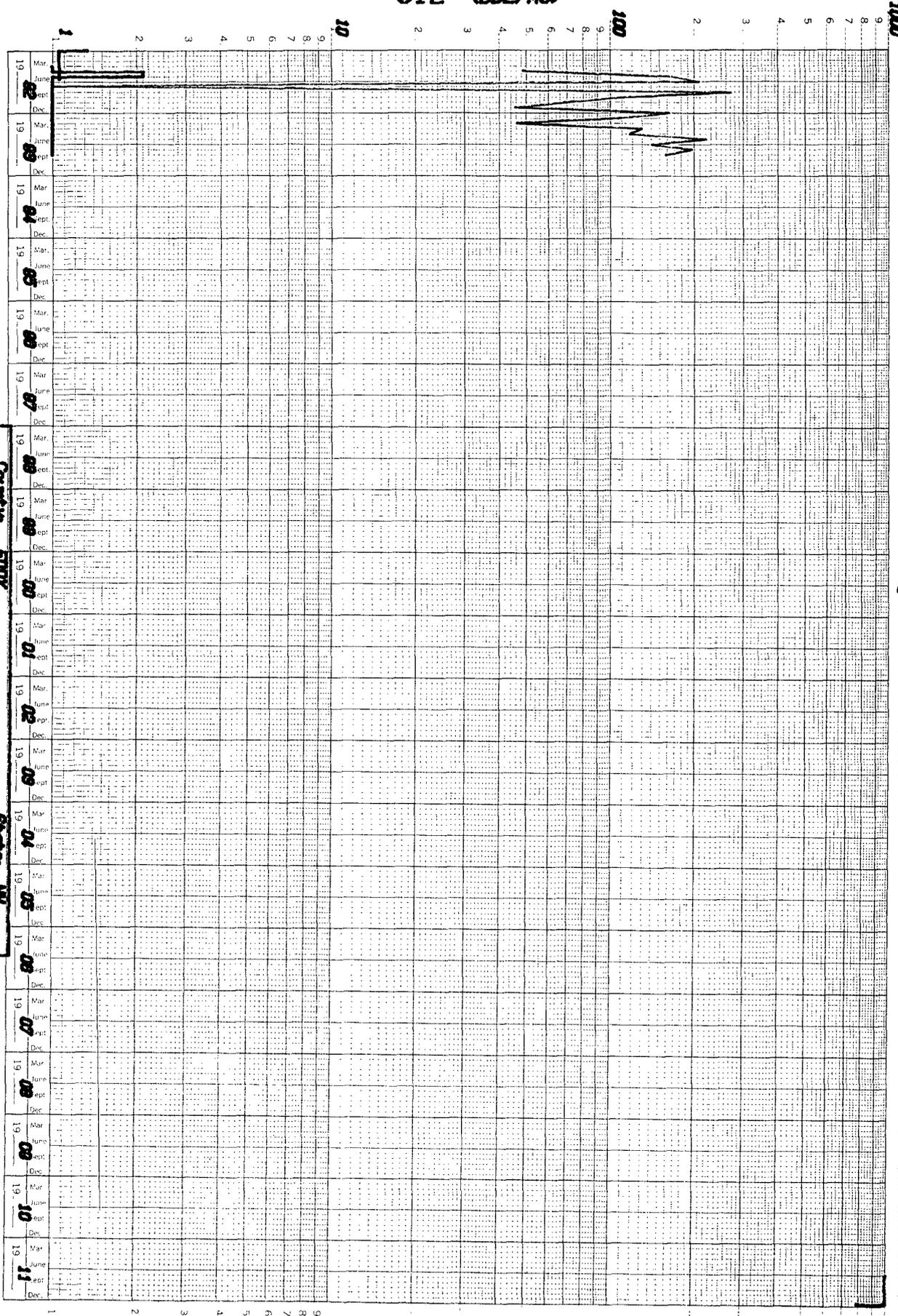
100000

1000 Lease DESERT ROSE FEDERAL

000001 Dwight's ENERGY [ENERGY] Inc.

Referral Code 250, 015, 2552527100PM

UIL (BBL/MO)



1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10

County: **ELDY** State: **NM**  
 Field: **HESS EAST OAKROD**  
 Reservoir: **MORON**  
 Operator: **YATES ENERGY CORP**  
 Oil Cum 2 Gas Cum 21594