



## Arch Petroleum Inc.

September 19, 1989

**RECEIVED**

SEP 22 1989

OIL CONSERVATION DIV.  
SANTA FE

New Mexico Oil Conservation Division  
Mr. William J. Lemay, Director  
Post Office Box 2088  
Santa Fe, New Mexico 87504

RE: Exception to Rule 303A  
Section 34 & 35  
T23S, R37E,  
Lea County, New Mexico

Dear Sir:

Arch Petroleum Inc. is requesting approval of an exception to Rule 303A to permit the commingling of production from different formations into a common tank battery facility.

The E. C. Hill "D" Federal wells No. 3, 4, and 5 produce from the Devonian formation at approximately 7150-7250'. The three wells produce approximately 40 BO and 20 BW per day. Well No. 1 has been plugged back to the Abo formation at 6638-6714'. This zone is currently producing 14 BO and 14.7 BW per day. Temporary approval of surface commingling was approved by Mr. Shannon Shaw of the BLM and Mr. Jerry Sexton of your District I office in Hobbs (see attached letter) on August 23, 1989.

The common tank battery for the requested commingling approval is located at Unit A, Section 34, T23S, R37E. The wells are located as follows and are indicated on the attached plat.

Well No. 1, Unit H, Section 34, T23S, R37E  
Well No. 3, Unit D, Section 35, T23S, R37E  
Well No. 4, Unit A, Section 34, T23S, R37E  
Well No. 5, Unit E, Section 35, T23S, R37E

Production allocation for the Hill "D" No. 1 Abo well, after commingling, will be based on a regularly scheduled well test using a portable tester. This tester will gauge daily production of oil, water and gas.

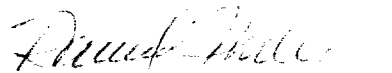
The gravities of the two crude oils are 36.6 degrees API and 38.8 degrees API for the Abo and Devonian respectively. Both gravities have been corrected to 60 degrees F. The expected gravity of the commingled oil is 38.2 degrees API.

The commingling of the production will not change the actual commercial value of the individual products. Posted prices for both sources are \$18.75 per barrel as of this date. Individual source value and commingled values are essentially equivalent.

Mr. Shannon Shaw of the Bureau of Land Management has been provided a copy of this information.

Should you require additional information, please call me.

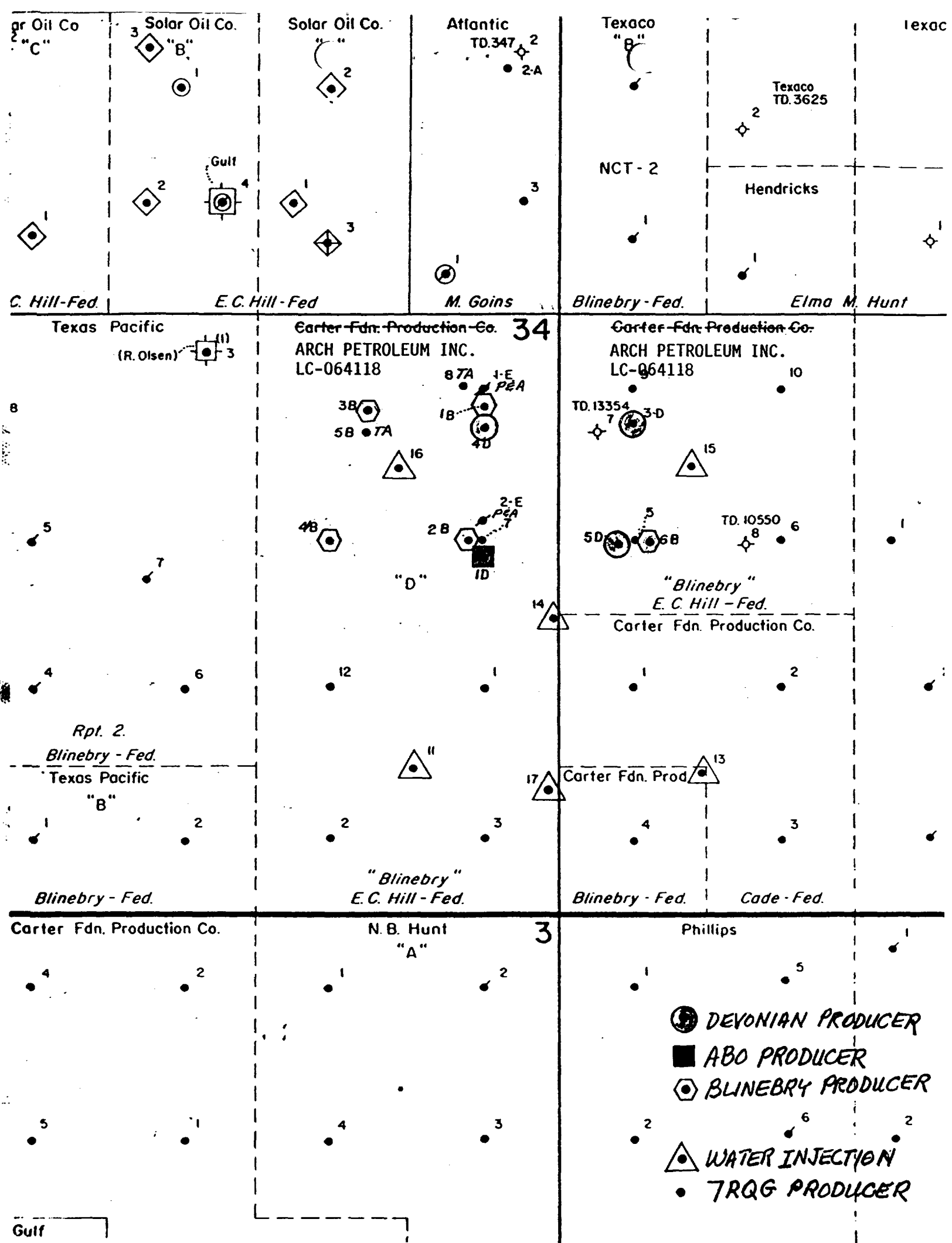
Sincerely,



David Miller  
Operations Manager

DM/slw  
Attachments  
XC: Shannon Shaw  
BLM  
Carlsbad, New Mexico

Jerry Sexton  
New Mexico Oil Conservation Division  
Hobbs, New Mexico





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

AUG 24 1989

GARREY CARRUTHERS  
GOVERNOR

August 23, 1989

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

Arch Petroleum Inc.  
10 Desta Drive, Suite 420  
Midland, TX 79705

Attn: Mr. David Miller  
Operations Manager

Re: Temporary Permission To Surface Commingle  
Teague Devonian and Undesignated Abo Production  
E. C. Hill D Federal Lease Sec. 34 & 35, T23S, R37E

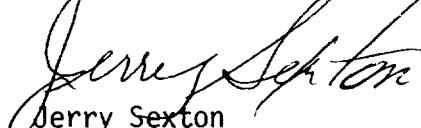
Gentlemen:

Permission to temporarily commingle the above-referenced production is hereby granted for 30 days. During this time you will need to get the Abo zone tested and submit your official application to surface commingle to our Santa Fe office as required by Rule 303-A.

As I indicated in my May 31st letter, this location is within a mile of the Teague Abo Gas pool and should the well be completed as a gas well it will be placed in the Teague Abo Gas Pool and as required by our rules, the gas from a gas well must be separately metered.

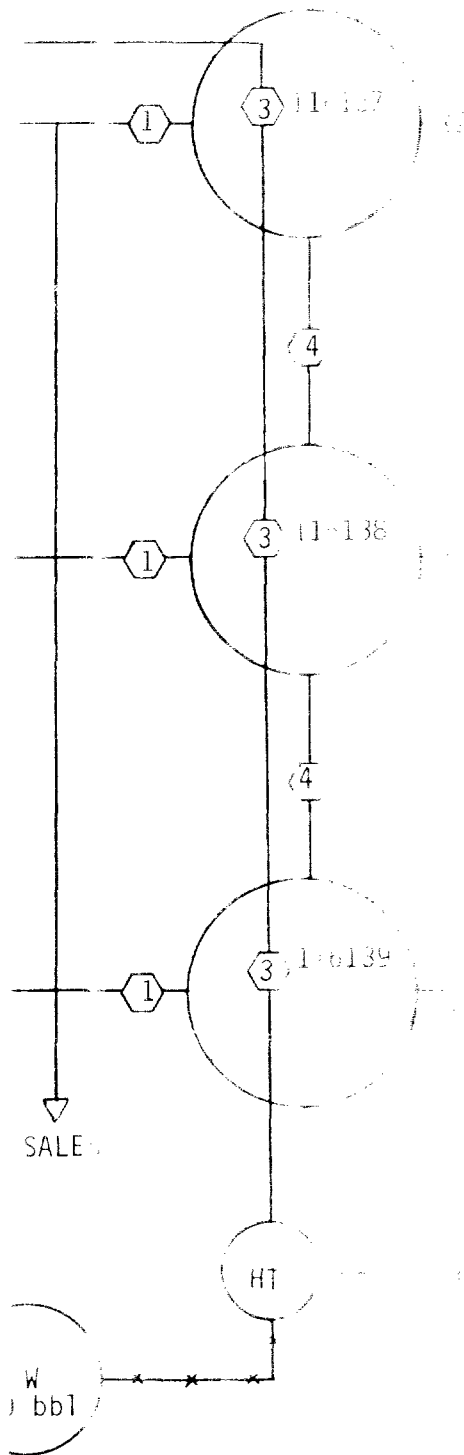
Very truly yours,

OIL CONSERVATION DIVISION

  
Jerry Sexton  
Supervisor, District I

ed

cc: David Catanach, OCD Santa Fe



## TE FACILITY DIAGRA

E. C. HILL FEDERAL "D" TRACT  
UNIT A, SEC. 34, T. 13, R. 10E  
LEA COUNTY, NEW MEXICO

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

Form approved,  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. LC064118					
b. TYPE OF COMPLETION: NEW WELL <input type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input checked="" type="checkbox"/> DIFF. RENVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME					
2. NAME OF OPERATOR Arch Petroleum Inc.		7. UNIT AGREEMENT NAME					
3. ADDRESS OF OPERATOR 10 Desta Dr., Suite 420 East, Midland, Texas 79705		8. FARM OR LEASE NAME E. C. Hill "D" Federal					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 2131 FNL & 660 FEL, Section 34, T-23-S, R-37-E At top prod. interval reported below At total depth		9. WELL NO. 1					
14. PERMIT NO. N/A		DATE ISSUED 6/15/89					
15. DATE SPUDDED 5/23/52		16. DATE T.D. REACHED 8/13/52					
17. DATE COMPL. (Ready to prod.) 8/20/89		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 3275 KB					
19. ELEV. CASINGHEAD		10. FIELD AND POOL, OR WILDCAT Teague Devonian					
20. TOTAL DEPTH, MD & TVD 9290		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 34, T-23-S, R-37-E					
21. PLUG, BACK T.D., MD & TVD 6900		12. COUNTY OR PARISH Lea					
22. IF MULTIPLE COMPL., HOW MANY*		13. STATE New Mexico					
23. INTERVALS DRILLED BY →		19. ELEV. CASINGHEAD					
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 6638-6714' Abo		25. WAS DIRECTIONAL SURVEY MADE No					
26. TYPE ELECTRIC AND OTHER LOGS RUN GST/NGT/CNL/TDT/Sonic		27. WAS WELL CORED No					
28. CASING RECORD (Report all strings set in well)							
CASINO SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED		
13 3/8	48	331	17 1/2	300 sx circ	0		
9 5/8	32 & 36	2919	12 1/4	1400 sx	0		
7	23 & 26	9100	8 3/4	650 sx	0		
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8	6478	6478
31. PERFORATION RECORD (Interval, size and number) 6638-6714 (55 - 0.4" dia holes). 6900 CIBP + 35' cement				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
				DEPTH INTERVAL (MD)			
				5222-5282			
				6958-7076			
				6958-7014			
				6638-6714			
				AMOUNT AND KIND OF MATERIAL USED			
				150 sx Class "C"			
				150 sx Class "H"			
				6000 gals 15% NeFe HCL			
				6000 gals 15% NeFe HCL + 80 B.S.			
33.* PRODUCTION							
DATE FIRST PRODUCTION 8/21/89		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing				WELL STATUS (Producing or shut-in) Producing	
DATE OF TEST 9/13/89	HOURS TESTED 24	CHOKE SIZE 14/64	PROD'N. FOR TEST PERIOD →	OIL—BBL. 13.6	GAS—MCF. 131	WATER—BBL. 14.7	GAS-OIL RATIO 9632
FLOW. TUBING PRESS. 50	CASING PRESSURE 0	CALCULATED 24-HOUR RATE →	OIL—BBL. 13.6	GAS—MCF. 131	WATER—BBL. 14.7	OIL GRAVITY-API (CORR.)	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold						TEST WITNESSED BY Buddy Hill	
35. LIST OF ATTACHMENTS							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records							
SIGNED <i>Dan Miller</i>		TITLE Operations Manager				DATE 9/19/89	

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Submit 5 Copies  
Appropriate District Office  
F[STRUCT]  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

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

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

I.

Operator Arch Petroleum Inc.	Well API No. 30-025-10947
Address 10 Desta Dr., suite 420 East, Midland, Texas 79705	
Reason(s) for Filing (Check proper box) <input checked="" type="checkbox"/> Other (Please explain)	
New Well <input type="checkbox"/>	Change in Transporter of:
Recompletion <input checked="" type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>

Change field designation from Devonian to Abo

If change of operator give name and address of previous operator \_\_\_\_\_

II. DESCRIPTION OF WELL AND LEASE

Lease Name E.C. Hill "D" Federal	Well No. 1	Pool Name, Including Formation Undesignated Abo	Kind of Lease State, <del>Federal</del> or Fee	Lease No. LC-064118
Location				
Unit Letter H	2131	Feet From The North	Line and 660	Feet From The East
Section 34	Township 23S	Range 37E	NMPM, Lea	County

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Texas New Mexico Pipeline	Address (Give address to which approved copy of this form is to be sent) P.O. Box 5568, Denver, Co. 80217					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> El Paso Natural Gas Company	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1492, El Paso, Texas 79978					
If well produces oil or liquids, give location of tanks.	Unit A	Sec. 34	Twp. 23S	Rge. 37E	Is gas actually connected? Yes	When? 8-52

If this production is commingled with that from any other lease or pool, give commingling order number: Temporary Approval 8-23-89

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well X	Gas Well	New Well	Workover	Deepen	Plug Back X	Same Res'v	Diff Res'v X
Date <del>Spotted</del> started 8-16-89	Date Compl. Ready to Prod. 8-20-89		Total Depth 9290		P.B.T.D. 6865'			
Elevations (DF, RKB, RT, GR, etc.) 3275 KB	Name of Producing Formation ABO		Top Oil/Gas Pay 6500		Tubing Depth 6478			
Perforations 6638-6714					Depth Casing Shoe 9100			

TUBING, CASING AND CEMENTING RECORD

HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
17 1/2	13 3/8	331	300
12 1/4	9 5/8	2919	1400
8 3/4	7	9100	650
	2 3/8	6478	

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

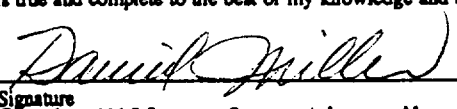
Date First New Oil Run To Tank 8-21-89	Date of Test 9-13-89	Producing Method (Flow, pump, gas lift, etc.) Flowing	
Length of Test 24 hours	Tubing Pressure 50	Casing Pressure 0	Choke Size 14/64
Actual Prod. During Test	Oil - Bbls. 13.6	Water - Bbls. 14.7	Gas- MCF 131

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

  
Signature  
David Miller, Operations Manager  
Printed Name  
8-20-89 915-685-1961  
Date Telephone No.

OIL CONSERVATION DIVISION

Date Approved \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.