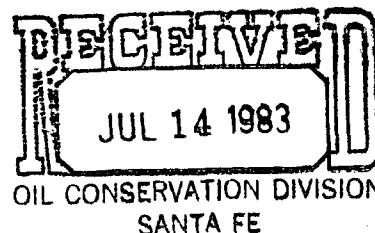




Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent



July 11, 1983

File: SJ0-1254-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
Eddy County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Amoco, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, requests your approval to downhole commingle the subject well in accordance with NMOCD Rule 303-C.

The subject well is located 1980' FSL x 660' FWL, Section 27, T-18-S, R-31-E, Eddy County, New Mexico, in the Shugart Morrow Field. Attached is a map showing the subject well location. The Greenwood Pre Grayburg Unit Federal "C" Com No. 1 was completed in the Morrow Formation March, 1979, potentialing 5.2 MMCFD x 9 BCPD. The Production in April, 1983 was 232 MCFD x 2 BCPD with a cumulative production of .8 BCF. During a recent recompletion (January, 1983), the Atoka formation was perforated and acidized in order to dually complete up the annulus with the Morrow formation. The Atoka was flow tested for 31 MCFD with no fluid production at a flowing tubing pressure of 25 psi. Due to the low flow rates achieved in the Atoka, it is believed the Atoka will not be economically produced as a dual completion and, therefore, is currently shut-in. We feel commingling both gas zones and producing through a single tubing string will enhance the economic operation of the well and recover the remaining reserves. The sales line pressure was decreased from 400 psi to 15 psi on June 1, 1983 to improve the production of the well. Attached are the proposed dual completion, downhole commingling, and the present wellbore sketches.

The following facts are submitted in support of our request.

1. The latest 24 hours productivity tests are as follows:

Date	BCPD	BWPD	MCFD	Perforations
Atoka 2-15-83	0	0	31	11,090'-122'
Morrow 5-16-83	2	0	113	11,594'-97', 601'-10', 629'-34', 652'-56', 762'-66', 772'-75'

2. There is currently no water produced from either zone.
3. We estimate that the value of the commingled production stream will not be less than the sum of the values of the individual streams. The gas produced is sold to Conoco. The BTU tests are as follows:

* Atoka 1178 BTU/cf at 14.696 PSIA Dry
Morrow 1152 BTU/cf at 14.696 PSIA Dry

Copy of the tests are attached.

*Note: The Atoka test is taken from the Greenwood PG Unit Fed. "D" No. 1, which is producing in the North Shugart Atoka Field located 660' FNL x 1980' FWL, Section 26, T-18-S, R-31-E.

4. Bottomhole pressures are:

Atoka 1601 PSI
Morrow 2223 PSI

Copies of the Dip-In BHP tests are attached.

5. Both zones to be commingled have common ownerships.
6. Recommended gas allotments are as follows:

Atoka Reserves	Unknown
Morrow Reserves	700 MMCF
	<u>700 MMCF</u>

*Note: Due to limited flow rate achieved and pressure depletion observed, it is recommended that all remaining gas recovered from the Atoka and Morrow formations be allocated to the Shugart Morrow Field for this well.

July 11, 1983
File: SJ0-1254-WF
Page 3

If more information is required, contact Charles Herring at (505)
393-1781.

Yours very truly,

S. J. O'Kerson *BN*

Attachments

cc: State of New Mexico
Energy and Minerals Department
Oil Conservation Division
Drawer DD
Artesia, NM 88210

United States Department of the Interior
Bureau of Land Management
Roswell District Office
1717 West 2nd Street
P. O. Box 1397
Roswell, NM 88201

[illegible]

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

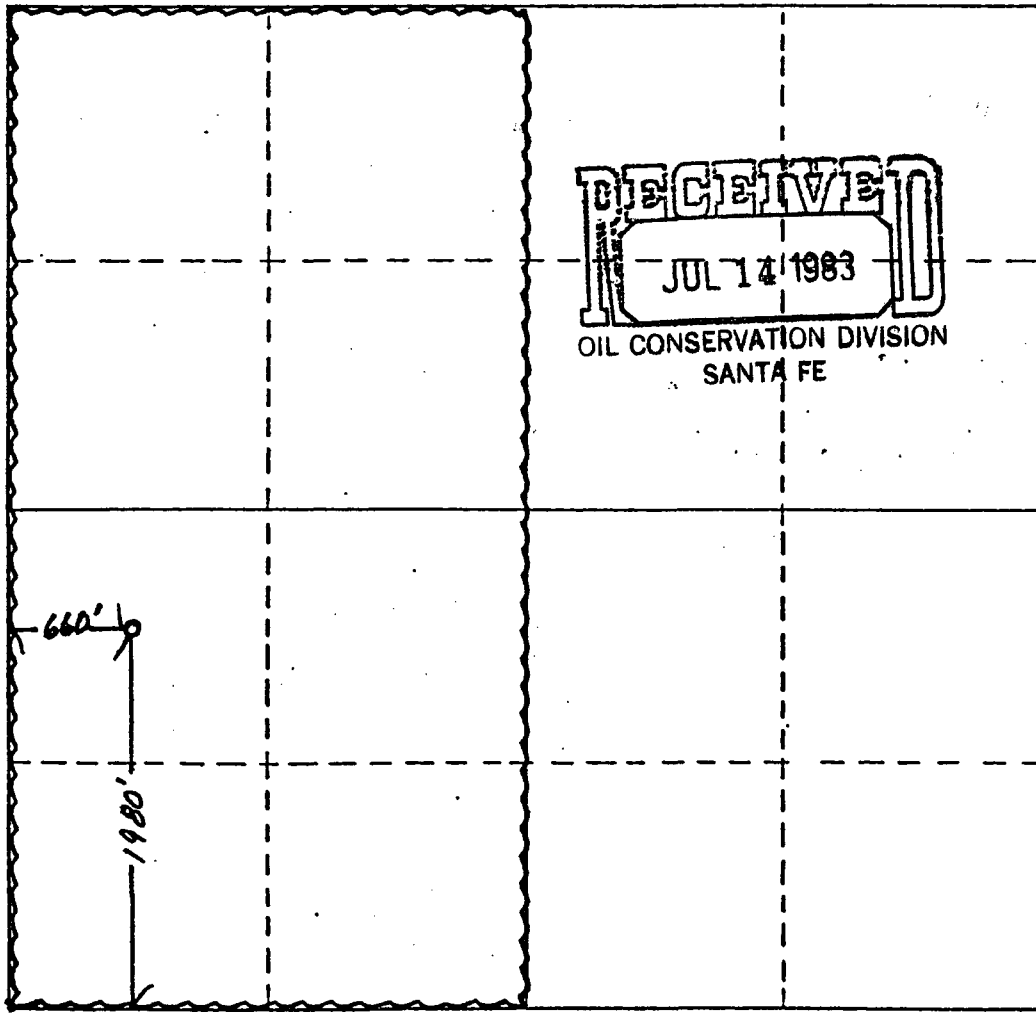
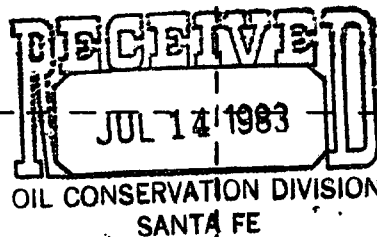
Operator Amoco Production Company			Lease Greenwood Pre-Grbg Unit Fed Clm		Well No. 1
Unit Letter L	Section 27	Township 18-South	Range 31-East	County Eddy	
Actual Footage Location of Well:					
1980 feet from the South line and 660 feet from the West line					
Ground Level Elev. 3614.3'	Producing Formation Atoka		Pool North Shugart Atoka		Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



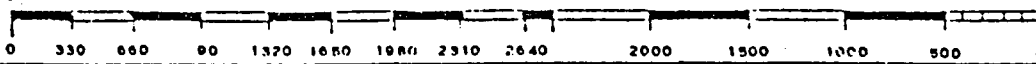
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name Charles M. Loring
Position Asst. Admin. Analyst
Company Amoco Production Company
Date May 25, 1983

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____
Registered Professional Engineer and/or Land Surveyor _____
Certificate No. _____



**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

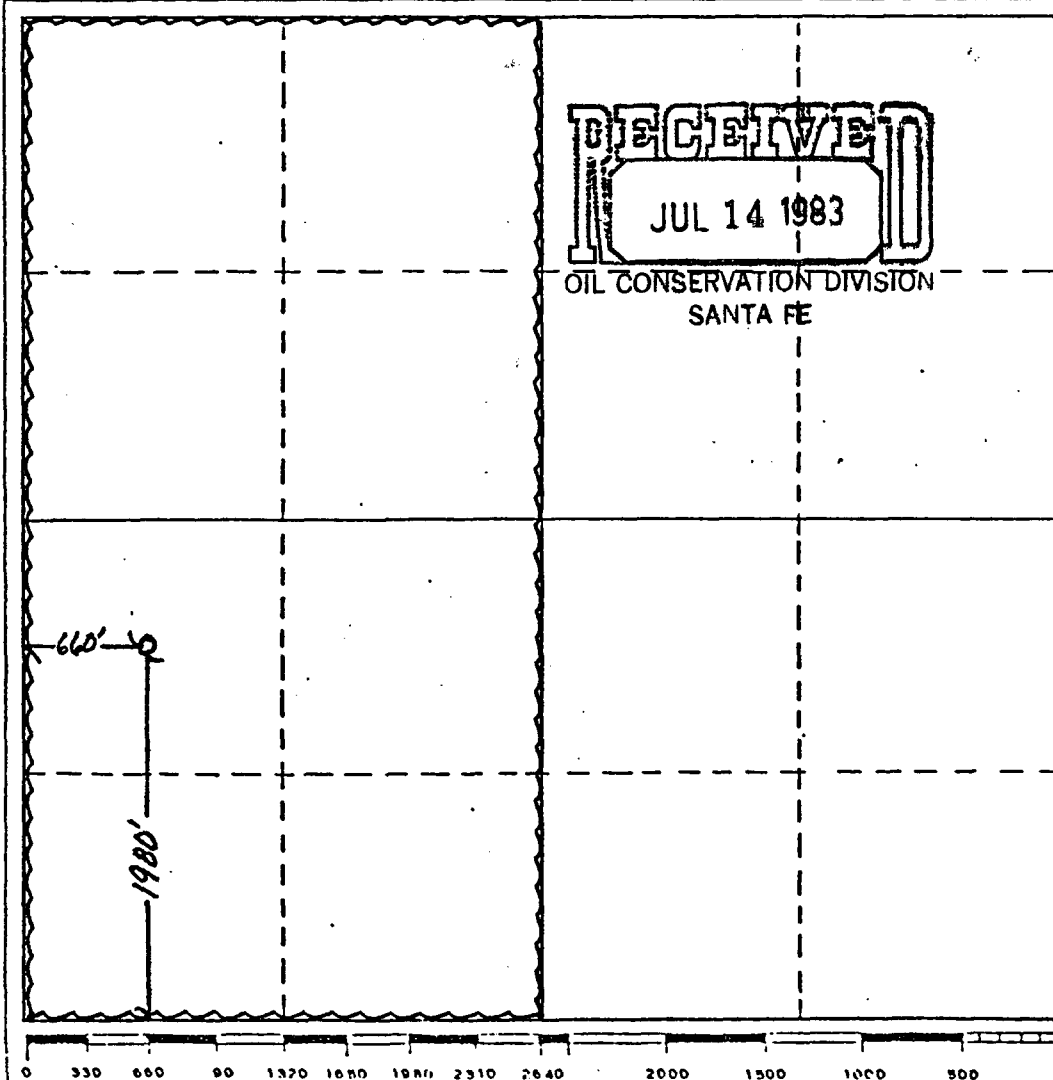
Operator Amoco Production Company			Lease Greenwood Pre-Grbg Unit Fed C Com		Well No. 1
Unit Letter L	Section 27	Township 18-South	Range 31-East	County Eddy	
Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the West line					
Ground Level Elev. 3614.3'	Producing Formation Morrow		Pool Shugart Morrow	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name *Charles M. Serrano*
Position **Assist. Admin. Analyst**

Company **Amoco Production Company**

Date **May 25, 1983**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

Registered Professional Engineer and/or Land Surveyor

Certificate No. _____



PROPOSED DUHL COMPLETION

Amoco Production Company

ENGINEERING CHART

SHEET NO.

OF

FILE

APPN

DATE 12/14/82

BY RHD

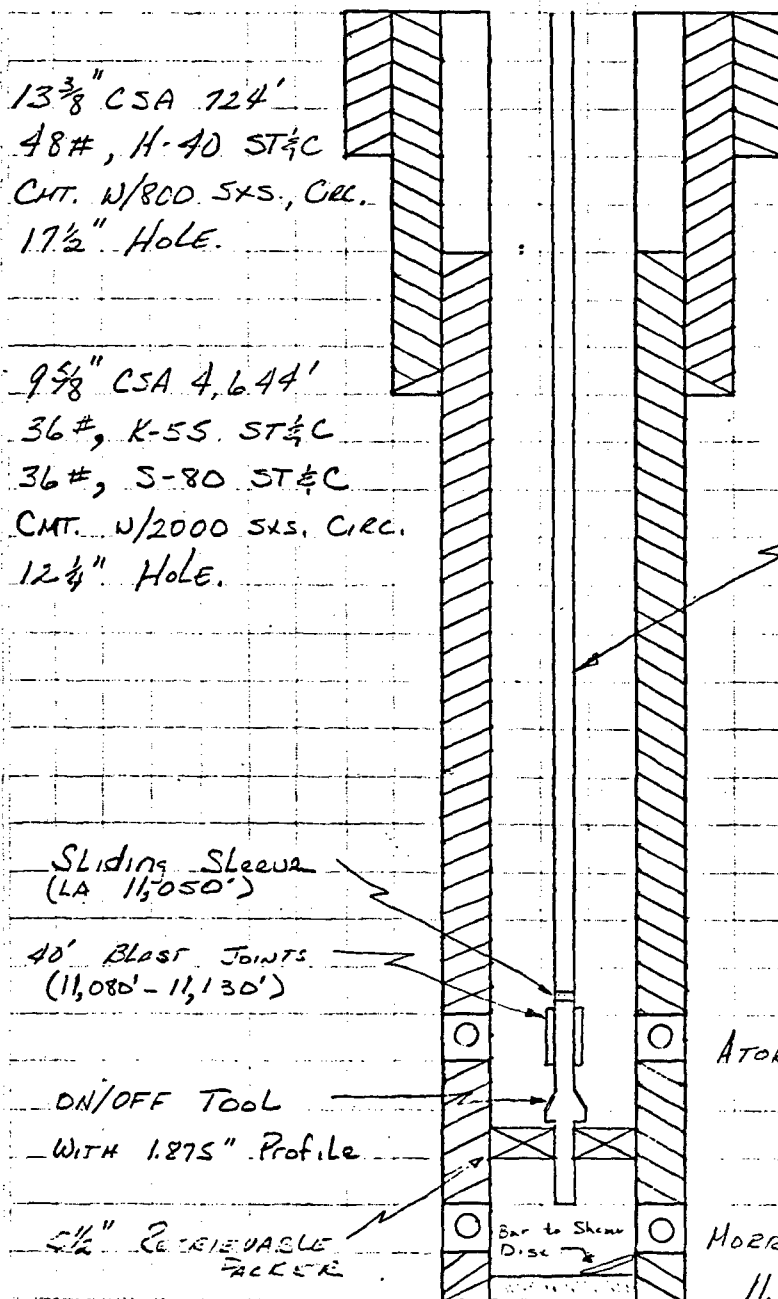
SUBJECT GREENWOOD PRE-GRAYBURG UNIT FED. "C" COH. No. 1

SHUGART MORROW (GAS)

1980' FSL & 660' FWL, SEC. 27, T-18-S, R-31-E
EDDY COUNTY, NEW MEXICO

COMPLETED: 3-9-79

ELEV. 3614.4 GL



TCMT - 2180'

2 7/8" TBG. LANDED AT 11,400'
PACKER LANDED AT 11,310'. DN/OFF
tool above PKR.

NOTE: THIS SKETCH SHOWS
PROPOSED MULTIPLE COMPLETION
TO PRODUCE FROM THE
MORROW & ATOKA HORIZONS.

ATOKA PERFS: 11,090'-122'

MORROW PERFS: 11,594'-597', 11,601'-610',
11,629'-634', 11,652'-656', 11,762'-766',
& 11,772'-775' WITH A JSPE

TD - 11,950'
PETD - 11,906'

5 1/2" CSA 11,950'
17# & 20# H-80 LT&C
CMT. W/2300 SXS.
TCMT - 2180'
2 3/4" HOLE.



ENGINEERING CHART

FILE

APPN

DATE 3-3-83

BY BAW

SUBJECT GREENWOOD PRE-GRAYBURG FED. "C" COM No. 1
(Formerly #10)

Shugart Penn Proposed wellbore for commingling

1980 FSL & 660 FWL, Sec 27, T18S, R31E
Eddy County, New Mexico

Completed: 3-9-79

E/EY S

3614.4' G.L.

13 3/8" CSA 724'

48# H-40 ST & C

CMT W/800 SXS CIRC

17 1/2" Hole

TCMT - 2180'

9 5/8" CSA 4644'

36# K-55- ST & C

36# S-80 ST & C

CMT W/2000 SXS CIRC

12 1/4" HOLE

Perf: 11090' - 122' W/4 SPF

Perfs: 11594-97, 11601-10, 11629-34,
11652-56, 11762-66, 11772-75 W/4 JS PF

5 1/2" CSA 11950'

17 #20 N-80 LT & C

CMT W/2300 SXS

TCMT - 2180'

8 1/4" Hole

TD - 11,950'

PBD - 11,906'



ENGINEERING CHART

FILE

APPN

DATE 3-3-83

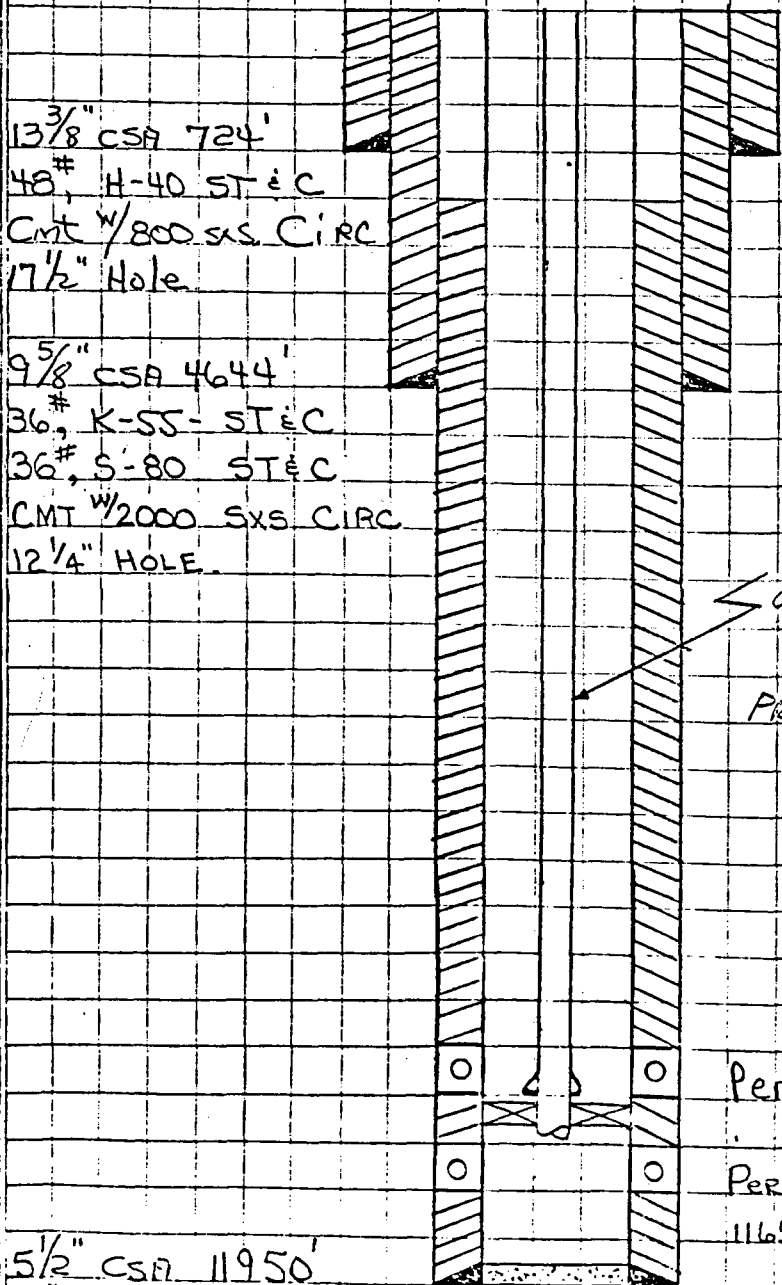
BY BAW

SUBJECT GREENWOOD PRE-GRAYBURG FED. "C" COM No. 1
(FORMERLY #10)
Shugart Down Present wellbore sketch

1980 FSL & 660 FWL, Sec 27, T18S, R31E
Eddy County, New Mexico

Completed: 3-9-79

ELEV 3614.4' G.L.



TCMT - 2180'

2 3/8" TBS LANDED IN PKR @ 11,383'
ON/OFF TOOL ABOVE PKR "1.875" PROFILE
TAILPIPE SET @ 11,482' "1.81" F-TYP.
PROFILE NIPPLE 1 JOINT OFF BOTTOM.

Perf: 11090' - 122' w/4 SPF

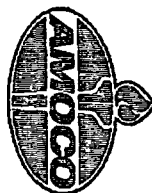
Perfs: 11594-97, 11601-10, 11629-34,
11652-56, 11762-66, 11772-75 w/4 JSPF

5 1/2" CSA 11950'
17 #20, N-80 LT & C
CMT w/2300 ss.
TCMT - 2180'
8 3/4" Hole

TD - 11,950'
PBD - 11,906'

PLOT 2 19.04.28 THUR 10 MAR, 1983

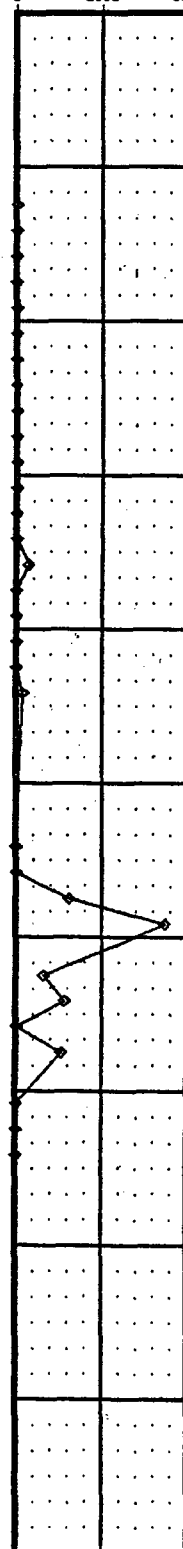
JOB-R63R0232, SOC0, TULSA CENTER DISPLA VER 8.2



INDUSTRY PRODUCTION DATA RATE-TIME PLOTS

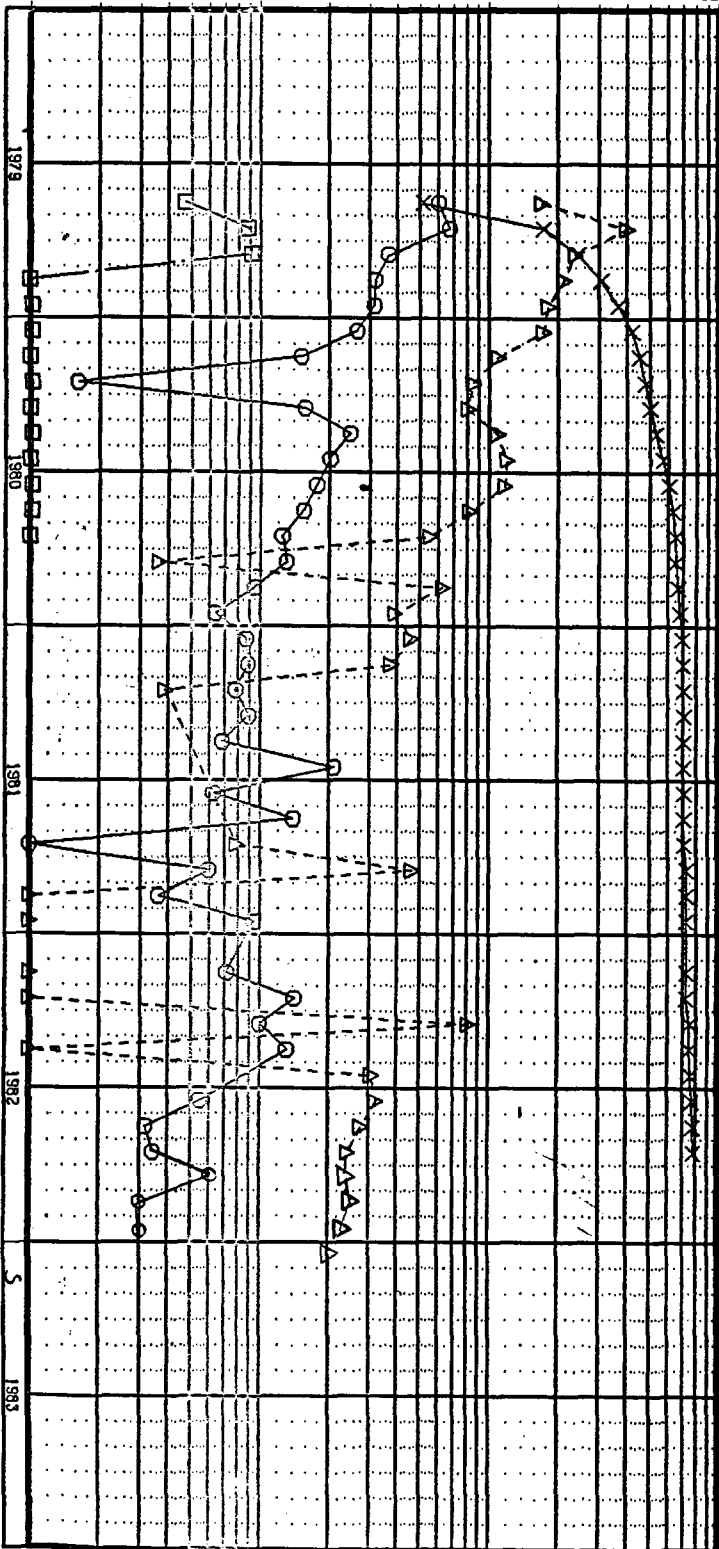
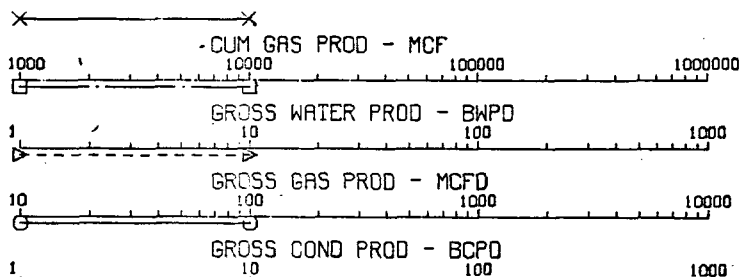
GAS
WELL: GREENWOOD PRE-GRAYBURG UNIT F 000001
FIELD: SHUGART MORROW (GAS)
OPERATOR: AMOCO PRODUCTION CO 019922
STATE: NM 30 COUNTY: EDDY
FIRST PROD 79 08 LAST PROD 82 09
REQUESTOR: KIMBLE -HOB-41 LOCATION: HOBBS
API NO: 300150000000
COMP DATE:
RESERVOIR: PM
MAJOR PROD CUM: 788,460

COND YIELD - BCPMMCF



1710
3998
2396
2144
1825
1734
1102
853
813
1095
1201
1178
829
558
37
632
394
462
378
39
0
0
0
0
79
466
2
2
9
10
817
10
312
326
281
246
200

MAJOR PRODUCT



1983-03-10

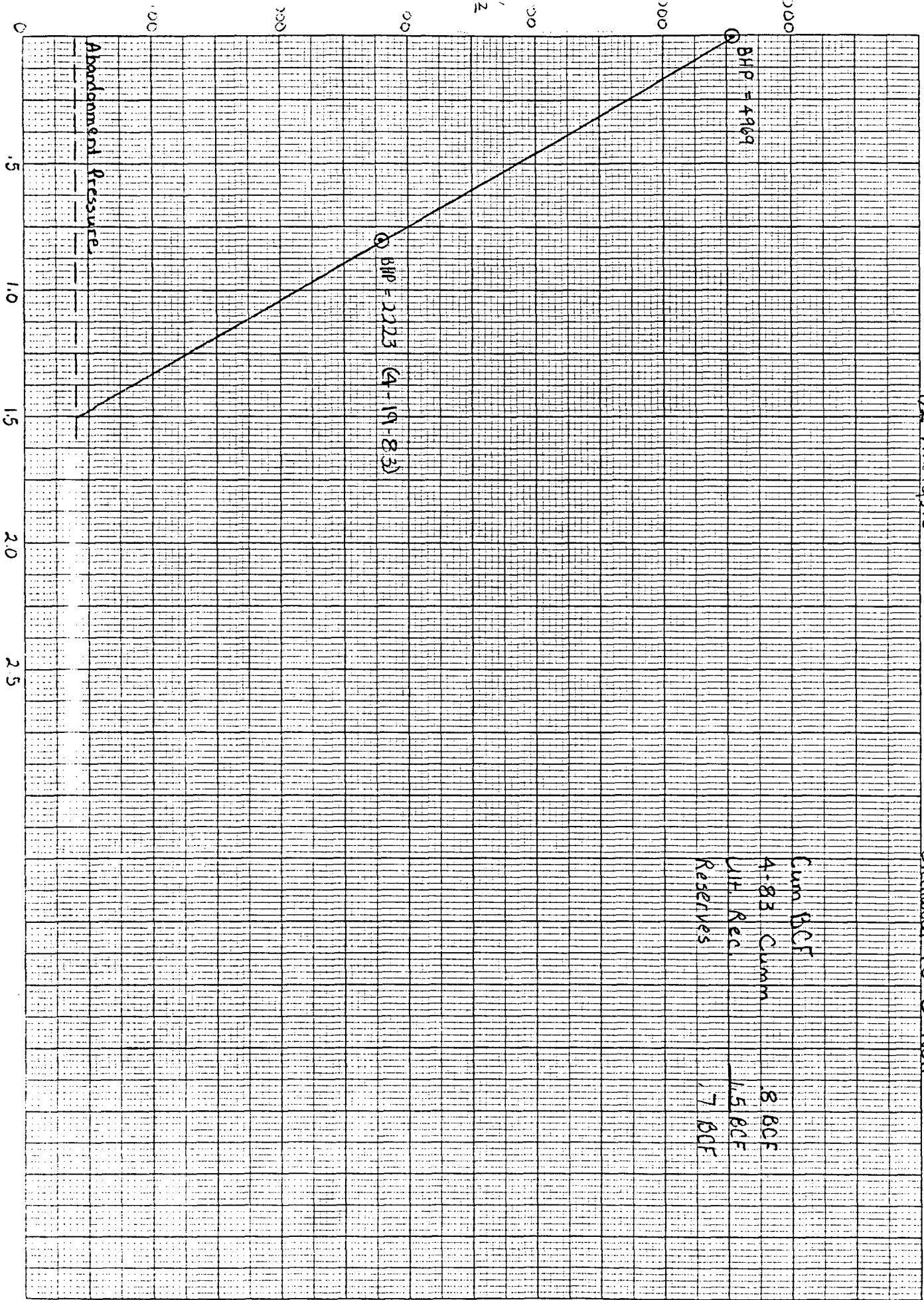
TIME

REPORT NUMBER 321

P/E Analysis

Greenwood P&C No.1

Cum BCF	8 BCF
4.83 Cum	1.5 BCF
With Rec.	1.7 BCF
Reserves	



JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

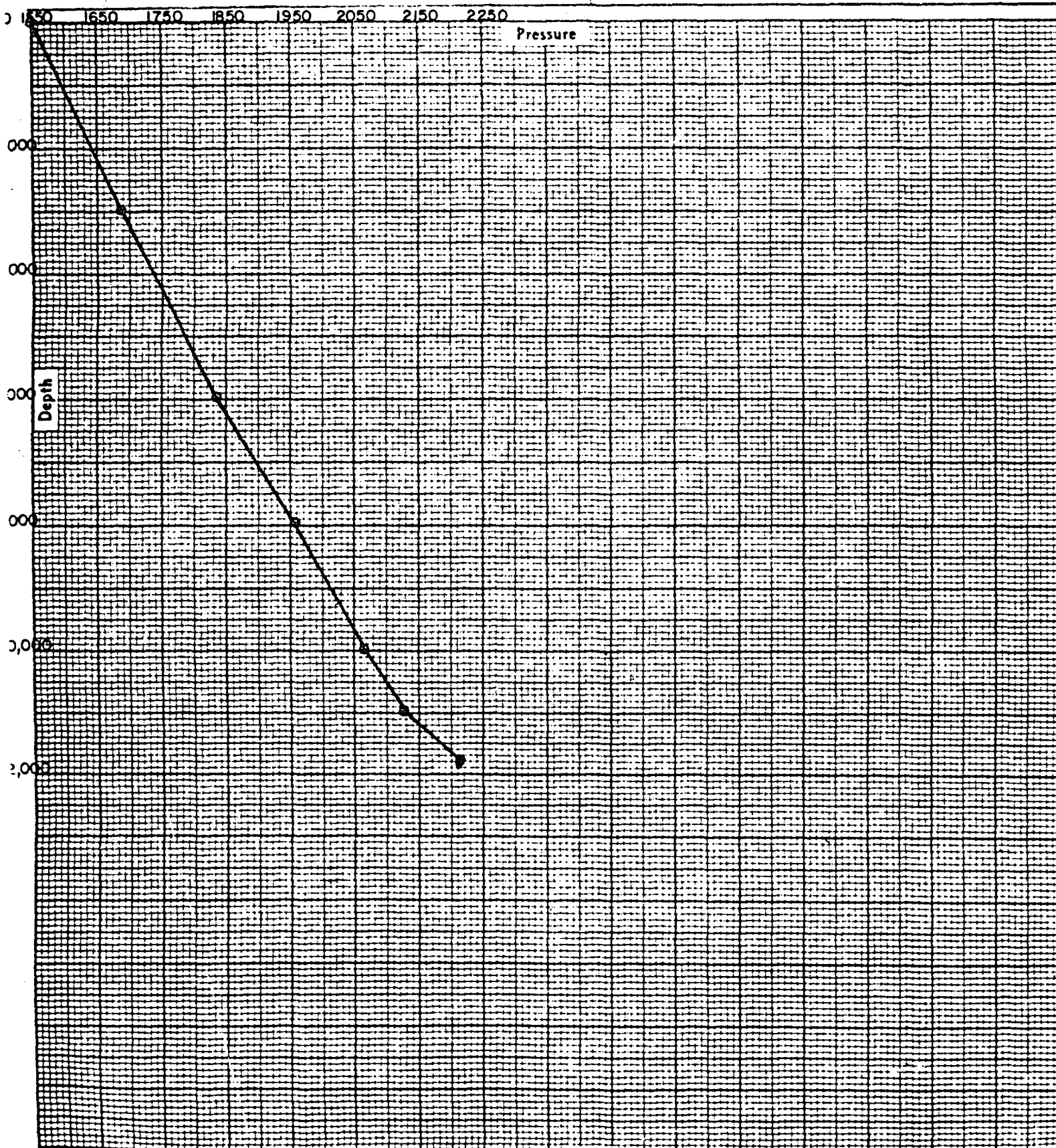
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR AMOCO PRODUCTION COMPANY
LEASE GREENWOOD PRE-GRAYBURG. FED. "C" COM
WELL NO. 1
FIELD Shugart Morrow
DATE 4-19-83 TIME 10:30 A.M.
STATUS Shut-In TEST DEPTH 11,780'
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 1550 psi BHP CHANGE
ELEV. FLUID TOP
DATUM WATER TOP
TEMP RUN BY B.T.
CLOCK NO. 84479 GAUGE NO. 19389
ELEMENT NO. 14659-N (0-3500 psi)

DEPTH	PRESSURE	GRADIENT
000	1550	
3000	1688	.046
6000	1835	.049
8000	1954	.040
10000	2065	.056
11000	2127	.062
11780	2223	.123

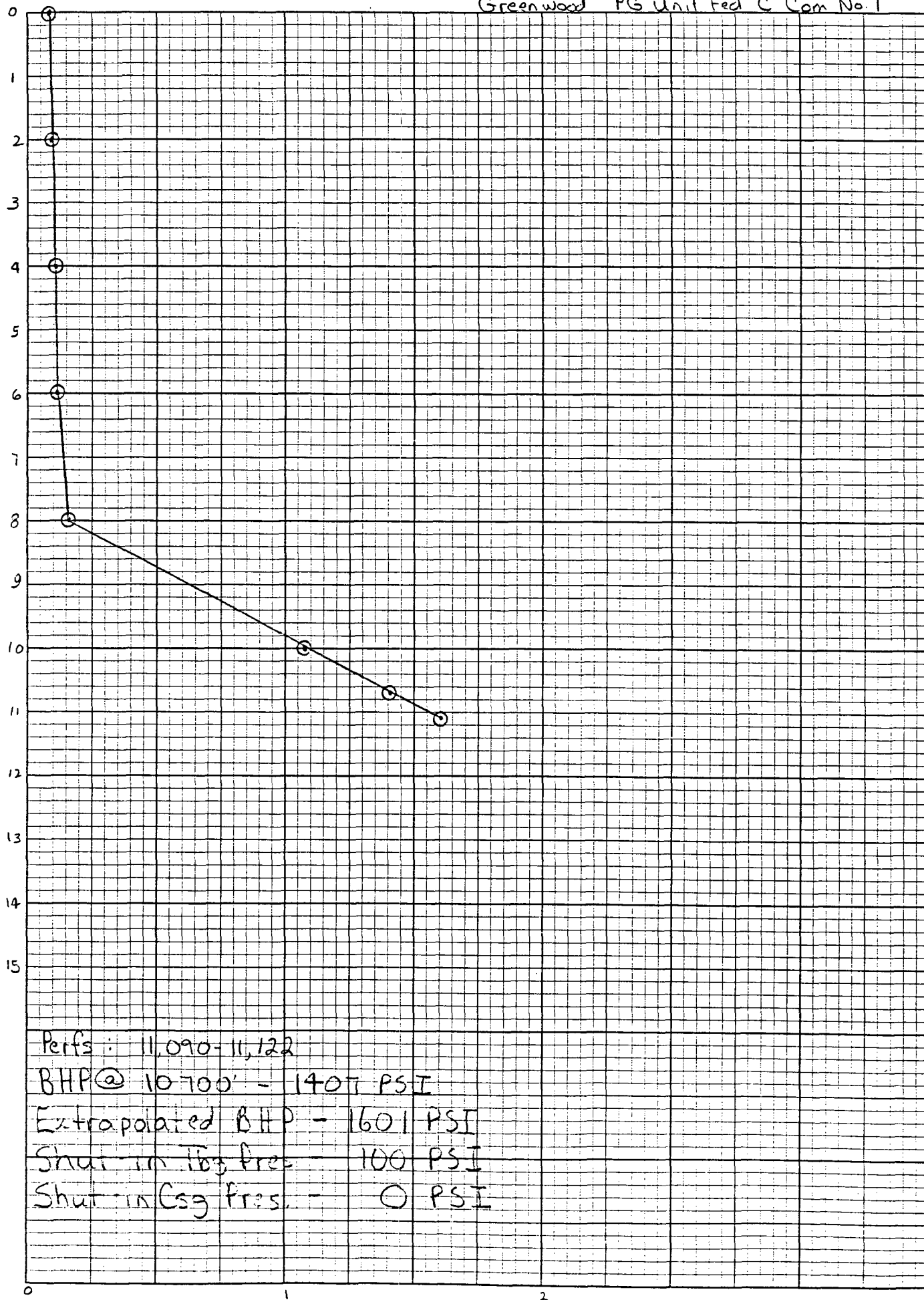
D.W. 1547 PSIG.



Greenwood PG Unit Fed "C" Com No. 1

46 0780

10 X 10 TO THE INCH • 1 X 10 INCHES
KEUFFEL & ESSER CO. NEW YORK



Perfs: 11,090-11,122

BHP@ 10-100' - 1407 PSI

Extrapolated BHP - 1601 PSI

Shut-in Tbg Pres - 100 PSI

Shut-in Csg Pres - 0 PSI

NEW-TEX LAB

P. O. BOX 1161
HOBBS, N.M. 88240

CERTIFICATE OF ANALYSIS

No. 1772
Run No. _____
Date of Run 10-3-79
Date Secured 10-3-79

A Sample of Amoco Production Company Greenwood Unit #10
Secured from West Engineering
At 412 N. Dal Paso Secured by _____
Hobbs, N. M. 88240 Time _____ Date _____
Sampling conditions _____ Press _____
Temp. _____
Eddy County, N. M.

FRACTIONAL ANALYSIS

Percentage Composition

	MOL %	LIQ. %	G.P.M.
Carbon Dioxide	.563		
Air			
Nitrogen	.679		
Oxygen			
Hydrogen sulfide			
Hydrogen			
Methane	86.247		
Ethane	7.329		1.955
Propane	3.198		.881
Butanes			
Iso-Butane	.390		.127
N-Butane	.908		.285
Pentanes			
Iso-Pentane	.240		.088
N-Pentane	.279		.101
Hexanes	.088		.036
Heptanes	.079		.034
Octanes			
TOTAL	100.000		3.507

Calc. Sp. Gr. — 0.6618
Calc. A.P.I. — _____
Calc. Vapor Press. — _____ PSIA
Sp. Gr. _____
Mol. Wt. 19.18

LIQUID CONTENT (GAL./MCF)

Propane Calc. G.P.M. .881
Butanes Calc. G.P.M. .412
Pentanes Plus. G.P.M. .259
Ethane Calc. G.P.M. 1.955
RVP Gasoline G.P.M. _____
B.T.U./Cu. Ft. @ 14.696 P.S.I.A.
Dry Basis 1152
Wet Basis 1132
Sulfur Analysis by Titration
Gr./100 Cu. Ft. _____
Hydrogen Sulfide _____
Mercaptans _____
Sulfides _____
Residual Sulfur _____
Total Sulfur _____

Run by Deane Simpson Checked by _____ Approved by Deane Simpson

Additional Data and Remarks

NEW-TEX LAB

PHONE 505/393-3561

P. O. BOX 1161

611 W. SNYDER

HOBBS, NEW MEXICO 88240

ANALYSIS CERTIFICATE

CLIENT: JOHN WEST ENGINEERING ANALYSIS NUMBER: 8294
ADDRESS: 412 N DAL PASO ST DATE OF RUN: 09/15/82
CITY, STATE: HOBBS NM 88240 DATE SECURED: 09/14/82

SAMPLE IDENT: AMOCO PRODUCTION COMPANY - GREENWOOD PREGRAY BURG
UNIT "D" WELL #1
SAMPLING PRESS: SAMPLING TEMP:

***** GAS ANALYSIS *****

	MOLE PERCENT	GAL/ MCF
NITROGEN	2.546	
CARBON DIOXIDE	0.350	
METHANE	79.892	
ETHANE	10.964	2.924
PROPANE	4.359	1.197
ISO-BUTANE	0.504	0.164
NORMAL BUTANE	0.921	0.290
ISO-PENTANE	0.163	0.060
NORMAL PENTANE	0.146	0.053
HEXANES	0.066	0.027
HEPTANES PLUS	0.087	0.041
TOTAL	100.000	4.756

PROPANE GPM: 1.20 BUTANES GPM: 0.45
ETHANE GPM: 2.92 PENTANES PLUS GPM: 0.18

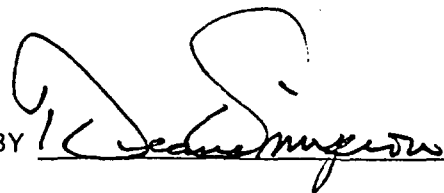
SPECIFIC GRAV (CALC): 0.6938
MOLE WEIGHT: 20.10

HHV-BTU/CU FT	PRESSURE (PSIA)	WET	DRY
14.696	1157		1178
14.650	1153		1174
14.730	1160		1180
14.735	1160		1181

ANALYZED BY:

R. H. HAMILTON

APPROVED BY



Greenwood PreGrayburg Federal "C" Com #1 (Formerly #10)

Well History:

Cementing Record:

- 12/08/78: Set 13 3/8"-48#, H-40 ST&C casing at 724' in a 17½" hole. Cemented with 800 sx Class C 2% CaCl. Circulated.
- 12/21/78: Set 9 5/8"-36#, K-55 and S-80 ST&C casing at 4644' in a 12¼" hole. Cemented with 1800 B J Lite containing 6% gel, 5lb/sk Gilsonite, 1/4 lb/sk Cello-flake and 8 lb/sk salt followed by 200 sx Class C 2% CaCl.
- 02/07/79: Set 5½"-17# & 20#, N-80 LT&C casing at 11950' in an 8 3/4" hole. Cemented with 1600 sx Trinity Lite and followed by 700 sx Class H. Cement did not circulate. Top of cement approximately 2180'.

Initial Completion:

- 03/01/79: Spotted 300 gallons 10% Acetic acid with 2 gallons FSF Surfactant plus 5 gallons claymaster and 2 gallons 1-6 Inhibitor per 100 gallons acid. Perforated intervals 11594'-97', 11601'-10', 11629'-34', 11652'-56', 11762'-66' and 11772'-75' with 4 JSPF. Packer set at 10885'.
- 03/09/79 Completed well, test 1; 24 hrs. ; 5200 mcf/d; 9 bcpd; 12/64" choke; tubing press.: 1150 psi.

- 1-12-83 POH tubing and packer. Ran retrievable bridge plug SA 11,400'.
- 1-13-83 MISU. Spot 250 gallons 10% acetic acid from 11,214' from surface to 10,900' from surface. Perf 11,090'-122' w/4 SPF. Drop bar. Pump 3000 gallons 7-1/2% NEFE HCL acid and 1000 SCF N2 per bbl. MAX TRTP 4900 PSI. MIN TRTP 4200 PSI. Air 4.3 BPM. ISIP 3400.
- Flow tested 31 MCFPD, TPF 25 PSI.
- 3-02-83 Ran 3 joints 2-7/8" tailpipe, 5-1/2" Pkr, 2-7/8" seating nipple land- at 10,874'; PSA 10,875', tailpipe SA 10,975'. Pumped 3200 gallons 7-1/2% MS acid and 3200 gallons CO2 with additives. MAX TRTP 4030 PSI. MIN TRTP 3100 PSI. AIR 3 BPM with CO2. ISIP 3170 PSI.
- 3-07-83 Pull tubing, packer, and retrievable bridge plug. Ran 3 joints 2-3/8" tubing, pkr and 2-3/8" tbg to surface. Tailpipe landed at 11,478' with PSA 11,377'. PKR was leaking therefore the packer and tubing was pulled.
- 3-24-83 Ran 2-3/8" tbg, 5-1/2" pkr, w/2-3/8" tailpipe to 11,482' w/PSA 11,383'. Back in hole.
- 4-28-83 Flow 2 BC X 0 BW, 180 MCF in 24 hours. TPF 410 PSI, on 48/64" choke. Morrow returned to production w/2 BCPD X 0 BWPD X 180 MCFD X TPF 410 PSI. Atoka zone left SI pending evaluation for downhole commingling with Morrow.

OFFSET OPERATORS

Gulf Oil Exploration and Production Company
P. O. Box 670
Hobbs, NM 88240

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762

Southland Royalty Company
21 Desta Drive
Midland, TX 79701

Arco Oil and Gas Company
P. O. Box 1610
Midland, TX 79701

Westall-Mask
P. O. Box 1477
Roswell, NM 88201

TXO Production Corporation
900 Wilco Bldg.
Midland, TX 79701

P 267 164 377

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		TXO Production Corp.	
STREET AND NO.		900 Wilco Bldg.	
P.O. STATE AND ZIP CODE		Midland, TX 79701	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976

P 267 164 378

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		Westall-Mask	
STREET AND NO.		P.O. Box 1477	
P.O. STATE AND ZIP CODE		Roswell, NM 88201	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976

P 267 164 379

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		Arco Oil and Gas Co.	
STREET AND NO.		P.O. Box 1610	
P.O. STATE AND ZIP CODE		Midland, TX 79701	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976

P 267 164 380

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		Southland Royalty Co.	
STREET AND NO.		21 Desta Drive	
P.O. STATE AND ZIP CODE		Midland, TX 79701	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976

P 267 164 381

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		Phillips Petroleum Co.	
STREET AND NO.		4001 Penbrook	
P.O. STATE AND ZIP CODE		Orcessa, TX 79762	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976

P 267 164 382

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

SENT TO		Gulf Oil Exp. & Prod. Co.	
STREET AND NO.		P.O. Box 670	
P.O. STATE AND ZIP CODE		Albany, NM 88240	
POSTAGE		\$.54	
CONSULT POSTMASTER FOR FEES	CERTIFIED FEE	75 ¢	
	SPECIAL DELIVERY	¢	
	RESTRICTED DELIVERY	¢	
	OPTIONAL SERVICES		
	RETURN RECEIPT SERVICE		
	SHOW TO WHOM AND DATE DELIVERED	60 ¢	
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY		¢	
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY		¢	
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY		¢	
TOTAL POSTAGE AND FEES		\$ 1.89	
POSTMARK OR DATE			
JUL 1983			

PS Form 3800, Apr. 1976



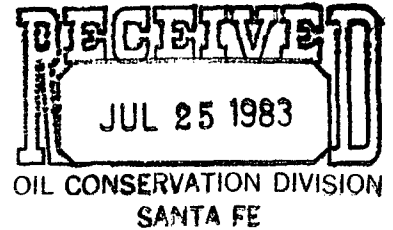
File
DHC- 419

Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

July 11, 1983



File: SJ0-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

Arco Oil and Gas Company
P. O. Box 1610
Midland, TX 79701

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

APPROVAL

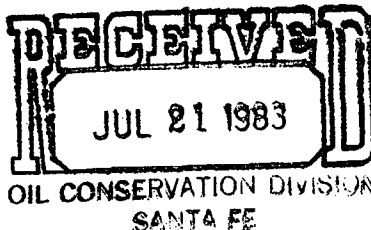
S. J. Okerson

Company: ARCO Oil and Gas Co.

By: *Ronald D. White*

Attachments

Date: July 21, 1983



Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

*File
DHC- A19*

July 11, 1983

File: SJ0-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

Southland Royalty Company
21 Desta Drive
Midland, TX 79701

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachments

APPROVAL

Company: Southland Royalty Company

By: *[Signature]*

Date: 7/15/83



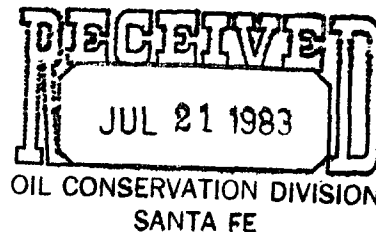
DC-419

Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

July 11, 1983



File: SJO-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachments

APPROVAL

Company: PHILLIPS PETROLEUM COMPANY

By: *G. R. Smith* G. R. Smith
Director of Reservoir Engineering

Date: July 15, 1983

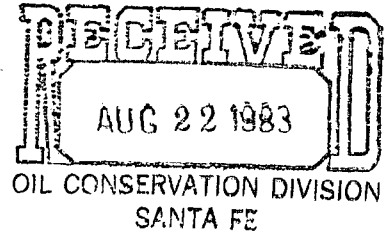


Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

July 11, 1983



File: SJ0-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

TXO Production Corporation
900 Wilco Bldg.
Midland, TX 79701

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachments

APPROVAL

Company: TXO PRODUCTION CORP.

By: *[Signature]*

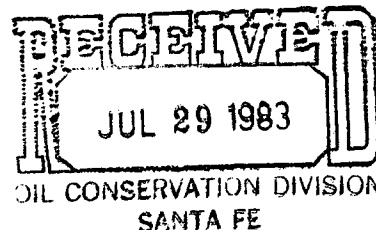
Date: August 18, 1983



Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent



July 11, 1983

File: SJ0-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

Gulf Oil Exploration and Production Company
P. O. Box 670
Hobbs, NM 88240

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachments

APPROVAL

Company: Gulf Oil Corporation

By: *J. R. Frank* J. R. Frank
Chief Production Engineer

Date: July 20, 1983

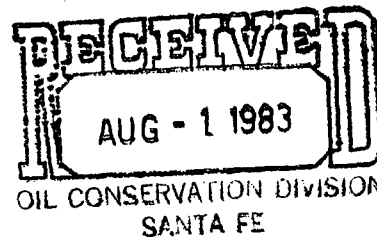


Amoco Production Company (USA)

Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

July 11, 1983



File: SJO-1253-WF

Re: Downhole Commingling of
Greenwood PG Unit Federal "C" Com Well No. 1
Shugart Morrow and North Shugart Atoka Gas Pools
1980' FSL x 660' FWL
Section 27, T-18-S, R-31-E
Eddy County, New Mexico

Westall-Mask
P. O. Box 1477
Roswell, NM 88201

Gentlemen:

Amoco Production Company, as operator of the Greenwood PG Unit Federal "C" Com Well No. 1, hereby notifies you that we have applied to the NMOCD for Administrative Approval to downhole commingle the subject well.

Our plans are to place a packer above the Morrow and Atoka gas zones and produce both through a single tubing string. Commingling will enhance the economic operation of the well and allow us to economically recover the remaining reserves.

If you have no objections to the commingling, sign below and forward one copy to the NMOCD in Santa Fe, one copy to the NMOCD in Artesia, one copy to this office and retain one copy for your records. Addressed, stamped envelopes have been provided for your convenience.

Yours very truly,

S. J. Okerson

Attachments

APPROVAL

Company: Westall-Mask

By: *[Signature]*
James T. Jennings

Date: July 29, 1983