KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265
SANTA FE. NEW MEXICO 87504-2265

TELEPHONE (505) 982-4285 TELEFAX (505) 982-2047

HAND DELIVERED

W. THOMAS KELLAHIN*

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

March 19, 1996

,

Mr. David R. Catanach Hearing Examiner Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Re:

NMOCD Case 11480
Hancock Well No. 3
Application of Meridian Oil Inc.
for Downhole Commingling,
San Juan County, New Mexico

Dear Mr. Catanach:

On behalf of Meridian Oil Inc., I filed the referenced DHC application and requested it be set for hearing in order to obtain an exception from the 50% pressure differential rule because the Pictured Cliffs pressure was 188 psi and the Mesaverde pressure was 550 psi.

Since then, as you know, the Commission has amended this rule which would now allow this case to be processed administratively because the Mesaverde pressure of 550 psi is less than the original virgin pressure for the Pictured Cliffs which was in excess of 750 psi in this area (See Exhibit 5 enclosed).

The case is set to be heard by you on Thursday of this week. I would like your permission to avoid bringing a petroleum engineering witness and have you dismiss the case from the Examiner's docket and then process this request administratively. I have enclosed the Exhibit Book and the Certificate of Notice which I would have introduced at Thursday's hearing. Please let me know if that is acceptable.

Very truly yours,

W. Thomas Kellahin

cc: Meridian Oil Inc.

Attn: Alan Alexander

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

In the matter of the hearing called by the Oil Conservation Division for the purpose of considering:

CASE NO. 11480

Application of Meridian Oil Inc. for Downhole Commingling Hancock Well No. 3
San Juan County, New Mexico.

CERTIFICATE OF MAILING AND COMPLIANCE WITH ORDER R-8054

W. THOMAS KELLAHIN, attorney in fact and authorized representative of Meridian Oil Inc., states that the notice provisions of Division Rule 1207 (Order R-8054) have been complied with, that Applicant has caused to be conducted a good faith diligent effort to find the correct addresses of all interested parties entitled to receive notice, that on the 13th day of February 1996 I caused to be sent, by certified mail return receipt requested, notice of this hearing and a copy of the application for the referenced case along with the cover letter, at least twenty days prior to the hearing set for March 21, 1996, to the parties shown in the application as evidenced by the attached copies of receipt cards, and that pursuant to Division Rule 1207, notice has been given at the correct addresses provided by such rule.

W. Thomas Kellahin

SUBSCRIBED AND SWORN to before me on this 20th day of March 1996.

Notary Public

My Commission Expires: June 15, 1998

Domestic Return Receipt

PS Form 3811, December 1994

PS Form 3811, December 1994

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Domestic Return Receip

MERDIANOIL

CASE # 11480 MARCH 7, 1996

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW EL PATIO BUILDING 117 NORTH GUADALUPE POST OFFICE BOX 2265

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

"NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

SANTA FE, NEW MEXICO 87504-2265

JASON KELLAHIN (RETIRED 1991)

W. THOMAS KELLAHIN*

February 12, 1996

HAND DELIVERED

Mr. William J. LeMay, Director Oil Conservation Division 2040 South Pacheco Santa Fe. New Mexico 87505

Re:

cc:

Hancock Well No. 3 Application of Meridian Oil Inc. for Downhole Commingling, San Juan County, New Mexico

Dear Mr. LeMay:

On behalf of Meridian Oil Inc., please find enclosed our application for downhole commingling of Aztec-Pictured Cliffs and Blanco-Mesaverde Pool production within its Hancock Well No. 3 which we request be set for hearing on the Examiner's docket now scheduled for March 7, 1996. Also enclosed is our proposed advertisement of this case for the NMOCD docket.

W. Thomas Kellahin

Meridian Oil Inc.

Attn: Alan Alexander

KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW

TELEPHONE (505) 982-4285

TELEFAX (505) 982-2047

EL PATIO BUILDING

117 NORTH GUADALUPE

POST OFFICE BOX 2265

SANTA FE, NEW MEXICO 87504-2265

JASON KELLAHIN (RETIRED 1991)

*NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

W. THOMAS KELLAHIN*

February 13, 1996

TO: ALL INTERESTED PARTIES ENTITLED TO NOTICE OF THE HEARING OF THE FOLLOWING NEW MEXICO **OIL CONSERVATION DIVISION CASE:**

> Re: NMOCD Case pending Hancock Well No. 3

Application of Meridian Oil Inc. for Downhole Commingling, San Juan County, New Mexico

On behalf of Meridian Oil Inc., please find enclosed our application for approval to downhole commingling Aztec-Pictured Cliffs Pool and Blanco-Mesaverde Pool production within its Hancock Well No. 3 which has been set for hearing on the New Mexico Oil Conservation Division Examiner's docket now scheduled for March 7, 1996. The hearing will be held at the Division hearing room located at 2040 South Pacheco, Santa Fe, New Mexico.

As an owner of an interest who may be affected by this application, we are notifying you of your right to appear at the hearing and participate in this case, including the right to present evidence either in support of or in opposition to the Failure to appear at the hearing may preclude you from any involvement in this case at a later date.

Pursuant to the Division's Memorandum 2-90, you are further notified that if you desire to appear in this case, then you are requested to file a Pre-Hearing Statement with the Division not later than 4:00 PM on Friday, March 1, 1996, with a copy delivered to the undersigned.

very truly yours.

W. Thomas Kellahin

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

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF MERIDIAN OIL INC. FOR DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.



APPLICATION

Comes now MERIDIAN OIL INC., ("Meridian") by and through its attorneys, Kellahin and Kellahin, and applies to the New Mexico Oil Conservation Division for approval to downhole commingle conventional Aztec-Pictured Cliffs Gas Pool production (160-acre standard dedication comprising the SW/4) with gas production from the Blanco-Mesaverde Gas Pool (320-acre standard dedication comprising the W/2) within the wellbore of its existing Hancock Well No. 3 located 890 feet from the South line and 990 feet from the West line (Unit M) of Section 22, T28N, R9W, NMPM. Applicant further seeks an exception to the pressure differential limitations of Rule 303(C)(b)(v).

In support of its application, Meridian states:

- (1) Meridian is the operator of the Hancock Well No. 3 located 890 feet from the South line and 990 feet from the West line of Section 22, T28N, R9W, NMPM, San Juan County, New Mexico which currently is a dual completion well within a 160-acre standard spacing and proration unit for the Aztec-Pictured Cliffs Gas Pool and within a 320-acres standard spacing and proration unit for the Blanco-Mesaverde Gas Pool. See Exhibit "A" attached.
- (2) The well is to be recompleted so that production from the Blanco-Mesaverde Gas Pool and the Aztec-Pictured Cliffs Gas Pool can be downhole commingled in the wellbore.
- (3) On September 14, 1996, Meridian filed an administrative application with the Division for the proposed downhole commingling which was denied by the Division on October 17, 1996 because the shut-in pressure of the Pictured Cliffs formation was 188 psi and for the Blanco Mesaverde was 550 psi.

NMOCD Application Meridian Oil Inc. Page 2

- (4) Meridian seeks an exception from the pressure differential limitations set forth in Rule 303(C)(1)(b)(v) and will demonstrate at hearing:
 - 1. the downhole commingling in this wellbore is necessary because evidence indicates that both the Pictured Cliffs and Mesaverde production from this well is now marginally productive and both Pictured Cliffs and Mesaverde production will have to be prematurely abandoned unless downhole commingled.
 - 2. there will not be any unrecovered crossflow between the two zones commingled;
 - 3. neither commingled zones exposes the other to damage by produced liquids;
 - 4. the fluids from each zone are compatible with the other;
 - 5. the bottom hole pressure of the highest pressured zone is less than the original bottom hole pressure of the lowest pressured zone.
 - 6. the value of the commingled production will not be less than the sum of the values of the individual production.
 - 7. ownership is common for both spacing units.
 - (6) an allocation formula to be presented at the time of the hearing.
- (7) Applicant requests that this matter be docketed for hearing on the Division's Examiner docket now scheduled for March 7, 1996 and that in the absence of any objection this matter be taken under advisement.
- (8) Copy of this application has been sent to all offsetting operators to the two spacing units for the well as shown on Exhibits "B", "C" and "D".

WHEREFORE Applicant requests that this matter be set for hearing on March 7, 1996 before a duly appointed Examiner of the Oil Conservation Division and that after notice and hearing as required by law, the Division enter its order granting this application.

Respectfully, submitted

W. Thomas Kellahin

KELLAHIN and KELLAHIN

P. O. Box 2265

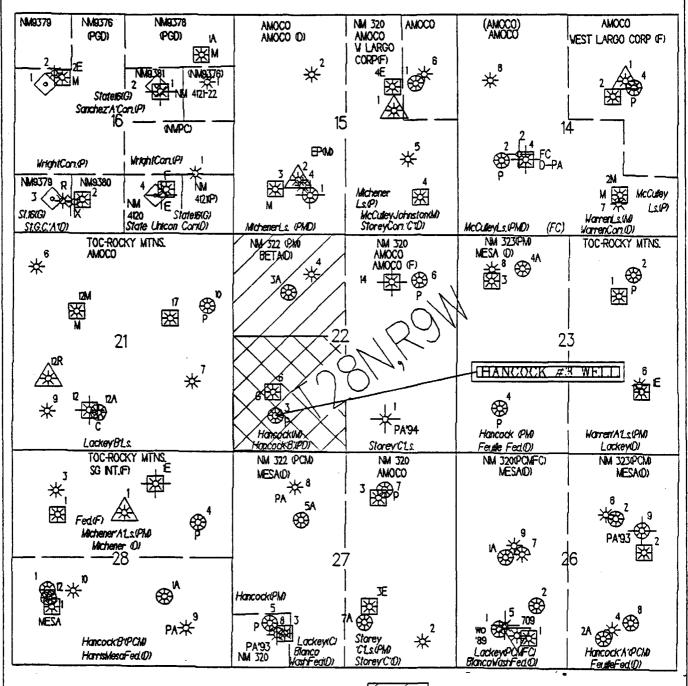
Santa Fe, New Mexico 87501

(505) 982-4285

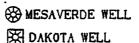
Attorneys for Applicant

EXHIBIT

HANCOCK #3 WELL UNIT M (SW/4) SECTION 22, T28N, R9W SAN JUAN CO, NEW MEXICO









Mesaverde Production Unit - 320 acres W/2 of Section 22, 28N-9W

* PICTURED CLIFFS WELL

GALLUP WELL

Pictured Cliffs Production Unit SW/4 of Section 22, 28N-9W

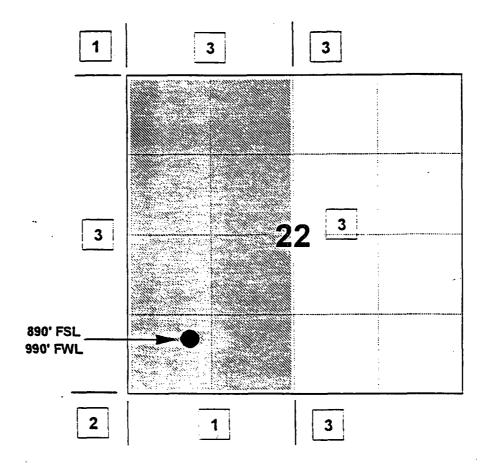
MERIDIAN OIL INC

HANCOCK #3

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1) Meridian Oil Inc	
2) Meridian Oil Inc., &	
Amoco Production Company	PO Box 800, Denver, CO 80201
3) Amoco Production Company	PO Box 800, Denver, CO 80201

EXHIBIT

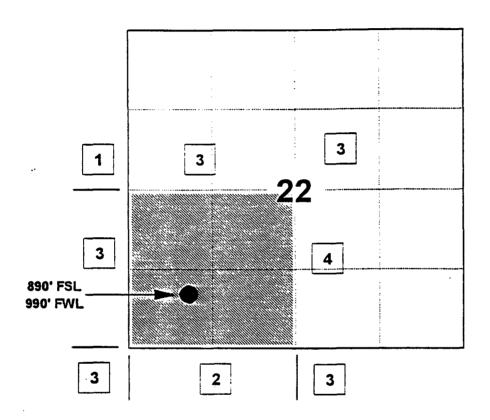
MERIDIAN OIL INC

HANCOCK #3

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1400 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134
11th Floor, Texas Commerce Bank Bidg, El Paso, TX 79901
PO Box 552, Midland, TX 79702
PO Box 800, Denver, CO 80201
10 Desta Drive, Suite 100W, Midland, TX 79705



EXHIBIT "D"

Amoco Production Company
P. O. Box 800
Denver, Colorado 80201
Attn: Pam Staley

Conoco, Inc. 10 Desta Drive, Suite 100W Midland, Texas 79705 Attn: Jerry Hoover

Louis Dreyfus Gas Holding, Inc. 1400 Quail Springs Parkway, Suite 600 Oklahoma City, OK 73134

R. H. Feuille Special 11th Floor Texas Commerce Bank Bldg El Paso Texas 79901

Marathon Oil Company
P. O. Box 522
Midland, Texas 79702
Attn: Thomas C. Lowry, Esq.

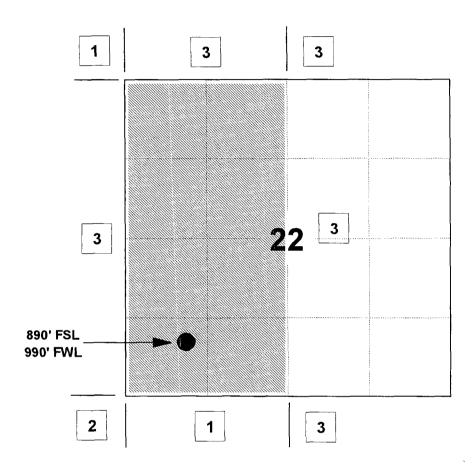
Bureau of Land Management 1235 LaPlata Hwy Farmington, New Mexico 87401

MERIDIAN OIL INC

HANCOCK #3 OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1) Meridian Oil Inc	
2) Meridian Oil Inc., &	
Amoco Production Company	PO Box 800, Denver, CO 80201
3) Amoco Production Company	PO Box 800, Denver, CO 80201

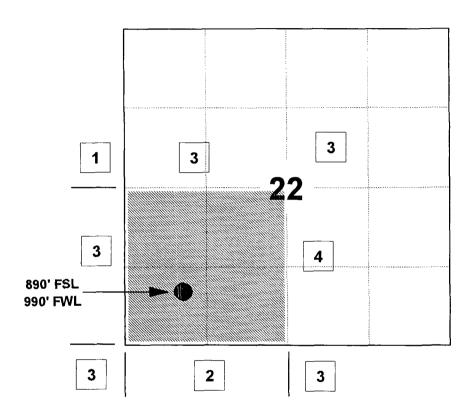
MERIDIAN OIL INC

HANCOCK #3

OFFSET OPERATOR \ OWNER PLAT

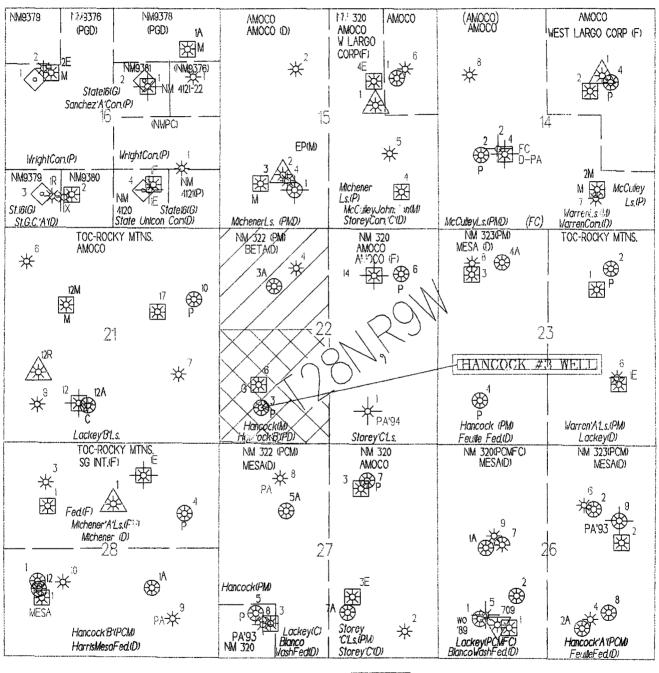
Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1) Meridian Oil Inc	
2) Meridian Oil Inc., &	
Louis Dreyfus Gas Holdings Inc.	1400 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134
R H Feuille Special	11th Floor, Texas Commerce Bank Bldg, El Paso, TX 79901
Marathon Oil Company	PO Box 552, Midland, TX 79702
3) Amoco Production Company	PO Box 800, Denver, CO 80201
4) Amoco Production Company 8	
Conoco, Inc.	10 Desta Drive, Suite 100W, Midland, TX 79705

HANCOCK #3 WELL UNIT M (SW/4) SECTION 22, T28N, R9W SAN JUAN CO., NEW MEXICO





FRUITLAND COAL WELL

* PICTURED CLIFFS WELL

MESAVERDE WELL

₩ DAKOTA WELL

GALLUP WELL



Mesaverde Production Unit - 320 ac. W/2 of Section 22, 28N-9W

Pictured Cliffs Production Unit - 160 ac. SW/4 of Section 22, 28N-9W



TOS SERVE ON DIVISION NED SERVE OF SERVE OF SERVE ON DIVISION

September 14, 1995

Mr. William J. LeMay N. M. Oil Conservation Division P. O. Box 2088 Santa Fe, N. M. 87501-2088

Re:

Hancock #3 PC/MV 890' FSL; 990' FWL Section 22, T28N R9W San Juan County, N. M.

Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced well in the Aztec Pictured Cliffs (PC) and the Blanco Mesaverde (MV) fields. The ownership of the zones to be commingled is common. The offset operators to both the Mesaverde and Pictured Cliffs are Amoco, Conoco, Marathon, R.H. Feuille Special, and Louis Dreyfus Gas Holdings Inc. The Bureau of Land Management and these offset operators will receive notification of this proposed downhole commingling.

This well has produced as a dual MV / PC well since 1959. The PC is a marginal producer with an average producing rate of 70 MCF/D. The MV's last producing rate was 35 MCF/D but is now logged off with fluid and unable to produce. The MV has had trouble producing for over a year due to a fluid loading problem. The addition of the PC gas to the producing stream should help lift the small amount of liquid (less than 1 BLPD). This would greatly enhance the MV producing efficiency thus preventing waste of the MV gas reserves. The cumulative production for the PC is 1,348 MMCF with 613 MMCF and 12,946 BO for the MV.

We believe that the MV production is currently being suppressed due to the presence of the well's production packer which limits the MV's ability to unload liquid with its small gas volume. We believe that the MV has the potential to initially produce 35 MCF/D. The PC should continue producing at its present rate of 70 MCF/D. The commingling of the subject well in the twilight of its producing life will result in better producing efficiency for both intervals. We believe that the combined gas volume will be sufficient to lift the produced liquids.

Granting this application will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

We plan to commingle this well by pulling the PC tubing and the MV tubing, eliminate the production packer, and run a single string of 2-3/8" tubing.

The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed downhole commingling. The fluids from each zone are compatible and no precipitates will be formed to cause damage to either reservoir. PC and MV wells have been successfully commingled in many areas of San Juan Basin with no detrimental effects. The daily production will not exceed the limit of Rule 303c, Section 1a, Part 1. The shut-in pressures for the PC and MV are 188 and 550 psi, respectively, however, we do not believe that there will be any significant crossflow.

To allocate the commingled production to each of the zones, the current PC rate of 70 MCF/D and the last MV rate of 35 MCF/D were utilized to obtain the following gas allocation: PC Gas = 66% and MV Gas = 33%. Since all of the well's oil has been produced by the MV, the oil allocation is: PC Oil = 0% and MV Oil = 100%.

Included with this letter are plats showing ownership of offsetting leases for both the PC and MV, a copy of letters to the offset operators and BLM, before and after wellbore diagrams, production curves, a pertinent data sheet, the proposed workover procedure, and maps indicating the offset PC and MV wells in the area.

Yours truly,

P. M. Pippin

Senior Production Engineer

PMP:pmp attachments

cc: Frank Chavez - Aztec OCD

OIL CONSERVATION DIVISION

October 17, 1995

MERIDIAN OIL

Meridian Oil Inc. P.O. Box 4289 Farmington, New Mexico 87499-4289 OCT 1 8 1995

FARMINGTON, NEW MEXICO REGULATORY

Attention: Mr. P. M. Pippin

Re: Hancock Well No. 3

Section 22, T-28N, R-9W San Juan County, N. M.

Dear Mr. Pippin:

Pursuant to your request for downhole commingling of Pictured Cliffs and Mesaverde pool production within the Hancock Well No. 3, please be advised that the well does not qualify for administrative approval pursuant to Division Rule No. 303(C)(1)(b)(vi).

If you would like to set the application for hearing before a Division Examiner, please advise.

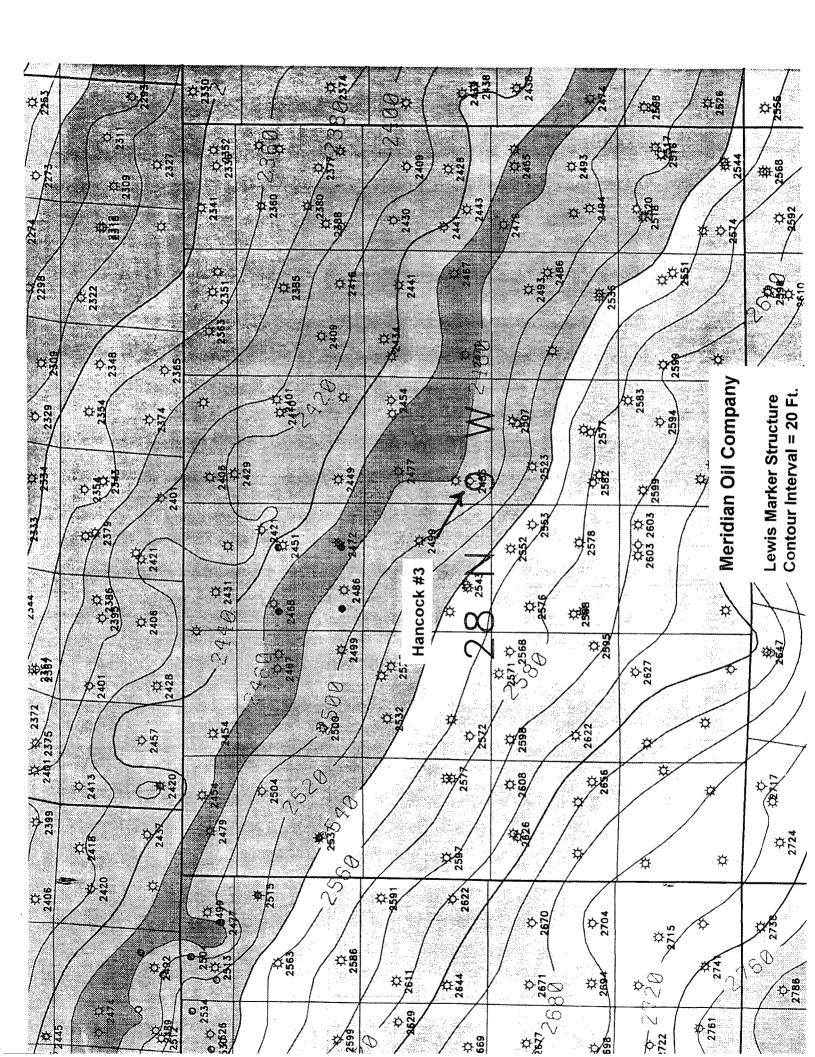
Sincerely,

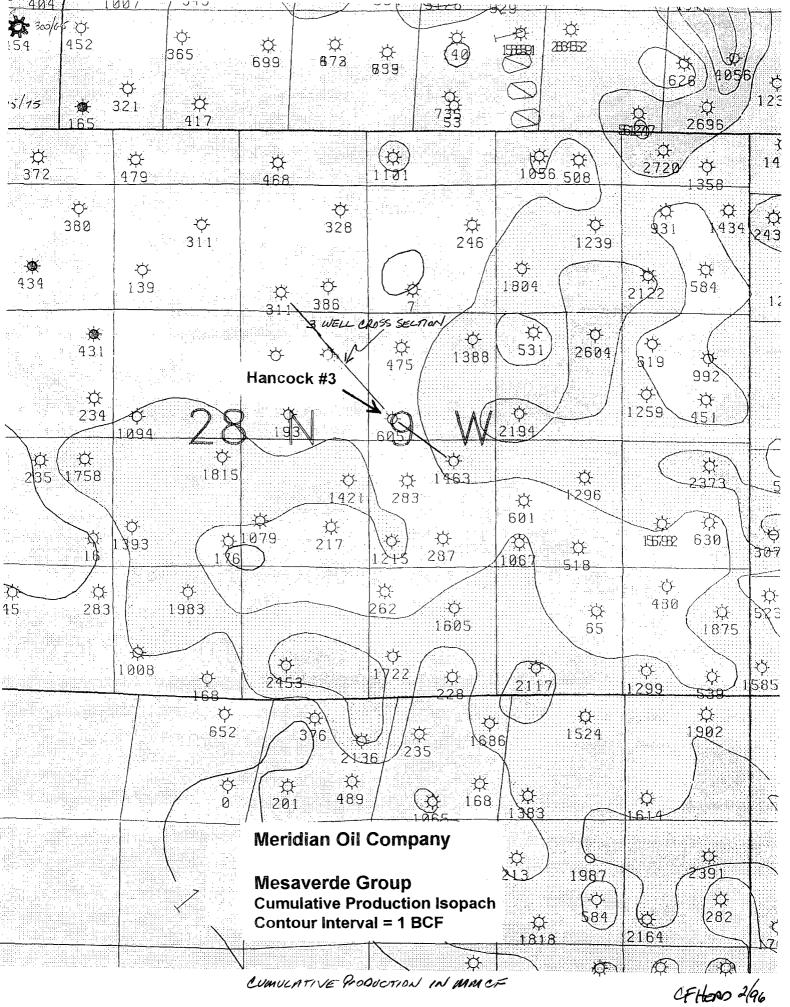
David Catanach

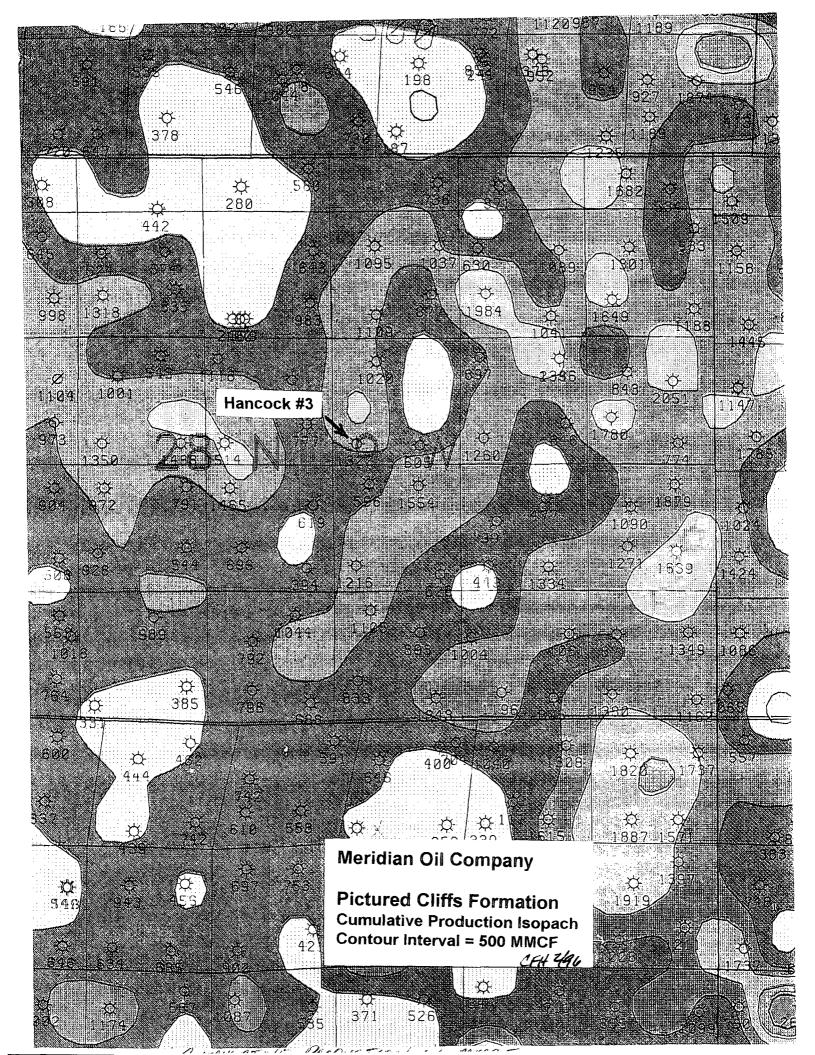
Engineer

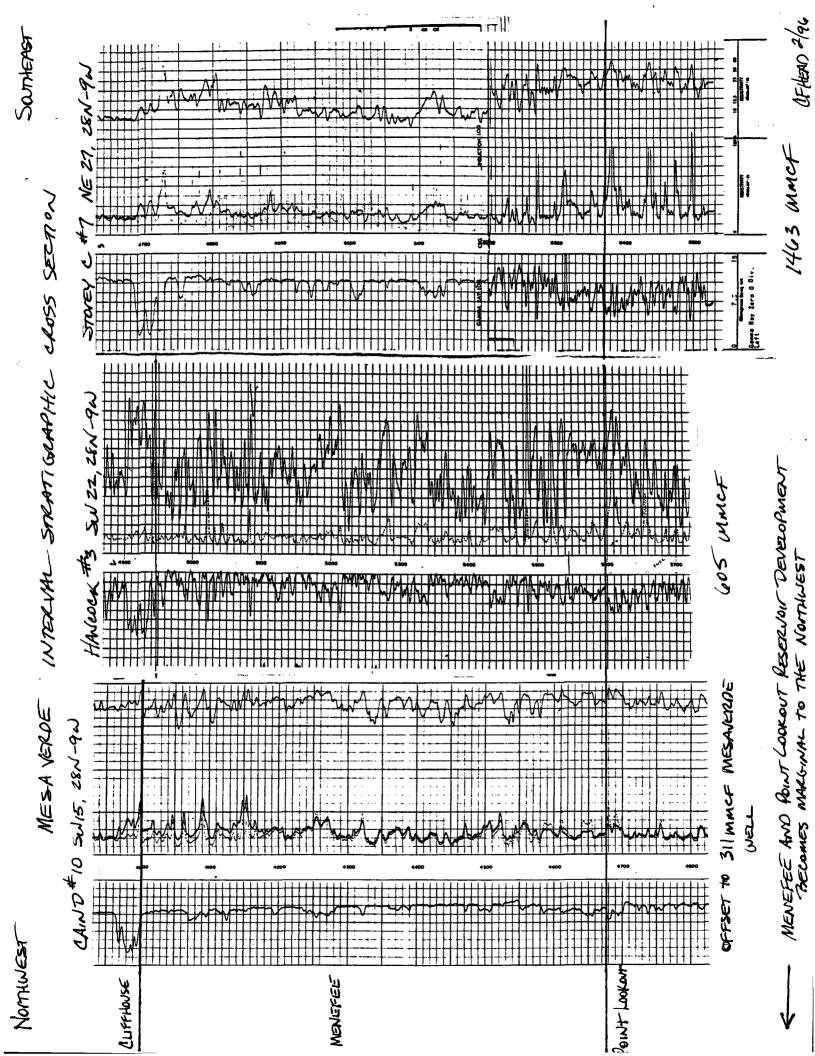
ALLOCATION FORMULA FOR THE HANCOCK # 3 PC/MV WELL

To allocate the commingled production to each of the zones, the current PC rate of 70 MCF/D and the last MV rate of 35 MCF/D will be utilized to obtain the following gas allocation: PC Gas = 66% and MV Gas = 33%. Since all of the well's oil has been produced by the MV, the oil allocation is: PC Oil = 0% and MV Oil = 100%.

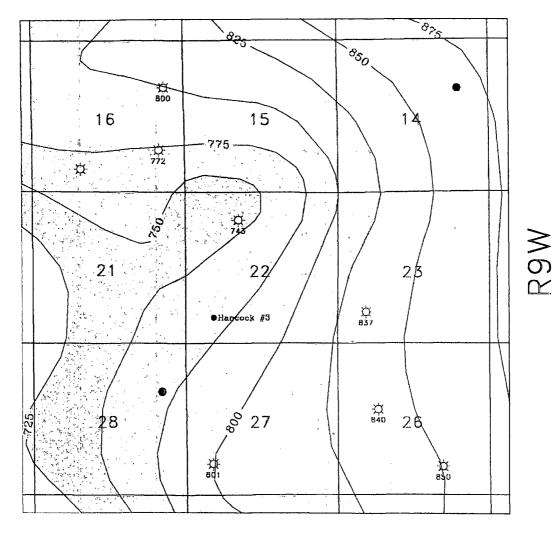










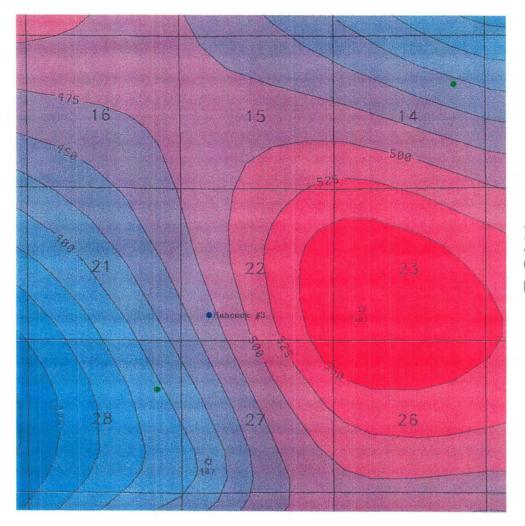


PICTURED CLIFFS ORIGINAL PRESSURE

CONTOUR INTERVAL = 25 PSI

- ♥ PRESSURE DATA POINT
 - COMMINGLE WELL
 - HANCOCK #3

T28N



MESA VERDE CURRENT PRESSURE

CONTOUR INTERVAL = 25 PSI

- PRESSURE DATA POINT
 - COMMINGLE WELL
 - HANCOCK #3

≥ 00 20