

ABOVE THIS LINE FOR DIVISION USE ONLY

**NEW MEXICO OIL CONSERVATION DIVISION**

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



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**ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

**Application Acronyms:**

- [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication  
 NSL  NSP  SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
 DHC  CTB  PLC  PC  OLS  OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX  PMX  SWD  IPI  EOR  PPR

- [D] Other: Specify \_\_\_\_\_

[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

**Note:** Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name: Alan W. Bohling Signature: *Alan W. Bohling* Title: Regulatory Agent Date: Nov. 20, 2008  
 e-mail Address: ABohling@chevron.com



Chevron Midcontinent, L.P.  
15 Smith Road  
Midland, Texas 79705  
Tel: 432-687-7158  
Fax: 432-687-7289  
[ABohlin@chevron.com](mailto:ABohlin@chevron.com)

November 20, 2008

New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

RE: Administrative Down Hole Commingling Application, John Charles #7 Well  
API No. 30-045-06445  
Unit N, Section 13, Township 27 North, Range 09 West NMPM  
San Juan County, New Mexico

Gentlemen:

Four Star Oil & Gas Co. respectfully submits to the New Mexico Oil Conservation Division for approval of the commingling of three zones within the John Charles #7 well (the Chacra, Mesaverde and Dakota). Working Interest Ownership is the same for each of these three zones.

Enclosed with this cover letter, you will find the required information:

1. NMOCD Form C-102(s) (Showing each zone(s) spacing unit and acreage dedication).
2. NMOCD Form C-107A including Supplemental Information.
3. Copies of other pertinent information (Approved DHC Orders & Wellbore Diagram).

A Copy of this Administrative DHC Application, with attachments, is concurrently being sent to the U. S. Bureau of Land Management-Farmington Office.

If after your review of the enclosed material you should require any additional technical information, please contact me at 432-687-7158 ([ABohling@chevron.com](mailto:ABohling@chevron.com)) for non-technical information, or Ms. Jean Kohoutek at 281-561-3509 for technical information.

Thank you in advance for your review and approval of our Administrative Application for Downhole Commingling of the Chacra, Mesaverde and Dakota zones within the John Charles #7 wellbore.

Sincerely,  
  
Alan W. Bohling  
Regulatory Agent

Cc: Jean M. Kohoutek

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-045-06445		<sup>2</sup> Pool Code 82329		<sup>3</sup> Pool Name Otero-Chacra	
<sup>4</sup> Property Code 17692		<sup>5</sup> Property Name John Charles			<sup>6</sup> Well Number 7
<sup>7</sup> OGRID No. 131994		<sup>8</sup> Operator Name Four Star Oil & Gas Co.			<sup>9</sup> Elevation 6006' GR

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	27-N	09-W		790	South	1850	West	San Juan

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 160 (SW/4)		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

*No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.*

16				<p><sup>17</sup> <b>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p><i>Alan W. Bohling</i> Nov. 20, 2008 Signature Date</p> <p>Alan W. Bohling – Regulatory Agent Printed Name</p>
				<p><sup>18</sup> <b>SURVEYOR CERTIFICATION</b> <i>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 belief.</i></p> <p>April 28, 1960 Date of Survey</p> <p>Signature and Seal of Professional Surveyor:  Ernest V. Echohawk</p> <p>1545 Certificate Number</p>
			<p>1850' → ○ ↑ 790'</p> <p>← Otero-Chacra, SW/4</p>	

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1625 N. French Dr., Hobbs, NM 88240  
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1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies  
 AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 30-045-06445		<sup>2</sup> Pool Code 72319		<sup>3</sup> Pool Name Blanco-Mesaverde	
<sup>4</sup> Property Code 17692		<sup>5</sup> Property Name John Charles			<sup>6</sup> Well Number 7
<sup>7</sup> OGRID No. 131994		<sup>8</sup> Operator Name Four Star Oil & Gas Co.			<sup>9</sup> Elevation 6006' GR

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	27-N	09-W		790	South	1850	West	San Juan

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320 (W/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

*No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.*

<p>16</p> <p>1850' → ○ ↑ 790'</p>									
								<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p><i>Alan W. Bohling</i> Nov. 20, 2008 Signature Date</p> <p>Alan W. Bohling - Regulatory Agent Printed Name</p>	
								<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p><i>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 belief.</i></p> <p>April 28, 1960 Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Ernest V. Echohawk</p> <p>1545 Certificate Number</p>	

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State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number <b>30-045-06445</b>		<sup>2</sup> Pool Code <b>71599</b>		<sup>3</sup> Pool Name <b>Basin-Dakota</b>	
<sup>4</sup> Property Code <b>17692</b>		<sup>5</sup> Property Name <b>John Charles</b>			<sup>6</sup> Well Number <b>7</b>
<sup>7</sup> OGRID No. <b>131994</b>		<sup>8</sup> Operator Name <b>Four Star Oil &amp; Gas Co.</b>			<sup>9</sup> Elevation <b>6006' GR</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	27-N	09-W		790	South	1850	West	San Juan

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres <b>320 (W/2)</b>		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

*No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.*

<sup>16</sup>          						<sup>17</sup> OPERATOR CERTIFICATION	
						<i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>	
						<i>Alan W. Bohling</i>	Nov. 20, 2008
						Signature	Date
						Alan W. Bohling – Regulatory Agent	
						Printed Name	
						<sup>18</sup> SURVEYOR CERTIFICATION	
						<i>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 belief.</i>	
						April 28, 1960	
						Date of Survey	
						Signature and Seal of Professional Surveyor:	
						Ernest V. Echohawk	
						1545	
						Certificate Number	

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date May 1, 1960

Operator SKELLY OIL COMPANY Lease John Charles  
Well No. 7 Unit Letter ■ Section 13 Township 27 North Range 9 West NMP  
Located 790 Feet From South Line, 1850 Feet From West Line  
County San Juan G. L. Elevation 6000 Dedicated Acreage 300 Acres  
Name of Producing Formation Sabote Pool Undesignated

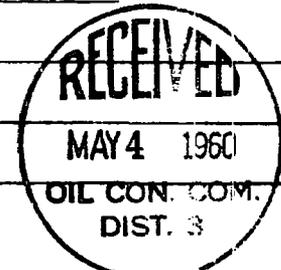
1. Is the Operator the only owner\* in the dedicated acreage outlined on the plat below?  
Yes  No
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes  No . If answer is "yes,"  
Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner

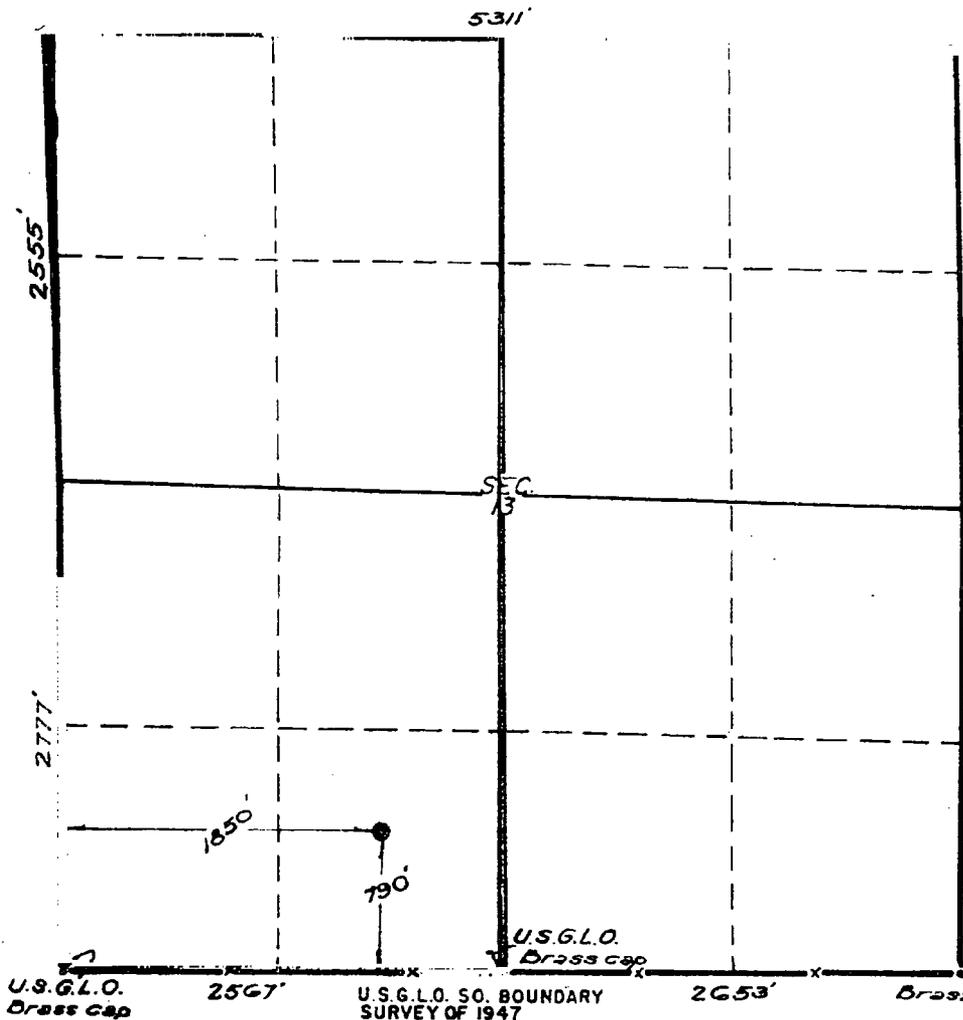
Land Description

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



Section B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

SKELLY OIL COMPANY

(Operator)

H. E. Cab  
(Representative)

Box 425  
Farmington, New Mexico

Address

This is to certify that the well location shown on the plat in Section A was plotted from field notes of Ernest V. Echolaw 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 APRIL 29, 1960

Ernest V. Echolaw  
Ernest V. Echolaw

Registered Land Surveyor.

Certificate No. 1545

District I  
1625 N. French Drive, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

District II  
1301 W. Grand Avenue, Artesia, NM 88210

**Oil Conservation Division**

APPLICATION TYPE

District III  
1000 Rio Brazos Road, Aztec, NM 87410

1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Single Well

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

**APPLICATION FOR DOWNHOLE COMMINGLING**

Establish Pre-Approved Pools  
EXISTING WELLBORE  
 Yes  No

Four Star Oil & Gas Company

15 Smith Road, Midland, TX 79705

Operator John Charles Address 15 Smith Road, Midland, TX 79705 *DHC-4131*

Lease John Charles Well No. 7 Unit Letter-Section-Township-Range UL N, SESW, Sec. 13, T-27-N, R-09-W County San Juan

OGRID No. 131994 Property Code 17692 API No. 30-045-06445 Lease Type:  Federal  State  Fee

DATA ELEMENT	UPPER ZONE	UPPER INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Otero-Chacra	Blanco-MV	Basin Dakota
Pool Code	82329	72319	71599
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	2940'-3100' (Proposed)	4290'-4385'	6370'-6480'
Method of Production (Flowing or Artificial Lift)	Plunger Lift	Plunger Lift	Plunger Lift
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)	216 psig Calculated from Blanco 2A (CH) SITP	222 psig Calculated from SITP	352 psig Calculated from SITP
Oil Gravity or Gas BTU (Degree API or Gas BTU)	1190	1300	1240
Producing, Shut-In or New Zone	New Zone	Producing	Producing
Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.)	See attachment	Date: 10/01/08 Rates: 42 mcfpd; 0.9 bblpd (water); 0 (oil)	Date: 10/01/08 Rates: 28 mcfpd; 0.25 bblpd (water); 0 (oil)
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil Gas (To be determined later by subtraction method) % %	Oil Gas (Based on production history) 58 % 60 %	Oil Gas (Based on production history) 42 % 40 %

**ADDITIONAL DATA**

Are all working, royalty and overriding royalty interests identical in all commingled zones? Yes  No

If not, have all working, royalty and overriding royalty interest owners been notified by certified mail? Yes  No

Are all produced fluids from all commingled zones compatible with each other? Yes  No

Will commingling decrease the value of production? Yes  No

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands or the United States Bureau of Land Management been notified in writing of this application? Yes  No

NMOCD Reference Case No. applicable to this well: \_\_\_\_\_

**Attachments:**

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- Production curve for each zone for at least one year. (If not available, attach explanation.)
- For zones with no production history, estimated production rates and supporting data.
- Data to support allocation method or formula.
- Notification list of working, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

**PRE-APPROVED POOLS**

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

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

SIGNATURE Alan W. Bohling TITLE Regulatory Agent DATE 11/20/2008

TYPE OR PRINT NAME Alan W. Bohling TELEPHONE NO. (432) 687-7158

E-MAIL ADDRESS ABohling@chevron.com

## **John Charles 7 Supplemental Data for C-107A**

### **Well History**

This well was drilled in 1960 and dual-completed in the Mesaverde and Dakota. Both zones are on production and on artificial lift. Four Star Oil and Gas proposes to add a Chacra completion and seeks approval to downhole commingle the Chacra, Mesaverde, and Dakota. On current spacing and with the economic limitations in drilling a stand-alone Chacra well, this is the most economic method of capturing the Chacra reserves.

### **Production History**

The current production is 70 mcfpd from the Mesaverde and Dakota; the Mesaverde contributes 42 mcfpd and Dakota contributes 28 mcfpd based on the current dual-stringed production. Both zones produce very little oil and water; cumulatively, the zones produce less than 0.5 bbl/day of fluids. An estimated initial rate for the Chacra completion is 150 mcfpd. This estimate is based on IP's and production from surrounding wells in offset sections. See attached graphs and table for supporting data.

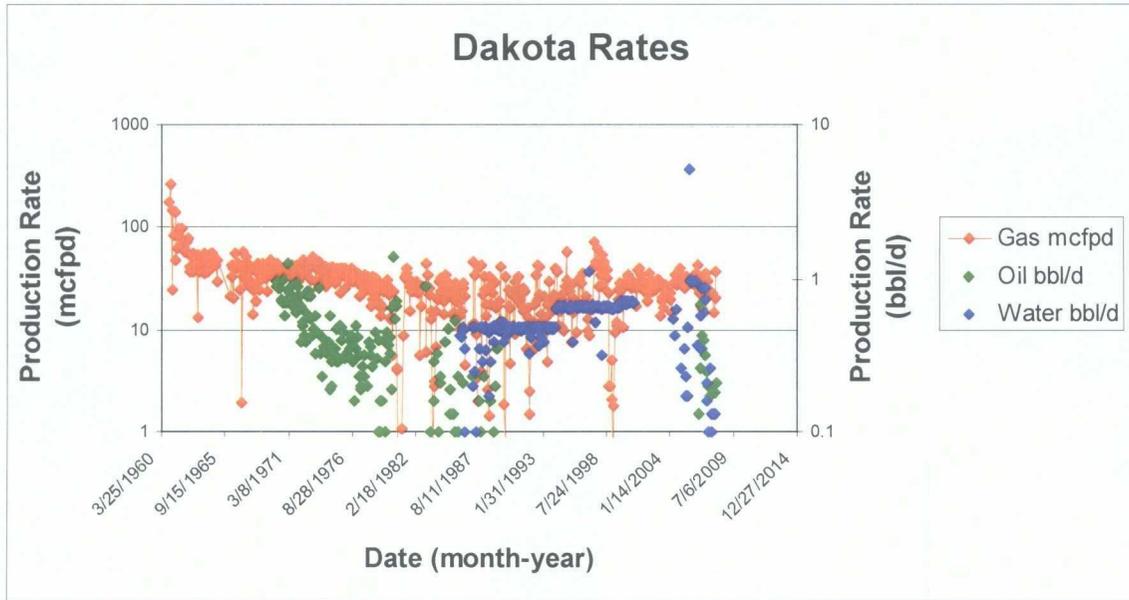
### **Pressure Data**

The bottomhole pressure of the Mesaverde and Dakota producing zones was calculated from the shut in tubing pressure of each string. The fluid column was negligible due to small fluid column and sufficient artificial lift. Offset Chevron Blanco Wash wells in the same area were used to estimate the expected bottomhole pressure of the new Chacra completion. A surface shut-in casing pressure was used here also. Please see attachments for supporting data.

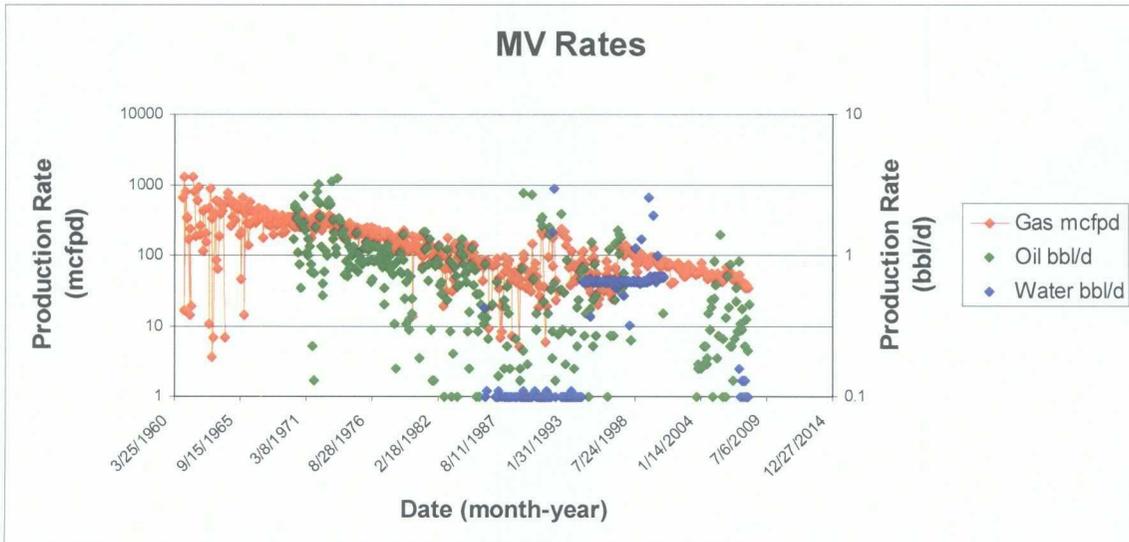
### **Allocation of Production**

Four Star Oil & Gas proposes to use an allocation based on the subtraction method. A baseline of production and decline will be established from the existing production data. The incremental production added after the Chacra completion will be used to determine an appropriate allocation factor for the new zone. See the attached historical production curves for the existing Mesaverde and Dakota producing zones.

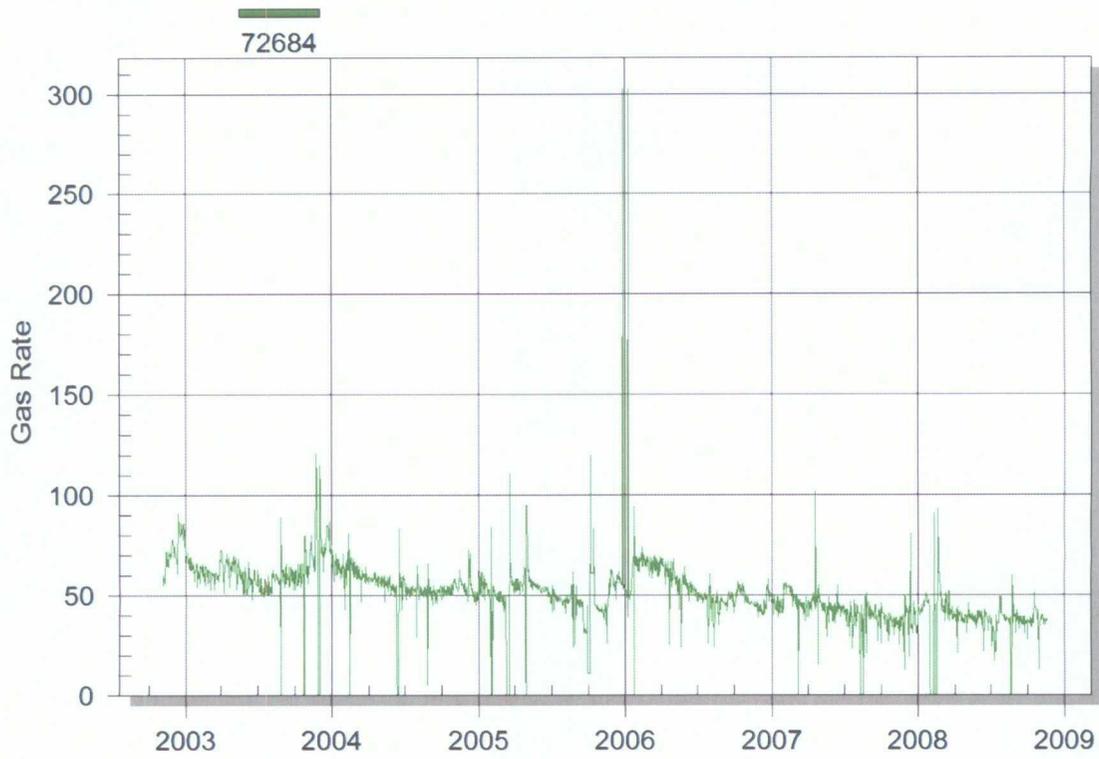
Historical Dakota production rates:



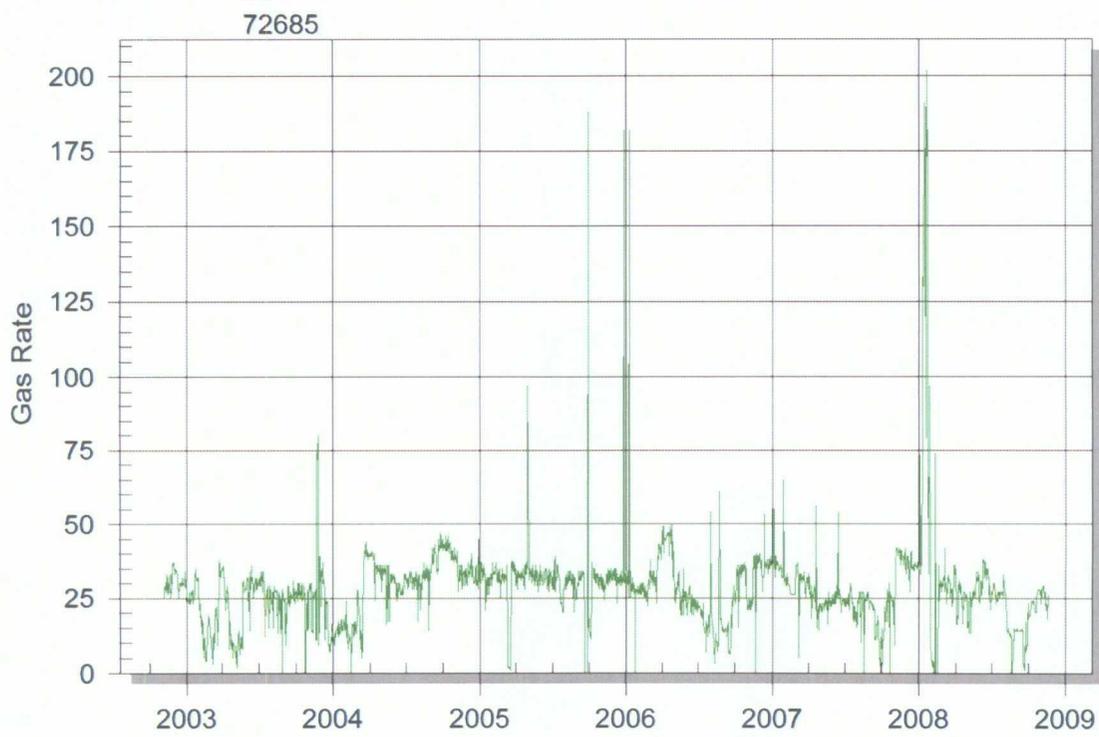
Historical Mesaverde production rates:



Mesaverde Daily Production History



Dakota Daily Production History



**John Charles #7 Dual Production Summary**

Allocation Factors Based on Historical Production						
Date	GAS			OIL		
	MCF/D	MV Zone	DK Zone	BBL/D	MV Zone	DK Zone
7/31/2008	60.71	56.48%	43.52%	0.25	44.00%	56.00%
6/30/2008	67.27	54.66%	45.34%	0.13	7.69%	92.31%
5/31/2008	63.06	60.31%	39.69%	0.44	56.82%	43.18%
4/30/2008	61.3	61.50%	38.50%	0.68	67.65%	32.35%
3/31/2008	72.65	58.71%	41.29%	0.51	58.82%	41.18%
2/29/2008	36.14	67.07%	32.93%	0.4	50.00%	50.00%
1/31/2008	79.16	53.59%	46.41%	0.59	57.63%	42.37%
12/31/2007	74.38	51.34%	48.66%	0.66	68.18%	31.82%
11/30/2007	72.97	48.10%	51.90%	0.39	53.85%	46.15%
10/31/2007	58.22	64.15%	35.85%	0.37	94.59%	5.41%
9/30/2007	54.66	72.69%	27.31%	0.24	50.00%	50.00%
8/31/2007	56.52	59.87%	40.13%	0.36	61.11%	38.89%
7/31/2007	59.97	63.26%	36.74%	0.12	58.33%	41.67%
6/30/2007	66.13	63.21%	36.79%	0.48	64.58%	35.42%
5/31/2007	64.84	65.58%	34.42%	0.65	63.08%	36.92%
4/30/2007	68.36	65.73%	34.27%	0.55	63.64%	36.36%
3/31/2007	76.16	59.34%	40.66%	1.06	83.96%	16.04%
2/28/2007	82.5	63.55%	36.45%	0.55	52.73%	47.27%
1/31/2007	81.49	56.38%	43.62%	0.63	47.62%	52.38%
		60.29%	39.71%		58.12%	41.88%

**Offset Chacra Well Production** - justification for John Charles 7 Chacra IP. The offsets also prove that the Chacra formation does not produce oil and produces very little water.

API	Lease	Completion Date	Initial Rate	Last Month w/ Volumes	Last Oil/Day	Last Water/Day
300451182900	FLORANCE 66	9/4/1996	34	12/31/2006	0	0
300452458300	SCHWERDTFEGER A 3E	3/17/1997	125	12/31/2006	0	0
300452659100	FLORANCE LS 4A	3/6/1986	200	12/31/2006	0	0
300453101600	FLORANCE 66F	7/19/2002	75	12/31/2006	0	0
300453105100	SCHWERDTFEGER A 3F	12/23/2002	75	12/31/2006	0	0
300453105200	SCHWERDTFEGER A 5F	6/26/2002	90	12/31/2006	0	0
300450677300	BURROUGHS COM B 4	8/1/1993	100	1/31/2007	0	0
300452153200	BLANCO 25	6/1/1975	170	2/28/2007	0	0
300452153300	JAQUES COM 1	6/1/1975	170	1/31/2007	0	0
300452266000	JOHN CHARLES 6A	7/1/1991	70	1/31/2007	0	0
300452267200	NELLIE PLATERO 5A	12/17/1992	180	2/28/2007	0	1
300452362700	PLATERO-NELLIE 6	7/1/1980	140	2/28/2007	0	0.1
300452362800	CHARLES JOHN 8	7/1/1980	250	2/28/2007	0	0.1
300452362900	MARSHALL-A 7A	5/1/1980	300	1/31/2007	0	0
300452481200	CHARLES JOHN 7E	5/1/1981	180	1/31/2007	0	0
300452637100	TURNER HUGHES 17A	6/4/2003	130	12/31/2006	0	0
300452638100	TURNER HUGHES 15A	7/6/1998	125	12/31/2006	0	0
300452653300	HUGHES 10A	12/11/2001		12/31/2006	0	0
300450699100	NAVAJO ALLOTTED GC B 1	12/19/2006	310	2/28/2007	0	0
300450703700	SCHWERDTFEGER A LS 9	7/22/2004	84	2/28/2007	0	0
300452152300	HANCOCK 7	1/23/1975	100	2/28/2007	0	1
300452156300	HANCOCK A 10	1/3/1975	233	2/28/2007	0	1
300452532200	STOREY C 2M	8/3/1995	85	2/28/2007	0	0
300452655900	SCHWERDTFEGER A LS 10A	8/22/2003	225	2/28/2007	0	0
300452663600	SCHWERDTFEGER A LS 9A	8/13/2004	232	2/28/2007	0	0
300452668300	SCHWERDTFEGER A LS 1A	3/6/1986	250	2/28/2007	0	0
300452279500	NAVAJO ALLOTTED GAS COM B 1A	8/10/2006	304	2/28/2007	0	2
300452656800	MICHENER A	12/16/1985	282	5/31/2007	0	0
		<b>Average</b>	167.37		0.00	0.19

### John Charles 7 Mesaverde

Gas Gravity=	<b>0.761</b>		
N2=	0.780	%	9/30/2008
CO2=	0.550	%	
H2S=	0.000	%	
Condensate?	n	(y/n)	
Tpc=	404.59	R	
Ppc=	666.03	psia	
Average Temp.=	<b>140</b>	Deg F	
TVD =	<b>4300</b>	Ft	
		<b>Press.</b>	
		psig	z
SI Tubing Pressure=	<b>200</b>		0.967
BHP =	<b>222</b>		0.963
Average Tbg Pressure:	<b>212</b>		0.965

Procedure:

- 1) Input the SITP, Gas Gravity, TVD, Avg Temp, etc
- 2) Based on the calcd BHP, input the average Tbg Press and get the "Final" BHP estimate

### John Charles 7 Dakota

Gas Gravity=	<b>0.761</b>		
N2=	0.780	%	9/30/2008
CO2=	0.550	%	
H2S=	0.000	%	
Condensate?	n	(y/n)	
Tpc=	404.59	R	
Ppc=	666.03	psia	
Average Temp.=	<b>140</b>	Deg F	
TVD =	<b>6400</b>	Ft	
		<b>Press.</b>	
		psig	z
SI Tubing Pressure=	<b>300</b>		0.952
BHP =	<b>352</b>		0.944
Average Tbg Pressure:	<b>326</b>		0.948

## John Charles 7 Chacra

<b>Gas Gravity=</b>	<b>0.761</b>		
<b>N2=</b>	0.780	%	9/30/2008
<b>CO2=</b>	0.550	%	
<b>H2S=</b>	0.000	%	
<b>Condensate?</b>	n	(y/n)	
<b>Tpc=</b>	404.59	R	
<b>Ppc=</b>	666.03	psia	
<b>Average Temp.=</b>	<b>140</b>	Deg F	
<b>TVD =</b>	<b>3100</b>	Ft	
		<b>Press.</b>	
		<b>psig</b>	<b>z</b>
	SI Tubing Pressure=	<b>200</b>	0.967
<b>BHP =</b>		<b>216</b>	0.964
	<b>Average Tbg Pressure:</b>	<b>208</b>	0.966

### Bottom Hole Pressures:

Chacra = 216 psig

Mesaverde = 222 psig

Dakota = 352 psig

The calculated bottomhole pressures are within a close range. All three zones produce less than ½ BWPD combined. Each zone contributes predominantly natural gas. Any fluids that are produced are removed via artificial lift, which helps maintain low bottomhole pressure. Furthermore, all gases from all zones are compatible. The well is tied into a compressor facility station at John Charles 2 so the pressure at the wellhead is between 30-40 psi, again ensuring no cross flow.

Overall, the approval of this downhole commingle will ensure the best way to recover marginal remaining reserves in the life of the John Charles 7 well. By doing so, this would protect the correlative rights and eliminate waste.



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

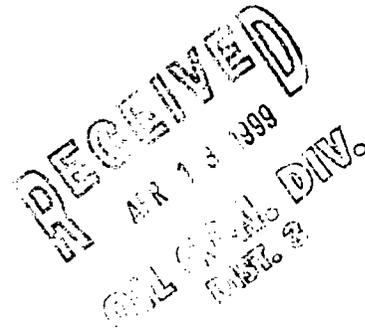
OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

ADMINISTRATIVE ORDER DHC-2258

Four Star Oil and Gas Company  
3300 N. Butler Avenue  
Suite 100  
Farmington, New Mexico 87401

Attention: Mr. Rached Hindi

*John Charles No. 7  
API No. 30-045-06445  
Unit N, Section 13, Township 27 North, Range 9 West, NMPM,  
San Juan County, New Mexico.  
Blanco-Mesaverde (Prorated Gas - 72319) and  
Otero-Chacra (Gas - 82329) Pools*



Dear Mr. Hindi:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the above described well to commingle production from the subject pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

The applicant shall consult with the supervisor of the Aztec District Office of the Division upon completion and testing of the well in order to establish a fixed allocation of production from each of the commingled zones. Upon approval by the Division's Aztec District Office, the applicant shall submit the allocation formula to the Santa Fe Office of the Division.

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

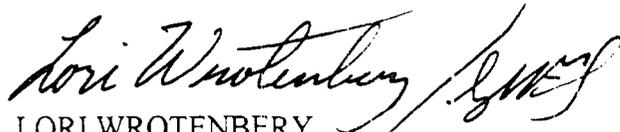
*Administrative Order DHC-2258  
Four Star Oil and Gas Company  
April 8, 1999  
Page 2*

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Pursuant to Rule 303.H., the commingling authority granted herein may be rescinded by the Division Director if conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 8th day of April, 1999.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION



LORI WROTENBERY  
Director

SEAL

LW/DRC

cc: Oil Conservation Division - Aztec /  
Bureau of Land Management-Farmington



# John Charles 7

## San Juan County, New Mexico

### Proposed Well Schematic as of 02-06-2008

API: 30-045-0644500  
 Legals: Sec 13 - T 27N - R 9W  
 Field: Blanco MV

KB  
 KB Elev  
 GR Elev

Spud Date: 5/6/60  
 Compl Date:

Formation Tops:

MV	3583
Point Lookout	4238
Mid. Gallup	5528
Lower Gallup	5740
I Dakota	6373
II Dakota	6411
III Dakota	6500
IV Dakota	6627

Surface Casing:  
 10-3/4" 32.75# H-40 Csg Set @ 335 in 15" hole  
 Cmt'd with 375 sks  
 TOC = 0' (Circ cmt)

Tubing Details:  
 2-3/8" tbg  
 EOT @ 6344'

Chacra Perfs: NEW Pay Zone  
 Need to Log Chacra

Frac Recommendation:  
 Pump 15% HCL and diversion balls  
 Foam Frac; 20/40 + 10/20 sand

**Pt. Lookout (MV) Perforations: 4 SPF**

Perforations	Net Feet	Holes
4290-4334	44	176
4340-4354	14	56
4360-4372	12	48
4375-4385	10	40

**Gallup Perfs: NEW Pay Zone**

Dependent upon geologist; however,  
 5475-80  
 5630-44  
 5692-5730  
 5936  
 More?

Recommend:  
 Pump 15% HCL and diversion balls  
 20#, x-linked gel + KCL water

Intermediate Casing:  
 7 5/8" 24# & 26.4#  
 Cmt'd with 200 sks  
 Calc TOC @ 2214'

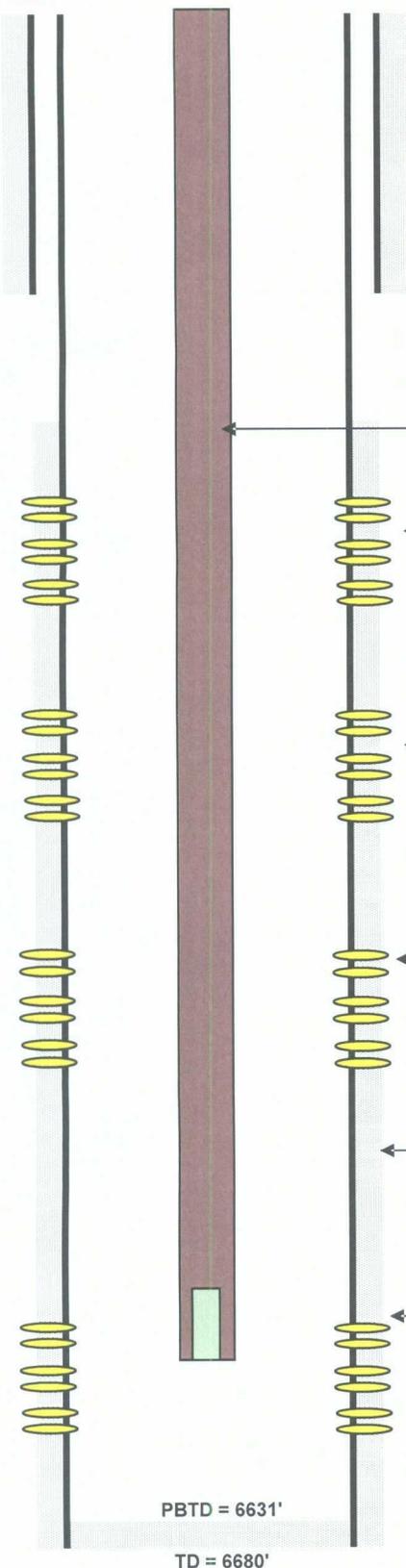
**Dakota Perforations: 4 SPF**

Perforations	Net Feet	Holes	
6374-90	16	64	Dakota I
6450-56	6	24	Dakota II
6464-80	16	64	Dakota II

6/09/60 Dakota II (6450-80') 20,000# 40-60 Sand & 27,105 gals Crude Oil  
 BDP 4000-2800#, avg IR 8.2 bpm

6/11/60 Dakota I (6374-90') 20,000# 40-60 Sand & 26,100 gals Crude Oil  
 BDP 3700#, avg IR 8 bpm

7-01-60 Test (3hrs) Dakota (6374-6480')  
 950 mcf/d, CAOF 985 mcf/d



PBTD = 6631'

TD = 6680'