

THE APPLICATION OF TENNECO OIL
COMPANY FOR A DUAL COMPLETION

ORDER NO. MC-2749

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION



Under the provisions of Rule 112-A Tenneco Oil Company made application to the New Mexico Oil Conservation Division on November 3, 1980, for permission to dually complete its Jicarilla C Well No. 5E located in Unit A of Section 24, Township 26 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit production of gas from the Blanco-Mesaverde Pool and from the Basin-Dakota Pool.

Now, on this 13th day of November, 1980, the Division Director finds:

1. That application has been filed under the provisions of Rule 112-A of the Division's Rules and Regulations;
2. That satisfactory information has been provided that all operators of offset acreage have been duly notified;
3. That waivers of objection have been received from such offsetting operators;
4. That the proposed dual completion will not cause waste nor impair correlative rights; and
5. That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Tenneco Oil Company be and the same is hereby authorized to dually complete its Jicarilla C Well No. 5E located in Unit A of Section 24, Township 26 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit production of gas from the Blanco-Mesaverde Pool and from the Basin-Dakota Pool through the casing-tubing annulus and the tubing respectively.

PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

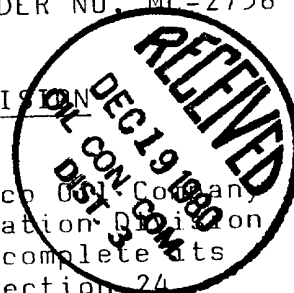
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Division Director

THE APPLICATION OF TENNECO OIL
COMPANY FOR A DUAL COMPLETION

ORDER NO. MC-2756

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION



Under the provisions of Rule 112-A, Tenneco Oil Company made application to the New Mexico Oil Conservation Division on October 20, 1980, for permission to dually complete its Jicarilla C Well No. 5E located in Unit A of Section 24, Township 26 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit production of gas from the Blanco-Mesaverde Pool and from the Basin-Dakota Pool.

Now, on this 24th day of November, 1980, the Division Director finds:

1. That application has been filed under the provisions of Rule 112-A of the Division's Rules and Regulations;
2. That satisfactory information has been provided that all operators of offset acreage have been duly notified;
3. That no objections have been received within the waiting period as prescribed by said rule;
4. That the proposed dual completion will not cause waste nor impair correlative rights; and
5. That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Tenneco Oil Company, be and the same is hereby authorized to dually complete its Jicarilla C Well No. 5E located in Unit A of Section 24, Township 26 North, Range 5 West, NMPM, Rio Arriba County, New Mexico, in such a manner as to permit production of gas from the Blanco-Mesaverde Pool and from the Basin-Dakota Pool through parallel strings of tubing.

PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Division Director

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Form C-107
5-1-61

Operator Tenneco Oil Company		County Rio Arriba		Date September 16, 1980
Address 720 S. Colo. Blvd., Denver, CO 80222		Lease Jicarrilla C		Well No. 5E
Location of Well A	Unit A	Section 24	Township T26N	Range R5W

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES X NO
2. If answer is yes, identify one such instance: Order No. R5707 ; Operator Lease, and Well No.: Jicarrilla C-7

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Blanco Mesaverde		Basin Dakota
b. Top and Bottom of Pay Section (Perforations)	5238-5483'		7456-7654'
c. Type of production (Oil or Gas)	Gas		Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing

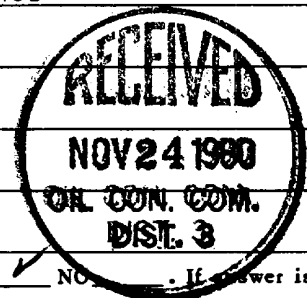
4. The following are attached. (Please check YES or NO)

Yes	No	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
<input checked="" type="checkbox"/>	<input type="checkbox"/>	d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

N.W. Production, 3539 E. 30th, Box 90, Farmington, New Mexico 87401

Supron (Southern Union), Box 808, Farmington, New Mexico 87401



6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES NO . If answer is yes, give date of such notification .

CERTIFICATE: I, the undersigned, state that I am the Asst. Div. Adm. Mgr. of the Tenneco Oil Company (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

Carley Watkins

Signature

*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard perforation unit in one or more of

JICARRILLA C5E
NE Section 24, T26N-R5W
San Juan County, New Mexico

N. W. Production
3539 E. 30th
Box 90
Farmington, New Mexico 87401

Supron (South. Union)
Box 808
Farmington, New Mexico 87401



Induction Gamma Ray

FILE NO. FM-6168

COMPANY TENNECO OIL COMPANY

WELL JICARILLA C #5E

FIELD BASIN DAKOTA

COUNTY RIO ARriba STATE NEW MEXICO

LOCATION:

960' FNL, 960' FEL

SEC 24 TWP 26N RGE 5W

Other Services

CDL/CN/GR

Permanent Datum G.L. Elev. 6652
 Log Measured from K.B. 12 Ft. Above Permanent Datum
 Drilling Measured from K.B.

Elevations

KB 6664

DF 6663

GL 6652

Date	6-11-80	6-19-80		
Run No	ONE	TWO		
Depth—Driller	5834	7705		
Depth—Logger	5838	7701		
Bottom Logged Interval	5834	7696		
Top Logged Interval	290	5834		
Casing—Driller	9 5/8@ 284	7 @ 5832	@	@
Casing—Logger	290	5834		
Bit Size	8 3/4	6 1/4		
Type Fluid in Hole	CHEM GEL	CHEM GEL		
Density and Viscosity	8.8 80	8.5 54		
pH and Fluid Loss	8.5 8.8 cc	- 6.0 cc	cc	cc
Source of Sample	FLOWLINE	FLOWLINE		
Rm @ Meas. Temp.	3.00 @ 70 °F	3.68 @ 87 °F	@ °F	@ °F
Rmf @ Meas. Temp.	2.25 @ 70 °F	2.76 @ 87 °F	@ °F	@ °F
Rmc @ Meas. Temp.	3.75 @ 70 °F	4.60 @ 87 °F	@ °F	@ °F
Source of Rmf and Rmc	CALCULATED	CALCULATED		
Rm @ BHT	1.46 @ 144 °F	2.04 @ 157 °F	@ °F	@ °F
Time Since Circ.	2 HOURS	2 HOURS		
Max. Rec. Temp. Deg. F.	144 °F	157 °F	°F	°F
Equip. No. and Location	6103 FAPM.	6103 FAPM.		
Recorded By	HUGHES	HITCHNER		
Witnessed By	CARLSON	RUDOLPH		

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____

2. NAME OF OPERATOR

Tenneco Oil Company

3. ADDRESS OF OPERATOR

720 South Colorado Blvd., Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 960' FNL 960' FEL

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.

Contract 108

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Jicarilla C

9. WELL NO.

5-B M

10. FIELD AND POOL, OR WILDCAT

Basin Dakota/Mesaverde

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 24-T26N-R5W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

15. DATE SPUDDED 6/2/80 16. DATE T.D. REACHED 6/21/80 17. DATE COMPL. (Ready to prod.) 9/4/80 18. ELEVATIONS (DF, REB, ET, GR, ETC.)* 6652' GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 7705' 21. PLUG, BACK T.D., MD & TVD 7676 22. IF MULTIPLE COMPL., HOW MANY* 2 23. INTERVALS DRILLED BY 0-TD 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 7456'-7654' Dakota 25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN

CBL/VD INO/GR CD/CN

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	284'	12 1/4"	200sx CL-B W/2% CACL 2	
7"	23#	5832'	8 3/4"	300sx CL-B W/2% CACL 2 80	0sx HOWCO LITE
4 1/2"	10.5#	7705'	6 1/4"	200sx HOWCO LITE W/6% HAL D-9	
				100sx CLB w/6% HALAD	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	7400'	7390'

31. PERFORATION RECORD (Interval, size and number)

7456-71' 7644-54'
7561-84' (2 JSPF)
7606-08'
7615-18'

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7456-7654	500 gals. 15% HCL
	250 Gals. 15% HCL
	80,000 gals. XL Gel. 80,000 #
	20/40 Sand: 25,000 #10/20 sand

33.* PRODUCTION

35.

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
9/4/80		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9/4/80	3 hrs.	3/4"	→		Q-2005		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
140 PSI		→		AOF-2015			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

Electric logs forwarded by Schlumberger, Dresser Atlas, Wellex

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Carley Watkins

TITLE Asst. Div. Admin. Mgr.

DATE 9/30/80

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Seals Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; COBED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	<div> <div>TOP</div> <div>MEAS. DEPTH</div> <div>TRUE VERT. DEPTH</div> </div>
Gallup	6600	6770'	Sand	Green Horn	6937'
Graneros	7150	7350	Shale		
Dakota	7350	7670'	Sand, Gas		

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other _____2. NAME OF OPERATOR
Tenneco Oil Company3. ADDRESS OF OPERATOR
720 South Colorado Blvd., Denver, Colorado 802224. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 960' FNL, 960' FEL

At top prod. interval reported below

At total depth

14. PERMIT NO. _____ DATE ISSUED _____

15. DATE SPUDDED 6/2/80 16. DATE T.D. REACHED 6/21/80 17. DATE COMPL. (Ready to prod.) 9/4/80 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6652' GR

20. TOTAL DEPTH, MD & TVD 7705' 21. PLUG, BACK T.D., MD & TVD 7676' 22. IF MULTIPLE COMPL., HOW MANY* _____ 23. INTERVALS DRILLED BY _____ ROTARY TOOLS 0-TD CABLE TOOLS _____

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
5238-5483' Mesaverde25. WAS DIRECTIONAL SURVEY MADE
No26. TYPE ELECTRIC AND OTHER LOGS RUN
CBL-VD IND/GR CD/CN27. WAS WELL CORED
No

CASING RECORD (Report all strings set in well)

CASINO SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36#	284'	12 1/4"	200sx CL-B w/2% CACL 2	
7"	23#	5832'	8 3/4"	300sx CL-B w/2% CACL 2 800 sx	
4 1/2"	10.5#	7705'	6 1/4"	HOWCO LITE 200 sx HOWCO LITE w/6% HI-9 100sx CL-B w/6% HI	

LINER RECORD				TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)
					2 3/8"	7400'
						7390'

31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
INTERVAL	SIZE	NUMBER	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5238-48'	5443-47'	4946-54'	5238-5248'	500 gals. 7% HCL 81,900#20/40san
5284-90'	4907-10'	5479-83'	5238-5483'	1500 g. 15% HCL 2050 BBLS 1%KCL w
5383-85'	4916-18'	(TTL 17' 34 holes)	4907-4954'	500 g. 7% HCL-1500 g 1% HCL
5415-19'	4931-33'			44,100#20/40 sd. 1150 BBLS 1%KCL
5434-36'	4938-40'			

33. PRODUCTION						WELL STATUS (Producing or shut-in)	
DATE FIRST PRODUCTION	PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)	WELL STATUS (Producing or shut-in)					
9/4/80	Flowing	Shut-in					
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
9/4/80	3	3/4"	→		Q=2723		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
190 PSI	750 PSI	→		40F-4259			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

35. LIST OF ATTACHMENTS

Electric logs forwarded by Schlumberger, Dresser Atlas, Welox

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Carley Watkins TITLE Asst. Div. Adm. Mgr. DATE 9/30/80

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

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

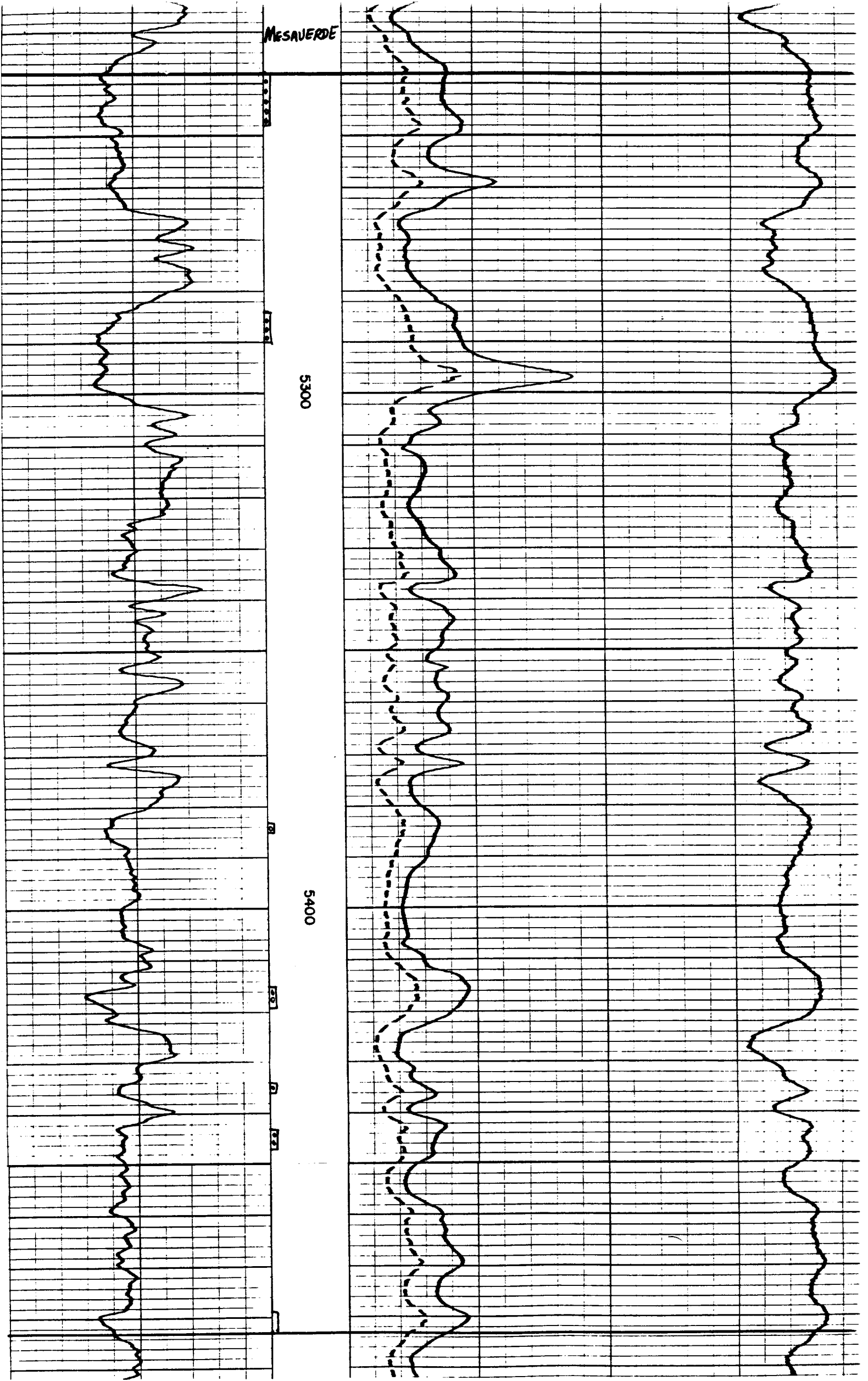
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CONED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Fruitland	3170'	3250'	Sand, Shale			
ctured Cliffs	4000'	4030'	Sand			
Lewis	4470'	4875'	Shale			
Cliffhouse	4900'	5050'	Sand, Gas			
Menefee	5200'	5500'	Sand, Shale, Gas			

MESAVERDE

5300

5400



DAKOTA

7500

7600

7700

Gamma Ray

SP Curve

F.R.

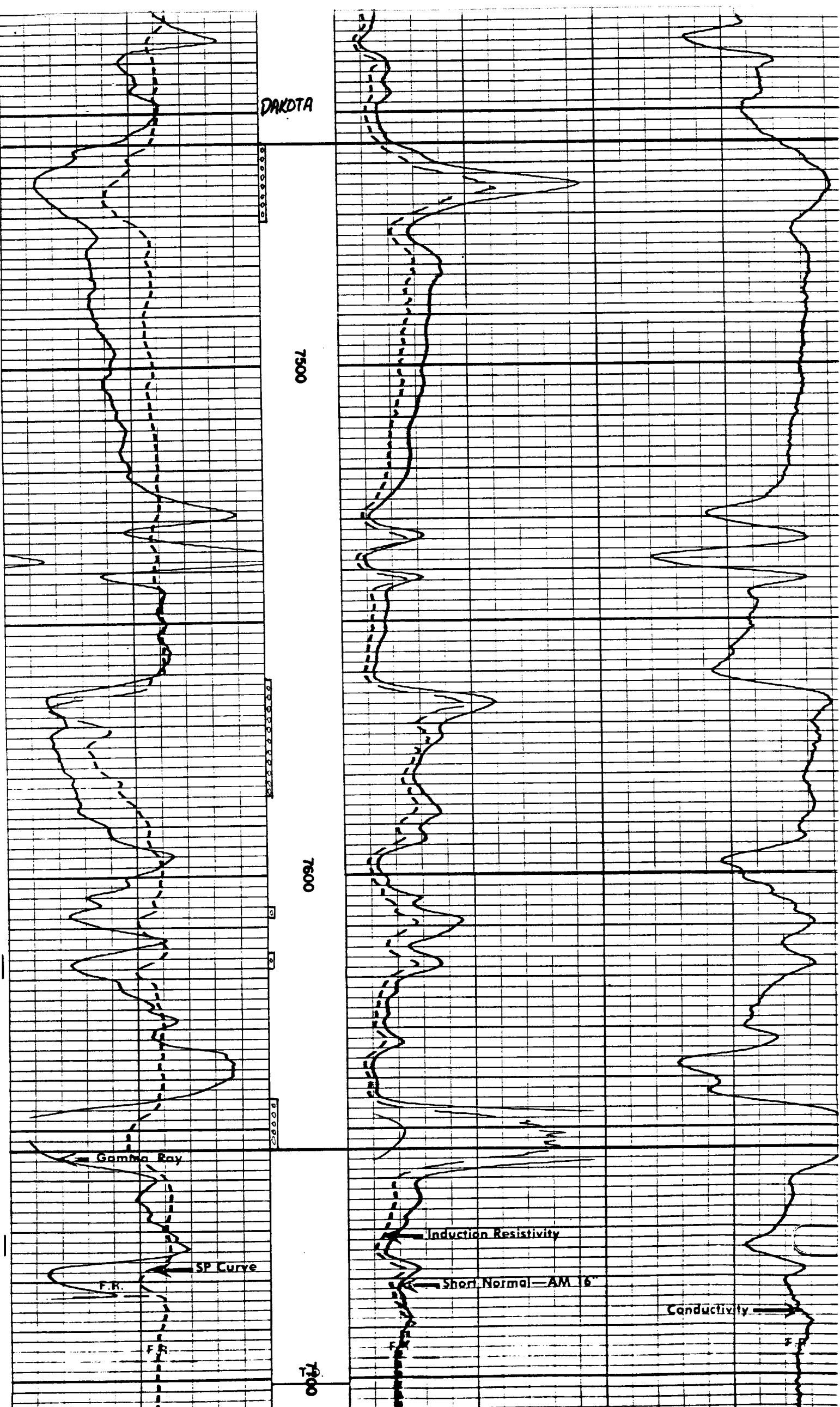
F.R.

Induction Resistivity

Short Normal—AM 16"

Conductivity

F.R.



LEASE Jicarilla
WELL NO. C5E

9-5/8 "OD, 36 LB, K-55 CSG.W/ 200 SX
TOC @ Surface.

7 "OD, 23 LB, K-55 CSG.W/ 300/800' SX
TOC @ 5390/3600.

4-1/2 "OD, 10.5&11.6 LB, K-55 CSG.W/ 300 SX
TOC @ 5661.

DETAILED PROCEDURE

1. MIRUSU. Install BOP
2. DO to PBTD. Drill to latch in collar @ 7657 Plus 20'.
3. Test csg to 3500 psi.
4. Circulate hole w/1% KCL water.
5. POOH w/tbg.
6. Run GR/CCL (1" 4 1/2" only).
7. Perforate Dakota as follows w/3-1/8" premium charge csg gun using 2 JSPF:

Dakota A	7456-71	15'
Dakota B	7561-84	23'
	7606-08	2'
	7615-18	3'
Dakota D	7644-54	10'
Total - 53', 106 holes		
8. RIH w/pkr & RBP w/ball catcher.
9. Acidize perms w/15% HCL as follows:

7644-54	500 gal	30 balls
7561-7618	1000 gal	84 balls
7456-71	500 gal	45 balls
Total	2000 gal	159 balls
10. POOH w/RBP & pkr.
11. Frac w/30# cross-linked gel in 1% KCL water as follows:

10,000 gal pad.
10,000 gal w/1 ppg 20/40 sand.
15,000 gal w/2 ppg 20/40 sand
5,000 gal w/2 ppg 10/20 sand
10,000 gal pad w/ 53 balls.
10,000 gal w/1 ppg 20/40 sand
15,000 gal w/2 ppg 20/40 sand
5,000 gal w/3 ppg 10/20 sand
Flush to top perf. Desired pressure = 3000psi.
Total sand: 80,000# 20/40
25,000# 10/20.
Total Gel: 80,000 gal.
12. SI overnight.
13. RIH w/tbg, S/N, & pump-out plug.
14. CO to PBTD w/foam.
15. Land tbg top set of perms.
16. Kick well around w/N₂.
17. Flow until clean-up.