

0024551074

DHC 9/20/00

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd. Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised March 17, 1999

APPROVAL PROCESS:

— Administrative — Hearing

EXISTING WELLBORE

— YES — NO

Operator Mewbourne Oil Company - P. O. Box 7698 - Tyler, Texas 75711 AddressLease Crow Flats "34" Federal #1

Well No.

Unit Ltr. - Sec - Twp - Rge L-Sec. 34, T16S, R28ECounty Eddy

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14744 Property Code _____ API NO. 30-015-31213 Federal ☒ State _____ (and/or) Fee _____

The following facts are submitted in support of downhole commingling: 1. Pool Name and Pool Code	Upper Zone Wildcat (Atoka) 96049	Intermediate Zone	Lower Zone S. E. Crow Flats (Morrow) 96840
2. Top and Bottom of Pay Section (Perforations)	9460'-9483'		9666'-9682'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) b. (Original) 4280#	a. b.	a. 3500# b. 3700#
6. Oil Gravity (° API) or Gas BTU Content			1036 BTU
7. Producing or Shut-In?	Shut-in		Producing
Production Marginal? (yes or no) * If Shut-In, give 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 * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	No Date: Rates: Date: 8-04-00 DST Rates: 375 MCFD 2 BOPD, 0 BWPD	 Date: Rates: Date: Rates:	No Date: Rates: Date: 8-28-00 Rates: 299 MCFD 0 BOPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? ___ Yes ___ No11. Will cross-flow occur? ☒ Yes ___ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ___ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ___ No13. Will the value of production be decreased by commingling? ___ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ___ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions ORDER NO(S). _____

16. 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 all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE K. M. Calvert TITLE Engineer DATE 8/30/00TYPE OR PRINT NAME K. M. Calvert TELEPHONE NO. (903) 561-2900

Attachments to C-107A

Mewbourne Oil Company
Crow Flats "34" Federal #1
Unit Letter L, Sec. 34, T16S,R28E
Eddy County, New Mexico

- ***C-102 for each zone to be commingled showing its spacing unit and acreage dedication.***

BLM Sundry Notice dated 6/02/00 showing new location w/C-102 attached.

BLM Sundry Notice dated 6/27/00 showing change of well name from Vandagriff "34" Fed. #1

- ***No production curve is attached because this is a new well.***
- ***Estimated production rates and supporting data:***

Morrow 299 MCF/D, 0 BOPD, 0 BWPD. Actual Daily Production into pipeline.

Atoka 375 MCF/D, 2 BOPD, 0 BWPD. Rate estimated from DST Test. No offset Atoka production in the area.

- ***Data to support allocation method or formula:***

Gas:	Morrow	44 %
	Atoka	56 %
Condensate:	Morrow	0 %
	Atoka	100 %

- ***Notification list of all offset operators.***

Enron Oil & Gas Company
P. O. Box 2267
Midland, TX 79702

Chi Energy, Inc.
P. O. Box 1799
Midland, TX 79702-1799

- ***Notification list of working, overriding, and royalty interests for uncommon interest cases.*** No uncommon interests.
- ***Any additional statements, data or documents required to support commingling.***

The addition of the Atoka as a commingled zone will prevent waste that would not otherwise be possible due to the increased cost to produce each individual zone. Commingling will prevent early abandonment of each production zone. The well is completed with 5½" OD casing. In order to dually complete the well to recover all economic reserves, the use of small diameter special clearance tubing would be required. Performing a dual completion as described could not be economically justified for a zone with limited deliverability.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Mewbourne Oil Company

3. Address and Telephone No.

PO Box 5270 Hobbs, NM 88241 505-393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Present stake @ 660' FS & WL

Had to move to 1060' FSL & 660' FWL Sec.34 T-16S R-28E

5. Lease Designation and Serial No.
NM 83066

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Vandagriff 34 Federal #1

9. API Well No.

10. Field and Pool, or Exploratory Area

SE Crow Flats, Morrow

11. County or Parish, State

Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Change Name of well.
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Mewbourne Oil Company request the name of the Vandagriff 34 Federal #1 (1060' FSL & 660' FWL Sec.34 T-16S R-28E) Eddy County, New Mexico, changed to the Crow Flats 34 Federal #1.

14. I hereby certify that the foregoing is true and correct

Signed

Title District Manager NM Young

Date 08/27/00

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

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Eddy, NM

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SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Mewbourne Oil Company

3. Address and Telephone No.

PO Box 5270 Hobbs, NM 88241 505-393-5905

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Present stake @ 660' FS & WL

Had to move to 1060' FSL & 660' FWL Sec.34 T-16S R-28E

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☒ Other Move stake for Archaeology
☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Original well was staked @ 660' FSL & 660' FWL of the aboved listed S/T/R.

After field Arch survey, Mewbourne Oil Company was told that this location would be unexceptable.

On 5/26/00, Mewboourne Oil Company, Desert West Archaeological Services & West Engineering staked & surveyed an exceptable site located @ 1060' FSL & 660' FWL of Sec.34 T-16S R-28E.

14. I hereby certify that the foregoing is true and correct

Signed A.M. Young
(This space for Federal or State office use)

Title District Manager NM Young

Date 06/02/00

Approved by
Conditions of approval, if any:

Title

Date

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*See Instruction on Reverse Side

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
Property Code	Property Name VANDAGRIFF 34 FEDERAL	Well Number 1
OGRID No.	Operator Name MEWBOURNE OIL CO.	Elevation 3527

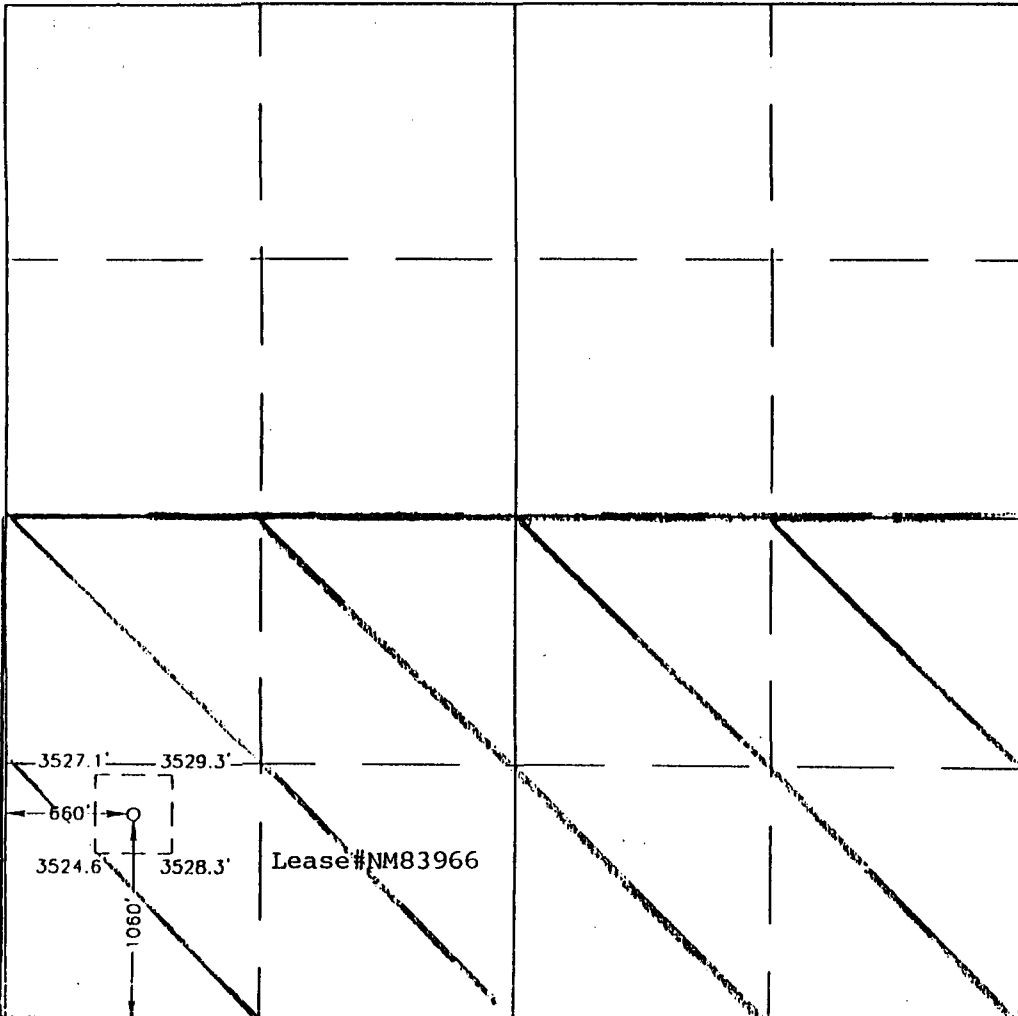
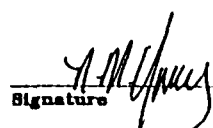
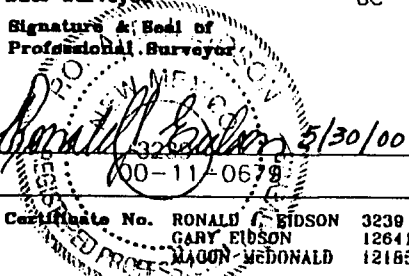
Surface Location

UL or lot No. M	Section 34	Township 16 S	Range 28 E	Lot Idn	Feet from the 1060	North/South line SOUTH	Feet from the 660	East/West line WEST	County EDDY
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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
Dedicated Acres	Joint or Infill	Consolidation Code	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

	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature N.M. Young Printed Name District Manager Title May 31, 2000 Date
	SURVEYOR CERTIFICATION 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. MAY 26, 2000 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. RONALD F. EBDSON 3239 GARY EBDSON 12641 JACOB WEDONALD 12185

REPORT NO.
6537807

PAGE NO. 1

TEST DATE:
04-AUG-2000

STAR

Schlumberger Testing Data Report Pressure Data Report

Schlumberger

COMPANY: MEWBOURNE OIL CO

WELL: CROW FLAT 34 FED-1, DST #1

TEST IDENTIFICATION

Test Type OH-DST-SLSR
Test No. ONE
Formation MIDDLE MORROW
Test Interval (ft) 9420 to 9540
Depth Reference

WELL LOCATION

Field W/C
County EDDY
State NEW MEXICO
Sec/Twn/Rng S34T16SR28E
Elevation (ft) 3527

HOLE CONDITIONS

Total Depth (MD/TVD) (ft)
Hole Size (in) 7.875
Casing/Liner I.D. (in) 8.625 * 2090
Perf'd Interval/Net Pay (ft)..
Shot Density/Diameter (in) ...

MUD PROPERTIES

Mud Type SW MUD
Mud Weight (lb/gal) 9.2
Mud Resistivity (ohm.m)
Filtrate Resistivity (ohm.m) .. 0.153 * 60F
Filtrate Chlorides (ppm) 53000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 4609.23
Gas Cushion Type
Surface Pressure (psi)
Liquid Cushion Type
Cushion Length (ft)

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 8655 / 3.826
Collar Length (ft)/I.D. (in) .. 809 / 2.25
Packer Depths (ft) 9414, 9420,
Bottomhole Choke Size (in)75
Gauge Depth (ft)/Type 9442/SLSR-1185

NET PIPE RECOVERY

Volume	Fluid Type	Properties
450 ft	DRLG MUD	Rw 0.153*60F 53000ppm

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
1.57 cuft	Gas	
450 cc	Oil	API 53.3*60F
400 cc	Mud	Rw 0.153*60F 53000p
Pressure: 360		GOR: 554
		GLR: 293

INTERPRETATION RESULTS

Model of Behavior
Fluid Type Used for Analysis..
Reservoir Pressure (psi)
Transmissibility (md.ft/cp) ..
Effective Permeability (md) ..
Skin Factor/Damage Ratio
Storativity Ratio, Omega
Interporos.Flow Coef., Lambda..
Distance to an Anomaly (ft) ..
Radius of Investigation (ft)..
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
Basic Solids (%)
Gas Gravity
GOR (scf/STB)
Water Cut (%)
Viscosity (cp)
Total Compressibility (1/psi)..
Porosity (%)
Reservoir Temperature (F) 152
Form.Vol.Factor (bbl/STB)

PRODUCTION RATE DURING TEST: Data Report

COMMENTS:

THIS DST OF THE MIDDLE MORROW (9420-9540) WAS MECHANICALLY SUCCESSFULL. TOTAL RECOVERY 450 FT=2.205 BBL. DRLG MUD. THANK YOU FOR USING SCHLUMBERGER TESTING.

WELL TEST INTERPRETATION REPORT #:6537807		PAGE: 2.
CLIENT : MEWBOURNE OIL CO		7-AUG-00
REGION :CSD	SEQUENCE OF EVENTS	FIELD:W/C
DISTRICT:HOBBS		ZONE :MIDDLE MORROW
BASE :MIDLAND		WELL :CROW FLAT 34-1
ENGINEER: J. DAUGHERTY		LOCATION: S34T16SR28E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
04-AUG	07:20	HYDROSTATIC MUD	-6	4609	
	07:26	START FLOW ON 1/8" HOSE	0	116	
	07:27	BOTTOM OF BUCKET	1		
	07:28		2		5.0
	07:29		3		8.0
	07:30		4		14.0
	07:31		5		18.0
	07:36		10		40.0
	07:36	CHANGED CHOKE 1/4" TO PIT	10		
	07:41		15		68.0
	07:41	END FLOW & START SHUT-IN	15	183	
	07:45	GAS TO SURFACE	19		
	08:42	END SHUT-IN	76	4357	
	08:44	START FLOW ON 1/4" CHOKE	78	180	
	08:45	30.38 MCFD	79		8.0
	08:46	81.51 "	80		46.0
	08:47	95.03 "	81		56.0
	08:48	103.15 "	82		62.0
	08:49	109.92 "	83		67.0
	08:54	141.15 "	88		90.0
	08:59	182.09 "	93		120.0
	09:04	209.51 "	98		140.0
	09:09	239.78 "	103		162.0
	09:14	264.64 "	108		180.0
	09:24	292.37 "	118		200.0
	09:34	320.19 "	128		220.0
	09:44	334.14 "	138		230.0
	09:54	355.12 "	148		245.0
	10:04	362.12 "	158		250.0
	10:09	376.15 "	163		260.0
	10:52	376.15 "	206		260.0
	10:52	END FLOW & START SHUT-IN	206	429	

Continued next page

WELL TEST INTERPRETATION REPORT #:6537807		PAGE: 3,
CLIENT : MEWBOURNE OIL CO		7-AUG-00
REGION :CSD	SEQUENCE OF EVENTS Continued	FIELD:W/C
DISTRICT:HOBBS		ZONE :MIDDLE MORROW
BASE :MIDLAND		WELL :CROW FLAT 34-1
ENGINEER:J.DAUGHERTY		LOCATION:S34T16SR28E

DATE	TIME (HR:MIN)	DESCRIPTION	ET (MINS)	BHP (PSIA)	WHP (PSIG)
=====					

	14:56	END SHUT-IN	450	4282	
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	15:02	HYDROSTATIC MUD	456	4596	
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 ** WELL TEST DATA PRINTOUT **

COMPANY: MEWBOURNE OIL CO
 WELL: CROW FLAT 34-1, DST #1

FIELD REPORT NO. 6537807
 INSTRUMENT NO. SLR-1185

RECORDER CAPACITY: 10000 PSI PORT OPENING: OUTSIDE DEPTH: 9442 FT

LABEL POINT INFORMATION

#	TIME OF DAY HH:MM:SS	DATE DD-MMM	EXPLANATION	ELAPSED TIME, MIN	BOT HOLE PRESSURE PSIA	BOT HOLE TEMP. DEG F
1	7:20:17	4-AUG	HYDROSTATIC MUD	500.28	4609.23	144.36
2	7:29:27	4-AUG	START FLOW	509.45	115.92	144.34
3	7:42:37	4-AUG	END FLOW & START SHUT-IN	522.62	182.65	144.19
4	8:42:37	4-AUG	END SHUT-IN	582.62	4356.53	149.65
5	8:46:57	4-AUG	START FLOW	586.95	180.31	148.62
6	10:51:27	4-AUG	END FLOW & START SHUT-IN	711.45	428.83	130.08
7	14:55:37	4-AUG	END SHUT-IN	955.62	4281.83	144.81
8	14:57:47	4-AUG	HYDROSTATIC MUD	957.78	4595.60	144.95

SUMMARY OF FLOW PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	INITIAL PRESSURE PSIA
1	509.45	522.62	13.17	115.92	182.65	115.92
2	586.95	711.45	124.50	180.31	428.83	180.31

SUMMARY OF SHUTIN PERIODS

PERIOD	START ELAPSED TIME, MIN	END ELAPSED TIME, MIN	DURATION MIN	START PRESSURE PSIA	END PRESSURE PSIA	FINAL FLOW PRESSURE PSIA	PRODUCING TIME, MIN
1	522.62	582.62	60.00	182.65	4356.53	182.65	13.17
2	711.45	955.62	244.17	428.83	4281.83	428.83	137.67