

Contractor Shelby Top Choke 1"
Rig No. 11-E Bottom Choke 3/4"
Spot -- Size Hole 7 7/8"
Sec. 3 Size Rat Hole --
Twp. 1N Size & Wt. D. P. 4 1/2" XH 16.60#
Rng. 102W Size Wt. Pipe --
Field West Rangely I. D. of D. C. --
County Rio Blanco Length of D. C. 459 ft.
State Colorado Total Depth 6455 ft.
Elevation 5286 ft. Interval Tested 3625-3744 ft.
Formation Dakota Type of Test Inflate
Straddle

Flow No. 1 -- Min.
Shut-in No. 1 -- Min.
Flow No. 2 -- Min.
Shut-in No. 2 -- Min.
Flow No. 3 -- Min.
Shut-in No. 3 -- Min.

Bottom
Hole Temp. --
Mud Weight 9.2#
Gravity --
Viscosity --

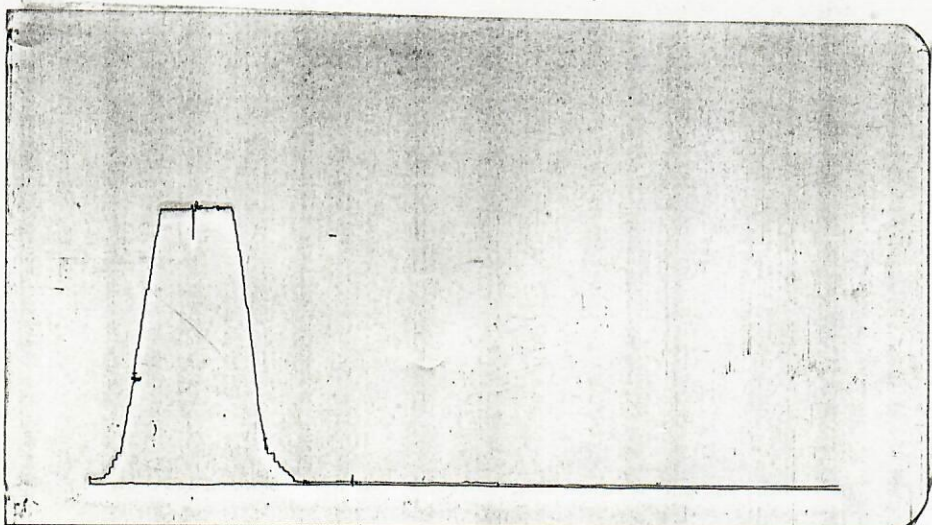
Tool opened @ 9:30 a.m.

Outside Recorder

PRD Make Kuster K-3
No. 14326 Cap. 2900 @ 3633'

	Press	Corrected
Initial Hydrostatic	A	--
Final Hydrostatic	K	--
Initial Flow	B	--
Final Initial Flow	C	--
Initial Shut-in	D	--
Second Initial Flow	E	--
Second Final Flow	F	--
Second Shut-in	G	--
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, WY
Our Tester: Larry L. Little
Witnessed By: Reed Wacker



Did Well Flow - Gas No Oil No Water No
RECOVERY IN PIPE:

MISRUN: Unable to obtain packer seats.



Operator Northern Pump Co.
Address 1010 Hudson Bay Center, 1600 Stout
Denver, CO 80202

Well Name and No. Government #3-1
Ticket No. 04194

Date 1-8-85

DST No. 1
No. Final Copies 12

Contractor <u>Shelby</u>	Top Choke <u>1"</u>	Flow No. 1 <u>30</u> Min.
Rig No. <u>11-E</u>	Bottom Choke <u>3/4"</u>	Shut-in No. 1 <u>60</u> Min.
Spot <u>--</u>	Size Hole <u>7 7/8"</u>	Flow No. 2 <u>60</u> Min.
Sec. <u>3</u>	Size Rat Hole <u>--</u>	Shut-in No. 2 <u>60</u> Min.
Twp. <u>1N</u>	Size & Wt. D. P. <u>4 1/2" XH</u>	Flow No. 3 <u>--</u> Min.
Rng. <u>102W</u>	Size Wt. Pipe <u>--</u>	Shut-in No. 3 <u>--</u> Min.
Field <u>West Rangely</u>	I. D. of D. C. <u>2 5/16"</u>	Bottom
County <u>Rio Blanco</u>	Length of D. C. <u>430 ft.</u>	Hole Temp. <u>122°F</u>
State <u>Colorado</u>	Total Depth <u>6455 ft.</u>	Mud Weight <u>9.2#</u>
Elevation <u>5286 ft.</u>	Interval Tested <u>3597-3735 ft.</u>	Gravity <u>--</u>
Formation <u>Dakota</u>	Type of Test <u>Inflate</u>	Viscosity <u>48</u>
	<u>Straddle</u>	

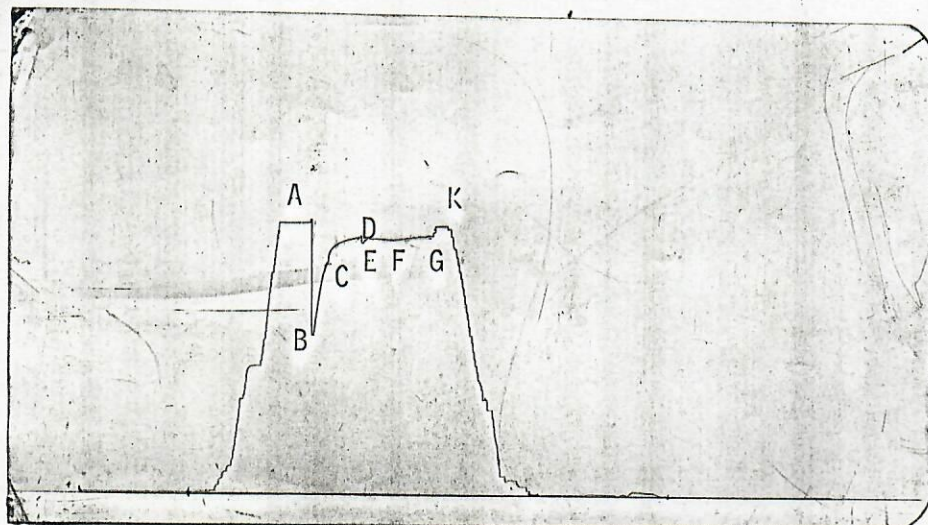
Tool opened @ 10:20 a.m.

Outside Recorder

PRD Make Kuster K-3
No. 14325 Cap. 2900 @ 3605'

	Press	Corrected
Initial Hydrostatic	A	1741
Final Hydrostatic	K	1733
Initial Flow	B	1022
Final Initial Flow	C	1487
Initial Shut-in	D	1647
Second Initial Flow	E	1611
Second Final Flow	F	1626
Second Shut-in	G	1659
Third Initial Flow	H	--
Third Final Flow	I	--
Third Shut-in	J	--

Lynes Dist.: Rock Springs, WY
Our Tester: Larry L. Little
Witnessed By: Reed Wacker



Did Well Flow - Gas Yes Oil No Water Yes
RECOVERY IN PIPE:

3500 ft. Total Recovery	= 45.70 Bbls
1000 ft. Mud and gas-cut water	= 14.20 Bbls
2500 ft. Gas-cut water	= 31.50 Bbls

Blow Description:

1st Flow: Tool opened with a 9" blow, increasing to 34 psi in 20 minutes with gas to surface in 23 minutes.

2nd Flow: Tool opened with a bottom of the bucket blow, increasing to 60 psi in 10 minutes. Mud to surface in 15 minutes. Opened 1/2" choke to pit with 20 - 23 psi for remainder of flow.

Comments: The test results indicate a mechanically successful test. The flow and shut-in curves suggest excellent permeability within the zone tested.

Operator Northern Pump Co.
1010 Hudson Bay Center, 1600 Stout
Address Denver, CO 80202-3130

Well Name and No. Government #3-1
Ticket No. 04195

Date 1-8-86

No. Final Copies 12

DST No. 2

Location: SEC. 3-1N-102W
Test Type: INFLATE STRADDLE
Formation: DAKOTA

Recorder Number: 14325
Recorder Depth: 3605 ft.

TIME-PRESSURE LISTING

CHART LABEL	COMMENTS	TIME MIN.	DELTA P psi	PRESSURE (T+dt)/dt psi	ABSCISSA	PRESSURE SQUARED psi ² /10 ⁶
A	INITIAL HYDROSTATIC	0.00		1741.0		
B	START OF 1st FLOW	0.00		1022.0		
C	END OF 1st FLOW	30.00		1487.0		
	1st SHUTIN PERIOD	0.00	0.0	1487.0	0.0000	
		1.00	46.0	1533.0	31.0000	
		2.00	59.0	1546.0	16.0000	
		3.00	67.0	1554.0	11.0000	
		4.00	75.0	1562.0	8.5000	
		5.00	78.0	1565.0	7.0000	
		6.00	83.0	1570.0	6.0000	
		7.00	87.0	1574.0	5.2857	
		8.00	91.0	1578.0	4.7500	
		9.00	95.0	1582.0	4.3333	
		10.00	97.0	1584.0	4.0000	
		12.00	109.0	1596.0	3.5000	
		15.00	120.0	1607.0	3.0000	
		25.00	128.0	1615.0	2.2000	
		30.00	135.0	1622.0	2.0000	
		35.00	141.0	1628.0	1.8571	
		40.00	146.0	1633.0	1.7500	
		45.00	150.0	1637.0	1.6667	
		50.00	154.0	1641.0	1.6000	
		55.00	158.0	1645.0	1.5455	
D	END OF 1st SHUTIN	60.00	160.0	1647.0	1.5000	
E	START OF 2nd FLOW	0.00		1611.0		
F	END OF 2nd FLOW	60.00		1626.0		
	2nd SHUTIN PERIOD	0.00	0.0	1626.0	0.0000	
		1.00	12.0	1638.0	91.0000	
		2.00	14.0	1640.0	46.0000	
		3.00	14.0	1640.0	31.0000	
		4.00	14.0	1640.0	23.5000	
		5.00	14.0	1640.0	19.0000	
		6.00	15.0	1641.0	16.0000	
		7.00	15.0	1641.0	13.8571	
		8.00	15.0	1641.0	12.2500	
		9.00	16.0	1642.0	11.0000	
		10.00	16.0	1642.0	10.0000	



NORTHERN PUMP COMPANY
DST#: 2
GOVERNMENT #3-1
3597 - 3735ft.

Page 2

Location: SEC. 3-1N-102W
Test Type: INFLATE STRADDLE
Formation: DAKOTA

Recorder Number: 14325
Recorder Depth: 3605 ft.

TIME-PRESSURE LISTING

CHART LABEL	COMMENTS	TIME MIN.	DELTA P psi	PRESSURE (T+dt)/dt psi	ABSCISSA	PRESSURE SQUARED psi ² /10 ⁶
		15.00	20.0	1646.0	7.0000*	
		20.00	21.0	1647.0	5.5000*	
		25.00	23.0	1649.0	4.6000*	
		30.00	26.0	1652.0	4.0000*	
		35.00	27.0	1653.0	3.5714*	
		40.00	27.0	1653.0	3.2500*	
		45.00	27.0	1653.0	3.0000*	
		50.00	31.0	1657.0	2.8000*	
		55.00	31.0	1657.0	2.6364*	
G	END OF 2nd SHUTIN	60.00	33.0	1659.0	2.5000*	
Q	FINAL HYDROSTATIC	0.00		1733.0		

* VALUES USED FOR EXTRAPOLATIONS

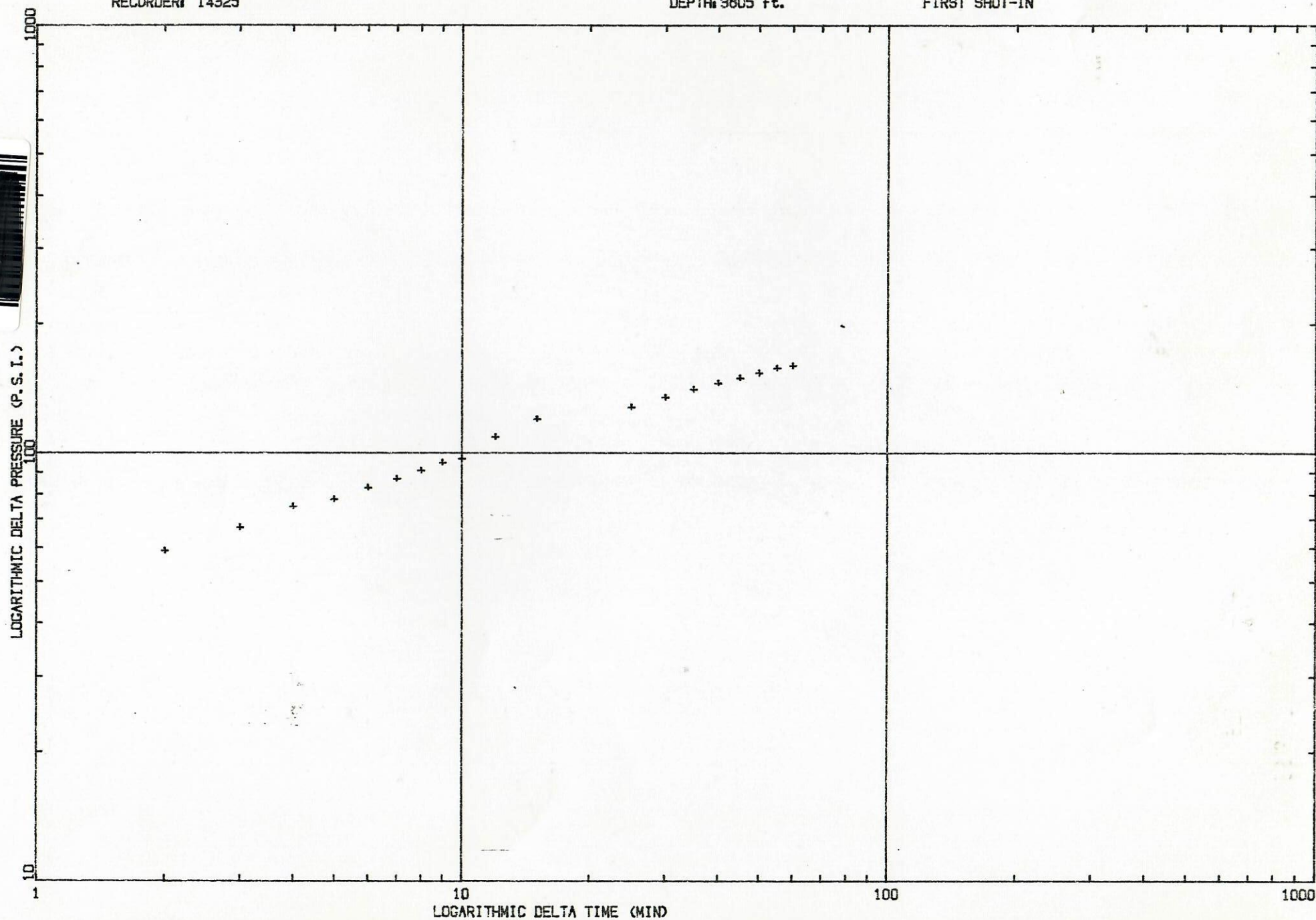
2nd SHUT-IN
HORNER EXTRAPOLATION 1669.99 PSI
HORNER SLOPE 30.70 psi/cycle



OPERATOR: NORTHERN PUMP COMPANY
LOCATION: SEC. 3-1N-102W
RECORDER: 14325

WELL NAME: GOVERNMENT #3-1
DST #: 2
DEPTH: 3805 ft.

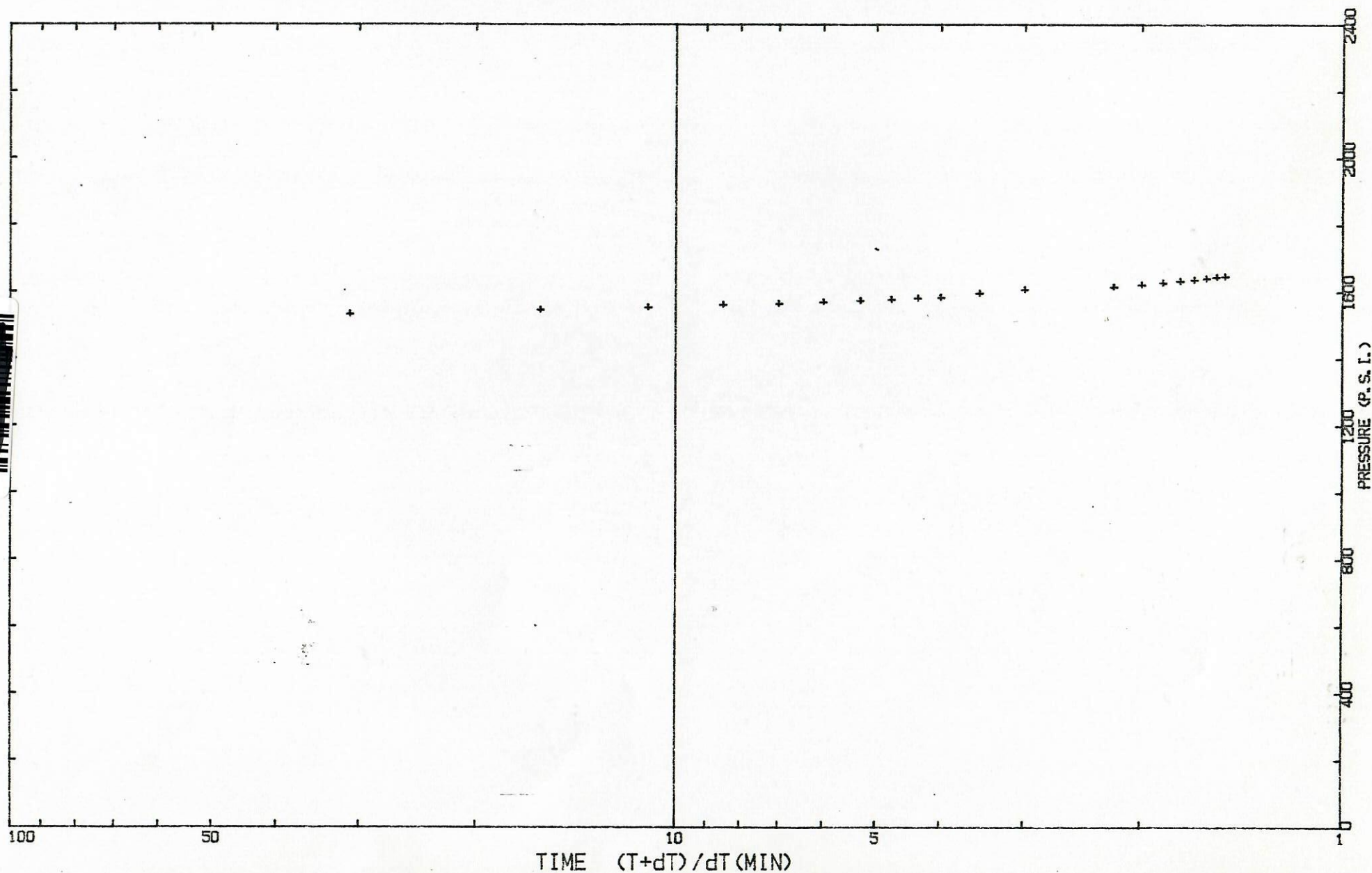
FIRST SHUT-IN



OPERATOR: NORTHERN PUMP COMPANY
WELL NAME: GOVERNMENT #3-1
LOCATION: SEC. 3-1N-102W
FIRST SHUT-IN
RECORDER: 14325

DST #: 2

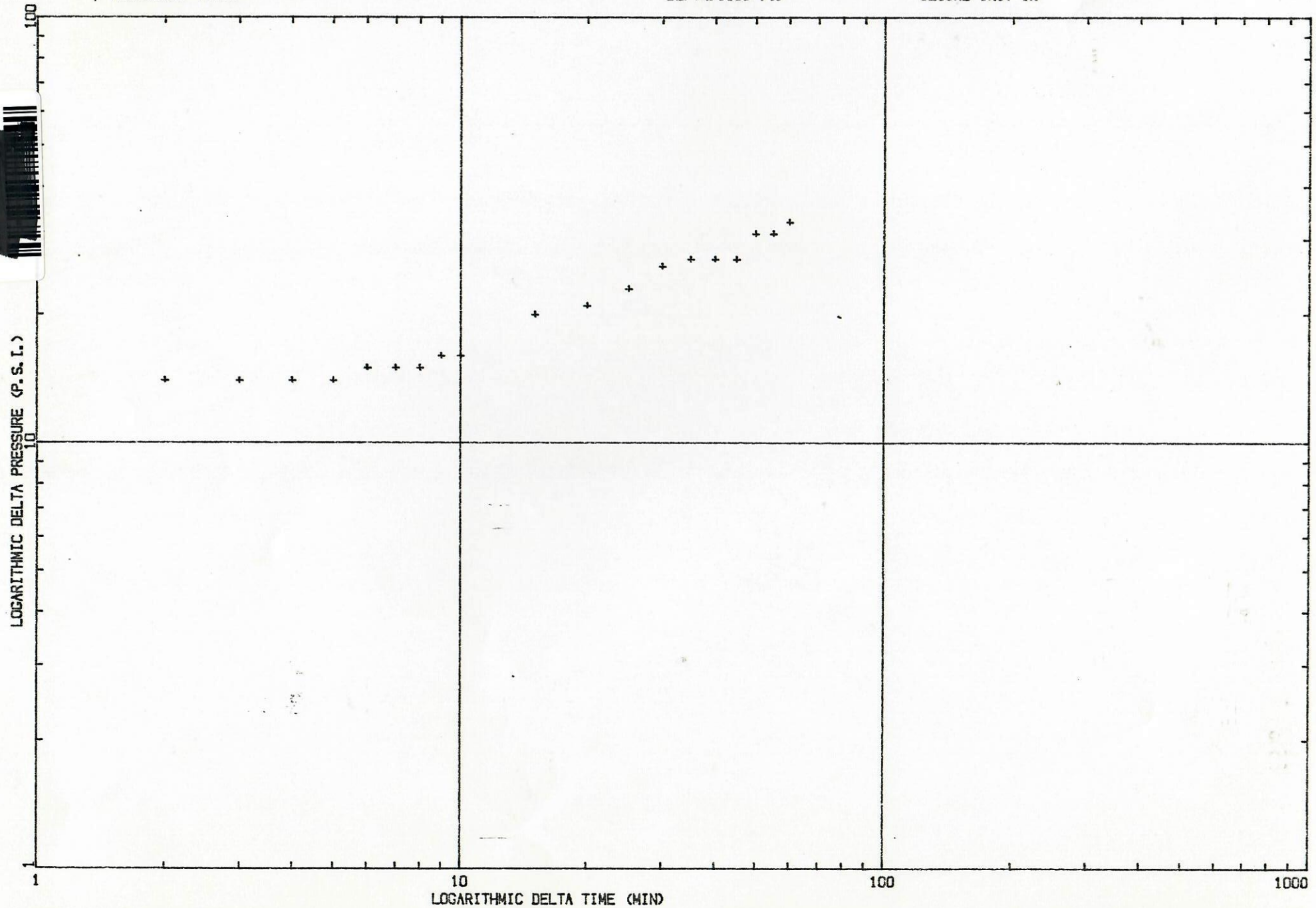
DEPTH: 3605 ft.



OPERATOR: NORTHERN PUMP COMPANY
LOCATION: SEC. 3-1N-102W
RECORDER: 14325

WELL NAME: GOVERNMENT #3-1
DST #: 2
DEPTH: 3805 ft.

SECOND SHUT-IN



OPERATOR: NORTHERN PUMP COMPANY

WELL NAME: GOVERNMENT #3-1

LOCATION: SEC. 3-1N-102W

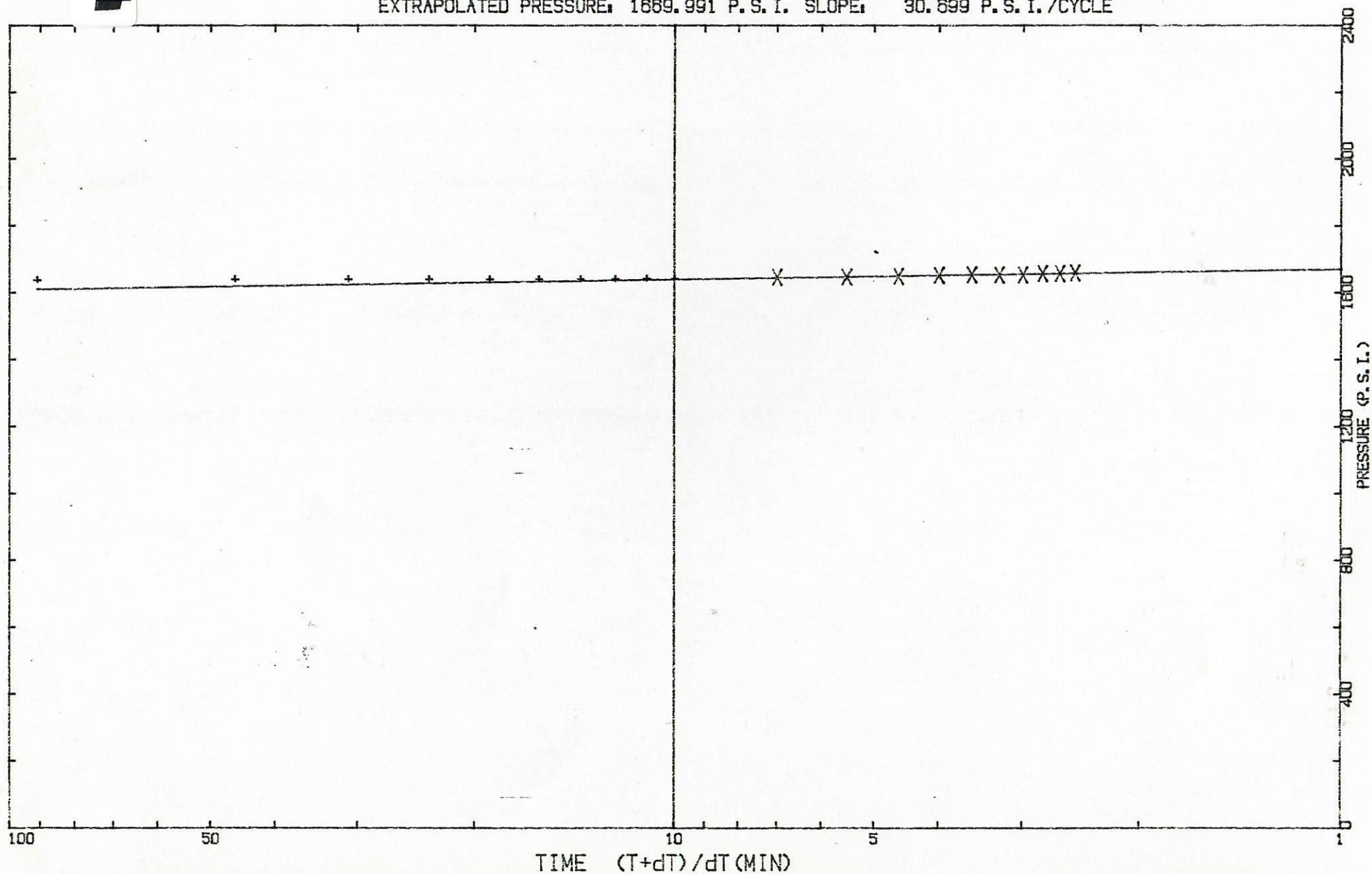
SECOND SHUT-IN

RECORDER: 14325

DST #: 2

DEPTH: 3605 ft.

EXTRAPOLATED PRESSURE: 1669.991 P. S. I. SLOPE: 30.699 P. S. I. /CYCLE



NORTHERN PUMP COMPANY
DST#: 2
GOVERNMENT #3-1
3597 - 3735ft.

Page 1

Location: SEC. 3-1N-102W
Test Type: INFLATE STRADDLE
Formation: DAKOTA

Recorder Number: 14325
Recorder Depth: 3605 ft.

SAMPLE DATA

SAMPLE CHAMBER:

Capacity of sample chamber	2000	cc
Volume of sample.....	1500	cc
Pressure in sampler.....	340	psig
Where sampler was drained...	ON LOCATION	

Sampler contained:
Water 1500 cc

RESISTIVITY DATA:

Top.....	28 000 PPM NACL
Middle.....	29 000 PPM NACL
Bottom.....	28 000 PPM NACL
Sampler.....	28 000 PPM NACL
Mud pit.....	8800 PPM NACL
Make-up Water...	600 PPM NACL



NORTHERN PUMP COMPANY
DST#: 2
GOVERNMENT #3-1
3597 - 3735ft.

Page 1

PRESSURE RECORDER NUMBER : 15620

DEPTH : 3605.00ft.

LOCATION : INSIDE

TYPE : K-3

CAPACITY : 2400.00psi

PRESSURE
psi

A)Initial Hydro : 1793.0

B)1st Flow Start: 1085.0

C)1st Flow End : 1540.0

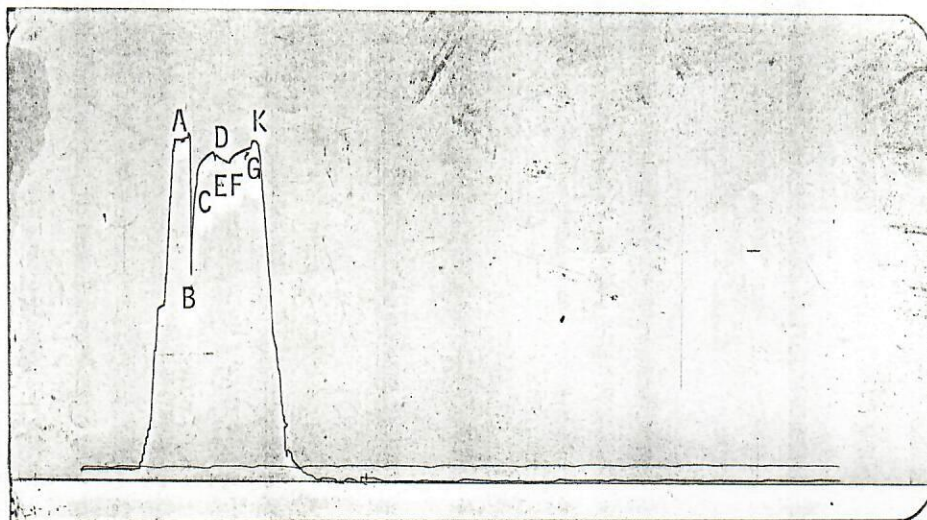
D)END 1st Shutin: 1728.0

E)2nd Flow Start: 1689.0

F)2nd Flow End : 1675.0

G)END 2nd Shutin: 1751.0

Q)Final Hydro. : 1787.0



Recorder ran under straddle; Recorder shows that straddle
packer held.

TEST TIMES(MIN)

1st FLOW : 30

SHUTIN: 60

2nd FLOW : 60

SHUTIN: 60

PRESSURE RECORDER NUMBER : 13735

DEPTH : 3751.00ft.

LOCATION : OUTSIDE

TYPE : K-3

CAPACITY : 2900.00psi

PRESSURE
psi

A)Initial Hydro : 1820.0

Q)Final Hydro. : 1821.0

