

ORIGINAL

DST REPORT

GENERAL INFORMATION

DATE : 2/7/95
CUSTOMER : NOBEL PETROLEUM, INC.
WELL : #1 TEST: 1
ELEVATION: 1959 KB
SECTION : 4
RANGE : 18W COUNTY: RUSH
GAUGE SN#: 10242 RANGE : 4100
TICKET : 20265
LEASE : GROSS
GEOLOGIST: HONAS
FORMATION: LOWER KANSAS CITY
TOWNSHIP : 16S
STATE : KS
CLOCK : 12

15-165-21677

WELL INFORMATION

PERFORATION INTERVAL FROM: 3388.00 ft TO: 3445.00 ft TVD: 3445.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3400.0 ft 3403.0 ft
TEMPERATURE: 101.0

DRILL COLLAR LENGTH:	0.0 ft	I.D.:	0.000 in
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:	0.000 in
DRILL PIPE LENGTH :	3368.0 ft	I.D.:	3.800 in
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :	5.500 in
ANCHOR LENGTH :	57.0 ft	ANCHOR SIZE:	5.500 in
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:	0.750 in
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :	4.5XH
PACKER DEPTH:	3383.0 ft	SIZE:	6.630 in
PACKER DEPTH:	3388.0 ft	SIZE:	6.630 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in
PACKER DEPTH:	0.0 ft	SIZE:	0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.300 ppg
CHLORIDES : 5000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 47.00 cp
WATER LOSS: 11.200 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD SURFACE BLOW - BUILT TO 1
INCH IN 17 MINUTES - STABILIZED.
FINAL FLOW PERIOD SURFACE BLOW - DIED IN 6 MINUTES

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
10.0	0.0	0.0	0.0	100.0	MUD W/SPECKS OF OIL

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	60.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	0.0000	STB/D
MUD VOLUME:	0.1403	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.1403	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1773.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	21.00	21.00
INITIAL SHUT-IN	30.00		109.00
FINAL FLOW	30.00	21.00	21.00
FINAL SHUT-IN	30.00		39.00

FINAL HYDROSTATIC PRESSURE: 1719.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1782.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	27.00	27.00
INITIAL SHUT-IN	27.00		129.00
FINAL FLOW	30.00	29.00	29.00
FINAL SHUT-IN	27.00		49.00

FINAL HYDROSTATIC PRESSURE: 1730.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 2/7/95	TICKET : 20265
CUSTOMER : NOBEL PETROLEUM, INC.	LEASE : GROSS
WELL : #1 TEST: 1	GEOLOGIST: HONAS
ELEVATION: 1959 KB	FORMATION: LOWER KANSAS CITY
SECTION : 4	TOWNSHIP : 16S
RANGE : 18W COUNTY: RUSH	STATE : KS
GAUGE SN#: 10242 RANGE : 4100	CLOCK : 12

INITIAL FLOW

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	27.00	27.00
5.00	27.00	0.00
10.00	27.00	0.00
15.00	27.00	0.00
20.00	27.00	0.00
25.00	27.00	0.00
30.00	27.00	0.00

INITIAL SHUT IN

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	28.00	28.00	0.00
6.00	32.00	4.00	0.00
9.00	37.00	5.00	0.00
12.00	46.00	9.00	0.00
15.00	54.00	8.00	0.00
18.00	69.00	15.00	0.00
21.00	86.00	17.00	0.00
24.00	110.00	24.00	0.00
27.00	129.00	19.00	0.00

FINAL FLOW

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	29.00	29.00
5.00	29.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
10.00	29.00	0.00
15.00	29.00	0.00
20.00	29.00	0.00
25.00	29.00	0.00
30.00	29.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	29.00	29.00	0.00
6.00	29.00	0.00	0.00
9.00	30.00	1.00	0.00
12.00	32.00	2.00	0.00
15.00	36.00	4.00	0.00
18.00	40.00	4.00	0.00
21.00	43.00	3.00	0.00
24.00	46.00	3.00	0.00
27.00	49.00	3.00	0.00



WESTERN TESTING CO., INC. FORMATION TESTING

TICKET No 20265

P. O. BOX 1599 PHONE (316) 262-5861 WICHITA, KANSAS 67201

Elevation 1959 No. B0 Formation Lower "K.C." Eff. Pay Ft.

District Hugoton Date 2-7-75 Customer Order No.

COMPANY NAME Nobel Petro. Inc.

ADDRESS 3101 No. Rock Rd. Suite 125 Wichita, KS. 67225

LEASE AND WELL NO. Cross #1 COUNTY Rush STATE KSa Sec. 4 Twp. 16S Rge. 18W

Mail Invoice To Nobel Petro. Same No. Copies Requested 100

Mail Charts To " #1 Cross " Address No. Copies Requested "

Formation Test No. 1 Interval Tested From 3388 ft. to 3445 ft. Total Depth 3445 ft.

Packer Depth 3383 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 3388 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3400 ft. Recorder Number 10242 Cap. 4100

Bottom Recorder Depth (Outside) 3403 ft. Recorder Number 12759 Cap. 3900

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Duke Rig 4 Drill Collar Length I. D. in.

Mud Type Chevron Viscosity 47 Weight Pipe Length I. D. in.

Weight 9.3 Water Loss 11.2 cc. Drill Pipe Length 3368 I. D. 3.08 in.

Chlorides 5000 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make Serial Number Anchor Length (31426) 57 ft. Size 4 1/2 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Surface Blow, Built to 1" in 17 Min. Stabilized I.F.P.

Surface Blow, Died in 6 Min. F.F.P.

Recovered 10 ft. of Mud w/ specks of Oil

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of Total Fluid Recd 10'

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 5:45 A.M. Time Pick Up Tool 6:45 A.M. Time Off Location P.M.

Time Set Packer(s) 7:55 P.M. Time Started Off Bottom 9:55 A.M. Maximum Temperature 101°F

Initial Hydrostatic Pressure (A) 1773 P.S.I.

Initial Flow Period Minutes 30 (B) 21 P.S.I. to (C) 21 P.S.I.

Initial Closed In Period Minutes 30 (D) 109 P.S.I.

Final Flow Period Minutes 30 (E) 21 P.S.I. to (F) 21 P.S.I.

Final Closed In Period Minutes 30 (G) 39 P.S.I.

Final Hydrostatic Pressure (H) 1719 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Signature of Customer or his authorized representative

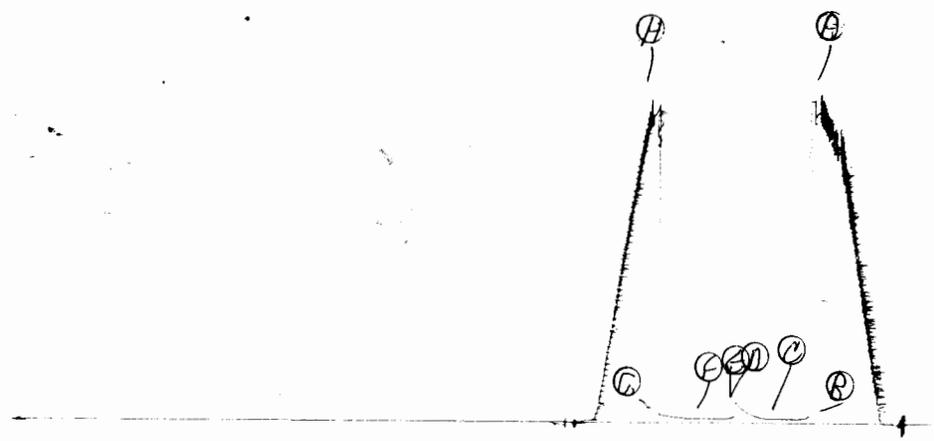
Western Representative Jimmy S. Salazar

FIELD INVOICE

Open Hole Test \$
Miscellaneous \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub \$
Mileage \$
Fluid Sampler \$
Extra Charts \$

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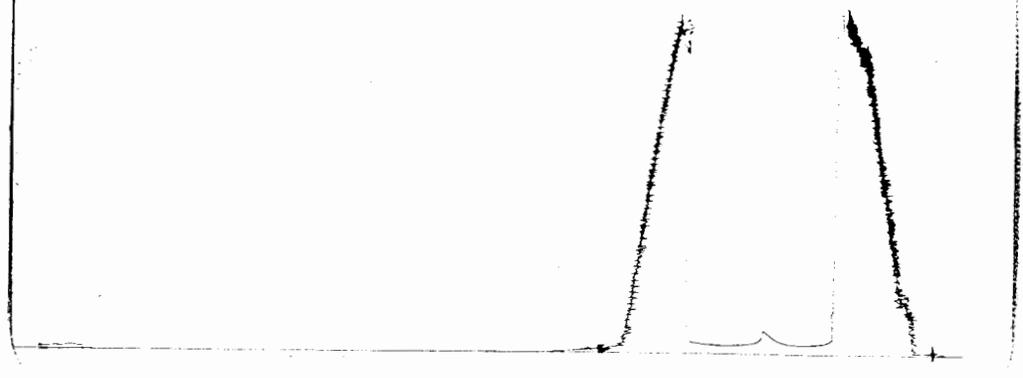
10242 DST1



Inside Recorder

KT 20165
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13759 DST1



Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE : 2/8/95
CUSTOMER : NOBEL PETROLEUM, INC.
WELL : #1 TEST: 2
ELEVATION: 1959 KB
SECTION : 4
RANGE : 18W COUNTY: RUSH
GAUGE SN#: 10242 RANGE : 4100
TICKET : 20266
LEASE : GROSS
GEOLOGIST: HONAS
FORMATION: PENNSYLVANIA SAND
TOWNSHIP : 16S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 3464.00 ft TO: 3535.00 ft TVD: 3535.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 3490.0 ft 3493.0 ft
TEMPERATURE: 102.0
DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 3444.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 20.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 71.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5XH
PACKER DEPTH: 3459.0 ft SIZE: 6.630 in
PACKER DEPTH: 3464.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : DUKE RIG 4
MUD TYPE : CHEMICAL
WEIGHT : 9.300 ppg
CHLORIDES : 5000 ppm
JARS-MAKE :
DID WELL FLOW?: NO
VISCOSITY : 47.00 cp
WATER LOSS: 12.000 cc
SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD SURFACE BLOW - SLOWLY BUILT TO
2 1/4 INCHES IN BUCKET IN 30 MINUTES. FINAL FLOW
PERIOD SURFACE BLOW - SLOWLY BUILT TO 2 1/2 INCHES

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

IN BUCKET IN 60 MINUTES.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
65.0	0.0	0.0	0.0	100.0	MUD

RATE INFORMATION

OIL VOLUME:	0.0000 STB		TOTAL FLOW TIME:	90.0000 min.
GAS VOLUME:	0.0000 SCF		AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	0.9117 STB		AVERAGE WATER RATE:	0.0000 STB/D
WATER VOLUME:	0.0000 STB			
TOTAL FLUID :	0.9117 STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1832.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	32.00	44.00
INITIAL SHUT-IN	45.00		1207.00
FINAL FLOW	60.00	44.00	51.00
FINAL SHUT-IN	45.00		1199.00

FINAL HYDROSTATIC PRESSURE: 1811.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1835.00

<u>Description</u>	<u>Duration</u>	<u>p1</u>	<u>p End</u>
INITIAL FLOW	30.00	42.00	47.00
INITIAL SHUT-IN	45.00		1215.00
FINAL FLOW	60.00	57.00	65.00
FINAL SHUT-IN	45.00		1203.00

FINAL HYDROSTATIC PRESSURE: 1784.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 2/8/95	TICKET : 20266
CUSTOMER : NOBEL PETROLEUM, INC.	LEASE : GROSS
WELL : #1 TEST: 2	GEOLOGIST: HONAS
ELEVATION: 1959 KB	FORMATION: PENNSYLVANIA SAND
SECTION : 4	TOWNSHIP : 16S
RANGE : 18W COUNTY: RUSH	STATE : KS
GAUGE SN#: 10242 RANGE : 4100	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	42.00	42.00
5.00	42.00	0.00
10.00	42.00	0.00
15.00	42.00	0.00
20.00	43.00	1.00
25.00	45.00	2.00
30.00	47.00	2.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	311.00	311.00	0.00
6.00	724.00	413.00	0.00
9.00	950.00	226.00	0.00
12.00	1050.00	100.00	0.00
15.00	1100.00	50.00	0.00
18.00	1134.00	34.00	0.00
21.00	1156.00	22.00	0.00
24.00	1170.00	14.00	0.00
27.00	1182.00	12.00	0.00
30.00	1193.00	11.00	0.00
33.00	1200.00	7.00	0.00
36.00	1207.00	7.00	0.00
39.00	1210.00	3.00	0.00
42.00	1213.00	3.00	0.00
45.00	1215.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	57.00	57.00
5.00	57.00	0.00
10.00	57.00	0.00
15.00	58.00	1.00
20.00	58.00	0.00
25.00	59.00	1.00
30.00	60.00	1.00
35.00	61.00	1.00
40.00	62.00	1.00
45.00	63.00	1.00
50.00	64.00	1.00
55.00	65.00	1.00
60.00	65.00	0.00

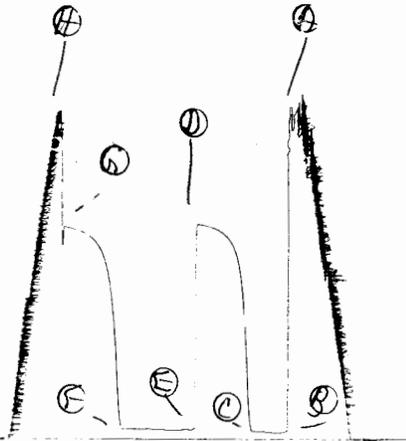
FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	497.00	497.00	0.00
6.00	792.00	295.00	0.00
9.00	940.00	148.00	0.00
12.00	1026.00	86.00	0.00
15.00	1078.00	52.00	0.00
18.00	1117.00	39.00	0.00
21.00	1139.00	22.00	0.00
24.00	1157.00	18.00	0.00
27.00	1167.00	10.00	0.00
30.00	1176.00	9.00	0.00
33.00	1184.00	8.00	0.00
36.00	1192.00	8.00	0.00
39.00	1198.00	6.00	0.00
42.00	1200.00	2.00	0.00
45.00	1203.00	3.00	0.00

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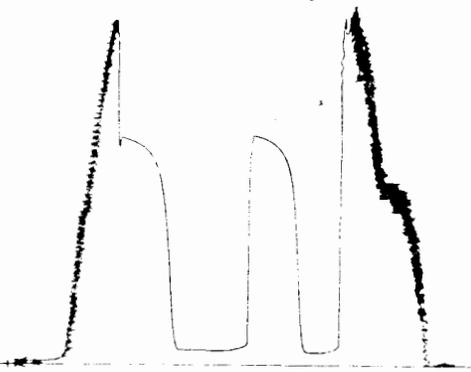


Inside Recorder

KT 2016

13759 DST 2

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Outside Recorder

DST REPORT

GENERAL INFORMATION

DATE	: 2/8/95	TICKET	: 20267
CUSTOMER	: NOBEL PETROLEUM, INC.	LEASE	: GROSS
WELL	: #1	TEST: 3	GEOLOGIST: HONAS
ELEVATION	: 1959 KB	FORMATION	: PENNSYLVANIA SAND
SECTION	: 4	TOWNSHIP	: 16S
RANGE	: 18W	COUNTY: RUSH	STATE : KS
GAUGE SN#	: 10242	RANGE : 4100	CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM:	3463.00 ft	TO:	3540.00 ft	TVD:	3540.0 ft
DEPTH OF SELECTIVE ZONE:				TEST TYPE:	GAS
DEPTH OF RECORDERS:	3529.0 ft		3532.0 ft		
TEMPERATURE:	102.0				
DRILL COLLAR LENGTH:	0.0 ft	I.D.:		0.000 in	
WEIGHT PIPE LENGTH :	0.0 ft	I.D.:		0.000 in	
DRILL PIPE LENGTH :	3443.0 ft	I.D.:		3.800 in	
TEST TOOL LENGTH :	20.0 ft	TOOL SIZE :		5.500 in	
ANCHOR LENGTH :	77.0 ft	ANCHOR SIZE:		5.500 in	
SURFACE CHOKE SIZE :	0.750 in	BOTTOM CHOKE SIZE:		0.750 in	
MAIN HOLE SIZE :	7.875 in	TOOL JOINT SIZE :		4.5XH	
PACKER DEPTH:	3458.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	3463.0 ft	SIZE:		6.630 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	
PACKER DEPTH:	0.0 ft	SIZE:		0.000 in	

MUD INFORMATION

DRILLING CON. :	DUKE RIG 4	VISCOSITY :	47.00 cp
MUD TYPE :	CHEMICAL	WATER LOSS:	12.000 cc
WEIGHT :	9.300 ppg	SERIAL NUMBER:	
CHLORIDES :	5000 ppm	REVERSED OUT?:	NO
JARS-MAKE :			
DID WELL FLOW?:	NO		

COMMENTS

Comment

INITIAL FLOW PERIOD VERY WEAK 1/2 INCH SLOWLY
BUILT TO 7 INCHES IN BUCKET IN 30 MINUTES. FINAL
FLOW PERIOD VERY WEAK 1/2 INCH SLOWLY BUILT TO

DST REPORT (CONTINUED)

COMMENTS (CONTINUED)

Comment

STRONG BLOW - OFF BOTTOM OF BUCKET IN 46 MINUTES.

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
40.0	0.0	0.0	0.0	100.0	MUD
60.0	0.0	2.0	0.0	98.0	SL GAS CUT MUD W/SPECKS
0.0	0.0	0.0	0.0	0.0	OF OIL
60.0	0.0	0.0	34.0	66.0	WATER CUT MUD
0.0	0.0	0.0	0.0	0.0	CHLORIDES 15000 PPM

RATE INFORMATION

OIL VOLUME:	0.0000 STB	TOTAL FLOW TIME:	85.0000 min.
GAS VOLUME:	0.0945 SCF	AVERAGE OIL RATE:	0.0000 STB/D
MUD VOLUME:	1.9412 STB	AVERAGE WATER RATE:	14.2574 STB/D
WATER VOLUME:	0.2861 STB		
TOTAL FLUID :	2.2274 STB		

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1850.00

Description	Duration	p1	p End
INITIAL FLOW	30.00	56.00	72.00
INITIAL SHUT-IN	45.00		1196.00
FINAL FLOW	60.00	79.00	123.00
FINAL SHUT-IN	45.00		1190.00

FINAL HYDROSTATIC PRESSURE: 1822.00

DST REPORT (CONTINUED)

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1860.00

Description	Duration	p1	p End
INITIAL FLOW	25.00	69.00	83.00
INITIAL SHUT-IN	45.00		1210.00
FINAL FLOW	60.00	95.00	135.00
FINAL SHUT-IN	45.00		1199.00

FINAL HYDROSTATIC PRESSURE: 1839.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 2/8/95	TICKET : 20267
CUSTOMER : NOBEL PETROLEUM, INC.	LEASE : GROSS
WELL : #1 TEST: 3	GEOLOGIST: HONAS
ELEVATION: 1959 KB	FORMATION: PENNSYLVANIA SAND
SECTION : 4	TOWNSHIP : 16S
RANGE : 18W COUNTY: RUSH	STATE : KS
GAUGE SN#: 10242 RANGE : 4100	CLOCK : 12

INITIAL FLOW

Time (min)	Pressure	Delta P
0.00	69.00	69.00
5.00	69.00	0.00
10.00	69.00	0.00
15.00	72.00	3.00
20.00	79.00	7.00
25.00	83.00	4.00

INITIAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	501.00	501.00	0.00
6.00	813.00	312.00	0.00
9.00	948.00	135.00	0.00
12.00	1032.00	84.00	0.00
15.00	1079.00	47.00	0.00
18.00	1118.00	39.00	0.00
21.00	1139.00	21.00	0.00
24.00	1159.00	20.00	0.00
27.00	1170.00	11.00	0.00
30.00	1181.00	11.00	0.00
33.00	1192.00	11.00	0.00
36.00	1201.00	9.00	0.00
39.00	1206.00	5.00	0.00
42.00	1208.00	2.00	0.00
45.00	1210.00	2.00	0.00

PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW

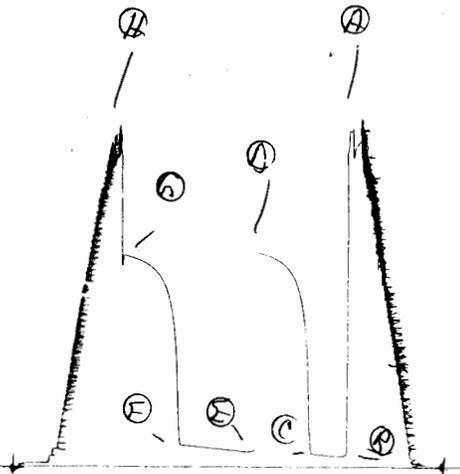
Time (min)	Pressure	Delta P
0.00	95.00	95.00
5.00	95.00	0.00
10.00	96.00	1.00
15.00	102.00	6.00
20.00	106.00	4.00
25.00	110.00	4.00
30.00	114.00	4.00
35.00	117.00	3.00
40.00	121.00	4.00
45.00	126.00	5.00
50.00	130.00	4.00
55.00	133.00	3.00
60.00	135.00	2.00

FINAL SHUT IN

Time (min)	Pressure	Delta P	Horner T
3.00	564.00	564.00	0.00
6.00	813.00	249.00	0.00
9.00	951.00	138.00	0.00
12.00	1023.00	72.00	0.00
15.00	1068.00	45.00	0.00
18.00	1102.00	34.00	0.00
21.00	1124.00	22.00	0.00
24.00	1144.00	20.00	0.00
27.00	1157.00	13.00	0.00
30.00	1167.00	10.00	0.00
33.00	1174.00	7.00	0.00
36.00	1181.00	7.00	0.00
39.00	1188.00	7.00	0.00
42.00	1195.00	7.00	0.00
45.00	1199.00	4.00	0.00

KT 2267
I

\$ 10242 DST 3



Inside Recorder

KT 2267
O

13759 DST 3



Outside Recorder