

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

1-15-30W

2628 K.B.

Date 11-26-1991 Location 4030' ESL 2970 FEL Elevation 26236.4 County GOVE

Company NATIONAL PETROLEUM RESERVES INC. Number of Copies 5

Charts Mailed to 250 North Rock Road Suite 340-Wichita Kansas 67206

Drilling Contractor Emphasis Drilling Rig # 7

Length Drill Pipe 3784 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 62 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 3789 Bottom Packer Depth 3874 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3874 TO 3988 ANCHOR LENGTH 114 TOTAL DEPTH 3988 Hole Size 7 7/8"

LEASE & WELL NO. ZIEGENBALG #2 FORMATION TESTED Kansas City "IS-K-L" 1 TEST NO. 1

Mud Weight 9.1 Viscosity 47 Water Loss 10.8 Chlorides - Pits 2000 D.S.T.

Maximum Temp. 114 °F Initial Hydrostatic Pressure (A) 1955 P.S.I. Final Hydrostatic Pressure (H) 1948 P.S.I.

Tool Open I.F.P. from 10:00 am to 10:15 am 15 min

Tool Closed I.C.I.P. from 10:15 m to 10:30 am 15 min

Tool Open F.F.P. from 10:30 am to 10:45 am 15 min

Tool Closed F.C.I.P. from 10:45 am to 11:00 am 15 min

Initial Blow WEAK blow for 9 minutes & died

Final Blow no blow

Total Feet Recovered 60 Gravity of Oil Corrected

60 Feet of Thin mud %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Feet of %Gas %Oil %Mud %Water

Remarks

Extra Equipment - Jars YES Safety Joint YES Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 906 Clock No. 47441 Depth 3982 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 13861 Clock No. 47442 Depth 3985 Insurance NONE

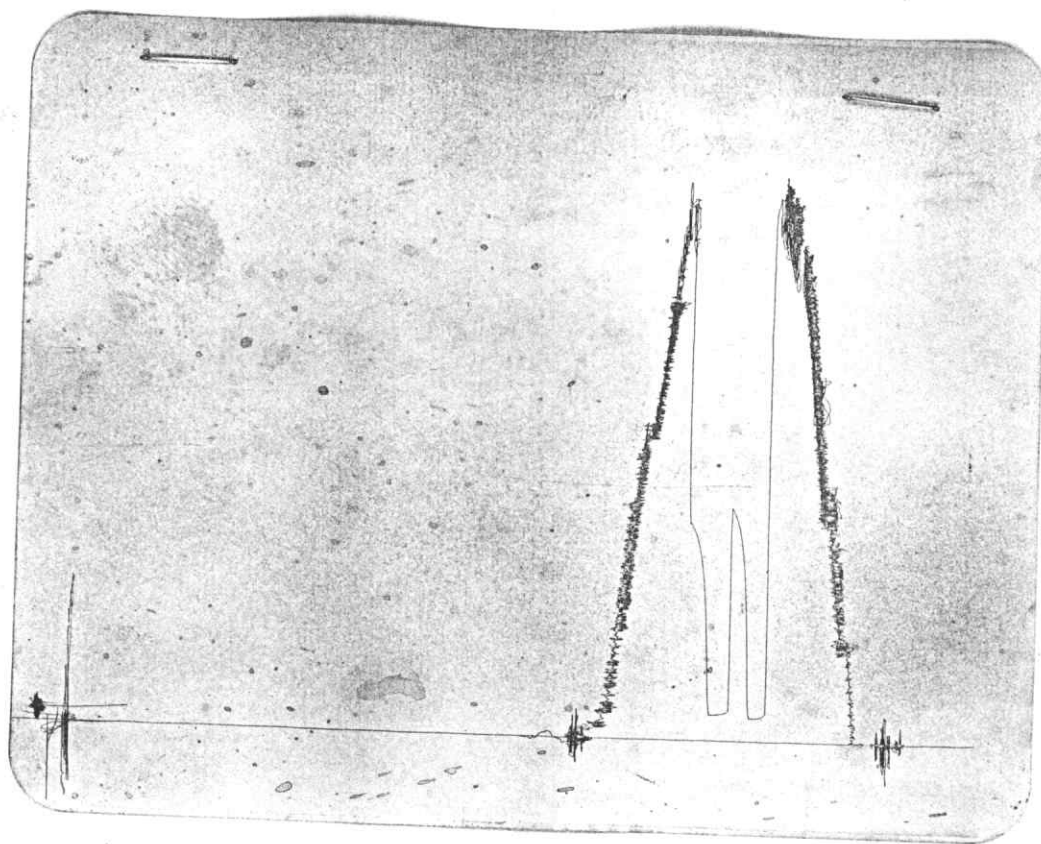
Price of Job

Tool Operator Gene Ludwig

Approved By

Nº 11476

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



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	<u>1955</u>	<u>1944</u>	P.S.I.
(B) First Initial Flow Pressure	<u>87</u>	<u>93</u>	P.S.I.
(C) First Final Flow Pressure	<u>87</u>	<u>87</u>	P.S.I.
(D) Initial Closed-in Pressure	<u>877</u>	<u>875</u>	P.S.I.
(E) Second Initial Flow Pressure	<u>87</u>	<u>106</u>	P.S.I.
(F) Second Final Flow Pressure	<u>87</u>	<u>96</u>	P.S.I.
(G) Final Closed-in Pressure	<u>819</u>	<u>818</u>	P.S.I.
(H) Final Hydrostatic Mud	<u>1948</u>	<u>1933</u>	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : NATIONAL PET.RES.INC. WELL NAME : ZIEGENBALG #2
ADDRESS : 250 N.ROCK ROAD LOCATION : 4030'FSL 2970'FEL 1-15-30
STATE & COUNTY : KANSAS,GOVE FIELD :
ELEV.(GR) : 2623 (KB) : 2628 TEST DATE : 11-26-1991

EQUIPMENT AND HOLE DATA

FORMATION TESTED : KANSAS CITY"I-J-KDRILL PIPE LENGTH(ft) : 3784
TEST INT. KB : 3874 to 3988 DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 114 WEIGHT PIPE LENGTH(ft) :
TYPE OF TEST : Conventional WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 3988 DRILL COLLAR LENGTH(ft) : 62
MAIN HOLE SIZE(in) : 7 7/8 DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.1 TOP PACKER DEPTH(kb) : 3779
MUD VISCOSITY : 47 BOTTOM PACKER DEPTH(kb) : 3874
MUD CHLORIDES : 2000 DUAL PACKERS :
SURFACE CHOKE : 3/4 PACKER SIZE(in) : 6 3/4
BOTTOM CHOKE(in) : 3/4 PACKER HOLD : Yes
TOOL SIZE(O.D.) : 5 1/2 TOOL PLUG : No
TOOL JOINT SIZE(F.H.) : 4 1/2 REVERSED OUT : No
RESERVOIR TEMPERATURE(F) : 114 TEST TICKET NUMBER : 11476

EXTRA EQUIPMENT : -JARS -SAFETY JOINT

ELEMENT SERIAL NO. : 906
RANGE : 0 - 2875 CLOCK RANGE : 12 HOURS
CAL. EQU. : $720.06 * \text{Defl.} + 3.83$

SURFACE BLOW

1st Opening : WEAK BLOW FOR 9 MINUTES AND DIED
2nd Opening : NO BLOW

RECOVERY

Recovered 60 feet of THIN MUD

REMARKS :

WITNESSED BY : JON ROSS

TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : NATIONAL PET.RES.INC.
 DATE OF TEST : 11-26-1991
 DEPTH : 3982.0

WELL NAME : ZIEGENBALG #2
 LOCATION : 4030'FSL 2970'FEL 1-15-30
 SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.:1					
Depth : 3982.0 ft-kb					
-1ST HYDROSTATIC	0.0	2.695	1944.38	.46	1944.84
-10:00 1ST FLOW	0.0	.129	96.72	-3.11	93.61
- 10:05	5.0	.121	90.96	-3.15	87.81
- 10:10	10.0	.121	90.96	-3.15	87.81
- 10:15	15.0	.121	90.96	-3.15	87.81
-10:15 END FLOW	0.0	.121	90.96	-3.15	87.81
- 10:20	5.0	.831	602.20	.85	603.05
- 10:25	10.0	1.099	795.17	2.36	797.53
- 10:31	16.0	1.206	872.22	2.96	875.18
-10:31 1ST SHUT-IN	0.0	1.206	872.22	2.96	875.18
-10:31 2ND FLOW	0.0	.147	109.68	-3.00	106.68
- 10:36	5.0	.135	101.04	-3.07	97.97
- 10:41	10.0	.133	99.60	-3.08	96.52
- 10:46	15.0	.133	99.60	-3.08	96.52
-10:46 END FLOW	0.0	.133	99.60	-3.08	96.52
- 10:51	5.0	.716	519.39	.20	519.59
- 10:56	10.0	1.002	725.33	1.81	727.14
- 11:01	15.0	1.098	794.45	2.35	796.81
- 11:03	17.0	1.128	816.06	2.52	818.58
-11:03 2ND SHUT-IN	0.0	1.128	816.06	2.52	818.58
-2ND HYDROSTATIC	0.0	2.679	1932.86	.52	1933.38

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Date 11-27-1991 Location 4030' FSL 2970' FEL Elevation 2628' B County GOVE

Company NATIONAL PETROLEUM RESERVES INC. Number of Copies 5

Charts Mailed to 250 NORTH ROCK ROAD SUITE 340 WICHITA KANSAS 67206

Drilling Contractor EMPHASIS DRILLING RIG #7

Length Drill Pipe 4114 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 4137 Bottom Packer Depth 4172 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4142 TO 4176 ANCHOR LENGTH 476 TOTAL DEPTH 34 Hole Size 7 7/8"

LEASE & WELL NO. Ziegenbalg #2 FORMATION TESTED Myrick Station TEST NO. 2

Mud Weight 9.1 Viscosity 47 Water Loss 10.8 Chlorides - Pits 2000 D.S.T.

Maximum Temp. 116 °F Initial Hydrostatic Pressure (A) 2084 P.S.I. Final Hydrostatic Pressure (H) 2034 P.S.I.

Tool Open I.F.P. from 4:15 A m to 4:45 A m 30 min

Tool Closed I.C.I.P. from 4:45 A m to 5:15 A m 30 min

Tool Open F.F.P. from 5:15 A m to 6:00 A m 45 min

Tool Closed F.C.J.P. from 6:00 A m to 7:00 A m 60 min

Initial Blow FAIR blow - bottom of a 5 Gallon bucket in 3 minutes

Final Blow FAIR blow - bottom of a 5 Gallon bucket in 5 minutes

Total Feet Recovered 335 Gravity of Oil 37 Corrected

700 Feet of GAS in the Pipe % Gas % Oil % Mud % Water

225 Feet of CLEAN GASSY OIL % Gas % Oil % Mud % Water

50 Feet of OIL & GAS cut mud 20 % Gas 20 % Oil 60 % Mud 0 % Water

60 Feet of OIL & GAS cut mud 52 % Gas 28 % Oil 20 % Mud 0 % Water

Feet of % Gas % Oil % Mud % Water

Feet of % Gas % Oil % Mud % Water

Feet of % Gas % Oil % Mud % Water

Feet of % Gas % Oil % Mud % Water

Feet of % Gas % Oil % Mud % Water

Remarks

Extra Equipment - Jars YES Safety Joint YES Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 906 Clock No. 47441 Depth 4170 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 13561 Clock No. 47442 Depth 4173 Insurance NONE

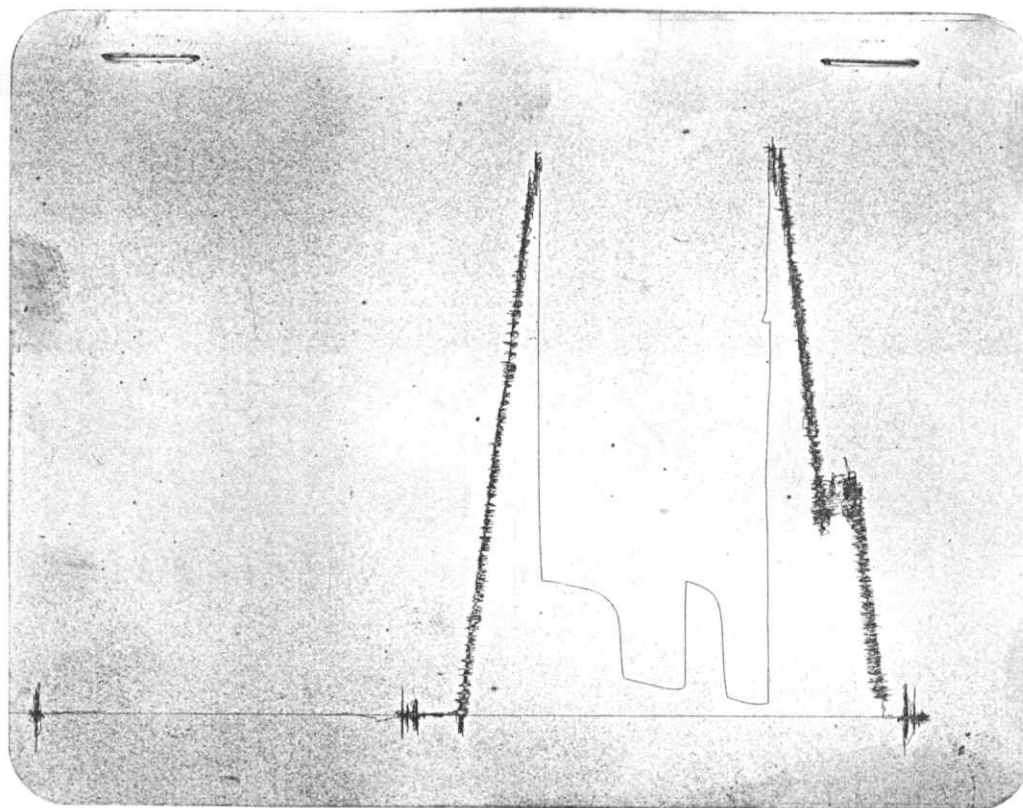
Price of Job

Tool Operator Gene Ludwig

Approved By

No 11477

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This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud	<u>2084</u>	<u>2068</u>	P.S.I.
(B) First Initial Flow Pressure	<u>50</u>	<u>52</u>	P.S.I.
(C) First Final Flow Pressure	<u>72</u>	<u>69</u>	P.S.I.
(D) Initial Closed-in Pressure	<u>507</u>	<u>504</u>	P.S.I.
(E) Second Initial Flow Pressure	<u>94</u>	<u>107</u>	P.S.I.
(F) Second Final Flow Pressure	<u>144</u>	<u>134</u>	P.S.I.
(G) Final Closed-in Pressure	<u>514</u>	<u>507</u>	P.S.I.
(H) Final Hydrostatic Mud	<u>2034</u>	<u>2040</u>	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : NATIONAL PET.RES.INC. WELL NAME : ZIEGENBALG #2
ADDRESS : 250 N.ROCK ROAD LOCATION : 4030'FSL 2970'FEL 1-15-30
STATE & COUNTY : KANSAS,GOVE FIELD :
ELEV.(GR) : 2623 (KB) : 2628 TEST DATE : 11-27-1991

EQUIPMENT AND HOLE DATA

FORMATION TESTED : MYRICK STATION DRILL PIPE LENGTH(ft) : 4114
TEST INT. KB : 4142 to 4176 DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 34 WEIGHT PIPE LENGTH(ft) :
TYPE OF TEST : Conventional WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 4176 DRILL COLLAR LENGTH(ft) : 0
MAIN HOLE SIZE(in) : 7 7/8 DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 9.1 TOP PACKER DEPTH(kb) : 4137
MUD VISCOSITY : 47 BOTTOM PACKER DEPTH(kb) : 4142
MUD CHLORIDES : 2000 DUAL PACKERS :
SURFACE CHOKE : 3/4 PACKER SIZE(in) : 6 3/4
BOTTOM CHOKE(in) : 3/4 PACKER HOLD : Yes
TOOL SIZE(O.D.) : 5 1/2 TOOL PLUG : No
TOOL JOINT SIZE(F.H.) : 4 1/2 REVERSED OUT : No
RESERVOIR TEMPERATURE(F) : 116 TEST TICKET NUMBER : 11477

EXTRA EQUIPMENT : -JARS -SAFETY JOINT

ELEMENT SERIAL NO. : 906
RANGE : 0 - 2875 CLOCK RANGE : 12 HOURS
CAL. EQU. : $720.06 * \text{Defl.} + 3.83$

SURFACE BLOW

1st Opening : FAIR BLOW-BOTTOM OF THE BUCKET IN 3 MINUTES
2nd Opening : FAIR BLOW-BOTTOM OF THE BUCKET IN 5 MINUTES

RECOVERY

Recovered 700 feet of GAS IN THE PIPE
Recovered 225 feet of CLEAN GASSY OIL
Recovered 110 feet of OIL AND GAS CUT MUD

REMARKS :

WITNESSED BY : JON ROSS

TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : NATIONAL PET.RES.INC.

WELL NAME : ZIEGENBALG #2

DATE OF TEST : 11-27-1991

LOCATION : 4030'FSL 2970'FEL 1-15-30

DEPTH : 4170.0

SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			----- CALC	CORR	CORRECTED
TEST NO.:2					
Depth : 4170.0 ft-kb					
-1ST HYDROSTATIC	0.0	2.868	2068.95	.01	2068.97
-4:15 1ST FLOW	0.0	.072	55.68	-3.43	52.25
- 4:20	5.0	.069	53.52	-3.44	50.07
- 4:25	10.0	.069	53.52	-3.44	50.07
- 4:30	15.0	.069	53.52	-3.44	50.07
- 4:35	20.0	.077	59.28	-3.40	55.88
- 4:40	25.0	.088	67.20	-3.34	63.86
- 4:45	30.0	.096	72.96	-3.29	69.67
-4:45 END FLOW	0.0	.096	72.96	-3.29	69.67
- 4:48	3.0	.262	192.49	-2.36	190.13
- 4:51	6.0	.556	404.18	-.70	403.48
- 4:54	9.0	.610	443.07	-.40	442.67
- 4:57	12.0	.636	461.79	-.25	461.54
- 5:00	15.0	.653	474.03	-.15	473.88
- 5:03	18.0	.664	481.95	-.09	481.86
- 5:06	21.0	.675	489.87	-.03	489.84
- 5:09	24.0	.685	497.07	.03	497.10
- 5:12	27.0	.690	500.67	.05	500.73
- 5:16	31.0	.695	504.27	.08	504.35
-5:16 1ST SHUT-IN	0.0	.695	504.27	.08	504.35
-5:16 2ND FLOW	0.0	.148	110.40	-3.00	107.40
- 5:21	5.0	.137	102.48	-3.06	99.42
- 5:26	10.0	.137	102.48	-3.06	99.42
- 5:31	15.0	.140	104.64	-3.04	101.60
- 5:36	20.0	.146	108.96	-3.01	105.95
- 5:41	25.0	.153	114.00	-2.97	111.03
- 5:46	30.0	.159	118.32	-2.94	115.38
- 5:51	35.0	.167	124.08	-2.89	121.19
- 5:56	40.0	.176	130.56	-2.84	127.72
- 6:01	45.0	.185	137.04	-2.79	134.25
-6:01 END FLOW	0.0	.185	137.04	-2.79	134.25
- 6:04	3.0	.456	332.18	-1.26	330.91
- 6:07	6.0	.544	395.54	-.77	394.78
- 6:10	9.0	.576	418.58	-.59	418.00
- 6:13	12.0	.600	435.87	-.45	435.41
- 6:16	15.0	.607	440.91	-.41	440.49
- 6:19	18.0	.630	457.47	-.28	457.18
- 6:22	21.0	.640	464.67	-.23	464.44
- 6:25	24.0	.647	469.71	-.19	469.52
- 6:28	27.0	.651	472.59	-.17	472.42

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

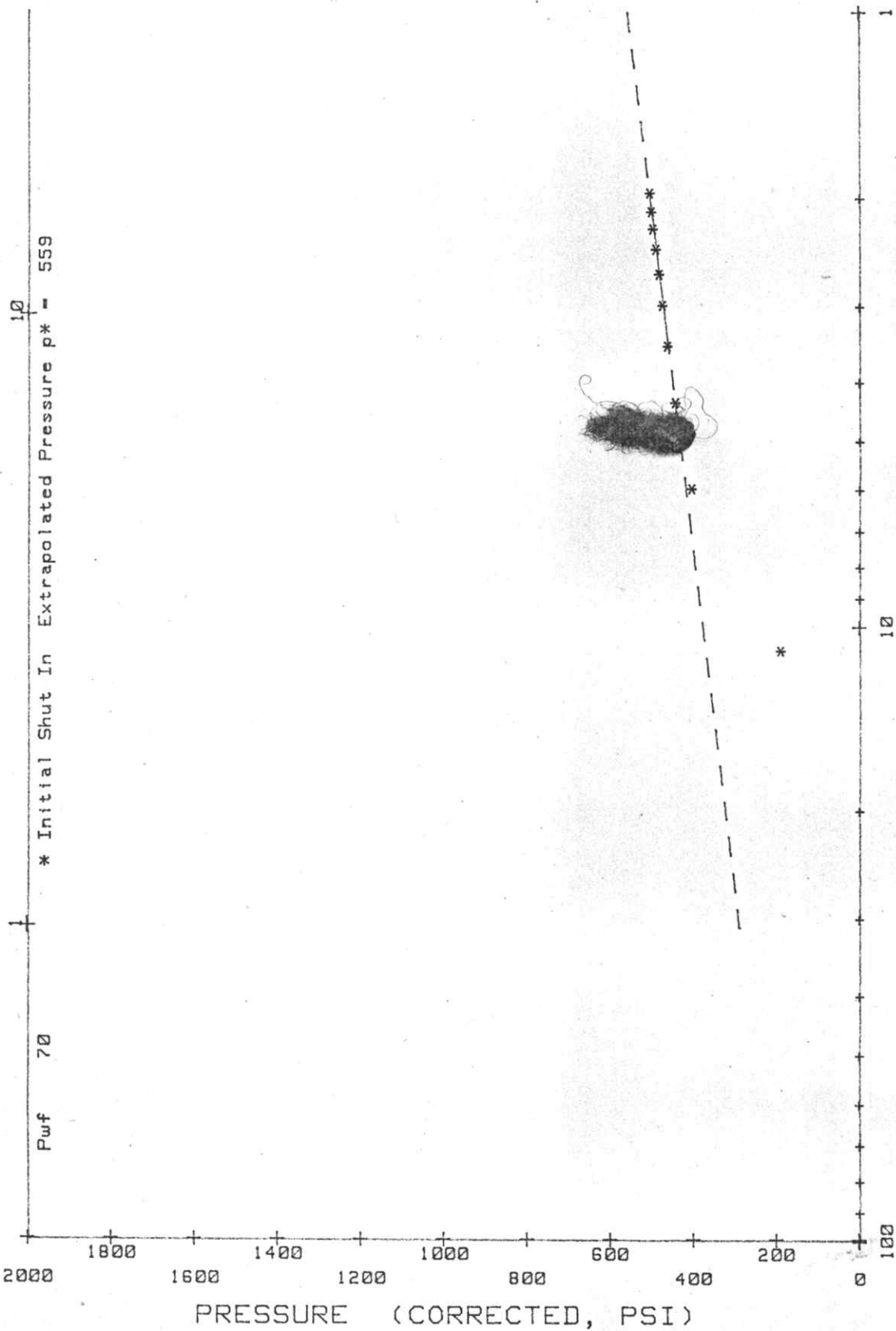
COMPANY : NATIONAL PET.RES.INC.
 DATE OF TEST : 11-27-1991
 DEPTH : 4170.0

WELL NAME : ZIEGENBALG #2
 LOCATION : 4030'FSL 2970'FEL 1-15-30
 SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	----- CALC	----- PRESSURE PSIG CORR	----- CORRECTED
TEST NO.:2					
- 6:31	30.0	.656	476.19	-.14	476.05
- 6:34	33.0	.660	479.07	-.11	478.96
- 6:37	36.0	.664	481.95	-.09	481.86
- 6:40	39.0	.669	485.55	-.06	485.49
- 6:43	42.0	.674	489.15	-.04	489.11
- 6:46	45.0	.680	493.47	-0.00	493.47
- 6:49	48.0	.685	497.07	.03	497.10
- 6:52	51.0	.691	501.39	.06	501.45
- 6:55	54.0	.694	503.55	.08	503.63
- 6:58	57.0	.696	504.99	.09	505.08
- 7:02	61.0	.699	507.15	.11	507.26
-7:02 2ND SHUT-IN	0.0	.699	507.15	.11	507.26
-2ND HYDROSTATIC	0.0	2.828	2040.15	.08	2040.23

GAUGE # : 906

LOCATION : 4030'FSL 2970'FEL 1-15-30DATE : 11-27-1991



SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : NATIONAL PET.RES.INC.
 WELL NAME : ZIEGENBALG #2
 LOCATION : 4030'FSL 2970'FEL 1-15-30
 STATE & COUNTY : KANSAS,GOVE
 DATE OF TEST : 11-27-1991
 TEST INT. KB : 4142 to 4176
 TOTAL INTERVAL (ft) K.B. : 34.00
 ELEV.(GR) : 2623 (KB) : 2628
 FIELD :

ELEMENT SERIAL NO. : 906
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES CORR PSIG
Refer. depth :	4170.0 ft-kb		
-4:45 END FLOW	0.00	0.00	69.67
	3.00	11.00	190.13
	6.00	6.00	403.48
	9.00	4.33	442.67
	12.00	3.50	461.54
	15.00	3.00	473.88
	18.00	2.67	481.86
	21.00	2.43	489.84
	24.00	2.25	497.10
	27.00	2.11	500.73
	31.00	1.97	504.35
-5:16 1ST SHUT-IN	0.00	0.00	504.35

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : NATIONAL PET.RES.INC.	WELL NAME : ZIEGENBALG #2
DATE OF TEST : 11-27-1991	LOCATION : 4030'FSL 2970'FEL 1-15-30
DST. NO : 2	SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

EXTRAPOLATED RESERVOIR PRESSURE (psi):	559.00
Slope of Build-up Curve (psi/log cycle):	180.53
Effective Producing Time (min):	30.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

GAUGE # : 906

LOCATION : 4030' FSL 2970' FEL 1-15-30 DATE : 11-27-1991

100

10

X Final Shut In Extrapolated Pressure $p^* = 554$

P_{wf} 134

1

2000

1800

1600

1400

1200

1000

800

600

400

200

0

PRESSURE (CORRECTED, PSI)

100

10

1

TIME (MINUTES) : $(T+dt)/dt$ -- (Semilog scale)

SUPERIOR TESTERS ENTERPRISES INC.

HORNER ANALYSIS

COMPANY : NATIONAL PET.RES.INC.
 WELL NAME : ZIEGENBALG #2
 LOCATION : 4030'FSL 2970'FEL 1-15-30
 STATE & COUNTY : KANSAS,GOVE
 DATE OF TEST : 11-27-1991
 TEST INT. KB : 4142 to 4176
 TOTAL INTERVAL (ft) K.B. : 34.00
 ELEV.(GR) : 2623 (KB) : 2628
 FIELD :

ELEMENT SERIAL NO. : 906
 LATEST CALIBRATION :

COMMENTS	TIME min	(T+dt)/dt min	----- PRESSURES ----- CORR PSIG
Refer. depth :	4170.0 ft-kb		
-6:01 END FLOW	0.00	0.00	134.25
	3.00	26.00	330.91
	6.00	13.50	394.78
	9.00	9.33	418.00
	12.00	7.25	435.41
	15.00	6.00	440.49
	18.00	5.17	457.18
	21.00	4.57	464.44
	24.00	4.13	469.52
	27.00	3.78	472.42
	30.00	3.50	476.05
	33.00	3.27	478.96
	36.00	3.08	481.86
	39.00	2.92	485.49
	42.00	2.79	489.11
	45.00	2.67	493.47
	48.00	2.56	497.10
	51.00	2.47	501.45
	54.00	2.39	503.63
	57.00	2.32	505.08
	61.00	2.23	507.26
-7:02 2ND SHUT-IN	0.00	0.00	507.26

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : NATIONAL PET.RES.INC.
DATE OF TEST : 11-27-1991
DST. NO : 2

WELL NAME : ZIEGENBALG #2
LOCATION : 4030'FSL 2970'FEL 1-15-30
SHUT-IN PERIOD : 2

INTERPRETIVE DATA (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp):	61.37
Gas (md.ft/cp):	0.00

EFFECTIVE PERMEABILITY

Oil (md):	5.45
Gas (md):	0.00

TOTAL MOBILITY (md/cp):	6.81
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TOTAL COMPRESSIBILITY (psi-1):	7.86E-06
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ESTIMATED DAMAGE RATIO:	.66
-------------------------------	-----

CALCULATED DAMAGE RATIO:	.66
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Reservoir Temperature (F):	116.00
Formation Porosity :	.18
Formation Thickness (ft):	10.00
Wellbore Radius (in):	3.94
Reservoir Compressibility (psi-1):	4.80E-07
Calculated Skin Factor :	-1.78

PRODUCTION WITH DAMAGE REMOVED (bbl/D):	53.30
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PRODUCTIVITY INDEX (bbl/psi):	.13
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Final Flow Pressure (psi):	134.00
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APPROXIMATE RADIUS OF INVESTIGATION (ft):	79.18
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Total Flowing Time (min):	75.00
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EXTRAPOLATED RESERVOIR PRESSURE (psi):	554.00
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Slope of Build-up Curve (psi/log cycle):	141.22
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Effective Producing Time (min):	75.00
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INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 11-27-1991 Location 4030 FSL 2970 FEL Elevation 2628 K.B. County Cove

Company National Petroleum Reserves, Inc. Number of Copies 5

Charts Mailed to 250 North Rock Road Suite 340 Wichita Kansas 67206

Drilling Contractor Emphasis Drilling, Inc. #1

Length Drill Pipe 1160 I.D. Drill Pipe 13.80 Tool Joint Size 4 1/2" X 1"

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars None I.D. Drill Collars None Tool Joint Size None

Top Packer Depth 4183 Bottom Packer Depth 4188 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4188 TO 4278 ANCHOR LENGTH 90 TOTAL DEPTH 4278 Hole Size 7 7/8"

LEASE & WELL NO. 3192000 #2 FORMATION TESTED Fort Scott Johnson 3 TEST NO. 3

Mud Weight 9.2 Viscosity 47 Water Loss 108 Chlorides - Pits 2000 D.S.T.

Maximum Temp. 117 °F Initial Hydrostatic Pressure (A) P.S.I. Final Hydrostatic Pressure (H) P.S.I.

Tool Open I.F.P. from 10:15 P.m. to 10:30 P.m. 15 min

Tool Closed I.C.I.P. from 10:30 P.m. to 10:45 P.m. 15 min

Tool Open F.F.P. from 10:45 P.m. to 11:00 P.m. 15 min

Tool Closed F.C.I.P. from 11:00 P.m. to 11:15 P.m. 15 min

Initial Blow WEAK blow for 11 minutes & died

Final Blow NO blow

Total Feet Recovered 5 Gravity of Oil Corrected

5 Feet of mud with a good show of oil between Gas % Oil % Mud % Water

 Feet of the shut-in & hydraulic tools Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

 Feet of Gas % Oil % Mud % Water

Remarks

Extra Equipment - Jars yes Safety Joint yes Extra Packer None Straddle None Hook Wall None

Top Recorder No. 906 Clock No. 47441 Depth 4272 Cir. Sub None Sampler None

Bottom Recorder No. 13561 Clock No. 47442 Depth 4275 Insurance None

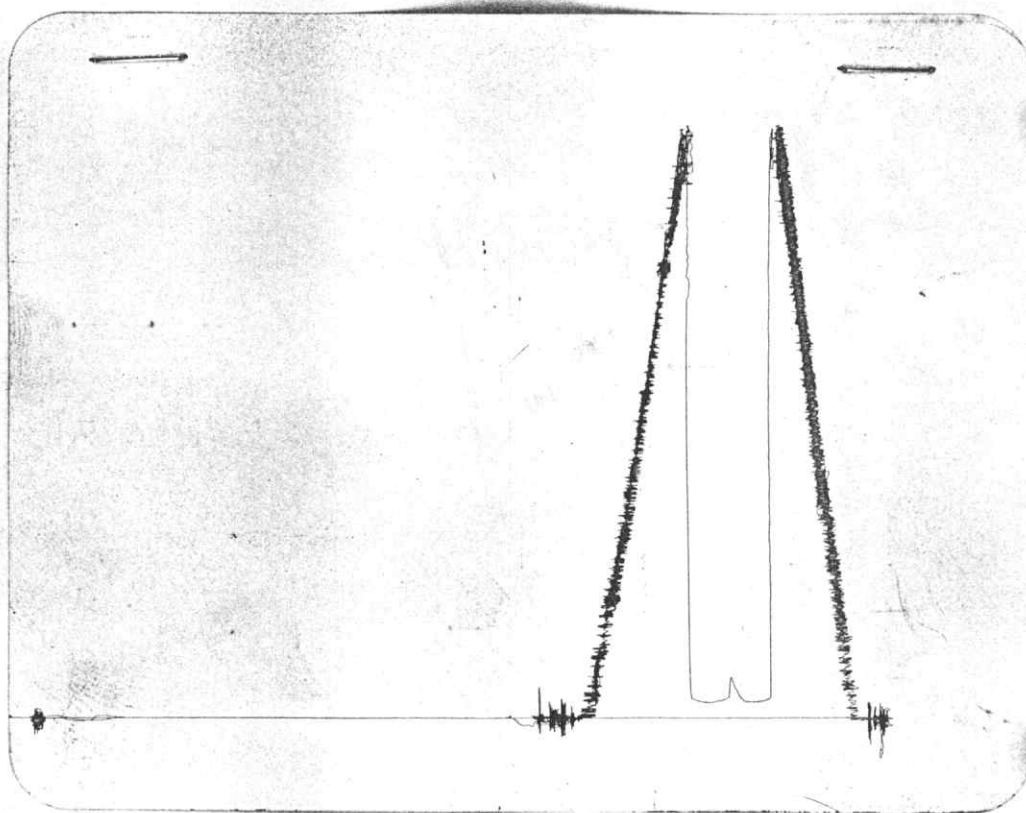
Price of Job

Tool Operator Aene Budig

Approved By

Nº 11478

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



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud		2117	P.S.I.
(B) First Initial Flow Pressure	58	69	P.S.I.
(C) First Final Flow Pressure	58	62	P.S.I.
(D) Initial Closed-in Pressure	144	144	P.S.I.
(E) Second Initial Flow Pressure	65	69	P.S.I.
(F) Second Final Flow Pressure	58	60	P.S.I.
(G) Final Closed-in Pressure	65	72	P.S.I.
(H) Final Hydrostatic Mud		2090	P.S.I.

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : NATIONAL PET.RESERVES	WELL NAME : ZIEGENBALG #2
ADDRESS : 250 N.ROCK ROAD,WICHITA	LOCATION : 4030 FSL 2970 FEL 1-15-30
STATE & COUNTY : KANSAS,GOVE	FIELD :
ELEV.(GR) : 2623 (KB) : 2628	TEST DATE : 11-27-1991

EQUIPMENT AND HOLE DATA

FORMATION TESTED : FORT SCOTT-JOHNSODRILL PIPE LENGTH(ft) : 4160	
TEST INT. KB : 4188 to 4278	DRILL PIPE O.D.(in) : 3.82
ANCHOR LENGTH(ft) : 90	WEIGHT PIPE LENGTH(ft) :
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-kb) : 4278	DRILL COLLAR LENGTH(ft) :
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D.(in) : 2.259
MUD WEIGHT : 10.8	TOP PACKER DEPTH(kb) : 4183
MUD VISCOSITY : 47	BOTTOM PACKER DEPTH(kb) : 4188
MUD CHLORIDES : 2000	DUAL PACKERS :
SURFACE CHOKE : 3/4	PACKER SIZE(in) : 6 3/4
BOTTOM CHOKE(in) : 3/4	PACKER HOLD : Yes
TOOL SIZE(O.D.) : 5 1/2	TOOL PLUG : No
TOOL JOINT SIZE(F.H.) : 4 1/2	REVERSED OUT : No
RESERVOIR TEMPERATURE(F) : 117	TEST TICKET NUMBER : 11478

EXTRA EQUIPMENT : -JARS -SAFETY JOINT

ELEMENT SERIAL NO. : 906
RANGE : 0 - 2875
CAL. EQU. : 720.06 * Defl. + 3.83
CLOCK RANGE : 12 HOURS

SURFACE BLOW

1st Opening : WEAK BLOW FOR 11 MINUTES AND DIED
2nd Opening : NO BLOW

RECOVERY

Recovered 5 feet of MUD WITH A SHOW OF OIL BETWEEN THE TOOLS

REMARKS :

WITNESSED BY : JON ROSE

TOOL OPERATOR : GENE BUDIG

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : NATIONAL PET.RESERVES
DATE OF TEST : 11-27-1991
DEPTH : 4272.0

WELL NAME : ZIEGENBALG #2
LOCATION : 4030 FSL 2970 FEL 1-15-30
SERIAL NO. : 906

COMMENTS	TIME min	DEFL in	----- CALC	PRESSURE PSIG CORR	----- CORRECTED
TEST NO.:1					
Depth : 4272.0 ft-kb					
-1ST HYDROSTATIC	0.0	2.935	2117.20	-.10	2117.10
-10:15 1ST FLOW	0.0	.096	72.96	-3.29	69.67
- 10:20	5.0	.091	69.36	-3.32	66.04
- 10:25	10.0	.086	65.76	-3.35	62.41
- 10:30	15.0	.086	65.76	-3.35	62.41
-10:30 END FLOW	0.0	.086	65.76	-3.35	62.41
- 10:35	5.0	.094	71.52	-3.30	68.21
- 10:40	10.0	.141	105.36	-3.04	102.32
- 10:44	14.0	.199	147.12	-2.71	144.41
-10:44 1ST SHUT-IN	0.0	.199	147.12	-2.71	144.41
-10:44 2ND FLOW	0.0	.096	72.96	-3.29	69.67
- 10:49	5.0	.093	70.80	-3.31	67.49
- 10:54	10.0	.088	67.20	-3.34	63.86
- 10:59	15.0	.083	63.60	-3.37	60.23
-10:59 END FLOW	0.0	.083	63.60	-3.37	60.23
- 11:04	5.0	.082	62.88	-3.37	59.51
- 11:09	10.0	.087	66.48	-3.34	63.13
- 11:14	15.0	.100	75.84	-3.27	72.57
-11:14 2ND SHUT-IN	0.0	.100	75.84	-3.27	72.57
- 11:14	0.0	2.098	1514.51	2.68	1517.19
-2ND HYDROSTATIC	0.0	2.898	2090.55	-.04	2090.52