

ORIGINAL

27-8s-12w

15-141-20337

Computer Inventoried

WELL NAME:	Schweitzer #1
COMPANY:	Castle Resources, Inc.
LOCATION:	27-8S-12W Osborne County Kansas
DATE:	05/19/97

TRILOBITE TESTING L.L.C.

OPERATOR : Castle Resources, Inc.
 WELL NAME: Schweitzer #1
 LOCATION : 27-8-12-Osborne
 INTERVAL : 2864.00 To 2940.00 ft

DATE 5-17-97

KB 0.00 ft TICKET NO: 10155 DST #1
 GR 0.00 ft FORMATION: Lansing KC 'B'
 TD 2940.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
45	Rec.	13754	13754	2357			PF Fr. 0345 to 0430 hr
30	Range(Psi)	4000.0	4000.0	4995.0	0.0	0.0	IS Fr. 0430 to 0500 hr
45	Clock(hrs)	12 hr	12 hr	Elec			SF Fr. 0500 to 0545 hr
30	Depth(ft)	2937.0	2937.0	2867.0	0.0	0.0	FS Fr. 0545 to 0615 hr

	Field	1	2	3	4	
A. Init Hydro	1356.0	1365.0	1365.0	0.0	0.0	T STARTED 0140 hr
B. First Flow	39.0	51.0	17.0	0.0	0.0	T ON BOTM 0340 hr
C. Final Flow	49.0	52.0	37.0	0.0	0.0	T OPEN 0345 hr
D. In Shut-in	1086.0	1079.0	1091.0	0.0	0.0	T PULLED 0615 hr
E. Init Flow	68.0	74.0	39.0	0.0	0.0	T OUT 0800 hr
F. Final Flow	78.0	75.0	54.0	0.0	0.0	
G. Fl Shut-in	1056.0	1052.0	1065.0	0.0	0.0	TOOL DATA-----
H. Final Hydro	1336.0	1305.0	1297.0	0.0	0.0	Tool Wt. 1500.00 lbs
Inside/Outside	O	O	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 80000.00 lbs
						Initial Str Wt 21000.00 lbs
						Unseated Str Wt 21000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 0.00 in
						D. Pipe ID 3.80 in
						D.C. Length 0.00 ft
						D.P. Length 2871.00 ft

RECOVERY

90.00 ft of Drilling Mud w/ oil spots in tool
 90.00 ft of
 90.00 ft of
 90.00 ft of
 90.00 ft of
 90.00 ft of
 90.00 ft of
 90.00 ft of

SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

BLOW DESCRIPTION

Initial Blow-Weak steady surface blow
 Final Blow-Weak steady surface blow

SAMPLES:
 SENT TO:

MUD DATA-----
 Mud Type Chemical
 Weight 8.80 lb/cf
 Vis. 40.00 S/L
 W.L. 12.00 in3
 F.C. 0.00 in
 Mud Drop N
 Amt. of fill 0.00 ft
 Btm. H. Temp. 95.00 F
 Hole Condition Good
 % Porosity 0.00
 Packer Size 6.75 in
 No. of Packers 2
 Cushion Amt. 0.00
 Cushion Type
 Reversed Out N
 Tool Chased N
 Tester Dan Bangle
 Co. Rep. Jerry Green
 Contr. Vonfeldt
 Rig # 1
 Unit #
 Pump T.

Test Successful: Y

*** TOOL DIAGRAM *** CONV

WELL NAME: Schweitzer #1

LOCATION : 27-8-12-Osborne

TICKET No. 10155 D.S.T. No. 1 DATE 5-17-97

TOTAL TOOL TO BOTTOM OF TOP PACKERS 20

INTERVAL TOOL

BOTTOM PACKERS AND ANCHOR 14

TOTAL TOOL 34

DRILL COLLAR ANCHOR IN INTERVAL

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands 1 Single Total 62

TOTAL ASSEMBLY 96

D.C. ABOVE TOOLS.Stands Single Total

D.P. ABOVE TOOLS.Stands40 Single Total 2871

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 2967

TOTAL DEPTH 2940

TOTAL DRILL PIPE ABOVE K.B. 27

REMARKS:

P.O. SUB	
C.O. SUB	2844
S.I. TOOL Sterling	2850
HMV Sterling	2855
JARS n/a	
SAFETY JOINT n/a	
PACKER	2859
PACKER	2864
DEPTH 2864	
STUBB 1'	2865
ANCHOR 1' Perfs	2866
1' Co Sub	2867
Alpine Rec @ 2867	
T.C.	
DEPTH	
1 Std Dp 62'	2929
1' Co Sub	2930
5' Perfs	2935
AK-1 Rec @ 2937	
BULLNOSE 5' Bullplug	2940
T.D.	

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10155 DST# 1 Schweitzer #1 Castle Res

DATE: 05/17/97

TIME: 01:40:31

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
***** Initial Hydro.	121.00	1365.1	0.0	92.28		
***** Start Flow 1	0.00	17.4	0.0	92.41		
	1.00	18.6	1.2	92.45		
	2.00	19.2	1.8	92.47		
	3.00	19.5	2.1	92.46		
	4.00	20.1	2.7	92.46		
	5.00	20.5	3.0	92.46		
	6.00	20.9	3.4	92.45		
	7.00	21.2	3.8	92.44		
	8.00	21.9	4.4	92.44		
	9.00	22.1	4.7	92.45		
	10.00	22.7	5.2	92.44		
	11.00	23.1	5.6	92.45		
	12.00	23.5	6.0	92.46		
	13.00	24.0	6.5	92.46		
	14.00	24.2	6.7	92.47		
	15.00	24.8	7.3	92.48		
	16.00	25.0	7.6	92.49		
	17.00	25.6	8.1	92.51		
	18.00	25.8	8.4	92.52		
	19.00	26.1	8.6	92.53		
	20.00	26.5	9.1	92.54		
	21.00	26.9	9.5	92.56		
	22.00	27.3	9.8	92.57		
	23.00	27.8	10.3	92.58		
	24.00	27.9	10.5	92.60		
	25.00	28.4	10.9	92.62		
	26.00	28.6	11.2	92.63		
	27.00	29.0	11.6	92.64		
	28.00	29.3	11.8	92.67		
	29.00	29.9	12.4	92.68		
	30.00	30.1	12.7	92.69		
	31.00	30.3	12.8	92.71		
	32.00	30.8	13.3	92.71		
	33.00	31.3	13.8	92.73		
	34.00	31.7	14.3	92.74		
	35.00	32.3	14.9	92.76		
	36.00	32.8	15.4	92.77		
	37.00	33.4	15.9	92.79		
	38.00	33.8	16.4	92.80		
	39.00	34.2	16.8	92.81		
	40.00	34.5	17.0	92.82		
	41.00	34.7	17.3	92.83		
	42.00	35.2	17.7	92.85		
	43.00	35.3	17.9	92.86		
	44.00	35.7	18.2	92.88		
	45.00	35.7	18.3	92.89		
	46.00	36.0	18.5	92.90		
	47.00	36.2	18.8	92.91		
***** End Flow 1	48.00	36.7	19.2	92.93		
***** Start Shutin 1	0.00	36.7	0.0	92.93	0.0000	0.001

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10155 DST# 1 Schweitzer #1 Castle Res

DATE: 05/17/97 TIME: 01:40:31

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	1.00	58.8	22.2	92.94	49.0000	0.003
	2.00	170.2	133.5	92.96	25.0000	0.029
	3.00	415.6	378.9	92.98	17.0000	0.173
	4.00	622.1	585.5	93.02	13.0000	0.387
	5.00	749.0	712.3	93.06	10.6000	0.561
	6.00	827.6	790.9	93.09	9.0000	0.685
	7.00	878.4	841.7	93.13	7.8571	0.772
	8.00	915.4	878.7	93.17	7.0000	0.838
	9.00	942.8	906.1	93.23	6.3333	0.889
	10.00	964.2	927.5	93.23	5.8000	0.930
	11.00	981.4	944.7	93.27	5.3636	0.963
	12.00	995.6	959.0	93.29	5.0000	0.991
	13.00	1007.7	971.0	93.31	4.6923	1.015
	14.00	1018.3	981.6	93.34	4.4286	1.037
	15.00	1027.4	990.8	93.35	4.2000	1.056
	16.00	1035.7	999.1	93.38	4.0000	1.073
	17.00	1043.0	1006.4	93.40	3.8235	1.088
	18.00	1049.7	1013.0	93.42	3.6667	1.102
	19.00	1055.9	1019.2	93.44	3.5263	1.115
	20.00	1061.3	1024.7	93.51	3.4000	1.126
	21.00	1066.5	1029.9	93.47	3.2857	1.138
	22.00	1071.3	1034.7	93.49	3.1818	1.148
	23.00	1075.7	1039.0	93.49	3.0870	1.157
	24.00	1079.9	1043.2	93.52	3.0000	1.166
	25.00	1083.7	1047.0	93.53	2.9200	1.174
	26.00	1087.3	1050.6	93.54	2.8462	1.182
***** End Shut-in 1	27.00	1090.5	1053.9	93.54	2.7778	1.189
***** Start Flow 2	0.00	38.7	0.0	93.51		
	1.00	39.2	0.5	93.49		
	2.00	39.3	0.6	93.47		
	3.00	39.4	0.8	93.45		
	4.00	39.9	1.2	93.43		
	5.00	40.2	1.5	93.41		
	6.00	40.5	1.8	93.39		
	7.00	41.1	2.4	93.39		
	8.00	41.5	2.8	93.38		
	9.00	41.8	3.1	93.37		
	10.00	42.1	3.4	93.38		
	11.00	42.5	3.9	93.38		
	12.00	42.7	4.0	93.38		
	13.00	43.2	4.5	93.38		
	14.00	43.6	5.0	93.39		
	15.00	44.0	5.3	93.40		
	16.00	44.6	6.0	93.40		
	17.00	44.8	6.1	93.41		
	18.00	45.1	6.5	93.41		
	19.00	45.5	6.8	93.42		
	20.00	46.1	7.4	93.42		
	21.00	46.2	7.6	93.44		
	22.00	46.6	7.9	93.45		
	23.00	46.9	8.2	93.45		

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10155 DST# 1 Schweitzer #1 Castle Res

DATE: 05/17/97

TIME: 01:40:31

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	24.00	47.2	8.6	93.46		
	25.00	47.5	8.8	93.47		
	26.00	47.7	9.1	93.48		
	27.00	48.0	9.3	93.49		
	28.00	48.7	10	93.50		
	29.00	48.8	10.2	93.51		
	30.00	49.1	10.4	93.51		
	31.00	49.3	10.7	93.53		
	32.00	49.8	11.1	93.53		
	33.00	50.0	11.3	93.54		
	34.00	50.5	11.8	93.55		
	35.00	50.7	12.0	93.56		
	36.00	51.0	12.3	93.57		
	37.00	51.3	12.6	93.58		
	38.00	51.7	13.0	93.59		
	39.00	52.0	13.3	93.61		
	40.00	52.2	13.5	93.61		
	41.00	52.6	13.9	93.62		
	42.00	52.9	14.2	93.63		
	43.00	53.1	14.4	93.64		
	44.00	53.5	14.9	93.65		
***** End Flow 2	45.00	53.7	15.0	93.66		
***** Start Shutin 2	0.00	53.7	0.0	93.66	0.0000	0.003
	1.00	67.8	14.1	93.68	94.0000	0.005
	2.00	127.7	74.0	93.69	47.5000	0.016
	3.00	264.3	210.6	93.71	32.0000	0.070
	4.00	465.0	411.2	93.74	24.2500	0.216
	5.00	630.1	576.4	93.77	19.6000	0.397
	6.00	738.5	684.8	93.80	16.5000	0.545
	7.00	808.6	754.8	93.83	14.2857	0.654
	8.00	855.9	802.2	93.87	12.6250	0.733
	9.00	889.8	836.1	93.90	11.3333	0.792
	10.00	915.2	861.5	93.94	10.3000	0.838
	11.00	935.1	881.4	93.97	9.4545	0.874
	12.00	951.6	897.9	93.99	8.7500	0.906
	13.00	965.2	911.5	94.03	8.1538	0.932
	14.00	977.1	923.4	94.05	7.6429	0.955
	15.00	987.2	933.4	94.08	7.2000	0.974
	16.00	996.1	942.4	94.10	6.8125	0.992
	17.00	1004.2	950.5	94.12	6.4706	1.008
	18.00	1011.4	957.7	94.14	6.1667	1.023
	19.00	1017.9	964.2	94.15	5.8947	1.036
	20.00	1024.1	970.4	94.17	5.6500	1.049
	21.00	1029.5	975.8	94.19	5.4286	1.060
	22.00	1034.6	980.9	94.20	5.2273	1.070
	23.00	1039.3	985.6	94.22	5.0435	1.080
	24.00	1043.7	990.0	94.23	4.8750	1.089
	25.00	1047.8	994.1	94.25	4.7200	1.098
	26.00	1051.8	998.1	94.26	4.5769	1.106
	27.00	1055.6	1001.9	94.28	4.4444	1.114
	28.00	1059.1	1005.4	94.28	4.3214	1.122

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk# 10155 DST# 1 Schweitzer #1 Castle Res

DATE: 05/17/97 TIME: 01:40:31

	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P ² /10 ⁶
	29.00	1062.4	1008.7	94.30	4.2069	1.129
***** End Shut-in 2	30.00	1065.5	1011.8	94.32	4.1000	1.135
***** Final Hydro.	275.00	1296.8	0.0	94.33		

TEST HISTORY

TK# 10155 DST# 1 Schweitzer #1 Castle Res

Flag Points

t (Min.)	Pk (PSig)
A: 0.00	1365.08
B: 0.00	17.45
C: 48.00	36.67
D: 27.00	1090.55
E: 0.00	38.68
F: 45.00	53.71
G: 30.00	1065.46
Q: 0.00	1296.76

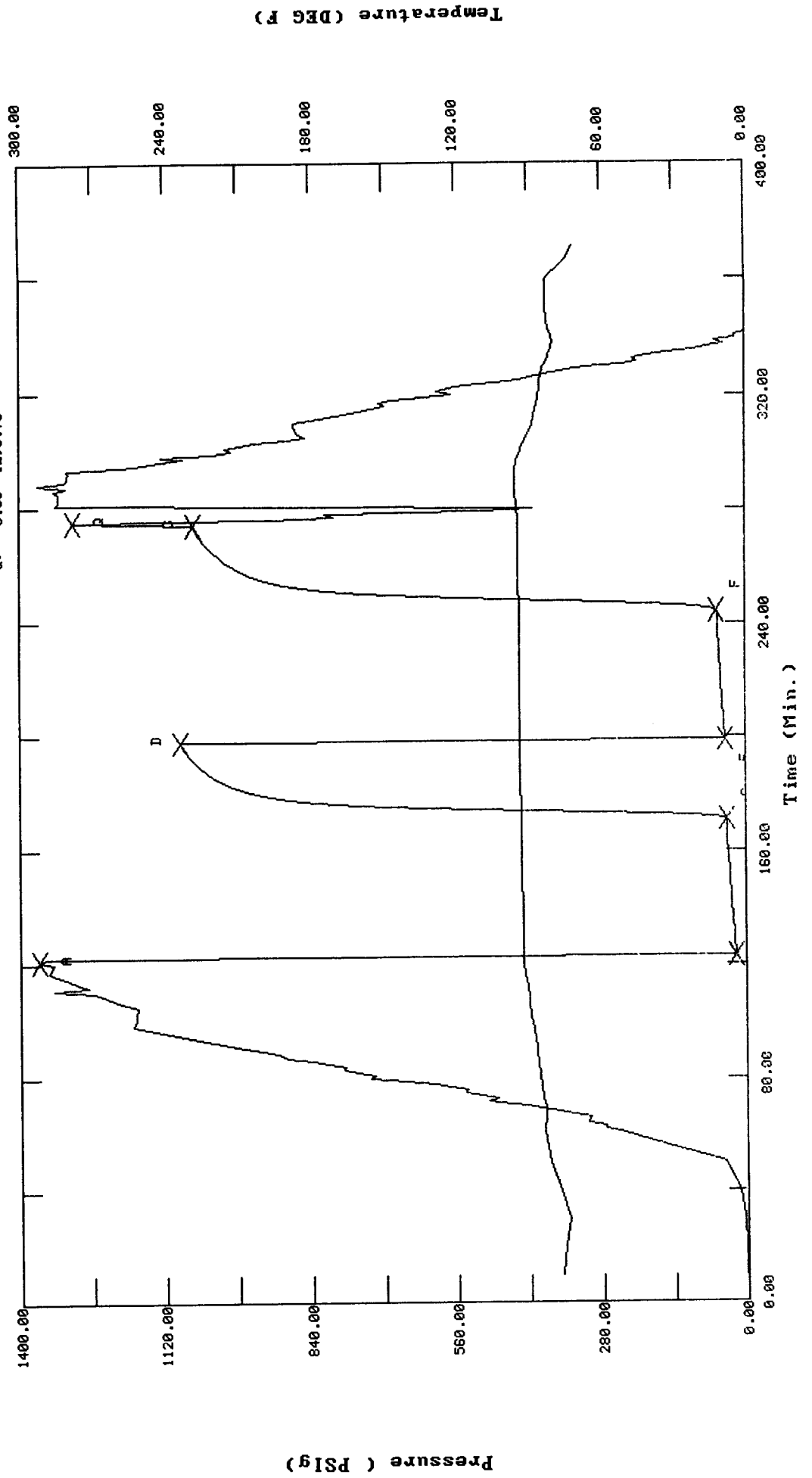
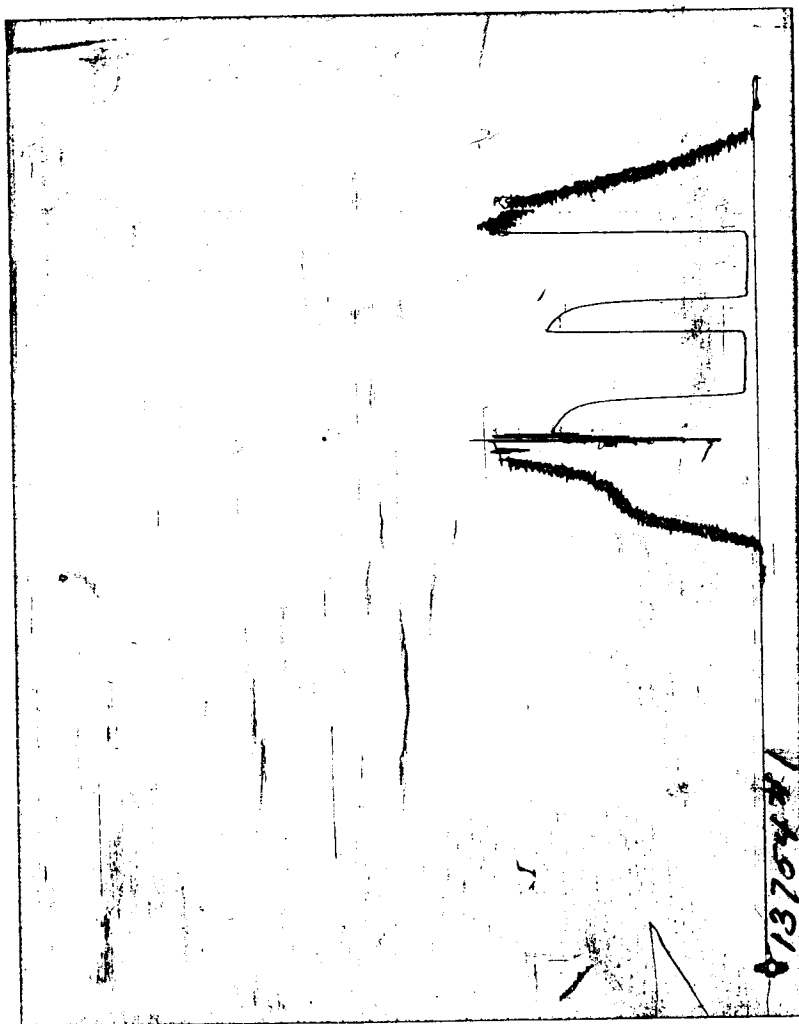


CHART PAGE



This is a photocopy of the actual AK-1 recorder chart



TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Test Ticket

N^o 10155

Well Name & No.	<u>Schweitzer #1</u>	Test No.	<u>1</u>	Date	<u>5-17-97</u>
Company	<u>Castle Res, Inc</u>	Zone Tested	<u>B</u>	<u>LKC</u>	
Address	<u>1200 E. 27th Ste C, Hays, Ks. 67601</u>		Elevation	<u>KB</u>	<u>GL</u>
Co. Rep / Geo.	<u>Jerry Green</u>	Cont.	<u>Vonfeldt #1</u>	Est. Ft. of Pay	<u>Por.</u> %
Location: Sec.	<u>27</u>	Twp.	<u>8</u>	Rge.	<u>12</u>
				Co.	<u>Osborne</u> State <u>Ks</u>
No. of Copies	Distribution Sheet (Y, N)	Turnkey (Y, N)	Evaluation (Y, N)		

Interval Tested	<u>2864-2940</u>	Initial Str Wt./Lbs.	<u>24000</u>	Unseated Str Wt./Lbs.	<u>21,000</u>
Anchor Length	<u>76</u>	Wt. Set Lbs.	<u>20,000</u>	Wt. Pulled Loose/Lbs.	<u>80,000</u>
Top Packer Depth	<u>2859</u>	Tool Weight	<u>1500</u>		
Bottom Packer Depth	<u>2864</u>	Hole Size — 7 7/8"		Rubber Size — 6 3/4"	
Total Depth	<u>2940</u>	Wt. Pipe Run		Drill Collar Run	
Mud Wt.	<u>8.8</u> LCM	Vis.	<u>40</u> WL	<u>12</u>	Drill Pipe Size <u>4.5 X H</u> Ft. Run <u>2871</u>
Blow Description	<u>I.F. Weak steady surface blow.</u>				
	<u>F.F. Weak steady surface blow.</u>				

Recovery — Total Feet	<u>90</u>	GIP		Ft. in DC		Ft. in DP	<u>90</u>
Rec.	<u>90</u>	Feet Of	<u>D.M w/oil spots</u>	%gas	%oil	%water	%mud
Rec.		Feet Of	<u>in Tool</u>	%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud
Rec.		Feet Of		%gas	%oil	%water	%mud

BHT 95 °F Gravity _____ °API D@ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud	<u>1356</u> <u>1365</u> PSI	Recorder No.	<u>2357</u>	T-Started	<u>01:40</u>
(B) First Initial Flow Pressure	<u>39</u> <u>17</u> PSI	(depth)	<u>2867</u>	T-Open	<u>03:45</u>
(C) First Final Flow Pressure	<u>49</u> <u>37</u> PSI	Recorder No.	<u>13754</u>	T-Pulled	<u>06:15</u>
(D) Initial Shut-in Pressure	<u>1086</u> <u>1091</u> PSI	(depth)	<u>2937</u>	T-Out	<u>08:00</u>
(E) Second Initial Flow Pressure	<u>68</u> <u>39</u> PSI	Recorder No.			
(F) Second Final Flow Pressure	<u>78</u> <u>54</u> PSI	(depth)			
(G) Final Shut-in Pressure	<u>1056</u> <u>1065</u> PSI	Initial Opening	<u>45</u>	Test	
(H) Final Hydrostatic Mud	<u>1336</u> <u>1332</u> PSI	Initial Shut-in	<u>30</u>	Jars	
	<u>AK-1 Alpine</u>	Final Flow	<u>45</u>	Safety Joint	
		Final Shut-in	<u>30</u>	Straddle	

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF 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, 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.

Approved By _____
 Our Representative Dan Rangle

Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Elect. Rec. X
 Other _____
 TOTAL PRICE \$ _____

Operator.....: Castle Resources
Well Name.....: Schweitzer #1
DST Number.....: 1

Location.: 27-8S-12W Osborne co KS Recorder No...: 2357
Test Type: conv Recorder Depth: 2867
Formation: Lansing KC B Test Interval.: 2864-2940

RESERVOIR CALCULATIONS: Fluid calculations based on shut-in #2

RESERVOIR PARAMETERS USED:

Net Pay.....:	2.00 ft
Porosity.....:	11.00 %
Bottom Hole Temp.....:	95.00 F
Specific Gravity.....:	0.027
API Gravity.....:	40.00
Compressibility.....:	0.000004 /psi
Viscosity.....:	7.8110 cp
Total Recovery.....:	90.00 ft
Total Flowing Time.....:	90.00 min.
Flow Rate.....:	0.20 bbls/d
Final Flowing Pressure.....:	54.00 psi
Horner Slope.....:	295.3800 psi/cycle
Extrapolated Pressure.....:	1246.00 psi
Formation Volume Factor.....:	1.02 Reservoir/Surface
Well Bore Radius.....:	3.94 in

RESULTS:

Effective Permeability.....:	0.439867 md
Flow Capacity.....:	0.8797 md.ft
Transmissibility.....:	0.1126 md.ft/cp
Skin Factor.....:	1.6029
Radius of Investigation.....:	12.70647 ft
Damage Ratio.....:	1.5269
Productivity Index.....:	0.0002 bbls/psi.d
Productivity Index W/O Damage.:	0.0003 bbls/psi.d