

ORIGINAL

15-051-24936

**Computer inventoried**

**WELL NAME:** Hammerschmidt #2  
**COMPANY:** Hertel Oil Company  
**LOCATION:** 20-14S-17W  
Ellis County Kansas  
**DATE:** 09/10/96

**KCC**

**MAR 7 1997**

TRILOBITE TESTING L.L.C.

OPERATOR : Hertel Oil Company

DATE 9-10-96

WELL NAME: Hammerschmidt #2

KB 1980.00 ft

TICKET NO: 9516

DST #1

LOCATION : 20-14S-17W, Ellis Cty KS

GR 1972.00 ft

FORMATION: Arbuckle

INTERVAL : 3526.00 To 3541.00 ft

TD 3541.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	13754	13754	2357			PF Fr. 1539 to 1559 hr
SI 15 Range(Psi )	4000.0	4000.0	.4995.0	0.0	0.0	IS Fr. 1559 to 1609 hr
SF 15 Clock(hrs)	12	12	Alpin			SF Fr. 1609 to 1624 hr
FS 15 Depth(ft )	3538.0	3538.0	3528.0	0.0	0.0	FS Fr. 1624 to 1639 hr

	Field	1	2	3	4	
A. Init Hydro	1836.0	1814.0	1819.0	0.0	0.0	T STARTED 1425 hr
B. First Flow	9.0	20.0	21.0	0.0	0.0	T ON BOTM 1537 hr
B1. Final Flow	9.0	20.0	21.0	0.0	0.0	T OPEN 1539 hr
C. In Shut-in	19.0	30.0	30.0	0.0	0.0	T PULLED 1639 hr
D. Init Flow	9.0	24.0	21.0	0.0	0.0	T OUT 1810 hr
E. Final Flow	9.0	24.0	20.0	0.0	0.0	
F. Fl Shut-in	19.0	27.0	33.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1786.0	1806.0	1809.0	0.0	0.0	Tool Wt. 1000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs

RECOVERY

Tot Fluid 1.00 ft of 1.00 ft in DC and 0.00 ft in DP  
 1.00 ft of Drilling mud w/ oil spots

Initial Str Wt 31000.00 lbs  
 Unseated Str Wt 31000.00 lbs  
 Bot Choke 0.75 in  
 Hole Size 7.88 in  
 D Col. ID 2.25 in  
 D. Pipe ID 3.80 in  
 D.C. Length 30.00 ft  
 D.P. Length 3479.00 ft

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

BLOW DESCRIPTION

Initial Flow -  
 Weak, died in 5 minutes

Final Flow -  
 No blow

MUD DATA-----  
 Mud Type Chemical  
 Weight 9.70 lb/c  
 Vis. 47.00 S/L  
 W.L. 9.60 in3  
 F.C. 0.00 in  
 Mud Drop N

Amt. of fill 0.00 ft  
 Btm. H. Temp. 105.00 F  
 Hole Condition Good  
 % Porosity 0.00  
 Packer Size 6.75 in  
 No. of Packers 2  
 Cushion Amt. 0.00  
 Cushion Type

SAMPLES:

SENT TO:

Reversed Out N  
 Tool Chased N  
 Tester Dan Bangle  
 Co. Rep. Mark Kilian  
 Contr. Discovery  
 Rig # 1  
 Unit #  
 Pump T.

Test Successful: Y

# TEST HISTORY

Tk#9516 DST#1 Hammerschmidt#2 Hertel Oil Co

## Flag Points

t(Min.) P( PSig)

A:	0.00	1818.62
B:	0.00	20.97
C:	10.00	20.97
D:	10.00	29.62
E:	0.00	21.06
F:	12.00	20.13
G:	13.50	33.39
Q:	0.00	1808.97

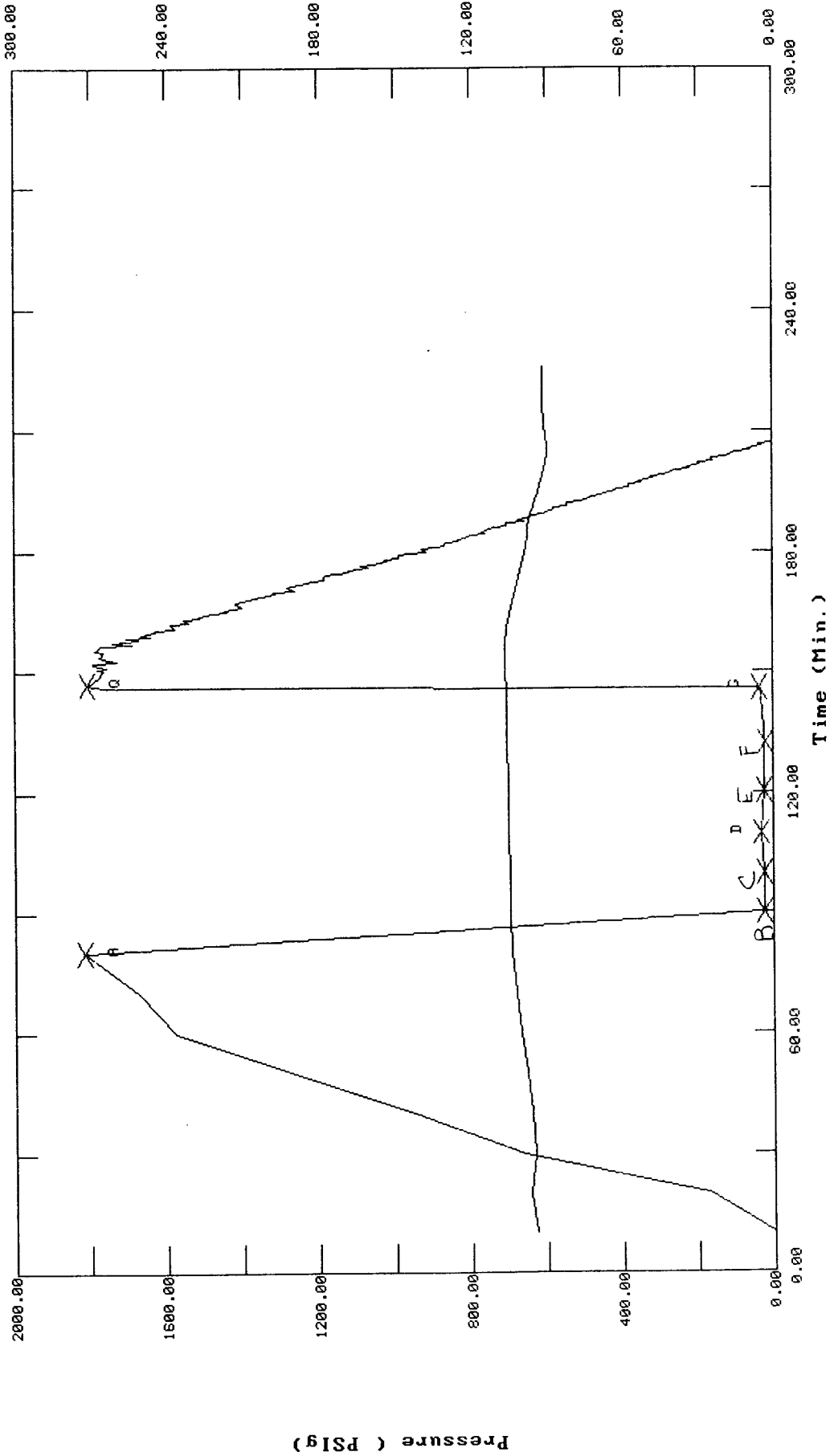
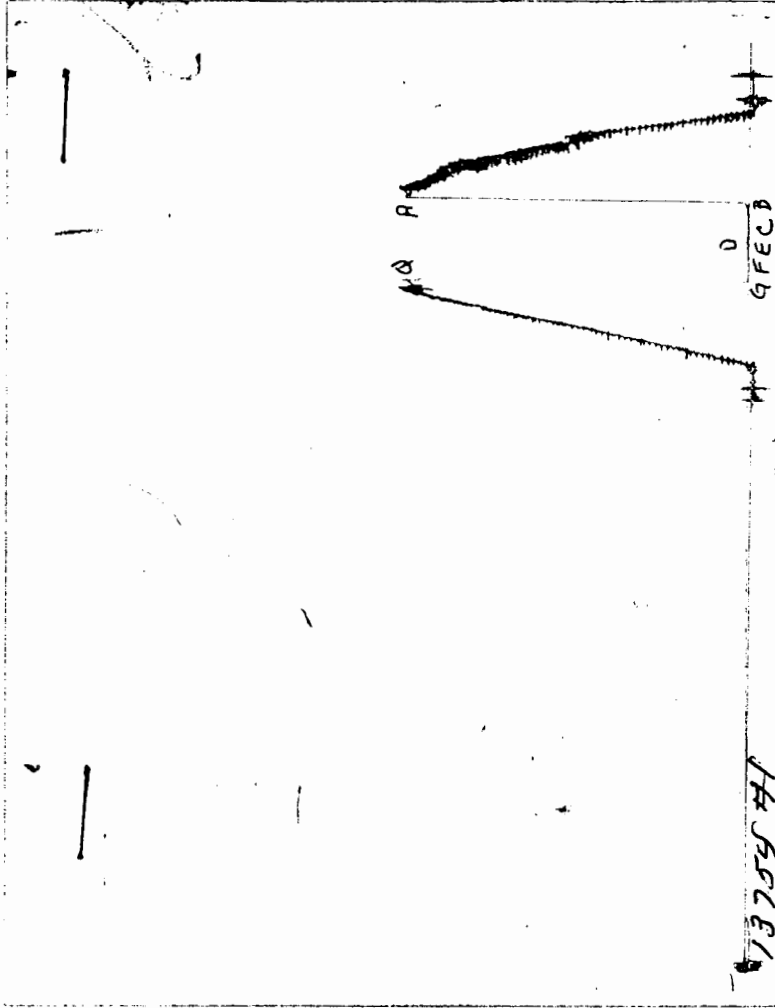


CHART PAGE



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

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9516 DST#1 Hammerschmidt#2 Hertel Oil Co

DATE: 09/10/96

TIME: 13:14:06

	Time	Pressure PSIg	delta P PSIg	P	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	80.00	1818.6	0.0		103.81		
***** Start Flow 1	0.00	21.0	0.0		104.30		
***** End Flow 1	10.00	21.0	0.0		104.37		
***** Start Shutin 1	0.00	21.0	0.0		104.37	0.0000	0.000
***** End Shut-in 1	10.00	29.6	8.6		104.62	2.0000	0.001
***** Start Flow 2	0.00	21.1	0.0		104.92		
	0.50	21.1	0.0		104.95		
	1.00	21.1	0.0		104.97		
	1.50	21.1	0.0		105.00		
	2.00	20.9	-0.2		105.01		
	2.50	21.0	-0.1		105.03		
	3.00	21.0	-0.1		105.05		
	3.50	21.0	-0.1		105.07		
	4.00	21.0	-0.1		105.09		
	4.50	21.0	-0.1		105.11		
	5.00	21.1	0.1		105.12		
	5.50	21.1	0.1		105.14		
	6.00	21.1	0.1		105.16		
	6.50	21.1	0.1		105.17		
	7.00	21.1	0.1		105.18		
	7.50	21.1	0.1		105.20		
	8.00	21.1	0.1		105.22		
	8.50	21.1	0.1		105.23		
	9.00	21.1	0.1		105.25		
	9.50	21.1	0.1		105.26		
	10.00	21.2	0.2		105.28		
	10.50	21.2	0.2		105.29		
	11.00	21.2	0.2		105.31		
	11.50	21.2	0.2		105.32		
***** End Flow 2	12.00	20.1	-0.9		105.34		
***** Start Shutin 2	0.00	20.1	0.0		105.34	0.0000	0.000
	0.50	20.6	0.4		105.35	45.0000	0.000
	1.00	20.9	0.8		105.36	23.0000	0.000
	1.50	21.3	1.2		105.38	15.6667	0.000
	2.00	21.8	1.7		105.39	12.0000	0.000
	2.50	22.2	2.1		105.41	9.8000	0.000
	3.00	22.5	2.4		105.42	8.3333	0.001
	3.50	22.9	2.8		105.43	7.2857	0.001
	4.00	23.3	3.2		105.44	6.5000	0.001
	4.50	23.7	3.6		105.46	5.8889	0.001
	5.00	24.2	4.0		105.47	5.4000	0.001
	5.50	24.6	4.4		105.49	5.0000	0.001
	6.00	25.2	5.0		105.50	4.6667	0.001
	6.50	25.6	5.5		105.51	4.3846	0.001
	7.00	26.2	6.0		105.52	4.1429	0.001
	7.50	26.8	6.6		105.54	3.9333	0.001
	8.00	27.2	7.0		105.55	3.7500	0.001
	8.50	27.7	7.6		105.56	3.5882	0.001
	9.00	28.2	8.1		105.58	3.4444	0.001
	9.50	28.7	8.6		105.59	3.3158	0.001
	10.00	29.2	9.1		105.60	3.2000	0.001

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9516 DST#1 Hammerschmidt#2 Hertel Oil Co

DATE: 09/10/96 TIME: 13:14:06  
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	Time	Pressure PSig	delta P PSig	Temp. DEG F	(T+dT)/dT	P^2/10^6
	10.50	29.9	9.7	105.62	3.0952	0.001
	11.00	30.4	10.2	105.63	3.0000	0.001
	11.50	31.0	10.8	105.64	2.9130	0.001
	12.00	31.5	11.3	105.65	2.8333	0.001
	12.50	32.0	11.8	105.66	2.7600	0.001
	13.00	32.6	12.5	105.68	2.6923	0.001
***** End Shut-in 2	13.50	33.4	13.3	105.69	2.6296	0.001
***** Final Hydro.	147.00	1809.0	0.0	105.77		

\*\*\* TOOL DIAGRAM \*\*\* CONV

WELL NAME: Hammerschmidt #2

LOCATION : 20-14S-17W, Ellis Cty KS

TICKET No. 9516 D.S.T. No. 1 DATE 9-10-96

TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 20

INTERVAL TOOL .....

BOTTOM PACKERS AND ANCHOR ..... 15

TOTAL TOOL ..... 35

DRILL COLLAR ANCHOR IN INTERVAL .....

D.C. ANCHOR STND.Stands Single Total

D.P. ANCHOR STND.Stands Single Total

TOTAL ASSEMBLY ..... 35

D.C. ABOVE TOOLS.Stands Single 1 Total 30

D.P. ABOVE TOOLS.Stands 57 Single Total 3479

TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3544

TOTAL DEPTH ..... 3541

TOTAL DRILL PIPE ABOVE K.B. .... 3

REMARKS:

P.O. SUB	
C.O. SUB	3506
S.I. TOOL	3512
HMV	3517
JARS na	
SAFETY JOINT na	
PACKER	3521
PACKER	3526
DEPTH 3526	
STUBB 1'	3527
ANCHOR 1'Perfs	3528
Alpine recorder	3528
5' Perfs	3533
T.C.	
DEPTH	
3' Perfs	3536
AK-1 recorder	3538
BULLNOSE 5' Bullplug	
T.D.	3541

TRILOBITE TESTING L.L.C.

OPERATOR : Hertel Oil Company

DATE 9-11-96

WELL NAME: Hammerschmidt #1

KB 1980.00 ft

TICKET NO: 9517

DST #2

LOCATION : 20-14S-17W, Ellis Cty KS

GR 1972.00 ft

FORMATION: Arbuckle

INTERVAL : 3542.00 To 3561.00 ft

TD 3561.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 15 Rec.	13754	13754	2357			PF Fr. 0300 to 0315 hr
SI 15 Range (Psi )	4000.0	4000.0	4995.0	0.0	0.0	IS Fr. 0315 to 0330 hr
SF 15 Clock (hrs)	12	12	Alpin			SF Fr. 0330 to 0345 hr
FS 15 Depth(ft )	3558.0	3558.0	3544.0	0.0	0.0	FS Fr. 0345 to 0400 hr

	Field	1	2	3	4	
A. Init Hydro	1876.0	1874.0	1854.0	0.0	0.0	T STARTED 0150 hr
B. First Flow	39.0	26.0	20.0	0.0	0.0	T ON BOTM 0258 hr
B1. Final Flow	39.0	26.0	20.0	0.0	0.0	T OPEN 0300 hr
C. In Shut-in	49.0	34.0	44.0	0.0	0.0	T PULLED 0400 hr
D. Init Flow	39.0	26.0	21.0	0.0	0.0	T OUT 0515 hr
E. Final Flow	39.0	26.0	20.0	0.0	0.0	
F. Fl Shut-in	49.0	39.0	38.0	0.0	0.0	TOOL DATA-----
G. Final Hydro	1836.0	1834.0	1825.0	0.0	0.0	Tool Wt. 1000.00 lbs
Inside/Outside	0	0	I			Wt Set On Packer 20000.00 lbs
						Wt Pulled Loose 31000.00 lbs
						Initial Str Wt 31000.00 lbs
						Unseated Str Wt 35000.00 lbs
						Bot Choke 0.75 in
						Hole Size 7.88 in
						D Col. ID 2.25 in
						D. Pipe ID 3.80 in
						D.C. Length 30.00 ft
						D.P. Length 3509.00 ft

RECOVERY

Tot Fluid 5.00 ft of 5.00 ft in DC and 0.00 ft in DP  
 5.00 ft of Drilling mud w/ oil spots

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

BLOW DESCRIPTION

Initial Flow -  
 Weak, died in 5 minutes  
  
 Final Flow -  
 No blow

MUD DATA-----

Mud Type	Chemical
Weight	9.70 lb/cf
Vis.	47.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop N	
Amt. of fill	0.00 ft
Btm. H. Temp.	103.00 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.	Mark Kilian
Contr.	Discovery
Rig #	1
Unit #	
Pump T.	

SAMPLES:

SENT TO:

Test Successful: Y

# TEST HISTORY

Tk#9517 DST#2 Hammerschmidt#1 Hertel Oil Co

## Flag Points

t<Min.> PK PSig>

A: 0.00 1854.38  
 B: 0.00 20.30  
 C: 15.00 19.80  
 D: 15.00 43.97  
 E: 0.00 20.81  
 F: 14.00 20.30  
 G: 14.00 37.51  
 Q: 0.00 1825.17

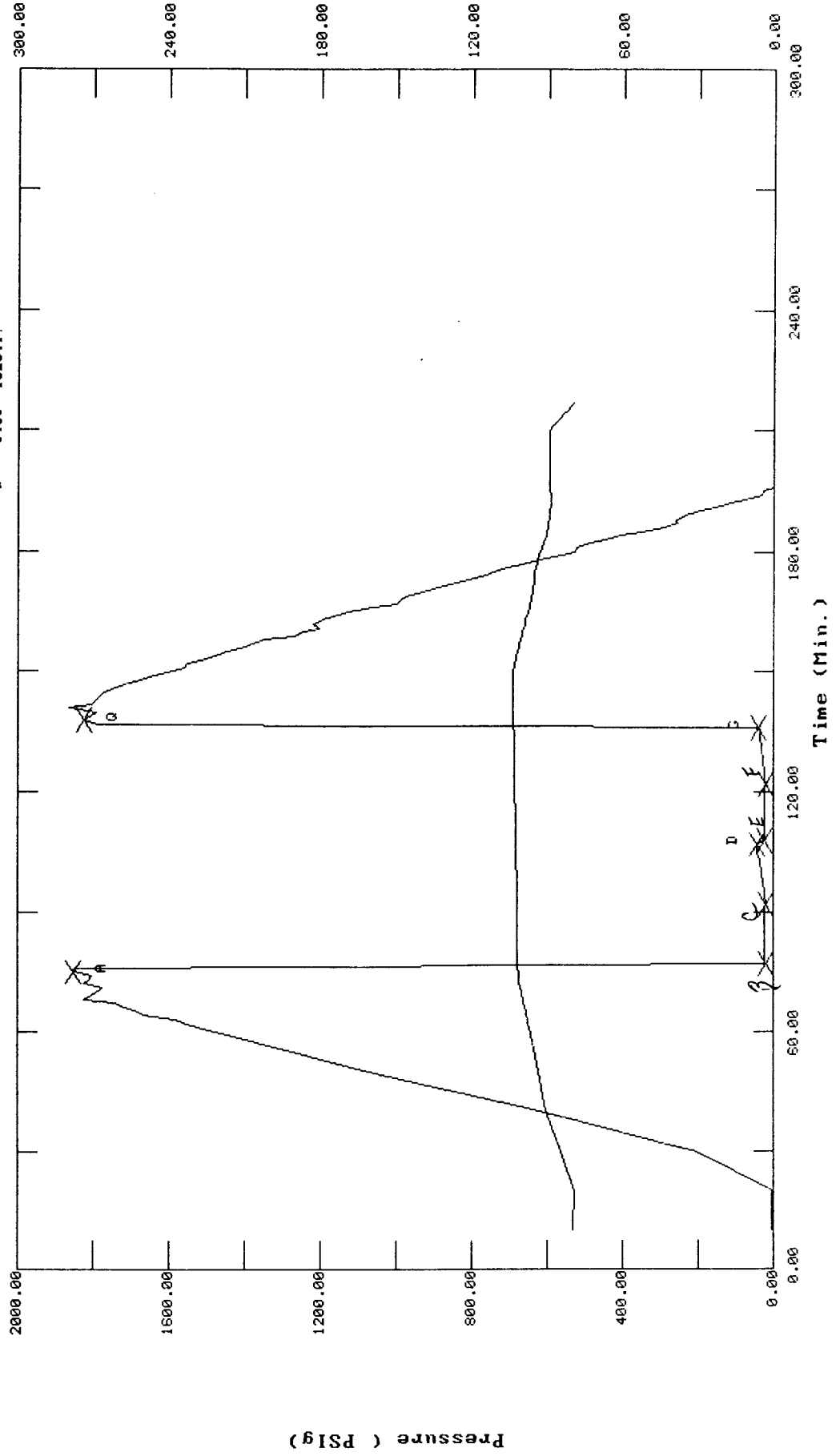
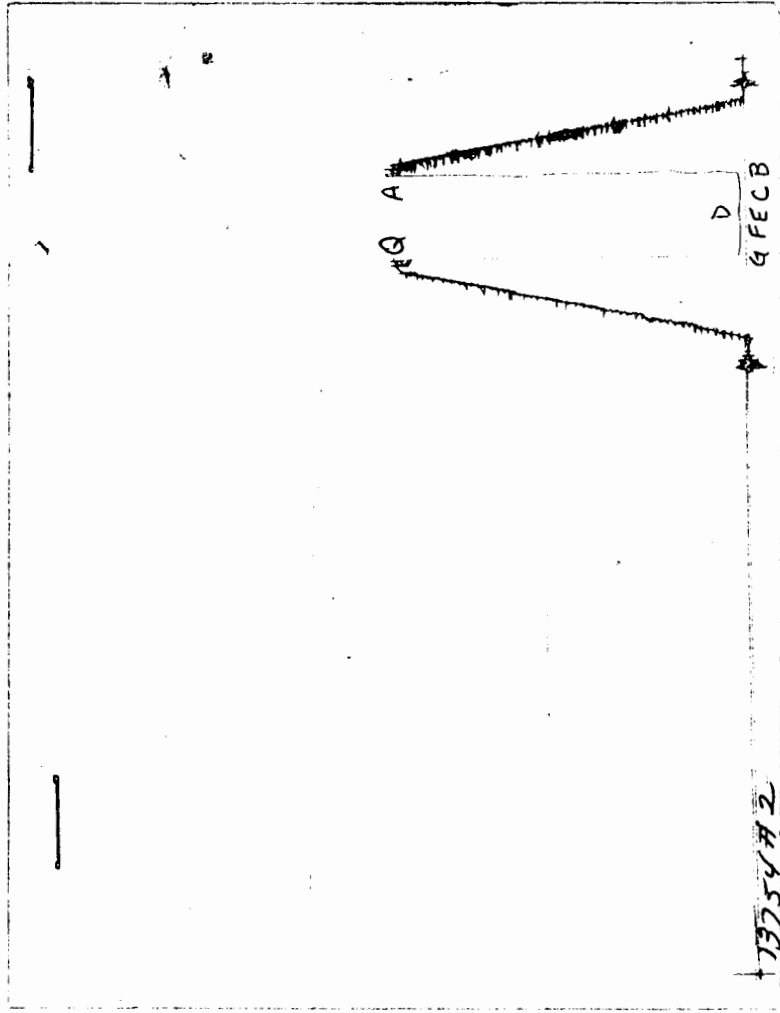


CHART PAGE



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

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 ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9517 DST#2 Hammerschmidt#1 Hertel Oil Co

DATE: 09/11/96

TIME: 01:50:32  
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	Time	Pressure PSI <sub>g</sub>	delta P PSI <sub>g</sub>	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
***** Initial Hydro.	75.00	1854.4	0.0	101.58		
***** Start Flow 1	0.00	20.3	0.0	101.80		
	1.00	20.6	0.3	101.84		
	2.00	20.6	0.3	101.85		
	3.00	20.6	0.3	101.85		
	4.00	20.5	0.2	101.84		
	5.00	20.5	0.2	101.83		
	6.00	20.5	0.2	101.83		
	7.00	20.5	0.2	101.83		
	8.00	20.5	0.2	101.84		
	9.00	20.5	0.2	101.86		
	10.00	20.5	0.2	101.86		
	11.00	20.5	0.2	101.87		
	12.00	20.5	0.2	101.90		
	13.00	20.5	0.2	101.92		
	14.00	20.6	0.3	101.94		
***** End Flow 1	15.00	19.8	-0.5	101.95		
***** Start Shutin 1	0.00	19.8	0.0	101.95	0.0000	0.000
	1.00	20.3	0.5	101.98	16.0000	0.000
	2.00	21.5	1.7	102.01	8.5000	0.000
	3.00	22.6	2.8	102.03	6.0000	0.001
	4.00	24.0	4.2	102.06	4.7500	0.001
	5.00	25.5	5.7	102.09	4.0000	0.001
	6.00	27.0	7.2	102.12	3.5000	0.001
	7.00	28.5	8.7	102.15	3.1429	0.001
	8.00	30.2	10.4	102.18	2.8750	0.001
	9.00	32.0	12.2	102.22	2.6667	0.001
	10.00	33.9	14.1	102.25	2.5000	0.001
	11.00	36.1	16.3	102.29	2.3636	0.001
	12.00	38.5	18.7	102.32	2.2500	0.001
	13.00	41.0	21.2	102.36	2.1538	0.002
	14.00	44.0	24.2	102.39	2.0714	0.002
***** End Shut-in 1	15.00	44.0	24.2	102.43	2.0000	0.002
***** Start Flow 2	0.00	20.8	0.0	102.46		
	1.00	20.8	0.0	102.50		
	2.00	20.9	0.1	102.53		
	3.00	20.9	0.1	102.57		
	4.00	20.9	0.1	102.60		
	5.00	20.9	0.1	102.63		
	6.00	21.0	0.2	102.67		
	7.00	21.0	0.2	102.70		
	8.00	21.0	0.2	102.74		
	9.00	21.0	0.2	102.77		
	10.00	21.1	0.3	102.80		
	11.00	21.1	0.3	102.84		
	12.00	21.1	0.3	102.88		
	13.00	21.1	0.3	102.91		
***** End Flow 2	14.00	20.3	-0.5	102.94		
***** Start Shutin 2	0.00	20.3	0.0	102.94	0.0000	0.000
	1.00	21.1	0.8	102.98	30.0000	0.000
	2.00	22.1	1.8	103.01	15.5000	0.000

ALPINE SUBSURFACE ELECTRONICS PROBE INCREMENTS LISTING

TEST: Tk#9517 DST#2 Hammerschmidt#1 Hertel Oil Co

DATE: 09/11/96

TIME: 01:50:32

	Time	Pressure PSig	delta P PSig	P	Temp. DEG F	(T+dT)/dT	P <sup>2</sup> /10 <sup>6</sup>
	3.00	23.1	2.8	103.05	103.05	10.6667	0.001
	4.00	24.1	3.8	103.08	103.08	8.2500	0.001
	5.00	25.2	4.9	103.12	103.12	6.8000	0.001
	6.00	26.3	6.0	103.15	103.15	5.8333	0.001
	7.00	27.5	7.2	103.18	103.18	5.1429	0.001
	8.00	28.8	8.5	103.22	103.22	4.6250	0.001
	9.00	30.0	9.7	103.25	103.25	4.2222	0.001
	10.00	31.4	11.1	103.28	103.28	3.9000	0.001
	11.00	32.8	12.5	103.31	103.31	3.6364	0.001
	12.00	34.3	14.0	103.35	103.35	3.4167	0.001
	13.00	36.0	15.7	103.38	103.38	3.2308	0.001
***** End Shut-in 2	14.00	37.5	17.2	103.41	103.41	3.0714	0.001
***** Final Hydro.	138.00	1825.2	0.0	103.52	103.52		

\*\*\* TOOL DIAGRAM \*\*\* CONV

WELL NAME: Hammerschmidt #1	P.O. SUB	
	C.O. SUB	3522
LOCATION : 20-14S-17W, Ellis Cty KS	S.I. TOOL	3528
TICKET No. 9517 D.S.T. No. 2 DATE 9-11-96		
TOTAL TOOL TO BOTTOM OF TOP PACKERS ..... 20	HMV	3533
INTERVAL TOOL .....		
BOTTOM PACKERS AND ANCHOR ..... 19	JARS na	
TOTAL TOOL ..... 39		
DRILL COLLAR ANCHOR IN INTERVAL .....		
D.C. ANCHOR STND.Stands Single Total	SAFETY JOINT na	
S.P. ANCHOR STND.Stands Single Total	PACKER	3537
TOTAL ASSEMBLY ..... 39	PACKER	3542
D.C. ABOVE TOOLS.Stands Single 1 Total 30	DEPTH 3542	
S.P. ABOVE TOOLS.Stands 57 Single 1 Total 3509	STUBB 1'	3543
TOTAL DRILL COLLARS DRILL PIPE & TOOLS .. 3578	ANCHOR 1' Perfs	3544
TOTAL DEPTH ..... 3561	Alpine recorder	3544
TOTAL DRILL PIPE ABOVE K.B. .... 17		
REMARKS:	5' Perfs	3549
	T.C.	
	DEPTH	
	3' Perfs	3552
	4' Perfs	3556
	AK-1 recorder	3558
	BULLNOSE 5' Bullplug	
	T.D.	3561