



99999999

087-08022

SCANNED

PREPARED FOR:

ROBERT SWANSON
HUEY 1A
2286' FEL 1492' FSL
SECTION 28 T2N R56W
MORGAN COUNTY, COLORADO

GEOLOGIST:
DONALD J. D'INNOCENZO
EATON, COLORADO
PH: (303) 454-3120



00048285

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WELL DATA SUMMARY

COMPANY: R. SWANSON

WELL NAME: HUEY #1-A

LOCATION: SECTION 28 T2N R56W

CO-ORDINATES: 2086' FEL 1491' FSL

ELEVATIONS: GL 4386 KB 4396

SPUD DATE: 10/13/90

HOLE SIZES: 12 $\frac{1}{4}$ " to 130' 7 $\frac{7}{8}$ " from 130' to TD

TOTAL DEPTH: LOGGER 5187' DRILLER 5186'

LOGGING RECORD: GREAT GUNS

CASING RECORD:

SIZE	WT	GRADE	MAKE	TYPE	SHOE DEPTH	CMT	JTS
12 $\frac{1}{4}$ "	24#	"J"	NEW	/	125'	85sx	3

DRILLING CONTRACTOR: GEAR

TOOL PUSHER: M GEIGER

RIG: #2

DRILLING ENGINEER: NONE

WELL SITE GEOLOGIST: DON D'INNOCENZO

STATUS: PLUGGED

SAMPLE DESCRIPTIONS

- 5110-5120 100% SHALE: BLACK, FRIM, FISSILE, LAMINATED, CARBONACEOUS, MICACEOUS, SLIGHTLY SILTY, TR PYRITE
- 5120-5130 80% SHALE: GENERALLY AS ABOVE
- 20% SAND: WHITE, LIGHT GRAY, CLEAR, FROSTED, SOFT, FRIABLE, FINE GRAIN, WELL SORTED, SUBANGULAR, SUBROUNDED, CLEAN, GOOD POROSITY, GOOD TO EXCELLENT YELLOW TO BRIGHT YELLOW?ORANGE FLUORESCENCE, GOOD STREAMING CUTS, FAIR ODOR
- "D" SAND
5125 (-729)
SAMPLE TOP
- 5130-5135 40% SAND: WHITE, CLEAR, FROSTED, FIRM, SOFT, FRIABLE, FINE GRAIN, WELL SORTED, SUBANGULAR, SUBROUNDED, CLEAN, GOOD POROSITY, GOOD TO EXCELLENT YELLOW/ORANGE TO BRIGHT YELLOW FLUORESCENCE, FAIR ODOR, GOOD/FAST STREAMING CUTS, TR PYRITE, SOME LOOSE UNCONSOLIDATED GRAINS WITH YELLOW FLUORESCENCE THROUGHOUT THAT SPECKLED THE SAMPLE TRAY
- 60% SLUFF
- 5135-5140 50% SAND: GENERALLY AS ABOVE, GOOD DULL YELLOW TO BRIGHT YELLOW TO YELLOW/ORANGE FLUORESCENCE, GOOD STREAMING/MILKY CUTS, FAIR ODOR, MINOR AMOUNT OF CLAY NOTED BUT GENERALLY VERY CLEAN
- 30% SILT/SAND: GRAY, LIGHT GRAY, BROWN, GRAY, WHITE, FIRM, HARD, MODERATE SORTING, SUBANGULAR, VERY FINE GRAIN, PYRITE, SOME CLAY, SHALE STREAKS NOTED, TR CARBONACEOUS MATERIAL, VERY TIGHT POROSITY
- 5140-5150 30% SAND: GRAY/WHITE, LIGHT BROWN, GRAY, FIRM, HARD, QUARZITIC, VERY FINE TO FINE GRAIN, MODERATE TO POOR SORTING, DIRTY, SHALE LAMINATIONS THROUGHOUT, SOME PYRITE
- 60% SILTSTONE: GRAY, HARD, VERY SANDY, SHALE STREAKS, TR PYRITE
- 10% JUNK
- 5150-5160 20% SAND: GENERALLY AS ABOVE, VERY TIGHT, DIRTY, NO SHOWS
- 80% SILT, SHALE AND MINOR SLUFF
- HUNTSMAN 5164 (-768) SAMPLE TOP
- 5160-5180 90% SAHLE: BLACK, DARK GRAY, FIRM, FISSILE, PLATTY, SOFT, LAMINATED, CARBONACEOUS, MICACEOUS IN PART, SILTY IN PART, TR PYRITE, TR FISH REMAINS
- 10% SILT & SAND
- "J" SILT 5180 (-784) SAMPLE TOP
- 5180-5186 60% SILTSTONE: GRAY, LIGHT GRAY, FIRM, HARD, SANDY IN PART, SOME CARBONACEOUS MATERIAL NOTED, SHALE STREAKS IN PART, PYRITE
- 40% SHALE & JUNK

NOTE: SAMPLES ARE LAGGED

	LOG TOP	FORMATION TOPS SUBSEA	SAMPLE TOP	SUBSEA
NIOBRARA	4402	-6	//	
FT. HAYS	4676	-280	//	
CARLILE	4711	-315	//	
GREENHORN	4790	-394	//	
GRANEROS (X)	5037	-641	//	
"D" SAND	5126	-730	5125	-729
HUNTSMAN	5164	-768	5164	-768
"J" SILT	NL	NL	5180	-784
"J" SAND	NP	NP	NP	NP
TD	5187	//	5186	//

NP: NOT PENETRATED
NL: NOT LOGGED

LOGGING RECORD

LOGGING COMPANY: GREAT GUNS

ENGINEER: A. SIERRA

TRUCK: 105

KB: 4396

GL: 4386

DEPTH LOGGER: 5187'

DRILLER: 5186'

HOLE SIZE: 7 7/8"

CASING: DRILLER 125'

LOGGER 123'

MUD TYPE: CHEM GEL

MUD WT: 9.4

VIS: 58

pH: 9.0

FILT: 6.0

MAX BHT: 140°

Rm @ MT 2.8 @ 65°

Rmf @ MT 2.8 @ 65°

Rmc @ MT 3.5 @ 65°

HOLE CONDITIONS PRIOR TO LOGGING: EXCELLENT

OPERATIONS SUMMARY:

NOTIFY LOGGER
LOGGER ARRIVE
DRILLING STOP
CIRC STOP
START LOGGING
FINISH LOGGING
HRS LOGGING

10/16/90
1:40am 10/17
5:45pm 10/16
10:15pm 10/16
1:40am 10/17
4:45am 10/17
3hrs 5min

SEQUENCE OF OPERATIONS:

RUN
1

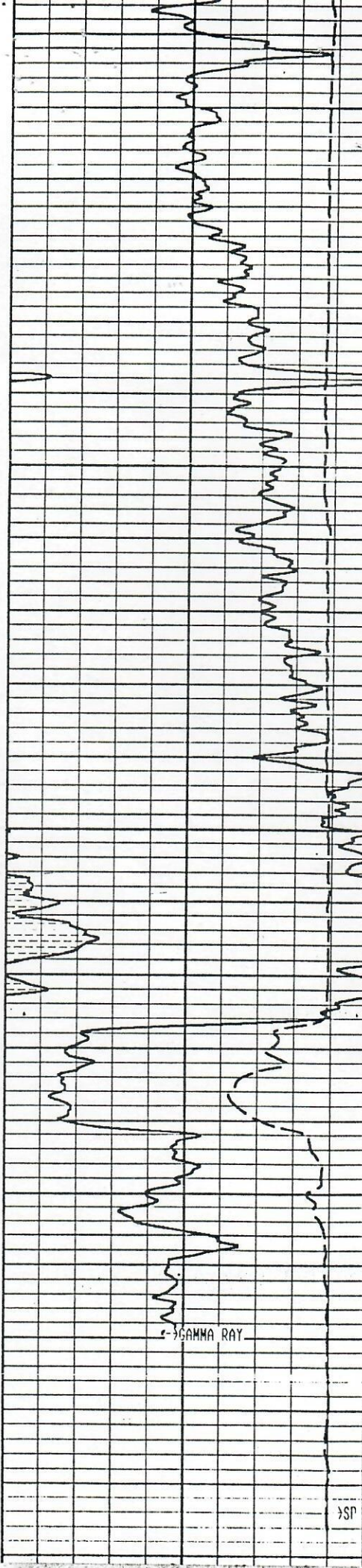
TIME SPENT
1hr 50min*

REMARKS

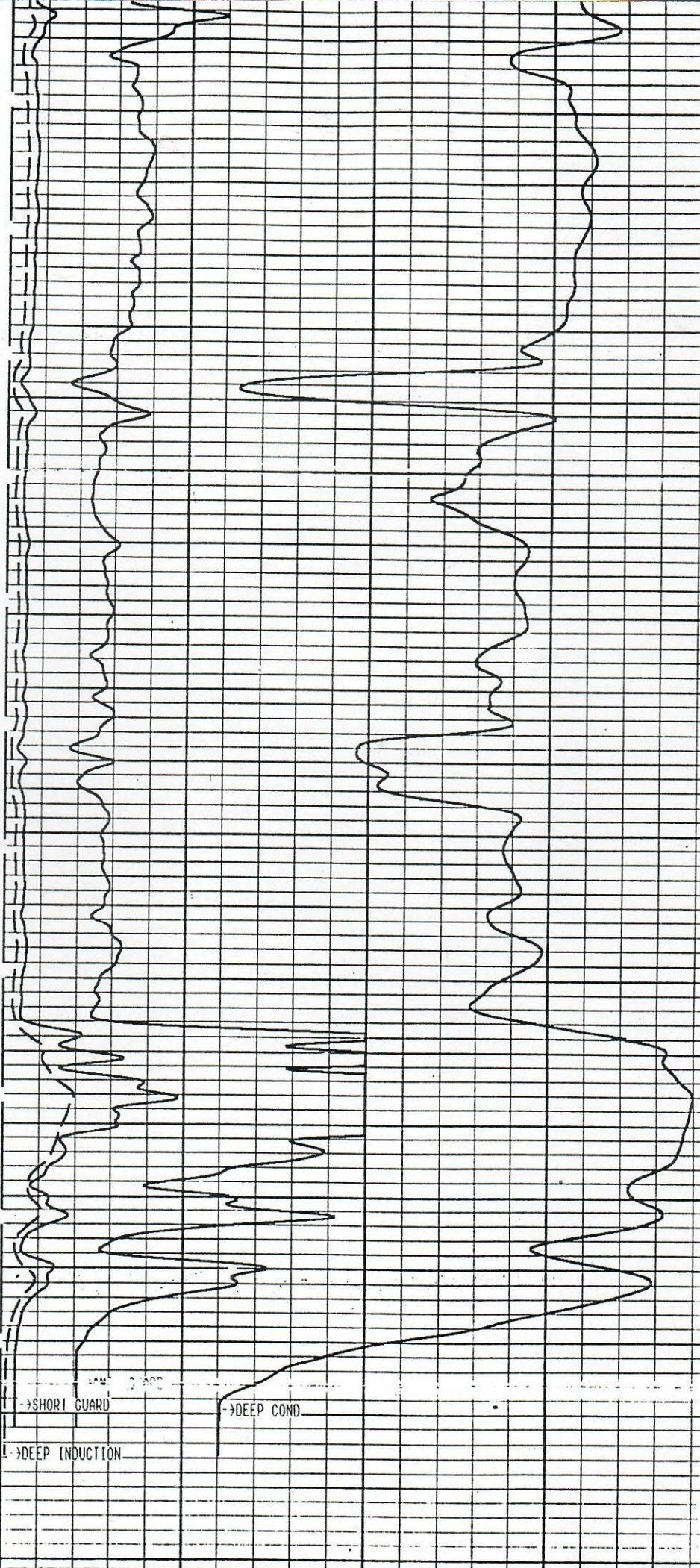
IND ELECTRIC/GR/DENSITY

*RIG UP/CALIBRATE/RIG DOWN TIME NOT INCLUDED

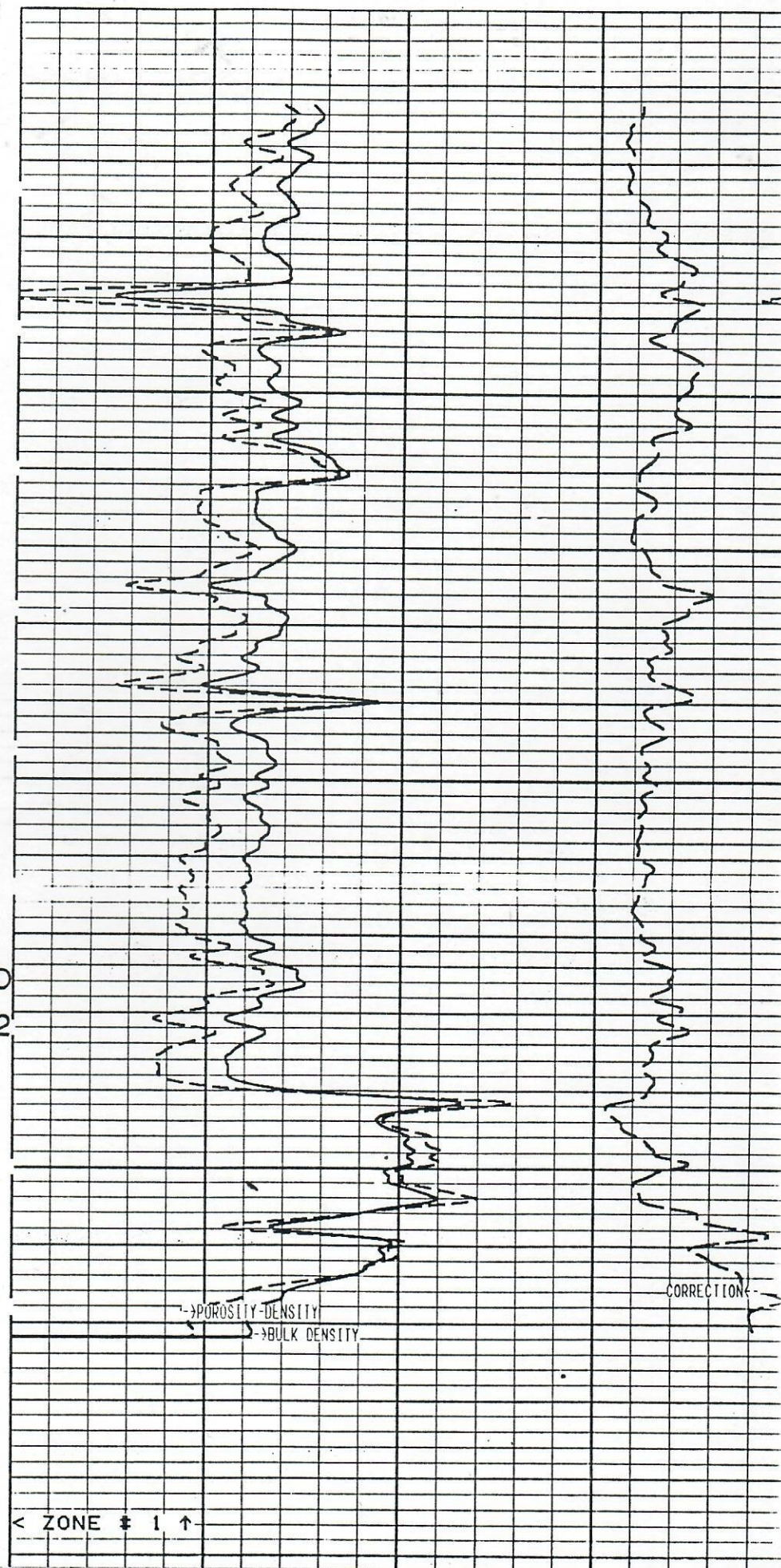
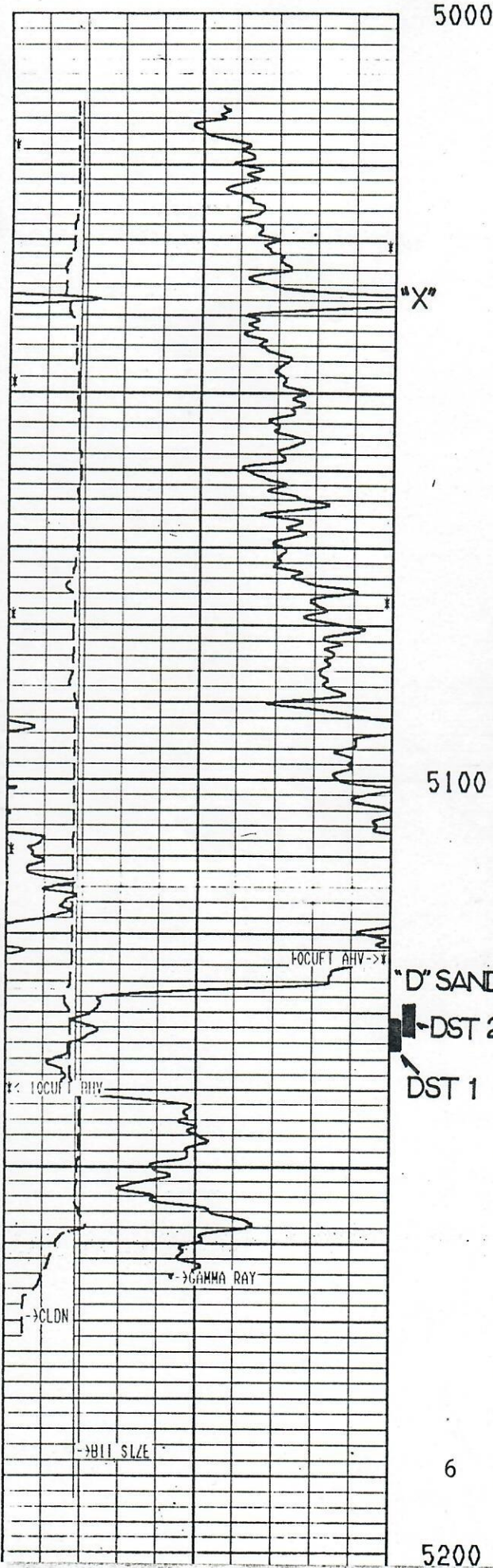
LOGS MADE IN ONE RUN
NO PROBLEMS IN OR OUT

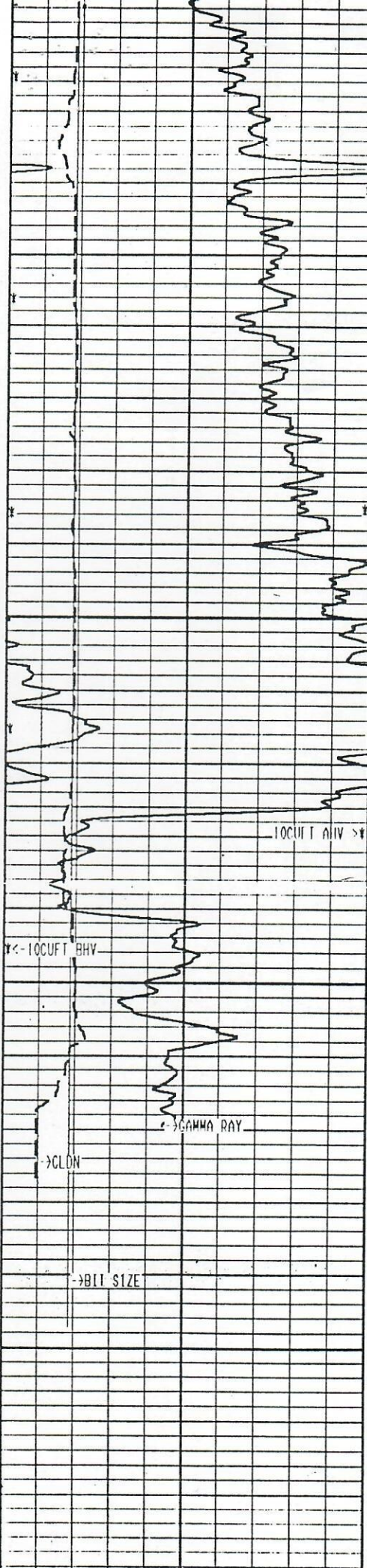


5000
5100
5200
-600
-700
-800
"X"
"D" SAND
DST 2
DST 1
5



REPEAT SECTION





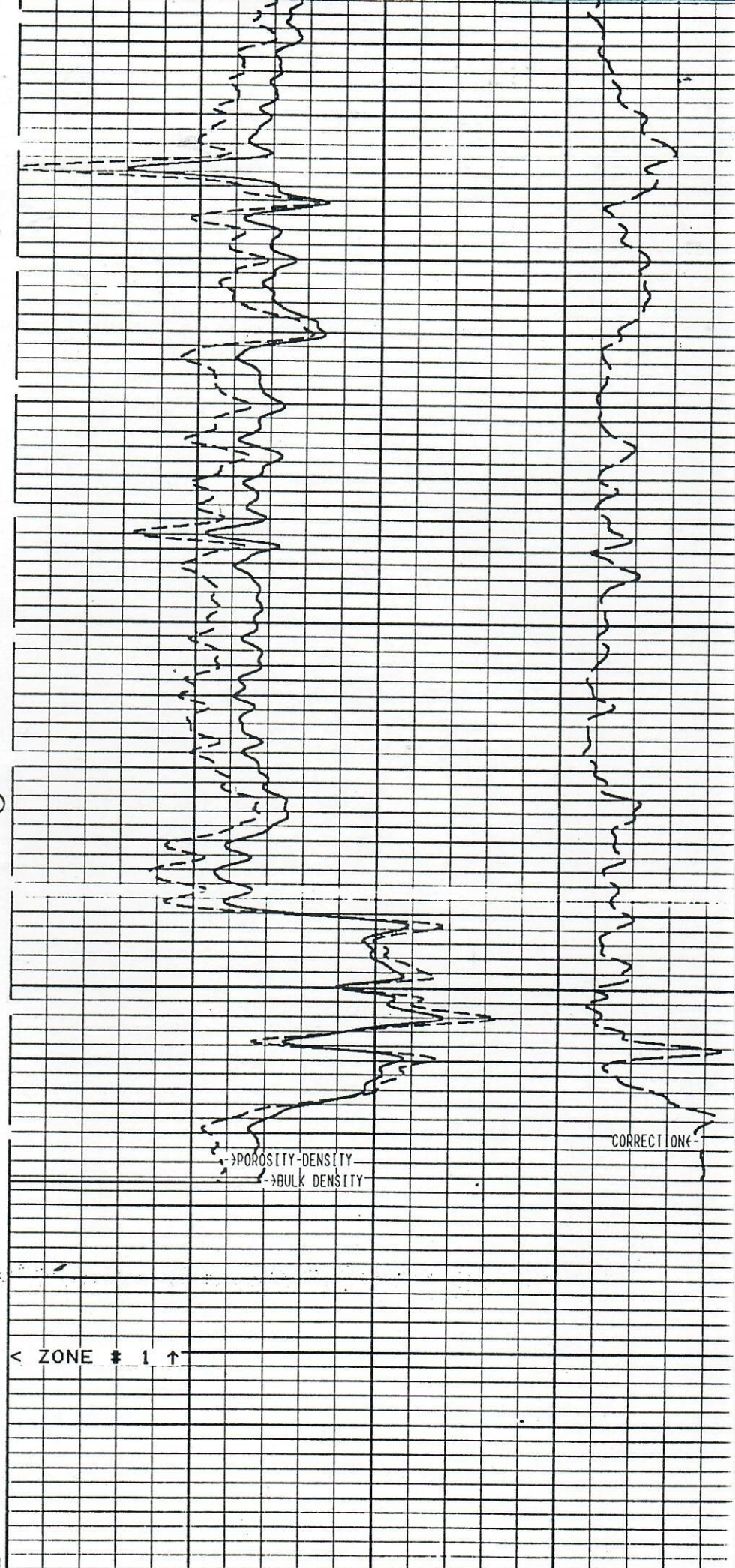
"X"

5100

D' SAND

5200

7



DST NO.1

PICK TESTERS

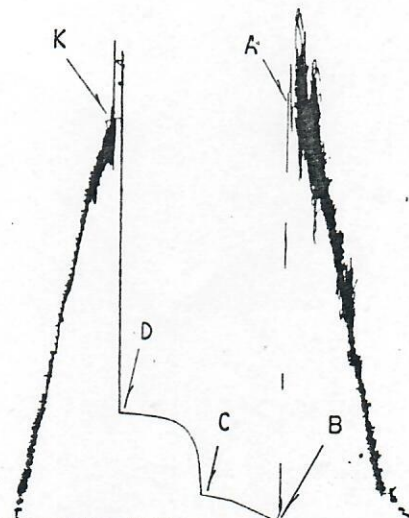
Box 341
Sterling, CO 80751Operator
Ticket No.
Date
1351
10/17/90
BOB SWANSON

Contractor	Gear Drilling Co.	Surface Choke	1"	Mud Type	Chemical/Gel
Rig No.	2	Bottom Choke	3/4"	Weight	9.4
Spot	--	Hole Size	7 7/8"	Viscosity	60
Sec.	28	Core Hole Size	--	Water Loss	--
Twp.	2 N	DP Size & Wt.	4 1/2" 16.60	Filter Cake	--
Rng.	56 W	Wt. Pipe	None	Resistivity	3.5 @ 75 of
Field	Sentry	I.D. of DC	2 1/4"		1,451 Ppm. NaCl
County	Morgan	Length of DC	401'	B.H.T.	150 of
State	Colorado	Total Depth	5187'	Co. Rep.	Don Di'Nnocenzo
Elevation	Not Reported	Type Test	Straddle	Tester	David Pickering
Formation	"D" Sand	Interval	5131' - 5135'		

	REPORTED	CORRECTED
Opened Tool @	08:15	hrs.
Flow No. 1	60	59 min.
Shut-in No. 1	60	62 min.
Flow No. 2	None Taken	min.
Shut-in No. 2	"	" min.
Flow No. 3	"	" min.
Shut-in No. 3	"	" min.

Recorder Type	Kuster AK-1
No. 13338	Cap. 4950 psi
Depth	5145 feet
Inside X	Outside

Initial Hydrostatic	A	2632.2
Final Hydrostatic	K	2551.6
Initial Flow	B	83.7
Final Initial Flow	C	191.4
Initial Shut-in	D	708.8
Second Initial Flow	E	
Second Final Flow	F	
Second Shut-in	G	
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	

Well Name & No.
Location
County, State
HUEY #1 "A"
S-28 T-2N R-56W
MORGAN COUNTY, CODSI No.
Interval
Formation
5131' - 5135'
"D" SAND

Pipe Recovery: 1860' Gas above fluid
463' Total fluid = 2.85 bbl., consisting of:
30' Oil = 0.43 bbl.
433' Water = 2.42 bbl.

Resistivity:
Middle: .85 @ 60°F - .36 @ Res Temp = 8,018 ppm NaCl., 4,874 ppm Cl.
Bottom: .75 @ 62°F - .33 @ Res Temp = 8,879 ppm NaCl., 5,398 ppm Cl.

1st Flow: Tool opened with a 1/2" blow, increased to a strong blow off bottom of bucket in 1 minute; began to decrease after 45 minutes to a slight blow at end of flow period. No gas to surface.

PICK TESTERS

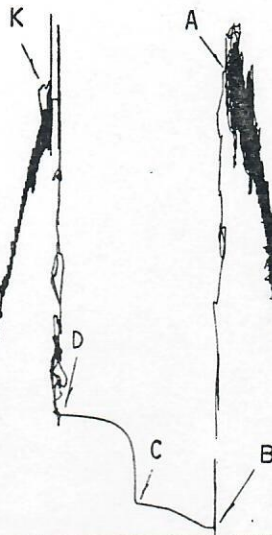
Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

1
DST No.

Recorder Type Kuster AK-1
No. 13617 Cap. 4550 psi
Depth 5124 feet
Inside X Outside

Initial Hydrostatic A 2627.2
Final Hydrostatic K 2550.5
Initial Flow B 65.3
Final Initial Flow C 197.9
Initial Shut-in D 709.8
Second Initial Flow E _____
Second Final Flow F _____
Second Shut-in G _____
Third Initial Flow H _____
Third Final Flow I _____
Third Shut-in J _____



Recorder Type Kuster AK-1
No. 6249 Cap. 4950 psi
Depth 5151 feet
Inside Outside X

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 _____

bled to:

Bled to: 2386.5

PICK TESTERS

SAMPLER REPORT

Company Bob Swanson Date 10/17/90
Well Name & No. Huey #1 "A" Ticket No. 1351
County Morgan State Colorado
Test Interval 5131' - 5135' DST No. 1

Pressure in Sampler: 80 psig
Total Volume of Sampler: 2150 cc.
Total Volume of Sample: 1950 cc.
Oil: 200 cc.
Water: 1750 cc.
Mud: None cc.
Gas: 0.53 cu. ft.
Other: None

Resistivity

Make Up Water _____ @ _____ °F of Chloride Content _____ ppm.

Mud Pit Sample 3.5 @ 75 °F of Chloride Content 1,451 ppm.

Gas/Oil Ratio 424/1 cu.ft./bbl. Gravity 39.2 °API @ 60 °F

Where was sample drained On location.

Remarks: _____

PICK TESTERS

Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

1
DST No.

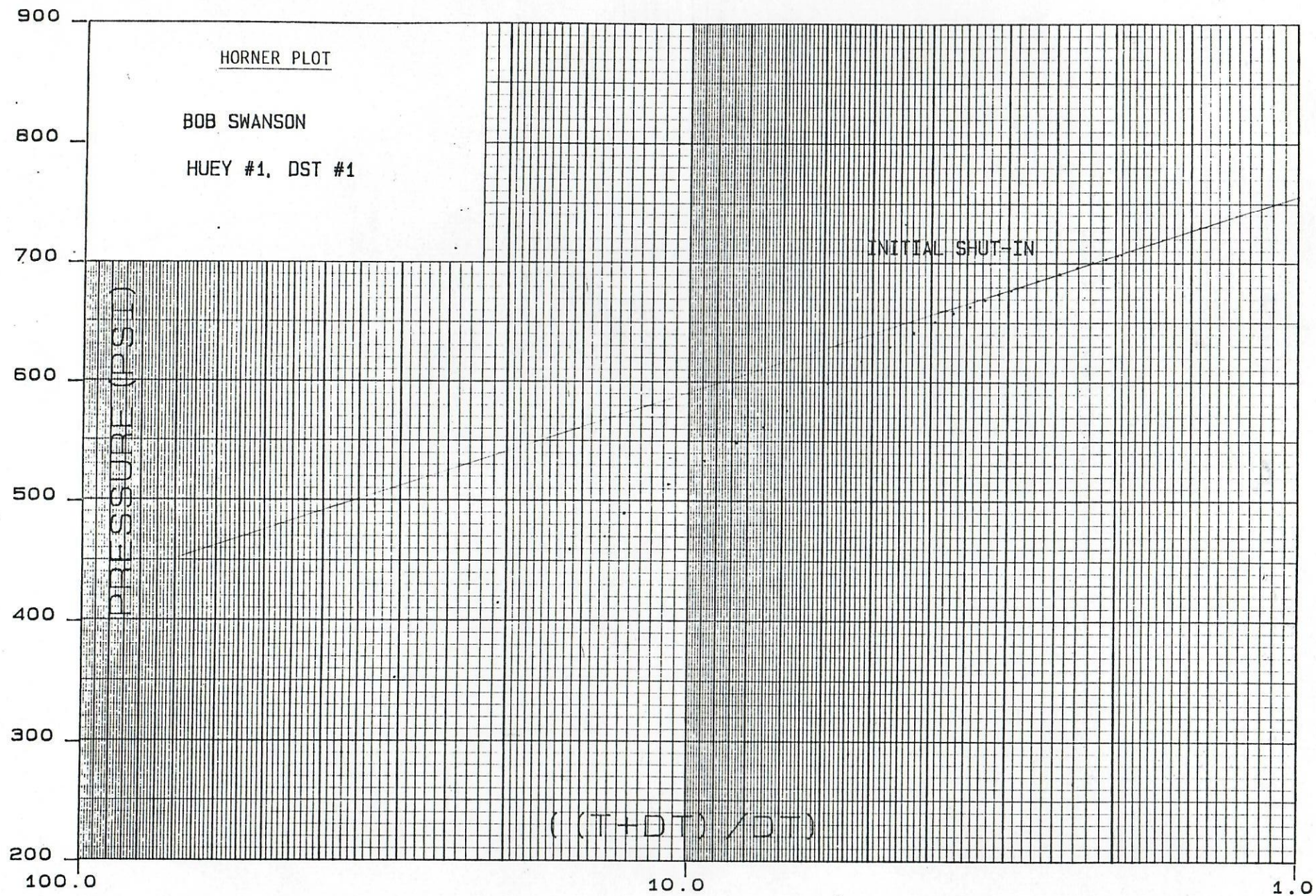
RECORDER NO. 13338 DEPTH 5145 FT.

INITIAL SHUT-IN

INITIAL FLOW TIME: T = 59 MIN.

DT(MIN)	LOG((T+DT)/DT)	PRESSURE(PSIG)	DP(P SIG)
0		191.4	0.0
1	1.778	252.7	61.3
2	1.484	354.3	162.9
3	1.315	416.3	225.0
4	1.197	461.1	269.7
5	1.107	491.2	299.9
6	1.035	515.5	324.1
7	0.974	535.2	343.9
8	0.923	550.2	358.8
9	0.878	563.4	372.1
10	0.839	577.0	385.7
12	0.772	600.2	408.8
14	0.717	619.0	427.6
16	0.671	631.0	439.6
18	0.631	642.9	451.5
20	0.597	652.1	460.7
22	0.566	659.4	468.0
24	0.539	665.1	473.7
26	0.514	670.7	479.3
28	0.492	675.6	484.2
30	0.472	678.8	487.5
35	0.429	686.9	495.5
40	0.394	692.8	501.4
45	0.364	698.0	506.6
50	0.338	702.2	510.8
55	0.317	704.9	513.6
60	0.297	708.0	516.7
62	0.290	708.8	517.4

EXTRAPOLATED PRESSURE: 757.7 PSI
SLOPE: 166.0 PSI/LOG CYCLE
POINTS USED: 9



PICK TESTERS

Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

1
DST No.

RECORDER NO. 13338 DEPTH 5145 FT.

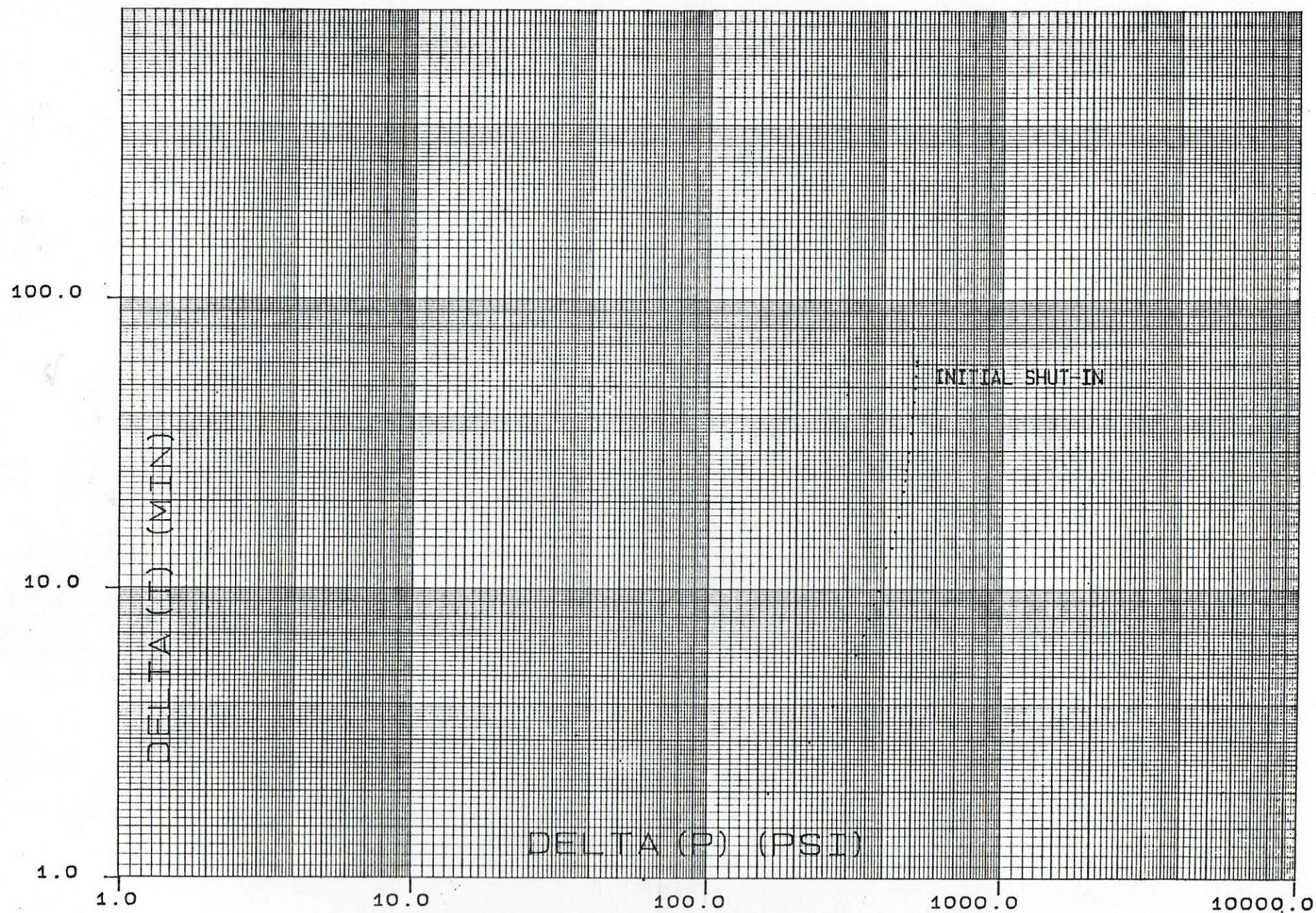
INITIAL FLOW

DT(MIN) PRESSURE(P SIG)

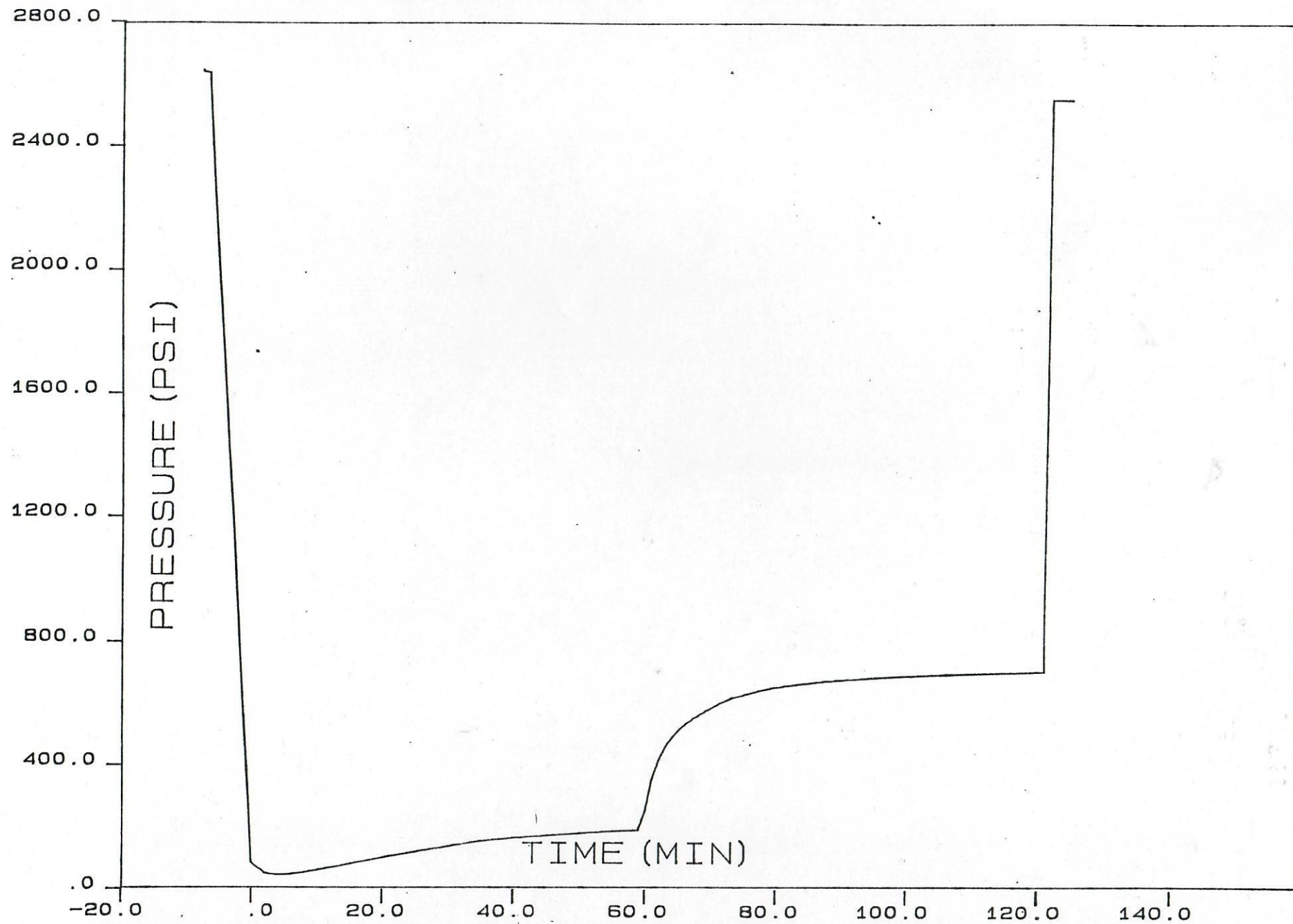
0	83.7
2	50.2
4	44.6
6	48.4
8	54.5
10	61.8
15	82.1
20	102.1
25	120.5
30	138.3
35	155.7
40	166.3
45	173.4
50	181.0
55	188.2
59	191.4

LOG/LOG PLOT

15



GAUGE NO. 13338 @ 5145 FT.



DST NO. 2

PICK TESTERS

Box 341
Sterling, CO 80751

Contractor Gear Drilling Co.
 Rig No. 2
 Spot --
 Sec. 28
 Twp. 2 N
 Rng. 56 W
 Field Sentry
 County Morgan
 State Colorado
 Elevation Not Reported
 Formation "D" Sand

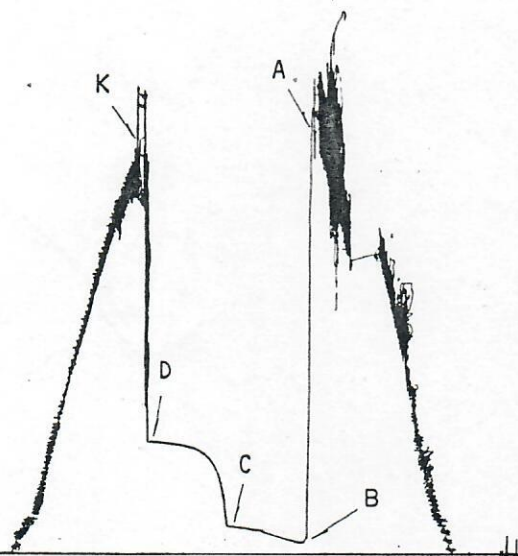
Surface Choke 1"
 Bottom Choke 3/4"
 Hole Size 7 7/8"
 Core Hole Size --
 DP Size & Wt. 4 1/2" 16.60
 Wt. Pipe None
 I.D. of DC 2 1/4"
 Length of DC 401'
 Total Depth 5187'
 Type Test Straddle
 Interval 5129'- 5133'

Mud Type Chemical/Gel
 Weight 9.4
 Viscosity 60
 Water Loss --
 Filter Cake --
 Resistivity 3.5 @ 75 of
1,451 Ppm. NaCl
 B.H.T. 150 of
 Co. Rep. Don Di'Nnocenzo
 Tester David Pickering

	REPORTED	CORRECTED
Opened Tool @	<u>14:53</u>	hrs.
Flow No. 1	<u>60</u>	<u>60</u> min.
Shut-in No. 1	<u>60</u>	<u>60</u> min.
Flow No. 2	<u>None Taken</u>	min.
Shut-in No. 2	<u>"</u>	<u>"</u> min.
Flow No. 3	<u>"</u>	<u>"</u> min.
Shut-in No. 3	<u>"</u>	<u>"</u> min.

Recorder Type Kuster AK-1
 No. 13338 Cap. 4950 psi
 Depth 5143 feet
 Inside X Outside

Initial Hydrostatic	A	<u>2657.9</u>
Final Hydrostatic	K	<u>2514.5</u>
Initial Flow	B	<u>102.0</u>
Final Initial Flow	C	<u>170.0</u>
Initial Shut-in	D	<u>702.7</u>
Second Initial Flow	E	
Second Final Flow	F	
Second Shut-in	G	
Third Initial Flow	H	
Third Final Flow	I	
Third Shut-in	J	



Pipe Recovery:

433' Total fluid = 2.43 bbl., consisting of:
 30' Oil = 0.43 bbl.
 10' Mud cut oil = 0.07 bbl.
 20' Mud & water = 0.10 bbl.
 373' Water = 1.83 bbl.

Resistivity:

Middle: .80 @ 66°F - .37 @ Res Temp = 7,803 ppm NaCl., 4,744 ppm Cl.
 Bottom: .75 @ 68°F - .36 @ Res Temp = 8,121 ppm NaCl., 4,937 ppm Cl.

1st Flow:

Tool opened with a 1/2" blow, increased to a strong blow off bottom of bucket in 1 minute and remained thru flow period.
 Gas to surface in 53 minutes; too small to measure.

Operator BOB SWANSON
 Ticket No. 1352
 Date 10/17/90

Well Name & No. HUEY #1 "A"
 Location S-28 T-2N R-56W
 County, State MORGAN COUNTY, CO

DSI No. 2
 Interval 5129' - 5133'
 Formation "D" SAND

PICK TESTERS

Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

2
DST No.

Recorder Type Kuster AK-1
No. 13617 Cap. 4550 psi
Depth 5122 feet
Inside X Outside

Initial Hydrostatic A 2659.0
Final Hydrostatic K 2513.0
Initial Flow B 87.6
Final Initial Flow C 178.9
Initial Shut-in D 704.4
Second Initial Flow E _____
Second Final Flow F _____
Second Shut-in G _____
Third Initial Flow H _____
Third Final Flow I _____
Third Shut-in J _____

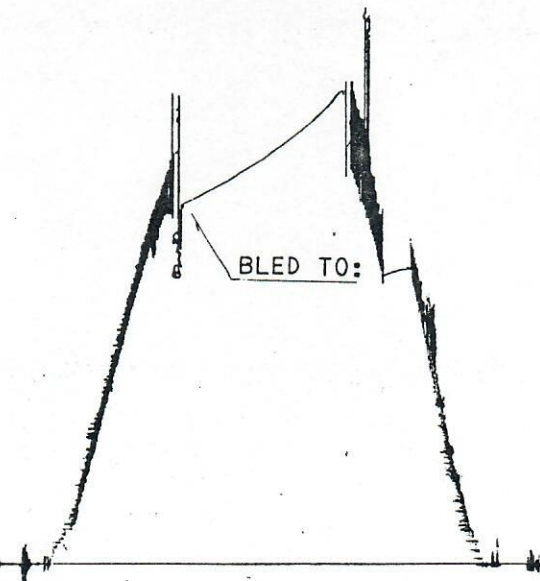


Recorder Type Kuster AK-1
No. 6249 Cap. 4950 psi
Depth 5149 feet
Inside Outside X

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 _____

bled to:

Bled to: 2311.4



PICK TESTERS

SAMPLER REPORT

Company _____ Bob Swanson _____ Date _____ 10/17/90 _____
Well Name & No. _____ Huey #1 "A" _____ Ticket No. _____ 1352 _____
County _____ Morgan _____ State _____ Colorado _____
Test Interval _____ 5129' - 5133' _____ DST No. _____ 2 _____

Pressure in Sampler: _____ 100 _____ psig

Total Volume of Sampler: _____ 2150 _____ cc.

Total Volume of Sample: _____ 1850 _____ cc.

Oil: _____ 300 _____ cc.

Water: _____ 1550 _____ cc.

Mud: _____ None _____ cc.

Gas: _____ 0.66 _____ cu. ft.

Other: _____ None _____

Resistivity

Make Up Water _____ @ _____ °F of Chloride Content _____ ppm.

Mud Pit Sample _____ 3.5 @ _____ 75 °F of Chloride Content _____ 1,451 ppm.

Gas/Oil Ratio _____ 352/1 cu.ft./bbl. Gravity _____ 38.4 °API @ _____ 60 °F

Where was sample drained _____ On location. _____

Remarks: _____

PICK TESTERS

Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

2
DST No.

RECORDER NO. 13338 DEPTH 5143 FT.

INITIAL FLOW

<u>DT(MIN)</u>	<u>PRESSURE(P SIG)</u>
0	102.0
2	76.2
4	69.8
6	69.9
8	73.6
10	77.5
15	87.5
20	101.7
25	117.3
30	130.5
35	144.5
40	148.4
45	155.8
50	161.3
55	166.5
60	170.0

PICK TESTERS

Bob Swanson
Operator

Huey #1 "A"
Well Name and No.

2
DST No.

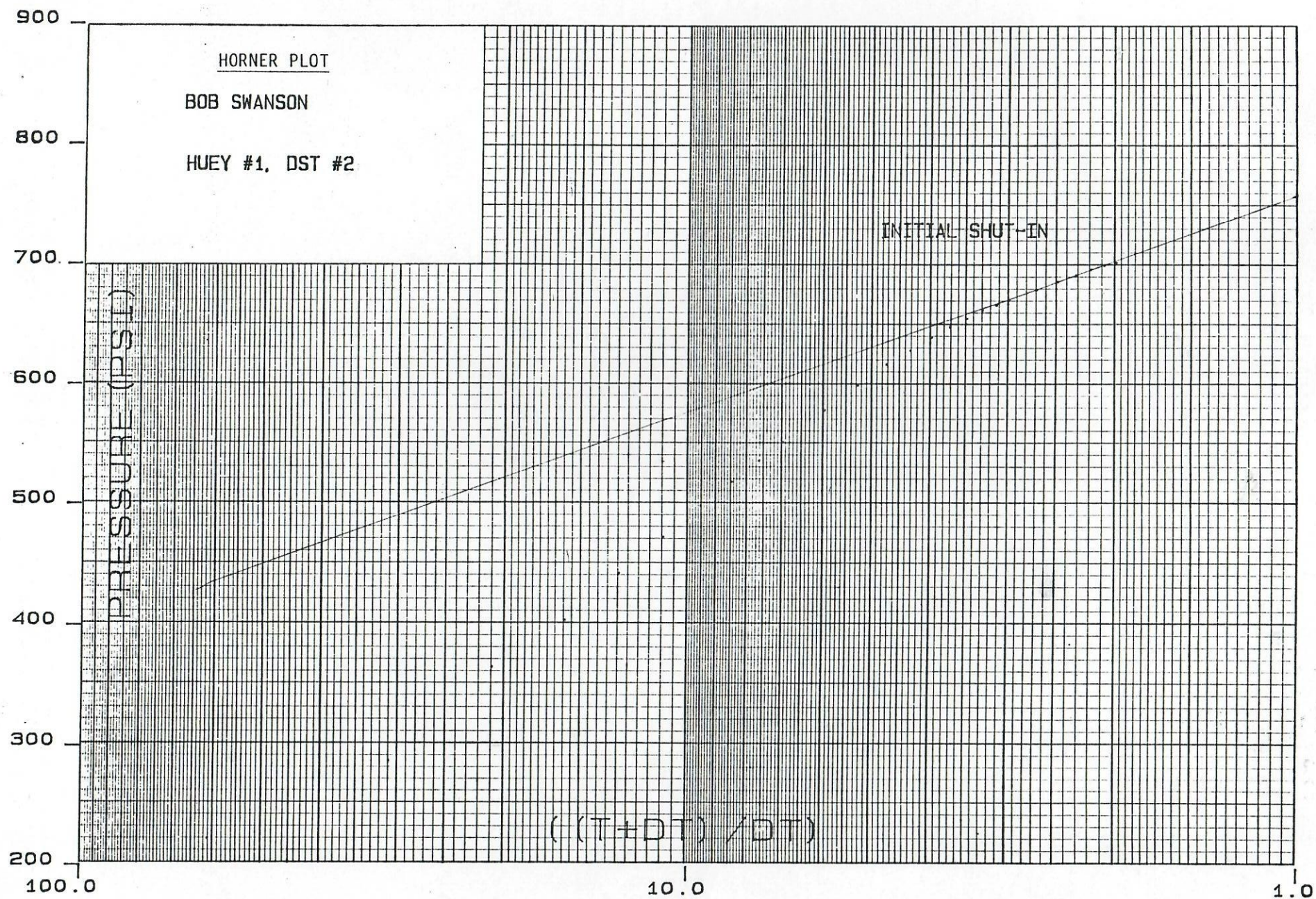
RECORDER NO. 13338 DEPTH 5143 FT.

INITIAL SHUT-IN

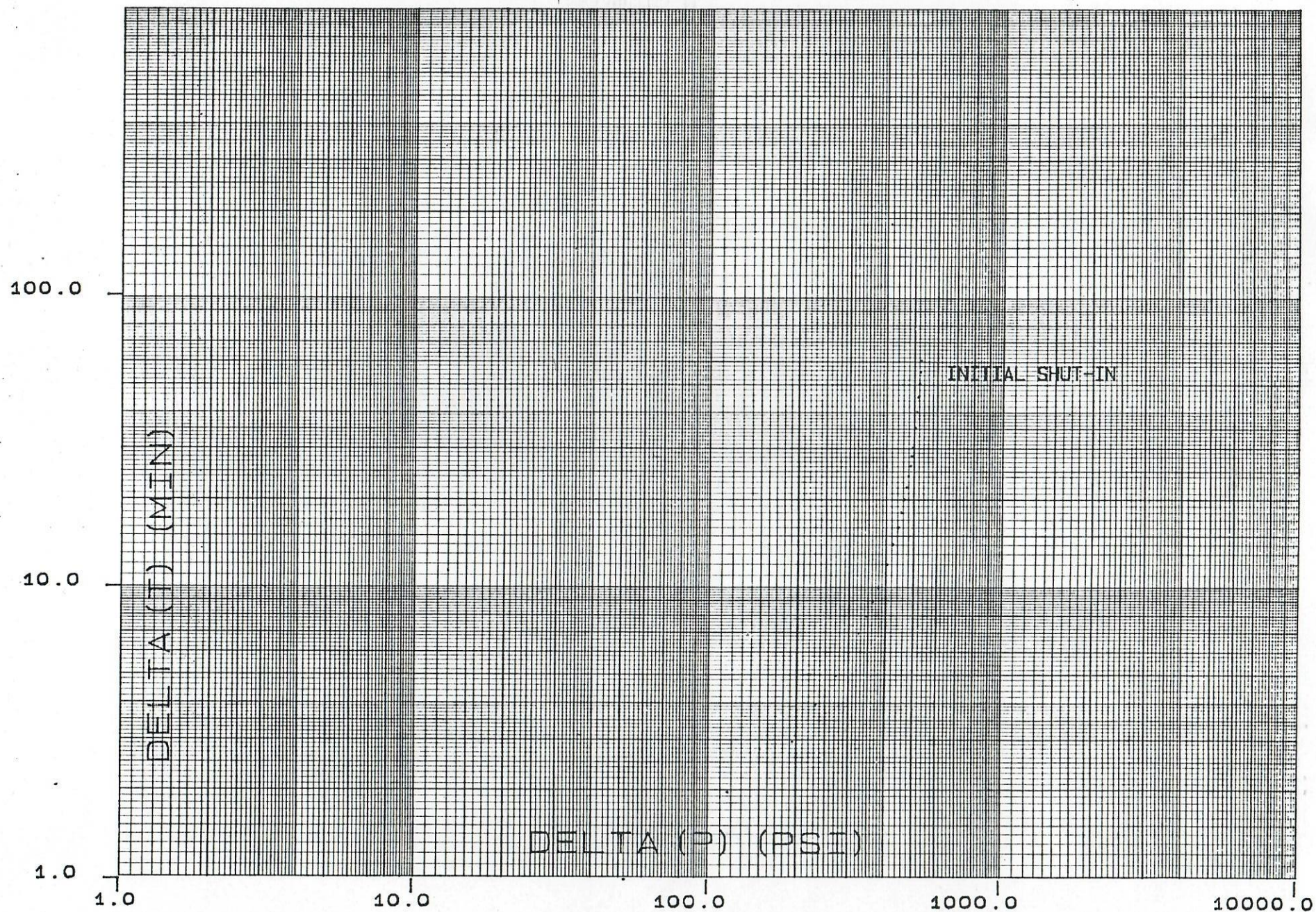
INITIAL FLOW TIME: T = 60 MIN.

<u>DT(MIN)</u>	<u>LOG((T+DT)/DT)</u>	<u>PRESSURE(PSIG)</u>	<u>DP(PSIG)</u>
0		170.0	0.0
1	1.785	222.3	52.3
2	1.491	287.8	117.7
3	1.322	365.7	195.6
4	1.204	404.8	234.7
5	1.114	443.6	273.6
6	1.041	473.3	303.2
7	0.981	499.0	329.0
8	0.929	519.2	349.1
9	0.885	536.7	366.7
10	0.845	552.2	382.2
12	0.778	579.1	409.0
14	0.723	600.3	430.2
16	0.677	617.5	447.5
18	0.637	629.1	459.0
20	0.602	640.4	470.3
22	0.571	649.0	478.9
24	0.544	656.2	486.2
26	0.520	663.4	493.4
28	0.497	667.7	497.7
30	0.477	671.9	501.9
35	0.434	680.4	510.3
40	0.398	686.9	516.8
45	0.368	692.2	522.1
50	0.342	697.2	527.2
55	0.320	700.7	530.7
60	0.301	702.7	532.7

EXTRAPOLATED PRESSURE: 758.7 PSI
SLOPE: 181.5 PSI/LOG CYCLE
POINTS USED: 8

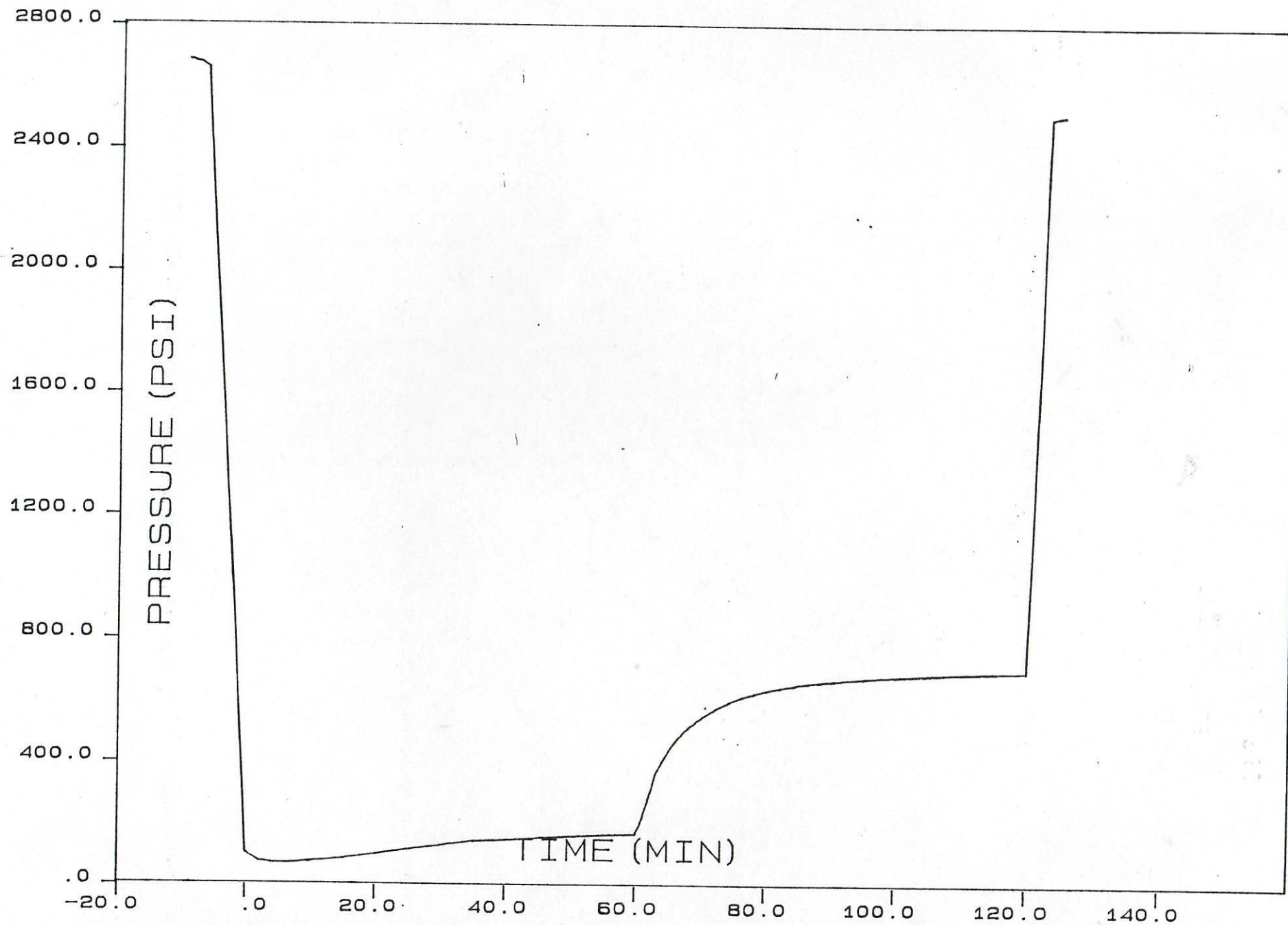


LOG/LOG PLOT



GAUGE NO. 13338 @ 5143 FT.

25



MUD AND BIT RECORD

MUD RECORD: QUALITY DRILLING FLUIDS

MUD UP: 5035'

MUD ENGINEER: F. ROTHAGE

REPORT #1 SPUD

REPORT #2 @ 4727	WT	9.5	#3 @ 5071	9.4
	VIS	46		51
	PV	22		28
	YP	12		16
	GEL	4/13		5/18
	pH	8.0		9.0
	FILT	12.0		6.0
	CK	2/32		1/32
	ALK	.04/.3		.04/.32
	CHL	420		400
	CAL	60		50
	SD	tr		tr
	SOL	8.5		7.8
	WTR	91.5		92.2

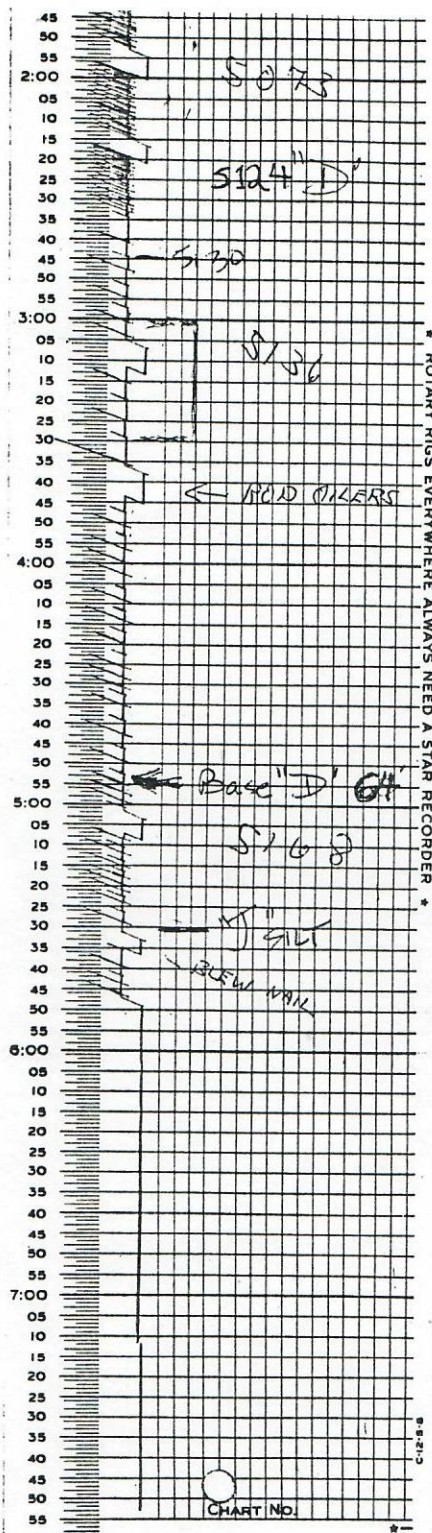
BIT RECORD:

NO.	SIZE	TYPE	DEPTH OUT	FTGE	HRS	WOB	RPM	PP
1A	12 $\frac{1}{4}$ "	2 cone	130	130	/	/	/	/
1	7 7/8"	FDS	3515	3385	14 $\frac{1}{4}$	38	200	850
2	7 7/8"	FDS	4725	1210	10 $\frac{1}{2}$	38	200	950
3	7 7/8"	AT-J1	5186	461	8 $\frac{1}{2}$	40	160/60	950

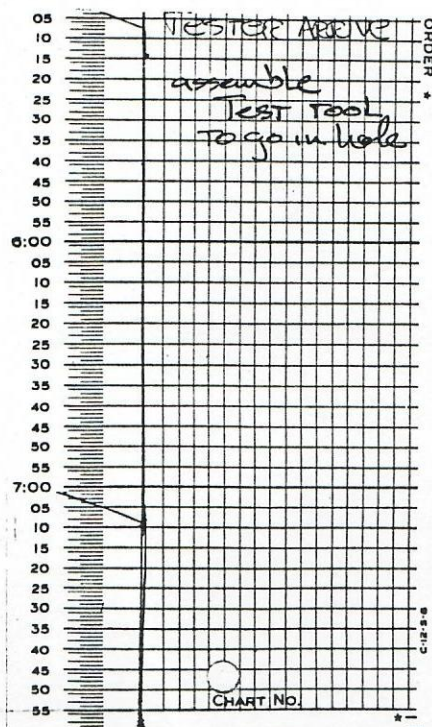
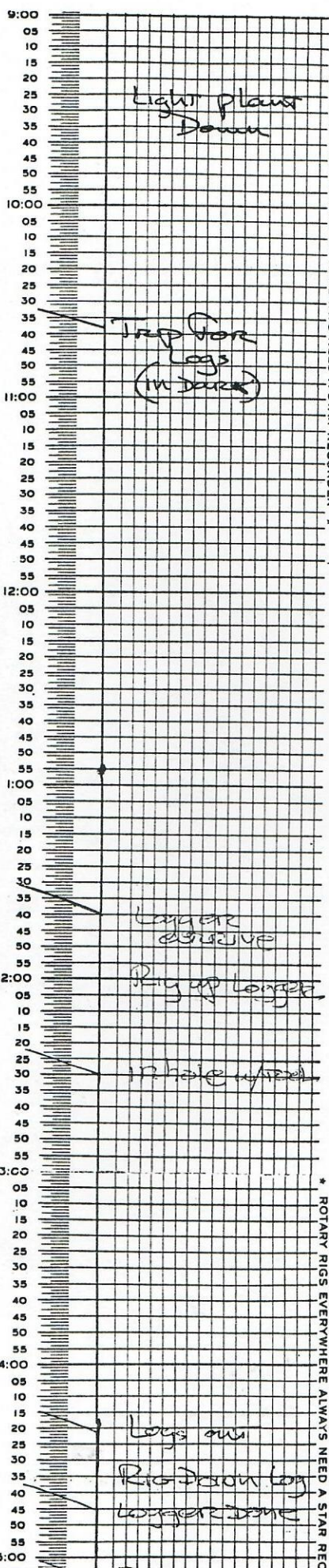
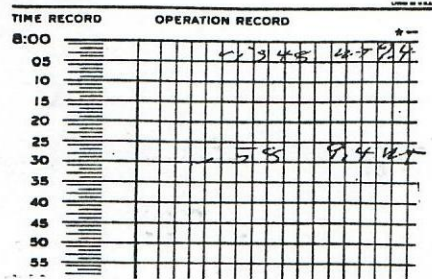
SURVEY:

$\frac{1}{4}^{\circ}$ @ 694'
 $\frac{1}{4}^{\circ}$ @ 1227'
 $\frac{1}{2}^{\circ}$ @ 1637'
 $\frac{1}{2}^{\circ}$ @ 2539'
 $3/4^{\circ}$ @ 3039'
 1° @ 3515'
 1° @ 4102'

DRILLING CONTRACTOR: GEAR DRILLING COMPANY



Eastman Cristensen
 ★ A STAR RECORDING ★
 12 HOUR CHART TIME ON 8:00pm
 COMPANY Swanson DATE 10/16/90
 WELL Huey 1A WELL NUMBER 1A
 TOTAL DEPTH ON 5186 TOTAL DEPTH OFF 1D
 REMARKS



Eastman Cristensen
 ★ A STAR RECORDING ★
 12 HOUR CHART TIME ON 8:00pm
 COMPANY Swanson DATE 10/17/90
 WELL Huey 1A WELL NUMBER 1A
 TOTAL DEPTH ON 1D TOTAL DEPTH OFF 1D
 REMARKS

