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COLORADO OIL & GAS COMS. COM'N.

Geological Report

BURTON & HAWKS, INC.

UNION TEXAS PETROLEUM

State #29-1

W/2 Southwest Southeast

Section 29, Township 9 North, Range 81 West

Jackson County, Colorado

C. S. CANNAN
PETROLEUM GEOLOGIST

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STATISTICAL WELL DATA

OPERATOR	BURTON - HAWKS, INC.
Lease & Well	State #29-1
Location	W/2 SW SE Sec. 2 ^o T ^o N R81W
Elevation	8365 K.B. 8358 CR.
Status	Wildcat
Contractor	George McGee Drilling Co.
Pusher	George McGee
Spud Date	6/3/73
Under surface	6/7/73
Completed Drilling	6/15/73
Plugged	6/16/73
Surface hole drilled with mud	0 - 283'
Drilled with gas	283 - 2901
Drilled with mud	2901 - 3492
Mud Company	Basin Mud
Engineer	Joe King

CASINGRECORD

8 Jts. 8 5/8 (24# J55) @ 283' K.B. with 190 sx Reg cement 2%
CaCl. Halliburton plug down @ 3:30 P.M. 6/4/73

BIT RECORD

Pilot for surface hole.

1	7 7/8	Retip		0 - 283'
2	12 1/4	Rerun		0 - 283'
1	7 7/8	Retip		283 - 1400'
2	7 7/8	Retip		1400 - 2127'
3	7 7/8	Rerun		2127 - 2660'
4	7 7/8	3JS		2660 - 3360'
5	7 7/8	Retip		3360 - 3364'
6	7 7/8	Smith	D2THJ	3364 - 3373'
7	7 7/8	HTC	WRJ	3373 - 3492'

DRILL STEM TEST

#1 Dakota Sand 3335 - 3360'

IH	1643#	
FH	1632#	
IF 1	14#	
FF 1	28#	10 min.
IF 2	42#	
FF 2	167#	1 hr.
ISI	1462#	50 min.
FSI	1462#	50 min

Bottom Hole Temperature 92°

Weak blow steady throughout test.

Recovered 365' fluid

60' Mud cut water

305' Freshwater

DAILY CHRONOLOGICAL REPORT

- 6/2/73 Moving in. Rig up.
- 6/3/73 Rig up. Pump water. Drilling rat hole. Drill pilot hole.
- 6/4/73 Finish pilot hole. Drill 12 1/4 hole. Ran casing. Cemented. Waiting on cement.
- 6/5/73 Nipple up and waiting on gas.
- 6/6/73 Waiting on gas.
- 6/7/73 Waiting on gas. 1:00 P.M. got gas. Blow line and test blow out preventors. Drill cement shoe. Under casing @ 4:30 P.M. Drill to 597'. Trip for bit. Pinched cones.
- 6/8/73 In hole. Ream one joint to bottom. Got water @ 825'. Hook up Mist Unit. Drill to 1600' 12:00 P.M.
- 6/9/73 Drilling 1889' @ 8:00 A.M. Trip @ 2660'. Take off square collar. In with button bit.
- 6/10/73 Finish trip. Frontier 2710'. Drilling to 2930'. Hole loaded up with water. Mud up. Drill ahead.
- 6/11/73 Drilling to 3134'. Bit locked up. Trip for new bit. On bottom @ 4:25 P.M. Mowry 3147'.
- 6 12/73 Drilling @ 3317' @ 6:00 A.M. Dakota Sand 3328'. Drill to 3360. Mix mud for Drill Stem Test. Pull test.
- 6/13/73 Finish. Pulling test tool. Going back in hole with bit. Dropped tong pin. Drill on iron. Order out magnet. Run magnet. No fish on first run. In with Bowin Basket. Made 18". No fish. In with magnet. No fish.
- 6/15/73 In with new WRJ. Drill iron. Took off. Drill Lakota Sand. Top 3398'. Drill to 3490. Preparing to log. Wait on Schlumberger to come out of hole. Vis. 64. Wt. 93.
- 6/16/73 Completed logging. Plugged and abandoned.

LOGGING PROGRAM

Schlumberger - I.E.S. Density - Dip Meter

ELECTRIC LOG FORMATION TOPS

Frontier	2708	+5657
Fort Hayes	2890	+5475
Mowry	3149	+5216
Dakota	3334	+5031
Lakota	3415	+4950
Morrison	3485	+4880

Schlumberger

INDUCTION ELECTRICAL LOG

COMPANY BURTON-HAWKS EXPLORATION
Co. Ltd. + Union Texas Petroleum
 WELL 29-1 State
 FIELD Wildcat
 COUNTY JACKSON STATE Colorado
 LOCATION West-Half SW-SE
 Sec. 29 Twp. 9N Rge. 81W

Other Services:
FDC-GR
HDT
 Elev.: K.B. 8361
 D.F. ---
 G.I. 8358

Permanent Datum: GL, Elev. 8358
 Log Measured From X_B, 7 Ft. Above Perm. Datum
 Drilling Measured From X_B

Date	<u>6/15/73</u>
Run No.	<u>1</u>
Depth—Driller	<u>3492</u>
Depth—Logger	<u>3494</u>
Btm. Log Interval	<u>3493</u>
Top Log Interval	<u>279</u>
Casing—Driller	<u>878 @ 279</u>
Casing—Logger	<u>778</u>
Bit Size	<u>EGM</u>
Type Fluid in Hole	<u>TIGHT</u>
Dens.	<u>8.5</u>
Visc.	<u>5.5</u>
pH	<u>8.6</u>
Fluid Loss	<u>6.4 ml</u>
Source of Sample	<u>Flowline</u>
R _m @ Meas. Temp.	<u>3.10 @ 70 °F</u>
R _{mf} @ Meas. Temp.	<u>2.90 @ 67 °F</u>
R _{mc} @ Meas. Temp.	<u>— @ — °F</u>
Source: R _{mf} R _{mc}	<u>M —</u>
R _m @ BHT	<u>— @ — °F</u>
Time Since Circ.	<u>2hr</u>
Max. Rec. Temp.	<u>110 °F</u>
Equip. Location	<u>7025 FM</u>
Recorded By	<u>Tullius</u>

Changes in Mud Type or Additional Samples

Date	Sample No.		
Depth—Driller			
Type Fluid in Hole			
Dens.	Visc.		
ph	Fluid Loss	ml	
Source of Sample			
R _m @ Meas. Temp.	@ °F	@ °F	
R _{mf} @ Meas. Temp.	@ °F	@ °F	
R _{mc} @ Meas. Temp.	@ °F	@ °F	
Source: R _{mf} R _{mc}			
R _m @ BHT	@ °F	@ °F	
R _{mf} @ BHT	@ °F	@ °F	
R _{mc} @ BHT	@ °F	@ °F	

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole
<u>SN + IND</u>	<u>REPEAT</u>	<u>0-100</u>	<u>0-50</u>

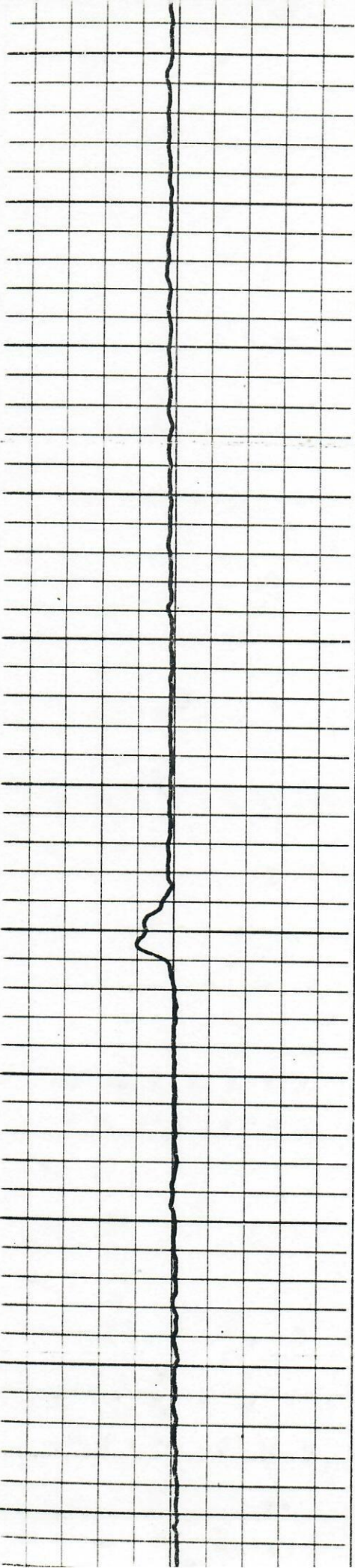
Equipment Data

Run No.	Tool Type	Tool Position	Other

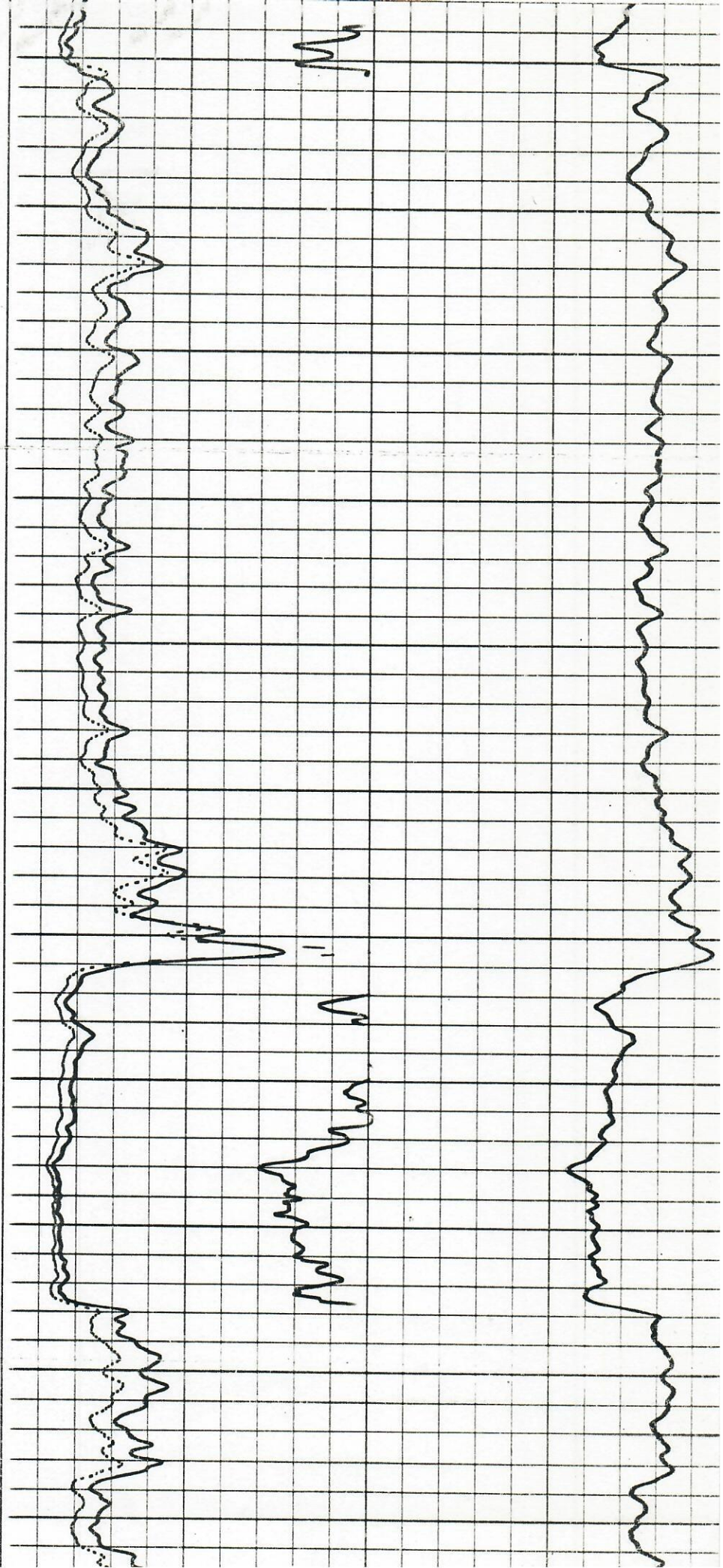
Run No.: 1
 C.D.: used
 S.O.: Yes
 Equip. PANEL No.: IRP-M-503
 Used: CART. No.: 1182-F-516
 SONDE No.: 1182-M-771
 IAP No.: MMIP-B-262
 S.B.R.: 1

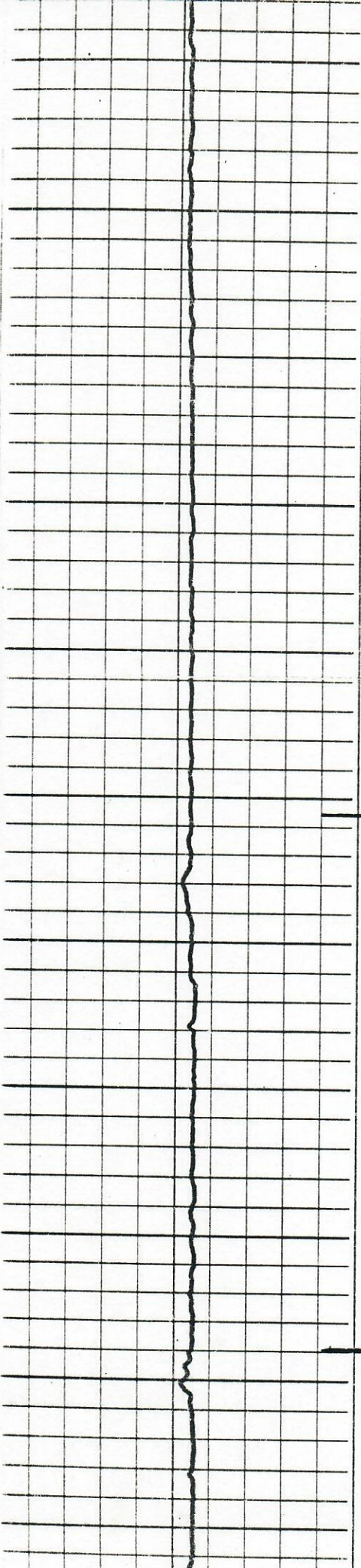
Rw from DST → 15.8 @ 6'
Metal PIN in Hole @ 3350'

Check one, filling in blanks where applicable:
 Surface determined sonde errors used for 6FF40.
 6FF40 sonde error corrected for _____ inch
 borehole signal at R_m = _____
 6FF40 zero set in hole at depth of _____ feet.



1900 2000 2100 2200 2300 2400





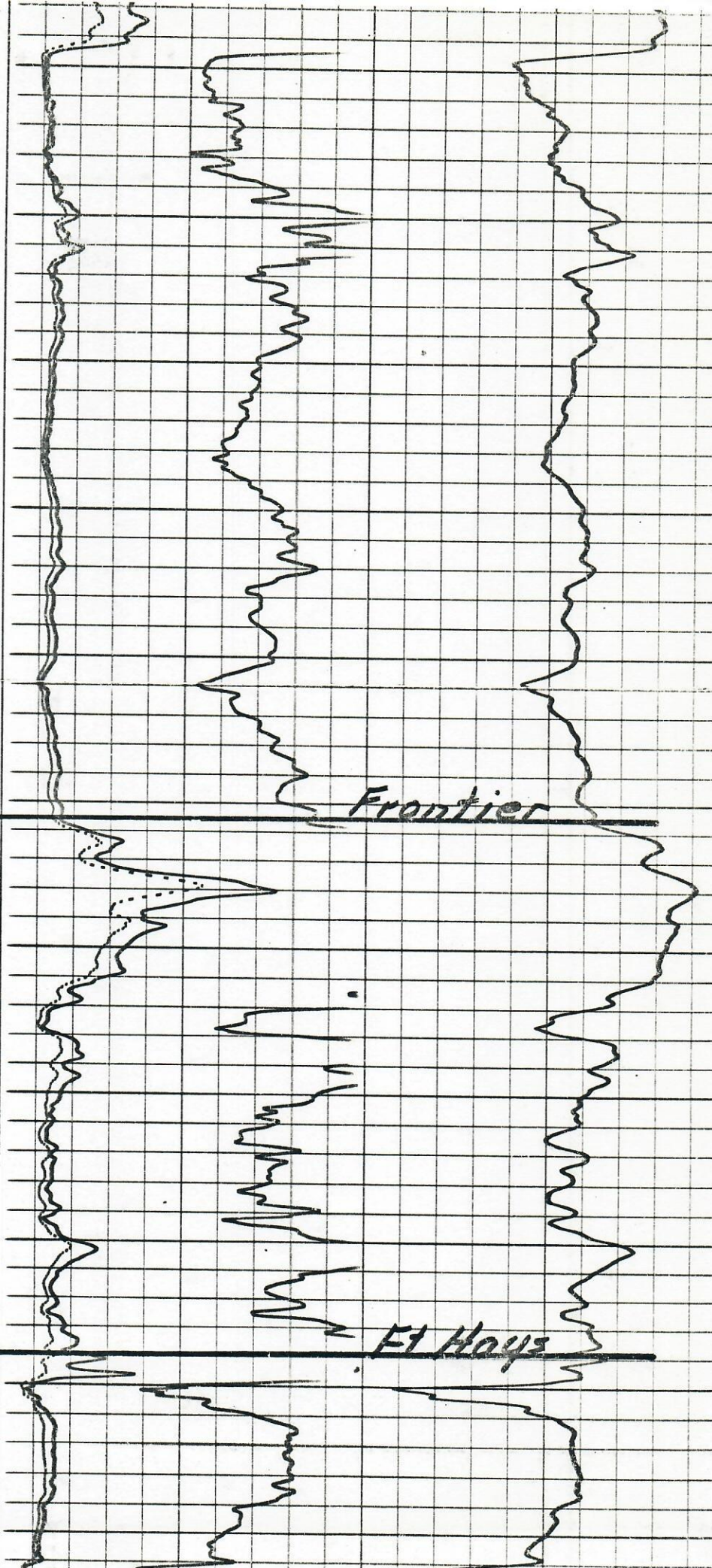
2500

2600

2700

2800

2900



3000

3100

3200

3300

3400

3500

LND

SN

amp SN

Mowry

Dakota

metal pin in hole

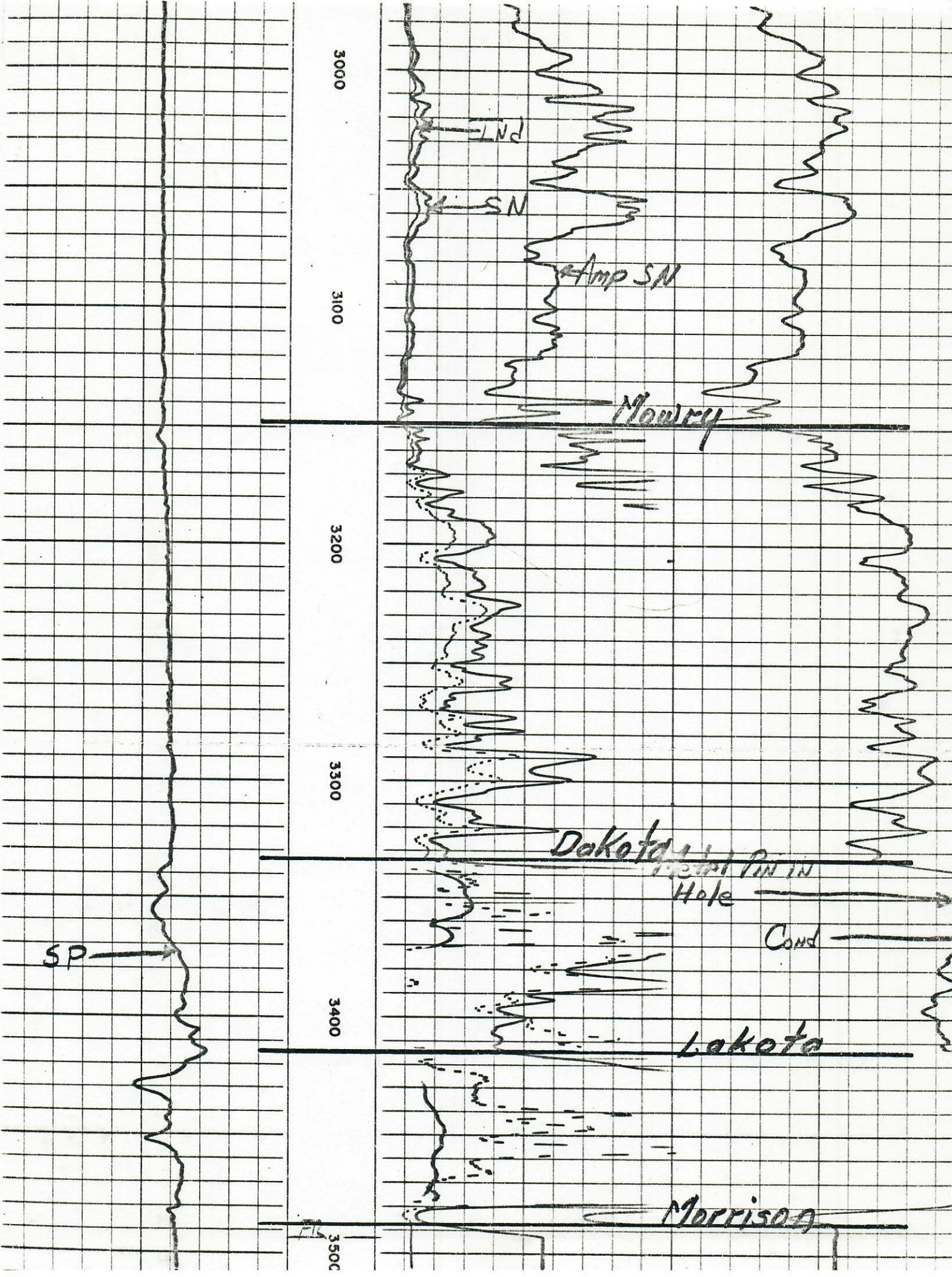
Cond

Lakota

Morrison

SP

FL





SYMBOL OF SERVICE

REPORT of SUB-SURFACE DIRECTIONAL SURVEY

Burton & Hawks
COMPANY

State 29-1
WELL NAME

Walden, Colorado
LOCATION

<u>JOB NUMBER</u>	<u>TYPE OF SURVEY</u>	<u>DATE</u>
	Single Shot	6-15-73

SURVEY BY

OFFICE

Rocky Mtn.



RECORD OF SURVEY

State 29-1

CHECKED BY _____

JOB NO. _____

DATE 6-15-73

STATION	MEASURED DEPTH	DRIFT ANGLE	TRUE VERTICAL DEPTH		VERTICAL SECTION	COURSE DEVIATION	DRIFT DIRECTION	RECTANGULAR COORDINATES						
								NORTH	SOUTH	EAST	WEST			
	224	Vertical												
1	449	1°30'	449	00		5 89	S77W		1 32				5 74	
2	597	2°	596	91		5 17	S68W		3 25				10 54	
3	718	2°15'	717	81		4 75	S64W		5 33				14 82	
4	901	2°15'	900	68		7 18	S63W		8 59				21 22	
5	1021	2°45'	1020	54		5 76	S53W		12 06				25 82	
6	1168	3°15'	1167	34		8 33	S51W		17 30				32 29	
7	1351	4°30'	1349	83		14 36	S49W		26 72				43 13	
8	1501	5°	1499	26		13 08	S44W		36 13				52 22	
9	1648	5°15'	1645	64		13 45	S48W		45 13				62 00	
10	1767	6°45'	1763	82		13 98	S47W		54 67				72 45	
11	1947	7°	1942	47		21 94	S47W		69 63				88 50	
12	2064	7°45'	2058	40		15 78	S46W		80 59				99 85	
13	2216	9°	2208	53		23 78	S44W		97 70				116 37	
14	2367	9°30'	2357	46		24 92	S43W		115 93				133 37	
15	2513	10°	2501	02		25 35	S42W		134 77				150 33	
16	2687	10°30'	2672	11		31 71	S39W		159 47				170 29	
17	2808	13°30'	2789	79		28 24	S27W		184 57				183 11	
18	2959	13°30'	2936	62		35 25	S24W		216 77				197 45	
19	3106	14°	3079	25		35 56	S21W		249 97				210 19	
20	3258	13°30'	3227	05		35 48	S14W		284 40				218 78	
21	3319	12°	3286	72		12 68	S14W		296 70				221 84	
22	3350	11°30'	3317	04		6 18	S14W		302 70				223 34	
								CLOSURE DIRECTION	S36°25'W					
								CLOSURE DISTANCE	376.18 feet					

PLAN

EASTMAN
OIL WELL
SURVEY COMPANY

