MERIDIAN OIL

Well File

February 1, 1991

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FEB 07 1991
OIL CON. DIV
DIST. 3

New Mexico Oil Conservation Division
Mr. Ernie Busch
1000 Rio Brazos
Aztec, New Mexico 98410

Dear Ernie:

Attached is an exerpt from a report completed in August, 1988 concerning the **San Juan 30-6 #413** casing failure. If I can be of further assistance don't hesitate to call.

Sincerely,

George T. Dunn

George T. Dunn
Regional Production Engineer

GTD:tt

K-23-30N-7W

SJ 30-06 #413 Casing Failure
(From Report dated 8/1988)

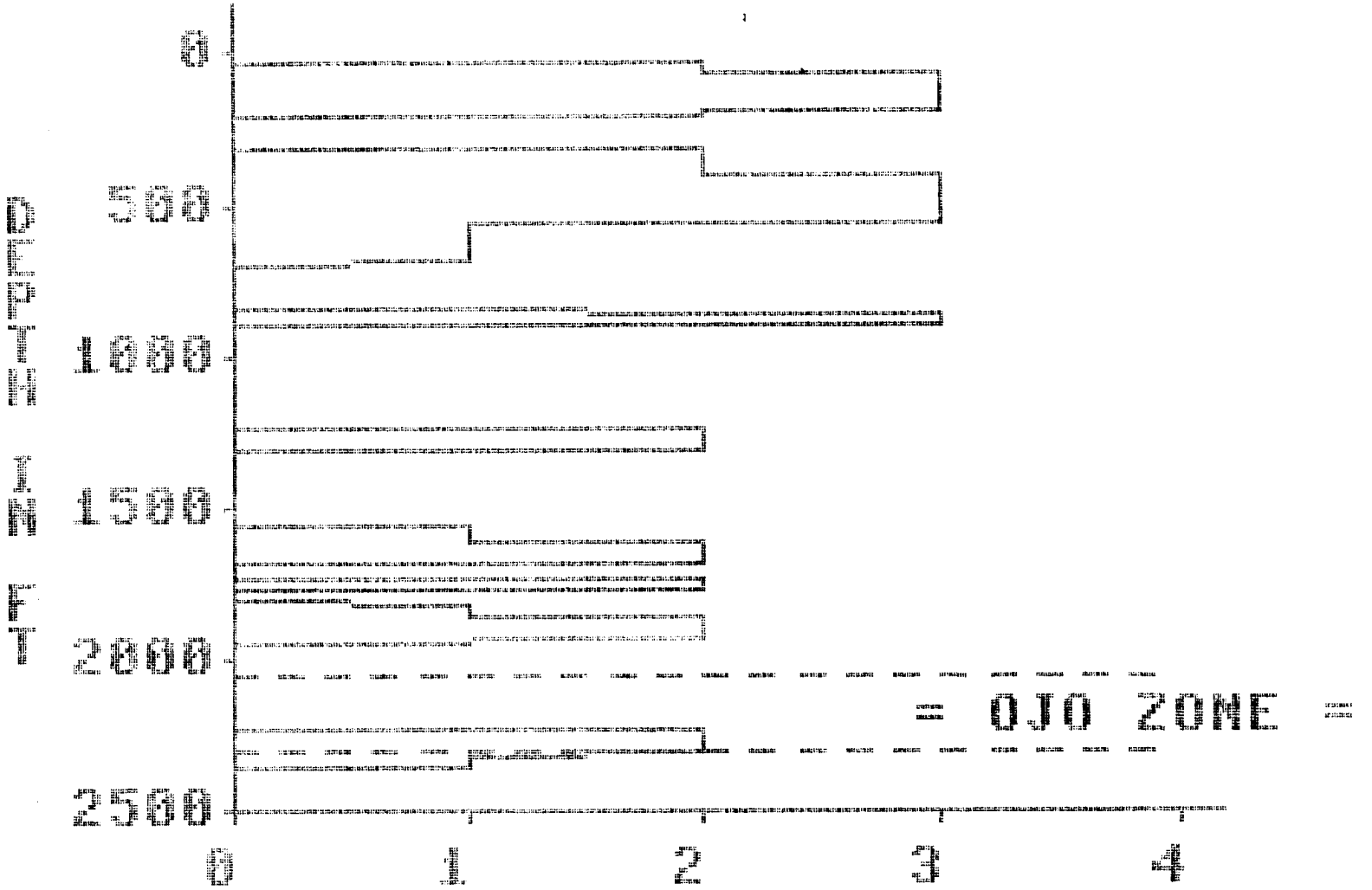
I. The casing failure of S.J. 30-6 #413 was the result of extensive external casing corrosion. See attached graph of results from Casing Caliper Log.

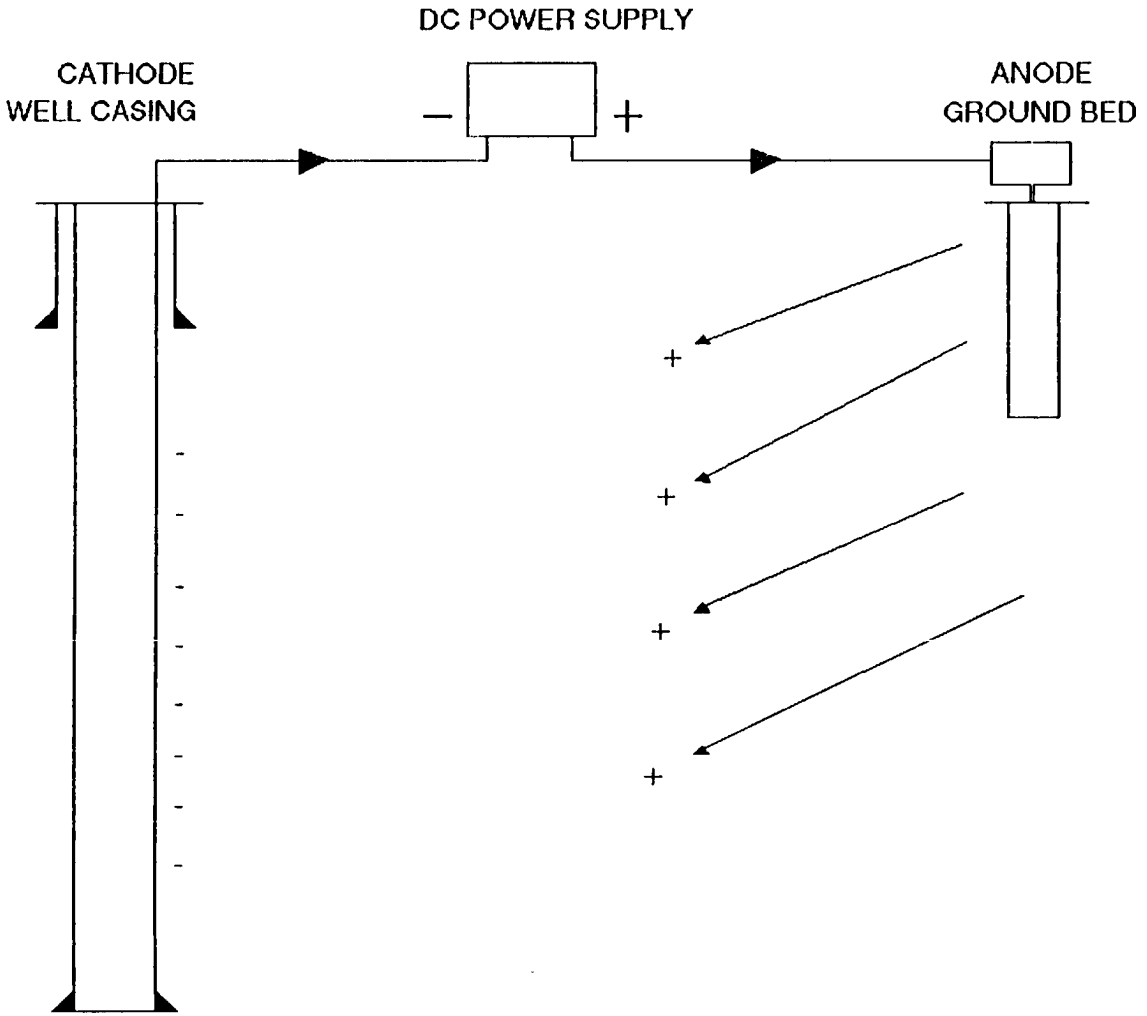
II. It is likely that stray current corrosion (CP Interference) made a major, if not dominant, contribution to the failure of the casing.

a) Pipe-to-soil cathodic protection measurements (see attached Table) showed the existence of interference (stray current) corrosion potential shifts on the casings of both coal-seam gas wells checked.

III. The present procedure of turning off the CP systems of nearby wells, until a rectifier and anode bed can be installed for the new well, to prevent Interference corrosion damage to the new wells, while necessary, may not be fully adequate. Other CP systems in the area (foreign pipelines and wells, etc.) may still be somewhat of a threat to the new wells. Subsequent Reports and Procedures are detailed to protect from such occurences.

SAN JUAN 30-6 WELL #413




DC POWER SUPPLY
CATHODE
WELL CASING
ANODE
GROUND BED
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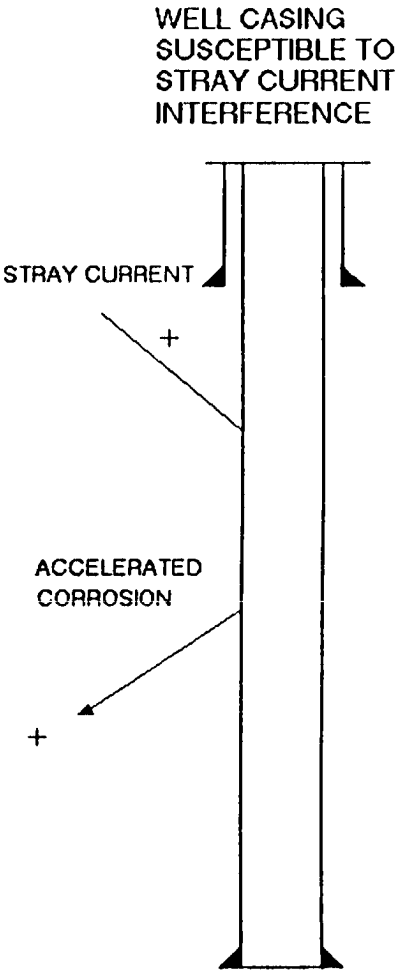
WELL CASING
SUSCEPTIBLE TO
STRAY CURRENT
INTERFERENCE
STRAY CURRENT
ACCELERATED
CORROSION

Table I - Cathodic Protection Interference

Pipe-to-Soil Potentials

Note: Shift may be '+' or '-'; P/S potentials vs Cu/CuSO4

WELL CASING	WELL RECTIFER ON - OFF	INTERFERENCE		
		RECTIFIER		SHIFT (MV)
		OFF	ON	
HOWELL K-1A	OFF	- 0.997		
	ON		- 1.220	
HOWELL K 303	NONE	- 0.936	- 0.563	+ 373
SJ 30-6 # 413	ON		- 1.431	
	ON	- 1.367	- 1.398	- 31
	OFF	- 1.131	- 1.181	- 50
	OFF		- 1.165	