

WELL FEDERAL 1-30

OPERATOR EMBERCH EXPLORATION INC.

LOCATION Sec. 30, T32 N, R 13W, San Juan County N.M.

ELEVATION GL: 6423 KE: 6436

DEVIATION REPORT

BIT RECORD					SURVEYS		FT PER/DAY		REMARKS	
RUN	TYPE	IN	FTG	HPS	SLOPE	DEPTH	DATE	MENT DEPTH	FT	CASING:
1	B3		460	11	1 1/2	300	12-27	2500	0	
2	DSC	460	210	4	1 1/4	670	12-28	2500	750	drilling
3	A1	670	2245	45	1 3/4	970	12-29	3250	625	drilling
4	F2	915	1250	44	1 1/2	1280	12-30	3875	625	tr for bit drilling
5	F3	1165	835		3	1589	12-31	4500	410	drilling
6	F3	5000	1754	113	2 3/4	1890	1-1	4910	224	drilling, tr for bit
7	F3	6764	1036	110	3	2190	1-2	5134	168	drilling
8	F3	7800	720	81	2 1/2	2513	1-3	5600	114	drilling
9	F4	8520	777	104	2 3/4	2813	1-4	6016	319	drilling
10	J44	9297	484	88	2 1/2	3318	1-5	6335	279	drilling
11	F 5	9781	110		1 3/4	4165	1-6	6614	187	trp for bit drilling
TD		9891			2 1/2	4660	1-7	6801	249	drilling
					2 1/2	5000	1-8	7050	246	drilling
					2 1/2	5528	1-9	7296	221	drilling
					2 1/2	6050	1-10	7517	185	drilling
					2	6490	1-11	7702	142	drilling trp for bit
					3	7800	1-12	7814	194	drilling
					2 3/4	9297	1-13	8038	198	drilling
					1 1/2	9781	1-14	8236	207	drilling
							1-15	8443	77	drilling
							1-16	8520	26	DST/1 drilling
							1-17	8546	163	drilling
							1-18	8709	180	drilling
							1-19	8839	202	drilling
							1-20	9091	158	drilling
							1-21	9249	81	bit trip drilling
							1-22	9330	142	drilling
							1-23	9472	101	drilling
							1-24	9573	117	drilling
							1-25	9690	138	drilling trip for bit
							1-26	9828	53	drilling, cond hole for logs
							1-27	9891	TD	

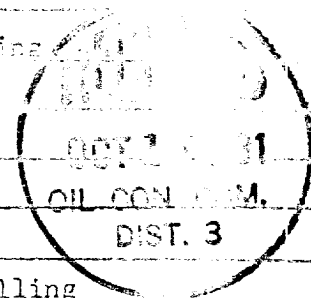
NOTED IN LOG

9091 1-21

OIL CON. COM.

DIST. 3

not used on back



ARAPAHOE DRILLING CO.

P.O. BOX 2078 • FARMINGTON, NEW MEXICO 87401

JOHN E. SCHALK
MANAGING PARTNER

AREA CODE 505
TELEPHONE: 325-5018

THIS IS TO CERTIFY THAT THE DEVIATION SERVEYS RECORDED ON THE REVERSE
OF THIS SHEET ARE TRUE AND CORRECT.

THE WELL IN QUESTION IS THE "FEDERAL 1-30" (SEC.30,T32N R13W,SAN JUAN
COUNTY, NEW MEXICO) AND WAS SPUDDED 12/22/77. THE OPERATOR OF THIS WELL .
IS ENSERCH EXPLORATION INC... THE WELL WAS DRILLED BY ARAPAHOE DRILLING
COMPANY, RIG #7.

STATE OF NEW MEXICO

COUNTY OF SAN JUAN

THIS DEVIATION RECORD WAS ACKNOWLEDGED BEFORE ME THIS 2nd DAY OF
Oct., 1981 BY John A. Ahlman II OFFICE MANAGER OF
ARAPAHOE DRILLING COMPANY.

MY COMMISSION EXPIRES: June-29-1985

Lee Coffman
NOTARY PUBLIC

