

Helmerich & Payne, Inc.  
 # 1 Leighton "B".

4482'-4484' Limestone, as above,  
 10 % Ø, 39 % SW.

4502'-4504' Limestone, buff-gray, oolitic & fossiliferous porosity.  
 9 % Ø, 35 % SW.

CONCLUSIONS

It is recommended that the # 1 Leighton "B" be plugged and abandoned because of its low structural position, negative drill stem tests, and electric log calculations.

Charles E. Nelson  
 Consulting Geologist  
 Garden City, Kansas

SPECIAL SERVICES

	<u>Firm</u>	<u>Type</u>	<u>Interval</u>
E-log	Welex	Gamma Guard	290'-4560'.
		Detail	3800'-4560'.
		Acoustic	3800'-4560'.
		FORNO-Caliper	3800'-4562'.
DST	Bomin Testing Co.	DST # 1	4034'-4059'.
		DST # 2	4114'-4138'.
		DST # 3	4179'-4208'.
		DST # 4	4219'-4238'.

DRILLING TIME

3500'-3510'	2	2	2	3	2,	2	2	3	4	4
3520'	4	3	4	2	3,	4	3	3	3	3
3530'	3	2	4	2	4,	2	3	1	1	2
3540'	2	2	3	4	4,	5	3	3	2	3
3550'	2	1	3	2	2,	3	3	3	3	6
3560'	2	2	2	1	1,	1	1	2	3	4
3570'	3	3	2	3	4,	3	5	3	3	3
3580'	5	4	3	5	3,	3	3	2	3	3
3590'	3	3	3	3	3,	4	3	2	3	4
3600'	3	4	4	3	4,	4	4	4	4	4
3600'-3610'	4	4	3	4	4,	3	3	2	3	3
3620'	3	2	3	2	3,	5	5	4	4	4
3630'	4	4	4	5	4,	4	3	4	3	4
3640'	4	4	4	4	4,	4	4	5	4	4
3650'	4	4	5	4	5,	4	5	3	4	2
3660'	3	3	3	5	4,	4	4	4	4	3
3670'	4	4	4	2	5,	3	2	3	4	4
3680'	5	4	4	4	4,	4	4	4	3	4
3690'	4	4	3	3	2,	2	1	2	1	1
3700'	2	3	3	5	4,	2	1	1	1	2
3700'-3710'	1	1/2	1/2	1/2	1/2,	1	2	1	3	2
3720'	3	3	3	2	3,	5	6	5	4	6
3730'	6	4	3	5	4,	7	6	3	7	6
3740'	6	3	3	1	2,	2	3	3	5	6
3750'	5	3	4	6	5,	5	3	2	2	3
3760'	5	3	2	2	4,	5	6	7	6	6
3770'	4	3	3	2	3,	4	2	5	5	5
3780'	7	7	6	6	3,	3	2	2	3	7
3790'	6	6	4	4	6,	3	5	4	4	6
3800'	4	4	6	6	6,	6	2	2	4	7
3810'	7	4	7	8	9,	2	1/2	1/2	2	3
3820'	6	5	5	4	1,	2	2	1	1	2
3830'	3	2	3	4	5,	5	2	3	4	5
3840'	7	7	6	6	4,	4	5	5	7	7
3850'	7	7	9	7	4,	11	8	7	8	7
3860'	7	8	5	3	4,	3	4	5	7	9
3870'	8	8	7	5	5,	3	3	4	5	7
3880'	3	2	1	3	3,	3	3	2	2	3
3890'	3	2	2	2	2,	3	2	3	5	4
3900'	2	4	3	3	1,	2	3	4	4	3

Trip @ 3805'.

Helmerich & Payne, Inc.  
 # 1 Leighton "B".

DRILLING TIME

3900'-3910' 4 5 3 3 5, 5 2 2 2 2  
 3920' 2 3 5 6 5, 3 5 5 4 4  
 3930' 4 10 7 6 6, 6 8 7 7 5  
 3940' 6 6 5 5 5, 7 8 8 8 8  
 3950' 12 12 11 12 10, 10 11 10 8 7  
 3960' 7 6 6 7 7, 5 4 5 5 6  
 3970' 5 5 5 5 7, 7 9 8 9 8  
 3980' 11 9 10 11 11, 10 13 12 12 11  
 3990' 11 14 10 7 8, 7 7 5 6 5  
 4000' 6 5 3 6 6, 9 12 14 13 12  
 4000'-4010' 13 14 10 7 10, 8 6 7 7 6  
 4020' 7 5 10 14 18, 20 12 11 7 8 Trip @ 4017'.  
 4030' 7 7 8 6 6, 7 7 6 6 6  
 4040' 4 7 7 7 6, 7 5 4 5 4  
 4050' 5 3 4 5 4, 5 4 4 4 7  
 4060' 7 6 6 6 5, 6 6 5 5 7  
 4070' 6 1 1 1 1,  $\frac{1}{2}$   $\frac{1}{2}$   $\frac{1}{2}$   $\frac{1}{2}$  1  
 4080' 2 2 4 5 5, 6 4 5 6 6  
 4090' 5 5 4 4 4, 5 4 5 5 5  
 4100' 5 7 5 6 6, 3 2 3 4 3  
 4100'-4110' 6 6 4 6 4, 5 4 4 4 5  
 4120' 6 6 6 6 7, 7 5 2 7 6  
 4130' 6 7 7 5 5, 4 8 5 5 3  
 4140' 3 3 4 4 4, 7 7 6 5 8  
 4150' 9 6 8 6 7, 5 5 6 4 5  
 4160' 4 4 4 4 5, 4 5 5 6 7  
 4170' 6 5 6 5 6, 7 5 5 6 7  
 4180' 10 8 9 7 8, 5 5 9 9 8  
 4190' 7 9 8 5 7, 5 5 4 5 6  
 4200' 7 2 1 1 3, 2 3 2 1 1  
 4200'-4210' 2 4 4 1 1, 1 1 8 8 9  
 4220' 8 8 8 9 5, 2 3 8 6 10  
 4230' 6 4 6 6 7, 4 3 3 2 4  
 4240' 4 4 4 3 4, 5 6 8 8 5  
 4250' 7 8 6 5 9, 12 4 3 2 3  
 4260' 9 12 6 4 5, 4 4 5 3 4  
 4270' 3 3 5 4 5, 7 12 8 10 8  
 4280' 9 9 7 6 7, 6 7 6 8 8  
 4290' 7 7 9 11 8, 10 4 4 5 12  
 4300' 13 11 6 5 7, 8 8 8 7 7  
 4300'-4310' 6 4 3 5 4, 4 5 4 4 6  
 4320' 11 11 11 10 8, 8 9 6 6 7 Trip @ 4314'.  
 4330' 8 7 6 5 4, 6 7 3 2 3  
 4340' 4 4 5 5 5, 6 6 5 7 4  
 4350' 5 5 5 4 5, 4 4 5 6 5  
 4360' 6 5 5 4 5, 5 5 8 7 7  
 4370' 8 6 5 5 6, 8 8 7 7 7  
 4380' 6 9 6 7 6, 5 4 5 6 5  
 4390' 7 7 6 7 6, 7 6 5 6 5  
 4400' 6 7 6 5 6, 6 7 5 6 6  
 4400'-4410' 5 6 6 6 7, 6 5 5 6 5  
 4420' 5 5 5 5 3, 2 6 3 3 6  
 4430' 6 7 6 6 6, 7 5 6 6 6  
 4440' 5 6 5 6 6, 8 8 6 7 7  
 4450' 4 7 7 7 5, 6 4 6 5 4  
 4460' 6 6 6 6 7, 5 6 3 4 4  
 4470' 5 5 6 5 6, 5 5 5 2 4  
 4480' 3 2 3 4 5, 4 5 6 7 7  
 4490' 12 5 9 10 11, 9 13 8 11 8  
 4500' 10 6 8 8 11, 12 9 10 10 11  
 4500'-4510' 12 10 10 12 12, 13 11 10 13 6  
 4520' 6 5 5 8 12, 11 10 10 12 6  
 4530' 6 10 6 7 5, 6 7 5 6 12  
 4540' 10 12 13 8 8, 6 7 9 11 10  
 4550' 10 11 10 6 10, 10 7 6 5 5  
 4560' 7 5 7 5 5, 7 6 7 8 8

Total Depth 4560' Driller.