

GEOLOGICAL DEPARTMENT
UNION GAS CORPORATION

10-31-10E

Company Peerless O. & R. Chanute, Kansas.
Sonner Ames Sharkey, Moline, Kansas.

S. T. R. 10-31-10
County Elk
State Kansas
Blk #45
Lease and Well No. wells on Blk
by different parties

Contractor Ames Etal

Drilling Commenced 12/1/28

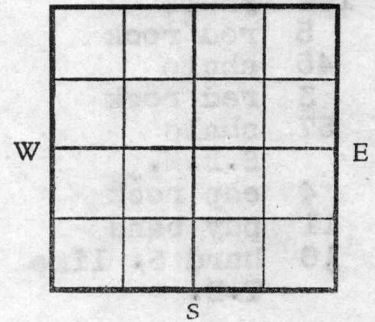
Drilling Completed 1/4/29

Initial Production

Initial Rock Pressure

Location Blk. #45, Moline, Kansas, 50' E. line
50' S. "

Casing 10" 582'
8 1/2" 1448'
6 1/2" 1980'



Driller's Record of Formations

6	soil	6	8	lime	648
6	gravel	12	28	shale	675
10	lime	22	5	lime	680
10	shale	32	15	shale	695
10	lime	42	35	sand	730
8	shale	50		5 blrs. water per hr.	
20	lime	70	85	shale	815
10	shale	80	125	lime	940
10	lime	90	5	shale	945
10	red rock	100	15	sand	960
5	lime	105	45	shale	1005
20	shale	125	5	lime	1010
10	lime	135	110	shale	1115
15	shale	150	5	lime	1120
10	lime	160	10	shale	1130
40	shale	200	35	sand gas	1165
10	lime	210	5	shale	1170
30	shale	240	40	lime	1210
10	lime	250	15	shale	1225
35	shale	285	60	lime	1285
10	sand	295	5 blrs.	10 shale	1295
5	lime	300	water	20 lime	1315
40	shale	340		10 sand	1325
30	lime	370		80 lime	1405
5	shale	375		3 blrs. water at 1390'	
15	red rock	390	42	shale dark	1447
20	sand	410	9 blrs. water		
5	shale	415	4	lime	1451
5	red rock	420	54	shale	1505
8	lime	428	15	lime	1520
17	shale	445	10	shale	1530
15	red rock	460	5	lime	1535
20	shale	480	5	shale	1540
15	lime	495	30	sand	1570
5	shale	500		3 blrs. water	
30	sand	530	H.F.W.	35 shale	1605
35	shale	565		25 lime	1630
15	sand	580		15 shale	1645
60	shale	640		30 lime Oswego	1675
				6 shale over	1681

10-21-01

UNION GAS CORPORATION

INDEPENDENCE, KANSAS

S. T. R.
County
State
Lease and
Well No.

7	lime
182	shale
5	red rock
45	shale
3	red rock
57	shale
4	cap rock
11	pay sand
6	hard S. lime
	D.T.

8898
1870
1875
1920
2291
0891

1984
5991
2011
1102
1102

Drilling
Completed

Drilling
Commenced

Initial
Production

Location

Casing

Driller's Record of Formations

840	lime	8	8	soft	6
875	shale	23	13	gravel	8
880	lime	8	22	lime	10
895	shale	13	23	shale	10
930	sand	25	23	lime	10
	3 pipe, water per hr.		20	shale	8
815	shale	28	70	lime	20
840	lime	125	30	shale	10
845	shale	5	30	lime	10
850	sand	13	100	red rock	10
1005	shale	45	105	lime	8
1010	lime	8	12	shale	20
1115	shale	110	120	lime	10
1120	lime	3	12	shale	18
1130	shale	10	120	lime	10
1135	sand	25	200	shale	40
1140	shale	5	210	lime	10
1210	lime	40	240	shale	20
1225	shale	13	250	lime	10
1225	lime	30	255	shale	25
1225	shale	10	255	sand	10
1225	lime	20	250	lime	5
1225	sand	10	250	shale	40
1405	lime	20	270	lime	20
	3 pipe, water at 1200'		275	shale	5
144	shale days	45	290	red rock	15
	3 pipe, water		310	sand	20
1481	lime	4	315	shale	5
1508	shale	24	330	red rock	5
1520	lime	13	325	lime	5
1530	shale	10	325	shale	15
1535	lime	8	320	red rock	15
1540	shale	8	320	shale	20
1570	sand	30	325	lime	15
	3 pipe, water		325	shale	5
1595	shale	28	330 N.E.V.	sand	20
1620	lime	23	335	shale	25
1645	shale	13	335	sand	15
1675	lime	30	340	shale	20
1681	shale	8			

Geological Form