

### DRILL LOG

Operator License# 34592

API 15-091-23938-00-00

Operator Kansas Resource Explora. & Dev.

Lease Name Guetterman

Address 9393 W. 110<sup>th</sup> St., Ste. 500, OP, KS

Well # KR 16

Contractor JTC Oil, Inc.

Spud Date Cement

Contractor License \_\_\_ 32834

11/21/2012  
Location \_\_\_\_\_ of \_\_\_\_\_

T.D. 940 T.D. of Pipe 906

\_\_\_\_\_ feet from \_\_\_\_\_

Surf. Pipe Size\_ 7" \_Depth 20 ft.

\_\_\_\_\_ feet from \_\_\_\_\_

Kind of Well \_\_\_prod. \_\_\_\_\_

County Johnson

Thickness	Strata	From	To	Thickness	Strata	From	To
10	dirt/clay	0	10	2	shale	145	147
15	shale	10	25	11	lime	147	168
1	lime	25	26	6	shale	168	174
4	shale	26	34	51	lime	174	225
2	lime	34	36	25	shale	225	250
17	shale	36	53	10	lime	250	260
18	lime	53	70	15	shale	260	275
2	shale	70	72	7	lime	275	282
18	lime	72	90	8	shale	282	290
6	shale	90	96	15	lime	290	305
11	lime	96	105	22	shale	305	327

9	shale	105	114	3	lime	327	330
14	lime	114	128	13	shale	330	343
7	shale	128	135	25	lime	343	368
10	sand/no oil	135	145	4	coal	368	372
				23	lime	372	395
				5	shale mix	395	400
				6	lime	400	406
				3	shale	406	409
				11	lime	409	420
				8	sand/no oil	420	428
				17	shale	428	445
				7	sand/no oil	445	452
				58	shale	452	520
				10	sand/no oil	520	530
				28	shale	530	558
				8	lime mix	558	566
				11	red shale mix	566	570
				8	lime mix	570	578
				12	shale	578	590
				5	lime	590	595
				6	shale	595	601
				2	shale mix	601	603

14	lime	603	617
8	sand/no oil	617	625
5	black shale	625	630
25	lime	630	655
10	red bed	655	665
4	shale	665	669
5	black shale	669	674
14	lime	674	688
12	sand/no oil	688	700
2	lime mix	700	702
19	sand/no oil	702	721
25	shale	721	746
11	little show oil	746	757
1	oil show	757	758
1	little	758	759
1	little sand oil	759	760
1	little	760	761
1	little sand/no oil	761	762
6	sand/shaley mix	762	768
22	shale	768	790
45	little mix	790	835
30	shale	835	865

11	lime mix	865	877
1	little sand oil show	877	878
1	good	878	879
1	good	879	880
1	good	880	881
1	very good	881	882
1	very good	882	883
1	very good	883	884
1	very good	884	885
1	very good	885	886
1	good	886	887
1	little	887	888
1	very little	888	889
1	sand & shale/no oil	889	890
15	sand shale/no oil	890	905
13	lime mix	905	918
22	shale mix	918	940