

### DRILL LOG

Operator License# 34592

API 15-091-23936-00-00

Operator Kansas Resource Explora. & Dev.

Lease Name Guetterman

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

Well # KR 14

Contractor JTC Oil, Inc.

Spud Date <sup>11/14/2012</sup> Cement

Contractor License\_\_32834

Location\_\_\_\_\_ of \_\_\_\_\_

T.D. 900 T.D. of Pipe 884

\_\_\_\_\_ 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
2	dirt	0	2	9	lime	77	86
6		2	8	4	shale	86	90
7	dirt	8	15	1	lime	90	91
1	lime	15	16	4	shale	91	95
4	shale	16	20	16	lime	95	111
6	lime	20	26	19	shale	111	130
9	shale	26	35	17	lime	130	147
5	lime	35	40	8	shale	147	165
4	sand/no oil	40	44	40	lime	165	205
2	shale	44	46	20	shale	205	225
5	lime	46	51	14	lime	225	239

2	shale	51	53	12	shale	239	251
17	lime	53	70	17	lime	251	270
7	shale	70	77	3	shale	270	273
				8	lime	273	281
				3	shale	281	284
				4	lime	284	288
				22	shale	288	300
				23	lime	300	323
				7	shale	323	330
				42	lime	330	372
				1	shale	372	373
				2	coal	373	375
				6	lime	375	381
				2	shale	381	384
				6	lime	384	390
				4	shale	390	394
				2	lime	394	396
				24	shale	396	420
				10	shale mix/no oil	420	430
				114	shale	530	544
				2	lime	544	546
				17	shale mix	546	563

	6	lime	563	569
	3	shale	569	572
	4	lime	572	575
	5	shale	575	580
	8	lime	580	588
	15	shale	588	603
	4	lime	603	607
	1	shale	607	608
	2	coal	608	610
	10	shale	610	620
	3	lime	620	623
	7	shale	623	630
	6	red bed	630	636
	3	shale	636	639
	2	lime	639	641
	8	shale	641	649
	7	sand/no oil	649	656
	65	shale	656	721
Little oil	2	oil sand	721	723
Little oil	2	sand mix	723	725
Little oil	2	sand mix	725	727
Little oil	2	sand mix	727	729

No oil	2	little sand	729	731
	21	shale mix	731	752
	4	lime	752	756
	12		756	768
	18	shale mix	768	786
	5	lime mix	786	791
	9	Sand/no oil	791	800
	11	no oil	800	811
	35	shale	811	846
	1		846	847
	5	sand	847	851
	49	shale	851	900