

Anderson County, KS
 Well: Zastrow 21-HD
 Lease Owner: Haas Petroleum

Town Oilfield Service, Inc.
 (913) 837-8400

Commenced Spudding:
 7/15/2013

WELL LOG

Thickness of Strata	Formation	Total Depth
15	Soil/Clay	15
60	Shale	75
28	Lime	103
13	Shale	116
6	Lime & Shale	122
49	Shale	171
4	Lime	175
2	Shale	177
5	Lime	182
7	Shale	189
38	Lime	227
6	Shale	233
22	Lime	255
3	Shale	258
23	Lime	281
3	Shale	284
3	Lime	287
7	Sandy Shale	294
18	Shale	312
5	Sand	317
91	Shale	408
7	Sand	415
4	Sandy Shale	419
27	Shale	446
2	Lime	448
5	Shale	453
2	Lime	455
5	Shale	460
10	Lime	470
15	Shale	485
5	Sand	490
5	Sandy Shale	495
4	Shale	499
7	Sand	506
9	Sandy Shale	515
2	Shale	517
2	Coal	519
4	Shale	523
8	Lime	531
4	Shale	535

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3	Lime	538
7	Shale	545
5	Lime	550
20	Shale	570
11	Lime	581
21	Shale	602
3	Lime	605
9	Shale	614
5	Lime	619
10	Shale	629
6	Sand	635
4	Sandy Shale	639
35	Shale	674
26	Sandy Shale & Sand	700
18	Shale	718
2	Lime	720
4	Shale	724
10	Sand	734
3	Sand	737
4	Sand	741
2	Sand	743
3	Sand	746
1	Sand	747
3	Sand	750
3	Sand	753
1	Brokensand	754
10	Sandy Shale	764
62	Shale	826

