

MORNING DRILLING REPORT

SOUTHWIND DRILLING, INC.

For: **H&D Exploration, LLC**

RIG No. 3

Well Name: Steinle #1
 Location: 2310' FNL & 1220' FEL
 Section: 30-14S-12W
 County: Russell
 API: 15-167-24043-00-00

GL Elevation: 1663'
 KB: 1671'
 Est. TD: 3400'
 Conductor Pipe: N/A

Rig No. 3 (Pusher Jay Krier) 620 617-4477
 Rig No. 3 (Doghouse) 620 566-7104
 Southwind Drilling Office 620 564-3800



Surface Casing: Ran 15 joints of new 23#, 8 5/8" casing, Tally @ 592.68', Set @ 602', used 300 sacks of 60/40 Poz, 3% cc, 2% gel, cement circulated, by Quality (Ticket #1325), plug down @ 1:30 am on 03.03.16.

Production Info: Ran 75 joints of new 15.5#, 5 1/2" casing, Tally @ 3188.51', Set @ 3196', used 180 sacks of Common, 10% salt, 5% Gilonite, 500 gal. mud clear - 48, cemented, by Quality (Ticket #1328), job complete @ 9:30 pm on 03.08.16.

Rotary Total Depth: 3202'

Log Total Depth: 3201'

Geologist: Jim Musgrove

7:00 A.M. Depth: 3202'

7:00 A.M. Current Operation: TEAR DOWN

Spud Date & Time:	03/02/16	03/03/16	03/04/16	03/05/16	03/06/16	03/07/16	03/08/16	03/09/16	Total
03/02/2016 @ 1:30 PM	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	
Total Depth (7:00am)	0	602	1980	2700	2870	3060	3170	3202	
Daily Progress	602	1378	720	170	190	110	32	0	3202
Ft. Per Hr.	86.00	83.52	45.00	32.38	23.03	22.00	42.67	0.00	54.50
Current Operation (7:00am)	Rig Up	WOC	Drilling	CTCH	TOWT	CFS	Drilling	Tear Down	
Formation	Surface	Surface	Lime / Shale	Lime / Shale	Lime / Shale	Lime / Shale	Lime / Shale	Arbuckle	
Fuel Used (39 Gall/Inch)	234.00	351.00	390.00	253.50	214.50	195.00	117.00		1755.00
Survey (degree & depth)	1° @ 602'			1 1/4° @ 2700'					

Mud Cost	\$0.00	\$753.79	\$2,174.16	\$100.43	\$0.00	\$700.00	\$0.00		\$3,728.38
Weight (# / Gal)	10.4		8.5	8.7	9.2	9.1			
Vis (Funnel)	40		54	51	52	54			
Water Loss (cc)			8.0	8.0	8.4	8.8			

Bit #1		Bit #2		Bit #3		Bit #4		Bit #5		Bit #6		Bit #7		Bit #8		Bit #9	
Bit Make / Type	Reed RT																
Bit Size	12 1/4																
Bit Hours	7.00																7.00
Bit Cumulative Hours	7.00	16.50	16.00	5.25	8.25	5.00	0.75										51.75
Weight on Bit (WOB)	15,000	30,000	30,000	30,000	30,000	30,000	30,000										
RPM	120	80	80	80	80	80	80										
Pump Pressure	300	825	950	700	750	800	800										
Drilling (Rotating) Hours	7.00	16.50	16.00	5.25	8.25	5.00	0.75										58.75

Daywork Hrs. (Operator's time)										
Rat Hole (> 75 Hrs)										0.00
Wait on Cement										0.00
Weather										0.00
Short Trip			1.50							1.50
Trip				8.25	5.50	9.25	2.25			25.25
Circulate			3.25	2.75	4.25	3.75	2.25			16.25
Tool				1.75	0.75	1.50				4.00
Testing				5.50	2.75	4.50				12.75
Clean Floor after DST					0.25					0.25
Logging							3.00			3.00
Nipple Down / Jet Cellar							1.00			1.00
LDDP / LDDC							2.75			2.75
Run Casing / Circ / Cement	2.50						2.50			5.00
Set Slips							0.50			0.50
Lost Circulation (> 2 hrs)										0.00
Billable Hours	2.50	0.00		18.25	13.50	19.00	14.25	0.00		72.25

Non-Billable Hours (Southwind's time)										
Rig Up / Tear Down	5.00						1.00			6.00
Wait on Cement (NB)	5.50	2.50								8.00
Drill Rat Hole (<.75 hrs)	0.75									0.75
Drill Plug										0.00
Circulate / Trip (Surface)	0.75									0.75
Rig Repair	0.75	0.25	0.75		2.00					3.75
Connections	1.75	3.75	1.75	0.50	0.25					8.00
Jet/Displace		1.00	0.75							1.75
Surveys										0.00
Rig Check										0.00
Lost Circulation (< 2 hrs)										0.00
Lay Down Kelly / MH & RH										0.00
Non-Billable Hrs.	14.50	7.50	3.25	0.50	2.25	0.00	1.00	0.00		29.00

Footage Cost	\$ 6,020.00	\$ 13,780.00	\$ 7,200.00	\$ 1,700.00	\$ 1,900.00	\$ 1,100.00	\$ 240.00	\$ -	\$ 31,940.00
Daywork Cost	\$ 625.00	\$ -	\$ 1,187.50	\$ 4,562.50	\$ 3,375.00	\$ 4,750.00	\$ 3,562.50	\$ -	\$ 18,062.50
Combined Est. Cost*	\$ 6,645.00	\$ 13,780.00	\$ 8,387.50	\$ 6,262.50	\$ 5,275.00	\$ 5,850.00	\$ 3,802.50	\$ -	\$ 50,002.50

*Please note that this is estimated footage & daywork cost only. Additional charges will apply on invoice (fuel surcharge, water transfer pump, etc)

DST #1 Info - Footage Interval: 2650' - 2700' Recovery: 240' Gas in Pipe 120' Oil Cut Mud	DST #2 Info - Footage Interval: 2814' - 2870' LKC "A-C" Recovery: 70' Oil Cut Muddy Water
DST #3 Info - Footage Interval: 2880' - 2935' LKC "F-G" Recovery: 539' Gas in Pipe 286' Gassy Heavy Oil Cut Muddy Water	DST #4 Info - Footage Interval: 2970' - 3060' LKC "H-J" Recovery: 53' Gas in Pipe 1" Clean Oil 96' Oil Cut Mud
DST #5 Info - Footage Interval: 3080' - 3142' "Arbuckle" Recovery: 143' Clean Oil 212' Heavy Oil Cut Mud	DST #6 Info - Footage Interval: Recovery: