

MORNING DRILLING REPORT

H&D Exploration, LLC

SOUTHWIND DRILLING, INC.

RIG No. 8

Well Name: SB #1
 Location: 1278' FSL & 1496' FWL
 Section: 19-14S-12W
 County: Russell
 API: 15-167-24028-00-00

Elevation: GL 1720'
 KB 1729'
 Est. TD: 3400'

Rig No 8 (Pusher Bill Sanders) 620-617-0708
 Rig No 8 (Doghouse) 620-566-7052
 Southwind Drilling Office 620 564-3800



Surface Casing: Ran 16 joints of new 23#, 8 5/8" casing, Tally @ 665', Set @ 667', used 280 sacks of 80/20, 3% cc, 2% gel, cement circulated, by Quality (Ticket #930), plug down @ 2:00 am on 03.20.15.

Production Info: Ran 77 joints of used 17#, 5 1/2" casing, Tally @ 3233', Set @ 3233', used 150 sacks of Common, 10% salt, 5% gilsonite, 30 sacks for Rat hole, 180 sacks total, cemented by Quality (Ticket #1403), job complete @ 1:15 pm on 03.27.15.

Rotary Total Depth: 3250'
 Log Total Depth: 3253'
 Geologist: Jim Musgrove

7:00 A.M. Depth: 3250' 7:00 A.M. Current Operation: TEAR DOWN

Spud Date & Time:	03/19/15	03/20/15	03/21/15	03/22/15	03/23/15	03/24/15	03/25/15	03/26/15	03/27/15	Total
03/19/2015 @ 10:30 AM	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	
Total Depth (7:00am)	0	867	867	1655	2270	2380	2984	3140	3250	
Daily Progress	667	0	988	615	110	604	155	110	0	3250
Ft. Per Hr.	95.29	0.00	84.09	48.24	31.43	35.01	24.00	25.88	0.00	51.59
Current Operation (7:00am)	Rig Up	WOC	Repair	Drilling	TOWB	Drilling	Short Trip	DST #4	LDDP	
Formation	Surface	Surface	Anhydrite	Lime / Shale	Lime / Shale	Lime / Shale	Lime / Shale	Lime / Shale	Lansing	
Fuel Used (32.4 Gal/Inch)	226.80	0.00	388.80	421.20	194.40	388.80	324.00	259.20	356.40	2559.60
Survey (degree & depth)	3/4' @ 667'			1/4' @ 2270'			1' @ 2984'	1' @ 3250'		

Mud Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$6,906.65	\$0.00	\$0.00	\$657.35	\$239.50	\$7,803.50
Weight (# / Gal)					8.9	9.5				
Vis (Funnel)					48	50				
Water Loss (cc)										
Bit #1										
Bit Make / Type	JZ									
Bit Size	12 1/4									
Bit Hours	7.00									7.00
Bit #2										
Bit Make / Type		Reed R24A	Reed R24A	Reed R24A	Reed R24A	Reed R24A	Reed R24A	Reed R24A	Reed R24A	
Bit Size		7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	7 7/8	
Bit Hours		0.00	11.75	12.75	3.50	17.25	6.50	4.25	0.00	56.00
Bit Cumulative Hours	7.00	0.00	11.75	12.75	3.50	17.25	6.50	4.25	0.00	63.00
Weight on Bit (WOB)	10,000		15,000	30,000	25,000	30,000	35,000	35,000		
RPM	80		80	80	80	80	80	80		
Pump Pressure	600		650	600	700	800	750	800		
Drilling (Rotating) Hours	7.00	0.00	11.75	12.75	3.50	17.25	6.50	4.25	0.00	63.00

Daywork Hrs. (on Operator's time)										
Rat Hole (>.75 Hrs)										0.00
Wait on Cement										0.00
Trip	2.50			2.75	9.25	0.50	8.25	4.50		27.75
Circulate	0.25			3.25	3.50	3.00	3.50	4.50		18.00
Tool					2.00		1.50	0.75		4.25
Testing					5.00		3.00	2.00		10.00
Clean Floor after DST								0.25		0.25
Dump Fluid after DST								1.25		1.25
LDDP / LDDC								0.75	2.50	3.25
Run Casing / Circ / Cement	2.00									4.75
Logging									0.50	0.50
Set Slips										0.50
Nipple Down/ Jet Cellar										0.50
Billable Hours	4.75	0.00	0.00	6.00	19.75	3.50	16.25	18.75	6.25	75.25

Non-Billable Hours (Southwind's time)										
Rig Up / Tear Down										9.25
Wait on Cement (NB)	5.00									5.00
Drill Mouse Hole										0.00
Drill Rat Hole (<.75 hrs)	0.50									0.50
Drill Plug										0.00
Circulate / Trip (Surface)										0.00
Rig Repair	3.00	24.00	8.50	1.25	0.25	0.25				37.25
Connections	3.25		2.50	2.25	0.25	2.25	0.50	0.50		11.50
Jet/Displace	0.25		0.75	0.75						1.75
Surveys	0.25			0.25			0.25	0.25		1.00
Rig Check			0.50	0.75	0.25	0.75	0.50	0.25		3.00
Trip Time (NB)										0.00
Lost Circulation (< 2 hrs)										0.00
Lay Down Kelly / MH & RH									0.50	0.50
Non-Billable Hrs.	12.25	24.00	12.25	5.25	0.75	3.25	1.25	1.00	9.75	69.75

Footage Cost	\$ 8,004.00	\$ -	\$ 11,856.00	\$ 7,380.00	\$ 1,320.00	\$ 7,248.00	\$ 1,872.00	\$ 1,320.00	\$ (108.00)	\$ 38,892.00
Daywork Cost	\$ 1,425.00	\$ -	\$ -	\$ 1,800.00	\$ 5,925.00	\$ 1,050.00	\$ 4,875.00	\$ 5,625.00	\$ 1,875.00	\$ 22,575.00
Combined Est. Cost*	\$ 9,429.00	\$ -	\$ 11,856.00	\$ 9,180.00	\$ 7,245.00	\$ 8,298.00	\$ 6,747.00	\$ 6,945.00	\$ 1,767.00	\$ 61,467.00

DST #1 Info - Footage Interval: 2212' - 2270' "Tarkio" Recovery: 315' Gas in Pipe 15' Mud	DST #2 Info - Footage Interval: 2240' - 2295' "Tarkio" Recovery: Mis-Run (tool would not open)
DST #3 Info - Footage Interval: 2881' - 2984' KC "A - F" Recovery: 38' Slight Oil Spotted Mud	DST #4 Info - Footage Interval: 3078' - 3140' KC "H-J" Recovery: 564' Gas in Pipe 60' Free Oil 1400' Oil Cut Mud

Incon Pyrite @ 256' - 262'

Anhydrite @ 661' - 682'

Displaced @ 2073' - 2105'

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 930

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-20-15	19	14	12	Russell	KS		2:00 AM

Location B Hill 4 1/2 Corners 1/4 E NW 1/4

Lease	SB	Well No.	#1	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	Southwest #18			Charge To	HD
Type Job	Surf Line			Street	
Hole Size	12"	T.D.	667'	City	State
Csg.	8 5/8"	Depth	667'	The above was done to satisfaction and supervision of owner agent or contractor.	
Tbg. Size		Depth		Cement Amount Ordered	250 80/20 30 2 1/2 1/2
Tool		Depth			
Cement Left in Csg.	20	Shoe Joint	20		
Meas Line		Displace	41 bbl		

EQUIPMENT

Pumptrk	17	No.	Cementer		Common
			Helper	Nick	
Bulktrk	13	No.	Driver	Driver	Poz. Mix
			Driver	Driver	Gel.
Bulktrk	PU	No.	Driver	Driver	Calcium
			Driver	Driver	

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Rubber Plug	
Butt Plug	
Pumptrk Charge	
Mileage	9.5

Cement Circulated!

Quality Oilwell Cementing

Tax	
Discount	
Total Charge	

X Signature

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Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1409

Date	3-27-15	Sec.	19	Twp.	14	Range	12	County	Russell	State	KS	On Location		Finish	1:15 PM
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Location Bunker Hill, S to four corners rd, 1/2 E, Nn 2

Lease	SB	Well No.	1	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	Longstring	Southwind		Charge To	HD. Exp.
Type Job	Longstring	T.D.	3250	Street	
Hole Size	7 7/8	Depth	3233	City	State
Csg.	5 1/2 #17	Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Tbg. Size		Shoe Joint	21.58	Cement Amount Ordered	180 sx com 10% salt, Fr. granite
Tool		Displace	74 1/2 bbl	20661 KCL	
Cement Left in Csg.		Common			
Meas Line		Poz. Mix			

EQUIPMENT

Pumptrk	17	No.	Cementer		
			Helper	Lonnie W.	
Bulktrk	15	No.	Driver	Dave	
Bulktrk	14	No.	Driver	Travis	

JOB SERVICES & REMARKS

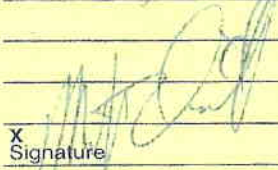
Remarks:	
Rat Hole	30 sx
Mouse Hole	
Centralizers	1, 3, 5, 7, 9
Baskets	
D/V or Port Collar	
Pipe on bottom	Make circulation Pumped 500 gal Mud CLR 48 with 100 lb of cement 17. Plug rat hole with sand. Hooked to 5 1/2 and mixed 150 sx. Shut down washed pump and lines. Released plug and displaced with 20661 KCL water and 54 1/2 bbl of Plug lander and hold.

FLOAT EQUIPMENT

Handling	
Mileage	
Guide Shoe	
Centralizer	5 turbos
Baskets	
AFU Inserts	
Float Shoe	1
Latch Down	1
Pumptrk Charge	
Mileage	

lift pressure 700 psi

Plug lander # 1500 psi

X Signature 

Tax	
Discount	
Total Charge	