

MORNING DRILLING REPORT

SOUTHWIND DRILLING, INC.

H&D Exploration

RIG No. 8

Well Name: Staudinger #1
Location: 330' FSL & 2179' FWL
Section: 25-15S-12W
County: Russell
API: 15-167-23906-00-00

Elevation: GL 1854'
KB 1863'
Est. TD: 3500'

Rig No. 8 (Pusher Darrell Yott) 620 617-1716
 Rig No. 8 (Doghouse) 620 566-7052
 Southwind Drilling Office 620 564-3800



Surface Casing: Ran 18 joints of new 23#, 8 5/8" casing, Tally @ 750.73', Set @ 760', used 350 sacks of Common, 3% cc, 2% gel, cement circulated, by Quality (Ticket #7386), plug down @ 12:30 pm on 09.24.13.

Production Info: Ran 81 joints of new 15.5#, 5 1/2" casing, Tally @ 3374', Set @ 3374', used 135 sacks of Common, 10% salt, 5% Gilsomite, cemented, by Quality (Ticket #7522), job complete @ 5:45 pm on 09.29.13.

Rotary Total Depth: 3375'
Log Total Depth: 3376'

Geologist: Jim Musgrove

7:00 A.M. Depth: 3375'

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

Spud Date & Time:	09/23/13	09/24/13	09/25/13	09/26/13	09/27/13	09/28/13	09/29/13	Total
09/23/2013 @ 7:15 PM	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	
Total Depth (7:00am)	0	758	1234	2320	3039	3226	3375	
Daily Progress	758	476	1086	719	187	149		3375
Ft. Per Hr.	89.18	86.55	51.71	36.41	19.18	22.07	#DIV/0!	47.37
Current Operation (7:00am)	Rig Up	Drilling	Drilling	Drilling	Drilling	DST #1	Logging	
Formation	Surface	Lime / Shale	Lime / Shale	Lime / Shale	Lime / Shale	LKC	Arbuckle	
Fuel Used (34.5 Gal / Inch)	207.00	172.50	448.50	448.50	414.00	379.50	172.50	2242.50
Survey (degree & depth)		1° @ 761'			1/2° @ 3226'			
Mud Cost	\$0.00	\$1,056.00	\$0.00	\$4,274.55	\$1,702.75	\$683.45	\$827.55	\$8,544.30
Weight (# / Gal)				8.9	9.1	9.2		
Vis (Funnel)				48	47	47		
Water Loss (cc)				8.0	8.0	8.8		
Bit #1								
Bit Make / Type	Reed RR							
Bit Size	12 1/4							8.50
Bit Hours	8.50							
Bit #2								
Bit Make / Type		JZ	JZ	JZ	JZ	JZ		
Bit Size		7 7/8	7 7/8	7 7/8	7 7/8	7 7/8		
Bit Hours		5.50	21.00	19.75	9.75	6.75		62.75
Bit Cumulative Hours	8.50	5.50	21.00	19.75	9.75	6.75	0.00	71.25
Weight on Bit (WOB)	10,000	15,000	35,000	35,000	35,000	35,000		
RPM	100	80	80	80	80	80		
Pump Pressure	600	650	900	800	800	800		
Drilling (Rotating) Hours	8.50	5.50	21.00	19.75	9.75	6.75	0.00	71.25
Daywork Hrs. (on Operator's time)								
Rat Hole (>.75 Hrs)	1.00							1.00
Wait on Cement		12.00						12.00
Trip		1.50			4.25	4.00	1.25	11.00
Circulate				1.00	7.25	7.50	1.00	16.75
Tool					0.50	0.50		1.00
Testing					1.50	1.50		3.00
Clean Floor after DST								0.00
Logging						2.75	1.00	3.75
LDDP / LDDC							3.00	3.00
Run Casing / Circ / Cement		2.00					3.25	5.25
Plug Well								0.00
Set Slips							0.50	0.50
Nipple Down/Jet Cellar							1.25	1.25
Billable Hours	1.00	15.50	0.00	1.00	13.50	16.25	11.25	58.50
Non-Billable Hours (Southwind's time)								
Rig Up / Tear Down	10.50						4.75	15.25
Drill Rat Hole (<.75 hrs)	0.75							0.75
Drill Plug		0.75						0.75
Circulate / Trip (Surface)		1.00						1.00
Rig Repair				0.75		0.50		1.25
Connections	3.00	0.50	2.00	1.50	0.75	0.50		8.25
Jet/Displace	0.25	0.50	1.00	1.00				2.75
Surveys		0.25						0.25
Riq Check								0.00
Lost Circulation (< 2 hrs)								0.00
Lay Down Kelly / MH & RH								0.00
Non-Billable Hrs.	14.50	3.00	3.00	3.25	0.75	1.00	4.75	30.25
Footage Cost	\$ 10,991.00	\$ 6,902.00	\$ 15,747.00	\$ 10,425.50	\$ 2,711.50	\$ 2,160.50	\$ -	\$ 48,937.50
Daywork Cost	\$ 350.00	\$ 5,425.00	\$ -	\$ 350.00	\$ 4,725.00	\$ 5,687.50	\$ 3,937.50	\$ 20,475.00
Combined Est. Cost*	\$ 11,341.00	\$ 12,327.00	\$ 15,747.00	\$ 10,775.50	\$ 7,436.50	\$ 7,848.00	\$ 3,937.50	\$ 69,412.50

*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: 3180' - 3226'
 Recovery: 2400' Gas in Pipe
 150' Muddy Oil

DST #2 Info -

Footage Interval:
 Recovery:

Office (620) 588-4250 212 Main St. • P.O. Box 215 • Clifton, KS 67525 Home (620) 587-3444
 James C. Musgrove
 Petroleum Geologist

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY H&D Exploration LLC
 LEASE Staudinger # 1
 FIELD Driscoll West
 LOCATION 1/2 Sec. SE-SW (33P, FSL, 2179, F.W.)
 SEC. 25 TWP. 15S RGE. 12W
 COUNTY Russell STATE Kansas
 CONTRACTOR Southwind Drilling (rig #
 SEND 9/23/13 COMP. 9/29/13
 RTD 3375 LTD. 3376
 MUD GP. 2600' TYPE MUD Chemical displaced

SAMPLES SAVED FROM 2700 TO TO
 DRILLING TIME KEPT FROM 2700 TO TO
 SAMPLES EXAMINED FROM 2800 TO TO
 GEOLOGICAL SUPERVISION FROM 2850 TO TO
 GEOLOGIST ON WELL Jim Musgrove

ELEVATIONS
 KB 1863
 DF _____
 GI 1854
 Measurements Are All From KB

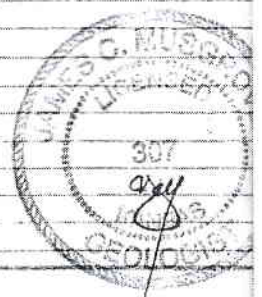
CASING SURFACE 8 5/8" 760
 PRODUCT ON 5 1/2" 116
 ELECTRICAL SURVEYS
 By Primer
DEL, CUL, C/DL, MEL, Sonic

FORMATION TOPS	LOG	SAMPLES
<u>Anhydrite</u>	<u>758 +1105</u>	
<u>Base anhydrite</u>	<u>787 +1076</u>	
<u>Hebner</u>	<u>2924 -1061</u>	
<u>Toronto</u>	<u>2941 -1078</u>	
<u>Douglas</u>	<u>2959 -1090</u>	
<u>Brown Lime</u>	<u>3014 -1151</u>	
<u>Hansing</u>	<u>3030 -1167</u>	
<u>Base Kansas City</u>	<u>3290 -1427</u>	
<u>Amherst</u>	<u>3308 -1445</u>	
<u>Arbuckle</u>	<u>3352 -1489</u>	
<u>RTD</u>	<u>3375 -1512</u>	
<u>LTD</u>	<u>3376 -1513</u>	

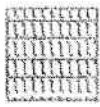

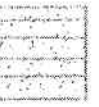



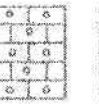
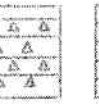

REMARKS

5 1/2" production casing was set on the Staudinger # 1.

Respectfully submitted;
 James C. Musgrove
 Petroleum Geologist



LEGEND

-  Anhydrite
-  Salt
-  Sandstone
-  Shale
-  Carbonate
-  Limestone
-  Oolitic Limestone
-  Chert
-  Dolomite

DRILLING TIME

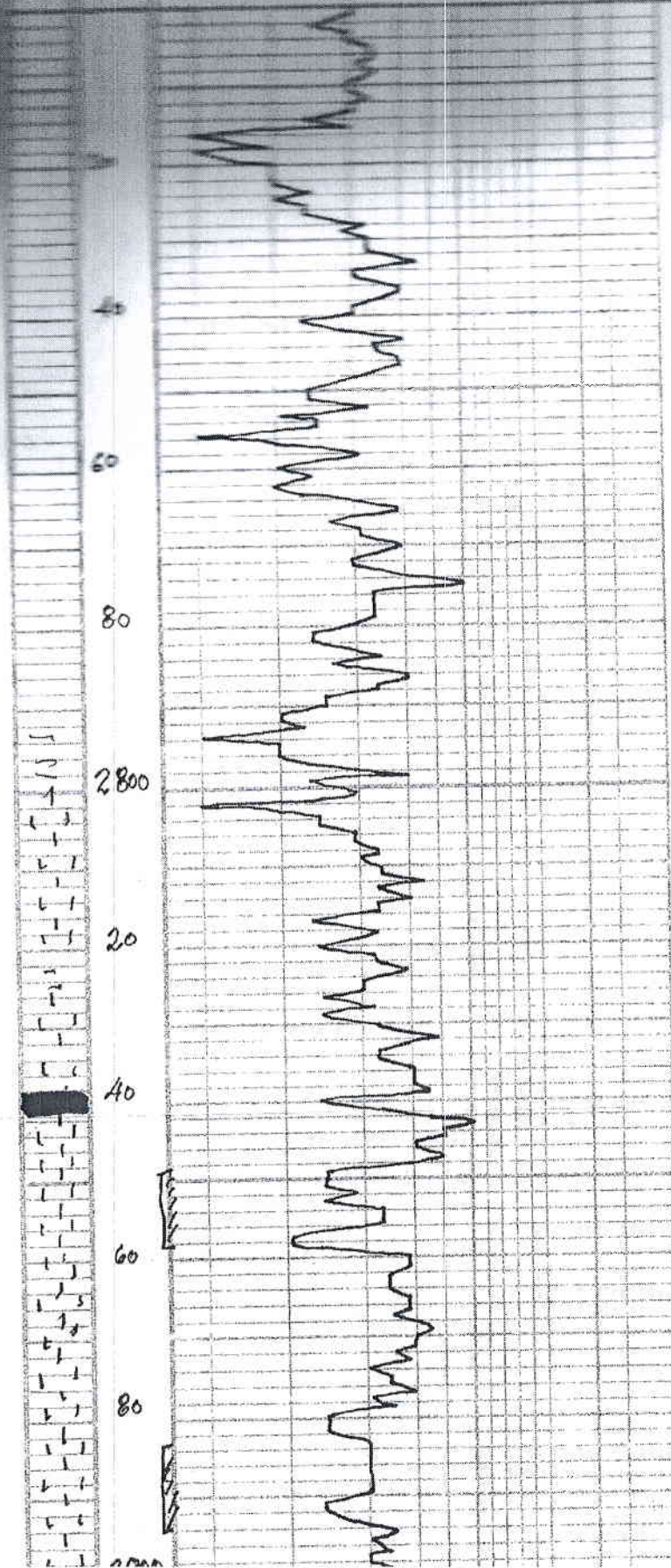
LOG

5054

2012 001

SAMPLE DESCRIPTIONS

REMARKS



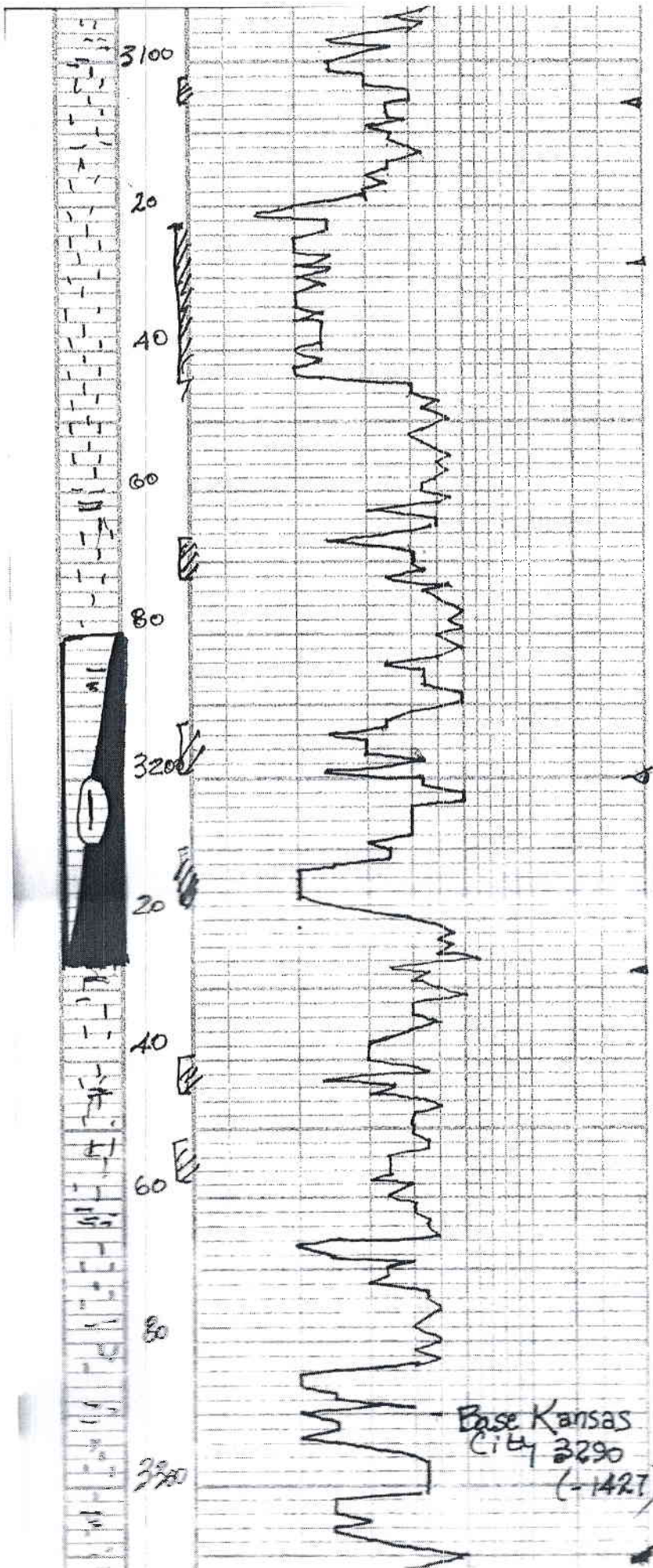
blk carb. sh.

ls, gm; tan, oom, scatt
 oom, brown stn, wk sfo
 no edon

ls, gm/wh, fishy
 cherty

ls, gm/wh, cherty,
 foss in parts

37



Tr. poor drain / gm stn
nsfo, no odor

LS, gm / tan, (fxh) saw oil,
chiky, poor stn, nsfo,
3% odor + Tr. fcs

LS, arm, wh. oom, chiky,
fr. o' (barren)

LS, gm / arm, oom, oil,
chiky m/s

LS, gm, (fxh) slightly dry
(dsc)

blk carb sh.

LS, tan, (fxh) slightly oil / fcs
poor vis o' m/s

LS, wh / gm, tan, oil, scatter o'
brown / golden brown stn,
sfo, ft. odor

LS, arm / wh, oil, oom,
fr. oom o', fr. stn / sfo
sfo odor

LS, wh / gm, oil, chiky,
poor stn, nsfo,
ft. odor

sluggy / green sh.
+ blk carb sh.

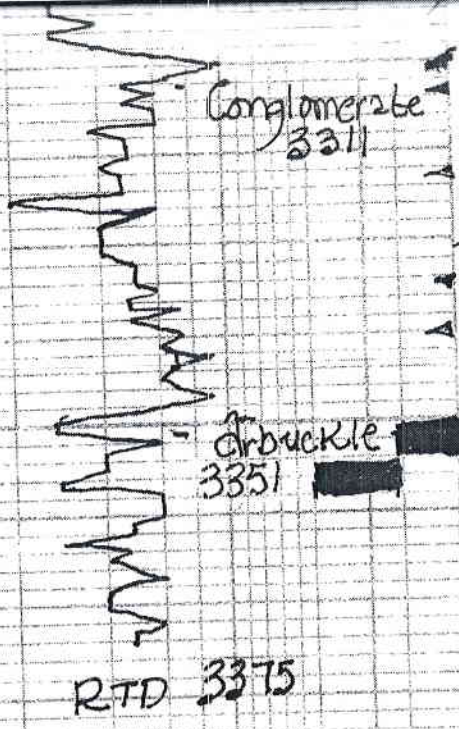
LS, wh / gm, oil, chiky,
poor stn, nsfo, odor
sample
broken

LS, tan, dry (dsc)
interf. on sh. d

gm / green sh
+ LS, wh / gm, chiky,
sluggy d

Dst # 1 3180-
30-30-45-60
Bbl, string
(BOB 5 m
rod
opening, string
(BOB 2 m
REC, 2400 gas i
150' muddy
oil
(1070 gas, 15
7500 oil)
pressures; Isip
Isip
ILP
SFP
NSH
155

Base Kansas
City 3290
(-1427)



v.c. Δ = scattered gray/wh
 ss, g. loose unconsolidated
 quartz grain "ll"
 gray/wh; ool/opaque Δ
 aa weathered in part
 dolomitic
 dol. wh/CRM, med xl, scatt, /
 fr. stn, ss, no odor
 dol. wh/CRM, med xl,
 scatt fr. k. g., brown/gray
 stn, ss, fr. k. g. odor
 aa + fr. k. g.
 dol. wh/gray; fr. k. slight
 dry only

20

40

60

Conglomerate
3311

druckle
3351

RTD 3375