

L & S WELL SERVICE
543A 22000 ROAD
CHERRYVALE, KANSAS 67335

316-3284433
THORNTON SWD#1-A

DRILLERS LOG

Operator: SOUTHWIND EXPLORATION,LLC. Lease: THORNTON Well no.: SWD-"A-1"
SE-SW-NE S16 T 30S R 17E API# 15-205-25531-000 1530FT. FEL 3034 FT. FSL
County Wilson State Ks Well type SWD Depth 1400 T.D.
Driller James D. Lorenz Driller Doug Higgenson Surface Casing Set 6-11-02 Drilled 11 1/8" hole
Set 20.2' of 8 5/8" Cement Used 5 sacks Portland Cement ✓
Date Drilling Started 6-14-02 Date Comp. 6-17-02 SIZE OF HOLE 6 3/4"

FROM	-TO	FORMATION
0'-	10'	TOP SOIL
10'-	20'	SHALE
20'-	50'	SHALE
50'-	83'	LIME
83'-	154'	SHALE
154'-	156'	COAL
156'-	175'	SHALE
175'-	184'	LIME
184'-	190'	SHALE
190'-	197'	LIME
197'-	208'	SHALE
208'-	210'	COAL
210'-	220'	SHALE (Water)
220'-	283'	LIME (235' Gas test 0" on 1/2" orifice- Slight blow)
283'-	332'	SHALE (285' Gas test 0" on 1/2" orifice- Slight blow)
332'-	345'	LIME
345'-	362'	SHALE
362'-	365'	LIME
365'-	370'	SHALE
370'-	376'	LIME
376'-	409'	SHALE
409'-	411'	COAL (411' Gas test 0 on 1/2" orifice-Slight blow)
411'-	456'	SHALE
456'-	476'	SAND- WHITE (looks wet)
476'-	488'	SHALE (486' Gas test 0 on 1/2" orifice-Slight blow)
488'-	513'	SAND-WHITE (Gas test 0 on 1/2" orifice-Slight blow)
515'-	517'	LIME-PINK
517'-	518'	COAL
518'-	545'	LIME (536' Gas test 1" on 1/2" orifice-6 mcf)
645'-	592'	SHALE
592'-	622'	LIME-OSWEGO
622'-	629'	SHALE,GAS
629'-	640'	LIME (637' Gas test 18" on 1/2" orifice-26.6 mcf)
640'-	642'	SHALE
642'-	643'	COAL GAS
643'-	650'	LIME
650'-	680'	SHALE (662' Gas test 23" on 1/2" orifice-30 mcf)
680'-	683'	COAL
683'-	686'	SHALE
686'-	687'	LIME
687'-	704'	SHALE
704'-	706'	LIME
706'-	708'	COAL
708'-	724'	SANDY SHALE (712' Gas test 20" on 1/2" orifice-28 mcf)
724'-	749'	SHALE
749'-	750'	COAL
750'-	767'	SHALE