

Date Started	6/15/2018
Date Completed	6/18/2018

Operator	A.P.I.#	County	State
River Rock Operating, LLC	15-205-28433-00-00	Wilson	Kansas

Well No.	Lease	Section	Township	Range
32-2M	Nelson Janice	32	28	15

Type of Well	Driller	Cement	Surface	TD	Size of Hole
Gas	Billy Thornton	4	25' 5" 8 5/8	1253	8

0-4	DIRT	628-648	SHALE	984-989	SAND
4-14	LIME	648-698	SAND	989-1005	SANDY SHALE
14-107	SHALE	698-715	SANDY SHALE	1005-1018	BROWN SAND
107-124	LIME	715-717	LIME	1018-1024	SANDY SHALE
124-206	SHALE	717-718	COAL (MULBERRY)	1024-1075	BROWN SAND/LOTS OF H2O
206-219	LIME	718-720	SHALE	1065	PICKED UP MORE H2O
219-240	SHALE	720-742	LIME (PAWNEE)	1075-1091	BLK SAND/KEROSENE ODOR
240-248	LIME	742-745	BLACK SHALE	1091-1115	SHALE
248-250	SHALE	745-750	LIME	1115-1130	MISS CHAT (MISS)
250-251	LIME	750-767	BLACK SHALE	1130-1160	GRAY LIME
251-260	SHALE	767-771	SHALE	1160-1205	CHERT
260-276	SAND	771-793	LIME (OSWEGO)	1205-1253	GRAY LIME
276-285	LIME	793-799	BLK SHALE (SUMMIT)	1253	TD
285-312	SHALE	799-808	LIME		
312-369	LIME	808-812	BLK SHALE (MULKY)		
369-373	LMY SHALE	812-813	COAL		
373-417	LIGHT GRAY LIME	813-815	LMY SHALE		
417-450	SAND	815-820	LIME	820	30# 1/8 Orifice
450-467	LIME	820-862	SHALE	928	18# 3/8 Orifice
467-475	SHALE	862-863	COAL		
475-509	LIME	863-875	SHALE		
509-520	BLACK SHALE	875-877	LIME		
520-537	BLACK LIME	877-880	BLACK SHALE		
537-580	SHALE	880-919	SHALE		
580-585	LIME	919-920	COAL (FLEMING)		
585-600	LMY SHALE	920-960	SHALE		
600-607	LIME	960-964	BLACK SHALE		
607-610	SHALE	964-970	SANDY SHALE		
610-615	LMY SHALE	970-975	SHALE		
615-628	SAND	975-984	SANDY SHALE		