

SINCLAIR OIL & GAS COMPANY
Krause-Federal No. 2
1000' FNL, 1000' FEL, Section 28-28N-11W
San Juan County, New Mexico

ELEVATION: 5694 grd
SPUD: 9/2/64
COMPLETED: 10/12/64
IP: 5690 MCFG/D 3/4" choke SITP (14 hrs) 1850#
CSG: 8-5/8" @ 337' W/250 sx
4-1/2" @ 6322' W/400 sx (1st stage) 850 sx (2nd stage)
2-3/8" @ 6101 in Baker Tubing sub

LOGS TOPS:

Pictured Cliffs	1605	+ 4089
Lewis Shale	1795	+ 3899
Mesaverde	3165	+ 2529
Mancos	4318	+ 1376
Gallup	5206	+ 488
Sanastee	5627	+ 67
Greenhorn	6010	- 316
Graneros	6071	- 377
Graneros Sd	6113	- 419
Dakota	6196	- 502

LITHOLOGY:

Kirtland-Fruitland	Surface - 1605	Interbedded variegated shales and sandstones, some coal
Pictured Cliffs	1605 - 1795	Sandstone, gray to grayish-white, salt and pepper, fine to medium grain, well sorted, angular to subrounded becomes shaly toward base.
Lewis Shale	1795 - 3165	Shale, dark gray, soft. Sandy in part.
Mesaverde formation	3165 - 4318	Interbedded sandstones and shales with coal beds. Gradational from shale to sand at top and from sand to shale at base. Sandstones, light to medium gray, very fine grained, well cemented, laminated with light to dark gray carbonaceous shales. Shales, light to dark gray, carbonaceous.

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LITHOLOGY (Continued)

Mancos Shale	4318 - 5206	Shale, light to dark gray, calcareous, some sandstone and limestone stringers.
Gallup formation	5206 - 5578	Sandstone and siltstone. Sandstone, gray, dirty, poorly sorted, trashy, fine grain to coarse. Some black carbonaceous shale, fissile in part.
	5578 - 5627	Shale, light to dark gray.
Sanastee	5627 - 5645	Sandstone, gray-brown, calcareous, fossiliferous.
	5645 - 6010	Shale, gray, calcareous, fossiliferous in part.
Greenhorn	6010 - 6071	Interbedded gray, shaly limestone and gray, limy shales.
Graneros	6071 - 6113	Shale, gray, dark, micaceous.
	6113 - 6196	Sandstone, gray, very fine grained, silty in part.
Dakota	6196 - 6325	Sandstone, white to light gray, fine to medium grained, silty in part, carbonaceous in part. Some siltstone, brownish, carbonaceous. Some shale, dark gray, coaly.