

Hughes Drilling Co. #5682

HUGHES DRILLING REPORT

2600 FSL
D300 FEL

57, T17, 21c

SET IN PIPE

PERMANENT CSG.

TUBING

FORMATION DRILLED

Well No. 3 Size 8" Circulated Size 5 1/2" Size 6 1/2"
 Arm South Hughes Feet 20.6 Feet 55 Feet 69.5
 Water Streak @ Cond good Cond to surface Cond 69.5
 Water Level @ Top Sand T. D. at Completion 69.5
 Approved _____ Contractor HUGHES DRILLING CO.
 Superintendent _____

API #15-059-24,917

DATE	HOURS OF TOUR	DRILLED		REMARKS - TYPE WORK - BILLING REF.	PIPE TALLY
		FROM	TO		
8/3/02		0	3	Soil	① 22.0-22.0
3" bit		3	16	clay	AUG 2.6 2002 ② 22.5-44.5
0'		16	57	shale	KCC WICHITA ③ 22.5-67.0
1/9		57	81	Lime	④ 22.5-89.5
1/4 button		81	106	shale	⑤ 22.5-112.0
1/2" 2000		106	112	Lime	⑥ 22.5-134.5
		112	141	shale	⑦ 22.5-157.0
		141	151	Lime	⑧ 22.5-179.0
		151	170	shale (Lime 160-161)	⑨ 22.5-202.0
30'		170	196	Lime	⑩ 22.5-224.5
		196	203	shale (slate 198-200)	⑪ 22.5-247.0
20'		203	226	Lime	⑫ 22.5-269.5
		226	231	shale (slate 229-231 Gas bubbles)	⑬ 22.5-292.0
		231	236	Lime	⑭ 22.5-314.5
		236	238	shale (broken)	⑮ 22.5-337.0
"Hertth"		238	242	Lime	⑯ 22.5-359.5
4" 3" trip		242	248	shale (Bxk 248-351)	⑰ 22.5-382.0
4" 3" bit		248	401	Lime	⑱ 22.5-404.5
		401	414	shale	⑲ 22.5-427.0
25'		414	418	Gray Sand	⑳ 22.5-449.5
9		418	454	shale (slate 446-447)	㉑ 22.5-472.0
		454	461	Lime	㉒ 22.5-494.5
		461	473	shale	㉓ 22.5-517.0
		473	476	Lime (Brown)	㉔ 22.5-539.5
		476	487	shale (slate 476-477-Gas)	㉕ 22.5-562.0
		487	494	Lime (Broken)	㉖ 22.5-584.5
		494	500	shale	㉗ 22.5-607.0

STRATA THICKNESS	FORMATION DRILLED	TO
3	Soil	3
13	clay	16
41	shale	57
24	Lime	81
25	shale	106
6	Lime	112
29	shale	141
10	Lime	151
19	shale	170
30'	26	Lime 196
	7	shale 203
20'	23	Lime 226
	5	shale 231
	5	Lime 236
	2	shale 238
Hertth 4	4	Lime 242
	154	shale 396
	5	Lime 401
	13	shale 414
	4	Gray Sand 418
	36	shale 454
	7	Lime 461
	12	shale 473
	3	Lime 476
	11	shale 487
	7	Lime 494
	6	shale 500
	3	Lime 503
	1	shale 504
	5	Lime 509
	6	shale 515
#1 sq	7	Sand 522
	35	shale 557
	1	Lime 558
	8	shale 566
	1	Lime 567
	3	shale 570
	2	Sdy shale 572
#2 sq	2	Bxk Sand 574
	7	shale 581
#3 sq	8	Oil Sand 589

4/8/02
 surface pipe - 8" - 20.6'
 circulated 5 sacks cement
 to surface

HUGHES DRILLING REPORT

SET IN PIPE

PERMANENT CSG.

TUBING

FORMATION DRILLED

Well No. 3 Size.....
 Farm South Hughes Feet.....
 Water Streak @..... Cond.....
 Water Level @..... Top Sand.....
 Approved.....

Size..... Size.....
 Feet..... Feet.....
 Cond..... Cond.....
 T. D. at Completion..... 695
 Contractor HUGHES DRILLING CO.

STRATA THICKNESS	FORMATION DRILLED	T. D.
28	Shale	617
1	Lime	618
9	Shale	627
2	Lime	629
16	Shale	645
11	Blk shale	656
39	Shale	695
		T.D.

DATE	HOURS OF TOUR	DRILLED		REMARKS - TYPE WORK - BILLING REF.	PIPE TALLY
		FROM	TO		
		500	503	Lime	(28) 22.5-629.5
		503	504	Shale (some slate)	(very good)
		504	509	Lime (Bleeding Oil 504-506 & 507-508)	
		509	515	Shale (lt. 512-515)	
		#1 Squared 515	522	Brown sand (Oil trace) Gas (Solid 517-522)	
		522	557	Shale	
		557	558	Lime	(29) 22.5-652.0
559'		558	566	Shale	(30) 22.5-674.5
4/10		566	567	Lime (Brk, soft)	
		567	570	Shale	
		570	572	Sdy shale (oil show)	
		#2 Squared 572	574	Broken Sand	> Core Time Pg. 3
		574	581	Shale	
		#3 Squared 581	589	Oil Sand	
		589	617	Shale (Slate 603-604)	
		617	618	Lime	
		618	627	Shale (Slate 619-620)	
		627	629	Lime	
		629	645	Shale (broken)	
		645	656	Black Shale & Slate	
591		656	695	Shale (Lime break 671)	
4/11				T.D.	
		4/11		Set 633' of 2 7/8" 2nd up set pipe	
				Used 3 centralizers	
				Bit in bottom	

Start core 571
 42 8.5'
 23 hrs left

673 695
 242
 453 570
 242
 328

581
 242
 329

515
 242
 273

HUGHES DRILLING CO.

Wellsville, Kansas 66092

Roger 913-883-2235
Darrel 913-883-4383

CORE TIME

Ron 913-883-4655
Clay 913-883-4383

LEASE S. Hughes #3

FORMATION ~~Squirrel~~ #2 #3

DATE: 4-10-02

(RPM Shave Bit)

FROM	FEET TO	TIME	MINUTES	REMARKS
570	571	chip sample		sdy shale (oil trace)
① 571	572	12:24:00-12:25:30	1:30	
② 572	573	12:25:30-12:26:45	1:15	672.5-674 sandy very lamin. w/shale
③ 573	574	12:26:45-12:27:45	1:00	(some bleeding oil)
④ 574	575	12:27:45-12:29:30	1:45	
⑤ 575	576	12:29:30-12:31:00	1:30	
⑥ 576	577	12:31:00-12:32:45	1:45	
⑦ 577	578	12:32:45-12:34:15	1:30	
⑧ 578	579	12:34:15-12:35:30	1:15	
⑨ 579	580	12:35:30-12:37:15	1:45	
⑩ 580	581	12:37:15-12:38:30	1:15	
⑪ 581	582	12:38:30-12:39:00	:30	
⑫ 582	583	12:39:00-12:39:30	:30	
⑬ 583	584	12:39:30-12:40:00	:30	
⑭ 584	585	12:40:00-12:40:30	:30	
⑮ 585	586	12:40:30-12:41:15	:45	
⑯ 586	587	12:41:15-12:42:30	1:15	
⑰ 587	588	12:42:30-12:43:30	1:00	
⑱ 588	589	12:43:30-12:44:45	1:15	
⑲ 589	590	12:44:45-12:46:30	1:45	
20 590	591	12:46:30-12:48:30	2:00	

Best Perf Zone

581-588

perfected
581-588
midwest surge
6/7/02 3 perf ft.
507 22 shots