

HUGHES DRILLING REPORT

Well No. 20-1 Size 7"
 Farm Brown Feet 2820
 Circulated 9 sx cement

PERMANENT CSG.
 Size 2 7/8" 8rd EUE
 Feet 910' (Baffle at 887.45)

2300 FSL 1495 FEL
 API # 15-091-24289

OPERATOR Hughes Drilling

T. D. at Completion 920
 Contractor HUGHES DRILLING CO.

STRATA THICKNESS	FORMATION DRILLED	T.D.
2	Soil	2
24	Clay	26
15	Shale	41
3	Lime	44
4	Shale	48
17	Lime	65
7	Shale	72
9	Lime	81
5	Shale	86
19	Lime	105
25	Shale	130
22	Lime	152
28	Shale	180
12	Lime	192
27	Shale	219
27	Shale	219
8	Lime	227
9	Shale	236
11	Lime	247
16	Shale	263
2	Lime	265
2	Shale	267
5	Lime	272
9	Shale	281
5	Lime	286
43	Shale	329
30'	23 Lime	352
6	Shale	358
20'	24 Lime	382
3	Shale	385
3	Lime	388
4	Shale	392
7	Lime	399
170	Shale	569
7	Lime	576
3	Shale	579
2	Lime	581
9	Shale	590
6	Lime	596
15	Shale	611
3	Lime	614

DATE	DRILLED		REMARKS - TYPE WORK - BILLING REF.	PIPE TALLY
	FROM	TO		
4/23/14	0	2	Soil	(1) 21.5-21.5
28'	2	26	Clay	(2) 22.5-44.0
5/12/14	26	41	Shale	(3) 22.5-66.5
5/28/14	41	44	LIME	(4) 22.5-89.0
	44	48	Shale (Sdy)	(5) 22.5-111.5
	48	65	LIME	(6) 22.5-134.0
	65	72	Shale (Slate 70-72)	(7) 22.5-156.5
	72	81	Lime	(8) 22.5-179.0
	81	86	Shale	(9) 22.5-201.5
	86	105	Lime	(10) 22.5-224.0
	105	130	Shale (Red Bed 107-112)	(11) 22.5-246.5
	130	152	LIME	(12) 22.5-269.0
	152	180	shale (Sdy 167-169)	(13) 22.5-291.5
	180	192	Lime	(14) 22.5-314.0
	192	219	Shale	(15) 22.5-336.5
	219	227	Lime	(16) 22.5-359.0
	227	236	Shale	(17) 22.5-381.5
	236	247	Lime	(18) 22.5-404.0
	247	263	Shale	(19) 22.5-426.5
	263	265	Lime	(20) 22.5-449.0
	265	267	Shale	(21) 22.5-471.5
	267	272	Lime	(22) 22.5-494.0
	272	281	Shale	(23) 22.5-516.5
	281	286	Lime	(24) 22.5-539.0
	286	329	Shale (Lime 318-319)	(25) 22.5-561.5
30'	329	352	Lime	(26) 22.5-584.0
	352	358	Shale (Slate 357-358)	(27) 22.5-606.5

HUGHES DRILLING CO.

Wellsville, Kansas 66092

Roger 913-883-2235
Darrel 913-883-4027

CORE TIME

LEASE Brown 20-T
FORMATION Bartlesville
DATE: 5-3-14

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

~~Chip~~ Chip Sample

FROM	FEEET	TO	TIME	MINUTES	REMARKS
①	847	848	-		Sdy lime (bleeding)
②	848	849			} solid sand (Good bleed)
③	849	850			
④	850	851			
⑤	851	852			
⑥	852	853			
⑦	853	854			} sand lamin w/shale (bleeding)
⑧	854	855			
⑨	855	856			- sand very lamin w/shale (some bleed)
	856	857			shale
					(Best Perf Zone)
					847-855
					7/2/14 - midwest surveys Perf
					847-855 25 Perfs
					2" DML RTG



CONSOLIDATED
Oil Well Services, LLC

267980

TICKET NUMBER 47106
LOCATION Ottawa, KS
FOREMAN Cassey Kennedy

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
5/5/14	3425	Brown # 20-I	SE 36	14	21	JO

CUSTOMER <u>Hughes Drilling</u>		
MAILING ADDRESS <u>122 Main</u>		
CITY <u>Wellsville</u>	STATE <u>KS</u>	ZIP CODE <u>66092</u>

TRUCK #	DRIVER	TRUCK #	DRIVER
729	Caskey	✓ Safety Meeting	
660	Gar Moo	✓	
558	Art McD	✓	

JOB TYPE <u>Logging</u>	HOLE SIZE <u>5 5/8"</u>	HOLE DEPTH <u>920'</u>	CASING SIZE & WEIGHT <u>2 7/8" EVE</u>
CASING DEPTH <u>910'</u>	DRILL PIPE	TUBING <u>baffle - 887'</u>	OTHER
SLURRY WEIGHT	SLURRY VOL	WATER gal/sk	CEMENT LEFT in CASING <u>23'</u>
DISPLACEMENT <u>5.13 bbls</u>	DISPLACEMENT PSI	MIX PSI	RATE <u>5 bpm</u>

REMARKS: held safety meeting, established circulation, mixed & pumped 200 # Premium Gel followed by 10 bbls fresh water, mixed & pumped 140 sks 50/50 Pozmix cement w/ 2% gel, + 1/4 # Flo Seal per sk, cement to surface, flushed pump clean, pumped 3 1/2" rubber plug to baffle w/ 5.13 bbls fresh water, pressured to 806 PSI, well held pressure for 30 min MIT, shut in casing.

Customer supplied H₂O

[Signature]

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE		
5406	30 mi	MILEAGE		1085.00
5402	910'	casing footage		126.00
5407	minimum	ton mileage		308.00
1124	140 sks	50/50 Pozmix cement	11010.00	
11188	435 #	Premium Gel	95.70	
1107	35 #	Flo Seal	86.45	
		materials	1792.15	
		-30%	537.65	
		subtotal		1254.50
4402	1	3/2" rubber plug		27.50
			3535.01	
		7.375% SALES TAX		94.71
		ESTIMATED TOTAL		2457.71

Havin 3737

AUTHORIZATION

[Signature]

TITLE

DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.