

HUGHES DRILLING REPORT

Well No. I-3

Farm W. Broers

SURFACE CASING

Size 6 1/4"

Feet 35'

Circulated 12 sx cement

PERMANENT CSG

Size 2 7/8 8th EUE (New)

Feet 782.45 of pipe
With Flare shoe on Bottom

T. D. at Completion 797'

Contractor HUGHES DRILLING CO.

Fr 1245 Co., Kansas
FSL 3070 FEL

API # 15-059-27155

Sec. 2 Twp. 16 R. 20

OPERATOR Hughes Drilling

STRATA THICKNESS	FORMATION DRILLED	T.D.
2	Soil	2
30	Clay	32
1	Gravel	33
25	Lime	38
6	Shale	64
12	Lime	76
6	Shale	82
19	Lime	101
65	Shale	166
17	Lime	183
55	Shale	238
23	Lime	261
15	Shale	276
7	Lime	283
29	Shale	312
12	Lime	324
20	Shale	344
30'	24 Lime	368
	9 Shale	377
20'	23 Lime	400
	4 Shale	404
	9 Lime	408
	2 Shale	410
"Hertma"	6 Lime	416
	11 Shale	527
	2 Sand	529
	37 Shale	566
	4 Lime	570
	15 Shale	585
	10 Lime	595
	8 Shale	603
	6 Lime	609
	7 Shale	616
	7 Lime	623
	14 Shale	637
	3 Lime	640
	7 Shale	647
	10 Lime	657
	9 Shale	665
	3 Lime	668
	10 Shale	678

DATE	DRILLED		REMARKS - TYPE WORK - BILLING REF.	PIPE TALLY
	FROM	TO		
7/18/17	0	2	Soil	① 21.5-21.5
35'	2	32	Clay	② 22.5-44.0
7/19/17	32	33	Gravel	③ 22.5-66.5
5/8 PDC	33	58	LIME	④ 22.5-89.0
	58	64	Shale (Slate 63-64)	⑤ 22.5-111.5
	64	76	Lime	⑥ 22.5-134.0
	76	82	Shale	⑦ 22.5-156.5
	82	101	Lime	⑧ 22.5-179.0
	101	166	Shale	⑨ 22.5-201.5
	166	183	Lime	⑩ 22.5-224.0
	183	238	Shale (Lime 93-94)	⑪ 22.5-246.5
	238	261	Lime	⑫ 22.5-268.0
	261	276	Shale (BRK 267-269)	⑬ 22.5-281.5
	276	283	LIME	⑭ 22.5-314.0
	283	312	Shale	⑮ 22.5-336.5
	312	324	LIME	⑯ 22.5-359.0
	324	344	Shale (Lime Break 328-329)	⑰ 22.5-381.5
30'	344	368	Lime	⑱ 22.5-404.0
	368	377	Shale (Slate 375-376)	⑲ 22.5-426.9
20'	377	400	Lime	⑳ 22.5-449.0
	400	404	Shale (Slate 400-401)	㉑ 22.5-471.5
	404	408	Lime	㉒ 22.5-494.0
	408	410	Shale	㉓ 22.5-516.5
"Hertma"	410	416	Lime	㉔ 22.5-539.0
	416	527	Shale (Broken 420-424)	㉕ 22.5-561.5
"Peru"	527	529	Sand (slight odor)	㉖ 22.5-584.0
	529	566	Shale	㉗ 22.5-606.5

HUGHES DRILLING REPORT

FC. Co., Kansas (157)
 1245 FSL 3070 FEL
 API # 15-099-27155
 Sec 2 TWP. 16 R. 20

SURFACE CASING

PERMANENT CSG.

Well No. I-3

Size.....

Size.....

Farm W. Brooks

Feet.....

Feet.....

Circulated _____ sx cement

T. D. at Completion 792'

Contractor HUGHES DRILLING CO.

OPERATOR

STRATA THICKNESS	FORMATION DRILLED	T.D.
15	sand	693
13	Shale	706
1	Lime	707
21	Shale	728
2	Lime	730
10	sand	740
32	Shale	772
1	Lime	773
19	Shale	792
		T.D.

DATE	DRILLED		REMARKS - TYPE WORK - BILLING REF.	PIPE TALLY
	FROM	TO		
	566	570	Lime	(28) 22.5-629.0
	570	585	Shale (BRKN 574-577)	(29) 22.5-651.5
	585	595	Lime	(30) 22.5-674.0
	595	603	Shale	(31) 22.5-696.5
	603	609	Lime	(32) 22.5-719.0
	609	616	Shale	(33) 22.5-741.5
	616	623	Lime	(34) 22.5-764.0
	623	637	Shale	(35) 22.5-786.5
	637	640	Lime (Brown)	
	640	647	Shale (slate 640-641)	
	647	657	Lime	
	657	665	Shale	
	665	668	Lime	
	668	678	Shale	
	678	693	Sand	
	693	706	Shale	
	706	707	Lime	
	707	728	Shale	
	728	730	Lime	
	730	740	Sand	
	740	792	Shale	
			T.D.	
			7-20-47 set 782.45 at 2 7/8" 800' EUE	
			used 3 centralizers	
			And float shoe on Bottom	

(New)

HUGHES DRILLING CO.

CORE TIME

Lease # I-3 w. Boery

Formation #1 squirrel

Date 7/19/17 RPM chip sample

FROM	TO	TIME	MINUTES	REMARKS
678	679	LT. Brown sand lamin, w/shale		(Bleed)
679	680	LT. Brown sand		solid (Bleed)
680	681	}	680-684	solid sand (exc. bleed)
681	682			
682	683			
683	684			
684	685	- sand very lamin, w/shale		(Bleed)
685	686	}	685-689	sand slightly lamin, w/shale
686	687			
687	688			
688	689			(Bleed)
689	690	- sand very lamin, w/shale		(Bleed)
690	691	}	shale	(Best Perf Zone)
691	692			
692	693			
693	694			
694	695			
695	696			
				680-689
				cont



8023/520

TICKET NUMBER 50457
 LOCATION Oftawa
 FOREMAN Alan Mader

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

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 810789

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-20-17	3425	N. Broens #9	SW 3	16	20	FL
CUSTOMER Hughes Drilling			TRUCK #			
MAILING ADDRESS 122 Main			DRIVER			
CITY Wellsville			TRUCK #			
STATE KS			DRIVER			
ZIP CODE 66092			TRUCK #			
			DRIVER			

JOB TYPE long string HOLE SIZE 5 5/8 HOLE DEPTH 792 CASING SIZE & WEIGHT 2 7/8
 CASING DEPTH 782 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING yes
 DISPLACEMENT _____ DISPLACEMENT PSI 800 MIX PSI 200 RATE 4.5 gpm

REMARKS: Held meeting, mixed & pumped 100 # gel followed by 105.5k PB IA plug 2% gel & 1/4# flo seal per sack. Circulated cement. Flushed pump. Pumped plug to casing TD. Set float.

Hughes water

Alan Mader

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0450	1	PUMP CHARGE	150.00	
CE0002	15	MILEAGE	107.25	
CE0711	min	Ten miles	860.00	
		Sub	2267.25	
		less 55%	-1246.99	1020.26
CC5840	105	PB 1-A	1417.50	
CC5965	276	gel	82.80	
CC6075	26	flo seal	52.00	
CP8176	1	2 1/2 plug	45.00	
		Sub	1597.30	
		less 55%	-878.52	718.78
		8%		
		SALES TAX		57.50
		ESTIMATED TOTAL		1796.58
				(3992.33)

Ravin 3737

AUTHORIZATION _____ 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.