CONFIDEN

KANSAS CORPORATION COMMISSION OILS GAS CONSERVATION DIVISION

WELL COMPLETION FORM WELL SIGNY - DESCRIPTION OF WELL & LEASE

Form ACO-1 September 1999 Form Must Be Typed

Operator: License # 3293	API No. 15 - 109-20815-0000
Name: Russell Oil Inc	County: Logan
Address: PO BOX 1469	NW SE NE Sec. 28 Twp. 15 S. R. 34 East West
City/Ctoto/Zin, Plainfield, IL 60544	1670
Purchaser: NA KANSAS CORPORATION COMMISSION	1010 feet from B) W (circle one) Line of Section
Operator Contact Person: LeRoy Holt	Footages Calculated from Nearest Outside Section Corner:
	(circle one) (NE) SE NW SW
Contractor: Name: H2 Drilling LLC CONSERVATION DIVISION	Lease Name: McDaniel M Well #: 1-28
License: 33793	Field Name: Wildcat
Wellsite Geologist: Steve Angle	Producing Formation: NA
Designate Type of Completion:	Elevation: Ground: 3028' Kelly Bushing: 3041'
New Well Re-Entry Workover	Total Depth: 4800 Plug Back Total Depth: 4801'
OilSWDSIOWTemp. Abd.	Amount of Surface Pipe Set and Cemented at 229 Feet
Gas ENHR SIGWNFIDENTIAL	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
Ory Other (Core, WSW, Expl., Cathodic etc)	If yes, show depth setFeet
Dry Other (Core, WSW, Expl., Cathodic etc) If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from
Operator: KCC	feet depth tosx cmt.
AAZ H A I	200 - 200 -
Original Comp. Date: Original Total Depth:	Drilling Fluid Management Plan PANH 12 11-08 (Data must be collected from the Reserve Pit)
Deepening Re-perf Conv. to Enhr./SWD	Chloride content 31000 ppm Fluid volume 525 bbls
Plug BackPlug Back Total Depth	Dewatering method used Evaporation
Commingled Docket No	Location of fluid disposal if hauled offsite:
Dual Completion Docket No	Location of hulu disposal in hadied offsite.
Other (SWD or Enhr.?) Docket No	Operator Name:
6/26/2008 7/7/2008 7/7/2008	Lease Name: License No.:
6/26/2008 7/7/2008 7/7/2008 Spud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. R
Recompletion Date Recompletion Date	County: Docket No.:
INSTRUCTIONS: An original and two copies of this form shall be filed with t	the Kanasa Caracratica Commission 120 C Market Boom 2079 Wishite
INSTRUCTIONS: An original and two copies of this form shall be filed with t Kansas 67202, within 120 days of the spud date, recompletion, workover	· · · · · · · · · · · · · · · · · · ·
Information of side two of this form will be held confidential for a period of 12	
107 for confidentiality in excess of 12 months). One copy of all wireline logs a TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells.	and geologist well report shall be attached with this form. ALL CEMENTING. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to re herein are complets-and correct to the best of my knowledge.	egulate the oil and gas industry have been fully complied with and the statemen
Signature: Part (. Hut	KCC Office Use ONLY
Title: EXECUTIVE ASST Date: 9134	Letter of Confidentiality Received
Subscribed and sworn to before me this 24th day of September 200	If Denied, Yes Date: Wireline Log Received
20 <u>08</u> .	Geologist Report Received
Notary Public. Mana Meller	OFFICIAL SEAL UIC Distribution
Date Commission Expires: Un 80, 3011	AYAMA MILLER Molecy Public - State of Illinois

Operator Name: Russ	ell Oil Inc		·π	Lease	e Name:	McDaniel M		_ Well #:	!	
Sec. 28 -15 Twp*5		Eas			y: Logan					
INSTRUCTIONS: Shot tested, time tool open temperature, fluid recording Electric Wireline Logs	ow important tops a and closed, flowing overy, and flow rate	and base of g and shut s if gas to	of formations portion pressures, surface test, a	whether s long with	hut-in pre	ssure reache	d static level, hydro	static pressur	es, botto	m hole
Drill Stem Tests Taken (Attach Additional S		✓ Y	es 🗌 No		 ✓L		ation (Top), Depth a			Sample
Samples Sent to Geol	ogical Survey	□ Y	es 🔽 No		Nam	е		Тор	l	Datum
Cores Taken Electric Log Run (Submit Copy)		_ Y ✓ Y	es V No es No			ittached geolo)-O-1)(-D		
List All E. Logs Run: borehole compe inter.; dual indut microsensitivity					SEP	KCC 2 2 2008 FIDENT	KANSAS COF	RECEIVED RPORATION CORPORATION CORPORATION DIVIS	3	I
		_		RECORD	✓ Ne			WICHITA, KS		
Purpose of String	Size Hole Drilled	Siz	rt all strings set-or re Casing t (In O.D.)	We	eight . / Ft.	Setting Depth	Type of Cement	# Sacks Used		and Percent
Surface	12 1/4"	8 5/8"	. (5.5)	23	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	229	common	165		3 % gel
			<u>.</u>		6 esges		<u>.</u>			L
		T	ADDITIONAL	CEMENT	ING / SQL	JEEZE RECO	AD .			
Purpose: Depth Type of Cement #Si		#Sacks	ks Used Type and Percent Additives							
Protect Casing Plug Back TD Plug Off Zone										
Shots Per Foot PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated			•		racture, Shot, Cement Amount and Kind of Ma		d	Depth		
										,
TUBING RECORD	Size	Set At		Packer /	At	Liner Run	Yes No			
Date of First, Resumerd	Production, SWD or E	Enhr.	Producing Met	hod	Flowing	g Pum			er (Explain)
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate		Bbls. G	Gas-Oil Ratio		Gravity
Disposition of Gas	METHOD OF (COMPLETIC) DN			Production In	terval			
Vented Sold	Used on Lease mit ACO-18.)		Open Hole Other (Spec	Per	f. 🗌 [Dually Comp.	Commingled _			

ALLIED CEMENTING CO., LLC. REMIT TO P.O. BOX 31 SERVICE POINT: RUSSELL, KANSAS 67665 DuKle RANG JQB FINISH COUNTY WELL# OLD OR NEW (Circle one) rleigh Ruch Sign, W TO Rol 320 S. Imile W/12, NWINTO **CONTRACTOR** TYPE OF JOB **HOLE SIZE** T.D. **CEMENT** AMOUNT ORDERED 165 Com 20 agel 300 Cl **CASING SIZE DEPTH TUBING SIZE DEPTH** DRILL PIPE **DEPTH** TOOL **DEPTH** PRES. MAX **MINIMUM COMMON** MEAS. LINE SHOE JOINT **POZMIX** CEMENT LEFT IN CSG. **GEL** PERFS. CHLORIDE 05/4 DISPLACEMENT ASC @ **EQUIPMENT** (a) RECEIVED KANSAS CORPORATION COMMISSION PUMP TRUCK Hlan CEMENTER 422 HELPER SEP 29 2008 **BULK TRUCK** 34) DRIVER CONSERVATION DIVISION BULK TRUCK WICHITA, KS **DRIVER** HANDLING MILEAGE WASK/ WG **REMARKS:** TOTAL **SERVICE** DEPTH OF JOB 2301 PUMP TRUCK CHARGE EXTRA FOOTAGE MILEAGE MANIFOLD Sylfaic Head @ @ CHARGE TO Kharell (0) STREET CITY STATE ZIP. PLUG & FLOAT EQUIPMENT To Allied Cementing Co., LLC. You are hereby requested to rent cementing equipment

and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. Ithavefreadfand understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)

TOTAL CHARGES

PRINTED NAME (1514/ Pf., 45)

DISCOUNT IF PAID IN 30 DAYS

SIGNATURE (1414) Pf., 45

ALLIE CEMENTING CO., LLC. 31548 M JUL 1 4 2008 D P.O. BOX 31 REMIT TO SERVICE POINT RUSSELL, KANSAS 67665 ON LOCATION 100pm LOCATION Ocklo 5. To Fairliegh Kunch Sign WTO OLD OR NEW (Circle one) Rd 320 S. Imile W1/2 mile N.W Into OWNER Same CONTRACTOR TYPE OF JOB **CEMENT** T.D. **HOLE SIZE** AMOUNT ORDERED 2005Kz 2271 **CASING SIZE DEPTH TUBING SIZE DEPTH** DRILL PIPE **DEPTH** TOOL **DEPTH** PRES. MAX **MINIMUM** COMMON MEAS. LINE **POZMIX** SHOE JOINT CEMENT LEFT IN CSG. **GEL** PERFS. CHLORIDE (a) **DISPLACEMENT ASC** @ plo Seal **EQUIPMENT** Alm PUMP TRUCK CEMENTER 122 Wagne **HELPER BULK TRUCK** SEP 2 2 2009 Lanene **DRIVER** DRIVER HANDLING 209 5K, MATRIX @ 240 MILEAGE 10 49 Miles TOTAL 4185 **REMARKS:** 25%@ 2400 **SERVICE** 1005kg 1230 RECEIVED 40 SILIC KANSAS CORPORATION COMMISSION 10 140 **DEPTH OF JOB** Ket Hole 15 ski SEP 2 9 2008 PUMP TRUCK CHARGE Manay Hole 10 5/1/2 EXTRA FOOTAGE CONSERVATION DIVISION MILEAGE 44 @ WICHITA, KS @ MANIFOLD _ @ @ CHARGE TO: KINSSELL O' TOTAL <u>1493 00.</u> STREET_ PLUG & FLOAT EQUIPMENT @ @ To Allied Cementing Co., LLC. @ You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL SALES TAX (If Any). TERMS AND CONDITIONS" listed on the reverse side. TOTAL CHARGES _ PRINTED NAME_ IF PAID IN 30 DAYS DISCOUNT _

GEOLOGICAL REPORT

RUSSELL OIL, INC.

MCDANIEL "M" NO. 1-28

1670' FNL; 1010' FEL

28-15S-34W

LOGAN COUNTY, KANSAS

API NO. 15-109-20815-0000

Commenced: June 26, 2008

Completed: July 7, 2008

KCC SEP 2 2 2008 CONFIDENTIAL

RECEIVED KANSAS CORPORATION COMMISSION

SEP 29 2008

CONSERVATION DIVISION WICHITA, KS

Re: Russell Oil, Inc.
McDaniel "M" No. 1-28
1670' FNL; 1010' FEL
28-15S-34W
Logan, County, Kansas

Dear Sir:

The following is a Geological Report with a Time Log attached on the above captioned well.

Drilling was supervised from 2600' to 4800', rotary total depth. Samples were examined from 2600' to 4800', rotary total depth.

All formation tops, zones of interest, porosity and staiming are based on rotary bushing measurements. Any corrections in measurements during the drilling of this well have been incorporated into this report.

Elevation

3028 GL -- 3041 KB

Log Tops

Anhydrite 2391'	to 2410' + 650 to + 631
Herington	2734 ¹ + 3 07
Winfield	2773 ' + 2 68
Wreford	2993' + 48
Neva	3197' - 156
Red Eagle	3260' - 219
Tarkio Lime	3523 - 482
Howard	3630† – 583
Topeka	3655' - 614
Heebner	3886† - 845
Toronto	3904† - 863
Lansing/Kansas City	3930 ' - 889
Stark Shale	4256' -11215
Base/Kansas City	4316' -11275
Marmaton	4341' -11300
Pawnee	4421' -11380
Myric Station	4458 ' -114 17
Fort Scott	4475' -11434
Cherokee Shale	4501 ' -114 60
Basal Pennsylvanian Sand	4665 ' -11:6 24
Mississippi	4713' -11672
Rotary Total Depth	4800' -11759
Log Total Depth	4801' -11760

(continued)

Re: Russell Oil, Inc.
McDaniel "M" No. 1-28
1670' FNL; 1010' FEL
28-15S-34W
Logan, County, Kansas

Structurally, on top of the Lansing/Kansas City, the Russell Oil, McDaniel "M" No. 1-28 ran 10'low to the Cities Service, McDaniel "B" No. 1 located approximately 720' to the southwest.

On top of the Cherokee Shale, the Russell Oil, Inc., McDaniel "M" ran 7" low to the Cities Service McDaniel "B" No. 1.

Russell Oil, Inc. McDaniel "M" No. 1-28 1670' FNL; 1010' FEL 28-15S-34W Logan, County, Kansas

Log-Tech logs of Borehole Compensated Sonic, Dual Compensated Porosity and Dual Induction.

Due to the low structural position and negative drill stem tests, the Russell Oil, Inc. McDaniel "M" No. 1-28 was plugged and abandoned a dry hole.

Sincerely,

Steven D. Angle J. Angle

McDaniel "M" No. 1-28 1670' FNL; 1010' FEL 28-15S-34W Logan County, Kansas

ZONES OF INTEREST

Note: All oil shows and odors are denoted with an asterisk (*). Samples only showing florescence are not.

2621	to 2629	Tan dense and tan sucrosic crystallune limes.
2629	to 2638	White and tan dense and fine crystalline limes.
2638	to 2646	Light green and glauconitic sand clusters and white dense limes.
2646	to 2659	White and light tan to tan dense to crystalline limes.
2659	to 2671	Varied colored shales and scattered angular clear quartz sand grains.
2671 1	to 2680	Varied colored shales and sucrosic crystalline white limes.
2680 t	to 2692	Tan sandy limes and varied colored shales.
2700 t	to 2710	Light grey, very fine fairy soft samdy lime.
2710 t	to 2729	White fine crystalline limes and soft fine sandy shales.
HERING	GTON (Top @ 2734)	
2734 t	to 2737	White dolomite.
2734 t	to 2447	White crystalline dolomite.
2747 t	co 2755	Tan dolmitic sand and tan dolmitic limes.

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WINFIELD (Top @ 2763) 2763 to 2772	White sandy dolomitic limes.
2772 to 2882	White fine sandy dolomite.
2782 to 2797	Varied colored shales and scattered white dolomitic limes.
2797 to 2808	White, tan, brown dolomite and dolmitic sand clusters.
2808 to 2814	Tan dolomitic, silty limes.
2814 to 2822	White dolomitic limes.
2822 to 2835	White to light tan dolomitic limes.
2835 to 2844	Varied colored shales and a few white $doloritic$ limes.
2844 to 2853	A few tan, slightly vuggy, dolomitic limes.
2853 to 2861	White, sandy, dolomitic limes and tan, silty, loose sand clusters.
2861 to 2882	Varied colored shales and a few scattered fine grained brown and white sand clusters.
2882 to 2896	Light tan, weathered limes, and fossiliferous limes, scattered pinpoint and slightly vuggy porosity and slightly vuggy dolomitic limes.
2896 to 2905	Dark tan with black fossils dolomitic limes.
2905 to 2917	Same as above with light tan and buff imstead.
2917 to 2928	Tan fossiliferous and grey lime with black fossils dolomitic limes.
2928 to 2941	Tan fossiliferous and grey with black fossils and other varied colored dolomitic limes.

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2941 to 2950	Tan, fine sandy dolomitic limes and varied colored fine sand clusters.
2950 to 2960	Same as above.
2960 to 2977	Tan, slightly crystalline with black fossils and buff and white colored weathered dolomitic limes.
2977 to 2996	Same with grey with black fossiliferoms dolomitic limes.
WREFORD (Top @ 2993)	
2993 to 3002	Tan, slightly crystalline dolmitic limes with black fossils, buff and white weathered dolomitic limes.
3006 to 3013	Light tan and glauconitic sand clusters.
3013 to 3029	Varied colored shales and scattered white and tan dolomitice limes. Angular clear loose quartz sand.
3029 to 3043	Væried colored shales and clays.
3043 to 3057	Varied colored shales, scattered whitee loosely bonded sand clusters and tan dolomitic limes.
3057 to 3067	Tam and white sandy dolomitic limes.
3067 to 3072	Tan and white fine crystalline dolomitic limes and scattered tan fine crystalline dolomite.
3072 to 3080	Varied colored shales and scattered light pünkish, sandy dolomite and grey with black fossiliferous dolomitic limes, and tan sandy dolomitic limes.
3080 to 3083	tan and pinkish to white sandy, fine crystalline dolomite.
3083 to 3089	Tam, filme crystalline dolomitic limes amd a few scattered clear sand clusters.
3089 to 3098	Tam and pinkish sandy dolmitic limes.

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3098 to 3106	Tan dolomitic sandstone.
3106 to 3128	Pinkish to tan to light grey sandy dolomitic limes.
3128 to 3145 3145 to 3153*	Scattered friable clear sand grained clusters and tan dolomitic limes. Buff fossiliferous dolomitic limes. One small glob of gilsonite asphaltic oil with gold flakes.
3153 to 3167	Buff colored dolomitic lime with pinpoint porosity.
3167 to 3177	Buff eathered slightly vuggy dolomitic limes with a show of florescence. Scattered brown and tan sandstone.
3177 to 3185	Grey and light tan crystalline dolomitic limes.
3185 to 3196	Tan crystalline dolomitic limes and light grey fine crystalline dolomitic limes.
NEVA (Top @ 3197 3197 to 3208	Buff weathered dolmitic lime with pinpoint to vuggy porosity.
3208 to 3220	White and tan crystalline dolomitic limes.
3220 to 3227	Tan and white crystalline dolomitic limes.
3227 to 3236	Buff to white to grey with black fossils dolomitic limes.
3236 to 3251	Light grey crystalline dolomitic and white dolomitic lime.
3251 to 3261	Varied colored shales and scattered white sandy dolomitic limes.
RED EAGLE (Top @ 3260) 3261 to 3272	White fossiliferous dolomatic limes and buff dense to sandy dolomitic limes.

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3272 to 3285	White dense limes.
3285 to 3294	Grey crystalline dolmitized limes and white cherty dolomitic limes.
3294 to 3303	Scattered grey shalely sand clusters.
3303 to 3310	Pale green shales and sandy shales. Light white fine crystalline dolmitic limes.
3310 to 3319	Tam, fine grained sandstone.
3319 to 3333	White scattered fossiliferous limes and grey crystalline dolomitized limes.
3333 to 3346	Varied colored shales and grey crystalline dolomite.
3346 to 3357	Varied colored shales and white fine crystalline dolomitic limes.
3357 to 3366	Buff colored fossiliferous, very weathered pieces of dolomitic lime with a fair show of florescence.
3366 to 3375	Scattered firm and soft white shales and a few scattered glauconitic sand clusteres.
3375 to 3384	Varied colored shales.
3384 to 3390	Red shales (sluff) and a few scattered tam dolomitic limes.
3590 to 3597	Green and grey soft shales and scattered tam dolomitic limes and chalky greyish limes.
3597 to 3412	Varied colored shales and scattered weathered light tan dolomitic limes.
3412 to 3422	Red gummay shales.
3422 to 3434	Pale green and light grey soft clays.

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3434 to 3443	Scattered medium sized clear quartz grained sand clusters and red shales.
3443 to 3451	Varied colored shales and scattered buff colored fossiliferous dolomitic limes.
3464 to 3472	Red and varied colored shales.
3472 to 3490	Same as above.
3490 to 3496	Scattered dark green shales and scattered light white dolomite.
3496 to 3511	Light grey and green soft shales amd a few pieces of white dolomitic limes.
TARKIO LIME (Top @ 3523)	
3523 to 3533	Light grey fossiliferous limes and white fossiliferous dolomitized lime.
3562 to 3570	Tan fossiliferous lime amd dense limes.
3570 to 3577	Tan and grey dense limes.
3577 to 3585	Same as above.
3585 to 3595	Tan and white dense and fossiliferous limes.
3595 to 3605	Tan dense limes.
3605 to 3616	Light tan dense and scattered fossiliferous limes and fossiliferous cherty limes.
3616 to 3622	Scattered black shales, grey dense and grey fossiliferous limes.

3622 to 3642	Light white fine crystalline lime with a show of florescence and tan fossiliferous dense limes.
3642 to 3653	Buff, fossiliferous limes.
TOPEKA (Top @ 3655) 3655 to 3662	Tam fossiliferous limes and tan weathered limes with scattered pinpoint to very slightly vuggy porosity.
3662 to 3669	Tam dense and tan fossilferous limes.
3669 to 3679	Tam silty to chalky to scattered fossiliferous limes.
3679 to 3690	Scattered grey fossiliferous limes and tan dense to fine crystalline to scattered fossiliferous limes.
3690 to 3700	White, slightly silty limes.
3700 to 3709	Scattered black shales and light tan foxssilferous limes.
3709 to 3717	Same as above with dense cherty grey lime.
3717 to 3723	Tam dense limes and scattered grey forsiferous limes.
3723 to 3732	Scattered tam dens limes and tan fine crystalline to slightly sandy limes.
3732 to 3752	Light tan, friable, silty, fossiliferous limes and tam dense to slightly crystalline limes.
3752 to 3763	Scattered black shales and silty tan fossiliferous limes.
3763 to 3772	Light tan, fine crystalline, slightly sandy limes and dark grey fossiliferous limes.

3772 to 3785	Tan dense, tan silty and tan fossiliferous limes and a few scattered fine grained shalely sand clusters.
3785 to 3796	Brown fossiliferous limes.
3796 to 3809	White and tan chalky and tan fossilferous limes.
3809 to 3815	Scattered black shales. A few scattered grey sandy shales and a few white chalky, fossiliferous limes and white chalk.
3815 to 3822	Light tan fossiliferous and sandy limes.
3822 to 3831	Tan, slightly weathered fossilferous limes and fossiliferous dense limes with some scattered florescence.
3831 to 3842	Tan slightly crystalline and tan dense and tan fossiliferous limes.
3855 to 3865	Tan, fine crystalline, tan fine sandy and tan fossiliferous limes.
HEEBNER SHALE (Top @ 3886)	Jet black shale.
TORONTO (Top @ 3904) 3904 to 3907	Tan and light grey crystallime limes and brown fossilferous limes.
3907 to 3914	Tan dense and tan weathered loose fossiliferous limes.
LANSING/KANSAS CITY (Top @ 3930) 3930 to 3940	Light tan to buff weathered limes and fossiliferous limes.
3940 to 3950	Tan, weathered, fairly loose limes with slightly vuggy porosity.
CFS @ 3950	

3951 to 3958 White crystalline, slightly weathered limes with good overall florescence. 3962* to 3970* Tan crystalline to slightly fossiliferou with three pieces with a very slight show of oil and overall florescence. 3972 to 3976* Light tan weathered, vuggy lime with pinpoint and vuggy porosity with a fair show of free oil. No. odor. 3976 to 3986* Tan crystalline limes with fair pinpoint and slightly vuggy porosity and a fair show of free oil. No odor. CFS @ 4005 DRILL STEM TEST NO. 1 3971 to 4005 TEST: 60-30-60-30, Strong blow off bottom of 5 gallon bucket in 4-1/2minutes. Shut In 30 minutes. No blow back. Strong blow off bottom of bucket in 9-1/2 minutes. Shut In 30 minutes. No blow back. Recovered: 93' of water cut mud, 186' of mud cut water, 186' of slightly mud cut water and 1116' of water. Pressures: 101-424, 434-670, 1138-1139 Bhps. 1945-1875 hydrostatic. 4016 to 4023 Light tan dense, slightly silty limes and scattered tan to white crystalline limes. 4025 to 4030 Tan fossiliferous, friable limes. 4034 to 4042 Tan to light grey fossiliferous, slightly cherty limes. 4044 to 4052 Tan and white dense to scattered tan and white chalky limes.

4058 to 4062	Tam fossiliferous firm chalky and scattered harder friable limes.
4063 to 4072*	One piece of poorly developed oolicastic and fossiliferous lime with an excellent show of free oil. Loaded with oil when sample broken. No odor.
4075 to 4083	Tam, fossiliferous limes, weathered and slightly vuggy.
4084 to 4092	Scattered tan fossiliferous, cherty to crystalline limes.
3094 to 4103	Tam to white dense to slightly crystalline limes.
4106 to 4113*	Faint odor and a show of very light oil floating. Tan dense to slightly crystalline lime.
4114 to 4124*	Very faint odor. One piece of of cherty dark grey fossiliferous lime with vuggy porosity and a good show of "wet" oil staining and a small show of free oil.
4126 to 4134	Tam cherty, firm, fossiliferous limes.
4138 to 4148*	One piece of tan, slightly vuggy lime with a fair show of free oil when broken. Very light colored oil floating amd a faint odor.
4151 to 4156*	Tam, fossiliferous lime with a very light colored oil show. No odor.
4157 to 4163	Tam to light grey, chalky to slightly weathered junky limes.
4165 to 4170	White to tan slightly chalky, crystalline, fossiliferous limes.
CFS @ 4170	

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DRILL STEM TEST NO. 2 4054 to 4170

TEST: 60-30-60-30, Strong blow off bottom of 5 gallon bucket in 3-1/2 minutes. Shut In 30 minutes. No blow back. Strong blow off bottom of bucket in 5-1/2 minutes.

Shut In 30 minutes. No blow back. Recovered: 186' of water cut mud, 124' of mud cut water, 124' slightly mud

cut water, 1860' of water. Pressures: 114-768, 764-1034,

1174-1190 Bhps.

Tan dense crystalline lime.

Same with barren oolitic limes and fairly well developed oolicastic lime with a good show of free oil, "wet" black oil staining and a faint odor.

Same as above but with a fair odor.

Scattered white barren oolicastic lime. Two pieces with fair show of dark oil and a fair odor.

Tan, slightly silty, fairly loose fossiliferous lime with a fair show of dark oil and a fair odor.

TEST: 60-30-60-30, Strong blow off bottom of 5 gallon bucket in 28 minutes. Shut In 30 minutes with a 5 inch blow. back return. Strong blow off bottom of bucket in 14 minutes. Shut In 30 minutes with a 6 inch blow back. Recovered: 124' of mud cut water, 124' of slightly mud cut water and 682' of sulfur water. Pressures: 24-201, 262-372, 288-441 Bhps. 2060-1978 hydrostatic pressures.

4178 to 4182

4184 to 4193*

4195 to 4199*

4203 to 4210*

4213 to 4220*

DRILL STEM TEST NO. 3 4174 to 4220

4222 to 4231* A few light tan silty, slightly vuggy lime with a fair show of dark oil and plastic oil with a fair odor. 4233 to 4236* Same as above but with no odor. 4238 to 4246 Scattered vuggy fossiliferous barren limes. 4250 to 4255 Tan and white dense to crystalline limes. STARK SHALE (Top @ 4256) 4260 to 4271* Light tan and dark tan crystalline to silty limes. One piece of white oolicastic lime with a fair show of black "wet" oil stain. No odor. 4274 to 4284 Tan and light tan dense to slightly crystalline limes, a few white fossilifierous limes and one piece of grey chert. 4286 to 4294 Tan and buff dense to slightly crystalline limes. 4299 to 4306 Scattered light grey cherty and varied colored dense to fossiliferous limes. BASE/KANSAS CITY (Top @ 4316) 4318 to 4331 Tan and white junky to silty and fossiliferous limes. MARMATON (Top @ 4341) 4341 to 4349 Tan and white silty fossiliferous limes:.. 4351 to 4360* Tan junky to crystalline to fossiliferous limes. One small piece of lime with a trace of oil and a very faint odor. 4362 to 4368* Tan junky to crystalline to fossiliferous slightly weathered fractured with a good show of fairly dark free oil and

a faint odor.

and a faint odor.

Scattered weathered fossiliferous limes with a fair show of "wet" oil stain

4370 to 4379*

4380 to 4386*

4388 to 4494*

4400 to 4410

PAWNEE (Top @ 4421) 4421 to 4436

CFS @ 4451

DRILL STEM TEST NO. 4
4288 to 4451

MYRIC STATION (Top @ 4458) 4458 to 4470

FORT SCOTT (Top @ 4475)
4475 to 4486*

CFS @ 4486

CFS @ 4490

CFS @ 4495

CHEROKEE SHALE (Top @ 4501)

Scattered tan slightly vuggy lime with a fair show of oil. No odor.

A few slightly silty, slightly cherty tan limes with a show of oil. No odor.

Tan to white cherty fossiliferous limes.

Tan to white cherty, fossiliferous limes.

TEST: 60-30-60-30, Strong blow off bottom of 5 gallon bucket in 7-1/2 minutes.

Shut In 30 minutes. No blow back.

Strong blow off the bottom of bucket in 11-1/2 minutes.
Shut In 30 minutes with no blow back.

Recovered: 124' of mud cut water, 124' of slightly mud cut water, 248' of very slightly mud cut water and 992' of water.

Pressures: 118-470, 460-706, 1290-1284 Bhps. 2272-2081 hydrostatic pressures.

Tan crystalline limes and tan fossiliferous to junky fossiliferous limes.

A few scattered pale grey and dark grey fossiliferous sharp hard cherts and fossiliferous limes. One piece with a show of free oil and a faint odor. 4505 to 4511*

CFS @ 4512

DRILL STEM TEST NO. 5
4451 to 4512

4524 to 4530*

4534 to 4540*

4542 to 4550*

4556 to 4560*

4568 to 4570

CFS @ 4576

DRILL STEM TEST NO. 6
4460 to 4576

Light cream colored limey, weathered vugular chert with a fairly good show of free oil and a fairly good odor.

TEST: 60-30-0-0, good blow of 5-1/2 inches in bucket at 60 minutes. Shut In 30 minutes. No blow back. Fair blow of 2-1/2 inches at 35 minutes then lost packer seat. Ended test and came out of hole. Recovered: 449' of slightly gassy oil cut mud and 1039' of mud. Pressures: 21-67, 68-72, 342-N/A Bhps. 2274-2125 hydrostatic pressures.

One piece of tan crystalline lime with a fair show of light free oil. No odor.

One piece of white lime with a trace of free oil. Light tan fresh chert with no show.

A few pieces of hard cherty vuggy lime with a show of free oil. No odor.

One barren sand cluster and tan slightly vuggy limes with a show of free oil. No odor.

A few scattered brown fresh cherts.

TEST: 60-30-15-30, very weak blow of 1/4 inch building to 3/4" then dead at 53 minutes.

Shut In 30 minutes. No blow back.

Weak surface blow for 1 minute, dead.

Shut In 30 minutes. No blow back.

Recovered: 52' of very slightly oil cut mud and 62' of slightly oil and water cut mud (water had 12,000 chlorides).

Pressures: 27-70, 118-80, 544-528

Bhps. 2306-2240 hydrostatic pressures.

MISSISSIPE	I (Top	@	<u>4713)</u>
/=10 /=			

4713 to 4749

4749 to 4757

4757 to 4765

4765 to 4774

4774 to 4786

4786 to 4795

4795 to 4800

CFS @ 4800

ROTARY TOTAL DEPTH @ 4800

LOG TOTAL DEPTH @ 4801

Scattered tan fossiliferous crystalline limes, tan fossiliferous cherty limes, tan crystallime and white chalky limes with a few scattered sandy limes and white sand clusters.

Tan crystalline limes and scattered white and tan fossiliferous limes.

Tan crystalline limes, tan cherty fossiliferous limes, scattered white bonded sand and brown sandy shales.

White and tan sandy limes and waried colored shales.

Varied colored shales and scattered tan fossiliferous limes.

Varied colored greenish shales and varied colored shales, and a few bonded white sand clusters.

White and fan fine fossiliferous limes and fine sand white limes and varied colored shales.

DRILLING INFORMATION ON THE MCDANIEL "M" NO. 1-28

Drilling Contractor: H2 Drilling Company, Rig 2.

Drillers: R. Baker

J. Coleman

Tool Pusher: Wes Pffaff

J. Durr

Spud Date: June 26, 2008

Date of RTD: July 7, 2008

Surface Pipe: New 8-5/8", 24# set @ 227' w/160 sx Common Cement, 6% cc & 3% gel.

Cement did circulate.

Status: Dry and Abandoned.

Production Casing: None.

Drilling Mud: Mud-Co, Engineer, Reid Atkins.

Drill Stem Testing: Trilobite Testing, Tester: Shane McBride.

Tests Ran: Five, none positive.

Cementing: Surface Pipe, Allied Cementing Co.

Electric Logging: Log-Tech, Engineer: C. Desaire, M. Garrison.

Logs Ran: Borehole Compensated Sonic, Dual Compensated Porosity

and Dual Induction.

Hydrocarbon Detection & Well Management: Geocertified, LLC; Engineer: Kevin J. Bailey.

TOTAL FOOTAGE DRILLED PER DAY Spudded on June 26, 2008

Under surface at 12:00 A.M. On June 27, 2008

700	Feet	At	7:00 A.M.	On	6-27-08
1632	11	11	Ħ	11	6-28-08
2815	11	11	11	11	6-29-08
3632	11	11 -	11	11	6-30-08
4005	11	11	11	11	7-01-08
4170	11	16	11	11	7-02-08
4220	11	**	11	11	7-03-08
4451	11	18	. 11	11	7-04-08
4512	11	11	11	11	7-05 08
4576	11	11	11	11	7-06-08
4735	11	11	11	11	7-07-08
4800	Feet	At	7:17 P.M.	On	7-07-08

MUD RECORD

Pre-Mix Tank Used and steel pits.

Surface - 70 sx gel, 1 sx lime, 25 sx hulls, 15 sx of quick seal.

2510' - 12 sx quick seal, 10 sx hulls.

3415' - 95 sx gel, 3/4 sx Drispac, 3 sx soda ash, 1-1/2 sx lignite,

30 sx quick seal, 2 sx caustic, 30 sx hulls.

3971' - 150 sx gel, 6 sx soda ash, 4 sx caustic, 2 sx ligmite, 1/2 sx drispac,

15 sx hulls, 6 sx of quick seal.

4451' - 1 gal of poly plus.

4512' - 110 sx gel, 1 sx caustic soda, 3 sx soda ash, 1 sx lignite, 1/2 sx of Drispac.

BIT RECORD

Size	Type	<u>In</u> <u>Out</u>	Jet Sizes	Pump Pressure Ran
Surface - 12-1/4" Smith - 7-7/8"	FH 24Y	0'- 230' 230'- 4800'	N/A 3 - 13's	1250#

DRILLERS TIME LOG

RUSSELL OIL COMPANY McDaniel "M" No. 1-28 1670' FNL & 1010' FEL 28-15S-34W Logan County, Kansas ELEVATION: 3028 GL

REMARKS

3041 KB

DEPTH	MINUTES
Note: 1/3" made ¼".	l foot drilling time
2600 to 2610 2620 2630 2640 2650 2660 2670 2680 2690	$ 1-1-1-1-1-1-1-1-\frac{1}{2}-1-1\frac{1}{2} \\ 2-2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2\frac{1}{2}-1-2-2-2 \\ 2-1\frac{1}{2}-2\frac{1}{2}-2-2-1-1\frac{1}{2}-2-2-1\frac{1}{2} \\ 1-1-1-2-1-1-2-1-\frac{1}{2}-1 \\ 1-1\frac{1}{2}-1\frac{1}{2}-1-2-2-1-1-2-1 \\ 1\frac{1}{2}-1\frac{1}{2}-1-1-1-1-1-1-1 \\ 1-1-1-1-1-1-1-1-1-1-1-1\frac{1}{2} \\ 1-1\frac{1}{2}-1\frac{1}{2}-2-2\frac{1}{2}-1\frac{1}{2}-1-1-1-1\frac{1}{2} \\ 2-2-1-1-1-1-1-1-1-1-1-1 $
2700 2700 to 2710 2720 2730 2740 2750 2760 2770 2780 2790 2800	$\begin{array}{c} 1\frac{1}{2}-2-2-1\frac{1}{2}-1-1-2-1\frac{1}{2}-1-2\\ \frac{1}{2}-1-3-2-1-3-1-1-1-1\\ 1\frac{1}{2}-1\frac{1}{2}-1-1-1-1-1-2-1-1\\ 2-1-1-1-2-1-1-2-1-2\\ \frac{1}{2}1-2-1-2-2-2-1-2-2\\ 1\frac{1}{2}-1\frac{1}{2}-2-2-3-2-2-2-2\\ 2-2-2-2-2-2-2-1-2-1\\ 2-2-1-1\frac{1}{2}-1\frac{1}{2}-2-2-1-2-1\frac{1}{2}\\ 1\frac{1}{2}-1-1\frac{1}{2}-3-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2-2-1\\ 1-2-2-1-2-1-1-1-\frac{1}{2}-\frac{1}{2}\\ \frac{1}{2}-\frac{1}{2}-1-1-2-2-2-3-2-2\end{array}$
2800 to 2810 2820 2830 2840 2850 2860 2870 2880 2890 2900	$\begin{array}{c} 1 & \frac{1}{2} - 1 & \frac{1}{2} - 2 - 2 & \frac{1}{2} - 1 - 2 & \frac{1}{2} - 2 - 2 \\ 1 - 1 - 1 & \frac{1}{2} - 2 & \frac{1}{2} - 1 - 1 - 1 - \frac{1}{2} - \frac{1}{2} - 1 \\ 1 - 1 - 1 - 2 & \frac{1}{2} - 1 & \frac{1}{2} - 2 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} \\ \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - 2 - 1 - 2 - 1 - 1 - 1 \\ \frac{1}{2} - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - $

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1-1-2-1-2-\frac{1}{2}-\frac{1}{2}-1-\frac{1}{2}-\frac{1}{2}
2900 to 2910
                                                                                                                                                                                                                                                                       1-1-\frac{1}{2}-\frac{1}{2}-1-2-1-1-2-1
                                                                   2920
                                                                                                                                                                                                                                                                       1-2-2-1-1-2-2-1-1-1
                                                                  2930
                                                                                                                                                                                                                                                                      1-1-1\frac{1}{2}-\frac{1}{2}-1-2-1-1\frac{1}{2}-\frac{1}{2}-2
                                                                  2940
                                                                                                                                                                                                                                                                      1\frac{1}{2}-1\frac{1}{2}-1-2-2-2-1-2-1-2
                                                                   2950
                                                                                                                                                                                                                                                                       2-1\frac{1}{2}-1\frac{1}{2}-2-1-2-1\frac{1}{2}-1\frac{1}{2}-3-1\frac{1}{2}
                                                                    2960
                                                                                                                                                                                                                                                                      1\frac{1}{2}-1\frac{1}{2}-\frac{1}{2}-1-1-1-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}
                                                                    2970
                                                                                                                                                                                                                                                                       1 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - 1 - 1 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2}
                                                                    2980
                                                                                                                                                                                                                                                                        \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - 1 - 1 - 2 - 1 \frac{1}{2} - 1 \frac{1}{2} - 1 - 1
                                                                    2990
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                                                                    3000
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3000 to 3010
                                                                                                                                                                                                                                                                       1-1-2-2-1-2-1-2-2-12
                                                                    3020
                                                                                                                                                                                                                                                                         \frac{1}{2} - \frac{1}
                                                                    3030
                                                                                                                                                                                                                                                                       1-2-2-1-12-12-1-12-12-1
                                                                    3040
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                                                                    3050
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                                                                    3060
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                                                                    3070
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                                                                    3080
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                                                                    3090
                                                                    3100
                                                                                                                                                                                                                                                                         1-1-1-1-1-\frac{1}{2}-\frac{1}{2}-1-1-1
                                                                                                                                                                                                                                                                         2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}
   3100 to 3110
                                                                                                                                                                                                                                                                         \frac{1}{2} - \frac{1}
                                                                     3120
                                                                                                                                                                                                                                                                         \frac{1}{2} - \frac{1}{2} - 1 - 1 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2} - \frac{1}{2}
                                                                     3130
                                                                                                                                                                                                                                                                         \frac{1}{2} - \frac{1}
                                                                      3140
                                                                                                                                                                                                                                                                         1-1-1-1-1-2\frac{1}{2}-1\frac{1}{2}-2-2-1
                                                                      3150
                                                                                                                                                                                                                                                                         1-1-2-1-13-13-1-13-1-3
                                                                      3160
                                                                                                                                                                                                                                                                          \frac{1}{2}-1-\frac{1}{2}-1-2-1-1-1\frac{1}{2}-1-1\frac{1}{2}
                                                                      3170
                                                                                                                                                                                                                                                                         1-1\frac{1}{2}-1\frac{1}{2}-2-1-1\frac{1}{2}-1-1\frac{1}{2}-1-2
                                                                      3180
                                                                                                                                                                                                                                                                         1-1-1\frac{1}{2}-1\frac{1}{2}-1-2-2-1-1\frac{1}{2}-1\frac{1}{2}
                                                                      3190
                                                                                                                                                                                                                                                                         2-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}
                                                                      3200
                                                                                                                                                                                                                                                                         1-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-1-1-2-1-1-1
   3200 to 3210
                                                                                                                                                                                                                                                                         1-2-1-1-2-2\frac{1}{2}-3-1\frac{1}{2}-1-2
                                                                      3220
                                                                                                                                                                                                                                                                         1-2-1-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-1-1\frac{1}{2}-1\frac{1}{2}
                                                                      3230
                                                                                                                                                                                                                                                                         1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-2-2-2-2-1-2
                                                                       3240
                                                                                                                                                                                                                                                                          1\frac{1}{2}-1\frac{1}{2}-2-2-1-1-\frac{1}{2}-1-1-1
                                                                       3250
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                                                                       3260
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                                                                       3270
                                                                                                                                                                                                                                                                          2\frac{1}{2}-2-\frac{1}{2}-\frac{1}{2}-1-1-1\frac{1}{2}-3-2\frac{1}{2}-2
                                                                       3280
                                                                                                                                                                                                                                                                           2-2-2-1\frac{1}{2}-3\frac{1}{2}-2-2-2-3-2
                                                                       3290
                                                                                                                                                                                                                                                                           2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2-2\frac{1}{2}-2-1-1\frac{1}{2}-2-2\frac{1}{2}
                                                                        3300
                                                                                                                                                                                                                                                                           2-2-2-2-2\frac{1}{2}-2-2-2-2-2
      3300 to 3310
                                                                                                                                                                                                                                                                           3-2-2-2-2-1\frac{1}{2}-2-1\frac{1}{2}-2
                                                                         3320
                                                                                                                                                                                                                                                                           1-2-2-1\frac{1}{2}-1\frac{1}{2}-1-1-1-1-1
                                                                         3330
                                                                         3340
                                                                                                                                                                                                                                                                           2-2-2-2-2-2-2
                                                                                                                                                                                                                                                                           2-2\frac{1}{2}-2\frac{1}{2}-2-2-3-2-2-2
                                                                         3350
                                                                                                                                                                                                                                                                           2\frac{1}{2}-3-2\frac{1}{2}-2-3-2-2-3-2-2\frac{1}{2}
                                                                         3360
                                                                                                                                                                                                                                                                           2\frac{1}{2}-2-3-2-2-3-2\frac{1}{2}-3-2-2\frac{1}{2}
                                                                         3370
                                                                                                                                                                                                                                                                            2-1\frac{1}{2}-3-2-2\frac{1}{2}-2-2\frac{1}{2}-2-2\frac{1}{2}
                                                                          3380
                                                                                                                                                                                                                                                                           2-2-3-2-2-1-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}
                                                                          3390
                                                                                                                                                                                                                                                                           2\frac{1}{2}-3-2-1-2-2-1-2-2
                                                                          3400
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3400 to 3410
                                                                   1-1-2-1-1-1-1-1-1 \frac{1}{2}-1 \frac{1}{2}
                 3420
                                                                   1\frac{1}{2}-2-1\frac{1}{2}-2-2-2-2-1\frac{1}{2}-1\frac{1}{2}
                  3430
                                                                   1-2-2-2-2-2-2-2\frac{1}{2}-1\frac{1}{2}-2-2-2\frac{1}{2}-2-1\frac{1}{2}-2
                 3440
                                                                   2-2\frac{1}{2}-2-1\frac{1}{2}-2-2-2-1-2-2
                 3450
                                                                  2-2-3-2-2-2-3\frac{1}{2}-2\frac{1}{2}-2-2
                 3460
                                                                  1-2-1-1\frac{1}{2}-1\frac{1}{2}-2-2-2-2-2
                 3470
                                                                  2-2-1-1\frac{1}{2}-2\frac{1}{2}-2-2-2-2-2\frac{1}{2}
                 3480
                                                                  2-2\frac{1}{2}-2-1-2-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2-2
                 3490
                                                                  2\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-2-2-1\frac{1}{2}-2-2-2\frac{1}{2}
                 3500
                                                                  2-2-1\frac{1}{2}-2-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}
3500 to 3510
                                                                  1-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1-1-1-1\frac{1}{2}-1\frac{1}{2}-1
                 3520
                                                                  1-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-2-2-2-1
                 3530
                                                                  1-1\frac{1}{2}-1-3-2-2-3-2-2-2
                 3540
                                                                  2-2-2-2-2-2-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-3
                 3550
                                                                  2-2-1\frac{1}{2}-1\frac{1}{2}-1-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}
                 3560
                                                                  2-2\frac{1}{2}-2-3-2-2-2\frac{1}{2}-2-2-1\frac{1}{2}
                 3570
                                                                  2-1\frac{1}{2}-1\frac{1}{2}-2-2-2\frac{1}{2}-2\frac{1}{2}-2-2-2
                 3580
                                                                  2\frac{1}{2}-2\frac{1}{2}-2-2\frac{1}{2}-2\frac{1}{2}-2-2-3-1-1
                 3590
                                                                  1-2-2\frac{1}{2}-2-2-2-1-1-1-2
                 3500
                                                                  2-2-1\frac{1}{2}-1-1-1-1-1-1-2-2
3600 to 3610
                                                                  2-1\frac{1}{2}-1-1-1-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1-2
                 3620
                                                                  2-2-2-2-2-2-1 \frac{1}{2}-1-1
                 3630
                                                                  1\frac{1}{2}-1\frac{1}{2}-1-1-1-1-1\frac{1}{2}-1-1-2\frac{1}{2}
                 3640
                                                                  2-2-2-1
                 3650
                                                                  2-2-2-2-2-2-3-2\frac{1}{2}-2
                 3660
                                                                  2-3-3-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-1-2\frac{1}{2}-2\frac{1}{2}
                 3670
                                                                  2-3-2-3-3-3-2-2-3-1
                 3680
                                                                  1-2-1-2-1-2-2-2-1-1\frac{1}{2}
                 3690
                                                                  1\frac{1}{2}-1-2-2-2-3-2-2-1-2
                 3700
                                                                  2-2-2-1-1-2-2-2-1\frac{1}{2}-1\frac{1}{2}
3700 to 3710
                                                                  1-2-1-1-2-1\frac{1}{2}-2\frac{1}{2}-2-2\frac{1}{2}-2\frac{1}{2}
                 3720
                                                                  2-2-2-2-2\frac{1}{2}-2\frac{1}{2}-2-2\frac{1}{2}-\frac{1}{2}-1
                 3730
                                                                  2-2\frac{1}{2}-1\frac{1}{2}-2-2-3-1-2-1-1
                 3740
                                                                  1-1-1-1-1 = 1 = -2 = -2-1-1-1
                 3750
                                                                  1-1-1\frac{1}{2}-1-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-1-1
                 3760
                                                                  1\frac{1}{2}-1\frac{1}{2}-1-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-2-2
                 3770
                                                                  2-2\frac{1}{2}-2-3-2-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2-3
                 3780
                                                                  3-2-2-3-1\frac{1}{2}-1\frac{1}{2}-2-1-1-2
                 3790
                                                                  1-1-1-2-2-2-5-3\frac{1}{2}-3\frac{1}{2}-4
                 3800
                                                                  3-3-2-3-2-3-2-1-3-1
3800 to 3810
                                                                  2-3-3-3-2-3-4-4-3-3
                 3820
                                                                  4-3-4-2\frac{1}{2}-3\frac{1}{2}-3-2\frac{1}{2}-3-3\frac{1}{2}-3
                 3830
                                                                  3-4-3-3-2\frac{1}{2}-2\frac{1}{2}-2-3-1\frac{1}{2}-1\frac{1}{2}
                 3840
                                                                  2-3-2-2\frac{1}{2}-1\frac{1}{2}-2-1-1-2-1
                 3850
                                                                  2-2-2-11-4-3-2-2-2
                 3860
                                                                  2-2-3-2\frac{1}{2}-2\frac{1}{2}-1\frac{1}{2}-1-1\frac{1}{2}-2-2
                 3870
                                                                  1 \cdot 2 - 2 - 1 \cdot 2 - 1 - 1 - 1 \cdot 2 - 1 \cdot 2 - 2 - 2 - 1 \cdot 3
                 3880
                                                                 1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-1-1-1\frac{1}{2}-1\frac{1}{2}
                3890
                                                                  2-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-3-2-1-2-3
                3900
                                                                  2\frac{1}{2}-3-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-4-3\frac{1}{2}-3\frac{1}{2}-2-4
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3900 to 3910
                                                          4-4\frac{1}{2}-3\frac{1}{2}-4-2-2-2-1-2
                3920
                                                           2-1\frac{1}{2}-1\frac{1}{2}-2-2-2-3-2-2-2
               3930
                                                           2-2-3-2-3-3\frac{1}{2}-4-4\frac{1}{2}-3-2
               3940
                                                           1-2-1\frac{1}{2}-2-2-2-2-2-2
               3950
                                                           2-2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}-2-2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}
                                                                                                                  CFS @ 3950.
               3960
                                                           2-3-4-3-2-2-3-3-3
               3970
                                                           3-4-4-3-4-3-4-4-2-23
               3980
                                                           3-3-2-2-2-1-2-1\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}
                                                                                                                  CFS @ 3971.
               3990
                                                          2\frac{1}{2}-2\frac{1}{2}-3-2-3-2-2-2-2\frac{1}{2}
                                                          212-2-2-2-2-2-112-112
               4000
4000 to 4010
                                                          3-2\frac{1}{2}-2\frac{1}{2}-3-3-3-4-3-3-3
                                                                                                                  CFS @ 4005. DST #1.
               4020
                                                          3-3-3-3-2-4-5-4-3-4
               4030
                                                          4-4-2-3-3-2-2-2-2
               4040
                                                          3-4-4-5-4-2-3-2-2-3
               4050
                                                          2-2-3-2-3-3-2-2-2
               4060
                                                          3-4-3-2-3-4-3-3-2-2
               4070
                                                          1-2-2-2-2-2-3-4-3
               4080
                                                          3-4-3-3\frac{1}{2}-2-2\frac{1}{2}-3\frac{1}{2}-2\frac{1}{2}-2-3
               4090
                                                          3-3-2-3-3-3-3\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}-2\frac{1}{2}
               4100
                                                          3-2-1\frac{1}{2}-2-2\frac{1}{2}-2-2-3-2-2
4100 to 4110
                                                          2\frac{1}{2} -3 -3\frac{1}{2} -4 -3 -4 -3\frac{1}{2} -3\frac{1}{2} -3\frac{1}{2} -3
               4120
                                                          2-2-3\frac{1}{2}-3-2\frac{1}{2}-4-3-2\frac{1}{2}-4\frac{1}{2}-3
               4130
                                                          5-2-3-2-2-2-2-3-3
               4140
                                                          2-2-2-2-2-3-2-4-3
               4150
                                                          3-3-3-4-3-2\frac{1}{2}-4-3-3-3\frac{1}{2}
               4160
                                                          2-3-3-4-3-3-4-3-3-4
               4170
                                                          4-3-4-3-312-312-3-3-3-312
                                                                                                                  CFS @ 4150. DST #2.
               4180
                                                          2-3-3-3-3-3\frac{1}{2}-3-3-2\frac{1}{2}-2
               4190
                                                          2-4-3-3-3-3-2-2-2
               4200
                                                          \frac{1}{2} - \frac{1}{2} - 1 - 1 - \frac{1}{2} - \frac{1}{2} - 1 - 3 - 2 - 3
4200 to 4210
                                                          3-2\frac{1}{2}-2\frac{1}{2}-2-3-3-2\frac{1}{2}-2-2\frac{1}{2}-3
               4220
                                                         2-2-2-3-3\frac{1}{2}-3\frac{1}{2}-3-2\frac{1}{2}-3\frac{1}{2}
                                                                                                                 SR @ 4219. CFS @ 4220. DST #3.
               4230
                                                         2-1-2-2-1\frac{1}{2}-2-2-2-1\frac{1}{2}
               4240
                                                         1\frac{1}{2}-1-1-1\frac{1}{2}-1\frac{1}{2}-2\frac{1}{2}-3-2-3-3
              4250
                                                         2-3-3-3-2\frac{1}{2}-2\frac{1}{2}-3-2-2-2\frac{1}{2}
              4260
                                                         2-1\frac{1}{2}-1-1\frac{1}{2}-2-3-1-2-3-3
              4270
                                                         2-3-4-3-3-3-2\frac{1}{2}-1\frac{1}{2}-\frac{1}{2}-\frac{1}{2}
              4280
                                                         3-3-3-2-2-1-2-2-3-2
              4290
                                                         2-3-2-2-3-2-3-1-1\frac{1}{2}-2\frac{1}{2}
              4300
                                                         2-3\frac{1}{2}-3-2\frac{1}{2}-3-2\frac{1}{2}-2-1\frac{1}{2}-1\frac{1}{2}-1\frac{1}{2}
4300 to 4310
                                                         1-2-1-2-2-3-3-3-3
                                                                                                                 CFS @ 4302.
              4320
                                                         3-3-3-3-2-4-2-2-2
              4430
                                                         2-2-1-1-2-1-1\frac{1}{2}-1\frac{1}{2}-2-1
              4340
                                                         2-2-1-2-1-3-2\frac{1}{2}-3\frac{1}{2}-4-3\frac{1}{2}
              4350
                                                         3\frac{1}{2}-3\frac{1}{2}-2\frac{1}{2}-2-3-3\frac{1}{2}-3\frac{1}{2}-4-2\frac{1}{2}-4\frac{1}{2}
              4360
                                                         3\frac{1}{2} - 3\frac{1}{2} - 3 - 3\frac{1}{2} - 3\frac{1}{2} - 4 - 4 - 3\frac{1}{2} - 4 - 3\frac{1}{2}
              4370
                                                         3-3-4-3\frac{1}{2}-3\frac{1}{2}-5-3-3-2-3\frac{1}{2}
              4380
                                                         2\frac{1}{2}-2\frac{1}{2}-3\frac{1}{2}-3-4-3-4-3\frac{1}{2}-3\frac{1}{2}-3
              4390
                                                         3-3\frac{1}{2}-3-2\frac{1}{2}-3-3-4-4-4-4-3\frac{1}{2}
              4400
                                                         5\frac{1}{2}-4-4-5\frac{1}{2}-4-4-4\frac{1}{2}-4-3\frac{1}{2}-3\frac{1}{2}
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4400 to 4410
                                                                                                                               4-4\frac{1}{2}-3\frac{1}{2}-4-3-3-3-3-4-3\frac{1}{2}
                                 4420
                                                                                                                               3\frac{1}{2} - 3 - 3\frac{1}{2} - 3\frac{1}{2} - 3\frac{1}{2} - 3\frac{1}{2} - 3 - 3 - 4 - 4\frac{1}{2}
                                 4430
                                                                                                                               41-41-4-4-4-4-4-31
                                 4440
                                                                                                                               3\frac{1}{2}-4-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}
                                 4450
                                                                                                                               4-42-42-42-42-42-42-42-43-43
                                 4460
                                                                                                                               4\frac{1}{2}-4-5-4-5-4-4-4\frac{1}{2}-6\frac{1}{2}-4
                                                                                                                                                                                                                                                         CFS @ 4451. DST #4.
                                 4470
                                                                                                                               3-4-43-4-3-4-3-33-23
                                 4480
                                                                                                                               4490
                                                                                                                               3\frac{1}{2}-4-4\frac{1}{2}-4-3\frac{1}{2}-4\frac{1}{2}-3-3-4-3\frac{1}{2}
                                                                                                                                                                                                                                                        CFS @ 4486.
                                4500
                                                                                                                               4-4-4-21-41-21-31-4-4-4
                                                                                                                                                                                                                                                        CFS @ 4495.
 4500 to 4510
                                                                                                                               2\frac{1}{2}-2\frac{1}{2}-3-3-\frac{1}{2}-\frac{1}{2}-1-1-1-1
                                4520
                                                                                                                               1-4-3-3-4-3\frac{1}{2}-5\frac{1}{2}-4-4\frac{1}{2}-4\frac{1}{2}
                                                                                                                                                                                                                                                        CFS @ 4512. DST #5.
                                4530
                                                                                                                               4-4-4-5-3-4-3}-5-5-6
                                4540
                                                                                                                              3\frac{1}{2}-5-5-3\frac{1}{2}-3-2-5-3\frac{1}{2}-4-5
                                                                                                                                                                                                                                                        CFS @ 4540.
                                4550
                                                                                                                               4-4-3-32-32-3-4-42-4-4
                                                                                                                                                                                                                                                        CFS @ 4550.
                                4560
                                                                                                                              3\frac{1}{2}-4-4\frac{1}{2}-4\frac{1}{2}-4\frac{1}{2}-3\frac{1}{2}-5-5-4-4
                                4570
                                                                                                                              5-5-4\frac{1}{2}-4\frac{1}{2}-4-4\frac{1}{2}-4-4-4-3\frac{1}{2}
                                4580
                                                                                                                              41-41-41-514-4-4-4-4
                                                                                                                                                                                                                                                        CFS # 4576. DST #6.
                                4590
                                                                                                                              4600
                                                                                                                              4\frac{1}{2}-4\frac{1}{2}-4-4-3\frac{1}{2}-3\frac{1}{2}-4-3-3\frac{1}{2}-3\frac{1}{2}
 4600 to 4610
                                                                                                                              3\frac{1}{2}-4-3\frac{1}{2}-4-4-4-4\frac{1}{2}-3\frac{1}{2}-4-4
                                4620
                                                                                                                              5-3-4-3\frac{1}{2}-3\frac{1}{2}-3-2\frac{1}{2}-3-3-2\frac{1}{2}
                                4630
                                                                                                                              2-2\frac{1}{2}-3-4\frac{1}{2}-4-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}
                                                                                                                              4-4-4-42-4-4-4-432
                                4640
                                                                                                                                                                                                                                                        CFS @ 4636.
                                4650
                                                                                                                              4-4-3-3-33-33-4-4-33-3
                                4660
                                                                                                                              3-2\frac{1}{2}-2\frac{1}{2}-3-3-3\frac{1}{2}-4-3-3-3
                                4670
                                                                                                                              3\frac{1}{2}-3-1\frac{1}{2}-2-3\frac{1}{2}-4-4-1-4-4
                                4680
                                                                                                                              41-5-5-5-5-4-5-3-2-41
                                                                                                                                                                                                                                                        CFS @ 4675.
                                4690
                                                                                                                              3\frac{1}{2}-4-4\frac{1}{2}-4-4-4-4\frac{1}{2}-3-\frac{1}{2}4-5
                                4700
                                                                                                                              3\frac{1}{2}-4-4\frac{1}{2}-4-4-4-4-4-4-4
                                                                                                                                                                                                                                                           CFS @ 4700.
4700 to 4710
                                                                                                                             4\frac{1}{2}-5\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-4-4-4-4-4\frac{1}{2}-3
                                4720
                                                                                                                              5-2\frac{1}{2}-2-2-2-2-4-4\frac{1}{2}-5-4\frac{1}{2}
                                4730
                                                                                                                             4 1 - 5 - 5 - 4 - 4 - 4 - 4 1 - 4 - 4 1 - 4
                                4740
                                                                                                                             4-41-4-4-4-4-4-4-4
                               4750
                                                                                                                             2-4-4-3\frac{1}{2}-3\frac{1}{2}-4\frac{1}{2}-4\frac{1}{2}-3-4-4
                                4760
                                                                                                                             5-5-4-5-5-5\frac{1}{2}-3\frac{1}{2}-4-3\frac{1}{2}-4\frac{1}{2}
                                4770
                                                                                                                             4\frac{1}{2}-4-4\frac{1}{2}-3\frac{1}{2}-3\frac{1}{2}-4-2-\frac{1}{2}-8\frac{1}{2}-3
                                4780
                                                                                                                             1-2-4-3-3-3-3-3-4-3
                               4790
                                                                                                                             4-3-3-3-3-3-3-3-3
                                4800
                                                                                                                             3-4-3-4-4-4-4-3\frac{1}{2}-3\frac{1}{2}-4
                                                                                                                                                                                                                                                  CFS @ 4800. RTD @ 4800.
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