

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1071142

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #_	31725		API No. 15 - 15-145-21642-00-00
Name: Shelby Reso			Spot Description:
Address 1: 2717 Canal E	Blvd.		NW_NE_SE_NE_Sec7 Twp22 S. R16 ☐ East West
Address 2: Suite C			
City: HAYS		o: 67601 +	635 Feet from 🗹 East / 🗌 West Line of Section
Contact Person: Chrls G		 	Footages Calculated from Nearest Outside Section Corner:
Phone: (785) 623-	1524		☑ NE □NW □SE □SW
CONTRACTOR: License #	5142		County: Pawnee
Name: Sterling Drilling			Lease Name: Eakin Well #: 4-7
Wellsite Geologist: Charlie	Sturdavant		Field Name; Wildcat
Purchaser:		····	Producing Formation: Arbuckle
Designate Type of Comple	lion:		Elevation: Ground: 2007 Kelly Bushing: 2018
New Well	Re-Entry	Workover	Total Depth; 4025 Plug Back Total Depth:
☑ □ □ ws	w 「Iswo	⊓ slow	Amount of Surface Pipe Set and Cemented at: 1027 Feet
☐ Gas ☐ D&/	=	☐ sigw	Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
□ og	☐ GSW	Temp. Abd.	If yes, show depth set:Feet
CM (Coal Bed Metha	ne)		If Alternate II completion, cement circulated from:
Cathodic COth	er (Core, Expl., etc.):	·	feet depth to:w/ sx cmt.
If Workover/Re-entry: Old	Well Info as follows:		W/ SX GHL
Operator:			
Well Name:	 		Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date:	Original To	otal Depth:	Chloride content: 3500 ppm Fluid volume: 3000 bbls
Deepening	Re-perf. 🔲 Conv. to	ENHR Conv. to SWD	•
	Conv. to	GSW	Dewatering method used: Evaporated
Plug Back:	Plu	g Back Total Depth	Location of fluid disposal if hauled offsite:
☐ Commingled	Permit #:		Operator Name:
Dual Completion	Permit #:		Lease Name: License #:
☐ SWD	Permit #:		
☐ ENHR			QuarterSecTwpS. R East West
☐ GSW	Permit #:		County: Permit #;
	06/19/2011	07/13/2011	
Spud Date or D Recompletion Date	ate Reached TD	Completion Date or Recompletion Date	

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regutations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
Letter of Confidentiality Received
Date;
Confidential Release Date:
☑ Wireline Log Received
☑ Geologist Report Received
UIC Distribution
ALT II II Approved by: Dearns Garrison Date: 01/27/2012

Side Two



3892-3900

_ Lease Name: Eakin Operator Name: Shelby Resources LLC __ Well #: __4-7 Sec. 7 Twp.22 S. R. 16 East West County: Pawnee INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wireline Logs surveyed. Attach final geological well site report. Loa ✓ Sample ✓ Yes No Formation (Top), Depth and Datum **Drill Stem Tests Taken** (Attach Additional Sheets) Name Datum Top ✓ Yes No Samples Sent to Geological Survey Topeka 3144 -1128 ✓ Yes □ No. Cores Taken -1416 Heebner 3432 ✓ Yes \[
☐ No Electric Log Run 3546 -1530 Lansing **Electric Log Submitted Electronically** Base KC 3796 -1780 (If no, Submit Copy) 3808 -1792 Marmaton List All E. Logs Run: 3891 -1875Arbuckle Attached TD 4025 -2009 CASING RECORD ✓ New Used Report all strings set-conductor, surface, intermediate, production, etc. Size Hole Size Casing Weight Setting Type of # Sacks Type and Percent Purpose of String Set (In O.D.) Lbs. / Ft. Depth Used Additives Surface 12.25 8.625 23 1027 60/40 Poz 415 2%gel, 3% cc AA2 Production 7.875 5.5 15.5 4000 200 2%gel, 3% cc ADDITIONAL CEMENTING / SQUEEZE RECORD Purpose: Depth Type of Cement # Sacks Used Type and Percent Additives Top Bottom Perforate Protect Casing 3921-3924 AA2 50 2% cc Plug Back TO ___ Plug Off Zone PERFORATION RECORD - Bridge Plugs Set/Type Acid, Fracture, Shot, Cement Squeeze Record Shots Per Foot Specify Footage of Each Interval Perforated (Amount end Kind of Material Used) Depth 4 3921-24 Saeezed with 50 sx 4 3867-72 250 gal 15% acid 3892-3900 3 500 gal 15% acid TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ No Yes Yes 3993 2.375 Date of First, Resumed Production, SWD or ENHR. **Producing Method:** 07/14/2011 Flowing ✓ Pumping Gas Lift Other (Explain) . **Estimated Production** Oil Bbls. Gas Mcf Water Bbls. Gas-Oll Ratio Gravity Per 24 Hours 20 8 METHOD OF COMPLETION: **DISPOSITION OF GAS:** PRODUCTION INTERVAL: Open Hole Perf. Dually Comp. Commingled 3867-72 ☐ Vented ☐ Sold ☐ Used on Lease (Submit ACO-5) (Submit ACO-4)

Other (Specify)

(If vented, Submit ACO-18.)

Form	ACO1 - Well Completion	
Operator	Shelby Resources LLC	
Well Name	Eakin 4-7	
Doc ID	1071142	

All Electric Logs Run

Dual Induction		
Comoensated Neutron		
Sonic		
Micro	-	
Cement Bond		



energy services, LP

TREATMENT REPORT

	<u> </u>											
Customer **	FLBY K	E SUL RC	E5	Lease No.					Date			
	AKIN			Well #	4-		77	a.	6	- 19-	<i>2011</i>	
Field Order #	Station	KATT	Ks.			Casing /	" Depth	200	County	PAWNEE		State K5.
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1024	4 NE Hiv	vay 61 • I	P.O. Box	8613	• Pra	itt, KS 6	7124-86	13 • (62	0) 672	2-1201 • Fa	ix (620)	672-5383

Taylor Printing, Inc. 620-672-3658

ALLIED CEMENTING CO., LLC. 039744

	AV 11				SER	ICE POINT:	
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SIGNATURE __

ALLIED CEMENTING CO: LLC. 036768

REMIT TO P.O. E RUSS		NSAS 6766			SERV	ICE POINT:	BEND
DATE 6-10-11	SEC.	TWP. 225	RANGE/6W	CALLED OUT	ON LOCATION	6:00 PM	10B FINISH 6:30 An
LEASEAKIN :	WELL#	4-11		ENZO-MAIN	7.+56	COUNTY	KANSAS
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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

CHARGE TO: CAPTIVA II

CITY_____STATE ____ZIP_

STREET _____



Eakin #4-7/Casing Report

API# 15-145-21642-0000

2005

2016'

GL:

KB:

NW-NE-SE-NE 1580' FNL & 607' FEL Sec. 7, T22s-R16w Pawnee County, Kansas

6/11/2011 Surface Casing

Spud at 8:45 p.m. on 6/8/11. Drill 12¼" hole to 1032'. Ran 24 joints of new 8. 5/8"-23# casing, tallied 1014' and set at 1027 KE. Cemented by Allied Cementing (ticket #036768) with 415sx 60/40 Poz 2% gel, 3% CC. Plug down at 6:30 p.m. Welded straps on the bottom 3 joints, welded collars on the next two and welded straps on the top 5 joints. Cement did circulate. Job complete at 6:30 p.m. on 6/11/11

6/8/11 **Production Casing**

On location @ 5:00 a.m. RIH with drill pipe and condition the hole. Laying down drill pipe and collars, Begin running moints 5 % (15.5#) 1-55 49 new joints and used easing (from inventory). Shoe joint was 20.99'. Insert @ 3965.12'. Marker joint was 8 joints off bottom and measured 21.21'. Set easing @ 3993.13' Etc. Landed casing 9' off RTD 4002' and LTD, 3994'. Ran a basket and insert on top of #1 and centralizers on #3, #5, #7, #9, and #11. Landed casing @ 11:15 a.m. (6/7/11) Circulate hole for 60 minutes to lower viscosity in mud. RU Basic Services (ticket #4357), plug RH with 30 sx. and MH with 20 sx.

Had good circulation throughout the job. Plug down @ 1:00 p.m. and held 1500#. Release pressure and float held. Release Sterling Rig #2 @ 2:00 p.m.

Scale 1:240 Imperial

Well Name: Eakin #4-7

Surface Location: 1580' FNL, 607' FEL Sec 7-T22S, R16W

Bottom Location:

API: 15-145-21642-00-00

License Number:

Spud Date: 6/8/2011 Time: 8:45 PM

Region: Pawnee County

Drilling Completed: 6/18/2011 Time: 10:38 AM

Surface Coordinates: 542704 & 18222941

Bottom Hole Coordinates:

Ground Elevation: 2005.00ft K.B. Elevation: 2016.00ft Logged Interval: 2900.00ft

Logged Interval: 2900.00ft To: 4026.00ft

Total Depth: 4025.00ft Formation: Arbuckle

Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Captiva II, LLC

Address: 445 Union Blvd., Suite 208

Lakewood, CO 80228

Contact Geologist: Janine M. Sturdavant

Contact Phone Nbr: 303-907-2209 Well Name: Eakin #4-7

Location: 1580' FNL, 607' FEL Sec 7-T22S, R16W API: 15-145-21642-00-00

Pool: Wildcat

State: Kansas Country: USA

Field:

LOGGED BY



Company: Charlie Sturdavant Consulting

Address: 920 12th Street

Golden, CO 80401

Phone Nbr: 303-907-2295----303-384-9481

Logged By: Geologist Name: Charlie Sturdavant

NOTES

The Captiva II # 4-7 Eakin Unit well was drilled to a LTD of 4026', bottoming in the Arbuckle. A Tooke DAQ gas detector was employed during the drilling of all prospective formations. Gas was noted in the Simpson Sand, but equipment problems precluded reliable gas detection in the Arbuckle. The Arbuckle (and Simpson Shale) were cored from 3876' to 3964', in three separeate runs. Oil shows were noted from the top of the Arbuckle to at least 3935'. Aluminum core tubes were used to protect formation fluids, and they were cut into 3' sections. The interval 3935'-3938' had shows of oil in the top, but none in the bottom.

Two stradle tests of the Arbuckle were attempted, but the packers failed to seat, and no fluid was recovered.

One drill stem test was conducted successfully in the Simpson sand, yielding 850' GIP, 360' CGO, and 1275' GMO.

Based on core analysis, log analysis, and a favorable DST, it was determined by all parties involved, that production casing should be run, and that the Arbuckle should be further tested through perforations.

The dry samples were saved and will be available for review at the Kansas Geological Survey well sample library, located in Wichita, Kansas.

Resprctfully submitted,

Well Comparison Sheet

Charlie Sturdavant Consulting

WELL COMPARISON SHEET

		DRILLING W	/ELL			COMPARI	SON WELL			COMPARIS	SON WELL		
		Captiva II #4-	7 Eakin Un	it	Captiva II #1-7 Eakin Unit				c	Captiva II #3-7 Eakin Unit			
		1580' FNL &	607' FEL			2676' FNL & 423' FEL				1238' FNL	& 1780 FE	L	
		Sec. 7, T229		Sec. 7, T22	2S R16W			Sec. 7, T22	2S R16W				
			1		Struc	tural			Struc	turel			
	2016	KB			2018	KB	Relatio	nship	2017	KB	Relatio	onship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	
Anhydrite	1000	1016	1010	1006	1015	1003	13	3	1006	1011	8	-5	
Topeka*	3144	-1128	3144	-1128	3140	-1122	-6	-6	3140	-1123	-5	-5	
Heebner	3432	-1416	3431	-1415	3428	-1410	-6	-5	3426	-1409	-7	-6	
Toronto	3450	-1434	3453	-1437	3442	-1424	-10	-13	3442	-1425	49	-12	
Douglas	3472	-1456	3471	-1455	3464	-1446	-10	.9	3461	-1444	-12	-11	
Brown Lime	3537	-1521	3537_	-1521	3527	-1509	12.	-12	3526	-1509	-12	-12	
Lensing	3546	-1530	3545	1529	3536	-1518	-12	-11	3534	-1517	-13	-12	
Muncie Creek	3673	-1657	3674	-1658	3664	-1646	-11	-12	3659	-1642	-15	-16	
Stark Shale	3740	-1724	3743	-1727	3729	-1711	-13	-16	3731	-1714	-10	-13	
Base KC	3796	-1780	3798	-1782	3792	-1774	-6	8	3786	-1769	-11	-13	
Marmaton	3808	-1792	3812	-1796	3804	-1786	4	-10	3800	-1783	9	-13	
Conglomerate	3817	-1801	3832	-1816	3822	-1804	3	-12	3820	-1803	2	·13	
Arbuckle	3891	-1875	3891	-1875	3883	-1865	·10	-10	3866	-1849	-26	-26	
Total Depth	4025	-2009	4026	-2010	4000	-1982	-27	÷8	4000	-1983	-26	-27	

Daily Drilling Report

Charlie Sturdavant Consulting

DAILY DRILLING REPORT

Company:

Charlie Sturdavant Consulting

920 12th Street Golden, CO 80401 Well: #4-7 Eakin Unit

Location: 1580' FNL & 607' FEL

Sec. 7 T22S R16W Pawnee County, KS

Captiva II Jim Waechter Office: 303-274-4682 Cell: 303-478-3388

Wellsite Geologist: Charlie Sturdavant

Cell: (303) 907-2295 Office: (303) 384-9481 Elevation: 2016' KB 2005' GL

Field: Wildcat

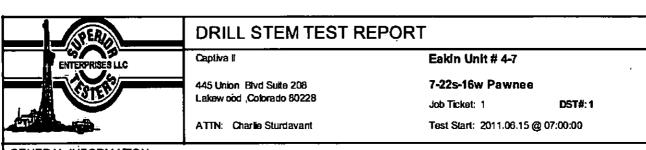
API No.: 15-145-21642-0000

Surface Casing: 8 5/8" set @ 1027' KB

Drilling Contractor: Sterling Drilling Rig #2 620-388-5651, Tool Pusher: Shane Downs, cell: 620-388-3474

DATE	7:00 AM DEPTH	REMARKS
6/8/2011	0 ft.	Will be moving into location. Spud @ 1645 hrs.
6/9/2011	380 ft.	Drilling ahead w/ RR JZ 12-1/4" bit.
6/10/2011	1002 ft.	Tripping for new bit.
6/11/2011	1032 ft.	WOC. Set 8-5/8" surface casing @ 1027".
6/12/2011	1948 ft.	Drilling ahead.
6/13/2011	2675 ft.	Drilling ahead.
6/14/2011	3345 ft.	Drilling ahead. Geologist on location at 0900 hrs.
6/15/2011	3803 ft.	Drilling ahead in the Lansing. Conducting DST # 1 in the Simpson Sand.
6/16/2011	3876 ft.	Preparing to core.
6/17/2011	3916 ft.	Laying down core # 2, 3890'-3915'. It is bleeding oil at the cut ends.
6/18/2011	3964 ft.	Begin drilling after CTCH. Cored 3915'-3963' last night.
6/19/2011	4026 ft.	Tripping out of hole, laying down pipe. Preparing to run casing. Two attempts to run DST #2 resulted in packer seat failures. Geologist off location @ 1000 hrs.

Drill Stem Test # 1



GENERAL INFORMATION:

Formation: Simpson Sand

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (hitial)

Time Tool Opened: 09:12:30 Tester: Gene Budig
Timo Test Ended: 15:20:00 Unit No: 3335-48

Interval: 3790.00 ft (KB) To 3876.00 ft (KB) (TVD) Reference Elevations: 2016.00 ft (KB)

 Total Depth:
 3876.00 ft (KB) (TVD)
 2005.00 ft (CF)

 Hole Diameter:
 7.88 inches Hole Condition: Fair
 KB to GR/CF:
 11.00 ft

Serial #: 8525 Outside

 Press@RunDepth:
 721.66 psia
 @ 3873.34 ft (KB)
 Capacity:
 5000.00 psia

 Start Date:
 2011.06.15
 End Date:
 2011.06.15
 Last Calib.:
 2011.06.16

Start Time:

07:00:00

End Time:

15:20:00

15 Minutes-Fair blow built to the bottom of a 5 gallon bucket in 9 minutes

Time On Bim

Time Off Btm:

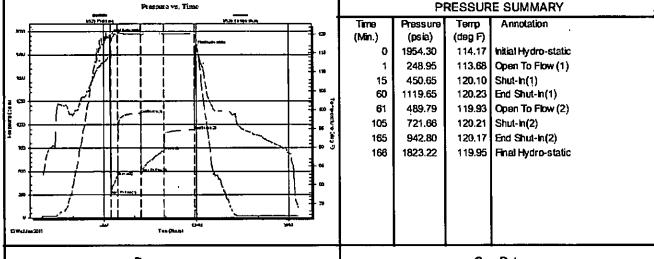
2011.08.15 @ 09:12:00 2011.06.15 @ 11:57:30

TEST COMMENT: 1st Opening

45 Minutes--fair blow back 1st Shut-in

2nd Öpening 45 Minutes-Fair blow built to the bottom of a 5 gallon bucket in 3 minutes

2nd Shut-In 60 Minutes-Fair blow back



Recovery Length (It) **Description** Volumé (bbl) 850.00 10.24 Gas in the pipe 425.00 muddy gassy oil 5.96 0.00 0.00 20%Gas 65% Emúlsified Oil 15% Water 425.00 Muddy gassy oil 5.98 20%Gas 70%Emulsified oil 10%Water 0.00 0.00 425.00 5.96 Muddy Gassy oil

Gas Rates

Chole (inches) Pressure (psiz) Gas Rate (Mct/d)

Superior Testers Enterprises LLC

Ref. No: 1

Printed: 2011.06.16 @ 01:09:25

SURFACE CO-ORDINATES

Well Type:

Vertical

Latitude:

Longitude: N/S Co-ord: E/W Co-ord:

542704 18222941

CONTRACTOR

Contractor:

Sterling Drilling Company

Rig #:

2

Rig Type: Spud Date: mud rotary

6/8/2011

Time: Time:

8:45 PM 10:38 AM

6/18/2011 TD Date:

Time:

ELEVATIONS

K.B. Elevation:

Rig Release:

2016.00ft

Ground Elevation:

2005.00ft

K.B. to Ground:

11.00ft

ROCK TYPES



Chtcongl // Dolsec



Lmst fw<7 Lmst fw7> shale, gm



Shgy shale, gry Carbon Sh

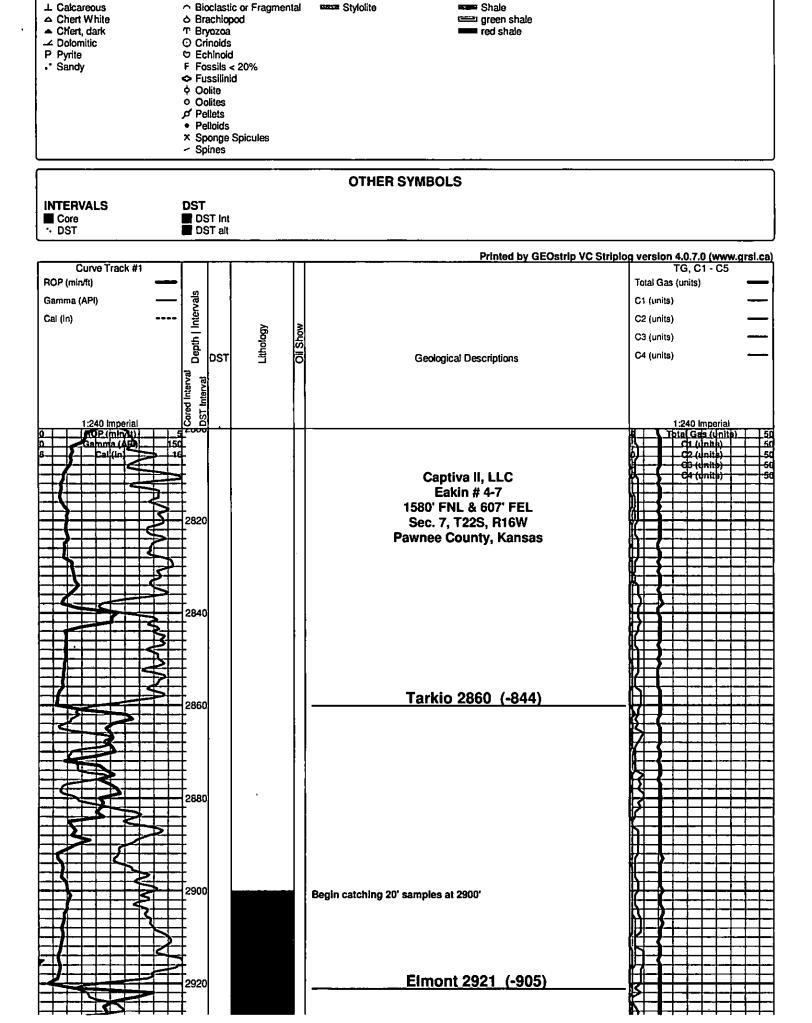


shale, red Shool

ACCESSORIES

RAINICOAL EVEGII

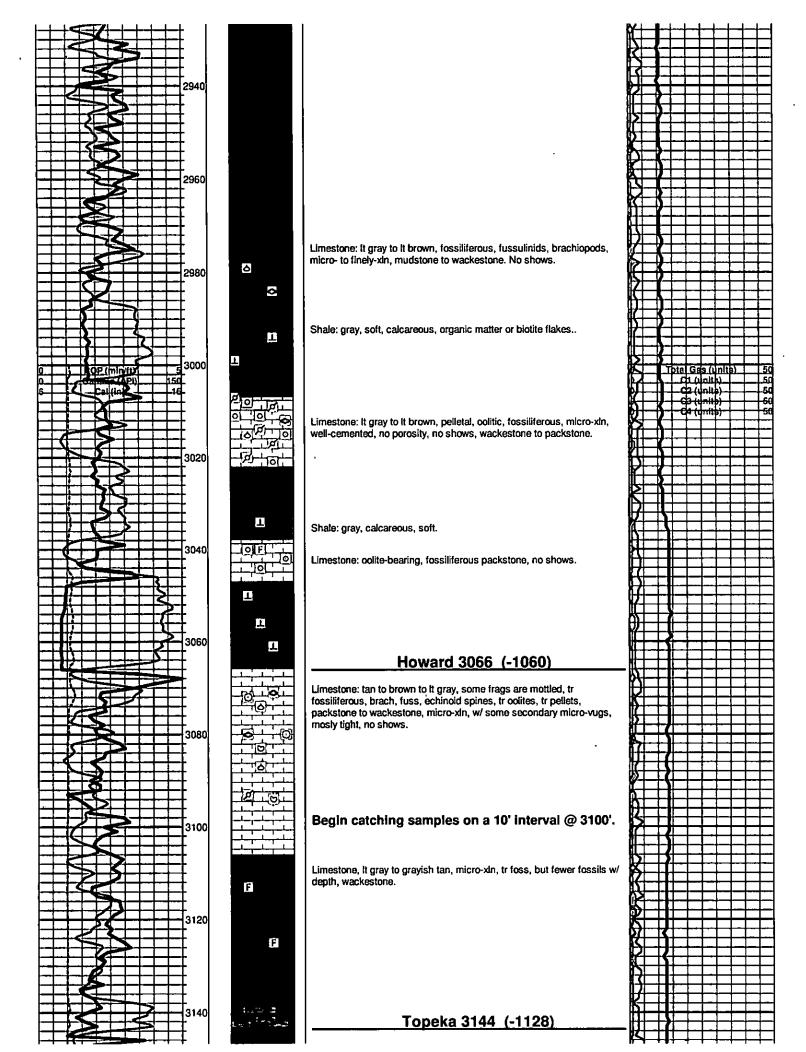
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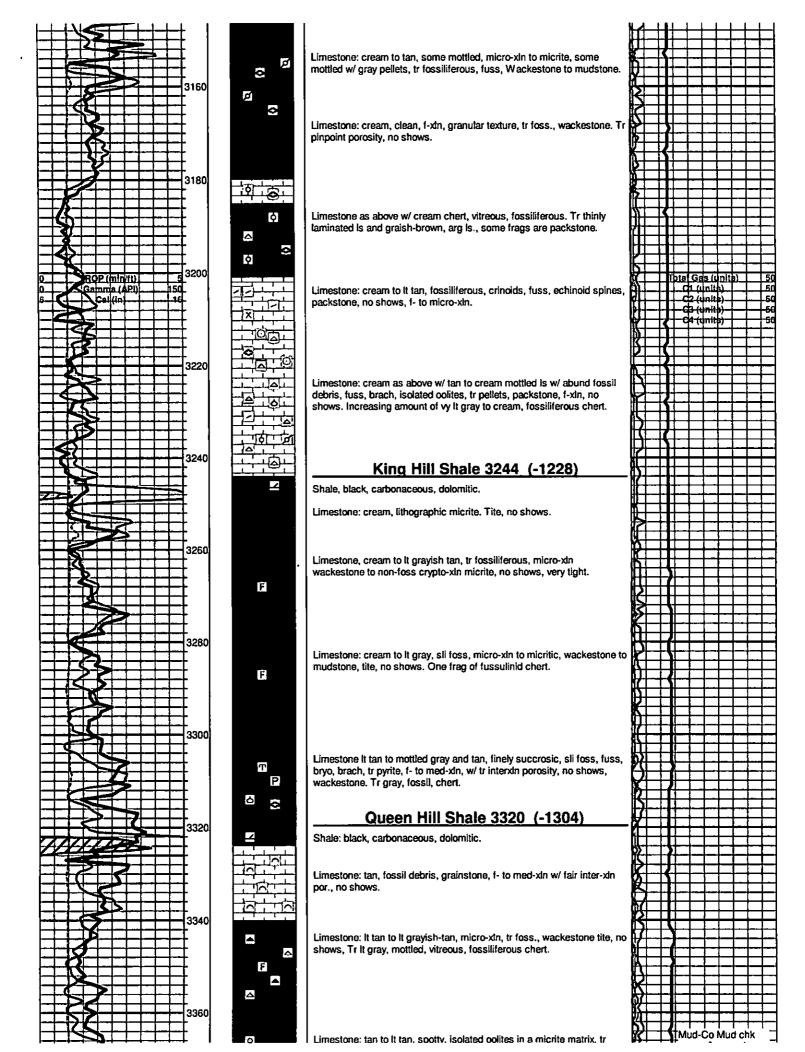


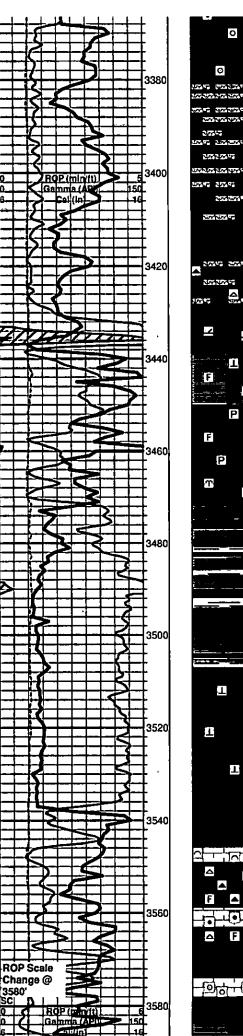
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WHITEDAL

FUGGIL







CANADA MARTIN WAY WAY \$ 4

stylolites, tite, no shows.

Limestone: cream to tan to It brown, crypto- to micro-xin, stylolitic micrite/mudstone. Very tite, no shows.

Limestone: cream to It tan, lithographic, stylolitic micrite. Tite, no shows.

Limestone as above w/ tt gray to grayish-white mottled, fossiliferous, vitreous chert, conchoidal fractures.

Heebner 3432 (-1416)

Black shale: carbonaceous, dolomitic.

Limestone: gray, fossiliferous, fuss, brach, pyrite, tite, no shows.

Shale, gray, it greenish-gray, brown, waxy, calc., tr foss.

Toronto 3450 (-1434)

Limestone: It brown, tr foss, vf- to crypto-xin, wackestone to mudstone, pyritic.. Tight, no shows.

Limestone, cream, tr fossiliferous, bryo., clean sti fossiliferous, f-xln, wackestone to crypto-xln, sli lithographic micrite, all is pyritic, no shows, despite having fair inter-xin porosity in the more coarsely-xin rock.

Douglas 3472 (-1456)

Shale: gray, it gray it greenish-gray, brown, maroon, it tan, some fragments are waxy, calcareous to dolomitic, soft. dark organic streaks in the gray shale.

Shale: predominantly gray, calcareous and soft with depth.

Brown Lime 3537 (-1521)

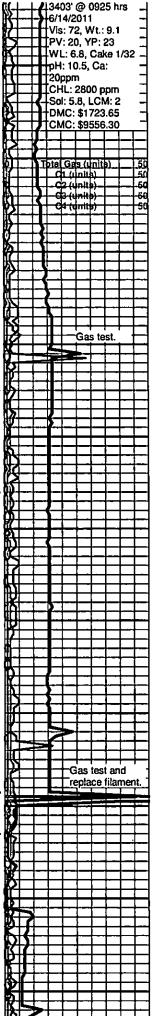
Limestone: brown, sli fossiliferous, crypto-xln matrix w/ sparry patches, wackestone to mudstone.

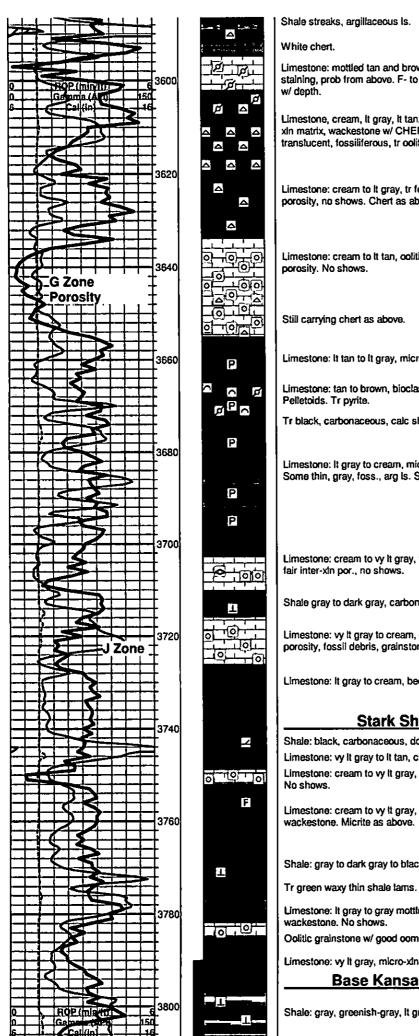
<u> Lansing 3546 (-1530)</u>

Limestone: cream, fossil debris, fuss., grainstone to packstone, vf-xln groundmass, ranging into micrite. Tite, no shows. Chert: fossiliferous, vy lt gray to cream to white, vitreous, translucent, conchoidal fractures.

Limestone as above w/ darker colors, It brown, tan It gray, f- to microxln, sparry calcite, seems to be a mix of textural types, mottled cream and gray pelletal packstone, chert as above,

Limestone: cream, colitic grainstone w/ good inter-colitic porosity, spotty oil staining, bright yellow fluor, instant streaming cut, good odor. Grades down into micrite.





Limestone: mottled tan and brown, pelletal packstone. Some frags w/ oil staining, prob from above. F- to micro-xlm matrix. Becomes wackestone

Limestone, cream, It gray, It tan, sli fossiliferous, tr fossil frags, microxin matrix, wackestone w/ CHERT! Lt gray to cream to it tan, amber, translucent, fossiliferous, tr oolitic, spicular, vitreous, abundant.

Limestone: cream to it gray, tr foss., micro- to crypto-xin mudstone, no porosity, no shows. Chert as above, not as abundant.

Limestone: cream to it tan, oolitic grainstone w/ excellent oomoldic

Limestone: It tan to It gray, micro-xln, mudstone, tr pyrite, no shows.

Limestone: tan to brown, bioclastic wackestone to packstone.

Tr black, carbonaceous, calc shate.

Limestone: It gray to cream, micro- to crypto-xin mudstone, tr pyrite. Some thin, gray, foss., arg Is. Some thin gray shale laminations.

Limestone: cream to vy lt gray, fossil debris, fuss., tr oolites, packstone,

Shale gray to dark gray, carbonaceous, calcareous, soft.

Limestone: vy lt gray to cream, oolitic, well-cemented to fair inter-oolite porosity, fossil debris, grainstone to packstone. No shows.

Limestone: It gray to cream, becomming micritic w/ depth.

Stark Shale 3740 (-1724)

Shale: black, carbonaceous, dolomitic.

Limestone: vy lt gray to lt tan, crypto-xin micrite.

Limestone: cream to vy lt gray, oolitic grainstone w/ inter oolite porosity.

Limestone: cream to vy tt gray, fossil debris in a vf-xln matrix, wackestone. Micrite as above.

Shale: gray to dark gray to black, calcareous, fossil frags. Tr pyrite.

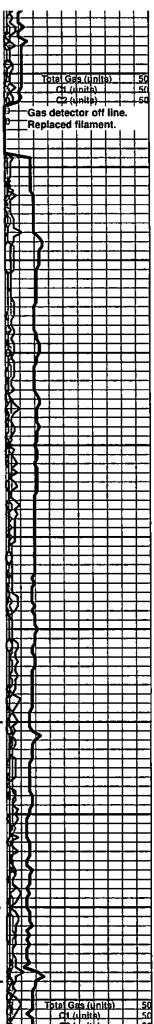
Limestone: It gray to gray mottled, tr foss., dark organic specks. F-xin,

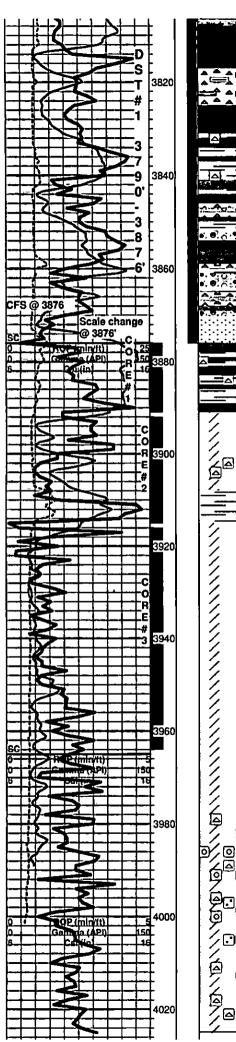
Oolitic grainstone w/ good oomoldic porosity.

Limestone: vy lt gray, mlcro-xin mudstone, tite, no shows.

Base Kansas City 3796 (-1780)

Shale: gray, greenish-gray, It gray, calcareous, soft.





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Limestone: tan to It brown, mottled, f-xln, tr sparry calcite, fair inter-xln porosity, no shows.

Conglomerate: orange to amber, vitreous chert, vy lt greenish-gray

Vari-colored shales: It greenish-gray, maroon, It gray, gray, brown. Cherl as above.

Vari-colored shales as above with It green, waxy shale.

Pyrite in some orange is frags.

Cherty, Ilmey, shaley conglomerate.

Mixed lithology conglomerate, limestones, vari-colored cherts and shales as noted above.

Sandstone: It brown (due to oil staining), qtz-rich/qtz arenite, f- to medgr, sub-rounded grains, well-sorted, saturated w/ oil, good porosity, the overlying conglomerate rock is also saturated with oil. Bright yellow, instant streaming cut. One fragment has grains of pyrite. Orange grains in one ss fragment, chert or orthoclase. Some fragments are laminated w/ thin vy it greenish-gray shale.

Core #1, 3876'-3891': Red and greenish-gray shale fragments in green and red mud. Core barrel plugged with conglomerate clay.

Arbuckle 3891 (-1875)

3895'-3900 sample has vf-succrosic dolo, cream w/ oil stalning in fair inter-xin porosity.

Dolomite: cream to white to tan, f- to vf-xln, succrosic, saturated with oil, bright yellow fluor., good to instant streaming cut, thin laminations of bright green shale. Chert: white to vy It gray, oolitic to fossiliferous, opaque, vitreous, conchoidal fracturing, spotty oil stainning on weathered surfaces.

Core tube ends show green shale with subordinate gray shale from 3908-3915.

> See core descriptions below. Core #2: 3891'-3915' Core #3: 3915'-3964'

Dolomite: It tan, succrosic, f- to vf-xln, fair inter-xln porosity in the more coarsely xin parts, mudstone. No shows.

Dolomite as above w/ tr chert: white to tan, translucent, vitreous. No shows. Tr micrite.

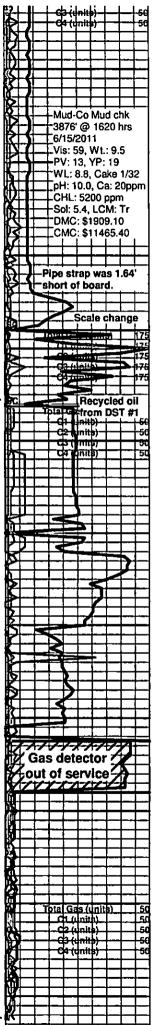
Dolomite as above w/ an increasing amount of chert as above. Some of the chert is oolitic.

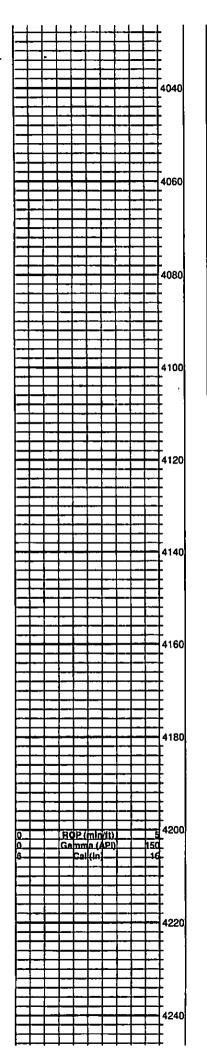
Dolomite: Lt tan, med-xln succrosic to micrite, some frags are arenaceous. White, tripolitic chert, tr aqua-green shale. No shows. Dolomite: cream to It tan, micro- to med-xln, fair to good porosity, tr oolitic dolo, tr of small vugs, Chert as above w/ opaque white vitreous to tripolitic (weathered), tr aqua-green shale laminations, no shows.

Dolomite: as above, med-xin to micrite, w/ vari-colored chert: tan to brown, red, white, translucent to opaque, vitreous. Tr black waxy shale. Some doto frags have intact chert. No shows. No oolites.

Dolomite as above w/ evidence of large vugs: coarse drusy coating on micrite. No shows.

RTD 4025 (-2009)





Rotary TD 4025' @ 1025 hrs, 6/18/2011 Superior Well Services Logging TD Complete logging operations 2000 hrs 6/18/2011

Geologist: Charlie Sturdavant off location @ 0900 hrs. 6/19/2011

Core #2 description: 3890'-3915'

Chips were collected at the end of each 3' core tube. The core was left in the tube to preserve as much of the fluid as possible. The descriptions are of the botom of the 3' section of core. 3890'-3893': top was muddy Simpson shale. The bottom was dolomite w/ bleeding oil. Dolomite: brown, stained w/ oil, patches of white non-stained, succrosic texture (0.1-0.5mm rhombs), fair inter-xin porosity, tr aqua-green shale specks w/in the dolo. Strong oil aroma, weak, dull yellow flour, and slow, bright yellow cut.

3893'-3896': Dolomite fragments, bleeding oil, encased in green shale. Dolomite: Micro-xln w/ fractures and small/micro-vugs with bleeding oil and staining, stylolite/compaction features between doto frags and shale. Algal, endolithic lichen, or bacterial encrustations on dolo frags. Predominantly dolomite.

3896"-3899": Lithoclasts of dolomite, free-floating in aqua-green shale, "collapse breccia". Dolomite: Lt tan succrosic micro-xin to crypto-xin w/darker brown rims (oil staining or authigenic lichens). Micro-vugs have free oil and staining of the host rock for< 1 mm.

3899'-3902': More "collapse breccia" w/ dolomite lithoclasts floating in green shale/mud. Thin layers of black, organic shale. Dolomite: It grayish-tan, succrosic micro-xin mixed w/ micrite, streaks of darker laminations that may be fractures. Thin layers of secondary pyrite and specks of pyrite in the dolo. No oil odor, staining or fluor in this sample.

3902'-3905': Dolomite: It greeinsh-gray, micro-xin succrosic, w/ dissolution along micro-fractures. Fractures are stained w/ oil and some have authigenic pyrite. Tr of aqua-green shale.

3905'-3908': Aqua-green to green shale.

3908'-3911': Green shale at top, black, waxy, shiney soft shale at bottom.

3911'-3915': Green Shale.

Core # 3 Description: 3915'-3964', Recovered 47.4'. Descriptions are of the bottom of the 3' sections of aluminum encased core.

3916': Dolomite: vy lt tan, micro-xln, tight, mudstone, tr aqua-green shale, random oil stalning in the few porous spots, weak, spotty dull yellow fluor.

3921': Dolomite: vy lt tan to vy lt greenish-tan, v/-xln (0.05-0.2mm rhombs), micro-succrosic, mudstone, spotty, micro-vugular to inter-xln porosity, spotty oil shows in the porosity. Most of the rock is tight.

3924': Dolomite: brown, succrosic, med-xin (0.2-0.5mm rhombs), good inter-xin porosity, thorough oil saturation, dull yellow fluor w/ instant streaming, bright yellow fluor. Mudstone.

3927*: Dolomite: vy lt tan, micro-xin mudstone w/ little porosity, oil staining along fractures only.

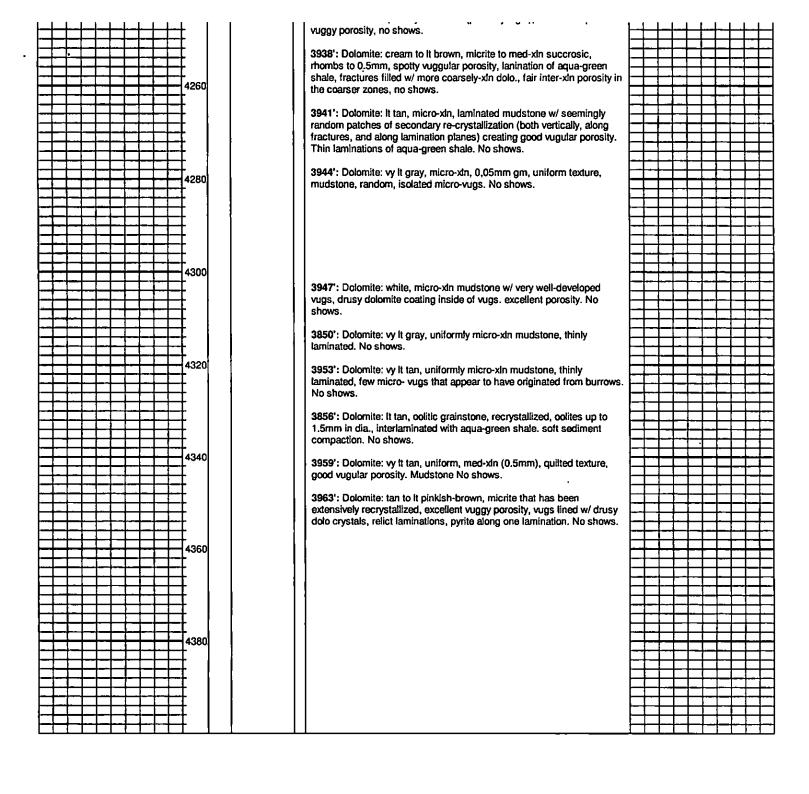
3930': No sample.

3932': Dolomite: It tan, f- to med-xln, relict oolite texture, oolites range in size from 0.2mm to 0.7mm, spotty micro-vugs w/ good porosity and oil staining, most of the rock is tight. Oolitic grainstone.

3935': Dolomite, tan, micrite to coarsely-xin, partially recrystallized, rhombs to 1.0mm, faintly laminated (possibly algal), well-developed

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Eakin #4-7

NW-NE-SE-NE 1580' FNL & 607' FEL Sec.7 T22s & R16w Pawnee County, Kansas

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CAPTIVA ENERGY, LLC

API#

15-145-21642-0000

Spud Date: Completed: 6/8/2011 7/13/2011

Field:

Wildcat

GL:

2005

KB:

2016

Surface Casing:

8-5/8" 23# set @ 1027' Cemented with 415 sx

60/40 PozMix

Production Casing: 5-1/2", 15.5# set @ 3993' Cemented with 250 sx 50 sx 60/40 scavenger

200 sx AA2

CIBP @ 3890'

TOC: 3918' .

PBTD: 3918' TD: 4002'

TOC: Surface

Tubing:

117 jts of 2.3/8" tbg, MA,

1 joint 2-3/8" tubg and SN set @ 3845'

Rods:

151 x 3/4" rods 6'-4' x 3/4" rod subs 1 1/4 x 18' PR w/7' liner

Pump:

2' x 1 1/2" x 12' RWT precision pump

TOC:2504'

Conglomerate Perfs:

3867-72' (20) 7/5/11

250 15% INS/3-3/4 BPM @ 0#

Arbuckle Perfs:

3892-3900' (24) 8/12/11 3904-07' (12) 9/26/11

3921-24'(16) 6/30/11

500 15% 1NS/2 BPM @ 0# 750 15% INS / 1.7 BPM @ 1500# Sqz 40 sx to 3000#

Created by Chris Gottschalk