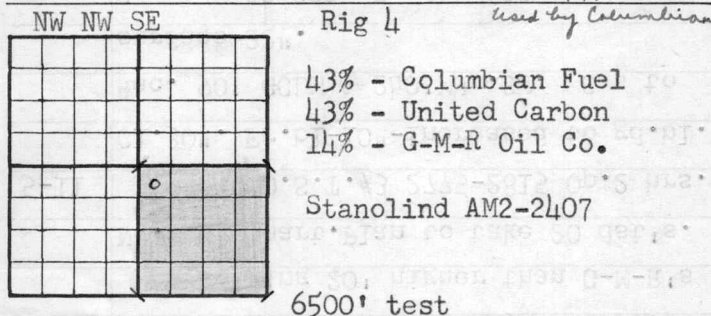


State Kansas County Seward
Company Columbian Fuel & G-M-R Oil Well No. 1
Farm Myra Atwell
Survey

Block No. Sec. 9 Twp. 33 S Range 31 W

Co-Ord. Elev. ²⁷⁸³2779 K.B.



NOTE: Show Sketch of Lease and Well Location in Above Space

330 Ft. from N. Line Ft. from S. Line

330 Ft. from W. Line Ft. from E. Line

Date	Depth	
		Staked 4-17-54, MIRT 4-29-54
4-30		Spudded @ 1:53 pm today
	108'	Drilling
5-1		598' 13 3/8" W/500 sx. cem.
		P.D. @ 5:30 p.m. today
5-3	1126	Drilling
5-4	1990	Drilling
5-5	2354	Drilling
5-6	2562	Drilling
5-7		Ran Sj - (T.D. 2598')

Date	Depth	
		Set 9 5/8" @ 2598' W/800 sx.
		P.D. @ 4:20 AM 5-7-54
	2514	Hollenberg (+269) Sj top
	2572	Herington (+211) Sj top
5-8		W.O.C.
5-10		D.S.T. #1 2643-2670 Op 90".,
		Cl. 30". Wk. bl-10", Medium bl-40",
		decreasing to wk. bl. by end of test.
		Rec. 60' Mud. I.F.-0, F.F.-0, BHP 225#.
		D.S.T. #2 2715-2730 Op. 90".,
		Cl. 30". Gd. bl-45", gradually decreasing
		to very weak blow by end of test. Rec.
		100' GCDM. I.F.-0, F.F.-0, BHP 225#.
		Running 20' higher than G-M-R's
		No. 1 Rinehart. Plan to take 20 dst's.
5-11		D.S.T. #3 2775-2815 Op. 2 hrs.,
		Cl. 30". Fr. bl-10"-increased to gd. bl.
		Rec. 90' GCDM & 240' Mdy. SW. Gas to
		surface-22".
		Gauged: 22,000 cfigpd - 60"
		22,000 cfigpd - 75"
		22,000 cfigpd - 90"
		22,000 cfigpd - 105"
		22,000 cfigpd - 120"
		K.F.-0, F.F. 225#., BHP 555#.

State Kansas County Seward

Company Columbian Fuel & G-M-R Oil Well No. 1

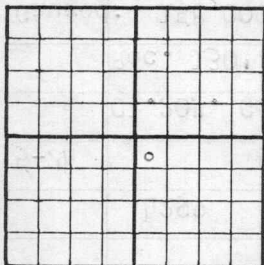
Farm Myra Atwell

Survey

Block No. Sec. 9 Twp. 33 S Range 31 W

Co-Ord. Elev. 2779 K.B.

NW NW SE



PAGE II.....

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

Ft. from W. Line

Ft. from E. Line

Date	Depth	
5-12		D.S.T. #4 3044-3074 Op. 90"., Cl. 30". Med-wk.bl. Rec. 360' Mdy S.W. & 90' HGCDM. I.F.-120#, F.F.-285, BHP 675#
	3082'	Circulating
5-13		D.S.T. #5 3104-3119. Op. 90"., Cl. 30". Fr.bl., Rec. 450' S.W. I.F.P.-120#, F.F.P. 270#., BHP 630#.
5-14		D.S.T. #6 3150-3170 Op. 90"., Cl. 30". Wk.bl thru test. Rec. 450' S.W.

Date	Depth	
		I.F. 120, F.F. 240, BHP 720#.
5-17	3822	Drilling
5-18	3981	Drilling
5-19	4148	Drilling
5-20	4240	Drilling - Started to run
		D.S.T. #7 4228-40, tool was
		plugged - no test.
5-21		D.S.T. #8 4228-40. Op. 90", Cl. 30"
		Bypassed 15", then 3 more times @ 30"
		Very wk. bl. to dead-1". Rec. 80' D.M. &
		270' Mdy. S.W. I.F. 0, F.F. 225, BHP-1155#
		4285 ^{No!} Cored 4285-4335' Rec. 50'.
5-22		Reaming hole, had porosity in
		core.
	4299	Toronto (-1520)
5-24		D.S.T. #9 4300-4335. Op. 2-1/2 hrs
		Cl. 20". Gd. bl-gas to surface-18".
		Rec. 130' HGCDM & 630' HGCSW.
Gauged:	158,000	cf gpd - 30"
	207,000	cf gpd - 45"
	242,000	cf gpd - 60"
	267,000	cf gpd - 75"
	292,000	cf gpd - 90"
	307,000	cf gpd - 105"
	318,000	cf gpd - 120"
	318,000	cf gpd - 150"
		F.F.P. 435#, B.H.P. 1245#.

State Seward County Kansas

Company Columbian Fuel & G-M-R Oil Well No. 1

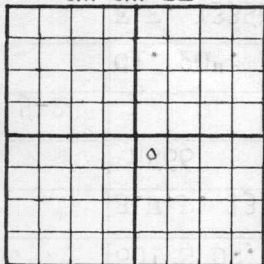
Farm Myra Atwell

Survey

Block No. Sec. 9 Twp. 33 S Range 31 W

Co-Ord. Elev. -2779 K.B.

NW NW SE



PAGE III.....

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

Ft. from W. Line

Ft. from E. Line

Date	Depth	
5-24	No. 2	Cored 4335-4381 Rec. 46'
5-25		D.S.T. #10 4350-81 Op. 60".,
		Cl. 30". Rec. 30' Mud. Fr. bl. on start.
		I.F. O, F.F. O, BHP O
		D.S.T. #11 4301-12 Op. 2-1/2 hrs.
		Cl. 30". Strong bl. Rec. 150' HGCDM.
		Gas to surface-9". Gauged:
		127,000 cf gpd - 15"
		231,000 cf gpd - 30"

Date	Depth	
	298,000	cfgpd - 45"
	337,000	cfgpd - 60"
	368,000	cfgpd - 75"
	386,000	cfgpd - 90"
	395,000	cfgpd - 105"
	409,000	cfgpd - 120"
	409,000	cfgpd - 150"
5-26	4506	Testing
5-27		D.S.T. #12 4494-4506 Op. 90".,
		Cl. 20". Fr. bl. to very wk. Rec. 225'
		R.M., 360' SM I.F. 195, F.F. 330,
		B.H.P. 1500#. Packer leaking.
		D.S.T. #13 4541-66 Op. 90".,
		Cl. 20". Fr. bl-70" dim. to wk. bl. Rec.
		60' S DM, 690' S.W. IF 105, F.F. 150.,
		B.H.P. 1335#.
	4566	Drilling
5-28		D.S.T. #14 4569-80. Op. 90".,
		Cl. 20". Rec. 2250' SW, Gd. bl. IF 405;
		F.F. 1335#., BHP 1395#.
	4604	Hole 1-1/4° off.
		Will be on this location 35-40 more
		days, taking dst and coring.
5-29	4668	Drilling

State Kansas County Seward

Company Columbian Fuel & G-M-R Oil Well No. 1

Farm Myra Atwell

Survey

Block No. Sec. 9 Twp. 33 S Range 31 W

Co-Ord. Elev. 2779 K.B.

NW NW SE

PAGE IV...

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

Ft. from W. Line

Ft. from E. Line

Date	Depth	
5-29	D.S.T.# 15	4610-4621 Op.90".,Cl.20".
	Rec.700'	S.W. Fr. bl.thru test. I.F.O.,
	F.F.P. 405,	B.H.P. 1410.
5-30	4733	Drilling
5-31	4763	Hole 1-1/4" off.
	D.S.T. #16	4721-4733.Op.90".,Cl.20".
	Wk.bl thru test.	Rec.30' DM.,240'S.W.
	I.F.P. 0,	F.F.P. 150.,B.H.P? 1080#/#
6-1	4837'	Hole 1" off.

Date	Depth	
		D.S.T.# 17. 4768-4780.Op.60W.,
	Cl. 30".	Wk.bl thru test. Rec.170' Mdy.
		S.W. I.F.P.O, F.F.P. O, BHP 1425#.
6-2		D.S.T. #18 4850-4914.Op.60".,
	Cl.20".	Wk.bl-6" then died.Equalized
		tool in 15", 30" & 45"-wk bl.for 1" &
		died after each.Bl. lost thru loose
		hose connection. Rec. 230' HGCSDM &
		720' S.W. I.F. 105, F.F.570,BHP 1575#.
	4914'	Drilling
6-3	5005	Hole 1-3/4 ⁰ off.Plan to core
		@ 5025-30.
	5058	Marmaton (-2275)
6-4	No.3	Cored 5045-95 Rec. 50'.
6-7		D.S.T. #19 5063-95.Op.3 hrs.,
	Cl.20".	Gas to surface-4". Strong bl.
		thru test.
	15"	- 1,463,000 cf gpd
	30"	- 1,644,000 cf gpd
	45"	- 1,644,000 cf gpd
	60"	- 1,644,000 cf gpd
	3hrs-	1,221,000 cf gpd
	Rec. 210'	HO&GCM, btm.60' salty. I.F.P.
	600, F.F.P.	435, BHP 1170#.

State Kansas County Seward

Company Columbian Fuel & G-M-R Oil Well No. 1

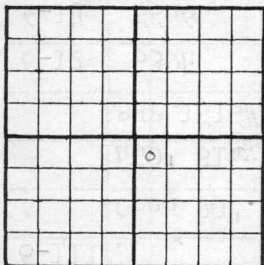
Farm Myra Atwell

Survey

Block No. Sec. 9 Twp. 33S Range 31 W

Co-Ord. Elev. 2779 K.B.

NW NW SE



PAGE V...

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

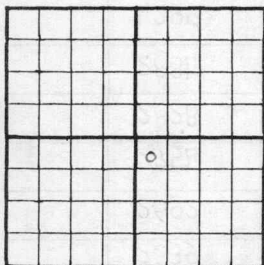
Ft. from W. Line

Ft. from E. Line

Date	Depth	
6-7		D.S.T. #20 5061-5075. Open
	4 hrs., Cl. 20".	Strong bl. thru test.
	Gas to surface - 5".	(Straddle Packer)
	15" - 335,000	cf gpd
	30" - 375,000	cf gpd
	45" - 411,000	cf gpd
	60" - 444,000	cf gpd
	90" - 375,000	cf gpd
	240" - 444,000	cf gpd

	Date	Depth	714823
			Rec. 3 Ft. Heavy GCDM.
			I.F. 165, FF 180, F.H.P. 975#.
6-7			D.S.T. #21 5076-5121. Op. 60".
			Cl. 30". Wk. bl-9". Rec. 105' Drlg. Mud.
			I.F.P. 0, F.F.P. 0, BHP 1360#.
		5121'	Going in with core barrell
6-8		<u>No. 4</u>	Cored 5095-5121 Rec. 26'.
		<u>No. 5</u>	Cored 5121-5148 Rec. 27'
6-9		5178 #6	Cored 5149-5177 Rec. 28'
			Finished coring.
6-10		<u>No. 7</u>	Cored 5177-5201 Rec. 24'.
		To	take D.S.T.
6-11			D.S.T. 5178-5201' (#22)
			Open 90". Cl. 20". Rec. 90' O&G CSDM.
			450' Slt. Wtr. I.F.P. 0#., F.F.P. 315#.
			BHP 1515#.
6-12		5394	Drilling
6-14		5546	Drilling
		<u>No. 8</u>	Cored 5515'-5565' Rec. 50'.
		5556	Morrow (-2773)
6-15		5565	Hole 2-3/4" off.
		<u>No. 9</u>	Cored 5565'-5586'. Rec. 21'.
		<u>No. 10</u>	Cored 5586'-5615'. Rec. 29'.

State Kansas County Seward
 Company Columbian Fuel & GrM-R Oil Well No. 1
 Farm Myra Atwell
 Survey _____
 Block No. _____ Sec. 9 Twp. 33S Range 31W
 Co-Ord. _____ Elev. 2783 K.B.



PAGE VI.....

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

Ft. from W. Line

Ft. from E. Line

Date	Depth	
6-17		Core #11 5615-5640 Rec.23'
	✓ 5622	Chester (-2839) 2' Assumed
		lost at base of core.
		D.S.T. #23 5587-5640.0p.60".,
		Cl.15". Wk. bl thru test. Rec. 30' D.M.
		I.F. -0, F.F. -0, BHP 0#.
6-18		Core #12 5640-5662 Rec.22'
6-21		Rig down, oil pump went out
		@ 5740, 6-20-54.

Date	Depth	
6-22	5747	Drilling
6-23	5812	Drilling
6-24	5877	Drilling
6-25	5918	Drilling
6-26	6035	Drilling
6-28		D.S.T.#24, 5947-5971 Mis-run, packer failed.
		D.S.T.#25, 5950-5971, Mis-run packer failure.
		D.S.T.#26, 5935-5970, Mis-run packer failure...
		Sj Tops:
	2639 ²⁶⁴¹	Krider (+142)
	2692	Winfield (+91)
	2754	Upper Ft. Riley (+29)
	2828	Lower Ft. Riley (-45)
	2884	Florence Flint (-101)
	4295	Toronto (-1512)
	4416	Lansing (-1633)
	5055	Marmaton (-2272)
	5214	Cherokee (-2431)
	5351	Atoka (-2568)
	6661 ⁵⁵⁵¹	Morrow (-2768)
	5620	Chester (-2837)

State Kansas County Seward

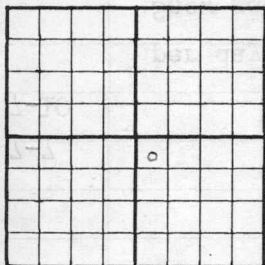
Company Columbian Fuel & G-M-R Oil Well No. 1

Farm Myra Atwell

Survey

Block No. 9 Sec. 9 Twp. 33S Range 31W

Co-Ord. 2783 Elev. 2783 K.B.



PAGE VII.....

NOTE: Show Sketch of Lease and Well Location in Above Space

Ft. from N. Line

Ft. from S. Line

Ft. from W. Line

Ft. from E. Line

Date	Depth	
	5826	St. Genevieve (-3043)
	6008	St. Louis (-3225)
	6050	T.D.
	6045	Sj, T.D.
		Conditioning hole to run DST.
6-29		D.S.T.#27 5972-5984 Op.30",
		Strong bl.thru test, gas to surface-12".
	Rec. 90'	HO&GCDM, & 630' HG&MC Salty Oil.
	630' O&GC	Salty DM.IF 150, BHP-not

714 823...

Date	Depth	recorded. Mis-run. Packers
		failed.
6-30		D.S.T. # 28, 5954-5964 Op. 90".
		Cl. 30". Fr. bl. thru test. Rec. 30'
		Salty D.M., 600' Sli O&GCSW. I.F.P. 0,
		F.F.P. 405, BHP 1695#.
		D.S.T. #29 5977-5983 Op. 2 hrs
		Cl. 30". Fr. bl. thru test. Rec. 960'
		Gas in drill pipe, 60' Very hvy mud
		gas & OCSW, 1410' O&GCSW. I.F.P. 0,
		F.F.P. 705, BHP 1620#.
7-1		5-1/2" @ 5150 W/775 sx. cem.
		P.D. 10:50 P.M. 6-30-54.
		Preparing to run temperature
		survey.
7-7		MICT
7-10		1st 12 hr. test - 368,000 dfg
		per day 20 gal SWPH. 2nd 12 hr. test
		Show gas, 60 gal SWPH. Preparing to
		squeeze w/plastic.
7-26		Perf. 4314-18.
		2 1/2 M gas & 10 BWPH
8-15	<i>Well compl according to Logging record</i>	
	<i>S & A - Logging Compl 9-29-54</i>	