

CHARLES R. SCHMALTZ

Consulting Geologist
1309 W. 33RD St., N.
Wichita, Kansas 67204

CHARTER PRODUCTION COMPANY

GOOD 'A' #1-TWIN 3

N/2 SW SW SEC 34 -T30S-R36W

SEWARD COUNTY, KANSAS

ELEVATIONS: 2726 GL
2737 KB

CONTRACTOR: ZENITH DRILLING CO.
RIG #6
MIKE GEARHART
Toolpusher

COMMENCED: 14 APRIL 1993
COMPLETED: 26 APRIL 1993

CASING - Surface 8 5/8 @ 1477'
- Production 5 1/2 @ 5449'

MUD PROGRAM: STEVENS MUD CO.
Chemical
Bruce Stevens - Engineer

DRILL STEM TESTS: Trilobite Testing Co. (4)

LOGGING PROGRAM: BPB LOGGING SER.
1) DSI w/ SP - GR
2) PDS
3) MRS

DAILY PENETRATION RATE:
(as of 7:00 am)

4/14/93 MIRT
4/15/93 700'
4/16/93 1546'
4/17/93 2360'
4/18/93 3105'
4/19/93 3755'
4/20/93 4200'
4/21/93 4424'
4/22/93 4435'

PIPE STRAPS:
@4424 - 0.84 short

4/23/93 4912'
4/24/93 5307'
4/25/93 5318'
4/26/93 5450'

BIT RECORD:

<u>NO</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FEET</u>	<u>HOURS</u>
1	12 1/4	STC	X11J	1546'	1546'	11 3/4
1	7 7/8	SEC	F15H	5307'	3761'	121 1/2
2	7 7/8	SOVACK	3V537	5450'	143'	9 1/4

The following is a structural comparison between the Charter Production Co. Good 'A' #1 and the Charter Good 'A' #1, an oil well approximately 300' south.

<u>FORMATION</u>	<u>CHARTER- GOOD 'A' #1-Twin</u>	<u>CHARTER- GOOD 'A' #1</u>
HEEBNER SHALE	4378 (-1641)	3994 (- 961)
TORONTO	4401 (-1664)	4014 (- 981)
LANSING	4549 (-1812)	4105 (-1072)
IOLA	4832 (-2095)	4826 (-2100)
DRUM	4860 (-2123)	4855 (-2129)
BKC	5139 (-2402)	5135 (-2409)
MARMATON	5215 (-2478)	5208 (-2486)
NOVINGER	5293 (-2556)	5288 (-2567)
CHEROKEE	5381 (-2644)	5373 (-2647)
TOTAL DEPTH - LTD	5450 (-2713)	6437 (-3711)
TOTAL DEPTH - RTD	5450 (-2713)	6440 (-3708)

The Charter Production Co. Good 'A' #1-Twin was drilled to establish oil production in the Iola and Drum Limestones of the Lansing-Kansas City Section, which currently are productive in the Good 'A' #1, so that the Good 'A' #1 could be recompleted in the Pennsylvannian Morrow Sandstone. The Good 'A' #1-Twin ran structurally high with good sample shows and positive log characteristics. In addition the Marmaton Novinger limestone member ran structurally high, developed good porosity and tested what could be a commercial volume of gas, depending on areal extent.

CONCLUSIONS

Based on sample examination, and electric and radiation logs, and drill stem test results, the decision was made to run 5 1/2 casing on 26 April 1993.

DRILL STEM TESTS

DST #1 - (4377 - 4424) TORONTO
30"-60"-60"-60"

IFP: Fair blow building to bottom in 25 min.
FFP: Weak blow building to bottom in 53 minutes

RECOVERED: **680' GCSW**
 Chlorides: Recovery -12000 ppm
 Chlorides: Pit - 4500 ppm

HSP: 2207#-2112#
FP: 101#-189#/211#-353#
SIP: 1192#-1183#
BHT: 116 F

DST #2 - (4463 - 4479) DOUGLAS
30"-60 -60"-60"

IFP: Weak blow building to 7 inches
FFP: Weak blow building to 5 inches

RECOVERED: **470' GCSW**
 (Chlorides - Recovery - 11,000 ppm)
 (Chlorides - Pit - 5,700 ppm)

HSP: 2207#-2212#
FP: 45#-89#/123#-211#
SIP: 1309#-1267#
BHT: 118 F

DRILL STEM TESTS (Con't)

DST #3 - (5610 - 5650) NOVINGER
30"-60"-35"-60"

IFP: Strong blow immediately

GTS/ 2"

IFP Gauged: 3215 MCF @ 10 min. w/ mist of mud
3334 MCF @ 20 min. w/ heavy mist of mud
3752 MCF @ 30 min. w/ heavy mist of mud

FFP Gauged: 3274 MCF @ 10 min , w/ mist of mud
3811 MCF @ 20 min. w/ mist of mud & oil
3633 MCF @ 30 min. w/ heavy mist of mud & oil
3811 MCF @ 35 min. w/ heavy nist of mud & oil

RECOVERED: 176' G&OCWM
(30%G,15%O.25%W,30%M)

HSP: 2521#-2459#
FP: 685#-685#/674#-632#
SIP: 1764#-1753#
BHT: 126 F

DST #4 - (5615 - 5731) NOVINGER
30"-60"-60"-60"

IFP: Stong blow off bottom in 1 minutes

FFP: Strong blow off bottom in 10 min,

RECOVERED: 3850' GIP
90' G&OCWM
(40%G,10%O,20%W,30%M)
673' GCSW
Chl: Recovery - 18,000 ppm
Pit - 5,400 ppm

HSP: 2521#-2490#
FP: 67#-189#/233#-375#
SIP: 1774#-1764#
BHT: 126 F

CHARTER PRODUCTION COMPANY
224 E. DOUGLAS, SUITE 400
WICHITA, KANSAS 67202
316-264-2808

GOOD "A" #3
(formally called Good "A" Twin #1)
15' S OF N/2 SW SW
975' FSL 660' FWL
SECTION 20-34S-31W
SEWARD COUNTY, KANSAS
WHITE LABEL PROSPECT

COMPLETION REPORT

5/7/93 MICU . Ran CBL, Plug back to 5400'. Top of cement at 4426'. Good cement bond. Swab csg to 1150'. Perforated 5295'-97' (Novinger) 4 shots per foot. SI 5:30 PM.

5/8/93 SIP, slight vacuum, TIH with 161 jts. tubing and landed at 5287'. Swab estimated 40 bbl load water and well kicked off. Flowed 2 1/2 hours on 1/4" choke. Tbg flowing pressure 850, csg flowing pressure 980 and producing an estimated 1250 MCFD and making load water with trace of oil. Recovered 64 bbl load water of total of 99 bbls. Well was not stabilized, flowing pressure still increasing. SI 5:00PM.

5/9/93 SI

5/10/93 41 hr TSI pressure 1150#. CSI pressure 1170#. Flowed Novinger 5295-97' perforations 3 1/2 hrs on 14/64 positive choke at tbg flowing pressure of 995#. csg flowing pressure of 1225#. Producing an estimated 1,100 MCFD with light mist of load water and oil. Well appears to have reached stabilization.

5/11/93 17 hr TSI pressure 1250#. CSI pressure 1475#. Rig down unit.

FINAL REPORT

CHARTER PRODUCTION COMPANY
224 E. DOUGLAS, SUITE 400
WICHITA, KANSAS 67202
(316) 264-2808

GOOD "A" #3 1991 HPEP-DEV
15'S OF N/2 SW SW
SECTION 20-34S-31W
SEWARD CO. KANSAS

REWORK REPORT

8-2-93 RU. Blew well down. POH w/161 jts 2 7/8 tbg. Set CIBP at 5280'. Perf. Drum 4861-63', 4 shots per foot. TIH w/148 jts tbg to 4905'. Tubing swab, 14 bbl of fluid. SI 7:00 PM.

8-3-93 13 hour TSIP-Vacuum. Csg. Slight blow. FL 3800'.

4861'-63' Swab down 24.36 bbls of fluid 3600-4400' FL Scum of oil to 90% oil
SWAB TEST

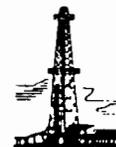
<u>HOUR</u>	<u>BARRELS OF FLUID</u>	<u>FLUID LEVEL</u>	<u>%</u>
1st	2.3	4400-4600'	100 Oil
2nd	1.16	4600-4800'	100 Oil

Serfco treated Drum formation 4861-63 perms. w/300 gals. 15% NE acid containing FE and surfactant additives. Formation broke at 800#. AIP 270#, AIR 2 BPM, Instant SI Vacuum. Total Load 120.4 bbl.

1st	47.56	200-2600'	Load Water/No show
2nd	33.6	2600-3000'	48% Oil
3rd	30.16	3000-3100'	70% Oil
4th	23.2	3100-3200'	81% Oil

Good show of gas. SI 6:00 PM

8-4-93 TSIP 150# CSI 175#, Preparing to TIH with pump and rods.



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1410 WESTERN AVENUE • (316) 672-7737
PRATT, KANSAS 67124

GOOD A#3
Charter Production Co
ACIDIZE WELL

July 18, 1993

7/12/93 10:30A. MIRU JW Gibson derrick. Gilmore's set Pratt Well Serv swb tnk (from Hays Trust). Rig had no flow lines on rig. SION 12:30 P.

7/13 8:15A. Blew tbg & csg down. Venting an est 200 Mcfd. W0 Halco until 12:30 P. Pumped down tbg & spotted 250 gals 15% FE acid (w/SSO-21 surfactant) to 5295-97' Novinger perms using 2% Kcl wtr. Circ 20 bbls formation fluid to surface (14 BSW & 6 bbl oil). Formation broke @ 540# & 0.4 BPM back to 1 BPM vacuum. AIR 0.6 BPM. ISIP vacuum. Total load 122 bbls. Tbg swbd 3 hrs recovering 69 BLW w/show of gas & ending FL staying @ 2600'. SION 6 PM.

7/14 8 AM. 14 hr TSIP 400#. CSIP 350#. Blew down & recovered no fluid.

SWAB/FLOW TEST DETAIL (5295-97')

Time	Chk	TFP	CFP	Tnk Gauge	Total		Est	Remarks
					Bbls	BPH	Mcf	
9:00A			330	5'-10½"	81.8			Swbg. FL 2000'
10:00			315	8'-5"	117.2			Show of gas. Trc 34° oil.
11:00			375					Swbg/Flowing
Noon		200	525	10'-2½"	142.1			Flwg. Recovered 129.3BF
1:00	½	50	600	10'-9½"	150.2	8.1	100	Flwg. 2% 34° API Oil
2:00	½	0-50	790				50	Well loading up
2:20	½	350	680				400	Flwg. 10-20% oil
3:00	3/8	110	620	11'-10"	164.7	14.5	100	Flwg. 40-50% oil
						2 hrs		
4:00	20/64	150	640	12'-1"	168.2	3.5	100	Flwg. 20-30% oil
5:00	20/64	320	775	12'-4½"	172.3	4.1	300	30% oil. SI.
5:15	20/64	445	860					Flwg into pipeline.
6:00P	20/64	425	790					Left on overnight
7/15								
8:00A	20/64	315	800				383	42 BF/15 hrs. 30% oil
10:00	20/64	315	800				380	Left on production. RD & released rig @ 11 AM.
7/16								
8:00A	20/64	290	705				687	83 BF

Respectfully submitted,

Robert Moorehead
Robert Moorehead

MAY 2 1994

Robert L. Moorehead Consulting Petroleum Engineer



ENGINEERING · WELLSITE SUPERVISION · DRILLING/COMPLETION/PRODUCTION

1410 WESTERN AVENUE • (316) 672-7737
PRATT, KANSAS 67124

GOOD A#3

April 30, 1994

Charter Production Co
2nd ReCOMPLETION REPORT

4/20/94 MIRU Gibson Well Serv derrick. POOH w/rods & pump.

4/21 8 AM. POOH w/149 jts 2 7/8 tbg. PU RTTS Pkr & TIH w/146 jts tbg & set Pkr @ 4813'. LTV picked up pump. SION 12:30 PM. Dillco set Frac Tnk.

4/22 8:15 AM. Dillco delivered 140 BLO & 80 bbls fresh wtr. SW Gas delivered 750 gals diesel. Laid swb line to Frac Tnk. W.O. Halco 1 hr. Halco loaded annulus to 400# w/38 BLO (FL was approx 2400'). Pumped 250 gals ClayFix II wtr w/CAT-1, 250 gals 7½% DSFE acid, 250 gals ClayFix II wtr w/CAT-1, flushed w/1250 gals ClayFix II wtr & acidized 4861-63' Drum perms. AIR 3 BPM. AIP 1200#. ISIP 500#. Vacuum in less than one minute. Total load 48 bbls. Swbd 48 bbls load (heavy soft paraffin in tbg). Treated 4861-63' Drum perms by pumping 2,000 gals MATROL, 5 bbls diesel, 325 gals MOC/ONE (25 sxs micro matrix cmt/diesel-1½ hrs to mix), 5 bbls diesel & displaced w/1,300 gals LO. SION 3:30 PM.

4/23-24 SI - WOC

4/25 8:15 AM. SIP vacuum. FL 1300'.

SWAB TEST (4861-63')

2 hr Swb Dwn	29.3 BF	FL 1300-4700'	Load Oil.
½ hr SI	3.6 BF	FL 4300'	Load Oil.
1 hr SI	3.6 BF	FL 4000'	Load Oil. (Flush load recovered)
1 hr SI	3.6 BF	FL 4000'	40% Oil.
1 hr SI	3.6 BF	FL 4000'	20% Oil.
1 hr SI	3.6 BF	FL 4000'	15% Oil. No trace of MOC/ONE. SION 3 PM.

4/26 8:30 AM. 17 hr SIP 60#. FL 2500'. ONFU 2300' (w/450' of free oil).

SWAB TEST (4861-63')

1 hr Swb Dwn	16.3 BF	FL 2500-4800'	15-20% Oil.
½ hr SI	2.3 BF	FL 4300'	30% Oil.
1 hr SI	6.0 BF	FL 3800'	15% Oil. 1st show of MOC/ONE.
1 hr SI	6.0 BF	FL 3800'	20% Oil. Trc MOC/ONE.
1 hr SI	6.0 BF	FL 3800'	10% Oil. " " "
½ hr SI	2.8 BF	FL 4200'	3% Oil. Slight Trc MOC/ONE.
½ hr SI	2.3 BF	FL 4300'	4% Oil. " " " "
1 hr SI	5.9 BF	FL 3800'	4% Oil. " " " "
1 hr SI	6.0 BF	FL 3800'	5% Oil. Very slight Trc MOC/ONE.
1 hr SI	4.1 BF	FL 4000'	6% Oil. " " " " "

SION 5:15 PM.

4/27 8:45 AM. 15 hr SIP 80#. Equalized, released & POOH w/Pkr & 146 jts of 2 7/8 tbg. FL 1350'. HLS set Titan CIBP @ 4858'. Perfd Iola 4839-42' (4SPF/23 gram)(no change in FL +/- after perfg). TIH w/6' tbg sub, SN & 147 jts of 2 7/8 EUE tbg. Landed SN @ 4845' & bottom of open ended tbg @ 4853'. Tbg swbd 2 hrs recovering 64 bbls of 83 bbl load w/ending FL @ 3800'. Csg on vacuum. SION 5:15 PM.

4/27 8:45 AM. 15 hr T&C SIP 0#. FL 4000' (no ONFU). Swbd dry to SN @ 4845' in 1 hr recovering 14 BL. 30 min SI recovered no fluid. 1 hr SI recovered no fluid. Halco spotted 300 gals 15% FE acid containing LoSurf 300 & Pen 88 to 4839-42' Iola perfs w/2% Kcl wtr containing LoSurf 300 & treated Iola perfs. AIR 1.1 BPM. AIP 328#. MIP 422#. ISIP 250#. Vacuum in 20 seconds. Total load 113 bbls.

SWAB TEST (4839-42')

1st hr	34 BF	FL 1000-2600'	LW. Trc Oil.
2nd hr	32 BF	FL 3600'	10% Oil (40.5° API Gravity)
3rd hr	26 BF	FL 2700'	20% Oil. GSG. CP 6#.
4th hr	29 BF	FL 2800'	25% Oil. GSG. CP 17#.
½ hr	13 BF	FL 2800'	40% Oil. GSG. CP 25#. SION 5:30 PM.

4/29 15 hr TSIP 95#, CSIP 120#. FL @ 2600' (ONFU 200'). Swbd and flowed 58 BF in 2 hrs w/ending FL 2700' and oil cutting 25%. TIH w/2½"x1 3/4"x12'x14'x17' RHBC/DV pump, 129 - 3/4" rods, 63 - 7/8" scraped rods, 6',6',6',2' - 7/8" pony rods & 1¼"x16' polish rod. Ralph's hot oiler loaded tbg & hot oiled flow-line to Treater. POP @ 1:30 PM. RD & moved to Hays Trust #1 @ 1:45 PM.

Respectfully submitted,


Robert Moorehead

CHARTER PRODUCTION COMPANY, INC
 224 E. DOUGLAS, SUITE 400
 WICHITA, KANSAS 67202
 316-264-2808

GOOD A-TWIN #1 #3 2726' GR
 15' S OF N/2 SW SW
 975' FSL 660' FWL 2737' KB
 SECTION 20-34S-31W
 SEWARD COUNTY, KANSAS
 WHITE LABEL PROSPECT

DAILY DRILLING REPORT

Sample tops	Depth /Datum	Log Tops
Heebner Shale	4379' (-1642)	4378' (-1641)
Toronto	4399' (-1662)	4401' (-1664)
Lansing	4547' (-1810)	4549' (-1812)
Iola	4836' (-2099)	4832' (-2095)
Drum	4865' (-2128)	4860' (-2123)
BKC	5145' (-2408)	5139' (-2402)
Marmaton	5219' (-2482)	5215' (-2478)
Novinger	5297' (-2560)	5293' (-2556)
Oswego	5339' (-2602)	5341' (-2604)
Cherokee Sh.	5383' (-2646)	5381' (-2644)
TD	5450'	5450'

4/14/93 MIRT4/15/93 SPUD at 12:00 midnight
 4/16/93 1546' at 7:00 AM Operation: WOC
 Ran 33 jts new 24# 8 5/8" surface casing. Total 1501.76' Set at 1477' Cemented w/
 525 sacks Pace setter lite-5% salt, 1/4 # cello flake, 125 sacks CLC
 2% cc. Plug down at 12:30 AM.

Hit bridge at 1477' 69' off bottom. Hooked up Western cement to circulate. Would
 not circulate...Pipe stuck.. Cemented casing without returns. Had 500# lift pressure
 1" top 90' with 100 sx cement. Cement circulated. Cement basket at 90'.

4/17/93 2360' at 7:00 AM Operation: Drilling ahead

4/18/93 3105' at 7:00 AM Operation: Drilling ahead

4/19/93 3755' at 7:00 AM Operation: Drilling ahead

4/20/93 4200' at 7:00 AM Operation: Drilling ahead
 Geologist on location.

4/21/93 4424' at 7:00 AM Operation: Drilling ahead
DST #1 4377'-4424' (Toronto)
Opens: 30"-60"-60"-60"

RECOVERED: 680' GAS CUT SALT WATER

FP: 101#-189#
HSP: 2207#-211#
FP: 101#-189#/211#-353#
SIP: 1193#-1182# BHT 116R

4/22/93 4535' at 7:00 AM Operation: Drilling
DST #2 4463-9' (Douglas group)
Opens: 30"-60"-60"-60"

RECOVERED 470' GAS CUT SALT WATER

HSP: 2207#-2112#
FP: 45#-89#/123#-211#
SIP: 1309#-1267#
BHT: 117 F

4/23/93 4912' at 7:00 AM Operation: Circulating for Samples (Drum formation)

4/24/93 5307' at 7:00 AM Operation: Running DST #3
DST #3 5255-5307' (Novinger)
Opens 30-60-35-60"

RECOVERED 176' Gassy Oil Cut Watery Mud (30% Gas, 15% Oil, 25% water, 30% mud)

HSP: 2521-2459#
FP: 685-685#/674-632#
SIP: 1764#-1753#
BHT: 126 F

4/25/93 5318' at 7:00 AM Operation: Running DST #4
DST #4 5308-5318' (Novinger)
Opens 30"-60"-60"-60"

**RECOVERED 3850' GAS IN PIPE
90' GASSY OIL CUT WATERY MUD
(40% GAS 10% OIL, 20% WATER 30% MUD)
673' GASSY CUT SALT WATER**

HSP: 2521#-2490#
FP: 67#-189#/233#-375#
SIP: 1774#-1764#
BHT: 126 F

4/26/93 5450' at 7:00 AM Operation: Logging

4/27/93 Ran 122 jts New 5 1/2" 15.5# J-55 casing, Total tally 5479', Set at 5449'
Cemented w/175 sacks E.A.-2. Plug down at 12:30 AM.